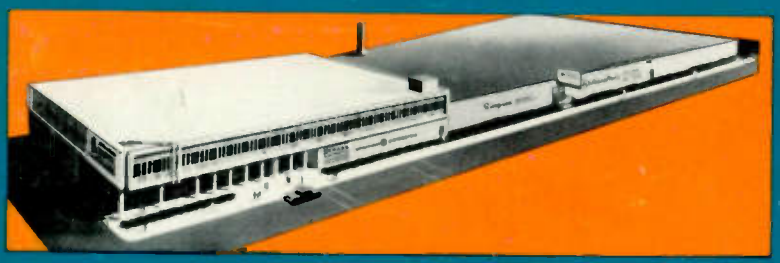
1968 INDUSTRIAL ELECTRONICS CATALOG NO. 68



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TWX 910-221-0268

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MODEL 310
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630

630-PLK

666-R

NEW!
MODEL 600
TVO
Transistorized

Start with these Models

. . . the 310, Miniature V-O-M; the 630, Standard V-O-M; the 630-PLK, streamlined V-O-M with transistorized overload protection; and the 666-R, handsize V-O-M. Add to these the all new 600 TVO, solid state Volt-Ohmmeter with F-E-T amplifier and 11 megohm input impedance; the 850, vacuum tube voltmeter; the 630-M, one million ohms per volt V-O-M and the other standard models shown in this catalog and you will find the exact Triplett instrument for your needs. Triplett offers the broadest line of multitesters in the industry.

MODEL 850
VTVM

New Flexible Panel Meter Design

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An all new meter design that features flexibility and interchangeability, with optional mounting bezel for modern "Picture Window" appearance.

Self-shielded, Exact, Reliable—DC instruments have the famous Triplett BAR-RING movements—more torque, faster response, greater ruggedness.

Modern design provides a dominant scale with plenty of dial area.

MODEL 630-M
One Million Ohms per volt

SEE COMPLETE TRIPLETT LISTINGS IN TEST EQUIPMENT SECTION

630 630-A 630-L 630-PL 630-APL 630-NA 630-NS 630-M 630-PLK 631 310 310-C 800 666-R

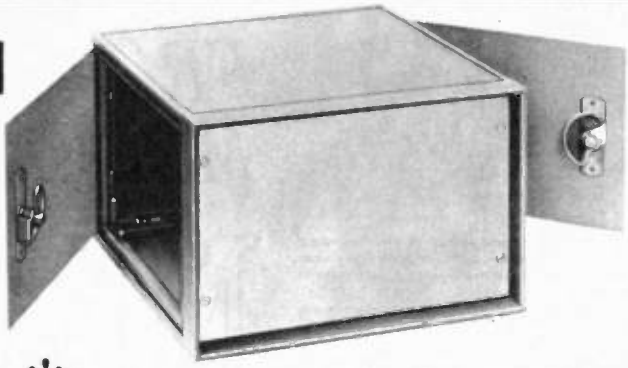
YOUR PRODUCT *Belongs* IN A BUD CABINET

Need them now? Get them now!

* Inventories at Newark in Cincinnati, Grand Rapids, Detroit, Denver, Chicago, and Inglewood, California provide for immediate delivery of these new cabinets as well as all Bud products.

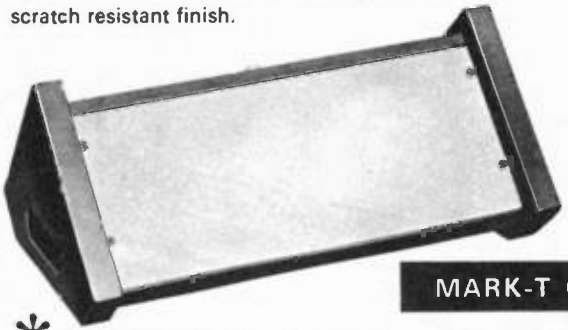
• See pages 586 to 596 for complete information on these and all other BUD products.

TUDOR CABINETS



* A cabinet is not expensive, regardless of price, when it provides value!! The Tudor cabinets fill the need for a top quality housing to compliment sophisticated equipment. Unique construction features and clean lines continue to provide a sophisticated silhouette. Unusual design affords access from either side through hinged doors; thus installation, inspection and servicing of contents is greatly simplified. Slender extruded aluminum framework yields greater net cubic area without sacrificing strength. Vinyl texture scratch resistant finish.

MARK-T CABINETS



* An exciting departure from ordinary cabinet design with many applications as enclosures for controls. Planned so that the entire contents are visible when door is open. Angle of both panel and door permit comfortable observation of dials, meters, lights, switches, etc. All welded construction with removable panel and hinged door. Vinyl texture charcoal gray body with light gray panel and door.

TILT-A-VIEW CABINETS

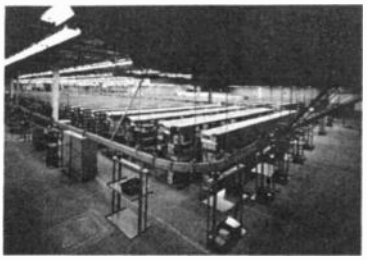
* New cabinets featuring slanted front panel for the installation of meters, dials, controls and recorders. Use of detachable legs permits changing the angle of vision. Unique two-piece construction permits immediate access to interior. Top and bottom section interlock, NO fasteners appear on the front or rear panel. Vinyl texture charcoal gray body with light sand color front and rear panels.

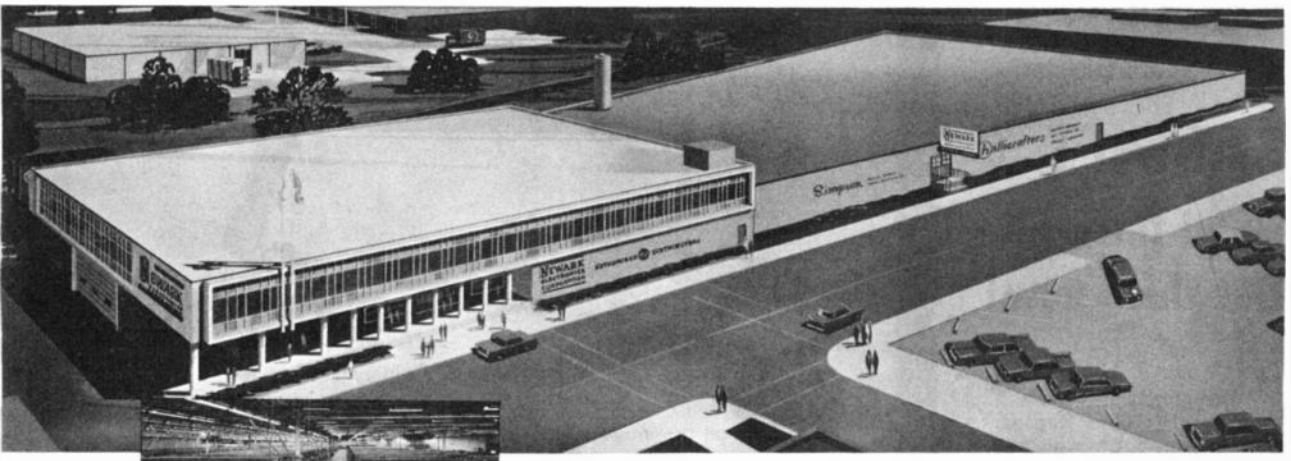
FROM THIS NEW MODERN FACILITY

NEWARK

PROVIDES THE FASTEST, MOST COMPLETE INDUSTRIAL ELECTRONIC DISTRIBUTION SERVICE AVAILABLE ANYWHERE!

The automated conveyor system in the foreground contains two miles of track and the order filling racks are individually programmed to stop at each location where an item is to be picked.





Shipping section and terminus of conveyor system. The active stock, on over 17 city blocks of steel shelving, is in the background.

A portion of the Industrial Sales department where over 1000 phone orders are handled daily.

- Computerized order processing and inventory control
- Programmed, conveyorized order-filling system
- Dataphone communication with all branches provides same-day back-up shipments of quantities not available at branches
- Over $7,000,000 inventory of 500 product lines
- Same day complete shipment on 95% of all orders

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All these services have made Newark the nation's leading 1-point source for brand-name Industrial Electronic Products:

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- Ultra-modern facilities
- Outstanding reputation for leadership

AND THESE SPECIAL SERVICES FROM NEWARK!

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CORPORATION

MAIN OFFICE AND WAREHOUSE: 500 NORTH PULASKI ROAD / CHICAGO, ILLINOIS 60624

Integrated Circuit Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
CA3000	RCA	4.70	3.85	3.25	.....
CA3002	RCA	4.40	3.60	3.05	.....
CA3004	RCA	4.40	3.60	3.05	.....
CA3005	RCA	2.80	2.30	1.95	.....
CA3006	RCA	6.80	5.55	4.70	.....
CA3007	RCA	6.00	4.90	4.15	.....
CA3008	RCA	12.00	9.75	8.25	.....
CA3010	RCA	9.20	7.50	6.35	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
CA3011	RCA	1.55	1.25	1.10	.....

Type No.	Mfr.	1-24	25-99	100-up
CA3012	RCA	2.25	1.85	1.55 .....
CA3013	RCA	2.65	2.15	1.85 .....
CA3014	RCA	3.15	2.55	2.15 .....
CA3015	RCA	10.00	8.15	6.90 .....
CA3016	RCA	12.80	10.40	8.80 .....

Type No.	Mfr.	1-24	25-99	100-999
CA3018	RCA	2.40	1.95	1.65 .....
CA3019	RCA	2.40	1.95	1.65 .....
CA3020	RCA	2.80	2.30	1.95 .....
CA3021	RCA	3.60	2.95	2.50 .....
CA3022	RCA	3.15	2.55	2.15 .....
CA3023	RCA	2.95	2.40	2.05 .....
CA3028	RCA	1.55	1.25	1.10 .....
CA3029	RCA	6.00	4.90	4.15 .....
CA3030	RCA	7.20	5.85	4.95 .....
CA3031	RCA	8.80	7.15	6.05 .....
CA3032	RCA	7.20	5.85	4.95 .....
CA3034	RCA	2.80	2.30	1.95 .....
CA3034VI	RCA	2.80	2.30	1.95 .....
CA3035	RCA	2.40	1.95	1.65 .....
CA3035VI	RCA	2.40	1.95	1.65 .....
CA3036	RCA	1.55	1.25	1.10 .....

Type No.	Mfr.	1-24	25-99	100-up
CD2100	RCA	6.00	4.90	4.15 .....
CD2101	RCA	6.35	5.15	4.35 .....
CD2150	RCA	5.20	4.25	3.60 .....
CD2151	RCA	5.20	4.25	3.60 .....
CD2152	RCA	5.20	4.25	3.60 .....
CD2200	RCA	6.00	4.90	4.15 .....
CD2201	RCA	6.35	5.15	4.35 .....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
CD2202	RCA	6.35	5.15	4.35	.....

Type No.	Mfr.	1-24	25-99	100-up
CD2203	RCA	8.00	6.50	5.50 .....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
CD2204	RCA	4.70	3.85	3.25	.....
CD2205	RCA	6.00	4.90	4.15	.....

Type No.	Mfr.	1-24	25-99	100-up
MC260G	MOT	10.50	9.30	8.45 .....
MC262F	MOT	8.00	7.30	6.30 .....
MC262G	MOT	6.00	5.30	4.80 .....
MC265G	MOT	3.30	2.90	2.65 .....
MC267G	MOT	2.80	2.50	2.25 .....
MC301F	MOT	12.65	10.15	8.45 .....
MC301G	MOT	11.55	9.25	7.70 .....
MC302F	MOT	14.85	11.90	9.90 .....
MC302G	MOT	13.70	11.00	9.15 .....
MC303F	MOT	16.70	13.40	11.15 .....
MC303G	MOT	15.60	12.50	10.40 .....
MC304F	MOT	8.40	6.70	5.60 .....
MC304G	MOT	7.25	5.80	4.85 .....
MC305F	MOT	8.40	6.70	5.60 .....
MC305G	MOT	7.25	5.80	4.85 .....
MC306F	MOT	11.30	9.05	7.55 .....
MC306G	MOT	10.20	8.15	6.80 .....
MC307F	MOT	11.30	9.05	7.55 .....

Type No.	Mfr.	1-24	25-99	100-up
MC307G	MOT	10.20	8.15	6.80 .....
MC308F	MOT	18.80	15.05	12.55 .....
MC308G	MOT	17.70	14.15	11.80 .....
MC309F	MOT	13.70	11.00	9.15 .....
MC310F	MOT	13.70	11.00	9.15 .....
MC311F	MOT	13.70	11.00	9.15 .....
MC312F	MOT	16.70	13.40	11.15 .....
MC312G	MOT	15.60	12.50	10.40 .....
MC312AF	MOT	16.70	13.40	11.15 .....
MC312AG	MOT	15.60	12.50	10.40 .....
MC313F	MOT	18.35	14.70	12.25 .....
MC314F	MOT	21.95	17.60	14.65 .....
MC315F	MOT	24.35	19.50	16.25 .....
MC316F	MOT	11.30	9.05	7.55 .....
MC317F	MOT	11.30	9.05	7.55 .....
MC318F	MOT	11.30	9.05	7.55 .....
MC318G	MOT	10.20	8.15	6.80 .....
MC351F	MOT	6.55	6.00	5.15 .....
MC351G	MOT	4.55	4.00	3.65 .....
MC352AF	MOT	6.45	5.65	5.15 .....
MC352AG	MOT	4.55	4.00	3.65 .....
MC352F	MOT	6.55	6.00	5.15 .....
MC352G	MOT	4.55	4.00	3.65 .....
MC353F	MOT	7.95	7.20	6.25 .....
MC353G	MOT	5.95	5.20	4.75 .....
MC354F	MOT	4.45	4.15	3.45 .....
MC354G	MOT	2.45	2.15	1.95 .....
MC355F	MOT	4.80	4.45	3.75 .....
MC355G	MOT	2.80	2.45	2.25 .....
MC356F	MOT	5.55	5.15	4.35 .....
MC356G	MOT	3.55	3.15	2.85 .....
MC357F	MOT	5.55	5.15	4.35 .....
MC357G	MOT	3.55	3.15	2.85 .....
MC358AF	MOT	11.50	10.35	9.10 .....
MC358AG	MOT	9.50	8.35	7.60 .....
MC358F	MOT	11.50	10.35	9.10 .....
MC358G	MOT	9.50	8.35	7.60 .....
MC359F	MOT	5.70	5.25	4.45 .....
MC359G	MOT	3.70	3.25	2.95 .....
MC360F	MOT	5.70	5.25	4.45 .....
MC360G	MOT	3.70	3.25	2.95 .....
MC361F	MOT	5.70	5.25	4.45 .....
MC361G	MOT	3.70	3.25	2.95 .....
MC362AF	MOT	6.85	6.05	5.50 .....
MC362AG	MOT	5.00	4.40	4.00 .....
MC362F	MOT	7.00	6.40	5.50 .....
MC362G	MOT	5.00	4.40	4.00 .....
MC363F	MOT	7.35	6.50	5.90 .....

Type No.	Mfr.	1-24	25-99	100-up
MC364F	MOT	12.20	10.70	9.75 .....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC364G	MOT	10.75	9.45	8.60	.....

Type No.	Mfr.	1-24	25-99	100-up
MC365F	MOT	11.05	9.75	8.85 .....
MC365G	MOT	9.20	8.10	7.35 .....
MC366F	MOT	8.10	7.15	6.50 .....
MC366G	MOT	6.25	5.50	5.00 .....
MC367F	MOT	7.50	6.60	6.00 .....
MC367G	MOT	5.60	4.95	4.50 .....
MC368F	MOT	7.50	6.60	6.00 .....
MC366G	MOT	5.60	4.95	4.50 .....
MC369F	MOT	7.25	6.40	5.80 .....
MC369G	MOT	5.45	4.80	4.35 .....
MC400F	MOT	8.40	6.70	5.60 .....

Type No.	Mfr.	1-999	1000-4999
MC400P	MOT	3.90	2.95 ....
MC401F	MOT	8.40	6.70	5.60 .....

Type No.	Mfr.	1-999	1000-4999
MC401P	MOT	3.90	2.95 ....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC402F	MOT	8.40	6.70	5.60	.....

Type No.	Mfr.	1-999	1000-4999
MC402P	MOT	3.90	2.95 ....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC403F	MOT	11.25	9.00	7.50	.....

Type No.	Mfr.	1-999	1000-4999
MC403P	MOT	5.20	3.95 ....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC404F	MOT	8.40	6.70	5.60	.....

Type No.	Mfr.	1-999	1000-4999
MC404P	MOT	3.90	2.95 ....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC405F	MOT	8.40	6.70	5.60	.....

Type No.	Mfr.	1-999	1000-4999
MC405P	MOT	3.90	2.95 ....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MOT	8.40	6.70	5.60	.....	MC406F

Type No.	Mfr.	1-999	1000-4999
MC406P	MOT	3.90	2.95 ....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC408F	MOT	9.35	7.50	6.25	.....

Type No.	Mfr.	1-999	1000-4999
MC408P	MOT	4.95	3.75 ....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC409F	MOT	5.30	4.25	3.55	.....

Type No.	Mfr.	1-999	1000-4999
MC409P	MOT	3.10	2.35 ....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC410F	MOT	4.65	3.70	3.10	.....

Type No.	Mfr.	1-999	1000-4999
MC410P	MOT	3.00	2.30 ....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC411F	MOT	4.65	3.70	3.10	.....

Type No.	Mfr.	1-999	1000-4999
MC411P	MOT	3.00	2.30 ....

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Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC412F	MOT	9.35	7.50	6.25	.....

Type No.	Mfr.	1-999	1000-4999
MC412P	MOT	4.95	3.75

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC413F	MOT	8.40	6.70	5.60	.....

Type No.	Mfr.	1-999	1000-4999
MC413P	MOT	3.90	2.95

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC415F	MOT	12.60	10.10	8.40	.....

Type No.	Mfr.	1-999	1000-4999
MC415P	MOT	5.50	4.20

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC416F	MOT	12.60	10.10	8.40	.....

Type No.	Mfr.	1-999	1000-4999
MC416P	MOT	5.50	4.20
MC450P	MOT	3.10	2.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC450F	MOT	5.60	4.50	3.75	.....
MC451F	MOT	5.60	4.50	3.75	.....

Type No.	Mfr.	1-999	1000-4999
MC451P	MOT	3.10	2.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC452F	MOT	5.60	4.50	3.75	.....

Type No.	Mfr.	1-999	1000-4999
MC452P	MOT	3.10	2.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC453F	MOT	7.50	6.00	5.00	.....

Type No.	Mfr.	1-999	1000-4999
MC453P	MOT	4.15	3.10

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC454F	MOT	5.60	4.50	3.75	.....

Type No.	Mfr.	1-999	1000-4999
MC454P	MOT	3.10	2.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC455F	MOT	5.60	4.50	3.75	.....

Type No.	Mfr.	1-999	1000-4999
MC455P	MOT	3.10	2.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC456F	MOT	5.60	4.50	3.75	.....

Type No.	Mfr.	1-999	1000-4999
MC456P	MOT	3.10	2.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC458F	MOT	6.35	5.10	4.25	.....

Type No.	Mfr.	1-999	1000-4999
MC458P	MOT	3.50	2.65

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC459F	MOT	5.30	4.25	3.55	.....

Type No.	Mfr.	1-999	1000-4999
MC459P	MOT	3.10	2.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC460F	MOT	4.65	3.70	3.10	.....

Type No.	Mfr.	1-999	1000-4999
MC460P	MOT	3.00	2.30

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC461F	MOT	4.65	3.70	3.10	.....

Type No.	Mfr.	1-999	1000-4999
MC461P	MOT	3.00	2.30

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC462F	MOT	6.35	5.10	4.25	.....

Type No.	Mfr.	1-999	1000-4999
MC462P	MOT	3.50	2.65

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC463F	MOT	5.60	4.50	3.75	.....

Type No.	Mfr.	1-999	1000-4999
MC463P	MOT	3.10	2.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC465F	MOT	8.45	6.80	5.65	.....

Type No.	Mfr.	1-999	1000-4999
MC465P	MOT	4.50	3.40

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC466F	MOT	8.45	6.80	5.65	.....

Type No.	Mfr.	1-999	1000-4999
MC466P	MOT	4.50	3.40

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC500F	MOT	11.25	9.00	7.50	.....
MC501F	MOT	11.25	9.00	7.50	.....
MC502F	MOT	11.25	9.00	7.50	.....
MC503F	MOT	15.00	12.00	10.00	.....
MC504F	MOT	11.25	9.00	7.50	.....
MC505F	MOT	11.25	9.00	7.50	.....
MC506F	MOT	11.25	9.00	7.50	.....

Type No.	Mfr.	1-24	25-99	100-up
MC508F	MOT	12.45	9.95	8.30

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC509F	MOT	9.00	7.20	6.00	.....

Type No.	Mfr.	1-24	25-99	100-up
MC510F	MOT	7.95	6.35	5.30

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC511F	MOT	7.95	6.36	5.30	.....

Type No.	Mfr.	1-24	25-99	100-up
MC512F	MOT	12.45	9.95	8.30

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC513F	MOT	11.25	9.00	7.50	.....
MC515F	MOT	16.85	13.50	11.25	.....
MC516F	MOT	16.85	13.50	11.25	.....

Type No.	Mfr.	1-24	25-99	100-up
MC550F	MOT	9.60	7.70	6.40
MC551F	MOT	9.60	7.70	6.40
MC552F	MOT	9.60	7.70	6.40

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC553F	MOT	12.75	10.20	8.50	.....

Type No.	Mfr.	1-24	25-99	100-up
MC554F	MOT	9.60	7.70	6.40
MC555F	MOT	9.60	7.70	6.40
MC556F	MOT	9.60	7.70	6.40

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC558F	MOT	10.65	8.50	7.10	.....
MC559F	MOT	9.00	7.20	6.00	.....
MC560F	MOT	7.95	6.35	5.30	.....
MC561F	MOT	7.95	6.35	5.30	.....
MC562F	MOT	10.65	8.50	7.10	.....
MC563F	MOT	9.60	7.70	6.40	.....
MC565F	MOT	14.40	11.50	9.60	.....
MC566F	MOT	14.40	11.50	9.60	.....
MC650G	MOT	8.65	7.60	6.90	.....
MC651F	MOT	10.65	9.35	8.50	.....

Type No.	Mfr.	1-9	10-24	25-up
MC651G	MOT	12.00	10.50	9.55

Type No.	Mfr.	1-24	25-99	100-up
MC652F	MOT	14.45	12.70	11.55
MC652G	MOT	12.00	10.50	9.95

Type No.	Mfr.	1-99	100-499	500-999	1000-up
MC660P	MOT	4.10	3.50	.....	.....
MC661P	MOT	4.10	3.50	.....	.....
MC663P	MOT	7.20	6.10	.....	.....
MC664P	MOT	4.80	4.05	.....	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC700F	MOT	3.30	2.65	2.15	.....
MC703F	MOT	3.30	2.65	2.15	.....
MC704F	MOT	3.35	2.70	2.25	.....
MC705F	MOT	4.80	3.80	3.20	.....
MC706F	MOT	4.80	3.80	3.20	.....
MC707F	MOT	3.30	2.65	2.15	.....
MC708F	MOT	2.60	2.10	1.75	.....
MC709F	MOT	2.85	2.30	1.95	.....
MC710F	MOT	2.30	1.80	1.50	.....
MC711F	MOT	2.30	1.80	1.50	.....
MC712F	MOT	2.60	2.10	1.75	.....
MC713F	MOT	3.75	3.00	2.50	.....
MC714F	MOT	3.30	2.65	2.15	.....
MC715F	MOT	3.65	2.90	2.40	.....
MC717F	MOT	3.40	2.75	2.25	.....
MC718F	MOT	2.75	2.15	1.80	.....
MC719F	MOT	3.40	2.75	2.25	.....
MC720F	MOT	6.00	4.85	4.00	.....

Type No.	Mfr.	1-999	1000-4999
MC700G	MOT	1.85	1.40
MC701G	MOT	1.85	1.40
MC702G	MOT	1.85	1.40
MC703G	MOT	1.85	1.40
MC704G	MOT	2.60	1.95
MC705G	MOT	3.00	2.25
MC706G	MOT	3.00	2.25
MC707G	MOT	1.85	1.40
MC708G	MOT	1.60	1.20
MC709G	MOT	1.85	1.40
MC710G	MOT	1.40	1.05
MC711G	MOT	1.40	1.05
MC712G	MOT	1.60	1.20
MC713G	MOT	2.75	2.05
MC714G	MOT	1.85	1.40
MC715G	MOT	2.20	1.65
MC715P	MOT	1.00	.75
MC717P	MOT	1.08	.81
MC718G	MOT	2.00	1.50
MC718P	MOT	1.00	.75
MC719P	MOT	1.08	.81

Type No.	Mfr.	1-999	1000-4999
MC720G	MOT	3.80	2.85

Integrated Circuit Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC721F	MOT	2.10	1.70	1.50	.....
MC722F	MOT	6.00	4.85	4.00	.....

Type No.	Mfr.	1-999	1000-4999
MC722P	MOT	1.35	1.00

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC723F	MOT	6.00	4.85	4.00	.....
MC724F	MOT	4.95	3.90	3.25	.....
MC725F	MOT	4.95	3.90	3.25	.....
MC726F	MOT	6.00	4.85	4.00	.....

Type No.	Mfr.	1-999	1000-4999
MC723G	MOT	3.80	2.85
MC723P	MOT	1.35	1.00
MC724P	MOT	1.08	.81
MC725P	MOT	1.08	.81
MC726G	MOT	3.80	2.85
MC726P	MOT	1.35	1.00
MC727G	MOT	2.20	1.65
MC728G	MOT	1.40	1.05
MC729G	MOT	1.85	1.40

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC727F	MOT	3.65	2.90	2.40	.....
MC728F	MOT	1.90	1.55	1.30	.....
MC729F	MOT	3.30	2.65	2.15	.....

Type No.	Mfr.	1-999	1000-4999
MC774G	MOT	3.80	2.85

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC776F	MOT	9.05	7.25	6.00	.....

Type No.	Mfr.	1-999	1000-4999
MC776P	MOT	2.10	1.60

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC778F	MOT	5.65	4.50	3.80	.....

Type No.	Mfr.	1-999	1000-4999
MC778P	MOT	2.35	1.75
MC779P	MOT	2.45	1.80

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC785F	MOT	4.95	3.90	3.25	.....

Type No.	Mfr.	1-999	1000-4999
MC785P	MOT	1.25	.95

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC786F	MOT	4.95	3.90	3.25	.....

Type No.	Mfr.	1-999	1000-4999
MC786P	MOT	1.25	.95
MC787P	MOT	2.45	1.80

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC788F	MOT	5.25	4.20	3.50	.....
MC789F	MOT	4.40	3.50	2.90	.....
MC790F	MOT	9.05	7.25	6.00	.....
MC792F	MOT	5.25	4.20	3.50	.....
MC793F	MOT	3.30	2.65	2.15	.....
MC798F	MOT	4.30	3.40	2.85	.....
MC799F	MOT	3.95	3.20	2.65	.....
MC800F	MOT	4.70	3.75	3.10	.....

Type No.	Mfr.	1-999	1000-4999
MC788P	MOT	1.35	1.00
MC789P	MOT	1.08	.81
MC790P	MOT	2.00	1.50

Type No.	Mfr.	1-999	1000-4999
MC792P	MOT	1.20	.90
MC793P	MOT	1.20	.90
MC798P	MOT	1.35	1.00
MC799G	MOT	2.25	1.70
MC799P	MOT	1.08	.81

Type No.	Mfr.	1-24	25-99	100-up
MC800G	MOT	3.60	2.90	2.40
MC801G	MOT	3.60	2.90	2.40
MC802G	MOT	3.60	2.90	2.40

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC803F	MOT	4.70	3.75	3.10	.....

Type No.	Mfr.	1-24	25-99	100-up
MC803G	MOT	3.60	2.90	2.40

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC804F	MOT	4.75	3.85	3.20	.....

Type No.	Mfr.	1-24	25-99	100-up
MC804G	MOT	3.65	2.95	2.45

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC805F	MOT	6.85	5.45	4.55	.....

Type No.	Mfr.	1-24	25-99	100-up
MC805G	MOT	5.25	4.20	3.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC806F	MOT	6.85	5.45	4.55	.....

Type No.	Mfr.	1-24	25-99	100-up
MC806G	MOT	5.25	4.20	3.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC807F	MOT	4.70	3.75	3.10	.....

Type No.	Mfr.	1-24	25-99	100-up
MC807G	MOT	3.60	2.90	2.40

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC808F	MOT	3.70	3.00	2.50	.....
MC809F	MOT	4.10	3.25	2.75	.....
MC810F	MOT	3.25	2.60	2.15	.....
MC811F	MOT	3.25	2.60	2.15	.....
MC812F	MOT	3.70	3.00	2.50	.....

Type No.	Mfr.	1-24	25-99	100-up
MC812G	MOT	3.70	3.25	2.95

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC813F	MOT	5.85	4.30	3.60	.....
MC814F	MOT	4.70	3.75	3.10	.....
MC814G	MOT	3.60	2.90	2.40	.....
MC815F	MOT	5.20	4.15	3.45	.....

Type No.	Mfr.	1-24	25-99	100-up
MC815G	MOT	3.95	3.20	2.65

Type No.	Mfr.	1-999	1000-4999
MC815P	MOT	1.15	.86

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC816F	MOT	8.60	6.90	5.70	.....

Type No.	Mfr.	1-24	25-99	100-up
MC816G	MOT	6.60	5.30	4.40

Type No.	Mfr.	1-999	1000-4999
MC816P	MOT	1.55	1.15

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC817F	MOT	4.85	3.90	3.20	.....

Type No.	Mfr.	1-999	1000-4999
MC817P	MOT	1.25	.93

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC818F	MOT	3.90	3.10	2.60	.....

Type No.	Mfr.	1-999	1000-4999
MC818P	MOT	1.15	.86

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC819F	MOT	4.85	3.90	3.20	.....

Type No.	Mfr.	1-999	1000-4999
MC819P	MOT	1.25	.93

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC820F	MOT	8.60	6.90	5.70	.....
MC821F	MOT	3.00	2.40	2.00	.....
MC822F	MOT	8.60	6.90	5.70	.....

Type No.	Mfr.	1-999	1000-4999
MC822P	MOT	1.55	1.15

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC824F	MOT	7.05	5.60	4.65	.....

Type No.	Mfr.	1-999	1000-4999
MC824P	MOT	1.25	.93

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC825F	MOT	7.05	5.60	4.65	.....

Type No.	Mfr.	1-999	1000-4999
MC825P	MOT	1.25	.93

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC826F	MOT	8.60	6.90	5.70	.....

Type No.	Mfr.	1-24	25-99	100-up
MC826G	MOT	6.60	5.30	4.40

Type No.	Mfr.	1-999	1000-4999
MC826P	MOT	1.55	1.15

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC827F	MOT	5.20	4.15	3.45	.....
MC828F	MOT	2.75	2.20	1.80	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC829F	MOT	4.70	3.75	3.10	
MC829G	MOT	3.60	2.90	2.40	
MC830F	MOT	3.60	2.90	2.40	
MC830G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC830P	MOT	1.55	1.15

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC831F	MOT	5.25	4.20	3.50	
MC831G	MOT	5.25	4.20	3.50	

Type No.	Mfr.	1-999	1000-4999
MC831P	MOT	3.00	2.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC832F	MOT	4.05	3.25	2.70	
MC832G	MOT	4.05	3.25	2.70	

Type No.	Mfr.	1-999	1000-4999
MC832P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-up
MC833F	MOT	4.70	3.80	3.15
MC833G	MOT	4.50	3.60	3.00

Type No.	Mfr.	1-999	1000-4999
MC833P	MOT	1.35	1.00

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC834F	MOT	4.35	3.50	2.90	

Type No.	Mfr.	1-999	1000-4999
MC834P	MOT	2.00	1.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC836F	MOT	4.35	3.50	2.90	

Type No.	Mfr.	1-999	1000-4999
MC836P	MOT	2.00	1.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC837F	MOT	4.35	3.50	2.90	

Type No.	Mfr.	1-999	1000-4999
MC837P	MOT	2.00	1.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC838F	MOT	15.00	12.00	10.00	

Type No.	Mfr.	1-999	1000-4999
MC838P	MOT	7.55	6.70
MC839P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC844F	MOT	4.05	3.25	2.70	
MC844G	MOT	4.05	3.25	2.70	

Type No.	Mfr.	1-999	1080-4999
MC844P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC845F	MOT	5.25	4.20	3.50	
MC845G	MOT	5.25	4.20	3.50	

Type No.	Mfr.	1-999	1000-4999
MC845P	MOT	3.00	2.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC846F	MOT	3.60	2.90	2.40	
MC846G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC846P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC848F	MOT	5.25	4.20	3.50	
MC848G	MOT	5.25	4.20	3.50	

Type No.	Mfr.	1-999	1000-4999
MC848P	MOT	3.00	2.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC849F	MOT	3.60	2.90	2.40	
MC849G	MOT	3.60	2.90	2.40	
MC850F	MOT	11.60	9.30	7.75	
MC850G	MOT	11.40	9.10	7.60	

Type No.	Mfr.	1-999	1000-4999
MC850P	MOT	4.50	3.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC851F	MOT	11.60	9.30	7.75	
MC851G	MOT	11.40	9.10	7.60	

Type No.	Mfr.	1-999	1000-4999
MC851P	MOT	4.50	3.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC852F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999
MC852P	MOT	4.75	3.60

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC853F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999
MC853P	MOT	4.75	3.60

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC855F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999
MC855P	MOT	4.75	3.60

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC856F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999
MC856P	MOT	4.75	3.60

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC861F	MOT	3.60	2.90	2.40	
MC861G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC861P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC862F	MOT	3.60	2.90	2.40	
MC862G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC862P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC863F	MOT	3.60	2.90	2.40	
MC863G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC863P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC874G	MOT	6.60	5.30	4.40	
MC876F	MOT	12.90	10.35	8.55	

Type No.	Mfr.	1-999	1000-4999
MC876P	MOT	2.40	1.85

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC878F	MOT	8.05	6.45	5.40	

Type No.	Mfr.	1-999	1000-4999
MC878P	MOT	2.70	2.00
MC879P	MOT	2.85	2.10

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC885F	MOT	7.05	5.65	4.65	

Type No.	Mfr.	1-999	1000-4999
MC885P	MOT	1.50	1.12

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC886F	MOT	7.05	5.65	4.65	

Type No.	Mfr.	1-999	1000-4999
MC886P	MOT	1.50	1.12
MC887P	MOT	2.85	2.10

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC888F	MOT	7.50	6.00	5.00	

Type No.	Mfr.	1-999	1000-4999
MC888P	MOT	1.55	1.15

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC889F	MOT	6.25	5.00	4.15	

Type No.	Mfr.	1-999	1000-4999
MC889P	MOT	1.25	.93

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC890F	MOT	12.90	10.35	8.55	

Type No.	Mfr.	1-999	1000-4999
MC890P	MOT	2.30	1.72

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC892F	MOT	7.50	6.00	5.00	

Type No.	Mfr.	1-999	1000-4999
MC892P	MOT	1.38	1.05

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC893F	MOT	4.70	3.70	3.10	

Type No.	Mfr.	1-999	1000-4999
MC893P	MOT	1.38	1.05

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC898F	MOT	6.15	4.85	4.10	

Type No.	Mfr.	1-999	1000-4999
MC898P	MOT	1.55	1.15

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC899F	MOT	5.65	4.55	3.75	
MC899G	MOT	4.35	3.50	2.90	

Type No.	Mfr.	1-999	1000-4999
MC899P	MOT	1.25	.93

Integrated Circuit Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC900F	MOT	8.80	7.00	5.85	.....

Type No.	Mfr.	1-24	25-99	100-up
MC900G	MOT	6.75	5.40	4.50
MC902G	MOT	6.75	5.40	4.50

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC903F	MOT	8.80	7.00	5.85	.....
MC904F	MOT	10.55	8.45	7.00	.....
MC905F	MOT	10.55	8.45	7.00	.....
MC906F	MOT	10.55	8.45	7.00	.....
MC907F	MOT	8.80	7.00	5.85	.....
MC908F	MOT	10.35	8.30	6.90	.....
MC909F	MOT	9.75	7.80	6.50	.....
MC910F	MOT	8.40	6.75	5.60	.....
MC911F	MOT	8.40	6.75	5.60	.....
MC912F	MOT	9.75	7.80	6.50	.....
MC913F	MOT	11.60	9.25	7.75	.....
MC915F	MOT	8.80	7.00	5.85	.....
MC916F	MOT	13.20	10.55	8.80	.....
MC917F	MOT	12.60	10.10	8.40	.....
MC918F	MOT	8.80	7.00	5.85	.....
MC919F	MOT	12.60	10.10	8.40	.....
MC920F	MOT	13.20	10.55	8.80	.....
MC921F	MOT	7.30	5.85	4.90	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC922F	MOT	13.20	10.55	8.80	.....
MC924F	MOT	13.10	10.50	8.75	.....

Type No.	Mfr.	1-24	25-99	100-up
MC925F	MOT	13.10	10.50	8.75
MC926F	MOT	13.20	10.55	8.80
MC927F	MOT	8.80	7.00	5.85
MC928F	MOT	6.20	4.95	4.10
MC929F	MOT	8.80	7.00	5.85
MC934F	MOT	7.80	6.25	5.20
MC936F	MOT	7.80	6.25	5.20
MC937F	MOT	7.80	6.25	5.20
MC938F	MOT	27.00	21.60	18.00
MC946G	MOT	6.50	5.20	4.35
MC949F	MOT	6.50	5.20	4.35
MC949G	MOT	6.50	5.20	4.35
MC950F	MOT	20.25	16.20	13.50
MC950G	MOT	18.50	14.80	12.35
MC951F	MOT	20.25	16.20	13.50
MC951G	MOT	18.50	14.80	12.35
MC952F	MOT	14.40	11.50	9.60
MC953F	MOT	14.40	11.50	9.60
MC955F	MOT	14.40	11.50	9.60
MC956F	MOT	14.40	11.50	9.60
MC961F	MOT	6.50	5.20	4.35
MC961G	MOT	6.50	5.20	4.35
MC962G	MOT	6.50	5.20	4.35
MC963F	MOT	6.50	5.20	4.35
MC963G	MOT	6.50	5.20	4.35
MC974G	MOT	10.10	8.10	6.75
MC976F	MOT	19.50	15.80	13.20
MC978F	MOT	17.40	13.85	11.60
MC985F	MOT	13.10	10.50	8.75
MC986F	MOT	13.10	10.50	8.75
MC988F	MOT	14.10	11.20	9.35
MC989F	MOT	10.55	8.40	7.00
MC990F	MOT	19.50	15.80	13.20
MC992F	MOT	14.10	11.20	9.35
MC993F	MOT	10.55	8.40	7.00
MC998F	MOT	14.60	11.70	9.75
MC999F	MOT	10.75	8.60	7.15

Type No.	Mfr.	1-999	1000-4999
MC1001P	MOT	2.65	2.05
MC1002P	MOT	2.65	2.05
MC1003P	MOT	2.65	2.05
MC1004P	MOT	2.85	2.20
MC1005P	MOT	2.85	2.20
MC1006P	MOT	2.85	2.20
MC1007P	MOT	2.85	2.20
MC1008P	MOT	2.85	2.20
MC1009P	MOT	2.85	2.20
MC1010P	MOT	3.05	2.35
MC1011P	MOT	3.05	2.35
MC1012P	MOT	3.05	2.35
MC1013P	MOT	4.55	3.50
MC1014P	MOT	5.50	4.25
MC1015P	MOT	5.50	4.25
MC1016P	MOT	5.50	4.25
MC1017P	MOT	3.45	2.65
MC1018P	MOT	3.45	2.65
MC1019P	MOT	6.70	5.15
MC1020P	MOT	3.05	2.35
MC1021P	MOT	6.70	5.15
MC1023P	MOT	8.45	6.50
MC1024P	MOT	3.00	2.30
MC1025P	MOT	2.75	2.10
MC1027P	MOT	9.60	7.40

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MC1050F	MOT	5.30	4.25	3.55	.....
MC1051F	MOT	5.30	4.25	3.55	.....
MC1052F	MOT	5.30	4.25	3.55	.....

Type No.	Mfr.	1-24	25-99	100-up
MC1110G	MOT	37.50	31.25	25.00

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MC1120P	MOT	4.90	.....	4.20	3.50
MC1124P	MOT	6.30	.....	5.40	4.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1201F	MOT	10.35	8.30	6.90	.....
MC1202F	MOT	10.35	8.30	6.90	.....
MC1203F	MOT	10.35	8.30	6.90	.....

Type No.	Mfr.	1-24	25-99	100-up
MC1204F	MOT	10.80	8.65	7.20
MC1205F	MOT	10.80	8.65	7.20
MC1206F	MOT	10.80	8.65	7.20

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1207F	MOT	10.80	8.65	7.20	.....
MC1208F	MOT	10.80	8.65	7.20	.....
MC1209F	MOT	10.80	8.65	7.20	.....

Type No.	Mfr.	1-24	25-99	100-up
MC1210	MOT	11.40	9.10	7.60
MC1211F	MOT	11.40	9.10	7.60
MC1212F	MOT	11.40	9.10	7.60
MC1213F	MOT	14.85	11.90	9.90

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1219F	MOT	22.85	18.30	15.25	.....
MC1221F	MOT	22.85	18.30	15.25	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MC1302P	MOT	4.90	.....	4.20	.....

Type No.	Mfr.	1-24	25-99	100-up
MC1429G	MOT	4.50	3.75	3.00

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1430F	MOT	15.00	12.50	10.00	.....
MC1430G	MOT	8.25	6.90	5.50	.....
MC1431F	MOT	17.25	14.35	11.50	.....
MC1431G	MOT	8.85	7.35	5.90	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC1433F	MOT	28.50	23.75	19.00	.....
MC1433G	MOT	9.75	8.10	6.50	.....
MC1440F	MOT	18.00	15.00	12.00	.....
MC1440G	MOT	12.00	10.00	8.00	.....
MC1510F	MOT	13.95	11.65	9.30	.....
MC1510G	MOT	12.00	10.00	8.00	.....
MC1511F	MOT	15.95	14.00	12.75	.....

Type No.	Mfr.	1-24	25-99	100-up
MC1511G	MOT	13.45	11.80	10.75

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1512F	MOT	18.45	16.20	14.75	.....

Type No.	Mfr.	1-24	25-99	100-up
MC1512G	MOT	15.30	13.50	12.25
MC1519G	MOT	50.00	40.00	30.00
MC1524G	MOT	70.00	55.00	40.00
MC1524G	MOT	70.00	55.00	40.00
MC1525G	MOT	12.00	10.00	8.00
MC1526G	MOT	60.00	48.00	36.00
MC1529G	MOT	11.25	9.35	7.50
MC1530	MOT	27.00	22.50	18.00
MC1531	MOT	30.00	25.00	20.00

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1530F	MOT	30.00	25.00	20.00	.....
MC1531F	MOT	33.00	27.50	22.00	.....
MC1533F	MOT	60.00	50.00	40.00	.....
MC1533G	MOT	51.00	42.50	34.00	.....
MC1540F	MOT	31.50	26.25	21.00	.....
MC1540G	MOT	36.75	30.60	24.50	.....
MC1550G	MOT	4.25	3.55	2.85	.....

Type No.	Mfr.	1-24	25-99	100-up
MC1552G	MOT	12.00	10.00	8.00
MC1553G	MOT	12.00	10.00	8.00

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1709	MOT	75.00	62.50	50.00	.....
MC1709CF	MOT	31.50	25.20	21.00	.....
MC1709CG	MOT	9.90	8.25	6.60	.....
MC1709F	MOT	69.00	57.50	46.00	.....
MC1710CF	MOT	18.00	14.40	12.00	.....
MC1710CG	MOT	8.25	6.60	5.50	.....
MC1710F	MOT	25.50	21.25	17.00	.....
MC1710G	MOT	16.50	13.75	11.00	.....
MC1711CG	MOT	13.54	11.25	9.00	.....
MC1712CF	MOT	18.00	14.40	12.00	.....
MC1712CG	MOT	9.00	7.20	6.00	.....
MC1712F	MOT	34.50	27.60	23.00	.....
MC1712G	MOT	22.50	18.00	15.00	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
NE106J	SPR	5.10	4.10	3.60	3.40
NE112J	SPR	7.65	6.15	5.40	5.10
NE116J	SPR	6.55	5.20	4.60	4.35
NE124J	SPR	10.40	8.35	7.35	6.95
NE125J	SPR	11.55	9.25	8.10	7.70
NE156J	SPR	7.65	6.15	5.40	5.10
NE161J	SPR	26.10	21.00	18.40	17.45
NE170J	SPR	7.45	5.95	5.20	4.95
NE180J	SPR	7.45	5.95	5.20	4.95
NE416J	SPR	11.25	9.00	7.90	7.50
NE424J	SPR	15.00	12.00	10.50	10.00
NE455J	SPR	12.00	9.60	8.40	8.00
NE480J	SPR	12.00	9.60	8.40	8.00

Type No.	Mfr.	1-24	25-99	100-up	
NE506K	SPR	26.25	21.00	18.50	17.50
NE518K	SPR	11.25	9.00	7.90	7.50

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Type No.	Mfr.	1-24	25-99	100-999	100-Mix
NE806J	SPR	5.20	4.20	3.80	3.50
NE808J	SPR	6.55	5.20	4.60	4.35
NE816J	SPR	6.55	5.20	4.60	4.35
NE825J	SPR	11.55	9.25	8.10	7.70
NE826J	SPR	15.00	12.00	10.50	10.00
NE840J	SPR	7.10	5.70	5.10	4.80
NE855J	SPR	7.65	6.15	5.40	5.10
NE870J	SPR	7.45	5.95	5.20	4.95
NE880J	SPR	7.45	5.95	5.20	4.95

Type No.	Mfr.	1-9	10-99	100-999	1000-up
PA107/4JPA107	GE	95.60	63.75	42.50	
PA113/4JPA113	GE	15.15	10.10	6.75	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
PA189	GE	3.60		2.40	
PA-222	GE	3.70		2.45	
PA223	GE	7.05		4.70	
PA230	GE	3.30		2.20	1.98
PA237	GE	3.98		2.65	2.38
PA424	GE	3.60		2.40	

Type No.	Mfr.	1-49	50-999
RC702D	RAY	9.45	5.20
RC702Q	RAY	9.45	5.20
RC702T	RAY	9.45	5.20
RC709D	RAY	13.50	7.40
RC709Q	RAY	13.50	7.40
RC709T	RAY	13.50	7.40
RC710D	RAY	9.45	5.20
RC710Q	RAY	9.45	5.20
RC710T	RAY	9.45	5.20
RC711D	RAY	13.50	7.40
RC711Q	RAY	13.50	7.40
RC711T	RAY	13.50	7.40
RF12D	RAY	6.96	5.58
RF12K	RAY	6.96	5.58
RF13D	RAY	5.27	4.22
RF13K	RAY	5.27	4.22
RF22D	RAY	9.45	7.52
RF22F	RAY	9.45	7.52
RF23D	RAY	6.94	5.55
RF23K	RAY	6.94	5.55
RF32D	RAY	9.45	7.52
RF32K	RAY	9.45	7.52
RF33D	RAY	6.94	5.55
RF33K	RAY	6.94	5.55
RF52D	RAY	10.52	8.42
RF52K	RAY	10.52	8.42
RF53D	RAY	7.88	6.31
RF53K	RAY	7.88	6.31
RF62D	RAY	10.52	8.42
RF62K	RAY	10.52	8.42
RF63D	RAY	7.88	6.31
RF63K	RAY	7.88	6.31
RF252D	RAY	11.80	9.40
RF252K	RAY	11.80	9.40
RF253D	RAY	8.70	6.95
RF253K	RAY	8.70	6.95
RF262D	RAY	11.80	9.40
RF262K	RAY	11.80	9.40
RF263D	RAY	8.70	6.95
RF263K	RAY	8.70	6.95
RG42D	RAY	6.96	5.58
RG42K	RAY	6.96	5.58
RG43D	RAY	5.27	4.22
RG43K	RAY	5.27	4.22
RG52D	RAY	6.96	5.58
RG52K	RAY	6.96	5.58
RG53D	RAY	5.27	4.22
RG53K	RAY	5.27	4.22
RG62D	RAY	6.96	5.58
RG62K	RAY	6.96	5.58
RG63D	RAY	5.27	4.22
RG63K	RAY	5.27	4.22
RG72K	RAY	9.45	7.52
RG73D	RAY	6.94	5.55
RG73K	RAY	6.94	5.55
RG92D	RAY	9.45	7.52
RG92K	RAY	9.45	7.52
RG93D	RAY	6.94	5.55
RG93K	RAY	6.94	5.55
RG102D	RAY	6.96	5.58
RG102K	RAY	6.96	5.58
RG103D	RAY	5.27	4.22
RG103K	RAY	5.27	4.22
RG112D	RAY	6.96	5.58
RG112K	RAY	6.96	5.58
RG113D	RAY	5.27	4.22
RG113K	RAY	5.27	4.22
RG122D	RAY	6.96	5.58
RG122K	RAY	6.96	5.58
RG123D	RAY	5.27	4.22
RG123K	RAY	5.27	4.22
RG132D	RAY	8.55	6.88
RG132K	RAY	8.55	6.88
RG133D	RAY	6.45	5.16
RG133K	RAY	6.45	5.16
RG142D	RAY	7.80	6.28
RG142K	RAY	7.80	6.28
RG143D	RAY	5.80	4.64
RG143K	RAY	5.80	4.64
RG152D	RAY	4.99	3.99
RG152K	RAY	4.99	3.99
RG153D	RAY	8.55	6.88
RG153K	RAY	8.55	6.88
RG162D	RAY	6.45	5.16
RG162K	RAY	6.45	5.16
RG163D	RAY	4.20	3.36
RG163K	RAY	4.20	3.36
RG172D	RAY	4.20	3.36
RG172K	RAY	4.20	3.36
RG173D	RAY	4.20	3.36
RG173K	RAY	4.20	3.36
RG182D	RAY	4.20	3.36
RG182K	RAY	4.20	3.36
RG183D	RAY	4.20	3.36
RG183K	RAY	4.20	3.36
RG192D	RAY	7.80	6.28
RG192K	RAY	7.80	6.28
RG193D	RAY	5.80	4.64
RG193K	RAY	5.80	4.64
RG212D	RAY	6.96	5.58
RG212K	RAY	6.96	5.58
RG213D	RAY	5.27	4.22
RG213K	RAY	5.27	4.22
RG222D	RAY	7.80	6.28
RG222K	RAY	7.80	6.28
RG223D	RAY	5.80	4.64
RG223K	RAY	5.80	4.64
RG232D	RAY	4.99	3.99
RG232K	RAY	4.99	3.99
RG233D	RAY	4.99	3.99
RG233K	RAY	4.99	3.99
RG242D	RAY	6.96	5.58
RG242K	RAY	6.96	5.58
RG243D	RAY	5.27	4.22
RG243K	RAY	5.27	4.22
RG262D	RAY	6.96	5.58
RG262K	RAY	6.96	5.58
RG263D	RAY	5.27	4.22
RG263K	RAY	5.27	4.22
RG272D	RAY	4.20	3.36
RG272K	RAY	4.20	3.36
RG273D	RAY	4.20	3.36
RG273K	RAY	4.20	3.36

Type No.	Mfr.	1-49	50-999	1000-up
RM201G	RAY	6.35	5.08	
RM202G	RAY	6.35	5.08	
RM206G	RAY	7.03	5.63	
RM210G	RAY	7.63	6.11	
RM211G	RAY	6.35	5.08	
RM212G	RAY	6.35	5.08	
RM213G	RAY	8.90	7.12	
RM214G	RAY	6.35	5.09	
RM215G	RAY	8.90	7.12	
RM217G	RAY	5.68	4.54	
RM220G	RAY	7.63	6.11	
RM221G	RAY	6.35	5.08	
RM222G	RAY	6.35	5.08	
RM224G	RAY	6.35	5.08	
RM226G	RAY	7.03	5.63	
RM227G	RAY	5.68	4.54	
RM231G	RAY	6.35	5.08	
RM234G	RAY	6.35	5.08	
RM236G	RAY	7.03	5.63	
RM241G	RAY	6.35	5.08	
RM246G	RAY	7.03	5.63	
RM261G	RAY	6.35	5.08	
RM266G	RAY	7.03	5.63	
RM286G	RAY	7.63	6.11	
RM296G	RAY	7.63	6.11	
RM702Q	RAY	18.90	10.40	
RM702T	RAY	18.90	10.40	
RM709Q	RAY	27.00	14.80	
RM709T	RAY	27.00	14.80	
RM710Q	RAY	18.90	10.40	
RM710T	RAY	18.90	10.40	

Type No.	Mfr.	1-49	50-999	1000-up
RM711Q	RAY	27.00	14.80	
RM711T	RAY	27.00	14.80	
RM930D Pg-in pk	RAY	6.35	5.08	
RM930J Flat pk	RAY	6.35	5.08	
RM930T TO-5 pk	RAY	6.35	5.08	
RM932D Pg-in pk	RAY	7.64	6.11	
RM932J Flat pk	RAY	7.64	6.11	
RM932T TO-5 pk	RAY	7.64	6.11	
RM933D Pg-in pk	RAY	5.68	4.54	
RM933J Flat pk	RAY	5.68	4.54	
RM933T TO-5 pk	RAY	5.68	4.54	
RM944D Pg-in pk	RAY	7.63	6.11	
RM944J Flat pk	RAY	7.63	6.11	
RM944T TO-5 pk	RAY	7.63	6.11	
RM945D Pg-in pk	RAY	8.90	7.12	
RM945J Flat pk	RAY	8.90	7.12	
RM945T TO-5 pk	RAY	8.90	7.12	
RM946D Pg-in pk	RAY	7.03	5.63	
RM946J Flat pk	RAY	7.03	5.63	
RM946T TO-5 pk	RAY	7.03	5.63	
RM948D Pg-in pk	RAY	8.90	7.12	
RM948J Flat pk	RAY	8.90	7.12	
RM948T TO-5 pk	RAY	8.90	7.12	
RM950D Pg-in pk	RAY	12.00	9.60	
RM950J Flat pk	RAY	12.00	9.60	
RM950T TO-5 pk	RAY	12.00	9.60	
RM951D Pg-in pk	RAY	12.00	9.60	
RM951J Flat pk	RAY	12.00	9.60	
RM951T TO-5 pk	RAY	12.00	9.60	
RM962D Pg-in pk	RAY	7.03	5.63	
RM962J Flat pk	RAY	7.03	5.63	
RM962T TO-5 pk	RAY	7.03	5.63	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
RM3002	RAY	25.70		16.40	
RM5008	RAY	26.00		1800	
RM5008D	RAY	35.00		24.00	

Type No.	Mfr.	1-49	50-999	1000-up
RM6172G	RAY	7.06	5.65	
RM6175G	RAY	9.90	7.92	
RM6176G	RAY	9.90	7.92	
RM6178G	RAY	7.81	6.25	
RM6179G	RAY	7.81	6.25	
RM6180G	RAY	7.81	6.25	
RM6181G	RAY	7.81	6.25	
RM6184G	RAY	7.81	6.25	
RM6185G	RAY	7.81	6.25	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
RM8007	RAY	22.00		15.00	
RM8007D	RAY	31.00		21.00	
RN1020	RAY	5.25		3.55	
RN1030	RAY	4.80		3.25	
RN1030A	RAY	5.70		3.85	
RN3020	RAY	4.80		3.25	
RN3030	RAY	3.95		2.65	

Integrated Circuit Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-24	25-99	100-up	
SA-10	SYL	35.90	28.60	24.20	
SA-11	SYL	26.10	20.80	17.60	

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
SA20-03	SYL	10.05	8.00	6.80	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
SE106J	SPR	7.30	5.70	5.10	4.85
SE111J	SPR	15.50	12.25	10.80	10.20
SE112J	SPR	15.50	12.25	10.80	10.20
SE116J	SPR	13.35	10.70	9.40	8.90
SE124J	SPR	17.85	14.30	12.50	11.90
SE125J	SPR	19.80	15.80	13.90	13.20
SE155J	SPR	15.50	12.25	10.80	10.20
SE156J	SPR	15.50	12.25	10.80	10.20
SE161J	SPR	59.90	48.00	40.20	39.95
SE170J	SPR	14.80	11.90	10.40	9.90
SE180J	SPR	14.80	11.90	10.40	9.90
SE416J	SPR	22.50	17.95	15.80	14.95
SE424J	SPR	30.00	24.00	21.00	20.00
SE455J	SPR	23.20	18.55	16.25	15.45
SE480J	SPR	23.20	18.55	16.25	15.45

Type No.	Mfr.	1-24	25-99	100-up	
SE501G	SPR	37.40	29.95	26.15	24.90
SE501K	SPR	34.40	27.50	24.00	22.90

Type No.	Mfr.	1-24	25-99	100-up	
SE506K	SPR	52.50	42.00	36.75	35.00
SE518K	SPR	22.50	18.00	15.75	15.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SE806J	SPR	10.40	8.40	7.50	7.00
SE808J	SPR	13.35	10.70	9.40	8.90
SE816J	SPR	13.35	10.70	9.40	8.90
SE825J	SPR	19.80	15.80	13.90	13.20
SE826J	SPR	30.00	24.00	21.00	20.00
SE840J	SPR	14.20	11.40	10.20	9.60
SE855J	SPR	15.50	12.25	10.80	10.20
SE870J	SPR	14.80	11.90	10.40	9.90
SE880J	SPR	14.80	11.90	10.40	9.90

Type No.	Mfr.	1-24	25-99	100-up	
SE1280A	SPR	24.00	19.20	14.40	
SE1281A	SPR	24.00	19.20	14.40	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SE8280J	SPR	49.00	39.30	32.70	
SE8416J	SPR	6.60	5.30	4.60	
SE8417J	SPR	6.60	5.30	4.60	
SE8424J	SPR	13.10	10.50	9.20	
SE8440J	SPR	6.60	5.30	4.60	
SE8455J	SPR	8.00	6.40	5.60	
SE8480J	SPR	6.60	5.30	4.60	
SE8826J	SPR	13.10	10.50	9.20	
SE8806J	SPR	6.00	4.80	4.00	
SE8808J	SPR	6.60	5.30	4.40	
SE8816J	SPR	6.60	5.30	4.40	
SE8825J	SPR	10.60	8.45	7.05	
SE8828J	SPR	12.90	10.30	8.40	
SE8840J	SPR	6.60	5.30	4.40	
SE8855J	SPR	7.30	5.80	4.85	
SE8870J	SPR	6.60	5.30	4.40	
SE8880J	SPR	6.60	5.30	4.40	
SF10-02	SYL	10.85	8.70	7.45	
SF10-03	SYL	10.85	8.70	6.85	
SF11-02	SYL	9.95	8.00	6.90	
SF11-03	SYL	9.95	8.00	6.80	
SF12-02	SYL	7.05	5.65	4.80	
SF12-03	SYL	7.05	5.65	4.80	
SF13-02	SYL	5.90	4.70	4.00	
SF13-03	SYL	5.90	4.70	4.00	
SF20-02	SYL	13.80	11.00	9.35	
SF20-03	SYL	13.80	11.00	9.35	
SF21-02	SYL	12.65	10.10	8.60	

Type No.	Mfr.	1-24	25-99	100-up	
SF21-03	SYL	12.65	10.10	8.60	
SF22-02	SYL	8.90	7.10	6.05	
SF22-03	SYL	8.90	7.10	6.05	
SF23-02	SYL	7.45	5.95	5.05	
SF23-03	SYL	7.45	5.95	5.05	
SF30-02	SYL	17.20	13.75	11.65	
SF30-03	SYL	17.20	13.75	11.65	
SF31-02	SYL	15.75	12.55	10.60	
SF31-03	SYL	15.75	12.55	10.60	
SF32-02	SYL	11.20	8.95	7.55	
SF32-03	SYL	11.20	8.95	7.55	
SF33-02	SYL	9.30	7.40	6.25	
SF33-03	SYL	9.30	7.40	6.25	
SF50-02	SYL	17.20	13.75	11.65	
SF50-03	SYL	17.20	13.75	11.65	

Type No.	Mfr.	1-99	100-999	1000-4999	
SF51-02	SYL	15.75	12.55	10.60	
SF51-03	SYL	15.75	12.55	10.60	
SF53-02	SYL	9.30	7.40	6.25	
SF53-03	SYL	9.30	7.40	6.25	

Type No.	Mfr.	1-24	25-99	100-up	
SF52-02	SYL	11.20	8.95	7.55	
SF52-03	SYL	11.20	8.95	7.55	
SF60-02	SYL	17.20	13.75	11.65	
SF60-03	SYL	17.20	13.75	11.65	
SF62-02	SYL	11.20	8.95	7.55	
SF62-03	SYL	11.20	8.95	7.55	

Type No.	Mfr.	1-99	100-999	1000-4999	
SF61-02	SYL	15.75	12.55	10.60	
SF61-03	SYL	15.75	12.55	10.60	
SF63-02	SYL	9.30	7.40	6.25	
SF63-03	SYL	9.30	7.40	6.25	

Type No.	Mfr.	1-24	25-99	100-up	
SF100-02	SYL	22.20	17.70	15.00	
SF100-03	SYL	22.20	17.70	15.00	
SF101-02	SYL	20.40	16.25	13.75	
SF101-03	SYL	20.40	16.25	13.75	
SF102-02	SYL	14.40	11.50	9.70	
SF102-03	SYL	14.40	11.50	9.70	
SF103-02	SYL	12.00	9.60	8.10	
SF103-03	SYL	12.00	9.60	8.10	
SF110-02	SYL	22.20	17.70	15.00	
SF110-03	SYL	22.20	17.70	15.00	
SF111-02	SYL	20.40	16.25	13.75	
SF111-03	SYL	20.40	16.25	13.75	
SF112-02	SYL	14.40	11.50	9.70	
SF112-03	SYL	14.40	11.50	9.70	
SF113-02	SYL	12.00	9.60	8.10	
SF113-03	SYL	12.00	9.60	8.10	
SF120-02	SYL	28.45	22.80	19.20	
SF120-03	SYL	28.45	22.80	19.20	
SF121-02	SYL	26.25	20.95	17.75	
SF121-03	SYL	26.25	20.95	17.75	
SF122-02	SYL	18.50	14.80	12.50	
SF122-03	SYL	18.50	14.80	12.50	
SF123-02	SYL	15.45	12.30	10.40	
SF123-03	SYL	15.45	12.30	10.40	
SF130-02	SYL	28.45	22.80	19.20	
SF131-02	SYL	26.25	20.95	17.75	
SF131-03	SYL	26.25	20.95	17.75	
SF133-02	SYL	15.45	12.30	10.40	
SF133-03	SYL	15.45	12.30	10.40	
SF130-03	SYL	28.45	22.80	19.20	
SF132-02	SYL	18.50	14.80	12.50	
SF132-03	SYL	18.50	14.80	12.50	
SF200-02	SYL	19.00	15.15	12.85	
SF200-03	SYL	19.00	15.15	12.85	
SF201-02	SYL	17.50	14.00	11.85	
SF201-03	SYL	17.50	14.00	11.85	
SF202-02	SYL	12.35	9.85	8.35	
SF202-03	SYL	12.35	9.85	8.35	
SF203-02	SYL	10.25	8.20	6.95	
SF203-03	SYL	10.25	8.20	6.95	
SF210-02	SYL	19.00	15.15	12.85	
SF210-03	SYL	19.00	15.15	12.85	

Type No.	Mfr.	1-24	25-99	100-up	
SF211-02	SYL	17.50	14.00	11.85	
SF211-03	SYL	17.50	14.00	11.85	
SF212-02	SYL	12.35	9.85	8.35	
SF212-03	SYL	12.35	9.85	8.35	
SF213-02	SYL	10.25	8.20	6.95	
SF213-03	SYL	10.25	8.20	6.95	
SF250-02	SYL	19.00	15.15	12.85	
SF250-03	SYL	19.00	15.15	12.85	
SF251-02	SYL	17.50	14.00	11.85	
SF251-03	SYL	17.50	14.00	11.85	
SF252-02	SYL	12.35	9.85	8.35	
SF252-03	SYL	12.35	9.85	8.35	
SF253-02	SYL	8.20	7.05	6.30	
SF253-03	SYL	8.20	7.05	6.30	
SF260-02	SYL	19.00	15.15	12.85	
SF260-03	SYL	19.00	15.15	12.85	
SF261-02	SYL	14.00	12.05	10.75	
SF261-03	SYL	14.00	12.05	10.75	
SF262-02	SYL	12.35	9.85	8.35	
SF262-03	SYL	12.35	9.85	8.35	
SF263-02	SYL	8.20	7.05	6.30	
SF263-03	SYL	8.20	7.05	6.30	
SFF3A	SYL	50.00	42.85		
SG40-02	SYL	10.85	8.70	7.45	
SG40-03	SYL	10.85	8.70	7.45	
SG41-02	SYL	9.95	8.00	6.80	
SG41-03	SYL	9.95	8.00	6.80	
SG42-02	SYL	7.05	5.65	4.80	
SG42-03	SYL	7.05	5.65	4.80	
SG43-02	SYL	5.90	4.70	4.00	
SG43-03	SYL	5.90	4.70	4.00	
SG50-02	SYL	10.85	8.70	7.45	
SG50-03	SYL	10.85	8.70	7.45	
SG51-02	SYL	9.95	8.00	6.80	
SG51-03	SYL	9.95	8.00	6.80	
SG52-02	SYL	7.05	5.65	4.80	
SG52-03	SYL	7.05	5.65	4.80	
SG53-02	SYL	5.90	4.70	4.00	
SG53-03	SYL	5.90	4.70	4.00	
SG60-02	SYL	10.85	8.70	7.45	
SG60-03	SYL	10.85	8.70	7.45	
SG61-02	SSYL	9.95	8.00	6.80	
SG61-03	SSYL	9.95	8.00	6.80	
SG62-02	SYL	7.05	5.65	4.80	
SG62-03	SYL	7.05	5.65	4.80	
SG63-02	SYL	5.90	4.70	4.00	
SG63-03	SYL	5.90	4.70	4.00	
SFF3A	SYL	50.00	42.85		
SG70-02	SYL	13.80	11.00	9.35	
SG70-03	SYL	13.80	11.00	9.35	
SG71-02	SYL	12.65	10.10	8.60	
SG71-03	SYL	12.65	10.10	8.60	
SG72-02	SYL	8.90	7.10	6.05	
SG72-03	SYL	8.90	7.10	6.05	
SG73-02	SYL	7.45	5.95	5.05	
SG73-03	SYL	7.45	5.95	5.05	
SG80-02	SYL	13.80	11.00	9.35	
SG80-03	SYL	13.80	11.00	9.35	
SG81-02	SYL	12.65	10.10	8.60	
SG81-03	SYL	12.65	10.10	8.60	
SG82-02	SYL	8.90	7.10	6.05	
SG82-03	SYL	8.90	7.10	6.05	
SG83-02	SYL	7.45	5.95	5.05	
SG83-03	SYL	7.45	5.95	5.05	
SG90-02	SYL	13.80	11.00	9.35	
SG90-03	SYL	13.80	11.00	9.35	
SG91-02	SYL	12.65	10.10	8.60	
SG91-03	SYL	12.65	10.10	8.60	
SG92-02	SYL	8.90	7.10	6.05	
SG92-03	SYL	8.90	7.10	6.05	
SG93-02	SYL	7.45	5.95	5.05	
SG93-03	SYL	7.45	5.95	5.05	
SG100-02	SYL	12.40	9.90	8.35	
SG100-03	SYL	12.40	9.90	8.35	
SG101-02	SYL	10.50	8.40	7.10	
SG101-03	SYL	10.50	8.40	7.10	
SG102-02	SYL	9.30	7.40	6.25	
SG102-03	SYL	9.30	7.40	6.25	
SG103-02	SYL	6.20	4.95	4.20	
SG103-03	SYL	6.20	4.95	4.20	

Type No.	Mfr.	1-24	25-99	100-up
SG110-02	SYL	12.40	9.90	8.35
SG110-03	SYL	12.40	9.90	8.35
SG111-02	SYL	10.50	8.40	7.10
SG111-03	SYL	10.50	8.40	7.10
SG112-02	SYL	9.30	7.40	6.25
SG112-03	SYL	9.30	7.40	6.25
SG113-02	SYL	6.20	4.95	4.20
SG113-03	SYL	6.20	4.95	4.20
SG120-02	SYL	10.85	8.70	7.45
SG120-03	SYL	10.85	8.70	7.45
SG121-02	SYL	9.95	8.00	6.80
SG121-03	SYL	9.95	8.00	6.80
SG122-02	SYL	7.05	5.65	4.80
SG122-03	SYL	7.05	5.65	4.80
SG123-02	SYL	5.90	4.70	4.00
SG123-03	SYL	5.90	4.70	4.00
SG130-02	SYL	13.80	11.00	9.35
SG130-03	SYL	13.80	11.00	9.35
SG131-02	SYL	12.65	10.10	8.60
SG131-03	SYL	12.65	10.10	8.60
SG132-02	SYL	8.90	7.10	6.05
SG132-03	SYL	8.90	7.10	6.05
SG133-02	SYL	7.45	5.95	5.05
SG133-03	SYL	7.45	5.95	5.05
SG140-02	SYL	10.85	8.70	7.45
SG140-03	SYL	10.85	8.70	7.45
SG141-02	SYL	9.95	8.00	6.80
SG141-03	SYL	9.95	8.00	6.80
SG142-02	SYL	7.05	5.65	4.80
SG142-03	SYL	7.05	5.65	4.80
SG143-02	SYL	5.90	4.70	4.00
SG143-03	SYL	5.90	4.70	4.00
SG150-02	SYL	8.35	6.65	5.65
SG150-03	SYL	8.35	6.65	5.65
SG151-02	SYL	8.35	6.65	5.65
SG151-03	SYL	8.35	6.65	5.65
SG152-02	SYL	4.90	3.90	3.35
SG152-03	SYL	4.90	3.90	3.35
SG153-02	SYL	4.90	3.90	3.35
SG153-03	SYL	4.90	3.90	3.35
SG160-02	SYL	13.80	11.00	9.35
SG160-03	SYL	13.80	11.00	9.35
SG161-02	SYL	12.65	10.10	8.60
SG161-03	SYL	12.65	10.10	8.60
SG162-02	SYL	8.90	7.10	6.05
SG162-03	SYL	8.90	7.10	6.05
SG163-02	SYL	7.45	5.95	5.05
SG163-03	SYL	7.45	5.95	5.05
SG170-02	SYL	8.35	6.65	5.65
SG170-03	SYL	8.35	6.65	5.65
SG171-02	SYL	8.35	6.65	5.65
SG171-03	SYL	8.35	6.65	5.65
SG172-02	SYL	4.90	3.90	3.35
SG172-03	SYL	4.90	3.90	3.35
SG173-02	SYL	4.90	3.90	3.35
SG173-03	SYL	4.90	3.90	3.35
SG180-02	SYL	8.35	6.65	5.65
SG180-03	SYL	8.35	6.65	5.65
SG181-02	SYL	8.35	6.65	5.65
SG181-03	SYL	8.35	6.65	5.65
SG182-02	SYL	4.90	3.90	3.35
SG182-03	SYL	4.90	3.90	3.35
SG183-02	SYL	4.90	3.90	3.35
SG183-03	SYL	4.90	3.90	3.35
SG190-02	SYL	10.85	8.70	7.45
SG190-03	SYL	10.85	8.70	7.45
SG191-02	SYL	9.95	8.00	6.80
SG191-03	SYL	9.95	8.00	6.80
SG192-02	SYL	7.05	5.65	4.80
SG192-03	SYL	7.05	5.65	4.80
SG193-02	SYL	5.90	4.70	4.00
SG193-03	SYL	5.90	4.70	4.00
SG200-02	SYL	11.50	9.20	7.80
SG200-03	SYL	11.50	9.20	7.80
SG201-02	SYL	10.50	8.40	7.10
SG201-03	SYL	10.50	8.40	7.10
SG202-02	SYL	7.45	5.95	5.05
SG202-03	SYL	7.45	5.95	5.05
SG203-02	SYL	6.20	4.95	4.20
SG203-03	SYL	6.20	4.95	4.20
SG210-02	SYL	11.50	9.20	7.80
SG210-03	SYL	11.50	9.20	7.80
SG211-02	SYL	10.50	8.40	7.10
SG211-03	SYL	10.50	8.40	7.10
SG212-02	SYL	7.45	5.95	5.05
SG212-03	SYL	7.45	5.95	5.05
SG213-02	SYL	6.20	4.95	4.20
SG213-03	SYL	6.20	4.95	4.20
SG220-02	SYL	11.50	9.20	7.80
SG220-03	SYL	11.50	9.20	7.80
SG221-02	SYL	10.50	8.40	7.10
SG221-03	SYL	10.50	8.40	7.10
SG222-02	SYL	7.45	5.95	5.05
SG222-03	SYL	7.45	5.95	5.05
SG223-02	SYL	6.20	4.85	4.20
SG223-03	SYL	6.85	5.45	4.60
SG230-02	SYL	8.70	6.95	5.90
SG230-03	SYL	8.70	6.95	5.90
SG231-02	SYL	8.70	6.95	5.90
SG231-03	SYL	8.70	6.95	5.90
SG232-02	SYL	5.15	4.10	3.45
SG232-03	SYL	5.15	4.10	3.45
SG233-02	SYL	5.15	4.10	3.45
SG233-03	SYL	5.15	4.10	3.45
SG240-02	SYL	11.50	9.20	7.80
SG240-03	SYL	11.50	9.20	7.80
SG241-02	SYL	10.50	8.40	7.10
SG241-03	SYL	10.50	8.40	7.10
SG242-02	SYL	7.45	5.95	5.05
SG242-03	SYL	7.45	5.95	5.05
SG243-02	SYL	6.20	4.95	4.20
SG243-03	SYL	6.20	4.95	4.20
SG250-02	SYL	11.50	9.20	7.80
SG250-03	SYL	11.50	9.20	7.80
SG251-03	SYL	10.50	8.40	7.10
SG251/2	SYL	10.50	8.40	7.10
SG252-02	SYL	7.45	5.95	5.05
SG252-03	SYL	7.45	5.95	5.05
SG253-02	SYL	6.20	4.95	4.20
SG253-03	SYL	6.20	4.95	4.20
SG260-02	SYL	11.50	9.20	7.80
SG260-03	SYL	11.50	9.20	7.80
SG261-02	SYL	10.50	8.40	7.10
SG261-03	SYL	10.50	8.40	7.10
SG262-02	SYL	7.45	5.95	5.05
SG262-03	SYL	7.45	5.95	5.05
SG263-02	SYL	6.20	4.95	4.20
SG263-03	SYL	6.20	4.95	4.20
SG270-02	SYL	8.70	6.95	5.90
SG270-03	SYL	8.70	6.95	5.90
SG271-02	SYL	8.70	6.95	5.90
SG271-03	SYL	8.70	6.95	5.90
SG272-02	SYL	5.15	4.10	3.45
SG272-03	SYL	5.15	4.10	3.45
SG273-02	SYL	5.15	4.10	3.45
SG273-03	SYL	5.15	4.10	3.45
SG280-02	SYL	10.85	8.70	7.45
SG280-03	SYL	10.85	8.70	7.45
SG281-02	SYL	9.95	8.00	6.80
SG281-03	SYL	9.95	8.00	6.80
SG282-02	SYL	7.05	5.65	4.80
SG282-03	SYL	7.05	5.65	4.80
SG283-02	SYL	5.90	4.70	4.00
SG283-03	SYL	5.90	4.70	4.00
SG290-02	SYL	8.35	6.65	5.65
SG290-03	SYL	8.35	6.65	5.65
SG291-02	SYL	8.35	6.65	5.65
SG291-03	SYL	8.35	6.65	5.65
SG292-02	SYL	4.90	3.90	3.35
SG292-03	SYL	4.90	3.90	3.35
SG293-02	SYL	4.90	3.90	3.35
SG293-03	SYL	4.90	3.90	3.35
SG300-02	SYL	11.50	9.20	7.80
SG300-03	SYL	11.50	9.20	7.80
SG301-02	SYL	10.50	8.40	7.10
SG301-03	SYL	10.50	8.40	7.10
SG303-02	SYL	6.20	4.95	4.20
SG303-03	SYL	6.20	4.95	4.20
SG302-02	SYL	7.45	5.95	5.05
SG302-03	SYL	7.45	5.95	5.05
SG310-02	SYL	15.10	12.05	10.25
SG310-03	SYL	15.10	12.05	10.25
SG311-02	SYL	13.90	11.05	9.45
SG311-03	SYL	13.90	11.05	9.45
SG312-02	SYL	9.80	7.80	6.65
SG312-03	SYL	9.80	7.80	6.65
SG313-02	SYL	8.25	6.60	5.60
SG313-03	SYL	8.25	6.60	5.60
SM10-02	SYL	22.65	18.10	15.30
SM10-03	SYL	22.65	18.10	15.30
SM11-02	SYL	20.80	16.60	14.05
SM11-03	SYL	20.80	16.60	14.05
SM12-02	SYL	14.70	11.70	9.90
SM12-03	SYL	14.70	11.70	9.90
SM13-02	SYL	12.25	9.75	8.25
SM13-03	SYL	12.25	9.75	8.25
SM20-02	SYL	22.65	18.10	15.30
SM20-03	SYL	22.65	18.10	15.30
SM21-02	SYL	20.80	16.60	14.05
SM21-03	SYL	20.80	16.60	14.05
SM22-02	SYL	14.70	11.70	9.90
SM22-03	SYL	14.70	11.70	9.90
SM23-02	SYL	12.25	9.75	8.25
SM23-03	SYL	12.25	9.75	8.25
SM30-02	SYL	22.65	18.10	15.30
SM30-03	SYL	22.65	18.10	15.30
SM31-02	SYL	20.80	16.60	14.05
SM31-03	SYL	20.80	16.60	14.05
SM32-02	SYL	14.70	11.70	9.90
SM32-03	SYL	14.70	11.70	9.90
SM33-02	SYL	12.25	9.75	8.25
SM33-03	SYL	12.25	9.75	8.25
SM40-02	SYL	17.35	13.85	11.75
SM40-03	SYL	17.35	13.85	11.75
SM41-02	SYL	17.35	13.85	11.75
SM41-03	SYL	17.35	13.85	11.75
SM42-02	SYL	10.20	8.15	6.90
SM42-03	SYL	10.20	8.15	6.90
SM43-02	SYL	10.20	8.15	6.90
SM43-03	SYL	10.20	8.15	6.90
SM50-02	SYL	36.20	28.90	24.45
SM50-03	SYL	36.20	28.90	24.45
SM51-02	SYL	33.25	26.55	22.45
SM51-03	SYL	33.25	26.55	22.45
SM52-02	SYL	23.50	18.75	15.85
SM52-03	SYL	23.50	18.75	15.85
SM53-02	SYL	19.60	15.60	13.20
SM53-03	SYL	19.60	15.60	13.20
SM60-02	SYL	25.70	20.50	17.35
SM60-03	SYL	25.70	20.50	17.35
SM61-02	SYL	23.55	18.80	15.90
SM61-03	SYL	23.55	18.80	15.90
SM62-02	SYL	16.55	13.30	11.25
SM62-03	SYL	16.55	13.30	11.25
SM63-02	SYL	13.85	11.05	9.35
SM63-03	SYL	13.85	11.05	9.35
SM70-02	SYL	25.70	20.50	17.35
SM70-03	SYL	25.70	20.50	17.35
SM71-02	SYL	23.55	18.80	15.90
SM71-03	SYL	23.55	18.80	15.90
SM72-02	SYL	16.65	13.30	11.25
SM72-03	SYL	16.65	13.30	11.25
SM73-02	SYL	13.85	11.05	9.35
SM73-03	SYL	13.85	11.05	9.35
SM80-02	SYL	73.35	58.50	50.00
SM80-03	SYL	73.35	58.50	50.00
SM81-02	SYL	62.35	49.75	42.50
SM81-03	SYL	62.35	49.75	42.50
SM82-02	SYL	51.25	40.95	35.00
SM82-03	SYL	51.25	40.95	35.00
SM83-02	SYL	36.70	39.25	25.00
SM83-03	SYL	36.70	39.25	25.00

Type No.	Mfr.	1-24	25-99	100-up
SN006A	TI	6.50	6.00	
SN14-206	TI	6.50	5.15	4.40
SN14-210	TI	6.50	5.15	4.40
SN14-213	TI	8.10	6.45	5.50
SN14-215	TI	8.10	6.45	5.50
SN14-216	TI	6.50	5.15	4.40
SN14-224	TI	5.85	4.65	3.95
SN14-226	TI	6.50	5.15	4.40
SN14-227	TI	4.55	3.60	3.10
SN14-231	TI	5.85	4.65	3.95
SN14-236	TI	6.50	5.15	4.40
SN14-261	TI	5.85	4.65	3.95
SN14-266	TI	6.50	5.15	4.40
SN14-286	TI	9.10	7.20	6.15
SN14-296	TI	9.10	7.20	6.15
SN14-306	TI	5.35	4.25	3.65
SN14-310	TI	5.35	4.25	3.65
SN14-313	TI	6.80	5.40	4.60
SN14-315	TI	6.80	5.40	4.60
SN14-316	TI	5.35	4.25	3.65
SN14-324	TI	4.80	3.80	3.25
SN14-326	TI	5.35	4.25	3.65
SN14-327	TI	3.70	2.95	2.55
SN14-331	TI	4.80	3.80	3.25
SN14-336	TI	5.35	4.25	3.65
SN14-346	TI	5.35	4.25	3.65
SN14-361	TI	4.80	3.80	3.25
SN14-366	TI	5.35	4.25	3.65
SN14-386	TI	7.45	5.95	5.05
SN14-396	TI	7.45	5.95	5.05
SN15-830	TI	3.90	3.10	2.65

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-830N	TI	1.90	1.50	1.25	

Integrated Circuit Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-831	TI	6.65	5.25	4.50	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-831N	TI	3.65	2.90	2.45	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-832	TI	4.70	3.70	3.20	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-832N	TI	2.00	1.60	1.35	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-833	TI	3.45	2.75	2.35	
SN15-833-2	TI	3.45	2.75	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-833N	TI	1.60	1.30	1.10	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-844	TI	4.70	3.70	3.20	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-844N	TI	2.00	1.60	1.35	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-845	TI	5.45	4.35	3.70	
SN15-845-2	TI	5.45	4.35	3.70	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-845N	TI	3.65	2.90	2.45	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-846	TI	4.30	3.40	2.90	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-846N	TI	2.00	1.60	1.35	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-848	TI	5.45	4.35	3.70	
SN15-848-2	TI	5.45	4.35	3.70	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-848N	TI	3.65	2.90	2.45	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-850	TI	11.70	9.30	8.00	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-850N	TI	10.50	7.40	7.15	

Type No.	Mfr.	1-24	25-99	100-up	
SN50-851	TI	11.70	9.30	8.00	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-851N	TI	11.30	9.05	7.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-862	TI	4.30	3.40	2.90	
SN15-862-2	TI	4.30	3.40	2.90	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-862N	TI	2.00	1.60	1.35	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-884N	TI	8.10	6.45	5.50	
SN15-930	TI	6.90	5.50	4.70	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-930N	TI	3.80	3.00	2.50	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-931	TI	11.75	9.35	8.00	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-931N	TI	7.30	5.80	4.90	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-932	TI	8.30	6.60	5.65	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-932N	TI	4.00	3.20	2.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-933	TI	6.10	4.85	4.15	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-933N	TI	3.20	2.60	2.20	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-944	TI	8.30	6.60	5.65	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-944N	TI	4.00	3.20	2.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-945	TI	9.70	7.75	6.60	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-945N	TI	7.30	5.80	4.90	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-946	TI	7.60	6.05	5.20	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-946N	TI	4.00	3.20	2.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-948	TI	9.70	7.75	6.60	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-948N	TI	7.30	5.80	4.90	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-950	TI	20.40	16.25	13.85	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-950N	TI	21.00	16.80	14.30	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-951	TI	20.40	16.25	13.85	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-951N	TI	22.60	18.10	15.40	

Type No.	Mfr.	1-24	25-99	100-up	
SN15-962	TI	7.60	6.05	5.20	
SN15-962-2	TI	7.60	6.05	5.20	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-962N	TI	4.00	3.20	2.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN17-808L	TI	6.00	5.05	3.85	
SN17-809L	TI	5.00	4.70	3.35	
SN17-810L	TI	3.00	2.45	1.95	
SN17-811L	TI	3.00	2.45	1.95	
SN17-812L	TI	6.00	5.05	3.95	
SN17-813L	TI	6.60	5.50	4.35	
SN17-821L	TI	3.00	2.45	1.95	
SN17-908L	TI	7.35	6.35	5.40	
SN17-909L	TI	7.00	6.05	5.10	
SN17-910L	TI	6.00	5.20	4.40	
SN17-911L	TI	6.00	5.20	4.40	
SN17-912L	TI	7.00	6.05	5.10	
SN17-913L	TI	8.20	7.10	6.00	
SN17-921L	TI	5.25	4.55	3.85	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN52-702	TI	17.75	14.00	12.00	
SN52-702L	TI	17.75	14.00	12.00	
SN52-709	TI	17.30	13.80	11.75	
SN52-709L	TI	17.30	13.80	11.75	
SN52-710	TI	17.75	14.00	12.00	
SN52-710L	TI	17.75	14.00	12.00	
SN52-711	TI	37.00	29.00	25.00	
SN52-711L	TI	37.00	29.00	25.00	

Type No.	Mfr.	1-24	25-99	100-up	
SN54-930	TI	6.50	5.15	4.40	
SN54-932	TI	7.15	5.70	4.85	
SN54-946	TI	6.50	5.15	4.80	
SN54-948	TI	9.05	7.25	6.15	
SN54-962	TI	6.50	5.15	4.40	
SN54-965	TI	6.50	5.15	4.40	
SN54-966	TI	6.50	5.15	4.40	
SN54-930-2	TI	6.50	5.15	4.40	
SN54-932-2	TI	7.15	5.70	4.85	
SN54-946-2	TI	6.50	5.15	4.80	
SN54-962-2	TI	6.50	5.15	4.40	
SN54-965-2	TI	6.50	5.15	4.40	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN54H00	TI	9.70	7.75	6.60	
SN54H10	TI	9.70	7.75	6.60	
SN54H11	TI	9.70	7.75	6.60	
SN54H20	TI	9.70	7.75	6.60	
SN54H21	TI	9.70	7.75	6.60	
SN54H30	TI	9.70	7.75	6.60	
SN54H40	TI	10.70	8.50	7.25	
SN54H50	TI	10.70	8.50	7.25	
SN54H52	TI	10.70	8.50	7.25	
SN54H53	TI	10.70	8.50	7.25	
SN54H55	TI	10.70	8.50	7.25	
SN54H60	TI	8.75	6.95	5.95	
SN54H61	TI	8.75	6.95	5.95	
SN54H62	TI	8.75	6.95	5.95	
SN54H71	TI	13.60	10.85	9.25	
SN54H72	TI	13.60	10.85	9.25	
SN54L00	TI	18.80	15.15	12.90	
SN54L20	TI	18.80	15.15	12.90	
SN54L71	TI	30.70	24.80	21.10	
SN54L72	TI	30.70	24.80	21.10	
SN72-702	TI	13.00	10.25	8.75	
SN72-702L	TI	13.00	10.25	8.75	
SN72-709	TI	9.35	7.45	6.35	
SN72-709L	TI	9.35	7.45	6.35	
SN72-710	TI	8.00	6.50	5.50	
SN72-710L	TI	8.00	6.50	5.50	
SN72-711	TI	26.00	20.75	17.50	
SN72-711L	TI	26.00	20.75	17.50	

Type No.	Mfr.	1-24	25-99	100-up	
SN74-930	TI	3.65	2.90	2.50	
SN74-930-2	TI	3.65	2.90	2.50	
SN74-932	TI	4.05	3.20	2.75	
SN74-932-2	TI	4.05	3.20	2.75	
SN74-946	TI	3.65	2.90	2.50	
SN74-946-2	TI	3.65	2.90	2.50	
SN74-948	TI	5.10	4.05	3.50	
SN74-962	TI	3.65	2.90	2.50	
SN74-962-2	TI	3.65	2.90	2.50	
SN74-965	TI	3.65	2.90	2.50	
SN74-965-2	TI	3.65	2.90	2.50	
SN74-966	TI	3.65	2.90	2.50	
SN74-966-2	TI	3.65	2.90	2.50	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN74H00	TI	5.50	4.40	3.75	
SN74H00N	TI	3.40	2.70	2.30	
SN74H10	TI	5.50	4.40	3.75	
SN74H10N	TI	3.40	2.70	2.30	
SN74H11	TI	5.50	4.40	3.75	
SN74H11N	TI	3.40	2.70	2.30	
SN74H20	TI	5.50	4.40	3.75	
SN74H20N	TI	3.40	2.70	2.30	
SN74H21	TI	5.50	4.40	3.75	
SN74H21N	TI	3.40	2.70	2.30	
SN74H30	TI	5.50	4.40	3.75	
SN74H30N	TI	3.40	2.70	2.30	
SN74H40	TI	6.05	4.85	4.10	

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Type No.	Mfr.	1-24	25-99	100-up	100-Mix
SN74H40N	TI	3.75	2.95	2.55	
SN74H50	TI	6.05	4.85	4.10	
SN74H50N	TI	3.75	2.95	2.55	
SN74H52	TI	6.05	4.85	4.10	
SN74H52N	TI	3.75	2.95	2.55	
SN74H53	TI	6.05	4.85	4.10	
SN74H53N	TI	3.75	2.95	2.55	
SN74H55	TI	4.40	3.50	2.95	
SN74H55N	TI	3.75	2.95	2.55	
SN74H60	TI	4.40	3.50	2.95	
SN74H60N	TI	2.65	2.15	1.80	
SN74H61	TI	4.40	3.50	2.95	
SN74H61N	TI	2.65	2.15	1.80	
SN74H62	TI	4.40	3.50	2.95	
SN74H62N	TI	2.60	2.15	1.80	
SN74H71	TI	7.70	6.15	5.20	
SN74H71N	TI	5.50	4.40	3.75	
SN74H72	TI	7.70	6.15	5.20	
SN74H72N	TI	5.50	4.40	3.75	
SN74L00	TI	12.00	9.75	8.25	
SN74L20	TI	12.00	9.75	8.25	
SN74L71	TI	20.50	16.50	14.10	
SN74L72	TI	20.50	16.50	14.10	

Type No.	Mfr.	1-24	25-99	100-up	
SN336A	TI	53.00	42.00		
SN344A	TI	19.50	15.50	13.20	
SN345A	TI	89.00	71.00		
SN346A	TI	57.00	45.00	38.50	
SN348A	TI	54.00	43.00	36.60	
SN351A	TI	142.00	114.00		
SN510A	TI	28.25	22.50	19.20	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN510B	TI	28.25	22.50	19.20	

Type No.	Mfr.	1-24	25-99	100-up	
SN511A	TI	31.10	24.75	21.10	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN511B	TI	31.10	24.75	21.10	

Type No.	Mfr.	1-24	25-99	100-up	
SN512A	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN512B	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-up	
SN513A	TI	24.55	19.55	16.65	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN513B	TI	24.55	19.55	16.65	

Type No.	Mfr.	1-24	25-99	100-up	
SN514A	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN514B	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-up	
SN515A	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN515B	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-up	
SN516A	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN516B	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-up	
SN517A	TI	29.50	23.50	20.00	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN517B	TI	29.50	23.50	20.00	

Type No.	Mfr.	1-24	25-99	100-up	
SN518A	TI	29.50	23.50	20.00	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN518B	TI	29.50	23.50	20.00	

Type No.	Mfr.	1-24	25-99	100-up	
SN521A	TI	36.50	29.00	24.80	
SN522A	TI	36.50	29.00	24.80	
SN523A	TI	26.00	20.60	17.60	
SN524A	TI	29.95	23.25	19.80	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN524AL	TI	17.00	13.60	9.80	
SN525	TI	35.70	28.40	24.20	

Type No.	Mfr.	1-24	25-99	100-up	
SN525A	TI	57.00	45.00	38.50	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN526	TI	29.20	23.20	19.80	

Type No.	Mfr.	1-24	25-99	100-up	
SN526A	TI	57.00	45.00	38.50	
SN530	TI	17.75	14.20	12.20	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN530L	TI	17.75	14.20	12.20	

Type No.	Mfr.	1-24	25-99	100-up	
SN531	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN531L	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN532	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN532L	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN533	TI	11.35	9.00	7.70	
SN534	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN534L	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN535	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN535L	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN534L	TI	11.35	9.00	7.70	
SN535-2	TI	11.35	9.00	7.70	
SN717A	TI	130.00	103.00		
SN723	TI	27.60	22.00	18.75	
SN723-L	TI	27.60	22.00	18.75	
SN724	TI	12.15	9.70	8.25	
SN724-L	TI	12.15	9.70	8.25	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN725	TI	25.20	20.00	17.10	
SN726	TI	20.10	16.10	13.75	

Type No.	Mfr.	1-24	25-99	100-up	
SN5101	TI	28.25	22.50	19.20	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5101B	TI	28.25	22.50	19.20	

Type No.	Mfr.	1-24	25-99	100-up	
SN5111	TI	31.10	24.75	21.10	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5111B	TI	31.10	24.75	21.10	

Type No.	Mfr.	1-24	25-99	100-up	
SN5112	TI	31.10	24.75	21.10	
SN5113	TI	28.25	22.50	19.20	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5113B	TI	28.25	22.50	19.20	

Type No.	Mfr.	1-24	25-99	100-up	
SN5161	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5161B	TI	22.30	17.75	15.15	

Type No.	Mfr.	1-24	25-99	100-up	
SN5162	TI	24.55	19.55	16.65	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5162B	TI	24.55	19.55	16.65	

Type No.	Mfr.	1-24	25-99	100-up	
SN5191	TI	29.50	23.50	20.00	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5191B	TI	29.50	23.50	20.00	
SN5231AL	TI	26.00	20.60	17.65	
SN5231L	TI	26.00	20.60	17.60	
SN5300	TI	17.75	14.25	12.10	

Type No.	Mfr.	1-24	25-99	100-up	
SN5301	TI	18.75	14.85	12.75	
SN5302	TI	22.75	18.00	15.50	
SN5304	TI	22.75	18.00	15.50	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5310	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN5311	TI	13.00	10.25	8.80	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5315	TI	13.00	10.25	8.80	
SN5320	TI	11.35	9.00	7.70	
SN5330	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN5331	TI	13.00	10.25	8.80	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5340	TI	11.35	9.00	7.70	
SN5350	TI	11.35	9.00	7.70	

Type No.	Mfr.	1-24	25-99	100-up	
SN5360	TI	13.00	10.25	8.80	
SN5370	TI	16.20	12.90	11.00	
SN5380	TI	18.75	14.85	12.75	
SN5380-2	TI	18.75	14.85	12.75	
SN5400	TI	6.50	5.15	4.40	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5400N	TI	4.50	3.60	3.10	
SN5401	TI	6.50	5.15	4.40	
SN5401N	TI	4.50	3.60	3.10	
SN5402	TI	7.15	5.70	4.85	
SN5402N	TI	5.00	4.00	3.40	

Type No.	Mfr.	1-24	25-99	100-up	
SN5410	TI	6.50	5.15	4.40	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5410N	TI	4.50	3.60	3.10	

Type No.	Mfr.	1-24	25-99	100-up	
SN5420	TI	6.50	5.15	4.40	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5420N	TI	4.50	3.60	3.10	

Type No.	Mfr.	1-24	25-99	100-up	
SN5430	TI	6.50	5.15	4.40	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5430N	TI	4.50	3.60	3.10	

Type No.	Mfr.	1-24	25-99	100-up	
SN5440	TI	7.15	5.70	4.85	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5440N	TI	5.00	4.00	3.40	
SN5441N	TI	30.80	24.50	21.00	

Type No.	Mfr.	1-24	25-99	100-up	
SN5450	TI	7.15	5.70	4.85	

Integrated Circuit Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5450N	TI	5.00	4.00	3.40	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5451	TI	6.50	5.15	4.40

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5451N	TI	4.50	3.60	3.10	.....
SN5453	TI	7.15	5.70	4.85	.....
SN5453N	TI	5.00	4.00	3.40	.....
SN5454	TI	6.50	5.15	4.40	.....
SN5454N	TI	4.50	3.60	3.10	.....
SN5460	TI	5.85	4.65	4.00	.....
SN5460N	TI	3.60	2.80	2.40	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5470	TI	10.35	8.25	7.05

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5470N	TI	8.10	6.40	5.50	.....
SN5472	TI	9.05	7.25	6.15	.....
SN5472N	TI	7.30	5.80	5.00	.....
SN5473	TI	23.20	18.45	15.75	.....
SN5473N	TI	11.80	9.40	8.00	.....
SN5474	TI	12.90	10.30	8.80	.....
SN5474N	TI	11.30	9.00	7.70	.....
SN5475N	TI	20.40	16.30	13.90	.....
SN5476N	TI	12.40	9.90	8.40	.....
SN5480	TI	16.20	12.90	11.00	.....
SN5480N	TI	11.30	9.00	7.70	.....
SN5482	TI	24.00	19.10	16.30	.....
SN5482N	TI	16.90	13.40	11.50	.....
SN5483N	TI	26.80	21.40	18.30	.....
SN5491	TI	16.20	12.90	11.00	.....
SN5491N	TI	30.00	23.80	20.40	.....
SN5494N	TI	7.30	5.80	5.00	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5500	TI	56.00	44.50	38.00
SN5510	TI	13.80	10.95	9.30

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5510L	TI	13.80	10.95	9.30	.....
SN5511	TI	22.00	18.00	15.40	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7231L	TI	17.85	14.20	12.10

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7300	TI	8.10	6.45	5.50	.....
SN7301	TI	8.50	6.75	5.75	.....
SN7301-2	TI	8.50	6.75	5.75	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7302	TI	10.50	8.35	7.15
SN7304	TI	10.50	8.35	7.15
SN7310	TI	5.65	4.50	3.85
SN7311	TI	6.50	5.15	4.40

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7315	TI	6.50	5.15	4.40	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7320	TI	5.65	4.50	3.85
SN7330	TI	5.65	4.50	3.85
SN7330-2	TI	5.65	4.50	3.85
SN7331	TI	6.50	5.15	4.40
SN7331-2	TI	6.50	5.15	4.40
SN7350	TI	5.65	4.50	3.85
SN7350-2	TI	5.65	4.50	3.85
SN7360	TI	6.50	5.15	4.40
SN7370	TI	7.70	6.15	5.25
SN7380	TI	9.75	7.75	6.60
SN7380-2	TI	9.75	7.75	8.60
SN7400	TI	3.65	2.90	2.50
SN7400N	TI	2.25	1.80	1.55

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7401	TI	3.65	2.90	2.50	.....
SN7402	TI	4.05	3.20	2.75	.....
SN7402N	TI	2.50	2.00	1.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7410	TI	3.65	2.90	2.50
SN7410N	TI	2.25	1.80	1.55

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7420	TI	3.65	2.90	2.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7420N	TI	2.25	1.80	1.55
SN7430	TI	3.65	2.90	2.50
SN7430-2	TI	3.65	2.90	2.50
SN7430N	TI	2.25	1.80	1.55

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7440	TI	4.05	3.20	2.75	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7440N	TI	2.50	2.00	1.70

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7441N	TI	15.40	12.25	10.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7450	TI	4.05	3.20	2.75
SN7450N	TI	2.50	2.00	1.70

Type No.	Mfr.	1-24	25-99	100-up
SN7451	TI	3.65	2.90	2.50
SN7451N	TI	2.25	1.80	1.55

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7453	TI	4.05	3.20	2.75	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7453N	TI	2.50	2.00	1.70

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7454	TI	3.65	2.90	2.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7460	TI	2.90	2.30	2.00
SN7460N	TI	1.80	1.40	1.20

Type No.	Mfr.	1-24	25-99	100-up
SN7470	TI	5.85	4.65	4.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7470N	TI	4.05	3.20	2.75	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7472	TI	5.10	4.05	3.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7472N	TI	3.65	2.90	2.50

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7473	TI	7.45	5.95	5.05	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7473N	TI	5.90	4.70	4.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7474	TI	7.30	5.80	4.95	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7474N	TI	5.65	4.50	3.85

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7475N	TI	10.20	8.15	6.95	.....
SN7476N	TI	6.20	4.95	4.20	.....
SN7480	TI	9.10	7.25	6.15	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7480N	TI	5.65	4.50	3.85

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7482	TI	13.50	10.80	9.20	.....
SN7482N	TI	8.45	6.70	5.75	.....
SN7483N	TI	13.40	10.70	9.15	.....
SN7490	TI	14.90	11.85	10.15	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7490N	TI	11.10	8.85	7.55

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7491	TI	19.90	15.90	13.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7491N	TI	15.00	11.90	10.20

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7492N	TI	12.20	9.75	8.30	.....
SN7493N	TI	12.20	9.75	8.30	.....
SN7494N	TI	3.65	2.90	2.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7500	TI	24.40	19.35	16.50

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7501	TI	37.00	29.75	24.25	.....
SN7501L	TI	37.00	29.75	24.25	.....
SN7502	TI	37.00	29.75	24.25	.....
SN7502L	TI	37.00	29.75	24.25	.....

Type No.	Mfr.	1-24	25-99	100-999	1000-9999
SP616A	SPR	1.75	1.40	1.15	1.10
SP620A	SPR	3.45	2.75	2.30	2.20
SP629A	SPR	3.45	2.75	2.30	2.20
SP631A	SPR	1.50	1.20	1.00	.95
SP659A	SPR	1.95	1.55	1.30	1.20
SP670A	SPR	1.95	1.55	1.30	1.20
SP680A	SPR	1.95	1.55	1.30	1.20
SP806A	SPR	1.75	1.35	1.15	1.10
SP808A	SPR	2.20	1.75	1.45	1.40
SP816A	SPR	2.20	1.75	1.45	1.40
SP825A	SPR	4.00	3.15	2.60	2.45
SP826A	SPR	7.05	5.65	4.70	4.45
SP828A	SPR	5.60	4.45	3.65	3.45
SP840A	SPR	2.45	1.95	1.60	1.50
SP855A	SPR	2.45	1.95	1.60	1.50
SP870A	SPR	2.20	1.75	1.45	1.40
SP880A	SPR	2.20	1.75	1.45	1.40

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
SP5G26C	INT	9.95	5.53	.....	.....

Type No.	Mfr.	1-24	25-99	100-999	1000-9999
ST616A	SPR	1.80	1.45	1.20	1.15
ST620A	SPR	3.50	2.80	2.35	2.25
ST629A	SPR	3.50	2.80	2.35	2.25
ST631A	SPR	1.55	1.25	1.05	1.00
ST659A	SPR	2.00	1.60	1.35	1.25
ST670A	SPR	2.00	1.60	1.35	1.25
ST680A	SPR	2.00	1.60	1.35	1.25
ST806A	SPR	1.80	1.40	1.15	1.10
ST808A	SPR	2.25	1.80	1.50	1.45
ST816A	SPR	2.25	1.80	1.50	1.45
ST825A	SPR	4.05	3.20	2.65	2.50
ST826A	SPR	7.10	5.70	4.75	4.50
ST828A	SPR	5.65	4.50	3.65	3.50
ST840A	SPR	2.50	2.00	1.65	1.55
ST855A	SPR	2.50	2.00	1.65	1.55
ST870A	SPR	2.25	1.80	1.50	1.45
ST880A	SPR	2.25	1.80	1.50	1.45

Type No.	Mfr.	1-9	10-99	100-999	1000-up
1N21B	SYL	.68	.58	.53	.....
1N21BR	SYL	1.02	.88	.81	.....
1N21C	SYL	1.02	.88	.81	.....
1N21CR	SYL	1.41	1.22	1.12	.....
1N21D	SYL	2.10	1.80	1.65	.....
1N21F	SYL	7.15	6.10	5.60	.....
1N21G	SYL	11.90	10.40	9.35	.....
1N21WE	SYL	4.35	3.72	3.40	.....
1N23B	SYL	.67	.58	.54	.....
1N23BR	SYL	1.02	.88	.81	.....
1N23C	SYL	1.02	.88	.81	.....
1N23CM	SYL	2.43	2.12	1.94	.....
1N23CR	SYL	1.41	1.22	1.12	.....
1N23D	SYL	2.10	1.80	1.65	.....
1N23DR	SYL	2.52	2.33	2.14	.....
1N23E	SYL	3.50	3.00	2.75	.....
1N23ER	SYL	4.55	3.90	3.85	.....
1N23F	SYL	7.15	6.10	5.60	.....
1N23G	SYL	11.90	10.40	9.35	.....
1N23WE	SYL	4.55	3.90	3.58	.....
1N25	SYL	3.53	3.03	2.74	.....
1N26	SYL	6.50	5.60	5.10	.....
1N26A	S YL	7.75	6.60	6.05	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N21CM	SYL	2.43	2.12	1.94	.....
1N34	AME	.35	.....	.23	.....
1N34	GE	.35	.....	.23	.....
1N34A	AME	.39	.....	.26	.....
1N34A	GE	.33	.....	.22	.....
1N34A	HUG	.30	.....	.23	.....
1N34A	SYL	.30	.....	.23	.14
1N34AS	GE	.32	5.53	.....	.....
1N35	SYL	1.58	.....	1.21	.99
1N38A	SYL	.49	.....	.38	.16
1N38B	SYL	.49	.....	.38	.16
1N38BS	SYL	.49	.....	.38	.16
1N48	SYL	.30	.....	.20	.14
1N48S	SYL	.30	.....	.20	.14
1N52A	SYL	1.06	.....	.83	.66

Type No.	Mfr.	1-99	10-99	100-999	1000-up
1N53	SYL	23.20	19.80	18.25	.....
1N53C	SYL	46.80	40.25	37.45	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N54A	SYL	.42	.....	.32	.17
1N55A	SYL	.40	.....	.31	.14
1N55AS	SYL	.40	.....	.31	.14
1N58AS	SYL	.55	.....	.41	.23
1N60	GE	.30	.....	.20	.....
1N60	SYL	.30	.....	.23	.18
1N63	GE	.42	.....	.28	.....
1N64	GE	.35	.....	.23	.....
1N64	SYL	.30	.....	.23	.18
1N65	SYL	.48	.....	.35	.30
1N67A	AME	.30	.....	.20	.....
1N67A	HUG	.58	.....	.44	.....
1N67A	SYL	.28	.....	.21	.14
1N68A	SYL	.28	.....	.21	.14
1N69	GE	.35	.....	.23	.....
1N69	SYL	.30	.....	.23	.18
1N70	SYL	.78	.....	.38	.30

Type No.	Mfr.	1-99	10-99	100-999	1000-up
1N76A	SYL	2.60	2.23	2.04	.....
1N78	SYL	4.50	3.85	3.54	.....
1N78A	SYL	5.00	4.28	3.93	.....
1N78E	SYL	31.50	27.00	.....	.....
1N78F	SYL	56.00	48.00	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N82	SYL	.700	.....	.55	.44
1N82A	SYL	.91	.....	.71	.61
1N82AG	SYL	.91	.....	.71	.61
1N86	HUG	.46	.....	.35	.....
1N87A	GE	.24	.....	.16	.....
1N90	GE	.33	.....	.22	.....
1N90	HUG	.33	.....	.22	.....
1N90	SYL	.33	.....	.22	.14
1N91	GE	.96	.....	.60	.....
1N91	MOT	.90	.....	.60	.....
1N92	GE	1.95	.....	1.30	.....
1N92	MOT	1.95	.....	1.30	.....
1N93	GE	2.70	.....	1.80	.....
1N93	MOT	2.70	.....	1.80	.....
1N95	HUG	.50	.....	.33	.....
1N96	HUG	.59	.....	.44	.....
1N96A	HUG	.59	.....	.44	.....
1N98	HUG	.48	.....	.38	.....
1N98	SYL	.31	.....	.24	.12
1N98A	HUG	.48	.....	.38	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N99	HUG	.50	.....	.39	.....
1N99	SYL	.50	.....	.39	.16
1N100	HUG	.50	.....	.39	.....
1N100	SYL	.32	.....	.27	.12
1N100A	HUG	.50	.....	.39	.....
1N115	SYL	.....	.....	5.00	4.00
1N116	GE	.53	.....	.35	.....
1N116	GE	.54	.....	.36	.....
1N116	HUG	.53	.....	.40	.....
1N116	SYL	.49	.....	.36	.....
1N118	HUG	.60	.....	.46	.....
1N118	SYL	.23	.....	.20	.13
1N120	SYL	.46	.....	.36	.29
1N126	SYL	.30	.....	.24	.15
1N126A	HUG	.30	.....	.24	.....
1N126A	SYL	.30	.....	.24	.11
1N127	SYL	.42	.....	.28	.16
1N127A	SYL	.42	.....	.28	.16
1N128	SYL	.32	.....	.25	.12
1N137A	HOF	2.75	2.50	2.06	.....
1N138A	HOF	2.75	2.50	2.06	.....
1N139	HUG	.48	.....	.36	.....
1N143	HUG	.95	.....	.71	.....
1N151	GE	2.70	.....	2.15	.....
1N152	GE	3.40	.....	2.70	.....
1N1584	GE	6.10	.....	5.00	.....
1N191	GE	.32	.....	.21	.....
1N191	HUG	.35	.....	.27	.....
1N191	SYL	.35	.....	.28	.15
1N192	SYL	.34	.....	.26	.14
1N198	HUG	.35	.....	.27	.....
1N198	SYL	.35	.....	.28	.15
1N198A	HUG	.35	.....	.28	.....
1N198A	SYL	.35	.....	.28	.15
1N198B	SYL	1.03	.....	.78	.64
1N200	HOF	3.25	2.95	2.44	.....
1N207	HOF	3.25	2.95	2.44	.....
1N210	HOF	3.25	2.95	2.44	.....
1N214	HOF	3.25	2.95	2.44	.....
1N216	HOF	3.25	2.95	2.44	.....
1N222	HOF	3.25	2.95	2.44	.....
1N225	HOF	5.75	5.20	4.31	.....
1N226	HOF	5.75	5.20	4.31	.....
1N227	HOF	5.75	5.20	4.31	.....
1N228	HOF	5.75	5.20	4.31	.....
1N231	HOF	6.25	5.65	4.69	.....
1N232	HOF	6.25	5.65	4.69	.....
1N248	WES	1.58	.....	1.10	.....
1N248A	WES	1.58	.....	1.10	.....
1N248B	MOT	1.65	.....	1.10	.....
1N248B	WES	1.58	.....	1.10	.....
1N248C	MOT	1.80	.....	1.20	.....
1N249	WES	1.65	.....	1.15	.....
1N249A	WES	1.65	.....	1.15	.....
1N249B	MOT	1.95	.....	1.30	.....
1N249B	WES	1.65	.....	1.15	.....
1N250A	GE	2.48	.....	1.65	.....
1N250B	MOT	2.75	.....	1.85	.....
1N250B	WES	2.38	.....	1.65	.....
1N250C	GET	2.78	.....	1.85	.....
1N251	GE	.65	.....	.43	.....
1N251	SYL	.65	.....	.43	.....
1N251	TI	.32	.....	.21	.....
1N252	HUG	.91	.....	.68	.....
1N252	SYL	.65	.....	.43	.18
1N253	GE	1.05	.....	.70	.....
1N253	TI	1.05	.....	.70	.....
1N254	TI	1.13	.....	.75	.....
1N255	GE	1.58	.....	1.05	.....
1N255	TI	1.58	.....	1.05	.....
1N256	TI	2.16	.....	1.44	.....
1N270	HUG	.32	.....	.25	.....
1N270	SYL	.32	.....	.25	.11
1N273		.68	.....	.51	.....
1N276	HUG	.31	.....	.24	.....
1N276	SYL	.31	.....	.24	.12
1N277	HUG	.34	.....	.26	.....
1N277	SYL	.34	.....	.26	.14
1N279	GE	.33	.....	.22	.....
1N279	SYL	.29	.....	.22	.17
1N281	GE	.35	.....	.23	.....
1N281	HUG	.31	.....	.24	.....
1N281	SYL	.31	.....	.24	.14
1N283	HUG	.51	.....	.40	.....
1N283	SYL	.51	.....	.40	.15
1N288	HUG	.53	.....	.40	.....
1N289	HUG	.66	.....	.50	.....
1N291	HUG	.84	.....	.63	.....
1N292	HUG	.60	.....	.45	.....
1N294	SYL	.34	.....	.26	.15
1N295	GE	.36	.....	.24	.....
1N295	SYL	.35	.....	.27	.15
1N295A	GE	.36)	.....	.24	.....
1N298	HUG	.68	.....	.53	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N315	GE	3.00	.....	2.00	.....
1N319A	HUG	3.50	.....	2.60	.....
1N332	TI	1.72	.....	1.15	.....
1N333	TI	1.72	.....	1.15	.....
1N338	TI	1.05	.....	.70	.....
1N342	TI	1.72	.....	1.15	.....
1N346	HUG	1.10	.....	.74	.....
1N347	TI	1.05	.....	.70	.....
1N348	TI	1.05	.....	.70	.....
1N368	GE	2.55	.....	1.70	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
1N415E	SYL	4.20	3.60	3.30	.....
1N416B	SYL	.68	.58	.53	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N415G	SYL	11.09	.....	10.40	9.35
1N416E	SYL	3.50	.....	3.00	2.75
1N416F	SYL	7.15	.....	6.10	5.60
1N416G	SYL	11.90	.....	10.40	9.35
1N429	HOF	5.40	4.85	4.10	.....
1N429	INT	5.00	.....	4.10	.....
1N429	MOT	5.45	4.70	4.10	.....
1N430	HOF	16.00	14.40	12.35	.....
1N430	INT	15.50	.....	12.40	.....
1N430A	HOF	24.00	21.60	18.70	.....
1N440	GE	.66	.....	.44	.....
1N440	INT	.66	.....	.44	.....
1N440B	GE	.66	.....	.44	.....
1N440B	TI	.66	.....	.44	.....
1N441	GE	.69	.....	.46	.....
1N441B	GE	.69	.....	.46	.....
1N441B	TI	.69	.....	.46	.....
1N442B	GE	.79	.....	.53	.....
1N442B	INT	.79	.....	.53	.....
1N443	GE	.98	.....	.65	.....
1N442B	GE	.98	.....	.65	.....
1N443B	INT	1.10	.....	.73	.....
1N443B	RCA	.98	.....	.65	.....
1N443B	TI	.97	.....	.65	.....
1N444B	TI	1.05	.....	.70	.....
1N445B	GE	1.43	.....	.95	.....
1N448	HUG	1.00	.....	.75	.....
1N450	HUG	1.02	.....	.77	.....
1N456	RAY	.36	.....	.28	.....
1N456	SYL	.42	.....	.28	.18
1N456	TI	.42	.....	.28	.....
1N456A	RA	.36	.....	.28	.....
1N456A	SYL	.42	.....	.28	.18
1N456A	TI				
1N457	GE	.45	.....	.30	.....
1N457	RAY	.44	.....	.35	.....
1N457	SYL	.45	.....	.30	.19
1N457	TI	.45	.....	.30	.....
1N457A	RAY	.44	.....	.35	.....
1N457A	SYL	.45	.....	.30	.19
1N458	RAY	.50	.....	.38	.....
1N458	SYL	.48	.....	.32	.21
1N458	TI	.48	.....	.32	.....
1N458A	RAY	.50	.....	.38	.....
1N458A	SYL	.48	.....	.32	.21
1N459	HOF	.66	.....	.50	.....
1N459	RAY	.66	.....	.51	.....
1N459	SYL	.51	.....	.34	.21
1N459	TI	.51	.....	.34	.....
1N459A	RAY	.66	.....	.51	.....
1N459A	SYL	.51	.....	.34	.21
1N459A	TI				
1N461	RAY	.35	.....	.26	.....
1N461	SYL	.42	.....	.28	.18
1N461	TI	.42	.....	.28	.....
1N461	HUG	.96	.....	.72	.....
1N461A	RAY	.35	.....	.26	.....
1N461A	SYL	.42	.....	.28	.18
1N461A	TI	.42	.....	.28	.....
1N462	RAY	.38	.....	.28	.....
1N462	SYL	.44	.....	.29	.19
1N462	TI	.45	.....	.30	.....
1N462A	RAY	.38	.....	.28	.....
1N462A	SYL	.44	.....	.29	.19
1N463	SYL	.54	.....	.36	.....
1N463	TI	.48	.....	.32	.....
1N463A	RAY	.46	.....	.36	.....
1N463A	SYL	.54	.....	.36	.22
1N464	SYL	.53	.....	.35	.21
1N464	TI	.51	.....	.34	.....
1N464A	SYL	.53	.....	.35	.21
1N465	HOF	3.25	2.90	2.45	.....
1N465	HUG	3.00	.....	2.25	.....
1N465A	HUG	3.50	.....	2.60	.....
1N466	HOF	3.25	2.90	2.45	.....
1N466	HUG	3.00	.....	2.25	.....
1N466A	HUG	3.50	.....	2.60	.....

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N467	HOF	3.25	2.90	2.45	.....
1N467A	HUG	3.50	.....	2.60	.....
1N468	HOF	3.25	2.90	2.45	.....
1N468	HUG	3.00	.....	2.25	.....
1N468A	HUG	3.50	.....	2.60	.....
1N469	HOF	3.25	2.90	2.45	.....
1N469	HUG	3.00	.....	2.25	.....
1N469A	HUG	3.50	.....	2.60	.....
1N470	HOF	3.25	2.90	2.45	.....
1N470A	HUG	3.50	.....	2.60	.....
1N471	HOF	4.75	4.30	3.80	.....
1N472	HOF	4.75	4.30	3.80	.....
1N473	HOF	4.75	4.30	3.60	.....
1N474	HOF	4.75	4.30	3.80	.....
1N475	HOF	4.75	4.30	3.80	.....
1N482	RAY	.58	.....	.44	.....
1N482	SYL	.66	.....	.40	.19
1N482	TI	.51	.....	.34	.....
1N482A	RAY	.59	.....	.46	.....
1N482A	SYL	.69	.....	.46	.19
1N482A	TI	.59	.....	.46	.....
1N482B	GI	.59	.....	.46	.....
14N82B	RAY	.59	.....	.46	.....
1N483	RAY	.61	.....	.47	.....
1N483	SYL	.70	.....	.47	.19
1N483	TI	.60	.....	.40	.....
1N483A	SYL	.70	.....	.47	.19
1N483A	TI	.61	.....	.47	.....
1N483B	RAY	.61	.....	.47	.....
1N483B	SYL	.70	.....	.47	.19
1N483B	TI	.....	.....	.....	.....
1N484	RAY	.71	.....	.55	.....
1N484	SYL	.70	.....	.47	.22
1N484	TI	.70	.....	.47	.....
1N484A	SYL	.70	.....	.47	.22
1N484A	TI	.71	.....	.55	.....
1N484B	SYL	.70	.....	.47	.22
1N485	SYL	.90	.....	.60	.24
1N485	TI	.90	.....	.60	.....
1N485A	SYL	.90	.....	.60	.24
1N485A	TI	.85	.....	.60	.....
1N485B	RAY	.90	.....	.60	.....
1N485B	SYL	.90	.....	.60	.24
1N485B	TI	.85	.....	.60	.....
1N486	SYL	.90	.....	.60	.26
1N486A	RAY	7.25	.....	.98	.....
1N486A	SYL	.90	.....	.60	.....
1N486B	SYL	.90	.....	.60	.26
1N486B	TI	1.25	.....	.98	.....
1N487	SYL	1.05	.....	.70	.35
1N487A	SYL	1.41	.....	.94	.38
1N488	SYL	1.17	.....	.78	.45
1N488A	SYL	1.78	.....	1.19	.49
1N497	HUG	.45	.....	.34	.....
1N497	SYL	.39	.....	.30	.14
1N498	HUG	.50	.....	.39	.....
1N498	SYL	.44	.....	.35	.15
1N500	HUG	.91	.....	.68	.....
1N536	GE	.45	.....	.30	.....
1N536	INT	.45	.....	.30	.....
1N536	TI	.45	.....	.30	.....
1N536	WES	.40	.....	.29	.....
1N537	GE	.50	.....	.33	.....
1N537	RCA	.50	.....	.33	.....
1N537	TI	.49	.....	.33	.....
1N537	WES	.47	.....	.32	.....
1N538	GE	.53	.....	.35	.....
1N538	INT	.53	.....	.35	.....
1N538	RCA	.53	.....	.36	.....
1N538	TI	.52	.....	.35	.....
1N538	WES	.53	.....	.35	.....
1N539	GE	.60	.....	.40	.....
1N539	RCA	.60	.....	.41	.....
1N539	TI	.60	.....	.40	.....
1N539	WES	.63	.....	.47	.....
1N540	GE	.68	.....	.45	.....
1N540	INT	.68	.....	.45	.....
1N540	RCA	.68	.....	.46	.....
1N540	TI	.67	.....	.45	.....
1N540	WES	.79	.....	.53	.....
1N541	GE	.30	.....	.20	.....
1N542	GE	.62	.....	.41	.....
1N547	GE	.96	.....	.64	.....
1N547	INT	.96	.....	.64	.....
1N547	RCA	.96	.....	.64	.....
1N547	TI	.96	.....	.64	.....
1N547	WES	1.00	.....	.68	.....
1N560	GE	1.50	.....	1.00	.....
1N560	TI	1.50	.....	1.00	.....
1N560	WES	1.46	.....	1.00	.....
1N561	TI	2.70	.....	1.80	.....
1N561	WES	3.49	.....	2.32	.....
1N588	TI	.....	.....	.....	.....
1N599	GE	.47	.....	.31	.....
1N600	GE	.49	.....	.33	.....
1N600A	GE	.63	.....	.42	.....
1N603	GE	.60	.....	.40	.....
1N605	GE	.76	.....	.51	.....
1N607	GE	1.01	.....	.67	.....
1N607	TI	1.00	.....	.67	.....
1N610	TI	1.12	.....	.75	.....
1N611	TI	1.42	.....	.95	.....
1N614	GE	2.40	.....	1.60	.....
1N617	AME	.59	.....	.39	.....
1N625	HUG	.54	.....	.33	.....
1N625	RAY	.42	.....	.28	.....
1N625	SYL	.43	.....	.29	.18
1N625	TI	.40	.....	.26	.....
1N626	HUG	.70	.....	.53	.....
1N626	SYL	.45	.....	.30	.19
1N626	TI	.40	.....	.26	.....
1N627	HUG	1.26	.....	.95	.....
1N627	RAY	.67	.....	.39	.....
1N627	SYL	.60	.....	.39	.21
1N627	TI	.51	.....	.34	.....
1N628	RAY	.81	.....	.47	.....
1N628	SYL	.72	.....	.47	.22
1N628	TI	.81	.....	.40	.....
1N629	SYL	.81	.....	.54	.24
1N629	TI	.68	.....	.44	.....
1N631	SYL	.80	.....	.63	.50
1N633	SYL	.83	.....	.65	.35
1N643	TI	.98	.....	.56	.....
1N643A	SYL	1.50	.....	1.00	.22
1N645	GE	1.40	.....	.93	.....
1N645	HUG	1.40	.....	1.05	.....
1N645	TI	1.40	.....	.80	.....
1N645A	GE	.....	.....	.....	.....
1N645A	HUG	1.40	.....	1.05	.....
1N646	GE	.....	.....	.....	.....
1N646	HUG	1.65	.....	1.24	.....
1N646	TI	1.60	.....	1.05	.....
1N646A	HUG	1.65	.....	1.24	.....
1N647	GE	1.80	.....	1.20	.....
1N647	HUG	1.80	.....	1.35	.....
1N647	TI	1.70	.....	1.10	.....
1N647A	HUG	1.80	.....	1.35	.....
1N648	GE	1.95	.....	1.30	.....
1N648	HUG	1.95	.....	1.46	.....
1N648	TI	1.80	.....	1.20	.....
1N648A	HUG	1.95	.....	1.46	.....
1N649	GE	2.50	.....	1.65	.....
1N649	HUG	2.50	.....	1.88	.....
1N649	TI	2.25	.....	1.40	.....
1N658	SYL	1.76	.....	1.20	.27
1N658	TI	1.48	.....	.98	.....
1N658A	RAY	2.25	.....	1.76	.....
1N659	HUG	.91	.....	.68	.....
1N659	RAY	.58	.....	.38	.....
1N659	SYL	.58	.....	.39	.17
1N659	TI	.56	.....	.36	.....
1N660	RAY	.69	.....	.36	.....
1N660	TI	.65	.....	.34	.....
1N661	RAY	1.75	.....	1.16	.....
1N661	TI	.98	.....	.68	.....
1N662	RAY	.92	.....	.44	.....
1N662	SYL	.92	.....	.44	.24
1N662	TI	.25	.....	.15	.....
1N663	RAY	1.20	.....	.80	.....
1N663	SYL	1.20	.....	.80	.26
1N663	TI	.65	.....	.52	.....
1N676	GE	.93	.....	.62	.....
1N677	GE	1.05	.....	.70	.....
1N681	GE	1.53	.....	1.02	.....
1N690	RAY	2.86	.....	1.92	.....
1N691	RAY	3.38	.....	2.25	.....
1N693	RAY	7.72	.....	6.02	.....
1N695	HUG	.77	.....	.58	.....
1N695	SYL	.30	.....	.24	.14
1N695A	HUG	.98	.....	.74	.....
1N697	RAY	4.20	.....	2.95	.....
1N702	INT	1.83	1.63	1.47	.....
1N702	HUG	1.80	.....	1.35	.....
1N702	TI	1.05	.....	.85	.....
1N702	HOF	1.50	1.35	1.25	.....
1N702A	HOF	1.75	1.55	1.50	.....
1N702A-0	MOT	2.60	.....	2.10	.....
1N702A-1	MOT	2.60	.....	2.10	.....
1N702A-2	MOT	2.60	.....	2.10	.....
1N702A-3	MOT	2.60	.....	2.10	.....
1N702A-4	MOT	2.60	.....	2.10	.....
1N702A-5	MOT	2.60	.....	2.10	.....
1N702A-6	MOT	2.60	.....	2.10	.....
1N702A-7	MOT	2.60	.....	2.10	.....
1N702A-8	MOT	2.60	.....	2.10	.....
1N702A-9	MOT	2.60	.....	2.10	.....
1N703	HUG	1.80	.....	1.35	.....
1N703	INT	1.83	1.63	1.47	.....
1N703	TI	1.05	.....	.85	.....
1N703	HOF	1.50	1.35	1.25	.....
1N703A	HOF	1.75	1.55	1.50	.....
1N703A	INT	2.55	2.25	2.03	.....
1N704	INT	1.83	1.63	1.47	.....
1N704	HOF	1.50	1.35	1.25	.....
1N704A	HOF	1.75	1.55	1.50	.....
1N704A	HUG	2.30	.....	1.70	.....
1N704A-0	MOT	2.60	.....	2.10	.....
1N704A-1	MOT	2.60	.....	2.10	.....
1N704A-2	MOT	2.60	.....	2.10	.....
1N704A-3	MOT	2.60	.....	2.10	.....
1N704A-4	MOT	2.60	.....	2.10	.....
1N704A-5	MOT	2.60	.....	2.10	.....
1N705	HUG	1.80	.....	1.35	.....
1N705	INT	1.83	1.63	1.47	.....
1N705	RAY	1.40	.....	1.20	.....
1N705A	HOF	1.50	1.35	1.25	.....
1N705A	HOF	1.75	1.55	1.50	.....
1N705A	HUG	2.30	.....	1.70	.....
1N705A-0	MOT	2.55	2.25	2.03	.....
1N705A-1	MOT	2.60	.....	2.10	.....
1N705A-2	MOT	2.60	.....	2.10	.....
1N705A-3	MOT	2.60	.....	2.10	.....
1N705A-4	MOT	2.60	.....	2.10	.....
1N705A-5	MOT	2.60	.....	2.10	.....
1N705A-6	MOT	2.60	.....	2.10	.....
1N705A-7	MOT	2.60	.....	2.10	.....
1N705A-8	MOT	2.60	.....	2.10	.....
1N705A	TI	1.05	.....	.85	.....
1N706	HUG	1.80	.....	1.35	.....
1N706	INT	1.83	1.63	1.47	.....
1N706	RAY	1.40	.....	1.20	.....
1N706	HOF	1.50	1.35	1.25	.....
1N706A	HOF	1.75	1.55	1.50	.....
1N706A	HUG	2.30	.....	1.70	.....
1N706A-0	MOT	2.60	.....	2.10	.....
1N706A-1	MOT	2.60	.....	2.10	.....
1N706A	TI	2.95	.....	2.20	.....
1N706A-1	MOT	2.60	.....	2.10	.....
1N706A-2	MOT	2.60	.....	2.10	.....
1N706A-3	MOT	2.60	.....	2.10	.....
1N706A-4	MOT	2.60	.....	2.10	.....
1N706A-5	MOT	2.60	.....	2.10	.....
1N706A-6	MOT	2.60	.....	2.10	.....
1N706A-7	MOT	2.60	.....	2.10	.....
1N706A-8	MOT	2.60	.....	2.10	.....
1N706A-9	MOT	2.60	.....	2.10	.....
1N707	RAY	1.40	.....	1.20	.....
1N707	HOF	1.50	1.35	1.25	.....
1N707A	HOF	1.75	1.55	1.50	.....
1N707A	HUG	2.30	.....	1.70	.....
1N707A	INT	2.55	2.25	2.03	.....
1N707A-0	MOT	2.60	.....	2.10	.....
1N707A-1	MOT	2.60	.....	2.10	.....
1N707A-2	MOT	2.60	.....	2.10	.....
1N707A-3	MOT	2.60	.....	2.10	.....
1N707A-4	MOT	2.60	.....	2.10	.....

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N707A-5	MOT	2.60	.....	2.10	.....
1N707A-6	MOT	2.60	.....	2.10	.....
1N707A-7	MOT	2.60	.....	2.10	.....
1N708	HOF	1.50	1.35	1.25	.....
1N708	INT	1.83	1.63	1.47	.....
1N708	MOT	1.85	.....	1.50	.....
1N708A	HOF	1.75	1.55	1.50	.....
1N708A	INT	2.55	2.25	2.03	.....
1N709	HOF	1.50	1.35	1.25	.....
1N709	HUG	1.80	.....	1.35	.....
1N709	INT	1.83	1.63	1.47	.....
1N709	RAY	1.40	1.20	.....	.....
1N709	MOT	1.85	.....	1.50	.....
1N709	TI	1.05	.....	.85	.....
1N709A	HOF	1.75	1.55	1.50	.....
1N709A	INT	2.55	2.25	2.03	.....
1N710	HOF	1.50	1.35	1.25	.....
1N710	HUG	1.80	.....	1.35	.....
1N710	INT	1.83	1.63	1.47	.....
1N710	MOT	1.85	.....	1.50	.....
1N710	RAY	1.40	1.20	.....	.....
1N710A	HOF	1.75	1.55	1.50	.....
1N710A	INT	2.55	2.25	2.03	.....
1N711	HOF	1.50	1.35	1.25	.....
1N711	INT	1.83	1.63	1.47	.....
1N711	MOT	1.85	.....	1.50	.....
1N711	RAY	1.40	1.20	.....	.....
1N711A	HOF	1.75	1.55	1.50	.....
1N711A	HUG	2.30	.....	1.70	.....
1N711A	INT	2.55	2.25	2.03	.....
1N711A	TI	2.80	.....	2.10	.....
1N712	HOF	1.50	1.35	1.25	.....
1N712	HUG	1.80	.....	1.35	.....
1N712	INT	1.83	1.63	1.47	.....
1N712	MOT	1.85	.....	1.50	.....
1N712	RAY	1.40	1.20	.....	.....
1N712A	HOF	1.75	1.55	1.50	.....
1N713	HOF	1.50	1.35	1.25	.....
1N713	HUG	1.80	.....	1.35	.....
1N713	INT	1.83	1.63	1.47	.....
1N713	MOT	1.85	.....	1.50	.....
1N713	RAY	1.40	1.20	.....	.....
1N713A	HOF	1.75	1.55	1.50	.....
1N713A	HUG	2.30	.....	1.70	.....
1N713A	INT	2.55	2.25	2.03	.....
1N714	HOF	1.50	1.35	1.25	.....
1N714	HUG	1.80	.....	1.35	.....
1N714	INT	1.83	1.63	1.47	.....
1N714	MOT	1.85	.....	1.50	.....
1N714	RAY	1.40	1.20	.....	.....
1N714A	HOF	1.75	1.55	1.50	.....
1N714A	HUG	2.30	.....	1.70	.....
1N714A	INT	2.55	2.25	2.03	.....
1N714A	TI	1.05	.....	.85	.....
1N715	HOF	1.50	1.35	1.25	.....
1N715	HUG	1.80	.....	1.35	.....
1N715	INT	1.83	1.63	1.47	.....
1N715	MOT	1.85	.....	1.50	.....
1N715	RAY	1.40	1.20	.....	.....
1N715A	HOF	1.75	1.55	1.50	.....
1N715A	HUG	2.30	.....	1.70	.....
1N715G	SYL	11.90	.....	10.40	9.35
1N716	HOF	1.50	1.35	1.25	.....
1N716	HUG	1.80	.....	1.35	.....
1N716	INT	1.83	1.63	1.47	.....
1N716	MOT	1.85	.....	1.50	.....
1N716	RAY	1.40	.....	1.20	.....
1N716A	HOF	1.75	1.55	1.50	.....
1N716A	HUG	2.30	.....	1.70	.....
1N717	HOF	1.50	1.35	1.25	.....
1N717	MOT	1.85	.....	1.50	.....
1N717	RAY	1.40	1.20	.....	.....
1N717	TI	2.35	.....	1.75	.....
1N717A	HOF	1.75	1.55	1.50	.....
N1717A	HUG	2.30	1.70	.....	.....
1N718	HOF	1.50	1.35	1.25	.....
1N718	HUG	2.10	.....	1.58	.....
1N718	INT	1.83	1.63	1.47	.....
1N718	MOT	1.85	.....	1.50	.....
1N718	TI	2.35	.....	1.75	.....
1N718A	HIF	1.75	1.55	1.50	.....
1N718A	HUG	2.53	.....	1.90	.....
1N719	HOF	1.50	1.35	1.25	.....
1N719	INT	1.83	1.63	1.47	.....
1N719	MOT	1.85	.....	1.50	.....
1N719	RAY	1.40	1.20	.....	.....
1N719	TI	2.35	.....	1.75	.....
1N719A	HOF	1.75	1.55	1.50	.....
1N719A	HUG	2.53	.....	1.90	.....
1N720	HOF	1.50	1.35	1.25	.....
1N720	HUG	2.10	.....	1.58	.....
1N720	INT	1.83	1.63	1.47	.....
1N720	MOT	1.85	.....	1.50	.....
1N720	RAY	1.40	1.20	.....	.....
1N720	TI	2.35	.....	1.75	.....
1N720A	HOF	1.75	1.55	1.50	.....
1N720A	HUG	3.21	.....	2.41	.....
1N720A	INT	2.55	2.25	2.03	.....
1N721	HOF	1.50	1.35	1.25	.....
1N721	HUG	1.98	.....	1.49	.....
1N721	INT	1.83	1.63	1.47	.....
1N721	MOT	1.85	.....	1.50	.....
1N721	TI	2.35	.....	1.75	.....
1N721A	HOF	1.75	1.55	1.50	.....
1N721A	HUG	2.53	.....	1.90	.....
1N722	INT	1.83	1.63	1.47	.....
1N722	MOT	1.85	.....	1.50	.....
1N722	T 1	2.35	.....	1.75	.....
1N722A	HOF	1.75	1.55	1.50	.....
1N722A	HUG	2.53	.....	1.90	.....
1N723	HOF	1.50	1.35	1.25	.....
1N723	MOT	1.85	.....	1.50	.....
1N723	TI	2.35	.....	1.75	.....
1N723A	HOF	1.75	1.55	1.50	.....
1N723A	INT	2.55	2.25	2.03	.....
1N724	HOF	1.50	1.35	1.25	.....
1N724	INT	1.83	1.63	1.47	.....
1N724	MOT	1.85	.....	1.50	.....
1N724	TI	2.35	.....	1.75	.....
1N724A	HOF	1.75	1.55	1.50	.....
1N725	HOF	1.50	1.35	1.25	.....
1N725	MOT	1.85	.....	1.50	.....
1N725	TI	2.35	.....	1.75	.....
1N725A	HOF	1.75	1.55	1.50	.....
1N725A	INT	2.55	2.25	2.03	.....
1N726	MOT	1.85	.....	1.50	.....
1N726	TI	2.35	.....	1.75	.....
1N726A	HOF	1.75	1.55	1.50	.....
1N726A	INT	2.55	2.25	2.03	.....
1N727	HOF	1.65	1.50	1.45	.....
1N727	MOT	1.85	.....	1.50	.....
1N727A	HOF	1.75	1.60	1.50	.....
1N228	MOT	1.85	.....	1.50	.....
1N728A	HOF	1.75	1.60	1.50	.....
1N729	HOF	1.65	1.50	1.45	.....
1N729	MOT	1.85	.....	1.50	.....
1N729A	HOF	1.75	1.60	1.50	.....
1N730	MOT	3.50	.....	2.00	.....
1N730A	HOF	1.75	1.60	1.50	.....
1N731	MOT	3.50	.....	2.80	.....
1N731A	HOF	1.75	1.60	1.50	.....
1N732	MOT	3.50	.....	2.80	.....
1N732A	HOF	1.75	1.60	1.50	.....
1N733	HOF	1.65	1.50	1.45	.....
1N733	MOT	3.50	.....	2.80	.....
1N733A	HOF	1.75	1.60	1.50	.....
1N734	MOT	3.50	.....	2.80	.....
1N734A	HOF	1.75	1.60	1.50	.....
1N735	HOF	1.65	1.50	1.45	.....
1N735	MOT	3.50	.....	2.80	.....
1N735A	HOF	1.75	1.60	1.50	.....
1N736	HOF	1.65	1.50	1.45	.....
1N736	MOT	3.50	.....	2.80	.....
1N736A	HOF	1.75	1.60	1.50	.....
1N737	HOF	1.65	1.50	1.45	.....
1N737	MOT	3.50	.....	2.80	.....
1N737A	HOF	1.75	1.60	1.50	.....
1N738	HOF	2.15	1.95	1.85	.....
1N738	MOT	3.50	.....	2.80	.....
1N738A	HOF	3.10	2.80	2.60	.....
1N739	MOT	3.50	.....	.....	.....
1N739A	HOF	3.10	2.80	2.60	.....
1N740	MOT	3.50	.....	2.80	.....
1N740	HOF	2.15	1.95	1.85	.....
1N740A	HOF	3.10	2.80	2.60	.....
1N741	MOT	3.50	.....	2.80	.....
1N741A	HOF	3.10	2.80	2.60	.....
1N742	HOF	2.15	1.95	1.85	.....
1N742	MOT	3.50	.....	2.80	.....
1N742A	HOF	3.10	2.80	2.60	.....
1N743	MOT	3.50	.....	2.80	.....
1N743A	HOF	3.10	2.80	2.60	.....
1N744	MOT	3.50	.....	2.80	.....
1N744A	HOF	3.10	2.80	2.60	.....
1N745	MOT	3.50	.....	2.80	.....
1N746	HOF	1.50	1.35	1.10	.....
1N746	INT	1.40	1.25	1.12	.....
16746	MOT	2.00	1.70	1.50	.....
1N746	TI	1.05	.....	.85	.....
1N746A	HOF	1.75	1.55	1.50	.....
1N746A	MOT	2.75	2.35	2.05	.....
1N746A	TI	1.05	.....	.85	.....
1N746AML1	MOT	3.05	.....	2.30	.....
1N747AML1	MOT	3.05	.....	2.30	.....
1N748AML1	MOT	3.05	.....	2.30	.....
1N749ML1	MOT	3.05	.....	2.30	.....
1N750AML1	MOT	3.05	.....	2.30	.....
1N751AML1	MOT	3.05	.....	2.30	.....
1N752AML1	MOT	3.05	.....	2.30	.....
1N753AML1	MOT	3.05	.....	2.30	.....
1N754AML1	MOT	3.05	.....	2.30	.....
1N755AML1	MOT	3.05	.....	2.30	.....
1N756AML1	MOT	3.05	.....	2.30	.....
1N757AML1	MOT	3.05	.....	2.30	.....
1N758AML1	MOT	3.05	.....	2.30	.....
1N759AML1	MOT	3.05	.....	2.30	.....
1N746AML2	MOT	4.10	.....	3.10	.....
1N747AML2	MOT	4.10	.....	3.10	.....
1N748AML2	MOT	4.10	.....	3.10	.....
1N749AML2	MOT	4.10	.....	3.10	.....
1N750AML2	MOT	4.10	.....	3.10	.....
1N751AML2	MOT	4.10	.....	3.10	.....
1N752AML2	MOT	4.10	.....	3.10	.....
N1753AML2	MOT	4.10	.....	3.10	.....
1N754AML2	MOT	4.10	.....	3.10	.....
1N755AML2	MOT	4.10	.....	3.10	.....
1N754AML2	MOT	4.10	.....	3.10	.....
1N757AML2	MOT	4.10	.....	3.10	.....
1N758AML2	MOT	4.10	.....	3.10	.....
1N759AML2	MOT	4.10	.....	3.10	.....
1N746AML3	MOT	4.65	.....	3.50	.....
1N747AML3	MOT	4.65	.....	3.50	.....
1N748AML3	MOT	4.65	.....	3.50	.....
1N749AML3	MOT	4.65	.....	3.50	.....
1N750AML3	MOT	4.65	.....	3.50	.....
1N751AML3	MOT	4.65	.....	3.50	.....
1N752AML3	MOT	4.65	.....	3.50	.....
1N753AML3	MOT	4.65	.....	3.50	.....
1N754AML3	MOT	4.65	.....	3.50	.....
1N755AML3	MOT	4.65	.....	3.50	.....
1N756AML3	MOT	4.65	.....	3.50	.....
1N757AML3	MOT	4.65	.....	3.50	.....
1N758AML3	MOT	4.65	.....	3.50	.....
1N759AML3	MOT	4.65	.....	3.50	.....
1N963AML1	MOT	3.25	.....	2.45	.....
1N963AML1	MOT	3.25	.....	2.45	.....
1N964AML1	MOT	3.25	.....	2.45	.....
1N965AML1	MOT	3.25	.....	2.45	.....
1N966AML1	MOT	3.25	.....	2.45	.....
1N967AML1	MOT	3.25	.....	2.45	.....
N1968AML1	MOT	3.25	.....	2.45	.....
1N969AML1	MOT	3.25	.....	2.45	.....
1N970AML1	MOT	3.25	.....	2.45	.....
1N971AML1	MOT	3.25	.....	2.45	.....
1N972BML1	MOT	3.25	.....	2.45	.....
1N973BML1	MOT	3.25	.....	2.45	.....
1N974BML1	MOT	3.25	.....	2.45	.....
1N975BML1	MOT	3.25	.....	2.45	.....
1N976BML1	MOT	3.25	.....	2.45	.....
1N977BML1	MOT	3.25	.....	2.45	.....
1N978BML1	MOT	3.25	.....	2.45	.....
1N979BML1	MOT	3.25	.....	2.45	.....
1N980BML1	MOT	3.25	.....	2.45	.....
1N981BML1	MOT	3.25	.....	2.45	.....
1N982BML1	MOT	3.25	.....	2.45	.....
1N983BML1	MOT	3.25	.....	2.45	.....
1N984BML1	MOT	3.25	.....	2.45	.....
1N962BML2	MOT	4.30	.....	3.25	.....
1N963BML2	MOT	4.30	.....	3.25	.....
1N964BML2	MOT	4.30	.....	3.25	.....
1N965BML2	MOT	4.30	.....	3.25	.....
1N966BML2	MOT	4.30	.....	3.25	.....
1N967BML2	MOT	4.30	.....	3.25	.....
1N968BML2	MOT	4.30	.....	3.25	.....
1N969BML2	MOT	4.30	.....	3.25	.....
1N970BML2	MOT	4.30	.....	3.25	.....
1N971BML2	MOT	4.30	.....	3.25	.....
1N972BML2	MOT	4.30	.....	3.25	.....
1N973BML2	MOT	4.30	.....	3.25	.....
1N974BML2	MOT	4.30	.....	3.25	.....
1N975BML2	MOT	4.30	.....	3.25	.....
1N976BML2	MOT	4.30	.....	3.25	.....
1N977BML2	MOT	4.30	.....	3.25	.....
1N978BML2	MOT	4.30	.....	3.25	.....
1N979BML2	MOT	4.30	.....	3.25	.....
1N980BML2	MOT	4.30	.....	3.25	.....
1N981BML2	MOT	4.30	.....	3.25	.....
1N982BML2	MOT	4.30	.....	3.25	.....
1N983BML2	MOT	4.30	.....	3.25	.....
1N984BML2	MOT	4.30	.....	3.25	.....
1N962BML3	MOT	5.70	.....	4.30	.....
1N963BML3	MOT	5.70	.....	4.30	.....
1N964BML3	MOT	5.70	.....	4.30	.....
1N965BML3	MOT	5.70	.....	4.30	.....
1N966BML3	MOT	5.70	.....	4.30	.....
1N967BML3	MOT	5.70	.....	4.30	.....
1N968BML3	MOT	5.70	.....	4.30	.....
1N969BML3	MOT	5.70	.....	4.30	.....
1N970BML3	MOT	5.70	.....	4.30	.....

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N971BML3	MOT	5.70		4.30	
1N972BML3	MOT	5.70		4.30	
1N973BML3	MOT	5.70		4.30	
1N974BML3	MOT	5.70		4.30	
1N975BML3	MOT	5.70		4.30	
1N976BML3	MOT	5.70		4.30	
1N977BML3	MOT	5.70		4.30	
1N978BML3	MOT	5.70		4.30	
1N979BML3	MOT	5.70		4.30	
1N980BML3	MOT	5.70		4.30	
1N981BML3	MOT	5.70		4.30	
1N983BML3	MOT	5.70		4.30	
1N982BML3	MOT	5.70		4.30	
1N984BML3	MOT	5.70		4.30	
1N985BML1	MOT	4.05		3.05	
1N986BML1	MOT	4.05		3.05	
1N987BML1	MOT	4.05		3.05	
1N988BML1	MOT	4.05		3.05	
1N989BML1	MOT	4.05		3.05	
1N990BML1	MOT	4.05		3.05	
1N991BML1	MOT	4.05		3.05	
1N992BML1	MOT	4.05		3.05	
1N985BML2	MOT	5.05		3.80	
1N986BML2	MOT	5.05		3.80	
1N987BML2	MOT	5.05		3.80	
1N988BML2	MOT	5.05		3.80	
1N989BML2	MOT	5.05		3.80	
1N990BML2	MOT	5.05		3.80	
1N991BML2	MOT	5.05		3.80	
1N992BML2	MOT	5.05		3.80	
1N985BML3	MOT	6.20		4.65	
1N986BML3	MOT	6.20		4.65	
1N987BML3	MOT	6.20		4.65	
1N988BML3	MOT	6.20		4.65	
1N989BML3	MOT	6.20		4.65	
1N990BML3	MOT	6.20		4.65	
1N991BML3	MOT	6.20		4.65	
1N992BML3	MOT	6.20		4.65	
1N747	INT	1.40	1.25	1.12	
1N747	MOT	2.00	1.70	1.50	
1N747	TI	1.05		.85	
1N747A	HOF	1.75	1.55	1.50	
1N747A	INT	1.68	1.49	1.34	
1N747A	MOT	2.75	2.35	2.05	
1N747A	T I	1.05		.85	
1N748	INT	1.40	1.25	1.12	
1N748	MOT	2.00	1.75	1.50	
1N748	TI	1.05		.85	
1N748A	HOF	1.75	1.55	1.50	
1N748A	INT	1.68	1.49	1.34	
1N748A	MOT	2.75	2.34	2.05	
1N748A	TI	1.05		.85	
1N749	HOF	1.50	1.35	1.10	
1N749	INT	1.40	1.25	1.12	
1N749	MOT	2.00	1.70	1.50	
1N749	TI	1.05		.85	
1N749A	HOF	1.75	1.55	1.50	
1N749A	INT	1.68	1.49	1.34	
1N749A	MOT	2.75	2.35	2.05	
1N749A	TI	1.05		.85	
1N750	HOF	1.50	1.35	1.10	
1N750	INT	1.40	1.25	1.12	
1N750	MOT	2.00	1.70	1.50	
1N750	TI	1.05		.85	
1N750A	INT	1.68	1.49	1.34	
1N750A	MOT	2.75	2.35	2.05	
1N750A	TI	1.05		.85	
1N751	HOF	1.50	1.35	1.10	
1N751	HUG	1.80		1.35	
1N751	INT	1.40	1.25	1.12	
1N751	MOT	2.00	1.70	1.50	
1N751	TI	1.05		.85	
1N751A	HOF	1.75	1.55	1.50	
1N751A	HUG	2.30		1.70	
1N751A	INT	1.68	1.49	1.34	
1N751A	MOT	2.75	2.35	2.05	
1N751A	TI	1.05		.85	
1N752	HOF	1.50	1.35	1.10	
1N752	HUG	1.80		1.35	
1N752	INT	1.40	1.25	1.12	
1N752	MOT	2.00	1.70	1.50	
1N752	TI	1.05		.85	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N752A	HOF	1.75	1.55	1.50	
1N752A	INT	1.68	1.49	1.34	
1N752A	MOT	2.75	2.35	2.05	
1N752A	TI	1.05		.85	
1N753	HOF	1.50	1.35	1.10	
1N753	HUG	1.80		1.35	
1N753	INT	1.40	1.25	1.12	
1N753	MOT	2.00	1.70	1.50	
1N753	TI	1.05		.85	
1N753A	HOF	1.75	1.55	1.50	
1N753A	INT	1.68	1.49	1.34	
1N753A	MOT	2.75	2.35	2.05	
1N753A	TI	1.05		.85	
1N754	HOF	1.50	1.35	1.10	
1N754	INT	1.40	1.25	1.12	
1N754	MOT	2.00	1.70	1.50	
1N754	TI	1.05		.85	
1N754A	HOF	1.75	1.55	1.50	
1N754A	INT	1.68	1.49	1.34	
1N754A	MOT	2.75	2.35	2.05	
1N754A	TI	1.05		.85	
1N755	HUG	1.80		1.35	
1N755	INT	1.40	1.25	1.12	
1N755	MOT	2.00	1.70	1.50	
1N755	TI	1.05		.85	
1N755A	HOF	1.75	1.55	1.50	
1N755A	MOT	2.75	2.35	2.05	
1N755A	TI	1.05		.85	
1N756	HOF	1.50	1.35	1.10	
1N756	HUG	1.80		1.35	
1N756	INT	1.40	1.25	1.12	
1N756	MOT	2.00	1.70	1.50	
1N756	TI	1.05		.85	
1N756A	HOF	1.75	1.55	1.50	
1N756A	HUG	2.30		1.70	
1N756A	INT	1.68	1.49	1.34	
1N756A	MOT	2.75	2.35	2.05	
1N756A	TI	1.05		.85	
1N757	HOF	1.50	1.35	1.10	
1N757	HUG	1.80		1.35	
1N757	INT	1.40	1.25	1.12	
1N757	MOT	2.00	1.70	1.50	
1N757	TI	1.05		.85	
1N757A	HOF	1.75	1.55	1.50	
1N757A	HUG	2.30		1.70	
1N757A	INT	1.68	1.49	1.34	
1N757A	MOT	2.75	2.35	2.05	
1N757A	TI	1.05		.85	
1N758	HOF	1.50	1.35	1.10	
1N758	HUG	1.80		1.35	
1N758	INT	1.40	1.25	1.12	
1N758	MOT	2.00	1.70	1.50	
1N758	TI	1.05		.85	
1N758A	HOF	1.75	1.55	1.50	
1N758A	HUG	2.30		1.70	
1N758A	INT	1.68	1.49	1.34	
1N758A	MOT	2.75	2.35	2.05	
1N758A	TI	1.05		.85	
1N759	HOF	1.50	1.35	1.10	
1N759	INT	1.40	1.25	1.12	
1N759	MOT	2.00	1.70	1.50	
1N759	TI	1.05		.85	
1N759A	HOF	1.75	1.55	1.50	
1N759A	INT	1.68	1.49	1.34	
1N759A	MOT	2.75	2.35	2.05	
1N759A	TI	1.05		.85	
1N761	HOF	1.55	1.40	1.30	
1N761	TI	1.05		.85	
1N761A	INT	2.20	1.96	1.76	
1N761-1	HOT	2.80		2.10	
1N761-2	MOT	2.80		2.10	
1N762	HOF	1.55	1.40	1.30	
1N762	TI	1.05		.85	
1N762-1	MOT	2.80		2.10	
1N762-2	MOT	2.80		2.10	
1N763	HOF	1.55	1.40	1.30	
1N763	TI	1.05		.85	
1N763A	INT	2.20	1.96	1.76	
1N763-1	MOT	2.80		2.10	
1N763-2	MOT	2.80		2.10	
1N763-3	MOT	2.80		2.10	
1N764	HOF	1.55	1.40	1.30	
1N764	TI	1.90		1.40	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N764A	INT	2.20	1.96	1.76	
1N764-1	MOT	2.80		2.10	
1N764-2	MOT	2.80		2.10	
1N764-3	MOT	2.80		2.10	
1N764-4	MOT	2.80		2.10	
1N765	HOF	1.55	1.40	1.30	
1N765-1	MOT	2.80		2.10	
1N765-2	MOT	2.80		2.10	
1N766	HOF	1.55	1.40	1.30	
1N766-1	MOT	2.80		2.10	
1N766-2	MOT	2.80		2.10	
1N766-3	MOT	2.80		2.10	
1N767	HOF	1.55	1.40	1.30	
1N767	INT	1.76	1.57	1.41	
1N767	TI	2.10		1.60	
1N767-1	MOT	2.80		2.10	
1N767-2	MOT	2.80		2.10	
1N767-3	MOT	2.80		2.10	
1N768	HOF	1.55	1.40	1.30	
1N768	TI	2.10		1.60	
1N769A	INT	2.20	1.96	1.76	
1N768-1	MOT	2.80		2.10	
1N768-2	MOT	2.80		2.10	
1N768-3	MOT	2.80		2.10	
1N769	HOF	1.55	1.40	1.30	
1N769	TI	210		1.60	
1N769A	INT	2.20	1.96	1.76	
1N769-1	MOT	2.80		2.10	
1N769-2	MOT	2.80		2.10	
1N769-3	MOT	2.80		2.10	
1N769-4	MOT	2.80		2.10	
1N770	HUG	.78		.59	
1N770	SYL	.48		.38	.16
1N771	HUG	.96		.72	
1N771B	HUG	1.28		.96	
1N772	HUG	.70		.53	
1N772A	H UG	.76		.57	
1N773	HUG	.66		.50	
1N773A	HUG	.72		.54	
1N774	HUG	.64		.48	
1N775	HUG	.58		.44	
1N776	HUG	.32		.24	
1N777	HUG	.66		.50	
1N781	HUG	.90		.68	
1N781A	HUG	.90		.68	
1N789	GE				
1N789	RAY	.65		.51	
1N811	HUG	.70		.53	
1N812	HUG	.98		.74	
1N814	HUG	1.47		1.10	
1N815	HUG	.91		.68	
1N816	SYL	.52		.35	.18
1N816W	SYL	.52		.35	.18
1N821	HOF	2.55	2.40	1.90	
1N821	INT	2.38		1.90	

Type No.	Mfr.	1-24	25-99	100-up	100-Mix
1N821	MOT	2.75	2.35	2.10	1.90
1N821A	INT	2.60	2.60	2.10	
1N821	MOT	3.05	2.60	2.30	2.10
1N821ML1	MOT	3.50	3.00	2.40	2.65
1N821ML2	MOT	5.65	4.85	3.90	4.30
1N821ML3	MOT	5.85	5.05	4.05	4.45

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N822	HOF	7.85	7.10	5.90	
1N823	HOF	3.35	3.30	2.50	
1N823	INT	3.10		2.50	

Type No.	Mfr.	1-24	25-99	100-up	100-Mix
1N823	MOT	3.60	3.10	2.75	2.50
1N823A	MOT	3.90	3.35	2.95	2.70
1N823ML1	MOT	4.35	3.75	3.00	3.30
1N823ML2	MOT	6.50	5.60	4.50	4.95
1N823ML3	MOT	7.25	6.25	5.00	5.50
1N824	HOF	9.60	9.60	7.20	8.65
1N825	INT	5.00		4.00	
1N825	MOT	5.80	5.00	4.40	
1N825ML1	MOT	6.50	5.60	4.95	4.50
1N825ML2	MOT	8.70	7.50	6.60	6.00
1N825ML3	MOT	10.00	8.60	7.60	6.90
1N825A	MOT	6.50	5.60	4.95	

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Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N827ML1	MOT	11.60	10.00	8.00	8.80
1N827ML2	MOT	13.75	11.85	9.50	10.45
1N827ML3	MOT	17.40	15.00	12.00	13.20
1N829	MOT	16.30	14.05	11.25	12.35
1N829A	MOT	19.55	16.85	13.50	14.85
1N829ML1	MOT	17.05	14.70	11.75	12.90
1N829ML2	MOT	19.20	16.55	13.25	14.55
1N829ML3	MOT	31.15	26.85	21.50	23.65

Type No.	Mfr.	1-9	10-99	100-999	1000-up
1N830	SYL	2.95	2.53	2.35	
1N830A	SYL	3.85	3.30	3.00	
1N831A	SYL	10.90	9.35	8.60	
1N833A	SYL	13.95	11.95	10.95	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N831	SYL	6.85		5.85	5.40
1N632	SYL	6.85		5.85	5.40
1N832A	SYL	10.90		9.35	8.60
1N844	HUG	2.27		1.70	
1N891	HUG				
1N903	GE				
1N903	HUG	1.40		1.05	
1N903A	GE	1.17		.78	
1N903A	HUG	1.47		1.10	
1N903A	SYL	1.02		.88	.31
1N904	GE	.99		.66	
1N904	HUG	1.33		1.00	
1N904A	HUG	1.40		1.05	
1N905	HUG	1.26		.95	
1N905A	SYL	1.55		1.09	.98
1N906	HUG	.98		.74	
1N906A	SYL	1.13		.75	.39
1N907	HUG	1.05		.79	
1N907A	HUG	1.12		.84	
1N908	HUG	1.12		.84	
1N908	SYL	.87		.58	.27
1N908A	HUG	1.19		.89	
1N908A	SYL	1.02		.68	.30
1N914	GE	.35		.24	
1N914	HUG	1.89		1.42	
1N914	RAY	.45		.30	
1N914	SYL	.45		.30	.18
1N914	TI	.32		.21	
1N914A	GE	.40		.26	
1N914A	RAY	.50		.33	
1N914A	SYL	.50		.33	.18
1N914A	TI	.41		.33	
1N914B	GE	.80		.54	
1N914B	SYL	1.35		.90	.22
1N914B	TI	.77		.52	
1N915	HUG	1.54		1.16	
1N916	GE	.52		.34	
1N916	HUG	2.17		1.63	
1N916	RAY	.67		.44	
1N916	SYL	.75		.50	.32
1N916	TI	.50		.32	
1N916A	RAY	.75		.50	
1N916A	SYL	.75		.50	.32
1N916A	TI	.56		.37	
1N916B	HUG	2.31		1.73	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
1N916B	SYL	.92	.61	.55	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N916B	TI	.72		.48	
1N917	HUG				
1N921	RAY	5.28		4.12	
1N929	HUG	1.26		.95	
1N930	HUG	1.68		1.26	
1N935	HOF	2.15	1.95	1.60	
1N935	INT	1.60	1.50	1.45	
1N935A	INT	1.80	1.70	1.60	
1N935B	INT	2.45	2.32	2.20	

Type No.	Mfr.	1-24	25-99	100-up	100-Mix
1N935	MOT	2.30	2.00	1.75	1.60
1N935A	MOT	2.60	2.25	2.00	1.80
1N935B	MOT	3.55	3.05	2.70	2.45
1N935BML1	MOT	4.25	3.70	2.95	3.25
1N935BML2	MOT	6.45	5.55	4.45	4.90
1N935BML3	MOT	8.20	7.05	5.65	6.20
1N936	MOT	2.75	2.35	2.10	1.90
1N936A	MOT	3.55	3.05	2.70	2.45
1N936B	MOT	4.20	3.60	3.20	2.90
1N937A	MOT	6.15	5.30	4.65	4.25
1N937B	MOT	7.10	6.10	5.40	4.90
1N937BML1	MOT	7.85	6.75	5.40	5.95
1N937BML2	MOT	10.00	8.60	6.90	7.60
1N937BML3	MOT	12.20	10.50	8.40	9.25

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N936	HOF	2.55	2.30	1.90	
1N936	INT	1.90	1.80	1.70	
1N936A	INT	2.45	2.32	2.20	
1N936B	HOF	3.85	3.45	2.90	
1N936B	INT	2.90	2.75	2.60	
1N937	INT	3.70	3.50	3.30	
1N937A	NIT	4.25	4.02	3.85	
1N937B	INT	4.90	4.65	4.40	
1N938	HOF	6.40	5.75	4.80	
1N938	INT	4.80	4.55	4.30	

Type No.	Mfr.	1-24	25-99	100-up	100-Mix
1N938	MOT	6.95	6.00	5.30	4.80
1N938A	MOT	7.55	6.50	6.70	5.20
1N938B	MOT	10.00	8.60	7.60	6.90
1N938BML1	MOT	10.75	9.25	7.40	8.15
1N938BML2	MOT	12.90	11.10	8.90	9.80
1N938BML3	MOT	16.55	14.25	11.40	12.55
1N939A	MOT	25.35	21.85	19.25	17.50

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N938A	HOF	7.00	6.30	5.20	
1N938A	INT	5.20	4.95	4.70	
1N938B	HOF	9.20	8.30	6.90	
1N938B	INT	6.90	6.55	6.20	
1N939	INT	12.40	11.78	11.15	
1N939A	INT	17.50	17.02	15.75	
1N939B	INT	18.85	17.92	17.00	

Type No.	Mfr.	1-24	25-99	100-Mix	100-999
1N939BML1	MOT	28.05	24.20	21.30	19.35
1N939BML2	MOT	30.25	26.05	22.95	20.85
1N939BML3	MOT	33.85	29.20	25.70	23.35
1N941	MOT	3.20	2.75	2.40	2.20
1N941B	MOT	3.60	3.10	2.75	2.50
1N941BML1	MOT	4.35	3.75	3.30	3.00
1N941BML2	MOT	6.50	5.60	4.95	4.50
1N941BML3	MOT	10.45	9.00	7.90	7.20
1N942	MOT	3.50	3.00	2.65	2.40
1N942A	MOT	4.35	3.75	3.30	3.00
1N943BML1	MOT	7.90	6.80	6.00	5.45
1N939BML2	MOT	10.05	8.70	7.65	6.95
1N943BML3	MOT	15.95	13.75	12.10	11.00
1N944A	MOT	13.05	11.25	9.90	9.00
1N944B	MOT	17.30	14.95	13.15	11.95
1N944BML1	MOT	18.05	15.55	13.70	12.45
1N944BML2	MOT	20.20	17.45	15.35	13.95
1N944BML3	MOT	20.65	17.80	15.65	14.25

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N949	GE	.65		.50	
N1949	HUG	1.00		.75	
1N949	SYL	.70		.55	
1N950	HUG	12.00		9.00	
1N951	HUG	12.00		9.00	
1N952	HUG	6.00		4.50	
1N953	HUG	4.50		3.25	
1N954	HUG	3.00		2.25	
1N955	HUG	3.00		2.25	
1N956	HUG	3.50		2.50	
1N957	HUG	1.35		1.01	
1N957	INT	1.40	1.28	1.15	
1N957	MOT	2.15	1.85	1.60	
1N957	TI	1.05		.85	
1N957A	INT	1.50	1.38	1.25	
1N957A	MOT	2.35	2.00	1.75	
1N957B	HOF	2.75	2.55	2.20	
1N957B	INT	1.75	1.63	1.50	
1N957B	MOT	2.95	2.55	2.20	
1N958	HUG	1.40		1.05	
1N958	TI	1.05		.85	
1N958A	MOT	2.35	2.00	1.75	
1N958B	HOF	2.75	2.55	2.20	
1N958B	MOT	2.95	2.55	2.20	
1N959	HUG	1.40		1.05	
1N959	MOT	2.15	1.85	1.60	
1N959	TI	1.05		.85	
1N959A	INT	1.50	1.38	1.25	
1N959B	HOF	2.75	2.55	2.20	
1N959B	MOT	2.95	2.55	2.20	
1N960	HUG	1.40		1.05	
1N960	INT	1.40	1.28	1.15	
1N960	MOT	2.15	1.85	1.60	
1N960	TI	1.05		.85	
1N960A	MOT	2.35	2.00	1.75	
1N960B	HOF	2.75	2.55	2.20	
1N960B	INT	1.75	1.63	1.50	
1N960B	MOT	2.95	2.55	2.20	
1N961	HUG	1.40		1.05	
1N961	INT	1.40	1.28	1.15	
1N961	MOT	2.15	1.85	1.60	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N961	TI	1.05		.85	
1N961A	HOF	2.20	2.00	1.65	
1N961A	INT	1.50	1.38	1.25	
1N961A	MOT	2.35	2.00	1.75	
1N961B	HOF	2.75	2.55	2.20	
1N961B	INT	1.75	1.63	1.50	
1N961B	MOT	2.95	2.55	2.20	
1N961B-HI-REL	HOF	2.96		2.22	
1N962	HUG	1.40		1.05	
1N962	MOT	2.15	1.85	1.60	
1N962A	HOF	2.37		1.78	
1N962A	TI	1.50		1.00	
1N962B	HOF	2.75	2.55	2.20	
1N962B	INT	1.75	1.63	1.50	
1N962B	MOT	2.95	2.55	2.20	
1N962B	TI	1.70		1.20	
1N962BML1	MOT	3.25		2.45	
1N962BML2	MOT	4.30		3.25	
1N962BML3	MOT	5.70		4.30	
1N963	HUG	1.40		1.05	
1N963	INT	1.40	1.28	1.15	
1N963	MOT	2.15	1.85	1.60	
1N963	TI	1.50		1.00	
1N963A	INT	1.50	1.38	1.25	
1N963A	MOT	2.35	2.00	1.75	
1N963B	HOF	2.75	2.55	2.20	
1N963B	INT	1.75	1.63	1.50	
1N963B	MOT	2.95	2.55	2.20	
1N963B	TI	1.70		1.20	
1N963BML1	MOT	3.25		2.45	
1N963BML2	MOT	4.30		3.25	
1N963BML3	MOT	5.70		4.30	
1N964	HUG	1.40		1.05	
1N964	MOT	2.15	1.85	1.60	
1N964	TI	1.50		1.00	
1N964A	HOF	2.37		1.78	
1N964A	INT	1.50	1.38	1.25	
1N964A	MOT	2.35	2.00	1.75	
1N964B	HOF	2.75	2.55	2.20	
1N964B	INT	1.75	1.63	1.50	
1N964B	MOT	2.95	2.55	2.20	
1N964B	TI	1.70		1.20	
1N964BML1	MOT	3.25		2.45	
1N964BML2	MOT	4.30		3.25	
1N964BML3	MOT	5.70		4.30	
1N965	HUG	1.40		1.05	
1N965	MOT	2.15	1.85	1.60	
1N965	TI	1.50		1.00	
1N965A	INT	1.50	1.38	1.25	
1N965A	MOT	2.15	1.85	1.60	
1N965B	HOF	2.75	2.55	2.20	
1N965B	INT	1.75	1.63	1.50	
1N965B	MOT	2.95	2.55	2.20	
1N965B	TI	1.70		1.20	
1N965BML1	MOT	6.25		2.45	
1N965BML2	MOT	4.30		3.25	
1N965BML3	MOT	5.70		4.30	
1N966	HUG	1.40		1.05	
1N966	INT				
1N966	MOT	2.15	1.85	1.60	
1N966	TI	1.50		1.00	
1N966A	HOF	2.20	2.00	1.65	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N966B	INT	1.75	1.63	1.50	
1N966B	MOT	2.95	2.55	2.20	
1N966B	TI	1.70		1.20	
1N966BML1	MOT	3.25		2.45	
1N966BML2	MOT	4.30		3.25	
1N966BML3	MOT	5.70		4.30	
1N967	HUG	1.40		1.05	
1N967	MOT	2.15	1.85	1.60	
1N967	TI	1.50		1.00	
1N967A	INT	1.50	1.38	1.25	
1N967A	MOT	2.35	2.00	1.75	
1N967B	HOF	2.75	2.55	2.20	
1N967B	INT	1.75	1.63	1.50	
1N967B	MOT	2.95	2.55	2.20	
1N967B	TI	1.70		1.20	
1N967BML1	MOT	3.25		2.45	
1N967BML2	MOT	4.30		3.25	
1N967BML3	MOT	5.70		4.30	
1N968	HUG	1.40		1.05	
1N968	M OT	2.15	1.85	1.60	
1N968	TI	1.50		1.00	
1N968A	INT	1.50	1.38	1.25	.69
1N968A	MOT	2.35	2.00	1.75	
1N968B	HOF	2.75	2.55	2.20	
1N968B	INT	1.75	1.63	1.50	
1N968B	MOT	2.95	2.55	2.20	
1N968B	TI	1.70		1.20	

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N968BML1	MOT	3.25		2.45	
1N968BML2	MOT	4.30		3.25	
1N968BML3	MOT	5.70		4.30	
1N969	HUG	1.40		1.05	
1N969	INT	1.40	1.28	1.15	
1N969	MOT	2.15	1.85	1.60	
1N969	TI	1.50		1.00	
1N969A	HOF	2.20	2.00	1.65	
1N969A	INT	1.50	1.38	1.25	
1N969A	MOT	2.35	2.00	1.75	
1N969B	HOF	2.75	2.55	2.20	
1N969B	HUG	1.75		1.31	
1N969B	INT	1.75	1.63	1.50	
1N969B	INT	1.75	1.63	1.50	.71
1N969B	MOT	2.95	2.55	2.20	
1N969B	TI	1.70		1.20	
1N969BML1	MOT	3.25		2.45	
1N969BML2	MOT	4.30		3.25	
1N969BML3	MOT	5.70		4.30	
1N970	HUG	1.40		1.05	
1N970	INT	1.40	1.28	1.15	
1N970	MOT	2.15	1.85	1.60	
1N970	TI	1.50		1.00	
1N970A	HUG	1.50		1.13	
1N970A	INT	1.50	1.38	1.25	
1N970A	MOT	2.35	2.00	1.75	
1N970B	HUG	1.70		1.28	
1N970B	INT	1.75	1.63	1.50	
1N970B	MOT	2.95	2.55	2.20	
1N970B	TI	1.70		1.20	
1N970BML1	MOT	3.25		2.45	
1N970BML2	MOT	4.30		3.25	
1N970BML3	MOT	5.70		4.30	
1N971	HUG	1.40		1.05	
1N971	INT	1.40	1.28	1.15	
1N971	TI	1.50		1.00	
1N971A	HUG	1.50		1.13	
1N971A	INT	1.50	1.38	1.25	
1N971B	HOF	2.75	2.55	2.20	
1N971B	INT	1.75	1.63	1.50	
1N971B	MOT	2.95	2.55	2.20	
1N971B	TI	1.70		1.20	
1N971BML1	MOT	3.25		2.45	
1N971BML2	MOT	4.30		3.25	
1N971BML3	MOT	5.70		4.30	
1N972	HUG	1.40		1.05	
1N972	INT	1.40		1.15	
1N972	TI	1.50		1.00	
1N972A	HUG	1.50		1.13	
1N972A	INT	1.50	1.38	1.25	
1N972B	HOF	2.75	2.55	2.20	
1N972B	INT	1.75	1.63	1.50	
1N972B	MOT	2.95	2.55	2.20	
1N972B	TI	1.70		1.20	
1N972BML1	MOT	3.25		2.45	
1N972BML2	MOT	4.30		3.25	
1N972BML3	MOT	5.70		4.30	
1N973	HUG	1.40		1.05	
1N973	INT	1.40		1.15	
1N973	MOT	2.15	1.85	1.60	
1N973	TI	1.50		1.00	
1N973A	HOF	2.37		1.78	
1N973A	HUG	1.50		1.13	
1N973A	INT	1.50	1.38	1.25	
1N973A	MOT	2.35	2.00	1.75	
1N973B	HOF	2.75	2.55	2.20	
1N973B	HUG	1.70		1.28	
1N973B	INT	1.75	1.63	1.50	
1N973B	MOT	2.95	2.55	2.20	
1N973B	TI	1.70		1.20	
1N973BML1	MOT	3.25		2.45	
1N973BML2	MOT	4.30		3.25	
1N973BML3	MOT	5.70		4.30	
1N974	HUG	2.10		1.58	
1N974	MOT	2.15	1.85	1.60	
1N974A	HUG	2.30		1.73	
1N974A	MOT	2.35	2.00	1.75	
1N974B	HUG	2.90		2.18	
1N974B	MOT	2.95	2.55	2.20	
1N974BML1	MOT	3.25		2.45	
1N974BML2	MOT	4.30		3.25	
1N974BML3	MOT	5.70		4.30	
1N975	MOT	2.35	2.00	1.75	
1N975A	MOT	2.35	2.00	1.75	
1N975B	HUG	2.90		2.18	
1N975B	MOT	2.95	2.55	2.20	
1N975BML1	MOT	3.25		2.45	
1N975BML2	MOT	4.30		3.25	
1N975BML3	MOT	5.70		4.30	
1N976B	HOF	2.75	2.55	2.20	
1N976B	HUG	2.95		2.20	
1N976B	MOT	2.95	2.55	2.20	
1N976BML1	MOT	3.25		2.45	
1N976BML2	MOT	4.30		3.25	
1N976BML3	MOT	5.70		4.30	
1N977	HUG	2.15		1.60	
1N977	MOT	2.15	1.85	1.60	
1N977B	HUG	2.95		2.20	
1N977B	MOT	2.95	2.55	2.20	
1N977BML1	MOT	3.25		2.45	
1N977BML2	MOT	4.30		3.25	
1N977BML3	MOT	5.70		4.30	
1N978	HUG	2.15		1.60	
1N978A	HUG	2.35		1.75	
1N978B	HOF	2.75	2.55	2.20	
1N978B	HUG	2.95		2.20	
1N978B	MOT	2.95	2.55	2.20	
1N978BML1	MOT	3.25		2.45	
1N978BML2	MOT	4.30		3.25	
1N978BML3	MOT	5.70		4.30	
1N979	HUG	2.15		1.60	
1N979	MOT	2.15	1.85	1.60	
1N979A	HUG	2.35		1.75	
1N979A	MOT	2.35	2.00	1.75	
1N979B	HUG	2.95		2.20	
1N979B	MOT	2.95	2.55	2.20	
1N979BML1	MOT	3.25		2.45	
1N979BML2	MOT	4.30		3.25	
1N979BML3	MOT	5.70		4.30	
1N980	HUG	2.15		1.60	
1N980	MOT	2.15	1.85	1.60	
1N980A	HUG	2.35		1.75	
1N980A	MOT	2.35	2.00	1.75	
1N980B	HUG	2.95		2.20	
1N980B	MOT	2.95	2.55	2.20	
1N980BML3	MOT	5.70		4.30	
1N980BML1	MOT	3.25		2.45	
1N980BML2	MOT	4.30		3.25	
1N981	HUG	2.15		1.60	
1N981A	HUG	2.35		1.75	
1N981B	HUG	2.95		2.20	
1N981B	MOT	2.95	2.55	2.20	
1N981BML1	MOT	3.25		2.45	
1N981BML2	MOT	4.30		3.25	
1N981BML3	MOT	5.70		4.30	
1N982	MOT	2.15	1.85	1.60	
1N982A	HUG	2.35		1.75	
1N982A	MOT	2.35	2.00	1.75	
1N982B	HUG	2.95		2.20	
1N982B	MOT	2.95	2.55	2.20	
1N982BML1	MOT	3.25		2.45	
1N982BML2	MOT	4.30		3.25	
1N982BML3	MOT	5.70		4.30	
1N983A	HUG	2.35		1.75	
1N983B	HOF	2.75	2.55	2.20	
1N983B	HUG	2.95		2.20	
1N983BML1	MOT	3.25		2.45	
1N983BML2	MOT	4.30		3.25	
1N983BML3	MOT	5.70		4.30	
1N984	MOT	2.15	1.85	1.60	
1N984A	HUG	2.35		1.75	
1N984A	MOT	2.35	2.00	1.75	
1N984B	HOF	2.75	2.55	2.20	
1N984B	HUG	2.95		2.20	
1N984B	MOT	2.95	2.55	2.20	
1N984BML1	MOT	3.25		2.45	
1N984BML2	MOT	4.30		3.25	
1N984BML3	MOT	5.70		4.30	
1N985	MOT	2.60	2.25	1.95	
1N985A	HUG	3.00		2.25	
1N985A	MOT	3.00	2.60	2.25	
1N985B	HOF	3.45	3.15	2.75	
1N985B	HUG	3.76		2.75	
1N985B	MOT	3.65	3.15	2.75	
1N986A	HUG	3.00		2.25	
1N986A	MOT	3.00	2.60	2.25	
1N986B	HOF	3.45	3.15	2.75	
1N986B	HUG	3.65		2.75	
1N987A	HUG	3.00		2.25	
1N987A	MOT	3.00	2.60	2.25	
1N987B	HUG	3.65		2.75	
1N988	MOT	2.60	2.25	1.95	
1N988A	HUG	3.00		2.25	
1N988A	MOT	2.60	2.25	1.95	
1N988B	HUG	3.65		2.75	
1N988B	MOT	3.65	3.15	2.75	
1N989A	HUG	3.00		2.25	
1N989A	MOT	3.00	2.60	2.25	
1N989B	HUG	3.65		2.75	
1N989B	MOT	3.65	3.15	2.75	
1N990A	HUG	3.00		2.25	
1N990A	MOT	3.00	2.60	2.25	
1N990B	HUG	3.65		2.75	
1N991A	HUG	3.00		2.25	
1N991A	MOT	3.00	2.60	2.25	
1N992	MOT	2.60	2.25	1.95	
1N992A	MOT	3.00	2.60	2.25	
1N992B	HOF	3.45		2.75	
1N992B	HUG	3.65		2.75	
1N992B	MOT	3.65	3.15	2.75	
1N995	HUG	.60		.45	
1N995	SYL	.60		.45	.18
1N996	HUG				

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N1081	SAR	.60	.55	.51	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1082	INT	.75		.60	
1N1083	INT	.85		.68	
1N1084	INT	.94		.76	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N1083	SAR	.70	.61	.57	
1N1084	SAR	.75	.63	.59	.53
1N1085A	SAR	3.24	2.86	2.66	
1N1086A	SAR	4.00	3.43	3.20	
1N1087A	S AR	4.67	4.00	3.73	
1N1088A	SAR	5.35	4.67	4.27	
1N1092	SAR	5.35	4.67	4.27	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1095	GE	.77		.51	
1N1095	INT	.76		.51	
1N1095	RCA	.88		.59	
1N1095	TI	.76		.51	
1N1095	WES	.89		.63	
1N1096	GE	.96		.64	
1N1096	INT	.96		.64	
1N1096	TI	.97		.64	
1N1096	WES	1.00		.68	
1N1101	TI	.63		.42	
1N1102	TI	.60		.40	
1N1103	TI	.67		.45	
1N1105	TI	.97		.64	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N1109	SAR	4.00	3.43	3.20	
1N1113	SAR	7.35	6.30	5.87	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1115	GE	1.05		.70	
1N1115	TI	1.05		.70	
1N1116	GE	1.12		.75	
1N1116	TI	1.12		.75	
1N1117	GE	1.43		.95	
1N1118	TI	1.72		1.15	
1N1119	GE	1.80		1.20	
1N1119	TI	1.80		1.20	
1N1120	GE	2.40		1.60	
1N1124	GI	2.10		1.40	
1N1124	HUG	1.85		1.39	
1N1124	TI	2.10		1.40	

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Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N1124A	TI	1.86	.....	1.24	.....
1N1124R	TI	2.10	.....	1.40	.....
1N1125	TI	2.55	.....	1.70	.....
1N1126	TI	3.90	.....	2.60	.....
1N1126R	TI	3.90	.....	2.60	.....
1N1128	TI	6.00	.....	4.00	.....
1N1128A	TI	5.20	.....	3.47	.....
1N1128R	TI	6.00	.....	4.00	.....
1N1130	INT	6.22	.....	4.15	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N1159	SAR	4.30	3.72	3.46	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1169	WES	.75	.....	.50	.....
1N1183	MOT	1.95	.....	1.30	.....
1N1183	WES	1.85	.....	1.30	.....
1N1183A	RCA	2.15	.....	1.43	.....
1N1183A	WES	2.45	.....	2.15	.....
1N1183AR	WES	2.45	.....	2.15	.....
1N1183R	WES	1.85	.....	1.30	.....
1N1184	GE	2.40	.....	1.60	.....
1N1184	MOT	2.40	.....	1.60	.....
1N1184	WES	2.30	.....	1.60	.....
1N1184A	RCA	2.48	.....	1.65	.....
1N1184R	WES	2.30	.....	1.60	.....
1N1185	MOT	2.90	.....	1.95	.....
1N1185	WES	2.83	.....	1.95	.....
1N1185R	WES	2.83	.....	1.95	.....
1N1186	GE	3.45	.....	2.30	.....
1N1186	MOT	3.45	.....	2.30	.....
1N1186	WES	3.35	.....	2.30	.....
1N1186A	RCA	3.55	.....	2.37	.....
1N1186R	WES	3.35	.....	2.30	.....
1N1187	GE	5.13	.....	2.42	.....
1N1187	MOT	5.10	.....	3.40	.....
1N1187	WES	5.03	.....	3.42	.....
1N1187R	WES	5.03	.....	3.42	.....
1N1188	GE	5.85	.....	3.90	.....
1N1188	MOT	5.85	.....	3.90	.....
1N1188	WES	5.75	.....	3.90	.....
1N1188R	WES	5.75	.....	3.90	.....
1N1189	MOT	6.45	.....	4.30	.....
1N1189	WES	6.10	.....	4.30	.....
1N1189A	RCA	7.43	.....	4.95	.....
1N1189R	WES	6.10	.....	4.30	.....
1N1190	GE	6.90	.....	4.60	.....
1N1190	MOT	6.90	.....	4.60	.....
1N1190	WES	6.65	.....	4.60	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N1190	SAR	4.89	4.19	3.90	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1190A	RCA	8.65	.....	5.80	.....
1N1190A	WES	7.65	.....	5.15	.....
1N1190AR	WES	7.65	.....	5.15	.....
1N1190R	WES	6.65	.....	4.60	.....
1N1191	WES	1.57	.....	1.10	.....
1N1191R	WES	1.57	.....	1.10	.....
1N1192	GE	1.73	.....	1.15	.....
1N1192	MOT	1.72	.....	1.15	.....
1N1192	WES	1.65	.....	1.15	.....
1N1192R	WES	1.65	.....	1.15	.....
1N1193	MOT	2.10	.....	1.40	.....
1N1193	WES	2.00	.....	1.40	.....
1N1193R	WES	2.00	.....	1.40	.....
1N1194	GE	2.48	.....	1.65	.....
1N1194	MOT	2.90	.....	1.95	.....
1N1194	WES	2.38	.....	1.65	.....
1N1194R	WES	2.38	.....	1.65	.....
1N1195	MOT	4.25	.....	2.85	.....
1N1195	WES	3.92	.....	2.68	.....
1N1195A	MOT	4.40	.....	2.95	.....
1N1195R	WES	3.92	.....	2.68	.....
1N1196	MOT	4.85	.....	3.30	.....
1N1196	WES	4.85	.....	3.30	.....
1N1196A	G E	4.85	.....	3.30	.....
1N1196A	MOT	5.25	.....	3.50	.....
1N1196R	WES	4.85	.....	3.30	.....
1N1197	MOT	6.15	.....	4.10	.....
1N1197	WES	5.90	.....	4.10	.....
1N1197A	MOT	6.45	.....	4.30	.....
1N1197R	WES	5.90	.....	4.10	.....
1N1198	WES	6.55	.....	4.45	.....
1N1198A	MOT	7.80	.....	5.20	.....
1N1198A	RCA	7.01	.....	4.68	.....
1N1198R	WES	6.55	.....	4.45	.....
1N1199	GE	1.25	.....	.83	.....
1N1199	WES	1.14	.....	.80	.....
1N1199A	GE	1.25	.....	.83	.....
1N1199A	INT	1.25	.....	.83	.....
1N1199A	RCA	1.24	.....	.83	.....
1N1199A	WES	1.29	.....	.87	.....
1N1199AR	WES	1.29	.....	.87	.....
1N1199R	WES	1.14	.....	.80	.....
1N1200	GE	1.41	.....	.94	.....
1N1200	WES	1.34	.....	.94	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N1200	SAR	1.19	1.02	.94	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1200A	GE	1.41	.....	.94	.....
1N1200A	INT	1.40	.....	.94	.....
1N1200A	RCA	1.41	.....	.94	.....
1N1200A	WES	1.34	.....	.94	.....
1N1200AR	WES	1.45	.....	.98	.....
1N1200R	WES	1.34	.....	.94	.....
1N1201	GE	1.82	.....	1.21	.....
1N1201	INT	1.80	.....	1.20	.....
1N1201	WES	1.71	.....	1.20	.....
1N1201A	INT	1.60	.....	1.20	.....
1N1201A	WES	1.71	.....	1.20	.....
1N1201AR	WES	1.86	.....	1.25	.....
1N1201R	WES	1.71	.....	1.20	.....
1N1202	GE	2.63	.....	1.75	.....
1N1202	WES	2.45	.....	1.70	.....
1N1202A	GE	2.63	.....	1.75	.....
1N1202A	INT	2.60	.....	1.75	.....
1N1202A	RCA	2.48	.....	1.65	.....
1N1202A	WES	2.67	.....	1.79	.....
1N1202AR	WES	2.67	.....	1.79	.....
1N1202R	WES	2.45	.....	1.70	.....
1N1203	WES	3.50	.....	2.40	.....
1N1203A	INT	3.50	.....	2.35	.....
1N1203A	WES	3.50	.....	2.40	.....
1N1203AR	WES	3.64	.....	2.44	.....
1N1203R	WES	3.50	.....	2.40	.....
1N1204	GE	4.58	.....	3.05	.....
1N1204	WES	4.50	.....	3.00	.....
1N1204A	INT	4.50	.....	3.00	.....
1N1204A	RCA	4.46	.....	2.97	.....
1N1204A	WES	4.50	.....	3.00	.....
1N1204AR	WES	4.62	.....	3.09	.....
1N1204R	INT	4.50	.....	3.00	.....
1N1204R	WES	4.50	.....	3.00	.....
1N1205	HUG				
1N1205	WES	5.23	.....	3.50	.....
1N1205A	INT	5.25	.....	3.50	.....
1N1205A	WES	5.23	.....	3.50	.....
1N1205AR	WES	5.37	.....	3.59	.....
1N1205R	WES	5.23	.....	3.50	.....
1N1206	WES	6.20	.....	4.20	.....

Type No.	Mfr.	1-24	25-99	100-up	
1N1206	SAR	2.34	2.00	1.86	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1206A	GE	6.38	.....	4.25	.....
1N1206A	INT	6.10	.....	4.10	.....
1N1206A	WES	6.20	.....	4.20	.....
1N1206AR	WES	6.34	.....	4.29	.....
1N1206R	WES	6.20	.....	4.20	.....
1N1217	WES	.40	.....	.29	.....
1N1218	WES	.47	.....	.32	.....
1N1220	WES	.53	.....	.35	.....
1N1222	WES	.79	.....	.53	.....
1N1224	WES	1.00	.....	.68	.....
1N1226	WES	1.46	.....	1.00	.....
1N1228	WES	1.31	.....	.83	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N1237	SAR	12.00	10.30	9.60	.....
1N1239	SAR	18.10	15.50	14.45	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1313	HOF	3.10	2.70	2.35	.....
1N1313	HUG	3.00	.....	2.25	.....
1N1313	MOT	3.10	2.70	2.35	.....
1N1313A	HUG	3.50	.....	2.60	.....
1N1313A	INT	4.85	.....	3.90	.....
1N1313A	MOT	5.45	4.70	4.10	.....
1N1314	HOF	3.10	2.70	2.35	.....
1N1314	HUG	3.00	.....	2.25	.....
1N1314	MOT	3.10	2.70	2.35	.....
1N1314A	HOF	5.00	4.50	4.10	.....
1N1314A	INT	4.85	.....	3.90	.....
1N1314A	MOT	5.45	4.70	4.10	.....
1N1315	HOF	3.10	2.70	2.35	.....
1N1315	MOT	3.10	2.70	2.35	.....
1N1315A	INT	4.85	.....	3.90	.....
1N1315A	MOT	5.45	4.70	4.10	.....
1N1316	MOT	3.10	2.70	2.35	.....
1N1316A	MOT	5.45	4.70	4.10	.....
1N1317	HOF	3.10	2.70	2.35	.....
1N1317	HUG	3.00	.....	2.25	.....
1N1317	MOT	3.10	2.70	2.35	.....
1N1317A	MOT	5.45	4.70	4.10	.....
1N1318	HUG	3.00	.....	2.25	.....
1N1318	MOT	3.10	2.70	2.35	.....
1N1318A	HUG	3.50	.....	2.60	.....
1N1318A	MOT	5.45	4.70	4.10	.....
1N1319	HUG	3.00	.....	2.25	.....
1N1319	MOT	3.10	2.70	2.35	.....
1N1319A	HUG	3.50	.....	2.60	.....
1N1319A	MOT	5.45	4.70	4.10	.....
1N1320	MOT	3.10	2.70	2.35	.....
1N1320A	MOT	5.45	4.70	4.10	.....
1N1321	MOT	3.10	2.70	2.35	.....
1N1321A	MOT	5.45	4.70	4.10	.....
1N1322	HOF	3.10	2.70	2.35	.....
1N1322	MOT	3.10	2.70	2.35	.....
1N1322A	MOT	5.45	4.70	4.10	.....
1N1323	HOF	3.10	2.70	2.35	.....
1N1323	MOT	3.10	2.70	2.35	.....
1N1323A	HOF	5.00	4.50	4.10	.....
1N1323A	MOT	5.45	4.70	4.10	.....
1N1324	MOT	3.10	2.70	2.35	.....
1N1324A	MOT	5.45	4.70	4.10	.....
1N1325	MOT	3.10	2.70	2.35	.....
1N1325A	MOT	5.45	4.70	4.10	.....
1N1326	MOT	3.10	2.70	2.35	.....
1N1326A	MOT	5.45	4.70	4.10	.....
1N1327	MOT	3.10	2.70	2.35	.....
1N1327A	MOT	5.45	4.70	4.10	.....
1N1341	GE	1.13	.....	.75	.....
1N1341	WES	1.06	.....	.75	.....
1N1341A	GE	1.13	.....	.75	.....
1N1341A	INT	1.15	.....	.75	.....
1N1341A	WES	1.06	.....	.75	.....
1N1341AR	WES	1.06	.....	.75	.....
1N1341R	WES	1.06	.....	.75	.....
1N1342	WES	1.22	.....	:85	.....
1N1342A	GE	1.28	.....	:85	.....
1N1342A	INT	1.25	.....	:85	.....
1N1342A	WES	1.22	.....	:85	.....
1N1342AR	WES	1.22	.....	:85	.....
1N1342B	RCA	1.32	.....	.88	.....
1N1342R	WES	1.22	.....	:85	.....
1N1342RB	RCA	1.32	.....	:88	.....
1N1343	GE	1.64	.....	1.09	.....
1N1343	WES	1.56	.....	1.05	.....
1N1343A	INT	1.60	.....	1.10	.....
1N1343A	WES	1.56	.....	1.05	.....
1N1343AR	WES	1.56	.....	1.05	.....
1N1343R	WES	1.56	.....	1.05	.....
1N1344	GE	2.22	.....	1.48	.....
1N1344	WES	2.12	.....	1.43	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N1344	SAR	1.20	1.05	.96	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1344A	WES	2.12	.....	1.43	.....
1N1344AR	WES	2.12	.....	1.43	.....
1N1344R	WES	2.12	.....	1.43	.....
1N1345	WES	3.07	.....	2.10	.....
1N1345A	INT	3.15	.....	2.08	.....
1N1345A	WES	3.07	.....	2.10	.....
1N1345AR	WES	3.07	.....	2.10	.....
1N1345R	WES	3.07	.....	2.10	.....
1N1346	GE	4.11	.....	2.74	.....
1N1346	WES	4.01	.....	2.70	.....

Type No.	Mfr.	1-24	25-99	100-up	
1N1346	SAR	1.50	1.29	1.20	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1346A	GE	4.11	.....	2.74	.....
1N1346A	WES	4.01	.....	2.70	.....
1N1346AR	WES	4.01	.....	2.70	.....
1N1346R	WES	4.01	.....	2.70	.....
1N1347	WES	4.60	.....	3.10	.....
1N1347A	WES	4.60	.....	3.10	.....
1N1347AR	WES	4.60	.....	3.10	.....
1N1347R	WES	4.60	.....	3.10	.....
1N1348	GE	5.93	.....	3.95	.....
1N1348	WES	5.40	.....	3.65	.....

Type No.	Mfr.	1-24	25-99	100-up	
1N1348	SAR	2.12	1.82	1.69	.....

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1348A	GE	5.93	.....	3.95	.....
1N1348A	WES	5.40	.....	3.65	.....
1N1348AR	WES	5.50	.....	3.65	.....
1N1348R	WES	5.40	.....	3.65	.....
1N1351	HUG	4.90	.....	3.68	.....
1N1351	MOT	6.20	5.35	4.65	.....
1N1351A	INT	7.05	6.30	5.65	.....
1N1351A	MOT	7.65	6.80	5.90	.....
1N1352	HUG	4.90	.....	3.68	.....
1N1352	MOT	6.20	5.35	4.65	.....
1N1352A	MOT	1.85	6.80	5.90)	.....

Type No.	Mfr.	1-24	25-99	100-up	
1N1352	SAR	3.39	2.90	2.70	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1353	HUG	4.90	.....	3.68	.....
1N1353	MOT	6.20	5.35	4.65	.....
1N1353A	INT	7.05	6.30	5.65	.....
1N1353A	MOT	7.85	6.80	5.90	.....
1N1354	HUG	4.90	.....	3.68)	.....
1N1354	MOT	6.20	5.35	4.65	.....
1N1354A	MOT	7.85	6.80	5.90	.....
1N1355	HOF	4.80	4.30	3.60	.....
1N1355	HUG	4.90	.....	3.68	.....
1N1355	MOT	6.20	5.35	4.65	.....
1N1355A	MOT	7.85	6.80	5.90	.....
1N1355A	INT	7.05	6.30	5.65	.....
1N1356	MOT	6.20	5.35	4.65	.....
1N1356A	INT	7.05	6.30	5.65	.....
1N1356A	MOT	7.85	6.80	5.90	.....
1N1357	MOT	6.20	5.35	4.65	.....
1N1357A	INT	7.05	6.30	5.65	.....
1N1357A	MOT	7.85	6.80	5.90	.....
1N1358	MOT	6.20	5.35	4.65	.....
1N1358A	INT	7.05	6.30	5.65	.....
1N1358A	MOT	7.85	6.85	5.90	.....
1N1359	MOT	6.20	5.35	4.65	.....
1N1359A	INT	7.05	6.30	5.65	.....
1N1359A	MOT	7.85	6.80	5.90	.....
1N1360	HOF	4.80	4.30	3.60	.....
1N1360	MOT	6.20	5.35	4.65	.....
1N1360A	INT	7.05	6.30	5.65	.....
1N1360A	MOT	7.85	6.80	5.90	.....
1N1361A	INT	7.05	6.30	5.65	.....
1N1361	MOT	6.20	5.35	4.65	.....
	MOT	7.85	6.80	5.90	.....
1N1362	MOT	6.20	5.35	4.65	.....
1N1362A	INT	7.05	6.30	5.65	.....
1N1362A	MOT	7.85	6.80	5.90	.....
1N1363	MOT	6.20	5.35	4.65	.....
1N1363A	MOT	7.85	6.80	5.90	.....
1N1364	MOT	6.20	5.35	4.65	.....
1N1364A	MOT	7.85	6.80	5.90	.....
1N1365	MOT	6.20	5.35	4.65	.....
1N1365A	MOT	7.85	6.80	5.90	.....
1N1366	MOT	6.20	5.35	4.65	.....
1N1366A	MOT	7.85	6.80	5.90	.....
1N1367	MOT	6.20	5.35	4.65	.....
1N1368	HOF	4.80	4.30	3.60	.....
1N1368	MOT	6.20	5.35	4.65	.....
1N1368A	MOT	7.85	6.80	5.90	.....
1N1369	HOF	4.80	4.30	3.60	.....
1N1369	MOT	6.20	5.35	4.65	.....
1N1370	HOF	4.80	4.30	3.60	.....
1N1370	MOT	6.20	5.35	4.65	.....
1N1370A	MOT	7.85	6.80	5.90	.....
1N1370A	INT	7.05	6.30	5.65	.....
1N1371	MOT	6.20	5.35	4.65	.....
1N1371A	INT	7.05	6.30	5.65	.....
1N1371A	MOT	7.85	6.80	5.90	.....
1N1372	HOF	4.80	4.30	3.60	.....
1N1372	MOT	6.20	5.30	4.65	.....
1N1373	MOT	6.20	5.35	4.65	.....
1N1373A	MOT	7.85	6.80	5.90	.....

Type No.	Mfr.	1-24	25-99	100-up	
1N1374	MOT	6.20	5.35	4.65	.....
1N1374A	MOT	7.85	6.80	5.90	.....
1N1375	MOT	6.20	5.35	4.65	.....
1N1375A	MOT	7.85	6.80	5.90	.....

Type No.	Mfr.	1-24	25-99	100-up	
1N1396	WES	5.65	4.80	.....	.....
1N1397	WES	6.95	5.90	.....	.....
1N1398	WES	9.05	7.55	.....	.....
1N1399	WES	11.30	9.05	.....	.....
1N1400	WES	12.80	10.50	.....	.....
1N1401	WES	13.85	11.50	.....	.....
1N1402	WES	15.40	12.80	.....	.....
1N1403	WES	18.10	15.00	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1409	INT	8.00	.....	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1486	WES	/85	.....	.60	.....
1N1487	GE	.49	.....	.33	.....
1N1487	TI	.49	.....	.33	.....
1N1488	TI	.52	.....	.35	.....
1N1489	GE	.60	.....	.40	.....
1N1489	TI	.60	.....	.40	.....
1N1490	GE	.67	.....	.45	.....
1N1490	TI	.67	.....	.45	.....
1N1491	GE	.76	.....	.51	.....
1N1492	GE	.96	.....	.64	.....
1N1507	MOT	2.95	.....	2.20	.....
1N1507A	INT	3.45	3.05	2.65	.....
1N1507A	MOT	2.95	.....	2.20	.....
1N1508	INT	2.75	2.45	2.10	.....
1N1508	MOT	2.95	.....	2.20	.....
1N1508A	INT	3.45	3.05	2.65	.....
1N1508A	MOT	3.65	.....	2.75	.....
1N1509	INT	2.75	2.45	2.10	.....
1N1509	MOT	2.95	.....	2.20	.....
1N1509A	MOT	3.65	.....	2.75	.....
1N1510	INT	2.75	2.45	2.10	.....
1N1510	MOT	2.95	.....	2.20	.....
1N1510A	INT	3.45	3.05	2.65	.....
1N1510A	MOT	3.65	.....	2.75	.....
1N1511	INT	2.75	2.45	2.10	.....
1N1511	MOT	2.95	.....	2.20	.....
1N1511A	INT	3.45	3.05	2.65	.....
1N1511A	MOT	3.65	.....	2.75	.....
1N1512	INT	2.75	2.45	2.10	.....
1N1512	MOT	2.95	.....	2.20	.....
1N1512A	INT	3.45	3.05	2.65	.....
1N1512A	MOT	3.65	.....	2.75	.....
1N1513	INT	2.75	2.45	2.10	.....
1N1513	MOT	2.95	.....	2.20	.....
1N1513A	INT	3.45	3.05	2.65	.....
1N1513A	MOT	3.65	.....	2.75	.....
1N1514	INT	2.75	2.45	2.10	.....
1N1514	MOT	2.95	.....	2.20	.....
1N1514A	INT	3.45	3.05	2.65	.....
1N1514A	MOT	3.65	.....	2.75	.....
1N1515A	INT	3.45	3.05	2.65	.....
1N1515	MOT	2.95	.....	2.20	.....
1N1515A	MOT	3.65	.....	2.75	.....
1N1516	INT	2.75	2.45	2.10	.....
1N1516	MOT	2.95	.....	2.20	.....
1N1516A	INT	3.45	3.05	2.65	.....
1N1516A	MOT	3.65	.....	2.75	.....
1N1517	INT	2.75	2.45	2.10	.....
1N1517	MOT	2.95	.....	2.20	.....
1N1517A	INT	3.45	3.05	2.65	.....
1N1517A	MOT	3.65	.....	2.75	.....
1N1518	INT	2.70	2.40	2.20	.....
1N1518	MOT	2.95	.....	2.20	.....
1N1518A	INT	3.50	3.00	2.75	.....
1N1518A	MOT	3.65	.....	2.75	.....
1N1519	INT	2.70	2.40	2.20	.....
1N1519	MOT	2.95	.....	2.20	.....
1N1519A	INT	3.50	3.00	2.75	.....
1N1519A	MOT	3.65	.....	2.75	.....
1N1520	INT	2.70	2.40	2.20	.....
1N1520	MOT	2.95	.....	2.20	.....
1N1520A	INT	3.50	3.00	2.75	.....
1N1520A	MOT	3.65	.....	2.75	.....
1N1521	INT	2.70	2.40	2.20	.....
1N1521	MOT	2.95	.....	2.20	.....
1N1521A	INT	3.50	3.00	2.75	.....
1N1521A	MOT	3.65	.....	2.75	.....
1N1522A	INT	3.50	3.00	2.75	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1522	MOT	2.95	.....	2.20	.....
1N1522A	MOT	3.65	.....	2.75	.....
1N1523	INT	2.70	2.40	2.20	.....
1N1523	MOT	2.95	.....	2.20	.....
1N1523A	INT	3.50	3.00	2.75	.....
1N1523A	MOT	3.65	.....	2.75	.....
1N1524	INT	2.70	2.40	2.20	.....
1N1524	MOT	2.95	.....	2.20	.....
1N1524A	INT	3.50	3.00	2.75	.....
1N1524A	MOT	3.65	.....	2.75	.....
1N1525	INT	2.70	2.40	2.20	.....
1N1525	MOT	2.95	.....	2.20	.....
1N1525A	INT	3.50	3.00	2.75	.....
1N1525A	MOT	3.65	.....	2.75	.....
1N1526	INT	2.70	2.40	2.20	.....
1N1526	MOT	2.95	.....	2.20	.....
1N1526A	INT	3.50	3.00	2.75	.....
1N1526A	MOT	3.65	.....	2.75	.....
1N1527	INT	2.70	2.40	2.20	.....
1N1527	MOT	2.95	.....	2.20	.....
1N1527A	INT	3.50	3.00	2.75	.....
1N1527B	MOT	3.65	.....	2.75	.....
1N1528	INT	2.70	2.40	2.20	.....
1N1528	MOT	2.95	.....	2.20	.....
1N1528A	INT	3.50	3.00	2.75	.....
1N1528A	MOT	3.65	.....	2.75	.....
1N1530	HOF	15.60	14.00	12.40	.....
1N1530A	HOF	23.40	21.00	18.70	.....
1N1563	MOT	1.57	.....	1.05	.....
1N1563A	MOT	1.80	.....	1.20	.....
1N1564	MOT	1.72	.....	1.15	.....
1N1564A	MOT	2.02	.....	1.35	.....
1N1565	MOT	1.87	.....	1.25	.....
1N1566	MOT	2.02	.....	1.35	.....
1N1566A	MOT	2.70	.....	1.80	.....
1N1567A	MOT	3.15	.....	2.10	.....
1N1568A	MOT	4.65	.....	3.10	.....
1N1581	TI	1.10	.....	.72	.....
1N1582	TI	1.20	.....	.80	.....
1N1585	TI	4.05	.....	2.70	.....
1N1588	MOT	4.10	.....	3.10	.....
1N1588	INT	3.80	3.40	3.05	.....
1N1588A	MOT	4.90	.....	3.70	.....
1N1588A	INT	4.55	4.05	3.65	.....
1N1589	MOT	4.10	.....	3.10	.....
1N1589A	MOT	4.90	.....	3.70	.....
1N1589A	INT	4.55	4.05	3.65	.....
1N1590	MOT	4.10	.....	3.10	.....
1N1590	INT	3.80	3.40	3.05	.....
1N1590A	MOT	4.90	.....	3.70	.....
1N1591	MOT	4.10	.....	3.10	.....
1N1691A	MOT	4.90	.....	3.70	.....
1N1591A	INT	4.55	4.05	3.65	.....
1N1592	MOT	4.10	.....	3.10	.....
1N1592	INT	3.80	3.40	3.05	.....
1N1592A	MOT	4.90	.....	3.70	.....
1N1593	MOT	4.10	.....	3.10	.....
1N1593	INT	3.80	3.40	3.05	.....
1N1593A	MOT	4.90	.....	3.70	.....
1N1593A	INT	4.55	4.05	3.65	.....
1N1594	MOT	4.10	.....	3.10	.....
1N1594	INT	3.80	3.40	3.05	.....
1N1594A	MOT	4.90	.....	3.70	.....
1N1594A	INT	4.55	4.05	3.65	.....
1N1595	MOT	4.10	.....	3.10	.....
1N1595	INT	3.80	3.40	3.05	.....
1N1595A	MOT	4.90	.....	3.70	.....
1N1595A	INT	4.55	4.05	3.65	.....
1N1596	MOT	4.10	.....	3.10	.....
1N1596	INT	3.80	3.40	3.05	.....
1N1596A	MOT	4.90	.....	3.70	.....
1N1596A	INT	4.55	4.05	3.65	.....
1N1597	MOT	4.10	.....	3.10	.....
1N1597	INT	3.80	3.40	3.05	.....
1N1597A	MOT	4.90	.....	3.70	.....
1N1597A	INT	4.55	4.05	3.65	.....
1N1598	MOT	4.10	.....	3.10	.....
1N1598A	MOT	4.90	.....	3.70	.....
1N1598A	INT	4.55	4.05	3.65	.....
1N1599	MOT	4.10	.....	3.10	.....
1N1599	INT	5.95	5.40	4.75	.....
1N1599A	INT	8.00	7.10	6.40	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1600	MOT	6.50		4.90	
1N1600	INT	5.95	5.40	4.75	
1N1600A	INT	8.00	7.10	6.40	
1N1601	MOT	6.50		4.90	
1N1601	INT	5.95	5.40	4.75	
1N1601A	INT	8.00	7.10	6.40	
1N1602	MOT	6.50		4.90	
1N1602	INT	5.95	5.40	4.75	
1N1602A	INT	8.00	7.10	6.40	
1N1603	MOT	6.50		4.90	
1N1604	MOT	6.50		4.90	
1N1604A	INT	8.00	7.10	6.40	
1N1605	INT	5.95	5.40	4.75	
1N1605	MOT	6.50		4.90	
1N1605A	INT	8.00	7.10	6.40	
1N1606	MOT	6.50		4.90	
1N1606	INT	5.95	5.40	4.75	
1N1607	MOT	6.50		4.90	
1N1607	INT	5.95	5.40	4.75	
1N1608	MOT	6.50		4.90	
1N1609	MOT	6.50		4.90	
1N1612	GE	1.08		.72	
1N1612	RCA	1.07		.72	
1N1612	TI	1.07		.72	
1N1612	WES	1.03		.72	
1N1612R	RCA	1.07		.72	
1N1613	RCA	1.24		.83	
1N1613	TI	1.20		.80	
1N1613	WES	1.19		.83	
1N1613R	RCA	1.24		.83	
1N1614	GE	1.91		1.27	
1N1614	INT	2.50		1.75	
1N1614	RCA	1.90		1.27	
1N1614	TI	1.87		1.25	
1N1614	WES	1.82		1.27	
1N1614R	RCA	1.90		1.27	
1N1615	GE	3.75		2.50	
1N1615	RCA	3.71		2.48	
1N1615	TI	3.71		2.48	
1N1615	WES	3.65		2.50	
1N1616	RCA	5.36		3.58	
1N1616	TI	5.36		3.58	
1N1616	WES	5.30		3.58	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N1622	SAR	2.80	2.40	2.24	
1N1624	SAR	4.24	3.62	3.40	
1N1670	WES	24.95	20.45		
1N1671	WES	29.85	24.40		
1N1672	WES	34.30	28.10		
N11673	WES	42.15	34.30		
1N1674	WES	62.30	50.80		
1N1675	WES	81.50	66.50		
1N1676	WES	106.30	86.75		

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1692	GE	.45		.30	
1N1692	INT	.45		.30	
1N1692	TI	.49		.33	
1N1693	GE	.48		.32	
1N1693	INT	.48		.32	
1N1693	TI	.52		.35	
1N1694	GE	.56		.37	
1N1694	TI	.60		.40	
1N1695	GE	.66		.44	
1N1695	INT	.66		.44	
1N1695	TI	.67		.45	
1N1696	GE	.72		.48	
1N1696	TI	.76		.51	
1N1697	GE	.93		.62	
1N1697	TI	.97		.64	
1N1701	INT	.75		.50	
1N1702	INT	.87		.58	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
1N1731	GE	6.30	5.18		
1N1732	GE	8.12	6.67		

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1731	MOT	6.80		4.08	
1N1733	MOT	7.80		5.20	
1N1734	MOT	11.60		7.75	
1N1736	MOT	8.75		6.60	
1N1736A	MOT	10.70		8.05	
1N1737	HOF	10.50	9.45	7.90	
1N1763A	RCA	.42		.29	
1N1764A	RCA	.42		.29	
1N1765	MOT	2.80		2.10	
1N1785	GE	2.40		1.60	
1N1765A	GE	3.00		2.00	
1N1765A	MOT	3.20		2.40	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N1766	HOF	2.60	2.35	2.05	
1N1766	GE	2.40		1.60	
1N1766	MOT	2.80		2.10	
1N1766A	GE	3.00		2.00	
1N1766A	HOF	2.85	2.55	2.25	
1N1766A	MOT	3.20		2.40	
1N176/	HOF	2.60	2.35	2.05	
1N1767	HUG	2.40		1.80	
1N1767	GE	2.40		1.60	
1N1767	MOT	2.80		2.10	
1N1767A	HOF	2.85	2.55	2.25	
1N1767A	INT	2.85	2.55	2.29	
1N1767A	MOT	3.20		2.40	
1N1768	HOF	2.60	2.35	2.05	
1N1768	HUG	2.40		1.80	
1N1768	GE	2.40		1.60	
1N1768	MOT	2.80		2.10	
1N1768A	MOT	3.20		2.40	
1N1769	HOF	2.60	2.35	2.05	
1N1769	HUT	3.00		2.25	
1N1769	GE	3.00		2.00	
1N1769	MOT	2.80		2.10	
1N1769A	MOT	3.20		2.40	
1N1770	HOF	2.60	2.35	2.05	
1N1770	HUG	3.00		2.25	
1N1770	GE	3.00		2.00	
1N1770	MOT	2.80		2.10	
1N1770A	MOT	3.20		2.40	
1N1771	HOF	2.60	2.35	2.05	
1N1771	HUG	3.00		2.25	
1N1771	MOT	2.80		2.10	
1N1771	GE	3.00		2.00	
1N1771A	HOF	2.85	2.55	2.25	
1N1771A	MOT	3.20		2.40	
1N1772	HOF	2.60	2.35	2.05	
1N1772	HUG	3.00		2.25	
1N1772	MOT	2.80		2.10	
1N1772A	MOT	3.20		2.40	
1N1773	HOF	2.60	2.35	2.05	
1N1773	HUG	3.00		2.25	
1N1773	MOT	2.80		2.10	
1N1773	GE	3.00		2.00	
1N1773A	HOG	2.85	2.55	2.25	
1N1773A	INT	2.85	2.55	2.29	
1N1773A	MOT	3.20		2.40	
1N1774	HUG	3.00		2.25	
1N1774	MOT	2.80		2.10	
1N1774/ 4J4JZ4X13B	GE	3.00		2.00	
1N1774A	INT	2.85	2.55	2.29	
1N1774A	MOT	3.20		2.40	
1N1775	HOF	2.60	2.35	2.05	
1N1775	HUG	3.00		2.25	
1N1775	MOT	2.80		2.10	
1N1775	GE	3.00		2.00	
1N1775A	HOF	2.85	2.55	2.25	
1N1775A	MOT	3.20		2.40	
1N1776	HOF	2.60	2.35	2.05	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1776	HUG	3.00		2.25	
1N1776	MOT	2.80		2.10	
1N1776	GE	3.00		2.00	
1N1776A	GE	3.60		2.40	
1N1776A	MOT	3.20		2.40	
1N1777	HOF	2.60	2.35	2.05	
1N1777	HUG	2.80		2.10	
1N1777	MOT	2.80		2.10	
1N1777A	HOF	2.85	2.55	2.25	
1N1777A	INT	2.85	2.55	2.29	
1N1777A	MOT	3.20		2.40	
1N1778	HOF	2.60	2.35	2.05	
1N1778	HUG	2.80		2.10	
1N1778	MOT	2.80		2.10	
1N1778A	HOF	2.85	2.55	2.25	
1N1778A	INT	2.85	2.55	2.29	
1N1778A	MOT	3.20		2.40	
1N1779	HOF	2.60	2.35	2.05	
1N1779	HUG	2.80		2.10	
1N1779	MOT	2.80		2.10	
1N1779A	MOT	3.20		2.40	
1N1780	HOF	2.60	2.35	2.05	
1N1780	MOT	2.80		2.10	
1N1780	HUG	2.80		2.10	
1N1780A	INT	2.85	2.55	2.29	
1N1780A	MOT	3.20		2.40	
1N1781	HOF	2.60	2.35	2.05	
1N1781	HUG	2.80		2.10	
1N1781	MOT	2.80		2.10	
1N1781A	MOT	3.20		2.40	
1N1782	MOT	2.80		2.10	
1N1782	HOF	3.00	2.70	2.30	
1N1782A	INT	3.10	2.75	2.47	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N1782A	MOT	3.20		2.40	
1N1783	HOF	3.00	2.70	2.30	
1N1783	HUG	2.85		2.14	
1N1783	MOT	2.80		2.10	
1N1783A	MOT	3.20		2.40	
1N1784	HUG	2.85		2.14	
1N1784	MOT	2.80		2.10	
1N1784A	MOT	3.20		2.40	
1N1785	HUG	2.85		2.14	
1N1785	MOT	2.80		2.10	
1N1785A	INT	3.10	2.75	2.47	
1N1785A	MOT	3.20		2.40	
1N1786	HUG	2.85		2.14	
1N1786	MOT	2.80		2.10	
1N1786A	MOT	3.20		2.40	
1N1787	HUG	2.85		2.14	
1N1787	MOT	2.80		2.10	
1N1787A	MOT	3.20		2.40	
1N1788	HOF	3.00	2.70	2.30	
1N1788	HUG	2.85		2.14	
1N1788	MOT	2.80		2.10	
1N1788A	MOT	3.20		2.40	
1N1789	HUG	2.85		2.14	
1N1789	MOT	2.80		2.10	
1N1789A	HOF	4.00	3.60	3.00	
1N1789A	MOT	3.20		2.40	
1N1790	HUG	2.85		2.14	
1N1790	MOT	2.80		2.10	
1N1790A	MOT	3.20		2.40	
1N1791	HUG	2.85		2.14	
1N1791	MOT	2.80		2.10	
1N1791A	MOT	3.20		2.40	
1N1792	HUG	2.85		2.14	
1N1792	MOT	2.80		2.10	
1N1792A	INT	3.10	2.75	2.47	
1N1792A	MOT	3.20		2.40	
1N1793	HUG	2.85		2.14	
1N1793	MOT	2.80		2.10	
1N1793A	MOT	3.20		2.40	
1N1794	HUG	2.85		2.14	
1N1794	MOT	2.80		2.10	
1N1794A	MOT	3.29		2.40	
1N1795	HOF	3.00	2.70	2.30	
1N1795	HUG	2.85		2.14	
1N1795	MOT	2.80		2.10	
1N1795A	INT	3.10	2.75	2.47	
1N1795A	MOT	3.20		2.40	
1N1796A	HUG	3.25		2.44	
1N1796	MOT	2.80		2.10	
1N1796A	INT	6.65	5.90	5.30	
1N1796A	MOT	7.80		5.85	
1N1797	MOT	2.80		2.10	
1N1797A	HUG	3.25		2.44	
1N1797A	MOT	7.80		5.85	
1N1798	MOT	2.80		2.10	
1N1799	MOT	2.80		2.10	
1N1799A	HUG	2.85		2.14	
1N1799A	MOT	7.80		5.85	
1N1800	HUG	1.20		.90	
1N1800	MOT	5.10		3.85	
1N1800A	MOT	7.80		5.85	
1N1801	HUG	1.20		.90	
1N1801	MOT	5.10		3.85	
1N1801A	MOT	7.80		5.85	
1N1802	HUG	1.20		.90	
1N1802	MOT	5.10		3.05	
1N1802A	MOT	7.80		5.85	
1N1804	HOF	4.50	4.05	3.60	
1N1804	MOT	6.20	5.35	4.65	

Type No.	Mfr.	1-24	25-99	100-up
1N1804	SAR	3.39	2.90	2.70

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1805A	INT	6.55	5.85	5.25	
1N1805	MOT	6.20	5.35	4.65	
1N1806	MOT	6.20	5.35	4.65	
1N1807	HOF	4.50	4.05	3.60	
1N1807	MOT	6.20	5.35	4.65	
1N1808	MOT	6.20	5.35	4.65	
1N1809	MOT	6.20	5.35	4.65	
1N1809A	MOT	7.85	6.80	5.90	
1N1810	MOT	6.20	5.35	4.65	
1N1810A	MOT	7.85	6.80	5.90	
1N1811	MOT	6.20	5.35	4.65	
1N1811A	MOT	7.85	6.80	5.90	
1N1812	HOF	4.50	4.05	3.60	
1N1812	MOT	6.20	5.35	4.65	
1N1812A	MOT	7.85	6.80	5.90	
1N1813	MOT	9.10	7.90	6.85	
1N1813A	MOT	14.10	12.20	10.60	
1N1814	MOT	9.10	7.90	6.85	
1N1814A	MOT	14.10	12.20	10.60	

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N1815	MOT	9.10	7.90	6.85	.....
1N1815A	MOT	14.10	12.20	10.60	.....
1N1816	MOT	6.20	5.35	4.65	.....
1N1816	TI	5.10	.....	4.50	.....
1N1816A	MOT	7.85	6.80	7.85	.....
1N1816A	TI	5.80	.....	5.05	.....
1N1817	MOT	6.20	5.35	4.65	.....
1N1817A	MOT	7.85	6.80	5.90	.....
1N1818	INT	5.70	5.05	4.55	.....
1N1818	MOT	6.20	5.35	4.65	.....
1N1818A	MOT	7.85	6.80	5.90	.....
1N1819	MOT	6.20	5.35	4.65	.....
1N1819R	TI	5.10	.....	4.50	.....
1N1820	MOT	6.20	5.35	4.65	.....
1N1820	TI	5.10	.....	4.50	.....
1N1820A	MOT	7.85	6.80	5.90	.....
1N1821	INT	5.70	5.05	4.55	.....
1N1821	MOT	6.20	5.35	4.65	.....
1N1821A	MOT	7.85	6.80	5.90	.....
1N1821C	MOT	12.35	10.70	9.30	.....
1N1822	TI	5.10	.....	4.50	.....
1N1822	MOT	6.20	5.35	4.65	.....
1N1822A	TI	5.80	.....	5.05	.....
1N1822A	MOT	7.85	6.80	5.90	.....
1N1822C	MOT	12.35	10.70	9.30	.....
1N1823	MOT	6.20	5.35	4.65	.....
1N1823A	MOT	7.85	6.80	5.90	.....
1N1824	TI	5.10	.....	4.50	.....
1N1824	MOT	6.20	5.35	4.65	.....
1N1824A	TI	5.80	.....	5.05	.....
1N1824A	MOT	7.85	6.80	5.90	.....
1N1824C	MOT	12.35	10.70	9.30	.....
1N1825A	HOF	6.50	5.85	5.05	.....
1N1825	MOT	6.20	4.65	5.35	.....
1N1825A	MOT	7.85	6.80	5.90	.....
1N1825C	MOT	12.35	10.70	9.30	.....
1N1826	TI	5.10	.....	4.50	.....
1N1826	MOT	6.20	5.35	4.65	.....
1N1826A	MOT	7.85	6.80	5.90	.....
1N1827A	INT	7.25	6.45	5.80	.....
1N1827A	MOT	7.85	6.80	5.90	.....
1N1827C	TI	6.50	.....	5.65	.....
1N1827C	MOT	12.35	10.70	9.30	.....
1N1828	MOT	6.20	5.35	4.65	.....
1N1828A	MOT	7.85	6.80	5.90	.....
1N1828C	MOT	12.35	10.70	9.30	.....
1N1829	MOT	6.20	5.35	4.65	.....
1N1829A	MOT	7.85	6.80	5.00	.....
1N1832	TI	5.10	.....	4.50	.....
1N1829C	MOT	12.35	10.70	9.30	.....
1N1830	MOT	6.20	5.35	4.65	.....
1N1830A	MOT	7.85	6.80	5.90	.....
1N1830C	MOT	12.35	10.70	9.30	.....
1N1831	MOT	6.20	5.35	4.65	.....
1N1831A	MOT	7.85	6.80	5.90	.....
1N1831C	MOT	12.35	10.70	9.30	.....
1N1832	MOT	6.20	5.35	4.65	.....
1N1832A	MOT	7.85	6.80	5.90	.....
1N1832C	MOT	12.35	10.70	9.30	.....
1N1833	MOT	6.20	5.35	4.65	.....
1N1833A	MOT	7.85	6.80	5.90	.....
1N1833C	MOT	12.35	10.70	9.30	.....
1N1834	MOT	6.20	5.35	4.65	.....
1N1834A	MOT	7.85	6.80	5.90	.....
1N1834C	MOT	12.35	10.70	9.30	.....
1N1835	MOT	6.20	5.35	4.65	.....
1N1835A	MOT	7.85	6.80	5.90	.....
1N1835C	MOT	12.35	10.70	9.30	.....
1N1836	MOT	6.20	4.65	5.35	.....
1N1836A	MOT	7.85	6.80	5.90	.....
1N1836C	MOT	12.35	10.70	9.30	.....
1N2008	TI	5.10		4.50	.....
1N2008	MOT	6.00		4.50	.....
1N2008A	MOT	7.50		5.65	.....
1N2009	MOT	6.00		4.50	.....
1N2009A	MOT	7.50		5.65	.....
1N2010	MOT	6.00		4.50	.....
1N2011A	TI	5.80		5.05	.....
1N2010A	MOT	7.50		5.65	.....
1N2011	MOT	6.00		4.50	.....
1N2011A	MOT	7.50		5.65	.....
1N2012	MOT	6.00		4.50	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N2012A	TI	5.85	.....	5.05	.....
1N2012A	MOT	7.50	.....	5.65	.....
1N2032-2	MOT	4.00	.....	3.00	.....
1N2032-1	MOT	4.00	.....	3.00	.....
1N2033-1	MOT	4.00	.....	3.00	.....
1N2033-2	MOT	4.00	.....	3.00	.....
1N2034-1	MOT	4.00	.....	3.00	.....
1N2034-2	MOT	4.00	.....	3.00	.....
1N2034-3	MOT	4.00	.....	3.00	.....
1N2035-1	MOT	4.00	.....	3.00	.....
1N2035-2	MOT	4.00	.....	3.00	.....
1N2035-3	MOT	4.00	.....	3.00	.....
1N2035-4	MOT	4.00	.....	3.00	.....
1N2036-1	MOT	4.00	.....	3.00	.....
1N2036-2	MOT	4.00	.....	3.00	.....
1N2037-1	MOT	4.00	.....	3.00	.....
1N2037-2	MOT	4.00	.....	3.00	.....
1N2037-3	MOT	4.00	.....	3.00	.....
1N2038-1	MOT	4.00	.....	3.00	.....
1N2038-2	MOT	4.00	.....	3.00	.....
1N2038-3	MOT	4.00	.....	3.00	.....
1N2039-1	MOT	4.00	.....	3.00	.....
1N2039-2	MOT	4.00	.....	3.00	.....
1N2039-3	MOT	4.00	.....	3.00	.....
1N2040-1	MOT	4.00	.....	3.00	.....
1N2040-2	MOT	4.00	.....	3.00	.....
1N2040-3	MOT	4.00	.....	3.00	.....
1N2045	HOF	6.60	5.95	4.95	.....
1N2041-1	MOT	7.60	.....	5.70	.....
1N2041-2	MOT	7.60	.....	5.70	.....
1N2042-1	MOT	7.60	.....	5.70	.....
1N2042-2	MOT	7.60	.....	5.70	.....
1N2043-1	MOT	7.60	.....	5.70	.....
1N2043-2	MOT	7.60	.....	5.70	.....
1N2043-3	MOT	7.60	.....	5.70	.....
1N2044-1	MOT	7.60	.....	5.70	.....
1N2044-2	MOT	7.60	.....	5.70	.....
1N2044-3	MOT	7.60	.....	5.70	.....
1N2044-4	MOT	7.60	.....	5.70	.....
1N2045-1	MOT	7.60	.....	5.70	.....
1N2045-2	MOT	7.60	.....	5.70	.....
1N2046-1	MOT	7.60	.....	5.70	.....
1N2046-2	MOT	7.60	.....	5.70	.....
1N2046-3	MOT	7.60	.....	5.70	.....
1N2047-1	MOT	7.60	.....	5.70	.....
1N2047-2	MOT	7.60	.....	5.70	.....
1N2047-3	MOT	7.60	.....	5.70	.....
1N2048-1	MOT	7.60	.....	5.70	.....
1N2048-2	MOT	7.60	.....	5.70	.....
1N2048-3	MOT	7.60	.....	5.70	.....
1N2049-1	MOT	7.60	.....	5.70	.....
1N2049-2	MOT	7.60	.....	5.70	.....
1N2049-3	MOT	7.60	.....	5.70	.....
1N2049-4	MOT	7.60	.....	5.70	.....
1N2055	INT	13.90	.....	.....	.....
1N2056	INT	16.60	.....	.....	.....
1N2057	INT	18.90	.....	.....	.....
1N2059	INT	22.10	.....	.....	.....
1N2068	IR	NET	61.00	.....	.....
1N2069	SYL	.65	.....	.43	.29
1N2069	TI	.45	.....	.30	.....
1N2069	ERI	.50	.....	.33	.22

Type No.	Mfr.	1-9	10-99	100-999	1000-up
1N2969	INT	.50	.33	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N2069A	INT	.50	.....	.33	.....
1N2069A	SYL	.67	.....	.45	.30
1N2070	SYL	.71	.....	.47	.31
1N2070	TI	.57	.....	.38	.....
1N2070	ERI	.61	.....	.45	.27
1N2070/10D4	INT	.68	.....	.45	.....
1N2070A	SYL	.72	.....	.47	.31
1N2070A	SYL	.87	.....	.50	.33
1N2071	TI	.72	.....	.48	.....
1N2071	ERI	.66	.....	.51	.29
1N2071	INT	.87	.....	.58	.....
1N2071A	INT	.87	.....	.58	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N2071A	SYL	.92	.....	.59	.39
1N2128	INT	NET	2.40	.....	.....
1N2129	INT	NET	3.05	.....	.....
1N2130	INT	3.80	.....	.....	.....
1N2130A	INT	3.10	.....	2.30	.....
1N2131	INT	4.50	.....	.....	.....
1N2131A	INT	3.65	.....	2.60	.....
1N2133	INT	6.35	.....	.....	.....
1N2133A	INT	4.45	.....	3.10	.....
1N2135	INT	NET	6.70	.....	.....
1N2137A	INT	5.95	.....	3.95	.....
1N2154	GE	2.39	.....	1.59	.....
1N2155	GE	3.00	.....	2.00	.....
1N2156	GE	4.38	.....	2.92	.....
1N2156R	GE	4.38	.....	2.92	.....
1N2157	GE	5.25	.....	3.50	.....
1N2158	GE	5.92	.....	3.95	.....
1N2158R	GE	5.92	.....	3.95	.....
1N2159	GE	6.15	.....	4.10	.....
1N2159R	GE	6.15	.....	4.10	.....
1N2160	GE	6.30	.....	4.20	.....
1N2163	MOT	3.30	2.85	2.50	.....
1N2163A	MOT	3.45	3.00	2.60	.....
1N2164	MOT	4.50	3.90	3.40	.....
1N2164A	MOT	5.50	4.75	4.15	.....
1N2165	MOT	5.65	4.90	4.25	.....
1N2165A	MOT	7.30	6.30	5.50	.....
1N2166	MOT	6.80	5.85	5.10	.....
1N2166A	MOT	8.10	7.00	6.10	.....
1N2167	MOT	8.65	7.45	6.50	.....
1N2167A	MOT	11.05	9.55	8.30	.....
1N2168	MOT	11.90	10.30	8.95	.....
1N2168A	MOT	15.95	13.80	12.00	.....
1N2169	MOT	16.95	14.65	12.75	.....
1N2169A	MOT	25.00	21.60	18.80	.....
1N2170	MOT	23.95	20.70	18.00	.....
1N2170A	MOT	36.95	31.95	27.80	.....
1N2171	MOT	34.85	30.15	26.20	.....
1N2171A	MOT	44.55	38.50	33.50	.....
1N2175	HOF	11.50	.....	8.00	.....
1N2175	TI	6.40	.....	5.05	.....
1N2326	RCA	.50	.....	.35	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N2389	SAR	6.10	5.23	4.87	.....
1N2482	SAR	.33	.29	.27	.....
1N2483	SAR	.35	.30	.20	.....
1N2484	SAR	.37	.32	.29	.....
1N2487	SAR	.43	.37	.35	.....
1N2489	SAR	.47	.40	.31	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N2482	SYL	.65	.....	.43	.29
	SYL	.69	.....	.46	.31
1N2484	SYL	.71	.....	.47	.31
1N2498	TI	5.10	.....	4.50	.....
1N2498	TI	6.00	4.50	.....	.....
1N2498A	TI	7.60	5.70	.....	.....
1N2499	TI	6.00	4.50	.....	.....
1N2499A	TI	7.60	5.70	.....	.....
1N2500	TI	6.00	4.50	.....	.....
1N2500A	TI	7.60	5.70	.....	.....
1N2609	TI	.90	.....	.60	.....
1N2610	GE	1.02	.....	.68	.....
1N2610	WES	1.10	.....	.75	.....
1N2611	GE	1.14	.....	.76	.....
1N2611	TI	1.18	.....	.79	.....
1N2611	WES	1.23	.....	.84	.....

Type No.	Mfr.	1-24	25-99	100-up	
1N2611	SAR	.37	.32	.29	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N2612	GE	1.52	.....	1.01	.....
1N2612	TI	1.55	.....	1.03	.....
1N2612	WES	1.60	.....	1.08	.....
1N2613	GE	1.71	.....	1.14	.....
1N2613	TI	1.70	.....	1.16	.....
1N2613	WES	1.75	.....	1.21	.....
1N2614	GE	1.92	.....	1.28	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N2614	TI	1.95		1.30	
1N2614	WES	2.00		1.35	
1N2615	GE	2.30		1.53	
1N2615	WES	2.35		1.60	

Type No.	Mfr.	1-24	25-99	100-up
1N2615	SAR	.47	.40	.37

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N2616	GE	3.38		2.25	
1N2616	WES	3.50		2.99	
1N2617	GE	5.25		3.50	
1N2617	WES	4.75		3.99	
1N2620	MOT	4.10	3.55	3.05	
1N2620A	MOT	4.35	3.75	3.25	
1N2621	MOT	4.60	3.95	3.45	
1N2622A	MOT	8.15	7.05	6.10	
1N2623	MOT	8.80	7.60	6.60	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
1N2630	INT	6.29	5.55		
1N2631	INT	5.50	4.95		
1N2632	INT	7.95	7.10		
1N2633	INT	5.50	4.95		
1N2634	INT	6.65	5.95		
1N2725	INT	6.01			
1N2728	INT	6.01			
1N2731	INT	7.31			

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N2767	MOT	9.05	7.80	6.80	
1N2804	MOT	5.65	4.90	4.25	
1N2804	TI	5.40		4.25	
1N2804A	MOT	7.65	6.60	5.75	
1N2804B	MOT	10.65	9.20	8.00	
1N2804B	MOT	10.65	9.20	8.00	
1N2804B/ML1	MOT	10.95	8.25		
1N2805B/ML1	MOT	10.95	8.25		
1N2806B/ML1	MOT	10.95	8.25		
1N2806B/ML1	MOT	10.95	8.25		
1N2808B/ML1	MOT	10.95	8.25		
1N2809B/ML1	MOT	10.95	8.25		
1N2810B/ML1	MOT	10.95	8.25		
1N2811B/ML1	MOT	10.95	8.25		
1N2812B/ML1	MOT	10.95	8.25		
1N2813B/ML1	MOT	10.95	8.25		
1N2814B/ML1	MOT	10.95	8.25		
1N2815B/ML1	MOT	10.95	8.25		
1N2816B/ML1	MOT	10.95	8.25		
1N2817B/ML1	MOT	10.95	8.25		
1N2818B/ML1	MOT	10.95	8.25		
1N2819B/ML1	MOT	10.95	8.25		
1N2820B/ML1	MOT	10.95	8.25		
1N2821B/ML1	MOT	10.95	8.25		
1N2822B/ML1	MOT	10.95	8.25		
1N2823B/ML1	MOT	10.95	8.25		
1N2824B/ML1	MOT	10.95	8.25		
1N2825B/ML1	MOT	10.95	8.25		
1N2826B/ML1	MOT	10.95	8.25		
1N2827B/ML1	MOT	10.95	8.25		
1N2828B/ML1	MOT	10.95	8.25		
1N2829B/ML1	MOT	10.95	8.25		
1N2830B/ML1	MOT	10.95	8.25		
1N2831B/ML1	MOT	10.95	8.25		
1N2832B/ML1	MOT	10.95	8.25		
1N2833B/ML1	MOT	10.95	8.25		
1N2834B/ML1	MOT	10.95	8.25		
1N2835B/ML1	MOT	10.95	8.25		
1N2836B/ML1	MOT	10.95	8.25		
1N2837B/ML1	MOT	10.95	8.25		
1N2837B/ML1	MOT	10.95	8.25		
1N2804B/ML2	MOT	13.30	10.00		
1N2805B/ML2	MOT	13.30	10.00		
1N2806B/ML2	MOT	13.30	10.00		
1N2807B/ML2	MOT	13.30	10.00		
1N2808B/ML2	MOT	13.30	10.00		
1N2809B/ML2	MOT	13.30	10.00		
1N2810B/ML2	MOT	13.30	10.00		
1N2811B/ML2	MOT	13.30	10.00		
1N2812B/ML2	MOT	13.30	10.00		
1N2813B/ML2	MOT	13.30	10.00		
1N2814B/ML2	MOT	13.30	10.00		
1N2815B/ML2	MOT	13.30	10.00		
1N2816B/ML2	MOT	13.30	10.00		
1N2817B/ML2	MOT	13.30	10.00		
1N2818B/ML2	MOT	13.30	10.00		
1N2819B/ML2	MOT	13.30	10.00		
1N2820B/ML2	MOT	13.30	10.00		
1N2821B/ML2	MOT	13.30	10.00		
1N2822B/ML2	MOT	13.30	10.00		
1N2823B/ML2	MOT	13.30	10.00		
1N2824B/ML2	MOT	13.30	10.00		
1N2825B/ML2	MOT	13.30	10.00		
1N2826B/ML2	MOT	13.30	10.00		
1N2827B/ML2	MOT	13.30	10.00		
1N2829B/ML2	MOT	13.30	10.00		
1N2830B/ML2	MOT	13.30	10.00		
1N2831B/ML2	MOT	13.30	10.00		
1N2832B/ML2	MOT	13.30	10.00		
1N2833B/ML2	MOT	13.30	10.00		
1N2834B/ML2	MOT	13.30	10.00		
1N2835B/ML2	MOT	13.30	10.00		
1N2836B/ML2	MOT	13.30	10.00		
1N2837B/ML2	MOT	13.30	10.00		
1N2838B/ML2	MOT	13.30	10.00		
1N2804B/ML3	MOT	17.30	13.00		
1N2805B/ML3	MOT	17.30	13.00		
1N2806B/ML3	MOT	17.30	13.00		
1N2807B/ML3	MOT	17.30	13.00		
1N2808B/ML3	MOT	17.30	13.00		
1N2809B/ML3	MOT	17.30	13.00		
1N2810B/ML3	MOT	17.30	13.00		
1N2811B/ML3	MOT	17.30	13.00		
1N2812B/ML3	MOT	17.30	13.00		
1N2813B/ML3	MOT	17.30	13.00		
1N2814B/ML3	MOT	17.30	13.00		
1N2815B/ML3	MOT	17.30	13.00		
1N2816B/ML3	MOT	17.30	13.00		
1N2817B/ML3	MOT	17.30	13.00		
1N2818B/ML3	MOT	17.30	13.00		
1N2819B/ML3	MOT	17.30	13.00		
1N2820B/ML3	MOT	17.30	13.00		
1N2821B/ML3	MOT	17.30	13.00		
1N2822B/ML3	MOT	17.30	13.00		
1N2823B/ML3	MOT	17.30	13.00		
1N2824B/ML3	MOT	17.30	13.00		
1N2825B/ML3	MOT	17.30	13.00		
1N2826B/ML3	MOT	17.30	13.00		
1N2827B/ML3	MOT	17.30	13.00		
1N2828B/ML3	MOT	17.30	13.00		
1N2829B/ML3	MOT	17.30	13.00		
1N2830B/ML3	MOT	17.30	13.00		
1N2831B/ML3	MOT	17.30	13.00		
1N2832B/ML3	MOT	17.30	13.00		
1N2833B/ML3	MOT	17.30	13.00		
1N2834B/ML3	MOT	17.30	13.00		
1N2835B/ML3	MOT	17.30	13.00		
1N2836B/ML3	MOT	17.30	13.00		
1N2837B/ML3	MOT	17.30	13.00		
1N2838B/ML3	MOT	17.30	13.00		
1N2839B/ML1	MOT	18.30	13.75		
1N2840B/ML1	MOT	18.30	13.75		
1N2841B/ML1	MOT	18.30	13.75		
1N2842B/ML1	MOT	18.30	13.75		
1N2843B/ML1	MOT	18.30	13.75		
1N2844B/ML1	MOT	18.30	13.75		
1N2845B/ML1	MOT	18.30	13.75		
1N2846B/ML1	MOT	20.60	15.50		
1N2839B/ML2	MOT	18.30	13.75		
1N2840B/ML2	MOT	20.60	15.50		
1N2841B/ML2	MOT	20.60	15.50		
1N2842B/ML2	MOT	20.60	15.50		
1N2843B/ML2	MOT	20.60	15.50		
1N2844B/ML2	MOT	20.60	15.50		
1N2845B/ML2	MOT	20.60	15.50		

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AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N2846B/ML2	MOT	20.60	15.50		
1N2839B/ML3	MOT	28.40	21.35		
1N2840B/ML3	MOT	28.40	21.35		
1N2841B/ML3	MOT	28.40	21.35		
1N2842B/ML3	MOT	28.40	21.35		
1N2843B/ML3	MOT	28.40	21.35		
1N2844B/ML3	MOT	28.40	21.35		
1N2845B/ML3	MOT	28.40	21.35		
1N2846B/ML3	MOT	28.40	21.35		
1N2970B/ML1	MOT	7.65	5.75		
1N2971B/ML1	MOT	7.65	5.75		
1N2972B/ML1	MOT	7.65	5.75		
1N2973B/ML1	MOT	7.65	5.75		
1N2974B/ML1	MOT	7.65	5.75		
1N2975B/ML1	MOT	7.65	5.75		
1N2976B/ML1	MOT	7.65	5.75		
1N2977B/ML1	MOT	7.65	5.75		
1N2978B/ML1	MOT	7.65	5.75		
1N2979B/ML1	MOT	7.65	5.75		
1N2980B/ML1	MOT	7.65	5.75		
1N2981B/ML1	MOT	7.65	5.75		
1N2982B/ML1	MOT	7.65	5.75		
1N2983B/ML1	MOT	7.65	5.75		
1N2984B/ML1	MOT	7.65	5.75		
1N2985B/ML1	MOT	7.65	5.75		
1N2986B/ML1	MOT	7.65	5.75		
1N2987B/ML1	MOT	7.65	5.75		
1N2988B/ML1	MOT	7.65	5.75		
1N2989B/ML1	MOT	7.65	5.75		
1N2990B/ML1	MOT	7.65	5.75		
1N2991B/ML1	MOT	7.65	5.75		
1N2992B/ML1	MOT	7.65	5.75		
1N2993B/ML1	MOT	7.65	5.75		
1N2994B/ML1	MOT	7.65	5.75		
1N2995B/ML1	MOT	7.65	5.75		
1N2996B/ML1	MOT	7.65	5.75		
1N2997B/ML1	MOT	7.65	5.75		
1N2998B/ML1	MOT	7.65	5.75		
1N2999B/ML1	MOT	7.65	5.75		
1N3000B/ML1	MOT	7.65	5.75		
1N3001B/ML1	MOT	7.65	5.75		
1N3002B/ML1	MOT	7.65	5.75		
1N3003B/ML1	MOT	7.65	5.75		
1N3004B/ML1	MOT	7.65	5.75		
1N3005B/ML1	MOT	7.65	5.75		
1N3006B/ML1	MOT	7.65	5.75		
1N3007B/ML1	MOT	7.65	5.75		
1N3008B/ML1	MOT	7.65	5.75		
1N3009B/ML1	MOT	7.65	5.75		
1N3010B/ML1	MOT	7.65	5.75		
1N3011B/ML1	MOT	7.65	5.75		
1N2970B/ML2	MOT	9.95	7.50		
1N2971B/ML2	MOT	9.95	7.50		
1N2972B/ML2	MOT	9.95	7.50		
1N2973B/ML2	MOT	9.95	7.50		
1N2974B/ML2	MOT	9.95	7.50		
1N2975B/ML2	MOT	9.95	7.50		
1N2976B/ML2	MOT	9.95	7.50		
1N2977B/ML2	MOT	9.95	7.50		
1N2978B/ML2	MOT	9.95	7.50		
1N2979B/ML2	MOT	9.95	7.50		
1N2980B/ML2	MOT	9.95	7.50		
1N2981B/ML2	MOT	9.95	7.50		
1N2982B/ML2	MOT	9.95	7.50		
1N2983B/ML2	MOT	9.95	7.50		
1N2984B/ML2	MOT	9.95	7.50		
1N2985B/ML2	MOT	9.95	7.50		
1N2986B/ML2	MOT	9.95	7.50		
1N2987B/ML2	MOT	9.95	7.50		
1N2988B/ML2	MOT	9.95	7.50		
1N2989B/ML2	MOT	9.95	7.50		
1N2990B/ML2	MOT	9.95	7.50		
1N2991B/ML2	MOT	9.95	7.50		
1N2993B/ML2	MOT	9.95	7.50		
1N2992B/ML2	MOT	9.95	7.50		
1N2994B/ML2	MOT	9.95	7.50		
1N2995B/ML2	MOT	9.95	7.50		
1N2996B/ML2	MOT	9.95	7.50		
1N2997B/ML2	MOT	9.95	7.50		
1N2998B/ML2	MOT	9.95	7.50		
1N2999B/ML2	MOT	9.95	7.50		
1N3000B/ML2	MOT	9.95	7.50		
1N3001B/ML2	MOT	9.95	7.50		
1N3002B/ML2	MOT	9.95	7.50		
1N3003B/ML2	MOT	9.95	7.50		
1N3004B/ML2	MOT	9.95	7.50		
1N3005B/ML2	MOT	9.95	7.50		
1N3006B/ML2	MOT	9.95	7.50		
1N3007B/ML2	MOT	9.95	7.50		
1N3008B/ML2	MOT	9.95	7.50		
1N3009B/ML2	MOT	9.95	7.50		
1N3010B/ML2	MOT	9.95	7.50		
1N3011B/ML2	MOT	9.95	7.50		
1N2970B/ML3	MOT	10.45	7.85		
1N2971B/ML3	MOT	10.45	7.85		
1N2972B/ML3	MOT	10.45	7.85		
1N2973B/ML3	MOT	10.45	7.85		
1N2974B/ML3	MOT	10.45	7.85		
1N2975B/ML3	MOT	10.45	7.85		
1N2976B/ML3	MOT	10.45	7.85		
1N2977B/ML3	MOT	10.45	7.85		
1N2978B/ML3	MOT	10.45	7.85		
1N2979B/ML3	MOT	10.45	7.85		
1N2980B/ML3	MOT	10.45	7.85		
1N2981B/ML3	MOT	10.45	7.85		
1N2982B/ML3	MOT	10.45	7.85		
1N2983B/ML3	MOT	10.45	7.85		
1N2984B/ML3	MOT	10.45	7.85		
1N2985B/ML3	MOT	10.45	7.85		
1N2986B/ML3	MOT	10.45	7.85		
1N2987B/ML3	MOT	10.45	7.85		
1N2988B/ML3	MOT	10.45	7.85		
1N2989B/ML3	MOT	10.45	7.85		
1N2990B/ML3	MOT	10.45	7.85		
1N2991B/ML3	MOT	10.45	7.85		
1N2992B/ML3	MOT	10.45	7.85		
1N2993B/ML3	MOT	10.45	7.85		
1N2994B/ML3	MOT	10.45	7.85		
1N2995B/ML3	MOT	10.45	7.85		
1N2996B/ML3	MOT	10.45	7.85		
1N2997B/ML3	MOT	10.45	7.85		
1N2998B/ML3	MOT	10.45	7.85		
1N2999B/ML3	MOT	10.45	7.85		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N3000B/ML3	MOT	10.45	7.85		
1N3001B/ML3	MOT	10.45	7.85		
1N3002B/ML3	MOT	10.45	7.85		
1N3003B/ML3	MOT	10.45	7.85		
1N3004B/ML3	MOT	10.45	7.85		
1N3005B/ML3	MOT	12.65	9.50		
1N3006B/ML3	MOT	12.65	9.50		
1N3007B/ML3	MOT	12.65	9.50		
1N3008B/ML3	MOT	12.65	9.50		
1N3009B/ML3	MOT	12.65	9.50		
1N3010B/ML3	MOT	12.65	9.50		
1N3011B/ML3	MOT	12.65	9.50		
1N3045B/ML2	MOT	7.30	5.50		
1N3046B/ML2	MOT	7.30	5.50		
1N3047B/ML2	MOT	7.30	5.50		
1N3048B/ML2	MOT	7.30	5.50		
1N3049B/ML2	MOT	7.30	5.50		
1N3050B/ML2	MOT	7.30	5.50		
1N3051B/ML2	MOT	7.30	5.50		
1N3045B/ML3	MOT	9.55	7.20		
1N3046B/ML3	MOT	9.55	7.20		
1N3047B/ML3	MOT	9.55	7.20		
1N3048B/ML3	MOT	9.55	7.20		
1N3049B/ML3	MOT	9.55	7.20		
1N3050B/ML3	MOT	9.55	7.20		
1N3051B/ML3	MOT	9.55	7.20		
1N3821A/ML1	MOT	3.00	2.25		
1N3822A/ML1	MOT	3.00	2.25		
1N3823A/ML1	MOT	3.00	2.25		
1N3824A/ML1	MOT	3.00	2.25		
1N3825A/ML1	MOT	3.00	2.25		
1N3826A/ML1	MOT	3.00	2.25		
1N3827A/ML1	MOT	3.00	2.25		
1N3828A/ML1	MOT	3.00	2.25		
1N3821A/ML2	MOT	4.65	3.50		
1N3822A/ML2	MOT	4.65	3.50		
1N3823A/ML2	MOT	4.65	3.50		
1N3824A/ML2	MOT	4.65	3.50		
1N3825A/ML2	MOT	4.65	3.50		
1N3826A/ML2	MOT	4.65	3.50		
1N3827A/ML2	MOT	4.65	3.50		
1N3828A/ML2	MOT	4.65	3.50		
1N3821A/ML3	MOT	7.05	5.30		
1N3822A/ML3	MOT	7.05	5.30		
1N3823A/ML3	MOT	7.05	5.30		
1N3824A/ML3	MOT	7.05	5.30		

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3825A/ML3	MOT	7.05	5.30		
1N3826A/ML3	MOT	7.05	5.30		
1N3827A/ML3	MOT	7.05	5.30		
1N3828A/ML3	MOT	7.05	5.30		
1N3993A/ML1	MOT	8.05	6.05		
1N3994A/ML1	MOT	8.05	6.05		
1N3995A/ML1	MOT	8.05	6.05		
1N3996A/ML1	MOT	8.05	6.05		
1N3997A/ML1	MOT	8.05	6.05		
1N3998A/ML1	MOT	8.05	6.05		
1N3999A/ML1	MOT	8.05	6.05		
1N4000A/ML1	MOT	8.05	6.05		
1N3993A/ML2	MOT	10.35	7.80		
1N3994A/ML2	MOT	10.35	7.80		
1N3995A/ML2	MOT	10.35	7.80		
1N3996A/ML2	MOT	10.35	7.80		
1N3997A/ML2	MOT	10.35	7.80		
1N3998A/ML2	MOT	10.35	7.80		
1N3999A/ML2	MOT	10.35	7.80		
1N4000A/ML2	MOT	10.35	7.80		
1N3993A/ML3	MOT	14.65	11.00		
1N3994A/ML3	MOT	14.65	11.00		
1N3995A/ML3	MOT	14.65	11.00		
1N3996A/ML3	MOT	14.65	11.00		
1N3997A/ML3	MOT	14.65	11.00		
1N3998A/ML3	MOT	14.65	11.00		
1N3999A/ML3	MOT	14.65	11.00		
1N4000A/ML3	MOT	14.65	11.00		
1N4370A/ML1	MOT	3.05	2.30		
1N4370A/ML3	MOT	4.65	3.50		
1N4370A/ML2	MOT	4.10	3.10		
1N4371A/ML1	MOT	3.05	2.30		
1N4371A/ML2	MOT	4.10	3.10		
1N4371A/ML2	MOT	4.65	3.50		
1N4372A/ML1	MOT	3.05	2.30		
1N4372A/ML2	MOT	4.10	3.10		
1N4372A/ML3	MOT	4.65	3.50		
1N2806	TI	5.40		4.25	
1N2807	TI	5.40		4.25	
1N2808	MOT	5.65	4.90	4.25	
1N2808	TI	5.40		4.25	
1N2808A	MOT	7.65	6.60	5.75	
1N2808B	MOT	10.65	9.20	8.00	
1N2809	TI	5.40		4.25	
1N2809B	HOF	10.60	9.54	8.46	
1N2810	MOT	5.65	4.90	4.25	
1N2810	TI	5.40		4.25	
1N2810A	MOT	7.65	6.60	5.75	
1N2810B	MOT	10.65	9.20	8.00	
1N2811	MOT	5.65	4.90	4.25	
1N2811	TI	5.40		4.25	
1N2811A	MOT	7.65	6.60	5.75	
1N2811B	MOT	10.65	9.20	8.00	
1N2812	TI	5.40		4.25	
1N2812B	MOT	10.65	9.20	8.00	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N2813	MOT	5.65	4.90	4.25	
1N2813	TI	5.40		4.25	
1N2813B	MOT	10.65	9.20	8.00	
1N2814	MOT	5.65	4.90	4.25	
1N2814B	MOT	10.65	9.20	8.00	
1N2814	TI	5.40		4.25	
1N2814A	MOT	7.65	6.60	5.75	
1N2815	TI	5.40		4.25	
1N2816	TI	5.40		4.25	
1N2817	TI	5.40		4.25	
1N2818	MOT	5.65	4.90	4.25	
1N2818	TI	5.40		4.25	
1N2818A	MOT	7.65	6.60	5.75	
1N2818B	MOT	10.65	9.20	8.00	
1N2819	MOT	5.65	4.90	4.25	
1N2819B	MOT	10.65	9.20	8.00	
1N2819	TI	5.40		4.25	
1N2819A	MOT	7.65	6.60	5.75	
1N2820	MOT	5.65	4.90	4.25	
1N2820	TI	5.40		4.25	
1N2820A	MOT	7.65	6.60	5.75	
1N2820B	MOT	10.65	9.20	8.00	
1N2821	TI	5.40		4.25	
1N2822	TI	5.40		4.25	
1N2822B	MOT	10.65	9.20	8.00	
1N2823	MOT	5.65	4.90	4.25	
1N2823	TI	5.40		4.25	
1N2823A	MOT	7.65	6.60	5.75	
1N2823B	HOF	10.60	9.54	8.46	
1N2823B	MOT	10.65	9.20	8.00	
1N2824	MOT	5.65	4.90	4.25	
1N2824B	MOT	10.65	9.20	8.00	
1N2824	TI	5.40		4.25	
1N2824A	MOT	7.65	6.60	5.75	
1N2825	TI	5.40		4.25	
1N2825B	MOT	10.65	9.20	8.00	
1N2826	MOT	5.65	4.90	4.25	
1N2826B	MOT	10.65	9.20	8.00	
1N2826	TI	5.40		4.25	
1N2826A	MOT	7.65	6.60	5.75	
1N2827	MOT	5.65	4.90	4.25	
1N2827A	MOT	7.65	6.60	5.75	
1N2827	TI	5.40		4.25	
1N2828	MOT	5.65	4.90	4.25	
1N2828	TI	5.40		4.25	
1N2828A	MOT	7.65	6.60	5.75	
1N2829	MOT	5.65	4.90	4.25	
1N2829A	MOT	7.65	6.60	5.75	
1N2829	TI	5.40		4.25	
1N2830	MOT	5.65	4.90	4.25	
1N2830	TI	5.40		4.25	
1N2830A	MOT	7.65	6.60	5.75	
1N2830B	MOT	10.65	9.20	8.00	
1N2831	TI	5.40		4.25	
1N2831B	MOT	10.65	9.20	8.00	
1N2832	MOT	5.65	4.90	4.25	
1N2832	TI	5.40		4.25	
1N2832A	MOT	7.65	6.60	5.75	
1N2832B	MOT	1065	9.20	8.00	
1N2833	MOT	5.65	4.90	4.25	
1N2833	TI	5.40		4.25	
1N2833A	MOT	7.65	6.60	5.75	
1N2833B	MOT	10.65	9.20	8.00	
1N2834	MOT	5.65	4.90	4.25	
1N2834	TI	5.40		4.25	
1N2834A	MOT	7.65	6.60	5.75	
1N2835	MOT	5.65	4.90	4.25	
1N2835B	MOT	10.65	9.20	8.00	
1N2835	TI	5.40		4.25	
1N2835A	MOT	7.65	6.60	5.75	
1N2836	MOT	5.65	4.90	4.25	
1N2836A	MOT	7.65	6.60	5.75	
1N2836	TI	5.40		4.25	
1N2837	MOT	5.65	4.90	4.25	
1N2837	TI	5.40		4.25	
1N2837A	MOT	7.65	6.60	5.75	
1N2838	MOT	5.65	4.90	4.25	
1N2838	TI	5.40		4.25	
1N2838A	MOT	7.65	6.60	5.75	
1N2838B	MOT	10.65	9.20	8.00	
1N2839	MOT	6.80	5.85	5.10	
1N2839	TI	6.05		5.04	
1N2840	MOT	6.80	5.85	5.10	
1N2840	TI	6.05		5.04	
1N2841	MOT	6.80	5.85	5.10	
1N2841	TI	6.05		5.04	
1N2841A	MOT	11.30	9.75	8.50	
1N2841B	MOT	17.95	15.50	13.50	
1N2842	MOT	6.80	5.85	5.10	
1N2842	TI	6.05		5.04	
1N2842A	MOT	11.30	9.75	8.50	
1N2842B	MOT	17.95	15.50	13.50	
1N2843	MOT	6.80	5.85	5.10	

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N2843	TI	6.05	.....	5.04	.....
1N2843A	MOT	11.30	9.75	8.50	.....
1N2843B	MOT	17.95	15.50	13.50	.....
1N2844	MOT	6.80	5.85	5.10	.....
N12844	TI	6.05	.....	5.04	.....
1N2844A	MOT	11.30	9.75	8.50	.....
1N2845	MOT	6.80	5.85	5.10	.....
1N2845B	MOT	17.95	15.50	13.50	.....
1N2845	TI	6.05	.....	5.04	.....
1N2845A	MOT	11.30	9.75	8.50	.....
1N2846	MOT	6.80	5.85	5.10	.....
1N2846	TI	6.05	.....	5.04	.....
1N2846A	MOT	11.30	9.75	8.50	.....
1N2846B	MOT	17.95	15.50	13.50	.....
1N2858A	RCA	.33	.....	.23	.....
1N2859A	RCA	.36	.....	.25	.....
1N2860A	RCA	.40	.....	.28	.....
1N2863A	RCA	.58	.....	.40	.....
1N2864A	RCA	.69	.....	.48	.....
1N2927	HOF	15.00	11.25	.....	.....
1N2927A	HOF	19.00	13.35	.....	.....
1N2928	HOF	12.50	.....	9.40	.....
1N2928A	HOF	17.50	.....	13.10	.....
1N2929	HOF	11.10	.....	8.30	.....
1N2929A	HOF	17.50	.....	13.10	.....
1N2930	HOF	11.10	.....	8.30	.....
1N2930A	HOF	17.50	.....	13.10	.....
1N2931	HOF	11.10	.....	8.30	.....
1N2939	GE	7.50	.....	5.00	.....
1N2939A	GE	15.40	.....	10.25	.....
1N2940	GE	5.65	.....	3.75	.....
1N2941	GE	4.70	.....	3.15	.....
1N2941A	GE	9.15	.....	6.10	.....
1N2969	GE	5.25	.....	3.50	.....
1N2969A	GE	10.50	.....	7.00	.....
1N2970	MOT	5.45	4.70	4.10	2.40
1N2970	TI	3.60	.....	2.40	.....
1N2970A	INT	3.30	2.95	2.65	.....
1N2970A	MOT	5.85	5.05	4.40	.....
1N2970A	TI	3.98	.....	2.65	.....
1N2970B	HOF	3.55	3.20	2.65	.....
1N2970B	INT	4.25	3.80	3.30	.....
1N2970B	MOT	7.30	6.30	5.50	3.30
1N2970B	TI	4.95	.....	3.30	.....
1N2971A	TI	3.98	.....	2.65	.....
1N2971B	INT	4.25	3.80	3.30	.....
1N2971B	TI	4.95	.....	3.30	.....
1N2972	MOT	5.45	4.70	4.10	.....
1N2972	TI	3.60	.....	2.40	.....
1N2972A	INT	3.30	2.95	2.65	.....
1N2972A	MOT	5.85	5.05	4.40	.....
1N2972A	TI	3.98	.....	2.65	.....
1N2972B	INT	4.25	3.80	3.30	.....
1N2972B	MOT	7.30	6.30	5.50	3.30
1N2972B	TI	4.95	.....	3.30	.....
1N2973	MOT	5.45	4.70	4.10	.....
1N2973A	TI	3.98	.....	2.65	.....
1N2973A	MOT	5.85	5.05	4.40	.....
1N2973B	MOT	7.30	6.30	5.50	3.30
1N2973B	TI	4.95	.....	3.30	.....
1N2974	MOT	5.45	4.70	4.10	.....
1N2974	TI	3.60	.....	2.40	.....
1N2974A	MOT	5.85	5.05	4.40	.....
1N2974A	TI	3.98	.....	2.65	.....
1N2974B	MOT	7.30	6.30	5.50	3.30
1N2974B	TI	4.95	.....	3.30	.....
1N2975	MOT	5.45	4.70	4.10	2.40
1N2975A	MOT	5.85	5.05	4.40	.....
1N2975A	TI	3.98	.....	2.65	.....
1N2975B	TI	4.95	.....	3.30	.....
1N2976	MOT	5.45	4.70	4.10	.....
1N2976	TI	3.60	.....	2.40	.....
1N2976A	INT	3.30	2.95	2.65	.....
1N2976A	MOT	5.85	5.05	4.40	.....
N12976A	TI	3.98	.....	2.65	.....
1N2976B	HOF	5.30	4.75	3.97	.....
1N2976B	INT	4.25	3.80	3.30	.....
1N2976B	MOT	7.30	6.30	5.50	3.30
1N2976B	TI	4.95	.....	3.30	.....
1N2977A	MOT	5.45	4.70	4.10	.....
1N2977	TI	3.60	.....	2.40	.....
1N2977A	INT	3.30	2.95	2.65	.....
1N2977A	TI	3.98	.....	2.65	.....
1N2977B	INT	4.25	3.80	3.30	.....
1N2977B	MOT	7.30	6.30	5.50	3.30
1N2977B	TI	4.95	.....	3.30	.....
1N2978	INT	3.00	2.68	2.40	.....
1N2973	MOT	5.45	4.70	4.10	2.40
1N2978	TI	3.60	.....	2.40	.....
1N2978A	MOT	5.85	5.05	4.40	.....
1N2978A	TI	3.98	.....	2.65	.....
N12978B	TI	4.95	.....	3.30	.....
1N2979	MOT	5.45	4.70	4.10	2.40
1N2979A	TI	3.98	.....	2.65	.....
1N2979A	MOT	5.85	5.05	4.40	.....
1N2979B	INT	4.25	3.80	3.30	.....
1N2979B	MOT	7.30	6.30	5.50	3.30
1N2979B	TI	4.95	.....	3.30	.....
1N2980	MOT	5.45	4.70	4.10	.....
1N2980A	TI	3.98	.....	2.65	.....
1N2980B	TI	4.95	.....	3.30	.....
1N2981	MOT	5.45	4.70	4.10	2.40
1N2981	TI	3.68	.....	2.40	.....
1N2981A	MOT	5.85	5.05	4.40	.....
1N2981B	TI	4.95	.....	3.30	.....
1N2982	MOT	5.45	4.70	4.10	.....
1N2982	TI	3.60	.....	2.40	.....
1N2982A	MOT	5.85	5.05	4.40	2.65
1N2982A	TI	3.98	.....	2.65	.....
1N2982B	INT	4.25	3.80	3.30	.....
1N2982B	MOT	7.30	6.30	5.50	3.30
1N2982B	TI	4.95	.....	3.30	.....
1N2983	MOT	5.45	4.70	4.10	2.40
1N2983	TI	3.60	.....	.....	2.40
1N2983A	MOT	5.85	5.05	4.40	.....
1N2983A	TI	3.98	.....	2.65	.....
N12983B	TI	4.95	.....	3.30	.....
1N2984	MOT	5.45	4.70	4.10	2.40
1N2984	TI	3.60	.....	2.40	.....
1N2984A	MOT	5.85	5.05	4.40	.....
1N2984A	TI	3.98	.....	2.65	.....
1N2984B	INT	4.25	3.80	3.30	.....
1N2984B	MOT	7.30	6.30	5.50	3.30
1N2984B	TI	4.95	.....	3.30	.....
1N2985	MOT	5.45	4.70	4.10	2.40
1N2985	TI	3.60	.....	2.40	.....
1N2985A	MOT	5.85	5.05	4.40	.....
1N2985A	TI	3.98	.....	2.65	.....
1N2985B	HOF	5.30	4.75	3.97	.....
1N2585B	MOT	7.30	6.30	5.50	3.30
1N2985B	TI	4.95	.....	3.30	.....
1N2986	MOT	5.45	4.70	4.10	2.40
1N2986	TI	3.60	.....	2.40	.....
1N2986A	INT	3.30	2.95	2.65	.....
1N2986A	MOT	5.85	5.05	4.40	.....
1N2986A	TI	3.98	.....	2.65	.....
1N2986B	INT	4.25	3.80	3.30	.....
1N2986B	MOT	7.30	6.30	5.50	3.30
1N2986B	TI	4.95	.....	3.30	.....
1N2987	MOT	5.45	4.70	4.10	.....
1N2987	TI	3.60	.....	2.40	.....
1N2987A	MOT	5.85	5.05	4.40	.....
1N2987A	TI	3.98	.....	2.65	.....
1N2987B	INT	4.25	3.80	3.30	.....
1N2987B	MOT	7.30	6.30	5.50	3.30
1N2987B	TI	4.99	.....	3.30	.....
1N2988	MOT	5.45	4.70	4.10	2.40
1N2988A	MOT	5.45	4.70	4.10	2.40
1N2988A	INT	3.30	2.95	2.65	.....
1N2988A	MOT	5.85	5.05	4.40	.....
IN2988A	TI	3.98	.....	2.65	.....
1N2988B	INT	4.25	3.80	3.30	.....
1N2988B	MOT	7.30	6.30	5.50	3.30
1N2988B	TI	4.95	3.30	.....	.....
1N2989	MOT	5.45	4.70	4.10	2.40
1N2989	TI	3.60	.....	)2.40	.....
1N2989A	INT	3.30	2.95	2.65	.....
1N2989A	MOT	5.85	5.05	4.40	.....
1N2989A	TI	3.98	.....	2.65	.....
1N2989B	INT	4.25	3.80	3.30	.....
1N2989B	MOT	7.30	6.30	5.50	3.30
1N2989B	TI	4.95	.....	3.30	.....
1N2990A	TI	3.98	.....	2.65	.....
1N2990B	MOT	7.30	6.30	5.50	3.30
1N2990B	TI	4.95	.....	3.30	.....
1N2991	MOT	5.45	4.70	4.10	2.40
1N2991	TI	3.60	.....	2.40	.....
1N2991A	MOT	5.85	5.05	4.40	.....
1N2991A	TI	3.98	.....	2.65	.....
1N2991B	INT	4.25	3.80	3.30	.....
1N2991B	MOT	7.30	6.30	5.50	3.30
1N2991B	TI	4.95	.....	3.30	.....
1N2992	MOT	5.45	4.70	4.10	2.40
1N2992A	MOT	5.85	5.05	4.40	.....
1N2992A	TI	3.98	.....	2.65	.....
1N2992B	HOF	5.30	4.75	3.97	.....
1N2992B	INT	4.25	3.80	3.30	.....
1N2992B	TI	4.95	.....	3.30	.....
1N2993	MOT	5.45	4.70	4.10	.....
1N2993	TI	3.60	.....	2.40	.....
1N2993A	MOT	5.85	5.05	4.40	.....
1N2993A	TI	3.98	.....	2.65	.....
1N2993B	INT	4.25	3.80	3.30	.....
1N2993B	TI	4.95	.....	3.30	.....
1N2994	MOT	5.45	4.70	4.10	.....
1N2994	TI	3.60	.....	2.40	.....
1N2994A	MOT	5.85	5.05	4.40	.....
1N2994A	TI	3.98	.....	2.65	.....
1N2994B	INT	4.25	3.80	3.30	.....
1N2994B	TI	4.95	.....	3.30	.....
1N2995	MOT	5.45	4.70	4.10	2.40
1N2995A	MOT	5.85	5.05	4.40	.....
1N2995A	TI	3.98	.....	2.85	.....
1N2995B	TI	4.95	.....	3.30	.....
1N2996	MOT	5.45	4.70	4.10	.....
1N2996A	MOT	5.85	5.05	4.40	.....
1N2996A	TI	3.98	.....	2.65	.....
1N2996B	MOT	7.30	6.30	5.50	3.30
1N2996B	TI	4.95	.....	3.30	.....
1N2997	TI	3.60	.....	2.40	.....
1N2297A	TI	3.98	.....	2.65	.....
1N2997B	HOF	5.30	4.75	3.97	.....
1N2997B	TI	4.95	.....	3.30	.....
1N2998	MOT	5.45	4.70	4.10	2.40
1N2998	TI	3.60	.....	2.40	.....
192998A	MOT	5.85	5.05	4.40	.....
1N2998A	TI	3.98	.....	2.65	.....
1N2998B	TI	4.95	.....	3.30	.....
1N2999	TI	3.60	.....	2.40	.....
1N2999A	TI	3.98	.....	2.85	.....
1N2999B	INT	4.25	3.80	3.30	.....
1N2999B	TI	4.95	.....	3.30	.....
1N3000	TI	3.60	.....	2.40	.....
1N3000A	TI	3.98	.....	2.85	.....
1N3000B	MOT	7.30	6.30	5.50	3.30
1N3000B	TI	4.95	.....	3.30	.....
1N3001	MOT	5.45	4.70	4.10	.....
1N3001	TI	3.60	.....	2.40	.....
1N3001A	TI	3.98	.....	2.65	.....
1N3001B	INT	4.25	3.80	3.30	.....
1N3001B	MOT	7.30	6.30	5.50	3.30
1N3001B	TI	4.95	.....	3.30	.....
1N3002	MOT	5.45	4.70	4.10	.....
1N3002	TI	3.60	.....	2.40	.....
1N3002A	TI	3.98	.....	2.65	.....
1N3002B	INT	4.25	3.80	3.30	.....
1N3002B	MOT	7.30	6.30	5.50	3.30
1N3002B	TI	4.95	.....	3.30	.....
1N3003	MOT	5.45	4.70	4.10	.....
1N3003	TI	3.60	.....	2.40	.....
1N3003A	INT	3.30	2.95	2.65	.....
1N3003A	MOT	5.85	5.05	4.40	.....
1N3003A	TI	3.98	.....	2.65	.....
1N3003B	INT	4.25	3.80	3.30	.....
1N3003B	MOT	7.30	6.30	5.50	3.30
1N3303B	TI	4.95	.....	3.30	.....
1N3004	MOT	5.45	4.70	4.10	.....
1N3004	TI	3.60	.....	2.40	.....
1N3004A	MOT	5.85	5.05	4.40	.....
1N3004A	TI	3.98	.....	2.65	.....
1N3004B	INT	4.25	3.80	3.30	.....
1N3004B	TI	4.95	.....	3.30	.....
1N3005	MOT	5.45	4.70	4.10	2.40
1N3005	TI	3.60	.....	2.40	.....
1N3005A	INT	3.30	2.95	2.65	.....
1N3005A	MOT	5.85	5.05	4.40	.....

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Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N3005A	TI	3.96	.....	2.65	.....
1N3005B	HOF	5.30	4.75	3.97	.....
1N3005B	INT	4.25	3.80	3.30	.....
1N3005B	MOT	7.30	6.30	5.50	3.30
1N3005B	TI	4.95	.....	3.30	.....
1N3006	MOT	5.45	4.70	4.10	.....
1N3006	TI	3.60	.....	2.40	.....
1N3006A	INT	3.30	2.95	2.65	.....
1N3006A	MOT	5.85	5.05	4.40	.....
1N3006A	TI	3.98	.....	2.65	.....
1N3006B	MOT	7.30	6.30	5.50	3.30
1N3006B	TI	4.95	.....	3.30	.....
1N3007	MOT	5.45	4.70	4.10	.....
1N3007	TI	3.60	.....	2.40	.....
1N3007A	MOT	5.85	5.05	4.40	.....
1N3007A	TI	3.98	.....	2.65	.....
1N3007B	INT	4.25	3.80	3.30	.....
1N3007B	MOT	7.30	6.30	5.50	3.30
1N3007B	TI	4.95	.....	3.30	.....
1N3008	MOT	5.45	4.70	4.10	.....
1N3008	TI	3.60	.....	2.40	.....
1N3008A	MOT	5.85	5.65	4.40	.....
1N3008A	TI	3.98	2.65	.....	.....
1N3008B	MOT	7.30	6.30	5.50	3.30
1N3008B	TI	4.95	.....	3.30	.....
1N3009	TI	3.60	.....	2.40	.....
1N3009A	TI	3.98	.....	2.65	.....
1N3009B	INT	4.25	3.80	3.30	.....
1N3009B	MOT	7.30	6.30	5.50	3.30
1N3009B	TI	4.95	.....	3.30	.....
1N3010	TI	3.60	.....	2.40	.....
1N3010	MOT	5.45	4.70	4.10	.....
1N3010A	MOT	5.85	5.05	4.40	.....
1N3010A	TI	3.98	.....	2.65	.....
1N3010B	INT	4.25	3.80	3.30	.....
1N3010B	MOT	7.30	6.30	5.50	3.30
1N3010B	TI	4.95	.....	3.30	.....
1N3011	MOT	5.45	4.70	4.10	2.40
1N3011	TI	3.60	.....	2.40	.....
1N3011A	INT	3.30	2.95	2.65	.....
1N3011A	MOT	5.85	5.05	4.40	.....
1N3011A	TI	3.98	.....	2.65	.....
1N3011B	INT	4.25	3.80	3.30	.....
1N3011B	MOT	7.30	6.30	5.50	3.30
1N3011B	TI	4.95	.....	3.30	.....
1N3012	MOT	6.00	5.15	4.50	.....
1N3012	TI	4.05	.....	2.70	.....
1N3012A	INT	4.90	4.35	3.90	.....
1N3012A	TI	5.85	.....	3.90	.....
1N3012B/ML1	MOT	14.10	.....	10.60	.....
1N3013B/ML1	MOT	14.10	.....	10.60	.....
1N3014B/ML1	MOT	14.10	.....	10.60	.....
1N3015B/ML1	MOT	14.10	.....	10.60	.....
1N3012B/ML2	MOT	17.75	.....	13.35	.....
1N3013B/ML2	MOT	17.75	.....	13.35	.....
1N3014B/ML2	MOT	17.75	.....	13.35	.....
1N3014B/ML2	MOT	17.75	.....	13.35	.....
1N3015B/ML2	MOT	17.75	.....	13.35	.....
1N3012B/ML3	MOT	21.40	.....	16.10	.....
1N3013B/ML3	MOT	21.40	.....	16.10	.....
1N3014B/ML3	MOT	21.40	.....	16.10	.....
1N3016B/ML1	MOT	4.05	.....	3.05	.....
1N3017B/ML1	MOT	4.05	.....	3.05	.....
1N3018B/ML1	MOT	4.05	.....	3.05	.....
1N3019B/ML1	MOT	4.05	.....	3.05	.....
1N3020B/ML1	MOT	4.05	.....	3.05	.....
1N3021B/ML1	MOT	4.05	.....	3.05	.....
1N3022B/ML1	MOT	4.05	.....	3.05	.....
1N3023B/MLI	MOT	4.05	.....	3.05	.....
1N3024B/ML1	MOT	4.05	.....	3.05	.....
1N3025B/ML1	MOT	4.05	.....	3.05	.....
1N3026B/ML1	MOT	4.05	.....	3.05	.....
1N3027B/ML1	MOT	4.05	.....	3.05	.....
1N3028B/ML1	MOT	4.05	.....	3.05	.....
1N3029B/ML1	MOT	4.05	.....	3.05	.....
1N3030B/ML1	MOT	4.05	.....	3.05	.....
1N3031B/ML1	MOT	4.05	.....	3.05	.....
1N3032B/ML1	MOT	4.05	.....	3.05	.....
1N3033B/ML1	MOT	4.05	.....	3.05	.....
1N3034B/ML1	MOT	4.05	.....	3.05	.....
1N3035B/ML1	MOT	4.05	.....	3.05	.....
1N3036B/ML1	MOT	4.05	.....	3.05	.....
1N3037B/ML1	MOT	4.05	.....	3.05	.....
1N3038B/ML1	MOT	4.05	.....	3.05	.....
1N3039B/ML1	MOT	4.05	.....	3.05	.....
1N3040B/ML1	MOT	4.05	.....	3.05	.....
1N3041B/ML1	MOT	4.05	.....	3.05	.....
1N3043B/ML1	MOT	4.05	.....	3.05	.....
1N3042B/ML1	MOT	4.05	.....	3.05	.....
1N3044B/ML1	MOT	4.05	.....	3.05	.....
1N3016B/ML2	MOT	5.07	.....	4.30	.....
1N3017B/ML2	MOT	5.07	.....	4.30	.....
1N3018B/ML2	MOT	5.07	.....	4.30	.....
1N3019B/ML2	MOT	5.07	.....	4.30	.....
1N3020B/ML2	MOT	5.07	.....	4.30	.....
1N3021B/ML2	MOT	5.07	.....	4.30	.....
1N3022B/ML2	MOT	5.07	.....	4.30	.....
1N3023B/ML2	MOT	5.07	.....	4.30	.....
1N3024B/ML2	MOT	5.07	.....	4.30	.....
1N3025B/ML2	MOT	5.07	.....	4.30	.....
1N3026B/ML2	MOT	5.07	.....	4.30	.....
1N3027B/ML2	MOT	5.70	.....	4.30	.....
1N3028B/ML2	MOT	5.70	.....	4.30	.....
1N3029B/ML2	MOT	5.70	.....	4.30	.....
1N3030B/ML2	MOT	5.70	.....	4.30	.....
1N3031B/ML2	MOT	5.70	.....	4.30	.....
1N3032B/ML2	MOT	5.70	.....	4.30	.....
1N3033B/ML2	MOT	5.70	.....	4.30	.....
1N3034B/ML2	MOT	5.70	.....	4.30	.....
1N3035B/ML2	MOT	5.70	.....	4.30	.....
1N3036B/ML2	MOT	5.70	.....	4.30	.....
1N3037B/ML2	MOT	5.70	.....	4.30	.....
1N3038B/ML2	MOT	5.70	.....	4.30	.....
1N3039B/ML2	MOT	5.70	.....	4.30	.....
1N3040B/ML2	MOT	5.70	.....	4.30	.....
1N3041B/ML2	MOT	5.70	.....	4.30	.....
1N3042B/ML2	MOT	5.70	.....	4.30	.....
1N3043B/ML2	MOT	5.70	.....	4.30	.....
1N3044B/ML2	MOT	5.70	.....	4.30	.....
1N3016B/ML3	MOT	6.00	.....	4.50	.....
1N3017B/ML3	MOT	6.00	.....	4.50	.....
1N3018B/ML3	MOT	6.00	.....	4.50	.....
1N3019B/ML3	MOT	6.00	.....	4.50	.....
1N3020B/ML3	MOT	6.00	.....	4.50	.....
1N3021B/ML3	MOT	6.00	.....	4.50	.....
1N3022B/ML3	MOT	6.00	.....	4.50	.....
1N3023B/ML3	MOT	6.00	.....	4.50	.....
1N3024B/ML3	MOT	6.00	.....	4.50	.....
1N3025B/ML3	MOT	6.00	.....	4.50	.....
1N3026B/ML3	MOT	6.00	.....	4.50	.....
1N3027B/ML3	MOT	6.00	.....	4.50	.....
1N3028B/ML3	MOT	6.00	.....	4.50	.....
1N3029B/ML3	MOT	6.00	.....	4.50	.....
1N3030B/ML3	MOT	6.00	.....	4.50	.....
1N3031B/ML3	MOT	6.00	.....	4.50	.....
1N3032B/ML3	MOT	6.00	.....	4.50	.....
1N3033B/ML3	MOT	6.00	.....	4.50	.....
1N3034B/ML3	MOT	6.00	.....	4.50	.....
1N3035B/ML3	MOT	6.00	.....	4.50	.....
1N3036B/ML3	MOT	6.00	.....	4.50	.....
1N3037B/ML3	MOT	6.00	.....	4.50	.....
1N3038B/ML3	MOT	6.00	.....	4.50	.....
1N3039B/ML3	MOT	6.00	.....	4.50	.....
1N3040B/ML3	MOT	6.00	.....	4.50	.....
1N3041B/ML3	MOT	6.00	.....	4.50	.....
1N3042B/ML3	MOT	6.00	.....	4.50	.....
1N3043B/ML3	MOT	6.00	.....	4.50	.....
1N3044B/ML3	MOT	6.00	.....	4.50	.....
1N3045B/ML1	MOT	5.00	.....	3.75	.....
1N3046B/ML1	MOT	5.00	.....	3.75	.....
1N3047B/ML1	MOT	5.00	.....	3.75	.....
1N3048B/ML1	MOT	5.00	.....	3.75	.....
1N3049B/ML1	MOT	5.00	.....	3.75	.....
1N3050B/ML1	MOT	5.00	.....	3.75	.....
1N3051B/ML1	MOT	5.00	.....	3.75	.....
1N3012B	TI	9.30	.....	6.20	.....
1N3013	MOT	6.00	5.15	4.50	2.70
1N3013	TI	4.05	.....	2.70	.....
1N3013A	TI	5.85	.....	3.90	.....
1N2012B	INT	7.75	6.90	6.20	.....
1N3014	MOT	6.00	6.15	4.50	2.70
1N3014	TI	4.05	.....	2.70	.....
1N3014A	T I	5.85	.....	3.90	.....
1N3014B	TI	9.30	.....	6.20	.....
1N3015	INT	3.40	3.00	2.70	.....
1N3015	MOT	6.00	5.15	4.50	2.70
1N3015	TI	4.05	.....	2.70	.....
1N3015A	INT	4.90	4.35	3.90	.....
1N3015A	TI	5.85	.....	3.90	.....
1N3015B	HOF	8.25	7.40	6.20	.....
1N3015B	INT	7.75	6.90	6.20	.....

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR- —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3015B	MOT	13.75	11.90	10.35	6.20
1N3015B	TI	9.30	.....	6.20	.....
1N3016	HOF	2.50	2.25	2.05	.....
1N3016	INT	2.57	2.28	2.05	.....
1N3016	MOT	2.85	2.45	2.15	.....
1N3016	TI	2.36	.....	2.05	.....
1N3016A	INT	2.76	2.30	2.25	.....
1N3016A	TI	2.59	.....	2.25	.....
1N3016B	HOF	3.60	3.20	2.70	.....
1N3016B	INT	3.32	3.01	2.70	.....
1N3016B	MOT	3.70	3.20	2.80	.....
1N3016B	TI	2.89	.....	2.60	.....
1N3017	INT	2.57	2.28	2.05	.....
1N3017	MOT	2.85	2.45	2.15	.....
1N3017	TI	2.36	.....	2.05	.....
1N3017A	TI	2.59	.....	2.25	.....
1N3017B	INT	3.32	3.01	2.70	.....
1N3017B	MOT	3.70	3.20	2.80	.....
1N3017B	TI	2.89	.....	2.60	.....
1N3018	HOF	2.50	2.25	2.05	.....
1N3018	MOT	2.85	2.45	2.15	.....
1N3018	TI	2.36	.....	2.05	.....
1N3018A	MOT	3.20	.....	2.75	2.40
1N3018A	TI	2.59	.....	2.25	.....
1N3018B	MOT	3.70	3.20	2.80	.....
1N3018B	TI	2.89	.....	2.60	.....
1N3019	HOF	2.50	2.25	2.05	.....
1N3019	MOT	2.85	2.45	2.15	.....
1N3019	TI	2.36	.....	2.05	.....
1N3019A	TI	2.59	.....	2.25	.....
1N3019B	INT	3.32	3.01	2.70	.....
1N3019B	MOT	3.70	3.20	2.80	.....
1N3019B	TI	2.89	.....	2.60	.....
1N3020	HOF	2.50	2.25	2.05	.....
1N3020	INT	2.57	2.28	2.05	.....
1N3020	TI	2.36	.....	2.05	.....
1N3020A	MOT	3.20	2.75	2.40	.....
1N3020A	TI	2.59	.....	2.25	.....
1N3020B	HOF	3.60	3.20	2.70	.....
1N3020B	INT	3.32	3.01	2.70	.....
1N3020B	MOT	3.70	3.20	2.80	.....
1N3020B	TI	2.89	.....	2.60	.....
1N3021	HOF	2.50	2.25	2.05	.....
1N3021	INT	2.57	2.28	2.05	.....
1N3021	MOT	2.85	2.45	2.15	.....
1N3021	TI	2.36	.....	2.05	.....
1N3021A	TI	2.59	.....	2.25	.....
1N3021B	INT	3.32	3.01	2.70	.....
1N3021B	MOT	3.70	3.20	2.80	.....
1N3021B	TI	2.89	.....	2.60	.....
1N3022	INT	2.57	2.28	2.05	.....
1N3022	MOT	2.85	2.45	2.15	.....
1N3022	TI	2.36	.....	2.05	.....
1N3022A	INT	2.76	2.30	2.25	.....
1N3022A	TI	2.59	.....	2.25	.....
1N3022B	HOF	3.60	3.20	2.70	.....
1N3022B	INT	3.32	3.01	2.70	.....
1N3022B	MOT	3.70	3.20	2.80	.....
1N3022B	TI	2.89	.....	2.60	.....
1N3023	TI	2.36	.....	2.05	.....
1N3023A	TI	2.59	.....	2.25	.....
1N3023B	HOF	3.60	3.20	2.70	.....
1N3023B	MOT	3.70	3.20	2.80	.....
1N3023B	TI	2.89	.....	2.60	.....
1N3024	HOF	2.50	2.25	2.05	.....
1N3024	INT	2.57	2.28	2.05	.....
1N3024	TI	2.36	.....	2.05	.....
1N3024A	INT	2.76	2.30	2.25	.....
1N3024A	MOT	3.20	2.75	2.40	.....
1N3024A	TI	2.59	.....	2.25	.....
1N3024B	HOF	3.60	3.20	2.70	.....
1N3024B	INT	3.32	3.01	2.70	.....
1N3024B	MOT	3.70	3.20	2.80	.....
1N3024B	TI	2.89	.....	2.60	.....
1N3025	MOT	2.85	2.45	2.15	.....
1N3025	TI	2.36	.....	2.05	.....
1N3025A	TI	2.59	.....	2.25	.....
1N3025B	MOT	3.70	3.20	2.80	.....
1N3025B	TI	2.89	.....	2.60	.....
1N3026	HOF	2.50	2.25	2.05	.....
1N3026	INT	2.57	2.28	2.05	.....
1N3026	MOT	2.85	2.45	2.15	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N3026	TI	2.36	.....	2.05	.....
1N3026A	INT	2.76	2.30	2.25	.....
1N3026A	TI	2.59	.....	2.25	.....
1N3026B	INT	3.32	3.01	2.70	.....
1N3026B	MOT	3.70	3.20	2.80	.....
1N3026B	TI	2.89	.....	2.60	.....
1N3027	HOF	2.50	2.25	2.05	.....
1N3027	INT	2.57	2.28	2.05	.....
1N3027	MOT	2.85	2.45	2.15	.....
1N3027	TI	2.36	.....	2.05	.....
1N3027A	INT	2.76	2.30	2.25	.....
1N3027A	TI	2.59	.....	2.25	.....
1N3027B	HOF	3.60	3.20	2.70	.....
1N3027B	INT	3.32	3.01	2.70	.....
1N3027B	MOT	3.70	3.20	2.80	.....
1N3027B	TI	2.89	.....	2.60	.....
1N3028	HOF	2.50	2.25	2.05	.....
1N3028	INT	2.57	2.28	2.05	.....
1N3028	TI	2.36	.....	2.05	.....
1N3028A	INT	2.76	2.30	2.25	.....
1N3028A	TI	2.59	.....	2.25	.....
1N3028B	INT	3.32	3.01	2.70	.....
1N3028B	MOT	3.70	3.20	2.80	.....
1N3028B	TI	2.89	.....	2.60	.....
1N3029	HOF	2.50	2.25	2.05	.....
1N3029	INT	2.57	2.28	2.05	.....
1N3029	MOT	2.85	2.45	2.15	.....
1N3029	TI	2.36	.....	2.05	.....
1N3029A	INT	2.76	2.30	2.25	.....
1N3029A	TI	2.59	.....	2.25	.....
1N3029B	HOF	3.60	3.20	2.70	.....
1N3029B	INT	3.32	3.01	2.70	.....
1N3029B	MOT	3.70	3.20	2.80	.....
1N3029B	TI	2.89	.....	2.60	.....
1N3030	HOF	2.50	2.25	2.05	.....
1N3030	INT	2.57	2.28	2.05	.....
1N3030	TI	2.36	.....	2.05	.....
1N3030A	TI	2.59	.....	2.25	.....
1N3030B	INT	3.32	3.01	2.70	.....
1N3030B	MOT	3.70	3.20	2.80	.....
1N3030B	TI	2.89	.....	2.60	.....
1N3031	INT	2.57	2.28	2.05	.....
1N3031	TI	2.36	.....	2.05	.....
1N3031A	TI	2.59	.....	2.25	.....
1N3031B	HOF	3.60	3.20	2.70	.....
1N3031B	INT	3.32	3.01	2.70	.....
1N3031B	MOT	3.70	3.20	2.80	.....
1N3031B	TI	2.89	.....	2.60	.....
1N3032	TI	2.36	.....	2.05	.....
1N3032A	TI	2.59	.....	2.25	.....
1N3032B	HOF	3.60	3.20	2.70	.....
1N3032B	INT	3.32	3.01	2.70	.....
1N3032B	MOT	3.70	3.20	2.80	.....
1N3032B	TI	2.89	.....	2.60	.....
1N3033	INT	2.57	2.28	2.05	.....
1N3033	TI	2.36	.....	2.05	.....
1N3033A	TI	2.59	.....	2.25	.....
1N3033B	HOF	3.60	3.20	2.70	.....
1N3033B	INT	3.32	3.01	2.70	.....
1N3033B	MOT	3.70	3.20	2.80	.....
1N3033B	TI	2.89	.....	2.60	.....
1N3034	TI	2.59	.....	2.25	.....
1N3034A	TI	2.36	.....	2.05	.....
1N3034B	INT	3.32	3.01	2.70	.....
1N3034B	MOT	3.70	3.20	2.80	.....
1N3034B	TI	2.89	.....	2.60	.....
1N3035	TI	2.36	.....	2.05	.....
1N3035A	TI	2.59	.....	2.25	.....
1N3035B	MOT	3.70	3.20	2.80	.....
1N3035B	TI	2.89	.....	2.60	.....
1N3036	INT	2.57	2.28	2.05	.....
1N3036	TI	2.36	.....	2.05	.....
1N3036A	TI	2.59	.....	2.25	.....
1N3036B	MOT	3.70	3.20	2.80	.....
1N3036B	TI	2.89	.....	2.60	.....
1N3037	INT	2.57	2.28	2.05	.....
1N3037	TI	2.36	.....	2.05	.....
1N3037A	TI	2.59	.....	2.25	.....
1N3037B	INT	3.32	3.01	2.70	.....
1N3037B	MOT	3.70	3.20	2.80	.....
1N3037B	T 1	2.89	.....	2.60	.....
1N3038	INT	2.57	2.28	2.05	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N3038	TI	2.36	.....	2.05	.....
1N3038A	TI	2.59	.....	2.25	.....
1N3038B	INT	3.32	3.01	2.70	.....
1N3038B	MOT	3.70	3.20	2.80	.....
1N2028B	TI	2.89	.....	2.60	.....
1N3039	TI	2.36	.....	2.05	.....
1N3039A	INT	2.76	2.30	2.25	.....
1N3039A	TI	2.59	.....	2.25	.....
1N3039B	INT	2.32	3.01	2.70	.....
1N3039B	MOT	3.70	3.20	2.80	.....
1N3039B	TI	2.89	.....	2.60	.....
1N3040	TI	2.36	.....	2.05	.....
1N3040A	TI	2.59	.....	2.25	.....
1N3040B	MOT	3.70	3.20	2.80	.....
1N3040B	TI	2.89	.....	2.60	.....
1N3041	TI	2.36	.....	2.05	.....
1N3041A	INT	2.76	2.30	2.25	.....
1N3041A	TI	2.59	.....	2.25	.....
1N3041B	INT	3.32	3.01	2.70	.....
1N3041B	MOT	3.70	3.20	2.80	.....
1N3041B	TI	2.89	.....	2.60	.....
1N3042	INT	2.57	2.28	2.05	.....
1N3042	TI	2.36	.....	2.05	.....
1N3042A	TI	2.59	.....	2.25	.....
1N3042B	INT				
1N3042B	MOT	3.70	3.20	2.80	.....
1N3042B	TI	2.89	.....	2.60	.....
1N3042	INT	2.57	2.28	2.05	.....
1N3043A	TI	2.59	.....	2.25	.....
1N3043B	MOT	3.70	3.20	2.80	.....
1N3043B	TI	2.89	.....	2.60	.....
1N3044	INT	2.57	2.28	2.05	.....
1N3044A	TI	2.59	.....	2.25	.....
1N3044B	INT	3.32	3.01	2.70	.....
1N3044B	MOT	3.70	3.20	2.80	.....
1N3044B	TI	2.89	.....	2.60	.....
1N3045	MOT	2.95	2.55	2.20	.....
1N3045	TI	2.55	.....	2.20	.....
1N3045A	MOT	3.25	.....	2.80	2.45
1N3045A	TI	2.80	.....	2.45	.....
1N3045B	TI	4.05	.....	3.50	.....
1N3046A	TI	2.80	.....	2.45	.....
1N3046B	MOT	4.65	4.05	3.50	.....
1N3046B	TI	4.05	.....	3.50	.....
1N3047	INT	2.45	2.25	1.95	.....
1N3047A	TI	2.80	.....	2.45	.....
1N3047B	MOT	4.65	4.05	3.50	.....
1N3047B	TI	4.05	.....	3.50	.....
1N3048	INT	2.45	2.25	1.95	.....
1N3048A	INT	2.85	2.56	2.30	.....
1N3048A	TI	2.80	.....	2.45	.....
1N3048B	MOT	4.65	4.05	3.50	.....
1N3048B	TI	4.05	.....	3.50	.....
1N3049	MOT	2.95	2.55	2.20	.....
1N3049A	TI	2.80	.....	2.45	.....
1N3049B	TI	4.05	.....	3.50	.....
1N3050	INT	2.45	2.25	1.95	.....
1N3050	MOT	2.95	2.55	2.20	.....
1N3050A	TI	2.80	.....	2.45	.....
1N3050B	TI	4.05	.....	3.50	.....
1N3051	INT	2.45	2.25	1.95	.....
1N3051A	INT	2.85	2.56	2.30	.....
1N3051A	TI	2.80	.....	2.45	.....
1N3051B	HOF	4.35	3.92	3.35	.....
1N3051B	MOT	4.65	4.05	3.50	.....
1N3051B	TI	4.05	.....	3.50	.....
1N3062	RAY	3.00	.....	2.00	.....
1N3063	HUG	2.45	.....	1.84	.....
1N3064	HUG	2.24	.....	1.68	.....
1N3064	SYL	.67	.....	.44	.23
1N3064	TI	.24	.....	.14	.....
1N3064	GE	.35	.....	.24	.....
1N3065	HUG	2.59	.....	1.94	.....
1N3065	RAY	3.75	.....	2.50	.....
1N3066	RAY	2.80	.....	1.90	.....
1N3067	HUG	1.40	.....	1.05	.....
1N3068	HUG	.84	.....	.63	.....
1N3069	RAY	1.20	.....	.80	.....
1N3070	TI	1.22	.....	.98	.....
1N3085	INT	8.00	.....	.....	.....
1N3086	INT	NET	14.00	.....	.....
1N3111	INT	NET	7.00	.....	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N3118	GE	9.15		6.10	
1N3124	HUG	1.47		1.10	
1N3125	HUG	.80		.60	
1N3125	SYL	.51		.40	.32
1N3129	RCA	7.59		5.24	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
1N3143	SYL	5.60	4.80	4.40	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3149	GE	4.70		3.15	
1N3150	GE	4.70		3.15	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N3154ML1	MOT	3.25	2.80	2.25	2.45
1N3154BL2	MOT	4.95	4.25	3.40	3.75
1N3154BL3	MOT	6.10	5.25	4.20	4.60
1N3155ML1	MOT	4.15	3.55	2.85	3.15
1N3155ML2	MOT	6.10	5.25	4.20	4.60
1N3155ML3	MOT	7.55	6.50	5.20	5.70
1N3156ML1	MOT	6.80	5.85	4.70	5.15
1N3156ML2	MOT	8.70	7.50	6.00	6.60
	MOT	12.20	10.50	8.40	9.25
	MOT	8.20	7.05	5.65	6.20
1N3157ML2	MOT	10.15	8.75	7.00	7.70
1N3157ML3	MOT	15.35	13.25	10.60	11.65

Type No.	Mfr.	1-24	25-99	100-up	
1N3161/439A	WES	19.25	16.20		
	WES	19.25	16.20		
1N2162	WES	22.95	19.35		
1N3162R	WES	22.95	19.35		
1N3163	WES	26.95	23.05		
1N3163R	WES	26.95	23.05		
1N3164	WES	31.80	26.85		
1N3164R	WES	31.80	26.85		
1N3165	WES	3615.	30.50		
1N3165R	WES	36.15	30.50		
1N3166	WES	41.40	34.75		
1N3166R	WES	41.20	34.75		
1N3167	WES	52.55	44.30		
1N3167R	WES	52.55	44.30		
1N3168	WES	60.20	50.65		
1N3168R	WES	60.20	50.65		
1N3169	WES	72.70	61.20		
1N3169R	WES	72.70	61.20		
1N3170	WES	89.05	74.70		
1N3170R	WES	89.05	74.70		
1N3171A	WES	103.45	87.90		
1N3171A	WES	122.40	102.85		
1N3172AR	WES	122.40	102.85		
1N3173A	WES	145.40	122.40		
1N3173AR	WES	145.40	122.40		
1N3174A	WES	171.85	143.10		

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3182	AME	.86		.45	

Type No.	Mfr.	1-9	10-29	30-99	100-up
1N3183	TI	7.80	6.50	5.90	5.30
1N3184	TI	8.90	7.45	6.70	6.05
1N3185	TI	17.35	14.50	13.10	11.80
1N3186	TI	20.00	16.70	15.10	13.60

Type No.	Mfr.	1-9	10-29	30-99	100-up
1N3187	TI	28.10	23.50	21.20	19.10
1N3188	TI	35.70	29.90	27.00	24.30

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3189	GE	2.70		1.80	
1N3189	GI	3.00		2.00	
1N3189	TI	3.00		2.00	
1N3190	TI	4.50		3.00	
1N3191	TI	7.20		4.80	
1N3193	RCA	.35		.24	
1N3194	RCA	.38		.27	
1N3195	RCA	.53		.36	
1N3196	RCA	.74		.51	
1N3208	GE	1.73		1.15	
1N3208	INT	1.05		.75	
1N3208	MOT	1.27		.85	
1N3208R	MOT	1.27		.85	
1N3208R	WES	1.30		.88	
1N3209	GE	1.77		1.18	
1N3209	INT	1.30		.90	
1N3209	MOT	1.42		.95	
1N3209R	MOT	1.42		.95	
1N3209R	WES	1.46		.99	
1N3210	INT	1.80		1.20	
1N3210	MOT	1.95		1.30	
1N3210R	MOT	1.95		1.30	
1N3210R	WES	2.68		1.80	
1N3211	GE	2.40		1.60	
1N3211	INT	2.35		1.60	
1N3211	MOT	2.60		1.75	
1N3211R	MOT	2.60		1.75	
1N3212	GE	2.90		1.93	
1N3212	INT	2.85		1.90	
1N3212	MOT	3.05		2.05	
1N3212R	MOT	3.05		2.05	
1N3213	MOT	5.40		3.60	
1N3214	MOT	6.75		4.50	
1N3253	RCA	.38		.26	
1N3254	RCA	.41		.29	
1N3255	RCA	.56		.39	
1N3256	RCA	.78		.54	

Type No.	Mfr.	1-24	25-99	100-up	
1N3260	WES	7.40	6.35		
1N3261	WES	8.45	7.25		
1N3262	WES	11.20	9.83		
1N3263	WES	14.75	12.60		
1N3264	WES	17.00	14.10		
1N3265	WES	17.85	14.70		
1N3266	WES	18.65	15.45		
1N3267	WES	19.45	16.20		
1N3268	WES	21.65	17.95		
1N3269	WES	25.50	21.00		
1N3270	WES	28.80	23.80		
1N3271	WES	32.55	26.95		
1N3272	WES	35.20	28.90		
1N3273	WES	38.45	32.00		
1N3274	WES	42.50	35.70		
1N3275	WES	46.70	39.35		
1N3276	WES	51.45	43.55		

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3282	MOT	2.45		1.65	
1N3283	MOT	3.05		2.05	
1N3284	MOT	7.95		5.30	
1N3285	MOT	10.05		6.70	
1N3288	WES	6.90		5.85	
1N3289	WES	11.25		9.00	
1N3289	GE	12.95		10.15	
1N3290	WES	12.75		10.45	
1N3291	WES	13.85		11.45	
1N3291	GE	15.40		11.90	
1N3292	WES	15.40		12.75	
1N3293	WES	18.10		15.00	
1N3294	WES	22.85		18.70	
1N3295	WES	27.20		22.40	
1N3296	GE	34.50		26.40	
1N3305	MOT	5.65	4.90	4.25	
1N3306	MOT	5.65	4.90	4.25	
1N3306A	INT	7.25	6.50	5.75	
1N3307	MOT	5.65	4.90	4.25	
1N3308	MOT	5.65	4.90	4.25	
1N3308A	INT	7.25	6.50	5.75	
1N3309	MOT	5.65	4.90	4.25	
1N3310	MOT	5.65	4.90	4.25	
1N3311	MOT	5.65	4.90	4.25	
1N3311A	INT	7.25	6.50	5.75	
1N3312	MOT	5.65	4.90	4.25	
1N3313	MOT	5.65	4.90	4.25	
1N3313A	INT	7.25	6.50	5.75	
1N3314	INT	5.50	4.87	4.25	
1N3314	MOT	5.65	4.90	4.25	
1N3314A	INT	7.25	6.50	5.75	
1N3315	MOT	5.65	4.90	4.25	
1N3315A	INT	7.25	6.50	5.75	
1N3316	MOT	5.65	4.90	4.25	
1N3317	MOT	5.65	4.90	4.25	
1N3318	MOT	5.65	4.90	4.25	
1N3319	MOT	5.65	4.90	4.25	
1N3320	MOT	5.65	4.90	4.25	
1N3321	MOT	5.65	4.90	4.25	
1N3321A	INT	7.25	6.50	5.75	
1N3322	MOT	5.65	4.90	4.25	
1N3323	MOT	5.65	4.90	4.25	
1N3323A	INT	7.25	6.50	5.75	
1N3324	MOT	5.65	4.90	4.25	
1N3324A	INT	7.25	6.50	5.75	
1N3325	MOT	5.65	4.90	4.25	
1N3325A	INT	7.25	6.50	5.75	
1N3326	MOT	5.65	4.90	4.25	
1N3327	MOT	5.65	4.90	4.25	
1N3328	MOT	5.65	4.90	4.25	
1N3329	MOT	5.65	4.90	4.25	
1N3330	MOT	5.65	4.90	4.25	
1N3331	MOT	5.65	4.90	4.25	
1N3331A	INT	7.25	6.50	5.75	
1N3332	MOT	5.65	4.90	4.25	
1N3333	MOT	5.65	4.90	4.25	
1N3334	MOT	5.65	4.90	4.25	
1N3335	MOT	5.65	4.90	4.25	
1N3336	MOT	5.65	4.90	4.25	
1N3337	MOT	5.65	4.90	4.25	
1N3338	MOT	5.65	4.90	4.25	
1N3338A	INT	7.25	6.50	5.75	
1N3339	MOT	5.65	4.90	4.25	
1N3340	MOT	5.65	4.90	4.25	
1N3340A	INT	7.25	6.50	5.75	
1N3341	MOT	6.80	5.85	5.10	
1N3342	MOT	6.80	5.85	5.10	
1N3343	MOT	6.80	5.85	5.10	
1N3344	MOT	6.80	5.85	5.10	
1N3345	MOT	6.80	5.85	5.10	
1N3346	MOT	6.80	5.85	5.10	
1N3347	MOT	6.80	5.85	5.10	
1N3348	MOT	6.80	5.85	5.10	
1N3349	MOT	6.80	5.85	5.10	
1N3350	MOT	6.80	5.85	5.10	
1N3483	AME	1.65		1.10	
1N3491	MOT	.67		.45	.40
1N3491R	MOT	.67		.45	.40
1N3492	MOT	.76		.51	.46
1N3492R	MOT	.76		.51	.46
1N3493	MOT	1.11		.74	.67
1N3493R	MOT	1.11		.74	.67
1N3494	MOT	1.27		.85	.76
1N3494R	MOT	1.27		.85	.76
1N3495	MOT	1.48		.99	.89
1N3495R	MOT	1.48		.99	.89
1N3498	IR	9.00		7.00	
1N3499	IR	19.00		15.50	
1N3506	TI	1.10		.90	
1N3510	INT	2.80	2.50	2.25	
1N3511	INT	2.80	2.50	2.25	
1N3511	TI	1.10		.90	
1N3512	INT	2.80	2.50	2.25	
1N3512	TI	1.10		.90	
1N3513	INT	2.80	2.50	2.25	
1N3514	INT	2.80	2.50	2.25	
1N3515	INT	2.80	2.50	2.25	
1N3516	INT	2.80	2.50	2.25	
1N3517	INT	2.80	2.50	2.25	
1N3518	INT	2.80	2.50	2.25	
1N3518	TI	1.10		.90	
1N3519	INT	2.80	2.50	2.25	
1N3520	INT	2.80	2.50	2.25	
1N3520	TI	1.10		.90	
1N3521	INT	2.80	2.50	2.25	
1N3522	INT	2.80	2.50	2.25	
1N3522	TI	2.95		2.20	
1N3523	INT	2.80	2.50	2.25	
1N3524	INT	2.80	2.50	2.25	
1N3525	INT	2.80	2.50	2.25	
1N3526	INT	2.80	2.50	2.25	
1N3527	INT	2.80	2.50	2.25	
1N3528	INT	2.80	2.50	2.25	
1N3529	INT	2.80	2.50	2.25	
1N3530	INT	2.80	2.50	2.25	
1N3530	TI	2.95		2.20	
1N3539	HOF	12.50		9.40	
1N3539A	HOF	19.00		13.35	
1N3540	HOF	7.50		5.70	
1N3540A	HOF	9.00		6.75	
1N3541	HOF	7.50		5.70	
1N3541A	HOF	9.00		6.75	
1N3542	HOF	7.50		5.70	
1N3542A	HOF	9.00		6.75	
1N3543	HOF	7.50		5.70	
1N3543A	HOF	9.00		6.75	
1N3563	RCA	.71		.63	
1N3569	GE	1.34		.89	
1N3570	GE	1.62		1.08	
1N3571	GE	2.10		1.40	
1N3580	MOT	4.90	4.20	3.65	
1N3580A	MOT	5.20	4.50	3.90	
1N3583	MOT	10.90	9.40	8.20	
1N3583A	MOT	11.80	10.20	8.85	
1N3583B	MOT	15.65	13.55	11.75	
1N3584	MOT	25.30	21.85	19.00	
1N3584A	MOT	32.80	28.35	24.65	
1N3584B	MOT	36.80	31.80	27.65	
1N3594	GI	3.37		2.25	
1N3604	HUG	2.59		1.94	
1N3604	SYL	.80		.56	.32
1N3604	GE	.83		.56	
1N3605	HUG	2.59		1.94	

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-9	10-99	100-999	1000-up
1N3605	SYL	.72	.48	.26	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3605	GE	.72	.....	.48	.....
1N3606	HUG	2.94	.....	2.21	.....
1N3606	GE	1.00	.....	.67	.....
1N3615	INT	1.38	.....	.95	.....
1N3616	INT	1.54	.....	1.05	.....
1N3617	INT	1.98	.....	1.38	.....
1N3618	INT	3.03	.....	2.04	.....
1N3619	INT	4.10	.....	2.60	.....
1N3620	INT	4.90	.....	3.15	.....
1N3621	INT	5.60	.....	3.60	.....
1N3622	INT	6.70	.....	4.30	.....
1N3624	INT	10.70	.....	6.90	.....
1N3639	GE	.57	.....	.38	.....
1N3640	GE	.72	.....	.48	.....
1N3641	GE	1.05	.....	.70	.....
1N3642	GE	1.46	.....	.97	.....
1N3649	RCA	11.10	.....	7.50	.....
1N3649	TI	11.10	.....	7.50	.....
1N3650	TI	13.75	.....	9.00	.....
1N3659	MOT	.90	.....	.60	.....
1N3659R	MOT	.90	.....	.60	.....
1N3660	MOT	.99	.....	.66	.....
1N3660R	MOT	.99	.....	.66	.....
1N3661	MOT	1.33	.....	.89	.....
1N3661R	MOT	1.33	.....	.89	.....
1N3662	MOT	1.48	.....	.99	.....
1N3662R	MOT	1.48	.....	.99	.....
1N3663	MOT	1.70	.....	1.14	.....
1N3663R	MOT	1.70	.....	1.14	.....
1N3666	MOT	.70	.....	.53	.....
1N3670	HUG	6.75	.....	5.15	.....
1N3670	WES	7.10	.....	5.25	.....
1N3670A	WES	7.10	.....	5.25	.....
1N3670A	INT	7.80	.....	5.25	.....
1N3671	HUG	7.90	.....	5.70	.....
1N3671	WES	8.54	.....	5.85	.....
1N3671A	WES	8.54	.....	5.85	.....
1N3671A	INT	8.70	.....	5.85	.....
1N3672	HUG	8.50	.....	6.20	.....
1N3672A	WES	9.35	.....	6.30	.....
1N3672A	INT	9.40	.....	6.30	.....
1N3673	HUG	9.10	.....	6.50	.....
1N3673A	GE	9.90	.....	6.60	.....
1N3673A	WES	9.80	.....	6.60	.....
1N3673A	INT	9.80	.....	6.60	.....
1N3675	MOT	3.45	3.00	2.60	.....
1N3675B	MOT	4.90	4.25	3.70	.....
1N3676	MOT	3.45	3.00	2.60	.....
1N3677	MOT	3.45	3.00	2.60	.....
1N3677B	MOT	4.90	4.25	3.70	.....
1N3678	MOT	3.45	3.00	2.60	.....
1N3679	MOT	3.45	3.00	2.60	.....
1N3679B	MOT	4.90	4.25	3.70	.....
1N3680	MOT	3.45	3.00	2.60	.....
1N3680B	MOT	4.90	4.25	3.70	.....
1N3681	MOT	3.45	3.00	2.60	.....
1N3681B	MOT	4.90	4.25	3.70	.....
1N3682	MOT	3.45	3.00	2.60	.....
1N3682B	MOT	4.90	4.25	3.70	.....
1N3683	MOT	3.45	3.00	2.60	.....
1N3683B	MOT	4.90	4.25	3.70	.....
1N3684	MOT	3.45	3.00	2.60	.....
1N3685	MOT	3.45	3.00	2.60	.....
1N3685B	MOT	4.90	4.25	3.70	.....
1N3686	MOT	3.45	3.00	2.60	.....
1N3686B	MOT	4.90	4.25	3.70	.....
1N3687	MOT	3.45	3.00	2.60	.....
1N3687B	MOT	4.90	4.25	3.70	.....
1N3688	MOT	3.45	3.00	2.60	.....
1N3688B	MOT	4.90	4.25	3.70	.....
1N3689	MOT	3.45	3.00	2.60	.....
1N3689B	MOT	4.90	4.25	3.70	.....
1N3690	MOT	3.45	3.00	2.60	.....
1N3690B	MOT	4.90	4.25	3.70	.....
1N3691	MOT	3.45	3.00	2.60	.....
1N3692	MOT	4.90	4.25	3.70	.....
1N3693	MOT	3.45	3.00	2.60	.....
1N3693B	MOT	4.90	4.25	3.70	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3694	MOT	3.45	3.00	2.60	.....
1N3695	MOT	3.45	3.00	2.60	.....
1N3696	MOT	3.45	3.00	2.60	.....
1N3697	MOT	3.45	3.00	2.60	.....
1N3697B	MOT	4.90	4.25	3.70	.....
1N3698	MOT	3.45	3.00	2.60	.....
1N3699	MOT	3.45	3.00	2.60	.....
1N3700	MOT	3.45	3.00	2.60	.....
1N3701	MOT	3.45	3.00	2.60	.....
1N3702	MOT	3.45	3.00	2.60	.....
1N3703	MOT	3.45	3.00	2.60	.....
1N3703B	MOT	4.90	4.25	3.70	.....
1N3712	GE	3.30	.....	2.20	.....
1N3713	GE	5.00	.....	3.30	.....
1N3714	GE	2.90	.....	1.95	.....
1N3716	GE	2.25	.....	1.50	.....
1N3717	GE	3.90	.....	2.60	.....
1N3718	GE	2.25	.....	1.50	.....
1N3719	GE	3.90	.....	2.60	.....
1N3720	GE	1.60	.....	1.05	.....
1N3722	GI	2.65	.....	1.75	.....
1N3729	RAY	4.45	.....	3.48	.....
1N3730	RAY	3.50	.....	2.65	.....

Type No.	Mfr.	1-24	25-99	100-up	
1N3742	GE	84.00	66.00	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3754	RCA	.32	.....	.22	.....
1N3755	RCA	.33	.....	.23	.....
1N3756	RCA	.35	.....	.24	.....
1N3765	WES	8.55	.....	5.70	.....
1N3766	WES	9.75	.....	6.50	.....
1N3785	MOT	3.75	3.20	2.80	.....
1N3785B	MOT	6.95	6.00	5.25	.....
1N3786	MOT	3.75	3.20	2.80	.....
1N3787	MOT	3.75	3.20	2.80	.....
1N3788	MOT	3.75	3.20	2.80	.....
1N3789	MOT	3.75	3.20	2.80	.....
1N3789B	MOT	6.95	6.00	5.25	.....
1N3790	MOT	3.75	3.20	2.80	.....
1N3791	MOT	3.75	3.20	2.80	.....
1N3791B	MOT	6.95	6.00	5.25	.....
1N3792	MOT	3.75	3.20	2.80	.....
1N3793	MOT	3.75	3.20	2.80	.....
1N3793B	MOT	6.95	6.00	5.25	.....
1N3794	MOT	3.75	3.20	2.80	.....
1N3795	MOT	3.75	3.20	2.80	.....
1N3795B	MOT	6.95	6.00	5.25	.....
1N3796	MOT	3.75	3.20	2.80	.....
1N3796B	MOT	6.95	6.00	5.25	.....
1N3797	MOT	3.75	3.20	2.80	.....
1N3798	MOT	3.75	3.20	2.80	.....
1N3798B	MOT	6.95	6.00	5.25	.....
1N3799	MOT	3.75	3.20	2.80	.....
1N3800	MOT	3.75	3.20	2.80	.....
1N3800B	MOT	6.95	6.00	5.25	.....
1N3801	MOT	3.75	3.20	2.80	.....
1N3801B	MOT	6.95	6.00	5.25	.....
1N3801A	MOT	5.30	4.60	4.00	.....
1N3804	MOT	3.75	3.20	2.80	.....
1N3803	MOT	3.75	3.20	2.80	.....
1N3803A	MOT	5.30	4.60	4.00	.....
1N3808B	MOT	6.95	6.00	5.25	.....
1N3810	MOT	3.75	3.20	2.80	.....
1N3810B	MOT	6.95	6.00	5.25	.....
1N3813	MOT	3.75	3.20	2.80	.....
1N3813B	MOT	6.95	6.00	5.25	.....
1N3813A	MOT	5.30	4.60	4.00	.....
1N3818	MOT	4.75	4.10	3.55	.....
1N3821	IR	2.00	.....	1.60	.....
1N3821A	IR	2.50	.....	2.00	.....
1N3821A	MOT	2.65	2.30	2.00	.....
1N3822	IR	2.00	.....	1.60	.....
1N3822A	IR	2.50	.....	2.00	.....
1N3822A	MOT	2.65	2.30	2.00	.....
1N3823	IR	2.00	.....	1.60	.....
1N3823A	IR	2.50	.....	2.00	.....
1N3823A	MOT	2.65	2.30	2.00	.....
1N3824	IR	2.00	.....	1.60	.....
1N3824A	IR	2.50	.....	2.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1N3824A	MOT	2.65	2.30	2.00	.....
1N3825	IR	2.00	.....	1.60	.....
1N3825A	IR	2.50	.....	2.00	.....
1N3825A	MOT	2.65	2.30	2.00	.....
1N3826	IR	2.00	.....	1.60	.....
1N3826A	IR	2.50	.....	2.00	.....
1N3826A	MOT	2.65	2.30	2.00	.....
1N3827	IR	2.00	.....	1.60	.....
1N3827A	IR	2.50	.....	2.00	.....
1N3827A	MOT	2.65	2.30	2.00	.....
1N3828	IR	2.00	.....	1.60	.....
1N3828A	IR	2.50	.....	2.00	.....
1N3828A	MOT	2.65	2.30	2.00	.....
1N3829	IR	2.00	.....	1.60	.....
1N3829A	IR	2.50	.....	2.00	.....
1N3829A	MOT	2.65	2.30	2.00	.....
1N3830A	MOT	2.65	2.30	2.00	.....
1N3858	RCA	6.52	.....	4.50	.....
1N3859	RCA	8.17	.....	5.64	.....
1N3862	RCA	7.87	.....	5.30	.....
1N3874	TI	7.50	.....	5.00	.....
1N3875	TI	8.03	.....	5.35	.....
1N3876	TI	10.50	.....	7.00	.....
1N3877	TI	14.62	.....	9.75	.....
1N3878	TI	17.28	.....	11.50	.....
1N3879	GE	4.20	.....	2.80	.....
1N3879	MOT	4.85	.....	3.25	.....
1N3879	TI	5.25	.....	3.50	.....
1N3879	WES	4.70	.....	2.80	.....
1N3880	MOT	5.40	.....	3.60	.....
1N3880	TI	5.77	.....	3.85	.....
1N3880	WES	4.65	.....	3.10	.....
1N3881	HUG	24.45	.....	18.34	.....
1N3881	MOT	7.85	.....	5.25	.....
1N3881	TI	8.25	.....	5.50	.....
1N3881	WES	6.60	.....	4.40	.....
1N3882	MOT	12.00	.....	8.00	.....
1N3882	TI	12.38	.....	8.25	.....
1N3882	WES	9.90	.....	6.60	.....
1N3883	MOT	13.65	.....	9.10	.....
1N3883	TI	15.00	.....	10.00	.....
1N3883	WES	13.55	.....	9.10	.....
1N3884	TI	8.55	.....	5.70	.....
1N3884R	TI	8.55	.....	5.70	.....
1N3885R	TI	9.00	.....	6.00	.....
1N3886	TI	12.00	.....	8.00	.....
1N3886R	TI	12.00	.....	8.00	.....
1N3887	TI	16.90	.....	10.25	.....
1N3887R	TI	16.90	.....	10.25	.....
1N3888	TI	19.90	.....	13.25	.....
1N3888R	TI	19.90	.....	13.25	.....
1N3889	GE	5.03	.....	3.35	.....
1N3889	MOT	6.00	.....	4.00	.....
1N3889	TI	6.30	.....	4.20	.....
N13889	WES	5.03	.....	3.35	.....
1N3889R	TI	6.30	.....	4.20	.....
1N3890	MOT	6.45	.....	4.30	.....
1N3890	TI	6.75	.....	4.50	.....
1N3890	WES	5.40	.....	3.60	.....
1N3890R	TI	6.75	.....	4.50	.....
1N3891	GE	7.80	.....	5.20	.....
1N3891	MOT	9.45	.....	6.30	.....
1N3891	TI	7.75	.....	6.50	.....
1N3891	WES	7.80	.....	5.20	.....
1N3891R	TI	7.75	.....	6.50	.....
1N3892	MOT	14.25	.....	9.50	.....
1N3892	TI	14.65	.....	9.75	.....
1N3892	WES	11.70	.....	7.80	.....
1N3892R	TI	14.65	.....	9.75	.....
1N3893	MOT	17.25	.....	11.50	.....
1N3893	TI	17.60	.....	11.75	.....
1N3893	WES	17.15	.....	11.50	.....
1N3893R	TI	17.60	.....	11.75	.....
1N3899	WES	6.35	.....	4.20	.....
1N3900	WES	7.00	.....	4.65	.....
1N3901	WES	9.70	.....	8.45	.....
1N3902	WES	14.95	.....	9.90	.....
1N3903	WES	22.25	.....	14.90	.....
1N3909	TI	30.00	.....	22.60	.....
1N3909	WES	8.95	.....	5.95	.....
1N3910	TI	41.50	.....	31.20	.....
1N3910	WES	9.70	.....	6.45	.....

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Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N3911	TI	51.00	.....	38.20	.....
1N3911	WES	12.70	.....	8.40	.....
1N3912	TI	57.00	.....	44.10	.....
1N3912	WES	18.50	.....	12.30	.....
1N3913	TI	64.00	.....	48.00	.....
1N3913	WES	27.70	.....	18.40	.....
1N3948	HOF	12.50	.....	9.40	.....
1N3987	HUG	8.25	.....	6.19	.....
1N3987R	WES	6.42	.....	5.50	.....
1N3988	HUG	9.10	.....	6.83	.....
1N3988R	WES	8.24	.....	5.84	.....
1N3989	HUG	11.05	.....	8.29	.....
1N3989R	WES	9.39	.....	6.29	.....
1N3990	GE	14.94	.....	9.96	.....
1N3990	HUG	12.00	.....	9.00	.....
1N3990R	WES	10.98	.....	7.20	.....
1N3993	INT	5.60	.....	4.10	.....
1N3993A	INT	7.20	.....	5.75	.....
1N3993A	MOT	7.70	6.65	5.80	.....
1N3994	INT	5.60	.....	4.10	.....
1N3994A	INT	7.20	.....	5.75	.....
1N3995A	MOT	7.70	6.65	5.80	.....
1N3996	INT	5.60	.....	4.10	.....
1N3996	MOT	5.65	4.90	4.25	.....
1N3996A	INT	7.20	.....	5.75	.....
1N3996A	MOT	7.70	6.65	5.80	.....
1N3997	INT	5.60	.....	4.10	.....
1N3997	MOT	5.65	4.90	4.25	.....
1N3997A	INT	7.20	.....	5.75	.....
1N3997A	MOT	7.70	6.65	5.80	.....
1N3998	INT	5.60	.....	4.10	.....
1N3998	MOT	5.65	4.90	4.25	.....
1N3998A	INT	7.20	.....	5.75	.....
1N3998A	MOT	7.70	6.65	5.80	.....
1N3999	INT	5.60	.....	4.10	.....
1N3999A	INT	7.20	.....	5.75	.....
1N3999A	MOT	7.70	6.65	5.80	.....
1N4000	INT	5.60	.....	4.10	.....
1N4000	MOT	5.65	4.90	4.25	.....
1N4000A	INT	7.20	.....	5.75	.....
1N4001	MOT	.45	.....	.30	.27
1N4001	T I	.45	.....	.30	.....
1N4002	MOT	.49	.....	.33	.30
1N4002	TI	.49	.....	.33	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N4002	SAR	.33	.29	.27	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N4003	MOT	.60	.....	.40	.36
1N4003	TI	.60	.....	.40	.....
1N4004	MOT	.67	.....	.45	.40
1N4004	TI	.67	.....	.45	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N4003	SAR	.33	.29	.27	.....
1N4004	SAR	.35	.30	.28	.....
1N4005	SAR	.37	.22	.29	.....
1N4006	SAR	.52	.44	.41	.....
1N4007	SAR	.79	.67	.63	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N4005	MOT	.81	.....	.54	.49
1N4005	TI	.81	.....	.54	.....
1N4006	MOT	1.12	.....	.75	.67
1N4006	TI	1.12	.....	.75	.....
1N4007	MOT	1.80	.....	1.20	1.08
1N4009	HUG	1.68	.....	1.26	.....
1N4009	GE	.42	.....	.28	.....

Type No.	Mfr.	1-24	25-99	100-up
1N4044	WES	13.50	11.75	.....
1N4044R	WES	13.50	11.75	.....
1N4045	WES	20.50	16.25	.....
1N4045R	WES	20.50	16.25	.....
1N4046	WES	23.90	19.00	.....
1N4046R	WES	23.90	19.00	.....
1N4047	WES	28.50	21.90	.....
1N4047R	WES	28.50	21.90	.....
1N4048	WES	30.50	23.50	.....
1N4048R	WES	30.50	23.50	.....
1N4049	WES	32.90	25.25	.....
1N4049R	WES	32.90	25.25	.....
1N4050	WES	36.00	27.50	.....
1N4050R	WES	36.00	27.50	.....
1N4051	WES	44.50	34.50	.....
1N4051R	WES	44.50	34.50	.....
1N4052	WES	52.75	40.75	.....
1N4052R	WES	52.75	40.75	.....
1N4053	WES	59.00	45.50	.....
1N4053R	WES	59.00	45.50	.....

Type No.	Mfr.	1-24	25-99	100-up
1N4054	WES	67.50	52.75	.....
1N4055	WES	72.50	58.00	.....
1N4056	WES	80.00	63.50	.....
1N4056R	WES	80.00	63.50	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N4056	INT	79.50	.....	.....	.....
1N4099	MOT	5.05	4.35	3.80	.....
1N4100	MOT	5.05	4.35	3.80	.....
1N4101	MOT	5.05	4.35	3.80	.....
1N4102	MOT	5.05	4.35	3.80	.....
1N4103	MOT	5.05	4.35	3.80	.....
1N4104	MOT	5.05	4.35	3.80	.....
1N4104	TI	5.05	.....	3.80	.....
1N4105	MOT	5.05	4.35	3.80	.....
1N4106	MOT	5.05	4.35	3.80	.....
1N4107	MOT	5.05	4.35	3.80	.....
1N4108	MOT	5.05	4.35	3.80	.....
1N4109	MOT	5.05	4.35	3.80	.....
1N4110	MOT	5.05	4.35	3.80	.....
1N4111	MOT	5.05	4.35	3.80	.....
1N4112	MOT	5.05	4.35	3.80	.....
1N4113	MOT	5.05	4.35	3.80	.....
1N4114	MOT	5.05	4.35	3.80	.....
1N4115	MOT	5.05	4.35	3.80	.....
1N4116	MOT	5.05	4.35	3.80	.....
1N4117	MOT	5.05	4.35	3.80	.....
1N4118	MOT	5.05	4.35	3.80	.....
1N4119	MOT	5.05	4.35	3.80	.....
1N4120	MOT	5.05	4.35	3.80	.....
1N4121	MOT	5.05	4.35	3.80	.....
1N4122	MOT	5.05	4.35	3.80	.....
1N4123	MOT	5.05	4.35	3.80	.....
1N4124	MOT	5.05	4.35	3.80	.....
1N4125	MOT	5.05	4.35	3.80	.....
1N4126	MOT	5.05	4.35	3.80	.....
1N4127	MOT	5.05	4.35	3.80	.....
1N4128	MOT	5.05	4.35	3.80	.....
1N4129	MOT	5.05	4.35	3.80	.....
1N4130	MOT	5.05	4.35	3.80	.....
1N4131	MOT	5.05	4.35	3.80	.....
1N4132	MOT	5.05	4.35	3.80	.....
1N4133	MOT	5.05	4.35	3.80	.....
1N4134	MOT	5.05	4.35	3.80	.....
1N4135	MOT	5.05	4.35	3.80	.....
1N4136	WES	5.55	.....	4.00	.....
1N4137	WES	7.55	.....	5.21	.....
1N4138	WES	9.15	.....	6.17	.....
1N4139	HUG	.36	.....	.27	.....
1N4140	HUG	.39	.....	.29	.....
1N4141	HUG	.44	.....	.33	.....
1N4142	HUG	.64	.....	.48	.....
1N4143	HUG	.87	.....	.65	.....
1N4144	HUG	1.30	.....	.98	.....
1N4145	HUG	1.50	.....	1.13	.....
1N4146	HUG	2.00	.....	1.50	.....
1N4148	GE	.35	.....	.24	.....
1N4148	HUG	.64	.....	.32	.....
1N4150	GE	2.10	.....	1.39	.....
1N4150	HUG	1.30	.....	.65	.....
1N4151	GE	.63	.....	.42	.....
1N4151	HUG	.80	.....	.40	.....
1N4152	GE	.67	.....	.43	.....
1N4152	HUG	1.14	.....	.57	.....
1N4153	GE	.95	.....	.62	.....
1N4153	HUG	1.27	.....	.64	.....
1N4154	HUG	.44	.....	.22	.....
1N4154	GE	.37	.....	.23	.....
1N4156	GE	.75	.....	.50	.....
1N4157	GE	1.04	.....	.69	.....
1N4245	HUG	.38	.....	.29	.....
1N4246	HUG	.46	.....	.35	.....
1N4247	HUG	.56	.....	.42	.....
1N4248	HUG	1.11	.....	.83	.....
1N4249	HUG	1.11	.....	.83	.....
1N4250	HUG	1.11	.....	.83	.....
1N4251	HUG	1.75	.....	1.31	.....
1N4252	HUG	1.50	.....	1.13	.....
1N4253	HUG	1.89	.....	1.42	.....
1N4254	HUG	1.80	.....	1.35	.....
1N4255	HUG	2.70	.....	2.03	.....
1N4256	HUG	3.60	.....	2.70	.....
1N4257	HUG	4.20	.....	3.15	.....
1N4305	GE	.53	.....	.35	.....
1N4305	HUG	1.40	.....	.70	.....
1N4306	HUG	7.00	.....	5.25	.....
1N4364	TI	.45	.....	.30	.....
1N4365	TI	.48	.....	.32	.....
1N4366	TI	.56	.....	.37	.....
1N4367	TI	.66	.....	.44	.....
1N4368	TI	.72	.....	.48	.....
1N4369	TI	.90	.....	.60	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N4370	TI	1.05	.....	.85	.....
1N4370	MOT	2.00	1.70	1.50	.....
1N4370A	HOF	2.45	2.20	1.85	.....
1N4370A	INT	2.30	.....	1.85	.....
1N4371	HOF	1.75	1.55	1.30	.....
1N4371	MOT	2.00	1.70	1.50	.....
1N4371	TI	1.05	.....	.85	.....
1N4371A	HOF	2.45	2.20	1.85	.....
1N4371A	INT	2.30	.....	1.85	.....
1N4372	HOF	1.75	1.55	1.30	.....
1N4372	MOT	2.00	1.70	1.50	.....
1N4372	TI	1.05	.....	.85	.....
1N4372A	HOF	2.45	2.20	1.65	.....
1N4372A	INT	2.30	.....	1.85	.....
1N4374	TI	7.50	.....	5.00	.....
1N4383	SYL	.48	.....	.38	.27
1N4384	SYL	.58	.....	.41	.30
1N4385	SYL	.78	.....	.54	.35
1N4387	MOT	42.00	.....	28.00	.....
1N4388	MOT	42.00	.....	28.00	.....
1N4389	HUG	1.05	.....	.80	.....
1N4390	HUG	2.85	.....	2.15	.....
1N4391	HUG	2.15	.....	1.60	.....
1N4392	HUG	1.55	.....	1.20	.....
1N4393	HOF	11.85	.....	8.88	.....
1N4394	HOF	9.60	.....	7.20	.....
1N4395	HOF	8.15	.....	6.10	.....
1N4396	HOF	8.15	.....	6.10	.....
1N4397	HOF	8.15	.....	6.10	.....
1N4398	HOF	8.15	.....	6.10	.....
1N4399	HOF	8.15	.....	6.10	.....
1N4444	GE	1.51	.....	.99	.....
1N4444	HUG	1.44	.....	.72	.....
1N4446	GE	.40	.....	.26	.....
1N4446	HUG	.66	.....	.33	.....
1N4448	GE	.80	.....	.54	.....
1N4448	HUG	.90	.....	.45	.....
1N4450	HUG	1.07	.....	.54	.....
1N4451	GE	1.28	.....	.85	.....
1N4452	GE	1.64	.....	1.09	.....
1N4454	HUG	.74	.....	.37	.....
1N4454/1N3064	GE	.35	.....	.24	.....
1N4458	TI	7.00	.....	4.80	.....
1N4459	TI	8.45	.....	5.65	.....
1N4461	HOF	3.95	2.95	2.80	.....
1N4464	HOF	3.95	2.95	2.80	.....
1N4467	HOF	3.95	2.95	2.80	.....
1N4469	HOF	3.95	2.95	2.80	.....
1N4472	HOF	3.95	2.95	2.80	.....
1N4474	HOF	3.95	2.95	2.80	.....
1N4475	HOF	3.95	2.95	2.80	.....
1N4477	HOF	3.95	2.95	2.80	.....
1N4507	GE	6.90	.....	4.60	.....
1N4517	HUG	.57	.....	.43	.....
1N4525	GE	6.45	.....	4.30	.....
1N4526	GE	8.78	.....	5.85	.....
1N4527	GE	10.70	.....	6.90	.....
1N4528	GE	12.30	.....	8.20	.....
1N4529	GE	13.50	.....	9.00	.....
1N4530	GE	17.25	.....	11.50	.....
1N4531	GE	.59	.....	.39	.....
1N4534	GE	1.20	.....	.80	.....
1N4536	GE	.59	.....	.39	.....
1N4549	MOT	6.05	5.25	4.55	.....
1N4549A	MOT	8.00	6.90	6.00	.....
1N4549B	MOT	11.50	9.95	8.65	.....
1N4550A	MOT	8.00	6.90	6.00	.....
1N4550B	MOT	11.50	9.95	8.65	.....
1N4551	MOT	6.05	5.25	4.55	.....
1N4551A	MOT	8.00	6.90	6.00	.....
1N4551B	MOT	11.50	9.95	8.65	.....
1N4552	MOT	6.05	5.25	4.55	.....
1N4552A	MOT	8.00	6.90	6.00	.....
1N4552B	MOT	11.50	9.95	8.65	.....
1N4553	MOT	6.05	5.25	4.55	.....
1N4553A	MOT	8.00	6.90	6.00	.....
1N4553B	MOT	11.50	9.95	8.65	.....
1N4554	MOT	6.05	5.25	4.55	.....
1N4554A	MOT	8.00	6.90	6.00	.....
1N4554B	MOT	11.50	9.95	8.65	.....
1N4555	MOT	6.05	5.25	4.55	.....
1N4555A	MOT	8.00	6.90	6.00	.....
1N4555B	MOT	11.50	9.95	8.65	.....
1N4556	MOT	6.05	5.25	4.55	.....
1N4556A	MOT	8.00	6.90	6.00	.....
1N4556B	MOT	11.50	9.95	8.65	.....
1N4557	MOT	6.05	5.25	4.55	.....
1N4557A	MOT	8.00	6.90	6.00	.....
1N4557B	MOT	11.50	9.95	8.65	.....
1N4558	MOT	6.05	5.25	4.55	.....
1N4558A	MOT	8.00	6.90	6.00	.....

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY**—Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N4558B	MOT	11.50	9.95	8.65	
1N4559	MOT	6.05	5.25	4.55	
1N4559A	MOT	8.00	6.90	6.00	
1N4559B	MOT	11.50	9.95	8.65	
1N4560	MOT	6.05	5.25	4.55	
1N4560A	MOT	8.00	6.90	6.00	
1N4560B	MOT	11.50	9.95	8.65	
1N4561	MOT	6.05	5.25	4.55	
1N4561A	MOT	8.00	6.90	6.00	
1N4561B	MOT	11.50	9.95	8.65	
1N4562	MOT	6.05	5.25	4.55	
1N4562A	MOT	8.00	6.90	6.00	
1N4562B	MOT	11.50	9.95	8.65	
1N4563	MOT	6.05	5.25	4.55	
1N4563A	MOT	8.00	6.90	6.00	
1N4563B	MOT	11.50	9.95	8.65	
1N4564	MOT	6.05	5.25	4.55	
1N4564A	MOT	8.00	6.90	6.00	
1N4564B	MOT	11.50	9.95	8.65	
1N4565	MOT	8.65	7.45	6.50	
1N4565A	MOT	9.70	8.40	7.30	
1N4566	MOT	11.70	10.10	8.80	
1N4566A	MOT	13.05	11.25	9.80	
1N4567	MOT	23.80	20.60	17.90	
1N4567A	MOT	26.45	22.90	19.90	
1N4568	MOT	41.10	35.55	30.90	
1N4568A	MOT	45.75	39.55	34.40	
1N4569	MOT	89.50	77.40	67.30	
1N4569A	MOT	99.50	86.00	74.80	
1N4570	MOT	5.85	5.05	4.40	
1N4570A	MOT	6.50	5.65	4.90	
1N4571	MOT	7.30	6.30	5.50	
1N4571A	MOT	8.10	7.00	6.10	
1N4572	MOT	13.25	11.45	9.95	
1N4572A	MOT	14.75	12.75	11.10	
1N4573	MOT	24.25	21.00	18.25	
1N4573A	MOT	27.00	23.35	20.30	
1N4574	MOT	56.50	48.85	42.50	
1N4574A	MOT	63.15	54.60	47.50	
1N4585	SYL	1.20		.80	.65
1N4586	SYL	2.40		1.80	1.62
1N4587	WES	8.25		7.05	
1N4588	WES	13.50		11.50	
1N4589	WES	15.90		12.65	
1N4590	WES	16.75		13.95	
1N4591	WES	18.65		15.40	
1N4592	WES	21.95		18.00	
1N4593	WES	27.35		22.65	
1N4594	WES	32.95		27.35	
1N4595	WES	55.15		40.15	
1N4596	WES	75.15		50.15	
1N4606	GE	1.27		.83	
1N4606	HUG	1.44		.72	
1N4607	HUG	2.50		1.25	
1N4608	GE	1.44		.94	
1N4719	MOT	.66		.44	.40
1N4720	MOT	.73		.49	.44
1N4721	MOT	.82		.55	.49
1N4722	MOT	1.12		.75	.67
1N4723	MOT	1.50		1.00	.90
1N4724	MOT	4.10		2.75	2.45
1N4725	MOT	6.35		4.25	3.80
1N4727	GE	.40		.26	
1N3728	MOT	1.26	1.09	.95	
1N4728A	MOT	1.93	1.66	1.45	
1N4729	MOT	1.26	1.09	.95	
1N4729A	MOT	1.93	1.66	1.45	
1N4730	MOT	1.26	1.09	.95	
1N4730A	MOT	1.93	1.66	1.45	
1N4731	MOT	1.26	1.09	.95	
1N4731A	MOT	1.93	1.66	1.45	
1N4732	MOT	1.26	1.09	.95	
1N4732A	MOT	1.93	1.66	1.45	
1N4733	MOT	1.26	1.09	.95	
1N4733A	MOT	1.93	1.66	1.45	
1N4734	MOT	1.26	1.09	.95	
1N4734A	MOT	1.93	1.66	1.45	
1N4735	MOT	1.26	1.09	.95	
1N4735A	MOT	1.93	1.66	1.45	
1N4736	MOT	1.26	1.09	.95	
1N4736A	MOT	1.93	1.66	1.45	
1N4737	MOT	1.26	1.09	.95	
1N4737A	MOT	1.93	1.66	1.45	
1N4738	MOT	1.26	1.09	.95	
1N4738A	MOT	1.93	1.66	1.45	
1N4739	MOT	1.26	1.09	.95	
1N4739A	MOT	1.93	1.66	1.45	
1N4740	MOT	1.26	1.09	.95	
1N4740A	MOT	1.93	1.66	1.45	
1N4741	MOT	1.26	1.09	.95	
1N4741A	MOT	1.93	1.66	1.45	
1N4742	MOT	1.26	1.09	.95	
1N4742A	MOT	1.93	1.66	1.45	
1N4743	MOT	1.26	1.09	.95	
1N4743A	MOT	1.93	1.66	1.45	
1N4744	MOT	1.26	1.09	.95	
1N4744A	MOT	1.93	1.66	1.45	
1N4745	MOT	1.26	1.09	.95	
1N4745A	MOT	1.93	1.66	1.45	
1N4746	MOT	1.26	1.09	.95	
1N4746A	MOT	1.93	1.66	1.45	
1N4747	MOT	1.26	1.09	.95	
1N4747A	MOT	1.93	1.66	1.45	
1N4748	MOT	1.26	1.09	.95	
1N4748A	MOT	1.93	1.66	1.45	
1N4749	MOT	1.26	1.09	.95	
1N4749A	MOT	1.93	1.66	1.45	
1N4750	MOT	1.26	1.09	.95	
1N4750A	MOT	1.93	1.66	1.45	
1N4751	MOT	1.26	1.09	.95	
1N4751A	MOT	1.93	1.66	1.45	
1N4752	MOT	1.26	1.09	.95	
1N4572A	MOT	1.93	1.66	1.45	
1N4753	MOT	1.26	1.09	.95	
1N4753A	MOT	1.93	1.66	1.45	
1N4754	MOT	1.26	1.09	.95	
1N4754A	MOT	1.93	1.66	1.45	
1N4755	MOT	1.26	1.09	.95	
1N4755A	MOT	1.93	1.66	1.45	
1N4756	MOT	1.26	1.09	.95	
1N4756A	MOT	1.93	1.66	1.45	
1N4757	MOT	1.26	1.09	.95	
1N4757A	MOT	1.93	1.66	1.45	
1N4758	MOT	1.26	1.09	.95	
1N4758A	MOT	1.93	1.66	1.45	
1N4759	MOT	1.26	1.09	.95	
1N4759A	MOT	1.93	1.66	1.45	
1N4760	MOT	1.26	1.09	.95	
1N4760A	MOT	1.93	1.66	1.45	
1N4761	MOT	1.26	1.09	.95	
1N4761A	MOT	1.93	1.66	1.45	
1N4762	MOT	1.26	1.09	.95	
1N4762A	MOT	1.93	1.66	1.45	
1N4763	MOT	1.26	1.09	.95	
1N4763A	MOT	1.93	1.66	1.45	
1N4764A	MOT	1.93	1.66	1.45	
1N4765	MOT	8.65	7.45	6.50	
1N4765A	MOT	9.70	8.40	7.30	
1N4766	MOT	11.70	10.10	8.80	
1N4766A	MOT	13.05	11.25	9.80	
1N4767	MOT	23.80	20.60	17.90	
1N4767A	MOT	26.45	22.90	19.90	
1N4768	MOT	41.10	35.55	30.90	
1N4768A	MOT	45.75	39.55	34.40	
1N4769	MOT	89.50	77.40	67.30	
1N4769A	MOT	99.50	86.00	74.80	
1N4770	MOT	5.85	5.05	4.40	
1N4770A	MOT	6.50	5.65	4.90	
1N4771	MOT	7.30	6.30	5.50	
1N4771A	MOT	8.10	7.00	6.10	
1N4772	MOT	13.25	11.45	9.95	
1N4772A	MOT	14.25	12.75	11.10	
1N4773	MOT	24.25	21.00	18.25	
1N4773A	MOT	27.00	23.35	20.30	
1N4774	MOT	56.50	48.85	42.50	
1N774A	MOT	63.15	54.60	47.50	
1N4775	MOT	8.65	7.45	6.50	
1N4775A	MOT	9.70	8.40	7.30	
1N4776	MOT	11.70	10.10	8.80	
1N4776A	MOT	13.05	11.25	9.80	
1N4777	MOT	23.80	20.60	17.90	
1N4777A	MOT	26.45	22.90	19.90	
1N4778	MOT	41.10	35.55	30.90	
1N4778A	MOT	45.75	39.55	34.40	
1N4779	MOT	89.50	77.40	67.30	
1N4779A	MOT	99.50	86.00	74.80	
1N4780	MOT	5.85	5.05	4.40	
1N4780A	MOT	6.50	5.65	4.90	
1N4781	MOT	7.30	6.30	5.50	
1N4781A	MOT	8.10	7.00	6.10	
1N4782	MOT	13.25	11.45	9.95	
1N4782A	MOT	14.25	12.75	11.10	
1N4783	MOT	24.25	21.00	18.25	
1N4783A	MOT	27.00	23.35	20.30	
1N4784	MOT	56.50	48.85	42.50	
1N4784A	MOT	63.15	54.60	47.50	
1N4785	RCA	1.08		.75	
1N4816	INT	.25		.20	
1N4816	WES	.24		.20	
1N4817	INT	.30		.24	
1N4817	WES	.29		.24	
1N4818	INT	.35		.28	
1N4818	WES	.33		.28	
1N4819	INT	.40		.32	
1N4819	WES	.38		.32	
1N4820	INT	.44		.35	
1N4820	WES	.42		.35	
1N4821	INT	.48		.38	
1N4821	WES	.46		.38	
1N4822	INT	.55		.44	
1N4822	WES	.52		.44	
1N4928	GE	.45		.30	
1N4829	GE	.69		.46	
1N4830	GE	.93		.62	
1N4863	HUG	1.07		.54	
1N4864	GE	1.37		.91	
1N4865	AME	15.90		10.00	
1N4933	MOT	1.12		.75	
1N4934	MOT	1.42		.95	
1N4935	MOT	1.65		1.10	
1N4936	MOT	2.45		1.65	
1N4937	MOT	3.90		2.60	
1N4951	GE	.42		.28	
1N4952	GE	.48		.32	
1N4997	MOT	.66		.44	.40
1N4998	MOT	.73		.49	.44
1N4999	MOT	.82		.55	.49
1N5000	MOT	1.12		.75	
1N5001	MOT	1.50		1.00	.90
1N5002	MOT	4.10		2.75	2.45
1N5003	MOT	6.35		4.25	
1N5004	WES	1.65		1.08	
1N5005	WES	1.85		1.26	
1N5006	WES	2.60		1.81	
1N5007	WES	3.55		2.40	
1N5052	INT	.78		.62	
1N5052	WES	.74		.62	
1N5053	INT	.94		.75	
1N5053	WES	.89		.75	
1N5054	INT	1.28		1.02	
1N5054	WES	1.22		1.02	
1N5059	GE	.46		.31	
1N5060	GE	.56		.37	
1N5061	GE	.75		.50	
1N5062	GE	1.12		.75	
1N5139	MOT	5.85		3.90	
1N5139A	MOT	6.45		4.30	
1N5140	MOT	5.85		3.90	
1N5140A	MOT	6.45		4.30	
1N5141	MOT	5.85		3.90	
1N5141A	MOT	6.45		4.30	
1N5142	MOT	5.85		3.90	
1N5142A	MOT	6.45		4.30	
1N5143	MOT	5.85		3.90	
1N5143A	MOT	6.45		4.30	
1N5144	MOT	5.85		3.90	
1N5144A	MOT	6.45		4.30	
1N5145	MOT	5.85		3.90	
1N5145A	MOT	6.45		4.30	
1N5146	MOT	5.85		3.90	
1N5146A	MOT	6.45		4.30	
1N5147	MOT	5.85		3.90	
1N5147A	MOT	6.45		4.30	
1N5148	MOT	5.85		3.90	
1N5148A	MOT	6.45		4.30	
1N5149	MOT	27.00		18.00	
1N5150	MOT	42.00		28.00	
1N5151	MOT	42.00		28.00	

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
1N4370	HOF	1.75	1.55	1.30	.....
1N5152	MOT	42.00	.....	28.00	.....
1N5153	MOT	42.00	.....	28.00	.....
1N5154	MOT	42.00	.....	28.00	.....
1N5155	MOT	42.00	.....	28.00	.....
1N5170	HUG	.36	.....	.27	.....
1N5171	HUG	.46	.....	.35	.....
1N5172	HUG	.50	.....	.38	.....
1N5173	HUG	.65	.....	.49	.....
1N5174	HUG	.81	.....	.61	.....
1N5175	HUG	.90	.....	.68	.....
1N5176	HUG	1.13	.....	.85	.....
1N5177	HUG	2.00	.....	1.50	.....
1N5178	HUG	2.50	.....	1.88	.....
1N5221	MOT	.67	.60	.45	.....
1N5222	MOT	.67	.60	.45	.....
1N5223	MOT	.67	.60	.45	.....
1N5224	MOT	.67	.60	.45	.....
1N5225	MOT	.67	.60	.45	.....
1N5226	MOT	.67	.60	.45	.....
1N5227	MOT	.67	.60	.45	.....
1N5228	MOT	.67	.60	.45	.....
1N5229	MOT	.67	.60	.45	.....
1N5230	MOT	.67	.60	.45	.....
1N5231	MOT	.67	.60	.45	.....
1N5232	MOT	.67	.60	.45	.....
1N5233	MOT	.67	.60	.45	.....
1N5234	MOT	.67	.60	.45	.....
1N5235	MOT	.67	.60	.45	.....
1N5236	MOT	.67	.60	.45	.....
1N5237	MOT	.67	.60	.45	.....
1N5238	MOT	.67	.60	.45	.....
1N5239	MOT	.67	.60	.45	.....
1N5240	MOT	.67	.60	.45	.....
1N5241	MOT	.67	.60	.45	.....
1N5242	MOT	.67	.60	.45	.....
1N5243	MOT	.67	.60	.45	.....
1N5244	MOT	.67	.60	.45	.....
1N5245	MOT	.67	.60	.45	.....
1N5246	MOT	.67	.60	.45	.....
1N5247	MOT	.67	.60	.45	.....
1N5248	MOT	.67	.60	.45	.....
1N5249	MOT	.67	.60	.45	.....
1N5250	MOT	.67	.60	.45	.....
1N5251	MOT	.67	.60	.45	.....
1N5252	MOT	.67	.60	.45	.....
1N5253	MOT	.67	.60	.45	.....
1N5254	MOT	.67	.60	.45	.....
1N5255	MOT	.67	.60	.45	.....
1N5256	MOT	.67	.60	.45	.....
1N5257	MOT	.67	.60	.45	.....
1N5258	MOT	.90	.80	.60	.....
1N5259	MOT	.90	.80	.60	.....
1N5260	MOT	.90	.80	.60	.....
1N5261	MOT	.90	.80	.60	.....
1N5262	MOT	.90	.80	.60	.....
1N5263	MOT	.90	.80	.60	.....
1N5264	MOT	.90	.80	.60	.....
1N5265	MOT	.90	.80	.60	.....
1N5266	MOT	.90	.80	.60	.....
1N5267	MOT	.90	.80	.60	.....
1N5268	MOT	.90	.80	.60	.....
1N5269	MOT	.90	.80	.60	.....
1N5270	MOT	.90	.80	.60	.....
1N5271	MOT	1.27	1.13	.85	.....
1N5272	MOT	1.27	1.13	.85	.....
1N5273	MOT	1.27	1.13	.85	.....
1N5274	MOT	1.27	1.13	.85	.....
1N5275	MOT	1.27	1.13	.85	.....
1N5276	MOT	1.27	1.13	.85	.....
1N5277	MOT	1.27	1.13	.85	.....
1N5278	MOT	1.27	1.13	.85	.....
1N5279	MOT	1.27	1.13	.85	.....
1N5280	MOT	1.27	1.13	.85	.....
1N5281	MOT	1.27	1.13	.85	.....
1N5283	MOT	8.60	7.65	6.60	5.75
1N5284	MOT	8.60	7.65	6.60	5.75
1N5285	MOT	8.60	7.65	6.60	5.75
1N5286	MOT	9.75	8.65	7.45	6.50
1N5287	MOT	9.75	8.65	7.45	6.50
1N5288	MOT	9.75	8.65	7.45	6.50
1N5289	MOT	9.75	8.65	7.45	6.50
1N5290	MOT	9.75	8.65	7.45	6.50
1N5291	MOT	7.35	6.50	5.65	4.90
1N5292	MOT	7.35	6.50	5.65	4.90
1N5293	MOT	7.35	6.50	5.65	4.90
1N5294	MOT	7.35	6.50	5.65	4.90
1N5295	MOT	7.35	6.50	5.65	4.90
1N5296	MOT	7.35	6.50	5.65	4.90
1N52597	MOT	7.35	6.50	5.65	4.90
1N5298	MOT	7.35	6.50	5.65	4.90
1N5299	MOT	7.35	6.50	5.65	4.90

Type No.	Mfr.	1-24	25-99	100-up	
1N5221A	MOT	.90	.80	.60	.....
1N5222A	MOT	.90	.80	.60	.....
1N5223A	MOT	.90	.80	.60	.....
1N5224A	MOT	.90	.80	.60	.....
1N5225A	MOT	.90	.80	.60	.....
1N5226A	MOT	.90	.80	.60	.....
1N5227A	MOT	.90	.80	.60	.....
1N5228A	MOT	.90	.80	.60	.....
1N5229A	MOT	.90	.80	.60	.....
1N5230A	MOT	.90	.80	.60	.....
1N5231A	MOT	.90	.80	.60	.....
1N5232A	MOT	.90	.80	.60	.....
1N5233A	MOT	.90	.80	.60	.....
1N5234A	MOT	.90	.80	.60	.....
1N5235A	MOT	.90	.80	.60	.....
1N5236A	MOT	.90	.80	.60	.....
1N5237A	MOT	.90	.80	.60	.....
1N5238A	MOT	.90	.80	.60	.....
1N5239A	MOT	.90	.80	.60	.....
1N5240A	MOT	.90	.80	.60	.....
1N5241A	MOT	.90	.80	.60	.....
1N5242A	MOT	.90	.80	.60	.....
1N5243A	MOT	.90	.80	.60	.....
1N5244A	MOT	.90	.80	.60	.....
1N5245A	MOT	.90	.80	.60	.....
1N5246A	MOT	.90	.80	.60	.....
1N5247A	MOT	.90	.80	.60	.....
1N5248A	MOT	.90	.80	.60	.....
1N5249A	MOT	.90	.80	.60	.....
1N5250A	MOT	.90	.80	.60	.....
1N5251A	MOT	.90	.80	.60	.....
1N5252A	MOT	.90	.80	.60	.....
1N5253A	MOT	.90	.80	.60	.....
1N5254A	MOT	.90	.80	.60	.....
1N5255A	MOT	.90	.80	.60	.....
1N5256A	MOT	.90	.80	.60	.....
1N5257A	MOT	.90	.80	.60	.....
1N5258A	MOT	1.12	1.00	.75	.....
1N5259A	MOT	1.12	1.00	.75	.....
1N5260A	MOT	1.12	1.00	.75	.....
1N5261A	MOT	1.12	1.00	.75	.....
1N5262A	MOT	1.12	1.00	.75	.....
1N5263A	MOT	1.12	1.00	.75	.....
1N5264A	MOT	1.12	1.00	.75	.....
1N5265A	MOT	1.12	1.00	.75	.....
1N5266A	MOT	1.12	1.00	.75	.....
1N5267A	MOT	1.12	1.00	.75	.....
1N5268A	MOT	1.12	1.00	.75	.....
1N5269A	MOT	1.12	1.00	.75	.....
1N5270A	MOT	1.12	1.00	.75	.....
1N5271A	MOT	1.50	1.33	1.00	.....
1N5272A	MOT	1.50	1.33	1.00	.....
1N5273A	MOT	1.50	1.33	1.00	.....
1N5274A	MOT	1.50	1.33	1.00	.....
1N5275A	MOT	1.50	1.33	1.00	.....
1N5276A	MOT	1.50	1.33	1.00	.....
1N5277A	MOT	1.50	1.33	1.00	.....
1N5278A	MOT	1.50	1.33	1.00	.....
1N5279A	MOT	1.50	1.33	1.00	.....
1N5280A	MOT	1.50	1.33	1.00	.....
1N5281A	MOT	1.50	1.33	1.00	.....
1N5221B	MOT	1.05	.93	.70	.....
1N5222B	MOT	1.05	.93	.70	.....
1N5223B	MOT	1.05	.93	.70	.....
1N5224B	MOT	1.05	.93	.70	.....
1N5225B	MOT	1.05	.93	.70	.....
1N5226B	MOT	1.05	.93	.70	.....
1N5227B	MOT	1.05	.93	.70	.....
1N5228B	MOT	1.05	.93	.70	.....
1N5229B	MOT	1.05	.93	.70	.....
1N5230B	MOT	1.05	.93	.70	.....
1N5231B	MOT	1.05	.93	.70	.....
1N5232B	MOT	1.05	.93	.70	.....
1N5233B	MOT	1.05	.93	.70	.....
1N5234B	MOT	1.05	.93	.70	.....
1N5235B	MOT	1.05	.93	.70	.....
1N5236B	MOT	1.05	.93	.70	.....
1N5237B	MOT	1.05	.93	.70	.....
1N5238B	MOT	1.05	.93	.70	.....
1N5239B	MOT	1.05	.93	.70	.....
1N5240B	MOT	1.05	.93	.70	.....
1N5241B	MOT	1.05	.93	.70	.....
1N5242B	MOT	1.05	.93	.70	.....
1N5243B	MOT	1.05	.93	.70	.....
1N5244B	MOT	1.05	.93	.70	.....
1N5245B	MOT	1.05	.93	.70	.....
1N5246B	MOT	1.05	.93	.70	.....
1N5247B	MOT	1.05	.93	.70	.....
1N5248B	MOT	1.05	.93	.70	.....
1N5249B	MOT	1.05	.93	.70	.....
1N5250B	MOT	1.05	.93	.70	.....
1N5251B	MOT	1.05	.93	.70	.....
1N5252B	MOT	1.05	.93	.70	.....

Type No.	Mfr.	1-24	25-99	100-up	
1N5253B	MOT	1.05	.93	.70	.....
1N5254B	MOT	1.05	.93	.70	.....
1N5255B	MOT	1.05	.93	.70	.....
1N5256B	MOT	1.05	.93	.70	.....
1N5257B	MOT	1.05	.93	.70	.....
1N5258B	MOT	1.27	1.13	.85	.....
1N5259B	MOT	1.27	1.13	.85	.....
1N5260B	MOT	1.27	1.13	.85	.....
1N5261B	MOT	1.27	1.13	.85	.....
1N5262B	MOT	1.27	1.13	.85	.....
1N5263B	MOT	1.27	1.13	.85	.....
1N5264B	MOT	1.27	1.13	.85	.....
1N5265B	MOT	1.27	1.13	.85	.....
1N5266B	MOT	1.27	1.13	.85	.....
1N5267B	MOT	1.27	1.13	.85	.....
1N5268B	MOT	1.27	1.13	.85	.....
1N5269B	MOT	1.27	1.13	.85	.....
1N5270B	MOT	1.27	1.13	.85	.....
1N5271B	MOT	1.65	1.46	1.10	.....
1N5272B	MOT	1.65	1.46	1.10	.....
1N5273B	MOT	1.65	1.46	1.10	.....
1N5274B	MOT	1.65	1.46	1.10	.....
1N5275B	MOT	1.65	1.46	1.10	.....
1N5276B	MOT	1.65	1.46	1.10	.....
1N5277B	MOT	1.65	1.46	1.10	.....
1N5278B	MOT	1.65	1.46	1.10	.....
1N5279B	MOT	1.65	1.46	1.10	.....
1N5280B	MOT	1.65	1.46	1.10	.....
1N5281B	MOT	1.65	1.46	1.10	.....
1N5225B	MOT	1.05	.93	.70	.....
1N5226B	MOT	1.05	.93	.70	.....
1N5227B	MOT	1.05	.93	.70	.....
1N5228B	MOT	1.05	.93	.70	.....
1N5229B	MOT	1.05	.93	.70	.....
1N5231B	MOT	1.05	.93	.70	.....
1N5232B	MOT	1.05	.93	.70	.....
1N5235B	MOT	1.05	.93	.70	.....
1N5237B	MOT	1.05	.93	.70	.....
1N5240B	MOT	1.05	.93	.70	.....
1N5245B	MOT	1.05	.93	.70	.....
1N5254B	MOT	1.05	.93	.70	.....
1N5263B	MOT	1.27	1.13	.85	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
1N5300	MOT	7.35	6.50	5.65	4.90
1N5301	MOT	7.35	6.50	5.65	4.90
1N5302	MOT	7.35	6.50	5.65	4.90
1N5303	MOT	7.35	6.50	5.65	4.90
1N5304	MOT	7.35	6.50	5.65	4.90
1N5305	MOT	7.35	6.50	5.65	4.90
1N5306	MOT	7.35	6.50	5.65	4.90
1N5307	MOT	7.35	6.50	5.65	4.90
1N5308	MOT	7.35	6.50	5.65	4.90
1N5309	MOT	7.35	6.50	5.65	4.90
1N5310	MOT	7.35	6.50	5.65	4.90
1N5311	MOT	9.75	8.65	7.45	6.30
1N5312	MOT	9.75	8.65	7.45	6.30
1N5313	MOT	9.75	8.65	7.45	6.30
1N5314	MOT	9.75	8.65	7.45	6.30

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N332A	TI	4.90	.....	3.30	.....
2N333A	TI	4.90	.....	3.30	.....
2N335A	TI	5.20	.....	3.50	.....
2N336A	TI	6.25	.....	4.20	.....
2N2160	TI	1.49	.....	.99	.....
2N2862	TI	6.00	.....	4.00	.....
2N43	GE	4.13	.....	2.75	.....
2N43A	GE	4.13	.....	2.75	.....
2N44	GE	2.93	.....	1.95	.....
2N78	GE	2.75	.....	1.66	.....
2N78A	GE	2.75	.....	1.83	.....
2N104	RCA	1.65	.....	1.14	.....
2N109	RCA	.60	.....	.41	.....
2N117	TI	8.15	.....	5.45	.....
2N118	TI	8.15	.....	5.45	.....
2N123	GE	3.68	.....	2.45	.....
2N139	RCA	1.16	.....	.80	.....
2N140	RCA	1.24	.....	.88	.....
2N155	RAY	2.83	.....	2.25	.....
2N167	GE	5.16	.....	3.44	.....
2N167A	GE	5.16	.....	3.44	.....
2N169	GE	1.59	.....	1.06	.....
2N169A	GE	2.42	.....	1.61	.....
2N170	GE	1.02	.....	.....	.....
2N173	MOT	3.40	.....	2.50	.....
2N174	MOT	3.60	.....	2.67	.....
2N174A	MOT	3.80	.....	2.79	.....
2N175	RCA	1.64	.....	1.13	.....
2N176	MOT	1.20	.....	.87	.....
2N176	RCA	1.31	.....	.90	.....
2N185	TI	.74	.....	.49	.....

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N187A	GE	1.50		1.00	
2N188A	GE	1.65		1.10	
2N189	GE	.78		.52	
2N190	GE	.83		.55	
2N191	GE	.90		.60	
2N192	GE	1.59		1.06	
2N215	RCA	1.73		1.20	
2N216	SYL	1.24		.83	
2N217	RCA	.52		.36	
2N219	RCA	1.24		.86	
2N220	RCA	1.52		1.05	
2N229	GE	.50		.33	
2N231	SPR	1.15		.85	
2N234A	BEN	1.13		.75	
2N235A	BEN	1.00		.90	
2N235B	BEN	1.80		1.20	
2N241A	GE	.98		.65	
2N242	MOT	1.65		1.10	
2N250	TI	1.90		1.25	
2N250A	TI	1.73		1.15	
2N251	TI	2.25		1.50	
2N251A	TI	1.88		1.25	
2N255	BEN	.75		.50	
2N256	BEN	.95		.70	
2N265	GE	1.95		1.30	
2N270	RCA	.70		.48	
2N274	RCA	1.24		.86	
2N277	MOT	2.25		1.66	
2N278	MOT	2.80		2.07	
2N279	AME	.70		.47	
2N284A	AME	1.68		1.12	
2N292	GE	.83		.55	
2N297A	MOT	1.60		1.17	
2N301	BEN	1.26		.84	
2N301	RCA	1.52		1.05	
2N301A	BEN	2.82		2.10	
2N301A	RCA	3.15		2.18	
2N307	BEN	1.49		1.03	
2N307	MOT	1.12		.75	
2N307	RCA	1.49		1.03	
2N307A	MOT	1.87		1.25	
2N319	GE	.44		.29	
2N320	GE	.59		.39	
2N320	MOT	.59		.39	
2N321	GE	.65		.43	
2N321	MOT	.65		.43	
2N322	GE	.42		.28	
2N322	MOT	.42		.28	
2N323	GE	.59		.39	
2N323	MOT	.59		.39	
2N324	GE	.72		.48	
2N324	MOT	.63		.42	
2N327A	HUG	2.25		1.49	
2N327A	RAY	3.65		2.80	
2N327A	TI	2.25		1.50	
2N328A	HUG	4.50		3.00	
2N328A	SPR	4.50		3.00	
2N328A	TI	4.50		3.00	
2N329A	HUG	6.00		4.50	
2N329A	RAY	9.00		6.50	
2N329A	SPR	6.50		4.35	
2N329A	TI	6.50		4.35	
2N329B	RAY	9.90		7.20	
2N331	MOT	1.50		1.00	
2N332	GE	4.65		3.10	
2N332	TI	4.65		3.10	
2N333	T I	4.65		3.10	
2N334	TI	4.65		3.10	
2N335	GE	4.95		3.30	
2N335	TI	4.90		3.30	
2N335A	GE	5.25		3.50	
2N336	GE	6.00		4.00	
2N336	TI	5.95		3.95	
2N336A	GE	6.30		4.20	
2N337	GE	4.85		3.20	
2N337	TI	4.85		3.20	
2N338	GE	5.50		3.65	
2N338	RAY	5.50		3.65	
2N338	TI	5.50		3.65	
2N338A	GE	5.80		3.85	
2N339	TI	8.12		6.08	
2N340	TI	8.64		6.48	
2N341	TI	14.00		10.49	
2N343	TI	14.72		11.03	
2N344	SPR	3.45		2.50	
2N345	SPR	4.35		3.15	
2N346	SPR	5.85		4.25	
2N350A	MOT	1.65		1.10	
2N351A	MOT	1.70		1.15	
2N370	RCA	.98		.68	
2N371	RCA	.80		.55	
2N372	RCA	.96		.67	
2N375	MOT	2.20		1.65	
2N376A	MOT	1.85		1.25	
2N378	MOT	1.80		1.20	
2N379	MOT	1.90		1.39	
2N380	MOT	1.70		1.26	
2N381	MOT	.82		.55	
2N382	MOT	1.12		.75	
2N383	MOT	1.42		.95	
2N388	RCA	.50		.35	
2N388	TI	.50		.35	
2N388A	RCA	.99		.69	
2N388A	TI	1.03		.69	
2N389	TI	21.00	—	14.00	
2N393	SPR	4.35		3.15	
2N394A	GE	.60		.40	
2N395	TI	.50		.33	
2N396	GE	.62		.41	
2N396	RCA	.61		.41	
2N396	TI	.61		.41	
2N396A	GE	.62		.41	
2N398	MOT	1.03		.69	
2N398	RCA	.99		.69	
2N398	TI	.90		.60	
2N398A	MOT	1.12		.75	
2N398A	RCA	1.08		.75	
2N398A	TI	.98		.65	
2N398B	RCA	1.24		.86	
2N404	AME	.67		.45	
2N404	GE	.42		.28	
2N404	RCA	.42		.28	
2N404	TI	.42		.28	
2N404A	GE	.58		.39	
2N404A	RCA	.58		.39	
2N404A	TI	.58		.39	
2N405	RCA	.37		.25	
2N406	RCA	.33		.23	
2N407	RCA	.42		.29	
2N408	RCA	.38		.27	
2N410	RCA	.43		.30	
2N411	RCA	.52		.36	
2N412	RCA	.48		.34	
2N414	GE	.42		.29	
2N414	RCA	.42		.28	
2N427	TI	.92		.61	
2N428	TI	1.23		.82	
2N441	MOT	1.85		1.25	
2N442	MOT	1.95		1.30	
2N443	MOT	1.90		1.39	
2N450	GE	2.10		1.40	
2N456	BEN	1.80		1.20	
2N456A	MOT	1.80		1.20	
2N456A	TI	1.80		1.20	
2N456B	TI	1.80		1.20	
2N457	BEN	2.18		1.45	
2N457A	MOT	2.20		1.45	
2N457A	TI	2.18		1.45	
2N457B	TI	2.18		1.45	
2N458A	MOT	2.65		1.75	
2N458A	TI	2.63		1.75	
2N458B	TI	2.63		1.75	
2N459	MOT	4.35		2.90	
2N459A	MOT	4.65		3.10	
2N460	MOT	1.50		1.00	
2N461	MOT	1.52		1.01	
2N465	MOT	1.50		1.00	
2N466	MOT	1.65		1.10	
2N467	MOT	2.10		1.40	
2N478	GE	3.60		2.40	
2N489	GE	7.10		4.75	
2N489	TI	7.10		4.75	
2N490	GE	7.80		5.20	
2N490	TI	7.80		5.20	
2N491	GE	8.40		5.60	
2N491	TI	8.40		5.60	
2N491A	GE	8.90		5.95	
2N491B	GE	10.40		6.95	
2N491B	TI	10.40		6.95	
2N492	GE	9.90		6.60	
2N492	TI	9.80		6.55	
2N492B	GE	11.90		7.95	
2N492B	TI	11.90		7.95	
2N493	GE	10.75		7.20	
2N493	TI	10.75		7.20	
2N494	GE	10.90		7.30	
2N494	TI	10.90		7.30	
2N494C	GE	14.95		9.95	
2N494C	TI	14.95		9.90	
2N497	RAY	1.89		1.76	
2N498	TI	2.12		1.41	
2N499	SPR	3.95		2.90	
2N501	SPR	6.35		4.65	
2N502	SPR	2.90		2.15	
2N502A	SPR	3.45		2.50	
2N502B	SPA	3.75		2.80	
2N508	GE	.69		.46	
2N508	MOT	.69		.46	
2N508A	GE	.81		.54	
2N511	TI	4.05		2.70	
2N511A	TI	4.73		3.15	
2N511B	TI	5.18		3.45	
2N512	TI	4.73		3.15	
2N513B	TI	8.70		5.80	
2N517	SYL	1.67		1.11	
2N524	GE	.59		.39	
2N524	MOT	1.02		.68	
2N524A	MOT	1.32		.88	
2N525	GE	.80		.53	
2N525	MOT	1.02		.68	
2N525A	MOT	1.32		.88	
2N526	GE	1.00		.67	
2N526	MOT	1.04		.69	
2N527	GE	1.00		.67	
2N527	MOT	1.23		.82	
2N538	HUG	5.40		3.60	
2N538A	HUG	5.70		3.80	
2N539	HUG	7.39		4.70	
2N539A	HUG	7.65		5.10	
2N540	HUG	7.80		5.20	
2N542	TI	6.30		4.20	
2N553	BEN	3.35		2.23	
2N554	BEN	.90		.67	
2N554	MOT	.60		.48	
2N555	BEN	1.13		.75	
2N555	MOT	.75		.50	
2N574	HUG	13.50		9.00	
2N574A	HUG	16.20		10.80	
2N575	HUG	16.90		11.25	
2N575A	HUG	20.25		13.50	
2N585	RCA	.99		.69	
2N586	RCA	1.73		1.20	
2N588	SPR	1.45		1.05	
2N591	RCA	.48		.34	
2N594	TI	2.76		1.83	
2N595	TI	4.25		2.83	
2N596	TI	5.65		3.77	
2N618	MOT	2.45		1.82	
2N627	MOT	2.85		1.90	
2N628	MOT	3.35		2.25	
2N629	MOT	5.30		3.55	
2N630	MOT	6.05		4.05	
2N647	RCA	1.08		.75	
2N649	RCA	.86		.60	
2N650	MOT	1.65		1.10	
2N650A	TI	1.69		1.13	
2N651	MOT	1.65		1.10	
2N651A	TI	1.69		1.13	
2N652	MOT	2.17		1.45	
2N652A	MOT	2.25		1.50	
2N652A	TI	2.25		1.50	
2N653	MOT	1.65		1.10	
2N654	MOT	1.80		1.20	
2N655	MOT	1.95		1.30	
2N656	GE	2.03		1.35	
2N656	RAY	2.03		1.35	

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N656	TI	2.03	.....	1.35	.....
2N657	GE	2.20	.....	1.47	.....
2N657	RAY	2.20	.....	1.47	.....
2N657	TI	2.20	.....	1.47	.....
2N657A	GE	2.92	.....	1.94	.....
2N657A	TI	9.00	.....	6.00	.....
2N658	TI	1.28	.....	.85	.....
2N659	TI	1.30	.....	.87	.....
2N660	TI	1.48	.....	.99	.....
2N661	TI	1.71	.....	1.14	.....
2N662	TI	1.40	.....	.93	.....
2N669	MOT	1.42	.....	.95	.....
2N677	BEN	3.00	.....	2.00	.....
2N677A	BEN	3.60	.....	2.40	.....
2N677B	BEN	7.13	.....	4.75	.....
2N678B	BEN	10.50	.....	7.00	.....
2N681	GE	6.50	.....	4.35	.....
2N681	WES	4.90	.....	3.20	.....
2N681	INT	7.65	.....	4.50	.....
2N682	TI	4.13	.....	2.75	.....
2N682	WES	5.70	.....	3.80	.....
2N682	GE	7.30	.....	4.85	.....
2N682	INT	8.35	.....	5.00	.....
2N682A	TI	4.55	.....	3.03	.....
2N683	MOT	5.60	.....	3.75	.....
2N683	WES	6.80	.....	4.50	.....
2N683	GE	8.05	.....	5.35	.....
2N683	INT	8.00	.....	5.30	.....
2N684	WES	7.80	.....	5.20	.....
2N684	INT	9.35	.....	6.20	.....
2N685	RCA	6.60	.....	4.40	.....
2N685	TI	6.60	.....	4.40	.....
2N685	WES	9.30	.....	5.90	.....
2N685	GE	11.10	.....	7.40	.....
2N685	INT	11.05	.....	7.35	.....
2N685A	TI	7.25	.....	4.84	.....
2N686	TI	7.01	.....	4.68	.....
2N686	WES	9.70	.....	6.40	.....
2N686	GE	12.45	.....	8.30	.....
2N686	INT	12.40	.....	8.25	.....
2N687	RCA	7.43	.....	4.95	.....
2N687	TI	14.60	.....	9.75	.....
2N687	WES	14.60	.....	9.75	.....
2N687	GE	14.60	.....	9.75	.....
2N687	INT	14.55	.....	9.70	.....
2N688	MOT	17.10	.....	11.40	.....
2N688	TI	17.10	.....	11.40	.....
2N688	GE	17.10	.....	11.40	.....
2N688	INT	17.05	.....	11.35	.....
2N689	MOT	20.60	.....	13.75	.....
2N689	RSA	10.30	.....	6.90	.....
2N689	GE	20.60	.....	13.75	.....
2N689	INT	20.55	.....	13.70	.....
2N689A	TI	22.60	.....	15.10	.....
2N690	RCA	11.95	.....	8.00	.....
2N690	WES	23.25	.....	15.50	.....
2N690	INT	23.20	.....	15.45	.....
2N691	INT	31.45	.....	20.95	.....
2N692	GE	36.00	.....	24.00	.....
2N692	INT	35.95	.....	23.95	.....
2N696	GE	.75	.....	.50	.....
2N696	RAY	.93	.....	.62	.....
2N696	TI	.52	.....	.46	.....
2N697	GE	.75	.....	.50	.....
2N697	MOT	.52	.....	.46	.38
2N697	RCA	.63	.....	.42	.....
2N697	RAY	1.10	.....	.75	.....
2N697	TI	.52	.....	.46	.....
2N698	TI	1.57	.....	1.05	.....
2N698	RAY	1.57	.....	1.05	.....
2N699	GE	1.32	.....	.88	.....
2N699	MOT	1.32	.....	.88	.....
2N699	RCA	1.44	.....	.94	.....
2N699	RAY	1.57	.....	1.05	.....
2N699	TI	1.57	.....	1.05	.....
2N700	MOT	7.35	.....	4.90	.....
2N702	MOT	6.75	.....	4.50	.....
2N702	TI	6.78	.....	4.50	.....
2N703	MOT	6.75	.....	4.50	.....
2N703	TI	6.75	.....	4.50	.....
2N705	MOT	1.80	.....	1.20	.....
2N705	TI	1.04	.....	.69	.....
2N706	GE	.60	.....	.39	.....
2N706	MOT	.46	.....	.40	.....
2N706	TI	.99	.....	.66	.....
2N706A	GE	.63	.....	.42	.....
2N706A	GI	.97	.....	.64	.....
2N706A	MOT	1.18	.....	.79	.....
2N706A	TI	1.19	.....	.79	.....
2N706B	GE	.69	.....	.46	.....
2N706B	GI	1.49	.....	.99	.....
2N706B	MOT	1.48	.....	.99	.....
2N706B	RAY	1.49	.....	.99	.....
2N706B	TI	1.49	.....	.99	.....
2N706C	GI	6.00	.....	4.00	.....
2N707	MOT	6.30	.....	4.20	.....
2N708	GE	.63	.....	.42	.....
2N708	MOT	.49	.....	.43	.....
2N708	RAY	1.20	.....	.80	.....
2N708	TI	1.32	.....	.88	.....
2N709	GE	1.65	.....	1.14	.....
2N709	RCA	1.65	.....	1.14	.....
2N709	TI	2.48	.....	1.65	.....
2N709A	GE	3.36	.....	2.24	.....
2N711	MOT	1.12	.....	.75	.....
2N711	TI	.89	.....	.59	.....
2N711A	MOT	1.35	.....	.90	.....
2N711A	TI	.89	.....	.59	.....
2N711B	MOT	1.42	.....	.95	.....
2N711B	TI	.94	.....	.63	.....
2N716	TI	43.10	.....	28.70	.....
2N717	RAY	.99	.....	.66	.....
2N718	GE	.93	.....	.62	.....
2N718	MOT	.46	.....	.40	.....
2N718	TI	.46	.....	.40	.....
2N718A	MOT	.79	.....	.68	.....
2N718A	RCA	1.08	.....	.72	.....
2N718A	RAY	1.50	.....	1.00	.....
2N718A	TI	.79	.....	.68	.....
2N720	RAY	1.83	.....	1.22	.....
2N720	TI	1.83	.....	1.22	.....
2N720A	GE	1.57	.....	1.05	.....
2N720A	RCA	1.32	.....	.88	.....
2N720A	TI	2.48	.....	1.65	.....
2N721	HUG	6.00	.....	4.50	.....
2N721	MOT	1.46	.....	1.27	.....
2N721	TI	1.46	.....	1.27	.....
2N722	HUG	6.00	.....	4.50	.....
2N722	MOT	1.46	.....	1.27	.....
2N722A	TI	1.46	.....	1.27	.....
2N722A	RAY	6.95	.....	4.50	.....
2N726	TI	3.00	.....	2.00	.....
2N727	TI	3.15	.....	2.10	.....
2N730	TI	.99	.....	.66	.....
2N731	MOT	1.30	.....	.86	.....
2N731	TI	1.30	.....	.86	.....
2N735	TI	2.50	.....	1.65	.....
2N736	TI	2.50	.....	1.65	.....
2N736A	TI	2.50	.....	1.65	.....
2N739	TI	2.70	.....	1.40	.....
2N740	TI	2.70	.....	1.40	.....
2N741	MOT	2.18	.....	1.45	.....
2N741A	MOT	3.30	.....	2.20	.....
2N743	TI	6.20	.....	4.15	.....
2N744	MOT	2.90	.....	1.95	.....
2N744	TI	2.90	.....	1.95	.....
2N753	TI	1.97	.....	1.31	.....
2N759	TI	2.504	.....	1.65	.....
2N759A	TI	1.83	.....	1.22	.....
2N760	GE	1.80	.....	1.20	.....
2N760	TI	1.80	.....	1.20	.....
2N760A	GE	1.83	.....	1.22	.....
2N760A	RAY	2.70	.....	1.80	.....
2N760A	TI	1.83	.....	1.22	.....
2N769	SPR	6.75	.....	4.95	.....
2N779A	SPR	3.50	.....	2.55	.....
2N780	TI	4.50	.....	3.00	.....
2N797	TI	4.27	.....	2.85	.....
2N799A	SPR	.....	.....	.....	.....
2N827	MOT	2.50	.....	1.65	.....
2N828	MOT	3.30	.....	2.20	.....
2N834	GE	.98	.....	.65	.....
2N834	MOT	2.00	.....	1.35	.....
2N838	MOT	5.40	.....	3.60	.....
2N850	TI	7.10	.....	4.75	.....
2N852	TI	9.43	.....	6.30	.....
2N858	RAY	3.70	.....	2.50	.....
2N859	RAY	5.75	.....	4.00	.....
2N860	RAY	2.40	.....	1.80	.....
2N861	SPR	6.00	.....	4.40	.....
2N862	RAY	2.20	.....	1.60	.....
2N863	RAY	2.40	.....	1.80	.....
2N863	SPR	4.50	.....	3.30	.....
2N865	SPR	8.25	.....	6.05	.....
2N869	MOT	5.85	.....	3.90	.....
2N871	RAY	5.25	.....	3.20	.....
2N876	TI	2.25	.....	1.50	.....
2N877	HOF	6.80	.....	5.10	.....
2N877	TI	3.00	.....	2.00	.....
2N878	HOF	7.95	.....	5.95	.....
2N878	TI	3.38	.....	2.20	.....
2N879	TI	5.40	.....	3.60	.....
2N880	TI	6.30	.....	4.20	.....
2N881	TI	7.50	.....	5.00	.....
2N884	HOF	8.00	.....	6.00	.....
2N884	TI	6.00	.....	4.00	.....
2N885	HOF	8.70	.....	6.50	.....
2N885	TI	9.00	.....	6.00	.....
2N886	HOF	9.80	.....	7.35	.....
2N886	TI	10.95	.....	7.30	.....
2N887	HOF	11.90	.....	8.95	.....
2N887	TI	13.35	.....	8.90	.....
2N888	TI	19.13	.....	12.75	.....
2N889	TI	36.00	.....	24.00	.....
2N910	TI	2.37	.....	1.58	.....
2N911	TI	5.55	.....	3.70	.....
2N914	GE	.95	.....	.63	.....
2N914	MOT	1.26	.....	.84	.....
2N914	RAY	1.57	.....	1.05	.....
2N914	TI	1.04	.....	.84	.....
2N915	GE	5.08	.....	3.39	.....
2N915	MOT	4.95	.....	3.30	.....
2N915	RAY	4.50	.....	3.04	.....
2N916	MOT	4.35	.....	2.90	.....
2N916	RAY	3.65	.....	2.90	.....
2N916	TI	3.65	.....	2.90	.....
2N917	GE	2.45	.....	1.65	.....
2N917	RAY	4.95	.....	3.30	.....
2N917	TI	4.95	.....	3.30	.....
2N918	GE	3.30	.....	2.20	.....
2N918	MOT	3.30	.....	2.20	.....
2N918	RCA	3.30	.....	2.20	.....
2N918	RAY	5.25	.....	3.50	.....
2N918	TI	5.25	.....	3.50	.....
2N929	MOT	3.60	.....	2.40	.....
2N929	RAY	3.60	.....	2.40	.....
2N929	TI	3.60	.....	2.40	.....
2N929A	RAY	4.50	.....	3.00	.....
2N930	GE	4.00	.....	2.67	.....
2N930	MOT	4.35	.....	2.90	.....
2N930	RAY	3.87	.....	2.65	.....
2N930	TI	3.87	.....	2.65	.....
2N935	RAY	2.40	.....	1.80	.....
2N936	RAY	5.75	.....	4.00	.....
2N937	RAY	9.00	.....	6.50	.....
2N938	RAY	3.65	.....	2.80	.....
2N939	RAY	6.00	.....	4.50	.....
2N940	RAY	10.50	.....	8.20	.....
2N941	RAY	9.75	.....	7.50	.....
2N956	GE	1.08	.....	.72	.....
2N956	MOT	.85	.....	.74	.....
2N956	RAY	2.17	.....	1.44	.....
2N956	TI	.85	.....	.74	.....
2N960	TI	.96	.....	.64	.....
2N961	TI	.91	.....	.61	.....
2N962	MOT	1.18	.....	.79	.....
N2962	TI	.86	.....	.57	.....
2N963	TI	.83	.....	.55	.....
2N964	MOT	1.57	.....	1.04	.....
2N964	TI	.99	.....	.66	.....
2N965	MOT	1.44	.....	.96	.....
2N965	TI	.94	.....	.63	.....
2N966	MOT	1.40	.....	.93	.....
2N966	TI	.89	.....	.59	.....
2N967	MOT	1.25	.....	.83	.....
2N967	TI	.87	.....	.58	.....
2N968	MOT	1.53	.....	1.02	.....
2N968	TI	.90	.....	.60	.....
2N969	TI	.84	.....	.56	.....
2N970	MOT	.89	.....	.59	.....
2N970	TI	.81	.....	.54	.....
2N971	TI	.80	.....	.53	.....
2N972	MOT	1.60	.....	1.07	.....
2N972	TI	.93	.....	.62	.....
2N973	TI	.89	.....	.59	.....
2N974	MOT	.94	.....	.63	.....
2N974	TI	.83	.....	.55	.....
2N975	TI	.81	.....	.54	.....
2N976	SPR	4.35	.....	3.20	.....
2N982	SPR	3.65	.....	2.70	.....
2N984	SPR	1.00	.....	.75	.....
2N985	MOT	2.88	.....	1.92	.....
2N985	TI	2.83	.....	1.89	.....
2N995	MOT	5.85	.....	3.90	.....
2N995	TI	5.85	.....	3.90	.....
2N997	GE	14.90	.....	9.95	.....
2N997	RAY	13.50	.....	9.10	.....
2N998	MOT	13.50	.....	9.00	.....
2N998	RAY	10.90	.....	8.80	.....
2N999	MOT	14.85	.....	9.90	.....
2N999	RAY	14.50	.....	9.70	.....
2N1008	MOT	.75	.....	.50	.....
2N1008A	MOT	.83	.....	.55	.....
2N1008B	MOT	.92	.....	.61	.....
2N1011	MOT	1.95	.....	1.45	.....
2N1015	WES	15.00	.....	11.50	.....
2N1015A	WES	19.00	.....	14.25	.....
2N1015B	WES	24.00	.....	18.00	.....

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N1015C	WES	32.00	.....	24.00	.....
2N1015D	WES	45.00	.....	33.75	.....
2N1015E	WES	77.00	.....	57.30	.....
2N1016	WES	16.00	.....	12.00	.....
2N1016A	WES	20.00	.....	15.00	.....
2N1016B	WES	26.00	.....	19.50	.....
2N1016C	WES	32.00	.....	24.00	.....
2N1016D	WES	50.00	.....	37.50	.....
2N1016E	WES	89.00	.....	66.50	.....
2N1021	MOT	3.10	.....	2.05	.....
2N1021	TI	3.08	.....	2.05	.....
2N1021A	BEN	3.10	.....	2.05	.....
2N1022	MOT	3.60	.....	2.40	.....
2N1022	TI	3.60	.....	2.40	.....
2N1022A	TI	3.60	.....	2.40	.....
2N1024	RAY	3.50	.....	2.70	.....
2N1024	SPR	2.70	.....	1.80	.....
2N1025	RAY	3.90	.....	3.00	.....
2N1026	RAY	6.50	.....	5.00	.....
2N1026	SPR	5.00	.....	3.35	.....
2N1027	RAY	3.90	.....	3.00	.....
2N1027	SPR	3.00	.....	2.00	.....
2N1028	RAY	3.90	.....	3.00	.....
2N1028	SPR	2.90	.....	1.95	.....
2N1034	HUG	4.35	.....	3.25	.....
2N1034	RAY	3.55	.....	2.70	.....
2N1035	RAY	6.10	.....	4.69	.....
2N1035	SPR	4.05	.....	2.70	.....
2N1036	HUG	10.23	.....	7.67	.....
2N1036	RAY	6.95	.....	5.35	.....
2N1036	SPR	5.10	.....	3.40	.....
2N1037	RAY	6.30	.....	3.75	.....
2N1037	SPR	4.50	.....	3.00	.....
2N1038	TI	2.85	.....	1.90	.....
2N1038-1	TI	3.00	.....	2.00	.....
2N1038-2	TI	3.05	.....	2.05	.....
2N1039	TI	3.75	.....	2.50	.....
2N1039-1	TI	3.90	.....	2.60	.....
2N1039-2	TI	3.95	.....	2.65	.....
2N1040	TI	5.70	.....	3.80	.....
2N1041	TI	7.50	.....	5.00	.....
2N1042	TI	4.50	.....	3.00	.....
2N1042-1	TI	4.45	.....	3.95	.....
2N1042-2	TI	4.30	.....	2.85	.....
2N1043	TI	5.85	.....	3.90	.....
2N1043-2	TI	5.65	.....	3.75	.....
2N1045-2	BEN	11.25	.....	7.50	.....
2N1046	TI	8.25	.....	5.50	.....
2N1046A	TI	18.35	.....	12.25	.....
2N1046B	T I	25.00	.....	16.67	.....
2N1047	TI	14.30	.....	9.55	.....
2N1048	TI	18.10	.....	12.05	.....
2N1049	TI	16.75	.....	11.15	.....
2N1050	TI	22.10	.....	14.20	.....
2N1050A	TI	22.10	.....	14.20	.....
2N1073	MOT	2.40	.....	1.78	.....
2N1073A	MOT	3.60	.....	2.67	.....
2N1073B	MOT	4.50	.....	3.30	.....
2N1086	GE	1.11	.....	.74	.....
2N1090	RCA	1.21	.....	.84	.....
2N1091	RCA	1.52	.....	1.05	.....
2N1097	G E	.57	.....	.38	.....
2N1098	GE	.53	.....	.35	.....
2N1100	MOT	4.50	.....	3.34	.....
2N1118	SPR	11.15	.....	8.25	.....
2N1118A	RAY	9.55	.....	7.10	.....
2N1121	GE	1.59	.....	1.06	.....
2N1131	HUG	5.00	.....	3.75	.....
2N1131	MOT	1.46	.....	1.27	1.10
2N1131	RAY	5.60	.....	3.75	.....
2N1131	TI	1.46	.....	1.27	.....
2N1132	HUG	5.85	.....	4.39	.....
2N1132	MOT	1.46	.....	1.27	1.10
2N1132	RAY	5.60	.....	3.75	.....
2N1132	TI	1.46	.....	1.27	.....
2N1132A	RAY	7.50	.....	5.00	.....
2N1132B	MOT	16.70	.....	11.15	.....
2N1136	BEN	2.48	.....	1.65	.....
2N1136A	BEN	3.23	.....	2.15	.....
2N1136B	BEN	4.50	.....	3.00	.....
2N1137	BEN	2.85	.....	1.90	.....
2N1137A	BEN	3.98	.....	2.65	.....
2N1137B	BEN	5.70	.....	3.80	.....
2N1138	BEN	3.23	.....	2.15	.....
2N1141	MOT	4.83	.....	3.22	.....
2N1141	TI	4.73	.....	3.15	.....
2N1141A	TI	13.70	.....	9.14	.....
2N1142	MOT	4.20	.....	2.80	.....
2N1142	TI	4.05	.....	2.70	.....
2N1142A	TI	6.29	.....	4.18	.....
2N1143	MOT	3.50	.....	2.33	.....
2N1143	TI	3.34	.....	2.22	.....
2N1143A	TI	5.86	.....	3.91	.....
2N1146	BEN	2.75	.....	1.80	.....
2N1146A	BEN	3.10	.....	2.25	.....
2N1149	TI	8.65	.....	5.75	.....
2N1151	TI	8.65	.....	5.75	.....
2N1155	T I	10.52	.....	7.92	.....
2N1156	TI	14.12	.....	10.58	.....
2N1157	HUG	21.60	.....	14.40	.....
2N1157A	HUG	25.95	.....	17.30	.....
2N1162	MOT	4.45	.....	3.30	.....
2N1163	MOT	4.45	.....	3.30	.....
2N1163A	MOT	5.08	.....	3.75	.....
2N1165	MOT	6.35	.....	4.70	.....
2N1167	MOT	7.55	.....	5.60	.....
2N1175	GE	.93	.....	.62	.....
2N1175A	GE	1.35	.....	.90	.....
2N1177	RCA	.91	.....	.63	.....
2N1178	RCA	.90	.....	.62	.....
2N1179	RCA	.90	.....	.62	.....
2N1180	RCA	.71	.....	.50	.....
2N1183	RCA	1.82	.....	1.25	.....
2N1183A	RCA	2.31	.....	1.60	.....
2N1183B	RCA	2.89	.....	2.00	.....
2N1184	RCA	2.48	.....	1.71	.....
2N1184A	RCA	2.81	.....	1.94	.....
2N1184B	RCA	4.13	.....	2.85	.....
2N1187	MOT	2.60	.....	1.75	.....
2N1188	MOT	3.15	.....	2.10	.....
2N1189	MOT	1.50	.....	1.00	.....
2N1191	MOT	1.12	.....	.75	.....
2N1192	MOT	1.12	.....	.75	.....
2N1193	MOT	1.50	.....	1.00	.....
2N1194	MOT	1.65	.....	1.10	.....
2N1195	MOT	3.95	.....	2.63	.....
2N1195	TI	3.95	.....	2.63	.....
2N1204	MOT	1.65	.....	1.10	.....
2N1204A	MOT	1.65	.....	1.10	.....
2N1228	HUG	3.10	.....	2.33	.....
2N1229	HUG	3.10	.....	2.33	.....
2N1230	HUG	8.65	.....	6.50	.....
2N1231	HUG	10.65	.....	8.00	.....
2N1233	HUG	17.50	.....	13.13	.....
2N1234	HUG	20.50	.....	15.38	.....
2N1244	HUG	27.65	.....	20.75	.....
2N1247	TI	13.50	.....	9.00	.....
2N1259	HUG	12.85	.....	9.64	.....
2N1273	TI	.42	.....	.28	.....
2N1274	TI	.50	.....	.33	.....
2N1275	HUG	6.50	.....	4.88	.....
2N1275	RAY	6.50	.....	4.88	.....
2N1278	TI	4.75	.....	3.15	.....
2N1300	RCA	1.32	.....	.92	.....
2N1301	RCA	1.49	.....	1.03	.....
2N1302	RCA	.45	.....	.31	.....
2N1302	TI	.45	.....	.31	.....
2N1303	GE	.45	.....	.30	.....
2N1303	RCA	.45	.....	.30	.....
2N1303	TI	.45	.....	.30	.....
2N1304	AME	.70	.....	.47	.....
2N1304	RCA	.53	.....	.37	.....
2N1304	TI	.53	.....	.37	.....
2N1305	AME	.70	.....	.47	.....
2N1305	GE	.52	.....	.35	.....
2N1305	RCA	.52	.....	.35	.....
2N1305	TI	.52	.....	.35	.....
2N1306	AME		.....		.....
2N1306	RCA	.71	.....	.51	.....
2N1306	TI	.74	.....	.49	.....
2N1307	GE	.66	.....	.44	.....
2N1307	RCA	.65	.....	.43	.....
2N1307	TI	.66	.....	.44	.....
2N1308	AME	.93	.....	.68	.....
2N1308	RCA	1.04	.....	.72	.....
2N1308	TI	1.08	.....	.72	.....
2N1308	RCA	1.04	.....	.72	.....
2N1309	TI	1.07	.....	.72	.....
2N1309	TI	4.50	.....	3.00	.....
2N1311	TI	3.23	.....	2.15	.....
2N1312	TI	1.77	.....	1.18	.....
2N1358	MOT	4.15	.....	3.06	.....
2N1360	MOT	1.70	.....	1.25	.....
2N1362	MOT	2.85	.....	2.12	.....
2N1363	MOT	3.10	.....	2.30	.....
2N1370	TI	.72	.....	.48	.....
2N1371	TI	1.14	.....	.76	.....
2N1372	TI	.81	.....	.54	.....
2N1373	TI	1.20	.....	.80	.....
2N1374	TI	1.02	.....	.68	.....
2N1375	TI	1.38	.....	.92	.....
2N1376	TI	1.29	.....	.86	.....
2N1377	SYL	1.50	.....	1.00	.....
2N1377	TI	1.50	.....	.100	.....
2N1378	TI	1.29	.....	.86	.....
2N1379	TI	1.44	.....	.96	.....
2N1380	TI	.66	.....	.44	.....
2N1381	TI	.72	.....	.48	.....
2N1382	TI	.99	.....	.66	.....
2N1383	T I	.92	.....	.61	.....
2N1384	RCA	2.89	.....	2.00	.....
2N1404	TI	.58	.....	.39	.....
2N1408	MOT	.83	.....	.55	.....
2N1413	MOT	.73	.....	.49	.....
2N1414	GE	.69	.....	.46	.....
2N1414	MOT	.78	.....	.52	.....
2N1415	GE	.80	.....	.53	.....
2N1415	MOT	.92	.....	.61	.....
2N1417	GE	.90	.....	.60	.....
2N1418	GE	.98	.....	.65	.....
2N1420	GE	1.67	.....	1.11	.....
2N1420	TI	.65	.....	.56	.....
2N1429	SPR	8.75	.....	6.45	.....
2N1479	RCA	2.15	.....	1.48	.....
2N1480	RCA	2.31	.....	1.60	.....
2N1481	RCA	2.48	.....	1.71	.....
2N1482	RCA	3.30	.....	2.28	.....
2N1483	RCA	2.89	.....	2.00	.....
2N1484	RCA	3.63	.....	2.51	.....
2N1485	RCA	4.46	.....	3.08	.....
2N1486	RCA	6.79	.....	4.67	.....
2N1487	RCA	4.54	.....	3.14	.....
2N1488	RCA	4.95	.....	3.42	.....
2N1489	RCA	7.43	.....	5.13	.....
2N1409	RCA	8.25	.....	5.70	.....
2N1491	RCA	1.82	.....	1.25	.....
2N1493	RCA	7.01	.....	4.85	.....
2N1494A	MOT	2.17	.....	1.45	.....
2N1495	MOT	3.30	.....	2.20	.....
2N1496	MOT	3.80	.....	2.55	.....
2N1499A	SPR	1.40	.....	1.05	.....
2N1500	SPR	6.95	.....	5.10	.....
2N1507	TI	1.20	.....	.80	.....
2N1512	RCA	9.90	.....	6.85	.....
2N1516	AME	1.65	.....	1.10	.....
2N1517	AME	1.84	.....	1.23	.....
2N1524	RCA	.40	.....	.28	.....
2N1525	RCA	.43	.....	.30	.....
2N1526	RCA	.41	.....	.28	.....
2N1527	RCA	.47	.....	.32	.....
2N1529	MOT	1.45	.....	1.08	.....
2N1529A	BEN	2.60	.....	1.75	.....
2N1530	BEN	2.00	.....	1.35	.....
2N1530	MOT	1.60	.....	1.15	.....
2N1530A	BEN	2.70	.....	1.80	.....
2N1531	BEN	3.00	.....	2.00	.....
2N1531	MOT	2.30	.....	1.70	.....
2N1531A	BEN	3.80	.....	2.55	.....
2N1532	MOT	3.00	.....	2.24	.....
2N1532A	BEN	5.10	.....	3.40	.....
2N1533	MOT	4.35	.....	3.25	.....
2N1534	MOT	1.40	.....	1.05	.....
2N1535	MOT	1.50	.....	1.14	.....
2N1536	MOT	1.70	.....	1.25	.....
2N1536A	MOT	2.20	.....	1.65	.....
2N1537	MOT	3.90	.....	2.90	.....
2N1537A	BEN	5.15	.....	3.45	.....

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N1537A	MOT	4.45		3.30	
2N1539	MOT	1.50		1.12	
2N1539	TI	1.50		1.12	
2N1539A	MOT	2.05		1.52	
2N1540	BEN	1.65		1.20	
2N1540	MOT	1.58		1.18	
2N1540	TI	1.58		1.18	
2N1540A	BEN	2.60		1.73	
2N1540A	MOT	2.10		1.62	
2N1541	BEN	2.70		1.90	
2N1541	MOT	1.85		1.38	
2N1541	TI	1.85		1.38	
2N1542	MOT	2.35		1.75	
2N1542	TI	2.35		1.75	
2N1543	TI	3.60		2.65	
2N1544	BEN	1.65		1.24	
2N1544	MOT	1.65		1.24	
2N1544A	MOT	2.22		1.64	
2N1545	BEN	2.35		1.75	
2N1545	MOT	1.85		1.35	
2N1545A	MOT	2.35		1.75	
2N1546	MOT	2.30		1.70	
2N1546A	MOT	2.95		2.20	
2N1547	BEN	2.75		2.05	
2N1547A	MOT	3.45		2.55	
2N1548	MOT	4.00		2.95	
2N1549	BEN	2.55		1.70	
2N1549A	BEN	3.30		2.20	
2N1550	BEN	3.05		2.05	
2N1550A	BEN	3.80		2.55	
2N1551	BEN	4.85		3.25	
2N1551A	BEN	5.60		3.75	
2N1552	BEN	5.55		3.70	
2N1552A	BEN	6.30		4.20	
2N1552A	MOT	6.30		4.20	
2N1553	MOT	1.85		1.35	
2N1554	MOT	2.30		1.70	
2N1554A	BEN	3.90		2.60	
2N1554A	MOT	2.85		2.10	
2N1555	MOT	2.75		2.05	
2N1555A	BEN	5.90		4.00	
2N1555A	MOT	3.45		2.55	
2N1556	MOT	4.00		2.95	
2N1556A	BEN	4.65		3.45	
2N1556A	MOT	4.65		3.45	
2N1557	BEN	3.20		2.15	
2N1557	MOT	2.15		1.58	
2N1557A	BEN	3.90		2.60	
2N1557A	MOT	2.70		2.00	
2N1558	MOT	2.80		2.06	
2N1558A	BEN	5.45		3.65	
2N1559	BEN	5.90		4.00	
2N1559	MOT	3.25		2.40	
2N1560	MOT	4.45		3.30	
2N1560A	MOT	5.00		3.70	
2N1565	TI	2.50		1.65	
2N1566	TI	2.50		1.65	
2N1566A	TI	2.50		1.65	
2N1595	GE	3.00		2.00	
2N1595	HOF	2.70		2.00	
2N1595	MOT	3.65		2.05	
2N1595	RAY	3.00		2.00	
2N1595	TI	3.00		2.00	
2N1596	HOF	4.10		3.05	
2N1596	MOT	4.95		3.30	
2N1596	RAY	4.60		3.05	
2N1596	TI	4.50		3.05	
2N1597	GE	9.35		6.25	
2N1597	HOF	8.40	7.39	6.30	
2N1597	MOT	9.45		6.30	
2N1597	RAY	9.35		6.25	
2N1597	TI	9.35		6.20	
2N1598	MOT	14.45		9.65	
2N1599	MOT	19.35		12.90	
2N1600	TI	5.10		3.40	
2N1600	INT	5.10		3.40	
2N1601	TI	5.70		3.45	
2N1601	INT	5.70		3.95	
2N1602	INT	9.45		6.30	
2N1603	INT	13.50		9.00	
2N1604	INT	16.80		10.80	
2N1605	TI	.72		.48	
2N1605A	RCA	1.08		.76	
2N1613	GE	1.01		.67	
2N1613	MOT	.79		.68	
2N1613	RCA	.75		.50	
2N1613	RAY	1.50		1.00	
2N1613	TI	.79		.68	
2N1618	GE	35.00		23.50	
2N1623	HUG	2.16		1.62	
2N1623	RAY	2.16		1.65	
2N1631	RCA	.53		.37	
2N1632	RCA	.49		.34	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N1637	RCA	.52		.36	
2N1638	RCA	.45		.31	
2N1651	B EN	5.25		3.50	
2N1652	BEN	12.00		8.00	
2N1671	GE	2.95		1.97	
2N1671	TI	2.95		1.98	
2N1671A	GE	3.20		2.13	
2N1671A	TI	3.20		2.14	
2N1671B	GE	3.55		2.36	
2N1671B	TI	3.55		2.36	
2N1671C	GE	8.25		5.50	
2N1683	RCA	1.90		1.31	
2N1692	MOT	22.50		17.00	
2N1694	GE	.99		.66	
2N1700	RCA	1.90		1.31	
2N1701	RCA	2.31		1.60	
2N1702	RCA	4.54		3.14	
2N1706	MOT	.66		.44	
2N1711	GE	1.08		.72	
2N1711	MOT	.85		.74	
2N1711	RCA	.99		.66	
2N1711	RAY	1.65		1.10	
2N1711	TI	.85		.74	
2N1714	TI	6.00		4.00	
2N1715	TI	8.25		5.50	
2N1716	TI	7.50		5.00	
2N1718	TI	6.75		4.50	
2N1719	TI	9.00		6.00	
2N1720	TI	8.25		5.50	
2N1721	TI	12.00		8.00	
2N1725	TI	43.50		29.00	
2N1727	SPR	1.00		.75	
2N1728	SPR	1.10		.80	
2N1742	SPR	2.93		2.15	
2N1744	SPR	2.25		1.65	
2N1745	SPR	1.80		1.32	
2N1747	SPR	1.00		.75	
2N1748	SPR	1.05		.80	
2N1748A	SPR	1.15		.85	
2N1749	SPR	1.45		1.05	
2N1754	SPR	1.35		.95	
2N1770	INT	5.00		3.30	
2N1770A	GE	6.15		4.10	
2N1770A	INT	5.50		3.63	
2N1771	TI	4.65		3.10	
2N1771	GE	4.65		3.10	
2N1771	INT	5.40		3.60	
2N1771A	GE	7.00		4.65	
2N1771A	INT	6.30		3.97	
2N1772	TI	5.75		3.85	
2N1772	GE	5.77		3.85	
2N1772	INT	5.72		3.80	
2N1772A	GE	9.00		6.00	
2N1772A	INT	8.95		5.95	
2N1773	GE	6.97		4.65	
2N1773	INT	6.92		4.60	
2N1773A	GE	11.10		7.40	
2N1773A	INT	11.05		7.35	
2N1774	TI	8.15		5.45	
2N1774	GE	8.17		5.45	
2N1774	INT	8.12		5.40	
2N1774A	GE	13.50		9.00	
2N1774A	INT	13.45		8.95	
2N1775A	GE	15.75		10.50	
2N1775A	INT	15.50		10.45	
2N1776A	GE	18.40		12.25	
2N1776A	INT	18.35		12.20	
2N1777A	GE	23.65		15.75	
2N1778	INT	23.60		15.50	
2N1792	WES	66.50		51.50	
2N1793	WES	24.80		19.20	
2N1795	WES	28.80		22.30	
	WES	38.00		29.40	

Type No.	Mfr.	1-24	25-99	100-up
2N1798	WES	66.50		51.50

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N1800	WES	97.50		75.50	

Type No.	Mfr.	1-24	25-99	100-up
2N1806	WES	97.50		75.50

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N1808	TI	.58		.39	

Type No.	Mfr.	1-24	25-99	100-up
2N1809	WES	76.00		63.00
2N1810	WES	115.00		76.00
2N1811	WES	141.00		94.00

Type No.	Mfr.	1-24	25-99	100-up
2N1812	WES	172.00		114.00
2N1813	WES	211.00		147.00
2N1814	WES	260.00		178.00
2N1816	WES	101.00		84.00
2N1817	WES	154.00		102.00
2N1818	WES	189.00		125.00
2N1819	WES	232.00		156.00
2N1820	WES	286.00		191.00
2N1823	WES	135.00		111.00
2N1824	WES	204.00		136.00
2N1825	WES	251.00		168.00
2N1826	WES	304.00		207.00
2N1830	WES	179.00		146.00
2N1831	WES	270.00		180.00
2N1832	WES	332.00		222.00
2N1833	WES	404.00		275.00

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N1842	MOT	3.00		2.00	
2N1842	INT	6.00		3.50	
2N1842A	WES	2.85		1.90	
2N1843	MOT	3.75		2.50	
2N1843	INT	6.75		3.85	
2N1843A	MOT	4.05		2.70	
2N1843A	WES	3.68		2.45	
2N1843A	INT	7.60		4.25	
2N1844	MOT	5.00		3.35	
2N1844	GE	4.95		3.30	
2N1844A	MOT	5.40		3.60	
2N1844A	WES	5.40		3.60	
2N1845	MOT	5.70		3.80	
2N1845A	MOT	6.05		4.05	
2N1845A	WES	5.93		3.95	
2N1846	MOT	6.00		4.00	
2N1846	WES	5.78		3.85	
2N1846	GE	5.78		3.85	
2N1846A	MOT	6.35		4.25	
2N1846A	WES	6.10		4.10	
2N1846B	TI	6.19		4.13	
2N1847	MOT	6.30		4.20	
2N1847	WES	6.15		4.10	
2N1847A	GE	6.60		4.40	
2N1847A	MOT	6.75		4.50	
2N1847A	WES	10.65		7.10	
2N1848	MOT	13.25		8.65	
2N1848	WES	11.65		7.75	
2N1848	GE	11.65		7.75	
2N1848A	MOT	14.25		9.50	
2N1848A	WES	12.70		8.45	
2N1849	MOT	15.00		10.00	
2N1849	WES	12.85		8.25	
2N1849A	MOT	16.10		10.75	
2N1849A	WES	15.60		10.40	
2N1849A	INT	15.55		10.35	
2N1849B	TI	15.60		10.40	
2N1850	MOT	18.15		12.10	
2N1850A	GE	18.40		12.25	
2N1850A	MOT	19.80		13.20	
2N1850A	INT	18.35		12.20	
2N1882	HOF	4.15		2.75	
2N1893	GE	1.57		1.05	
2N1893	MOT	2.45		1.65	
2N1893	RCA	1.16		.77	
2N1893	RAY	2.45		1.65	
2N1893	TI	1.32		.88	
2N1905	RCA	4.13		2.85	
2N1906	RCA	6.60		4.56	
2N1907	TI	7.88		5.25	
2N1908	TI	11.25		7.50	

Type No.	Mfr.	1-24	25-99	100-up
2N1909	GE	19.50		15.10
2N1911	GE	24.80		19.20
2N1913	GE	38.00		29.40
2N1916	WES	66.50		51.50

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N1916	GE	66.50		51.50	
2N1917	SPR	6.60		4.40	
2N1918	SPR	5.30		3.55	
2N1919	SPR	8.80		5.25	
2N1924	GE	1.35		.90	
2N1924	MOT	1.57		1.04	
2N1925	GE	1.56		1.04	
2N1925	MOT	1.77		1.18	
2N1926	GE	1.82		1.21	
2N1926	MOT	2.08		1.39	
2N1929	TI	6.15		4.10	
2N1930	TI	7.65		5.10	
2N1930	GE	7.65		5.10	
2N1959	MOT	4.45		2.95	

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-9	10-99	100-999	1000-up
2N1959	SYL	4.45	4.45	2.95	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N1970	MOT	2.35	.....	1.73	.....
2N1973	TI	2.37	.....	1.58	.....
2N1980	MOT	4.50	.....	3.00	.....
2N1981	MOT	5.50	.....	3.70	.....
2N1982	MOT	7.80	.....	5.20	.....
2N1983	RAY	1.87	.....	1.50	.....
2N1987	RAY	4.15	.....	3.20	.....
2N1990	GI	3.90	.....	2.60	.....
2N1990	RAY	3.60	.....	2.60	.....
2N1991	HUG	3.95	.....	2.96	.....
2N1991	MOT	3.95	.....	2.96	.....
2N1994	TI	2.33	.....	1.55	.....
2N1997	TI	1.77	.....	1.18	.....
2N1998	TI	1.88	.....	1.25	.....
2N1999	TI	2.07	.....	1.38	.....
2N2000	TI	2.50	.....	1.87	.....
2N2001	TI	2.17	.....	1.45	.....
2N2010	HOF	4.15	.....	2.75	.....
2N2014	HOF				
2N2015	RCA	9.08	.....	6.25	.....
2N2016	RCA	9.90	.....	6.85	.....

Type No.	Mfr.	1-9	10-99
2N2023	INT	20.15	15.75
2N2024	INT	25.60	18.15
2N2025	INT	29.90	21.78
2N2026	INT	34.50	25.00
2N2027	INT	39.20	27.50
2N2028	INT	43.75	30.80
2N2029	INT	52.25	35.80
2N2030	INT	68.75	42.35

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2042	MOT	1.85	.....	1.25	.....
2N2043	MOT	2.25	.....	1.50	.....
2N2048	SPR	1.80	.....	1.32	.....
2N2060	MOT	27.00	.....	18.00	.....
2N2060	RAY	27.44	.....	22.00	.....
2N2060A	MOT	36.00	.....	24.00	.....
2N2075	MOT	5.20	.....	3.84	.....
2N2076	MOT	3.60	.....	2.67	.....
2N2076A	MOT	4.75	.....	3.17	.....
2N2077	MOT	2.85	.....	2.12	.....
2N2078	MOT	1.90	.....	1.39	.....
2N2079	MOT	7.20	.....	5.34	.....
2N2080	MOT	5.10	.....	3.78	.....
2N2081	MOT	3.15	.....	2.32	.....
2N2082	MOT	2.40	.....	1.78	.....
2N2084	AME	1.34	.....	.90	.....
2N2089	AME	.84	.....	.56	.....
2N2090	AME	.84	.....	.56	.....
2N2096	MOT	1.65	.....	1.10	.....
2N2097	MOT	3.30	.....	2.20	.....
2N2099	MOT	2.17	.....	1.45	.....
2N2100	MOT	3.80	.....	2.55	.....
2N2102	RCA	1.24	.....	.86	.....
2N2102	RAY	1.05	.....	.85	.....
2N2106	GE	1.97	.....	1.32	.....
2N2107	GE	2.09	.....	1.39	.....
2N2108	GE	2.10	.....	1.40	.....
2N2137	MOT	1.80	.....	1.20	.....
2N2138	MOT	2.10	.....	1.40	.....
2N2139	MOT	2.25	.....	1.50	.....
2N2140	MOT	3.90	.....	2.60	.....
2N2142	MOT	2.30	.....	1.55	.....
2N2143	MOT	2.45	.....	1.65	.....
2N2144	MOT	3.75	.....	2.50	.....
2N2147	RCA	1.57	.....	1.09	.....
2N2148	RCA	1.07	.....	.74	.....
2N2151	TI	24.75	.....	16.50	.....
2N2152	MOT	3.60	.....	2.40	.....
2N2153	MOT	5.55	.....	3.70	.....
2N2153A	MOT	6.30	.....	4.20	.....
2N2154	MOT	10.10	.....	6.75	.....
2N2156	MOT	4.10	.....	2.75	.....
2N2156A	MOT	4.85	.....	3.25	.....
2N2157	MOT	6.35	.....	4.25	.....
2N2158	MOT	10.85	.....	7.25	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2160	GE	1.49	.....	.99	.....
2N2164	SPR	7.40	.....	5.50	.....
2N2165	SPR	5.70	.....	4.25	.....
2N2171	MOT	1.27	.....	.85	.....
2N2185	SPR	15.00	.....	11.00	.....
2N2188	TI	1.28	.....	.85	.....
2N2189	TI	1.64	.....	1.09	.....
2N2190	TI	1.47	.....	.98	.....
2N2191	TI	1.85	.....	1.23	.....
2N2192	GE	4.20	.....	2.80	.....
2N2192	MOT	4.20	.....	2.80	.....
2N2192	TI	4.20	.....	2.80	.....
2N2192A	GE	4.45	.....	2.95	.....
2N2192A	MOT	4.40	.....	2.95	.....
2N2192A	TI	4.45	.....	2.95	.....
2N2193	MOT	12.45	.....	8.30	.....
2N2193	GE	2.95	.....	1.95	.....
2N2193	MOT	2.90	.....	1.95	.....
2N2193	RAY	2.90	.....	1.95	.....
2N2193	TI	2.95	.....	1.95	.....
2N2193A	MOT	3.15	.....	2.10	.....
2N2193A	TI	3.15	.....	2.10	.....
2N2193B	MOT	10.80	.....	7.20	.....
2N2194	MOT	2.18	.....	1.45	.....
2N2194A	MOT	2.40	.....	1.60	.....
2N2194A	RAY	2.40	.....	1.60	.....
2N2194B	MOT	8.25	.....	5.50	.....
2N2195	GE	1.38	.....	.92	.....
2N2195	MOT	1.38	.....	.92	.....
2N2195	RAY	1.38	.....	.92	.....
2N2195A	MOT	1.53	.....	1.02	.....
2N2195A	RAY	1.53	.....	1.02	.....
2N2195B	MOT	2.40	.....	1.60	.....
2N2196	GE	4.50	.....	3.00	.....
2N2197	GE	4.62	.....	3.25	.....
2N2201/7B4	GE	6.90	.....	4.60	.....
2N2207	AME	1.42	.....	.96	.....
2N2217	GE	3.02	.....	2.01	.....
2N2217	SPR	3.35	.....	2.25	.....
2N2217	TI	3.02	.....	2.01	.....
2N2218	GE	1.37	.....	.91	.....
2N2218	RAY	3.00	.....	2.00	.....
2N2218	SPR	1.07	.....	.93	.....
2N2218	TI	1.00	.....	.88	.....
2N2218	MOT	1.07	.....	.93	.82
2N2218A	GE	5.26	.....	3.51	.....
2N2218A	RAY	4.75	.....	3.50	.....
2N2218A	SPR	3.75	.....	2.50	.....
2N2218A	TI	5.25	.....	3.50	.....
2N2218A/ML1	MOT	5.40	.....	3.60	.....
2N2218A/ML2	MOT	6.00	.....	4.00	.....
2N2218A/ML3	MOT	6.75	.....	4.50	.....
2N2218ML1	MOT	3.50	.....	2.35	.....
2N2218ML2	MOT	4.10	.....	2.75	.....
2N2218ML3	MOT	4.85	.....	3.25	.....
2N2219	GE	1.37	.....	.91	.....
2N2219	RAY	3.95	.....	2.65	.....
2N2219	SPR	1.07	.....	.93	.....
2N2219	TI	1.00	.....	.88	.....
2N2219	MOT	1.07	.....	.93	.82
2N2219A	GE	6.07	.....	4.05	.....
2N2219A	MOT	6.00	.....	4.00	.....
2N2219A	RAY	6.75	.....	4.50	.....
2N2219A	SPR	4.35	.....	2.90	.....
2N2219A	TI	6.00	.....	4.00	.....
2N2219A/ML1	MOT	6.15	.....	4.10	.....
2N2219A/ML2	MOT	6.75	.....	4.50	.....
2N2219A/ML3	MOT	7.50	.....	5.00	.....
2N2219ML1	MOT	3.50	.....	2.35	.....
2N2219ML2	MOT	4.10	.....	2.75	.....
2N2219ML3	MOT	4.85	.....	3.25	.....
2N2220	GE	3.02	.....	2.01	.....
2N2220	SPR	3.35	.....	2.25	.....
2N2220	TI	3.02	.....	2.01	.....
2N2220	MOT	3.35	.....	2.25	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2221	GE	1.37	.....	.91	.....
2N2221	MOT	1.07	.....	.93	.82
2N2221	SPR	1.07	.....	.93	.....
2N2221	TI	1.00	.....	.88	.....
2N2221A	GE	5.26	.....	3.51	.....
2N2221A	MOT	5.25	.....	3.50	.....
2N2221A	SPR	3.75	.....	2.50	.....
2N2221A	TI	5.25	.....	3.50	.....
2N2221A/ML1	MOT	5.40	.....	3.60	.....
2N2221A/ML2	MOT	6.00	.....	4.00	.....
2N2221A/ML3	MOT	6.75	.....	4.50	.....
2N2221ML1	MOT	3.50	.....	2.35	.....
2N2221ML2	MOT	4.10	.....	2.75	.....
2N2221ML3	MOT	4.85	.....	3.25	.....
2N2222	GE	1.37	.....	.91	.....
2N2222	MOT	1.07	.....	.93	.82
2N2222	SPR	1.07	.....	.93	.....
2N2222	TI	1.07	.....	.93	.....
2N2222ML1	MOT	3.50	.....	2.35	.....
2N2222ML2	MOT	4.10	.....	2.75	.....
2N2222ML3	MOT	4.85	.....	3.25	.....
2N2222A	GE	6.07	.....	4.05	.....
2N2222A	MOT	6.00	.....	4.00	.....
2N2222A	SPR	4.35	.....	2.90	.....
2N2222A	TI	6.00	.....	4.00	.....
2N2222AML	MOT	6.15	.....	4.10	.....
2N2222ML2	MOT	6.75	.....	4.50	.....
2N2222ML3	MOT	7.50	.....	5.00	.....
2N2223	GE	10.00	.....	6.70	.....
2N2223	MOT	10.05	.....	6.70	.....
2N2223	TI	10.00	.....	6.70	.....
2N2223A	MOT	15.00	.....	10.00	.....
2N2224	MOT	3.75	.....	2.50	.....

Type No.	Mfr.	1-24	25-99	100-up
2N2226	WES	44.10	29.10	.....
2N2227	WES	61.10	41.10	.....
2N2228	WES	83.10	55.10	.....
2N2230	WES	73.10	48.10	.....
2N2231	WES	99.10	66.10	.....
2N2232	WES	132.10	88.10	.....
2N2233	WES	183.10	122.10	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2229	WES	112.00	.....	75.00	.....
2N2243	RAY	.....	.....	.....	.....
2N2243	TI	4.80	.....	3.20	.....
2N2243A	RAY	.....	.....	.....	.....
2N2243A	TI	5.10	.....	3.40	.....
2N2257	MOT	1.27	.....	.85	.....
2N2258	MOT	1.12	.....	.75	.....
2N2259	MOT	1.27	.....	.85	.....
2N2267	HUG	11.85	.....	7.90	.....
2N2270	RCA	.99	.....	.69	.....
2N2270	RAY	.88	.....	.70	.....
2N2273	MOT	2.45	.....	1.65	.....
2N2280	SPR	4.50	.....	3.30	.....
2N2285	BEN	5.25	.....	3.50	.....
2N2288	BEN	2.65	.....	1.78	.....
2N2289	BEN	4.00	.....	2.67	.....
2N2303	HUG	7.33	.....	5.50	.....
2N2303	MOT	8.25	.....	5.50	.....
2N2322	MOT	3.00	.....	2.00	.....
2N2322	G E	3.00	.....	2.00	.....
2N2322A	GE	3.60	.....	2.40	.....
2N2323	HOF	3.10	.....	2.30	.....
2N2323	MOT	3.30	.....	2.20	.....
2N2323	GE	3.30	.....	2.20	.....
2N2323A	GE	4.00	.....	2.65	.....
2N2324	MOT	5.40	.....	3.60	.....
2N2324	GE	5.40	.....	3.60	.....
2N2324A	GE	6.60	.....	4.40	.....
2N2325	MOT	7.95	.....	5.30	.....
2N2325	GE	7.95	.....	5.30	.....
2N2326	HOF	9.34	8.20	7.00	.....
2N2326	MOT	10.35	.....	6.90	.....
2N2326	GE	10.35	.....	6.90	.....
2N2326A	GE	12.40	.....	8.25	.....

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Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
2N2327	HOF	11.50		8.65	
2N2327	GE	12.95		8.65	
2N2328	GE	16.00		10.65	
2N2330	SPR	4.35		2.90	
2N2331	SPR	4.35		2.90	
2N2338	RCA	6.60		4.56	
2N2345	HOF	8.95		6.70	
2N2345	GE	9.15		6.10	
2N2346	GE	13.35		8.90	
2N2348	GE	18.90		12.60	
2N2349	GE	2.32		1.54	

Type No.	Mfr.	1-24	25-99	100-up
2N2351	GE	3.55		2.35

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2360	SPR	2.40		1.80	
2N2361	SPR	2.25		1.65	
2N2362	SPR	2.10		1.55	
2N2364A	GE	5.70		3.80	
2N2368	GE	2.31		1.54	
2N2368	MOT	1.07		.93	.82
2N2368	RAY	2.30		1.54	
2N2368	TI	2.31		1.54	
2N2369	GE	2.40		1.60	
2N2369	MOT	1.07		.93	.82
2N2369	RAY	2.40		1.60	
2N2369	TI	2.40		1.60	
2N2369A	RCA	1.65		1.14	
2N2369A	RAY	3.45		2.30	
2N2369A	TI	3.45		2.30	
2N2377	SPR	11.15		8.25	
2N2378	SPR	11.15		8.25	
2N2382	MOT	5.15		3.45	
2N2386	TI	3.75		2.40	
2N2387	TI	11.55		7.70	
2N2388	TI	14.40		9.65	
2N2395	TI	10.10		6.75	
2N2396	TI	11.55		7.70	
2N2398	SPR	3.45		2.50	
2N2399	SPR	3.35		2.45	
2N2400	SPR	1.25		.95	
2N2401	SPR	1.45		1.05	
2N2402	SPR	2.25		1.65	
2N2405	MOT	1.82		1.25	
2N2405	RCA	1.82		1.25	
2N2405	RAY	4.10		2.75	
2N2410	MOT	4.50		3.00	
2N2410	TI	4.50		3.00	
2N2411	TI	3.15		2.10	
2N2412	TI	6.00		4.00	
2N2415	MOT	6.00		4.00	
2N2415	TI	5.80		3.85	
2N2416	MOT	3.35		2.25	
2N2417A	GE	7.65		5.10	
2N2417B	GE	9.15		6.10	
2N2417B	GE	9.85		6.55	
2N2419	GE	8.40		5.60	
2N2420B	GE	11.90		7.95	
2N2420B	MOT	11.90		7.95	
2N2428	AME	.56		.37	
2N2429	AME	.57		.38	
2N2430	AME	.57		.38	
2N2431	AME	.62		.42	
2N2432	TI	8.10		5.40	
2N2432A	TI	12.00		8.00	
2N2433	WES	89.00		66.50	
2N2453	RAY	30.00		20.00	
2N2459	HUG	9.62		7.40	
2N2460	HUG	10.50		8.08	
2N2461	HUG	12.90		9.90	
2N2462	HUG	13.20		10.10	
2N2467	BEN	6.00		4.00	
2N2469	BEN	11.25		7.50	

Type No.	Mfr.	1-24	25-99	100-up
2N2471	WES	61.00	41.00	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2475	RCA	2.56		1.71	
2N2477	SPR	3.30		2.20	
2N2480	GE	12.75		8.50	
2N2480	MOT	12.75		8.50	
2N2480	RAY	10.65		8.55	
2N2480	SPR	12.00		8.00	
2N2480A	MOT	15.35		10.25	
2N2480A	RAY	12.90		10.35	
2N2481	RAY	2.63		1.75	
2N2481	TI	3.90		2.60	
2N2481ML3	MOT	2.75		1.85	
2N2481ML1	MOT	2.75		1.85	
2N2481ML2	MOT	3.35		1.25	
2N2483	RAY	7.50		5.00	
2N2483	TI	3.60		2.40	
2N2484	GE	4.00		2.67	
2N2484	RAY	5.25		3.50	
2N2484	TI	3.87		2.65	
2N2489	SPR	3.65		2.75	
2N2490	MOT	1.88		1.39	
2N2491	MOT	2.63		1.95	
2N2492	MOT	3.38		2.50	
2N2493	MOT	6.00		4.45	
2N2495	AME	2.10		1.40	
2N2497	TI	8.45		5.95	
2N2498	TI	7.50		5.75	
2N2499	TI	8.45		5.95	
2N2500	TI	13.20		10.50	
2N2512	AME	1.34		.89	
2N2515	HUG	8.12		6.13	
2N2516	HUG	8.79		6.76	
2N2518	HUG	10.80		8.30	
2N2519	HUG	6.45		4.30	
2N2520	HUG	10.30		7.93	
2N2521	HUG	10.70		8.24	
2N2522	HUG	4.35		2.90	
2N2523	HUG	3.75		2.50	
2N2524	HUG	5.40		3.60	
2N2527	MOT	9.30		6.20	
2N2528	MOT	14.85		9.90	
2N2537	GE	4.95		3.30	
2N2537	TI	4.95		3.30	
2N2538	GE	5.85		3.90	
2N2538	MOT	5.85		3.90	
2N2538	SPR	5.85		3.90	
2N2538	TI	5.85		3.90	
2N2539	GE	4.95		3.30	
2N2539	TI	4.95		3.30	
2N2540	GE	5.85		3.90	
2N2540	MOT	5.85		3.90	
2N2540	TI	5.85		3.90	
2N2551	HUG	29.75		22.31	
2N2552	TI	3.00		2.00	
2N2553	TI	3.90		2.60	
2N2554	TI	5.85		3.90	
2N2556	TI	3.05		2.05	
2N2556	TI	3.05		2.05	
2N2557	TI	3.95		2.65	
2N2560	TI	4.45		3.95	
2N2562A	RAY	16.25		13.05	
2N2564	TI	4.30		2.85	
2N2565	TI	5.65		3.75	
2N2574	MOT	5.60		3.75	
2N2575	MOT	7.10		4.75	
2N2577	MOT	16.10		10.75	
2N2586	TI	6.00		4.00	
2N2604	RAY	6.00		4.00	
2N2604	TI	6.00		4.00	
2N2605	RAY	6.60		4.40	
2N2605	TI	6.60		4.40	
2N2611	GE	6.90		4.60	
2N2613	RCA	.55		.38	
2N2614	RCA	.50		.35	
2N2630	MOT	3.22		2.15	
2N2631	TI	4.79		3.31	
2N2632	HUG	46.00		30.85	
2N2633	HUG	62.00		41.20	
2N2634	HUG	79.00		52.65	
2N2635	MOT	1.75		1.15	
2N2635	TI	.94		.63	
2N2639	GE	22.00		14.70	
2N2639	HUG	22.00		14.70	
2N2639	MOT	22.50		15.00	
2N2639	RAY	20.16		16.20	
2N2639	TI	22.00		14.90	
2N2640	HUG	16.50		11.00	
2N2640	MOT	17.25		11.50	
2N2640	RAY	15.12		12.15	
2N2641	GE	7.20		4.80	
2N2641	HUG	9.00		6.00	
2N2641	RAY	7.39		5.94	
2N2641	MOT	7.20		4.80	
2N2641	TI	9.00		6.00	
2N2642	HUG	25.50		17.00	
2N2642	MOT	22.50		17.50	
2N2642	RAY	30.00		20.00	
2N2642	SPR	25.50		17.00	
2N2642	TI	26.25		17.50	
2N2643	HUG	18.00		12.00	
2N2643	MOT	22.20		14.80	
2N2643	RAY	22.40		18.00	
2N2643	TI	25.00		16.70	
2N2644	HUG	10.50		7.00	
2N2644	MOT	8.25		5.50	
2N2644	RAY	13.72		11.02	
2N2646	GE	1.05		.70	
2N2646	MOT	1.05		.70	
2N2647	GE	3.00		2.00	
2N2647	MOT	3.00		2.00	
2N2652	RAY	14.00		11.25	
2N2652A	RAY	16.25		13.05	
2N2653	TI	24.00		16.00	
2N2654	AME	.99		.66	
2N2657	HUG	26.00		17.35	
2N2658	HUG	32.40		21.60	
2N2659	TI	1.80		1.20	
2N2660	TI	2.35		1.55	
2N2661	TI	2.85		1.90	
2N2662	TI	1.95		1.30	
2N2663	TI	2.50		1.65	
2N2664	TI	3.00		2.00	
2N2665	TI	2.40		1.60	
2N2666	TI	3.10		2.05	
2N2667	TI	3.75		2.50	
2N2668	TI	2.55		1.70	
2N2669	TI	3.25		2.15	
2N2670	TI	3.90		2.60	
2N2671	AME	.84		.56	
2N2672	AME	.67		.45	
2N2687	TI	2.25		1.50	
2N2688	TI	2.50		1.70	
2N2689	TI	3.75		2.50	
2N2690	TI	6.75		4.50	
2N2692	TI	15.00		10.00	
2N2693	TI	7.75		5.50	
2N2694	TI	5.25		3.50	
2N2695	TI	8.00		5.75	
2N2696	TI	7.50		5.00	
2N2697	HUG	34.00		22.75	
2N2698	HUG	40.50		27.00	
2N2706	AMP	.57	.38		
2N2708	RCA	2.89		2.00	
2N2708	RAY	4.38		3.50	
2N2711	SPR	.45		.30	.20
2N2711	GE	.45		.30	
2N2712	SPR	.48		.32	.22
2N2712	GE	.48		.32	
2N2713	SPR	.51		.34	.23
2N2713	GE	.51		.34	
2N2714	SPR	.53		.35	.24
2N2714	GE	.53		.35	
2N2722	HUG	21.00		14.00	
2N2723	HUG	19.50		13.00	
2N2724	HUG	21.00		14.00	
2N2725	HUG	28.50		19.00	
2N2726	GE	2.10		1.40	
2N2727	GE	4.27		2.85	
2N2728	MOT	11.25		7.50	
2N2730	HUG	23.50		15.65	
2N2731	HUG	17.50		11.65	
2N2732	HUG	11.25		7.50	

Type No.	Mfr.	1-24	25-99	100-up
2N2739	WES	57.10	48.10	
2N2740	WES	74.10	62.10	
1N2741	WES	95.10	80.10	
2N2742	WES	122.10	102.10	
2N2745	WES	63.10	52.10	
2N2746	WES	82.10	68.10	
2N2747	WES	105.10	87.10	
2N2748	WES	134.10	112.10	
2N2751	WES	70.10	59.10	
2N2752	WES	90.10	76.10	
2N2753	WES	115.10	98.10	
2N2754	WES	147.10	124.10	
2N2757	WES	57.10	48.10	
2N2758	WES	74.10	62.10	
2N2759	WES	95.10	80.10	
2N2760	WES	122.10	102.10	
2N2761	WES	158.10	130.10	
2N2763	WES	63.10	52.10	
2N2764	WES	82.10	68.10	
2N2765	WES	105.10	87.10	
2N2766	WES	134.10	112.10	
2N2769	WES	70.10	59.10	
2N2770	WES	90.10	76.10	
2N2771	WES	115.10	98.10	
2N2772	WES	147.10	124.10	
2N2775	WES	77.10	65.00	
2N2776	WES	99.10	83.70	
2N2777	WES	126.60	107.90	
2N2778	WES	161.80	136.50	

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2784	GE	4.32	.....	2.70	.....
2N2800	MOT	6.75	.....	4.50	.....
2N2801	MOT	7.10	.....	4.75	.....
2N2801	RAY	7.10	.....	4.75	.....
2N2802	MOT	22.50	.....	15.00	.....
2N2802	TI	39.50	.....	26.30	.....
2N2803	MOT	16.50	.....	11.00	.....
2N2803	TI	24.00	.....	16.00	.....
2N2804	MOT	9.00	.....	6.00	.....
2N2805	MOT	23.25	.....	15.50	.....
2N2806	MOT	17.25	.....	11.50	.....
2N2807	MOT	9.75	.....	6.50	.....
2N2807	TI	22.50	.....	15.00	.....
2N2808	MOT	4.95	.....	3.30	.....
2N2809	RAY	12.50	.....	8.30	.....
2N2809A	RAY	15.50	.....	10.40	.....
2N2810	RAY	11.20	.....	7.50	.....
2N2810A	RAY	13.70	.....	9.15	.....
2N2811	HUG	57.00	.....	38.00	.....
2N2812	HUG	72.00	.....	48.00	.....
2N2813	HUG	75.00	.....	50.00	.....
2N2814	HUG	90.00	.....	60.00	.....
2N2833	MOT	4.85	.....	3.25	.....
2N2834	MOT	5.25	.....	3.50	.....
2N2838	MOT	7.10	.....	4.75	.....
2N2840	GE	6.35	.....	4.25	.....
2N2845	GE	4.95	.....	3.30	.....
2N2845	MOT	4.95	.....	3.30	.....
2N2845	SPR	4.95	.....	3.30	.....
2N2846	GE	4.95	.....	3.30	.....
2N2846	MOT	4.95	.....	3.30	.....
2N2847	MOT	5.10	.....	3.40	.....
2N2848	MOT	5.10	.....	3.40	.....
2N2848	SPR	5.85	.....	3.90	.....
2N2857	MOT	6.85	.....	4.56	.....
2N2857	RCA	4.95	.....	3.42	.....
2N2861	TI	8.50	.....	5.65	.....
2N2863	TI	1.50	.....	1.00	.....
2N2865	TI	3.45	.....	2.30	.....
2N2868	GE	1.68	.....	1.12	.....
2N2869	RCA	1.52	.....	1.05	.....
2N2870	RCA	3.15	.....	2.18	.....
2N2876	RCA	14.50	.....	10.05	.....
2N2876	TI	14.50	.....	10.05	.....
2N2877	HUG	32.40	.....	21.60	.....
2N2878	HUG	40.50	.....	27.00	.....
2N2879	HUG	40.50	.....	27.00	.....
2N2880	HUG	48.60	.....	32.40	.....
2N2883	TI	30.00	.....	20.00	.....
2N2884	TI	39.00	.....	26.00	.....
2N2894	MOT	6.00	.....	4.00	.....
2N2894	TI	1.95	.....	1.30	.....
2N2895	RCA	1.41	.....	.97	.....
2N2896	RCA	2.06	.....	1.43	.....
2N2897	RCA	1.16	.....	.80	.....
2N2903A	RAY	25.50	.....	17.00	.....
2N2904	GE	2.48	.....	1.65	.....
2N2904	MOT	1.90	.....	1.65	1.45
2N2904	SPR	1.90	.....	1.65	.....
2N2904	TI	1.90	.....	1.65	.....
2N2904A	GE	7.43	.....	4.95	.....
2N2904A	MOT	10.50	.....	7.00	.....
2N2904A	RAY	10.50	.....	7.00	.....
2N2904A	SPR	10.50	.....	7.00	.....
2N2904A	TI	10.50	.....	7.00	.....
2N2904A/ML1	MOT	10.65	.....	7.10	.....
2N2904A/ML2	MOT	11.25	.....	7.50	.....
2N2904A/ML3	MOT	12.00	.....	8.00	.....
2N2904ML1	MOT	7.65	.....	5.10	.....
1N2904ML2	MOT	8.25	.....	5.50	.....
2N2904ML3	MOT	9.00	.....	6.00	.....
2N2905	GE	2.48	.....	1.65	.....
2N2905	M OT	1.90	.....	1.65	1.45
2N2905	RAY	9.00	.....	6.00	.....
2N2905	SPR	1.90	.....	1.65	.....
2N2905	TI	1.90	.....	1.65	.....
2N2905A	GE	7.43	.....	4.95	.....
2N2905A	MOT	12.00	.....	8.00	.....
2N2905A	RAY	12.00	.....	8.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
2N2905A	SPR	12.00	.....	8.00	.....
2N2905A	TI	12.00	.....	8.00	.....
2N2905A/ML1	MOT	12.15	.....	8.10	.....
2N2905A/ML2	MOT	12.75	.....	8.50	.....
2N2905/ML3	MOT	13.50	.....	9.00	.....
2N2905ML1	MOT	9.15	.....	6.10	.....
2N2905ML2	MOT	9.75	.....	6.50	.....
2N2905ML3	MOT	10.50	.....	7.00	.....
2N2906	GE	2.48	.....	1.65	.....
2N2906	MOT	1.90	.....	1.65	1.45
2N2906	RAY	7.20	.....	4.80	.....
2N2906	SPR	1.90	.....	1.65	.....
2N2906	TI	1.90	.....	1.65	.....
2N2906A	GE	7.43	.....	4.95	.....
2N2906A	R AY	10.05	.....	6.70	.....
2N2906A	SPR	10.05	.....	6.70	.....
2N2906A	TI	10.05	.....	6.70	.....
2N2906A/ML1	MOT	10.20	.....	6.80	.....
2N2906A/ML2	MOT	10.80	.....	7.20	.....
2N2906A/ML3	MOT	11.55	.....	7.70	.....
2N2906ML1	MOT	7.35	.....	4.90	.....
2N2906ML2	MOT	7.95	.....	5.30	.....
2N2906ML3	MOT	8.70	.....	5.80	.....
2N2907	GE	2.48	.....	1.65	.....
2N2907	MOT	1.90	.....	1.65	1.45
2N2907	RAY	8.75	.....	5.80	.....
2N2907	SPR	1.90	.....	1.65	.....
2N2907	TI	1.90	.....	1.65	.....
2N2907A	GE	7.43	.....	4.95	.....
2N2907A	RAY	11.55	.....	7.70	.....
2N2907A	SPR	11.55	.....	7.70	.....
2N2907A	TI	11.55	.....	7.70	.....
2N2907A/ML1	MOT	11.70	.....	7.80	.....
2N2907A/ML2	MOT	12.30	.....	8.20	.....
2N2907A/ML3	MOT	13.05	.....	8.70	.....
2N2907ML1	MOT	8.85	.....	5.90	.....
2N2907ML2	MOT	9.45	.....	6.30	.....
2N2907ML3	MOT	10.20	.....	6.80	.....
2N2910	GE	12.75	.....	9.35	.....
2N2912	MOT	8.10	.....	5.40	.....

Type No.	Mfr.	1-99	100-499	500-999	1000-up
2N2913	HUG	8.90	6.60	5.94	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2913	MOT	9.75	.....	6.50	.....
2N2913	TI	9.90	.....	6.60	.....

Type No.	Mfr.	1-99	100-499	500-999	1000-up
2N2914	HUG	12.00	8.00	7.20	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2914	TI	12.00	.....	8.00	.....
2N2915	TI	22.50	.....	15.00	.....
2N2916	GE	25.50	.....	17.00	.....
2N2916	MOT	30.75	.....	20.50	.....
2N2916	TI	25.50	.....	17.00	.....
2N2917	MOT	22.50	.....	15.00	.....
2N2917	TI	21.00	.....	14.00	.....
2N2918	MOT	25.50	.....	17.00	.....
2N2918	TI	24.75	.....	16.50	.....
2N2919	MOT	29.25	.....	19.50	.....
2N2919	TI	24.00	.....	16.00	.....
2N2920	MOT	32.25	.....	21.50	.....
2N2920	TI	27.00	.....	18.00	.....
2N2923	GE	.48	.....	.32	.....
2N2923	SPR	.48	.....	.32	.22
2N2924	GE	.53	.....	.35	.....
2N2924	SPR	.53	.....	.35	.24
2N2925	GE	.60	.....	.40	.....
2N2925	SPR	.60	.....	.40	.29

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N2926	SPR	.45	.....	.30	.20
2N2926	GE	.45	.....	.30	.....
2N2929	MOT	6.75	.....	4.50	.....
2N2944	RAY	9.00	.....	6.00	.....
2N2944	SPR	5.50	.....	3.88	.....
2N2944	TI	5.50	.....	3.68	.....
2N2944A	TI	6.30	.....	4.20	.....
2N2945	RAY	7.50	.....	5.00	.....
2N2945	SPR	5.00	.....	3.35	.....
2N2945	TI	5.00	.....	3.35	.....
2N2945A	TI	6.00	.....	4.00	.....
2N2946	RAY	9.60	.....	6.40	.....
2N2946	SPR	5.50	.....	3.68	.....
2N2946	TI	5.75	.....	3.85	.....
2N2946A	TI	7.35	.....	4.90	.....
2N2948	MOT	20.25	.....	13.50	.....
2N2949	MOT	10.50	.....	7.00	.....
2N2950	MOT	11.25	.....	7.50	.....
2N2951	MOT	4.50	.....	3.00	.....
2N2952	MOT	4.95	.....	3.30	.....
2N2956	MOT	2.63	.....	1.75	.....
2N2957	MOT	3.37	.....	2.25	.....
2N2958	MOT	2.25	.....	1.50	.....
2N2959	MOT	2.70	.....	1.80	.....
2N2972	MOT	11.60	.....	7.75	.....
2N2973	MOT	14.55	.....	9.70	.....
2N2974	MOT	27.75	.....	18.50	.....
2N2977	MOT	25.50	.....	17.00	.....
2N2979	MOT	32.25	.....	21.50	.....
2N2989	TI	10.20	.....	6.75	.....
2N2990	TI	13.10	.....	8.75	.....
2N2991	TI	9.00	.....	6.00	.....
2N2992	TI	12.00	.....	8.00	.....
2N2993	TI	10.90	.....	7.25	.....
2N2995	GE	10.50	.....	7.00	.....
2N2996	TI	1.48	.....	.99	.....
2N2997	TI	3.38	.....	2.25	.....
2N2998	TI	52.50	.....	35.00	.....
2N3001	TI	3.63	.....	2.42	.....
2N3002	TI	3.90	.....	2.60	.....
2N3003	TI	6.54	.....	4.36	.....
2N3004	TI	9.08	.....	6.05	.....
2N3005	TI	3.30	.....	2.20	.....
2N3006	TI	3.63	.....	2.42	.....
2N3307	TI	5.99	.....	3.96	.....
2N3008	TI	8.25	.....	5.50	.....
2N3009	MOT	1.98	.....	1.32	.....
2N3009	TI	1.98	.....	1.32	.....
2N3010	GE	1.90	.....	1.27	.....
2N3010	RAY	6.16	.....	4.95	.....
2N3010	TI	1.90	.....	1.27	.....
2N3011	RCA	1.25	.....	.86	.....
2N3011	RAY	1.48	.....	1.19	.....
2N3011	TI	1.98	.....	1.32	.....
2N3012	TI	1.95	.....	1.30	.....
2N3013	MOT	7.00	.....	4.69	.....
2N3013	TI	7.00	.....	4.69	.....
2N3014	MOT	3.60	.....	2.40	.....
3N3014	TI	3.60	.....	2.40	.....
2N3015	MOT	1.93	.....	1.29	.....
2N3015	TI	3.50	.....	2.88	.....
3N3019	MOT	6.00	.....	4.00	.....
2N3019	RAY	6.00	.....	4.00	.....
2N3020	MOT	5.70	.....	3.80	.....
2N3020	RAY	6.75	.....	4.50	.....
2N3020	RAY	5.70	.....	3.80	.....
2N3033	TI	45.00	.....	30.00	.....
2N3034	TI	14.50	.....	9.67	.....
2N3035	TI	12.50	.....	8.30	.....
2N3036	TI	5.50	.....	3.70	.....
2N3039	TI	22.50	.....	15.00	.....
2N3043	MOT	39.00	.....	26.00	.....
2N3044	MOT	33.00	.....	22.00	.....

Type No.	Mfr.	1-24	25-99	100-up	
2N3043	TI	44.00	38.00	29.40	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N3045	MOT	14.25	.....	9.50	.....
2N3046	MOT	36.00	.....	24.00	.....
2N3047	MOT	30.00	.....	20.00	.....

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Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
2N3048	MOT	12.75		8.50	
2N3049	MOT	34.50		23.00	

Type No.	Mfr.	1-24	25-99	100-up
2N3049	TI	50.90	44.00	34.00
2N3050	TI	44.00	38.00	29.40
2N3051	TI	29.25	25.40	19.50
2N3052	TI	27.00	23.40	18.00

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N3053	MOT	1.09		.73	
2N3053	RCA	.83		.57	
2N3054	RCA	1.41		.97	
2N3055	BEN	2.48		1.71	
2N3055	HUG	2.89		1.95	
2N3055	RCA	2.48		1.71	
2N3055	WES	2.48		1.71	
2N3056	RAY	7.95		5.30	
2N3057	RAY	8.40		5.60	
2N3058	RAY	8.00		5.35	
2N3059	RAY	8.00		5.35	
2N3077	AME	18.50		12.30	
2N3114	MOT	6.00		4.00	
2N3114	TI	6.00		4.00	
2N3115	MOT	1.95		1.30	
2N3116	MOT	2.40		1.60	
2N3117	TI	6.00		4.00	
2N3118	RCA	4.95		3.42	
2N3119	RCA	5.36		3.71	
2N3133	MOT	4.95		3.30	
2N3134	MOT	5.85		3.90	
2N3135	MOT	4.95		3.30	
2N3136	MOT	5.85		3.90	
2N3137	MOT	11.10		7.40	
2N3146	TI	4.60		3.50	
2N3147	TI	5.65		3.75	
2N3149	HUG	320.00		240.00	
2N3150	HUG	360.00		270.00	
2N3151	HUG	400.00		340.00	
2N3210	MOT	.83		.55	
2N3211	MOT	1.27		.85	
2N3217	SPR	2.55		1.70	
2N3218	SPR	2.25		1.50	
2N3219	SPR	2.55		1.70	
2N3223	GE	19.85		13.25	
2N3227	MOT	2.40		1.60	
2N3228	RCA	1.62		1.12	
2N3232	BEN	3.75		2.50	
2N3232	MOT	3.75		2.50	
2N3232	WES	2.06		1.43	
2N3233	WES	2.89		2.00	
2N3234	WES	5.78		3.99	
2N3235	MOT	3.75		2.50	
2N3235	WES	2.48		1.71	
2N3236	WES	5.55		3.83	
2N3237	WES	6.85		4.73	
2N3238	WES	5.55		3.83	
2N3239	WES	5.78		3.99	
2N3240	WES	10.65		7.35	
2N3241A	RCA	.73		.51	
2N3242A	RCA	.83		.57	
2N3244	MOT	15.75		10.50	
2N3244	TI	15.75		10.50	
2N3245	MOT	15.75		10.50	
2N3245	TI	15.75		10.50	
2N3248	MOT	3.90		2.60	
2N3248	RAY	3.90		2.60	
2N3249	MOT	4.65		3.10	
2N3249	RAY	4.65		3.10	
2N3250	MOT	3.90		2.60	
2N3250	RAY	3.90		2.60	
2N3250A	MOT	4.50		3.00	
2N3250A	RAY	4.50		3.00	
2N3250A/ML1	MOT	4.65		3.10	
2N3250A/ML2	MOT	5.25		3.50	
2N3250A/ML3	MOT	6.00		4.00	
2N3250ML1	MOT	4.05		2.70	
2N3250ML2	MOT	4.65		3.10	
2N3250ML3	MOT	5.40		3.60	
2N3251	MOT	4.65		3.10	
2N3251	RAY	4.65		3.10	
2N3251A	MOT	5.25		3.50	
2N3251A	RAY	5.25		3.50	
2N3251A/ML1	MOT	5.40		3.60	
2N3251A/ML2	MOT	6.00		4.00	
2N3251A/ML3	MOT	6.75		4.50	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
2N3251ML1	MOT	4.80		3.20	
2N3251ML2	MOT	5.40		3.60	
2N3251ML3	MOT	6.15		4.10	
2N3252	MOT	9.75		6.50	
2N3252	RAY	9.75		6.50	
2N3253	MOT	9.75		6.50	
2N3279	MOT	4.50		3.00	
2N3280	MOT	4.10		2.75	
2N3282	MOT	2.15		1.45	
2N3283	MOT	1.50		1.00	
2N3284	MOT	1.42		.95	
2N3285	MOT	1.12		.75	
2N3286	MOT	.97		.65	
2N3287	MOT	7.50		5.00	
2N3291	MOT	2.25		1.50	
2N3292	MOT	2.10		1.40	
2N3293	MOT	1.80		1.20	
2N3294	MOT	1.65		1.10	
2N3298	MOT	2.40		1.60	
2N3303	MOT	13.50		9.00	
2N3303	TI	18.00		12.00	
2N3304	MOT	4.50		3.00	
2N3304	TI	8.25		5.50	
2N3307	MOT	10.50		7.00	
2N3309	MOT	5.25		3.50	
2N3311	MOT	2.70		1.80	
2N3312	MOT	3.30		2.20	
2N3313	MOT	4.20		2.80	
2N3314	MOT	3.15		2.10	
2N3315	MOT	3.90		2.60	
2N3316	MOT	5.25		3.50	
2N3317	SPR	12.75		9.45	
2N3318	SPR	7.40		5.50	
2N3319	SPR	3.75		2.80	
2N3320	SPR	3.50		2.60	
2N3321	SPR	2.25		1.65	
2N3323	MOT	.90		.60	
2N3324	MOT	.82		.55	
2N3325	MOT	.75		.50	
2N3328	TI	10.50		7.00	
2N3330	TI	7.25		5.75	
2N3331	TI	7.45		5.95	
2N3332	TI	13.20		10.50	
2N3340	HUG	7.20		4.80	
2N3343	RAY	6.13		4.70	
2N3344	RAY	7.42		5.70	
2N3371	TI	5.43		3.62	
2N3375	MOT	14.84		9.90	
2N3375	RCA	14.52		10.02	
2N3390	GE	.94		.62	
2N3391	GE	.72		.48	
2N3391	GE	.65		.43	
2N3391	SPR	.65		.43	.32
2N3391A	GE	.75		.50	
2N3391A	SPR	.75		.50	.37
2N3392	SPR	.53		.35	.25
2N3393	GE	.45		.30	
2N3393	SPR	.45		.30	.20
2N3394	GE	.42		.28	
2N3394	SPR	.42		.28	.19
2N3395	GE	.59		.39	
2N3395	SPR	.59		.39	.29
2N3396	GE	.54		.36	
2N3396	SPR	.54		.36	.26
2N3397	GE	.51		.34	
2N3397	SPR	.51		.34	.24
2N3398	GE	.59		.39	
2N3398	SPR	.58		.38	.29
2N3399	AMP	2.55		1.70	
2N3402	GE	.75		.50	
2N3402	SPR	.75		.50	.37
2N3403	GE	.80		.53	
2N3403	SPR	.80		.53	.40
2N3404	GE	.80		.53	
2N3404	SPR	.80		.53	.40
2N3405	GE	.91		.63	
2N3405	SPR	.91		.63	.48
2N3409	MOT	13.50		9.00	
2N3411	MOT	18.00		12.00	
2N3414	GE	.45		.30	
2N3414	SPR	.45		.38	.23
2N3415	GE	.51		.34	
2N3415	SPR	.51		.34	.25
2N3416	GE	.65		.43	
2N3416	SPR	.65		.43	.32
2N3417	GE	.74		.51	
2N3417	SPR	.74		.51	.41
2N3418	TI	12.45		8.30	
2N3419	TI	14.10		9.40	
2N3420	TI	13.35		8.90	
2N3421	TI	16.95		11.30	
2N3427	MOT	1.34		.89	
2N3428	MOT	1.50		1.00	

Type No.	Mfr.	1-24	25-99	100-up
2N3429	WES	29.10	21.70	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N3430	WES	38.10		28.40	
2N3431	WES	51.10		37.80	
2N3432	WES	67.10		50.10	
2N3433	WES	89.10		66.60	
2N3439	RCA	3.71		2.57	
2N3440	RCA	1.82		1.25	
2N3441	RCA	2.48		1.71	
2N3442	RCA	4.54		3.14	
2N3442	WES	4.54		3.14	
2N3444	MOT	12.00		8.00	
2N3444	TI	12.00		8.00	
2N3445	MOT	12.00		8.00	
2N3446	MOT	18.00		12.00	
2N3447	MOT	19.50		13.00	
2N3448	MOT	29.25		19.50	
2N3467	MOT	9.75		6.50	
2N3469	HUG	13.50		9.00	

Type No.	Mfr.	1-24	25-99	100-up
2N3470	WES	44.10	29.10	
2N3471	WES	61.00	41.10	
2N3472	WES	83.10	55.10	
2N3473	WES	112.10	75.10	
2N3474	WES	73.10	48.10	
2N3475	WES	99.10	66.10	
2N3476	WES	132.10	88.10	
2N3477	WES	183.10	122.10	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N3478	RCA	1.90		1.31	
2N3484	MOT				
2N3485	MOT	8.70		5.80	
2N3485	RAY	8.70		5.80	
2N3485	TI	8.70		5.30	
2N3485A	RAY	12.00		8.00	
2N3485SA	TI	12.00		8.00	
2N3486	MOT	10.20		6.80	
2N3486	RAY	10.40		6.80	
2N3486	TI	10.20		6.80	
2N3486A	RAY	13.50		9.00	
2N3486A	TI	13.50		9.00	
2N3487	MOT	42.00		28.00	
2N3491	MOT	63.00		42.00	
2N3492	MOT	75.00		50.00	
2N3493	MOT	14.25		9.50	
2N3494	MOT	9.75		6.50	
2N3495	MOT	12.75		8.50	
2N3496	MOT	9.75		6.50	
2N3497	MOT	12.75		8.50	
2N3498	MOT	6.60		4.40	
2N3499	MOT	7.40		4.95	
2N3500	MOT	11.25		7.50	
2N3501	MOT	12.60		8.40	
2N3502	GE	2.78		1.85	
2N3503	GE	7.88		5.25	
2N3504	GE	2.78		1.85	
2N3505	GE	7.88		5.25	
2N3506	MOT	11.55		7.70	
2N3507	MOT	13.20		8.80	
2N3509	MOT	5.40		3.60	
2N3510	MOT	1.42		.95	
2N3511	MOT	1.80		1.20	
2N3512	RCA	1.82		1.25	
2N3522	GE	35.10		23.40	
2N3525	RCA	2.31		1.60	
2N3528	RCA	1.63		1.12	
2N3529	RCA	2.31		1.60	
2N3544	MOT	7.50		5.00	
2N3546	MOT	5.25		3.50	
2N3551	TI	100.00		67.50	
2N3552	TI	112.50		75.00	
2N3553	RCA	4.37		3.02	
2N3554	TI	8.10		5.40	
2N3555	TI	7.45		4.95	
2N3556	TI	8.95		5.95	
2N3559	TI	5.75		3.83	
2N3560	TI	6.15		4.10	
2N3562	TI	9.50		6.33	
2N3563	RAY	.75		.50	
2N3564	RAY	.85		.58	
2N3565	RAY	.62		.43	
2N3566	RAY	.60		.41	
2N3567	RAY	.65		.45	
2N3568	RAY	.68		.45	
2N3569	RAY	.75		.50	
2N3570	TI	21.90		14.60	
2N3571	TI	7.35		4.90	
2N3572	TI	5.90		3.95	
2N3583	RCA	2.48		1.71	

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N3584	RCA	4.95		3.42	
2N3585	RCA	13.20		9.10	
2N3597	HUG	78.30		52.20	
2N3598	HUG	94.50		63.00	
2N3599	HUG	110.00		73.80	
2N3600	RCA	4.13		2.85	
2N3605	GE	.58		.39	
2N3605A	GE	.69		.46	
2N3606	GE	.45		.30	
2N3606A	GE	.48		.32	
2N3607	GE	.40		.27	
2N3611	MOT	1.15		.78	
2N3612	MOT	1.30		.88	
2N3613	MOT	1.25		.85	
2N3614	MOT	1.40		.94	
2N3615	MOT	1.65		1.10	
2N3616	MOT	2.10		1.39	
2N3617	MOT	1.88		1.25	
2N3618	MOT	2.37		1.58	
2N3632	RCA	19.64		13.58	
2N3634	MOT	13.20		8.80	
2N3635	MOT	14.40		9.60	
2N3636	MOT	19.40		12.95	
2N3637	MOT	21.30		14.20	
2N3638	RAY	.46		.31	
2N3638A	RAY	.70		.54	
2N3639	RAY	.60		.43	
2N3640	RAY	.67		.46	
2N3647	MOT	2.25		1.50	
2N3648	MOT	2.70		1.80	
2N3649	GE	9.85		6.55	
2N3650	GE	10.75		7.15	
2N3651	GE	15.30		10.20	
2N3652	GE	23.10		15.40	
2N3653	GE	28.05		18.70	
2N3654	GE	10.35		6.90	
2N3655	GE	11.25		7.50	
2N3656	GE	16.10		10.70	
2N3657	GE	24.20		16.10	
2N3658	GE	29.25		19.50	
2N3662	GE	.75		.50	
2N3663	GE	.80		.53	
2N3669	RCA	3.27		2.26	
2N3670	RCA	4.92		3.40	
2N3671	RAY	9.00		6.00	
2N3672	RAY	9.00		6.00	
2N3680	TI	49.00		32.60	
2N3700	RAY	6.00		4.00	
2N3701	RAY	5.70		3.80	
2N3702	TI	.45		.30	
2N3703	TI	.39		.26	
2N3704	TI	.60		.41	
2N3705	TI	.57		.38	
2N3706	TI	.52		.35	
2N3707	TI	.60		.37	
2N3708	TI	.48		.32	
2N3709	TI	.48		.32	

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
2N3710	TI	.49		.33	
2N3711	TI	.54		.36	
2N3712	TI	3.00		2.00	
2N3713	MOT	4.40		2.95	
2N3714	MOT	4.70		3.15	
2N3715	MOT	4.85		3.25	
2N3716	MOT	6.75		4.50	
2N3719	MOT	11.90		7.95	
2N3720	MOT	13.40		8.95	
2N3721	GE	.39		.26	
2N3721	SPR	.39		.26	.18
2N3722	GE	10.50		7.00	6.30
2N3723	GE	12.97		8.65	7.79
2N3730	RCA	1.24		.86	
2N3731	RCA	1.62		1.12	
2N3733	MOT	34.20		22.80	
2N3733	RCA	33.00		22.80	
2N3734	MOT	6.00		4.00	
2N3735	MOT	6.00		4.00	
2N3736	MOT	6.60		4.40	
2N3737	MOT	6.60		4.40	
2N3738	MOT	2.25		1.50	
2N3739	MOT	2.45		1.65	

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
2N3740	MOT	2.90		1.95	
2N3741	MOT	3.15		2.10	
2N3742	MOT	12.60		8.40	
2N3743	MOT	29.25		19.50	
2N3744	HUG	32.40		21.60	
2N3745	HUG	34.30		22.85	
2N3746	HUG	42.40		28.25	
2N3747	HUG	37.80		25.20	
2N3748	HUG	42.40		28.25	
2N3749	HUG	52.50		33.65	
2N3750	HUG	46.80		31.30	
2N3753	GE	9.40		6.25	
2N3755	GE	14.25		9.50	
2N3756	GE	21.00		14.00	
2N3757	GE	25.50		17.00	
2N3759	GE	37.50		25.00	
2N3761	GE	48.00		32.00	
2N3762	MOT	7.50		5.00	
2N3763	MOT	7.50		5.00	
2N3764	MOT	8.25		5.50	
2N3765	MOT	8.25		5.50	
2N3766	MOT	2.10		1.40	
2N3767	MOT	2.30		1.55	
2N3771	HUG	5.78		3.99	
2N3771	RCA	4.95		3.42	
2N3771	WES	4.95		3.42	
2N3772	BEN	4.95		3.42	
2N3772	HUG	5.78		3.99	
2N3772	RCA	4.95		3.42	
2N3772	WES	4.95		3.42	
2N3773	BEN	4.95		3.42	
2N3773	HUG	7.84		5.20	
2N3773	RCA	7.84		5.42	
2N3773	WES	7.84		5.42	
2N3783	MOT	30.00		20.00	
2N3784	MOT	15.00		10.00	
2N3785	MOT	6.75		4.50	
2N3789	MOT	8.90		5.95	
2N3790	MOT	10.65		7.10	
2N3791	MOT	12.35		8.25	
2N3792	MOT	14.85		9.90	
2N3796	MOT	13.50		9.00	
2N3797	MOT	16.50		11.00	
2N3798	MOT	6.15		4.10	
2N3798	TI	6.15		4.10	
2N3799	MOT	6.75		4.50	
2N3799	TI	6.75		4.50	
2N3800	MOT	14.25		9.50	
2N3801	MOT	15.75		10.50	
2N3802	MOT	21.00		14.00	
2N3803	MOT	22.50		15.00	
2N3804	MOT	26.50		17.50	
2N3805	MOT	27.75		18.50	
2N3806	MOT	14.25		9.50	
2N3806	TI	14.25		9.50	
2N3807	MOT	15.75		10.50	
2N3807	TI	15.75		10.50	
2N3808	MOT	21.00		14.00	
2N3808	TI	21.00		14.00	
2N3809	MOT	22.50		15.00	
2N3809	TI	22.50		15.00	
2N3810	MOT	26.25		17.50	
2N3810	TI	26.25		17.50	
2N3811	MOT	27.75		18.50	
2N3811	TI	27.25		18.50	
2N3818	MOT				
2N2819	TI	2.95		1.95	
2N3820	TI	2.95		1.95	
263821	MOT	11.15		7.45	
2N3821	TI	9.65		7.45	
2N3821A	MOT	22.40		14.95	
2N3822	MOT	8.85		5.90	
2N3822	TI	7.50		5.90	
2N3822A	MOT	21.65		14.95	
2N3823	MOT	6.05		4.05	
2N3823	TI	5.95		4.50	
2N3824	MOT	7.20		4.80	
2N3824	TI	6.25		4.80	
2N3824A	MOT	14.15		9.45	
2N3825	TI	.58		.39	
2N3826	TI	.54		.36	
2N3827	TI	.58		.39	

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
2N3829	TI	6.00		4.00	
2N3830	TI	13.50		9.00	
2N3831	TI	9.00		6.00	
2N3832	TI	7.50		5.00	

Type No.	Mfr.	1-24	25-99	100-up
2N3838	TI	30.15	26.13	20.10

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N3839	MOT	17.10		11.40	
2N3839	RCA	16.50		11.40	
2N3843	GE	.54		.36	
2N3843	SPR	.54		.36	.26
2N3843A	GE	.53		.39	
2N3843A	SPR	.59		.39	.27
2N3844	GE	.57		.38	
2N3844	SPR	.57		.38	.27
2N3844A	GE	.62		.42	
2N3844A	SPR	.62		.42	.28
2N3845	GE	.62		.42	
2N3845	SPR	.62		.42	.28
2N3845A	GE	.66		.44	
2N3845A	SPR	.66		.44	.30
2N3846	TI	90.00		60.00	
2N3847	TI	105.00		70.00	
2N3848	TI	125.00		85.00	
2N3849	TI	160.00		105.00	
2N3852	BEN	17.00		11.00	
2N3854	SPR	.51		.34	.24
2N3854	GE	.51		.34	
2N3854A	SPR	.54		.36	.26
2N3854A	GE	.54		.36	
2N3855	SPR	.53		.35	.25
2N3855	GE	.53		.35	
2N3855A	SPR	.57		.38	.27
2N3855A	GE	.57		.38	
2N3856	SPR	.57		.38	.27
2N3856	GE	.57		.38	
2N3856A	SPR	.62		.42	.28
2N3856A	GE	.62		.42	
2N3858	GE	.48		.32	
2N3858	SPR	.48		.32	.22
2N3858A	GE	.59		.39	
2N3858A	SPR	.59		.39	.27
2N3859	GE	.49		.33	
2N3859	SPR	.49		.33	.23
2N3859A	GE	.60		.40	
2N3859A	SPR	.60		.40	.28
2N3860	GE	.54		.36	
2N3860	SPR	.54		.36	.26
2N3866	MOT	4.30		2.85	
2N3866	RCA	2.97		2.05	
2N3870	RCA	4.70		3.25	
2N3871	RCA	5.12		3.53	
2N3872	RCA	7.18		4.96	
2N3873	RCA	10.50		7.25	
2N3877	SPR	.56		.38	.38
2N3877	GE	.56		.38	
2N3877A	SPR	.63		.42	.31
2N3877A	GE	.63		.42	
2N3878	RCA	6.60		4.56	
2N3879	RCA	8.25		5.70	
2N3883	MOT	1.35		.90	
2N3896	RCA	4.95		3.42	
2N3897	RCA	5.36		3.71	
2N3898	RCA	7.43		5.13	
2N3899	RCA	10.75		7.40	
2N3900	GE	.60		.40	
2N3900	SPR	.60		.40	.30
2N3900A	GE	.70		.47	
2N3900A	SPR	.70		.47	.35
2N3903	MOT	.75	.50	.37	.35
2N3904	MOT	.82	.55	.41	.38
2N3905	MOT	.75	.50	.37	.35
2N3906	MOT	.82	.55	.41	.38
2N3909	TI	6.30		4.20	
2N3910	RAY	7.50		5.25	
2N3911	RAY	7.75		5.40	
2N3912	RAY	8.00		5.70	
2N3913	RAY	5.20		4.00	
2N3914	RAY	6.75		4.50	

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Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N3915	RAY	7.75		5.50	
2N3924	MOT	5.15		3.42	
2N3925	MOT	8.70		5.80	
2N3926	MOT	14.85		9.90	
2N3927	MOT	20.25		13.50	
2N3932	RCA	1.41		.97	
2N3933	RCA	1.62		1.12	
2N3936	TI	7.35		4.90	
2N3937	TI	14.60		9.75	
2N3938	TI	18.75		12.50	
2N3939	TI	26.25		17.50	
2N3940	TI	30.00		20.00	
2N3946	MOT	2.40		1.60	
2N3947	MOT	2.75		1.85	
2N3948	MOT	5.12		3.42	
2N3950	MOT	34.20		22.80	
2N3959	MOT	10.50		7.00	
2N3960	MOT	13.10		8.75	
2N3961	MOT	8.70		5.80	
2N3962	TI	3.80		2.65	
2N3963	TI	6.00		4.00	
2N3964	TI	6.00		4.00	
2N3965	TI	7.50		5.00	
2N3973	GE	.63		.42	
2N3973	SPR	.63		.42	.31
2N3974	GE	.70		.46	
2N3974	SPR	.70		.46	.35
2N3975	GE	.58		.39	
2N3975	SPR	.58		.39	.29
2N3976	GE	.60		.40	
2N3976	SPR	.60		.40	.30
2N3977	SPR	3.30		2.20	
2N3978	SPR	3.00		2.00	
2N3970	SPR	3.30		2.20	
2N3980	MOT	3.40		2.25	
2N3980	TI	7.35		4.90	
2N3995	TI	8.85		5.95	
2N3997	TI	54.00		36.00	
2N3998	TI	30.00		20.00	
2N3999	TI	42.00		28.00	
2N4000	BEN	10.20		6.75	
2N4000	TI	10.20		6.75	
2N4001	TI	13.10		8.75	
2N4002	TI	112.50		75.00	
2N4003	TI	148.00		99.00	
2N4004	TI	112.50		75.00	
2N4005	TI	148.00		99.00	
2N4012	MOT	24.75		16.50	
2N4012	RCA	23.95		16.55	
2N4036	RCA	1.62		1.12	
2N4048	RCA	1.31		.91	
2N4037	MOT	5.60		3.75	
2N4050	MOT	7.50		5.00	
2N4049	HUG	50.00		34.00	
2N4050	MOT	9.30		6.20	
2N4051	MOT	6.45		4.30	
2N4052	MOT	8.25		5.50	
2N4053	MOT	10.10		6.75	
2N4054	GE	1.56		1.04	
2N4055	GE	1.44		.96	
2N4056	GE	1.20		.80	
2N4057	GE	1.08		.72	
2N4058	TI	.99		.67	
2N4059	TI	.76		.51	
2N4060	TI	.81		.54	
2N4061	TI	.82		.55	
2N4062	TI	.90		.60	
2N4063	RCA	3.80		2.62	
2N4063	RCA	3.80		2.62	
2N4064	RCA	1.90		1.31	
2N4068	RCA	1.57		1.09	
2N4069	RCA	1.64		1.13	
2N4070	HUG	25.00		16.00	
2N4071	HUG	50.00		34.00	
2N4072	MOT	3.00		2.00	
2N4073	MOT	4.50		3.00	
2N4074	RCA	.73		.51	
2N4080	RAY	6.80		4.50	
2N4101	RCA	3.05		2.11	
2N4102	RCA	3.05		2.11	
2N4103	RCA	9.90		6.85	
2N4104	TI	6.00		4.00	
2N4123	MOT	.52		.35	
2N4124	MOT	.60		.40	
2N4125	MOT	.52		.35	
2N4126	MOT	.60		.40	
2N4138	TI	12.00		8.00	
2N4140	TI	.63		.42	
2N4141	TI	.74		.49	
2N4142	TI	.75		.50	
2N4143	TI	.96		.64	
2N4151	MOT	1.45		1.05	
2N4152	MOT	1.60		1.10	
2N4153	MOT	1.75		1.25	
2N4154	MOT	1.95		1.35	
2N4155	MOT	2.40		1.60	
2N4156	MOT	2.80		1.85	
2N4157	MOT	5.00		3.35	
2N4158	MOT	6.75		4.50	
2N4159	MOT	1.45		1.05	
2N4160	MOT	1.60		1.10	
2N4161	MOT	1.75		1.25	
2N4162	MOT	1.95		1.35	
2N4163	MOT	2.40		1.60	
2N4164	MOT	2.80		1.85	
2N4165	MOT	5.00		3.35	
2N4166	MOT	6.75		4.50	
2N4167	MOT	1.60		1.20	
2N4168	MOT	1.75		1.25	
2N4169	MOT	1.90		1.40	
2N4170	MOT	2.10		1.50	
2N4171	MOT	2.55		1.75	
2N4172	MOT	2.95		2.00	
2N4173	MOT	5.15		3.50	
2N4174	MOT	6.90		4.65	
2N4175	MOT	1.60		1.20	
2N4176	MOT	1.75		1.25	
2N4177	MOT	1.90		1.40	
2N4178	MOT	2.10		1.50	
2N4179	MOT	2.55		1.75	
2N4180	MOT	2.95		2.00	
2N4181	MOT	5.15		3.50	
2N4182	MOT	6.90		4.65	
2N4183	MOT	1.59		1.19	
2N4184	MOT	1.74		1.24	
2N4185	MOT	1.89		1.39	
2N4186	MOT	2.09		1.49	
2N4187	MOT	2.54		1.74	
2N4188	MOT	2.94		1.99	
2N4189	MOT	5.14		3.49	
2N4190	MOT	6.89		4.64	
2N4191	MOT	1.59		1.19	
2N4192	MOT	1.74		1.24	
2N4193	MOT	1.89		1.39	
2N4194	MOT	2.09		1.49	
2N4195	MOT	2.54		1.74	
2N4196	MOT	2.94		1.99	
2N4197	MOT	5.14		3.49	
2N4198	MOT	6.89		4.64	
2N4199	MOT	21.25		15.00	
2N4200	MOT	28.75		20.00	
2N4201	MOT	32.50		22.50	
2N4202	MOT	44.25		29.50	
2N4203	MOT	51.75		34.50	
2N4204	MOT	63.75		42.50	
2N4212	MOT	2.70		1.80	
2N4213	MOT	3.00		2.00	
2N4214	MOT	4.95		3.30	
2N4215	MOT	6.15		4.10	
2N4216	MOT	8.10		5.40	
2N4220	MOT	2.85		1.90	
2N4220A	MOT	4.35		2.90	
2N4221	MOT	2.85		1.90	
2N4221A	MOT	4.35		2.90	
2N4222	MOT	2.85		1.90	
2N4222A	MOT	4.35		2.90	
2N4223	MOT	5.85		3.90	
2N4224	MOT	3.65		2.45	
2N4225	BEN	5.40		3.60	
2N4226	BEN	6.45		4.30	
2N4234	MOT	3.00		2.00	
2N4235	MOT	3.60		2.39	
2N4236	MOT	4.00		2.66	
2N4237	BEN	2.25		1.50	
2N4237	BEN	2.25		1.50	
2N4238	BEN	2.75		1.85	
2N4238	MOT	2.75		1.85	
2N4239	BEN	3.05		2.05	
2N4239	MOT	3.05		2.05	
2N4240	RCA	2.89		2.00	
2N4242	HUG	2.25		1.50	
2N4244	HUG	1.47		.98	
2N4247	HUG	1.62		1.08	
2N4252	TI	1.85		1.23	
2N4253	TI	1.60		1.00	
2N4254	TI	.90		.60	
2N4255	TI	.85		.57	
2N4256	GE	.69		.46	
2N4256	SPR	.69		.46	.35
2N4259	RCA	1.90		1.31	
2N4260	MOT	12.35		8.25	
2N4261	MOT	14.60		9.75	
2N4264	MOT	.60		.40	
2N4265	MOT	.67		.45	
2N4274	RAY	.57		.38	
2N4275	RAY	.60		.40	
2N4276	MOT	3.50		2.35	
2N4277	MOT	4.20		2.80	
2N4278	MOT	4.65		3.10	
2N4279	MOT	5.30		3.55	
2N4280	MOT	5.70		3.80	
2N4281	MOT	6.80		4.55	
2N4282	MOT	7.05		4.70	
2N4283	MOT	8.45		5.65	
2N4296	RCA	2.48		1.71	
2N4297	RCA	2.89		2.00	
2N4298	RCA	3.71		2.57	
2N4299	RCA	4.13		2.85	
2N4300	BEN	12.75		8.50	
2N4300	TI	12.75		8.50	
2N4301	TI	58.50		39.00	
2N4314	RCA	1.41		.97	
2N4346	RCA	2.31		1.60	
2N4347	RCA	2.97		2.05	
2N4348	RCA	4.54		3.14	
2N4351	MOT	6.75		4.50	
2N4352	MOT	6.75		4.50	

Type No.	Mfr.	1-24	25-99	100-up
2N4371	WES	25.90	20.05	
2N4372	WES	34.20	26.45	
2N4373	WES	59.85	46.35	
2N4374	WES	92.60	71.20	
2N4375	WES	137.75	106.40	
2N4376	WES	199.50	147.25	
2N4377	WES	282.15	211.85	
2N4378	WES	370.50	278.35	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N4383	SPR	1.35		.90	
2N4384	SPR	1.35		.90	
2N4385	SPR	.85		.56	
2N4386	SPR	.85		.56	
2N4390	RCA	.75		.52	
2N4395	RCA	2.06		1.43	
2N4396	RCA	2.48		1.71	
2N4398	MOT	11.25		7.50	
2N4399	MOT	13.50		9.05	
2N4400	MOT	.82		.55	
2N4401	MOT	.97		.65	
2N4402	MOT	.82		.55	
2N4403	MOT	.97		.65	
2N4409	MOT	.67		.45	
2N4410	MOT	.96		.64	
2N4411	MOT	18.00		12.00	
2N4412	SPR	2.00		1.35	
2N4412A	SPR	2.15		1.45	
2N4413	SPR	2.00		1.35	
2N4413A	SPR	2.15		1.45	
2N4414	SPR	1.25		.85	
2N4414A	SPR	1.40		.95	
2N4415	SPR	1.25		.85	
2N4415A	SPR	1.40		.95	
2N4416	MOT	5.00		3.35	
2N4418	TI	.64		.48	
2N4419	TI	.60		.45	
2N4420	TI	.65		.49	
2N4421	TI	.60		.45	
2N4422	TI	.60		.46	
2N4423	TI	.76		.51	
2N4424	GE	.69		.46	
2N4425	GE	.86		.58	
2N4427	RCA	2.15		1.48	
2N4440	RCA	20.65		14.25	
2N4441	MOT	1.20		.80	.68
2N4442	MOT	1.50		1.00	.85
2N4443	MOT	2.00		1.35	1.15
2N4444	MOT	4.50		3.00	2.55
2N4851	MOT	1.10		.75	
2N4853	MOT	2.25		1.50	
2N4854	TI	13.50		9.00	
2N4855	TI	10.80		7.20	
2N4856	TI	7.75		5.95	
2N4857	TI	6.95		5.45	
2N4858	TI	7.25		5.55	
2N4859	TI	6.95		5.40	
2N4860	TI	6.35		4.90	
2N4861	TI	6.50		5.00	
2N4862	HUG	12.00		10.00	
2N4863	HUG	10.00		8.00	
2N4864	HUG	13.00		11.00	
2N4865	HUG	380.00		320.00	
2N4866	HUG	420.00		360.00	
2N4870	MOT	.96		.64	.61
2N4871	MOT	.96		.64	.58

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	HOF —Hoffman	RCA —Radio Corp. of America	SYL —Sylvania
BEN —Bendix	HUG —Hughes Aircraft	RAY —Raytheon	TI —Texas Instruments
GE —General Electric	INT —International Rectifier	SAR —Sarkes-Tarzian	WES —Westinghouse
	MOT —Motorola	SPR —Sprague	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
2N4874	TI	5.85	.....	3.90	.....
2N4875	TI	4.95	.....	3.42	.....
2N4876	TI	4.20	.....	2.80	.....
2N4890	MOT	1.12	.....	.75	.....
2N4891	TI	1.05	.....	.72	.....
2N4892	TI	1.25	.....	.85	.....
2N4893	TI	1.10	.....	.75	.....
2N4894	TI	1.20	.....	.80	.....
2N4898	MOT	1.95	.....	1.30	.....
2N4899	MOT	2.60	.....	1.75	.....
2N4900	MOT	2.90	.....	1.95	.....
2N4910	MOT	1.55	.....	1.05	.....
2N4911	MOT	1.80	.....	1.20	.....
2N4912	MOT	2.10	.....	1.40	.....
2N4913	MOT	2.40	.....	1.60	.....
2N4918	MOT	1.65	.....	1.11	.....
2N4919	MOT	1.90	.....	1.27	.....
2N4920	MOT	2.25	.....	1.50	.....
2N4921	MOT	1.33	.....	.89	.....
2N4922	MOT	1.48	.....	.99	.....
2N4923	MOT	1.80	.....	1.20	.....
2N4928	MOT	4.05	.....	2.70	.....
2N4929	MOT	4.95	.....	3.30	.....
2N4930	MOT	5.90	.....	4.50	.....
2N4931	MOT	6.75	.....	4.50	.....
2N4932	RCA	33.00	.....	22.80	.....
2N4933	RCA	33.00	.....	22.80	.....
2N4937	MOT	14.50	.....	9.00	.....
2N4938	MOT	10.50	.....	7.00	.....
2N4939	MOT	8.25	.....	5.50	.....
2N4940	MOT	20.55	.....	13.70	.....
2N4941	MOT	16.05	.....	10.70	.....
2N4942	MOT	11.55	.....	7.70	.....
2N4947	TI	2.03	.....	1.35	.....
2N4948	TI	1.47	.....	.98	.....
2N4949	TI	2.78	.....	1.85	.....
2N4951	SPR	.67	.....	.45	.34
2N4952	SPR	.72	.....	.48	.36
2N4953	SPR	.80	.....	.53	.40
2N4954	SPR	.59	.....	.39	.29
2N4957	MOT	20.25	.....	13.50	.....
2N4958	MOT	10.35	.....	6.90	.....
2N4959	MOT	6.75	.....	4.50	.....
2N4964	RAY	.48	.....	.33	.....
2N4965	RAY	.51	.....	.35	.....
2N4969	RAY	.68	.....	.45	.....
2N4970	RAY	.68	.....	.45	.....
2N4971	RAY	.48	.....	.33	.....
2N4972	RAY	.70	.....	.54	.....
2N4983	GE	1.17	.....	.78	.....
2N4987	GE	.84	.....	.56	.....
2N4988	GE	1.23	.....	.82	.....
2N4989	GE	1.73	.....	1.15	.....
2N4990	GE	.89	.....	.59	.....
2N4991	GE	.93	.....	.62	.....
2N4992	GE	1.35	.....	.90	.....
2N4993	GE	1.65	.....	1.10	.....
2N5024	MOT	7.35	.....	4.90	.....
2N5027	GE	.60	.....	.40	.....
2N5028	GE	.69	.....	.48	.....
2N5029	GE	.69	.....	.48	.....
2N5030	GE	.60	.....	.40	.....
2N5034	RCA	1.34	.....	.93	.....
2N5035	RCA	1.32	.....	.92	.....
2N5036	RCA	1.42	.....	.99	.....
2N5037	RCA	1.41	.....	.96	.....
2N5060	MOT	.77	.....	.51	.....
2N5061	MOT	.83	.....	.55	.....
2N5062	MOT	.96	.....	.64	.....
2N5063	MOT	1.09	.....	.85	.....
2N5067	MOT	1.80	.....	1.20	.....
2N5068	MOT	2.25	.....	1.50	.....
2N5069	MOT	2.85	.....	1.90	.....
2N5086	MOT	.75	.....	.50	.....
2N5087	MOT	.81	.....	.54	.....
2N5088	MOT	.75	.....	.50	.....
2N5089	MOT	.98	.....	.65	.....
2N5253	RAY	9.75	.....	6.50	.....
3N34	TI	5.00	.....	4.15	.....
3N35	TI	22.50	.....	15.00	.....
3N58	GE	3.40	.....	2.25	.....
3N59	GE	3.75	.....	2.50	.....
3N60	GE	4.15	.....	2.75	.....
3N74	TI	15.00	.....	10.00	.....
3N75	TI	12.00	.....	8.00	.....
3N81	GE	3.40	.....	2.25	.....
3N82	GE	4.95	.....	3.30	.....
3N83	GE	2.13	.....	1.42	.....
3N84	GE	1.98	.....	1.32	.....
3N85	GE	3.30	.....	2.20	.....
3N85	TI	3.30	.....	2.20	.....
3N86	GE	6.00	.....	4.00	.....
3N90	SPR	11.25	.....	7.50	.....
3N92	SPR	6.75	.....	4.50	.....
3N105	SPR	7.50	.....	5.00	.....
3N106	SPR	9.00	.....	6.00	.....
3N107	SPR	12.00	.....	8.00	.....
3N108	TI	29.50	.....	19.65	.....
3N109	TI	24.00	.....	16.00	.....
3N110	TI	18.00	.....	12.00	.....
3N111	TI	11.25	.....	7.50	.....
3N117	SPR	7.50	.....	5.00	.....
3N123	SPR	3.30	.....	2.20	.....
3N124	MOT	4.35	.....	2.90	.....
3N125	MOT	4.35	.....	2.90	.....
3N126	MOT	4.35	.....	2.90	.....
3N128	RCA	1.46	.....	1.01	.....
.4M10ZS-10	MOT	1.15	.75	.71	.64
.4M100ZS-10	MOT	1.35	.90	.85	.76
.4M100ZS-5	MOT	1.60	1.05	1.00	.90
.4M10AZ5	MOT	2.75	2.35	2.05	.....
.4M10AZ10	MOT	2.00	1.70	1.50	.....
.4M11ZS-5	MOT	1.40	.95	.87	.78
.4M11ZS-10	MOT	1.15	.75	.71	.64
.4M12AZ5	MOT	2.75	2.35	2.05	.....
.4M12AZ10	MOT	2.00	1.70	1.50	.....
.4M12ZS-5	MOT	1.40	.95	.87	.78
.4M12ZS-10	MOT	1.15	.75	.71	.64
.4M1.3FR5	MOT	1.66	1.25	1.44	.....
.4M13ZS-5	MOT	1.40	.95	.87	.78
.4M1.36FR2	MOT	2.30	1.75	2.00	.....
.4M13ZS-10	MOT	1.15	.75	.71	.64
.4M15ZS-5	MOT	1.40	.95	.87	.78
.4M15ZS-10	MOT	1.15	.75	.71	.64
.4M16ZS-5	MOT	1.40	.95	.87	.78
.4M16ZS-10	MOT	1.15	.75	.71	.64
.4M18ZS-5	MOT	1.40	.95	.87	.78
.4M18ZS-10	MOT	1.15	.75	.71	.64
.4M20ZS-10	MOT	1.15	.75	.71	.64
.4M20ZS-5	MOT	1.40	.95	.87	.78
.4M2.04FR2	MOT	3.05	2.30	2.65	.....
.4M2.04FR5	MOT	2.40	1.80	2.05	.....
.4M22ZS-5	MOT	1.40	.95	.87	.78
.4M2.4AZ5	MOT	2.75	2.35	2.05	.....
.4M2.4AZ10	MOT	2.00	1.70	1.50	.....
.4M22ZS-10	MOT	1.15	.75	.71	.64
.4M24ZS-10	MOT	1.15	.75	.71	.64
.4M24ZS-5	MOT	1.40	.95	.87	.78
.4M2.7AZ5	MOT	2.75	2.35	2.05	.....
.4M2.7AZ10	MOT	2.00	1.70	1.50	.....
.4M277S-5	MOT	1.40	.95	.87	.78
.4M27ZS-10	MOT	1.15	.75	.71	.64
.4M30ZS-10	MOT	1.15	.75	.71	.64
.4M3.3ZS-5	MOT	1.40	.95	.87	.78
.4M33ZS-10	MOT	1.15	.75	.71	.64
.4M3.3ZS-10	MOT	1.15	.75	.71	.64
.4M3.6AZ5	MOT	2.75	2.35	2.05	.....
.4M3.6ZS-5	MOT	1.40	.95	.87	.78
.4M3.9AZ5	MOT	2.75	2.35	2.05	.....
.4M3.6ZS-10	MOT	1.15	.75	.71	.64
.4M3.9AZ10	MOT	2.00	1.70	1.50	.....
.4M3.9ZS-5	MOT	1.40	.95	.87	.78
.4M3.0AZ5	MOT	2.75	2.35	2.05	.....
.4M3.0AZ10	MOT	2.00	1.70	1.50	.....
.4M30ZS-5	MOT	1.40	.95	.87	.78
.4M3.3AZ5	MOT	2.75	2.35	2.05	.....
.4M3.3AZ10	MOT	2.00	1.70	1.50	.....
.4M33ZS-5	MOT	1.40	.95	.87	.78
.4M36ZS-5	MOT	1.60	1.05	1.00	.90
.4M36ZS-10	MOT	1.35	.90	.85	.76
.4M38ZS-5	MOT	1.60	1.05	1.00	.90
.4M3.9ZS-10	MOT	1.15	.75	.71	.64
.4M4.3ZS-10	MOT	1.15	.75	.71	.64
.4M38ZS-10	MOT	1.35	.90	.85	.76
.4M4.3AZ5	MOT	2.75	2.35	2.05	.....
.4M4.3AZ10	MOT	2.00	1.70	1.50	.....
.4M4.3ZS-5	MOT	1.40	.95	.87	.78
.4M4.7AZ5	MOT	2.75	2.35	2.05	.....
.4M4.7AZ10	MOT	2.00	1.70	1.50	.....
.4M4.7ZS-5	MOT	1.40	.95	.87	.78
.4M4.7ZS-10	MOT	1.15	.75	.71	.64
.4M43ZS-5	MOT	1.60	1.05	1.00	.90
.4M43ZS-10	MOT	1.35	.90	.85	.76
.4M47ZS-10	MOT	1.35	.90	.85	.76
.4M47ZS-5	MOT	1.60	1.05	1.00	.90
.4M5.1AZ5	MOT	2.75	2.35	2.05	.....
.4M5.1AZ10	MOT	2.00	1.70	1.50	.....
.4M5.1ZS-5	MOT	1.40	.95	.87	.78
.4M5.6AZ5	MOT	2.75	2.35	2.05	.....
.4M5.6AZ10	MOT	2.00	1.70	1.50	.....
.4M5.6ZS-5	MOT	1.40	.95	.87	.78
.4M5.6ZS-10	MOT	1.15	.75	.71	.64
.4M51ZS-5	MOT	1.60	1.05	1.00	.90
.4M51ZS-10	MOT	1.35	.90	.85	.76
.4M56ZS-10	MOT	1.35	.90	.85	.76
.4M56ZS-5	MOT	1.60	1.05	1.00	.90
.4M6.2ZS-10	MOT	1.15	.75	.71	.64
.4M62ZS-10	MOT	1.35	.90	.85	.76
.4M6.2AZ5	MOT	2.75	2.35	2.05	.....
.4M6.2AZ10	MOT	2.00	1.70	1.50	.....
.4M6.2ZS-5	MOT	1.40	.95	.87	.78
.4M6.8AZ5	MOT	2.75	2.35	2.05	.....
.4M6.8AZ10	MOT	2.00	1.70	1.50	.....
.4M6.8ZS-5	MOT	1.40	.95	.87	.78
.4M6.8ZS-10	MOT	1.15	.75	.71	.64
.4M62ZS-5	MOT	1.60	1.05	1.00	.90
.4M64FR10	MOT	.33	.25	.....	.....
.4M68ZS-10	MOT	1.35	.90	.85	.76
.4M68ZS-5	MOT	1.60	1.05	1.00	.90
.4M7.5AZ5	MOT	2.75	2.35	2.05	.....
.4M7.5AZ10	MOT	2.00	1.70	1.50	.....
.4M7.5ZS-5	MOT	1.40	.95	.87	.78
.4M7.5ZS-10	MOT	1.15	.75	.71	.64
.4M75ZS-10	MOT	1.35	.90	.85	.76
.4M75ZS-5	MOT	1.60	1.05	1.00	.90
.4M8.2AZ5	MOT	2.75	2.35	2.05	.....
.4M8.2AZ10	MOT	2.00	1.70	1.50	.....
.4M8.2ZS-5	MOT	1.40	.95	.87	.78
.4M8.2ZS-10	MOT	1.15	.75	.71	.64
.4M82ZS-10	MOT	1.35	.90	.85	.76
.4M82ZS-5	MOT	1.60	1.05	1.00	.90
.4M9.1AZ5	MOT	2.75	2.35	2.05	.....
.4M9.1AZ10	MOT	2.00	1.70	1.50	.....
.4M9.1ZS-5	MOT	1.40	.95	.87	.78
.4M9.1ZS-10	MOT	1.15	.75	.71	.64
.4M91ZS-5	MOT	1.60	1.05	1.00	.90
.4M91ZS-10	MOT	1.35	.90	.85	.76
1.5M10Z5	MOT	6.95	6.00	5.25	.....
1.5M100Z5	MOT	6.95	6.00	5.25	.....
1.5M12Z5	MOT	6.95	6.00	5.25	.....
1.5M15Z5	MOT	6.95	6.00	5.25	.....
1.5M17Z5	MOT	6.95	6.00	5.25	.....
1.5M18Z5	MOT	6.95	6.00	5.25	.....
1.5M20Z5	MOT	6.95	6.00	5.25	.....
1.5M24Z5	MOT	6.95	6.00	5.25	.....
1.5M25Z5	MOT	6.95	6.00	5.25	.....
1.5M30Z5	MOT	6.95	6.00	5.25	.....
1.5M33Z5	MOT	6.95	6.00	5.25	.....
1.5M6.8Z5	MOT	6.95	6.00	5.25	.....
1.5M62Z5	MOT	6.95	6.00	5.25	.....
1.5M75Z5	MOT	6.95	6.00	5.25	.....
1/4M10Z	MOT	2.10	1.95	1.70	.....
1/4M10Z5	MOT	4.00	3.65	3.20	.....
1/4M100Z5	MOT	2.80	2.60	2.25	.....
1/4M12Z5	MOT	4.00	3.65	3.20	.....
1/4M13Z5	MOT	4.00	3.65	3.20	.....
1/4M15Z	MOT	2.10	1.95	1.70	.....
1/4M15Z5	MOT	4.00	3.65	3.20	.....
1/4M150Z	MOT	2.80	2.60	2.25	.....
1/4M16Z5	MOT	4.00	3.65	3.20	.....
1/4M2.4AZ	MOT	2.10	1.95	1.70	.....
1/4M2.4AZ5	MOT	4.00	3.65	3.20	.....
1/4M2.7AZ	MOT	2.10	1.95	1.70	.....
1/4M2.7AZ5	MOT	4.00	3.65	3.20	.....
1/4M20Z	MOT	2.10	1.95	1.70	.....

Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1/4M20Z5	MOT	4.00	3.65	3.20	
1/4M3.0AZ	MOT	2.10	1.95	1.70	
1/4M3.0AZ5	MOT	4.35	4.00	3.50	
1/4M3.3AZ	MOT	2.10	1.95	1.70	
1/4M3.3AZ5	MOT	4.00	3.65	3.20	
1/4M3.9AZ	MOT	2.00	1.70	1.50	
1/4M4.7AZ	MOT	2.10	1.95	1.70	
1/4M4.7AZ5	MOT	4.00	3.65	3.20	
1/4M5.6AZ	MOT	2.10	1.95	1.70	
1/4M50Z5	MOT	4.35	4.00	3.50	
1/4M6.2AZ	MOT	2.10	1.95	1.70	
1/4M6.2AZ5	MOT	4.00	3.65	3.20	
1/4M6.8AZ	MOT	2.10	1.95	1.70	
1/4M6.8AZ5	MOT	4.00	3.65	3.20	
1/4M6.8Z5	MOT	4.00	3.65	3.20	
1/4M62Z5	MOT	4.35	4.00	3.50	
1/4M7.5Z5	MOT	4.00	3.65	3.20	
1/4M8.2Z5	MOT	4.00	3.65	3.20	
1/4M9.1Z5	MOT	4.00	3.65	3.20	
1D303	GE	1.60			
1ZC11T10	INT	1.12		.85	
1ZC12T10	INT	1.12		.85	
1ZC13T10	INT	1.12		.85	
1ZC16T10	INT	1.12		.85	
1ZC20T10	INT	1.12		.85	
1ZC24T10	INT	1.12		.85	
1ZC27T10	INT	1.12		.85	
1ZC3.9T10	INT	2.70	2.40	2.20	
1ZC30T10	INT	1.12		.85	
1ZC4.3T10	INT	1.34		1.02	
1ZC5.1T10	INT	1.34		1.02	
1ZC6.2T10	INT	1.34		1.02	
1ZC7.5T10	INT	1.12		.85	
1ZC9.1T10	INT	1.12		.85	
1ZF11T10	INT	1.12		.85	
1ZF12T10	INT	1.12		.85	
1ZF13T10	INT	1.12		.85	
1ZF16T10	INT	1.12		.85	
1ZF20T10	INT	1.12		.85	
1ZF24T10	INT	1.12		.85	
1ZF27T10	INT	1.12		.85	
1ZF30T10	INT	1.12		.85	
1ZF4.3T10	INT	1.34		1.02	
1ZF5.1T10	INT	1.34		1.02	
1ZF6.2T10	INT	1.34		1.02	
1ZF7.5T10	INT	1.12		.85	
1ZF9.1T10	INT	1.12		.85	
1ZM10T10	INT	.90		.70	
1ZM10T20	IR	.80		.60	
1ZM10T5	IR	1.20		.90	
1ZH11T10	IR	.90		.70	
1ZM11T20	IR	.80		.60	
1ZM11T5	IR	1.20		.90	
1ZM12T10	IR	.90		.70	
1ZM12T20	IR	.80		.60	
1ZM12T5	IR	1.20		.90	
1ZM13T10	IR	.90		.70	
1ZM13T20	IR	.80		.60	
1ZM13T5	IR	1.20		.90	
1ZM15T10	IR	.90		.70	
1ZM15T20	IR	.80		.60	
1ZM15T5	IR	1.20		.90	
1ZM16T10	INT	.90		.70	
1ZM16T20	INT	.80		.60	
1ZM16T5	INT	1.20		.90	
1ZM18T10	INT	.90		.70	
1ZM18T20	INT	.80		.60	
1ZM18T5	INT	1.20		.90	
1ZM20T10	INT	.90		.70	
1ZM20T20	INT	.80		.60	
1ZM20T5	IT	1.20		.90	
1ZM3.3T10	IR	1.20		.90	
1ZM3.3T5	IR	1.50		1.10	
1ZM3.6T10	IR	1.20		.90	
1ZM3.6T5	IR	1.50		1.10	
1ZM3.9T10	IR	1.20		.90	
1ZM3.9T5	IR	1.50		1.10	
1ZM4.3T10	IR	1.20		.90	
1ZM4.3T5	IR	1.50		1.10	
1ZM4 7T10	IR	1.20		.90	
1ZM4.7T5	IR	1.20		.90	
1ZM5.1T10	IR	1.50		1.10	
1ZM5.1T5	IR	1.50		1.10	
1ZM5.6T10	IR	1.20		.90	
1ZM5.6T5	IR	1.50		1.10	
1ZM6.2T10	IR	1.20		.90	
1ZM6.2T5	IR	1.50		1.10	
1ZM6 8T10	IR	.90		.70	
1ZM6.8T20	IR	.80		.60	
1ZM6.8T5	IR	1.20		.90	
1ZM7 5T10	IR	.90		.70	
1ZM7.5T20	IR	.80		.60	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
1ZM7.5T5	IR	1.20		.90	
1ZM8.2T10	IR	.90		.70	
1ZM8.2T20	IR	.80		.60	
1ZM8.2T5	IR	1.20		.90	
1ZM9.1T10	IR	.90		.70	
1ZM9.1T20	IR	.80		.60	
1ZM9.1T5	IR	1.20		.90	
1Z10T10	INT	2.70	2.40	2.20	
1Z10T5	INT	3.50	3.00	2.75	
1Z12T10	INT	2.70	2.40	2.20	
1Z12T5	INT	3.50	3.00	2.75	
1Z15T10	INT	2.70	2.40	2.20	
1Z15T5	INT	3.50	3.00	2.75	
1Z18T10	INT	2.70	2.40	2.20	
1Z18T5	INT	3.50	3.00	2.75	
1Z22T10	INT	2.70	2.40	2.20	
1Z22T5	INT	3.50	3.00	2.75	
1Z27T10	INT	2.70	2.40	2.20	
1Z27T5	INT	3.50	3.00	2.75	
1Z3.9T10	INT	2.70	2.40	2.20	
1Z3.9T5	INT	3.50	3.00	2.75	
1Z30T5	INT	3.70		2.95	
1Z4.7T10	INT	2.70	2.40	2.20	
1Z4.7T5	INT	3.50	3.00	2.75	
1Z5.1T5	INT	3.50	3.00	2.75	
1Z5.6T10	INT	2.70	2.40	2.20	
1Z5.6T5	INT	3.50	3.00	2.75	
1Z6.8T10	INT	2.70	2.40	2.20	
1Z6.8T5	INT	3.50	3.00	2.75	
1Z8.2T5	INT	3.50	3.00	2.75	
2A	HOF	7.50		6.00	
2AFB05AP	INT	4.05		3.25	
2AFB1AP	INT	4.30		3.45	
2AFB2AP	INT	5.15		4.15	
2AFB3AP	INT	5.55		4.50	
2AFB4AP	INT	6.50		5.30	
2AFB5AP	INT	8.00		6.40	
2E4-91	INT	.55	.50	.42	

Type No.	Mfr.	1-24	25-99	100-up
2F4	SAR	.40	.36	.33
2R174	GE	2.20		
3AF1	SAR	.60	.53	.49
3AF2	SAR	.65	.57	.53
3AF4	SAR	.85	.72	.67
3AF6	SAR	1.25	1.07	1.00
3BS1	INT	.53		.38
3CS1	INT	.54		.36

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
3FS1	INT	.81		.54	
3F10	INT	1.20		.79	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
3F100D	INT	7.05	6.34	5.71	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
3F20	INT	2.20		1.45	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
3F20D	INT	.93	.82	.74	
3F40D	INT	1.50	1.43	1.27	
3F60D	INT	3.51	3.16	2.84	
3F80D	INT	5.43	4.89	4.40	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
3GS1	INT	.90		.60	
3HS1	INT	1.19		.79	
3MS10	INT	.87		.58	
3MS30	INT	1.23		.82	
3RC10A	INT	5.70		3.95	
3RC20A	INT	9.45		6.30	
3RC30A	INT	13.50		9.00	
3RC40A	INT	16.80		10.80	
3RC5A	INT	5.10		3.40	
3Z10T10	INT	3.80	3.40	3.05	
3Z10T5	INT	4.55	4.05	3.65	
3Z12T10	INT	3.80	3.40	3.05	
3Z12T5	INT	4.55	4.05	3.65	
3Z15T10	INT	3.80	3.40	3.05	
3Z15T5	INT	4.55	4.05	3.65	
3Z18T10	INT	3.80	3.40	3.05	
3Z18T5	INT	4.55	4.05	3.65	
3Z22T10	INT	3.80	3.40	3.05	
3Z22T5	INT	4.55	4.05	3.65	
3Z27T5	INT	4.55	4.05	3.65	
3Z3.9T10	INT	3.80	3.40	3.05	
3Z3.9T5	INT	4.55	4.05	3.65	
3Z4.7T10	INT	3.80	3.40	3.05	
3Z4.7T5	INT	4.55	4.05	3.65	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
3Z5.6T10	INT	3.80	3.40	3.05	
3Z5.6T5	INT	4.55	4.05	3.65	
3Z6.8T5	INT	4.55	4.05	3.65	
3Z8.2T10	INT	3.80	3.40	3.05	
3Z8.2T5	INT	4.55	4.05	3.65	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
4D4	INT	.55	.40	.31	
4D6	INT	.65	.55	.40	
4D8	INT	.75	.65	.55	
4JAPA107	GE	95.60	63.75	42.50	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
4JA10N	GE	1.80		1.20	
4JA211CB2	GE	25.70		22.50	
4JA40A	GE	1.77		1.18	
4JA40B	GE	1.82		1.21	
4JA40C	GE	2.40		1.60	
4JA40D	GE	2.90		1.93	
4JA40E	GE	4.20		2.80	
4JA40J	GE	1.73		1.15	
4JA40M	GE	4.20		2.80	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
4JA411CB1	GE	7.20		6.00	
4JPA112	GE	20.50	13.65	9.10	
4JPA113	GE	15.15	10.10	6.75	
4JPA114	GE	17.30	11.55	7.70	
4JPA116	GE	73.10	48.75	32.50	
4JPA345	GE	44.75	29.95	19.90	
4JPA358	GE	39.40	26.25	17.50	
4JPA908	GE	9.65	6.45	4.30	
4JPA909	GE	9.65	6.45	4.30	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
4JZ4X10B	GE	3.00		2.00	
4JZ4X11B	GE	3.00		2.00	
4JZ4X12B	GE	3.00		2.00	
4JZ4X13B	GE	3.00		2.00	
4JZ4X15B	GE	3.00		2.00	
4JZ4X16B	GE	3.00		2.00	
4JZ4X5.1B	GE	2.40		1.60	
4JZ4X5.6B	GE	2.40		1.60	
4JZ4X6.2B	GE	2.40		1.60	
4JZ4X6.8B	GE	2.40		1.60	
4JZ4X7.5B	GE	2.40		1.60	
4JZ4X8.2B	GE	3.00		2.00	
4JZ4X9.1B	GE	3.00		2.00	
4A10	INT	2.45		1.43	
5A2	INT	.50		.33	
5A3	INT	.59		.39	
5A4	INT	.68		.45	
5A5	INT	.78		.52	
5A6	INT	.87		.58	
5A8	INT	2.00		1.18	
5E35	GE	1.35		.90	
5E36	GE	2.67		1.78	
5MA10	INT	3.40		2.40	
5MA2	INT	.75		.60	
5MA4	INT	.94		.76	
5MA5	INT	1.25		.99	
5MA6	INT	1.70		1.35	
5MA8	INT	2.70		1.95	
5RC10A	INT	5.72		3.80	
5RC10B	INT	8.95		5.95	
5RC15A	INT	6.92		4.60	
5RC15B	INT	11.05		7.35	
5RC2A	INT	5.00		3.30	
5RC2B	INT	5.50		3.63	
5RC20A	INT	8.12		5.40	
5RC20B	INT	13.45		8.95	
5RC25B	INT	15.50		10.45	
5R308B	INT	18.35		12.20	
5RC40B	INT	23.60		15.50	
5RC5A	INT	5.40		3.60	
5RC5B	INT	6.30		3.97	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
5SM1020E6	INT	13.20		12.15	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
5V1/1N163	INT				
6.8SC20	INT	1.10	.99	.83	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
6F100D	INT	6.63	5.97	5.37	
6F20D	INT	1.45	1.31	1.16	
6F40D	INT	2.61	2.35	2.09	
6F60D	INT	3.30	2.97	2.67	
6F80D	INT	3.90	3.51	2.84	

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-49	50-999	1000-up	
6RS2S1SA/20D20	GE	5.25		4.30	
6RS20SP/1B1	GE	.63		.52	
6RS20SP/10B10	GE	1.73		1.31	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
6RS20SP/2B2	GE	.80		.60	
6RS20SP/3B3	GE	.91		.69	
6RS20SP/4B4	GE	1.03		.78	
6RS20SP/5B5	GE	1.15		.87	

Type No.	Mfr.	1-49	50-999	1000-up	
6RS20SP/6B6	GE	1.26		.95	
6RS20SP/7B7	GE	1.38		1.04	
6RS20SP/8B8	GE	1.50		1.13	
6RS20SP/9B9	GE	1.62		1.22	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
6RS21SA1D	GE	1.87		1.33	
6RS21SA 10D10	GE	3.47		2.55	

Type No.	Mfr.	1-49	50-999	1000-up	
6RS21SA 11D11	GE	3.65		2.70	
6RS21SA/12D12	GE	3.85		2.88	2.62
6RS21SA/2D2	GE	2.00		1.45	
6RS21SA/3D3	GE	2.00		1.63	1.43
6RS21SA/4D4	GE	2.38		1.70	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
6RS21SA/5D5	GE	2.55		1.85	

Type No.	Mfr.	1-49	50-999	1000-up	
6RS21SA/7D7	GE	2.90		2.10	
6RS21SA/8D8	GE	3.10		2.25	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
6RS21SA/9D9	GE	3.30		2.40	
6RS5S/1B1	GE	.62		.47	
6RS5SP2B2	GE	.68		.51	
6RS5SP4B4	GE	.81		.61	
7A-32	GE	2.25		1.50	
7A30	GE	1.01		.67	
7A31	GE	1.08		.72	
7B4/2N2201	GE	6.90		4.60	
7PS834	MOT	.70		.46	

Type No.	Mfr.	1-4	5-99	100-up	
8D10	INT	1.25	1.00	.90	.80
8D4	INT	.59	.50	.44	.40
8D6	INT	.67	.59	.53	.48
8D8	INT	1.00	.85	.70	.61

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
10	SAR	.90	.54		
10C1	IR	.32		.29	
10C10	IR	1.70		1.20	
10C2	IR	.35		.32	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
10C4	IR	.42		.38	
10C6	IR	.52		.46	
10C8	IR	.75		.65	
10DB10A	IR	5.40		4.85	
10DB5A	IR	2.90		2.60	
10DB7A	IR	3.35		3.00	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
10B	SAR	1.05	.89	.83	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
10B1	INT	.50		.37	
10B10	INT	2.05		1.64	
10B2	INT	.55		.40	
10B4	INT	.80		.64	
10B5	INT	.95		.75	
10C3	INT	.38		.38	
10C5	INT	.47		.43	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
10D10	INT	2.45	1.43		
10D2	INT	.50	.33		
10D3	INT	.55	.40		
10D4	INT	.68	.45		
10D5	INT	.78	.52		
10D6	INT	.97	.58		
10D8	INT	2.00	1.18		

Type No.	Mfr.	1-24	25-99	100-up
10JM	SAR	2.24	1.92	1.80
10LA	SAR	3.24	2.88	2.68
10M	SAR	.60	.55	.51

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
10RC2	INT	6.00		3.50	
10RC40A	INT	15.55		10.35	
10RC5	INT	6.75		3.85	
10RC5A	INT	7.60		4.25	
10RC50A	INT	18.35		12.20	

Type No.	Mfr.	1-24	25-99	100-up
10T5.6	SAR	4.80	4.14	3.86
10T6.2	SAR	3.39	2.90	2.70
10T7.5	SAR	4.83	4.14	3.86
10T9.1	SAR	4.83	4.14	3.86

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
10Z10T5	INT	8.00	7.10	6.40	
10Z12T10	INT	5.95	5.40	4.75	
10Z12T5	INT	8.00	7.10	6.40	
10Z15T10	INT	5.95	5.40	4.75	
10Z18T10	INT	5.95	5.40	4.75	
10Z27T5	INT	8.00	7.10	6.40	
10Z3.9T10	INT	5.95	5.40	4.75	
10Z3.9T5	INT	8.00	7.10	6.40	
10Z4.7T10	INT	5.95	5.40	4.75	
10Z4.7Z5	INT	8.00	7.10	6.40	
10Z5.6T10	INT	5.95	5.40	4.75	
10Z5.6T5	INT	8.00	7.10	6.40	
10Z6.8T10	INT	5.95	5.40	4.75	
10Z6.8T5	INT	8.00	7.10	6.40	
10Z8.2T5	INT	8.00	7.10	6.40	
12A8	GE	5.65		3.75	
12F100	INT	9.80		6.60	
12F70A	INT	7.80		5.25	
12F80A	INT	8.70		5.85	
12F90A	INT	9.40		6.30	
12X207-1	GE	75.00		50.00	
12X207-2	GE	60.00		40.00	
12X218	GE	82.50		55.00	
12X235	GE	22.50		15.00	
12X239	GE	35.10		23.50	
12X257	GE	45.00		30.00	

Type No.	Mfr.	1-24	25-99	100-up
14A502	GE	15.00	13.80	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
16F10	INT	1.54		1.05	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
16F100	INT	10.70		6.90	
16F15	INT	1.98		1.38	
16F20	INT	3.03		2.04	
16F30	INT	4.10		2.60	
16F40	INT	4.90		3.15	
16F5	INT	1.38		.94	
16F50	INT	5.80		3.60	
16F60	INT	6.70		4.30	
16J1	GE	.58		.39	
16J2	GE	.45		.30	
16J3	GE	.40		.27	
16L43	GE	.51		.34	
16L44	GE	.53		.35	
16L45	GE	.57		.38	
16L63	GE	.54		.36	
16L64	GE	.57		.38	
16RC10A	INT	8.00		5.30	
16RC15A	INT	9.35		6.20	
16RC2A	INT	7.65		4.50	
16RC20A	INT	11.05		7.35	
16RC25A	INT	12.40		8.25	
16RC30A	INT	14.55		9.70	
61RC40A	INT	17.05		11.35	
16RC5A	INT	8.35		5.00	
16RC50A	INT	20.55		13.70	
16RC60	INT	11.95		8.00	
16RC60A	INT	23.20		15.45	
16RC70A	INT	31.45		20.95	
16RC80A	INT	35.95		23.95	
18DB2A	INT	2.50		2.25	
18DB3A	INT	2.60		2.35	
18DB4A	INT	2.75		2.48	
18DB6A	INT	3.05		2.75	
18DB8A	INT	3.60		3.24	
20A1	INT	.50		.35	
20A2	INT	.55		.39	
20A3	INT	.60		.43	
20A4	INT	.70		.50	
20A5	INT	.80		.56	
20A6	INT	.90		.63	
20A8	INT	1.30		.91	
20A05	INT	.45		.32	
20A10	INT	1.60		1.10	

Type No.	Mfr.	1-24	25-99	100-up
20C	SAR	.37	.32	.29
20H3P	SAR	1.20	1.03	.96
20J2	SAR	2.80	2.40	2.24
20LA	SAR	4.00	3.43	3.20
20RAN	SAR	4.30	3.72	3.46

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
20SP4B4	GE	1.03		.78	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
25-2003	INT	.12		.10	
25-2004	INT	.25		.20	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
25-2005	INT	.90		.75	
25HB15	INT	3.80			
25HB20	INT	NET 4.50			
25HB30	INT	NET 6.35			
25HB40	INT	NET 6.70			
25HB5	INT	NET 2.40			
25H15	INT	NET 3.10		2.30	
25H20	INT	3.65		2.60	
25H30	INT	4.45		3.10	
25H50	INT	5.95		3.95	

Type No.	Mfr.	1-24	25-99	100-up
25LA	SAR	4.67	4.00	3.73
30M	SAR	.70	.61	.57

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Type No.	Mfr.	1-9	10-99		
36RC10A	INT	19.30	15.10	.....	.....
36RC20A	INT	25.30	20.00	.....	.....
36RC40A	INT	45.00	35.25	.....	.....

Type No.	Mfr.	1-24	25-99	100-up	
40-H	SAR	.43	.37	.35	.....
40-LF	SAR	5.35	4.67	4.27	.....
40B	WES	1.75	1.51	1.41	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
40HF-10	IR	1.45	.....	1.05	.....
40HF-20	IR	2.00	.....	1.40	.....
40HF-30	IR	2.55	.....	1.85	.....
40HF-40	IR	3.05	.....	2.20	.....
40HF-5	IR	1.15	.....	.80	.....
40HF100	INT	9.90	.....	7.20	.....
40HF50	INT	3.85	.....	2.80	.....
40HF60	INT	4.55	.....	3.30	.....
40HF80	INT	7.05	.....	5.05	.....

Type No.	Mfr.	1-24	25-99	100-up	
40H3P	SAR	1.50	1.29	1.20	.....
40J2	SAR	4.24	3.62	3.40	.....
40J3N	SAR	4.48	3.84	3.60	.....
40J3P	SAR	4.48	3.84	3.60	.....
40LA	SAR	5.35	4.67	4.27	.....
40SAN	SAR	6.90	5.93	5.54	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
45L10	INT	8.00	.....	.....	.....
40L15	INT	10.75	.....	.....	.....
45L20	INT	14.00	.....	.....	.....
45L25	INT	16.25	.....	.....	.....
45L30	INT	17.75	.....	.....	.....
45L35	INT	18.90	.....	.....	.....
45L40	INT	25.00	.....	.....	.....
45L45	INT	21.75	.....	.....	.....
45L5	INT	7.00	.....	.....	.....
45L50	INT	22.50	.....	.....	.....
50	SAR	1.15	.70	.....	.....
51C	HOF	2.50	.....	2.00	.....
52C	HOF	3.60	.....	2.80	.....
55C	HOF	1.50	.....	1.20	.....
58C	HOF	1.00	.....	.80	.....
58CL	HOF	1.25	1.15	1.05	.....

Type No.	Mfr.	1-24	25-99	100-up	
60B	SAR	1.50	1.27	1.19	.....
60B	WES	1.95	1.66	1.54	.....
60C	SAR	.55	.45	.42	.....
60H	SAR	.47	.40	.31	.....
60H3P	SAR	2.12	1.82	1.69	.....
60LA	WES	6.45	5.52	5.15	.....
60M	SAR	.85	.70	.66	.....

Type No.	Mfr.	1-4	5-99	100-up	
61-8968	INT	1.15	1.03	.93	.84
61-8969	INT	2.95	2.65	2.35	1.95

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
70H100	INT	13.25	.....	9.30	.....
70H60	INT	7.80	.....	5.25	.....

Type No.	Mfr.	1-9	10-99
70RC10B	INT	29.90	21.78
70RC15B	INT	34.50	25.00
70RC2B	INT	20.15	15.75
70RC20B	INT	39.20	27.50
70RC25B	INT	43.75	30.80
70RC30B	INT	52.25	35.80
70RC40B	INT	68.75	42.35
70RC5B	INT	25.60	18.15

Type No.	Mfr.	1-99	100-Mix
70010	INT	13.90	553.00
70U15	INT	16.60	553.00
70U20	INT	18.90	553.00
70U30	INT	22.10	553.00

Type No.	Mfr.	1-9	10-99	100-999	1000-up
71RA100	INT	220.00	141.55	.....	.....
71RA60	INT	105.90	81.70	.....	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
72DK	TI	49.50	553.00	.....	.....
73DK	TI	49.50	553.00	.....	.....
74DK	TI	49.50	553.00	.....	.....
75	SAR	1.35	.....	.81	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
80C	SAR	.62	.53	.49	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
100	SAR	1.70	1.02	.....	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
100C	SAR	.95	.82	.76	.....

Type No.	Mfr.	1-9	10-29	30-99	
100-150	SAR	1.20	.44	.40	.....
100SC2	INT	2.75	2.55	.....	.....

Type No.	Mfr.	1-24	25-99	100-up	
109UA	WES	57.10	48.10	.....	.....
109UB	WES	74.10	62.10	.....	.....
109UC	WES	95.10	80.10	.....	.....
109WA	WES	63.10	52.10	.....	.....
109WB	WES	82.10	68.10	.....	.....
109WC	WES	105.10	87.10	.....	.....
109XA	WES	70.10	59.10	.....	.....
109XB	WES	90.10	76.10	.....	.....
109XC	WES	115.10	98.10	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
110C	HOF	1.90	.....	1.50	.....
110CL	HOF	2.15	1.95	1.75	.....
120C-9					
120C8	HOF	3.75	.....	3.45	.....

Type No.	Mfr.	1-24	25-99	100-up	
120SM	SAR	4.00	3.43	3.20	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
150	SAR	1.70	1.02	.....	.....
151-04	WES	5.65	.....	4.45	.....
151-06	WES	8.50	.....	6.65	.....
151-08	WES	11.40	.....	8.80	.....
151-09	WES	12.85	.....	10.00	.....
151-10	WES	14.40	.....	11.20	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
151RA100	INT	328.00	225.00	.....	.....
151RA60	INT	177.00	124.50	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
152-04	WES	6.55	.....	5.10	.....
152-06	WES	9.60	.....	7.50	.....
152-08	WES	12.70	.....	9.90	.....
152-09	WES	14.25	.....	11.10	.....
152-10	WES	15.85	.....	12.35	.....
153-04	WES	5.65	.....	4.45	.....
153-05	WES	7.10	.....	5.55	.....
153-06	WES	8.50	.....	6.65	.....
153-07	WES	9.95	.....	7.75	.....
153-08	WES	11.40	.....	8.80	.....
153-10	WES	14.40	.....	11.20	.....
153-12	WES	16.25	.....	12.50	.....
153-14	WES	18.30	.....	14.10	.....
153-16	WES	20.60	.....	15.80	.....
153-18	WES	23.20	.....	17.90	.....
153-20	WES	26.20	.....	20.10	.....
153-22	WES	29.60	.....	22.70	.....
153-24	WES	34.20	.....	25.85	.....
153-26	WES	38.90	.....	29.40	.....
153-28	WES	44.10	.....	33.50	.....
154-04	WES	6.55	.....	5.10	.....
154-05	WES	8.05	.....	6.55	.....
154-06	WES	9.60	.....	7.50	.....
154-08	WES	12.70	.....	9.90	.....
154-10	WES	15.85	.....	12.35	.....
154-12	WES	18.70	.....	14.40	.....
154-14	WES	21.00	.....	16.20	.....
154-16	WES	23.70	.....	18.30	.....
154-18	WES	26.70	.....	20.35	.....
154-20	WES	28.90	.....	22.10	.....
154-22	WES	32.70	.....	24.90	.....
154-24	WES	37.20	.....	28.40	.....
154-26	WES	42.35	.....	32.30	.....
154-28	WES	48.20	.....	36.80	.....
163-04	WES	14.60	.....	11.35	.....
163-05	WES	16.90	.....	12.60	.....
163-06	WES	18.60	.....	13.40	.....
163-07	WES	19.60	.....	14.15	.....
163-08	WES	20.60	.....	14.85	.....
163-09	WES	21.60	.....	15.56	.....
163-10	WES	22.60	.....	16.30	.....
163-12	WES	25.60	.....	18.45	.....
163-14	WES	28.60	.....	20.60	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
163-16	WES	31.60	.....	22.75	.....
163-18	WES	34.60	.....	24.90	.....
163-20	WES	37.60	.....	27.10	.....
164-04	WES	19.50	.....	14.15	.....
164-05	WES	20.60	.....	14.85	.....
164-06	WES	21.60	.....	15.60	.....
164-07	WES	22.60	.....	16.30	.....
164-08	WES	23.60	.....	17.00	.....
164-09	WES	24.60	.....	17.75	.....
164-10	WES	25.60	.....	18.45	.....
164-12	WES	28.60	.....	20.60	.....
164-14	WES	31.60	.....	22.75	.....
164-16	WES	34.60	.....	24.90	.....
164-18	WES	37.60	.....	27.10	.....
164-20	WES	40.60	.....	29.30	.....
200	SAR	2.10	1.26	.....	.....
202M	WES	17.00	.....	11.00	.....
202M	WES	17.00	.....	11.00	.....
203M	WES	22.00	.....	16.10	.....
2106500	BEN	.50	.....	.25	.20
2106518	BEN	.40	.....	.20	.16

Type No.	Mfr.	1-24	25-99	100-up	
211A	WES	18.60	14.60	.....	.....
211B	WES	21.50	16.80	.....	.....
211C	WES	25.10	19.60	.....	.....
211D	WES	28.50	22.30	.....	.....
211E	WES	32.00	25.00	.....	.....
211F	WES	38.00	29.70	.....	.....
211H	WES	50.15	39.25	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
211M	WES	73.15	.....	57.25	.....
211S	WES	108.00	.....	85.05	.....
211Z	WES	148.75	.....	117.50	.....

Type No.	Mfr.	1-24	25-99	100-up	
212A	WES	32.80	25.00	.....	.....
212B	WES	37.00	28.50	.....	.....
212D	WES	47.20	37.00	.....	.....
212F	WES	61.60	48.40	.....	.....
212H	WES	84.00	63.00	.....	.....
212K	WES	97.50	76.00	.....	.....
212M	WES	117.00	91.20	.....	.....
212S	WES	259.00	149.50	.....	.....
212V	WES	305.00	175.00	.....	.....
212Z	WES	360.00	206.00	.....	.....
213A	WES	22.40	17.90	.....	.....
213B	WES	27.00	20.25	.....	.....
213D	WES	33.00	26.30	.....	.....
213F	WES	42.80	34.00	.....	.....
213H	WES	57.50	45.00	.....	.....
213K	WES	68.00	53.75	.....	.....
213M	WES	82.25	64.75	.....	.....
213S	WES	132.00	105.50	.....	.....
213V	WES	141.00	113.00	.....	.....
213Z	WES	165.00	132.00	.....	.....
218B	WES	67.00	56.00	.....	.....
218C	WES	70.00	59.00	.....	.....
218D	WES	73.00	62.00	.....	.....
218F	WES	85.00	74.00	.....	.....
218H	WES	109.00	93.00	.....	.....
218K	WES	134.00	113.00	.....	.....
218M	WES	156.80	134.00	.....	.....
218P	WES	285.00	162.00	.....	.....
218S	WES	239.00	197.00	.....	.....
218V	WES	277.00	237.00	.....	.....
218Z	WES	315.00	269.00	.....	.....
218ZB	WES	351.00	296.00	.....	.....
218ZD	WES	406.00	332.00	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
219A	WES	18.60	.....	14.60	.....
219B	WES	21.50	.....	16.80	.....

Type No.	Mfr.	1-24	25-99	100-up	
219C	WES	26.50	20.50	.....	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
219D	WES	28.50	.....	22.30	.....
219F	WES	38.00	.....	29.70	.....
219H	WES	50.15	.....	39.25	.....
219K	WES	60.25	.....	47.15	.....
219M	WES	73.15	.....	57.25	.....
219P	WES	89.70	.....	70.20	.....
219S	WES	108.00	.....	85.05	.....
219V	WES	126.00	.....	99.50	.....
219Z	WES	148.75	.....	117.50	.....
219ZB	WES	174.00	.....	130.50	.....

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-24	25-99	100-up	
219ZD	WES	285.50	154.50		
223A	WES	124.00	108.00		
223B	WES	132.00	115.00		
223C	WES	138.00	120.00		
223D	WES	144.00	125.00		
223F	WES	166.00	145.00		
223H	WES	210.00	183.00		
223K	WES	260.00	226.00		
223M	WES	315.00	274.00		
223P	WES	370.00	322.00		
223S	WES	425.00	370.00		
223V	WES	485.00	422.00		
223Z	WES	540.00	470.00		
223ZB	WES	600.00	525.00		
223ZD	WES	675.00	590.00		

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
242ZB	WES	11.80		10.75	
242ZD	WES	17.10		14.40	
2422H	WES	28.10		24.00	
2422M	WES	38.60		33.20	

Type No.	Mfr.	1-24	25-99	100-up	
254A	WES	22.30	17.25		
254F	WES	45.45	35.25		
254K	WES	72.45	56.25		
254P	WES	114.00	89.30		
254V	WES	163.40	126.35		
254ZB	WES	240.80	179.55		
254ZF	WES	322.05	243.20		

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
254A	WES	24.80		19.20	
254F	WES	50.50		39.20	
254K	WES	80.50		62.50	
254P	WES	120.00		94.00	
254V	WES	172.00		133.00	

Type No.	Mfr.	1-24	25-99	100-up	
254ZB	WES	285.00	223.00		
280SM	SAR	7.35	6.30	5.87	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
300	SAR	2.20	1.26		

Type No.	Mfr.	1-9	10-29	30-99	
300-500	SAR	2.20	1.70	.61	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
320-H	WES	.75		.50	
366-F	WES	1.08		.70	
368A	WES	.75		.64	
368B	WES	.80		.67	
368C	WES	.88		.69	
368D	WES	1.05		.73	
368F	WES	1.25		.84	
368H	WES	1.45		.94	
368K	WES	1.70		1.10	
368M	WES	1.99		1.35	
376A	WES	6.30		5.40	
376B	WES	7.50		6.40	
376C	WES	8.95		7.60	
376D	WES	10.70		9.50	
376F	WES	13.60		11.50	
376H	WES	15.50		13.10	
376M	WES	21.30		18.00	
377-A	WES	7.95		6.25	
377-B	WES	9.45		7.50	
377-C	WES	11.40		8.90	
377-D	WES	15.45		11.00	
377-E	WES	16.50		12.30	
377-H	WES	20.20		16.00	
377-K	WES	25.30		22.10	
377-M	WES	31.00		26.10	
384A	WES	.24		.20	
384B	WES	.29		.24	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
384D	WES	.33		.28	
384F	WES	.38		.32	
384H	WES	.42		.35	
384K	WES	.46		.38	
384M	WES	.52		.44	
384P	WES	.74		.62	
384S	WES	.89		.75	
384Z	WES	12.2		1.02	
3861A	WES	1.35		.90	
3861C	WES	1.74		1.20	
3861F	WES	2.40		1.62	
3861K	WES	3.00		2.05	
387C	WES	8.35		5.55	
398A	WES	.46		.31	
398B	WES	.50		.35	
398D	WES	.62		.42	
398F	WES	.70		.47	
398H	WES	.82		.55	
398K	WES	.94		.63	
398M	WES	1.08		.72	
398P	WES	1.28		.86	
398S	WES	1.60		1.07	
398Z	WES	2.04		1.37	
400	SAR	2.80	1.61		
407A	WES	.64		.43	
407B	WES	.67		.45	
407C	WES	.74		.50	
407D	WES	.85		.57	
407F	WES	1.06		.71	
407H	WES	1.15		.77	
407K	WES	1.38		.93	
407M	WES	1.71		1.15	
408A	WES	.67		.45	
408B	WES	.70		.47	
408C	WES	.78		.52	
408D	WES	.90		.60	
408F	WES	1.11		.75	
408H	WES	1.22		.82	
408K	WES	1.45		.97	
408M	WES	1.80		1.23	
409A	WES	.71		.47	
409B	WES	.74		.50	
409C	WES	.82		.55	
409D	WES	.95		.65	
409F	WES	1.17		.78	
409H	WES	1.28		.86	
409K	WES	1.53		1.03	
409M	WES	1.90		1.27	
416A	WES	2.85		2.21	
416B	WES	3.95		2.74	
416C	WES	4.65		3.35	
416F	WES	6.55		4.57	
416K	WES	8.55		5.74	
416P	WES	11.00		9.65	
416S	WES	12.55		10.37	
416V	WES	13.80		10.90	
416Z	WES	1505		11.45	
417A	WES	1.30		.87	
417B	WES	1.70		1.14	
417C	WES	2.05		1.37	
417D	WES	2.30		1.54	
417F	WES	3.60		2.41	
417H	WES	4.20		2.81	
417K	WES	5.00		3.35	
417M	WES	6.00		4.02	
418A	WES	1.63		1.09	
418B	WES	1.86		1.25	
418C	WES	2.16		1.45	
418D	WES	2.40		1.61	
418F	WES	4.10		2.75	
418H	WES	4.85		3.25	
418K	WES	5.65		3.79	
418M	WES	6.50		4.36	
419A	WES	1.70		1.14	
419B	WES	1.95		1.31	
419C	WES	2.25		1.51	
419D	WES	3.00		2.01	
419F	WES	4.70		3.15	
419H	WES	5.50		3.69	
419K	WES	6.30		4.22	
419M	WES	6.75		4.52	

Type No.	Mfr.	1-24	25-99	100-up	
439A/1N3161	WES	19.25	16.20		
439B/1N3162	WES	22.95	19.35		
439C/1N3163	WES	26.95	23.05		
439D/1N3164	WES	31.80	26.85		
439F/1N3165	WES	36.15	30.50		
439F/1N3166	WES	41.20	34.75		
439G/1N3167	WES	52.55	44.30		
439H/1N3168	WES	62.00	50.65		
439K/1N3169	WES	72.70	61.20		
439M/1N3170	WES	89.05	74.70		

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
478C	WES	5.63		3.75	
479C	WES	6.60		4.40	
500	SAR	2.90	1.74		

Type No.	Mfr.	1-24	25-99	100-up	
509C/916H14	WES	3.52	2.80		
509C/916H16	WES	3.80	2.88		
509C/916H18	WES	5.00	3.80		
509C/916H22	WES	8.00	7.00		
509C/916H74	WES	4.25	3.60		
509C/916H76	WES	5.80	4.90		
509C/916H78	WES	8.05	7.20		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
600	TI	1.94		1.58	
601	TI	3.60		2.94	
622	TI	3.70		3.03	
624	TI	3.75		3.07	
650	TI	4.35		3.65	
650C	TI	4.35		3.65	
650C0	TI	4.85		4.15	
650C3	TI	4.85		4.15	
651C5	TI	4.85		4.15	
652C	TI	4.35		3.65	
652C0	TI	4.85		4.15	
652C5	TI	4.85		4.15	
653C4	TI	4.85		4.15	
653C9	TI	4.85		4.15	
654C9	TI	4.85		4.15	
655C9	TI	4.85		4.15	
703A	WES	.48		.41	
703AR	WES	.48		.41	
703B	WES	.55		.46	
703BR	WES	.55		.46	
703D	WES	.78		.66	
703DR	WES	.79		.66	
703F	WES	.90		.78	
703FR	WES	.90		.78	

Type No.	Mfr.	1-24	25-99	100-up	
760ZH	WES	109.50	104.50		
760ZHR	WES	109.50	104.50		
760ZM	WES	125.50	120.50		
760ZMR	WES	125.50	120.50		
770ZD	WES	96.50	81.50		
770ZDR	WES	96.50	81.50		
809P	WES	120.00	94.00		
809V	WES	172.00	133.00		
809ZB	WES	248.00	190.00		
809ZD	WES	286.00	215.00		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
809S	WES	145.00		112.00	
809Z	WES	210.00		155.00	

Type No.	Mfr.	1-24	25-99	100-up
903	TI	8.65	5.75	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
904A	TI	8.65		5.75	
952	TI	10.52		7.92	
953	TI	14.12		10.58	
4402	RCA	1.67		1.15	
4403	RCA	1.21		.84	
4404	RCA	1.32		.92	
4425	RCA	2.10		1.45	
4448	RCA	1.32		.92	
4450	RCA	1.37		.95	
4451	RCA	1.37		.95	
4453	RCA	1.28		.88	
4453	RCA	1.28		.88	
7163	RCA	1.21		.84	
354001-100	TI	.15		.10	
354001-99	TI	.15		.05	
40004	RCA	1.65		1.14	
40022	RCA	.83		.57	
40050	RCA	.99		.69	
40051	RCA	1.21		.84	
40053	RCA	.99		.69	
40080	RCA	1.08		.75	
40081	RCA	1.41		.97	
40082	RCA	5.03		3.48	
40108	RCA	.99		.69	
40108R	RCA	.99		.69	
40109	RCA	1.16		.80	
40109R	RCA	1.16		.80	
40110	RCA	1.57		1.09	
40110R	RCA	1.57		1.09	
40111R	RCA	2.15		1.48	
40112	RCA	2.48		1.71	
40113	RCA	3.14		2.17	
40113R	RCA	3.14		2.17	
40114	RCA	3.71		2.57	
40114R	RCA	3.71		2.57	
40115R	RCA	6.60		4.56	
40208R	RCA	1.19		.83	
40209R	RCA	1.32		.92	
40210R	RCA	1.78		1.23	
40211R	RCA	2.39		1.65	
40212R	RCA	2.89		2.00	
40213	RCA	3.63		2.51	
40213R	RCA	3.63		2.51	
40214	RCA	4.51		2.91	
40231	RCA	.47		.32	
40232	RCA	.53		.37	
40233	RCA	.60		.42	
40234	RCA	.42		.29	
40235	RCA	.79		.55	
40236	RCA	.71		.49	
40237	RCA	.54		.38	
40238	RCA	.64		.44	
40240	RCA	.61		.42	
40242	RCA	.74		.51	
40243	RCA	.68		.47	
40244	RCA	.53		.36	
40245	RCA	.63		.43	
40246	RCA	.61		.42	
40250	RCA	1.24		.86	
40250V1	RCA	1.32		.92	
40251	RCA	2.48		1.71	
40253	RCA	.53		.37	
40254	RCA	.78		.54	
40255	RCA	4.21		2.91	
40255	RCA	3.80		2.62	
40256	RCA	2.15		1.48	
40263	RCA	.42		.29	
40264	RCA	1.21		.84	
40265	RCA	.35		.24	
40266	RCA	.29		.20	
40267	RCA	.33		.23	
40280	RCA	4.62		3.19	
40285	RCA	42.90		29.65	
40291	RCA	14.85		10.25	
40310	RCA	.99		.69	
40311	RCA	.81		.56	
40312	RCA	1.03		.71	
40313	RCA	2.23		1.54	
40314	RCA	.86		.60	
40315	RCA	.83		.57	
40316	RCA	.99		.69	
40317	RCA	.86		.60	
40318	RCA	2.10		1.45	
40319	RCA	1.41		.97	
40321	RCA	1.32		.92	
40322	RCA	2.15		1.48	
40323	RCA	.78		.54	
40324	RCA	.99		.69	
40325	RCA	2.31		1.60	
40326	RCA	.86		.60	
40327	RCA	1.32		.92	
40328	RCA	2.19		1.52	
40329	RCA	.38		.27	
40340	RCA	33.00		22.80	
40346	RCA	1.14		.79	
40346V1	RCA	1.23		.85	
40346V2	RCA	1.23		.85	
40347	RCA	.66		.46	
40347V1	RCA	.75		.52	
40347V2	RCA	.75		.52	
40348	RCA	1.06		.73	
40348V1	RCA	1.14		.79	
40348V2	RCA	1.14		.79	
40349	RCA	1.56		1.08	
40349V1	RCA	1.64		1.13	
40349V2	RCA	1.64		1.13	
40354	RCA	1.18		.81	
40355	RCA	1.24		.86	
40359	RCA	.32		.22	
40360	RCA	1.11		.77	
40361	RCA	1.04		.72	
40362	RCA	1.54		1.07	
40363	RCA	2.31		1.60	
40364	RCA	6.44		4.45	
40372	RCA	1.49		1.03	
40373	RCA	2.56		1.77	
40374	RCA	2.97		2.05	
40375	RCA	6.68		4.62	
40378	RCA	1.62		1.12	
40379	RCA	2.31		1.60	
40385	RCA	9.50		6.55	
40389	RCA	.91		.63	
40390	RCA	2.15		1.48	
40391	RCA	1.39		.96	
40392	RCA	.91		.63	
40394	RCA	1.39		.96	
40395	RCA	.38		.27	
40396	RCA	.83		.57	
40397	RCA	.66		.46	
40398	RCA	.60		.42	
40399	RCA	.55		.38	
40400	RCA	.50		.35	
40403	RCA	.62		.43	
40404	RCA	1.65		1.14	
40405	RCA	2.06		1.43	
40406	RCA	1.36		.94	
40407	RCA	.81		.56	
40408	RCA	1.08		.75	
40409	RCA	1.14		.79	
40410	RCA	1.64		1.13	
40411	RCA	4.79		3.31	
40412	RCA	1.06		.73	
40412V1	RCA	1.14		.79	
40412V2	RCA	1.14		.79	
40421	RCA	1.28		.88	
40422	RCA	1.03		.71	
40423	RCA	1.11		.77	
40424	RCA	.98		.68	
40425	RCA	1.06		.73	
40426	RCA	.93		.64	
40427	RCA	1.01		.70	
40428	RCA	.29		.20	
40429	RCA	2.48		1.71	
40430	RCA	3.29		2.26	
40431	RCA	2.97		2.05	
40432	RCA	3.77		2.60	
40439	RCA	1.98		1.37	
40440	RCA	1.32		.92	
40442	RCA	.83		.57	
40444	RCA	14.55		10.05	
40446	RCA	5.94		4.10	
40450	RCA	.80		.55	
40451	RCA	.90		.62	
40452	RCA	.80		.55	
40453	RCA	.73		.51	
40454	RCA	.66		.46	
40455	RCA	.62		.43	
40456	RCA	.57		.39	
40457	RCA	.58		.40	
40458	RCA	.78		.54	
40459	RCA	.85		.59	
40460	RCA	10.75		7.40	
40461	RCA	11.55		8.00	
40462	RCA	1.16		.80	
40464	RCA	1.40		.97	
40465	RCA	1.65		1.14	
40466	RCA	2.06		1.43	
40468	RCA	.75		.52	
40469	RCA	.94		.65	
40470	RCA	.79		.55	
40471	RCA	.78		.54	
40472	RCA	.91		.63	
40473	RCA	.83		.57	
40474	RCA	.66		.46	
40475	RCA	.76		.52	
40476	RCA	.74		.51	
40477	RCA	.73		.50	
40478	RCA	.86		.59	
40479	RCA	.79		.55	
40480	RCA	.66		.44	
40481	RCA	.74		.51	
40482	RCA	.73		.50	
40485	RCA	2.48		1.71	
40486	RCA	3.28		2.26	
40513	RCA	1.24		.86	
40514	RCA	1.26		.87	
70318-1	TI	.15		.05	
A1B	INT	1.22		.82	
A1H	INT	.43		.30	
A5M	INT	7.00	6.65	4.55	
A7B	GE	1.95		1.30	
A7E	GE	1.95		1.30	
A7G	GE	1.95		1.30	
A14A	GE	.42		.28	
A14B	GE	.46		.31	
A14C	GE	.54		.36	
A14D	GE	.56		.37	
A14E	GE	.68		.45	
A14F	GE	.37		.25	
A14M	GE	.75		.50	
A14N	GE	1.12		.75	
A15M	INT	10.40		7.15	
A27D	GE	6.90		4.60	
A38B	GE	6.45		4.30	
A38D	GE	8.78		5.85	
A38M	GE	10.70		6.90	
A38N	GE	12.30		8.20	
A38P	GE	13.50		9.00	
A38PB	GE	17.25		11.50	
A40A	GE	1.77		1.18	
A40B	GE	1.82		1.21	
A40C	GE	2.40		1.60	
A40D	GE	2.90		1.93	
A40E	GE	3.53		2.35	
A40F	GE	1.73		1.15	
A40M	GE	4.20		2.80	
A41B	GE	1.82		1.21	
A44B	GE	1.16		.77	
A44C	GE	1.28		.85	
A130	AME	1.35		.90	
A321	AME	1.06		.71	
A322	AME	1.20		.80	
A323	AME	1.62		1.08	
A324	AME	1.62		1.08	
A415	AME	.75		.50	
A466	AME	1.32		.88	
A467	AME	.92		.61	
A473	AME	.92		.61	
A-580	TI	7.00		5.25	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
A581	TI	11.00		7.50	
A582	TI	7.00		5.25	
A583	TI	13.00		10.00	
A584	TI	7.00		5.25	
A586	TI	8.00		6.25	
A587	TI	13.00		10.00	
A588	TI	10.00		7.25	
A589	TI	17.00		13.00	

Type No.	Mfr.	1-9	10-29	30-99	100-up
A725EH/2AB1	GE	4.48	3.68	3.66	3.20
A1480	AME	19.00		13.00	
AC172	AME	.61		.41	
AF139	MOT	1.95		1.30	
AF239	MOT	2.17		1.45	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
B1B	INT	1.28		.86	
B-2M	INT	1.50		1.35	
B3M	INT	1.75		1.55	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
B10M	INT	7.00	6.65	4.55	

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-9	10-99	100-999	1000-up
B12F10	INT	8.75	7.95		
B12F20	INT	13.11	11.40		
B12F30	INT	14.80	12.35		
B12F40	INT	18.65	15.55		
B12F50	INT	19.55	16.35		
B70HB10	INT	16.35	14.72		
B70HB20	INT	22.00	18.70		
B70HB30	INT	26.60	22.65		
B70HB40	INT	32.70	27.80		
B70HB5	INT	13.75	12.38		
B70HB50	INT	40.20	34.20		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
B5000	BEN	.99		.75	
B-170000	BEN	2.35		1.55	
B-170001	BEN	2.40		1.60	
B-170002	BEN	2.50		1.65	
B-170003	BEN	2.40		1.60	
B-170004	BEN	2.50		1.65	
B-170005	BEN	2.55		1.70	
B-170006	BEN	2.80		1.85	
B-170007	BEN	2.90		1.95	
B-170008	BEN	3.45		2.30	
B-170009	BEN	2.10		1.40	
B-170010	BEN	2.25		1.50	
B-170011	BEN	2.35		1.55	
B-170012	BEN	2.25		1.50	
B-170013	BEN	2.35		1.55	
B-170014	BEN	2.40		1.60	
B-170015	BEN	2.70		1.80	
B-170016	BEN	2.85		1.90	
B-170017	BEN	3.40		2.25	
B-170018	BEN	2.20		1.45	
B-170019	BEN	2.35		1.55	
B-170020	BEN	2.40		1.60	
B-170021	BEN	2.35		1.55	
B-170022	BEN	2.40		1.60	
B-170023	BEN	2.55		1.70	
B-170024	BEN	2.80		1.85	
B-170025	BEN	2.85		1.95	
B-170026	BEN	3.40		2.25	
B-176000	BEN	4.43		2.85	
B-176004	BEN	6.38		4.25	
B-176008	BEN	9.38		6.25	
B-176012	BEN	21.45		14.30	
BD1	GE	5.00		3.30	
BD2	GE	5.00		3.30	
BD3	BEN	3.00		2.00	
BD4	GE	5.00		3.30	

Type No.	Mfr.	1-24	25-99	100-up
BN4000	BEN	30.00	24.50	
BN4001	BEN	30.00	24.50	
BN4002	BEN	30.00	24.50	
BN4003	BEN	30.00	24.50	
BN4004	BEN	37.00	30.00	
BN4005	BEN	37.00	30.00	
BN4006	BEN	37.00	30.00	
BN4008	BEN	30.00	24.50	
BN4009	BEN	37.00	30.00	
BN4100	BEN	10.40	8.90	
BN4101	BEN	10.40	8.90	
BN4102	BEN	10.40	8.90	
BN4103	BEN	10.40	8.90	
BN4104	BEN	10.50	8.90	
BY100S	AME	.69		.46
C-1	GE	1.60	NET	
C-2	GE	1.60	NET	
C1B	INT	1.46		1.00
C1H	INT	.42		.29

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
C5A	GE	5.40		3.60	
C5B	GE	10.35		6.90	
C5C	GE	18.00		10.65	
C5F	GE	3.30		2.20	
C5G	GE	7.95		5.30	
C5H	GE	12.95		8.65	
C5U	GE	3.00		2.00	
C6A	GE	1.87		1.25	
C6B	GE	2.07		1.38	
C6F	GE	1.65		1.10	
C6G	GE	1.98		1.32	
C6U	GE	1.57		1.05	
C7A	GE	13.35		8.90	
C7B	GE	18.90		12.60	
C7F	GE	9.15		6.10	
C8H	GE	7.65		5.10	
C10A	GE	9.00		6.00	
C10B	GE	13.50		9.00	
C10C	GE	18.40		12.25	
C10D	GE	23.65		15.75	
C10F	GE	7.00		4.65	
C10G	GE	11.10		7.40	
C10H	GE	15.75		10.50	
C11A	GE	5.77		3.85	
C11B	GE	8.17		5.45	
C11F	GE	4.65		3.10	
C11G	GE	6.97		4.65	
C15A	GE	2.10		1.40	
C15B	GE	3.75		2.50	
C15F	GE	1.88		1.25	
C15G	GE	2.14		1.45	
C20A	GE	1.92		1.28	
C20B	GE	1.98		1.32	
C20C	GE	2.64		1.76	
C20D	GE	3.00		2.00	
C20F	GE	1.77		1.18	
C22A	GE	1.62		1.08	
C22B	GE	1.68		1.12	
C22C	GE	2.34		1.56	
C22D	GE	2.70		1.80	
C22F	GE	1.47		.98	
C22U	GE	1.41		.94	
C30A	GE	4.95		3.30	
C30B	GE	5.75		3.85	
C30C	GE	7.40		4.95	
C30D	GE	9.35		6.25	
C31B	GE	6.45		4.30	
C31C	GE	8.10		5.40	
C31D	GE	10.25		6.85	
C32A	GE	4.55		3.05	
C32B	GE	5.40		3.60	
C32C	GE	7.05		4.70	
C32D	GE	9.00		6.00	
C32F	GE	3.75		2.50	
C32U	GE	3.35		2.25	
C33C	GE	7.70		5.15	
C33D	GE	9.90		6.60	
C35A	GE	8.05		5.35	
C35B	GE	11.10		7.40	
C35C	GE	14.60		9.75	
C35D	GE	17.10		11.40	
C35E	GE	20.60		13.75	
C35F	GE	7.30		4.85	
C35H	GE	12.45		8.30	
C35N	GE	36.00		24.00	
C36A	GE	8.25		4.15	
C36B	GE	8.70		5.80	
C36C	GE	11.65		7.75	
C36G	GE	7.35		4.90	
C36H	GE	9.75		8.50	
C36N	GE	30.00		20.00	
C37B	GE	5.75		3.85	
C37E	GE	15.00		10.00	
C37M	GE	18.00		12.00	
C37S	GE	21.00		14.00	
C38D	GE	34.15		22.75	
C38H	GE	23.25		15.50	
C40B	GE	17.40		11.60	
C40G	GE	14.50		9.65	

Type No.	Mfr.	1-24	25-99	100-up
C45E	GE	60.25		47.15
C45H	GE	32.00		25.00
C45T	GE	126.50		99.50
C45U	GE	14.95		11.70
C46A	GE	21.50	16.80	
C46B	GE	28.50	22.30	
C46C	GE	38.00	29.70	
C46D	GE	50.15	39.25	
C46E	GE	60.25	47.15	
C46H	GE	32.00	25.00	
C46T	GE	126.50	99.50	
C46U	GE	14.85	11.70	
C50A	GE	28.80		22.30
C50B	GE	38.00		29.40
C50N	GE	145.00	112.00	
C50T	GE	172.00	133.00	
C50U	GE	19.50		15.10
C52N	GE	145.00	112.00	
C52S	GE	120.00	94.00	
C52T	GE	172.00	133.00	
C55M	GE	117.00	91.80	
C56A	GE	34.50	27.00	
C56B	GE	45.50	35.60	
C56G	GE	40.00	31.30	
C56M	GE	117.00	91.80	
C60E	GE	92.50	72.50	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
C106A1	GE	1.13		.75	
C106A2	GE	1.13		.75	
C106A3	GE	1.13		.75	
C106A4	GE	1.13		.75	
C106B1	GE	1.28		.85	
C106B2	GE	1.28		.85	
C106B3	GE	1.28		.85	
C106B4	GE	1.28		.85	
C106F1	GE	1.05		.70	
C106F2	GE	1.05		.70	
C106F3	GE	1.05		.70	
C106F4	GE	1.05		.70	
C106G1	GE	1.23		.82	
C106G2	GE	1.23		.82	
C106G3	GE	1.23		.82	
C106G4	GE	1.23		.82	
C106Y1	GE	.90		.60	
C106Y2	GE	.90		.60	
C106Y3	GE	.90		.60	
C106Y4	GE	.90		.60	
C135B	GE	14.25		9.50	
C135C	GE	21.00		14.00	
C135D	GE	25.50		17.00	
C135F	GE	9.40		6.25	
C135M	GE	37.50		25.00	
C135N	GE	48.00		32.00	
C137M	GE	37.50		25.00	
C137N	GE	48.00		32.00	
C137P	GE	66.50		44.30	
C137PB	GE	93.50		62.30	
C141A	GE	11.25		7.50	
C141B	GE	16.10		10.70	
C141C	GE	24.20		16.10	
C141D	GE	29.25		19.50	
C141F	GE	10.35		6.90	
C-145A	GE	17.00		12.75	
C145B	GE	22.00		16.50	
C145C	GE	29.00		21.80	
C180D	GE	145.00		123.00	
C145E	GE	46.00		34.50	
C-145M	GE	54.00		40.50	
C-145N	GE	75.50		56.60	
C-145P	GE	106.00		79.50	
C145PA	GE	124.00		93.00	
C145PB	GE	144.00		108.00	
C150M	GE	117.00		91.80	
C150P	GE	244.00		191.00	
C150PC	GE	373.00		292.00	
C155A	GE	43.00		33.70	
C155C	GE	75.90		59.40	
C155E	GE	121.00		94.50	

Type No.	Mfr.	1-24	25-99	100-up
C180A	GE	82.50		70.50
C180B	GE	99.00		84.00
C180C	GE	120.00	108.00	
C180E	GE	176.00		149.00
C180M	GE	197.00	167.00	
C180N	GE	292.00		248.00
C180P	GE	364.00		310.00

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Type No.	Mfr.	1-24	25-99	100-up
C180PB	GE	450.00	.....	382.00
C180PC	GE	535.00	455.00	.....
C185A	GE	99.00	.....	84.50
C185C	GE	144.00	.....	130.00
C185E	GE	211.00	.....	179.00
C290M	GE	262.00	.....	244.00
C290PB	GE	582.00	.....	500.00
C611A	GE	2.40	.....	1.60
C611B	GE	2.60	.....	1.73
C611F	GE	2.20	.....	1.45
C611G	GE	2.50	.....	1.67
C611U	GE	2.10	.....	1.40

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
CA3000	RCA	4.70	3.85	3.25	.....
CA3002	RCA	4.40	3.60	3.05	.....
CA3004	RCA	4.40	3.60	3.05	.....
CA3005	RCA	2.80	2.30	1.95	.....
CA3006	RCA	6.80	5.55	4.70	.....
CA3007	RCA	6.00	4.90	4.15	.....
CA3008	RCA	12.00	9.75	8.25	.....
CA3010	RCA	9.20	7.50	6.35	.....
CA3011	RCA	1.55	1.25	1.10	.....

Type No.	Mfr.	1-24	25-99	100-up
CA3012	RCA	2.25	1.85	1.55
CA3013	RCA	2.65	2.15	1.85
CA3014	RCA	3.15	2.55	2.15
CA3015	RCA	10.00	8.15	6.90
CA3016	RCA	12.80	10.40	8.80

Type No.	Mfr.	1-24	25-99	100-999
CA3018	RCA	2.40	1.95	1.65
CA3019	RCA	2.40	1.95	1.65
CA3020	RCA	2.80	2.30	1.95
CA3021	RCA	3.60	2.95	2.50
CA3022	RCA	3.15	2.55	2.15
CA3023	RCA	2.95	2.40	2.05
CA3028	RCA	1.55	1.25	1.10
CA3029	RCA	6.00	4.90	4.15
CA3030	RCA	7.20	5.85	4.95
CA3031	RCA	8.80	7.15	6.05
CA3032	RCA	7.20	5.85	4.95
CA3034	RCA	2.80	2.30	1.95
CA3034VI	RCA	2.80	2.30	1.95
CA3035	RCA	2.40	1.95	1.65
CA3035VI	RCA	2.40	1.95	1.65
CA3036	RCA	1.55	1.25	1.10

Type No.	Mfr.	1-24	25-99	100-up
CD2100	RCA	6.00	4.90	4.15
CD2101	RCA	6.35	5.15	4.35
CD2150	RCA	5.20	4.25	3.60
CD2151	RCA	5.20	4.25	3.60
CD2152	RCA	5.20	4.25	3.60
CD2200	RCA	6.00	4.90	4.15
CD2201	RCA	6.35	5.15	4.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
CD2202	RCA	6.35	5.15	4.35	.....

Type No.	Mfr.	1-24	25-99	100-up
CD2203	RCA	8.00	6.50	5.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
CD2204	RCA	4.70	3.85	3.25	.....
CD2205	RCA	6.00	4.90	4.15	.....

Type No.	Mfr.	1-24	25-99	100-up
CK735	RAY	4.55	.....	3.50
CR101	RCA	5.75	.....	5.47
CR102	RCA	7.20	.....	6.85
CR103	RCA	8.15	.....	7.75
CR104	RCA	9.60	.....	9.10
CR105	RCA	10.55	.....	10.05
CR106	RCA	12.00	.....	11.40
CR108	RCA	13.90	.....	13.20
CR110	RCA	16.30	.....	15.50
CR201	RCA	3.10	.....	2.96
CR203	RCA	4.80	.....	4.56
CR204	RCA	5.75	.....	5.47
CR206	RCA	6.95	.....	6.60
CR208	RCA	8.40	.....	8.00
CR210	RCA	10.10	.....	9.60
CR212	RCA	12.00	.....	11.40
CS45D	GE	3.93	.....	2.62
CS-120-U16	INT	3.50	.....	2.33
CS-120-U6	INT	1.95	.....	1.30

Type No.	Mfr.	1-24	25-99	100-up
CS120	INT	2.35	.....	1.57
CS120M6	INT	2.35	.....	1.57

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
D5K1	GE	6.95	.....	4.64	.....
D11E404	GE	7.50	.....	5.00	.....
D11E405	GE	11.55	.....	7.70	.....
D11E406	GE	9.98	.....	6.65	.....
D11E407	GE	14.25	.....	9.50	.....
D13D1	GE	1.50	.....	1.00	.....
D13D1	GE	1.17	.....	.78	.....
D13E1	GE	1.65	.....	1.10	.....
D14A502	GE	6.00	.....	4.00	.....
D16KT1300	GE	25.00	.....	.....	.....
D16K1	GE	.94	.....	.62	.....
D16K2	GE	.98	.....	.66	.....
D16K3	GE	1.06	.....	.70	.....
D16P1	GE	.68	.....	.45	.....
D16P2	GE	.70	.....	.47	.....
D16P3	GE	.76	.....	.50	.....
D16P4	GE	.78	.....	.52	.....
D16U1	GE	.42	.....	.28	.....
D16U2	GE	.48	.....	.32	.....
D16U3	GE	.63	.....	.41	.....
D16U4	GE	.72	.....	.48	.....
D19RA1	GE	4.50	.....	3.00	.....
D26E1	GE	3.60	.....	2.40	.....
D26E2	GE	2.30	.....	1.20	.....
D26E3	GE	2.20	.....	1.45	.....
D26E4	GE	2.25	.....	1.50	.....
D26E5	GE	2.95	.....	1.95	.....
D26E6	GE	1.55	.....	1.05	.....
D26G1	GE	3.25	.....	2.17	.....
D29A4	GE	.58	.....	.39	.....
D29A5	GE	72	.....	.48	.....

Type No.	Mfr.	1-9	10-99
D4800H	SYL	90.00	77.00
D4801H	SYL	60.00	51.50
D4810H	SYL	68.00	58.25
D4821H	SYL	75.00	64.30
D4841C	SYL	35.00	30.00

Type No.	Mfr.	1-9	10-99	100-999	1000-up
D5046	SYL	90.00	77.00	71.00	.....
D5046A	SYL	150.00	129.00	118.00	.....
D5046B	SYL	240.00	206.00	189.00	.....
D5047A	SYL	120.00	103.00	94.00	.....
D5047B	SYL	170.00	146.00	134.00	.....
D5047C	SYL	230.00	197.00	181.00	.....
D5047D	SYL	300.00	258.00	235.00	.....
D5146	SYL	110.00	94.00	86.50	.....
D5146A	SYL	150.00	129.00	118.00	.....
D5146B	SYL	190.00	163.00	149.00	.....
D5147A	SYL	120.00	103.00	94.00	.....
D5147B	SYL	170.00	146.00	134.00	.....
D5147C	SYL	230.00	197.00	181.00	.....
D6623	SYL	.48	.....	.32	.21
D6623A	SYL	.52	.....	.35	.22
D6624A	SYL	.56	.....	.38	.23
D6625	SYL	.57	.....	.38	.23
D6625A	SYL	.60	.....	.40	.24
DD04	INT	.49	.44	36	.....
DD05	INT	.49	.44	.36	.....
DD07	INT	1.25	1.12	.94	.....
DD-190	INT	.99	.89	.....	.....
DP2	NT	9.00	.....	6.15	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
DR303	GI	1.12	.....	.90	.....
DR351	GI	.75	.....	.60	.....
DR352	GI	1.19	.....	.95	.....
DR482	GI	.90	.....	.64	.....
DR498	GI	1.45	.....	1.09	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
DT420P	SAR	2.44	2.09	1.94	.....
E1	SAR	.33	.29	.27	.....
E2	SAR	.33	.29	.27	.....
E4	SAR	.35	.30	.28	.....
E6	SAR	.37	.22	.29	.....
E8	SAR	.52	.44	.41	.....
E10	SAR	.79	.67	.63	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
EA7E1	HOF	6.75	.....	5.10	.....
EA7E2	HOF	6.00	.....	4.50	.....
EA7E3	HOF	5.10	.....	3.80	.....
ED3001A	ERI	.45	.....	.30	.21

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
ED3002A	ERI	.50	.....	.33	.22
ED3003A	ERI	.58	.....	.39	.23
ED3004A	ERI	.61	.....	.45	.27
ED3005A	ERI	.64	.....	.49	.28
ED3006A	ERI	.66	.....	.51	.29
ED3008A	ERI	.72	.....	.57	.42
ED3010A	ERI	.76	.....	.61	.46
EM1505	RAY	.65	.....	.51	.....
EP-50	INT	3.95	.....	.....	.....
F-2	SAR	.33	.29	.27	.....
F-4	SAR	.35	.30	.28	.....
F-6	SAR	.37	.32	.29	.....
F10	SAR	.79	.67	.63	.....
F15	SAR	1.17	1.00	.93	.....
F20	SAR	1.50	1.29	1.20	.....
F25	SAR	2.00	1.72	1.60	.....
FN1024	RAY	27.50	.....	22.30	.....
FN1034	RAY	27.50	.....	22.30	.....
FWB3001A	ERI	1.80	.....	1.45	.....
FWB3002A	ERI	1.80	.....	1.50	.....
FWB3003A	ERI	1.90	.....	1.60	.....
FWB3004A	ERI	2.00	.....	1.75	.....
FWB3005A	ERI	2.25	.....	1.80	.....
FWB3006A	ERI	2.50	.....	1.90	.....
FWB3008A	ERI	2.75	.....	2.30	.....
FWB3010A	ERI	3.00	.....	2.50	.....
FWBTS/3001	ERI	1.70	.....	1.25	.....
FWBTS/3002	ERI	1.75	.....	1.30	.....
FWBTS/3003	ERI	1.85	.....	1.40	.....
FWBTS/3004	ERI	1.95	.....	1.50	.....
FWBTS/3005	ERI	2.05	.....	1.60	.....
FWBTS/3006	ERI	2.15	.....	1.70	.....
FWBTS/3008	ERI	2.60	.....	2.10	.....
FWBTS/3010	ERI	3.00	.....	2.50	.....
FWDA/3001A	ERI	.97	.....	.69	.59
FWDA/3002A	ERI	.98	.....	.70	.60
FWDA/3003A	ERI	.99	.....	.71	.61
FWDA/3004A	ERI	1.00	.....	.72	.62
FWDA/3005A	ERI	1.01	.....	.73	.63
FWDA/3006A	ERI	1.09	.....	.79	.67
FWDA/3007A	ERI	1.12	.....	.81	.70
FWDA/3008A	ERI	1.18	.....	.84	.73
FWDA/3009A	ERI	1.27	.....	.91	.78
FWDA/3010A	ERI	1.57	.....	1.12	.88
G129	TI	1.00	.....	.75	.....
G01	TI	.85	.....	.66	.....
G02	TI	.60	.....	.49	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
G1	SAR	.35	.30	.28	.....
G2	SAR	.37	.32	.29	.....
GA	SAR	.43	.37	.35	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
G3.0T5	INT	1.90	.....	1.40	.....
G3T10	INT	1.25	.....	.93	.....
G3.0T20	INT	.95	.....	.73	.....
G3.3T5	INT	1.90	.....	1.40	.....
G3.3T10	INT	1.25	.....	.93	.....
G3.3T20	INT	.95	.....	.73	.....
G3.6T5	INT	1.90	.....	1.40	.....
G3.6T10	INT	1.25	.....	.93	.....
G3.6T20	INT	.95	.....	.73	.....
G3.9T5	INT	1.90	.....	1.40	.....
G3.9T10	INT	1.25	.....	.93	.....
G3.9T20	INT	.95	.....	.73	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
G4	SAR	.43	.37	.35	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
G4.3T5	INT	1.90	.....	1.40	.....
G4.3T10	INT	1.25	.....	.93	.....

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
G4.3T20	INT	.95	.....	.73	.....
G4.7T5	INT	1.90	.....	1.40	.....
G4.7T10	INT	1.25	.....	.93	.....
G4.7T20	INT	.95	.....	.73	.....
G5.1T5	INT	1.90	.....	1.40	.....
G5.1T10	INT	1.25	.....	.93	.....
G5.1T20	INT	.95	.....	.73	.....
G5.6T5	INT	1.90	.....	1.40	.....
G5.6T10	INT	1.25	.....	.93	.....
G5.6T20	INT	.95	.....	.73	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
G6	SAR	.47	.40	.37	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
G6.2T5	INT	1.90	.....	1.40	.....
G6.2T10	INT	1.25	.....	.93	.....
G6.2T20	INT	.95	.....	.73	.....
G6.8T5	INT	1.90	.....	1.40	.....
G6.8T10	INT	1.25	.....	.95	.....
G6.8T20	INT	.95	.....	.73	.....
G7.5T5	INT	1.90	.....	1.40	.....
G7.5T10	INT	1.25	.....	.93	.....
G7.5T20	INT	.95	.....	.73	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
G8	SAR	.62	.53	.49	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
G8.2T5	INT	1.90	.....	1.40	.....
G8.2T10	INT	1.25	.....	.93	.....
G8.2T20	INT	95	.....	.73	.....
G9.1T5	INT	1.90	.....	1.40	.....
G9.1T10	INT	1.25	.....	.93	.....
G9.1T20	INT	.95	.....	.73	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
G10	SAR	.95	.82	.76	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
G10T5	INT	1.90	.....	1.40	.....
G10T10	INT	1.25	.....	.93	.....
G10T20	INT	.95	.....	.73	.....
G11T5	INT	1.90	.....	1.40	.....
G11T10	INT	1.25	.....	.93	.....
G11T20	INT	.95	.....	.73	.....
G12T5	INT	1.90	.....	1.40	.....
G12T10	INT	1.25	.....	.93	.....
G12T20	INT	.95	.....	.73	.....
G13T5	INT	1.90	.....	1.40	.....
G13T10	INT	1.25	.....	.93	.....
G13T20	INT	.95	.....	.73	.....
G15T5	INT	1.90	.....	1.40	.....
G15T10	INT	1.25	.....	.93	.....
G15T20	INT	.95	.....	.73	.....
G16T5	INT	1.90	.....	1.40	.....
G16T10	INT	1.25	.....	.93	.....
G16T20	INT	.95	.....	.73	.....
G18T5	INT	1.90	.....	1.40	.....
G18T10	INT	1.25	.....	.93	.....
G18T20	INT	.95	.....	.73	.....
G20T5	INT	1.90	.....	1.40	.....
G20T10	INT	1.25	.....	.93	.....
G20T20	INT	.95	.....	.73	.....
G22T5	INT	1.90	.....	1.40	.....
G22T10	INT	1.25	.....	.93	.....
G22T20	INT	.95	.....	.73	.....
G24T5	INT	1.90	.....	1.40	.....
G24T10	INT	1.25	.....	.93	.....
G24T20	INT	.95	.....	.73	.....
G27T5	INT	1.90	.....	1.40	.....
G27T10	INT	1.25	.....	.93	.....
G27T20	INT	.95	.....	.73	.....
G30T5	INT	1.90	.....	1.40	.....
G30T10	INT	1.25	.....	.93	.....
G30T20	INT	.95	.....	.73	.....
G100B	GI	.47	.....	.33	.....
G100D/ 1N4383	GI	.48	.....	.38	.....

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
G100G/ 1N4384	GI	.58	.....	.41	.....
G100J/ 1N4385	GI	.78	.....	.54	.....
G100K/ 1N4585	GI	1.20	.....	.80	.....
G100M/ 1N4586	GI	2.70	.....	1.80	.....
G129	TI	1.30	.....	.85	.....
G129	TI	1.00	.....	.75	.....
G130	TI	1.00	.....	.75	.....
G222	TI	.75	.....	.65	.....
G296	TI	.85	.....	.70	.....
GAD-3000-1	HUG	2.46	.....	1.23	.....
GAD-4010-1	HUG	3.20	.....	2.40	.....
GAD-4110-1	HUG	3.20	.....	2.40	.....
GE-1	GE	1.20	.....	.....	.....
GE-2	GE	1.02	.....	.....	.....
GE-3	GE	2.34	.....	.....	.....
GE-4	GE	4.44	.....	.....	.....
GE-5	GE	1.68	.....	.....	.....
GE-6	GE	1.83	.....	.....	.....
GE-7	GE	1.77	.....	.....	.....
GE-8	GE	1.27	.....	.....	.....
GE-9	GE	1.26	.....	.....	.....
GE-10	GE	1.20	.....	.....	.....
GE-11	GE	NET	1.53	.....	.....
GE-504A					
GE-X1	GE	2.60	.....	.....	.....
GE-X2A	GE	2.80	.....	.....	.....
GE-X3	GE	4.00	.....	.....	.....
GE-X4	GE	1.60	.....	.....	.....
GE-X5	GE	2.30	.....	.....	.....
GE-X6	GE	1.40	.....	.....	.....
GE-X7	GE	.80	.....	.....	.....
GE-X8	GE	.70	.....	.....	.....
GE-X9	GE	.70	.....	.....	.....
GE-X10	GE	1.35	.....	.....	.....
GE-X11	GE	1.80	.....	.....	.....
GE-X12	GE	4.50	.....	.....	.....
GE-X13	GE	NET	1.60	.....	.....
GE-X14	GE	NET	1.15	.....	.....
GE-X15	GE	NET	3.45	.....	.....
GE-X16	GE	NET	3.45	.....	.....
GT34	GI	.85	.....	.55	.....
GT1200	GI	4.47	.....	3.00	.....
GTD970/ 1N771B	GI	1.50	.....	1.10	.....
GTD979/ 1N775	GI	.60	.....	.40	.....
GTD980/ 1N776	GI	.32	.....	.21	.....
GTD990/ 1N777	GI	.87	.....	.72	.....
GZ-1/1N702	HOF	2.10	1.90	1.60	.....
GZ-2/1N703	HOF	1.85	1.65	1.38	.....
GZ-3/1N704	HOF	1.85	1.65	1.38	.....
GZ-4/1N705	HOF	1.85	1.65	1.38	.....
GZ-5/1N706	HOF	1.85	1.65	1.38	.....
GZ-6/1N707	HOF	1.85	1.65	1.38	.....

Type No.	Mfr.	1-24	25-99	100-up
H1D1	GE	95.00	.....	.....
H11	TI	4.00	.....	2.80
H35	TI	5.00	.....	3.50
H38	TI	4.00	.....	2.80
H-60	TI	8.00	.....	5.60
H-61	TI	9.00	.....	6.25
H-62	TI	13.50	.....	10.00

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
HA2000	HUG	17.05	.....	12.80	.....
HA2001	HUG	16.00	.....	12.00	.....
HA2010	HUG	15.00	.....	11.25	.....
HA2020	HUG	15.55	.....	11.65	.....
HA7524	HUG	27.70	.....	20.78	.....
HA7527	HUG	16.13	.....	12.10	.....
HA7528	HUG	35.39	.....	27.23	.....
HA7533	HUG	9.00	.....	6.75	.....
HA7534	HUG	21.05	.....	15.79	.....
HA7537	HUG	14.65	.....	11.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
HA7538	HUG	20.00	.....	15.00	.....
HA7730	HUG	2.50	.....	1.88	.....
HA7731	HUG	3.00	.....	2.25	.....
HA7732	HUG	3.60	.....	2.70	.....
HA7733	HUG	4.40	.....	3.30	.....
HA9048	HUG	3.20	.....	2.40	.....
HB-1	HOF	.65	.....	.....	.....
HB-2	HOF	.65	.....	.....	.....
HB-3	HOF	.65	.....	.....	.....
HC7060	HUG	3.50	.....	2.50	.....
HD1810	HUG	.98	.....	.74	.....
HD1811	HUG	.77	.....	.58	.....
HD1812	HUG	.39	.....	.29	.....
HD1840	HUG	.98	.....	.74	.....
HD1841	HUG	.88	.....	.66	.....
HD1842	HUG	.49	.....	.37	.....
HD1870	HUG	.98	.....	.74	.....
HD1871	HUG	.88	.....	.66	.....
HD1872	HUG	.63	.....	.47	.....
HD2051	HUG	.89	.....	.67	.....
HD2135	HUG	.64	.....	.48	.....
HD2149	HUG	.64	.....	.48	.....
HD2155	HUG	.85	.....	.64	.....
HD2166	HUG	.85	.....	.64	.....
HD2236	HUG	.48	.....	.36	.....
HD-5000	HUG	2.85	.....	2.14	.....
HD5001	HUG	2.55	.....	1.91	.....
HD-5004	HUG	.90	.....	.68	.....
HD-6001	HUG	.96	.....	.72	.....
HD6224	HUG	1.19	.....	.89	.....
HD6225	HUG	1.68	.....	1.26	.....
HE9001	HUG	3.01	.....	2.26	.....
HE9002	HUG	2.73	.....	2.05	.....
HE9003	HUG	3.46	.....	2.60	.....
HE8004	HUG	2.94	.....	2.21	.....
HE9005	HUG	2.45	.....	1.84	.....
HE9006	HUG	3.36	.....	2.52	.....
HE9007	HUG	2.97	.....	2.23	.....
HE9008	HUG	2.45	.....	1.84	.....
HE9009	HUG	1.96	.....	1.47	.....
HE9010	HUG	1.54	.....	1.16	.....
HS6	HOF	1.30	.....	.85	.....
HS7	HOF	3.50	.....	2.10	.....
HS8	HOF	3.50	.....	2.10	.....
HS10	HOF	5.00	.....	3.10	.....
HS14	HOF	6.00	.....	3.70	.....
HT-91	HOF	11.10	9.99	8.30	.....
HU5	HOF	7.50	.....	5.70	.....
HU5A	HOF	9.00	.....	6.75	.....
HU10	HOF	7.50	.....	5.70	.....
HU-25	HOF	7.50	.....	5.70	.....
HU25A	HOF	9.00	.....	6.75	.....
HU50	HOF	7.50	.....	5.70	.....
HU100	HOF	7.50	.....	5.70	.....
HW6.8B	HOF	1.65	.....	1.25	.....
HW7.5B	HOF	1.65	.....	1.25	.....
HW8.2B	HOF	1.65	.....	1.25	.....
HW9.1B	HOF	1.65	.....	1.25	.....
HW10B	HOF	1.65	.....	1.25	.....
HW11B	HOF	1.65	.....	1.25	.....
HW12B	HOF	1.65	.....	1.25	.....
HW15B	HOF	1.65	.....	1.25	.....
HW18B	HOF	1.65	.....	1.25	.....
HW20B	HOF	1.65	.....	1.25	.....
HW22B	HOF	1.65	.....	1.25	.....
HW24B	HOF	1.65	.....	1.25	.....
HW27B	HOF	1.65	.....	1.25	.....
HW30B	HOF	1.65	.....	1.25	.....
HW33B	HOF	1.65	.....	1.25	.....
HW36B	HOF	1.65	.....	1.25	.....
HW39B	HOF	1.65	.....	1.25	.....
HW43B	HOF	1.65	.....	1.25	.....
HW47B	HOF	1.65	.....	1.25	.....
HW51B	HOF	1.65	.....	1.25	.....
HW56B	HOF	1.65	.....	1.25	.....
HW62B	HOF	1.65	.....	1.25	.....
HW68B	HOF	1.65	.....	1.25	.....
HW75B	HOF	1.65	.....	1.25	.....
HW82B	HOF	1.65	.....	1.25	.....
HW91B	HOF	1.65	.....	1.25	.....
HDS-10	HUG	1.20	.....	.90	.....
HDS-11	HUG	.85	.....	.64	.....

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Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
HDS-12	HUG	.65		.49	
HDS-50	HUG	.98		.49	
HDS-51	HUG	.62		.31	
HDS-52	HUG	.50		.25	
HDS-100	HUG	1.84		.92	
HDS-110	HUG	.77		.39	
HDS-120	HUG	.66		.33	
HLS-50	HOF				
HMC1148	HUG	35.00		28.00	
HMG9001	HUG	2.10		1.58	
HMG9002	HUG	1.91		1.54	
HMG9003	HUG	2.42		1.82	
HMG9004	HUG	2.06		1.54	
HMG9005	HUG	1.72		1.29	
HMG9006	HUG	3.36		2.52	
HMG9007	HUG	2.08		1.56	
HMG9008	HUG	1.72		1.29	
HMG9009	HUG	1.37		1.03	
HMG9010	HUG	1.08		.82	
HSSP-6	HOF	20.00			
HSS-P-2-40	HOF	5.50		4.10	

Type No.	Mfr.	1-24	25-99	100-up
HVC180	SAR	3.35	2.86	2.66
HVC240	SAR	3.60	3.08	2.87
HVC300	SAR	3.85	3.28	3.07
HVC400	SAR	4.00	3.44	3.20
HVC500	SAR	4.15	3.67	3.34
HVC600	SAR	4.55	3.92	3.66
HVC650	SAR	5.00	4.29	4.00
HVC750	SAR	5.40	4.64	4.34
HVC840	SAR	5.85	5.00	4.66
HVC960	SAR	6.65	5.72	5.34
HVC1200	SAR	8.35	7.15	6.66
HVC1500	SAR	10.40	8.94	8.34
HVC1800	SAR	12.50	10.70	10.00
HVC2100	SAR	14.60	12.50	11.67
HVC2500	SAR	17.50	15.00	14.00
HVC3000	SAR	20.80	17.90	16.70
HVC10000	SAR	7.10	6.00	5.66

Type No.	Mfr.	1-9	10-99	100-999	1000-up
J29B04	INT	1.70	1.44		
J29B1	INT	2.48	2.10		
J29B5	INT	7.02	5.94		
J29B8	INT	10.25	8.25		
J29B17	INT	15.35	12.99		
J58B5	INT	13.98	11.83		
J58B8	INT	19.38	16.40		
J116B04	INT	6.08	5.15		
J116B1	INT	8.91	7.54		
J116B5	INT	26.48	22.41		
J116B8	INT	37.13	31.42		
J135B04	INT	7.70	6.26		
J135B1	INT	10.86	9.19		
JD241K	INT				
JJ1010	INT				
JJ1020	INT				
K1038	HOF	6.30		4.75	
KY5DPF	INT	1.27	1.12	.97	
KY6DPF	INT	1.36	1.20	1.04	
KY10DPF	INT	1.74	1.53	1.33	
KZ1DPF	INT	.98	.86	.75	
KZ5DPF	INT	1.53	1.35	1.17	
KZ6DPF	INT	1.74	1.53	1.33	
KZ9DPF	INT	2.00	1.76	1.53	
KSA1DAF	INT	1.04	.91	.79	
KSA2DAF	INT	1.24	1.09	.95	
KSA5DAF	INT	1.84	1.62	1.40	
KSA6DBF	INT	2.04	1.80	1.56	
KSA8DAF	INT	3.74	3.08		
KSA9DBF	INT	2.64	2.33	2.02	
KSA10DBF	INT	2.85	2.51	2.18	
KSA14DBF	INT	3.87	3.41	2.96	
KSL1DAF	INT	2.97	2.62	2.27	
KSL2DAF	INT	3.57	3.15	2.73	
KSL5DAF	INT	5.95	5.25	4.55	
KSL6DBF	INT	6.71	5.92	5.13	
KSL11DBF	INT	26.14	23.06	19.99	
KSL11DBF	INT	26.14	23.06	19.99	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
L1V	GE	3.15		2.10	
L8A	GE	7.00		4.65	
L8F	GE	4.90		3.25	
L8U	GE	4.50		3.00	
L9F	GE	5.40		3.60	
L9U	GE	4.95		3.30	
L14A502	GE	6.00		4.00	
L14B	GE	1.45		.97	
L811A	GE	8.50		5.45	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
LASCS	GE	3.15		2.10	
LED7	GE	135.00			
LED8	GE	135.00			
LED-9	GE	9.00	7.70	5.30	
LED-10	GE	21.00	18.00	12.00	
LED-11	GE	21.00	18.00	12.00	
LS400	TI	10.30		9.10	
LS600	TI	9.00		7.60	
LSX515	TI	14.95		11.30	

Type No.	Mfr.	1-24	25-99	100-up
LSX900	TI	85.00	73.00	
LU300K	SPR	3.90	3.15	2.70	2.60
LU305K	SPR	4.20	3.35	2.95	2.80
LU306K	SPR	4.20	3.35	2.95	2.80
LU314K	SPR	4.20	3.35	2.95	2.80
LU315K	SPR	4.20	3.35	2.95	2.80
LU316K	SPR	4.20	3.35	2.95	2.80
LU320K	SPR	5.55	4.50	3.95	3.75
LU331K	SPR	4.20	3.35	2.95	2.80
LU332K	SPR	4.20	3.35	2.95	2.80

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
M1B	INT	1.72		1.03	
M1H	INT	.56		.34	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
M-150	SAR	.65	.57	.53	
M-150KIT	SAR	.94	.85	.77	
M500KIT	SAR	2.80	2.52	2.24	
M4L20-3	MOT	6.05	5.40	4.05	
M4L20-8	MOT	4.05	3.60	2.70	
M4L20-28	MOT	3.60	3.20	2.40	
M4L20A	MOT	2.70	2.40	1.80	
M4L20M-3	MOT	14.25	12.65	9.50	
M4L20M-8	MOT	9.00	8.00	6.00	
M4L20M-28	MOT	9.00	8.00	6.00	
M4L30-3	MOT	5.25	4.65	3.50	
M4L30-8	MOT	4.05	3.60	2.70	
M4L30-28	MOT	3.60	3.20	2.40	
M4L30A	MOT	2.70	2.40	1.80	
M4L30M-3	MOT	12.75	11.30	8.50	
M4L30M-8	MOT	9.00	8.00	6.00	
M4L30M-28	MOT	9.00	8.00	6.00	
M4L40-3	MOT	5.25	4.65	3.50	
M4L40-8	MOT	4.05	3.60	2.70	
M4L40-28	MOT	3.60	3.20	2.40	
M4L40A	MOT	2.70	2.40	1.80	
M4L40M-3	MOT	12.75	11.30	8.50	
M4L40M-8	MOT	9.00	8.00	6.00	
M4L40M-28	MOT	9.00	8.00	6.00	
M4L50-3	MOT	5.25	4.65	3.50	
M4L50-8	MOT	4.05	3.80	2.70	
M4L50-28	MOT	3.60	3.20	2.40	
M4L50A	MOT	2.70	2.40	1.80	
M4L50M-3	MOT	12.75	11.30	8.50	
M4L50M-8	MOT	9.00	8.00	6.00	
M4L50M-28	MOT	9.00	8.00	6.00	
M4L3052	MOT	4.20	3.65	2.80	
M4L3053	MOT	3.60	3.10	2.15	
M4L3054	MOT	3.45	3.00	2.30	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MA100	MOT	1.00		.67	
MA200	MOT	.58		.39	
MA201	MOT	.67		.45	
MA202	MOT	.67		.45	
MA203	MOT	.75		.50	
MA204	MOT	.58		.39	
MA205	MOT	.50		.33	
MA206	MOT	.42		.28	
MA881	MOT	.72		.48	
MA882	MOT	.80		.52	
MA883	MOT	.89		.59	
MA884	MOT	.98		.65	
MA885	MOT	.50		.33	
MA886	MOT	.59		.39	
MA887	MOT	.68		.45	
MA888	MOT	.75		.50	
MA889	MOT	.84		.56	
MA909	MOT	.63		.42	
MA910	MOT	.75		.50	
MA1703	MOT	1.17		.78	
MA1704	MOT	1.34		.89	
MA1706	MOT	1.00		.67	
MA1707	MOT	1.17		.78	
MAC1-2	MOT	2.40		1.60	
MAC1 4	MOT	3.30		2.20	
MAC1 6	MOT	5.25		3.50	
MAC2 2	MOT	2.55		1.75	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MAC2-4	MOT	3.45		2.35	
MAC2-6	MOT	5.40		3.65	
MAC3-2	MOT	2.50		1.70	
MAC3-4	MOT	3.40		2.30	
MAC3-4	MOT	3.40		2.45	
MAC3-6	MOT	5.35		3.75	
MAC3-6	MOT	5.35		3.60	
MAC3/2	MOT	2.50		1.85	

Type No.	Mfr.	1-24	25-99	100-up
MC260G	MOT	10.50	9.30	8.45
MC262F	MOT	8.00	7.30	6.30
MC262G	MOT	6.00	5.30	4.80
MC265G	MOT	3.30	2.90	2.65
MC267G	MOT	2.80	2.50	2.25
MC301F	MOT	12.65	10.15	8.45
MC301G	MOT	11.55	9.25	7.70
MC302F	MOT	14.85	11.90	9.90
MC302G	MOT	13.70	11.00	9.15
MC303F	MOT	16.70	13.40	11.15
MC303G	MOT	15.60	12.50	10.40
MC304F	MOT	8.40	6.70	5.60
MC304G	MOT	7.25	5.80	4.85
MC305F	MOT	8.40	6.70	5.60
MC305G	MOT	7.25	5.80	4.85
MC306F	MOT	11.30	9.05	7.55
MC306G	MOT	10.20	8.15	6.80
MC307F	MOT	11.30	9.05	7.55
MC307G	MOT	10.20	8.15	6.80
MC308F	MOT	18.80	15.05	12.55
MC308G	MOT	17.70	14.15	11.80
MC309F	MOT	13.70	11.00	9.15
MC310F	MOT	13.70	11.00	9.15
MC311F	MOT	13.70	11.00	9.15
MC312F	MOT	16.70	13.40	11.15
MC312G	MOT	15.60	12.50	10.40
MC312AF	MOT	16.70	13.40	11.15
MC312AG	MOT	15.60	12.50	10.40
MC313F	MOT	18.35	14.70	12.25
MC314F	MOT	21.95	17.60	14.65
MC315F	MOT	24.35	19.50	16.25
MC316F	MOT	11.30	9.05	7.55
MC317F	MOT	11.30	9.05	7.55
MC318F	MOT	11.30	9.05	7.55
MC318G	MOT	10.20	8.15	6.80
MC351F	MOT	6.55	6.00	5.15
MC351G	MOT	4.55	4.00	3.65
MC352AF	MOT	6.45	5.65	5.15
MC352AG	MOT	4.55	4.00	3.65
MC352F	MOT	6.55	6.00	5.15
MC352G	MOT	4.55	4.00	3.65
MC353F	MOT	7.95	7.20	6.25
MC353G	MOT	5.95	5.20	4.75
MC354F	MOT	4.45	4.15	3.45
MC354G	MOT	2.45	2.15	1.95
MC355F	MOT	4.80	4.45	3.75
MC355G	MOT	2.80	2.45	2.25
MC356F	MOT	5.55	5.15	4.35
MC356G	MOT	3.55	3.15	2.85
MC357F	MOT	5.55	5.15	4.35
MC357G	MOT	3.55	3.15	2.85
MC358AF	MOT	11.50	10.35	9.10
MC358AG	MOT	9.50	8.35	7.60
MC358F	MOT	11.50	10.35	9.10
MC358G	MOT	9.50	8.35	7.60
MC359F	MOT	5.70	5.25	4.45
MC359G	MOT	3.70	3.25	2.95
MC360F	MOT	5.70	5.25	4.45
MC360G	MOT	3.70	3.25	2.95
MC361F	MOT	5.70	5.25	4.45
MC361G	MOT	3.70	3.25	2.95
MC362AF	MOT	6.85	6.05	5.50
MC362AG	MOT	5.00	4.40	4.00
MC362F	MOT	7.00	6.40	5.50
MC362G	MOT	5.00	4.40	4.00
MC363F	MOT	7.35	6.50	5.90

Type No.	Mfr.	1-24	25-99	100-up
MC364F	MOT	12.20	10.70	9.75

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC364G	MOT	10.75	9.45	8.60	

Type No.	Mfr.	1-24	25-99	100-up
MC365F	MOT	11.05	9.75	8.85
MC365G	MOT	9.20	8.10	7.35
MC366F	MOT	8.10	7.15	6.50
MC366G	MOT	6.25	5.50	5.00
MC367F	MOT	7.50	6.60	6.00
MC367G	MOT	5.60	4.95	4.50

Semiconductor Directory

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TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-24	25-99	100-up	
MC368F	MOT	7.50	6.60	6.00	
MC368G	MOT	5.60	4.95	4.50	
MC369F	MOT	7.25	6.40	5.80	
MC369G	MOT	5.45	4.80	4.35	
MC400F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999	
MC400P	MOT	3.90	2.95	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC401F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999	
MC401P	MOT	3.90	2.95	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC402F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999	
MC402P	MOT	3.90	2.95	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC403F	MOT	11.25	9.00	7.50	

Type No.	Mfr.	1-999	1000-4999	
MC403P	MOT	5.20	3.95	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC404F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999	
MC404P	MOT	3.90	2.95	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC405F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999	
MC405P	MOT	3.90	2.95	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC406F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999	
MC406P	MOT	3.90	2.95	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC408F	MOT	9.35	7.50	6.25	

Type No.	Mfr.	1-999	1000-4999	
MC408P	MOT	4.95	3.75	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC409F	MOT	5.30	4.25	3.55	

Type No.	Mfr.	1-999	1000-4999	
MC409P	MOT	3.10	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC410F	MOT	4.65	3.70	3.10	

Type No.	Mfr.	1-999	1000-4999	
MC410P	MOT	3.00	2.30	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC411F	MOT	4.65	3.70	3.10	

Type No.	Mfr.	1-999	1000-4999	
MC411P	MOT	3.00	2.30	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC412F	MOT	9.35	7.50	6.25	

Type No.	Mfr.	1-999	1000-4999	
MC412P	MOT	4.95	3.75	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC413F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999	
MC413P	MOT	3.90	2.95	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC415F	MOT	12.60	10.10	8.40	

Type No.	Mfr.	1-999	1000-4999	
MC415P	MOT	5.50	4.20	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC416F	MOT	12.60	10.10	8.40	

Type No.	Mfr.	1-999	1000-4999	
MC416P	MOT	5.50	4.20	
MC450P	MOT	3.10	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC450F	MOT	5.60	4.50	3.75	
MC451F	MOT	5.60	4.50	3.75	

Type No.	Mfr.	1-999	1000-4999	
MC451P	MOT	3.10	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC452F	MOT	5.60	4.50	3.75	

Type No.	Mfr.	1-999	1000-4999	
MC452P	MOT	3.10	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC453F	MOT	7.50	6.00	5.00	

Type No.	Mfr.	1-999	1000-4999	
MC453P	MOT	4.15	3.10	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC454F	MOT	5.60	4.50	3.75	

Type No.	Mfr.	1-999	1000-4999	
MC454P	MOT	3.10	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC455F	MOT	5.60	4.50	3.75	

Type No.	Mfr.	1-999	1000-4999	
MC455P	MOT	3.10	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC456F	MOT	5.60	4.50	3.75	

Type No.	Mfr.	1-999	1000-4999	
MC456P	MOT	3.10	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC458F	MOT	6.35	5.10	4.25	

Type No.	Mfr.	1-999	1000-4999	
MC458P	MOT	3.50	2.65	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC459F	MOT	5.30	4.25	3.55	

Type No.	Mfr.	1-999	1000-4999	
MC459P	MOT	3.10	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC460F	MOT	4.65	3.70	3.10	

Type No.	Mfr.	1-999	1000-4999	
MC460P	MOT	3.00	2.30	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC461F	MOT	4.65	3.70	3.10	

Type No.	Mfr.	1-999	1000-4999	
MC461P	MOT	3.00	2.30	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC462F	MOT	6.35	5.10	4.25	

Type No.	Mfr.	1-999	1000-4999	
MC462P	MOT	3.50	2.65	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC463F	MOT	5.60	4.50	3.75	

Type No.	Mfr.	1-999	1000-4999	
MC463P	MOT	3.10	2.35	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC465F	MOT	8.45	6.80	5.65	

Type No.	Mfr.	1-999	1000-4999	
MC465P	MOT	4.50	3.40	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC466F	MOT	8.45	6.80	5.65	

Type No.	Mfr.	1-999	1000-4999	
MC466P	MOT	4.50	3.40	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC500F	MOT	11.25	9.00	7.50	
MC501F	MOT	11.25	9.00	7.50	
MC502F	MOT	11.25	9.00	7.50	
MC503F	MOT	15.00	12.00	10.00	
MC504F	MOT	11.25	9.00	7.50	
MC505F	MOT	11.25	9.00	7.50	
MC506F	MOT	11.25	9.00	7.50	

Type No.	Mfr.	1-24	25-99	100-up	
MC508F	MOT	12.45	9.95	8.30	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC509F	MOT	9.00	7.20	6.00	

Type No.	Mfr.	1-24	25-99	100-up	
MC510F	MOT	7.95	6.35	5.30	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC511F	MOT	7.95	6.36	5.30	

Type No.	Mfr.	1-24	25-99	100-up	
MC512F	MOT	12.45	9.95	8.30	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC513F	MOT	11.25	9.00	7.50	
MC515F	MOT	16.85	13.50	11.25	
MC516F	MOT	16.85	13.50	11.25	

Type No.	Mfr.	1-24	25-99	100-up	
MC550F	MOT	9.60	7.70	6.40	
MC551F	MOT	9.60	7.70	6.40	
MC552F	MOT	9.60	7.70	6.40	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC553F	MOT	12.75	10.20	8.50	

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Type No.	Mfr.	1-24	25-99	100-up	
MC554F	MOT	9.60	7.70	6.40	.....
MC555F	MOT	9.60	7.70	6.40	.....
MC556F	MOT	9.60	7.70	6.40	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC558F	MOT	10.65	8.50	7.10	.....
MC559F	MOT	9.00	7.20	6.00	.....
MC560F	MOT	7.95	6.35	5.30	.....
MC561F	MOT	7.95	6.35	5.30	.....
MC562F	MOT	10.65	8.50	7.10	.....
MC563F	MOT	9.60	7.70	6.40	.....
MC565F	MOT	14.40	11.50	9.60	.....
MC566F	MOT	14.40	11.50	9.60	.....
MC650G	MOT	8.65	7.60	6.90	.....
MC651F	MOT	10.65	9.35	8.50	.....

Type No.	Mfr.	1-9	10-24	25-up	
MC651G	MOT	12.00	10.50	9.55	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC652F	MOT	14.45	12.70	11.55	.....
MC652G	MOT	12.00	10.50	9.95	.....

Type No.	Mfr.	1-99	100-499	500-999	1000-up
MC660P	MOT	4.10	3.50	.....	.....
MC661P	MOT	4.10	3.50	.....	.....
MC663P	MOT	7.20	6.10	.....	.....
MC664P	MOT	4.80	4.05	.....	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC700F	MOT	3.30	2.65	2.15	.....
MC703F	MOT	3.30	2.65	2.15	.....
MC704F	MOT	3.35	2.70	2.25	.....
MC705F	MOT	4.80	3.80	3.20	.....
MC706F	MOT	4.80	3.80	3.20	.....
MC707F	MOT	3.30	2.65	2.15	.....
MC708F	MOT	2.60	2.10	1.75	.....
MC709F	MOT	2.85	2.30	1.95	.....
MC710F	MOT	2.30	1.80	1.50	.....
MC711F	MOT	2.30	1.80	1.50	.....
MC712F	MOT	2.60	2.10	1.75	.....
MC713F	MOT	3.75	3.00	2.50	.....
MC714F	MOT	3.30	2.65	2.15	.....
MC715F	MOT	3.65	2.90	2.40	.....
MC717F	MOT	3.40	2.75	2.25	.....
MC718F	MOT	2.75	2.15	1.80	.....
MC719F	MOT	3.40	2.75	2.25	.....
MC720F	MOT	6.00	4.85	4.00	.....

Type No.	Mfr.	1-999	1000-4999	
MC700G	MOT	1.85	1.40	.....
MC701G	MOT	1.85	1.40	.....
MC702G	MOT	1.85	1.40	.....
MC703G	MOT	1.85	1.40	.....
MC704G	MOT	2.60	1.95	.....
MC705G	MOT	3.00	2.25	.....
MC706G	MOT	3.00	2.25	.....
MC707G	MOT	1.85	1.40	.....
MC708G	MOT	1.60	1.20	.....
MC709G	MOT	1.85	1.40	.....
MC710G	MOT	1.40	1.05	.....
MC711G	MOT	1.40	1.05	.....
MC712G	MOT	1.60	1.20	.....
MC713G	MOT	2.75	2.05	.....
MC714G	MOT	1.85	1.40	.....
MC715G	MOT	2.20	1.65	.....
MC715P	MOT	1.00	.75	.....
MC717P	MOT	1.08	.81	.....
MC718G	MOT	2.00	1.50	.....
MC718P	MOT	1.00	.75	.....
MC719P	MOT	1.08	.81	.....

Type No.	Mfr.	1-999	1000-4999	
MC720G	MOT	3.80	2.85	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC721F	MOT	2.10	1.70	1.50	.....
MC722F	MOT	6.00	4.85	4.00	.....

Type No.	Mfr.	1-999	1000-4999	
MC722P	MOT	1.35	1.00	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC723F	MOT	6.00	4.85	4.00	.....
MC724F	MOT	4.95	3.90	3.25	.....
MC725F	MOT	4.95	3.90	3.25	.....
MC726F	MOT	6.00	4.85	4.00	.....

Type No.	Mfr.	1-999	1000-4999		
MC723G	MOT	3.80	2.85	.....	.....
MC723P	MOT	1.35	1.00	.....	.....
MC724P	MOT	1.08	.81	.....	.....
MC725P	MOT	1.08	.81	.....	.....
MC726G	MOT	3.80	2.85	.....	.....
MC726P	MOT	1.35	1.00	.....	.....
MC727G	MOT	2.20	1.65	.....	.....
MC728G	MOT	1.40	1.05	.....	.....
MC729G	MOT	1.85	1.40	.....	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC727F	MOT	3.65	2.90	2.40	.....
MC728F	MOT	1.90	1.55	1.30	.....
MC729F	MOT	3.30	2.65	2.15	.....

Type No.	Mfr.	1-999	1000-4999	
MC774G	MOT	3.80	2.85	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC776F	MOT	9.05	7.25	6.00	.....

Type No.	Mfr.	1-999	1000-4999	
MC776P	MOT	2.10	1.60	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC778F	MOT	5.65	4.50	3.80	.....

Type No.	Mfr.	1-999	1000-4999	
MC778P	MOT	2.35	1.75	.....
MC779P	MOT	2.45	1.80	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC785F	MOT	4.95	3.90	3.25	.....

Type No.	Mfr.	1-999	1000-4999	
MC785P	MOT	1.25	.95	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC786F	MOT	4.95	3.90	3.25	.....

Type No.	Mfr.	1-999	1000-4999	
MC786P	MOT	1.25	.95	.....
MC787P	MOT	2.45	1.80	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC788F	MOT	5.25	4.20	3.50	.....
MC789F	MOT	4.40	3.50	2.90	.....
MC790F	MOT	9.05	7.25	6.00	.....
MC792F	MOT	5.25	4.20	3.50	.....
MC793F	MOT	3.30	2.65	2.15	.....
MC798F	MOT	4.30	3.40	2.85	.....
MC799F	MOT	3.95	3.20	2.65	.....
MC800F	MOT	4.70	3.75	3.10	.....

Type No.	Mfr.	1-999	1000-4999	
MC788P	MOT	1.35	1.00	.....
MC789P	MOT	1.08	.81	.....
MC790P	MOT	2.00	1.50	.....

Type No.	Mfr.	1-999	1000-4999	
MC792P	MOT	1.20	.90	.....
MC793P	MOT	1.20	.90	.....
MC798P	MOT	1.35	1.00	.....
MC799G	MOT	2.25	1.70	.....
MC799P	MOT	1.08	.81	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC800G	MOT	3.60	2.90	2.40	.....
MC801G	MOT	3.60	2.90	2.40	.....
MC802G	MOT	3.60	2.90	2.40	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC803F	MOT	4.70	3.75	3.10	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC803G	MOT	3.60	2.90	2.40	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC804F	MOT	4.75	3.85	3.20	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC804G	MOT	3.65	2.95	2.45	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC805F	MOT	6.85	5.45	4.55	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC805G	MOT	5.25	4.20	3.50	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC806F	MOT	6.85	5.45	4.55	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC806G	MOT	5.25	4.20	3.50	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC807F	MOT	4.70	3.75	3.10	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC807G	MOT	3.60	2.90	2.40	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC808F	MOT	3.70	3.00	2.50	.....
MC809F	MOT	4.10	3.25	2.75	.....
MC810F	MOT	3.25	2.60	2.15	.....
MC811F	MOT	3.25	2.60	2.15	.....
MC812F	MOT	3.70	3.00	2.50	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC812G	MOT	3.70	3.25	2.95	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC813F	MOT	5.85	4.30	3.60	.....
MC814F	MOT	4.70	3.75	3.10	.....
MC814G	MOT	3.60	2.90	2.40	.....
MC815F	MOT	5.20	4.15	3.45	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC815G	MOT	3.95	3.20	2.65	.....

Type No.	Mfr.	1-999	1000-4999	
MC815P	MOT	1.15	.86	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC816F	MOT	8.60	6.90	5.70	.....

Type No.	Mfr.	1-24	25-99	100-up	
MC816G	MOT	6.60	5.30	4.40	.....

Type No.	Mfr.	1-999	1000-4999	
MC816P	MOT	1.55	1.15	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC817F	MOT	4.85	3.90	3.20	.....

Type No.	Mfr.	1-999	1000-4999	
MC817P	MOT	1.25	.93	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC818F	MOT	3.90	3.10	2.60	.....

Type No.	Mfr.	1-999	1000-4999	
MC818P	MOT	1.15	.86	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC819F	MOT	4.85	3.90	3.20	.....

Type No.	Mfr.	1-999	1000-4999	
MC819P	MOT	1.25	.93	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC820F	MOT	8.60	6.90	5.70	.....
MC821F	MOT	3.00	2.40	2.00	.....
MC822F	MOT	8.60	6.90	5.70	.....

Type No.	Mfr.	1-999	1000-4999	
MC822P	MOT	1.55	1.15	.....

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC824F	MOT	7.05	5.60	4.65	.....

Type No.	Mfr.	1-999	1000-4999	
MC824P	MOT	1.25	.93	.....

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	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC825F	MOT	7.05	5.60	4.65	

Type No.	Mfr.	1-999	1000-4999
MC825P	MOT	1.25	.93

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC826F	MOT	8.60	6.90	5.70	

Type No.	Mfr.	1-24	25-99	100-up
MC826G	MOT	6.60	5.30	4.40

Type No.	Mfr.	1-999	1000-4999
MC826P	MOT	1.55	1.15

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC827F	MOT	5.20	4.15	3.45	
MC828F	MOT	2.75	2.20	1.80	
MC829F	MOT	4.70	3.75	3.10	
MC829G	MOT	3.60	2.90	2.40	
MC830F	MOT	3.60	2.90	2.40	
MC830G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC830P	MOT	1.55	1.15

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC831F	MOT	5.25	4.20	3.50	
MC831G	MOT	5.25	4.20	3.50	

Type No.	Mfr.	1-999	1000-4999
MC831P	MOT	3.00	2.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC832F	MOT	4.05	3.25	2.70	
MC832G	MOT	4.05	3.25	2.70	

Type No.	Mfr.	1-999	1000-4999
MC832P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-up
MC833F	MOT	4.70	3.80	3.15
MC833G	MOT	4.50	3.60	3.00

Type No.	Mfr.	1-999	1000-4999
MC833P	MOT	1.35	1.00

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC834F	MOT	4.35	3.50	2.90	

Type No.	Mfr.	1-999	1000-4999
MC834P	MOT	2.00	1.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC836F	MOT	4.35	3.50	2.90	

Type No.	Mfr.	1-999	1000-4999
MC836P	MOT	2.00	1.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC837F	MOT	4.35	3.50	2.90	

Type No.	Mfr.	1-999	1000-4999
MC837P	MOT	2.00	1.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC838F	MOT	15.00	12.00	10.00	

Type No.	Mfr.	1-999	1000-4999
MC838P	MOT	7.55	6.70
MC839P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC844F	MOT	4.05	3.25	2.70	
MC844G	MOT	4.05	3.25	2.70	

Type No.	Mfr.	1-999	1000-4999
MC844P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC845F	MOT	5.25	4.20	3.50	
MC845G	MOT	5.25	4.20	3.50	

Type No.	Mfr.	1-999	1000-4999
MC845P	MOT	3.00	2.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC846F	MOT	3.60	2.90	2.40	
MC846G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC846P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC848F	MOT	5.25	4.20	3.50	
MC848G	MOT	5.25	4.20	3.50	

Type No.	Mfr.	1-999	1000-4999
MC848P	MOT	3.00	2.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC849F	MOT	3.60	2.90	2.40	
MC849G	MOT	3.60	2.90	2.40	
MC850F	MOT	11.60	9.30	7.75	
MC850G	MOT	11.40	9.10	7.60	

Type No.	Mfr.	1-999	1000-4999
MC850P	MOT	4.50	3.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC851F	MOT	11.60	9.30	7.75	
MC851G	MOT	11.40	9.10	7.60	

Type No.	Mfr.	1-999	1000-4999
MC851P	MOT	4.50	3.35

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC852F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999
MC852P	MOT	4.75	3.60

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC853F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999
MC853P	MOT	4.75	3.60

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC855F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999
MC855P	MOT	4.75	3.60

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC856F	MOT	8.40	6.70	5.60	

Type No.	Mfr.	1-999	1000-4999
MC856P	MOT	4.75	3.60

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC861F	MOT	3.60	2.90	2.40	
MC861G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC861P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC862F	MOT	3.60	2.90	2.40	
MC862G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC862P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC863F	MOT	3.60	2.90	2.40	
MC863G	MOT	3.60	2.90	2.40	

Type No.	Mfr.	1-999	1000-4999
MC863P	MOT	1.65	1.25

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC874G	MOT	6.60	5.30	4.40	
MC876F	MOT	12.90	10.35	8.55	

Type No.	Mfr.	1-999	1000-4999
MC876P	MOT	2.40	1.85

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC878F	MOT	8.05	6.45	5.40	

Type No.	Mfr.	1-999	1000-4999
MC878P	MOT	2.70	2.00
MC879P	MOT	2.85	2.10

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC885F	MOT	7.05	5.65	4.65	

Type No.	Mfr.	1-999	1000-4999
MC885P	MOT	1.50	1.12

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC886F	MOT	7.05	5.65	4.65	

Type No.	Mfr.	1-999	1000-4999
MC886P	MOT	1.50	1.12
MC887P	MOT	2.85	2.10

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC888F	MOT	7.50	6.00	5.00	

Type No.	Mfr.	1-999	1000-4999
MC888P	MOT	1.55	1.15

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC889F	MOT	6.25	5.00	4.15	

Type No.	Mfr.	1-999	1000-4999
MC889P	MOT	1.25	.93

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC890F	MOT	12.90	10.35	8.55	

Type No.	Mfr.	1-999	1000-4999
MC890P	MOT	2.30	1.72

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC892F	MOT	7.50	6.00	5.00	

Type No.	Mfr.	1-999	1000-4999
MC892P	MOT	1.38	1.05

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC893F	MOT	4.70	3.70	3.10	

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Type No.	Mfr.	1-999	1000-4999		
MC893P	MOT	1.38	1.05		

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC898F	MOT	6.15	4.85	4.10	

Type No.	Mfr.	1-999	1000-4999		
MC898P	MOT	1.55	1.15		

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC899F	MOT	5.65	4.55	3.75	
MC899G	MOT	4.35	3.50	2.90	

Type No.	Mfr.	1-999	1000-4999		
MC899P	MOT	1.25	.93		

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC900F	MOT	8.80	7.00	5.85	

Type No.	Mfr.	1-24	25-99	100-up
MC900G	MOT	6.75	5.40	4.50
MC902G	MOT	6.75	5.40	4.50

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC903F	MOT	8.80	7.00	5.85	
MC904F	MOT	10.55	8.45	7.00	
MC905F	MOT	10.55	8.45	7.00	
MC906F	MOT	10.55	8.45	7.00	
MC907F	MOT	8.80	7.00	5.85	
MC908F	MOT	10.35	8.30	6.90	
MC909F	MOT	9.75	7.80	6.50	
MC910F	MOT	8.40	6.75	5.60	
MC911F	MOT	8.40	6.75	5.60	
MC912F	MOT	9.75	7.80	6.50	
MC913F	MOT	11.60	9.25	7.75	
MC915F	MOT	8.80	7.00	5.85	
MC916F	MOT	13.20	10.55	8.80	
MC917F	MOT	12.60	10.10	8.40	
MC918F	MOT	8.80	7.00	5.85	
MC919F	MOT	12.60	10.10	8.40	
MC920F	MOT	13.20	10.55	8.80	
MC921F	MOT	7.30	5.85	4.90	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
MC922F	MOT	13.20	10.55	8.80	
MC924F	MOT	13.10	10.50	8.75	

Type No.	Mfr.	1-24	25-99	100-up
MC925F	MOT	13.10	10.50	8.75
MC926F	MOT	13.20	10.55	8.80
MC927F	MOT	8.80	7.00	5.85
MC928F	MOT	6.20	4.95	4.10
MC929F	MOT	8.80	7.00	5.85
MC934F	MOT	7.80	6.25	5.20
MC936F	MOT	7.80	6.25	5.20
MC937F	MOT	7.80	6.25	5.20
MC938F	MOT	27.00	21.60	18.00
MC946G	MOT	6.50	5.20	4.35
MC949F	MOT	6.50	5.20	4.35
MC949G	MOT	6.50	5.20	4.35
MC950F	MOT	20.25	16.20	13.50
MC950G	MOT	18.50	14.80	12.35
MC951F	MOT	20.25	16.20	13.50
MC951G	MOT	18.50	14.80	12.35
MC952F	MOT	14.40	11.50	9.60
MC953F	MOT	14.40	11.50	9.60
MC955F	MOT	14.40	11.50	9.60
MC956F	MOT	14.40	11.50	9.60
MC961F	MOT	6.50	5.20	4.35
MC961G	MOT	6.50	5.20	4.35
MC962G	MOT	6.50	5.20	4.35
MC963F	MOT	6.50	5.20	4.35
MC963G	MOT	6.50	5.20	4.35
MC974G	MOT	10.10	8.10	6.75
MC976F	MOT	19.50	15.80	13.20
MC978F	MOT	17.40	13.85	11.60
MC985F	MOT	13.10	10.50	8.75
MC986F	MOT	13.10	10.50	8.75
MC988F	MOT	14.10	11.20	9.35
MC989F	MOT	10.55	8.40	7.00
MC990F	MOT	19.50	15.80	13.20
MC992F	MOT	14.10	11.20	9.35
MC993F	MOT	10.55	8.40	7.00
MC998F	MOT	14.60	11.70	9.75
MC999F	MOT	10.75	8.60	7.15

Type No.	Mfr.	1-999	1000-4999		
MC1001P	MOT	2.65	2.05		
MC1002P	MOT	2.65	2.05		

Type No.	Mfr.	1-999	1000-4999		
MC1003P	MOT	2.65	2.05		
MC1004P	MOT	2.85	2.20		
MC1005P	MOT	2.85	2.20		
MC1006P	MOT	2.85	2.20		
MC1007P	MOT	2.85	2.20		
MC1008P	MOT	2.85	2.20		
MC1009P	MOT	2.85	2.20		
MC1010P	MOT	3.05	2.35		
MC1011P	MOT	3.05	2.35		
MC1012P	MOT	3.05	2.35		
MC1013P	MOT	4.55	3.50		
MC1014P	MOT	5.50	4.25		
MC1015P	MOT	5.50	4.25		
MC1016P	MOT	5.50	4.25		
MC1017P	MOT	3.45	2.65		
MC1018P	MOT	3.45	2.65		
MC1019P	MOT	6.70	5.15		
MC1020P	MOT	3.05	2.35		
MC1021P	MOT	6.70	5.15		
MC1023P	MOT	8.45	6.50		
MC1024P	MOT	3.00	2.30		
MC1025P	MOT	2.75	2.10		
MC1027P	MOT	9.60	7.40		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MC1050F	MOT	5.30	4.25	3.55	
MC1051F	MOT	5.30	4.25	3.55	
MC1052F	MOT	5.30	4.25	3.55	

Type No.	Mfr.	1-24	25-99	100-up
MC1110G	MOT	37.50	31.25	25.00

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MC1120P	MOT	4.90		4.20	3.50
MC1124P	MOT	6.30		5.40	4.50

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1201F	MOT	10.35	8.30	6.90	
MC1202F	MOT	10.35	8.30	6.90	
MC1203F	MOT	10.35	8.30	6.90	

Type No.	Mfr.	1-24	25-99	100-up
MC1204F	MOT	10.80	8.65	7.20
MC1205F	MOT	10.80	8.65	7.20
MC1206F	MOT	10.80	8.65	7.20

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1207F	MOT	10.80	8.65	7.20	
MC1208F	MOT	10.80	8.65	7.20	
MC1209F	MOT	10.80	8.65	7.20	

Type No.	Mfr.	1-24	25-99	100-up
MC1210	MOT	11.40	9.10	7.60
MC1211F	MOT	11.40	9.10	7.60
MC1212F	MOT	11.40	9.10	7.60
MC1213F	MOT	14.85	11.90	9.90

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1219F	MOT	22.85	18.30	15.25	
MC1221F	MOT	22.85	18.30	15.25	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MC1302P	MOT	4.90		4.20	

Type No.	Mfr.	1-24	25-99	100-up
MC1429G	MOT	4.50	3.75	3.00

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1430F	MOT	15.00	12.50	10.00	
MC1430G	MOT	8.25	6.90	5.50	
MC1431F	MOT	17.25	14.35	11.50	
MC1431G	MOT	8.85	7.35	5.90	
MC1433F	MOT	28.50	23.75	19.00	
MC1433G	MOT	9.75	8.10	6.50	
MC1440F	MOT	18.00	15.00	12.00	
MC1440G	MOT	12.00	10.00	8.00	
MC1510F	MOT	13.95	11.65	9.30	
MC1510G	MOT	12.00	10.00	8.00	
MC1511F	MOT	15.95	14.00	12.75	

Type No.	Mfr.	1-24	25-99	100-up
MC1511G	MOT	13.45	11.80	10.75

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1512F	MOT	18.45	16.20	14.75	

Type No.	Mfr.	1-24	25-99	100-up	
MC1512G	MOT	15.30	13.50	12.25	
MC1519G	MOT	50.00	40.00	30.00	
MC1524G	MOT	70.00	55.00	40.00	
MC1524G	MOT	70.00	55.00	40.00	
MC1525G	MOT	12.00	10.00	8.00	
MC1526G	MOT	60.00	48.00	36.00	
MC1529G	MOT	11.25	9.35	7.50	
MC1530	MOT	27.00	22.50	18.00	
MC1531	MOT	30.00	25.00	20.00	

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1530F	MOT	30.00	25.00	20.00	
MC1531F	MOT	33.00	27.50	22.00	
MC1533F	MOT	60.00	50.00	40.00	
MC1533G	MOT	51.00	42.50	34.00	
MC1540F	MOT	31.50	26.25	21.00	
MC1540G	MOT	36.75	30.60	24.50	
MC1550G	MOT	4.25	3.55	2.85	

Type No.	Mfr.	1-24	25-99	100-up
MC1552G	MOT	12.00	10.00	8.00
MC1553G	MOT	12.00	10.00	8.00

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
MC1709	MOT	75.00	62.50	50.00	
MC1709CF	MOT	31.50	25.20	21.00	
MC1709CG	MOT	9.90	8.25	6.60	
MC1709F	MOT	69.00	57.50	46.00	
MC1710CF	MOT	18.00	14.40	12.00	
MC1710CG	MOT	8.25	6.60	5.50	
MC1710F	MOT	25.50	21.25	17.00	
MC1710G	MOT	16.50	13.75	11.00	
MC1711CG	MOT	13.54	11.25	9.00	
MC1712CF	MOT	18.00	14.40	12.00	
MC1712CG	MOT	9.00	7.20	6.00	
MC1712F	MOT	34.50	27.60	23.00	
MC1712G	MOT	22.50	18.00	15.00	

Type No.	Mfr.	1-99	100-999	
MCA1911N	MOT	4.50	3.00	
MCA1911P	MOT	4.50	3.00	
MCA1912N	MOT	4.50	3.00	
MCA1912P	MOT	7.95	5.30	
MCA1913N	MOT	7.95	5.30	
MCA1913P	MOT	14.10	9.40	
MCA1914N	MOT	14.10	9.40	
MCA1914P	MOT	23.40	15.60	
MCA1921N	MOT	23.40	15.60	
MCA1921P	MOT	7.95	5.30	
MCA1922N	MOT	7.95	5.30	
MCA1922P	MOT	14.10	9.40	
MCA1923N	MOT	14.10	9.40	
MCA1923P	MOT	22.50	15.00	
MCA1924N	MOT	22.50	15.00	
MCA1924P	MOT	45.00	29.00	
MCA1931N	MOT	45.00	29.00	
MCA1931P	MOT	8.25	5.50	
MCA1932N	MOT	8.25	5.50	
MCA1932P	MOT	14.10	9.40	
MCA1933N	MOT	14.10	9.40	
MCA1933P	MOT	23.40	15.60	
MCA1934N	MOT	49.50	33.00	
MCA1934P	MOT	49.50	33.00	
MCA2011N	MOT	4.50	3.00	
MCA2011P	MOT	4.50	3.00	
MCA2012N	MOT	7.95	5.30	
MCA2012P	MOT	7.95	5.30	

Type No.	Mfr.	1-99	100-999	
MCA2013N	MOT	14.10	9.40	
MCA2013P	MOT	14.10	9.40	
MCA2014N	MOT	23.40	15.60	
MCA2014P	MOT	23.40	15.60	
MCA2021N	MOT	7.95	5.30	
MCA2021P	MOT	7.95	5.30	
MCA2022N	MOT	14.10	9.40	
MCA2022P	MOT	14.10	9.40	
MCA2023N	MOT	22.50	15.00	
MCA2023P	MOT	22.50	15.00	
MCA2024N	MOT	45.00	29.00	
MCA2024P	MOT	45.00	29.00	
MCA2031N	MOT	8.25	5.50	
MCA2031P	MOT	8.25	5.50	
MCA2032N	MOT	14.10	9.40	
MCA2032P	MOT	14.10	9.40	
MCA2033N	MOT	23.40	15.60	
MCA2033P	MOT	23.40	15.60	
MCA2034N	MOT	49.50	33.00	
MCA2034P	MOT	49.50	33.00	
MCA2111N	MOT	5.25	3.95	

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GE	—General Electric	**INT**	—International Rectifier	**SAR**	—Sarkes-Tarzian	**WES**	—Westinghouse
		MOT	—Motorola	**SPR**	—Sprague		

Type No.	Mfr.	1-99	100-999
MCA2111P	MOT	5.25	3.95
MCA2112N	MOT	7.95	5.30
MCA2112P	MOT	7.95	5.30
MCA2114N	MOT	23.40	15.60
MCA2114P	MOT	23.40	15.60
MCA2121N	MOT	7.95	5.30
MCA2121P	MOT	7.95	5.30
MCA2122N	MOT	14.10	9.40
MCA2122P	MOT	14.10	9.40
MCA2123N	MOT	22.50	15.00
MCA2123P	MOT	22.50	15.00
MCA2124N	MOT	45.00	29.00
MCA2131N	MOT	8.25	5.50
MCA2131P	MOT	8.25	5.50
MCA2132N	MOT	14.10	9.40
MCA2132P	MOT	14.10	9.40
MCA2133N	MOT	23.40	15.60
MCA2133P	MOT	23.40	15.60
MCA2134N	MOT	49.50	33.00
MCA2134P	MOT	49.50	33.00
MCA2211N	MOT	5.25	3.95
MCA2211P	MOT	5.25	3.95
MCA2212N	MOT	7.95	5.30
MCA2212P	MOT	7.95	5.30
MCA2213N	MOT	14.10	9.40
MCA2213P	MOT	14.10	9.40
MCA2214N	MOT	23.40	15.60
MCA2214P	MOT	23.40	15.60
MCA2221N	MOT	7.95	5.30
MCA2221P	MOT	7.95	5.30
MCA2222N	MOT	14.10	9.40
MCA2222P	MOT	14.10	9.40
MCA2223N	MOT	22.50	15.00
MCA2223P	MOT	22.50	15.00
MCA2224N	MOT	45.00	29.00
MCA2224P	MOT	45.00	29.00
MCA2231N	MOT	8.25	5.50
MCA2231P	MOT	8.25	5.50
MCR649-1	MOT	4.35	2.90
MCR649-2	MOT	4.80	3.20
MCR649-3	MOT	5.55	3.70
MCR649-4	MOT	7.35	4.90
MCR649-5	MOT	14.10	9.40
MCR649-6	MOT	16.50	11.00
MCR649-7	MOT	19.65	13.10
MCR808-4	MOT	4.504	3.60
MCR808-5	MOT	6.75	5.40
MCR808-6	MOT	9.90	7.90
MCR1308-1	MOT	3.05	2.50
MCR1308-2	MOT	3.35	2.75
MCR1308-3	MOT	4.05	3.30
MCR1308-4	MOT	4.75	3.85
MCR1308-5	MOT	7.00	5.65
MCR1308-6	MOT	10.05	8.15
MCR1308/R-5	MOT	7.20	5.85
MCR1718-5	MOT	25.50	17.00
MCR1718-6	MOT	30.00	20.00
MCR1718-7	MOT	37.50	25.00
MCR1718-8	MOT	45.00	30.00
MCR1906-1	MOT	1.57	1.05
MCR1906-2	MOT	1.65	1.10
MCR1906-3	MOT	1.87	1.25
MCR1906-4	MOT	1.98	1.35
MCR2304-1	MOT	1.45	1.05
MCR2304-2	MOT	1.60	1.10
MCR2304-3	MOT	1.75	1.25
MCR2304-4	MOT	1.95	1.35
MCR2304-5	MOT	2.40	1.60
MCR2304-6	MOT	2.80	1.85
MCR2304-7	MOT	5.00	3.35
MCR2304-8	MOT	6.75	4.50
MCR2304/L-2	MOT	1.60	1.10
MCR2304/L-3	MOT	1.75	1.25
MCR2304/L-4	MOT	1.95	1.35
MCR2304/L-5	MOT	2.40	1.60
MCR2304/L-6	MOT	2.80	1.85
MCR2304/L-7	MOT	5.00	3.35
MCR2304/L-8	MOT	6.75	4.50
MCR2305-2	MOT	1.75	1.25
MCR2305-3	MOT	1.90	1.40
MCR2305-4	MOT	2.10	1.50
MCR2305-5	MOT	2.55	1.75
MCR2305-6	MOT	2.95	2.00
MCR2305-7	MOT	5.15	3.50
MCR2305-8	MOT	6.90	4.65
MCR2305/L-1	MOT	1.60	1.20
MCR2305/L-1	MOT	1.64	1.24
MCR2305/L-2	MOT	1.75	1.25
MCR2305/L-3	MOT	1.90	1.40
MCR2305/L-4	MOT	2.10	1.50
MCR2305/L-5	MOT	2.55	1.75
MCR2305/L-6	MOT	2.95	2.00
MCR2305/L-7	MOT	5.15	3.50
MCR2305/L-8	MOT	6.90	4.65
MCR2394/L-1	MOT	1.45	1.05
MCR2604-1	MOT	1.55	1.15
MCR2604-2	MOT	1.70	1.20
MCR2604-3	MOT	1.85	1.35
MCR2604-4	MOT	2.05	1.45
MCR2604-5	MOT	2.50	1.70
MCR2604-6	MOT	2.90	1.95
MCR2604-8	MOT	6.85	4.50
MCR2604/L-1	MOT	1.59	1.19
MCR2604/L-2	MOT	1.74	1.24
MCR2604/L-3	MOT	1.89	1.39
MCR2604/L-4	MOT	2.09	1.49
MCR2604/L-5	MOT	2.54	1.74
MCR2604/L-6	MOT	2.94	1.99
MCR2604/L-7	MOT	5.14	3.49
MCR2604/L-8	MOT	6.89	4.64
MCR2605-1	MOT	1.55	1.15 .80
MCR2605-2	MOT	1.70	1.20 .87
MCR2605-3	MOT	1.85	1.35 .97
MCR2605-4	MOT	2.05	1.45 1.06
MCR2605-5	MOT	2.50	1.70 1.26
MCR2605-6	MOT	2.90	1.95 1.46
MCR2605-7	MOT	5.10	3.45
MCR2605-8	MOT	6.85	4.60
MCR2605/L-1	MOT	1.59	1.19
MCR2605/L-2	MOT	1.74	1.24
MCR2605/L-3	MOT	1.89	1.39
MCR2605/L-4	MOT	2.09	1.49
MCR2605/L-5	MOT	2.54	1.74
MCR2605/L-6	MOT	2.94	1.99
MCR2605/L-7	MOT	5.14	3.49
MCR2605/L-8	MOT	6.89	4.64
MCR2818-1	MOT	3.00	2.00
MCR2818-2	MOT	3.30	2.20
MCR2818-3	MOT	3.75	2.50
MCR2818-4	MOT	4.65	3.10
MCR2818-5	MOT	5.55	3.70
MCR2818-6	MOT	6.45	4.30
MCR2818-7	MOT	8.85	5.90
MCR2818-8	MOT	9.75	6.50
MCR2818/R-1	MOT	3.00	2.00
MCR2818/R-2	MOT	3.30	2.20
MCR2818/R-3	MOT	3.75	2.50
MCR2835-1	MOT	3.75	2.50
MCR2835-2	MOT	4.50	3.00
MCR2835-3	MOT	4.85	3.25
MCR2835-4	MOT	5.85	3.90
MCR2835-5	MOT	7.20	4.80
MCR2835-6	MOT	8.25	5.50
MCR2835-7	MOT	10.65	7.10
MCR2835-8	MOT	12.35	8.25
MCR2918-8	MOT	10.10	6.75
MCR2935-1	MOT	4.10	2.75
MCR2935-2	MOT	4.85	3.25
MCR2935-3	MOT	5.25	3.50
MCR2935-4	MOT	6.20	4.15
MCR2935-5	MOT	7.55	5.05
MCR2935-6	MOT	8.60	5.75
MCR2935-7	MOT	11.00	7.35
MCR2935-8	MOT	12.75	8.50
MD500B	MOT	15.75	10.50
MD708	MOT	4.35	2.90
MC708A	MOT	6.75	4.50
MD708AF	MOT	15.75	10.50
MD708B	MOT	4.80	3.20
MD708BF	MOT	12.30	8.20
MD708F	MOT	8.85	5.90
MD918	MOT	8.25	5.50
MD918A	MOT	15.75	10.50
MD918AF	MOT	24.75	16.50
MD918B	MOT	13.20	8.80
MD918BF	MOT	20.25	13.50
MD918F	MOT	12.75	8.50

Type No.	Mfr.	1-9	10-99	100-999	1000-up
MDA942-1	MOT	2.15	1.90	1.60	
MDA942-2	MOT	2.40	2.15	1.80	
MDA942-3	MOT	2.65	2.40	2.00	
MDA942-5	MOT	3.10	2.80	2.35	
MDA942-6	MOT	4.10	3.70	3.10	
MDA952-1	MOT	3.25	2.95	2.45	
MDA952-2	MOT	3.50	3.20	2.65	
MDA952-3	MOT	4.45	4.00	3.35	
MDA952-4	MOT	4.90	4.45	3.70	
MDA952-5	MOT	6.00	5.40	4.50	
MDA960-1	MOT	2.90	2.55	1.95	
MDA960-2	MOT	3.35	2.95	2.25	
MDA960-3	MOT	3.75	3.30	2.50	
MDA962-1	MOT	3.65	3.30	2.75	
MDA962-2	MOT	3.90	3.55	2.95	
MDA962-3	MOT	4.85	4.40	3.65	
MDA962-4	MOT	5.30	4.80	4.00	
MDA962-5	MOT	6.40	5.75	4.80	
MDA970-1	MOT	3.20	2.90	2.15	
MDA970-2	MOT	3.65	3.30	2.45	
MDA970-3	MOT	4.10	3.70	2.75	

Type No.	Mfr.	1-99	100-999
MD981	MOT	12.95	8.65
MD981F	MOT	29.10	19.40
MD982	MOT	27.60	18.40
MD982F	MOT	49.70	33.15
MD984	MOT	20.65	13.75
MD984F	MOT	37.20	24.80
MD-985	MOT	9.00	6.00
MD-985F	MOT	13.50	9.00
MD986F	MOT	30.15	10.10

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MD1120	MOT	19.10		12.75	
MD1120F	MOT	42.95		28.65	
MD1121	MOT	24.80		16.55	
MD1121F	MOT	55.80		37.20	

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Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MD1122	MOT	37.00		24.65	
MD1122F	MOT	83.15		55.45	
MD1123	MOT	27.60		18.40	
MD1123F	MOT	49.70		33.15	
MD1124F	MOT	64.80		43.20	
MD1125F	MOT	83.15		55.45	
MD1127	MOT	12.00		8.00	
MD1129	MOT	51.75		34.50	
MD1129F	MOT	93.15		62.10	
MD1130	MOT	58.20		38.80	
MD1131	MOT	28.35		18.90	
MD1131F	MOT	39.60		26.40	
MD1132	MOT	38.25		25.50	
MD1132F	MOT	48.50		33.00	

Type No.	Mfr.	1-99	100-999
MD-1133	MOT	15.00	10.00
MD-1133F	MOT	22.50	15.00

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MD1134	MOT	11.65		7.75	
MD2218	MOT	6.75		4.50	
MD2218A	MOT	11.40		7.60	

Type No.	Mfr.	1-99	100-999
MD2218AF	MOT	15.90	10.60
MD2218F	MOT	11.25	7.50

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
MD2219	MOT	7.95		5.30	
MD2219A	MOT	13.20		8.80	

Type No.	Mfr.	1-99	100-999
MD2219AF	MOT	17.70	11.80
MD2219F	MOT	12.45	8.30
MD2369	MOT	9.00	6.00
MD2904	MOT	6.75	4.50
MD2904A	MOT	11.40	7.60
MD2904AF	MOT	15.90	10.60
MD2904F	MOT	11.25	7.50
MD2905	MOT	7.95	5.30
MD2905A	MOT	13.20	8.80
MD2905AF	MOT	17.70	11.80
MD2905F	MOT	12.45	8.30
MD3133	MOT	7.35	4.90
MD3133F	MOT	11.10	7.40
MD3134	MOT	7.80	5.20
MD3134F	MOT	11.70	7.80

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MD3250	MOT	9.75		6.50	
MD3250A	MOT	19.50		13.00	

Type No.	Mfr.	1-99	100-999
MD3250AF	MOT	29.25	19.50
MD3250F	MOT	17.25	11.50

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
MD3251	MOT	11.60		7.75	
MD3251A	MOT	23.25		15.50	

Type No.	Mfr.	1-99	100-999
MD3251AF	MOT	30.75	20.50
MD3251F	MOT	19.10	12.75
MD6001	MOT	10.80	7.20
MD5000A	MOT	11.25	7.50
MD5000A	MOT	23.25	15.50
MD6001F	MOT	15.30	10.20
MD6002	MOT	13.50	9.00
MD6002F	MOT	18.00	12.00
MD6100	MOT	14.85	9.90
MFE2000	MOT	4.00	2.65
MFE2001	MOT	4.45	2.95
MFE2002	MOT	6.10	4.05
MFE2093	MOT	2.85	1.90
MFE2094	MOT	2.85	1.90
MFE2095	MOT	2.85	1.90
MFE2097	MOT	7.35	4.90
MFE2098	MOT	7.35	4.90
MFE2133	MOT	14.70	9.80
MFE3001	MOT	5.85	3.90
MFE3002	MOT	8.10	5.40
MFE3003	MOT	8.10	5.40
MFE3004	MOT	6.40	4.25
MFE3005	MOT	6.75	4.50
MF3304	MOT	6.75	4.50
MFE4001	MOT	11.10	7.40
MFE4002	MOT	6.45	4.30

Type No.	Mfr.	1-99	100-999	
MFE4003	MOT	8.10		5.40
MFE4004	MOT	11.85		7.90
MFE4005	MOT	7.20		4.80
MFE4006	MOT	8.85		5.90

Type No.	Mfr.	1-24	25-99	100-up
MHO-AMP	RAY	100.00	85.00	60.00

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
MJ400	MOT	1.65		1.10	
MJ413	MOT	6.50		4.82	
MJ421	MOT	1.85		1.25	
MJ423	MOT	8.00		5.93	
MJ431	MOT	37.50		27.78	
MJ450	MOT	1.80		1.20	
MJ480	MOT	1.93		1.29	
MJ481	MOT	2.45		1.64	
MJ491	MOT	2.80		1.88	
MJ2249	MOT	2.02		1.35	
MJ2250	MOT	2.15		1.45	
MJ2251	MOT	1.87		1.25	
MJ2252	MOT	2.02		1.35	
MJ2253	MOT	2.65		1.76	
MJ2254	MOT	2.90		1.95	
MJ2255	MOT	2.70		1.80	
MJ2256	MOT	3.05		2.05	
MJ2257	MOT	4.40		2.95	
MJ2267	MOT	4.95		3.30	
MJ2268	MOT	5.45		3.65	
MJ2901	MOT	3.75		2.50	
MJ3101	MOT	1.95		1.30	
MJ3201	MOT	1.72		1.15	
MJ3202	MOT	1.87		1.25	
MJ3701	MOT	2.00		1.35	
MK10	MOT	.23		.15	
MK15	MOT	.23		.15	
MK20	MOT	.35		.23	
MK25	MOT	.25		.18	
MM380	MOT	1.26		.84	
MM487	MOT	1.07		.93	.82
MM488	MOT	1.07		.93	.82
MM709	MOT	1.65		1.10	
MM719	MOT	4.50		3.00	
MM801	MOT	11.25		7.50	
MM1139	MOT	1.35		.90	
MM1151	MOT	4.50		3.00	
MM1152	MOT	4.10		2.75	
MM1154	MOT	2.15		1.45	
MM1500	MOT	42.00		28.00	
MM1501	MOT	27.00		18.00	
MM1736	MOT	13.20		8.80	
MM1737	MOT	14.40		9.60	
MM1738	MOT	19.40		12.95	
MM1739	MOT	21.30		14.20	
MM1803	MOT	11.70		7.80	
MM1812	MOT	3.75		2.50	
MM1941	MOT	1.95		1.30	
MM2090	MOT	4.35		2.90	
MM2091	MOT	4.35		2.90	
MM2092	MOT	4.35		2.90	
MM2258	MOT	3.90		2.60	
MM2259	MOT	4.20		2.80	
MM2260	MOT	4.50		3.00	
MM2261	MOT	3.35		2.25	
MM2263	MOT	5.15		3.45	
MM2264	MOT	1.57		1.05	
MM2400	MOT	10.50		7.00	
MM2401	MOT	13.10		8.75	
MM2483	MOT	4.50		3.00	
MM2484	MOT	5.25		3.50	
MM2500	MOT	30.00		20.00	
MM2502	MOT	6.75		4.50	
MM3724	MOT	5.25		3.50	
MM3725	MOT	5.60		3.75	
MM3726	MOT	6.75		4.50	
MM4048	MOT	4.10		2.75	
MM5000	MOT	7.10		4.75	
MM5001	MOT	4.20		2.80	
MM5002	MOT	3.00		2.00	
MN-21	MOT	2.20		1.65	
MN-28	MOT	.60		.40	
MN-29	MOT	.75		.50	
MN-49	MOT	2.45		1.82	

Type No.	Mfr.	1-24	25-99	100-up
MP110	MOT	1.67		1.12

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MP500	MOT	5.70		3.80	

Type No.	Mfr.	1-24	25-99	100-up	
MP500A	MOT	7.10		4.75	

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
MP504	MOT	6.60		4.40	
MP506	MOT	13.85		9.25	

Type No.	Mfr.	1-24	25-99	100-up
MP506A	MOT	16.85		11.25
MP525	MOT	1.00		.75

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MP732	MOT	3.38		2.50	
MP733	MOT	6.00		4.45	

Type No.	Mfr.	1-24	25-99	100-up	
MPC-1A	TI	4.75	4.10	3.50	3.25
MPC-2	TI	6.50	6.00	5.40	
MPC-4	TI	3.50	2.60	2.25	
MPC-5A	TI	3.50	2.60	2.25	
MPC-58	TI	5.25	4.25	3.40	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MPD200	GE	1.21		.81	
MPD300	GE	1.49		.99	
MPD400	GE	1.62		1.08	

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
MPF102	MOT	.90	.60	.45	.42
MPF103	MOT	1.00	.67	.50	.47
MPF104	MOT	1.00	.67	.50	.47
MPF105	MOT	1.00	.67	.50	.47
MPF106	MOT	1.34		.90	
MPF107	MOT	1.50		1.00	
MPF151	MOT	1.00		.67	
MPF152	MOT	.75		.50	
MPF153	MOT	1.00		.67	
MPF154	MOT	1.50		1.00	
MPF155	MOT	1.20		.80	
MPF156	MOT	1.50		1.00	
MPF157	MOT	1.20		.80	
MPF158	MOT	1.50		1.00	
MPF159	MOT	4.15		2.75	
MPF160	MOT	4.15		2.75	
MPS706	MOT	.45	.30	.22	.21
MPS834	MOT	.52	.35	.26	.24
MPS918	MOT	1.30	.87	.65	.61

Type No.	Mfr.	1-99	100-Mix	100-999	1000-up
MP2060-4	MOT	1.05		.75	
MP2062	MOT	1.35		1.00	
MP2063	MOT	1.65		1.25	

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
MPS2369	MOT	.53	.35	.26	.24
MPS2711	MOT	.40	.27	.20	.19
MPS2712	MOT	.43	.29	.22	.20
MPS2713	MOT	.48	.32	.24	.22
MPS2714	MOT	.51	.34	.25	.24
MPS2715	MOT	.57	.38	.28	.27
MPS2716	MOT	.60	.40	.30	.28
MPS2923	MOT	.43	.29	.22	.20
MPS2924	MOT	.51	.34	.25	.24
MPS2925	MOT	.60	.40	.30	.28
MPS2926	MOT	.40	.27	.20	.19
MPS3392	MOT	.51	.34	.25	.24
MPS3393	MOT	.40	.27	.20	.19
MPS3394	MOT	.39	.26	.19	.18
MPS3395	MOT	.58	.39	.29	.27
MPS3396	MOT	.54	.36	.27	.25
MPS3397	MOT	.48	.32	.24	.22
MPS3398	MOT	.57	.38	.28	.27
MPS3563	MOT	.57	.38	.28	.27
MPS3638	MOT	.46	.31	.28	.26
MPS3638A	MOT	.76	.51	.38	.36
MPS3639	MOT	.54	.36	.27	.25
MPS3640	MOT	.57	.38	.28	.27
MPS3646	MOT	.69	.46	.35	.32

Type No.	Mfr.	1-99	100-999
MPS3693	MOT	.55	.37
MPS3694	MOT	.57	.38

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MPS3702	MOT	.45	.30	.22	.21
MPS3703	MOT	.49	.33	.25	.23
MPS3704	MOT	.61	.41	.31	.29
MPS3705	MOT	.57	.38	.29	.27
MPS3706	MOT	.52	.35	.26	.24

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BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
MPS3707	MOT	.60	.40	.30	.28
MPS3708	MOT	.48	.32	.24	.22
MPS3709	MOT	.45	.30	.22	.21
MPS3710	MOT	.49	.33	.25	.23
MPS3711	MOT	.54	.36	.27	.25

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MPS3826	MOT	.54	.36	.27	.25
MPS3827	MOT	.58	.39	.29	.27
MPS6507	MOT	1.12	.75	.56	.52
MPS6511	MOT	1.05	.70	.52	.49

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
MPS6512	MOT	.54	.36	.27	.25
MPS6513	MOT	.57	.38	.28	.27
MPS6514	MOT	.60	.40	.30	.28
MPS6515	MOT	.64	.43	.32	.30

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MPS6516	MOT	.60	.40	.30	.28
MPS6517	MOT	.63	.42	.31	.29
MPS6518	MOT	.67	.45	.34	.31
MPS6519	MOT	.75	.50	.37	.35

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
MPS6520	MOT	.82	.55	.41	.38
MPS6521	MOT	.90	.60	.45	.42

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MPS6522	MOT	.90	.60	.45	.42
MPS6523	MOT	.97	.65	.49	.45
MPS6528	MOT	1.00	.67	.50	.47
MPS6529	MOT	1.15	.77	.58	.54
MPS6530	MOT	.72	.48	.36	.34
MPS6531	MOT	.75	.50	.37	.35
MPS6532	MOT	.60	.40	.30	.28
MPS6533	MOT	.78	.52	.39	.36
MPS6534	MOT	.81	.54	.40	.38
MPS6535	MOT	.66	.44	.33	.31
MPS6541	MOT	.96	.64	.48	.45
MPC6542	MOT	1.20	.80	.60	.56
MPS6543	MOT	1.32	.88	.66	.62
MPS6544	MOT	1.12	.75	.56	.52
MPS6545	MOT	1.24	.83	.62	.58
MPS6546	MOT	1.24	.83	.62	.58
MPS6547	MOT	1.35	.90	.67	.63
MPS6552	MOT	.55	.37	.28	.26
MPS6553	MOT	.60	.40	.30	.28
MPS6554	MOT	.63	.42	.31	.29
MPS6555	MOT	.67	.45	.34	.31
MPS6560	MOT	.75	.50	.37	.35
MPS6561	MOT	.87	.58	.43	.40
MPS6564	MOT	.75	.50	.37	.35
MPS6565	MOT	.52	.35	.26	.24
MPS6566	MOT	.57	.38	.28	.27
MPS6567	MOT	1.00	.67	.50	.47
MPS6568	MOT	1.50	1.00	.75	.70
MPS6569	MOT	1.11	.74	.55	.52

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
MPS6570	MOT	.96	.64	.48	.45

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MPSK-300	MOT	553.00	49.50		

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
MPT-28	MOT	.68	.....	.45	.....
MPT-32	MOT	.68	.....	.45	.....
MPT-36	MOT	.68	.....	.45	.....

Type No.	Mfr.	1-24	25-99	100-up	100-Mix
MPZ5-16A	MOT	46.80	40.30	36.00	.....
MPZ5-16B	MOT	52.00	44.80	40.00	.....
MPZ5-180A	MOT	48.75	42.00	37.50	.....
MPZ5-180B	MOT	58.50	50.40	45.00	.....
MPZ5-180C	MOT	65.00	56.00	50.00	.....
MPZ5-32A	MOT	39.00	33.60	30.00	.....
MPZ5-32B	MOT	46.80	40.30	36.00	.....
MPZ5-32C	MOT	52.00	44.80	40.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MR312	MOT	1.15	.....	.79	.....
MR314	MOT	1.75	.....	1.19	.....
MR315	MOT	2.40	.....	1.60	.....
MR316	MOT	2.90	.....	1.93	.....
MR322	MOT	.67	.....	.45	.40
MR322R	MOT	.67	.....	.45	.40
MR323	MOT	.76	.....	.51	.46
MR323R	MOT	.76	.....	.51	.46
MR324	MOT	1.11	.....	.74	.67
MR324R	MOT	1.11	.....	.74	.67
MR325	MOT	1.27	.....	.85	.76
MR325R	MOT	1.27	.....	.85	.76
MR326	MOT	1.48	.....	.99	.89
MR326R	MOT	1.48	.....	.99	.89
MR327	MOT	2.40	.....	1.60	1.45
MR327R	MOT	2.40	.....	1.60	1.45
MR328	MOT	3.35	.....	2.25	2.00
MR328R	MOT	3.35	.....	2.25	2.00
MR330	MOT	6.75	.....	4.50	4.05
MR330R	MOT	6.75	.....	4.50	4.05
MR331	MOT	9.75	.....	6.50	5.85
MR331R	MOT	9.75	.....	6.50	5.85
MR810	MOT	.67	.....	.45	.....
MR811	MOT	.75	.....	.50	.....
MR812	MOT	.97	.....	.65	.....
MR814	MOT	1.27	.....	.95	.....
MR816	MOT	2.40	.....	1.60	.....
MR830	MOT	2.40	.....	1.60	.....
MR831	MOT	2.75	.....	1.85	.....
MR832	MOT	3.35	.....	2.25	.....
MR834	MOT	5.60	.....	3.75	.....
MR836	MOT	9.35	.....	6.25	.....
MR990	MOT	1.42	.....	.95	.....
MR991	MOT	2.10	.....	1.40	.....
MR992	MOT	4.95	.....	3.30	.....
MR993	MOT	6.60	.....	4.40	.....
MR994	MOT	7.85	.....	5.25	.....
MR1030A	MOT	.55	.....	.37	.33
MR1030B	MOT	.55	.....	.37	.33
MR1031A	MOT	.60	.....	.40	.36
MR1031B	MOT	.60	.....	.40	.36
MR1032A	MOT	.67	.....	.45	.40
MR1032B	MOT	.67	.....	.45	.40
MR1033A	MOT	.93	.....	.62	.....
MR1033B	MOT	.83	.....	.62	.56
MR1034A	MOT	.67	.....	.65	.58
MR1035A	MOT	1.32	.....	.88	.....
MR1035B	MOT	1.32	.....	.88	.79
MR1036A	MOT	1.33	.....	.89	.80
MR1036B	MOT	1.33	.....	.89	.80
MR1038A	MOT	4.10	.....	2.75	2.45
MR1038B	MOT	4.10	.....	2.75	2.45
MR1040A	MOT	6.35	.....	4.25	3.80
MR1040B	MOT	6.35	.....	4.25	3.80
MR1120	MOT	1.03	.....	.69	.....
MR1121	MOT	1.15	.....	.77	.....
MR1122	MOT	1.32	.....	.88	.....
MR1123	MOT	1.48	.....	.99	.....
MR1124	MOT	1.65	.....	1.10	.....
MR1125	MOT	2.02	.....	1.35	.....
MR1126	MOT	2.45	.....	1.65	.....
MR1128	MOT	5.60	.....	3.75	.....
MR1130	MOT	7.85	.....	5.25	.....

Type No.	Mfr.	1-24	25-99	100-up	
MR1200FL	MOT	3.20	2.90	2.40	.....
MR1201FL	MOT	4.10	3.70	3.10	.....
MR1202FL	MOT	5.60	5.05	4.20	.....
MR1204FL	MOT	6.40	5.75	4.80	.....
MR1205FL	MOT	6.40	5.75	4.80	.....
MR1207FL	MOT	7.30	6.60	5.50	.....
MR1208FL	MOT	8.65	7.80	6.50	.....
MR1209FL	MOT	10.30	9.30	7.75	.....
MR1210SB	MOT	4.80	4.30	3.60	.....
MR1211SL	MOT	5.25	4.75	3.95	.....
MR1212SB	MOT	7.00	6.30	5.25	.....
MR1212SL	MOT	6.60	5.95	4.95	.....

Type No.	Mfr.	1-24	25-99	100-up	
MR1213SL	MOT	6.60	5.95	4.95	.....
MR1214SB	MOT	8.15	7.40	6.15	.....
MR1214SL	MOT	7.80	7.00	5.85	.....
MR1216SB	MOT	10.35	9.35	7.80	.....
MR1216SL	MOT	9.95	9.00	7.50	.....
MR1217SL	MOT	9.95	9.00	7.50	.....
MR1218SB	MOT	11.30	10.20	8.50	.....
MR1218SL	MOT	10.90	9.85	8.20	.....
MR1219SB	MOT	13.55	12.25	10.20	.....
MR1218SL	MOT	13.15	11.90	9.90	.....
MR1222FB	MOT	12.65	11.40	9.50	.....
MR1222FL	MOT	12.25	11.05	9.20	.....
MR1222SB	MOT	12.65	11.40	9.50	.....
MR1222SL	MOT	12.65	11.40	9.50	.....
MR1224FB	MOT	15.30	13.80	11.50	.....
MR1224FL	MOT	14.80	13.45	11.20	.....
MR1224SB	MOT	15.30	13.80	11.50	.....
MR1224SL	MOT	15.30	13.80	11.50	.....
MR1225FB	MOT	15.30	13.80	11.50	.....
MR1225FL	MOT	14.90	13.45	11.20	.....
MR1225SB	MOT	15.30	13.80	11.50	.....
MR1225SL	MOT	15.30	13.80	11.50	.....
MR1226FL	MOT	17.55	15.85	13.20	.....
MR1226SB	MOT	17.95	16.20	13.50	.....
MR1227SB	MOT	17.95	16.20	13.50	.....
MR1228FB	MOT	19.95	18.00	15.00	.....
MR1228FL	MOT	19.55	17.65	14.70	.....
MR1228SB	MOT	19.95	18.00	15.00	.....
MR1229FL	MOT	23.55	21.25	17.70	.....
MR1229SB	MOT	23.95	21.60	18.00	.....
MR1230SB	MOT	13.05	11.75	9.80	.....
MR1232FB	MOT	17.30	15.60	13.00	.....
MR123FL	MOT	17.30	15.60	13.00	.....
MR1232SB	MOT	17.30	15.60	13.00	.....
MR1232SL	MOT	17.30	15.60	13.00	.....
MR1234FB	MOT	19.60	17.70	14.75	.....
MR1234FL	MOT	18.00	16.25	13.55	.....
MR1234SB	MOT	19.60	17.70	14.75	.....
MR1234SL	MOT	19.60	17.70	14.75	.....
MR1235FB	MOT	19.60	17.70	14.75	.....
MR1235FL	MOT	18.00	16.25	13.55	.....
MR1235SB	MOT	19.60	17.70	14.75	.....
MR1235SL	MOT	19.60	17.70	14.75	.....
MR1236FB	MOT	24.25	21.90	18.25	.....
MR1236FL	MOT	23.20	20.95	17.45	.....
MR1236SB	MOT	24.25	21.90	18.25	.....
MR1236SL	MOT	24.25	21.90	18.25	.....
MR1238FB	MOT	27.95	25.20	21.00	.....
MR1238FL	MOT	26.55	23.95	19.95	.....
MR1238SB	MOT	27.95	25.20	21.00	.....
MR1238SL	MOT	27.95	25.20	21.00	.....
MR1239FB	MOT	34.60	31.20	26.00	.....
MR1239SB	MOT	34.60	31.20	26.00	.....
MR1239SL	MOT	34.60	31.20	26.00	.....
MR1239FL	MOT	33.20	29.95	24.95	.....
MR1242FB	MOT	22.85	20.65	17.20	.....
MR1242FL	MOT	21.55	19.45	16.20	.....
MR1242SB	MOT	22.85	20.65	17.20	.....
MR1242SL	MOT	22.85	20.65	17.20	.....
MR1244FB	MOT	27.95	25.20	21.00	.....
MR1244FL	MOT	26.60	24.00	20.00	.....
MR1244SB	MOT	27.95	25.20	21.00	.....
MR1244SL	MOT	27.95	25.20	21.00	.....
MR1245FB	MOT	27.95	25.20	21.00	.....
MR1245FL	MOT	26.60	24.00	20.00	.....
MR1245SB	MOT	27.95	25.20	21.00	.....
MR1245SL	MOT	27.95	25.20	21.00	.....
MR1246FB	MOT	31.40	28.30	23.60	.....
MR1246FL	MOT	30.05	27.10	22.60	.....
MR1246SB	MOT	31.40	28.30	23.60	.....
MR1246SL	MOT	31.40	28.30	23.60	.....
MR1248SB	MOT	45.20	40.80	34.00	.....
MR1248FB	MOT	45.20	40.80	34.00	.....
MR1248FL	MOT	42.55	38.40	32.00	.....
MR1248SL	MOT	45.20	40.80	34.00	.....
MR1249FB	MOT	66.50	60.00	50.00	.....
MR1249SB	MOT	66.50	60.00	50.00	.....
MR1249FL	MOT	63.85	57.60	48.00	.....
MR1249SL	MOT	66.50	60.00	50.00	.....
MR1262FL	MOT	55.20	49.80	41.50	.....
MR1264FL	MOT	61.20	55.20	46.00	.....
MR1265FL	MOT	61.20	55.20	46.00	.....

Type No.	Mfr.	1-24	25-99	100-up	
MR1266FL	MOT	67.85	61.20	51.00	
MR1268FL	MOT	82.45	74.40	62.00	
MR1269FL	MOT	99.75	90.00	75.00	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MR1290	MOT	60.00		54.00	
MR1290R	MOT	60.00		54.00	
MR1291	MOT	66.50		60.00	
MR1291R	MOT	66.50		60.00	
MR1292	MOT	76.50		69.00	
MR1292R	MOT	76.50		69.00	
MR1293	MOT	76.50		69.00	
MR1293R	MOT	76.50		69.00	
MR1294	MOT	87.50		79.00	
MR1294R	MOT	87.50		79.00	

Type No.	Mfr.	1-24	25-99	100-up	
MR1295	MOT	87.50	79.00		
MR1295R	MOT	87.50	79.00		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MR1296	MOT	98.50		88.75	
MR1296R	MOT	98.50		88.75	
MR1297	MOT	98.50		88.75	
MR1297R	MOT	98.50		88.75	

Type No.	Mfr.	1-24	25-99		
MR1298	MOT	152.95	138.00		
MR1299	MOT	199.50	180.00		

Type No.	Mfr.	1-24	25-99	100-up	
MR1337-1	MOT	3.35	2.25		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MR1337-2	MOT	4.95		3.30	
MR1337-3	MOT	6.75		4.50	
MR1337-4	MOT	9.00		6.00	
MR1337-5	MOT	12.00		8.00	

Type No.	Mfr.	1-24	25-99	100-up	
MR1810SB	MOT	5.45	4.90	4.10	
MR1810SL	MOT	5.05	4.55	3.80	
MR1811SB	MOT	6.30	5.70	4.75	
MR1811SL	MOT	5.90	5.35	4.45	
MR1812SB	MOT	7.65	6.90	5.75	
MR1812SL	MOT	7.25	6.55	5.45	
MR1813SB	MOT	7.65	6.90	5.75	
MR1813SL	MOT	7.25	6.55	5.45	
MR1814SB	MOT	8.70	7.85	6.55	
MR1814SL	MOT	8.30	7.50	6.25	
MR1815SB	MOT	8.70	7.85	6.55	
MR1815SL	MOT	8.30	7.50	6.25	
MR1816SB	MOT	11.05	9.95	8.30	
MR1816SL	MOT	10.65	9.60	8.00	
MR1817SB	MOT	11.05	9.95	8.30	
MR1817SL	MOT	10.65	9.60	8.00	
MR1818SB	MOT	11.95	10.80	9.00	
MR1818SL	MOT	11.55	10.45	8.70	
MR1819SB	MOT	14.25	12.85	10.70	
MR1819SL	MOT	13.85	12.50	10.40	

Type No.	Mfr.	1-99		100-999	
MR2064	MOT	.36		.24	
MR2065	MOT	.40		.27	
MR2066	MOT	.48		.32	
MR2067	MOT	.54		.36	
MR2068	MOT	.67		.45	
MR2069	MOT	.60		.40	
MR2070	MOT	.67		.45	
MR2071	MOT	.76		.51	
MR2072	MOT	.87		.58	
MR2073	MOT	1.06		.71	
MR2074	MOT	1.26		.84	
MR2075	MOT	1.44		.96	
MR2261	MOT	.19		.13	
MR2262	MOT	.25		.17	
MR2263	MOT	.30		.20	
MR2264	MOT	.37		.25	
MR2265	MOT	.54		.36	
MR2266	MOT	1.08		.72	
MR2271	MOT	1.68		1.12	
MR2272	MOT	.57		.38	
MR2273	MOT	.48		.32	
MR2360	MOT	.28		.19	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MRK-200	MOT	94.50			

Type No.	Mfr.	1-99		100-999	
MS10	MOT	2.10		1.75	
MS15	MOT	2.10		1.75	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MSR6100	MOT	1.12	.75	.56	.52

Type No.	Mfr.	1-9	10-99	100-999	1000-up
MU1864A	MOT	12.00	10.00	8.00	
MU1872	MOT	10.50	8.75	7.00	
MU1876	MOT	10.50	8.75	7.00	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MV830	MOT	1.35		.90	
MV831	MOT	1.35		.90	
MV832	MOT	1.35		.90	
MV833	MOT	1.35		.90	
MV834	MOT	1.35		.90	
MV835	MOT	1.35		.90	
MV836	MOT	1.35		.90	
MV837	MOT	1.35		.90	
MV838	MOT	1.35		.90	
MV839	MOT	1.35		.90	
MV840	MOT	1.35		.90	

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MV1403	MOT	8.95		5.95	
MV1620	MOT	1.42		.95	
MV1622	MOT	1.42		.95	
MV1624	MOT	1.42		.95	
MV1626	MOT	1.42		.95	
MV1628	MOT	1.42		.95	
MV1630	MOT	1.42		.95	
MV1632	MOT	1.42		.95	
MV1634	MOT	1.42		.95	
MV1636	MOT	1.42		.95	
MV1638	MOT	1.42		.95	
MV1640	MOT	1.42		.95	
MV1642	MOT	1.42		.95	
MV1644	MOT	1.42		.95	
MV1646	MOT	1.42		.95	
MV1648	MOT	1.42		.95	
MV1650	MOT	1.42		.95	
MV1720	MOT	7.35		4.90	
MV1722	MOT	7.35		4.90	
MV1724	MOT	7.35		4.90	
MV1726	MOT	7.35		4.90	
MV1728	MOT	7.35		4.90	
MV1730	MOT	7.35		4.90	
MV1732	MOT	7.35		4.90	
MV1734	MOT	7.35		4.90	
MV1736	MOT	7.35		4.90	
MV1738	MOT	7.35		4.90	
MV1740	MOT	7.35		4.90	
MV1742	MOT	7.35		4.90	
MV1744	MOT	7.35		4.90	
MV1748	MOT	7.35		4.90	
MV1750	MOT	7.35		4.90	

Type No.	Mfr.	1-9	10-99	100-999	1000-up
MV1804	MOT	42.00	35.00	28.00	
MV1805C	MOT	42.00	28.00		
MV1806	MOT	42.00	35.00	28.00	
MV1806C	MOT	27.00	18.00		
MV1807C	MOT	42.00	28.00		
MV1808A	MOT	42.00	28.00		
MV1808C	MOT	42.00	28.00		
MV1810A	MOT	42.00		28.00	
MV1810B	MOT	42.00		28.00	

Type No.	Mfr.	1-24	25-99	100-up	
MV1866	MOT	10.50	7.00		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MV1868	MOT	10.50		7.00	

Type No.	Mfr.	1-24	25-99	100-up	
MV1870	MOT	10.50	7.00		
MV1871	MOT	10.50	7.00		
MV1872	MOT	10.50	7.00		
MV1874	MOT	10.50	7.00		
MV1876	MOT	10.50	7.00		
MV1877	MOT	10.50	7.00		

Type No.	Mfr.	1-24	25-99	100-up	
MV1878	MOT	10.50	7.00		
MV1892	MOT	42.00	28.00		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MZ3.9T5	INT	3.45	3.05	2.65	
MZ4.7T10	INT	2.75	2.45	2.10	
MZ4.7T5	INT	3.45	3.05	2.65	
MZ5.6T10	INT	2.75	2.45	2.10	
MZ6.8T10	INT	2.75	2.45	2.10	
MZ6.8T5	INT	3.45	3.05	2.65	
MZ8.2T10	INT	2.75	2.45	2.10	
MZ8.2T5	INT	3.45	3.05	2.65	
MZ10T10	INT	2.75	2.45	2.10	
MZ10T5	INT	3.45	3.05	2.65	
MZ12T10	INT	2.75	2.45	2.10	
MZ12T5	INT	3.45	3.05	2.65	
MZ13T5	INT	3.45	3.05	2.65	
MZ15T10	INT	2.75	2.45	2.10	
MZ15T5	INT	3.45	3.05	2.65	
MZ18T5	INT	3.45	3.05	2.65	
MZ22T10	INT	2.75	2.45	2.10	
MZ22T5	INT	3.45	3.05	2.65	
MZ27T5	INT	3.45	3.05	2.65	
MZ27T10	INT	2.75	2.45	2.10	

Type No.	Mfr.	1-99		100-999	
MZ500-1	MOT	.57	.38		
MZ500-10	MOT	.57	.38		
MZ500-11	MOT	.57	.38		
MZ500-12	MOT	.57	.38		
MZ500-13	MOT	.57	.38		
MZ500-14	MOT	.57	.38		
MZ500-15	MOT	.57	.38		
MZ500-16	MOT	.57	.38		
MZ500-17	MOT	.57	.38		
MZ500-18	MOT	.57	.38		
MZ500-19	MOT	.57	.38		
MZ500-2	MOT	.57	.38		
MZ500-20	MOT	.57	.38		
MZ500-21	MOT	.57	.38		
MZ500-22	MOT	.57	.38		
MZ500-23	MOT	.57	.38		
MZ500-24	MOT	.57	.38		
MZ500-25	MOT	.57	.38		
MZ500-26	MOT	.57	.38		
MZ500-27	MOT	.57	.38		
MZ500-28	MOT	.57	.38		
MZ500-29	MOT	.57	.38		
MZ500-3	MOT	.57	.38		
MZ500-30	MOT	.57	.38		
MZ500-31	MOT	.57	.38		
MZ500-32	MOT	.57	.38		
MZ500-33	MOT	.57	.38		
MZ500-34	MOT	.57	.38		
MZ500-35	MOT	.57	.38		
MZ500-36	MOT	.57	.38		
MZ500-37	MOT	.57	.38		
MZ500-38	MOT	.57	.38		
MZ500-39	MOT	.57	.38		
MZ500-4	MOT	.57	.38		
MZ500-40	MOT	.57	.38		
MZ500-5	MOT	.57	.38		
MZ500-6	MOT	.57	.38		
MZ500-7	MOT	.57	.38		
MZ500-8	MOT	.57	.38		
MZ500-9	MOT	.57	.38		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MZ605	MOT	73.50	65.15		
MZ610	MOT	52.50	46.55		
MZ620	MOT	37.50	33.25		
MZ640	MOT	28.50	25.25		
MZ805	MOT	67.50	59.85		
MZ810	MOT	48.00	42.55		
MZ820	MOT	33.00	29.25		
MZ840	MOT	23.25	20.60		

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
MZK100	MOT	79.00			
N-120CG-/8L	HOF	3.85		3.25	
N-120CG-/9L	HOF	4.35		3.65	
N-120CG-/10L	HOF	5.05		4.25	
N-120CG-/11L	HOF	7.45		6.25	

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
NE106J	SPR	5.10	4.10	3.60	3.40
NE112J	SPR	7.65	6.15	5.40	5.10
NE116J	SPR	6.55	5.20	4.60	4.35
NE124J	SPR	10.40	8.35	7.35	6.95
NE125J	SPR	11.55	9.25	8.10	7.70
NE156J	SPR	7.65	6.15	5.40	5.10
NE161J	SPR	26.10	21.00	18.40	17.45
NE170J	SPR	7.45	5.95	5.20	4.95
NE180J	SPR	7.45	5.95	5.20	4.95

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
NE416J	SPR	11.25	9.00	7.90	7.50
NE424J	SPR	15.00	12.00	10.50	10.00
NE455J	SPR	12.00	9.60	8.40	8.00
NE480J	SPR	12.00	9.60	8.40	8.00
NE506K	SPR	26.25	21.00	18.50	.....
NE518K	SPR	11.25	9.00	7.90	.....
NE806J	SPR	5.20	4.20	3.80	3.50
NE808J	SPR	6.55	5.20	4.60	4.35
NE816J	SPR	6.55	5.20	4.60	4.35
NE825J	SPR	11.55	9.25	8.10	7.70
NE826J	SPR	15.00	12.00	10.50	10.00
NE840J	SPR	7.10	5.70	5.10	4.80
NE855J	SPR	7.65	6.15	5.40	5.10
NE870J	SPR	7.45	5.95	5.20	4.95
NE880J	SPR	7.45	5.95	5.20	4.95

Type No.	Mfr.	1-9	10-99	100-999	1000-up
PA107/4JPA107	GE	95.60	63.75	42.50	.....
PA113/4JPA113	GE	15.15	10.10	6.75	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
PA189	GE	3.60	.....	2.40	.....
PA-222	GE	3.70	.....	2.45	.....
PA223	GE	7.05	.....	4.70	.....
PA230	GE	3.30	.....	2.20	1.89
PA237	GE	3.98	.....	2.65	2.38
PA424	GE	3.60	.....	2.40	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
Q1B	INT	.55	.41	.33	.....
Q1H	INT	.38	.29	.23	.....
Q4B	INT	1.56	.....	.94	.....

Type No.	Mfr.	1-24	25-99	100-up	100-Mix
OC71N	AME	.49	.....	.32	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
RA1A	GE	7.95	.....	5.30	.....
RA1B	GE	14.10	.....	9.40	.....
RA1/D19 RA1	GE	4.50	.....	3.00	.....
RA2	GE	7.95	.....	5.30	.....
RA2A	GE	22.50	.....	15.00	.....
RA3	GE	8.25	.....	5.50	.....

Type No.	Mfr.	1-49	50-999
RC702D	RAY	9.45	5.20
RC702Q	RAY	9.45	5.20
RC702T	RAY	9.45	5.20
RC709D	RAY	13.50	7.40
RC709Q	RAY	13.50	7.40
RC709T	RAY	13.50	7.40
RC710D	RAY	9.45	5.20
RC710Q	RAY	9.45	5.20
RC710T	RAY	9.45	5.20
RC711D	RAY	13.50	7.40
RC711Q	RAY	13.50	7.40
RC711T	RAY	13.50	7.40
RF12D	RAY	6.96	5.58
RF12K	RAY	6.96	5.58
RF13D	RAY	5.27	4.22
RF13K	RAY	5.27	4.22
RF22D	RAY	9.45	7.52
RF22F	RAY	9.45	7.52
RF23D	RAY	6.94	5.55
RF23K	RAY	6.94	5.55
RF32D	RAY	9.45	7.52
RF32K	RAY	9.45	7.52
RF33D	RAY	6.94	5.55
RF33K	RAY	6.94	5.55
RF52D	RAY	10.52	8.42
RF52K	RAY	10.52	8.42
RF53D	RAY	7.88	6.31
RF53K	RAY	7.88	6.31
RF62D	RAY	10.52	8.42
RF62K	RAY	10.52	8.42
RF63D	RAY	7.88	6.31
RF63K	RAY	7.88	6.31
RF252D	RAY	11.80	9.40
RF252K	RAY	11.80	9.40
RF253D	RAY	8.70	6.95
RF253K	RAY	8.70	6.95
RF262D	RAY	11.80	9.40
RF262K	RAY	11.80	9.40
RF263D	RAY	8.70	6.95
RF263K	RAY	8.70	6.95
RG42D	RAY	6.96	5.58
RG42K	RAY	6.96	5.58
RG43D	RAY	5.27	4.22
RG43K	RAY	5.27	4.22
RG52D	RAY	6.96	5.58
RG52K	RAY	6.96	5.58
RG53D	RAY	5.27	4.22
RG53K	RAY	5.27	4.22
RG62D	RAY	6.96	5.58
RG62K	RAY	6.96	5.58
RG63D	RAY	5.27	4.22
RG63K	RAY	5.27	4.22
RG72K	RAY	9.45	7.52
RG73D	RAY	6.94	5.55
RG73K	RAY	6.94	5.55
RG92D	RAY	9.45	7.52
RG92K	RAY	9.45	7.52
RG93D	RAY	6.94	5.55
RG93K	RAY	6.94	5.55
RG102D	RAY	6.96	5.58
RG102K	RAY	6.96	5.58
RG103D	RAY	5.27	4.22
RG103K	RAY	5.27	4.22
RG112D	RAY	6.96	5.58
RG112K	RAY	6.96	5.58
RG113D	RAY	5.27	4.22
RG113K	RAY	5.27	4.22
RG122D	RAY	6.96	5.58
RG122K	RAY	6.96	5.58
RG123D	RAY	5.27	4.22
RG123K	RAY	5.27	4.22
RG132D	RAY	8.55	6.88
RG132K	RAY	8.55	6.88
RG133D	RAY	6.45	5.16
RG133K	RAY	6.45	5.16
RG142D	RAY	7.80	6.28
RG142K	RAY	7.80	6.28
RG143D	RAY	5.80	4.64
RG143K	RAY	5.80	4.64
RG152D	RAY	4.99	3.99
RG152K	RAY	4.99	3.99
RG153D	RAY	8.55	6.88
RG153K	RAY	8.55	6.88
RG162D	RAY	6.45	5.16
RG162K	RAY	6.45	5.16
RG163D	RAY	4.20	3.36
RG163K	RAY	4.20	3.36
RG172D	RAY	4.20	3.36
RG172K	RAY	4.20	3.36
RG173D	RAY	4.20	3.36
RG173K	RAY	4.20	3.36
RG182D	RAY	4.20	3.36
RG182K	RAY	4.20	3.36
RG183D	RAY	4.20	3.36
RG183K	RAY	4.20	3.36
RG192D	RAY	7.80	6.28
RG192K	RAY	7.80	6.28
RG193D	RAY	5.80	4.64
RG193K	RAY	5.80	4.64
RG212D	RAY	6.96	5.58
RG212K	RAY	6.96	5.58
RG213D	RAY	5.27	4.22
RG213K	RAY	5.27	4.22
RG222D	RAY	7.80	6.28
RG222K	RAY	7.80	6.28
RG223D	RAY	5.80	4.64
RG223K	RAY	5.80	4.64
RG232D	RAY	4.99	3.99
RG232K	RAY	4.99	3.99
RG233D	RAY	4.99	3.99
RG233K	RAY	4.99	3.99
RG242D	RAY	6.96	5.58
RG242K	RAY	6.96	5.58
RG243D	RAY	5.27	4.22
RG243K	RAY	5.27	4.22
RG262D	RAY	6.96	5.58
RG262K	RAY	6.96	5.58
RG263D	RAY	5.27	4.22
RG263K	RAY	5.27	4.22
RG272D	RAY	4.20	3.36
RG272K	RAY	4.20	3.36
RG273D	RAY	4.20	3.36
RG273K	RAY	4.20	3.36

Type No.	Mfr.	1-49	50-999	1000-up
RM201G	RAY	6.35	5.08	.....
RM202G	RAY	6.35	5.08	.....
RM206G	RAY	7.03	5.63	.....
RM210G	RAY	7.63	6.11	.....
RM211G	RAY	6.35	5.08	.....
RM212G	RAY	6.35	5.08	.....
RM213G	RAY	8.90	7.12	.....
RM214G	RAY	6.35	5.09	.....
RM215G	RAY	8.90	7.12	.....
RM217G	RAY	5.88	4.54	.....
RM220G	RAY	7.63	6.11	.....
RM221G	RAY	6.35	5.08	.....
RM222G	RAY	6.35	5.08	.....
RM224G	RAY	6.35	5.08	.....
RM226G	RAY	7.03	5.63	.....
RM227G	RAY	5.68	4.54	.....
RM231G	RAY	6.35	5.08	.....
RM234G	RAY	6.35	5.08	.....
RM236G	RAY	7.03	5.63	.....
RM241G	RAY	6.35	5.08	.....
RM246G	RAY	7.03	5.63	.....
RM261G	RAY	6.35	5.08	.....
RM266G	RAY	7.03	5.63	.....
RM286G	RAY	7.63	6.11	.....
RM296G	RAY	7.63	6.11	.....
RM702Q	RAY	18.90	10.40	.....
RM702T	RAY	18.90	10.40	.....
RM709Q	RAY	27.00	14.80	.....
RM709T	RAY	27.00	14.80	.....
RM710Q	RAY	18.90	10.40	.....
RM710T	RAY	18.90	10.40	.....
RM711Q	RAY	27.00	14.80	.....
RM711T	RAY	27.00	14.80	.....
RM930D Pg-in pk	RAY	6.35	5.08	.....
RM930J Flat pk	RAY	6.35	5.08	.....
RM930T TO-5 pk	RAY	6.35	5.08	.....
RM932D Pg-in pk	RAY	7.64	6.11	.....
RM932J Flat pk	RAY	7.64	6.11	.....
RM932T TO-5 pk	RAY	7.64	6.11	.....
RM933D Pg-in pk	RAY	5.68	4.54	.....
RM933J Flat pk	RAY	5.68	4.54	.....
RM933T TO-5 pk	RAY	5.68	4.54	.....
RM944D Pg-in pk	RAY	7.63	6.11	.....
RM944J Flat pk	RAY	7.63	6.11	.....
RM944T TO-5 pk	RAY	7.63	6.11	.....
RM945D Pg-in pk	RAY	8.90	7.12	.....
RM945J Flat pk	RAY	8.90	7.12	.....
RM945T TO-5 pk	RAY	8.90	7.12	.....

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Type No.	Mfr.	1-49	50-999	1000-up
RM946D Pg-in pk	RAY	7.03	5.63	.....
RM946J Flat pk	RAY	7.03	5.63	.....
RM946T TO-5 pk	RAY	7.03	5.63	.....
RM948D Pg-in pk	RAY	8.90	7.12	.....
RM948J Flat pk	RAY	8.90	7.12	.....
RM948T TO-5 pk	RAY	8.90	7.12	.....
RM950D Pg-in pk	RAY	12.00	9.60	.....
RM950J Flat pk	RAY	12.00	9.60	.....
RM950T TO-5 pk	RAY	12.00	9.60	.....
RM951D Pg-in pk	RAY	12.00	9.60	.....
RM951J Flat pk	RAY	12.00	9.60	.....
RM951T TO-5 pk	RAY	12.00	9.60	.....
RM962D Pg-in pk	RAY	7.03	5.63	.....
RM962J Flat pk	RAY	7.03	5.63	.....
RM962T TO-5 pk	RAY	7.03	5.63	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
RM3002	RAY	25.70	.....	16.40	.....
RM5008	RAY	26.00	.....	1600	.....
RM5008D	RAY	35.00	.....	24.00	.....

Type No.	Mfr.	1-49	50-999	1000-up
RM6172G	RAY	7.06	5.65	.....
RM6175G	RAY	9.90	7.92	.....
RM6176G	RAY	9.90	7.92	.....
RM6178G	RAY	7.81	6.25	.....
RM6179G	RAY	7.81	6.25	.....
RM6180G	RAY	7.81	6.25	.....
RM6181G	RAY	7.81	6.25	.....
RM6184G	RAY	7.81	6.25	.....
RM6185G	RAY	7.81	6.25	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
RM8007	RAY	22.00	.....	15.00	.....
RM8007D	RAY	31.00	.....	21.00	.....
RN1020	RAY	5.25	.....	3.55	.....
RN1030	RAY	4.80	.....	3.25	.....
RN1030A	RAY	5.70	.....	3.85	.....
RN3020	RAY	4.80	.....	3.25	.....
RN3030	RAY	3.95	.....	2.65	.....
RS6	HOF	1.80	1.60	1.35	.....
RT6	HOF	1.80	1.60	1.35	.....
RT930H	RAY	6.30	.....	4.20	.....
RT3333	RAY	10.00	.....	6.70	.....
RT3333A	RAY	12.50	.....	9.00	.....
RT5204	RAY	2.30	.....	1.70	.....
S1M	INT	2.25	.....	2.00	.....
S3M	INT	3.95	.....	3.51	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
S4M	INT	3.95	3.51	.....	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
S5M	INT	4.95	.....	4.40	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
S5W5P-AC	INT	3.22	2.98	2.10	.....

Type No.	Mfr.	1-24	25-99	100-up
S-50M	SAR	12.00	10.30	9.60

Type No.	Mfr.	1-9	10-99	100-999	1000-up
S6V2P/DC	INT	.90	.75	.....	.....
S26	GE	9.85	8.30	.....	.....
S27	GE	11.30	9.45	.....	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
S100A1	GE	6.90	.....	4.60	.....
S100A2	GE	8.95	.....	5.95	.....
S100A3	GE	7.45	.....	4.95	.....
S100A4	GE	9.85	.....	6.55	.....
S100B1	GE	7.80	.....	5.20	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
S100B2	GE	9.75	.....	6.50	.....
S100B3	GE	8.35	.....	5.55	.....
S100B4	GE	10.70	.....	7.15	.....
S100C1	GE	8.80	.....	5.85	.....
S100C2	GE	10.80	.....	7.20	.....
S100C3	GE	9.30	.....	6.20	.....
S100C4	GE	11.70	.....	7.80	.....
S100D1	GE	8.20	.....	5.45	.....
S100D2	GE	10.20	.....	6.80	.....
S100D3	GE	8.70	.....	5.80	.....
S100D4	GE	11.20	.....	7.45	.....
S100E1	GE	8.80	.....	5.85	.....
S100E2	GE	10.80	.....	7.20	.....
S100E3	GE	9.30	.....	6.20	.....
S100E4	GE	11.70	.....	7.80	.....
S100F1	GE	8.20	.....	5.45	.....
S100F2	GE	10.20	.....	6.80	.....
S100F3	GE	8.70	.....	5.80	.....
S100F4	GE	11.20	.....	7.45	.....
S100G1	GE	5.70	.....	3.80	.....
S100G2	GE	7.75	.....	5.15	.....
S100G3	GE	6.25	.....	4.15	.....
S100G4	GE	8.65	.....	5.75	.....
S200A1	GE	18.00	.....	12.00	.....
S200A2	GE	20.90	.....	13.95	.....
S200A21	GE	22.10	.....	14.70	.....
S200A3	GE	20.30	.....	13.55	.....
S200A4	GE	24.75	.....	16.50	.....
S200A41	GE	26.30	.....	17.55	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
S-488	SAR	1.60	1.15	1.02	.....
S-490	SAR	2.20	1.58	1.41	.....
S-492	SAR	2.80	2.02	1.80	.....
S-493	SAR	3.35	2.44	2.18	.....
S-494	SAR	4.00	2.88	2.56	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
S-591	SAR	.83	.75	.72	.....
S-594	SAR	5.03	4.53	4.02	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
S1020E4PL	INT	1.95	.....	1.75	.....
S1020E6PL	INT	2.50	.....	2.20	.....
S1020E8PL	INT	3.85	.....	3.40	.....

Type No.	Mfr.	1-24	25-99	100-up
S-5017	SAR	12.00	10.30	9.60
S-5018	SAR	12.00	10.30	9.60
S-5019	SAR	18.10	15.50	14.45
S5130	SAR	22.50	19.30	18.00
S-5251	SAR	6.10	5.23	4.87
S-5343	SAR	18.10	15.50	14.50
S-5483	SAR	58.30	50.00	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
S-5959	SAR	1.94	1.66	1.54	.....
S-5959-1	SAR	2.22	1.90	1.77	.....
S-5959-2	SAR	2.44	2.09	1.94	.....
S-5959-3	SAR	3.06	2.62	2.43	.....
S-5991	SAR	3.50	3.00	2.80	.....
S-6121	SAR	4.01	3.43	3.19	.....
S-6121-1	SAR	4.21	3.60	3.35	.....
S-6121-2	SAR	4.36	3.73	3.47	.....
S-6121-3	SAR	4.41	3.78	3.51	.....
S-6121-4	SAR	5.01	4.29	3.99	.....
S-6121-5	SAR	5.61	4.81	4.47	.....
S-6211	SAR	2.12	1.82	1.69	.....
S-6211-1	SAR	2.34	2.00	1.86	.....
S-6211-2	SAR	2.65	2.19	2.04	.....
S-6211-3	SAR	3.21	2.75	2.55	.....

Type No.	Mfr.	1-24	25-99	100-up
S9303-02	SYL	3.65	3.65	2.50
S9313-02	SYL	5.10	5.10	3.50
S9323-02	SYL	4.05	4.05	2.75
S9443-02	SYL	4.05	4.05	2.75
S9463-02	SYL	3.65	3.65	2.50
SA-10	SYL	35.90	28.60	24.20
SA-11	SYL	26.10	20.80	17.60

Type No.	Mfr.	1-99	100-999	1000-4999	5000-up
SA20-03	SYL	10.05	8.00	6.80	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
SA7405A	HUG	9.68	.....	7.26	.....
SA7406A	HUG	8.12	.....	6.09	.....
SA7407A	HUG	7.08	.....	5.31	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
SA7408A	HUG	6.64	.....	4.98	.....
SA7409A	HUG	19.36	.....	14.52	.....
SA7410A	HUG	16.24	.....	13.68	.....
SA7411A	HUG	14.16	.....	10.62	.....
SA7412A	HUG	13.28	.....	9.96	.....
SC40A	GE	2.84	.....	1.89	.....
SC40B	GE	3.03	.....	2.02	.....
SC40D	GE	3.86	.....	2.57	.....
SC40E	GE	4.31	.....	2.87	.....
SC40F	GE	2.64	.....	1.76	.....
SC41A	GE	2.39	.....	1.59	.....
SC41B	GE	2.58	.....	1.72	.....
SC41D	GE	3.41	.....	2.27	.....
SC41E	GE	3.86	.....	2.57	.....
SC41F	GE	2.19	.....	1.46	.....
SC45A	GE	3.65	.....	2.43	.....
SC45B	GE	4.32	.....	2.88	.....
SC45D	GE	4.98	.....	3.32	.....
SC45E	GE	5.64	.....	3.76	.....
SC45F	GE	3.38	.....	2.25	.....
SC46A	GE	3.20	.....	2.13	.....
SC46B	GE	2.48	.....	2.32	.....
SC46D	GE	4.53	.....	3.02	.....
SC46E	GE	5.19	.....	3.46	.....
SC46F	GE	5.19	.....	3.46	.....
SC50A	GE	5.40	.....	3.60	.....
SC50B	GE	5.80	.....	3.87	.....
SC50D	GE	7.40	.....	4.93	.....
SC50E	GE	8.50	.....	5.67	.....
SC50F	GE	5.00	.....	3.33	.....
SC51A	GE	4.95	.....	3.30	.....
SC51B	GE	5.36	.....	3.57	.....
SC51D	GE	6.93	.....	4.63	.....
SC51E	GE	8.05	.....	5.37	.....
SC51F	GE	4.55	.....	3.03	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
SC1000	HUG	30.00	18.00	12.00	.....
SC1100	HUG	75.00	63.50	49.25	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
SC5074	HUG	110.00	68.00	44.00	.....
SC5091	HUG	4.00	3.40	3.00	.....
SC5124	HUG	5.00	4.60	4.25	.....
SC5140	HUG	27.50	22.00	18.00	.....
SC5250	HUG	34.00	31.00	27.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
SD-91	INT	.53	.....	.35	.....
SD-91A	INT	.59	.....	.39	.....
SD-92	INT	.63	.....	.42	.....
SD-92A	INT	.68	.....	.46	.....
SD-93	INT	.73	.....	.52	.....
SD-93A	INT	.86	.....	.57	.....
SD-94	INT	.89	.....	.60	.....
SD-94A	INT	.96	.....	.64	.....
SD-95	INT	.99	.....	.67	.....
SD95A	INT	1.06	.....	.71	.....
SDA1020E6	INT	5.40	.....	4.30	.....
SDA1020E8	INT	6.75	.....	6.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
SD150	GE	.83	.....	.56	.....

Type No.	Mfr.	1-4	5-99	100-up
SD500	INT	.67	.59	.63	.48

Type No.	Mfr.	1-24	25-99	100-999	100 Mix
SE106J	SPR	7.30	5.70	5.10	4.85
SE111J	SPR	15.50	12.25	10.80	10.20
SE112J	SPR	15.50	12.25	10.80	10.20
SE116J	SPR	13.35	10.70	9.40	8.90
SE124J	SPR	17.85	14.30	12.50	11.90
SE125J	SPR	19.80	15.80	13.90	13.20
SE155J	SPR	15.50	12.25	10.80	10.20
SE156J	SPR	15.50	12.25	10.80	10.20
SE161J	SPR	59.90	48.00	40.20	39.95
SE170J	SPR	14.80	11.90	10.40	9.90
SE180J	SPR	14.80	11.90	10.40	9.90
SE416J	SPR	22.50	17.95	15.80	14.95
SE424J	SPR	30.00	24.00	21.00	20.00
SE455J	SPR	23.20	18.55	16.25	15.45
SE480J	SPR	23.20	18.55	16.25	15.45

Type No.	Mfr.	1-24	25-99	100-up
SE501G	SPR	37.40	29.95	26.15	24.90
SE501K	SPR	34.40	27.50	24.00	22.90
SE506K	SPR	52.50	42.00	36.75	35.00

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex	**HOF** —Hoffman	**RCA** —Radio Corp. of America	**SYL** —Sylvania
BEN —Bendix	**HUG** —Hughes Aircraft	**RAY** —Raytheon	**TI** —Texas Instruments
GE —General Electric	**INT** —International Rectifier	**SAR** —Sarkes-Tarzian	**WES** —Westinghouse
	MOT —Motorola	**SPR** —Sprague	

Type No.	Mfr.	1-24	25-99	100-up	
SE518K	SPR	22.50	18.00	15.75	15.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SE806]	SPR	10.40	8.40	7.50	7.00
SE808]	SPR	13.35	10.70	9.40	8.90
SE816]	SPR	13.35	10.70	9.40	8.90
SE825]	SPR	19.80	15.80	13.90	13.20
SE826]	SPR	30.00	24.00	21.00	20.00
SE840]	SPR	14.20	11.40	10.20	9.60
SE855]	SPR	15.50	12.25	10.80	10.20
SE870]	SPR	14.80	11.90	10.40	9.90
SE880]	SPR	14.80	11.90	10.40	9.90

Type No.	Mfr.	1-24	25-99	100-up	
SE1280A	SPR	24.00	19.20	14.40	.....
SE1281A	SPR	24.00	19.20	14.40	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SE8280]	SPR	49.00	39.30	32.70	.....
SE8416]	SPR	6.60	5.30	4.60	.....
SE8417]	SPR	6.60	5.30	4.60	.....
SE8424]	SPR	13.10	10.50	9.20	.....
SE8440]	SPR	6.60	5.30	4.60	.....
SE8455]	SPR	8.00	6.40	5.60	.....
SE8480]	SPR	6.60	5.30	4.60	.....
SE8826]	SPR	13.10	10.50	9.20	.....
SE8806]	SPR	6.00	4.80	4.00	.....
SE8808]	SPR	6.60	5.30	4.40	.....
SE8816]	SPR	6.60	5.30	4.40	.....
SE8825]	SPR	10.60	8.45	7.05	.....
SE8828]	SPR	12.90	10.30	8.40	.....
SE8840]	SPR	6.60	5.30	4.40	.....
SE8855]	SPR	7.30	5.80	4.85	.....
SE8870]	SPR	6.60	5.30	4.40	.....
SE8880]	SPR	6.60	5.30	4.40	.....
SF10-02	SYL	10.85	8.70	7.45	.....
SF10-03	SYL	10.85	8.70	6.85	.....
SF11-02	SYL	9.95	8.00	6.80	.....
SF11-03	SYL	9.95	8.00	6.80	.....
SF12-02	SYL	7.05	5.65	4.80	.....
SF12-03	SYL	7.05	5.65	4.80	.....
SF13-02	SYL	5.90	4.70	4.00	.....
SF13-03	SYL	5.90	4.70	4.00	.....
SF20-02	SYL	13.80	11.00	9.35	.....
SF20-03	SYL	13.80	11.00	9.35	.....
SF21-02	SYL	12.65	10.10	8.60	.....

Type No.	Mfr.	1-24	25-99	100-up	
SF21-03	SYL	12.65	10.10	8.60	.....
SF22-02	SYL	8.90	7.10	6.05	.....
SF22-03	SYL	8.90	7.10	6.05	.....
SF23-02	SYL	7.45	5.95	5.05	.....
SF23-03	SYL	7.45	5.95	5.05	.....
SF30-02	SYL	17.20	13.75	11.65	.....
SF30-03	SYL	17.20	13.75	11.65	.....
SF31-02	SYL	15.75	12.55	10.60	.....
SF31-03	SYL	15.75	12.55	10.60	.....
SF32-02	SYL	11.20	8.95	7.55	.....
SF32-03	SYL	11.20	8.95	7.55	.....
SF33-02	SYL	9.30	7.40	6.25	.....
SF33-03	SYL	9.30	7.40	6.25	.....
SF50-02	SYL	17.20	13.75	11.65	.....
SF50-03	SYL	17.20	13.75	11.65	.....

Type No.	Mfr.	1-99	100-999	1000-4999	
SF51-02	SYL	15.75	12.55	10.60	.....
SF51-03	SYL	15.75	12.55	10.60	.....
SF53-02	SYL	9.30	7.40	6.25	.....
SF53-03	SYL	9.30	7.40	6.25	.....

Type No.	Mfr.	1-24	25-99	100-up	
SF52-02	SYL	11.20	8.95	7.55	.....
SF52-03	SYL	11.20	8.95	7.55	.....
SF60-02	SYL	17.20	13.75	11.65	.....
SF60-03	SYL	17.20	13.75	11.65	.....
SF62-02	SYL	11.20	8.95	7.55	.....
SF62-03	SYL	11.20	8.95	7.55	.....

Type No.	Mfr.	1-99	100-999	1000-4999	
SF61-02	SYL	15.75	12.55	10.60	.....
SF61-03	SYL	15.75	12.55	10.60	.....
SF63-02	SYL	9.30	7.40	6.25	.....
SF63-03	SYL	9.30	7.40	6.25	.....

Type No.	Mfr.	1-24	25-99	100-up	
SF100-02	SYL	22.20	17.70	15.00	.....
SF100-03	SYL	22.20	17.70	15.00	.....
SF101-02	SYL	20.40	16.25	13.75	.....
SF101-03	SYL	20.40	16.25	13.75	.....
SF102-02	SYL	14.40	11.50	9.70	.....
SF102-03	SYL	14.40	11.50	9.70	.....
SF103-02	SYL	12.00	9.60	8.10	.....
SF103-03	SYL	12.00	9.60	8.10	.....
SF110-02	SYL	22.20	17.70	15.00	.....
SF110-03	SYL	22.20	17.70	15.00	.....
SF111-02	SYL	20.40	16.25	13.75	.....
SF111-03	SYL	20.40	16.25	13.75	.....
SF112-02	SYL	14.40	11.50	9.70	.....
SF112-03	SYL	14.40	11.50	9.70	.....
SF113-02	SYL	12.00	9.60	8.10	.....
SF113-03	SYL	12.00	9.60	8.10	.....
SF120-02	SYL	28.45	22.80	19.20	.....
SF120-03	SYL	28.45	22.80	19.20	.....
SF121-02	SYL	26.25	20.95	17.75	.....
SF121-03	SYL	26.25	20.95	17.75	.....
SF122-02	SYL	18.50	14.80	12.50	.....
SF122-03	SYL	18.50	14.80	12.50	.....
SF123-02	SYL	15.45	12.30	10.40	.....
SF123-03	SYL	15.45	12.30	10.40	.....
SF130-02	SYL	28.45	22.80	19.20	.....
SF131-02	SYL	26.25	20.95	17.75	.....
SF131-03	SYL	26.25	20.95	17.75	.....
SF133-02	SYL	15.45	12.30	10.40	.....
SF133-03	SYL	15.45	12.30	10.40	.....
SF130-03	SYL	28.45	22.80	19.20	.....
SF132-02	SYL	18.50	14.80	12.50	.....
SF132-03	SYL	18.50	14.80	12.50	.....
SF200-02	SYL	19.00	15.15	12.85	.....
SF200-03	SYL	19.00	15.15	12.85	.....
SF201-02	SYL	17.50	14.00	11.85	.....
SF201-03	SYL	17.50	14.00	11.85	.....
SF202-02	SYL	12.35	9.85	8.35	.....
SF202-03	SYL	12.35	9.85	8.35	.....
SF203-02	SYL	10.25	8.20	6.95	.....
SF203-03	SYL	10.25	8.20	6.95	.....
SF210-02	SYL	19.00	15.15	12.85	.....
SF210-03	SYL	19.00	15.15	12.85	.....

Type No.	Mfr.	1-24	25-99	100-up	
SF211-02	SYL	17.50	14.00	11.85	.....
SF211-03	SYL	17.50	14.00	11.85	.....
SF212-02	SYL	12.35	9.85	8.35	.....
SF212-03	SYL	12.35	9.85	8.35	.....
SF213-02	SYL	10.25	8.20	6.95	.....
SF213-03	SYL	10.25	8.20	6.95	.....
SF250-02	SYL	19.00	15.15	12.85	.....
SF250-03	SYL	19.00	15.15	12.85	.....
SF251-02	SYL	17.50	14.00	11.85	.....
SF251-03	SYL	17.50	14.00	11.85	.....
SF252-02	SYL	12.35	9.85	8.35	.....
SF252-03	SYL	12.35	9.85	8.35	.....
SF253-02	SYL	8.20	7.05	6.30	.....
SF253-03	SYL	8.20	7.05	6.30	.....
SF260-02	SYL	19.00	15.15	12.85	.....
SF260-03	SYL	19.00	15.15	12.85	.....
SF261-02	SYL	14.00	12.05	10.75	.....
SF261-03	SYL	14.00	12.05	10.75	.....
SF262-02	SYL	12.35	9.85	8.35	.....
SF262-03	SYL	12.35	9.85	8.35	.....
SF263-02	SYL	8.20	7.05	6.30	.....
SF263-03	SYL	8.20	7.05	6.30	.....
SFF3A	SYL	50.00	42.85	.....	.....
SG40-02	SYL	10.85	8.70	7.45	.....
SG40-03	SYL	10.85	8.70	7.45	.....
SG41-02	SYL	9.95	8.00	6.80	.....
SG41-03	SYL	9.95	8.00	6.80	.....
SG42-02	SYL	7.05	5.65	4.80	.....
SG42-03	SYL	7.05	5.65	4.80	.....
SG43-02	SYL	5.90	4.70	4.00	.....
SG43-03	SYL	5.90	4.70	4.00	.....
SG50-02	SYL	10.85	8.70	7.45	.....

Type No.	Mfr.	1-24	25-99	100-up	
SG50-03	SYL	10.85	8.70	7.45	.....
SG51-02	SYL	9.95	8.00	6.80	.....
SG51-03	SYL	9.95	8.00	6.80	.....
SG52-02	SYL	7.05	5.65	4.80	.....
SG52-03	SYL	7.05	5.65	4.80	.....
SG53-02	SYL	5.90	4.70	4.00	.....
SG53-03	SYL	5.90	4.70	4.00	.....
SG60-02	SYL	10.85	8.70	7.45	.....
SG60-03	SYL	10.85	8.70	7.45	.....
SG61-02	SSYL	9.95	8.00	6.80	.....
SG61-03	SSYL	9.95	8.00	6.80	.....
SG62-02	SYL	7.05	5.65	4.80	.....
SG62-03	SYL	7.05	5.65	4.80	.....
SG63-02	SYL	5.90	4.70	4.00	.....
SG63-03	SYL	5.90	4.70	4.00	.....
SFF3A	SYL	50.00	42.85	.....	.....
SG70-02	SYL	13.80	11.00	9.35	.....
SG70-03	SYL	13.80	11.00	9.35	.....
SG71-02	SYL	12.65	10.10	8.60	.....
SG71-03	SYL	12.65	10.10	8.60	.....
SG72-02	SYL	8.90	7.10	6.05	.....
SG72-03	SYL	8.90	7.10	6.05	.....
SG73-02	SYL	7.45	5.95	5.05	.....
SG73-03	SYL	7.45	5.95	5.05	.....
SG80-02	SYL	13.80	11.00	9.35	.....
SG80-03	SYL	13.80	11.00	9.35	.....
SG81-02	SYL	12.65	10.10	8.60	.....
SG81-03	SYL	12.65	10.10	8.60	.....
SG82-02	SYL	8.90	7.10	6.05	.....
SG82-03	SYL	8.90	7.10	6.05	.....
SG83-02	SYL	7.45	5.95	5.05	.....
SG83-03	SYL	7.45	5.95	5.05	.....
SG90-02	SYL	13.80	11.00	9.35	.....
SG90-03	SYL	13.80	11.00	9.35	.....
SG91-02	SYL	12.65	10.10	8.60	.....
SG91-03	SYL	12.65	10.10	8.60	.....
SG92-02	SYL	8.90	7.10	6.05	.....
SG92-03	SYL	8.90	7.10	6.05	.....
SG93-02	SYL	7.45	5.95	5.05	.....
SG93-03	SYL	7.45	5.95	5.05	.....
SG100-02	SYL	12.40	9.90	8.35	.....
SG100-03	SYL	12.40	9.90	8.35	.....
SG101-02	SYL	10.50	8.40	7.10	.....
SG101-03	SYL	10.50	8.40	7.10	.....
SG102-02	SYL	9.30	7.40	6.25	.....
SG102-03	SYL	9.30	7.40	6.25	.....
SG103-02	SYL	6.20	4.95	4.20	.....
SG103-03	SYL	6.20	4.95	4.20	.....
SG110-02	SYL	12.40	9.90	8.35	.....
SG110-03	SYL	12.40	9.90	8.35	.....
SG111-02	SYL	10.50	8.40	7.10	.....
SG111-03	SYL	10.50	8.40	7.10	.....
SG112-02	SYL	9.30	7.40	6.25	.....
SG112-03	SYL	9.30	7.40	6.25	.....
SG113-02	SYL	6.20	4.95	4.20	.....
SG113-03	SYL	6.20	4.95	4.20	.....
SG120-02	SYL	10.85	8.70	7.45	.....
SG120-03	SYL	10.85	8.70	7.45	.....
SG121-02	SYL	9.95	8.00	6.80	.....
SG121-03	SYL	9.95	8.00	6.80	.....
SG122-02	SYL	7.05	5.65	4.80	.....
SG122-03	SYL	7.05	5.65	4.80	.....
SG123-02	SYL	5.90	4.70	4.00	.....
SG123-03	SYL	5.90	4.70	4.00	.....
SG130-02	SYL	13.80	11.00	9.35	.....
SG130-03	SYL	13.80	11.00	9.35	.....
SG131-02	SYL	12.65	10.10	8.60	.....
SG131-03	SYL	12.65	10.10	8.60	.....
SG132-02	SYL	8.90	7.10	6.05	.....
SG132-03	SYL	8.90	7.10	6.05	.....
SG133-02	SYL	7.45	5.95	5.05	.....
SG133-03	SYL	7.45	5.95	5.05	.....
SG140-02	SYL	10.85	8.70	7.45	.....
SG140-03	SYL	10.85	8.70	7.45	.....
SG141-02	SYL	9.95	8.00	6.80	.....
SG141-03	SYL	9.95	8.00	6.80	.....
SG142-02	SYL	7.05	5.65	4.80	.....
SG142-03	SYL	7.05	5.65	4.80	.....
SG143-02	SYL	5.90	4.70	4.00	.....
SG143-03	SYL	5.90	4.70	4.00	.....
SG150-02	SYL	8.35	6.65	5.65	.....
SG150-03	SYL	8.35	6.65	5.65	.....

Type No.	Mfr.	1-24	25-99	100-up
SG151-02	SYL	8.35	6.65	5.65
SG151-03	SYL	8.35	6.65	5.65
SG152-02	SYL	4.90	3.90	3.35
SG152-03	SYL	4.90	3.90	3.35
SG153-02	SYL	4.90	3.90	3.35
SG153-03	SYL	4.90	3.90	3.35
SG160-02	SYL	13.80	11.00	9.35
SG160-03	SYL	13.80	11.00	9.35
SG161-02	SYL	12.65	10.10	8.60
SG161-03	SYL	12.65	10.10	8.60
SG162-02	SYL	8.90	7.10	6.05
SG162-03	SYL	8.90	7.10	6.05
SG163-02	SYL	7.45	5.95	5.05
SG163-03	SYL	7.45	5.95	5.05
SG170-02	SYL	8.35	6.65	5.65
SG170-03	SYL	8.35	6.65	5.65
SG171-02	SYL	8.35	6.65	5.65
SG171-03	SYL	8.35	6.65	5.65
SG172-02	SYL	4.90	3.90	3.35
SG172-03	SYL	4.90	3.90	3.35
SG173-02	SYL	4.90	3.90	3.35
SG173-03	SYL	4.90	3.90	3.35
SG180-02	SYL	8.35	6.65	5.65
SG180-03	SYL	8.35	6.65	5.65
SG181-02	SYL	8.35	6.65	5.65
SG181-03	SYL	8.35	6.65	5.65
SG182-02	SYL	4.90	3.90	3.35
SG182-03	SYL	4.90	3.90	3.35
SG183-02	SYL	4.90	3.90	3.35
SG183-03	SYL	4.90	3.90	3.35
SG190-02	SYL	10.85	8.70	7.45
SG190-03	SYL	10.85	8.70	7.45
SG191-02	SYL	9.95	8.00	6.80
SG191-03	SYL	9.95	8.00	6.80
SG192-02	SYL	7.05	5.65	4.80
SG192-03	SYL	7.05	5.65	4.80
SG193-02	SYL	5.90	4.70	4.00
SG193-03	SYL	5.90	4.70	4.00
SG200-02	SYL	11.50	9.20	7.80
SG200-03	SYL	11.50	9.20	7.80
SG201-02	SYL	10.50	8.40	7.10
SG201-03	SYL	10.50	8.40	7.10
SG202-02	SYL	7.45	5.95	5.05
SG202-03	SYL	7.45	5.95	5.05
SG203-02	SYL	6.20	4.95	4.20
SG203-03	SYL	6.20	4.95	4.20
SG210-02	SYL	11.50	9.20	7.80
SG210-03	SYL	11.50	9.20	7.80
SG211-02	SYL	10.50	8.40	7.10
SG211-03	SYL	10.50	8.40	7.10
SG212-02	SYL	7.45	5.95	5.05
SG212-03	SYL	7.45	5.95	5.05
SG213-02	SYL	6.20	4.95	4.20
SG213-03	SYL	6.20	4.95	4.20
SG220-02	SYL	11.50	9.20	7.80
SG220-03	SYL	11.50	9.20	7.80
SG221-02	SYL	10.50	8.40	7.10
SG221-03	SYL	10.50	8.40	7.10
SG222-02	SYL	7.45	5.95	5.05
SG222-03	SYL	7.45	5.95	5.05
SG223-02	SYL	6.20	4.85	4.20
SG223-03	SYL	6.85	5.45	4.60
SG230-02	SYL	8.70	6.95	5.90
SG230-03	SYL	8.70	6.95	5.90
SG231-02	SYL	8.70	6.95	5.90
SG231-03	SYL	8.70	6.95	5.90
SG232-02	SYL	5.15	4.10	3.45
SG232-03	SYL	5.15	4.10	3.45
SG233-02	SYL	5.15	4.10	3.45
SG233-03	SYL	5.15	4.10	3.45
SG240-02	SYL	11.50	9.20	7.80
SG240-03	SYL	11.50	9.20	7.80
SG241-02	SYL	10.50	8.40	7.10
SG241-03	SYL	10.50	8.40	7.10
SG242-02	SYL	7.45	5.95	5.05
SG242-03	SYL	7.45	5.95	5.05
SG243-02	SYL	6.20	4.95	4.20
SG243-03	SYL	6.20	4.95	4.20
SG250-02	SYL	11.50	9.20	7.80
SG250-03	SYL	11.50	9.20	7.80
SG251-03	SYL	10.50	8.40	7.10
SG251/2	SYL	10.50	8.40	7.10
SG252-02	SYL	7.45	5.95	5.05
SG252-03	SYL	7.45	5.95	5.05
SG253-02	SYL	6.20	4.95	4.20
SG253-03	SYL	6.20	4.95	4.20
SG260-02	SYL	11.50	9.20	7.80
SG260-03	SYL	11.50	9.20	7.80
SG261-02	SYL	10.50	8.40	7.10
SG261-03	SYL	10.50	8.40	7.10
SG262-02	SYL	7.45	5.95	5.05
SG262-03	SYL	7.45	5.95	5.05

Type No.	Mfr.	1-24	25-99	100-up
SG263-02	SYL	6.20	4.95	4.20
SG263-03	SYL	6.20	4.95	4.20
SG270-02	SYL	8.70	6.95	5.90
SG270-03	SYL	8.70	6.95	5.90
SG271-02	SYL	8.70	6.95	5.90
SG271-03	SYL	8.70	6.95	5.90
SG272-02	SYL	5.15	4.10	3.45
SG272-03	SYL	5.15	4.10	3.45
SG273-02	SYL	5.15	4.10	3.45
SG273-03	SYL	5.15	4.10	3.45
SG280-02	SYL	10.85	8.70	7.45
SG280-03	SYL	10.85	8.70	7.45
SG281-02	SYL	9.95	8.00	6.80
SG281-03	SYL	9.95	8.00	6.80
SG282-02	SYL	7.05	5.65	4.80
SG282-03	SYL	7.05	5.65	4.80
SG283-02	SYL	5.90	4.70	4.00
SG283-03	SYL	5.90	4.70	4.00
SG290-02	SYL	8.35	6.65	5.65
SG290-03	SYL	8.35	6.65	5.65
SG291-02	SYL	8.35	6.65	5.65
SG291-03	SYL	8.35	6.65	5.65
SG292-02	SYL	4.90	3.90	3.35
SG292-03	SYL	4.90	3.90	3.35
SG293-02	SYL	4.90	3.90	3.35
SG293-03	SYL	4.90	3.90	3.35
SG300-02	SYL	11.50	9.20	7.80
SG300-03	SYL	11.50	9.20	7.80
SG301-02	SYL	10.50	8.40	7.10
SG301-03	SYL	10.50	8.40	7.10
SG303-02	SYL	6.20	4.95	4.20
SG303-03	SYL	6.20	4.95	4.20
SG302-02	SYL	7.45	5.95	5.05
SG302-03	SYL	7.45	5.95	5.05
SG310-02	SYL	15.10	12.05	10.25
SG310-03	SYL	15.10	12.05	10.25
SG311-02	SYL	13.90	11.05	9.45
SG311-03	SYL	13.90	11.05	9.45
SG312-02	SYL	9.80	7.80	6.65
SG312-03	SYL	9.80	7.80	6.65
SG313-02	SYL	8.25	6.60	5.60
SG313-03	SYL	8.25	6.60	5.60
Single Clip	SAR	.12	.11	.10

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
SK3012	RCA	4.38			
SK3013	RCA	4.68			
SK3014	RCA	3.15			
SK3015	RCA	6.30			
SK3016	RCA	.48			
SK3017A	RCA	.51			
SK3018	RCA	1.35			
SK3019	RCA	1.47			
SK3020	RCA	1.08			
SK3021	RCA	1.71			
SK3003	RCA	.99	5.53		
SK3004	RCA	.99	5.53		
SK3005	RCA	1.17	5.53		
SK3006	RCA	1.26	5.53		
SK3007	RCA	1.26	5.53		
SK3008	RCA	1.23	5.53		
SK3009	RCA	2.34	5.53		
SK3010	RCA	1.26	5.53		
SK3011	RCA	1.62	5.53		

Type No.	Mfr.	1-24	25-99	100-up
SM10-02	SYL	22.65	18.10	15.30
SM10-03	SYL	22.65	18.10	15.30
SM11-02	SYL	20.80	16.60	14.05
SM11-03	SYL	20.80	16.60	14.05
SM12-02	SYL	14.70	11.70	9.90
SM12-03	SYL	14.70	11.70	9.90
SM13-02	SYL	12.25	9.75	8.25
SM13-03	SYL	12.25	9.75	8.25
SM20-02	SYL	22.65	18.10	15.30
SM20-03	SYL	22.65	18.10	15.30
SM21-02	SYL	20.80	16.60	14.05
SM21-03	SYL	20.80	16.60	14.05
SM22-02	SYL	14.70	11.70	9.90
SM22-03	SYL	14.70	11.70	9.90
SM23-02	SYL	12.25	9.75	8.25
SM23-03	SYL	12.25	9.75	8.25
SM30-02	SYL	22.65	18.10	15.30
SM30-03	SYL	22.65	18.10	15.30
SM31-02	SYL	20.80	16.60	14.05
SM31-03	SYL	20.80	16.60	14.05
SM32-02	SYL	14.70	11.70	9.90
SM32-03	SYL	14.70	11.70	9.90
SM33-02	SYL	12.25	9.75	8.25
SM33-03	SYL	12.25	9.75	8.25

Type No.	Mfr.	1-24	25-99	100-up
SM40-02	SYL	17.35	13.85	11.75
SM40-03	SYL	17.35	13.85	11.75
SM41-02	SYL	17.35	13.85	11.75
SM41-03	SYL	17.35	13.85	11.75
SM42-02	SYL	10.20	8.15	6.90
SM42-03	SYL	10.20	8.15	6.90
SM43-02	SYL	10.20	8.15	6.90
SM43-03	SYL	10.20	8.15	6.90
SM50-02	SYL	36.20	28.90	24.45
SM50-03	SYL	36.20	28.90	24.45
SM51-02	SYL	33.25	26.55	22.45
SM51-03	SYL	33.25	26.55	22.45
SM52-02	SYL	23.50	18.75	15.85
SM52-03	SYL	23.50	18.75	15.85
SM53-02	SYL	19.60	15.60	13.20
SM53-03	SYL	19.60	15.60	13.20
SM60-02	SYL	25.70	20.50	17.35
SM60-03	SYL	25.70	20.50	17.35
SM61-02	SYL	23.55	18.80	15.90
SM61-03	SYL	23.55	18.80	15.90
SM62-02	SYL	16.55	13.30	11.25
SM62-03	SYL	16.55	13.30	11.25
SM63-02	SYL	13.85	11.05	9.35
SM63-03	SYL	13.85	11.05	9.35
SM70-02	SYL	25.70	20.50	17.35
SM70-03	SYL	25.70	20.50	17.35
SM71-02	SYL	23.55	18.80	15.90
SM71-03	SYL	23.55	18.80	15.90
SM72-02	SYL	16.65	13.30	11.25
SM72-03	SYL	16.65	13.30	11.25
SM73-02	SYL	13.85	11.05	9.35
SM73-03	SYL	13.85	11.05	9.35
SM80-02	SYL	73.35	58.50	50.00
SM80-03	SYL	73.35	58.50	50.00
SM81-02	SYL	62.35	49.75	42.50
SM81-03	SYL	62.35	49.75	42.50
SM82-02	SYL	51.25	40.95	35.00
SM82-03	SYL	51.25	40.95	35.00
SM83-02	SYL	36.70	39.25	25.00
SM83-03	SYL	36.70	39.25	25.00
SN006A	TI	6.50	6.00	
SN14-206	TI	6.50	5.15	4.40
SN14-210	TI	6.50	5.15	4.40
SN14-213	TI	8.10	6.45	5.50
SN14-215	TI	8.10	6.45	5.50
SN14-216	TI	6.50	5.15	4.40
SN14-224	TI	5.85	4.85	3.95
SN14-226	TI	6.50	5.15	4.40
SN14-227	TI	4.55	3.60	3.10
SN14-231	TI	5.85	4.85	3.95
SN14-236	TI	6.50	5.15	4.40
SN14-261	TI	5.85	4.65	3.95
SN14-266	TI	6.50	5.15	4.40
SN14-286	TI	9.10	7.20	6.15
SN14-296	TI	9.10	7.20	6.15
SN14-306	TI	5.35	4.25	3.65
SN14-310	TI	5.35	4.25	3.65
SN14-313	TI	6.80	5.40	4.60
SN14-315	TI	6.80	5.40	4.60
SN14-316	TI	5.35	4.25	3.65
SN14-324	TI	4.80	3.80	3.25
SN14-326	TI	5.35	4.25	3.65
SN14-327	TI	3.70	2.95	2.55
SN14-331	TI	4.80	3.80	3.25
SN14-336	TI	5.35	4.25	3.65
SN14-346	TI	5.35	4.25	3.65
SN14-361	TI	4.80	3.80	3.25
SN14-366	TI	5.35	4.25	3.65
SN14-386	TI	7.45	5.95	5.05
SN14-396	TI	7.45	5.95	5.05
SN15-830	TI	3.90	3.10	2.65

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-830N	TI	1.90	1.50	1.25	

Type No.	Mfr.	1-24	25-99	100-up
SN15-831	TI	6.65	5.25	4.50

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-831N	TI	3.65	2.90	2.45	

Type No.	Mfr.	1-24	25-99	100-up
SN15-832	TI	4.70	3.70	3.20

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-832N	TI	2.00	1.60	1.35	

Type No.	Mfr.	1-24	25-99	100-up
SN15-833	TI	3.45	2.75	2.35
SN15-833-2	TI	3.45	2.75	2.35

Semiconductor Directory

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-833N	TI	1.60	1.30	1.10	

Type No.	Mfr.	1-24	25-99	100-up
SN15-844	TI	4.70	3.70	3.20

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-844N	TI	2.00	1.60	1.35	

Type No.	Mfr.	1-24	25-99	100-up
SN15-845	TI	5.45	4.35	3.70
SN15-845-2	TI	5.45	4.35	3.70

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-845N	TI	3.65	2.90	2.45	

Type No.	Mfr.	1-24	25-99	100-up
SN15-846	TI	4.30	3.40	2.90

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-846N	TI	2.00	1.60	1.35	

Type No.	Mfr.	1-24	25-99	100-up
SN15-848	TI	5.45	4.35	3.70
SN15-848-2	TI	5.45	4.35	3.70

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-848N	TI	3.65	2.90	2.45	

Type No.	Mfr.	1-24	25-99	100-up
SN15-850	TI	11.70	9.30	8.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-850N	TI	10.50	7.40	7.15	

Type No.	Mfr.	1-24	25-99	100-up
SN50-851	TI	11.70	9.30	8.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-851N	TI	11.30	9.05	7.70	

Type No.	Mfr.	1-24	25-99	100-up
SN15-862	TI	4.30	3.40	2.90
SN15-862-2	TI	4.30	3.40	2.90

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-862N	TI	2.00	1.60	1.35	

Type No.	Mfr.	1-24	25-99	100-up
SN15-884N	TI	8.10	6.45	5.50
SN15-930	TI	6.90	5.50	4.70

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-930N	TI	3.80	3.00	2.50	

Type No.	Mfr.	1-24	25-99	100-up
SN15-931	TI	11.75	9.35	8.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-931N	TI	7.30	5.80	4.90	

Type No.	Mfr.	1-24	25-99	100-up
SN15-932	TI	8.30	6.60	5.65

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-932N	TI	4.00	3.20	2.70	

Type No.	Mfr.	1-24	25-99	100-up
SN15-933	TI	6.10	4.85	4.15

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-933N	TI	3.20	2.60	2.20	

Type No.	Mfr.	1-24	25-99	100-up
SN15-944	TI	8.30	6.60	5.65

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-944N	TI	4.00	3.20	2.70	

Type No.	Mfr.	1-24	25-99	100-up
SN15-945	TI	9.70	7.75	6.60

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-945N	TI	7.30	5.80	4.90	

Type No.	Mfr.	1-24	25-99	100-up
SN15-946	TI	7.60	6.05	5.20

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-946N	TI	4.00	3.20	2.70	

Type No.	Mfr.	1-24	25-99	100-up
SN15-948	TI	9.70	7.75	6.60

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-948N	TI	7.30	5.80	4.90	

Type No.	Mfr.	1-24	25-99	100-up
SN15-950	TI	20.40	16.25	13.85

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-950N	TI	21.00	16.80	14.30	

Type No.	Mfr.	1-24	25-99	100-up
SN15-951	TI	20.40	16.25	13.85

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-951N	TI	22.60	18.10	15.40	

Type No.	Mfr.	1-24	25-99	100-up
SN15-962	TI	7.60	6.05	5.20
SN15-962-2	TI	7.60	6.05	5.20

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN15-962N	TI	4.00	3.20	2.70	

Type No.	Mfr.	1-24	25-99	100-up
SN17-808L	TI	6.00	5.05	3.95
SN17-809L	TI	5.00	4.70	3.35
SN17-810L	TI	3.00	2.45	1.95
SN17-811L	TI	3.00	2.45	1.95
SN17-812L	TI	6.00	5.05	3.95
SN17-813L	TI	6.60	5.50	4.35
SN17-821L	TI	3.00	2.45	1.95
SN17-908L	TI	7.35	6.35	5.40
SN17-909L	TI	7.00	6.05	5.10
SN17-910L	TI	6.00	5.20	4.40
SN17-911L	TI	6.00	5.20	4.40
SN17-912L	TI	7.00	6.05	5.10
SN17-913L	TI	8.20	7.10	6.00
SN17-921L	TI	5.25	4.55	3.85

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN52-702	TI	17.75	14.00	12.00	
SN52-702L	TI	17.75	14.00	12.00	
SN52-709	TI	17.30	13.80	11.75	
SN52-709L	TI	17.30	13.80	11.75	
SN52-710	TI	17.75	14.00	12.00	
SN52-710L	TI	17.75	14.00	12.00	
SN52-711	TI	37.00	29.00	25.00	
SN52-711L	TI	37.00	29.00	25.00	

Type No.	Mfr.	1-24	25-99	100-up
SN54-930	TI	6.50	5.15	4.40
SN54-932	TI	7.15	5.70	4.65
SN54-946	TI	6.50	5.15	4.80
SN54-948	TI	9.05	7.25	6.15
SN54-962	TI	6.50	5.15	4.40
SN54-965	TI	6.50	5.15	4.40
SN54-966	TI	6.50	5.15	4.40

Type No.	Mfr.	1-24	25-99	100-up
SN54-930-2	TI	6.50	5.15	4.40
SN54-932-2	TI	7.15	5.70	4.85
SN54-946-2	TI	6.50	5.15	4.80
SN54-962-2	TI	6.50	5.15	4.40
SN54-965-2	TI	6.50	5.15	4.40

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN54H00	TI	9.70	7.75	6.60	
SN54H10	TI	9.70	7.75	6.60	
SN54H11	TI	9.70	7.75	6.60	
SN54H20	TI	9.70	7.75	6.60	
SN54H21	TI	9.70	7.75	6.60	
SN54H30	TI	9.70	7.75	6.60	
SN54H40	TI	10.70	8.50	7.25	
SN54H50	TI	10.70	8.50	7.25	
SN54H52	TI	10.70	8.50	7.25	
SN54H53	TI	10.70	8.50	7.25	
SN54H55	TI	10.70	8.50	7.25	
SN54H60	TI	8.75	6.95	5.95	
SN54H61	TI	8.75	6.95	5.95	
SN54H62	TI	8.75	6.95	5.95	
SN54H71	TI	13.60	10.85	9.25	
SN54H72	TI	13.60	10.85	9.25	
SN54L00	TI	18.80	15.15	12.90	
SN54L20	TI	18.80	15.15	12.90	
SN54L71	TI	30.70	24.80	21.10	
SN54L72	TI	30.70	24.80	21.10	
SN72-702	TI	13.00	10.25	8.75	
SN72-702L	TI	13.00	10.25	8.75	
SN72-709	TI	9.35	7.45	6.35	
SN72-709L	TI	9.35	7.45	6.35	
SN72-710	TI	8.00	6.50	5.50	
SN72-710L	TI	8.00	6.50	5.50	
SN72-711	TI	26.00	20.75	17.50	
SN72-711L	TI	26.00	20.75	17.50	

Type No.	Mfr.	1-24	25-99	100-up
SN74-930	TI	3.65	2.90	2.50
SN74-930-2	TI	3.65	2.90	2.50
SN74-932	TI	4.05	3.20	2.75
SN74-932-2	TI	4.05	3.20	2.75
SN74-946	TI	3.65	2.90	2.50
SN74-946-2	TI	3.65	2.90	2.50
SN74-948	TI	5.10	4.05	3.50
SN74-962	TI	3.65	2.90	2.50
SN74-962-2	TI	3.65	2.90	2.50
SN74-965	TI	3.65	2.90	2.50
SN74-965-2	TI	3.65	2.90	2.50
SN74-966	TI	3.65	2.90	2.50
SN74-966-2	TI	3.65	2.90	2.50

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN74H00	TI	5.50	4.40	3.75	
SN74H00N	TI	3.40	2.70	2.30	
SN74H10	TI	5.50	4.40	3.75	
SN74H10N	TI	3.40	2.70	2.30	
SN74H11	TI	5.50	4.40	3.75	
SN74H11N	TI	3.40	2.70	2.30	
SN74H20	TI	5.50	4.40	3.75	
SN74H20N	TI	3.40	2.70	2.30	
SN74H21	TI	5.50	4.40	3.75	
SN74H21N	TI	3.40	2.70	2.30	
SN74H30	TI	5.50	4.40	3.75	
SN74H30N	TI	3.40	2.70	2.30	
SN74H40	TI	6.05	4.85	4.10	
SN74H40N	TI	3.75	2.95	2.55	
SN74H50	TI	6.05	4.85	4.10	
SN74H50N	TI	3.75	2.95	2.55	
SN74H52	TI	6.05	4.85	4.10	
SN74H52N	TI	3.75	2.95	2.55	
SN74H53	TI	6.05	4.85	4.10	
SN74H53N	TI	3.75	2.95	2.55	
SN74H55	TI	4.40	3.50	2.95	
SN74H55N	TI	3.75	2.95	2.55	
SN74H60	TI	4.40	3.50	2.95	
SN74H60N	TI	2.65	2.15	1.80	
SN74H61	TI	4.40	3.50	2.95	
SN74H61N	TI	2.65	2.15	1.80	
SN74H62	TI	4.40	3.50	2.95	
SN74H62N	TI	2.60	2.15	1.80	
SN74H71	TI	7.70	6.15	5.20	
SN74H71N	TI	5.50	4.40	3.75	
SN74H72	TI	7.70	6.15	5.20	

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Type No.	Mfr.	1-24	25-99	100-up	100-Mix
SN74H72N	TI	5.50	4.40	3.75	.....
SN74L00	TI	12.00	9.75	8.25	.....
SN74L20	TI	12.00	9.75	8.25	.....
SN74L71	TI	20.50	16.50	14.10	.....
SN74L72	TI	20.50	16.50	14.10	.....

Type No.	Mfr.	1-24	25-99	100-up
SN336A	TI	53.00	42.00	.....
SN344A	TI	19.50	15.50	13.20
SN345A	TI	89.00	71.00	.....
SN346A	TI	57.00	45.00	38.50
SN348A	TI	54.00	43.00	36.60
SN351A	TI	142.00	114.00	.....
SN510A	TI	28.25	22.50	19.20

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN510B	TI	28.25	22.50	19.20	.....

Type No.	Mfr.	1-24	25-99	100-up
SN511A	TI	31.10	24.75	21.10

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN511B	TI	31.10	24.75	21.10	.....

Type No.	Mfr.	1-24	25-99	100-up
SN512A	TI	22.30	17.75	15.15

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN512B	TI	22.30	17.75	15.15	.....

Type No.	Mfr.	1-24	25-99	100-up
SN513A	TI	24.55	19.55	16.65

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN513B	TI	24.55	19.55	16.65	.....

Type No.	Mfr.	1-24	25-99	100-up
SN514A	TI	22.30	17.75	15.15

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN514B	TI	22.30	17.75	15.15	.....

Type No.	Mfr.	1-24	25-99	100-up
SN515A	TI	22.30	17.75	15.15

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN515B	TI	22.30	17.75	15.15	.....

Type No.	Mfr.	1-24	25-99	100-up
SN516A	TI	22.30	17.75	15.15

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN516B	TI	22.30	17.75	15.15	.....

Type No.	Mfr.	1-24	25-99	100-up
SN517A	TI	30.50	23.50	20.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN517B	TI	29.50	23.50	20.00	.....

Type No.	Mfr.	1-24	25-99	100-up
SN518A	TI	29.50	23.50	20.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN518B	TI	29.50	23.50	20.00	.....

Type No.	Mfr.	1-24	25-99	100-up
SN521A	TI	36.50	28.00	24.80
SN522A	TI	36.50	29.00	24.80
SN523A	TI	26.00	20.60	17.60
SN524A	TI	29.95	23.25	19.80

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN524AL	TI	17.00	13.60	9.80	.....
SN525	TI	35.70	28.40	24.20	.....

Type No.	Mfr.	1-24	25-99	100-up
SN525A	TI	57.00	45.00	38.50

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN526	TI	29.20	23.20	19.80	.....

Type No.	Mfr.	1-24	25-99	100-up
SN526A	TI	57.00	45.00	38.50
SN530	TI	17.75	14.20	12.20

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN530L	TI	17.75	14.20	12.20	.....

Type No.	Mfr.	1-24	25-99	100-up
SN531	TI	11.35	9.00	7.70

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN531L	TI	11.35	9.00	7.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN532	TI	11.35	9.00	7.70

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN532L	TI	11.35	9.00	7.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN533	TI	11.35	9.00	7.70
SN534	TI	11.35	9.00	7.70

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN534L	TI	11.35	9.00	7.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN535	TI	11.35	9.00	7.70

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN535L	TI	11.35	9.00	7.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN534L	TI	11.35	9.00	7.70
SN535-2	TI	11.35	9.00	7.70
SN717A	TI	130.00	103.00	.....
SN723	TI	27.60	22.00	18.75
SN723-L	TI	27.60	22.00	18.75
SN724	TI	12.15	9.70	8.25
SN724-L	TI	12.15	9.70	8.25

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN725	TI	25.20	20.00	17.10	.....
SN726	TI	20.10	16.10	13.75	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5101	TI	28.25	22.50	19.20

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5101B	TI	28.25	22.50	19.20	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5111	TI	31.10	24.75	21.10

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5111B	TI	31.10	24.75	21.10	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5112	TI	31.10	24.75	21.10
SN5113	TI	28.25	22.50	19.20

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5113B	TI	28.25	22.50	19.20	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5161	TI	22.30	17.75	15.15

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5161B	TI	22.30	17.75	15.15	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5162	TI	24.55	19.55	18.65

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5162B	TI	24.55	19.55	16.65	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5191	TI	29.50	23.50	20.00

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5191B	TI	29.50	23.50	20.00	.....
SN5231AL	TI	26.00	20.60	17.65	.....
SN5231L	TI	26.00	20.60	17.60	.....
SN5300	TI	17.75	14.25	12.10	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5301	TI	18.75	14.85	12.75
SN5302	TI	22.75	18.00	15.50
SN5304	TI	22.75	18.00	15.50

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5310	TI	11.35	9.00	7.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5311	TI	13.00	10.25	8.80

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5315	TI	13.00	10.25	8.80	.....
SN5320	TI	11.35	9.00	7.70	.....
SN5330	TI	11.35	9.00	7.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5331	TI	13.00	10.25	8.80

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5340	TI	11.35	9.00	7.70	.....
SN5350	TI	11.35	9.00	7.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5360	TI	13.00	10.25	8.80
SN5370	TI	16.20	12.90	11.00
SN5380	TI	18.75	14.85	12.75
SN5380-2	TI	18.75	14.85	12.75
SN5400	TI	6.50	5.15	4.40

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5400N	TI	4.50	3.60	3.10	.....
SN5401	TI	6.50	5.15	4.40	.....
SN5401N	TI	4.50	3.60	3.10	.....
SN5402	TI	7.15	5.70	4.85	.....
SN5402N	TI	5.00	4.00	3.40	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5410	TI	8.50	5.15	4.40

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5410N	TI	4.50	3.60	3.10	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5420	TI	6.50	5.15	4.40

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5420N	TI	4.50	3.60	3.10	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5430	TI	6.50	5.15	4.40

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5430N	TI	4.50	3.60	3.10	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5440	TI	7.15	5.70	4.85

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5440N	TI	5.00	4.00	3.40	.....
SN5441N	TI	30.80	24.50	21.00	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5450	TI	7.15	5.70	4.85

Type No.	Mfr.	1-24	25-99	100-up	100-Mix
SN5450N	TI	5.00	4.00	3.40	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5451	TI	6.50	5.15	4.40

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5451N	TI	4.50	3.60	3.10	.....
SN5453	TI	7.15	5.70	4.85	.....
SN5453N	TI	5.00	4.00	3.40	.....
SN5454	TI	6.50	5.15	4.40	.....
SN5454N	TI	4.50	3.60	3.10	.....
SN5460	TI	5.85	4.65	4.00	.....
SN5460N	TI	3.60	2.80	2.40	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5470	TI	10.35	8.25	7.05

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5470N	TI	8.10	6.40	5.50	.....

Semiconductor Directory

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SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5472	TI	9.05	7.25	6.15	.....
SN5472N	TI	7.30	5.80	5.00	.....
SN5473	TI	23.20	18.45	15.75	.....
SN5473N	TI	11.80	9.40	8.00	.....
SN5474	TI	12.90	10.30	8.80	.....
SN5474N	TI	11.30	9.00	7.70	.....
SN5475N	TI	20.40	16.30	13.90	.....
SN5476N	TI	12.40	9.90	8.40	.....
SN5480	TI	16.20	12.90	11.00	.....
SN5480N	TI	11.30	9.00	7.70	.....
SN5482	TI	24.00	19.10	16.30	.....
SN5482N	TI	16.90	13.40	11.50	.....
SN5483N	TI	26.80	21.40	18.30	.....
SN5491	TI	16.20	12.90	11.00	.....
SN5491N	TI	30.00	23.80	20.40	.....
SN5494N	TI	7.30	5.80	5.00	.....

Type No.	Mfr.	1-24	25-99	100-up
SN5500	TI	56.00	44.50	38.00	.....
SN5510	TI	13.80	10.95	9.30	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN5510L	TI	13.80	10.95	9.30	.....
SN5511	TI	22.00	18.00	15.40	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7231L	TI	17.85	14.20	12.10	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7300	TI	8.10	6.45	5.50	.....
SN7301	TI	8.50	6.75	5.75	.....
SN7301-2	TI	8.50	6.75	5.75	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7302	TI	10.50	8.35	7.15	.....
SN7304	TI	10.50	8.35	7.15	.....
SN7310	TI	5.65	4.50	3.85	.....
SN7311	TI	6.50	5.15	4.40	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7315	TI	6.50	5.15	4.40	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7320	TI	5.65	4.50	3.85	.....
SN7330	TI	5.65	4.50	3.85	.....
SN7330-2	TI	5.65	4.50	3.85	.....
SN7331	TI	6.50	5.15	4.40	.....
SN7331-2	TI	6.50	5.15	4.40	.....
SN7350	TI	5.65	4.50	3.85	.....
SN7350-2	TI	5.65	4.50	3.85	.....
SN7360	TI	6.50	5.15	4.40	.....
SN7370	TI	7.70	6.15	5.25	.....
SN7380	TI	9.75	7.75	6.60	.....
SN7380-2	TI	9.75	7.75	6.60	.....
SN7400	TI	3.65	2.90	2.50	.....
SN7400N	TI	2.25	1.80	1.55	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7401	TI	3.65	2.90	2.50	.....
SN7402	TI	4.05	3.20	2.75	.....
SN7402N	TI	2.50	2.00	1.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7410	TI	3.65	2.90	2.50	.....
SN7410N	TI	2.25	1.80	1.55	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7420	TI	3.65	2.90	2.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7420N	TI	2.25	1.80	1.55	.....
SN7430	TI	3.65	2.90	2.50	.....
SN7430-2	TI	3.65	2.90	2.50	.....
SN7430N	TI	2.25	1.80	1.55	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7440	TI	4.05	3.20	2.75	.....
SN7440N	TI	2.50	2.00	1.70	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7441N	TI	15.40	12.25	10.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7450	TI	4.05	3.20	2.75	.....
SN7450N	TI	2.50	2.00	1.70	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7451	TI	3.65	2.90	2.50	.....
SN7451N	TI	2.25	1.80	1.55	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7453	TI	4.05	3.20	2.75	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7453N	TI	2.50	2.00	1.70	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7454	TI	3.65	2.90	2.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7460	TI	2.90	2.30	2.00	.....
SN7460N	TI	1.80	1.40	1.20	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7470	TI	5.85	4.65	4.00	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7470N	TI	4.05	3.20	2.75	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7472	TI	5.10	4.05	3.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7472N	TI	3.65	2.90	2.50	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7473	TI	7.45	5.95	5.05	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7473N	TI	5.90	4.70	4.00	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7474	TI	7.30	5.80	4.95	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7474N	TI	5.65	4.50	3.85	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7475N	TI	10.20	8.15	6.95	.....
SN7476N	TI	6.20	4.95	4.20	.....
SN7480	TI	9.10	7.25	6.15	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7480N	TI	5.65	4.50	3.85	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7482	TI	13.50	10.80	9.20	.....
SN7482N	TI	8.45	6.70	5.75	.....
SN7483N	TI	13.40	10.70	9.15	.....
SN7490	TI	14.90	11.85	10.15	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7490N	TI	11.10	8.85	7.55	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7491	TI	19.90	15.90	13.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7491N	TI	15.00	11.90	10.20	.....
SN7492N	TI	12.20	9.75	8.30	.....
SN7493N	TI	12.20	9.75	8.30	.....
SN7494N	TI	3.65	2.90	2.50	.....

Type No.	Mfr.	1-24	25-99	100-up
SN7500	TI	24.40	19.35	16.50	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SN7501	TI	37.00	29.75	24.25	.....
SN7501L	TI	37.00	29.75	24.25	.....
SN7502	TI	37.00	29.75	24.25	.....
SN7502L	TI	37.00	29.75	24.25	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
SP5G26C	INT	9.95	5.53	.....	.....

Type No.	Mfr.	1-24	25-99	100-999	1000-9999
SP616A	SPR	1.75	1.40	1.15	1.10
SP620A	SPR	3.45	2.75	2.30	2.20
SP629A	SPR	3.45	2.75	2.30	2.20
SP631A	SPR	1.50	1.20	1.00	.95
SP659A	SPR	1.95	1.55	1.30	1.20
SP670A	SPR	1.95	1.55	1.30	1.20
SP680A	SPR	1.95	1.55	1.30	1.20
SP806A	SPR	1.75	1.35	1.15	1.10
SP808A	SPR	2.20	1.75	1.45	1.40
SP816A	SPR	2.20	1.75	1.45	1.40
SP825A	SPR	4.00	3.15	2.60	2.45
SP826A	SPR	7.05	5.65	4.70	4.45
SP828A	SPR	5.60	4.45	3.65	3.45
SP840A	SPR	2.45	1.95	1.60	1.50
SP855A	SPR	2.45	1.95	1.60	1.50
SP870A	SPR	2.20	1.75	1.45	1.40
SP880A	SPR	2.20	1.75	1.45	1.40

Type No.	Mfr.	1-9	10-99	100-999	1000-up
SR92	SYL	1.28	.....	.88	.78

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
SR200B	SYL	.65	.....	.42	.25
SR500B	SYL	.68	.....	.45	.26

Type No.	Mfr.	1-9	10-99	100-999	1000-up
SR1692	SYL	.45	.45	.30	.25

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
SR6587	SYL	1.20	.....	.80	.40
SR6588	SYL	1.29	.....	.86	.43
SR6589	SYL	1.38	.....	.92	.46
SR6590	SYL	2.07	.....	1.38	.69
SR6591	SYL	3.30	.....	2.20	1.10

Type No.	Mfr.	1-9	10-99	100-999	1000-up
ST-1/1N263	INT	6.29	5.55	.....	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
ST-2	GE	1.02	.....	.68	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
ST-2	INT	5.50	4.95	.....	.....

Type No.	Mfr.	1-24	25-99	100-up
ST2-30P	SAR	3.70	3.17	2.97	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
ST-2A	INT	7.95	7.10	.....	.....
ST-3	INT	5.50	4.95	.....	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
ST3A40	SAR	3.16	2.70	2.52	.....
ST-4	INT	6.65	5.95	.....	.....
ST4-10P	SAR	1.75	1.50	1.39	.....
ST4-20P	SAR	2.44	2.09	1.94	.....
ST5A10P	SAR	3.25	2.78	2.60	.....
ST5A20P	SAR	3.78	3.23	3.00	.....
ST5A40P	SAR	5.28	4.52	4.20	.....
ST5A60P	SAR	7.80	6.68	6.20	.....
ST-7A	INT	9.65	8.65	.....	.....

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Type No.	Mfr.	1-24	25-99	100-999	100-Mix
ST-14	INT	4.20	3.75	.....	.....
ST260P	SAR	3.30	2.83	2.64	.....
ST360P	SAR	3.80	3.28	3.06	.....
ST460P	SAR	4.89	4.19	3.90	.....
ST510P	SAR	9.00	7.71	7.20	.....

Type No.	Mfr.	1-24	25-99	100-999	1000-9999
ST616A	SPR	1.80	1.45	1.20	1.15
ST620A	SPR	3.50	2.80	2.35	2.25
ST629A	SPR	3.50	2.80	2.35	2.25
ST631A	SPR	1.55	1.25	1.05	1.00
ST659A	SPR	2.00	1.60	1.35	1.25
ST670A	SPR	2.00	1.60	1.35	1.25
ST680A	SPR	2.00	1.60	1.35	1.25
ST806A	SPR	1.80	1.40	1.15	1.10
ST808A	SPR	2.25	1.80	1.50	1.45
ST816A	SPR	2.25	1.80	1.50	1.45
ST825A	SPR	4.05	3.20	2.65	2.50
ST826A	SPR	7.10	5.70	4.75	4.50
ST828A	SPR	5.65	4.50	3.65	3.50
ST840A	SPR	2.50	2.00	1.65	1.55
ST855A	SPR	2.50	2.00	1.65	1.55
ST870A	SPR	2.25	1.80	1.50	1.45
ST880A	SPR	2.25	1.80	1.50	1.45

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
SU300K	SPR	7.35	6.30	5.25	.....
SU305K	SPR	8.20	6.95	5.85	.....
SU306K	SPR	8.20	6.95	5.85	.....
SU314K	SPR	8.20	6.95	5.85	.....
SU315K	SPR	8.20	6.95	5.85	.....
SU316K	SPR	8.20	6.95	5.85	.....
SU320K	SPR	13.30	11.40	9.50	.....
SU331K	SPR	8.20	6.95	5.85	.....
SU332K	SPR	8.20	6.95	5.85	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
T200/300	INT	1.10	.92	.61	.....
T450/500	INT	1.22	1.02	.70	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
TD-1/ 1N3712	GE	3.30	.....	2.20	.....
TD-1A/ 1N3713	GE	5.00	.....	3.30	.....
TD-2/ 1N3714	GE	2.90	.....	1.95	.....
TD-3/ 1N3716	GE	2.25	.....	1.50	.....
TD-3A/ 1N3717	GE	3.90	.....	2.60	.....
TD-4/ 1N3718	GE	2.25	.....	1.50	.....
TD-4A/ 1N3719	GE	3.90	.....	2.60	.....
TD-5/ N13720	GE	1.60	.....	1.05	.....
TD-9	GE	4.00	.....	2.65	.....
TD-104/ TD-253B	GE	12.00	.....	8.00	.....
TD-251	GE	7.50	.....	5.00	.....
TD-251A	GE	12.00	.....	8.00	.....
TD-252	GE	7.50	.....	5.00	.....
TD-252A	GE	12.00	.....	8.00	.....
TD-253	GE	6.00	.....	4.00	.....
TD-253A	GE	9.00	.....	6.00	.....
TD-253B/ TD104	GE	12.00	.....	8.00	.....
TD-254A	GE	12.00	.....	8.00	.....
TD255	GE	7.50	.....	5.00	.....
TD255A	GE	12.00	.....	8.00	.....
TD256	GE	7.50	.....	5.00	.....
TD256A	GE	12.00	.....	8.00	.....
TD554/ 1N3118	GE	8.15	.....	6.10	.....
TI-40A0	TI	1.70	.....	1.18	.....
TI-40A1	TI	1.85	.....	1.28	.....
TI-40A2	TI	2.05	.....	1.52	.....
TI40A3	TI	3.65	.....	2.45	.....
TI-42	TI	.87	.....	.58	.....
TI-43	TI	1.02	.....	.68	.....
TI51	TI	.39	.....	.30	.....
TI-51	TI	.39	.....	.26	.....
TI-130/ 2N1600	TI	5.10	.....	3.40	.....
TI-131/ 2N1601	TI	5.70	.....	3.45	.....
TI52	TI	.44	.....	.34	.....
TI-52	TI	.42	.....	.28	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
TI53	TI	.47	.....	.36	.....
TI-53	TI	.45	.....	.30	.....
TI54	TI	.57	.....	.44	.....
TI-54	TI	.50	.....	.33	.....
TI55	TI	.65	.....	.50	.....
TI-55	TI	.57	.....	.34	.....
TI56	TI	.73	.....	.56	.....
TI-56	TI	.65	.....	.40	.....
TI57	TI	.81	.....	.62	.....
TI-57	TI	.73	.....	.46	.....
TI58	TI	.88	.....	.68	.....
TI-58	TI	.81	.....	.53	.....
TI59	TI	.96	.....	.74	.....
TI-59	TI	.90	.....	.60	.....
TI60	TI	.99	.....	.78	.....
TI-60	TI	.96	.....	.67	.....
TI-110/ 2N1595	TI	3.00	.....	2.00	.....
TI-111/ 2N1596	TI	4.50	.....	3.05	.....
TI-112/ 2N1597	TI	9.45	.....	6.30	.....
TI140A0	TI	4.65	.....	3.10	.....
TI140A2	TI	6.30	.....	4.20	.....
TI140A3	TI	8.70	.....	5.80	.....
TI140A4	TI	10.30	.....	6.85	.....
TI145A0	TI	1.60	.....	1.10	.....
TI145A1	TI	1.75	.....	1.25	.....
TI145A2	TI	1.95	.....	1.35	.....
TI156L	TI	2.25	.....	1.50	.....
TI156AL	TI	3.30	.....	2.20	.....
TI-158L	TI	2.63	.....	1.75	.....
TI159	TI	3.00	.....	2.00	.....
TI160	TI	3.90	.....	2.60	.....
TI161	TI	5.85	.....	3.90	.....
TI162	TI	7.65	.....	5.10	.....
TI376/ 2N185	TI	.74	.....	.49	.....
TI-395	TI	.66	.....	.44	.....
TI400	TI	.92	.....	.61	.....
TI401	TI	.56	.....	.37	.....
TI402	TI	.56	.....	.37	.....
TI403	TI	.92	.....	.61	.....
TI407	TI	.59	.....	.39	.....
TI408	TI	.57	.....	.38	.....
TI409	TI	.54	.....	.36	.....
TI412/ 2N3704	TI	.60	.....	.41	.....
TI413/ 2N3705	TI	.57	.....	.38	.....
TI414/ 2N3706	TI	.52	.....	.35	.....
TI415/ 2N3707	TI	.60	.....	.37	.....
TI416/ 2N3708	TI	.48	.....	.32	.....
TI417/ 2N3710	TI	.49	.....	.33	.....
TI418/ 2N3711	TI	.54	.....	.36	.....
TI421/ 2N2388	TI	14.40	.....	9.65	.....
TI429/ 2N2394	TI	18.00	.....	12.00	.....
TI433/ 2N2396	TI	11.55	.....	7.70	.....
TI474/ 2N929	TI	3.60	.....	2.40	.....
TI480	TI	1.55	.....	1.20	.....
TI481	TI	1.90	.....	1.45	.....
TI482	TI	2.15	.....	1.65	.....
TI483	TI	2.40	.....	1.85	.....
TI484	TI	2.95	.....	2.25	.....
TI485	TI	3.25	.....	2.50	.....
TI-486	TI	4.90	.....	3.25	.....
TI487	TI	5.60	.....	3.75	.....
TI490/ 2N780	TI	4.50	.....	3.00	.....
TI492	TI	1.55	.....	1.20	.....
TI493	TI	1.90	.....	1.45	.....
TI494	TI	2.50	.....	1.90	.....
TI495	TI	3.00	.....	2.30	.....
TI496	TI	1.75	.....	1.35	.....
TI539	TI	7.65	.....	5.10	.....
TI540	TI	7.88	.....	5.25	.....
TI543	TI	1.08	.....	.72	.....
TI610/ 2N3035	TI	12.50	.....	8.30	.....
TI611/ 2N3034	TI	14.50	.....	9.67	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
TI612/ 2N3033	TI	45.00	.....	30.00	.....
TI619/ 2N2802	TI	39.50	.....	26.30	.....
TI620/ 2N2803	TI	24.00	.....	16.00	.....
TI621/ 2N2804	TI	21.45	.....	14.30	.....
TI622/ 2N2805	TI	41.10	.....	27.40	.....
TI623/ 2N2806	TI	26.00	.....	17.30	.....
TI624/ 2N2807	TI	22.50	.....	15.00	.....
TI874	TI	4.20	.....	2.70	.....
TI898/ 2N985	TI	2.83	.....	1.89	.....
TI-1121	TI	18.00	.....	12.00	.....
TI-1122	TI	16.30	.....	10.85	.....
TI-1123	TI	14.30	.....	9.55	.....
TI-1124	TI	12.70	.....	8.45	.....
TI-1125	TI	9.50	.....	6.35	.....
TI-1126	TI	8.65	.....	5.75	.....
TI-1131	TI	18.15	.....	12.25	.....
TI-1133	TI	14.70	.....	9.80	.....
TI-1135	TI	9.90	.....	6.60	.....
TI-1141	TI	22.20	.....	14.80	.....
TI-1142	TI	20.40	.....	13.60	.....
TI-1145	TI	14.85	.....	9.90	.....
TI-1146	TI	12.75	.....	8.50	.....
TI-1151	TI	22.95	.....	15.30	.....
TI-1153	TI	19.70	.....	13.80	.....
TI-3010	TI	1.73	.....	1.30	.....
TI-3011	TI	1.93	.....	1.45	.....
TI-3012	TI	2.15	.....	1.60	.....
TI-3013	TI	2.93	.....	2.20	.....
TI-3014	TI	4.66	.....	3.50	.....
TI-3027	TI	1.20	.....	.80	.....
TI-3028	TI	1.43	.....	.95	.....
TI-3029	TI	1.65	.....	1.10	.....
TI-3030	TI	1.88	.....	1.25	.....
TI-3031	TI	2.03	.....	1.35	.....
TI3033/ 2N3418	TI	12.45	.....	8.30	.....
TI-3034/ 2N3419	TI	14.10	.....	9.40	.....
TI-3035/ 2N3420	TI	13.35	.....	8.90	.....
TI-3036/ 2N3421	TI	16.95	.....	11.30	.....
TI-3037	TI	9.00	.....	6.40	.....
TI-3038	TI	10.00	.....	7.00	.....
TI-3039	TI	14.00	.....	9.35	.....
TI-3040	TI	19.00	.....	13.50	.....
TI-3041	TI	29.25	.....	19.50	.....
TI-3042	TI	44.65	.....	29.75	.....
TN-53	SPR	.95	.....	.63	.....
TN-54	SPR	.95	.....	.63	.....
TN-55	SPR	1.35	.....	.90	.....
TN-59	SPR	.75	.....	.50	.....
TN-60	SPR	.75	.....	.50	.....
TN-61	SPR	.65	.....	.43	.....
TN-62	SPR	.65	.....	.43	.....
TN-63	SPR	.60	.....	.40	.....
TN-64	SPR	.60	.....	.40	.....
TN-237	SPR	.75	.....	.50	.....
TN-238	SPR	.75	.....	.50	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
T065/075	INT	.59	.44	.35	.....
T075/150	INT	.74	.62	.44	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
TQ-55	SPR	2.95	.....	1.95	.....
TQ-56	SPR	2.95	.....	1.95	.....
TQ-59	SPR	1.10	.....	.75	.....
TQ-60	SPR	1.10	.....	.75	.....
TQ-61	SPR	.95	.....	.64	.....
TQ-62	SPR	.95	.....	.64	.....
TQ-63	SPR	.80	.....	.55	.....
TQ-64	SPR	.80	.....	.55	.....
TW-135	SPR	7.10	.....	4.75	.....
TIC12	TI	9.60	.....	6.40	.....
TIC13	TI	12.50	.....	8.35	.....
TIC20	TI	6.82	.....	4.55	.....
TIC21	TI	7.50	.....	5.00	.....
TIC22	TI	6.98	.....	4.65	.....
TIC23	TI	7.66	.....	5.11	.....

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Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
TIC28	TI	1.20	.....	.85	.....
TIC29	TI	1.35	.....	.90	.....
TIC30	TI	1.45	.....	.98	.....
TIC31	TI	2.75	.....	1.95	.....
TIC44	TI	.84	.....	.56	.....
TIC45	TI	1.00	.....	.67	.....
TIC46	TI	1.08	.....	.72	.....
TIC47	TI	1.26	.....	.84	.....
TID12	TI	4.00	.....	2.60	.....
TID13	TI	3.75	.....	2.35	.....
TID14	TI	3.50	.....	2.10	.....
TID15	TI	3.25	.....	1.90	.....
TID16	TI	2.35	.....	1.80	.....
TID-31	TI	2.60	.....	1.12	.....
TID-32	TI	2.30	.....	1.09	.....
TID-33	TI	2.11	.....	1.02	.....
TID-34	TI	2.03	.....	.97	.....
TID-35	TI	1.94	.....	.88	.....
TID-36	TI	1.45	.....	.82	.....
TID-37	TI	1.45	.....	.84	.....
TIG05	TI	3.90	.....	2.90	.....
TIG06	TI	4.85	.....	3.70	.....
TIG08	TI	4.40	.....	3.15	.....
TIP14	TI	1.50	.....	.95	.....
TIP24	TI	1.50	.....	.95	.....
TIS03/ 2N3702	TI	.45	.....	.30	.....
TIS04/ 2N3703	TI	.39	.....	.26	.....
TIS05	TI	30.00	.....	20.00	.....
TIS-22	TI	4.20	.....	2.80	.....
TIS-23	TI	4.65	.....	3.10	.....
TIS-24	TI	6.45	.....	4.30	.....
TIS-25	TI	15.50	.....	10.20	.....
TIS-26	TI	13.50	.....	8.90	.....
TIS-27	TI	12.50	.....	8.20	.....
TIS34	TI	1.10	.....	.75	.....
TIS-34	TI	1.10	.....	.75	.....
TIS-37	TI	.88	.....	.59	.....
TIS-38	TI	.83	.....	.55	.....
TIS-41	TI	6.40	.....	4.85	.....
TIS-42	TI	4.95	.....	3.25	.....
TIS-43	TI	1.08	.....	.72	.....
TIS-44	TI	.49	.....	.37	.....
TIS-45	TI	.60	.....	.45	.....
TIS-46	TI	.63	.....	.47	.....
TIS-47	TI	.60	.....	.45	.....
TIS-48	TI	.64	.....	.48	.....
TIS-49	TI	.75	.....	.55	.....
TIS-51	TI	.63	.....	.48	.....
TIS-52	TI	.65	.....	.49	.....
TIS-55	TI	.60	.....	.46	.....
TIS-56	TI	2.70	.....	1.80	.....
TIS-57	TI	1.80	.....	1.20	.....
TIS-58	TI	.99	.....	.67	.....
TIS-59	TI	.96	.....	.64	.....
TIV-300	TI	1.00	.....	.80	.....
TIV-301	TI	1.00	.....	.80	.....
TIV-302	TI	1.25	.....	1.00	.....
TIV-303	TI	1.25	.....	1.00	.....
TIX94	TI	14.78	.....	9.85	.....
TIX-210/ 2N3551	TI	100.00	.....	67.50	.....
TIX-211/ 2N3552	TI	112.50	.....	75.00	.....
TIX-316/ 2N2996	TI	1.48	.....	.99	.....
TIX318	TI	6.80	.....	4.55	.....
TIX-441	TI	16.10	.....	10.75	.....
TIX-442	TI	20.25	.....	13.50	.....
TIX605/ 2N3432	TI	8.10	.....	5.40	.....
TIX-608/ 3N74	TI	15.00	.....	10.00	.....
TIX-613/ 2N2639	TI	22.00	.....	14.70	.....
TIX-616/ 2N2642	TI	26.25	.....	17.50	.....
TIX693/ 2N2386	TI	3.75	.....	2.40	.....
TIX694/ 2N2479	TI	8.45	.....	5.95	.....
TIX695/ 2N2498	TI	7.50	.....	5.75	.....
TIX696/ 2N2499	TI	8.45	.....	5.95	.....
TIX697/ 2N2500	TI	13.20	.....	10.50	.....
TIX-802/ 2N3037	TI	18.00	.....	12.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
TIX-803/ 2N3038	TI	19.50	.....	13.00	.....
TIX-804/ 2N3039	TI	22.50	.....	15.00	.....
TIX-805/ 2N3040	TI	24.00	.....	16.00	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
TIX-806/ 2N3043	TI	44.00	38.00	29.40	.....
TIX-808/ 2N3045	TI	22.40	19.40	14.90	.....
TIX-810/ 2N3047	TI	29.90	25.90	19.90	.....
TIX-812/ 2N3049	TI	50.90	44.00	34.00	.....
TIX-813/ 2N3050	TI	44.00	38.00	29.40	.....
TIX-814/ 2N3051	TI	29.95	25.40	19.50	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
TIX-815/ 2N3052	TI	27.00	23.40	18.00	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
TIX3016A	TI	50.00	43.50	29.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
TIX3033	TI	20.60	.....	13.75	.....
TIX3034	TI	28.35	.....	18.90	.....
TIX3035	TI	23/35	.....	16.90	.....
TIX3036	TI	33.00	.....	22.00	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
TIXD-17	TI	4.38	2.92	2.10	1.60
TIXD-18	TI	3.10	2.05	1.50	1.15
TIXD-19	TI	4.38	2.92	2.10	1.60
TIXD-20	TI	3.10	2.05	1.50	1.15
TIXD21	TI	25.00	16.80	12.10	9.15
TIXD22	TI	22.50	15.00	11.00	8.25
TIXD23	TI	25.00	16.80	12.10	9.15
TIXD24	TI	22.50	15.00	11.00	8.25
TIXD25	TI	54.00	36.00	26.20	20.00
TIXD26	TI	46.50	31.00	22.50	17.10

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
TIXM10	TI	.92	.....	.61	.....
TIXM12	TI	1.07	.....	.71	.....
TIXM-101	TI	19.00	.....	12.65	.....
TIXM-103	TI	82.50	.....	55.00	.....
TIXM-104	TI	52.50	.....	35.00	.....
TIXM-201	TI	.47	.....	.31	.....
TIXM-202	TI	.41	.....	.27	.....
TIXM-203	TI	.39	.....	.26	.....
TIXM-204	TI	.41	.....	.27	.....
TIXM-205	TI	.38	.....	.25	.....
TIXM-206	TI	.38	.....	.25	.....
TIXM-301	TI	5.95	.....	3.97	.....
TIXP07	TI	85.00	.....	59.90	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
TIXS09	TI	35.00	29.40	19.60	.....
TIXS10	TI	15.00	11.85	7.90	.....
TIXS-12	TI	155.00	128.00	105.00	.....
TIXS-13	TI	125.00	100.00	85.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
TIXS-33	TI	33.60	.....	22.50	.....
TIXS-35	TI	39.30	.....	26.50	.....
TIXS-36	TI	36.30	.....	24.50	.....
TIXS-39	TI	5.55	.....	3.70	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
TIXV01	TI	125.00	100.00	90.00	.....
TIXV02	TI	150.00	120.00	100.00	.....
TIXV03	TI	225.00	200.00	175.00	.....
TIXV04	TI	525.00	475.00	375.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
T550	INT	.....	.....	.....	.....
U212	TI	.45	.....	.30	.....
U213	TI	.63	.....	.42	.....
U214	TI	.90	.....	.60	.....

Type No.	Mfr.	1-24	25-99	100-999	100-Mix
US720J	SPR	15.60	12.50	10.95	.....
US721J	SPR	15.60	12.50	10.95	.....
US727J	SPR	15.60	12.50	10.95	.....
US729J	SPR	18.60	14.90	13.10	.....
US730J	SPR	14.10	11.25	9.90	.....
US731J	SPR	8.00	6.40	5.65	.....
US732J	SPR	8.00	6.40	5.65	.....
V50HF	INT	3.43	2.40	2.06	.....
V75HF	INT	4.60	3.22	2.76	.....

Type No.	Mfr.	1-9	10-99	100-999	1000-up
V100HF	INT	5.50	3.85	3.30	.....
V150HF	INT	7.75	5.42	4.65	.....
V175HF	INT	9.10	6.37	5.46	.....
VR6	SAR	.62	.53	.49	.....
VR7	SAR	.62	.53	.49	.....
VR8.5	SAR	.62	.53	.49	.....
VR10	SAR	.62	.53	.49	.....

Type No.	Mfr.	1-24	25-99	100-up	
VR-10A	SAR	.67	.57	.53	.....
VR12	SAR	.62	.53	.49	.....
VR14	SAR	.62	.53	.49	.....
VR18	SAR	.62	.53	.49	.....
VR20	SAR	.62	.53	.49	.....
VR-20A	SAR	.67	.57	.53	.....
VR24	SAR	.62	.53	.49	.....
VR28	SAR	.62	.53	.49	.....
VR33	SAR	.62	.53	.49	.....
VR39	SAR	.62	.53	.49	.....
VR47	SAR	.62	.53	.49	.....
VR56	SAR	.62	.53	.49	.....
VR67	SAR	.62	.53	.49	.....
VR80	SAR	.62	.53	.49	.....
VR90	SAR	.62	.53	.49	.....
VR105	SAR	.82	.70	.65	.....
VR110	SAR	.82	.70	.65	.....
VR120	SAR	.82	.70	.65	.....
VR130	SAR	.82	.70	.65	.....
VR160	SAR	.82	.70	.65	.....
VR180	SAR	.82	.70	.65	.....
VR200	SAR	.82	.70	.65	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
W463A	TI	3.35	.....	2.25	.....
W463B	TI	5.85	.....	3.90	.....
W463C	TI	7.25	.....	4.90	.....
W463D	TI	9.75	.....	6.50	.....
W463F	TI	11.85	.....	7.90	.....
W463F	TI	15.00	.....	10.00	.....

Type No.	Mfr.	1-24	25-99	100-up	
WX115UA	WES	76.00	63.00	.....	.....
WX115UB	WES	115.00	76.00	.....	.....
WX115VC	WES	141.00	94.00	.....	.....
WX115VD	WES	172.00	114.00	.....	.....
WX115WA	WES	101.00	84.00	.....	.....
WX115WB	WES	154.00	102.00	.....	.....
WX115WC	WES	189.00	125.00	.....	.....
WX115XA	WES	135.00	111.00	.....	.....
WX115XB	WES	204.00	136.00	.....	.....
X-150	HOF	4.95	5.53	.....	.....
X-200	HOF	9.95	.....	9.10	.....
XA587	TI	13.00	.....	10.00	.....
XC63	MOT	150.00	120.00	100.00	.....
XC72	MOT	240.00	192.00	160.00	.....
XC73	MOT	210.00	168.00	140.00	.....

Type No.	Mfr.	1-99	100 Mix	100-999	1000-up
Z4XL6.2	GE	.75	.....	.50	.....
Z4XL7.5	GE	.75	.....	.50	.....
Z4XL9.1	GE	.75	.....	.50	.....
Z4XL12	GE	.75	.....	.50	.....
Z4XL14	GE	.75	.....	.50	.....
Z5XL16	GE	.75	.....	.50	.....
Z4XL18	GE	.75	.....	.50	.....
Z4XL18B	GE	.84	.....	.56	.....
Z4XL20	GE	.75	.....	.50	.....
Z4XL20B	GE	.84	.....	.56	.....
Z4XL22	GE	.75	.....	.50	.....
Z4XL22B	GE	.84	.....	.56	.....
ZJ238	GE	1.02	.....	.68	.....
ZJ257B	GE	3.03	.....	2.02	.....
ZJ285B	GE	2.58	.....	1.72	.....
ZJ290B	GE	4.32	.....	2.88	.....
ZJ291B	GE	3.87	.....	2.58	.....
ZRS1	HOF	6.20	5.60	4.65	.....
ZRS3	HOF	13.00	11.70	9.80	.....

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorla
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N21WE	SYL	S-19500/232A	5.25	4.50	4.15
JAN 1N21WEM	SYL	S-19500/232A	13.10	11.25	10.40
JAN 1N21WEMR	SYL	S-19500/232A	13.10	11.25	10.40
JAN 1N23B	SYL	E-1618	.67	.58	.54
JAN 1N23WE	SYL	S-19500/233B	5.25	4.50	4.15
JAN 1N23WEM	SYL	S-19500/233B	13.10	11.25	10.40
JAN 1N23WEMR	SYL	S-19500/233B	13.10	11.25	10.40
JAN 1N25	SYL	S-19500/234	3.25	3.03	2.74
JAN 1N26	SYL	S-19500/235	8.50	5.60	5.10
USA 1N26B	SYL	S-19500/128	27.25	23.70	21.75
JAN 1N31	SYL	S-19500/236	7.05	6.05	5.53
JAN 1N32	SYL	S-19500/237	11.61	9.95	9.15
JAN 1N53	SYL	S-19500/238	23.20	19.80	18.25
JAN 1N78	SYL	S-19500/239	4.50	3.85	3.54
USA 1N78B	SYL	S-19500/129	7.00	6.00	5.50
JAN 1N78C	SYL	S-19500/130A	14.00	12.00	11.00
JAN 1N78CM	SYL	S-19500/130A	35.00	30.00	27.50
JAN 1N78CMR	SYL	S-19500/130A	42.00	37.00	33.00
JAN 1N78CR	SYL	S-19500/130A	21.00	18.00	16.50
USA 1N82A	SYL	S-19500/188A	.91	.71	.71
USA 1N82AG	SYL	S-19500/1364	.91	.91	.71

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N93A	GE	S-19500/293A	3.45	.....	2.30
JAN 1N249B	WES	S-19500/134A	2.45	.....	1.69
USA 1N249B	RCA	S-19500/134	2.89	.....	2.00
JAN 1N249BR	GE	S-19500/134A	3.30	.....	2.20
JAN 1N250B	WES	S-19500/134A	3.63	.....	2.42
USA 1N250B	RCA	S-19500/134	3.55	.....	2.45
JAN 1N250BR	GE	S-19500/134A	4.55	.....	3.03
JAN 1N251	GE	S-19500/188A	.72	.....	.48
JAN 1N251	RAY	S-19500/1364	1.10	.....	.75

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N251	SYL	S-19500/188A	.72	.48	.48

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N251	TI	S-19500/188A	.72	.....	.48
JAN 1N253	TI	S-19500/194A	1.25	.....	.83
JAN 1N254	TI	S-19500/194A	1.34	.....	.89
JAN 1N256	TI	S-19500/194A	2.64	.....	1.76
JAN 1N270	HUG	S-19500/200	.32	.....	.25

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N270	SYL	S-19500/200	.32	.25	.11

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N276	HUG	S-19500/192	.31	.....	.24

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N276	SYL	S-19500/192	.31	.24	.24

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N277	HUG	S-19500/201	.34	.....	.26

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N277	SYL	S-19500/201	.34	.26	.14

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
USAF 1N457	MOT	S-19500/299	7.30	6.30	5.50
JAN 1N429	RAY	S-19500/1132	.44	.....	.35

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N457	SYL	S-19500/193A	.45	.30	.19

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N457	TI	S-19500/193A	.45	.....	.36
JAN 1N458	RAY	S-19500/1132	.50	.....	.38

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N458	SYL	S-19500/193A	.48	.32	.21

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N458	TI	S-19500/193A	.51	.....	.40
JAN 1N459	RAY	S-19500/1132	.66	.....	.51

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N459	SYL	S-19500/193A	.51	.34	.21

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N459	TI	S-19500/193A	.66	.....	.51

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N483B	RAY	S-19500/2-61	.61	.....	.47
JAN 1N483B	TI	S-19500/118B	.61	.....	.47
JAN 1N485B	RAY	S-19500/2-61	.90	.....	.60
JAN 1N485B	TI	S-19500/118B	.85	.....	.60
JAN 1N486B	RAY	S-19500/2-61	1.25	.....	.98
JAN 1N486B	TI	S-19500/118B	1.25	.....	.98
JAN 1N538	GE	S-19500/202A	.72	.....	.48
JAN 1N540	GE	S-19500/202A	.90	.....	.60
JAN 1N547	GE	S-19500/202A	1.28	.....	.85

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
USA 1N633	RAY	S-19500/329-65	1.20	.....	.80

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N643	TI	S-19500/256B	1.50	.....	1.04
JAN 1N643	RAY	S-19500/240A	1.33	.....	1.00
JAN 1N645	GE	S-19500/240B	2.40	.....	1.60
JAN 1N645	TI	S-19500/240A	1.40	.....	.80
JAN 1N647	GE	S-19500/240B	4.05	.....	2.70
AF 1N646	TI	E-1/1143	1.85	.....	1.25
USAF 1N647	TI	MIL-E-1/1143	1.70	.....	1.10
AF 1N648	TI	E-1/1143	2.15	.....	1.45
JAN 1N649	GE	S-19500/240B	5.25	.....	3.50
AF 1N649	TI	E-1/1143	3.00	.....	2.43
JAN 1N658	RAY	S-6700	1.80	.....	1.20

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
USN 1N658	SYL	S-19500/127EL	1.76	1.76	1.20

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N662	RAY	S-19500/329	.92	.....	.44

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N662	SYL	S-19500/256B	1.00	1.00	.78

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N662	TI	S-19500/256B	.90	.....	.60
JAN 1N663	RAY	S-19500/329	1.35	.....	1.05

Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN 1N663	SYL	S-19500/256B	1.20	1.20	.80

Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN 1N663	TI	S-19500/256B	.65	.....	.52
JAN 1N691	RAY	S-19500/6-61	3.38	.....	2.25
JAN 1N697	RAY	S-19500/8-62	4.20	.....	2.95
JAN 1N747A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N746A	TI	S-19500/127D	1.10	.....	.90
JAN 1N747A	TI	S-19500/127D	1.10	.....	.90
JAN 1N748A	TI	S-19500/127D	1.10	.....	.90
JAN 1N748A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N748A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N749A	TI	S-19500/127C	1.10	.....	.90
JAN 1N749A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N750A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N750A	TI	S-19500/127D	1.10	.....	.90
JAN 1N751A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N751A	TI	S-19500/127D	1.10	.....	.90
JAN 1N752A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N752A	TI	S-19500/127D	1.10	.....	.90
USN 1N752A	MOT	S-19500/127D	2.95	2.55	2.20
JAN 1N753A	TI	S-19500/127D	1.10	.....	.90
JAN 1N753A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N754A	TI	S-19500/127D	1.10	.....	.90
JAN 1N754A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N755A	TI	S-19500/127D	1.10	.....	.90
JAN 1N755A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N756A	TI	S-19500/127C	1.10	.....	.90
JAN 1N756A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N757A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N757A	TI	S-19500/127D	1.10	.....	.90
JAN 1N758A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N758A	TI	S-19500/127D	1.10	.....	.90
JAN 1N759A	MOT	S-19500/127C	2.95	2.55	2.20
JAN 1N759A	TI	S-19500/127D	1.10	.....	.90

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Type No.		Mfg.	Mil. No.	1-24	25-99	100-999
JAN	1N821	MOT	S-19500/159B	2.95	2.55	2.05
JAN	1N821	MOT	S-19500/159B	2.95	2.55	2.25
JAN	1N823	MOT	S-19500/159B	4.35	3.75	3.30
JAN	1N825	MOT	S-19500/159B	7.10	6.10	4.90
JAN	1N827	MOT	S-19500/159B	14.50	12.50	11.00
JAN	1N829	MOT	S-19500/159B	28.20	24.35	21.45

Type No.		Mfg.	Mil. No.	1-9	10-99	100-999
JAN	1N830A	SYL	10385	3 [illegible]	3.00	.....

Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	1N914	TI	S-19500/116B	.45	.....	.30
JAN	1N914	GE	S-19500/116B	.45	.....	.30
JAN	1N914	RAY	S-19500/116A	.45	.....	.30
JAN	1N914	TI	S-19500/116B	.45	.....	.30

Type No.		Mfg.	Mil. No.	1-24	25-99	100-999
JAN	1N935B	MOT	S-19500/156C	5.30	4.55	4.00
JAN	1N937B	MOT	S-19500/156C	9.30	8.00	7.05
JAN	1N938B	MOT	S-19500/156C	13.35	11.75	9.40
JAN	1N939B	MOT	S-19500/156C	29.80	26.70	21.35
JAN	1N941B	MOT	S-19500/157D	7.45	6.70	5.35
JAN	1N943B	MOT	S-19500/157D	12.80	11.55	9.25
JAN	1N944B	MOT	S-19500/157D	17.30	15.60	12.50

Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	1N962B	MOT	S-19500/117C	3.50	3.05	2.65
JAN	1N963B	MOT	S-19500/117B	3.50	3.05	2.65
JAN	1N964B	MOT	S-19500/117C	3.50	3.05	2.65
JAN	1N965B	MOT	S-19500/117B	3.50	3.05	2.65
USN	1N965B	HOF	S-19500/117A	3.25	2.95	2.60
JAN	1N966B	MOT	S-19500/117C	3.50	3.05	2.65
USN	1N966B	HOF	S-19500/117A	3.25	2.95	2.60
JAN	1N967B	MOT	S-19500/117C	3.50	3.05	2.65
USN	1N967B	HOF	S-19500/117A	3.25	2.95	2.60
JAN	1N968B	MOT	S-19500/117C	3.50	3.05	2.65
USN	1N968B	HOF	S-19500/117A	3.25	2.95	2.60
JAN	1N969B	MOT	S-19500/117C	3.50	3.05	2.65
USN	1N969B	HOF	S-19500/117A	3.25	2.95	2.60
JAN	1N970B	MOT	S-19500/117C	3.50	3.05	2.65
USN	1N970B	HOF	S-19500/117A	3.25	2.95	2.60
JAN	1N971B	MOT	S-19500/117C	3.50	3.05	2.65
USN	1N971B	HOF	S-19500/117A	3.25	2.95	2.60
JAN	1N972B	MOT	S-19500/117C	4.00	3.45	3.00
USN	1N972B	HOF	S-19500/117A	3.25	2.95	2.60
JAN	1N973B	MOT	S-19500/117C	4.00	3.45	3.00
USN	1N973B	HOF	S-19500/117A	3.25	2.95	2.60
JAN	1N974B	MOT	S-19500/117C	4.00	3.45	3.00
JAN	1N975B	MOT	S-19500/117C	4.00	3.45	3.00
JAN	1N976B	MOT	S-19500/117C	4.00	3.45	3.00
JAN	1N977B	MOT	S-19500/117C	4.00	3.45	3.00
JAN	1N978B	MOT	S-19500/117C	4.00	3.45	3.00
JAN	1N979B	MOT	S-19500/117C	4.00	3.45	3.00
JAN	1N980B	MOT	S-19500/117C	4.00	3.45	3.00
JAN	1N981B	MOT	S-19500/117C	4.00	3.45	3.00
JAN	1N982B	MOT	S-19500/117C	4.00	3.45	3.00
JAN	1N985B	MOT	S-19500/117C	4.45	3.85	3.35
JAN	1N986B	MOT	S-19500/117C	4.45	3.85	3.35
JAN	1N987B	MOT	S-19500/117C	4.45	3.85	3.35
JAN	1N988B	MOT	S-19500/117C	4.45	3.85	3.35
JAN	1N989B	MOT	S-19500/117C	4.45	3.85	3.35
JAN	1N990B	MOT	S-19500/117C	4.45	3.85	3.35
JAN	1N991B	MOT	S-19500/117C	4.45	3.85	3.35
JAN	1N992B	MOT	S-19500/117C	4.45	3.85	3.35
JAN	1N995	HUG	S-19500/227	.60	.....	.45
USN	1N1124A	BEN	S-19500/104B	3.35	.....	2.25
USN	1N1126A	BEN	S-19500/104B	5.25	.....	3.50
JAN	1N1130	TI	S-19500/259A	7.03	.....	4.69
JAN	1N1131	TI	S-19500/259A	7.03	.....	4.69
JAN	1N1184	WES	S-19500/297	3.70	.....	2.47
USAF	1N1184	RCA	E-1/1135	3.75	.....	2.50
JAN	1N1184R	GE	S-19500/297	3.70	.....	2.47
JAN	1N1186	WES	S-19500/297	5.60	.....	4.30
USAF	1N1186	RCA	E-1/1135	5.20	.....	3.47
JAN	1N1186R	GE	S-19500/297	6.45	.....	4.30
JAN	1N1188	WES	S-19500/297	8.85	.....	6.18
USAF	1N1188	RCA	E-1/1135	7.84	.....	5.23
JAN	1N1188R	GE	S-19500/297	9.28	.....	6.18
JAN	1N1190	WES	S-19500/297	12.05	.....	8.05
USAF	1N1190	RCA	E-1/1135	11.55	.....	8.00
JAN	1N1198A	RCA	E-1/1108	7.84	.....	5.42
JAN	1N1202	BEN	E-1/1108	3.96	.....	2.64
JAN	1N1202	WES	E-1/1108	3.96	.....	2.64
JAN	1N1202R	GE	S-19500/260	3.96	.....	2.64
JAN	1N1204	WES	E-1/1108	5.55	.....	3.70
USAF	1N1204	RCA	E-1/1108	5.28	.....	6.52
JAN	1N1204R	GE	S-19500/260	5.55	.....	3.70
JAN	1N1206	WES	S-19500/260	8.25	.....	5.50
JAN	1N1206R	BEN	S-19500/260	8.25	.....	5.50
USA	1N1614	BEN	S-19500/162A	3.03	.....	2.02
JAN	1N1614R	GE	S-19500/162B	3.03	.....	2.02
JAN	1N1615R	GE	S-19500/162B	5.25	.....	3.50
JAN	1N1616R	GE	S-19500/162B	7.16	.....	4.77

Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
USN	1N1816A-36A	TI	E-1/1259	8.05	.....	6.70
USN	1N1817A	TI	E-1/1259	8.05	.....	6.70
USN	1N1818A	TI	E-1/1259	8.05	.....	6.70
USN	1N1819A	TI	E-1/1259	8.05	.....	6.70
USN	1N1820A	TI	E-1/1259	8.05	.....	6.70
USN	1N1821A	TI	E-1/1259	8.05	.....	6.70
USN	1N1822A	TI	E-1/1259	8.05	.....	6.70
USN	1N1823A	TI	E-1/1259	8.05	.....	6.70
USN	1N1824A	TI	E-1/1259	8.05	.....	6.70
USN	1N1825A	TI	E-1/1259	8.05	.....	6.70
USN	1N1826A	TI	E-1/1259	8.05	.....	6.70
USN	1N1827A	TI	E-1/1259	8.05	.....	6.70
USN	1N1828A	TI	E-1/1259	8.05	.....	6.70
USN	1N1829A	TI	E-1/1259	8.05	.....	6.70
USN	1N1830A	TI	E-1/1259	8.05	.....	6.70
USN	1N1831A	TI	E-1/1259	8.05	.....	6.70
USN	1N1832A	TI	E-1/1259	8.05	.....	6.70
USN	1N1833A	TI	E-1/1259	8.05	.....	6.70
USN	1N1834A	TI	E-1/1259	8.05	.....	6.70
USN	1N1835A	TI	E-1/1259	8.05	.....	6.70
USN	1N1836A	TI	E-1/1259	8.05	.....	6.70
JAN	1N2135A	WES	S-19500/134A	7.10	.....	4.80
USA	1N2135A	RCA	S-19500/134	6.11	.....	4.22
JAN	1N2135AR	GE	S-19500/134A	7.05	.....	4.70
JAN	1N2805B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2806B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2807B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2808B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2809B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2810B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2811B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2813B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2814B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2816B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2817B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2819B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2820B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2822B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2823B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2824B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2825B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2826B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2827B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N3828A	MOT	S-19500/115E	5.05	4.35	3.80
USN	1N3827A	MOT	S-19500/115E	5.05	4.35	3.80
JAN	1N2829B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2831B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2832B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2833B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2834B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2835B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2836B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2837B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2838B	MOT	S-19500/114C	14.65	12.65	11.00
JAN	1N2840B	MOT	S-19500/114C	25.75	22.25	19.35
JAN	1N2841B	MOT	S-19500/114C	25.75	22.25	19.35
JAN	1N2842B	MOT	S-19500/114C	25.75	22.25	19.35
JAN	1N2843B	MOT	S-19500/114C	25.75	22.25	19.35
JAN	1N2844B	MOT	S-19500/114C	25.75	22.25	19.35
JAN	1N2845B	MOT	S-19500/114C	25.75	22.25	19.35
JAN	1N2846B	MOT	S-19500/114C	25.75	22.25	19.35
JAN	1N2970B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2970B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2970B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2971B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2971B	HOF	S-19500/124A	7.85		5.85
JAN	1N2971B	MOT	S-19500/124C	7.80	6.70	5.85
USA	1N2971B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2972B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2972B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2973B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2973B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2974B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2974B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2974RB	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2975B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2975B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2976B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2976B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2976B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2977B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2977B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2978B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2979B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2979B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2980B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2980B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2981B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2982B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2982B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2984B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2984B	HOF	S-19500/124A	7.85		5.85
USA	1N2984B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2985B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2985B	HOF	S-19500/124A	7.85		5.85

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	1N2985B	MOT	S-19500/124C	7.80	6.70	5.85
USA	1N2985B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2986B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2986B	HOF	S-19500/124A	7.85		5.85
JAN	1N2986B	MOT	S-19500/124C	7.80	6.70	5.85
USA	1N2986B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2987B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2988B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2988B	HOF	S-19500/124A	7.85		5.85
JAN	1N2988B	MOT	S-19500/124C	7.80	6.70	5.85
USA	1N2988B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2989B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2989B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2989B	MOT	S-19500/124C	7.80	6.70	5.85
USA	1N2989B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2990B	MOT	S-19500/124D	7.80	7.00	5.85
JAN	1N2990B	HOF	S-19500/124A	7.80	6.70	5.85
JAN	1N2990B	MOT	S-19500/124C	7.80	6.70	5.85
USA	1N2990B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2991B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2991B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2991B	MOT	S-19500/124C	7.80	6.70	5.85
USA	1N2991B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2992B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2992B	HOF	S-19500/124A	7.80	7.00	5.85
USA	1N2992B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2993B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2993B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2993B	MOT	S-19500/124C	7.80	6.70	5.85
JAN	1N2995B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2995B	HOF	S-19500/124A	7.80	7.00	5.85
USA	1N2995B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2997B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2997B	HOF	S-19500/124A	7.85		5.85
USA	1N2997B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N2999B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N2999B	HOF	S-19500/124A	7.85		5.85
USA	1N2999B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N3000B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N3001B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N3002B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N3003B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N3004B	MOT	S-19500/124D	7.80	6.70	5.85
JAN	1N3004B	HOF	S-19500/124A	7.85		5.85
USA	1N3004B	HOF	S-19500/124A	7.80	7.00	5.85
JAN	1N3005B	MOT	S-19500/124D	9.95	8.60	7.50
JAN	1N3005B	MOT	S-19500/124C	9.95	8.60	7.50
JAN	1N3007B	MOT	S-19500/124D	9.95	8.60	7.50
JAN	1N3009B	MOT	S-19500/124D	9.95	8.60	7.50
JAN	1N3011B	MOT	S-19500/124D	9.95	8.60	7.50
JAN	1N3012B	MOT	S-19500/124D	17.40	15.00	13.10
JAN	1N3014B	MOT	S-19500/124D	17.40	15.00	13.10
JAN	1N3015B	MOT	S-19500/124D	17.40	15.00	13.10
JAN	1N3016B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3016B	TI	S-19500/115D	3.45		3.00
USN	1N3016B	HOF	S-19500/175B	9.45	8.50	2.90
JAN	1N3016B-43B	TI	S-19500/115E	3.45		3.00
JAN	1N3017B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3018B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3018B	TI	S-19500/115D	3.45		3.00
JAN	1N3019B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3019B	TI	S-19500/115D	3.45		3.00
JAN	1N3020B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3041B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3020B	TI	S-19500/115D	3.45		3.00
JAN	1N3021B	TI	S-19500/115D	3.45		3.00
JAN	1N3021B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3022B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3022B	TI	S-19500/115D	3.45		3.00
USN	1N3022B	HOF	S-1950/115B	3.90	3.70	2.90
JAN	1N3023B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3023B	TI	S-19500/115D	3.45		3.00
USN	1N3023B	HOF	S-19500/115B	3.90	3.70	2.90
JAN	1N3024B	MOT	S-19500/115E	4.00	3.45	3.00
USN	1N3024B	HOF	S-19500/105A	3.90	3.70	2.90
JAN	1N3025B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3024B	TI	S-19500/115D	3.45		3.00
JAN	1N3025B	TI	S-19500/115D	3.45		3.00
JAN	1N3026B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3026B	TI	S-19500/115D	3.45		3.00
USN	1N3026B	HOF	S-19500/115B	3.90	3.70	2.90
JAN	1N3027B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3028B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3029B	MOT	S-19500/115E	4.00	3.45	3.00

Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	1N3029B	TI	S-19500/115D	3.45		3.00
USN	1N3029B	HOF	S-19500/115B	3.90	3.70	2.90
JAN	1N3030B	TI	S-19500/115D	3.45		3.00
USN	1N3030B	HOF	S-19500/115B	3.90	3.70	2.90
JAN	1N3031B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3031B	TI	S-19500/115D	3.45		3.00
USN	1N3031B	HOF	S-19500/115B	3.90	3.70	2.90
JAN	1N3032B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3032B	TI	S-19500/115D	3.45		3.00
USN	1N3032B	HOF	S-19500/115B	3.90	3.70	2.90
JAN	1N3033B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3033B	TI	S-19500/115D	3.45		3.00
JAN	1N3034B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3034B	TI	S-19500/115D	3.45		3.00
JAN	1N3035B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3035B	TI	S-19500/115D	3.45		3.00
JAN	1N3036B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3036B	TI	S-19500/115D	3.45		3.00
JAN	1N3037B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3037B	TI	S-19500/115D	3.45		3.00
JAN	1N3038B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3038B	TI	S-19500/115D	3.45		3.00
JAN	1N3039B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3039B	TI	S-19500/115D	3.45		3.00
JAN	1N3040B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3041B	TI	S-19500/115D	3.45		3.00
JAN	1N3042B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3042B	TI	S-19500/115D	3.45		3.00
JAN	1N3043B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3043B	TI	S-19500/115D	3.45		3.00
JAN	1N3044B	MOT	S-19500/115E	4.00	3.45	3.00
JAN	1N3045B	MOT	S119500/115E	6.90	6.00	5.20
JAN	1N3046B	MOT	S119500/115E	6.90	6.00	5.20
JAN	1N3047B	MOT	S119500/115E	6.90	6.00	5.20
JAN	1N3048B	MOT	S119500/115E	6.90	6.00	5.20
JAN	1N3049B	MOT	S119500/115E	6.90	6.00	5.20
JAN	1N3050B	MOT	S-19500/115E	6.90	6.00	5.20
JAN	1N3064	TI	S-19500/144C	.40	.....	.26
USN	1N3064	HOF	S-19500/112-61	.40	.....	.26
JAN	1N3064	GE	S-19500/144C	.67	.....	.44
JAN	1N4064	RAY	S-19500/12-61	2.00	.....	1.20

Type No.		Mfg.	Mil. No.	1.9	10-99	100-999
JAN	1N3064	SYL	S-19500/144A	.67	.67	.44

Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	1N3070	TI	S-19500/169C	2.25	.....	1.50
JAN	1N3070	RAY	S-19500/3-64	5.25	.....	3.50

Type No.		Mfg.	Mil. No.	1-24	25-99	100-Up
JAN	1N3154	MOT	S-19500/158D	3.50	3.00	2.40
JAN	1N3155	MOT	S-19500/158D	4.95	4.25	3.40
JAN	1N3156	MOT	S-19500/158D	9.55	8.25	6.60
JAN	1N3157	MOT	S-19500/158D	12.75	11.00	8.80
USA	1N3164	WES	S-19500/211/O	520.02	970.00	.....
USA	1N3168	WES	S-19500/211/O	65.65	55.15	.....
USA	1N3170	WES	S-19500/211/O	97.40	81.60	.....

Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	1N3189	GE	S-19500/155C	3.00	.....	2.00
JAN	1N3190	GE	S-19500/155C	5.40	.....	3.60
JAN	1N3191	GE	S-19500/155C	7.55	.....	5.05

Type No.		Mfg.	Mil. No.	1-24	25-99	100-Up
USA	1N3263	WES	S-19500/212	20.90	17.65	.....
USA	1N3267	WES	S-19500/212	36.45	30.55	.....
USA	1N3269	WES	S-19500/212	62.15	52.50	.....

Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	1N3287	HUG	S-19500/205	.55	.....	.41
JAN	1N3287W	HUG	S-19500/205	.55	.....	.41

Type No.		Mfg.	Mil. No.	1-9	10-99	100-999
USN	1N3287W	SYL	S-19500/205	.45	.45	.35

Type No.		Mfg.	Mil. No.	1-99	100-499	
JAN	1N3289R	GE	S-19500/246C	14.90	12.10	
JAN	1N3291R	GE	S-19500/246C	17.35	13.85	
JAN	1N3293R	GE	S-19500/246C	22.05	17.45	
JAN	1N3294R	GE	S-19500/246C	29.30	23.40	
JAN	1N3295R	GE	S-19500/246C	34.10	27.10	

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Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	1N3666	HUG	S-19500/226	.70	.....	.53
JAN	1N3666M	HUG	S-19500/226	.70	.....	.53
JAN	1N3713	GE	S-19500/269	5.30	.....	3.55
JAN	1N3715	GE	S-19500/269	4.95	.....	3.30
JAN	1N3717	GE	S-19500/269	4.30	.....	2.85
JAN	1N3719	GE	S-19500/269	4.30	.....	2.85
JAN	1N3721	GE	S-19500/269	4.30	.....	2.85

Type No.		Mfg.	Mil. No.	1-9	10-99	100-999
USAF	1N3747	SYL	S-19500/281	18.75	16.95	15.50

Type No.		Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	1N3821A	MOT	S-19500/115E	5.05	4.35	3.80
JAN	1N3822A	MOT	S-19500/115E	5.05	4.35	3.80
JAN	1N3823A	MOT	S-19500/115E	5.05	4.35	3.80
JAN	1N3824A	MOT	S-19500/115E	5.05	4.35	3.80
JAN	1N3825A	MOT	S-19500/115E	5.05	4.35	3.80
JAN	1N3826A	MOT	S-19500/115E	5.05	4.35	3.80
USN	1N3826A	MOT	S-19500/115E	5.05	4.35	3.80
JAN	1N3827A	MOT	S-19500/115E	5.05	4.35	3.80
JAN	1N3827A	MOT	S-19500/115C	5.05	4.35	3.80
USN	1N3827A	MOT	S-19500/115C	5.05	4.35	3.80
USN	1N3828A	MOT	S-19500/115E	5.05	4.35	3.80
JAN	1N3828A	MOT	S-19500/115C	5.05	4.35	3.80
JAN	1N3993A	MOT	S-19500/272B	11.95	10.35	9.00
JAN	1N3993A	MOT	S-19500/272A	11.95	10.35	9.00
JAN	1N3994A	MOT	S-19500/272B	11.95	10.35	9.00
USN	1N3994A	MOT	S-19500/272B	11.95	10.35	9.00
JAN	1N3994A	MOT	S-19500/272A	11.95	10.35	9.00
USN	1N3994A	MOT	S-19500/272A	11.95	10.35	9.00
JAN	1N3995A	MOT	S-19500/272B	11.95	10.35	9.00
USN	1N3995A	MOT	S-19500/272B	11.95	10.35	9.00
JAN	1N3995A	MOT	S-19500/272A	11.95	10.35	9.00
USN	1N3995A	MOT	S-19500/272A	11.95	10.35	9.00
JAN	1N3996A	MOT	S-19500/272B	11.95	10.35	9.00
USN	1N3996A	MOT	S-19500/272B	11.95	10.35	9.00
JAN	1N3996A	MOT	S-19500/272A	11.95	10.35	9.00
USN	1N3996A	MOT	S-19500/272A	11.95	10.35	9.00
JAN	1N3997A	MOT	S-19500/272B	11.95	10.35	9.00
USN	1N3997A	MOT	S-19500/272B	11.95	10.35	9.00
JAN	1N3997A	MOT	S-19500/272A	11.95	10.35	9.00
USN	1N3997A	MOT	S-19500/272A	11.95	10.35	9.00
JAN	1N3998A	MOT	S-19500/272B	11.95	10.35	9.00
USN	1N3998A	MOT	S-19500/272B	11.95	10.35	9.00
JAN	1N3998A	MOT	S-19500/272A	11.95	10.35	9.00
USN	1N3998A	MOT	S-19500/272A	11.95	10.35	9.00
JAN	1N3999A	MOT	S-19500/272B	11.95	10.35	9.00
USN	1N3999A	MOT	S-19500/272B	11.95	10.35	9.00
JAN	1N3999A	MOT	S-19500/272A	11.95	10.35	9.00
USN	1N3999A	MOT	S-19500/272A	11.95	10.35	9.00
JAN	1N4000A	MOT	S-19500/272A	11.95	10.35	9.00
USN	1N4000A	MOT	S-19500/272A	11.95	10.35	9.00
JAN	1N4148	HUG	S-19500/116	.45	.....	.30
USN	1N4370A	MOT	S-19500/127D	2.95	2.55	2.20
JAN	1N4370A	TI	S-19500/127D	2.95	.....	2.25
USN	1N4370A	MOT	S-19500/127C	2.95	2.55	2.20
JAN	1N4370A	TI	S-19500/127D	2.95	.....	2.25
JAN	1N4371A	TI	S-19500/127D	2.95	.....	2.25
USN	1N4371A	MOT	S-19500/127C	2.95	2.55	2.20
JAN	1N4372A	TI	S-19500/127D	2.95	.....	2.25
USN	1N4372A	MOT	S-19500/127C	2.95	2.55	2.20
JAN	1N4454	GE	S-19500/144C	.67	.....	.43
JAN	2N43A	GE	S-19500/6A	5.00	.....	3.33
JAN	2N44A	GE	S-19500/6A	4.67	.....	3.11
JAN	2N78A	GE	S-19500/90	3.15	.....	2.11
JAN	2N117	TI	S-19500/35B	8.45	.....	5.65
USN	2N117	TI	T-19500/35	8.45	.....	5.65
JAN	2N118	TI	S-19500/2A	9.15	.....	6.35
JAN	2N119	TI	S-19500/35B	11.45	.....	7.55
USN	2N119	TI	T-19500/35	11.45	.....	7.55
USAF	2N123	GE	T-19500/30	4.50	.....	3.00
JAN	2N167A	GE	S-19500/11B	5.67	.....	3.78
JAN	2N174A	MOT	S-19500/13B	4.30	.....	3.18
JAN	2N220	RCA	T-19500/1	1.56	.....	1.25
USA	2N274	RCA	T-19500/26	1.87	.....	1.50
	2N297A	BEN	T-19500/36A	2.40	.....	1.78
JAN	2N297A	MOT	S-19500/36B	2.40	.....	1.78
JAN	2N328A	HUG	S-19500/110A	4.95	.....	3.27
JAN	2N328A	RAY	S-19500/595	6.35	.....	4.85
JAN	2N329A	HUG	S-19500/110A	6.50	.....	4.88
JAN	2N329A	RAY	S-19500/595	11.00	.....	7.35
JAN	2N331	MOT	S-19500/4C	1.80	.....	1.20
USN	2N332	TI	T-19500/37A	4.95	.....	3.30
JAN	2N333	TI	S-19500/37C	4.95	.....	3.30
JAN	2N333	GE	S-19500/37C	4.95	.....	3.30
JAN	2N333	TI	S-19500/37C	4.95	.....	3.30
USN	2N334	TI	T-19500/37A	4.95	.....	3.30
JAN	2N335	TI	S-19500/37C	5.25	.....	3.50
USN	2N335	TI	T-19500/37A	5.25	.....	3.50
JAN	2N335	GE	S-19500/37C	5.25	.....	3.50
JAN	2N336	GE	S-19500/37C	6.30	.....	4.20
JAN	2N336	TI	S-19500/37C	6.30	.....	4.20
JAN	2N337	TI	S-19500/69D	5.15	.....	3.40
USN	2N337	TI	S-19500/69C	5.15	.....	3.40

Type No.		Mfr.	Mil. Spec.	1-99	100-Mix	100-999
JAN	2N337	GE	S-19500/69D	5.15	.....	3.40
JAN	2N338	TI	S-19500/69D	5.80	.....	3.85
USN	2N338	TI	S-19500/69C	5.80	.....	3.85
JAN	2N338	GE	S-19500/69D	5.80	.....	3.85
JAN	2N341	TI	S-19500/31D	17.50	.....	11.65
JAN	2N342	TI	S-19500/16E	14.55	.....	9.65
JAN	2N343	TI	S-19500/16E	21.75	.....	14.45
JAN	2N358A	TI	S-19500/63C	3.92	.....	2.62
JAN	2N384	RCA	S-19500/27C	3.30	.....	2.28
JAN	2N388	TI	S-19500/65A	.52	.....	.36
JAN	2N388	RCA	T-19500/65L2	.61	.....	.42
JAN	2N389	TI	S-19500/173A	21.50	.....	14.35
JAN	2N396A	GE	S-19500/64C	.74	.....	.49
JAN	2N398	RCA	S-19500/174	1.27	.....	.88
USN	2N398	MOT	S-19500/174	1.47	.....	.98
JAN	2N398A	MOT	S-19500/174A	1.20	.....	.80
JAN	2N404	TI	S-19500/20B	.43	.....	.30
JAN	2N404	RCA	T-19500/20L2	.50	.....	.35
JAN	2N404A	TI	S-19500/20B	.74	.....	.49
JAN	2N404A	RCA	T-19500/20A	.78	.....	.54
USA	2N416	TI	T-19500/56A	1.09	.....	.73
USA	2N417	TI	T-19500/57A	1.27	.....	.85
JAN	2N424	TI	S-19500/173A	17.00	.....	11.35
USA	2N427	TI	T-19500/43A	1.34	.....	.89
JAN	2N428M	TI	S-19500/44C	1.48	.....	.99
JAN	2N461	MOT	S-19500/45	1.92	.....	1.28
JAN	2N461	GE	T-19500/45	1.92	.....	1.28
JAN	2N465	MOT	T-19500/50A	1.80	.....	1.20
JAN	2N467	MOT	T-19500/52B	2.25	.....	1.50
USA	2N467	MOT	T-19500/52B	2.25	.....	1.50
AF	2N489	TI	T-19500/75	7.85	.....	5.25
JAN	2N489A	GE	T-19500/75A	7.80	.....	5.20
USAF	2N490	TI	S-19500/75	8.55	.....	5.70
JAN	2N490A	TI	S-19500/75A	8.95	.....	6.40
JAN	2N490A	GE	T-19500/75A	8.55	.....	5.70
JAN	2N490A	TI	S-19500/75A	8.95	.....	6.40
USAF	2N491	TI	T-19500/75	9.15	.....	6.10
JAN	2N491A	TI	S-19500/75A	9.45	.....	7.15
JAN	2N491A	GE	T-19500/75A	9.15	.....	6.10
JAN	2N491A	GE	S-19500/75B	9.15	.....	6.10
JAN	2N491A	TI	S-19500/75A	9.45	.....	7.15
USAF	2N492	TI	T-19500/75	10.55	.....	7.05
JAN	2N492A	TI	S-19500/75A	9.95	.....	7.95
JAN	2N492A	GE	T-19500/75A	10.55	.....	7.05
USAF	2N493	TI	T-19500/75	11.40	.....	7.60
JAN	2N493A	TI	S-19500/75A	11.95	.....	6.45
JAN	2N493A	GE	T-19500/75A	11.40	.....	7.60
USAF	2N494	TI	T-19500/75	11.60	.....	7.70
JAN	2N494A	TI	S-19500/75A	11.95	.....	8.95
JAN	2N494A	GE	T-19500/75A	11.60	.....	7.70
JAN	2N497	TI	S-19500/74D	1.96	.....	1.31
JAN	2N497	GE	S-19500/74D	1.96	.....	1.31
JAN	2N497	RAY	S-19500/746	1.96	.....	1.31
JAN	2N498	TI	S-19500/74D	2.18	.....	1.46
JAN	2N498	GE	S-19500/74D	2.18	.....	1.48
JAN	2N498	RAY	S-19500/74C	4.90	.....	3.25
JAN	2N502A	MOT	S-19500/112C	4.10	.....	2.75
JAN	2N502B	MOT	S-19500/112C	4.55	.....	3.05
JAN	2N526	MOT	T-19500/60D	1.10	.....	.73
JAN	2N526	GE	S-19500/60D	1.10	.....	.73
JAN	2N539AM	HUG	S-19500/38	8.25	.....	5.50
JAN	2N539M	HUG	S-19500/38	7.95	.....	5.30
JAN	2N555	BEN	S-19500/89C	7.65	.....	5.10
JAN	2N557	BEN	S-19500/89C	3.95	.....	2.85
JAN	2N559	BEN	S-19500/89C	7.75	.....	5.15
JAN	2N559	MOT	S-19500/152B	5.75	.....	3.85
USA	2N574	HUG	S-19500/46	15.75	.....	10.50
USA	2N575	HUG	S-19500/46	19.15	.....	12.75
USA	2N575A	HUG	S-19500/46	22.50	.....	15.00
USN	2N650A	MOT	T-19500/175B	2.90	.....	1.95
JAN	2N651A	TI	S-19500/175D	2.82	.....	1.88
USN	2N651A	MOT	T-19500/175B	2.82	.....	1.88
JAN	2N652A	TI	S-19500/175D	3.33	.....	2.22
JAN	2N652A	MOT	7-19500/175B	3.33	.....	2.22
JAN	2N652A	TI	S-19500/175B	3.33	.....	2.22
USN	2N652A	MOT	T-19500/175B	3.33	.....	2.22
JAN	2N656	TI	S-19500/74D	2.10	.....	1.40
JAN	2N656	GE	S-19500/74D	2.10	.....	1.40
JAN	2N656	RAY	S-19500/746	2.10	.....	1.40
JAN	2N656	TI	S-19500/74D	2.10	.....	1.40
JAN	2N657	MOT	S-19500/74D	8.65	.....	5.75
JAN	2N657	TI	S-19500/74D	9.00	.....	6.00
JAN	2N657	GE	S-19500/74D	2.28	.....	1.52
JAN	2N657	RAY	S-19500/746	2.28	.....	1.52
JAN	2N665	MOT	T-19500/58C	8.90	.....	6.60
JAN	2N682	GE	S-19500/108B	8.40	.....	5.60
JAN	2N683	GE	S-19500/108B	9.15	.....	6.10
JAN	2N685	GE	S-19500/108B	12.25	.....	8.15
JAN	2N686	GE	S-19500/108B	13.55	.....	9.05
JAN	2N687	GE	S-19500/108B	15.00	.....	10.00
JAN	2N688	GE	S-19500/108B	18.20	.....	12.15
JAN	2N689	GE	S-19500/108B	21.75	.....	14.50
JAN	2N696	MOT	S-19500/99D	1.12	.....	.75
JAN	2N696	TI	S-19500/99D	1.12	.....	.75
USA	2N696	TI	S-19500/99A	1.25	.....	.83

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

KEY TO SEMICONDUCTOR MANUFACTURERS

AMP —Amperex
BEN —Bendix
GE —General Electric
HOF —Hoffman
HUG —Hughes Aircraft
INT —International Rectifier
MOT —Motorola
RCA —Radio Corp. of America
RAY —Raytheon
SAR —Sarkes-Tarzian
SPR —Sprague
SYL —Sylvania
TI —Texas Instruments
WES —Westinghouse

	Type No.	Mfr.	Mil. Spec.	1-99	100-Mix	100-999
JAN	2N696	GE	S-19500/99D	.93	.....	.62
JAN	2N696	RAY	S-19500/44-64	1.12	.....	.75
JAN	2N697	MOT	S-19500/99D	1.29	.....	.86
JAN	2N697	TI	S-19500/99D	1.29	.....	.86
USA	2N697	TI	S-19500/99A	1.35	.....	.90
JAN	2N697	GE	S-19500/99D	.93	.....	.62
JAN	2N697	RAY	S-19500/44-64	1.29	.....	.86
JAN	2N700A	MOT	S-19500/123A	14.25	.....	9.50
USA	2N700A	MOT	S-19500/123A	14.25	.....	9.50
USA	2N702	TI	S-19500/153	7.65	.....	5.10
JAN	2N703	MOT	S-19500/153A	7.85	.....	5.25
USN	2N703	TI	S-19500/153	7.85	.....	5.25
JAN	2N705	MOT	S-19500/86A	2.45	.....	1.65
USN	2N705	MOT	S-19500/86A	2.45	.....	1.65
JAN	2N705	TI	S-19500/86A	1.14	.....	.76
JAN	2N706	MOT	S-19500/120B	.58	.....	.50
JAN	2N706	TI	S-19500/120B	1.29	.....	.86
JAN	2N706	GE	S-19500/120B	1.03	.....	.69
JAN	2N706	MOT	S-19500/120B	1.29	.....	.89
JAN	2N706	RAY	S-19500/1215	1.03	.....	.69

	Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN	2N706	SYL	S-19500/120B	.91	.91	.61

	Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	2N706	TI	S-19500/120B	1.29	.....	.86
JAN	2N718A	TI	S-19500/181C	4.68	.....	3.12
USN	2N718A	TI	S-19500/181A	4.68	.....	3.12
JAN	2N718A	RAY	S-19500/8-64	2.43	.....	1.98
JAN	2N744	TI	S-19500/273A	7.05	.....	4.80
USA	2N759A	TI	S-19500/218	3.00	.....	2.00
USA	2N760A	HUG	S-19500/218	3.00	.....	2.00
USA	2N760A	TI	S-19500/218	3.00	.....	2.00
JAN		TI	S-19500/274A	10.50	.....	7.00
JAN	2N910	RAY	S-6745	4.50	.....	3.00
JAN	2N910	TI	S-19500/274	10.50	.....	7.00
JAN	2N911	TI	S-19500/274A	7.50	.....	5.00
JAN	2N911	RAY	S-6746	6.00	.....	4.00
JAN	2N912	TI	S-19500/274A	7.73	.....	5.15
JAN	2N912	RAY	S-6747	6.00	.....	4.00
JAN	2N916	MOT	S-19500/271A	4.87	.....	3.25
JAN	2N916	TI	S-19500/271A	4.87	.....	3.25
JAN	2N916	RAY	S-19500/6-64	4.87	.....	3.25
JAN	2N918	MOT	S-19500/301	4.10	.....	2.75
USA	2N918	TI	S-19500/301	6.00	.....	4.00
JAN	2N918	MOT	S-19500/301	6.75	.....	4.50
JAN	2N918	RAY	S-6783	6.00	.....	4.00
USA	2N918	TI	S-19500/301	6.00	.....	4.00
JAN	2N929	HUG	S-19500/253	4.98	.....	3.32
JAN	2N929	MOT	S-19500/253A	4.35	.....	2.90
JAN	2N929	TI	S-19500/253A	5.70	.....	3.80
JAN	2N929	GE	S-19500/253A	4.98	.....	3.32
JAN	2N929	TI	S-19500/253A	5.70	.....	3.80
JAN	2N930	HUG	S-19500/253	5.73	.....	3.82
JAN	2N930	MOT	S-19500/253A	4.55	.....	3.05
JAN	2N930	TI	S-19500/253A	6.15	.....	4.10
JAN	2N930	GE	S-19500/253A	5.73	.....	3.82
JAN	2N930	RAY	S-19500/520	3.87	.....	2.65
JAN	2N930	TI	S-19500/253A	6.15	.....	4.10
JAN	2N962	MOT	S-19500/258A	1.57	.....	1.25
JAN	2N962	TI	S-19500/258A	1.14	.....	.76
USN	2N962	MOT	S-19500/258A	1.57	.....	1.25
JAN	2N962	MOT	S-19500/258A	1.57	.....	1.25
JAN	2N962	TI	S-19500/258A	1.14	.....	.76
USN	2N962	MOT	S-19500/259A	1.57	.....	1.25

	Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
USN	2N962	SYL	S-19500/258	.93	.93	.62

	Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	2N964	MOT	S-19500/258A	2.71	.....	1.81
JAN	2N964	TI	S-19500/258A	1.27	.....	.85
USN	2N964	MOT	S-19500/258A	2.71	.....	1.81
JAN	2N964	MOT	S-19500/258A	2.71	.....	1.81
JAN	2N964	TI	S-19500/258A	1.27	.....	.85
USN	2N964	MOT	S-19500/258A	2.71	.....	1.81

	Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
USN	2N964	SYL	S-19500/258	1.65	1.65	1.10

	Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	2N1008B	MOT	S-19500/196	6.00	.....	4.00
USA	2N1008B	MOT	S-19500/196	6.00	.....	4.00
JAN	2N1011	MOT	S-19500/67A	2.65	.....	1.94

	Type No.	Mfg.	Mil. No.	1-24	25-99	100-Up
USN	2N1016BM	WES	C-19500/102A	43.70	32.55	.....
USN	2N1016CM	WES	C-19500/102A	52.70	43.25	.....
USN	2N1016DM	WES	C-19500/102A	77.05	57.50	.....

	Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	2N1025M	HUG	S-19500/78	3.90	.....	3.00
JAN	2N1026M	HUG	S-19500/78	6.50	.....	5.00
JAN	2N1039	TI	S-19500/89C	4.50	.....	3.00
USN	2N1039	BEN	S-19500/89	4.50	.....	3.00
JAN	2N1041	TI	S-19500/89C	8.25	.....	5.50

	Type No.	Mfg.	Mil. No.	1-9	10-99	100-999
JAN	2N1041	SYL	S-19500/89C	8.25	8.25	5.50

	Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	2N1042	TI	S-19500/137B	5.25	.....	3.50
JAN	2N1043	TI	S-19500/137B	6.60	.....	4.40
JAN	2N1044	TI	S-19500/137B	9.53	.....	6.35
JAN	2N1045	TI	S-19500/137B	12.20	.....	8.13
USN	2N1046	TI	S-19500/88	8.85	.....	5.90
USN	2N1046	TI	S-19500/88	8.85	.....	5.90
JAN	2N1049A	TI	S-19500/176A	17.50	.....	11.65
JAN	2N1050A	TI	S-19500/176A	46.90	.....	31.20
JAN	2N1120	MOT	S-19500/68A	12.75	.....	8.50
USA	2N1120	MOT	S-19500/68A	12.75	.....	8.50
JAN	2N1131	MOT	S-19500/117A	2.30	.....	1.55
JAN	2N1131	RAY	S-19500/9-64	6.00	.....	4.00
JAN	2N1132	TI	S-19500/177B	6.00	.....	4.00
JAN	2N1132	MOT	S-19500/117A	2.30	.....	1.55
JAN	2N1131	RAY	S-19500/9-64	6.00	.....	4.00
USN	2N1132	MOT	S-19500/177B	6.00	.....	4.00
JAN	2N1142	MOT	S-19500/87A	4.61	.....	3.08
USN	2N1142	TI	S-19500/87	4.35	.....	2.90
USN	2N1142	MOT	S-19500/87	4.61	.....	3.08
USA	2N1157A	HUG	S-19500/46	28.20	.....	18.80
JAN	2N1165	MOT	S-19500/178B	14.60	.....	9.75
USN	2N1165	MOT	S-19500/178B	14.60	.....	9.75
USA	2N1183	RCA	S-19500/143	2.64	.....	1.82
USA	2N1183A	RCA	S-19500/143	3.30	.....	2.28
USA	2N1183B	RCA	S-19500/143	3.88	.....	2.68
USA	2N1184	RCA	S-19500/143	3.71	.....	2.57
USA	2N1184A	RCA	S-19500/143	4.04	.....	2.79
USA	2N1184B	RCA	S-19500/147	5.36	.....	3.71
JAN	2N1195	MOT	S-19500/71C	4.43	.....	2.95
USA	2N1224	RCA	S-19500/189	1.41	.....	.97
USN	2N1225	RCA	S-19500/189	1.57	.....	1.09
JAN	2N1234	HUG	S-19500/179	25.30	.....	19.00
JAN	2N1302	RCA	S-19500/126A	.52	.....	.36
JAN	2N1302	TI	S-19500/126B	.51	.....	.34
JAN	2N1303	TI	S-19500/126B	.47	.....	.31
USN	2N1303	GE	S-19500/126B	.47	.....	.31
JAN	2N1303	RCA	S-19500/126A	.52	.....	.35
JAN	2N1304	TI	S-19500/126B	.57	.....	.39
JAN	2N1304	RCA	S-19500/126A	.65	.....	.45
JAN	2N1305	TI	S-19500/126B	.54	.....	.37
JAN	2N1305	GE	S-19500/126B	.54	.....	.37
JAN	2N1305	RCA	S-19500/126A	.65	.....	.43
JAN	2N1306	TI	S-19500/126B	.81	.....	.54
JAN	2N1306	RCA	S-19500/126A	.86	.....	.60
JAN	2N1307	TI	S-19500/126B	.71	.....	.47
JAN	2N1307	GE	S-19500/126B	.71	.....	.47
JAN	2N1307	RCA	S-19500/126A	.86	.....	.58
JAN	2N1308	RCA	S-19500/126A	1.16	.....	.80
JAN	2N1308	TI	S-19500/126B	1.16	.....	.77
JAN	2N1309	TI	S-19500/126B	1.16	.....	.77
JAN	2N1309	RCA	S-19500/126A	1.16	.....	.80
JAN	2N1358	MOT	S-19500/122B	4.50	.....	3.34
USA	2N1358	MOT	S-19500/122A	6.25	.....	4.17
USN	2N1412	MOT	S-19500/76B	5.25	.....	3.89
JAN	2N1469M	HUG	S-19500/78	19.50	.....	15.00
USA	2N1479	RCA	S-19500/207	2.56	.....	1.77
USA	2N1480	RCA	S-19500/207	2.72	.....	1.88
USA	2N1481	RCA	S-19500/207	2.89	.....	2.00
USA	2N1482	RCA	S-19500/207	3.71	.....	2.57
USA	2N1483	RCA	S-19500/180	3.71	.....	2.57
USA	2N1484	RCA	S-19500/180	4.46	.....	3.08
USA	2N1485	RCA	S-19500/180	5.28	.....	3.65

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	Type No.	Mfr.	Mil. Spec.	1-99	100-Mix	100-999
USA	2N1486	RCA	S-19500/180	7.59	.....	5.24
USA	2N1187	RCA	S-19500/208A	5.36	.....	3.71
USA	2N1488	RCA	S-19500/208	5.78	.....	3.99
USA	2N1489	RCA	S-19500/208	8.25	.....	5.70
USA	2N1490	RCA	S-19500/208	9.08	.....	6.25
USA	2N1493	RCA	S-19500/247	7.43	.....	5.13
JAN	2N1459A	MOT	S-19500/332	3.65	.....	2.45
JAN	2N1550A	MOT	S-19500/332	4.20	.....	2.80
JAN	2N1551A	MOT	S-19500/332	6.00	.....	4.00
JAN	2N1552A	MOT	S-19500/332	6.65	.....	4.45
JAN	2N1553A	MOT	S-19500/331	3.35	.....	2.25
JAN	2N1554A	MOT	S-19500/331	4.05	.....	2.70
JAN	2N1555A	MOT	S-19500/331	5.25	.....	3.50
JAN	2N1556A	MOT	S-19500/331	6.00	.....	4.00
JAN	2N1613	TI	S-19500/181C	3.80	.....	2.40
JAN	2N1613	GE	S-19500/181B	2.25	.....	1.50
USA	2N1011	MOT	S-19500/67A	2.65	.....	1.94
JAN	2N1613	RAY	S-19500/10-61	2.25	.....	1.50
JAN	2N1613	TI	S-19500/181B	3.80	.....	2.40
JAN	2N1711	TI	S-19500/225C	6.35	.....	4.23
JAN	2N1711	GE	S-19500/225C	3.83	.....	2.56
JAN	2N1711	RAY	S-19500/9-62	3.35	.....	2.30
JAN	2N1714	TI	S-19500/263A	6.45	.....	4.30
JAN	2N1715	TI	S-19500/263A	8.70	.....	5.80
JAN	2N1716	TI	S-19500/263A	7.95	.....	5.30
JAN	2N1717	TI	S-19500/263A	11.70	.....	7.80
JAN	2N1722	TI	S-19500/262B	57.00	.....	38.00
JAN	2N1724	TI	S-19500/262B	60.00	.....	40.00
JAN	2N1724	GE	S-19500/262B	60.00	.....	40.00
JAN	2N1771A	GE	S-19500/168B	9.38	.....	6.25
JAN	2N1772A	GE	S-19500/168B	11.76	.....	7.84
JAN	2N1774A	GE	S-19500/168B	17.04	.....	11.36
JAN	2N1776A	GE	S-19500/168B	22.00	.....	14.67
JAN	2N1777A	GE	S-19500/168B	27.36	.....	18.24
JAN	2N1853	RCA	S-19500/171A	1.32	.....	.92
JAN	2N1890	RAY	S-19500/9-62	6.50	.....	5.20
JAN	2N1890	GE	S-19500/225C	8.65	.....	5.80
JAN	2N1893	MOT	S-19500/182B	4.65	.....	3.10
JAN	2N1893	TI	S-19500/182B	7.20	.....	4.80
JAN	2N1893	RAY	00465	.....	3.10	.....
JAN	2N1893	TI	S-19500/6-62	4.65	.....	3.10
JAN	2N1893	RAY	S-19500/182A	7.20	.....	4.80

	Type No.	Mfg.	Mil. No.	1-24	25-99	100-Up
JAN	2N1910W	GE	S-19500/204A	29.20	23.60	.....
USN	2N1910W	WES	S-19500/204A	29.20	23.60	.....
JAN	2N1911W	GE	S-19500/204A	33.20	26.70	.....
USN	2N1911W	WES	S-19500/204A	33.20	26.70	.....
JAN	2N1913W	GE	S-19500/204A	42.40	33.80	.....
USN	2N1913W	WES	S-19500/204A	42.40	33.80	.....
JAN	2N1915W	GE	S-19500/204A	54.90	43.60	.....
USN	2N1915W	WES	S-19500/204A	54.90	43.60	.....
JAN	2N1916W	GE	S-19500/204A	70.90	55.90	.....

	Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
USA	2N2015	RCA	S-19500/248A	9.90	.....	6.85
USA	2N2016	RCA	S-19500/248A	10.73	.....	7.40

	Type No.	Mfg.	Mil. No.	1-24	25-99	100-Up
JAN	2N2031W	GE	S-19500/204A	29.20	23.60	.....
USN	2N2031W	GE	S-19500/204A	29.20	23.60	.....
USN	2N2031W	WES	S-19500/204A	29.20	23.60	.....

	Type No.	Mfg.	Mil. No.	1-99	100-Mix	100-999
JAN	2N2060	Mot	S-19500/270B	36.00	.....	24.00
JAN	2N2060	TI	S-19500/270B	45.00	.....	30.00
JAN	2N2079A	MOT	S-19500/340	9.95	.....	6.65
JAN	2N2218	MOT	S-19500/251D	1.80	.....	1.20
JAN	2N2218	TI	S-19500/251E	5.26	.....	3.51
JAN	2N2218	RAY	S-7032	3.75	.....	2.50
JAN	2N2218A	TI	S-19500/251E	5.78	.....	3.85
JAN	2N2218A	MOT	S-19500/251D	6.00	.....	4.00
JAN	2N2218A	RAY	S-6848	5.25	.....	3.75
JAN	2N2219	MOT	S-19500/251D	1.80	.....	1.20
JAN	2N2219	TI	S-19500/251E	6.07	.....	4.05
JAN	2N2219	RAY	S-7033	5.04	.....	4.05
JAN	2N2219A	MOT	S-19500/251D	6.75	.....	4.50
JAN	2N2219A	TI	S-19500/251E	6.67	.....	4.45
JAN	2N2219A	RAY	S-6849	7.00	.....	4.75

	Type No.	Mfg.	Mil. Spec.	1-99	100-Mix	100-999
JAN	N2219A	TI	S-19500/251D	6.67	.....	4.45
JAN	N2221	MOT	S-19500/255D	1.80	.....	1.20
JAN	N2221	TI	S-19500/255E	5.26	.....	3.51
JAN	N2221	GE	S-19500/255D	4.10	.....	2.75
JAN	N2221	RAY	S-7034	4.10	.....	2.75
JAN	N2221	TI	S-19500/255D	5.26	.....	3.51
JAN	N2221A	MOT	S-19500/255D	6.00	.....	4.00
JAN	N2221A	TI	S-19500/255E	5.78	.....	3.85
JAN	N2221A	RAY	S-6850	6.00	.....	4.00
JAN	N2222	TI	S-19500/255E	6.07	.....	4.05
JAN	N2222	GE	S-19500/255D	4.70	.....	3.15
JAN	N2222	MOT	S-19500/255D	1.80	.....	1.20
JAN	2N2222	RAY	S-7035	5.04	.....	4.05
JAN	2N2222	TI	S-19500/255D	6.07	.....	4.05
USA	2N2222	MOT	S-19500/255D	4.10	.....	2.75
JAN	2N2222A	MOT	S-19500/255D	6.75	.....	4.50
JAN	2N2222A	RAY	S-6851	5.04	.....	4.05
JAN	2N2222A	TI	S-19500/255D	6.67	.....	4.45
JAN	2N2273	MOT	S-19500/244B	2.25	.....	1.50
JAN	2N2273	TI	S-19500/244B	2.25	.....	1.50
JAN	2N2273	MOT	S-19500/244B	2.25	.....	1.50
JAN	2N2323	GE	S-19500/276	5.05	.....	3.95
JAN	2N2323A	GE	S-19500/276	5.75	.....	4.40
JAN	2N2324	GE	S-19500/276	7.40	.....	5.60
JAN	2N2324A	GE	S-19500/276	8.60	.....	6.40
JAN	2N2326	GE	S-19500/276	12.85	.....	9.40
JAN	2N2326A	GE	S-19500/276	14.90	.....	10.75
JAN	2N2369A	MOT	S-19500/317D	3.15	.....	2.10
JAN	2N2481	MOT	S-19500/268B	3.35	.....	2.25
JAN	2N2481	TI	S-19500/268B	3.90	.....	2.60
JAN	2N2481	MOT	S-19500/268A	3.35	.....	2.25
JAN	2N2481	RAY	S-19500/7-64	3.35	.....	2.25
JAN	2N2481	TI	S-19500/268A	3.90	.....	2.60
JAN	2N2553	TI	S-19500/89C	3.90	.....	2.60
JAN	2N2553	BEN	S-19500/89C	3.90	.....	2.60
JAN	2N2555	TI	S-19500/89C	7.65	.....	5.10
JAN	2N2557	TI	S-19500/89C	3.95	.....	2.65
JAN	2N2559	TI	S-19500/89C	7.75	.....	5.15
JAN	2N2708	MOT	S-19500/302	5.15	.....	3.42
JAN	2N2708	RCA	S-19500/302	6.60	.....	4.56
JAN	2N2834	MOT	S-19500/310	9.00	.....	6.00
JAN	2N2904	MOT	S-19500/290A	2.85	.....	1.90
JAN	2N2904	TI	S-19500/290B	8.25	.....	5.50
JAN	2N2904	RAY	S-6775	8.25	.....	5.50
JAN	2N2904A	MOT	S-19500/290A	11.25	.....	7.50
JAN	2N2904A	RAY	S-6852	11.25	.....	7.50
JAN	2N2905	MOT	S-19500/290A	2.85	.....	1.90
JAN	2N2905	TI	S-19500/290B	9.75	.....	6.50
JAN	2N2905	MOT	S-19500/290A	9.75	.....	6.50
JAN	2N2905	RAY	S-6964	9.75	.....	6.50
JAN	2N2905	TI	S-19500/290A	10.10	.....	6.75
JAN	2N2905A	MOT	S-19500/290A	12.75	.....	8.50
JAN	2N2905A	MOT	S-19500/290A	12.75	.....	8.50
JAN	2N2905A	RAY	S-6853	12.75	.....	8.30
JAN	2N2906	MOT	S-19500/291A	2.85	.....	1.90
JAN	2N2906	TI	S-19500/291B	7.95	.....	5.30
JAN	2N2906	MOT	S-19500/291A	7.95	.....	5.30
JAN	2N2906	RAY	S-6776	7.95	.....	5.30
JAN	2N2906	TI	S-19500/291A	8.30	.....	5.50
USA	2N2906	MOT	S-19500/291A	7.95	.....	5.30
JAN	2N2906A	MOT	S-19500/291A	10.80	.....	7.20
JAN	2N2906A	TI	S-19500/291B	10.80	.....	7.20
JAN	2N2906A	RAY	S-6854	10.80	.....	7.20
JAN	2N2907	MOT	S-19500/291A	2.85	.....	1.90
JAN	2N2907	TI	S-19500/291B	9.45	.....	6.30
JAN	2N2907	RAY	S-6965	9.45	.....	6.30
JAN	2N2907	TI	S-19500/291A	9.80	.....	6.75
JAN	2N2907A	TI	S-19500/291B	12.30	.....	8.20
JAN	2N2907A	MOT	S-19500/291A	12.30	.....	8.20
JAN	2N2907A	RAY	S-6855	12.30	.....	8.20
JAN	2N3013	TI	S-19500/287	8.05	.....	5.36
JAN	2N3250A	MOT	S-19500/323	5.25	.....	3.50
JAN	2N3251A	MOT	S-19500/323	6.00	.....	4.00
JAN	2N3253	MOT	S-19500/347	10.50	.....	7.00
JAN	2N3375	MOT	S-19500/341A	21.75	.....	14.50
JAN	2N3506	MOT	S-19500/349	12.30	.....	8.20
JAN	2N3553	MOT	S-19500/341A	7.35	.....	4.90
JAN	3N35	TI	S-19500/80D	24.38	.....	16.25

SEMICONDUCTOR GUIDE IS CURRENT AS OF AUGUST 15, 1967.

PRICES FOR QUANTITIES ARE COMPETITIVE WITH THE MANUFACTURER OEM PRICES. ORDERS WILL BE BILLED AT PRICES IN EFFECT AT THE TIME OF SHIPMENT.

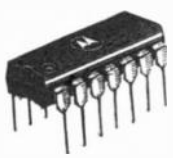
Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

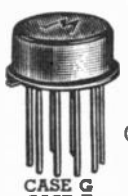
Case A (TO-91)

CASE B 10-LEAD

CASE C (TO-86)

CASE D 12-LEAD


CASE E


CASE G CASE F (TO-99) (TO-100)

MECL INTEGRATED CIRCUITS (Operating Temperature: —55°C to +125°C)

Type	Function	Case	DC Fan-Out each output	Propagation Delay @ 25°C tpd ns typ	Total Power Dissipation mW typ	1-24	25-99	100-999
MC301F	5-Input OR/NOR Gate	A	25	7.5	37	12.85	10.15	8.45
MC302F	R-S Flip-Flop	A	25	11	42	14.85	11.90	9.90
MC303F	Half-Adder	A	25	7.5	63	16.70	13.40	11.15
MC304F	Bias Driver	A	25	.....	18	8.40	6.70	5.60
MC305F	5-Input Gate Expander	A	.....	4.5	.....	8.40	6.70	5.60
MC306F	3-Input OR/NOR Gate	A	25	7.5	37	11.30	9.05	7.55
MC307F	3-Input OR/NOR Gate	A	25	7.5	15	11.30	9.05	7.55
MC308F	AC-Coupled J-K Flip-Flop	A	25	8.5	87	18.80	15.05	12.55
MC309F	Dual 2-Input NOR Gate	A	25	7.0	54	13.70	11.00	9.15
MC310F	Dual 2-Input NOR Gate	A	25	7.0	54	13.70	11.00	9.15
MC311F	Dual 2-Input NOR Gate	A	25	7.0	41	13.70	11.00	9.15
MC312AF	Dual 3-Input NOR Gate	A	25	7.5	70	16.70	13.40	11.15
MC312F	Dual 3-Input NOR Gate	C	25	7.5	54	16.70	13.40	11.15
MC313F	Quad 2-Input NOR Gate	C	25	7.0	125	18.35	14.70	12.25
MC314F	AC-Coupled J-K Flip-Flop	A	25	12	118	21.95	17.60	14.65
MC315F	Line Driver	A	.....	14	270	24.35	19.50	16.25
MC316F	Lamp Driver	A	.....	.....	135	11.30	9.05	7.55
MC317F	Level Translator— MECL to Saturated Logic	A	7 (DTL)	27.5	63	11.30	9.05	7.55
MC318F	Level Translator— Saturated Logic to MECL	A	25 (MECL)	17	105	11.30	9.05	7.55
MC301G	5-Input OR/NOR Gate	B	25	7.5		11.55	9.25	7.70
MC302G	R-S Flip-Flop	B	25	11	37	13.70	11.00	9.15
MC303G	Half-Adder	B	25	7.5	42	15.60	12.50	10.40
MC304G	Bias Driver	B	25	.....	63	7.25	5.80	4.95
MC305G	5-Input Gate Expander	B	.....	4.5	18	7.25	5.80	4.85
MC306G	3-Input OR/NOR Gate	B	25	7.5	.....	10.20	8.15	6.80
MC307G	3-Input OR/NOR Gate	B	25	7.5	37	10.20	8.15	6.80
MC308G	AC-Coupled J-K Flip-Flop	B	25	8.5	15	17.70	14.15	11.80
MC312AG	Dual 3-Input NOR Gate	B	25	7.5	70	15.60	12.50	10.40
MC312G	Dual 3-Input NOR Gate	D	25	7.5	54	15.60	12.50	10.40
MC318G	Level Translator— Saturated Logic to MECL	B	25 (MECL)	17	105	10.20	8.15	6.80

INDUSTRIAL MECL INTEGRATED CIRCUITS (Operating Temperature: 0°C to +75°C)

MC351F	5-Input OR/NOR Gate	A	25	7.5	37	6.55	6.00	5.15
MC352AF	R-S Flip-Flop	A	25	11	42	6.45	5.85	5.15
MC352F	R-S Flip-Flop	A	25	11	40	6.55	6.00	5.15
MC353F	Half-Adder	A	25	7.5	63	7.95	7.20	6.25
MC354F	Bias Driver	A	25	.....	18	4.45	4.15	3.45
MC355F	5-Input Gate Expander	A	.....	4.5	.....	4.80	4.45	3.75
MC356F	3-Input OR/NOR Gate	A	25	7.5	37	5.55	5.15	4.35
MC357F	3-Input OR/NOR Gate	A	25	7.5	15	5.55	5.15	4.35
MC358AF	AC-Coupled J-K Flip-Flop	A	25	8.5	87	11.50	10.35	9.10
MC358F	Dual 2-Input NOR Gate	A	25	7.0	54	5.70	5.25	4.45
MC360F	Dual 2-Input NOR Gate	A	25	7.0	54	5.70	5.25	4.45
MC361F	Dual 2-Input NOR Gate	A	25	7.0	41	5.70	5.25	4.45
MC362AF	Dual 3-Input NOR Gate	A	25	7.5	70	6.85	6.05	5.50
MC362F	Dual 3-Input NOR Gate	C	25	7.5	54	7.50	6.40	5.50
MC363F	Quad 2-Input NOR Gate	C	25	7.0	125	7.35	6.50	5.90
MC364F	AC-Coupled J-K Flip-Flop	A	25	12	118	12.20	10.70	9.75
MC365F	Line Driver	A	.....	14	270	11.05	9.75	8.85
MC366F	Lamp Driver	A	.....	.....	135	8.10	7.15	6.50
MC367F	Level Translator— MECL to Saturated Logic	A	7 (DTL)	27.5	63	7.50	6.60	6.00
MC368F	Level Translator— Saturated Logic to MECL	A	25 (MECL)	17	105	7.50	6.60	6.00
MC369F	Dual 4-Input Clock Driver/High-Speed Gate	C	100	3.0	250	7.25	6.40	5.80
MC351G	5-Input OR/NOR Gate	B	25	7.5	37	4.55	4.00	3.65
MC352AG	R-S Flip-Flop	B	25	11	42	4.55	4.00	3.65
MC352G	R-S Flip-Flop w/o Buffered Outputs	B	25	11	40	4.55	4.00	3.65
MC353G	Half-Adder	B	25	7.5	63	5.85	5.20	4.75
MC354G	Bias Driver	B	25	.....	18	2.45	2.15	1.95
MC355G	5-Input Gate Expander	B	.....	4.5	.....	2.80	2.45	2.25
MC356G	3-Input OR/NOR Gate	B	25	7.5	37	3.55	3.15	2.85
MC357G	3-Input OR/NOR Gate	B	25	7.5	15	3.55	3.15	2.85
MC358AG	AC-Coupled J-K Flip-Flop	B	25	8.5	87	9.50	8.35	7.60
MC359G	Dual 2-Input NOR Gate	B	25	7.0	54	3.70	3.25	2.95
MC360G	Dual 2-Input NOR Gate	B	25	7.0	54	3.70	3.25	2.95
MC361G	Dual 2-Input NOR Gate	B	25	7.0	41	3.70	3.25	2.95
MC362AG	Dual 3-Input NOR Gate	B	25	7.5	70	5.00	4.40	4.00
MC362G	Dual 3-Input NOR Gate	D	25	7.5	54	5.00	4.40	4.00
MC364G	AC-Coupled J-K Flip-Flop	B	25	12	118	10.75	9.45	8.60
MC365G	Line Driver	B	.....	14	180	9.20	8.10	7.35
MC366G	Lamp Driver	B	.....	.....	135	6.25	5.50	5.00
MC367G	Level Translator— MECL to Saturated Logic	B	7 (DTL)	27.5	63	5.60	4.95	4.50
MC368G	Level Translator— Saturated Logic to MECL	B	25 (MECL)	17	105	5.60	4.95	4.50
MC369G	Dual 2-Input Clock Driver/High-Speed Gate	B	100	3.0	250	5.45	4.80	4.35

Motorola Integrated Circuits

MONOLITHIC CURRENT MODE LOGIC (Operating Temperature: 0°C to +70°C)

Type	Function	1-24	25-99	100-999
MC1050F MC1051F MC1052F	Dual 5-Input Gate Dual 5-Input Gate Single 8-Input Gate	5.30	4.25	3.55

MECL II INTEGRATED CIRCUITS (Operating Temperature: —55°C to +125°C) Ceramic Flat Package — Case C

Type	Function	DC Fanout each Output	Propagation @ 25°C tpd ns typ	Total Power Dissipation mW typ	1-24	25-99	100-999
MC1201F	Single 6 Input Gate, 3 "OR" Outputs w Pulldowns 3 "NOR" Outputs w Pulldowns	25 25	4 4	115	10.35	8.30	6.90
MC1202F	Single 6 Input Gate, 3 "OR" Outputs w Pulldowns 3 "NOR" Outputs w/o Pulldowns	25 25	4 4	80	10.35	8.30	6.90
MC1203F	Single 6 Input Gate, 3 "OR" Outputs w/o Pulldowns 3 "NOR" Outputs w/o Pulldowns	25 25	4 4	40	10.35	8.30	6.90
MC1204F	Dual 4 Input Gate, 2 "OR" Outputs w Pulldowns 2 "NOR" Outputs w Pulldowns	25 25	4 4	95	10.80	8.65	7.20
MC1205F	Dual 4 Input Gate, 2 "OR" Outputs w Pulldowns 2 "NOR" Outputs w/o Pulldowns	25 25	4 4	65	10.80	8.65	7.20
MC1206F	Dual 4 Input Gate, 2 "OR" Outputs w/o Pulldowns 2 "NOR" Outputs w/o Pulldowns	25 25	4 4	45	10.80	8.65	7.20
MC1207F	Triple 3 Input Gate, 3 "NOR" Outputs w Pulldowns	25	4	110	10.80	8.65	7.20
MC1208F	Triple 3 Input Gate, 1 "NOR" Output w Pulldown 2 "NOR" Outputs w/o Pulldowns	25 25	4 4	75	10.80	8.65	7.20
MC1209F	Triple 3 Input Gate, 3 "NOR" Outputs w/o Pulldowns	25	4	60	10.80	8.65	7.20
MC1210F	Quad 2 Input Gate, 4 "NOR" Outputs w Pulldowns	25	4	115	11.40	9.10	7.60
MC1211F	Quad 2 Input Gate, 2 "NOR" Output w Pulldowns 2 "NOR" Output w/o Pulldowns	25 25	4 4	95	11.40	9.10	7.60
MC1212F	Quad 2 Input Gate, 4 "NOR" Outputs w/o Pulldowns	25	4	65	11.40	9.10	7.60
MC1213F	85 MHz AC Coupled J-K Flip-Flop	25	6	125	14.85	11.90	9.90
MC1219F	Full Adder	25	8	110	22.85	18.30	15.25
MC1221F	Full Subtractor	25	8	110	22.85	18.30	15.25

MECL II INTEGRATED CIRCUITS (Operating Temperature: 0°C to +75°C) Dual In-Line Plastic Package—CASE E

Type	Function				1-999	1000-4999
MC1001P	Single 6 Input Gate, 3 "OR" Outputs w Pulldowns 3 "NOR" Outputs w Pulldowns	25 25	4 4	115	2.65	2.05
MC1002P	Single 6 Input Gate, 3 "OR" Outputs w Pulldowns 3 "NOR" Outputs w/o Pulldowns	25 25	4 4	80	2.65	2.05
MC1003P	Single 6 Input Gate, 3 "OR" Outputs w/o Pulldowns 3 "NOR" Outputs w/o Pulldowns	25 25	4 4	40	2.65	2.05
MC1004P	Dual 4 Input Gate, 2 "OR" Outputs w Pulldowns 2 "NOR" Outputs w Pulldowns	25 25	4 4	95	2.85	2.20
MC1005P	Dual 4 Input Gate, 2 "OR" Outputs w Pulldowns 2 "NOR" Outputs w/o Pulldowns	25 25	4 4	65	2.85	2.20
MC1006P	Dual 4 Input Gate, 2 "OR" Outputs w/o Pulldowns 2 "NOR" Outputs w/o Pulldowns	25 25	4 4	45	2.85	2.20
MC1007P	Triple 3 Input Gate, 3 "NOR" Outputs w Pulldowns	25	4	110	2.85	2.20
MC1008P	Triple 3 Input Gate, 1 "NOR" Output w Pulldown 2 "NOR" Outputs w/o Pulldowns	25 25	4 4	75	2.85	2.20
MC1009P	Triple 3 Input Gate, 3 "NOR" Outputs w/o Pulldowns	25	4	60	2.85	2.20
MC1010P	Quad 2 Input Gate, 4 "NOR" Outputs w Pulldowns	25	4	115	3.05	2.35
MC1011P	Quad 2 Input Gate, 2 "NOR" Output w Pulldowns 2 "NOR" Output w/o Pulldowns	25 25	4 4	95	3.05	2.35
MC1012P	Quad 2 Input Gate, 4 "NOR" Outputs w/o Pulldowns	25	4	65	3.05	2.35
MC1013P	85 MHz AC Coupled J-K Flip-Flop	25	6	125	4.55	3.50
MC1014P	Dual R-S Flip-Flop (Positive Clock)	25	6	140	5.50	4.25
MC1015P	Dual R-S Flip-Flop (Negative Clock)	25	6	140	5.50	4.25
MC1018P	Dual R-S Flip-Flop (Single Rail)	25	6	140	5.50	4.25
MC1017P	Level Translator (Sat. Logic to MECL)	25 (MECL)	15	105	3.45	2.65
MC1018P	Level Translator (MECL to Sat. Logic)	7 (DTL)	20	70	3.45	2.65
MC1019P	Full Adder	25	8	110	6.70	5.15
MC1020P	Quad Line Receiver	25	4	115	3.05	2.35
MC1021P	Full Subtractor	25	8	110	6.70	5.15
MC1023P	Dual 4 Input "OR, NOR" Clock Driver	25	2	250	8.45	6.50
MC1024P	Dual 2 Input Expandable Gate	25	4	95	3.00	2.30
MC1025P	Dual 4 and 5 Input Expander	....	....	....	2.75	2.10
MC1027P	120 MHz AC Coupled J-K Flip-Flop	25	4	250	9.60	7.40

DTL LOGIC CIRCUITS (Operating Temperature: 0°C to +75°C)

Type	Function	Case	Fan-Out	Propagation tpd ns typ	Power Dissipation mW typ	1-24	25-99	100-999
MC251F	4-Input Gate NAND/NOR	A	4	30	6	6.40	5.85	5.00
MC252F	3-Input Gate NAND/NOR	A	4	30	6	6.05	5.80	4.75
MC253F	6-Input Gate AND (Expander)	A	8**	4*	....	5.10	4.75	4.00
MC254F	3-Input Power Gate NAND/NOR	A	12	40	30	7.80	7.10	6.15
MC255F	Line Driver	A	12	55	50	8.00	7.30	6.30
MC256F	Dual 2-Input Gate NAND/NOR	A	4	30	12	7.60	6.95	6.00
MC257F	Dual 3-2 Input Gate NAND/NOR	A	4	30	12	7.80	7.10	6.15
MC258F	Dual 3-2 Input Gate NAND/NOR	A	3	30	30	7.80	7.10	6.15
MC259F	Clocked R-S Flip-Flop	A	6	60	16	11.95	10.75	9.45
MC260F	Clocked R-S Flip-Flop (Pulse Triggered Binary)	A	6	60	16	12.50	11.30	9.95
MC262F	Dual 3-Input Gate NAND/NOR	A	4	30	12	8.00	7.30	6.30
MC263F	Dual 3-Input Gate NAND/NOR	A	3	30	30	8.00	7.30	6.30
MC265F	Dual 3-Input Gate AND (Expander)	A	8**	4*	....	5.30	4.90	4.15
MC267F	Dual 3-Input Diode Array	A	8**	4*	....	4.80	4.50	3.75
MC251G	4-Input Gate NAND/NOR	B	4	30	6	4.40	3.85	3.50
MC252G	3-Input Gate NAND/NOR	B	4	30	6	4.05	3.60	3.25
MC253G	6-Input Gate AND (Expander)	B	8**	4*	....	3.10	2.75	2.50
MC254G	3-Input Power Gate NAND/NOR	B	12	40	30	5.80	5.10	4.65
MC255G	Line Driver	B	12	55	50	6.00	5.30	4.80

* trr (ns) ** vr (volts)

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Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

DTL LOGIC CIRCUITS Cont. (Operating Temperature: 0°C to 75°C)

Type	Function	Case	Fan-Out	Propagation Delay tpd ns typ	Power Dissipation mW typ	1-24	25-99	100-999
MC256G	Dual 2-Input Gate NAND/NOR	B	4	30	12	5.60	4.95	4.50
MC257G	Dual 3-2 Input Gate NAND/NOR	B	4	30	12	5.80	5.10	4.65
MC258G	Dual 3-2 Input Gate NAND/NOR	B	3	30	30	5.80	5.10	4.65
MC259G	Clocked R-S Flip-Flop	B	6	60	16	9.95	8.75	7.95
MC260G	Clocked R-S Flip-Flop (Pulse Triggered Binary)	B	6	60	16	10.50	9.30	8.45
MC262G	Dual 3-Input Gate NAND/NOR	B	4	30	12	6.00	5.30	4.80
MC263G	Dual 3-Input Gate NAND/NOR	B	3	30	30	6.00	5.30	4.80
			vr	trr				
MC265G	Dual 3-Input Gate AND (Expander)	B	8	4	—	3.30	2.90	2.65
MC267G	Dual 3-Input Diode Array	B	8	4	—	2.80	2.50	2.25
MC281G	Dual 3-Input Gate NAND/NOR			tpd				
MC282G	R-S Flip-Flop	D		18	15	18.75	16.50	15.00
MC284G	4-Input Gate	D		18	15	22.50	19.80	18.00
MC934F	Hex Inverter	F		18	7.5	16.85	14.85	13.50
MDTL INTEGRATED CIRCUIS (Operating Temperature: —55° to +125°C)								
MC949F	Quad 2-Input Gate NAND/NOR (2 kΩ pull-up resistor)	C	8	30	66	7.80	6.25	5.20
MC949G	Quad Inverter (2 kΩ pull-up resistor)	C G	7	25	66	6.50	5.20	4.35
MC950F	Pulse Triggered Binary	C G	7	25	60	6.50	5.20	4.35
MC950G	Pulse Triggered Binary	C G	8	15	50	20.25	16.20	13.50
MC951F	Monostable Multivibrator	C G	8	15	50	18.50	14.80	12.35
MC951G	Monostable Multivibrator	C G	10	40	30	20.25	16.20	13.50
MC952F	Dual J-K Flip-Flop (common clock and Cd, separate Sd)	C G	10	40	30	18.50	14.80	12.35
MC953F	Dual J-K Flip-Flop (separate clock and Sd, no Cd)	C G	10	40	120	14.40	11.50	9.60
MC955F	Dual J-K Flip-Flop (common clock and Cd, separate Sd)	C G	10	40	120	14.40	11.50	9.60
MC956F	Dual J-K Flip-Flop (separate clock and Sd, no Cd)	C G	9	40	140	14.40	11.50	9.60
MC961F	Dual 4-Input Gate NAND/NOR (2 kΩ pull-up resistor)	C G	9	40	140	14.40	11.50	9.60
MC961G	Dual 3-2 Input Gate NAND/NOR (2 kΩ pull-up resistor)	C G	7	25	33	6.50	5.20	4.35
MC962G	Dual 2-Input Gate NAND/NOR plus Inverter	G	7	25	33	6.50	5.20	4.35
MC963F	Triple 3-Input Gate NAND/NOR (2 kΩ pull-up resistor)	G	8	30	30	6.50	5.20	4.35
MC963G	Dual 2-Input Gate NAND/NOR (plus Inverter; 2 kΩ pull-up resistor)	C G	7	25	50	6.50	5.20	4.35
		G	7	25	45	6.50	5.20	4.35
MDTL INTEGRATED CIRCUITS (Operating Temperature 0°C to +75°C)								
MC830F	Dual 4-Input Gate NAND/NOR	C	8	30	22	3.60	2.90	2.40
MC830G	Dual 3-2 Input Gate NAND/NOR	C G	8	30	22	3.60	2.90	2.40
MC831F	Clocked Flip-Flop	C G	7	40	55	5.25	4.20	3.50
MC831G	Clocked Flip-Flop	C G	7	40	55	5.25	4.20	3.50
MC832F	Dual 4-Input Buffer	C	25	35	85	4.05	3.25	2.70
MC832G	Dual 3-2 Input Buffer	C G	25	35	85	4.05	3.25	2.70
MC833F	Dual 4-Input Gate Expander	C	—	—	—	4.70	3.80	3.15
MC833G	Dual 3-4 Input Gate Expander	C G	—	—	—	4.50	3.60	3.00
MC834F	Hex Inverter	C	8	30	66	4.35	3.50	2.90
MC844F	Dual 4-Input Power Gate NAND/NOR	C	27	30	65	4.05	3.25	2.70
MC844G	Dual 3-2 Input Power Gate NAND/NOR	C G	27	30	65	4.05	3.25	2.70
MC845F	Clocked Flip-Flop	C	12	40	60	5.25	4.20	3.50
MC845G	Clocked Flip-Flop	C G	12	40	60	5.25	4.20	3.50
MC846F	Quad 2-Input Gate NAND/NOR	C	8	30	44	3.60	2.90	2.40
MC846G	Quad Inverter	C G	8	30	44	3.60	2.90	2.40
MC848F	Clocked Flip-Flop	C	11	40	70	5.25	4.20	3.50
MC848G	Clocked Flip-Flop	C G	11	40	70	5.25	4.20	3.50
MC849F	Quad 2-Input Gate NAND/NOR (2 kΩ pull-up resistor)	C	7	25	66	3.60	2.90	2.40
MC849G	Quad Inverter (2 kΩ pull-up resistor)	C G	7	25	60	3.60	2.90	2.40
MC850F	Pulse Triggered Binary	C	10	15	50	11.60	9.30	7.75
MC850G	Pulse Triggered Binary	C G	10	15	50	11.40	9.10	7.60
MC851F	Monostable Multivibrator	C	10	40	30	11.60	9.30	7.75
MC851G	Monostable Multivibrator	C G	10	40	30	11.40	9.10	7.60
MC852F	Dual J-K Flip-Flop (common clock and Cd, sep. Sd)	C	12	40	120	8.40	6.70	5.60
MC853F	Dual J-K Flip-Flop (separate clock and Sd, no Cd)	C	12	40	120	8.40	6.70	5.60
MC855F	Dual J-K Flip-Flop (common clock and Cd, sep. Sd)	C	11	40	140	8.40	6.70	5.60
MC856F	Dual J-K Flip-Flop (separate clock and Sd, no Cd)	C	11	40	140	8.40	6.70	5.60
MC861F	Dual 4-Input Gate NAND/NOR (2 kΩ pull-up resistor)	C	7	25	33	3.60	2.90	2.40
MC861G	Dual 3-2 Input Gate NAND/NOR (2 kΩ pull-up resistor)	C G	7	25	33	3.60	2.90	2.40
MC862F	Triple 3-Input Gate NAND/NOR	C	8	30	33	3.60	2.90	2.40
MC862G	Dual 2-Input Gate NAND/NOR plus Inverter	C G	8	30	30	3.60	2.90	2.40
MC863F	Triple 3-Input Gate NAND/NOR (2 kΩ pull-up resistor)	C	7	25	50	3.60	2.90	2.40
MC863G	Dual 2-Input Gate NAND/NOR (plus Inverter; 2 kΩ pull-up resistor)	G	7	25	45	3.60	2.90	2.40

PLASTIC MDTL INTEGRATED CIRCUITS (Operating Temperature: 0°C to +75°C)

Type	Function	Fan-out each output	Propagation Delay tpd ns typ	Total Power Dissipation mW typ	1-999	1000-4999
MC830P	Dual 4-Input Gate NAND/NOR	8	30	22	1.55	1.15
MC831P	Clocked Flip-Flop	7	40	55	3.00	2.25
MC832P	Dual 4-Input Buffer	25	35	85	1.65	1.25
MC833P	Dual 4-Input Gate Expander	—	—	—	1.35	1.00
MC834P	Hex Inverter	8	30	66	2.00	1.50
MC844P	Dual 4-Input Power Gate NAND/NOR	27	30	65	1.65	1.25
MC845P	Clocked Flip-Flop	12	40	60	3.00	2.25
MC846P	Quad 2-Input Gate NAND/NOR	8	30	44	1.65	1.25
MC848P	Clocked Flip-Flop	11	40	70	3.00	2.25
MC849P	Quad 2-Input Gate NAND/NOR (2kΩ pull-up resistor)	7	25	66	1.65	1.25
MC850P	Pulse Triggered Binary	10	15	50	4.50	3.35
MC851P	Monostable Multivibrator	10	40	30	4.50	3.35
MC852P	Dual J-K Flip-Flop (common clock and Cd, sep. Sd)	12	40	120	4.75	3.60
MC853P	Dual J-K Flip-Flop (separate clock and Sd, no Cd)	12	40	120	4.75	3.60
MC855P	Dual J-K Flip-Flop (common clock and Cd, sep. Sd)	11	40	140	4.75	3.60
MC856P	Dual J-K Flip-Flop (separate clock and Sd, no Cd)	11	40	140	4.75	3.60
MC861P	Dual 4-Input Gate NAND/NOR (2 kΩ pull-up resistor)	7	25	33	1.65	1.25
MC862P	Triple 3-Input Gate NAND/NOR	8	30	33	1.65	1.25
MC863P	Triple 3-Input Gate NAND/NOR (2 kΩ pull-up resistor)	7	25	50	1.65	1.25

Motorola Integrated Circuits

MRTL INTEGRATED CIRCUITS (Operating Temperature: —55°C to +125°C)

Type	Function	Case	1-24	25-99	100-999
MC900G	Buffer	TO-99	6.75	5.40	4.50
MC902G	R-S Flip-Flop	TO-99	6.75	5.40	4.50
MC974G	J-K Flip-Flop	TO-99	10.10	8.10	6.75
MC900F	Buffer	TO-91	8.80	7.00	5.85
MC903F	3-Input Gate NAND/NOR	TO-91	8.80	7.00	5.85
MC904F	Half Adder	TO-91	10.55	8.45	7.00
MC905F	Half-Shift Register	TO-91	10.55	8.45	7.00
MC906F	Half-Shift Register (w/o inverter)	TO-91	10.55	8.45	7.00
MC907F	4-Input Gate NAND/NOR	TO-91	8.80	7.00	5.85
MC914F	Dual 2-Input Gate NAND/NOR	TO-91	8.80	7.00	5.85
MC915F	Dual 3-Input Gate NAND/NOR	TO-91	8.80	7.00	5.85
MC916F	J-K Flip-Flop	TO-91	13.20	10.55	8.80

Type	Function	Case	1-24	25-99	100-999
MC924F	Quad 2-Input Gate NAND/NOR	TO-86	13.10	10.50	8.75
MC925F	Dual 4-Input Gate NAND/NOR	TO-86	13.10	10.50	8.75
MC926F	J-K Flip-Flop	TO-91	13.20	10.55	8.80
MC927F	Quad Inverter	TO-91	8.80	7.00	5.85
MC929F	5-Input Gate NAND/NOR	TO-91	8.80	7.00	5.85
MC985F	Quad 2-Input Expander	TO-86	13.10	10.50	8.75
MC986F	Dual 4-Input Expander	TO-86	13.10	10.50	8.75
MC988F	Dual 3-Input Buffer, non inverting	TO-86	14.10	11.20	9.35
MC989F	Hex Inverter	TO-86	10.55	8.40	7.00
MC990F	Dual J-K Flip-Flop	TO-86	19.50	15.80	13.20
MC992F	Triple 3-Input Gate NAND/NOR	TO-86	14.10	11.20	9.35
MC999F	Dual Buffer	TO-91	10.75	8.60	7.15

MRTL INTEGRATED CIRCUITS (Operating Temperature: 0°C to +100°C)

MC800G	Buffer	TO-99	3.60	2.90	2.40
MC801G	Counter Adapter	TO-99	3.60	2.90	2.40
MC802G	R-S Flip-Flop	TO-99	3.60	2.90	2.40
MC803G	3-Input Gate NAND/NOR	TO-99	3.60	2.90	2.40
MC804G	Half Adder	TO-99	3.65	2.95	2.45
MC805G	Half-Shift Register	TO-99	5.25	4.20	3.50
MC806G	Half-Shift Register (w/o inverter)	TO-99	5.25	4.20	3.50
MC807G	4-Input Gate NAND/NOR	TO-99	3.60	2.90	2.40
MC814G	Dual 2-Input Gate NAND/NOR	TO-99	3.60	2.90	2.40
MC815G	Dual 3-Input Gate NAND/NOR	TO-100	3.95	3.20	2.65
MC816G	J-K Flip-Flop	TO-99	6.60	5.30	4.40
MC826G	J-K Flip-Flop	TO-100	6.60	5.30	4.40
MC829G	5-Input Gate NAND/NOR	TO-99	3.60	2.90	2.40
MC874G	J-K Flip-Flop	TO-99	6.60	5.30	4.40
MC899G	Dual Buffer	TO-100	4.35	3.50	2.90
MC800F	Buffer	TO-91	4.70	3.75	3.10
MC803F	3-Input Gate NAND/NOR	TO-91	4.70	3.75	3.10
MC804F	Half Adder	TO-91	4.75	3.85	3.20

MC805F	Half-Shift Register	TO-91	6.85	5.45	4.55
MC806F	Half-Shift Register (w/o inverter)	TO-91	6.85	5.45	4.55
MC807F	4-Input Gate NAND/NOR	TO-91	4.70	3.75	3.10
MC814F	Dual 2-Input Gate NAND/NOR	TO-91	4.70	3.75	3.10
MC815F	Dual 3-Input Gate NAND/NOR	TO-91	5.20	4.15	3.45
MC816F	J-K Flip-Flop	TO-91	8.60	6.90	5.70
MC824F	Quad 2-Input Gate NAND/NOR	TO-86	7.05	5.60	4.65
MC825F	Dual 4-Input Gate NAND/NOR	TO-86	7.05	5.60	4.65
MC826F	J-K Flip-Flop	TO-91	8.60	6.90	5.70
MC827F	Quad Inverter	TO-91	5.20	4.15	3.45
MC829F	5-Input Gate NAND/NOR	TO-91	4.70	3.75	3.10
MC885F	Quad 2-Input Expander	TO-86	7.05	5.65	4.65
MC886F	Dual 4-Input Expander	TO-86	7.05	5.65	4.65
MC888F	Dual 3-Input Buffer, non inverting	TO-86	7.50	6.00	5.00
MC889F	Hex Inverter	TO-86	6.25	5.00	4.15
MC890F	Dual J-R Flip-Flop	TO-86	12.90	10.35	8.55
MC892F	Triple 3-Input Gate NAND/NOR	TO-86	7.50	6.00	5.00
MC899F	Dual Buffer	TO-91	5.65	4.55	3.75

INDUSTRIAL/COMMERCIAL MRTL INTEGRATED CIRCUITS (Operating Temperature: +15 to +55°C)

Type	Function	Case	1-999	1000-4999
MC700G	Buffer	TO-99	1.85	1.40
MC701G	Counter Adapter	TO-99	1.85	1.40
MC702G	R-S Flip-Flop	TO-99	1.85	1.40
MC703G	3-Input Gate NAND/NOR	TO-99	1.85	1.40
MC704G	Half Adder	TO-99	2.60	1.95
MC705G	Half-Shift Register	TO-99	3.00	2.25
MC706G	Half-Shift Register (w/o inverter)	TO-99	3.00	2.25
MC707G	4-Input Gate NAND/NOR	TO-99	1.85	1.40
MC708G	Half Adder	TO-99	1.60	1.20
MC709G	2-Input Buffer	TO-99	1.85	1.40
MC710G	Dual 2-Input Gate NAND/NOR	TO-99	1.40	1.05
MC711G	4-Input Gate AND/NAND-OR/NOR	TO-99	1.40	1.05
MC712G	Half Adder	TO-99	1.60	1.20
MC713G	Type D Flip-Flop	TO-99	2.75	2.05
MC714G	Dual 2-Input Gate NAND/NOR	TO-99	1.85	1.40
MC715G	Dual 3-Input Gate NAND/NOR	TO-100	2.20	1.65
MC718G	Dual 3-Input Gate NAND/NOR	TO-100	2.00	1.50
MC720G	J-K Flip-Flop	TO-99	3.80	2.85
MC723G	J-K Flip-Flop	TO-99	3.80	2.85
MC726G	J-K Flip-Flop	TO-100	3.80	2.85
MC727G	Quad Inverter	TO-100	2.20	1.65
MC728G	5-Input Gate NAND/NOR	TO-99	1.40	1.05
MC729G	5-Input Gate NAND/NOR	TO-99	1.85	1.40
MC774G	J-K Flip-Flop	TO-99	3.80	2.85
MC799G	Dual Buffer	TO-100	2.25	1.70

Type	Function	Case	1-24	25-99	100-999
MC700F	Buffer	TO-91	3.30	2.65	2.15
MC703F	3-Input Gate NAND/NOR	TO-91	3.30	2.65	2.15
MC704F	Half Adder	TO-91	3.35	2.70	2.25
MC705F	Half-Shift Register	TO-91	4.80	3.80	3.20
MC706F	Half-Shift Register (w/o inverter)	TO-91	4.80	3.80	3.20
MC707F	4-Input Gate NAND/NOR	TO-91	3.30	2.65	2.15
MC708F	Half Adder	TO-91	2.60	2.10	1.75
MC709F	2-Input Buffer	TO-91			

Type	Function	Case	1-24	25-99	100-999
MC710F	Dual 2-Input Gate NAND/NOR	TO-91	2.85	2.30	1.95
MC711F	4-Input Gate AND/NAND-OR/NOR	TO-91	2.30	1.80	1.50
MC712F	Half Adder	TO-91	2.30	2.10	1.50
MC713F	Type D Flip-Flop	TO-91	2.60	1.80	1.75
MC714F	Dual 2-Input Gate NAND/NOR	TO-91	3.75	3.00	2.50
MC715F	Dual 3-Input Gate NAND/NOR	TO-86	3.30	2.65	2.15
MC717F	Quad 2-Input Gate NAND/NOR	TO-91	3.65	2.90	2.40
MC718F	Dual 3-Input Gate NAND/NOR	TO-86	3.40	2.75	2.25
MC719F	Dual 4-Input Gate NAND/NOR	TO-91	2.75	2.15	1.80
MC720F	J-K Flip-Flop	TO-91	3.40	2.75	2.25
MC721F	Dual 2-Input Gate Expander	TO-91	6.00	4.85	4.00
MC722F	J-K Flip-Flop	TO-91	2.10	1.70	1.50
MC723F	J-K Flip-Flop	TO-91	6.00	4.85	4.00
MC724F	Quad 2-Input Gate NAND/NOR	TO-86	4.95	3.90	3.25
MC725F	Dual 4-Input Gate NAND/NOR	TO-86	4.95	3.90	3.25
MC726F	J-K Flip-Flop	TO-91	6.00	4.85	4.00
MC727F	Quad Inverter	TO-91	3.65	2.90	2.40
MC728F	5-Input Gate NAND/NOR	TO-91	1.90	1.55	1.30
MC729F	5-Input Gate NAND/NOR	TO-91	3.30	2.65	2.15
MC776F	Dual J-K Flip-Flop	TO-86	9.05	7.25	6.00
MC778F	Dual Type D Flip-Flop	TO-86	5.65	4.50	3.80
MC785F	Quad 2-Input Expander	TO-86	4.95	3.90	3.25
MC786F	Dual 4-Input Expander	TO-86	4.95	3.90	3.25
MC788F	Dual 3-Input Buffer, non inverting	TO-86	5.25	4.20	3.50
MC789F	Hex inverter	TO-86	4.40	3.50	2.90
MC790F	Dual J-K Flip-Flop	TO-86	9.05	7.25	6.00
MC792F	Triple 3-Input Gate NAND/NOR	TO-86	5.25	4.20	3.50
MC793F	Triple 3-Input Gate NAND/NOR	TO-86	3.30	2.65	2.15
MC798F	Dual 2-Input Buffer	TO-86	4.30	3.40	2.85
MC799F	Dual Buffer	TO-91	3.95	3.20	2.65

NEWARK CAN SUPPLY ALL MOTOROLA INTEGRATED CIRCUITS AT OEM PRICES. CONTACT THE BRANCH NEAREST YOU FOR THE LATEST INFORMATION AVAILABLE. PRICES LISTED WERE IN EFFECT AS OF AUGUST 15, 1967.

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

Motorola Integrated Circuits

PLASTIC MRTL INTEGRATED CIRCUITS — CASE E

Operating Temperature 0°C to +75°C

Type	Function	1-999	1000-4999
MC815P	Dual 3-Input Gate NAND/NOR	1.15	.86
MC816P	J-K Flip-Flop	1.55	1.15
MC817P	Quad 2-Input Gate NAND/NOR	1.25	.93
MC818P	Dual 3-Input Gate NAND/NOR	1.15	.86
MC819P	Dual 4-Input Gate NAND/NOR	1.25	.93
MC822P	J-K Flip-Flop	1.55	1.15
MC824P	Quad 2-Input Gate NAND/NOR	1.25	.93
MC825P	Dual 4-Input GateNAND/NOR	1.25	.93
MC826P	J-K Flip-Flop	1.55	1.15
MC876P	Dual J-K Flip-Flop	2.40	1.85
MC878P	Dual Type D Flip-Flop	2.70	2.00
MC879P	1 J-K FF, 1 Expander, 2 Buffers	2.85	2.10
MC885P	Quad 2-Input Expander	1.50	1.12
MC886P	Dual 4-Input Expander	1.50	1.12
MC887P	1 J-K FF, 1 Inverter, 2 Buffers	2.85	2.10
MC888P	Dual 3-Input Buffer, non inverting	1.55	1.15
MC889P	Hex Inverter	1.25	.93
MC890P	Dual J-K Flip-Flop	2.30	1.72
MC892P	Triple 3-Input Gate NAND/NOR	1.38	1.05
MC893P	Triple 3-Input Gate NAND/NOR	1.38	1.05
MC898P	Dual 2-Input Buffer	1.55	1.15
MC899P	Dual Buffer	1.25	.93

Operating Temperature: +15°C to +55°C

Type	Function	1-999	1000-4999
MC715P	Dual 3-input Gate NAND/NOR	1.00	.75
MC717P	Quad 2-Input Gate NAND/NOR	1.08	.81
MC718P	Dual 3-Input Gate NAND/NOR	1.00	.75
MC719P	Dual 4-Input Gate NAND/NOR	1.08	.81
MC722P	J-K Flip Flop	1.35	1.00
MC723P	J-K Flip Flop	1.35	1.00
MC724P	Quad 2-Input Gate NAND/NOR	1.08	.81
MC725P	Dual 4-Input Gate NAND/NOR	1.08	.81
MC726P	J-K Flip Flop	1.35	1.00
MC776P	Dual J-K Flip-Flop	2.10	1.60
MC778P	Dual Type D Flip-Flop	2.35	1.75
MC779P	1 J-K FF, 1 Expander, 2 Buffers	2.45	1.80
MC785P	Quad 2-Input Expander	1.25	.95
MC786P	Dual 4-Input Expander	1.25	.95
MC787P	1 J-K FF, 1 Inverter, 2 Buffers	2.45	1.80
MC788P	Dual 3-Input Buffer, non inverting	1.35	1.00
MC789P	Hex Inverter	1.08	.81
MC790P	Dual J-K Flip-Flop	2.00	1.50
MC792P	Triple 3-Input Gate NAND/NOR	1.20	.90
MC793P	Triple 3-Input Gate NAND/NOR	1.20	.90
MC798P	Dual 2-Input Buffer	1.35	1.00
MC799P	Dual Buffer	1.08	.81

MILLIWATT MRTL INTEGRATED CIRCUITS (Operating Temperature: 0°C to +75°C)

Type	Function	Case	FAN-OUT Each Output	Propagation Delay tpd ns typ	Total Power Dissipation mW typ	1-24	25-99	100-999
MC808F	Half Adder	TO-91	4	60	19/12.5	3.70	3.00	2.50
MC809F	2-Input Buffer	TO-91	30	57	7.0/23	4.10	3.25	2.75
MC810F	Dual 2-Input Gate NAND/NOR	TO-91	4	27	10/2.5	3.25	2.60	2.15
MC811F	4-Input Gate AND/NAND—OR/NOR	TO-91	4	60	8.0/5.5	3.25	2.60	2.15
MC812F	Half Adder	TO-91	4	66	15.5/10.5	3.70	3.00	2.50
MC813F	Type D Flip-Flop	TO-91	3	75	24/17.5	5.35	4.30	3.60
MC817F	Quad 2-Input Gate NAND/NOR	TO-86	4	27	20/5.0	4.85	3.90	3.20
MC818F	Dual 3-Input Gate NAND/NOR	TO-91	4	27	12/2.5	3.90	3.10	2.60
MC819F	Dual 4-Input Gate NAND/NOR	TO-86	4	27	13/2.5	4.85	3.90	3.20
MC820F	J-K Flip-Flop	TO-91	2	50	20.5/14.5	8.60	6.90	5.70
MC821F	Dual 2 Input Gate Expander	TO-91	—	27	3.0/—	3.00	2.40	2.00
MC822F	J-K Flip-Flop	TO-91	4	70	24/20	8.60	6.90	5.70
MC828F	5-Input Gate NAND/NOR	TO-91	4	27	7.5/1.0	2.75	2.20	1.80
MC876F	Dual J-K Flip-Flop	TO-86	2	50	41/29	12.90	10.35	8.55
MC878F	Dual Type D Flip-Flop	TO-86	3	60	48/35	8.05	6.45	5.40
MC893F	Triple 3-Input Gate NAND/NOR	TO-86	4	27	18/3.5	4.70	3.70	3.10
MC898F	Dual 2-Input Buffer	TO-86	30	57	14/46	6.15	4.85	4.10

*Inputs High/Inputs Low

MILLIWATT MRTL INTEGRATED CIRCUITS (Operating Temperature: —55°C to +125°C)

Type	Function	Case	FAN-OUT Each Output	Propagation Delay tpd ns typ	Total Power Dissipation mW typ	1-24	25-99	100-999
MC908F	Half Adder	TO-91	4	60	14/8.5	10.35	8.30	6.90
MC909F	2-Input Buffer	TO-91	30	57	5.5/16	9.75	7.80	6.50
MC910F	Dual 2-Input Gate NAND/NOR	TO-91	4	27	8.0/1.0	8.40	6.75	5.60
MC911F	4-Input Gate AND/NAND—OR/NOR	TO-91	4	60	6.0/3.5	8.40	6.75	5.60
MC912F	Half Adder	TO-91	4	66	11.5/5.5	9.75	7.80	6.50
MC913F	Type D Flip-Flop	TO-91	3	75	17.5/13	11.60	9.25	7.75
MC917F	Quad 2-Input Gate NAND/NOR	TO-86	4	27	16/2.5	12.60	10.10	8.40
MC918F	Dual 3-Input Gate NAND/NOR	TO-91	4	27	9.5/1.0	8.80	7.00	5.85
MC919F	Dual 4-Input Gate NAND/NOR	TO-86	4	27	11/1.0	12.60	10.10	8.40
MC920F	J-K Flip-Flop	TO-91	2	50	15.5/10	13.20	10.55	8.80
MC921F	Dual 2 Input Gate Expander	TO-91	—	27	3.0/—	7.30	5.85	4.90
MC922F	J-K Flip-Flop	TO-91	4	70	17.5/13	13.20	10.55	8.80
MC928F	5-Input Gate NAND/NOR	TO-91	4	27	6.5/0.5	6.20	4.95	4.10
MC976F	Dual J-K Flip-Flop	TO-86	2	50	31/20	19.50	15.88	13.20
MC978F	Dual Type D Flip-Flop	TO-86	3	60	35/26	17.40	13.85	11.60
MC993F	Triple 3-Input Gate NAND/NOR	TO-86	4	27	14/2.0	10.55	8.40	7.00
MC998F	Dual 2-Input Buffer	TO-86	30	57	11/32	14.60	11.70	9.75

*Inputs High/Inputs Low

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Motorola Integrated Circuits

MTTL INTEGRATED CIRCUITS (Operating Temperature: —55°C to +125°C) TO-86 CASE

Type	Function	Fan-Out	Propagation ns typ	Power gate typ	1-24	25-99	100-999
MC500F	Dual 4-Input Gate NAND/NOR	15	10	15	11.25	9.00	7.50
MC550F	Dual 4-Input Gate NAND/NOR	7	10	15	9.60	7.70	6.40
MC501F	Expandable Quad 2-Input Gate AND-OR-INVERT	15	12	30	11.25	9.00	7.50
MC551F		7	12	30	9.60	7.70	6.40
MC502F	8-Input Gate NAND/NOR	15	12	15	11.25	9.00	7.50
MC552F	8-Input Gate NAND/NOR	7	12	15	9.60	7.70	6.40
MC503F	Dual 3-Input Gate AND-OR-INVERT (with complement)	15	11	30	15.00	12.00	10.00
MC553F		7	11	30	12.75	10.20	8.50
MC504F	Expandable Triple 3-Input Gate AND-OR-INVERT	15	12	25	11.25	9.00	7.50
MC554F		7	12	25	9.60	7.70	6.40
MC505F	Expandable Dual 4-Input Gate AND-OR-INVERT	15	12	20	11.25	9.00	7.50
MC555F		7	12	20	9.60	7.70	6.40
MC506F	Expandable 8-Input Gate NAND/NOR	15	18	15	11.25	9.00	7.50
MC556F	Expandable 8-Input Gate NAND/NOR	7	18	15	9.60	7.70	6.40
MC508F	Quad 2-Input Gate NAND/NOR	15	10	15	12.45	9.95	8.30
MC558F	Quad 2-Input Gate NAND/NOR	7	10	15	10.65	8.50	7.10
MC509F	Quad 2-Input Expander AND-OR	15	—	—	9.00	7.20	6.00
MC559F	Quad 2-Input Expander AND-OR	7	—	—	9.00	7.20	6.00
MC510F	Dual 4-Input Expander AND-OR	15	—	—	7.95	6.35	5.30
MC560F	Dual 4-Input Expander AND-OR	7	—	—	7.95	6.35	5.30
MC511F	Dual 4-Input Expander AND	15	—	—	7.95	6.35	5.30
MC561F	Dual 4-Input Expander AND	7	—	—	7.95	6.35	5.30
MC512F	Triple 3-Input Gate NAND/NOR	15	10	15	12.45	9.95	8.30
MC562F	Triple 3-Input Gate NAND/NOR	7	10	15	10.65	8.50	7.10
MC513F	R-S Flip-Flop	15	f=20 MHz	30	11.25	9.00	7.50
MC563F	R-S Flip-Flop	7	f=20 MHz	30	9.60	7.70	6.40
MC515F	J-K Flip-Flop AND	15	f=20 MHz	40	16.85	13.50	11.25
MC565F	J-K Flip-Flop AND	7	f=20 MHz	40	14.40	11.50	9.60
MC516F	J-K Flip-Flop OR	15	f=20 MHz	50	16.85	13.50	11.25
MC566F	J-K Flip-Flop OR	7	f=20 MHz	50	14.40	11.50	9.60

MTTL INTEGRATED CIRCUITS (Operating Temperature: 0°C to +75°C) CASE: TO-86

MC400F	Dual 4-Input Gate NAND/NOR	12	10	15	8.40	6.70	5.60
MC450F	Dual 4-Input Gate NAND/NOR	6	10	15	5.60	4.50	3.75
MC401F	Expandable Quad 2-Input Gate AND-OR INVERT	12	12	30	8.40	6.70	5.60
MC451F		6	12	30	5.60	4.50	3.75
MC402F	8-Input Gate NAND/NOR	12	12	15	8.40	6.70	5.60
MC452F	8-Input Gate NAND/NOR	6	12	15	5.60	4.50	3.75
MC403F	Dual 3-Input Gate AND-OR-INVERT (with complement)	12	11	30	11.25	9.00	7.50
MC453F		6	11	30	7.50	6.00	5.00
MC404F	Expandable Triple 3-Input Gate AND-OR-INVERT	12	12	25	8.40	6.70	5.60
MC454F		6	12	25	5.60	4.50	3.75
MC405F	Expandable Dual 4-Input Gate AND-OR-INVERT	12	12	20	8.40	6.70	5.60
MC455F		6	12	20	5.60	4.50	3.75
MC406F	Expandable 8-Input Gate NAND/NOR	12	18	15	8.40	6.70	5.60
MC456F	Expandable 8-Input Gate NAND/NOR	6	18	15	5.60	4.50	3.75
MC408F	Quad 2-Input Gate NAND/NOR	12	10	15	9.35	7.50	6.25
MC458F	Quad 2-Input Gate NAND/NOR	6	10	15	6.35	5.10	4.25
MC409F	Quad 2-Input Expander AND-OR	12	—	—	5.30	4.25	3.55
MC459F	Quad 2-Input Expander AND-OR	6	—	—	5.30	4.25	3.55
MC410F	Dual 4-Input Expander AND-OR	12	—	—	4.65	3.70	3.10
MC460F	Dual 4-Input Expander AND-OR	6	—	—	4.65	3.70	3.10
MC411F	Dual 4-Input Expander AND	12	—	—	4.65	3.70	3.10
MC461F	Dual 4-Input Expander AND	6	—	—	4.65	3.70	3.10
MC412F	Triple 3-Input Gate NAND/NOR	12	10	15	9.35	7.50	6.25
MC462F	Triple 3-Input Gate NAND/NOR	6	10	15	6.35	5.10	4.25
MC413F	R-S Flip-Flop	12	f=20 MHz	30	8.40	6.70	5.60
MC463F	R-S Flip-Flop	6	f=20 MHz	30	5.60	4.50	3.75
MC415F	J-K Flip-Flop AND	12	f=20 MHz	40	12.60	10.10	8.40
MC465F	J-K Flip-Flop AND	6	f=20 MHz	40	8.45	6.80	5.65
MC416F	J-K Flip-Flop OR	12	f=20 MHz	50	12.60	10.10	8.40
MC466F	J-K Flip-Flop OR	6	f=20 MHz	50	8.45	6.80	5.65

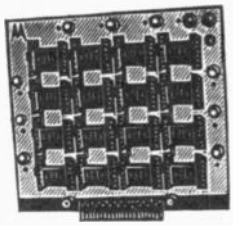
PLASTIC PACKAGE — CASE E

					1.999	1000-4999
MC400P	Dual 4-Input Gate NAND/NOR	12	10	15	3.90	2.95
MC450P	Dual 4-Input Gate NAND/NOR	6	10	15	3.10	2.35
MC401P	Expandable Quad 2-Input Gate AND-OR INVERT	12	12	30	3.90	2.95
MC451P		6	12	30	3.10	2.35
MC402P	8-Input Gate NAND/NOR	12	12	15	3.90	2.95
MC452P	8-Input Gate NAND/NOR	6	12	15	3.10	2.35
MC403P	Dual 3-Input Gate AND-OR-INVERT (with complement)	12	11	30	5.20	3.95
MC453P		6	11	30	4.15	3.10
MC404P	Expandable Triple 3-Input Gate AND-OR-INVERT	12	12	25	3.90	2.95
MC454P		6	12	25	3.10	2.35
MC405P	Expandable Dual 4-Input Gate AND-OR-INVERT	12	12	20	3.90	2.95
MC455P		6	12	20	3.10	2.35
MC406P	Expandable 8-Input Gate NAND/NOR	12	18	15	3.90	2.95
MC456P	Expandable 8-Input Gate NAND/NOR	6	18	15	3.10	2.35
MC408P	Quad 2-Input Gate NAND/NOR	12	10	15	4.95	3.75
MC458P	Quad 2-Input Gate NAND/NOR	6	10	15	3.50	2.65
MC409P	Quad 2-Input Expander AND-OR	12	—	—	3.10	2.35
MC459P	Quad 2-Input Expander AND-OR	6	—	—	3.10	2.35
MC410P	Dual 4-Input Expander AND-OR	12	—	—	3.00	2.30
MC460P	Dual 4-Input Expander AND-OR	6	—	—	3.00	2.30
MC411P	Dual 4-Input Expander AND	12	—	—	3.00	2.30
MC461P	Dual 4-Input Expander AND	6	—	—	3.00	2.30
MC412P	Triple 3-Input Gate NAND/NOR	12	10	15	4.95	3.75
MC462P	Triple 3-Input Gate NAND/NOR	6	10	15	3.50	2.65
MC413P	R-S Flip-Flop	12	f=20 MHz	30	3.90	2.95
MC463P	R-S Flip-Flop	6	f=20 MHz	30	3.10	2.35
MC415P	J-K Flip-Flop AND	12	f=20 MHz	40	5.50	4.20
MC465P	J-K Flip-Flop AND	6	f=20 MHz	40	4.50	3.40
MC416P	J-K Flip-Flop OR	12	f=20 MHz	50	5.50	4.20
MC466P	J-K Flip-Flop OR	6	f=20 MHz	50	4.50	3.40

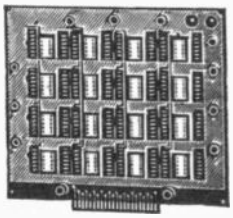
Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

Motorola Integrated Circuits

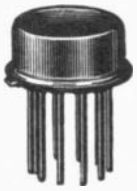
XC63



XC72



XC73



TO5

CASE-J
5-LEAD

INTEGRATED CIRCUIT BREADBOARDS

These 16-socket breadboards are designed to allow rapid interconnection and evaluation of individual integrated circuits or complete logic designs. With three supply voltages at each socket, double pin jacks, 22-pin PC edge connector or a 11BNC coaxial connector Input/Output arrangement, plus banana plugs for power connection between boards. Complete breadboarding flexibility with simple "plug in-plug out" changes possible. Designed using 11/16" glass epoxy with 2 oz. gold plated runs. rated for DC to 50 mc freq. and —65°C to +150° temp. performance.

Type	Function	1-9	10-24	25-up
XC63	16 10-pin sockets for TO-5 cases.	150.00	120.00	100.00
XC72	16 14-pin sockets for 10 and 14-pin flat packs	240.00	192.00	160.00
XC73	16 14-pin sockets for 14-pin dual in-line pkgs.	210.00	168.00	140.00

MHTL INTEGRATED CIRCUITS
(Operating Temperature Range: —30°C to +75°C
Plastic Package — Case E)

Type	Function	1-999	1000-4999
MC660P	Dual 4-Input Gate NAND/NOR (active pull-up)	4.10	3.50
MC661P	Dual 4-Input Gate NAND/NOR (passive pull-up)	4.10	3.50
MC663P	Dual J-K Flip-Flop	7.20	6.10
MC664P	Master-Slave R-S Flip-Flop	4.80	4.05

MOS INTEGRATED CIRCUITS
(Operating Temperature: 0°C to +75°C Plastic Package—
Case E; Fan-Out = 5; Noise Immunity = 1.0 V)

Type	Function	1-99	100-999
MC1120P	Dual Keyer Gate	4.90	4.20
MC1124P	Frequency Divider	6.30	5.40

LINEAR INTEGRATED CIRCUITS (Operating Temperature: —55°C to +125°C)

Type	Function	Case	1-24	25-99	100-999
MC1110G	Emitter-Coupled Amp	J	37.50	31.25	25.00
MC1510F	Video Amplifier	H	13.95	11.65	9.30
MC1510G	Video Amplifier	TO-99	12.00	10.00	8.00
MC1519	Wide Band Diff Amp	B	50.00	40.00	30.00
MC1524G	Power Amplifier	B	70.00	55.00	40.00
MC1525G	Diff Amp	B	12.00	10.00	8.00
MC1526G	Diff Amp, Darlington Inputs	B	60.00	48.00	36.00
MC1529G	Diff Amp, Darlington Inputs	B	11.25	9.35	7.50
MC1530F	Operational Amp	A	30.00	25.00	20.00
MC1530G	Operational Amp	B	27.00	22.50	18.00
MC1531F	Operational Amp	A	33.00	27.50	22.00
MC1531G	Operational Amp	B	30.00	25.00	20.00
MC1533F	Operational Amp	A	60.00	50.00	40.00

Type	Function	Case	1-24	25-99	100-999
MC1533G	Operational Amp	B	51.00	42.50	34.00
MC1540F	Sense Amplifier	A	31.50	26.25	21.00
MC1540G	Sense Amplifier	B	22.50	18.75	15.00
MC1550G	RF-IF Amplifier	B	4.25	3.55	2.85
MC1552G	Video Amplifier	B	12.00	10.00	8.00
MC1553G	Video Amplifier	B	12.00	10.00	8.00
MC1554G	Power Amplifier	B	22.50	18.75	15.00
MC1709F	Operational Amp	A	69.00	57.50	46.00
MC1709G	Operational Amp	TO-99	57.00	47.50	38.00
MC1710F	Differential Comparator	A	25.50	21.25	17.00
MC1710G	Differential Comparator	TO-99	16.50	13.75	11.00
MC1712F	Operational Amplifier	A	34.50	27.60	23.00
MC1712G	Operational Amplifier	TO-99	22.50	18.00	15.00

LINEAR INTEGRATED CIRCUITS (Operating Temperature: 0°C to +75°C)

Type	Function	Case	1-24	25-99	100-999
MC1429G	Diff Amp, Darlington Inputs	B	4.50	3.75	3.00
MC1430F	Operational Amp	A	15.00	12.50	10.00
MC1430G	Operational Amp	B	8.25	6.90	5.50
MC1431F	Operational Amp	A	17.25	14.35	11.50
MC1431G	Operational Amp	B	8.85	7.35	5.90
MC1433F	Operational Amp	A	28.50	23.75	19.00
MC1433G	Operational Amp	B	9.75	8.10	6.50
MC1440F	Sense Amplifier	A	18.00	15.00	12.00
MC1440G	Sense Amplifier	B	12.00	10.00	8.00

Type	Function	Case	1-24	25-99	100-999
MC1709CF	Operational Amp	A	31.50	25.20	21.00
MC1709CG	Operational Amp	TO-99	9.90	8.25	6.60
MC1710CF	Differential Comparator	A	18.00	14.40	12.00
MC1710CG	Differential Comparator	TO-99	8.25	6.60	5.50
MC1712CF	Operational Amp	A	18.00	14.40	12.00
MC1712CG	Operational Amp	TO-99	9.00	7.20	6.00
			1-99		100-999
MC1302P	Dual Preamplifier	E	4.90		4.20

NEWARK STOCKS OVER 2,300 DIFFERENT TYPES OF INTEGRATED CIRCUITS IN OUR TEN STOCKING WAREHOUSES COAST-TO-COAST. HOWEVER, NEW TYPES ARE CONTINUALLY BEING ADDED TO NEWARK'S COMPLETE LINE. CONTACT NEWARK'S INDUSTRIAL DEPARTMENT FOR NEW LISTINGS.

Integrated Circuit Selection Guide

LINEAR DIFFERENTIAL/OPERATIONAL AMPLIFIERS

Parameter		SN521A	SN522A	SN523A SN523IL	SN524A SN524AL	SN525	SN526	SN5510 SN5510L	SN723 SN723IL	SN724 SN724L	UNIT
Avs	Open-loop voltage gain	62	62	72	63	90	66	40	69	61	dB
BW	Bandwidth (-3db)	50	50	180	140	45	120	40000	150	140	Khz
Zin	Input impedance	.....	.....	15	1000	140	1000	6	10	800	Ko
Cin	Input capacitance	.....	.....	55	60	250	50	7	55	60	pF
Vdl	Differential-input offset Voltage	1	1	2.2	12	1	3	3	4	15	mV
Idl	Differential-input offset Current	0.2	0.2	0.5	0.02	0.016	0.006	3	1	0.044	μA
αVDI	Differential-input offset Voltage temperature coefficient	8	8	9	25	5	10	10	10	30	μV/deg
Vcmim	Maximum common-mode input Voltage range	±3	±3	±5	±5	±7	±7	±1	±5	±5	V
Vcmo	Common mode output offset Voltage	0.5	0.5	0.5	.....	0.25	0.22	3.1	0.6	.....	V
Zout	Output impedance	10000	160	200	200	10000	.....	35	250	300	o
Vom	Maximum peak-to-peak output voltage	8.2	5.4	24	15	18	11.7	4.0	20	12	V
CMRR	Common-mode rejection ratio	60	60	90	55	100	77	85	80	55	dB
Pt	Total power dissipation	28	72	100	120	100	132	165	100	120	mW
Iin	Input current	2	2	5	0.08	0.45	0.05	40	6.5	0.11	μA

DIGITAL INTEGRATED CIRCUITS SELECTION GUIDE

HIGH SPEED — HIGH AC AND DC NOISE MARGINS

Logic Family	Type of Logic	Typical Characteristics: Propagation Delay Time	Power Dissipation	Noise Immunity	Temp. Range
Series 54	TTL	13ns	10mW	1000mV	-55°-125°C
Series 54H	TTL	6ns	22mW	1000mV	-55°-125°C
Series 54 930	TTL	13ns	10mW	1000mV	-55°-125°C
Series 74	TTL	13ns	10mW	1000mV	0°-70°C
Series 74H	TTL	6ns	22mW	1000mV	0°-70°C
Series 74 930	TTL	13ns	10mW	1000mV	0°-70°C

MEDIUM SPEED — HIGH DC NOISE MARGINS

Series 15 830	DTL	25ns	8mW	750mV	0°-75°C
Series 15 930	DTL	25ns	8mW	750mV	-55°-125°C

LOW POWER — COMPATIBLE WITH STD HIGH SPEED TTL

Logic Family	Type of Logic	Typical Characteristics: Propagations Delay Time	Power Dissipation	Noise Immunity	Temp. Range
Series 54L	TTL	33ns	1mW	1000mV	-55°-125°C
Series 74L	TTL	33ns	1mW	1000mV	0°-70°C
ECONOMICAL PLUG-IN PACKAGE					
Series 54N	TTL	6ns	22mW	1000mV	0°-70°C
Series 74N	TTL	13ns	10mW	1000mV	0°-70°C
Series 74HN	TTL	6ns	22mW	1000mV	0°-70°C
Series 15 830N	DTL	25ns	8mW	750mV	0°-70°C
Series 15 930N	DTL	25ns	22mW	1000mV	0°-70°C
MODIFIED DTL					
Series 53	DTL	30ns	10mW	300mV	-55°-125°C
Series 73	DTL	30ns	10mW	300mV	0°-70°C

SENSE AMPLIFIERS

Parameter		SN5500	SN7500	SN7501	SN7502	UNIT
Vt	Differential-input threshold Voltage	17	17	17	21	mV
Vcmf	Common-mode input firing Voltage	2	2	2	2.5	V
Vout(1)	Logical 1 ouput voltage	3.2	3.2	3.2	3.2	V
VOut (0)	Logical 0 ouput voltage	0.2	0.2	0.2	0.2	V
Iin (1)	Logical level input current (strobe or reset)	1.2	1.2	.....	.....	mA

Parameter		SN5500	SN7500	SN7501	SN7502	UNIT
Iin (0)	Logical 0 level input current (strobe or reset)	.....	.....	-1.1	-1.1	mA
ZinD	Differential input impedance	0.2	0.2	5	5	Ko
Icc1	Vcc1 supply current	15	15	18	15	mA
Icc2	Vcc2 supply current	-10	-10	-10	-8	mA
Iref	Vref supply current	.....	.....	2.5	2.5	mA
Tcyc(min)	Minimum cycle time	1.5	1.5	0.7	1.5	μs

INTEGRATED CIRCUITS DEVICE DESIGNATIONS

When you order a Texas Instrument integrated circuit, the designation must contain three (and may contain four) parts.

1. PREFIX 2. UNIQUE DEVICE DESCRIPTION 3. PACKAGE 4. SPECIAL INSTRUCTIONS (optional)

EXAMPLE: SNR • S4H72 • F • 02

PREFIX
MUST CONTAIN TWO OR THREE LETTERS

SN	Standard Prefix
SNR	Hi-Rel processing without Group B and C
SNT	Hi-Rel processing with B and C
SNX	Preliminary Device prefix

UNIQUE DEVICE DESCRIPTION
MUST CONTAIN THREE, FOUR, OR FIVE CHARACTERS

EXAMPLES:	15930	52709
	74H72	5473
	510B	521A
	777	5161B

PACKAGE
MUST CONTAIN A SINGLE LETTER ONLY —F THROUGH 2

F	Flat package	Kovar	10 or 14 leads std.
R	Flat package	Kovar	10 or 14 leads long
L	TO-5 type	.....	8 or 10 leads
N	Dual in line	Plastic	14 or 16 leads

SPECIAL INSTRUCTIONS
MUST CONTAIN TWO NUMBERS ONLY IF PACKAGE DESIGNATION IS "F" OR "R"

No.	Formed leads	Insulator	Mech Pak	Tinned leads
00	No	No	No	No
01	Yes	Yes	No	No
02	No	No	Yes	No
03	No	Yes	Yes	No
04	Yes	No	Yes	No
05	Yes	Yes	Yes	No
06	No	Yes	No	No
07	Yes	No	No	No
10	No	No	No	Yes
11	Yes	Yes	No	Yes
12	No	No	Yes	Yes
13	No	Yes	Yes	Yes
14	Yes	No	Yes	Yes
15	Yes	Yes	Yes	Yes
16	No	Yes	No	Yes
17	Yes	No	No	Yes

Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

Texas Instruments Integrated Circuits

SERIES 54 TTL DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN5400	Quadruple 2-input positive NAND Gate	6.50	5.15	4.40
SN5401	Quadruple 2-input positive NAND with open collector output	6.50	5.15	4.40
SN5402	Quadruple 2-input positive NOR Gate	7.15	5.70	4.85
SN5410	Triple 3-input positive NAND gate	6.50	5.15	4.40
SN5420	Dual 4-input positive NAND gate	6.50	5.15	4.40
SN5430	8-input positive NAND gate	6.50	5.15	4.40
SN5440	Dual 4-input positive NAND Buffer	7.15	5.70	4.85
SN5450	Expandable Dual 2-wide 2-input AND-OR-INVERT gate	7.15	5.70	4.85
SN5451	Dual 2-wide 2-input AND-OR-INVERT gate	6.50	5.15	4.40
SN5453	Expandable 4-wide 2-input AND-OR-INVERT gate	7.15	5.70	4.85
SN5454	4-wide 2-input AND-OR-INVERT gate	6.50	5.15	4.40
SN5460	Dual 4 input Expander	5.85	4.65	4.00
SN5470	J-K Flip-Flop	10.35	8.25	7.05
SN5472	J-K Master slave flip-flop	9.05	7.25	6.15
SN5473	Dual J-K master slave flip-flop	13.30	10.60	9.00
SN5474	Dual D-type edge triggered flip-flop	12.90	10.30	8.80
SN5480	Gated full adder	16.20	12.90	11.00
SN5482	2-bit binary full adder	24.00	19.10	16.30
SN5491	8-bit shift register	38.90	31.30	26.40

SERIES 74 TTL DIGITAL CIRCUITS

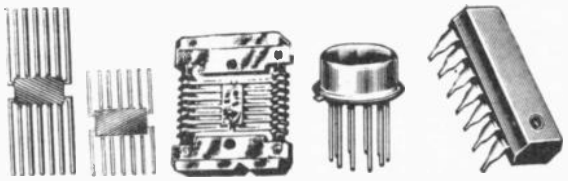
Type	Description	1-24	25-99	100-999
SN7400	Quadruple 2-input positive NAND Gate	3.65	2.90	2.50
SN7401	Quadruple 2-input positive NAND with open collector output	3.65	2.90	2.50
SN7402	Quadruple 2-input positive NOR Gate	4.05	3.20	2.75
SN7410	Triple 3-input positive NAND gate	3.65	2.90	2.50
SN7420	Dual 4-input positive NAND gate	3.65	2.90	2.50
SN7430	8-input positive NAND gate	3.65	2.90	2.50
SN7440	Dual 4-input positive NAND Buffer	4.05	3.20	2.75
SN7450	Expandable Dual 2-wide 2-input AND-OR-INVERT gate	4.05	3.20	2.75
SN7451	Dual 2-wide 2-input AND-OR-INVERT gate	3.65	2.90	2.50
SN7453	Expandable 4-wide 2-input AND-OR-INVERT gate	4.05	3.20	2.75
SN7454	4-wide 2-input AND-OR-INVERT gate	3.65	2.90	2.50
SN7460	Dual 4 input Expander	2.90	2.30	2.00
SN7470	J-K Flip-Flop	5.85	4.65	4.00
SN7472	J-K Master slave flip-flop	5.10	4.05	3.50
SN7473	Dual J-K master slave flip-flop	7.45	5.95	5.05
SN7474	Dual D-type edge triggered flip-flop	7.30	5.80	4.95
SN7480	Gated full adder	9.10	7.25	6.15
SN7482	2-bit binary full adder	13.50	10.80	9.20
SN7490	Decade Counter	14.90	11.85	10.15
SN7491	8-bit shift register	19.90	15.90	13.50

SERIES 74 — 930 DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN74930	Quadruple 2-input positive NAND gate	3.65	2.90	2.50
SN74932	Dual 4-input positive NAND Buffer	4.05	3.20	2.75
SN74946	Dual 4-input positive NAND gate	3.65	2.90	2.50
SN74948	Flip-flop wtih clear set	5.10	4.05	3.50
SN74962	Triple 3-input positive NAND gate	3.65	2.90	2.50
SN74965	8-input positive NAND gate	3.65	2.90	2.50
SN74966	Dual 2-wide 2-input AND-OR-INVERT gate	3.65	2.90	2.50

SERIES 74N TTL DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN7400N	Quadruple 2-input positive NAND gate	2.25	1.80	1.55
SN7401N	Quadruple 2-input positive NAND gate with collector	2.25	1.80	1.55
SN7402N	Quadruple 2-input positive NOR gate	2.50	2.00	1.70
SN7410N	Triple 3-input positive NAND gate	2.25	1.80	1.55
SN7420N	Dual 4-input positive NAND gate	2.25	1.80	1.55
SN7430N	8-input postve NAND gate	2.25	1.80	1.55
SN7440N	Dual 4-input positive NAND Buffer	2.50	2.00	1.70
SN7450N	Expandable dual 2-wide AND-OR-INVERT gate	2.50	2.00	1.70
SN7451N	Dual 2-wide 2-input AND-OR-INVERT gate	2.25	1.80	1.55
SN7453N	Expandable 4-wide 2-input AND-OR-INVERT gate	2.50	2.00	1.70



F-Flat Package | R-Flat Package | 2 Suffix | L TO-5 | N-Molded Plastic Plug-in

SERIES 74N TTL DIGITAL CIRCUITS (Cont'd)

Type	Description	1-24	25-99	100-999
SN7454N	4-wide-2-input AND-OR-INVERT gate	2.25	1.80	1.55
SN7460N	Dual 4-input expander	1.80	1.40	1.20
SN7470N	J-K Flip-Flop	4.05	3.20	2.75
SN7472N	J-K Master-slave Flip-Flop	3.65	2.90	2.50
SN7473N	Dual J-K Master-slave Flip-Flop	5.90	4.70	4.00
SN7474N	Dual D-type Edge triggered Flip-Flop	5.65	4.50	3.85
SN7475N	Quadruple Bistable latch	10.20	8.15	6.95
SN7476N	Dual J-K Master-slave Flip-Flop with preset and clear	6.20	4.95	4.20
SN7480N	Gated full adder	5.65	4.50	3.85
SN7482N	2-bit binary full adder	8.45	6.70	5.75
SN7483N	4-bit binary full adder	13.40	10.70	9.15
SN7490N	Decade counter	11.10	8.85	7.55
SN7491N	8-bit shift register	15.00	11.90	10.20
SN7492N	Divide by twelve counter	12.20	9.75	8.30
SN7493N	4-bit binary counter	12.20	9.75	8.30
SN7494N	Flip-flop with set and clear	3.65	2.90	2.50

SERIES 54N DIGITAL CIRCUITS

SN5400N	Quadruple 2-input positive NAND gate	4.50	3.60	3.10
SN5401N	Quadruple 2-input positive NAND gate with open collector	4.50	3.60	3.10
SN5402N	Quadruple 2-input positive NOR gate	5.00	4.00	3.40
SN5410N	Triple 3-input positive NAND gate	4.50	3.60	3.10
SN5420N	Dual 4-input positive NAND gate	4.50	3.60	3.10
SN5430N	8-nput positive NAND gate	4.50	3.60	3.10
SN5440N	Dual 4-input positive NAND Buifers	5.00	4.00	3.40
SN5441N	BCD-to-decimal decoder/driver	30.80	24.50	21.00
SN5450N	Expandable dual 2-wide 2-input AND-OR-INVERT gate	5.00	4.00	3.40
SN5451N	Dual 2-wide 2-input AND-OR-INVERT gate	4.50	3.60	3.10
SN5453N	Expandable 4-wide 2-input AND-OR-INVERT gate	5.00	4.00	3.40
SN5454N	4-wide 2-input AND-OR-INVERT gate	4.50	3.60	3.10
SN5460N	Dual 4-input expander	3.60	2.80	2.40
SN5470N	J-K Flip-Flop	8.10	6.40	5.50
SN5472N	J-K Master-slave Flip-Flop	7.30	5.80	5.00
SN5473N	Dual J-K Master-slave Flip-Flop	11.80	9.40	8.00
SN5474N	Dual D-type edge triggered Flip-Flop	11.30	9.00	7.70
SN5475N	Quadruple Bistable latch	20.40	16.30	13.90
SN5476N	Dual J-K Master-slave Flip-Flop with preset and clear	12.40	9.90	8.40
SN5480N	Gated full added	11.30	9.00	7.70
SN5482N	2-bit Binary full adder	16.90	13.40	11.50
SN5483N	4-bit Binary full adder	26.80	21.40	18.30
SN5491N	8-bit shift register	30.00	23.80	20.40
SN5494N	Flip-Flop with clear and set	7.30	5.80	5.00

SERIES 54H DIGITAL CIRCUITS

SN54H00	Quadruple 2-input NAND gate	9.70	7.75	6.60
SN54H10	Triple 3-input NAND gate	9.70	7.75	6.60
SN54H11	Triple 3-input AND gate	9.70	7.75	6.60
SN54H20	Dual 4-input NAND gate	9.70	7.75	6.60
SN54H21	Dual 4-input AND gate	9.70	7.75	6.60
SN54H30	8-input NAND gate	9.70	7.75	6.60
SN54H40	Dual 4-input buffer	10.70	8.50	7.25
SN54H50	Expandable dual 2-wide 2-input AND-OR-INVERT gate	10.70	8.50	7.25
SN54H52	Expandable 4-wide 2-2-2-3 input AND-OR gate	10.70	8.50	7.25
SN54H53	Expandable 4-wide 2-input AND-OR-INVERT gate	10.70	8.50	7.25
SN54H55	Expandable 2-wide 4-input AND-OR-INVERT gate	10.70	8.50	7.25
SN54H60	Dual 4-input expander	8.75	6.95	5.95
SN54H61	Triple 3-input expander	8.75	6.95	5.95
SN54H62	4-wide 3-2-2-3 input AND-OR Expander	8.75	6.95	5.95
SN54H71	J-K Master-slave Flip-Flop	13.60	10.85	9.25
SN54H72	J-K Master-slave Flip-Flop	13.60	10.85	9.25

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SERIES 54 — 930 DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN54-930	Quadruple 2-input positive NAND gate	6.50	5.15	4.40
SN54-932	Dual 4-input positive NAND Buffer	7.15	5.70	4.85
SN54-946	Dual 4-input positive NAND Gate	6.50	5.15	4.40
SN54-948	Flip-flop with set clear	9.05	7.25	6.15
SN54-962	Triple 3-input positive NAND Gate	6.50	5.15	4.40
SN54-965	8-input positive NAND gate	6.50	5.15	4.40
SN54-966	Dual 2-wide 2-input AND-OR-INVERT gate	6.50	5.15	4.40

SERIES 74H DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN74H00	Quadruple 2-input NAND gate	5.50	4.40	3.75
SN74H10	Triple 3-input NAND gate	5.50	4.40	3.75
SN74H11	Triple 3-input AND gate	5.50	4.40	3.75
SN74H20	Dual 4-input NAND gate	5.50	4.40	3.75
SN74H21	Dual 4-input AND gate	5.50	4.40	3.75
SN74H30	8-input NAND gate	5.50	4.40	3.75
SN74H40	Dual 4-input buffer	6.05	4.85	4.10
SN74H50	Expandable dual 2-wide 2-input AND-OR-INVERT gate	6.05	4.85	4.10
SN74H52	Expndabe 4-wide 2-2-2-3 input AND-OR gate	6.05	4.85	4.10
SN74H53	Expandable 4-wide 2-input AND-OR-INVERT gate	6.05	4.85	4.10
SN74H55	Expandable 2-wide 4-input AND-OR-INVERT gate	6.05	4.85	4.10
SN74H60	Dual 4-input expander	4.40	3.50	2.95
SN74H61	Triple-3-input expander	4.40	3.50	2.95
SN74H62	4-wide 3-2-2-3 input AND-OR Expander	4.40	3.50	2.95
SN74H71	J-K Master-slave Flip-Flop	7.70	6.15	5.20
SN74H72	J-K Master-slave Flip-Flop	7.70	6.15	5.20

SERIES 74HN DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN74H00N	Quadruple 2-input NAND gate	3.40	2.70	2.30
SN74H10N	Triple 3-input NAND gate	3.40	2.70	2.30
SN74H11N	Triple 3-input AND gate	3.40	2.70	2.30
SN74H20N	Dual 4-input NAND gate	3.40	2.70	2.30
SN74H21N	Dual 4-input AND gate	3.40	2.70	2.30
SN74H30N	8-input NAND gate	3.40	2.70	2.30
SN74H40N	Dual 4-input buffer	3.75	2.95	2.55
SN74H50N	Expandable dual 2-wide 2-input AND-OR-INVERT gate	3.75	2.95	2.55
SN74H52N	Expandable 4-wide 2-2-2-3 input AND-OR gate	3.75	2.95	2.55
SN74H53N	Expandable 4-wide 2-input AND-OR-INVERT gate	3.75	2.95	2.55
SN74H55N	Expandable 2-wide 4-input AND-OR-INVERT gate	3.75	2.95	2.55
SN74H60N	Dual 4-input expander	2.65	2.15	1.80
SN74H61N	Triple-3-input expander	2.65	2.15	1.80
SN74H62N	4-wide 3-2-2-3 input AND-OR Expander	2.65	2.15	1.80
SN74H71N	J-K Master-slave Flip-Flop	5.50	4.40	3.75
SN74H72N	J-K Master-slave Flip-Flop	5.50	4.40	3.75

SERIES 54L DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN54L00	Quadruple 2-input NAND gate	18.80	15.15	12.90
SN54L20	Dual 4-input NAND gate	18.80	15.15	12.90
SN54L71	J-K Flip-Flop	30.70	24.80	21.10
SN54L72	J-K Flip-Flop	30.70	24.80	21.10

SERIES 74L DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN74L00	Quadruple 2-input NAND gate	12.00	9.70	8.25
SN74L20	Dual 4-input NAND gate	12.00	9.70	8.25
SN74L71	R-S Flip-Flop	20.50	16.50	14.10
SN74L72	J-K Flip-Flop	20.50	16.50	14.10

SERIES 15930 DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN15-930	Dual 4-input NAND/NOR gate	6.90	5.50	4.70
SN15-931	Flip-Flop with set and clear	11.75	9.35	8.00
SN15-932	Dual 4-input NAND/NOR buffer	8.30	6.60	5.65
SN15-933	Dual 4-input expander	6.10	4.85	4.15
SN15-944	Dual 4-input NAND/NOR power gate	8.30	6.60	5.65
SN15-945	Flip-Flop with set and clear	9.70	7.75	6.60
SN15-946	Quadruple 2-input NAND/NOR gate	7.60	6.05	5.20
SN15-948	Flip-Flop with set and clear	9.70	7.75	6.60
SN15-950	Pulse triggered binary	20.40	16.25	13.85
SN15-951	Monostable mutivibrator	20.40	16.25	13.85
SN15-962	Triple 3-input NAND/NOR gate	7.60	6.05	5.20

SERIES 15930N DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN15-930N	Dual 4-input NAND/NOR gate	3.80	3.00	2.50
SN15-931N	Flip-Flop with set and clear	7.30	5.80	4.90
SN15-932N	Dual 4-input NAND/NOR buffer	4.00	3.20	2.70
SN15-933N	Dual 4-input expander	3.20	2.60	2.20
SN15-944N	Dual 4-input NAND/NOR power gate	4.00	3.20	2.70
SN15-945N	Flip-Flop with set and clear	7.30	5.80	4.90
SN15-946N	Quadruple 2-input NAND/NOR gate	4.00	3.20	2.70
SN15-948N	Flip-Flop with set and clear	7.30	5.80	4.90
SN15-950N	Pulse triggered binary	21.00	16.80	14.30
SN15-951N	Monostable multivibrator	22.60	18.10	15.40
SN15-962N	Triple 3-input NAND/NOR gate	4.00	3.20	2.70

SERIES 15830 DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN15-830	Dual 4-input NAND/NOR gate	3.90	3.10	2.65
SN15-831	Flip-Flop with set and clear	6.65	5.25	4.50
SN15-832	Dual 4-input NAND/NOR buffer	4.70	3.70	3.20
SN15-833	Dual 4-input expander	3.45	2.75	2.35
SN15-844	Dual 4-input NAND/NOR power gate	4.70	3.70	3.20
SN15-845	Flip-Flop with set and clear	5.45	4.35	3.70
SN15-846	Quadruple 2-input NAND/NOR gate	4.30	3.40	2.90
SN15-848	Flip-Flop with set and clear	5.45	4.35	3.70
SN15-850	Pulse triggered binary	11.70	9.30	8.00
SN15-851	Monostable multivibrator	11.70	9.30	8.00
SN15-862	Triple 3-input NAND/NOR gate	4.30	3.40	2.90

SERIES 15830N DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN15-830N	Dual 4-input NAND/NOR gate	1.90	1.60	1.40
SN15-831N	Flip-Flop with set and clear	3.65	3.00	2.80
SN15-832N	Dual 4-input NAND/NOR buffer	2.00	1.70	1.50
SN15-833N	Dual 4-input expander	1.60	1.40	1.30
SN15-844N	Dual 4-input NAND/NOR power gate	2.00	1.70	1.50
SN15-845N	Flip-Flop with set and clear	3.65	3.00	2.80
SN15-846N	Quadruple 2-input NAND/NOR gate	2.00	1.70	1.50
SN15-848N	Flip-Flop with set and clear	3.65	3.00	2.80
SN15-850N	Pulse triggered binary	10.50	8.40	7.15
SN15-851N	Monostable multivibrator	11.30	9.05	7.70
SN15-862N	Triple 3-input NAND/NOR gate	2.00	1.70	1.50

SERIES 51 LOW POWER DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN510B	R-S Flip/Flop/Counter	28.25	22.50	19.20
SN511B	R-S Flip-Flop/Counter with Emitter follower outputs	31.10	24.75	21.10
SN512B	6-input NAND/NOR gate	22.30	17.75	15.15
SN513B	6-input NAND/NOR gate with Emitter follower output	24.55	19.55	16.65
SN514B	Dual 3-input NAND/NOR gate	22.30	17.75	15.15
SN515B	EXCLUSIVE-OR gate	22.30	17.75	15.15
SN516B	Dual 2-input NAND/NOR gate and inverter buffer	22.30	17.75	15.15
SN517B	Clock driver	29.50	23.50	20.00
SN518B	"One-shot" monostable multi-vibrator	29.50	23.50	20.00
SN5101B	R-S Flip-Flop with dual preset	28.25	22.50	19.20
SN5111B	R-S Flip-Flop with emitter follower outputs and dual preset	31.10	24.75	21.10
SN5113B	Ripple counter Flip-Flop	28.25	22.50	19.20
SN5161B	Triple 2-input NAND/NOR gate	22.30	17.75	15.15
SN5162B	Triple 2-input NAND/NOR gate with emitter follower output	24.55	19.55	16.65
SN5191B	Pulse EXCLUSIVE-OR gate	29.50	23.50	20.00

SERIES 53 DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN5300	J-K Flip-Flop with preset	17.75	14.25	12.10
SN5301	J-K Flip-Flop with preset and clear	18.75	14.85	12.75
SN5302	Dual J-K Flip-Flop with preset	22.75	18.00	15.50
SN5304	Dual J-K Flip-Flop with preset and clear	22.75	18.00	15.50
SN5310	5-input expandable NAND/NOR gate	11.35	9.00	7.70
SN5311	Dual 5-input NAND/NOR gate	13.00	10.25	8.80
SN5315	10-input NAND/NOR gate	13.00	10.25	8.80
SN5320	5-input AND/OR gate OR expander	11.35	9.00	7.70
SN5330	Dual 3-input NAND/NOR gate	11.35	9.00	7.70
SN5331	Triple 3-input NAND/NOR gate	13.00	10.25	8.80
SN5340	Dual AND/OR gate (2 and 3 inputs	11.35	9.00	7.70
SN5350	Quadruple inverter/driver	11.35	9.00	7.70
SN5360	Quadruple 2-input NAND/NOR gate	13.00	10.25	8.80
SN5370	Dual EXCLUSIVE-OR gate	16.20	12.90	11.00
SN5380	"One shot" Monostable multi-vibrator	18.75	14.85	12.75

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SERIES 73 DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN7300	J-K Flip-Flop with preset	8.10	6.45	5.50
SN7301	J-K Flip-Flop with preset and clear	8.50	6.75	5.75
SN7302	Dual J-K Flip-Flop with preset	10.50	8.35	7.15
SN7304	Dual J-K Flip-Flop with preset and clear	10.50	8.35	7.15
SN7310	5-input expandable NAND/NOR gate	5.65	4.50	3.85
SN7311	Dual 5-input NAND/NOR gate	6.50	5.15	4.40
SN7315	10-input NAND/NOR gate	6.50	5.15	4.40
SN7320	5-input AND/OR gate OR expander	5.65	4.50	3.85
SN7330	Dual 3-input NAND/NOR gate	5.65	4.50	3.85
SN7331	Triple 3-input NAND/NOR gate	6.50	5.15	4.40
SN7350	Quadruple inverter/driver	5.65	4.50	3.85
SN7360	Quadruple 2-input NAND/NOR gate	6.50	5.15	4.40
SN7370	Dual EXCLESIVE-OR gate	7.70	6.15	5.25
SN7380	"One shot" Monostable multivibrator	9.75	7.75	6.60

SERIES 17900L DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN17-908L	Adder	7.35	6.35	5.40
SN17-909L	Buffer	7.00	6.05	5.10
SN17-910L	Dual 2-input gate	6.00	5.20	4.40
SN17-911L	4-input gate	6.00	5.20	4.40
SN17-912L	Half Adder	7.00	6.05	5.10
SN17-913L	D-type Flip-Flop	8.20	7.10	6.00
SN17-921L	Expander	5.25	4.55	3.85

SERIES 17800L DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN17-808L	Adder	6.00	5.05	3.95
SN17-809L	Buffer	5.00	4.70	3.35
SN17-810L	Dual 2-input gate	3.00	2.45	1.95
SN17-811L	4-input gate	3.00	2.45	1.95
SN17-812L	Half Adder	6.00	5.05	3.95
SN17-813L	D-type Flip-Flop	6.60	5.50	4.35
SN17-821L	Expander	3.00	2.45	1.95

SERIES 14300 DIGITAL CIRCUITS

Type	Description	1-24	25-99	100-999
SN14-306	Triple NAND gate, 3, 3, 2 + NODE inputs, w/o RC	7.50	5.95	5.10
SN14-310	Dual Driver, 3 inputs/ driver	7.50	5.95	5.10
SN14-313	Pulse binary counter	9.50	7.55	6.45
SN14-315	J-K Flip-Flop	9.50	7.55	6.45
SN14-316	Triple NAND gate, 3-inputs/gate, w/o RC	7.50	5.95	5.10
SN14-324	Single NAND gate, 8-inputs+NODE w/o RC	6.70	5.30	4.45
SN14-326	Triple NAND gate, 3, 3, 2 + NODE inputs with RC	7.50	5.95	5.10
SN14-327	Diode expander 4,3,3, array	5.20	4.10	3.55
SN14-331	Dual NAND gate, 4 inputs + NODE gate w/o RC	6.70	5.30	4.45
SN14-336	Triple NAND gate, 3-inputs/gate with RC	7.50	5.95	5.10

SERIES 14300 DIGITAL CIRCUITS (Cont.)

Type	Description	1-24	25-99	100-999
SN14-346	Quad NAND gate, 2-inputs/gate w/o RC	7.50	5.95	5.10
SN14-361	Dual NAND gate, 4-inputs + NODE/Gate with RC	6.70	5.30	4.45
SN14-366	Quad NAND gate, 2-inputs/gate with RC	7.50	5.95	5.10
SN14-386	Hex NAND gate, 1-input/ inverter w/o RC	10.50	8.35	7.05
SN14-396	Hex NAND gate, 1-input/ inverter with RC	10.50	8.35	7.05

SERIES 52 AND SERIES SN5510 LINEAR CIRCUITS

SN521A	Operational amplifier	36.50	29.00	24.80
SN522A	OA with emitter follower output	36.50	29.00	24.80
SN523A	General purpose DA	26.00	20.60	17.60
SN5231L	General purpose DA	26.00	20.60	17.60
SN524A	General purpose OA	17.00	13.60	11.60
SN524AL	General purpose OA	17.00	13.60	11.60
SN525	General purpose DA	35.70	28.40	24.20
SN526	General purpose DA	29.20	23.20	19.80
SN52-702	General purpose OA	17.75	14.00	12.00
SN52-702L	General purpose OA	17.75	14.00	12.00
SN52-709	High-performance OA	17.30	13.80	11.75
SN52-709L	High-performance OA	17.30	13.80	11.75
SN52-710	Differential comparator	17.75	14.00	12.00
SN52-710L	Differential comparator	17.75	14.00	12.00
SN52-711	Dual differential comparator	37.00	29.00	25.00
SN52-711L	Dual differential comparator	37.00	29.00	25.00

SERIES 72 LINEAR CIRCUITS

SN723	General purpose DA	17.85	14.20	12.10
SN7231L	General purpose DA	17.85	14.20	12.10
SN724	General purpose OA	12.15	9.70	8.25
SN724L	General purpose OA	12.15	9.70	8.25
SN725	General purpose DA	25.20	20.00	17.10
SN726	General purpose DA	20.10	16.10	13.75
SN72-702	General purpose OA	13.00	10.25	8.75
SN72-702L	General purpose OA	13.00	10.25	8.75
SN72-709	High performance OA	9.35	7.45	6.35
SN72-709L	High performance OA	9.35	7.45	6.35
SN72-710	Differential comparator	8.00	6.50	5.50
SN72-710L	Differential comparator	8.00	6.50	5.50
SN72-711	Dual differential comparator	26.00	20.75	17.50
SN72-711L	Dual differential comparator	26.00	20.75	17.50

SERIES 55 LINEAR CIRCUITS

SN5500	Magnetic core sense amp.	56.00	44.50	38.00
SN5510	Wide-band video amplifier	13.80	10.95	9.30
SN5510L	Wide-band video amplifier	13.80	10.95	9.30
SN5511	Wide-band video amplifier	22.00	18.00	15.40

SERIES 75 LINEAR CIRCUITS

SN7500	Sense amplifier with one shot output	24.40	19.35	16.50
SN7501	Sense amplifier with Flip-Flop output	37.00	29.75	24.25
SN7502	Sense amplifier wth one shot output	37.00	29.75	24.25
SN7510	Monolithic wide band video Amplifier	6.50	5.15	4.40
SN7510L	Monolithic wide band video Amplifier	6.50	5.15	4.40

THIS INTEGRATED CIRCUIT LISTING IS COMPLETE TO THE DATE OF PRINTING, AUGUST 15, 1967. BUT NEW ITEMS ARE CONTINUALLY BEING DEVELOPED AND ARE ADDED TO THE NEWARK STOCK. CHECK WITH THE NEWARK INDUSTRIAL DEPARTMENT FOR ANY NEW INTEGRATED CIRCUITS NOT LISTED. ORDERS WILL BE BILLED TO YOU AT THOSE PRICES IN EFFECT AT TIME OF SHIPMENT.

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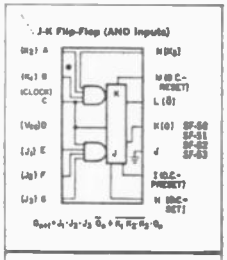

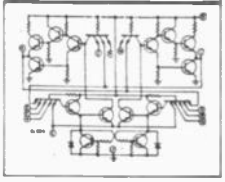

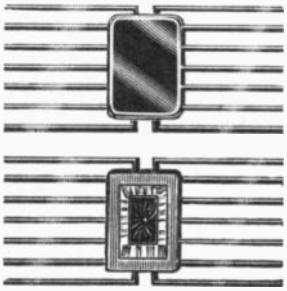

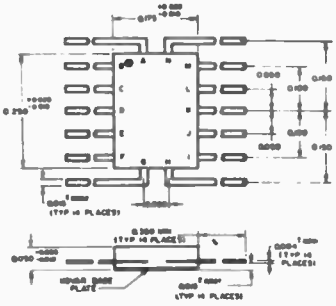

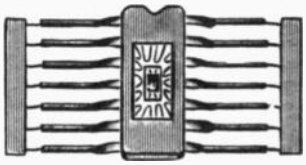

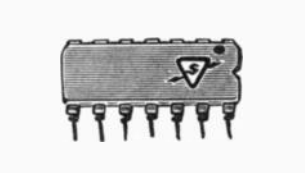

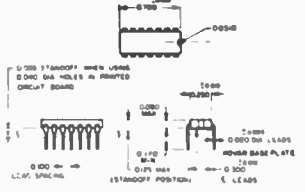

SUHL circuits characterized into two temperature ranges: —55°C to ±125°C for military applications and 0°C to +75°C for industrial and commercial use. SUHL I circuits designed for applications up to and including 20 megacycles, with gate propagation delays within 10 nanoseconds.

Single chip high speed (20 mos) Si planar epitaxial, hermetically sealed units. Low speed-power product. Provides fan-in capabilities as high as 18. Use suffix —02 for standard flat package and suffix —03 for Plug-In package when ordering types with SF, SG, SM and SA.

SUHL I

Flat Pack	Plug-In	Circuit	TPD (nsec)	Fan-Out Military	Fan-Out Industrial	1-24	25-99	100-249
SG40-02	SG40-03	Dual 4-	10	15	....	10.85	8.70	7.45
SG41-02	SG41-03	Input	10	7	....	9.95	8.00	6.80
SG42-02	SG42-03	NAND/NOR	10	....	12	7.05	5.65	4.80
SG43-02	SG43-03	Gate	10	....	6	5.90	4.70	4.00
SG50-02	SG50-03	Expand-	12	15	....	10.85	8.70	7.45
SG51-02	SG51-03	able Quad	12	7	....	9.95	8.00	6.80
SG52-02	SG52-03	2-Input	12	....	12	7.05	5.65	4.80
SG53-02	SG53-03	OR Gate	12	....	6	5.90	4.70	4.00
SG60-02	SG60-03	Single	12	15	....	10.85	8.70	7.45
SG61-02	SG61-03	8-input	12	7	....	9.95	8.00	6.80
SG62-02	SG62-03	NAND/NOR	12	....	12	7.05	5.65	4.80
SG63-02	SG63-03	Gate	12	....	6	5.90	4.70	4.00
SG70-02	SG70-03	Expand-	12	15	....	13.80	11.00	9.35
SG71-02	SG71-03	able 2-	12	7	....	12.65	10.10	8.60
SG72-02	SG72-03	Input Excl.	12	....	12	8.90	7.10	6.05
SG73-02	SG73-03	OR Gate	12	....	6	7.45	5.95	5.05
SG80-02	SG80-03	Dual Pulse	11	15	....	13.80	11.00	9.35
SG81-02	SG81-03	Shaper/	11	7	....	12.65	10.10	8.60
SG82-02	SG82-03	Delay	11	....	12	8.90	7.10	6.05
SG83-02	SG83-03	Gate	11	....	6	7.45	5.95	5.05
SG90-02	SG90-03	Exclusive	11	15	....	13.80	11.00	9.35
SG91-02	SG91-03	OR with	11	7	....	12.65	10.10	8.60
SG92-02	SG92-03	Comple-	11	....	12	8.90	7.10	6.05
SG93-02	SG93-03	ment	11	....	6	7.45	5.95	5.05
SG100-02	SG100-03	Expand-	12	15	....	10.85	8.70	7.45
SG101-02	SG101-03	able Triple	12	7	....	9.95	8.00	6.80
SG102-02	SG102-03	3-Input	12	....	12	7.05	5.65	4.80
SG103-02	SG103-03	OR Gate	12	....	6	5.90	4.70	4.00
SG110-02	SG110-03	Expand-	12	15	....	10.85	8.70	7.45
SG111-02	SG111-03	able Dual	12	7	....	9.95	8.00	6.80
SG112-02	SG112-03	4-Input	12	....	12	7.05	5.65	4.80
SG113-02	SG113-03	OR Gate	12	....	6	5.90	4.70	4.00
SG120-02	SG120-03	Single 8	18	15	....	10.85	8.70	7.45
SG121-02	SG121-03	Input	18	7	....	9.95	8.00	6.80
SG122-02	SG122-03	NAND/NOR	18	....	12	7.05	5.65	4.80
SG123-02	SG123-03	Gate	18	....	6	5.90	4.70	4.00
SG130-02	SG130-03	Dual 4-Input	25	30	....	13.80	11.00	9.35
SG131-02	SG131-03	Line Driver/	25	15	....	12.65	10.10	8.60
SG132-02	SG132-03	Lamp	25	....	24	8.90	7.10	6.05
SG133-02	SG133-03	Driver	25	....	12	7.45	5.95	5.05
SG140-02	SG140-03	Quad 2	10	15	....	10.85	8.70	7.45
SG141-02	SG141-03	Input	10	7	....	9.95	8.00	6.80
SG142-02	SG142-03	NAND/NOR	10	....	12	7.05	5.65	4.80
SG143-02	SG143-03	Gate	10	....	6	5.90	4.70	4.00
SG150-02	SG150-03	Quad 2	4	15	....	8.35	6.65	5.65
SG151-02	SG151-03	Input	4	7	....	8.35	6.65	5.65
SG152-02	SG152-03	OR	4	....	12	4.90	3.90	3.35
SG153-02	SG153-03	Expander	4	....	6	4.90	3.90	3.35
SG160-02	SG160-03	Triple 2	15	15	....	13.80	11.00	9.35
SG161-02	SG161-03	Input	15	7	....	12.65	10.10	8.60
SG162-02	SG162-03	Buss	15	....	12	8.90	7.10	6.05
SG163-02	SG163-03	Driver	15	....	6	7.45	5.95	5.05
SG170-02	SG170-03	Dual 4	3	15	....	8.35	6.65	5.65
SG171-02	SG171-03	Input	3	7	....	8.31	6.65	5.65
SG172-02	SG172-03	OR	3	....	12	4.90	3.90	3.35
SG173-02	SG173-03	Expander	3	....	6	4.90	3.90	3.35
SG180-02	SG180-03	Dual 4	20 Mcs	....	....	8.35	6.65	5.65
SG181-02	SG181-03	Input	20 Mcs	....	....	8.35	6.65	5.65
SG182-02	SG182-03	and	20 Mcs	....	....	4.90	3.90	3.35
SG183-02	SG183-03	Expander	20 Mcs	....	....	4.90	3.90	3.35
SG190-02	SG190-03	Triple	10	15	....	10.85	8.70	7.45
SG191-02	SG191-03	Input	10	7	....	9.95	8.00	6.80
SG192-02	SG192-03	NAND/NOR	10	....	12	7.05	5.65	4.80
SG193-02	SG193-03	Gate	10	....	6	5.90	4.70	4.00
SF10-02	SF10-03	SET/	20 mc	15	....	10.85	8.70	7.45
SF11-02	SF11-03	RE-SET	20 mc	7	....	9.95	8.00	6.80
SF12-02	SF12-03	Flip-	20 mc	....	12	7.05	5.65	4.80
SF13-02	SF13-03	Flop	20 mc	....	6	5.90	4.70	4.00
SF20-02	SF20-03	2 Phase	20 mc	15	....	13.80	11.00	9.35
SF21-02	SF21-03	SR clock-	20 mc	7	....	12.65	10.10	8.60
SF22-02	SF22-03	ed Flip	20 mc	....	12	8.90	7.10	6.05
SF23-02	SF23-03	Flop	20 mc	....	6	7.45	5.95	5.05
SF30-02	SF30-03	Single	12 mc	15	....	17.20	13.75	11.65
SF31-02	SF31-03	Phase	12 mc	7	....	15.75	12.55	10.60
SF32-02	SF32-03	SRT Flip-	12 mc	....	12	11.20	8.95	7.55
SF33-02	SF33-03	Flop	12 mc	....	6	9.30	7.40	6.25
SF50-02	SF50-03	J-K	20 mc	15	....	17.20	13.75	11.65
SF51-02	SF51-03	Flip-Flop	20 mc	7	....	15.75	12.55	10.60
SF52-02	SF52-03	(and	20 mc	....	12	11.20	8.95	7.55
SF53-02	SF53-03	inputs)	20 mc	....	6	9.30	7.40	6.25

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

SUHL I (Cont'd)

Flat Pack	Plug-In	Circuit	TPD (nsec)	Fan-Out Mil.	Fan-Out Ind.	1-24	25-99	100-249
SF60-02	SF60-03	J-K	20 mc	15	....	17.20	13.75	11.65
SF61-02	SF61-03	Flip-Flop	20 mc	7	....	15.75	12.55	10.60
SF62-02	SF62-03	(or	20 mc	....	12	11.20	8.95	7.55
SF63-02	SF63-03	inputs)	20 mc	....	6	9.30	7.40	6.25
SF100-02	SF100-03	Dual J-K	35 mcs	11	....	22.20	17.70	15.00
SF101-02	SF101-03	Flip-Flop	35 mcs	6	....	20.40	16.25	13.75
SF102-02	SF102-03	Separate	35 mcs	....	9	14.40	11.50	8.10
SF103-02	SF103-03	Clock	35 mcs	....	5	12.00	9.60	9.70
SF110-02	SF110-03	Dual J-K	35 mcs	11	....	22.20	17.70	15.00
SF111-02	SF111-03	Flip-Flop	35 mcs	6	....	20.40	16.25	13.75
SF112-02	SF112-03	Common	35 mcs	....	9	14.40	11.50	9.70
SF113-02	SF113-03	Clock	35 mcs	....	5	12.00	9.60	8.10
SF120-02	SF120-03	Dual J-K	50 mcs	11	....	28.45	22.80	19.20
SF121-02	SF121-03	Flip-Flop	50 mcs	6	....	26.25	20.95	17.75
SF122-02	SF122-03	Separate	50 mcs	....	9	18.50	14.80	12.50
SF123-02	SF123-03	Clock	50 mcs	....	5	15.45	12.30	10.40
SF130-02	SF130-03	Dual J-K	50 mcs	11	....	28.45	22.80	19.20
SF131-02	SF131-03	Flip-Flop	50 mcs	6	....	26.25	20.95	17.75
SF132-02	SF132-03	Common	50 mcs	....	9	18.50	14.80	12.50
SF133-02	SF133-03	Clock	50 mcs	....	5	15.45	12.30	10.40

SUHL II

Flat Pack	Plug-In	Circuit	TPD (nsec)	Fan-Out Mil.	Fan-Out Ind.	1-24	25-99	100-249
SG200-02	SG200-03	Expandable	8	11	....	11.50	9.20	7.80
SG201-02	SG201-03	Dual 4 Input	8	6	....	10.50	8.40	7.10
SG202-02	SG202-03	AND/OR	8	....	9	7.45	5.95	5.05
SG203-02	SG203-03	Gate	8	....	5	6.20	4.85	4.20
SG210-02	SG210-03	Expandable	7	11	....	11.50	9.20	7.80
SG211-02	SG211-03	Dual 4	7	6	....	10.50	8.40	7.10
SG212-02	SG212-03	Input	7	....	9	7.45	5.95	5.05
SG213-02	SG213-03	OR Gate	7	....	5	6.20	4.95	4.20
SG220-02	SG220-03	Quad 2	6	11	....	11.50	9.20	7.80
SG221-02	SG221-03	Input	6	6	....	10.50	8.40	7.10
SG222-02	SG222-03	NAND/NOR	6	....	9	7.45	5.95	5.05
SG223-02	SG223-03	Gate	6	....	5	6.20	4.85	4.20
SG230-02	SG230-03	Quad 2	2	11	....	8.70	6.95	5.90
SG231-02	SG231-03	Input	2	6	....	8.70	6.95	5.90
SG232-02	SG232-03	OR	2	....	9	5.15	4.10	3.45
SG233-02	SG233-03	Expander	2	....	5	5.15	4.10	3.45
SG240-02	SG240-03	Dual 4	6	11	....	11.50	9.20	7.80
SG241-02	SG241-03	Input	6	6	....	10.50	8.40	7.10
SG242-02	SG242-03	NAND/NOR	6	....	9	7.45	5.95	5.05
SG243-02	SG243-03	Gate	6	....	5	6.20	4.95	4.20
SG250-02	SG250-03	Expander	7.5	11	....	11.50	9.20	7.80
SG251-02	SG251-03	Quad 2	7.5	6	....	10.50	8.40	7.10
SG252-02	SG252-03	Input	7.5	....	9	7.45	5.95	5.05
SG253-02	SG253-03	OR Gate	7.5	....	5	6.20	4.95	4.20
SG260-02	SG260-03	Single 8	8	11	....	11.50	9.20	7.80
SG261-02	SG261-03	Input	8	6	....	10.50	8.40	7.10
SG262-02	SG262-03	NAND/NOR	8	....	9	7.45	5.95	5.05
SG263-02	SG263-03	Gate	8	....	5	6.20	4.95	4.20
SG270-02	SG270-03	Dual 4	2	11	....	8.70	6.95	5.90
SG271-02	SG271-03	Input	2	6	....	8.70	6.95	5.90
SG272-02	SG272-03	OR	2	....	9	5.15	4.10	3.45
SG273-02	SG273-03	Expander	2	....	5	5.15	4.10	3.45
SG280-02	SG280-03	Expandable	11	10	....	10.85	8.70	7.45
SG281-02	SG281-03	Dual 4	11	5	....	9.95	8.00	6.80
SG282-02	SG282-03	Input AND/	11	....	8	7.05	5.65	4.80
SG283-02	SG283-03	OR Gate	11	....	4	5.90	4.70	4.00
SG290-02	SG290-03	Dual 2 & 3	11	10	....	8.35	6.65	5.65
SG291-02	SG291-03	Input or	11	5	....	8.35	6.65	5.65
SG292-02	SG292-03	Expander	11	....	8	4.90	3.90	3.35
SG293-02	SG293-03		11	....	4	4.90	3.90	3.35
SG300-02	SG300-03	Expandable	7	11	....	11.50	9.20	7.88
SG301-02	SG301-03	Triple 3-	7	6	....	10.50	8.40	7.10
SG302-02	SG302-03	Input AND/	7	....	9	7.45	5.95	5.05
SG303-02	SG303-03	OR Gate	7	....	5	6.20	4.95	4.20
SG310-02	SG310-03	Expandable	7	11	....	15.10	12.05	10.25
SG311-02	SG311-03	Dual 2-Input	7	6	....	13.90	11.05	9.45
SG312-02	SG312-03	Exclusive	7	....	9	9.80	7.80	6.65
SG313-02	SG313-03	OR Gate	7	....	5	8.25	6.60	5.60
SF200-02	SF200-03	Single J-K	50 mcs	11	....	19.00	15.15	12.85
SF201-02	SF201-03	Flip-Flop	50 mcs	6	....	17.50	14.00	11.85
SF202-02	SF202-03	AND	50 mcs	....	9	12.35	9.85	8.35
SF203-02	SF203-03	Input	50 mcs	....	5	10.25	8.20	6.95
SF210-02	SF210-03	Single	50 mcs	11	....	19.00	15.15	12.85
SF211-02	SF211-03	J-K	50 mcs	6	....	17.50	14.00	11.85
SF212-02	SF212-03	Flip-Flop	50 mcs	....	9	12.35	9.85	8.35
SF213-02	SF213-03	OR Input	50 mcs	....	5	10.25	8.20	6.95
SF250-02	SF250-03	J-K Flip-	30 mcs	11	....	19.00	15.15	12.85
SF251-02	SF251-03	Flop and	30 mcs	6	....	17.50	14.00	11.85
SF252-02	SF252-03	Inputs	30 mcs	....	9	12.35	9.85	8.35
SF253-02	SF253-03		30 mcs	....	5	10.25	8.20	6.95
SF260-02	SF260-03	J-K Flip-	30 mcs	11	....	19.00	15.15	12.85
SF261-02	SF261-03	Flop or	30 mcs	6	....	17.50	14.00	11.85
SF262-02	SF262-03	Inputs	30 mcs	....	9	12.35	9.85	8.35
SF263-02	SF263-03		30 mcs	....	5	10.25	8.20	6.95

MONOLITHIC DIGITAL FUNCTIONAL ARRAYS

Flat Pack	Plug-In	Function	1-24	25-99	100-249
SM10-02	SM10-03	Full Adder	22.85	18.10	15.30
SM11-02	SM11-03		20.80	16.60	14.05
SM12-02	SM12-03		14.70	11.70	9.90
SM13-02	SM13-03		12.25	9.75	8.25
SM20-02	SM20-03	Fast Adder Dependent Carry	22.85	18.10	15.30
SM21-02	SM21-03		20.80	16.60	14.05
SM22-02	SM22-03		14.70	11.70	9.90
SM23-02	SM23-03		12.25	9.75	8.25
SM30-02	SM30-03	Fast Adder Independent Carry	22.85	18.10	15.30
SM31-02	SM31-03		20.80	16.60	14.05
SM32-02	SM32-03		14.70	11.70	9.90
SM33-02	SM33-03		12.25	9.75	8.25
SM40-02	SM40-03	Carry Decoder	17.35	13.85	11.75
SM41-02	SM41-03		17.35	13.85	11.75
SM42-02	SM42-03		10.20	8.15	6.90
SM43-02	SM43-03		10.20	8.15	6.90
SM50-02	SM50-03	Decade Divider	36.20	28.90	24.45
SM51-02	SM51-03		33.25	26.55	22.45
SM52-02	SM52-03		23.50	18.75	15.85
SM53-02	SM53-03		19.60	15.60	13.20
SM60-02	SM60-03	4 Bit Storage Register Buss Transfer Output	25.70	20.50	17.35
SM61-02	SM61-03		23.55	18.80	15.90
SM62-02	SM62-03		16.65	13.30	11.25
SM63-02	SM63-03		13.85	11.05	9.35
SM70-02	SM70-03	4 Bit Storage Register Cascade Pull-up Outlet	25.70	20.50	17.35
SM71-02	SM71-03		23.55	18.80	15.90
SM72-02	SM72-03		16.65	13.30	11.25
SM73-02	SM73-03		13.85	11.05	9.35
SM80-02	SM80-03	16 Bit Memory	73.50	68.50	50.00
SM81-02	SM81-03		62.35	49.75	42.50
SM82-02	SM82-03		51.35	40.95	35.00
SM83-02	SM83-03		36.70	29.25	25.00

AMPLIFIERS

Type	Circuit Function	Au Pa mW	TPD nSec	1-24	25-99	100-249
SA10	Sense Amplifier	125	45	35.90	28.60	24.20
SA11	Flat-pack only TO-85	125	45	26.10	20.80	17.60
SA20	Wide band video amplifier. Plug-in pack only	100 mclinear 20db typical gain.		10.05	8.00	6.80

DTL INTEGRATED CIRCUITS

Supply voltage 5V ±10%. Average fanout: 8. Average power dissipation: 5 MW Gates, 20 MW Flip-Flop. In Ceramic hermetically sealed packages. M — Indicates −55° to +125°C Mil Temp. Range. I — indicates 0° to +75°C Ind. Temp. Range. * indicates dual expandable, ** indicates J-K/R-S Flip-Flop.

Flat Pack	Plug-In	Temp. Range	Function	1-24	25-99	100-249
S9301-02	S9301-03	M	*NAND Gate	6.60	6.60	4.45
S9303-02	S9303-03	I		3.65	3.65	2.50
S9311-02	S9311-03	M	**	9.30	9.30	6.35
S9313-02	S9313-03	I		5.10	5.10	3.50
S9321-02	S9321-03	M	4-Input	7.35	7.35	4.95
S9323-02	S9323-03	I	Buffer*	4.05	4.05	2.75
S9331-02	S9331-03	M	4-Input*	6.05	6.05	4.05
S9333-02	S9333-03	I		3.30	3.30	2.25
S9441-02	S9441-03	M	*4-Input NAND	7.35	7.35	4.95
S9443-02	S9443-03	I	"Power" Gate	4.05	4.05	2.75
S9451-02	S9451-03	M	**High	9.30	9.30	6.35
S9453-02	S9453-03	I	Performance	5.10	5.10	3.50
S9461-02	S9461-03	M	Quad 2 Input	6.60	6.60	4.45
S9463-02	S9463-03	I	NAND Gate	3.65	3.65	2.50
S9481-02	S9481-03	M	Fast Rise	9.30	9.30	6.35
S9483-02	S9483-03	I	**Time	5.10	5.10	3.50
S9621-02	S9621-03	M	Triple 3-Input	6.60	6.60	4.45
S9623-02	S9623-03	I	NAND Gate	3.65	3.65	2.50

MIXING PRIVILEGES

Pricing for mixed quantities of integrated circuits: Price benefit given where single order consists of mixture of Integrated Circuit types on the price list and in the same type package. Types within the following groups may not be added to any other group in calculating price cut.

A:—SA10 and SA11
B:—SA20, 21
C:—Any SF or SG prefixed types Except series SF100, SF110, SF120, SF130
D:—SM10, SM20, SM30, SM40 series
E:—SM50 series
F:—SM60 and SM70 series
G:—SM80 series
H:—SM100, SM110, SM120, SM130 series
I:—Any S-prefixed types

SPRAGUE Integrated Circuits

THE MARK OF RELIABILITY

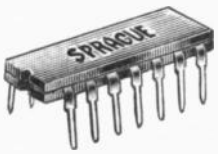

FIG. A

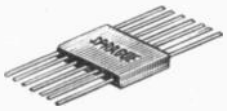

FIG. B

● NEW SERIES USN 7400A (0°C to +70°C) Fig. A COMPATIBLETTL LOGIC HIGH SPEED LOW POWER

All gates of classical TTL design utilizing multiple-emitter input transistors for optimum switching speed. Compatible and interchangeable with other similar TTL logic.

14 LEAD PLASTIC DUAL IN LINE PACKAGE

Type Number	Circuit Function	1-24	25-99	100-999
USN7400A	Quad 2-Input NAND Gate	2.25	1.80	1.55
USN7410A	Triple 3-Input NAND Gate	2.25	1.80	1.55
USN7420A	Dual 4-Input NAND Gate	2.25	1.80	1.55
USN7430A	Single 8-Input NAND Gate	2.25	1.80	1.55
USN7440A	Dual 4-Input NAND Power Gate	2.50	2.00	1.70
USN7450A	Dual 4-Input EXCLUSIVE-OR Gate	2.50	2.00	1.70
USN7460A	Dual 4-Input Gate Expander	1.80	1.40	1.20
USN7470A	DC Clocked J-K Binary Element	4.05	3.20	2.75
USN7474A	Dual D Type Flip Flop	5.65	4.50	3.85
USN7479A	Dual AC Flip Flop	7.10	5.70	5.00

● NEW SERIES 8000J (—55°C to +125°C) Fig. B COMPATIBLE TTL LOGIC HIGH SPEED-LOW POWER

These circuits offer a high DC noise margin of 1 Volt. High performance, high speed, and low pre-power consumption. Recommended power supply is 5 Volts.

IN 14 LEAD FLAT PACK

SE8416J Type Number	Circuit Function	1-24	25-99	100-999
	Dual4-InputExpandableNANDGate	6.60	5.30	4.40
SE8417J	Dual3-InputExpandableNANDGate	6.60	5.30	4.40
SE8424J	Dual AC Binary Element	13.10	10.50	8.75
SE8440J	Dual EXCLUSIVE OR Gate	6.60	5.30	4.40
SE8455J	Dual 4-Input Buffer/Driver	8.00	6.40	5.35
SE8480J	Quad 2-Input NAND Gate	6.60	5.30	4.40
SE8806J	Dual 4-Input Gate Expander	6.00	4.80	4.00
SE8808J	Single 8-Input NAND Gate	6.60	5.30	4.40
SE8816J	Dual 4-Input NAND Gate	6.60	5.30	4.40
SE8825J	DC Clocked J.K. Binary Element	10.60	8.45	7.05
SE8826J	Dual J.K. Binary Element	13.10	10.50	8.75
SE8828J	Dual Type D Flip Flop	12.90	10.30	8.40
SE8840J	Dual4-InputEXCLUSIVEORGATE	6.60	5.30	4.40
SE8855J	Dual 4-Input Power Gate	7.30	5.80	4.85
SE8870J	Triple 3-Input NAND Gate	6.60	5.30	4.40
SE8880J	Quad 2-Input NAND Gate	6.60	5.30	4.40
SE8280J	Decade Counter	49.00	39.30	32.70
SE8281J	Binary Counter	49.00	39.30	32.70

COMPLETE INFORMATION & ENGINEERING BULLETIN IMMEDIATELY AVAILABLE UPON REQUEST

● NEW SERIES SP500A (+15°C to +55°C) AND ST600A (0°C to +70°C) INDUSTRIAL/COMMERCIAL Fig. A

Both series offer a noise margin of 700 mV to 2V, high performance, high speed, and low power consumption. Recommended power supply is 5 Volts.

DTL LOGIC IN 14 LEAD PLASTIC DUAL IN LINE PACKAGE

Type Number	Circuit Function	1-24	25-99	100-999	1000-4999
SP616A	Dual 4-Input NAND Gate	1.75	1.40	1.15	1.10
SP620A	J-K Binary Element	3.45	2.75	2.30	2.20
SP629A	RST Binary Element	3.45	2.75	2.30	2.20
SP631A	Quad 2-Input Gate Expander	1.50	1.20	1.00	.95
SP659A	Dual 4-Input Buffer/Driver	1.95	1.55	1.30	1.20
SP670A	Triple 3-Input NAND Gate	1.95	1.55	1.30	1.20
SP680A	Quad 2-Input NAND Gate	1.95	1.55	1.30	1.20
ST616A	Dual 4-Input NAND Gate	1.80	1.45	1.20	1.15
ST620A	J-K Binary Element	3.50	2.80	2.35	2.25
ST629A	RST Binary Element	3.50	2.80	2.35	2.25
ST631A	Quad 2-Input Gate Expander	1.55	1.25	1.05	1.00
ST659A	Dual 4-Input Buffer/Driver	2.00	1.60	1.35	1.25
ST670A	Triple 3-Input NAND Gate	2.00	1.60	1.35	1.25
ST680A	Quad 2-Input NAND Gate	2.00	1.60	1.35	1.25

● NEW SERIES SP800A (+15°C to +55°C) AND ST800A (0°C to +70°C) HIGH SPEED TTL LOGIC Fig. A

Offer noise margin of 750 mV to 2V. High speed, moderate power consumption. Recommended power supply is 5 volts.

14 LEAD PLASTIC DUAL IN LINE PACKAGE

Type Number	Circuit Function	1-24	25-99	100-999	1000-4999
SP806A	Dual 4-Input Gate Expander	1.75	1.35	1.15	1.10
SP808A	Single 8-Input NAND Gate	2.20	1.75	1.45	1.40
SP816A	Dual 4-Input NAND Gate	2.20	1.75	1.45	1.40
SP825A	DC Clocked J-K Binary Element	4.00	3.15	2.60	2.45
SP826A	Dual J-K Binary Element	7.05	5.65	4.70	4.45
SP828A	Dual Type D Flip Flop	5.60	4.45	3.65	3.45
SP840A	Dual 4-Input Exclusive OR Gate	2.45	1.95	1.60	1.50
SP855A	Dual 4-Input Power Gate	2.45	1.95	1.60	1.50
SP870A	Triple 3-Input NAND Gate	2.20	1.75	1.45	1.40
SP880A	Quad 2-Input NAND Gate	2.20	1.75	1.45	1.40
ST806A	Dual 4-Input Gate Expander	1.80	1.40	1.15	1.10
ST808A	Single 8-InputNAND Gate	2.25	1.80	1.50	1.45
ST816A	Dual 4-Input NAND Gate	2.25	1.80	1.50	1.45
ST825A	DC Clocked J-K Binary Element	4.05	3.20	2.65	2.50
ST826A	Dual J-K Binary Element	7.10	5.70	4.75	4.50
ST828A	Dual Type D Flip Flop	5.65	4.50	3.65	3.50
ST840A	Dual 4-Input Exclusive OR Gate	2.50	2.00	1.65	1.55
ST855A	Dual 4-Input Power Gate	2.50	2.00	1.65	1.55
ST870A	Triple 3-Input NAND Gate	2.25	1.80	1.50	1.45
ST880A	Quad 2-Input NAND Gate	2.25	1.80	1.50	1.45

● NEW COMPATIBLE MONOLYTHIC SUB-SYSTEM (0°C to +70°C)

Have counting rate of 25 MHz, power consumption of 100 mW, and excellent noise immunity plus great functional versatility.

IN 14 LEAD PLASTIC DUAL IN LINE PACKAGE

Type Number	Circuit Function	1-24	25-99	100-999	1000-4999
SE1280A	Decade Counter	24.00	19.20	14.40	.....
SE1281A	Binary Counter	24.00	19.20	14.40	.....

Sprague series SE8000, SP600, ST600, SP800, ST800 are identical with Signetics Corporation Series of identical numbers and are made under a full technology interchange with Signetics.

Elements within any single group on this page may be mixed on a single order to obtain the maximum applicable quantity discount. Mix priviledges do not apply on orders calling for elements from more than one group.

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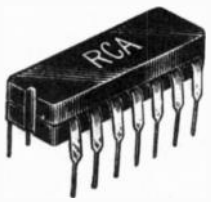
Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

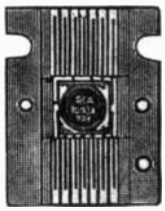
RCA

A
8-Lead



B
Dual-in Line

C
12-Lead



D
Flat-pack

LINEAR INTEGRATED CIRCUITS

Type	Function	Fig.	1-24	25-99	100-999
CA3000	Operational Amplifer	D	4.70	3.85	3.25
CA3001	Video and Wide-Band Amplifier	C	6.40	5.20	4.40
		C	4.40	3.60	3.05
CA3002	IF Amplifier	C	4.40	3.60	3.05
CA3004	RF Amplifier	C	2.80	2.30	1.95
CA3005	RF Amplifier	C	6.80	5.55	4.70
CA3006	RF Amplifier	C	6.00	4.90	4.15
CA3007	Audio Amplifier	D	12.00	9.75	8.25
CA3008	Operational Amplifier	C	9.20	7.50	6.35
CA3010	Operational Amplifier	C	1.55	1.25	1.10
CA3011	FM IF Amplifier	C	2.25	1.85	1.55
CA3012	FM IF Amplifier				
CA3013	FM IF Amplifiers/	C	2.65	2.15	1.85
CA3014	Discriminators/ AF Amplifiers.	A	3.15	2.55	2.15
CA3015	Operational Amplifier	C	10.00	8.15	6.90
CA3016	Operational Amplifier	D	12.80	10.40	8.80
CA3018	Transistor Array	C	2.40	1.95	1.65
CA3019	Diode Array	.....	2.40	1.95	1.65

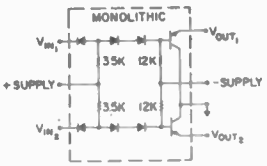
Type	Function	Fig.	1-24	25-99	100-999
CA3020	Multi purpose Wide-Band Amplifier	C	2.80	2.30	1.95
CA3021	Video and Wide-Band Amplifier	C	3.60	2.95	2.50
CA3022	Video and Wide-Band Amplifier	C	3.15	2.55	2.15
CA3023	Video and Wide-Band Amplifier	C	2.95	2.40	2.05
CA3028	RF Amplifier	A	1.55	1.25	1.10
CA3029	Operational Amplifier	A	6.00	4.90	4.15
CA3030	Operational Amplifier	A	7.20	5.89	4.95
CA3031/702A	Operational Amplifier	A	8.80	7.15	6.05
CA3032/702C	Operational Amplifier	A	7.20	5.85	4.95
CA3034	High Freq. Amplifier	A	2.80	2.30	1.95
CA3034V1	High Freq. Amplifier	.....	2.80	2.30	1.95
CA3035	Ultra high gain Amp.	A	2.40	1.95	1.65
CA3035V1	Ultra high gain Amp.	.....	2.40	1.95	1.65
CA3036	Dual Darlington Array	A	1.55	1.25	1.10

DIGITAL INTEGRATED CIRCUITS

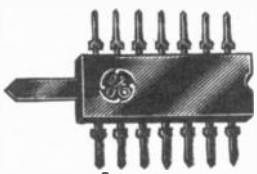
Type	Function	Fig.	1-24	25-99	100-999
CD2100	High Speed ECCSL Gate	D	6.00	4.90	4.15
CD2101	High Speed ECCSL Gate	D	6.35	5.15	4.35
CD2150	Ultra High Speed ECCSL Gate	D	5.20	4.25	3.60
CD2151	Ultra High Speed ECCSL Gate	D	5.20	4.25	3.60
CD2152	Ultra High Speed ECCSL Gate	D	5.20	4.25	3.60
CD2200	Low Power DTL Gate	D	6.00	4.90	4.15

Type	Function	Fig.	1-24	25-99	100-999
CD2201	Low Power DTL Gate	D	6.35	5.15	4.35
CD2202	Low Power DTL Gate	D	6.35	5.15	4.35
CD2203	Low Power DTL Gate	D	8.00	6.50	5.50
CD2204	Low Power DTL Gate	D	4.70	3.85	3.25
CD2205	Low Power DTL Gate	D	6.00	4.90	4.15

GENERAL ELECTRIC



PA345, PA358



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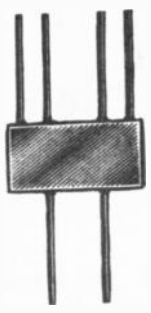

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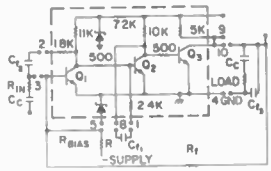
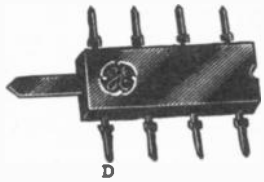
C



PA116



D

LOW LEVEL SWITCHES 6-LEAD FLAT PACK

Contains 6 diodes, 4 resistors and 2 transistors. Feature extremely low offset voltage, low capacitances, and low leakage current. PA345 is tighter spaced than PA-358.

Type	1-9	10-99	100-999
PA345	44.75	29.95	19.90
PA358	39.40	26.25	17.50

PA189—DUAL IN LINE PACKAGE

IF amp/detector with 80 db @ 4.5 Mhz. Flexible configuration-quadrature dection or regular amplifier.

Type	1-99	100-999
PA189	3.60	2.40

PA237—DUAL IN LINE PACKAGE

2 Watt audio amplifier. Wide supply voltage capability, 12-26V. Tap provided for heat linking. Output noise level <5 mV rms.

Type	1-99	100-999	1M-Up
PA237	3.98	2.65	2.38

PA222—DUAL IN LINE PACKAGE

One watt audio amplifier featuring feedback loop that eliminates thermal runaway. Current drain of 6 mA to 25 mA and typical input impedance of 55K ohms. Uses supply of 19V to 25V.

Type	1-99	100-999
PA222	3.70	2.45

PA113—TO-5

3 Stage direct coupled amplifier featuring high current and high power gains. Easy application of either negative feedback for high gain stability or postve feedback for monostable, bistable or astable applications. Uses power supply of 4.5 to 15V.

Type	1-9	10-99	100-999
PA113	15.15	10.10	6.75

PA230—DUAL IN-LINE PACKAGE

Low level amplifier. May be used as pre-amp or op-amp .12V or 6V power supply. 9.5V peak/peak output. Low input noise voltage and high open loop voltage gain.

Type	1-99	100-999	1M-Up
PA230	3.30	2.20	1.98

PA116—TO-5

Summing amplifier featuring high gain and accurate addition of AC signals. Circuit can also be used as a stable high gain voltage amplifier. Low input and output capacitances with a large output voltage swing. Current gain bandwidth without feedback; 100 Mhz.

Type	1-9	10-99	100-999
PA116	73.10	48.75	32.50

PA223—DUAL IN LINE PACKAGE

High performance operational amplifier. Features high open loop voltage gain. Darlington input configuration, ±12V power supply operation.

Type	1-99	100-999
PA223	7.05	4.70

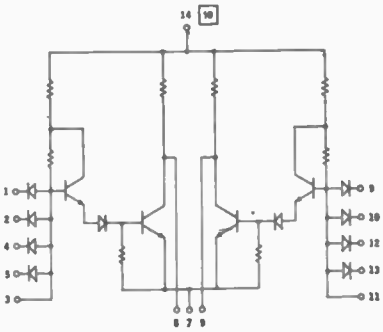
PA424—DUAL IN LINE PACKAGE

Zero voltage synchronous switch used to pulse Triac of SCR and eliminate radio frequency interference. Input terminals allow wide variation of control functions. Load must be resistive.

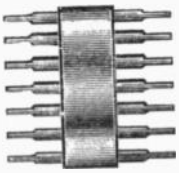
Type	1-99	100-999
PA424	3.60	2.40

RAYTHEON Integrated Circuits

NAND/NOR GATES

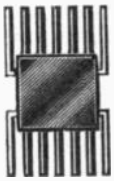


14 PIN TO-5



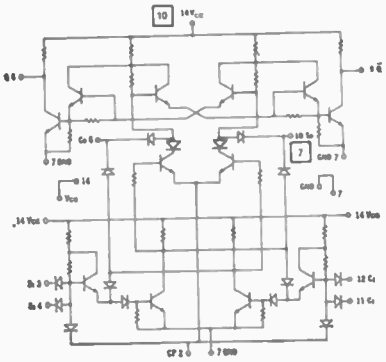
D PACKAGE

10 PIN TO-5



J PACKAGE

CLOCKED FLIP-FLOPS



LINEAR RC AND RM 700 SERIES

MILITARY

TO-5 Case	Flat Pack*	Description	1-49	50-499
RM702T	RM702Q	Wideband DC Amp	18.90	10.40
RM709T	RM709Q	High Gain Op Amp	27.00	14.80
RM710T	RM710Q	High Speed Diff. Comp	18.90	10.40
RM711T	RM711Q	Dual Comparator	27.00	14.80

* ¼ x ¼ Flat Pack with 10 Leads

COMMERCIAL

TO-5 Case	Flat Pack	Dual In Line	Description	1-49	50-499
RC702T	RC702Q	RC702D	Wideband DC Amp	9.45	5.20
RC709T	RC709Q	RC709D	High Gain Op Amp	13.50	7.40
RC710T	RC710Q	RC710D	High Speed Diff Comp	9.45	5.20
RC711T	RC711Q	RC711D	Dual Comparator	13.50	7.40

RM AND RC 930 SERIES — DTL

MILITARY

TO-5 Case	Flat Pack**	Dual In Line	Description	1-49	50-499
RM930T	RM930J	RM930D	Dual 4-NAND Gate	6.35	5.08
RM932T	RM932J	RM932D	Dual 4-Buffer	7.63	6.11
RM933T	RM933J	RM933D	Dual 4-Diode Array	5.68	4.54
RM944T	RM944J	RM944D	Dual 4-Power Gate	7.63	6.11
RM945T	RM945J	RM945D	J-K Flip-Flop	8.90	7.12
RM946T	RM946J	RM946D	Quad 2-NAND Gate	7.03	5.63
RM948T	RM948J	RM948D	J-K Flip-Flop	8.90	7.12
RM950T	RM950J	RM950D	AC Binary	12.00	9.60
RM951T	RM951J	RM951D	†	12.00	9.60
RM962T	RM962J	RM962D	Triple NAND Gate	7.03	5.63

**¼ x ¼ Flat Pack with 14 leads. (†) Monostable Multi-Vibrator.

COMMERCIAL

TO-5 Case	Flat Pack**	Dual In Line	Description	1.49	50-499
RC930T	RC930J	RC930D	Dual 4-NAND Gate	3.81	3.05
RC932T	RC932J	RC932D	Dual 4-Buffer	4.58	3.67
RC933T	RC933J	RC933D	Dual 4-Diode Array	3.40	2.72
RC944T	RC944J	RC944D	Dual 4-Power Gate	4.58	3.67
RC945T	RC945J	RC945D	J-K Flip-Flop	5.34	4.27
RC946T	RC946J	RC946D	Quad 2-NAND Gate	4.22	3.38
RC948T	RC948J	RC948D	J-K Flip-Flop	5.34	4.27
RC950T	RC950J	RC950D	AC Binary	7.20	5.76
RC951T	RC951J	RC951D	†	7.20	5.76
RC962T	RC962J	RC962D	Triple 3-NAND Gate	4.22	3.38

HIGH LEVEL TTL INTEGRATED CIRCUITS

Flat Pack‡	Dual In Line	Function	Appl.	1-49	50-499
RF12K	RF12D	Set RE-set	IP	6.96	5.58
RF13K	RF13D	Flip Flop	IS	5.27	4.22
RF22K	RF22D	2 Phase SR Clocked	IP	9.45	7.52
RF23K	RF23D	Flip-Flop	IS	6.94	5.55
RF32K	RF32D	1-Phase SRT	IP	9.45	7.52
RF33K	RF33D	Flip-Flop	IS	6.94	5.55
RF52K	RF52D	J-K Flip-Flop	IP	10.52	8.42
RF53K	RF53D	and inputs	IS	7.88	6.31
RF62K	RF62D	J-K Flip-Flops	IP	10.52	8.42
RF63K	RF63D	or inputs	IS	7.88	6.31
RG42K	RG42D	Dual 4-input	IP	6.96	5.58
RG43K	RG43D	NAND/NOR Gate	IS	5.27	4.22
RG122K	RG122D	1 8-input	IP	6.96	5.58
RG123K	RG123D	NAND/NOR Gate	IS	5.27	4.22
RG132K	RG132D	Line Driver/	IP	8.55	6.88
RG133K	RG133D	Lamp Driver	IS	6.45	5.16
RG142K	RG142D	Quad 2-input	IP	7.80	6.28
RG143K	RG143D	NAND/NOR Gate	IS	5.80	4.64
RG152K	RG152D	Quad 2 input	IP	4.99	3.99
RG153K	RG153D	or Expander	IS	4.99	3.99
RG162K	RG162D	Triple 2-input	IP	8.55	6.88
RG163K	RG163D	Bus Driver	IS	6.45	5.16
RG172K	RG172D	Dual 4-input	IP	4.20	3.36
RG173K	RG173D	or Expander	IS	4.20	3.36
RG182K	RG182D	Dual 4-input	IP	4.20	3.36
RG183K	RG183D	and Expander	IS	4.20	3.36
RG262K	RG262D	1 8-input	IP	6.96	5.58
RG263K	RG263D	NAND/NOR Gate	IS	5.27	4.22

Flat Pack‡	Dual In Line	Function	Appl.	1-49	50-499
RG52K	RG52D	Expandable Quad-	IP	6.96	5.58
RG53K	RG53D	2-input OR Gate	IS	5.27	4.22
RG62K	RG62D	1 8-input NAND/	IP	6.96	5.58
RG63K	RG63D	NOR Gate	IS	5.27	4.22
RG72K	RG72D	Expandable 2-input	IP	9.45	7.52
RG73K	RG73D	AND-NOR Gate	IS	6.94	5.55
RG92K	RG92D	Exclusive OR with	IP	9.45	7.52
RG93K	RG93D	Complement	IS	6.94	5.55
RG102K	RG102D	Expandable Triple	IP	6.96	5.58
RG103K	RG103D	3-input OR Gate	IS	5.27	4.22
RG112K	RG112D	Expandable Dual 4-	IP	6.96	5.58
RG113K	RG113D	input OR Gate	IS	5.27	4.22
RG192K	RG192D	Triple 3-input	IP	7.80	6.28
RG193K	RG193D	NAND/NOR Gate	IS	5.80	4.64
RF252K	RF252D	J-K Flip-Flop	IP	11.80	9.40
RF253K	RF253D	and inputs	IS	8.70	6.95
RF262K	RF262D	J-K Flip-Flop	IP	11.80	9.40
RF263K	RF263D	and inputs	IS	8.70	6.95
RG212K	RG212D	Expandable Dual 4-	IP	6.96	5.58
RG213K	RG213D	input or Gate	IS	5.27	4.22
RG222K	RG222D	Quad 2-input	IP	7.80	6.28
RG223K	RG223D	NAND/NOR Gate	IS	5.80	4.64
RG232K	RG232D	Quad 2-input or	IP	4.99	3.99
RG233K	RG233D	Expander	IS	4.99	3.99
RG242K	RG242D	Dual 4-input NAND/	IP	6.96	5.58
RG243K	RG243D	NOR Gate	IS	5.27	4.22
RG272K	RG272D	Dual 4-input	IP	4.20	3.36
RG273K	RG273D	or Expander	IS	4.20	3.36

IP—Industrial Prime; IS—Industrial Standard; (‡) indicates ¼ x 5/16 Flat Pack with 14 leads.

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

½ WATT COMPLEMENTARY AMPLIFIER

Model PCA-2-9. Similar to PCA-2-14 at right except for the minor changes necessary for 9 volt voltage supply.

Stock No.	Type	1-9	10-99
59F1452	PCA-2-9	5.90	4.40

1-WATT COMPLEMENTARY AMPLIFIER

Model PCA-1-9. Provides 1 watt output when connected to a crystal cartridge. Use 3 stage direct coupled circuit with a complementary output. Highly stable for interchangeability and uses negative feedback. Very low idle current allows long battery life. Supply voltage. 9 VDC Load impedance: 8-16 ohms. Input impedance: 600K ohms avg.; 220K ohms min. Frequency response: 100 Hz — 50 KHz @ —3db. Size: 1 9/16 x 3 3/16 x 2 5/8".

Stock No.	Type	1-9	10-99
59F1450	PCA-1-9	7.20	5.35

2-WATT COMPLEMENTARY AMPLIFIER

Model PCA-1-14. Provides 2 watts output when driven by crystal cartridge. Uses 3 stage direct coupled circuit with a complementary output. Low idle current allows low temperature operation and low heat output. Supply voltage: 14 VDC. Load impedance: 8-16 ohms. Input impedance 600K ohms avg.; 220K ohms min. Frequency response: 100 Hz — 40 KHz @ —3 db. Size: 1 9/16 x 3 3/16 x 2 5/8".

Stock No.	Type	1-9	10-99
59F1451	PCA-1-14	7.00	5.20

4 WATT COMPLEMENTARY AMPLIFIER

Model PCA-3B-18-1. Provides 4 watts output per channel when driven by a crystal cartridge. Unit has dual volume, bass and treble controls, plus balance control. Circuit is highly stablized DC coupled 3 stage, complementary amplifier with neg. feedback. Temperature stabilized by thermistor and uses special low noise silicon input transistor. Circuit built on 7½ x 3½" printed circuit board; contains all power supply components. Supply voltage: 18 VDC. Load impedance: 8 ohms. Input impedance: 1 megohm avg.; 300K ohms min. Frequency response: 45 Hz — 20 KHz @ —3 db. 1½ x 7½ x 3½".

Stock No.	Type	1-9	10-99
59F1454	PCA-3B-18-1	19.20	14.45

20 WATT COMPLEMENTARY AMPLIFIER

Model PCA-8-36. Provides full output with ½ volt input at high input impedance to make it compatible with a transistor type preamp. DC coupled circuit. Complete 20 watt amplifier except for power transformer. 5" x 4½" printed circuit board. Supply voltage: 36 V. Input impedance: 1 megohm avg. Frequency response: 20 Hz to 40 KHz @ —3db. 2⅜ x 5⅜ x 4½".

Stock No.	Type	1-9	10-99
59F1465	PCA-8-36	18.85	14.20

● *NEW* 4-TRANSISTOR UTILITY AMP

Model PCA-4-18A. Three stage four transistor amplifier provides a 3-watt output. High sensitivity permits use with a simple AM tuner, magnetic guitar pick-up or high impedance dynamic mike. Circuit is temperature compensated and contains power supply components for AC operation. 1% distortion at normal level.

Stock No.	Type	1-9	10-99
59F1466	PCA-4-18A	9.52	7.12

● *NEW* TAPE PLAY BACK AMPLIFIER

Model PCA-9-18. 10 transistor amplifier provides 3.0 watts output per channel when driven by a tape playback head. Pre-amp is properly equalized for 3¾ ips tape speed. 3 controls are volume, balance, and tone. Low noise transistors assure wide band frequency response.

Stock No.	Type	1-9	10-99
59F1467	PCA-9-18	25.30	18.95

LOW COST 1 WATT AMPLIFIER

Model PCA-2-14. Incorporates direct coupled circuit to provide exceptional frequency response: 80 Hz — 25 KHz @ —3 db. Temperature stabilized with thermistor. Low idle current and low temperature rise operation. Connections may be made to printed circuit board with solderless connectors. Supply voltage: 14 VDC. Load impedance: 12-16 ohms. Input impedance: 220K ohms min. Size: 1 9/16 x 2 x 2 7/8".

Stock No.	Type	1-9	10-99
59F1453	PCA-2-14	5.90	4.40

1 WATT HIGH GAIN AMPLIFIER

Model PCA-4-9. Three stage, 4 transistor unit—a high sensitivity version of PCA-1-9 at left. Can be used with simple AM tuner or ceramic cartridge. Supply voltage: 10 VDC. Load impedance: 8 ohms. Input impedance: 25K ohms avg. 20K ohms min. Frequency response: 50 Hz — 20 KHz @ —3db. 1½ x 4½ x 2".

Model PCA-4-9A. Same as above, but with tone control.

Stock No.	Type	1-9	10-99
59F1455	PCA-4-9	8.30	6.20
59F1456	PCA-4-9A	9.20	6.90

2 WATT HIGH GAIN AMPLIFIER

Model PCA-4-14. Three stage, 4 transistor amplifier—a high sensitivity version of the PCA-1-14 at left. Can be used with a simple AM tuner or ceramic cartridge. Supply voltage: 14 VDC. Load imp. 8-16 freq. ¼ ohms. Input imp. 25K ohms avg. 20K ohms min. Freq. response: 40 Hz —18 KHz @ —3db. Size: 1½ x 4½ x 2".

Model PCA-4-14A. Same as above, but with tone control.

Stock No.	Type	1-9	10-99
59F1457	PCA-4-14	8.30	6.20
59F1458	PCA-4-14A	9.20	6.90

2 WATT STEREO AMPLIFIER

Model PCA-5A-14. A stereo version of the PCA-1-14 at left. 2 watt output per channel when connected to a crystal cartridge. Volume, balance, tone controls. Supply voltage: 14 VDC. Load impedance: 8 ohms. Input impedance: 600K ohms avg. 300K ohms min. Freq. res.: 100 Hz —40 KHz @ —3 db. Size: 1⅝ x 7¼ x 2".

Stock No.	Type	1-9	10-99
59F1459	PCA-5A-14	15.80	11.90

10 WATT STEREO AMPLIFIER

Model PCA-6A-25. 8 watts output per channel when driven by ceramic cartridge. Also used with a tuner input since sensitivity is 0.5 volt. Volume, balance, bass and treble controls. Separate preamp stage for each channel. Supply voltage: 25 VDC. Load impedance: 8 ohms. Input impedance: 500K ohms avg. Freq. res.: 30 Hz — 40 KHz @ —3db. 1⅝ x 7⅝ x 4¾".

Model PCA-6A-25SCS. Same as above, but with separate preamp strip to allow mounting in compact phonographs.

Stock No.	Type	1-9	10-99
59F1460	PCA-6A-25	30.10	22.60
59F1461	PCA-6A-25SCS	31.80	23.80

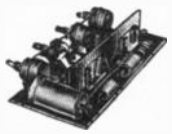
STEREO PREAMP

Model PCA-7B-18. Designed for use with 8 track stereo tape playback unit. Input sensitivity of 700 uv in adjustable output up to 1.5 v. An ideal link between tape head and low cost phono amplifiers listed on this page. Properly equalized for 3¾" speed. Supply voltage: 14-18 VDC. Input impedance: >20K ohms. Output impedance: <10K ohms. Size: 4⅞" long x 2 9/16" wide.

Model PCA-7C-18. Same as above, but without the adjustable output stage. Has an output of 40 mv.

Stock No.	Type	1-9	10-99
59F1463	PCA-7B-18	12.00	9.00
59F1464	PCA-7C-18	9.50	7.10

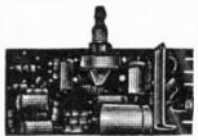
PCA-1-9



PCA-3B-18-1

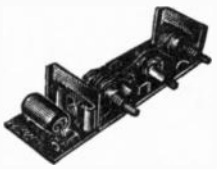
PCA-8-36

PCA-2-14



PCA-4-9

PCA-4-14



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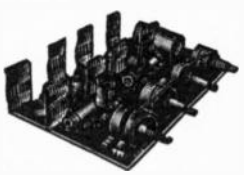

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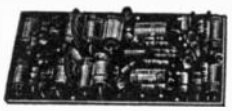
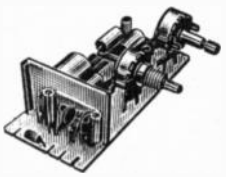
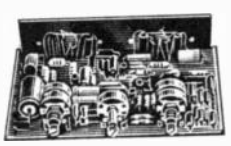


PCA-7B-18



PAC 4-14A



PAC 9-18

Motorola Diodes

Case 53

Case 56

Case 59

Case 55

Case 54

TEMPERATURE COMPENSATED ZENER REFERENCE DIODES

6.2 VOLT SUBMINIATURES

DO-7. Dissipation: 400 mW @ 25°C. Vz=6.2 ±5% @ Izt=7.5 mA.

Type No.	V. Temp. Coef. %/°C.	Temp. Range °C.	Max. Dyn. Z Ω	1-24	25-99	100 Mix: 10 of Type	100-999
1N821	.01	—55 to +100	15	2.75	2.35	2.10	1.90
1N821A	.01	—55 to +100	10	3.05	2.60	2.30	2.10
1N823	.005	—55 to +100	15	3.60	3.10	2.75	2.50
1N823A	.005	—55 to +100	10	3.90	3.35	2.95	2.70
1N825	.002	—55 to +100	15	5.80	5.00	4.40	4.00
1N825A	.002	—55 to +100	10	6.50	5.60	4.95	4.50
1N829	.0005	—55 to +100	15	16.30	14.05	12.35	11.25
1N829A	.0005	—55 to +100	10	18.55	16.85	14.85	13.50

6.4 VOLT LOW LEVEL SUBMINIATURES

DO-7. Dissip.: 250 mw @ 50°C, Vz=6.4V ± 5% @ Izt=0.5 mA.

Type	V.-Temp. Coef. %/°C	Temp. Range °C	Max. Dyn. Z Ω	1-99	100 Mix. 10 of Type	100-999
1N4565	.01	0 to + 75	200	8.65	7.45	6.50
1N4565A	.01	—55 to +100	200	9.70	8.40	7.30
1N4566	.005	0 to + 75	200	11.70	10.10	8.80
1N4566A	.005	—55 to +100	200	13.05	11.25	9.80
1N4567	.002	0 to + 75	200	23.80	20.60	17.90
1N4567A	.002	—55 to +100	200	26.45	22.90	19.90
1N4568	.001	0 to + 75	200	41.10	35.55	30.90
1N4568A	.001	—55 to +100	200	45.75	39.55	34.40
1N4569	.0005	0 to + 75	200	89.50	77.40	67.30
1N4569A	.0005	—55 to +100	200	99.50	86.00	74.80

DO-7. Dissipation: 400 mw @ 50°C, Vz=6.4V ± 5% @ Izt=1.0mA.

Type	V. Temp. Coef. %/°C.	Temp. Range °C.	Max. Dyn. Z Ω	1-99	100 Mix. 10 of Type	100-999
1N4570	.01	0 to + 75	100	5.85	5.05	4.40
1N4570A	.01	—55 to +100	100	6.50	5.65	4.90
1N4571	.005	0 to + 75	100	7.30	6.30	5.50
1N4571A	.005	—55 to +100	100	8.10	7.00	6.10
1N4572	.002	0 to + 75	100	13.25	11.45	9.95
1N4572A	.002	—55 to +100	100	14.75	12.75	11.10
1N4573	.001	0 to + 75	100	24.25	21.00	18.25
1N4573A	.001	—55 to +100	100	27.00	23.35	20.30
1N4574	.0005	0 to + 75	100	56.50	48.85	42.50
1N4574A	.0005	—55 to +100	100	63.15	54.60	47.50

8.5 VOLT LOW-LEVEL SUBMINIATURES

DO-7. Dissip.: 250 mW @ 50°C, Vz=8.5V, ± 5% @ Izt=0.5 mA.

Type	V. Temp. Coef. %/°C.	Temp. Range °C.	Max. Dyn. Z Ω	1-99	100 Mix. 10 of Type	100-999
IN4775	.01	0 to + 75	200	8.65	7.45	6.50
IN4775A	.01	—55 to +100	200	9.70	8.40	7.30
IN4776	.005	0 to + 75	200	11.70	10.10	8.80
IN4776A	.005	—55 to +100	200	13.05	11.25	9.80
IN4777	.002	0 to + 75	200	23.80	20.60	17.90
IN4777A	.002	—55 to +100	200	26.45	22.90	19.90
IN4778	.001	0 to + 75	200	41.10	35.55	30.90
IN4778A	.001	—55 to +100	200	45.75	39.55	34.40
IN4779	.0005	0 to + 75	200	89.50	77.40	67.30
IN4779A	.0005	—55 to +100	200	99.50	86.00	74.80
IN4780	.01	0 to + 75	100	5.85	5.05	4.40
IN4780A	.01	—55 to +100	100	6.50	5.65	4.90
IN4781	.005	0 to + 75	100	7.30	6.30	5.50
IN4781A	.005	—55 to +100	100	8.10	7.00	6.10
IN4782	.002	0 to + 75	100	13.25	11.45	9.95
IN4782A	.002	—55 to +100	100	14.75	12.75	11.10
IN4783	.001	0 to + 75	100	24.25	21.00	18.25
IN4783A	.001	—55 to +100	100	27.00	23.35	20.30
IN4784	.0005	0 to + 75	100	56.50	48.85	42.50
IN4784A	.0005	—55 to +100	100	63.15	54.60	47.50

9.1 VOLT LOW LEVEL SUBMINIATURE

DO-7. Diss.: 250 mW @ 50°C, Vz=9.1V ± 5% ⅛ Izt=0.5 mA.

Type	V. Temp. Coef. %/°C.	Temp. Range °C.	Max. Dyn. Z Ω	1-99	100 Mix. 10 of Type	100-999
IN4765	01.	0 to + 75	350	8.65	7.45	6.50
IN4765A	01.	—55 to +100	350	9.70	8.40	7.30
IN4766	.005	0 to + 75	350	11.70	10.10	8.80
IN4766A	.005	—55 to +100	350	13.05	11.25	9.80
IN4767	.002	0 to + 75	350	23.80	20.60	17.90
IN4767A	.002	—55 to +100	350	26.45	22.90	19.90
IN4768	.001	0 to + 75	350	41.10	35.55	30.90
IN4768A	.001	—55 to +100	350	45.75	39.55	34.40
IN4769	.0005	0 to + 75	350	89.50	77.40	67.30
IN4769A	.0005	—55 to +100	350	99.50	86.00	74.80

9.1 VOLT LOW-LEVEL SUBMINIATURE (CONT'D)

DO-7. Diss.: 250 mW @ 50°C, Vz=9.1V ± 5% @ Izt=1.0 mA.

Type	V. Temp. Coef. %/°C.	Temp. Range °C.	Max. Dyn. Z Ω	1-99	100 Mix. 10 of Type	100-999
IN4770	.01	0 to + 75	200	5.85	5.05	4.40
IN4770A	.01	—55 to +100	200	6.50	5.65	4.90
IN4771	.005	0 to + 75	200	7.30	6.30	5.50
IN4771A	.005	—55 to +100	200	8.10	7.00	6.10
IN4772	.002	0 to + 75	200	13.25	11.45	9.95
IN4772A	.002	—55 to +100	200	14.75	12.75	11.10
IN4773	.001	0 to + 75	200	24.25	21.00	18.25
IN4773A	.001	—55 to +100	200	27.00	23.35	20.30
IN4774	.0005	0 to + 75	200	56.50	48.85	42.50
IN4774A	.0005	—55 to +100	200	63.15	54.60	47.50

9.3 VOLT MINIATURES

Case 52. Dissip.: 750 mw @ 25°C, Vz=9.3V ± 5% @ Izt=10 mA.

Type	V. Temp. Coef. %/°C.	Temp. Range °C.	Max. Dyn. Z Ω	1-99	100 Mix. 10 of Type	100-999
IN2620	.01	0 to + 75	15	4.10	3.55	3.05
IN2620A	.01	—55 to +100	15	4.35	3.75	3.25
IN2621	.005	0 to + 75	15	4.60	3.95	3.45
IN2622A	.002	—55 to +100	15	8.15	7.05	6.10
IN2622B	.002	—55 to +100	15	8.35	8.05	6.60
IN2623	.001	0 to + 75	15	8.80	7.60	6.60
IN2623A	.001	—55 to +150	15	10.05	8.70	7.55
IN2624B	.0005	—55 to +100	15	38.50	33.30	28.95

9.4 VOLT MINIATURES

Case 52. Dissip: 759 mW @ 25°C, Vz=9.4 (±0.2 V suffix "A"). Izt=10 mA.

Type	V. Temp. Coef. %/°C.	Temp. Range °C.	Max. Dyn. Z Ω	1-99	100-up	100-mix
1N2163	0.005	0 to + 70	15	3.30	2.50	2.85
1N2163A	0.005	0 to + 70	15	3.45	2.60	3.00
1N2164	0.005	—55 to +125	15	4.50	3.40	3.90
1N2164A	0.005	—55 to +125	15	5.50	4.15	4.75
1N2165	0.005	—55 to +185	15	5.65	4.25	4.90
1N2165A	0.005	—55 to +185	15	7.30	5.50	6.30
1N2166	0.001	0 to + 70	15	6.80	5.10	5.85
1N2166A	0.001	0 to + 70	15	8.10	6.10	7.00
1N2167	0.001	—55 to +125	15	8.65	6.50	7.45
1N2167A	0.001	—55 to +125	15	11.05	8.30	9.55
1N2168	0.001	—55 to +185	15	11.90	8.95	10.30
1N2168A	0.001	—55 to +185	15	15.95	12.00	13.80
1N2169	0.0005	0 to + 70	15	16.85	12.75	14.65
1N2169A	0.0005	0 to + 70	15	25.00	18.80	21.60
1N2170	0.0005	—55 to +125	15	23.95	18.00	20.70
1N2170A	0.0005	—55 to +125	15	36.95	27.80	31.95
1N2171	0.0005	—55 to +185	15	34.85	26.20	30.15
1N2171A	0.0005	—55 to +185	15	44.50	33.50	38.50

9.0 VOLT SUBMINIATURES

DO-7. Dissipation: 500 mW @ 25°C. Vz=9.0V ± 5% @ Izt=7.5mA.

Type	V. Temp. Coef. %/°C.	Temp. Range °C	Max. Dyn. ZΩ	1-24	100 Mix	25-99	100-999
IN935	.01	0 to + 75	20	2.30	2.00	1.75	1.60
IN935A	.01	—55 to +100	20	2.60	2.25	2.00	1.80
IN935B	.01	—55 to +150	20	3.55	3.05	2.70	2.45
IN936	.005	0 to + 75	20	2.75	2.35	2.10	1.90
IN936A	.005	—55 to +100	20	3.55	3.05	2.70	2.45
IN936B	.005	—55 to +150	20	4.20	3.60	3.20	2.90
IN937A	.002	—55 to +100	20	6.15	5.30	4.65	4.25
IN937B	.002	—55 to +150	20	7.10	6.10	5.40	4.90
IN938	.001	0 to + 75	20	6.95	6.00	5.30	4.80
IN938A	.001	—55 to +100	20	7.55	6.50	5.70	5.20
IN938B	.001	—55 to +150	20	10.00	8.60	7.60	6.90
1N939A	.0005	—55 to +100	20	25.35	21.85	19.25	17.50

You Can Depend on NEWARK

for Everything

in Industrial Electronics

Case 49

Case 58

Case 47

Case 43

Case 70

Case 81

Case 82

Case 119

TEMPERATURE COMPENSATED ZENER REFERENCE DIODES (Cont'd.)

11.7 VOLT SUBMINIATURES

DO-7. Dissipation: 500 mW @ 25°C. Vz=11.7 ± 5% @ Izt=7.5 mA.

Type No.	V.-Temp. Coef. %/°C	Temp. Range °C.	Max. Dyn. Z Ω	1-24	25-99	100 Mix. 10 of Type	100-999
1N941	.01	0 to + 75	30	3.20	2.75	2.40	2.20
1N941B	.01	-55 to +150	30	3.60	3.10	2.75	2.50
1N942	.005	0 to + 75	30	3.50	3.00	2.65	2.40
1N942A	.005	-55 to +100	30	4.35	3.75	3.30	3.00
1N944A	.001	-55 to +100	30	13.05	11.25	9.90	9.00
1N944B	.001	-55 to +150	30	17.30	14.95	13.15	11.95

11.7 MINIATURES

Case 52. Dissip.: 750 m @ 25°C. Vz=11.7 ± 5% @ Izt=7.5 mA.

Type	Zener Volt. Vz±% (Volts)	Max. Dyn. Imp. zZt (Ohms)	Temp. Coeff. (%/°C)	1-99	100 Mix.	100-up
1N3580	.01	0 to + 75	25	4.90	4.20	3.65
1N3580A	.01	-55 to +100	25	5.20	4.50	3.90
1N3581		0 to + 75	25	5.55	4.80	4.15
1N3583	.001	0 to + 75	25	10.90	9.40	8.20
1N3583A	.001	-56 to +100	25	11.80	10.20	8.85
1N3583B	.001	-55 to +150	25	15.65	13.55	11.75
1N3584	.005	0 to + 75	25	25.30	21.85	19.00
1N3584A	.005	-55 to +150	25	32.80	28.35	24.65
1N3584B	.005	-55 to +100	25	36.80	31.80	27.65

TEMPERATURE COMPENSATED REFERENCES DIODE MOLDED ASSEMBLIES

Type	Zener Volt. Vz±5% (Volts)	Max. Dyn. Imp. zZT (Ohms)	Temp. Coeff. (%/°C)	1-99	100 Mix.	100-up
1N429	6.2	.20	.01	5.45	4.70	4.10
1N1736	12.4	.40	.01	8.75	7.60	6.60
1N1736A	12.4	.40	.005	10.70	9.25	8.05
1N2767	20.4	.60	.005	9.05	7.80	6.80

PRECISION REFERENCE DIODES

Stability certified to as low as 5 parts per million per 1000 hours. Certificate in and data with each diode.

6.2 VOLT PRECISION REFERENCE DIODES

Type	PPM/1000 hours	1-10	11-99	100-999
MZ840	40	28.50	25.25	19.00
MZ620	20	37.50	33.25	25.00
MZ610	10	52.50	46.55	35.00
MZ605	5	73.50	65.15	49.00

8.4 VOLT PRECISION REFERENCE DIODES

MZ840	40	23.25	20.60	15.50
MZ820	20	33.00	29.25	22.00
MZ810	10	48.00	42.25	32.00
MZ805	5	67.50	59.85	45.00

● NEW FORWARD REFERENCE DIODES

Case 59. Constant voltage reference diodes for low-voltage applications. High conductance silicon diodes designed as stable forward reference sources for biasing transistor amplifiers and similar applications. Max and electrical: Ta=25°C.

Type	Pd mW	Tj Tstg °C	Vf @ If = 10 mAdc Volts min/max	1-99	100-up
MR2360	1000	175	0.64/0.70	.28	.19

● NEW 50-VOLT SILICON NPN PHOTOSENSITIVE DEVICES

Photo-Detector. Microminiature package; 0.060 x 0.120". For tape and card readers, shaft or position encorders.

Type	Iceo μA Max	Srce * Min/typ	Sice ** Min/typ	1-24	25-99	100-up
MRD200	0.025	0.25/0.5	2.0/5.0	11.30	9.80	7.50

*mA/mW/cm2, Vcc=20V, Rl=100 ohms. **μA/mW/cm2, Vcc=20V, Rl=100 ohms.

Photo-Transistor. TO-18 package. Detects low light levels. MRD-200 and 300 have wavelength max sensitivity: 0.8 microns.

Type	Iceo μA (Max)	Srceo* Min/typ	Srcbo** Min	1-24	25-99	100-up
MRD300	0.025	0.8/1.6	1.4	10.50	9.10	7.00

● NEW PNPN 4-LAYER DIODES

Two terminal, low-leakage, oxide passivated devices used for applications such as pulse generators, alarm circuits, telephone switching circuits, sawtooth oscillator and controlled rectifier trigger circuits. 20-50 Volts, 200 mW.

Type	V (BR) F Forward Breakover Voltage @ TA = 25°C Volts Min/Max	IH Holding Current @ TA = 25°C mA Min/Max	1-24	25-99	100-up
M4L20A	14/26	0.5/60	2.70	2.40	1.80
M4L30A	24/36	0.5/60	2.70	2.40	1.80
M4L40A	34/46	0.5/60	2.70	2.40	1.80
M4L50A	44/56	0.5/60	2.70	2.40	1.80
M4L20-3	16/24	1/6	6.05	5.40	4.05
M4L30-3	26/34	1/6	5.25	4.65	3.50
M4L40-3	36/44	1/6	5.25	4.65	3.50
M4L50-3	46/54	1/6	5.25	4.65	3.50
M4L20-8	16/24	1/15	4.05	3.60	2.70
M4L30-8	26/34	1/15	4.05	3.60	2.70
M4L40-8	36/44	1/15	4.05	3.60	2.70
M4L50-8	46/54	1/15	4.05	3.60	2.70
M4L20-28	16/24	14/45	3.60	3.20	2.40
M4L30-28	26/34	14/45	3.60	3.20	2.40
M4L40-28	36/44	14/45	3.60	3.20	2.40
M4L50-28	46/54	14/45	3.60	3.20	2.40

The M4L3052, -53, -and -54 are fast switching devices used for low voltage applications, such as logic circuits, memory and relay drivers, and relay replacements. 8-12 Volts, 200 mW.

Type	V (BR) F Forward Breakover Voltage @ TA = 25°C Volts Min/Max	Ih Holding Current @ TA = 25°C mA Min/Max	1-24	25-99	100-up
M4L20M-3	16/24	1/6	14.25	12.65	9.50
M4L30M-3	26/34	1/6	12.75	11.30	8.50
M4L40M-3	36/44	1/6	12.75	11.30	8.50
M4L50M-3	46/54	1/6	12.75	11.30	8.50
M4L20M-8	16/24	1/15	9.00	8.00	6.00
M4L30M-8	26/34	1/15	9.00	8.00	6.00
M4L40M-8	36/44	1/15	9.00	8.00	6.00
M4L50M-8	46/54	1/15	9.00	8.00	6.00
M4L20M-28	16/24	14/45	9.00	8.00	6.00
M4L30M-28	26/34	14/45	9.00	8.00	6.00
M4L40M-28	36/44	14/45	9.00	8.00	6.00
M4L50M-28	46/54	14/45	9.00	8.00	6.00
M4L3052	8/10	1/20	4.20	3.65	2.80
M4L3053	9/11	1/20	3.60	3.10	2.40
M4L3054	10/12	1/20	3.45	3.00	2.30

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Motorola Zener Diodes

150 WATT DIFFUSED ZENER DIODES

Standard types are ±10% tolerance; suffix A denotes ±5% tolerance.

Type	Voltage	1-99	100 Mixed	100-999
1N1313	8.75	NO SUFFIX		
1N1314	10.50	3.10	2.70	2.35
1N1315	12.75	"A" SUFFIX		
1N1316	15.75	5.45	4.70	4.10
1N1317	19.00	NO SUFFIX		
1N1318	23.50	3.10	2.70	2.35
1N1319	28.50	"A" SUFFIX		
1N1320	34.50	5.45	4.70	4.10
1N1321	41.00			
1N1322	48.50			
1N1323	58.00			
1N1324	71.00			
1N1325	87.50			
1N1326	105.00			
1N1327	127.50			

DO-7—¼ WATT PASSIATED DIFFUSED ZENER DIODES

Standard tolerance of ±5%. Case 51 DO-7.

Type	Vz	1-99	100 Mixed	100-999
1N4099	6.8			
1N4100	7.5			
1N4101	8.2			
1N4102	8.7			
1N4103	9.1			
1N4104	10			
1N4105	11			
1N4106	12			
1N4107	13			
1N4108	14			
1N4109	15			
1N4110	16	5.05	4.35	3.80
1N4111	17			
1N4112	18			
1N4113	19			
1N4114	20			
1N4115	22			
1N4116	24			
1N4117	25			
1N4118	27			
1N4119	28			
1N4120	30			
1N4121	33			
1N4122	36			
1N4123	39			
1N4124	43			
1N4125	47			
1N4126	51			
1N4127	56			
1N4128	60			
1N4129	62	5.05	4.35	3.80
1N4130	68			
1N4131	75			
1N4132	82			
1N4133	87			
1N4134	91			
1N4135	100			

DO-7—INDUSTRIAL ¼ WATT LOW VOLTAGE ZENER DIODES

Suffix "5" indicates ±5% tolerance. For ±10% tolerance add "10" suffix to type no. No suffix, ±20%.

Type	Nom Zener Volt.	1-99	100 Mixed	100-999
¼M2.4AZ	2.4	NO SUFFIX		
¼M2.7AZ	2.7	2.10	1.95	1.70
¼M3.0AZ	3.0	"10" SUFFIX		
¼M3.3AZ	3.3	2.60	2.40	2.10
¼M3.9AZ	3.9	"5" SUFFIX		
¼M4.7AZ	4.7	4.00	3.65	3.20
¼M5.6AZ	5.6			
¼M6.2AZ	6.2			
¼M6.8AZ	6.8			

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● NEW 250 mW DIFFUSED ZENER DIODES

Standard types are ±10% tolerance and are supplied to min-max voltages shown; suffix "A" (with dash numbers) denotes ±5% tolerance with varying nominal voltages within the standard min-max voltage

Type	Vz Volts	1-99	100-999
1N702A-0	2.0	2.60	2.10
1N702A-1	2.1	2.60	2.10
1N702A-2	2.2	2.60	2.10
1N702A-3	2.3	2.60	2.10
1N702A-4	2.4	2.60	2.10
1N702A-5	2.5	2.60	2.10
1N702A-6*	2.6	2.60	2.10
1N702A-7	2.7	2.60	2.10
1N702A-8	2.8	2.60	2.10
1N702A-9	2.9	2.60	2.10
1N704A-0	3.7	2.60	2.10
1N704A-1	3.8	2.60	2.10
1N704A-2	3.9	2.60	2.10
1N704A-3	4.0	2.60	2.10
1N704A-4*	4.1	2.60	2.10
1N704A-5	4.2	2.60	2.10
1N705A-0	4.3	2.60	2.10
1N705A-1	4.4	2.60	2.10
1N705A-2	4.5	2.60	2.10
1N705A-3	4.6	2.60	2.10
1N705A-4	4.7	2.60	2.10
1N705A-5	4.8	2.60	2.10
1N705A-6*	4.9	2.60	2.10
1N705A-7	5.0	2.60	2.10
1N705A-8	5.1	2.60	2.10
1N706A-0	5.2	2.60	2.10
1N706A-1	5.3	2.60	2.10
1N706A-2	5.4	2.60	2.10
1N706A-3	5.5	2.60	2.10
1N706A-4	5.6	2.60	2.10
1N706A-5	5.7	2.60	2.10
1N706A-6*	5.8	2.60	2.10
1N706A-7	5.9	2.60	2.10
1N706A-8	6.0	2.60	2.10
1N706A-9	6.1	2.60	2.10
1N707A-0	6.2	2.60	2.10
1N707A-1	6.3	2.60	2.10
1N707A-2	6.4	2.60	2.10
1N707A-3	6.5	2.60	2.10
1N707A-4	6.6	2.60	2.10
1N707A-5	6.7	2.60	2.10
1N707A-6	6.8	2.60	2.10
1N707A-7	7.1	2.60	2.10
1N708	5.6	1.85	1.50
1N709	6.2	1.85	1.50
1N710	6.8	1.85	1.50
1N711	7.5	1.85	1.50
1N712	8.2	1.85	1.50
1N713	9.1	1.85	1.50
1N714	10	1.85	1.50
1N715	11	1.85	1.50
1N716	12	1.85	1.50
1N717	13	1.85	1.50
1N718	15	1.85	1.50

Type	Vz Volts	1-99	100-999
1N719	16	1.85	1.50
1N720	18	1.85	1.50
1N721	20	1.85	1.50
1N722	22	1.85	1.50
1N723	24	1.85	1.50
1N724	27	1.85	1.50
1N725	30	1.85	1.50
1N726	33	1.85	1.50
1N727	36	1.85	1.50
1N728	39	1.85	1.50
1N729	43	3.50	2.80
1N730	47	3.50	2.80
1N731	51	3.50	2.80
1N732	56	3.50	2.80
1N733	62	3.50	2.80
1N734	68	3.50	2.80
1N735	75	3.50	2.80
1N736	82	3.50	2.80
1N737	91	3.50	2.80
1N738	100	3.50	2.80
1N739	110	3.50	2.80
1N740	120	3.50	2.80
1N741	130	3.50	2.80
1N742	150	3.50	2.80
1N743	160	3.50	2.80
1N744	180	3.50	2.80
1N745	200	3.50	2.80
1N761-1	4.5	2.80	2.10
1N761-2	5.0	2.80	2.10
1N762-1	5.5	2.80	2.10
1N762-2	6.0	2.80	2.10
1N763-1	6.5	2.80	2.10
1N763-2	7.0	2.80	2.10
1N763-3	7.5	2.80	2.10
1N764-1	8.0	2.80	2.10
1N764-2	8.5	2.80	2.10
1N764-3	9.0	2.80	2.10
1N764-4	9.5	2.80	2.10
1N765-1	10.0	2.80	2.10
1N765-2	11.0	2.80	2.10
1N766-1	12.0	2.80	2.10
1N766-2	13.0	2.80	2.10
1N766-3	14.0	2.80	2.10
1N767-1	15.0	2.80	2.10
1N767-2	16.0	2.80	2.10
1N767-3	17.0	2.80	2.10
1N768-1	18.0	2.80	2.10
1N768-2	19.0	2.80	2.10
1N768-3	20.0	2.80	2.10
1N769-1	22.0	2.80	2.10
1N769-2	24.0	2.80	2.10
1N769-3	26.0	2.80	2.10
1N769-4	28.0	2.80	2.10

400 mW DIFFUSED ZENER DIODES

All have standard tolerances of 5, 10, and 20% — no suffix is ±20% tolerance; "A" suffix is ±10% tolerance and "B" suffix is ±5% tolerance. Except 1N4370, 4371, 4372 which are featured in standard tolerances of 5 and 10%, no suffix is lower priced and has a standard tolerance of ±10%. "A" suffix (*) has a standard tolerance of ±5%.

Type	Vz Volts	1-99	100 Mixed	100-999
1N4370	2.4	2.00	1.50	1.70
1N4371	2.7	2.00*	1.50*	1.70*
1N4372	3.0	2.00	1.50	1.70
1N957A	6.8	NO SUFFIX		
1N959	8.2	2.15	1.85	1.60
1N960	9.1	"A" SUFFIX		
1N961	10	2.35	2.00	1.75
1N962	11	"B" SUFFIX		
1N963	12	2.95	2.55	2.20
1N964	13			
1N965A	15			
1N966A	16			
1N967A	18			
1N968A	20			
1N969A	22			
1N970A	24			

Type	Vz Volts	1-99	100 Mixed	100-999
1N973A	33	NO SUFFIX		
1N974A	36	2.15	1.85	1.60
1N975NA	39	"A" SUFFIX		
1N977	47	2.35	2.00	1.75
1N979A	56	"B" SUFFIX		
1N980A	62	2.95	2.55	2.20
1N982A	75			
1N984A	91			
1N985A	100	NO SUFFIX		
1N986A	110	2.60	2.25	1.95
1N987A	120	"A" SUFFIX		
1N988NA	130	3.00	2.25	2.60
1N989A	150	"B" SUFFIX		
1N990A	160	3.65	3.15	2.75
1N991A	180			
1N992A	200			

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

DO-7 INDUSTRIAL 400 MW ALLOY ZENER DIODES

No suffix on type number indicates ±10% tolerance; "A" suffix indicates ±5% tolerance Meg-A-Life II devices available for high reliability on three levels, all ±5% tolerance.

Type	Vz	1-99	100 Mix.†	100-999
1N746	3.3			
1N747	3.6			
1N748	3.9			
1N749	4.3	No Suffix		
1N750	4.7			
1N751	5.1	2.00	1.70	1.50
1N752	5.6			
1N753	6.2			
1N754	6.8	"A" SUFFIX		
1N755	7.5			
1N756	8.2			
1N757	9.1	2.75	2.35	2.05
1N758	10.0			
1N759	12.0			

● NEW 500 mW ZENER DIODES CASE 56

Standard 5% tol; "A" is ±2% tol.

1N2.63	9.4	3.30	2.85	2.50
1N2163A	9.4	3.45	3.00	2.60
1N2164	9.4	4.50	3.90	3.40
1N2164A	9.4	5.50	4.75	4.15
1N2165	9.4	5.65	4.90	4.25
1N2165A	9.4	7.30	6.30	5.50
1N2166	9.4	6.80	5.85	5.10
1N2166A	9.4	8.10	7.00	6.10
1N2167	9.4	8.65	7.45	6.50
1N2167A	9.4	11.05	9.55	8.30
1N2168	9.4	11.90	10.30	8.95
1N2168A	9.4	15.95	13.80	12.00
1N2169	9.4	16.95	14.65	12.75
1N2169A	9.4	25.00	21.60	18.80
1N2170	9.4	23.95	20.70	18.00
1N2170A	9.4	36.95	31.95	27.80
1N2171	9.4	34.85	30.15	26.20
1N2171A	9.4	44.55	38.50	33.50

400 mW "SURMETIC" ZENER DIODES

DO-7 package. Add suffix "10" for ±10% tolerance; suffix "5" for ±5% tolerance.

Type No.	Vz	1-99	100-499	500-999	1K-up
.4M3.3ZS	3.3				
.4M3.6ZS	3.6				
.4M3.9ZS	3.9				
.4M4.3ZS	4.3				
.4M4.7ZS	4.7	"10" SUFFIX			
.4M5.1ZS	5.1				
.4M5.6ZS	5.6	1.15	.75	.71	.64
.4M6.2ZS	6.2				
.4M6.8ZS	6.8				
.4M7.5ZS	7.5				
.4M8.2ZS	8.2	"5" SUFFIX			
.4M9.1ZS	9.1				
.4M10ZS	10				
.4M11ZS	11	1.40	.95	.87	.78
.4M12ZS	12				
.4M13ZS	13				
.4M15ZS	15				
.4M16ZS	16				
.4M18ZS	18				
.4M20ZS	20	"10" SUFFIX			
.4M22ZS	22	1.15	.75	.71	.64
.4M24ZS	24				
.4M27ZS	27	"5" SUFFIX			
.4M30ZS	30	1.40	.95	.87	.78
.4M33ZS	33				
.4M36ZS	36				
.4M39ZS	39				
.4M43ZS	43				
.4M47ZS	47	"10" SUFFIX			
.4M51ZS	51	1.35	.90	.85	.76
.4M56ZS	56				
.4M62ZS	62				
.4M68ZS	68	"5" SUFFIX			
.4M75ZS	75	1.60	1.05	1.00	.90
.4M82ZS	82				
.4M91ZS	91				
.4M100ZS	100				

● NEW ¾ W ZENER DIODES

Standard = ±10% tol; "A" denotes ±5% tol.

Type	Vz Volts	1-99	100-999
1N1507	3.9	No Suffix	
1N1508	4.7	2.95	2.20
1N1509	5.6	"A" Suffix	
1N1510	6.8	3.65	2.75

(Cont'd in next column)

● NEW ¾ W ZENER DIODES (Cont'd)

Type	Vz Volts	1-99	100-999
1N1511	8.2	No Suffix	
1N1512	10.0	2.95	2.20
1N1513	12.0	"A" Suffix	
1N1514	15.0	3.65	2.75
1N1515	18.0		
1N1516	22.0		
1N1517	27.0		
1N2032-1	4.5		
1N2032-2	5.0		
1N2033-1	5.5		
1N2033-2	6.0	No Suffix	
1N2034-1	6.5		
1N2034-2	7.0	4.00	3.00
1N2034-3	7.5		
1N2035-1	8.0		
1N2035-2	8.5		
1N2035-3	9.0		
1N2035-4	9.5		
1N2036-1	10.0		
1N2036-2	11.0		
1N2037-1	12.0		
1N2037-2	13.0		
1N2037-3	14.0	No Suffix	
1N2038-1	15.0		
1N2038-2	16.0	4.00	3.00
1N2038-3	17.0		
1N2039-1	18.0		
1N2039-2	19.0		
1N2039-3	20.0		
1N2040-1	22.0		
1N2040-2	24.0		
1N2040-3	26.0		

CASE 59—1 WATT "SURMETIC" ZENER DIODES

Type numbers without suffix are ±10% tolerance. Also available on special order with ±5% tolerance (add suffix "A").

Type	Vz	1-99	100-Mix	100-999
1N4728	3.3			
1N4729	3.6			
1N4730	3.9			
1N4731	4.3			
1N4732	4.7	NO SUFFIX		
1N4733	5.1			
1N4734	5.6	1.26	1.09	.95
1N4735	6.2			
1N4736	6.8			
1N4737	7.5			
1N4738	8.2			
1N4739	9.1			
1N4740	10	"A" SUFFIX		
1N4741	11			
1N4742	12	1.93	1.66	1.45
1N4743	13			
1N4744	15			
1N4745	16			
1N4746	18			
1N4747	20			
1N4748	22			
1N4749	24			
1N4750	27			
1N4751	30	NO SUFFIX		
1N4752	33			
1N4753	36	1.26	1.09	.95
1N4754	39			
1N4755	43			
1N4756	47			
1N4757	51	"A" SUFFIX		
1N4758	56			
1N4759	62	1.93	1.66	1.45
1N4760	68			
1N4761	75			
1N4762	82			
1N4763	91			
1N4764	100			

CASE 52—1 WATT LOW VOLTAGE ZENER DIODES

No suffix (±10% tol.); "A" suffix (±5% tol.). Stnd. Pol. cathode to case.

1N3821	3.3		
1N3822	3.6	NO SUFFIX	
1N3823	3.9	2.10	1.85	1.60
1N3824	4.3		
1N3825	4.7		
1N3826	5.1	"A" SUFFIX	
1N3827	5.6		
1N3828	6.2	2.65	2.30	2.00
1N3829	6.8		
1N3830	7.5		

CASE 59—¾ WATT SURMETIC ZENER DIODES

No suffix on type no. indicates ±20% tolerance; "A" suffix indicates ±10% tolerance; "B" suffix indicates ±5% tolerance.

Type	Vz	1-99	100-Mixed	100-999
1N3675	6.8			
1N3676	7.5			
1N3677	8.2			
1N3678	9.1			
1N3679	10			
1N3680	11	NO SUFFIX		
1N3681	12			
1N3682	13	3.45	3.00	2.60
1N3683	15			
1N3684	16			
1N3685	18			
1N3686	20			
1N3687	22	"A" SUFFIX		
1N3688	24			
1N3689	27	4.10	3.55	3.10
1N3690	30			
1N3691	33			
1N3692	36			
1N3693	39			
1N3694	43	"B" SUFFIX		
1N3695	47			
1N3696	51	4.90	4.25	3.70
1N3697	56			
1N3698	62			
1N3690	68			
1N3700	75			
1N3701	82			
1N3702	91			
1N3703	100			

CASE 52—1 WATT DIFFUSED ZENER DIODES

No suffix on type no. indicates ±20%; "A" suffix—±10%; "B" suffix— ±5% tolerance. (†10 per type). Standard polarity cathode to case. Meg-A-Life II devices available on three levels for high-reliability requirements all ±5% tolerance. Reverse polarines available at same price.

Type	Vz	1-99	100-Mix†	100-999
1N3016	6.8			
1N3016B	6.8	NO SUFFIX		
1N3017	7.5			
1N3017B	7.5	2.85	2.45	2.15
1N3018	8.2			
1N3018B	8.2			
1N3019	9.1			
1N3019B	9.1	"A" SUFFIX		
1N3020A	10			
1N3020B	10	3.20	2.75	2.40
1N3021B	11			
1N3022	12			
1N3023	13			
1N3024B	15	"B" SUFFIX		
1N3024A	15	3.70	3.20	2.80
1N3025	16			
1N3026	18			
1N3026B	18			
1N3027	20			
1N3027B	20			
1N3028A	22	NO SUFFIX		
1N3028B	22			
1N3029	24	2.85	2.45	2.15
1N3029B	24			
1N3030B	27			
1N3031B	30			
1N3032B	33	"A" SUFFIX		
1N3033B	36			
1N3034B	39			
1N3035B	43	3.20	2.75	2.40
1N3036B	47			
1N3037B	51			
1N3037A	51			
1N3038B	56	"B" SUFFIX		
1N3039B	62			
1N3040B	68	3.70	3.20	2.80
1N3041B	75			
1N3042B	82			
1N3043B	91			
1N3044B	100			
1N3045	110	NO SUFFIX		
1N3046B	120	2.95	2.55	2.20
1N3047B	130			
1N3048B	150			
1N3049	160	"B" SUFFIX		
1N3050	180	4.65	4.05	3.50
1N3051B	200			

Motorola Diodes

Case 48

Case 33

Case 46

Case 32
TO-5

Case 32A
TO-5

Case 51
DO-7

Case 42

Case 50

● *NEW* 1.0 WATT ZENER DIODES CASE 59

Standard types ±10% tol; "A" denotes ±5% tolerance.

Type	Vz Nom Volts	1-99	100-999
1N1518	3.9		
1N1519	4.7		
1N1520	5.6	No Suffix	
1N1521	6.8	2.95	2.20
1N1522	8.2		
1N1523	10.0		
1N1524	12.0	"A" Suffix	
1N1525	15.0		
1N1526	18.0	3.65	2.75
1N1527	22.0		
1N1528	27.0		
1N1765	5.6		
1N1766	6.2		
1N1767	6.8	No Suffix	
1N1768	7.5		
1N1769	8.2	2.80	2.10
1N1770	9.1		
1N1771	10		
1N1772	11	"A" Suffix	
1N1773	12		
1N1774	13	3.20	2.40
1N1775	15		
1N1776	16		
1N1777	18		

Type	Vz Nom Volts	1-99	100-999
1N1778	20	No Suffix	
1N1779	22	2.80	2.10
1N1780	24	"A" Suffix	
1N1781	27	3.20	2.40
1N1782	30		
1N1783	33		
1N1784	36		
1N1785	39	No Suffix	
1N1786	43		
1N1787	47	3.05	2.30
1N1788	51		
1N1789	56		
1N1790	62	"A" Suffix	
1N1791	68		
1N1792	75	4.00	3.00
1N1793	82		
1N1794	91		
1N1795	100		
1N1796	110	No Suffix	
1N1797	120		
1N1798	130	5.10	3.85
1N1799	150		
1N1800	160	"A" Suffix	
1N1801	180		
1N1802	200	7.80	5.85

CASE 55—IND. 1.5 W ZENER DIFFUSED DIODES

No suffix on type no.—±20% tol.; "B" suffix—±5% "A" suffix—±10%. (per type). Standard polarity cathode to case. Reverse ploarities available at slightly higher prices.

Type	Vz	1-99	100-Mixed	100-999
1N3785	6.8			
1N3786	4.5			
1N3787	8.2	No Suffix*		
1N3788	9.1			
1N3789	10	3.75	3.20	2.80
1N3790	11			
1N3791	12			
1N3792	12	"A" Suffix**		
1N3793	15			
1N3794	16	5.30	4.60	4.00
1.5M17Z5	17			
1N3795	18			
1N3796	20	"B" Suffix***		
1N3797	22			
1N3798	24	6.95	6.00	5.25
1.5M25Z5	25			
1N3799	27			
1N3800	30			
1N3801	33			
1N3803	39			
1N3813	100	4.75	4.10	3.55
1N3818	160			

● *NEW* 3.5 WATT ZENER DIODES

Standard types are ±10% tol; "A" denotes ±5% tol. Strd. polarity is cathode to case.

1N1588	3.9	
1N1589	4.7	
1N1590	5.6	No Suffix
1N1591	6.8	4.10 | 3.10
1N1592	8.2	
1N1593	10.0	
1N1594	12.0	"A" Suffix
1N1595	15.0	4.90 | 3.70
1N1596	18.0	
1N1597	22.0	
1N1598	27.0	

DO-4—10 WATT DIF. ZENER DIODES

No suffix — ±20%; "A" suffix — ±10% Standard pol. is anode to case, reverse polarity available.

Type	Vz	1-99	Mix 100-Up	100-Up	500-999
1N2970	6.8				
1N2972	8.2				
1N2973	9.1				
1N2974	10				
1N2975	11				
1N2976	12				
1N2977	13				
1N2978	14				
1N2979	15				
1N2980	16				
1N2981	17				
1N2982	18				
1N2983	19	No Suffix			
1N2984	20	5.45	4.70	4.10	2.40
1N2985	22				
1N2986	24				
1N2987	25	"A" Suffix**			
1N2988	27				
1N2989	30	5.85	5.05	4.40	2.65
1N2991	36				
1N2992	39				
1N2993	43	"B" Suffix***			
1N2994	45				
1N2995	47	7.30	6.30	5.50	3.30
1N2996	50				
1N2998	52				
1N3001	68				
1N3002	75				
1N3003	82				
1N3004	91				
1N3005	100				
1N3006	105				
1N3007	110				
1N3008	120				
1N3010	140				
1N3011	150				
1N3012	160	6.00*	5.15*	4.50*	2.70*
1N3013	175	6.00**	5.15**	4.50**	2.70**
1N3014	180	6.00***	5.15***	4.50***	2.70***
1N3015	200	6.00	5.15	4.50	2.70

● *NEW* 10 WATT ZENER DIODES

Low Voltage. Case 56, DO-4.

1N3996	5.1	No Suffix	
1N3997	5.6	5.65 | 4.90 | 4.25 |	
1N3998	6.2	"A" Suffix	
		7.70 | 6.65 | 5.80 |	

● *NEW* 10 WATT ZENER

Standard types are ±10% tolerance. Suffix "A" denotes ±5% tolerance. Standard polarity is cathode-to-case. For reverse polarity suffix "R." Add "A" to standard JEDEC type number: 1N2041A.

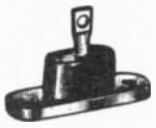
Type	Vz Nom. Volt	1-99	100-999
1N1599	3.9		
1N1600	4.7		
1N1601	5.6	No Suffix*	
1N1602	6.8	6.50	4.90
1N1603	8.2		
1N1604	10.0		
1N1605	12.0	"A" Suffix	
1N1606	15.0		
1N1607	18.0	8.50	6.40
1N1608	22.0		
1N1609	27.0		
1N2041-1	4.5		
1N2041-2	5.0		
1N2042-1	5.5		
1N2042-2	6.0		
1N2043-1	6.5		
1N2043-2	7.0		
1N2043-3	7.5	No Suffix*	
1N2044-1	8.0	6.00	4.50
1N2044-2	8.5		
1N2044-3	9.0		
1N2044-4	9.5		
1N2045-1	10.0	"A" Suffix	
1N2045-2	11.0		
1N2046-1	12.0	7.60	5.70
1N2046-2	13.0		
1N2046-3	14.0	Numerical Suffix	
1N2047-1	15.0		
1N2047-2	16.0		
1N2047-3	17.0	7.60	5.70
1N2048-1	18.0		
1N2048-2	19.0		
1N2048-3	20.0		
1N2049-1	22.0		
1N2049-2	24.0		
1N2049-3	26.0		
1N2049-4	28.0		

Type	Vz	1-99	100-Up Mixed	100-Up
1N1803	5.6	No Suffix		
1N1804	6.2	6.20	5.35	4.65
1N1805	6.8			
1N1806	7.5	"A" Suffix		
1N1807	8.2	7.85	6.80	5.90
1N1808	9.1			
1N1351	10			
1N1352	11			
1N1353	12			
1N1354	13			
1N1355	15			
1N1356	16			
1N1357	18			
1N1358	20			
1N1359	22			
1N1360	24			
1N1361	27	No Suffix		
1N1362	30			
1N1363	33	6.20	5.35	4.65
1N1364	36			
1N1365	39			
1N1366	43	"A" Suffix		
1N1367	47			
1N1368	51	7.85	6.80	5.90
1N1369	56			
1N1370	62			
1N1371	68			
1N1372	75			
1N1373	82			
1N1374	91			
1N1375	100			
1N1809	110			
1N1810	120			
1N1811	130			
1N1812	150			
1N1813	160	No Suffix		
1N1814	180	9.10 | 7.90 | 6.85		
1N1815	200	"A" Suffix		
		14.10 | 12.20 | 10.60		

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

Case 68

Case 64 TO-48


Flange Mount Solid Suffix FL

Stud Lug Suffix SL

Flange Braid

Stud Braid

Flange Lug Suffix FL

ZENER DIODES (CONT'D)

● NEW 10 WATT ZENER DIODES

Standard types are ±10% tolerance; suffix "A" denotes ±5.0% tolerance: "C" suffix denotes 10% clipper. Standard polarity is anode to case. For reverse polarity, add suffix "R."

Type	Vz Volts	1-99	100-up	100 up Mix
1N2498	10	No Suffix		
1N2499	11	6.00	4.50	
1N2500	12	"A" Suffix		
		7.60	5.70	
1N1816	13	No Suffix		
1N1817	15	6.20	4.65	5.35
1N1818	16	"A" Suffix		
1N1819	18	7.85	5.90	6.80
1N1820	20			

* "C" suffix price in next column.

Type	Vz Volts	1-99	100-up	100 Mix
1N1821	22			
1N1822	24			
1N1823	27	No Suffix		
1N1824	30	6.20	4.65	5.35
1N1825	33	"A" Suffix		
1N1826	36	7.85	5.90	6.80
1N1827	39	"C" Suffix		
1N1828	43	12.35	9.30	10.70
1N1829	47			
1N1830	51			

Type	Vz Volts	1-99	100-up	100 Mix
1N1831	56	No Suffix		
1N1832	62	6.20	4.65	5.30
1N1833	68	"A" Suffix		
1N1834	75	7.85	5.90	6.80
1N1835	82	"C" Suffix		
1N1836	91	12.35	9.30	10.70
1N2008	100	No Suffix		
1N2009	110	6.00	4.50	
1N2010	120	"A" Suffix		
1N2011	130	7.50	5.65	
1N2012	150			

FIG. TO-3 — 50 WATT ZENER DIODES

No suffix means ±20% tolerance; "A" Suffix, ±10%; "B" Suffix, ±5% Std. polarity is anode-to-case, Reverse polarity, add "R." For Meg-A-Life listings, see pages 44 and 45.

Type	Vz	1-99	100 up Mix	100 up
1N2804	6.8			
1N2808	10			
1N2810	12	No Suffix*		
1N2811	13	5.65	4.90	4.25
1N2813	15	"A" Suffix*		
1N2814	16	7.65	6.60	5.75
1N2818	20	"B" Suffix*		
1N2819	22	10.65	9.20	8.00
1N2820	24			
1N2823	30			

*Prices apply to 1N2836, -37, -38 in the third column.

Type	Vz	1-99	100 up Mix	100 up
1N2824	33			
1N2826	39			
1N2827	43	No Suffix		
1N2828	45	5.65	4.90	4.25
1N2829	47	"A" Suffix		
1N2830	50	7.65	6.60	5.75
1N2832	56	"B" Suffix		
1N2833	62	10.65	9.20	8.00
1N2834	68			
1N2835	75			

Type	Vz	1-99	100 up Mix	100 up
1N2836	82	See middle column below for prices.		
1N2837	91			
1N2838	100			
1N2839	105			
1N2840	110	No Suffix		
1N2841	120	6.80	5.85	5.10
1N2842	130	"A" Suffix		
1N2843	140	11.30	9.75	8.50
1N2844	160	"B" Suffix		
1N2845	180	17.95	15.50	13.50
1N2846	200			

CASE 58—50 WATT ZENER DIODES

No suffix indicates ±20% tolerance; "A" suffix ±10% tol.; "B" suffix ±5% tol. Reverse polarities available upon request at same prices.

IN3305	6.8			
IN3306	7.5			
IN3307	8.2			
IN3308	9.1			
IN3309	10	NO SUFFIX		
IN3310	11	5.65	4.90	4.25
IN3311	12	"A" SUFFIX		
IN3312	13	7.65	6.60	5.75
IN3313	14	"B" SUFFIX		
IN3314	15	10.65	9.20	8.00
IN3315	16			
IN3316	17			
IN3317	18			
IN3318	19			
IN3319	20			

IN3320	22			
IN3321	24			
IN3322	25			
IN3323	27			
IN3324	30	NO SUFFIX		
IN3325	33	5.65	4.90	4.25
IN3326	36	"A" SUFFIX		
IN3327	39	7.65	6.60	5.75
IN3328	43	"B" SUFFIX		
IN3329	45	10.65	9.20	8.00
IN3330	47			
IN3331	50			
IN3332	51			
IN3333	52			
IN3334	56			

IN3335	62			
IN3336	68	NO SUFFIX		
IN3337	75	5.65	4.90	4.25
IN3338	82	"A" SUFFIX		
IN3339	91	7.65	6.60	5.75
IN3340	100	"B" SUFFIX		
IN3341	105	10.65	9.20	8.00
IN3342	110			
IN3343	120	NO SUFFIX		
IN3344	130	6.80	5.85	5.10
IN3345	140	"A" SUFFIX		
IN3346	150	11.30	9.75	8.50
IN3347	160	"B" SUFFIX		
IN3348	175	17.95	15.50	13.50
IN3349	180			
IN3350	200			

● NEW 50 WATT ZENER DIODES

No suffix indicates ±20% tolerance; "A" suffix, 10%; "B" suffix, 5%.

Motorola Diodes are 100% oscilloscope tested for conformity to specified chacateristics.

Case 58

Type	Vz Nom	1-99	100 Mix	100-up
1N4549	3.9			
1N4550	4.3	No Suffix		
1N4551	4.7	6.05	5.25	4.55
1N4552	5.1	"A" Suffix		
1N4553	5.6	8.00	6.90	6.00
1N4554	6.2	"B" Suffix		
1N4555	6.8	11.50	9.95	8.65
1N4556	7.5			

Case 54

Type	Vz Nom	1-99	100 Mix	100-up
1N4557	3.9	No Suffix		
1N4558	4.3	6.05	5.25	4.55
1N4559	4.7	"A" Suffix		
1N4560	5.1	8.00	6.90	6.00
1N4561	5.6	"B" Suffix		
1N4562	6.2	11.50	9.95	8.65
1N4563	6.8			
1N4564	7.5			

● NEW FORWARD REFERENCE DIODES

400 mW @ 50°C Ambient. Suffix denotes tolerances of 2, 5, and 10%.

Type	Vz Max.	1-99	100 up Mix	100-999
.4M.64FR10	.64	.33	.....	.25
.4M1.36FR5	.36	1.66	1.44	1.25
.4M1.36FR2	.36	2.30	2.00	1.75
.4M2.04FR5	.04	2.40	2.05	1.80
.4M2.04FR2	.04	3.05	2.65	2.30
.4M2.4AZ	2.4	See next column for prices.		
.4M2.7AZ	2.7			

Type	Vz Max.	1-99	100 up Mix	100-999
.4M3.0AZ	3.0			
.4M3.3AZ	3.3	"10" Suffix		
.4M3.6AZ	3.6	2.00	1.70	1.50
.4M3.9AZ	3.9	"5" Suffix		
.4M4.3AZ	4.3	2.75	2.35	2.05
.4M4.7AZ	4.7			
.4M5.1AZ	5.1			

Type	Vz. Max.	1-99	100 up Mix	100-999
.4M5.6AZ	5.6			
.4M6.2AZ	6.2			
.4M6.8AZ	6.8	"10" Suffix		
.4M7.5AZ	7.5	2.00	1.70	1.50
.4M8.2AZ	8.2	"5" Suffix		
.4M9.1AZ	9.1	2.75	2.35	2.05
.4M10AZ	10			
.4M12AZ	12			

● NEW 5.0 kW TRANSIENT SUPPRESSOR

CASE 119. Silicon power zener diode with DC pwr. Diss. 350 W @ Tc=25°C (Derate 2.33W/°C above 25°C. Tj, stg: —65 to 175°C.

Type	Vop (pk) Vdc	1-24	25-99	100-up
MPZ5-16A	14	46.80	40.30	36.00
MPZ5-16B	14	52.00	44.80	40.00
MPZ5-32A	28	39.00	33.60	30.00
MPZ5-32B	28	46.80	40.30	36.00
MPZ5-32C	28	52.00	44.80	40.00
MPZ5-180A	165	48.75	42.00	37.50
MPZ5-180B	165	58.50	50.40	45.00
MPZ5-180C	165	65.00	56.00	50.00

Motorola Regulator Diodes

● *NEW* LOW COST 500 mW "SURMETIC 20" VOLTAGE REGULATOR DIODES

DO-7 Case. Features higher ratings, tighter limits, better operating characteristics. Silicon-oxide-passivated junctions. Axial lead, transfer molded plastic package. Junction and storage temp: —65 to +200°C. Based on dc measurements at thermal equilibrium; lead length=⅜"; thermal resistance of heat sink=30°C/W. Vf=1.1 max @ If=200 mA for all types. Surge power: 10 Watts (Non-recurrent square wave @ PW=8.3 ms, Tj=55°C. Ta=25°C. Standard 20% tolerance. Suffix "A" is for ±10% tol; "B" is for ±5% tol.

Type	Vz Nom.	Izt mA	1-24	25-99	100-249	250-499	500-999	1K-4999	5K-Up
1N5221	2.4	20							
1N5222	2.5	20							
1N5223	2.7	20							
1N5224	2 8	20							
1N5225	3.0	20							
1N5226	3.3	20			"A" Suffix				
1N5227	3.6	20	.67	.60	.45	.43	.40	.38	.36
1N5228	3.9	20							
1N5229	4.3	20							
1N5230	4.7	20							
1N5231	5.1	20							
1N5232	5.6	20							
1N5233	6 0	20							
1N5234	6.2	20			"B" Suffix				
1N5235	6.8	20							
1N5236	7.5	20	.90	.80	.60	.57	.54	.51	.48
1N5237	8.2	20							
1N5238	8.7	20							
1N5239	9.1	20							
1N5240	10	20							
1N5241	11	20							
1N5242	12	20							
1N5243	13	9.5							
1N5244	14	9.0			No Suffix				
1N5245	15	8.5	1.05	.93	.70	.66	.63	.59	.56
1N5246	16	7.8							
1N5247	17	7.4							
1N5248	18	7.0							
1N5249	19	6.6							
1N5250	20	6.2							

Type	Vz Nom.	Izt mA	1-24	25-99	100-249	250-499	500-999	1K-4999	5K-Up
1N5251	22	5.6				No Suffix			
1N5252	24	5.2	.67	.60	.45	.43	.40	.38	.36
1N5253	25	5.0				"A" Suffix			
1N5254	27	4.6	.90	.80	.60	.57	.54	.51	.48
1N5255	28	4.5							
1N5256	30	4 2				"B" Suffix			
1N5257	33	3.8	1.05	.93	.70	.66	.63	.59	.56
1N5258	36	3.4							
1N5259	39	3.2				No Suffix			
1N5260	43	3.0							
1N5261	47	2.7	.90	.80	.60	.57	.54	.51	.48
1N5262	51	2.5							
1N5263	56	2.2				"A" Suffix			
1N5264	60	2.1							
1N5265	62	2.0	1.12	1.00	.75	.71	.67	.64	.60
1N5266	68	1.8							
1N5267	75	1.7							
1N5268	82	1.5				"B" Suffix			
1N5269	87	1.4	1.27	1.13	.85	.81	.76	.72	.68
1N5270	91	1.4							
1N5271	100	1.3							
1N5272	110	1.1				No Suffix			
1N5273	120	1.0	1.27	1.13	.85	.81	.76	.72	.68
1N5274	130	.95							
1N5275	140	.90				"A" Suffix			
1N5276	150	.85							
1N5277	160	.80	1.50	1.33	1.00	.95	.90	.85	.80
1N5278	170	.74							
1N5279	180	.68				"B" Suffix			
1N5280	190	.66	1.65	1.46	1.10	1.04	.99	.93	.88
1N5281	200	.65							

● *NEW* 600 mW CURRENT REGULATOR DIODES — CASE 51, DO-7

Ta=25°C. 100 Volts P.O.V. * indicates Regulator Current, Ip (mA) @ Vt=25 Volts. ** specifies the minimum dynamic impedance @ Vt +25 Volts, Zt(MΩ). The impedance of these new regulator diodes is specified at test voltage.

Type	* Nom.	** Imp.	1-24	25-99	100-Mix	100-Up
1N5283	0.22	25 0	8.60	7.65	6.60	5.75
1N5284	0.24	19.0	8.60	7.65	6.60	5.75
1N5285	0 27	14.0	8.60	7.65	6.60	5.75
1N5286	0.30	9.0	9.75	8.65	7.45	6.50
1N5287	0.33	6.6	9.75	8.65	7.45	6.50
1N5288	0.39	4.10	9.75	8.65	7.45	6.50
1N5289	0.43	3.30	9.75	8.65	7.45	6.50
1N5290	0.47	2.70	9.75	8.65	7.45	6.50
1N5291	0.56	1 90	7.35	6.50	5.65	4.90
1N5292	0.62	1.55	7.35	6.50	5.65	4.90
1N5293	0.68	1.35	7.35	6.50	5.65	4.90
1N5294	0.75	1.15	7.35	6.50	5.65	4.90
1N5295	0.82	1.00	7.35	6.50	5.65	4.90
1N5296	0.91	0.88	7.35	6.50	5.65	4.90
1N5297	1.00	0.80	7.35	6.50	5.65	4.90
1N5298	1.10	0.70	7.35	6.50	5.65	4.90

Type	* Nom.	** Imp.	1-24	25-99	100-Mix	100-Up
1N5299	1.20	0.64	7.35	6.50	5.65	4.90
1N5300	1.30	0.58	7.35	6.50	5.65	4.90
1N5301	1.40	0.54	7.35	6.50	5.65	4.90
1N5302	1.50	0.51	7.35	6.50	5.65	4.90
1N5303	1.60	0.475	7.35	6.50	5.65	4.90
1N5304	1.80	0.420	7.35	6.50	5.65	4.90
1N5305	2.00	0.395	7.35	6.50	5.65	4.90
1N5306	2.20	0.370	7.35	6.50	5.65	4.90
1N5307	2.40	0.345	7.35	6.50	5.65	4.90
1N5308	2.70	0.320	7.35	6.50	5.65	4.90
1N5309	3.00	0.300	7.35	6.50	5.65	4.90
1N5310	3.30	0.280	7.35	6.50	5.65	4.90
1N5311	3.60	0.265	9.75	8.65	7.45	6.50
1N5312	3.90	0.255	9.75	8.65	7.45	6.50
1N5313	4.30	0.245	9.75	8.65	7.45	6.50
1N5314	4.70	0.235	9.75	8.65	7.45	6.50

MICROWAVE PRODUCTS

SILICON STEP-RECOVERY VARACTOR DIODES

Type	Case	Minimum Efficiency %	Pin (W)	fin (mc)	fout (mc)	1-99	100-999
IN4387	49	50	30	150	450	42.00	28.00
IN4388	49	55	20	500	1000	42.00	28.00
IN5149	47	55	20	500	1000	27.00	18.00
IN5150	47	65	37	500	1000	42.00	28.00

Type	Case	Minimum Efficiency %	Pin (W)	fin (mc)	fout (mc)	1-99	100-999
IN5151	48	60	12	1000	2000	42.00	28.00
IN5152	46	60	12	1000	2000	42.00	28.00
IN5153	47	60	12	1000	2000	42.00	28.00
IN5154	48	40	5	2000	6000	42.00	28.00
IN5155	46	40	5	2000	6000	42.00	28.00

DO-7—EPICAP VOLTAGE VARIABLE CAPACITANCE DIODES

BV=60 V min @ 10μA; IR=20 nA max. @ 55 V. No suffix ±10% tolerance; "A" suffix ±5% tolerance.

Type	CT Typ. @4V pf	Tuning Ratio (Min) CT4V	Qmin @ 4v 50 MHz	1-99	100-999
IN5139	6.8	2.7	350	NO SUFFIX	
IN5140	10	2.8	300	5.85	3.90
IN5141	12	2.8	300		
IN5142	15	2.8	250	"A" SUFFIX	
IN5143	18	2.8	250	6.45	4.30

Type	CT Typ. @ 4V pf	Tuning Ratio (Min) CT4V	Qmin @ 4V 50 MHz	1-99	100-999
IN5144	22	3.2	200	NO SUFFIX	
IN5145	27	3.2	200	5.85	3.90
IN5146	33	3.2	200		
IN5147	39	3.2	200	"A" SUFFIX	
NI5148	47	3.2	200	6.45	4.30

DO-7—VOLTAGE VARIABLE CAPACITANCE DIODES

BV=30V min. @ 10μA; IR=0.2 μA max. @ 25V

Type	CT Typ. @ 4V pf	Tuning Ratio (Min) CT4V	Qmin @ 4V 50 MHz	1-99	100-999
MV830	15	1.8	30	1.35	.90
MV831	18	1.8	25	1.35	.90
MV832	22	1.8	25	1.35	.90
MV833	27	1.8	25	1.35	.90
MV834	33	1.9	20	1.35	.90

Type	CT Typ. @ 4V pf	Tuning Ratio (Min) CT4V	Qmin @ 4V 50 MHz	1-99	100-999
MV835	39	1.9	20	1.35	.90
MV836	47	1.9	15	1.35	.90
MV837	56	1.9	15	1.35	.90
MV838	68	2.0	15	1.35	.90
MV839	82	2.0	10	1.35	.90
MV840	100	2.0	10	1.35	.90

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

● *NEW* EPICAP VOLTAGE VARIABLE CAPACITANCE DIODES — CASE 51

Designed specifically for AFC in home entertainment equipment, as FM radios, TV tuners where high Q and very low cost are essential. BV=20 V min @ 10 μA; IR=0.1 μA max @ 15 V. Tuning Ratio: C2/C20.

Type	CT Nom @ 4V pF	Tuning Ratio Min CT4V	Q Min @ 4 V 50 MHz	1-99	100-999
MV1620	6 8	2.0	300		
MV1622	8 2	2 0	300		
MV1624	10	2.0	300		
MV1626	12	2.0	300	1.42	.95
MV1628	15	2.0	250		
MV1630	18	2.0	250		
MV1632	20	2 0	250		
MV1634	22	2 0	250		

Type	CT Nom @ 4 V pF	Tuning Ratio Min CT4V	Q Min @ 4 V 50 MHZ	1-99	100-999
MV1636	27	2.0	200		
MV1638	33	2.0	200		
MV1640	39	2.0	200		
MV1642	47	2.0	200	1.42	.95
MV1644	56	2.0	150		
MV1646	68	2.0	150		
MV1648	82	2.0	150		
MV1650	100	2.0	150		

Designed for the same applications as the above items. Features a C2/C30 tuning ratio. Also enclosed in Case 51. BV=30 V min @ 10 μA; IR=0 02 μA max @ 25 Volts.

MV1720	6 8	2.80	500		
MV1722	8 2	2 80	500		
MV1724	10	2.80	500		
MV1726	12	3 00	450	7.35	4.90
MV1728	15	3 00	250		
MV 730	18	3.00	450		
MV 732	20	3.20	400		
MV 734	22	3.20	400		

MV1736	27	3.20	400		
MV1738	33	3.20	350		
MV1740	39	3.20	350		
MV1742	47	3.20	300	7.35	4.90
MV1744	56	3.20	300		
MV1746	68	3.20	250		
MV1748	82	3.20	250		
MV1750	100	3.20	250		

DO-7—RF SWITCHING DIODES

Type No.	BVZ V (Min)	CT max @ 100V (pf)	Rf max (Ohms)	1-99	100-999
MV1892	700	2.5	0.62	42.00	28.00

MOTOROLA TWIN RESISTORS

DIFFERENTIAL AMPLIFIERS

Type	Fig.	Struc.	Amb. Power Diss. 1 side	Amb. Power Diss. Both Sides	hFE @ Ic=100mA	1-99	100-999
2N2060	32A	NPN	500	600	30/90	27.00	18.00
2N2060A	32A	NPN	500	600	30/90	36.00	24.00
2N2223	32A	NPN	500	600	25/150	10.05	6.70
2N2223A	32A	NPN	500	600	25/150	15.00	10.00
2N2430	32A	NPN	500	600	20/-	12.75	8.50
2N2430A	32A	NPN	500	600	35/-	15.35	10.25
2N2639	32A	PNP	300	600	55/-	22.50	15.00
2N2640	32A	PNP	300	600	55/-	17.25	11.50
2N2642	32A	PNP	300	600	55/-	25.50	17.50
2N2643	32A	PNP	300	600	110/-	22.20	14.80
2N2802	32A	PNP	250	500	20/120	22.50	15.00
2N2803	32A	PNP	250	500	20/120	16.50	11.00
2N2804	32A	PNP	250	500	20/120	9.00	6.00
2N2805	32A	PNP	250	500	40/120	23.25	15.50
2N2806	32A	PNP	250	500	40/120	17.25	11.50
2N2915	32	NPN	300	600	100/-	10.50	7.00
2N2916	32	NPN	300	600	225/-	12.00	8.00
2N2917	32	NPN	300	600	100/-	7.50	5.00
2N2918	32	NPN	300	600	225/-	9.75	6.50
2N2919	32	NPN	300	600	100/-	11.25	7.50
2N2920	32	NPN	300	600	225/-	14.25	9.50
2N2974	35	NPN	250	300	100/-	27.75	18.50
2N2977	35	NPN	250	300	225/-	25.50	17.00
2N2979	35	NPN	250	300	225/-	32.25	21.50
2N3043	33	NPN	250	350	130/-	39.00	26.00
2N3044	33	NPN	250	350	130/-	33.00	22.00
2N3046	33	NPN	250	350	65/-	36.00	24.00
2N3047	33	NPN	250	350	65/-	30.00	20.00
2N3049	33	PNP	250	350	30/120	34.50	23.00
2N3050	33	PNP	250	350	30/120	24.00	16.00
2N3802	35	PNP	500	600	150 500	21.00	14.00
2N3803	35	PNP	500	600	300/500	22.50	15.00
2N3804	35	PNP	500	600	150/500	26.25	17.50
2N3805	35	PNP	500	600	300/500	27.25	18.50
2N3409	32	NPN	0 6	0 5	30/120	13.50	9.00
2N3411	32	NPN	0 6	0 5	30/120	18.00	12.00
2N3308	32	PNP	500	600	150/450	21.00	14.00

Type	Fig.	Struc.	Ambient Pwr. Diss. 1 Side	Ambient Pwr. Diss. Both Sides	hFE @ Ic=100mA	1-99	100-999
2N3809	32	PNP	500	600	300/400	22.50	15.00
2N3810	32	PNP	500	600	150/450	26.25	17.50
2N3811	32	PNP	500	600	300/400	27.75	18.50
MD708A	32	NPN	300	400	35/••	6.75	4.50
MD708AF	33	NPN	300	400	35/••	15.75	10.50
MD708B	32	NPN	300	400	35/••	4.80	3.20
MD708BF	33	NPN	300	400	35/••	12.30	8.20
MD708F	33	NPN	300	400	35/••	8.85	5.90
MD918A	32	NPN	300	400	50/-†	15.75	10.50
MD918AF	33	NPN	300	400	50/-†	24.75	16.50
MD918B	32	NPN	300	400	50/-†	13.20	8.80
MD918BF	33	NPN	300	400	50/-†	20.25	13.50
MD918F	33	NPN	300	400	50/-†	12.75	8.50
MD1120	32	NPN	500	600	30/120	19.10	12.75
MD1121	32	NPN	500	600	30/120	24.80	16.55
MD1122	32	NPN	500	600	30/120	37.00	24.65
MD1123	32	PNP	500	600	30/120	27.60	18.40
MD1127	32	NPN	300	400	30/-#	12.00	8.00
MD1129	32	NPN	500	600	100/300	51.75	34.50
MD1130	32	PNP	500	600	100/300	58.20	38.80
MD1131	32	NPN	300	400	50/-	28.35	18.90
MD1132	32	NPN	300	400	50/-•	38.25	25.50
MD1120F	33	NPN	250	350	30/120	42.95	28.65
MD1121F	33	NPN	250	600	30/120	55.80	37.20
MD1122F	33	NPN	250	350	30/120	83.15	55.45
MD1123F	33	PNP				49.70	33.15
MD1124F	33	PNP				64.80	43.20
MD1125F	33	PNP				83.15	55.45
MD1129F	33	NPN	250	350	100/300	93.15	62.10
MD1131F	33	NPN	250	350	50/-	39.60	26.40
MD1132F	33	NPN	250	350	50/-	48.50	33.00
MD1134	32	NPN	500	600	50/-#	11.65	7.75
MD3250A	32	PNP	500	600	50/150	19.50	13.00
MD3250AF	33	PNP	250	350	50/150	29.25	19.50
MD3251A	32	PNP	500	600	100/300	23.25	15.50
MD3251AF	33	PNP	250	350	100/300	30.75	20.50

†@Ic=1 0mA ••Ic=100mA; #Ic=10mA.

COMPLEMENTARY PAIRS

MD985	32	NPN-PNP	500	600	35/-	9.00	6.00
MD985F	33	NPN-PNP	250	350	35/-	13.50	9.00
MD986	32	NPN-PNP	500	600	35/-	18.90	12.60
MD986F	33	NPN PNP	250	350	35/-	30.15	20.10
MD6002	32	NPN-PNP	500	600	100/150	13.50	9.00

MD6002F	33	NPN-PNP	500	600	100/150	18.00	12.00
MD6001	32	NPN-PNP	500	600	40/150	10.80	7.20
MD6001F	33	NPN-PNP	500	600	40/150	15.30	10.20
MD6100	32	NPN-PNP	500	600	125/-	14.85	9.90

DARLINGTON AMPLIFIERS

2N998	TO-72	NPN	500		2,000*	13.50	9.00
2N999	TO-72	NPN	500		7000/70000*	14.85	9.90
2N2723	TO-72	NPN	500		2000/10000†	15.00	10.00

2N2724	TO-72	NPN	500		7000/50000†	16.50	11.00
2N2725	TO-72	NPN	500		2000/10000#	21.00	14.00
2N2785	TO-72	NPN	500		2000/20000*	11.25	7.50

*Ic=100 mA; #Ic=100 μA; †Ic=10 mA.

Motorola Transistors And Thyristors

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Fig. A

DUAL TRANSISTORS

Type	Fig.	Struc.	Amb. Power Diss. 1 Side	Amb. Power Diss. Sides	hFE @ Ic=100 mA	1-99	100-999
2N2641	32A	NPN	300	600	55/- #	7.20	4.80
2N2644	32A	NPN	300	600	110/- #	8.25	5.50
2N2804	32A	PNP	250	500	20/120 #	9.00	6.00
2N2807	32A	PNP	250	600	40/120 #	9.75	6.50
2N2913	32A	NPN	300	600	100/-	3.00	2.00
2N2972	35	NPN	250	300	100/-	11.60	7.75
2N2973	35	NPN	250	300	225/- #	14.55	9.70
2N3045	33	NPN	250	350	100/300 *	14.25	9.50
2N3048	33	NPN	250	350	50/200 *	12.75	8.50
2N3800	35	PNP	250	360	150/450 #	14.25	9.50
2N3801	35	PNP	250	360	300/900 #	15.75	10.50
2N3806	32	PNP	500	600	150/450 #	14.25	9.50
2N3807	32	PNP	500	600	300/900 #	15.75	10.50
MD708	32	NPN	300	400	35/-	4.35	2.90
MD918	32	NPN	300	400	50/- %	8.25	5.50
MD981	32	NPN	500	600	25/- %	12.95	8.65
MD981F	33	NPN	250	350	25/- %	29.10	19.40
MD982	32	PNP	500	600	25/- %	27.60	18.40
MD982F	33	PNP	250	350	25/- %	49.70	33.15
MD984	32	PNP	500	600	25/- /	20.65	13.75
MD984F	33	PNP	250	350	25/- /	37.20	24.80
MD2218	32	NPN	500	600	35/- /	6.75	4.50
MD2218A	32	NPN	500	600	35/- /	11.40	7.60
MD2218AF	33	NPN	250	350	35/- /	15.90	10.60
MD2218F	33	PNP	250	350	35/- /	11.25	7.50
MD2219	32	PNP	500	600	75/- /	7.95	5.30
MD2219A	32	PNP	500	600	75/- /	13.20	8.80
MD2219AF	33	PNP	250	350	75/- /	17.70	11.80
MD2219F	33	PNP	250	350	75/- /	12.45	8.30
MD2369	32	PNP	500	600	40/140 /	9.00	6.00
MD2904	32	PNP	500	600	35/- /	6.75	4.50
MD2904A	32	PNP	500	600	40/- /	11.40	7.60
MD2904AF	33	PNP	250	350	40/- /	15.90	10.60
MD2904F	33	PNP	250	350	40/- /	11.25	7.50
MD2905	32	PNP	500	600	75/- /	7.95	5.30
MD2905A	32	PNP	500	600	100/- /	13.20	8.80
MD2905AF	33	PNP	250	350	100/- /	17.70	11.80
MD2905F	33	PNP	250	350	100/- /	12.45	8.30
MD3133	32	PNP	500	600	25/- %	7.35	4.90
MD3133F	33	PNP	250	350	25/- %	11.10	7.40
MD3134	32	PNP	500	600	50/- %	7.80	5.20
MD3134F	33	PNP	250	350	50/- %	11.70	7.80
MD3250	32	PNP	500	600	50/150 #	9.75	6.50
MD3250F	33	PNP	250	350	50/150 #	17.25	11.50
MD3251	32	PNP	500	600	100/300 #	11.60	7.75
MD3251F	33	PNP	250	350	100/300 #	19.10	12.75
MD5000	32	PNP	300	400	20/- △	11.25	7.50
MD5000A	32	PNP	300	400	20/- △	23.25	15.50
MD5000B	32	PNP	300	400	20/- △	15.75	10.50

@ Ic=100 A; * @ Ic=10 A; % @ Ic=1.0 mA; / @ Ic=10 mA; △ @ Ic= 3.0 mA.

● *NEW* REFERENCE AMPLIFIERS (ASSEMBLIES) — PNP & NPN

For use in regulated power supplies as a combination voltage reference element and error voltage amplifier, providing temperature compensation for excellent reference voltage stability. Operation over three different temperature ranges: 0 to 75°C, —55 to +100°C, —55 to 150°C. Tj, Tstg = —65 to +175°C. Izt= 5.0 mA. **Suffix P for PNP or N of an NPN transistor.**

Type	Max. V Change Vref.	Temp. Range	Ref. Volt. Vref.	1-99	100-Up
MCA1911	.051	0 to +75	6.8 ±10%	4.50	3.00
MCA1912	.025			4.50	3.00
MCA1913	.010			4.50	3.00
MCA1914	.005			4.50	3.00
MCA1921	.105	—55 to +100	6.8 ±5%	4.50	3.00
MCA1922	.052			4.50	3.00
MCA1923	.020			4.50	3.00
MCA1924	.010			4.50	3.00
MCA1931	.139	—55 to +150	6.8 ±5%	4.50	3.00
MCA1932	.069			4.50	3.00
MCA1933	.026			4.50	3.00
MCA1934	.013			4.50	3.00
MCA2111N	.071	0 to +75	9.5 ±10%	5.25	3.95
MCA2112N	.035			5.25	3.95
MCA2113N	.014			5.25	3.95
MCA2114N	.007			5.25	3.95
MCA2121N	.147	—55 to +100	9.5 ±5%	5.25	3.95
MCA2122N	.073			5.25	3.95
MCA2123N	.028			5.25	3.95
MCA2124N	.014			5.25	3.95
MCA2131N	.194	—55 to +150	9.5 ±5%	5.25	3.95
MCA2132N	.097			5.25	3.95
MCA2133N	.038			5.25	3.95
MCA2134N	.019			5.25	3.95

Type	Max. V Change Vref.	Temp. Range	Ref. Volt. Vref.	1-99	100-Up
MCA2011	.060	0 to +75	8.0 ±10%	4.50	3.00
MCA2012	.030			7.95	5.30
MCA2013	.012			14.10	9.40
MCA2014	.006			23.40	15.60
MCA2021	.124	—55 to +100	8.0 ±5%	7.95	5.30
MCA2032	.062			14.10	9.40
MCA2023	.024			22.50	15.00
MCA2024	.012			45.00	29.00
MCA2031	.164	—55 to +150	8.0 ±5%	8.25	5.50
MCA2032	.082			14.10	9.40
MCA2033	.032			23.40	15.60
MCA2034	.016			49.50	33.00
MCA2211	.082	0 to +75	11.0 ±10%	5.25	3.95
MCA2212	.041			7.95	5.30
MCA2213	.016			14.10	9.40
MCA2214	.008			23.40	15.60
MCA2221	.170	—55 to +100	11.0 ±5%	7.95	5.30
MCA2222	.085			14.10	9.40
MCA2223	.034			22.50	15.00
MCA2224	.017			45.00	29.00
MCA2231	.225	—55 to +150	11.0 ±5%	8.25	5.50
MCA2232	.112			14.10	9.40
MCA2233	.044			23.40	15.60
MCA2234	.022			49.50	33.00

THYRISTORS

● *NEW* SENSITIVE GATE 800 mA PNPN THYRISTORS (LOW CURRENT)

CASE 29(10) Plastic. Designed for operation in low voltage mA μA switching and detection circuits. Tj = —65 to +125°C.

Type	Vrrm(rep) Volts	1-99	100-999
2N5060	30	.51	.43
2N5061	60	.55	.47
2N5062	100	.64	.54
2N5063	150	.85	.72

● *NEW* 8.0 AMPERE TRIACS SILICON BI-DIRECTIONAL THYRISTORS

Cases 85 (MAC1's), 86 (MAC2's), and 87 (MAC3's). For full wave AC control applications such as heating or lighting. Switch from a blocking to a conducting state for either polarity of applied anode voltage with + or — gate triggering.

Type	Peak Block Vbom	Ibom mA Max	Iho mA Max	1-99	100-Up
MAC1-2	50	2.0	30	2.40	1.60
MAC1-4	200	2.0	30	3.30	2.20
MAC1-6	400	2.0	30	5.25	3.50
MAC2-2	50	2.0	30	2.55	1.75
MAC2-4	200	2.0	30	3.45	2.35
MAC2-6	400	2.0	30	5.40	3.65
MAC3-2	50	2.0	30	2.50	1.70
MAC3-4	200	2.0	30	3.40	2.30
MAC3-6	400	2.0	30	5.35	3.60

Tj = —40 to +100°C. Tstg = —40 to +150°C.

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

Case 42

Case 60

Case 1, 3, 11
TO-3

Case 80
TO-66

Case 31
TO-5

Case 78
TO-53

Case 9
TO-61

THYRISTORS (Continued)

1.6 AMP THYRISTORS

Type	Vfom. Vrom Volts	Case	1-99	100-999
2N1595	50	TO-5	3.05	2.05
2N1596	100	TO-5	4.95	3.30
2N1597	200	TO-5	9.45	6.30
2N1598	300	TO-5	14.45	9.65
2N1599	400	TO-5	19.35	12.90
2N2322	25	TO-5	3.00	2.00
2N2323	50	TO-5	3.30	2.20
2N2324	100	TO-5	5.40	3.60
2N2325	150	TO-5	7.95	5.30
2N2326	200	TO-5	10.35	6.90
MCR1906-1	25	TO-5	1.57	1.05
MCR1906-2	50	TO-5	1.65	1.10
MCR1906-3	100	TO-5	1.87	1.25
MCR1906-4	200	TO-5	1.98	1.35

8 AMP ECONOMY THYRISTORS

Type	Vfom. Vrom Volts	Case	1-99	100-999
2N4151	25	85	1.45	1.05
2N4152	50	85	1.60	1.10
2N4153	100	85	1.75	1.25
2N4154	200	85	1.95	1.35
2N4155	300	85	2.40	1.60
2N4156	400	85	2.80	1.85
2N4157	500	85	5.00	3.35
2N4158	600	85	6.75	4.50
2N1159	25	85	1.45	1.05
2N1160	50	85	1.60	1.10
2N1161	100	85	1.75	1.25
2N1162	200	85	1.95	1.35
2N1163	300	85	2.40	1.60
2N1164	400	85	2.80	1.85
2N1157	500	85	5.00	3.35
2N1166	600	85	6.75	4.50
2N1167	25	86	1.60	1.20
2N1168	50	86	1.75	1.25
2N1169	100	86	1.90	1.40
2N1170	200	86	2.10	1.50
2N1171	300	86	2.55	1.75
2N1172	400	86	2.95	2.00
2N1173	500	86	5.15	3.50
2N1173	600	86	6.90	4.65
2N4175	25	86	1.60	1.20
2N4176	50	86	1.75	1.25
2N4177	100	86	1.90	1.40
2N4178	200	86	2.10	1.50
2N4179	300	86	2.55	1.75
2N4180	400	86	2.95	2.00
2N4181	500	86	5.15	3.50
2N4182	600	86	6.90	4.65
2N4183/MCR2604L-1	25	87	1.59	1.19
2N4184/MCR2604L-2	50	87	1.74	1.24
2N4185/MCR2604L-3	100	87	1.89	1.39
2N4186/MCR2604L-4	200	87	2.09	1.49
2N4187/MCR2604L-5	300	87	2.54	1.74
2N4188/MCR2604L-6	400	87	2.94	1.99
2N4189/MCR2604L-7	500	87	5.14	3.49
2N4190/MCR2604L-8	600	87	6.89	4.64
2N4191/MCR2605L-1	25	88	1.59	1.19
2N4192/MCR2605L-2	50	88	1.74	1.24
2N4193/MCR2605L-3	100	88	1.89	1.39
2N4194/MCR2605L-4	200	88	2.09	1.49
2N4195/MCR2605L-5	300	88	2.54	1.74
2N4196/MCR2605L-6	400	88	2.94	1.99
2N4197/MCR2605L-7	500	88	5.14	3.49
2N4198/MCR2605L-8	600	88	6.89	4.64
MCR2604-1	25	87	1.55	1.15
MCR2604-2	50	87	1.70	1.20
MCR2604-3	100	87	1.85	1.35
MCR2604-4	200	87	2.05	1.45
MCR2604-5	300	87	2.50	1.70
MCR2604-6	400	87	2.90	1.95
MCR2604-7	500	87	5.10	3.45
MCR2604-8	600	87	6.85	4.60
MCR2605-1	25	88	1.55	1.15
MCR2605-2	50	88	1.70	1.20
MCR2605-3	100	88	1.85	1.35
MCR2605-4	200	88	2.05	1.45
MCR2605-5	300	88	2.50	1.70
MCR2605-6	400	88	2.90	1.95
MCR2605-7	500	88	5.10	3.45
MCR2605-8	600	88	6.85	4.60

● *NEW* LOW CURRENT 8.0 AMP THYRISTORS — SILICON WITH PLASTIC CASE

Low "On" V: 1.0V (Typ) @ 5.0A @ 25°C. High surge current rating: Ifm=80A. Practical level triggering: 10 mA (Typ) @ 25°C.

2N4441	50	90	1.20	.80
2N4442	200	90	1.50	1.00
2N4443	400	90	2.00	1.35
2N4444	600	90	4.50	3.00

16-AMP THYRISTORS

@ 100°C with negligible power dissipation, Forward On Voltage 1.8 Volts max.

Type	Vfom. Vrom Volts	Case	1-99	100-999
2N1842	25	64	3.00	2.00
2N1843	50	64	3.75	2.50
2N1844	100	64	5.00	3.35
2N1845	150	64	5.70	3.80
2N1846	200	64	6.00	4.00
2N1847	250	64	6.30	4.20
2N1848	300	64	13.25	8.85
2N1849	400	64	15.00	10.00
2N1850	500	64	18.15	12.10

@ 125°C with negligible power dissipation, Forward On Voltage 1.6 Volts max.

Type	Vfom. Vrom Volts	Case	1-99	100-999
2N1842A	25	64	3.15	2.10
2N1843A	50	64	4.05	2.70
2N1844A	100	64	5.40	3.60
2N1845A	150	64	6.05	4.05
2N1846A	200	64	6.35	4.25
2N1847A	250	64	6.75	4.50
2N1848A	300	64	14.25	9.50
2N1849A	400	64	16.10	10.75
2N1850A	500	64	19.80	13.20

● *NEW* 20 AMP THYRISTORS

For Case 54, TO-3, types specify with "P" suffix, i.e. MR649P-1. MCR649-1 indicates the Case 61.

MCR649-1	25	61	4.35	2.90
MCR649-2	50	61	4.80	3.20
MCR649-3	100	61	5.55	3.70
MCR649-4	200	61	7.35	4.90
MCR649-5	300	61	14.10	9.40
MCR649-6	400	61	16.50	11.00
MCR649-7	500	61	19.65	13.10

THYRISTOR Listing is continued on next page.

Motorola Thyristors And Rectifiers

THYRISTORS (CONT'D)

● NEW 20 AMP THYRISTORS

If reverse polarity is desired, merely suffix "R" to the original type number, i.e. MCR2818R-1.

Type	Vfom, Vrom Volts	Case	1-99	100-999
MCR2818-1	25	91	3.00	2.00
MCR2818-2	50	91	3.30	2.20
MCR2818-3	100	91	3.75	2.50
MCR2818-4	200	91	4.65	3.10
MCR8218-5	300	91	5.55	3.70
MCR2818-6	400	91	6.45	4.30
MCR2818-7	500	91	8.85	5.90
MCR2818-8	600	91	9.75	6.50

Type	Vfom, Vrom Volts	Case	1-99	100-999
MCR2918-1	25	92	3.40	2.25
MCR2918-2	50	92	3.70	2.45
MCR2918-3	100	92	4.10	2.75
MCR2918-4	200	92	5.00	3.35
MCR2918-5	300	92	5.90	3.95
MCR2918-6	400	92	6.80	4.55
MCR2918-7	500	92	9.20	6.15
MCR2918-8	600	92	10.10	6.75

25-AMP THYRISTORS

@ 125°C with negligible power dissipation.

Type	Vfom, Vrom Volts	Case	1-99	100-999
2N683	100	64	5.60	3.75
2N688	400	64	17.10	11.40
2N689	500	64	20.60	13.75
2N2574	50	61	5.60	3.75
2N2575	100	61	7.10	4.75
2N2577	300	61	16.10	10.75
MCR2835-1	25	91	3.75	2.50

Type	Vfom, Vrom Volts	Case	1-99	100-999
MCR2835-2	50	91	4.50	3.00
MCR2835-3	100	91	4.85	3.25
MCR2835-4	200	91	5.85	3.90
MCR2835-5	300	91	7.20	4.80
MCR2835-6	400	91	8.25	5.50
MCR2835-7	500	91	10.65	7.10
MCR2835-8	600	91	12.35	8.25

● NEW 35 AMP THYRISTORS

Type	Vfom, Vrom Volts	Case	1-99	100-999
MCR2935-1	25	92	4.10	2.75
MCR2935-2	50	92	4.85	3.25
MCR2935-3	100	92	5.25	3.50
MCR2935-4	200	92	6.20	4.15

Type	Vfom, Vrom Volts	Case	1-99	100-999
MCR2935-5	300	92	7.55	5.05
MCR2935-6	400	92	8.60	5.75
MCR2935-7	500	92	11.00	7.35
MCR2935-8	600	92	12.75	8.50

RADAR MODULATOR SILICON-CONTROLLED RECTIFIERS

@ 125°C with negligible power dissipation, di.dt=1000 (A/usec.) 1000 amps pulse current (PW=10 usec), 5 ma min. holding curr.

Type	Vfom, Vrom Volts	Case	1-99	100-999
MCR1718-5	300	64	25.50	17.00
MCR1718-6	400	64	30.00	20.00

Type	Vfom, Vrom Volts	Case	1-99	100-999
MCR1718-7	500	64	37.50	25.00
MCR1718-8	600	64	45.00	30.00

PREMIUM PULSE MODULATOR THYRISTORS

Delay time—200 n sec max; Rise time—100 to 200 n sec max; Ultra —high di/dt—5000 Amps/uS; Repetive pulse current—to 100 Amps (Pw=10uS).

Type	Vfom, Vrom Volts	Case	1-99	100-999
2N4199	300	63	21.25	15.00
2N4200	400	63	28.75	20.00
2N4201	500	63	32.50	22.50

Type	Vfom, Vrom Volts	Case	1-99	100-999
2N4202	600	63	44.25	29.50
2N4203	700	63	51.75	34.50
2N4204	800	63	63.75	42.50

● NEW PLASTIC SILICON 3-LAYER BILATERAL TRIGGERS, CASE 29B

Annular, 2-terminal device exhibits symmetrical negative resistance switching characteristics. Developed for use in thyristor triggering circuits and signal switching and detection circuits. Made of durable plastic. Pd = 300 mW @ Ta = —40 to +25°C. *Both Directions. Ibr12 means term 1 is pos.

Type	Vbr* V Nom	Ipulse A Max	I (br) 12 & 21 A Max	1-99	100-999
MPT28	28	2.0	50	.68	.45
MPT32	32	2.0	50	.68	.45
MPT36	36	2.0	50	.68	.45

SILICON RECTIFIERS

HIGH VOLTAGE RECTIFIERS—"MOLDED ASSEMBLIES"

Type	PIV (V)	Io(A) @ 25°C	Isurge (A)	1-99	100-999
IN1731	1500	0.2	2.5	6.00	4.00
IN1733	3000	0.15	2.5	7.80	5.20
IN1734	5000	0.10	2.5	11.60	7.75

Case 43—GENERAL PURPOSE INDUSTRIAL RECTIFIERS

Type	Vrm (rep)	Av. Half Wave Rect. Amps.	Max. 1-Cyc. Surge I	1-99	100-999	1000-up
IN3491R	50	25 A @ 25°C	300A	.67	.45	.40
IN3492R	100			.76	.51	.46
IN3493R	200			1.11	.74	.67
IN3494R	300			1.27	.85	.76
IN3495R	400			1.48	.99	.89
MR327R	500			2.40	1.60	1.45
MR328R	600			3.35	2.25	2.00
MR330R	800			6.75	4.50	4.05
MR331R	1000			9.75	6.50	5.85
IN3659R	50	30 A @ 25°C	400A	.90	.60	.....
IN3660R	100			.99	.66	.....
IN3661R	200			1.33	.89	.....
IN3662R	300			1.48	.99	.....
IN3663R	400			1.70	1.14	.....
MR2261	10	25 A @ 100°C	300A	.19	.13	.....
MR2262	20			.25	.17	.....
MR2263	30			.30	.20	.....
MR2264	40			.37	.25	.....
MR2265	50			.54	.36	.....

Case 55—SINGLE-ENDED RECTIFIERS

IN1563	100	1.0 @ 55°C	70A	1.57	1.05
IN1564	200			1.72	1.15
IN1565	300			1.87	1.25
IN1566	400			2.02	1.35
IN1563A	100			1.80	1.20
IN1564A	200	1.5 @ 55°C	70A	2.02	1.35
IN1566A	400			2.70	1.80
IN1567A	500	1.5 @ 55°C	70A	3.15	2.10
IN1568A	600			4.65	3.10

Case 52—FLANGELESS TYPES

Type No.	Vrm (rep)	Av. Half Wave Rect. Amps.	Max ½ Cycle Surge I	1-99	100-999
MR1337-1	50	1.0A	30A	3.35	2.25
MR1337-2	100	1.0A	30A	4.95	3.30
MR1337-3	200	1.0A	30A	6.75	4.50
MR1337-4	300	1.0A	30A	9.00	6.00
MR1337-5	400	1.0A	30A	12.00	8.00

DO-7—SUBMINIATURE RECTIFIERS

Type	Vrm (rep)	Av. Half Wave Rect. Amps.	Max. ½-Cycle Surge I	1-99	110-999
IN3282	1000	100 ma @ 25°C	2.5A	2.45	1.65
IN3283	1500			3.05	2.05
IN3284	2000			7.95	5.30
IN3285	2500			10.05	6.70

SURMETIC® RECTIFIER

Type	Vrm (rep)	Av. Half Wave Rect. Amps	Max 1-Cy Surge I	1-99	100-up	1K up	5K up
IN4001	50	1 Amp @ 75°C	30A	.45	.30	.27	.25
IN4002	100			.49	.33	.30	.28
IN4003	200			.60	.40	.36	.33
IN4004	400			.67	.45	.40	.37
IN4005	600			.81	.54	.49	.45
IN4006	800			1.12	.75	.67	.62
IN4007	1000			1.80	1.20	1.08	.99
MR990	1000	250 A @ 75°C	15A	1.42	.95	.....	.....
MR991	1500			2.10	1.40	.....	.....
MR992	2000			4.95	3.30	.....	.....
MR993	2500			6.60	4.40	.....	.....
MR994	3000			7.85	5.25	.....	.....
MR2064	50	1.0 Amp @ 75°C	30 A	.36	.24	.....	.....
MR2065	100			.40	.27	.....	.....
MR2066	200			.48	.32	.....	.....
MR2067	400			.54	.36	.....	.....
MR2068	600			.67	.45	.....	.....
MR2266	800			1.08	.72	.....	.....
MR2271	300			1.68	1.12	.....	.....
MR2272	400			.57	.38	.....	.....
MR2273	200			.48	.32	.....	.....

Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

SILICON RECTIFIERS (Continued)

CASE 42—11/16" STUD-MOUNTED RECTIFIERS

Cathode connected to case. Suffix "R" indicates reverse polarity.

Type	Vrm (rep)	Av. Half Wave Rect. Amps	Max ½-Hz Surge I	1-99	100-999
1N248B	50	20 @ 150°C	350A	1.65	1.10
1N248C	55	20 @ 150°C	350A	1.80	1.20
1N249B	100	20 @ 150°C	350A	1.95	1.30
1N249C	110	20 @ 150°C	350A	2.25	1.50
1N250B	200	20 @ 150°C	350A	2.75	1.85
1N250C	220	20 @ 150°C	350A	3.00	2.00
1N1183	50	35 @ 140°C	400A	1.95	1.30
1N1184	100	35 @ 140°C	400A	2.40	1.60
1N1185	150	35 @ 140°C	400A	2.90	1.95
1N1186	200	35 @ 140°C	400A	3.45	2.30
1N1187	300	35 @ 140°C	400A	5.10	3.40
1N1188	400	35 @ 140°C	400A	5.85	3.90
1N1189	500	35 @ 140°C	400A	6.45	4.30
1N1190	600	35 @ 140°C	400A	6.90	4.60
1N1192	100	20 @ 150°C	350A	1.72	1.15
1N1193	150	20 @ 150°C	350A	2.10	1.40
1N1194	200	20 @ 150°C	350A	2.90	1.95
1N1195	300	20 @ 150°C	350A	4.25	2.85
1N1195A	300	20 @ 150°C	350A	4.40	2.95
1N1196	400	20 @ 150°C	350A	4.95	3.30
1N1196A	400	20 @ 150°C	350A	5.25	3.50
1N1197	500	20 @ 150°C	350A	6.15	4.10
1N1197A	500	20 @ 150°C	350A	6.45	4.30
1N1198A	600	20 @ 150°C	350A	7.80	5.20
1N3208	50	20 @ 150°C	350A	1.27	.85
1N3208R	50	20 @ 150°C	350A	1.27	.85
N13209R	100	20 @ 150°C	350A	1.42	.95
1N3210	200	20 @ 150°C	350A	1.75	1.19
1N3210R	200	20 @ 150°C	350A	1.75	1.19
1N3211	300	20 @ 150°C	350A	1.95	1.30
1N3211R	300	20 @ 150°C	350A	1.95	1.30
1N3212	400	20 @ 150°C	350A	2.60	1.75
1N3212R	400	20 @ 150°C	350A	2.60	1.75
1N3213	†R500	20 @ 150°C	350A	3.05	2.05
1N3214	600	20 @ 150°C	350A	3.05	2.05

DO-4—CASE 50—7/16" STUD-MOUNTED RECTIFIERS

1N3379	50	6A @ 100°C	75A	4.85	3.25
1N3380	100	6A @ 100°C	75A	5.40	3.60
1N3381	200	6A @ 100°C	75A	7.85	5.25
1N3382	300	6A @ 100°C	75A	12.00	8.00
1N3383	400	6A @ 100°C	75A	13.65	9.10
1N3389	50	12A @ 100°C	150A	6.00	4.00
1N3390	100	12A @ 100°C	150A	6.45	4.30
1N3391	200	12A @ 100°C	150A	9.45	6.30
1N3392	300	12A @ 100°C	150A	14.25	9.50
1N3393	400	12A @ 100°C	150A	17.25	11.50

CASE 50—DO-4—STUD-MOUNTED RECTIFIERS

Type	Vrm (rep)	Av. Half Wave Rect. Amps	Max ½-Hz Surge I	1-99	100-999
MR1120	50	12A @ 100°C	300A	1.03	.69
MR1121	100	12A @ 100°C	300A	1.15	.77
MR1122	200	12A @ 100°C	300A	1.32	.88
MR1123	300	12A @ 100°C	300A	1.48	.99
MR1124	400	12A @ 100°C	300A	1.65	1.10
MR1125	500	12A @ 100°C	300A	2.02	1.35
MR1126	600	12A @ 100°C	300A	2.45	1.65
MR1128	800	12A @ 100°C	300A	5.60	3.75
MR1130	1000	12A @ 100°C	300A	7.85	5.25

CASE 60—LOW-CURRENT RECTIFIERS

1N4719	50	3.0 @ 75°C	300A	.66	.44
1N4720	100	3.0 @ 75°C	300A	.73	.49
1N4721	200	3.0 @ 75°C	300A	.82	.55
1N4722	400	3.0 @ 75°C	300A	1.12	.75
1N4723	600	3.0 @ 75°C	300A	1.50	1.00
1N4724	800	3.0 @ 75°C	300A	4.10	2.75
1N4725	1000	3.0 @ 75°C	300A	6.35	4.25
MR1033A	300	3.0 @ 75°C	300A	.93	.62
MR1035A	500	3.0 @ 75°C	300A	1.32	.88
MR2069	50	3.0 @ 75°C	300A	.60	.40
MR2070	100	3.0 @ 75°C	300A	.67	.45
MR2071	200	3.0 @ 75°C	300A	.76	.51
MR2072	300	3.0 @ 75°C	300A	.87	.58
MR2073	400	3.0 @ 75°C	300A	1.06	.71
MR2074	500	3.0 @ 75°C	300A	1.26	.84
MR2075	600	3.0 @ 75°C	300A	1.44	.96

CASE 70—LOW CURRENT RECTIFIERS

1N4997	50	3.0 @ 75°C	300A	.66	.44
1N4998	100	3.0 @ 75°C	300A	.73	.49
1N4999	200	3.0 @ 75°C	300A	.82	.55
1N5000	400	3.0 @ 75°C	300A	1.12	.75
1N5001	600	3.0 @ 75°C	300A	1.50	1.00
1N5002	800	3.0 @ 75°C	300A	4.10	2.75
1N5003	1000	3.0 @ 75°C	300A	6.35	4.25
MR1033B	300	3.0 @ 75°C	300A	.93	.62
MR1035B	500	3.0 @ 75°C	300A	1.32	.88
MR2369	50	3.0 @ 75°C	300A	.60	.40
MR2370	100	3.0 @ 75°C	300A	.67	.45
MR2371	200	3.0 @ 75°C	300A	.76	.51
MR2372	300	3.0 @ 75°C	300A	.87	.58
MR2373	400	3.0 @ 75°C	300A	1.06	.71
MR2374	500	3.0 @ 75°C	300A	1.26	.84
MR2375	600	3.0 @ 75°C	300A	1.44	.96

HIGH CURRENT MULTIPLE CELL RECTIFIER

50 AMP FLANGE MOUNTED, SOLID LUG TERMINAL

Type	PIV	1-24	25-99	100-999
MR1200 FL	50	3.20	2.90	2.40
MR1201 FL	100	4.10	3.70	3.10
MR1202 FL	150	5.60	5.05	4.20
MR1204 FL	250	6.40	5.75	4.80
MR1205 FL	300	6.40	5.75	4.80
MR1207 FL	400	7.30	6.60	5.50
MR1208 FL	500	8.65	7.80	6.50
MR1209 FL	600	10.30	9.30	7.75

80 AMP STUD-MOUNTED, FLEX. BRAIDED TERMINAL 10-32 STUD THREAD

MR1210 SB	50	4.80	4.30	3.60
MR1212 SB	150	7.00	6.30	5.25
MR1214 SB	250	8.15	7.40	6.15
MR1216 SB	350	10.35	9.35	7.80
MR1218 SB	500	11.30	10.20	8.50
MR1219 SB	600	13.55	12.25	10.20

80 AMP STUD-MOUNTED, SOLID LUG TERMINAL

MR1211 SL	100	5.25	4.75	3.95
MR1212 SL	150	6.60	5.95	4.95
MR1213 SL	200	6.60	5.95	4.95
MR1214 SL	250	7.80	7.00	5.85
MR1216 SL	350	9.95	9.00	7.50
MR1217 SL	400	9.95	9.00	7.50
MR1218 SL	500	10.90	9.85	8.20
MR1219 SL	600	13.15	11.90	9.90

80 AMP STUD-MOUNTED, FLEX. BRAIDED TERMINAL

MR1810 SB	50	5.05	4.55	3.80
MR1811 SB	100	5.90	5.35	4.45
MR1812 SB	150	7.25	6.55	5.45
MR1813 SB	200	7.25	6.55	5.45
MR1814 SB	250	8.30	7.50	6.25
MR1815 SB	300	8.30	7.50	6.25
MR1816 SB	350	10.65	9.60	8.00
MR1817 SB	400	10.65	9.60	8.00
MR1818 SB	500	11.55	10.45	8.70
MR1819 SB	600	13.85	12.50	10.40

80 AMP STUD-MOUNTED, FLEX. BRAIDED TERMINAL ⅜-24 STUD THREAD

Type	PIV	1-24	25-99	100-999
MR1810 SL	50	5.45	4.90	4.10
MR1811 SL	100	6.30	5.70	4.75
MR1812 SL	150	7.65	6.90	5.75
MR1813 SL	200	7.65	6.90	5.75
MR1814 SL	250	8.70	7.85	6.55
MR1815 SL	300	8.70	7.85	6.55
MR1816 SL	350	11.05	9.95	8.30
MR1817 SL	400	11.05	9.95	8.30
MR1818 SL	500	11.95	10.80	9.00
MR1819 SL	600	14.25	12.85	10.70

160 AMP STUD-MOUNTED, FLEX. BRAIDED TERMINAL

MR1222 SB	150	12.65	11.40	9.50
MR1224 SB	250	15.30	13.80	11.50
MR1225 SB	300	15.30	13.80	11.50
MR1226 SB	350	17.95	16.20	13.50
MR1227 SB	400	17.95	16.20	13.50
MR1228 SB	500	19.95	18.00	15.00
MR1229 SB	600	23.95	21.60	18.00

160 AMP STUD-MOUNTED, SOLID LUG TERMINAL

MR1222 SL	150	12.65	11.40	9.50
MR1224 SL	250	15.30	13.80	11.50
MR1225 SL	300	15.30	13.80	11.50
MR1227 SL	400	17.95	16.20	13.50
MR1228 SL	500	19.95	18.00	15.00
MR1229 SL	600	23.95	21.60	18.00

160 AMP STUD-MOUNTED, FLEX. BRAIDED TERMINAL

MR1222 FB	150	12.65	11.40	9.50
MR1224 FB	250	15.30	13.80	11.50
MR1225 FB	300	15.30	13.80	11.50
MR1228 FB	500	19.95	18.00	15.00
MR1229 FB	600	23.95	21.60	18.00

Motorola Semiconductors

CASE 80 (TO-66)

TO-17

TO-18

TO-5

CASE 25

TO-23

TO-46

HIGH CURRENT MULTI-CELL RECTIFIERS (Cont'd)

160 AMP STUD-MOUNTED, SOLID LUG TERMINAL

Type	PIV	1-24	25-99	100-999
MR1222 FL	150	12.25	11.05	9.20
MR1224 FL	250	14.90	13.45	11.20
MR1225 FL	300	14.90	13.45	11.20
MR1226 FL	350	17.55	15.85	13.20
MR1227FL	400	17.55	15.85	13.20
MR1228 FL	500	19.55	17.65	14.70
MR1229 FL	600	23.55	21.25	17.70
240 Amp Stud Mtd., Flex. Braided Terminal				
MR1230SB	50	13.05	11.75	9.80
MR1232SB	100	17.30	15.60	13.00
MR1234SB	250	19.60	17.70	14.75
MR1235SB	300	19.60	17.70	14.75
MR1236SB	350	24.25	21.90	18.25
MR1238SB	500	27.95	25.20	21.00
MR1239SB	600	34.60	31.20	26.00
240 Amp Stud Mtd. Solid Lug Terminal				
MR1230SL	50	13.05	11.75	9.80
MR1232SL	150	17.30	15.60	13.00
MR1234SL	250	19.60	17.70	14.75
MR1235SL	300	19.60	17.70	14.75
MR1236SL	350	24.25	21.90	18.25
MR1238SL	500	27.95	25.20	21.00
MR1239SL	600	34.60	31.20	26.00
240 Amp Flange Mtd. Flex Braided Terminal				
Type	PIV	1-24	25-99	100-999
MR1232FB	600	17.30	15.60	13.00
MR1234FB	150	19.60	17.70	14.75
MR1235FB	250	19.60	17.70	14.75
MR1236FB	300	24.25	21.90	18.25
MR1238FB	350	27.95	25.20	21.00
MR1239FB	500	34.60	31.20	26.00
240 Amp Flange Mtd., Solid Lug Terminal				
MR1232FL	150	16.30	14.70	12.25
MR1234FL	250	18.00	16.25	13.55
MR1235FL	300	18.00	16.25	13.55
MR1236FL	350	23.20	20.95	17.45
MR1238FL	500	26.55	23.95	19.95
MR1239FL	600	33.20	29.95	24.95
400 Amp Stud Mtd., Flex. Braided Terminal				
MR1242SB	150	22.85	20.65	17.20
MR1244SB	250	27.95	25.20	21.00
MR1245SB	300	27.95	25.20	21.00
MR1246SB	350	31.40	28.30	23.60
MR1248SB	500	45.20	40.80	34.00
MR1249SB	600	66.50	60.00	50.00

400 Amp Stud Mtd., Solid Lug Terminal

Type	PIV	1-24	25-99	100-999
MR1242SL	150	22.85	20.65	17.20
MR1244SL	250	27.95	25.20	21.00
MR1245SL	300	27.95	25.20	21.00
MR1246SL	350	31.40	28.30	23.60
MR1248SL	500	45.20	40.80	34.00
MR1249SL	600	66.50	60.00	50.00

400 Amp Flange Mtd., Flex. Braided Terminal

MR1242FB	150	22.85	20.65	17.20
MR1244FB	250	27.95	25.20	21.00
MR1245FB	300	27.95	25.20	21.00
MR1246FB	350	31.40	28.30	23.60
MR1248FB	500	45.20	40.80	34.00
MR1249FB	600	66.50	60.00	50.00

400 Amp Flange Mtd., Solid Lug Terminal

Type	PIV	1-24	25-99	100-999
MR1242FL	150	21.55	19.45	16.20
MR1244FL	250	26.60	24.00	20.00
MR1245FL	300	26.60	24.00	20.00
MR1246FL	350	30.05	27.10	22.60
MR1248FL	500	42.55	38.40	32.00
MR1249FL	600	63.85	57.60	48.00

650 Amp Flange Mtd., Solid Lug Terminal

MR1262FL	150	55.20	49.80	41.50
MR1264FL	250	61.20	55.20	46.00
MR1265FL	300	61.20	55.20	46.00
MR1266FL	350	67.85	61.20	51.00
MR1268FL	500	82.45	74.40	62.00
MR1269FL	600	99.75	90.00	75.00

1000 Amp Water-Cooled

Type	PIV	1-99	100-999
MR1290	50	60.00	54.00
MR1291	100	66.50	60.00
MR1292	150	76.50	69.00
MR1293	200	76.50	69.00
MR1294	250	87.50	79.00
MR1295	300	87.50	79.00
MR1296	350	98.50	88.75
MR1297	400	98.50	88.75
MR1298	500	152.95	138.00
MR1299	600	199.50	180.00

POWER TRANSISTORS

● *NEW* 0.1 AMP NPN SILICON POWER TRANSISTORS

Type	Case	Pc W	BVCBO	hFE @ IC	1-99	100-999
MJ420	TO-5	2.5	275	25-250 @ 0.3A	1.80	1.20
MJ421	TO-5	2.5	350	25-250 @ 0.3A	1.85	1.25
MJ3201	TO-66	15	225	30-200 @ 0.5A	1.72	1.15
MJ3202	TO-66	15	300	30-200 @ 0.5A	1.87	1.25
0.5 Amp Silicon NPN Power Transistors						
MJ400	TO-66	6.67	350	30-300 @ 0.5A	1.65	1.10
MJ2251	TO-63	10	300	25-200 @ 0.5A	1.87	1.25
MJ2252	TO-63	10	300	20-200 @ 0.5A	2.02	1.35
1 Amp Silicon PNP Power Transistors						
2N3740	TO-66	25	60	30-100 @ 0.25A	2.90	1.95
2N3741	TO-66	25	80	30-100 @ 0.25A	3.15	2.10
2N4234	TO-5	5	.....	30-150 @ 0.25A	3.00	2.00
2N4235	TO-5	5	.....	30-150 @ 0.25A	3.60	2.39
2N4236	TO-5	5	.....	30-150 @ 0.25A	4.00	2.66
MJ2253	TO-66	25	50	20-100 @ 0.25A	2.65	1.76
MJ2254	TO-66	25	70	20-100 @ 0.25A	2.90	1.95
MJ3701	TO-66	25	90	20-100 @ 0.25A	2.00	1.35
1-Amp NPN Silicon Power Transistors						
2N3766	TO-66	20	80	40-160 @ 0.5A	2.10	1.40
2N3767	TO-66	20	100	40-160 @ 0.5A	2.30	1.55
2N4237	TO-5	5	.....	40-160 @ 0.5A	2.25	1.50
2N4238	TO-5	5	.....	40-160 @ 0.5A	2.75	1.85
2N4239	TO-5	5	.....	40-160 @ 0.5A	3.05	2.05

● *NEW* 2 AMP NPN SILICON POWER TRANSISTOR

Type	Case	Pc W	BVCBO	hFE @ IC	1-99	100-999
MJ2249	TO-66	20	50	25-200 @ 0.1A	2.02	1.35
MJ2250	TO-66	20	50	25-200 @ 0.1A	2.15	1.45
MJ3101	TO-66	20	50	25-200 @ 0.1A	1.95	1.30

3 AMP INDUSTRIAL PNP POWER TRANSISTORS

Type	Case	Pc W	BVCBO	hFE @ IC	1-99	100-999
2N176	TO-3	90	40	25- 90 @ 0.5A	1.20	.87
2N350A	TO-3	90	50	20- 60 @ 0.7A	1.65	1.10
2N351A	TO-3	90	50	25- 90 @ 0.7A	1.70	1.15
2N375	TO-3	90	80	35- 90 @ 1A	2.20	1.65
2N376A	TO-3	90	50	35-120 @ 0.7A	1.85	1.25
2N554	TO-3	90	15	50 @ 0.5A	.60	.40
2N555	TO-3	90	30	50 @ 0.5A	.75	.50
2N618	TO-3	90	80	60-140 @ 1A	2.45	1.82
2N699	TO-3	90	40	75-250 @ 0.5A	1.32	.88
2N3160	TO-3	90	50	60-140 @ 1A	1.70	1.25
2N1362	TO-3	90	100	35- 90 @ 1A	2.85	2.12
2N1363	TO-3	90	100	60-140 @ 1A	3.10	2.30
†2N2137	TO-3	62.5	30	30- 60 @ .5A	1.80	1.20
†2N2138	TO-3	62.5	45	30- 60 @ .5A	2.10	1.40
†2N2139	TO-3	62.5	60	30- 60 @ .5A	2.25	1.50

Continued in next page.

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

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TO-107

3 AMP INDUSTRIAL PNP POWER TRANSISTORS (Cont'd)

Type	Case	Pc W	BVCBO	hFE @ Ic	1-99	100-999
†2N2140	TO-3	62.5	75	30- 60 @ .5A	3.90	2.60
†2N2142	TO-3	62.5	30	50-100 @ .5A	2.30	1.55
†2N2143	TO-3	62.5	45	50-100 @ .5A	2.45	1.65
†2N2144	TO-3	62.5	60	50-100 @ .5A	3.75	2.50
2N3719	TO-5	6	60	25-180 @ 1A	11.90	7.95
2N3720**	TO-3	6	40	25-180 @ 1A	13.40	8.95
2N3738	TO-66	20	250	40-200 @ 0.1A	2.25	1.50
2N3739	TO-66	20	325	40-200 @ 0.1A	2.45	1.65
2N4234	TO-5	6	40	30-150 @ 0.25A	3.00	2.00
2N4235	TO-5	6	60	30-150 @ 0.25A	3.60	2.39
2N4236	TO-5	6	80	30-150 @ 0.25A	4.00	2.66
2N4918	77	30	40	20-100 @ 0.5A	1.65	1.11
2N4919	77	30	60	20-100 @ 0.5A	1.90	1.27
2N4920	77	30	80	20-100 @ 0.5A	2.25	1.50
2N4921	77	30	40	20-100 @ 0.5A	1.33	.89
2N4922	77	30	60	20-100 @ 0.5A	1.48	.99
2N4923	77	30	80	20-100 @ 0.5A	1.80	1.20
MJ2267	TO-3	150	40	15- 70 @ 3A	4.95	3.30
MJ2268	TO-3	150	55	15- 70 @ 3A	5.45	3.65

**Silicon # Solid base TO-5. †For solid lugs, prefix "MP."

● NEW 4 AMP NPN SILICON POWER TRANSISTORS

2N3766	TO-66	20	80	40-160 @ 0.5A	2.10	1.40
2N3767	TO-66	20	100	40-160 @ 0.5A	2.30	1.55
2N4910	TO-66	25	40	20-100 @ 0.5A	1.55	1.05
2N4911	TO-66	25	60	20-100 @ 0.5A	1.80	1.20
2N4912	TO-66	25	80	20-100 @ 0.5A	2.10	1.40

● NEW 4-AMP PNP SILICON POWER TRANSISTORS

2N4898	TO-66	25	40	20-100 @ 0.5A	1.95	1.30
2N4899	TO-66	25	60	20-100 @ 0.5A	2.60	1.75
2N4900	TO-66	25	80	20-100 @ 0.5A	2.90	1.95

● NEW 1.0 AMPERE GERMANIUM RECTIFIERS

CASE 52, DO-13. For applications requiring low forward V drop, low power diss. and high rectification efficiency. Tj = —65 to +95°C, Tstg = —65 to +125°C. Ir = .22 mA.

Type	Vrm V Max	Ifm (surge) A	Vf V Max	1-99	100-up
1N91	100	30	0.45	.90	.60
1N92	200	30	0.45	1.95	1.30
1N93	300	30	0.45	2.70	1.80

5 AMP GERMANIUM PNP POWER TRANSISTORS

Type	Case	Pd W	BVCBO	hFE @ Ic	1-99	100-up
2N242	TO-3	106	45	30-120 @ 3A	1.65	1.10
2N307	TO-3	106	35	20-120 @ 3A	1.12	.75
2N307A	TO-3	106	35	30-120 @ 3A	1.87	1.25
2N378	TO-3	106	20	40- 80 @ 3A	1.80	1.20
2N379	TO-3	106		20- 70 @ 2A	1.90	1.39
2N380	TO-3	106	30	30- 70 @ 3A	1.70	1.26
2N459	TO-3	106	.....	20- 70 @ 3A	4.35	2.90
2N459A	TO-3	106	105	40- 70 @ 3A	4.65	3.10
2N1011	TO-3	60	80	30- 75 @ 3A	1.95	1.45
2N1021	TO-3	85	100	30- 90 @ 3A	3.10	1.08
2N1022	TO-3	85	120	30- 90 @ 3A	3.60	2.05
†2N1529	TO-3	90	40	20- 40 @ 3A	1.45	2.40
†2N1530	TO-3	90	60	20- 40 @ 3A	1.60	1.15
†2N1531	TO-3	90	80	20- 40 @ 3A	2.30	1.70
†2N1532	TO-3	90	100	20- 40 @ 3A	3.00	2.24
†2N1533	TO-3	90	120	20- 40 @ 3A	4.35	3.25
†2N1534	TO-3	90	40	35- 70 @ 3A	1.40	1.05
†2N1535	TO-3	90	60	35- 70 @ 3A	1.50	1.14
†2N1536	TO-3	90	80	35- 70 @ 3A	1.70	1.25
†2N1537	TO-3	90	100	35- 70 @ 3A	3.90	2.90
†2N1539	TO-3	90	40	50-100 @ 3A	1.50	1.12
†2N1540	TO-3	90	60	50-100 @ 3A	1.58	1.18
†2N1541	TO-3	90	80	50-100 @ 3A	1.85	1.38
†2N1542	TO-3	90	100	50-100 @ 3A	2.35	1.24
†2N1544	TO-3	90	40	75-150 @ 3A	1.65	1.75
†2N1545	TO-3	90	60	75-150 @ 3A	1.85	1.35
†2N1546	TO-3	90	80	75-150 @ 3A	2.30	1.70
†2N1547A	TO-3	90	100	75-150 @ 3A	3.45	2.55
†2N1548	TO-3	90	120	75-150 @ 3A	4.00	2.95
2N3311	TO-36	170	30	60-120 @ 3A	2.70	1.80
2N3312	TO-36	170	45	60-120 @ 3A	3.30	2.20
2N3313	TO-36	170	60	60-120 @ 3A	4.20	2.80
2N3314	TO-36	170	30	100-200 @ 3A	3.15	2.10
2N3315	TO-36	170	45	100-200 @ 3A	3.90	2.60
2N3316	TO-36	170	60	100-200 @ 3A	5.25	3.50

**Silicon # Solid base TO-5. †For solid lugs, prefix "MP."

5-AMP SILICON NPN POWER TRANSISTORS

Type	Case	Pc W	BVCBO	hFE @ Ic	1-99	100-up
2N4913	TO-3	87.5	40	25-100 @ 2.5A	2.40	1.60
2N4914	TO-3	87.5	60	25-100 @ 2.5A	2.60	1.75
2N4915	TO-3	87.5	80	25-100 @ 2.5A	4.20	2.80
2N5067	TO-3	87.5	40	20- 80 @ 1A	1.80	1.20
2N5068	TO-3	87.5	60	20- 80 @ 1A	2.25	1.50
2N5069	TO-3	87.5	80	20- 80 @ 1A	2.85	1.90

7-AMP GERMANIUM PNP POWER TRANSISTORS

MP110	TO-3	106	.....	74-250 @ 1A	1.67	1.12
MP525	TO-3	106		30-150 @ 3A	1.00	.75
MP2060	TO-3	85	40	30-200 @ 3A	1.05	.75
MP2061	TO-3	85	60	30-200 @ 3A	1.15	.85
MP2062	TO-3	85	75	30-200 @ 3A	1.35	1.00
MP2063	TO-3	85	90	30-200 @ 3A	1.65	1.25
2N456A	TO-3	50	40‡	30- 90 @ 3A	1.80	1.20
2N457A	TO-3	50	60‡	30- 90 @ 3A	2.20	1.45
2N258A	TO-3	50	80‡	30- 90 @ 3A	2.65	1.75
2N3611	TO-3	85	40	35- 70 @ 3A	1.15	.78
2N3612	TO-3	85	60	35- 70 @ 3A	1.30	.88
2N3613	TO-3	85	40	60-120 @ 3A	1.25	.85
2N3614	TO-3	85	60	60-120 @ 3A	1.40	.94
2N3615	TO-3	85	80	30- 60 @ 3A	1.65	1.10
2N3616	TO-3	85	100	30- 60 @ 3A	2.10	1.39
2N3617	TO-3	85	80	45- 90 @ 3A	1.88	1.25
2N3618	TO-3	85	100	45- 90 @ 3A	2.37	1.58

7.5-AMP SILICON NPN POWER TRANSISTORS

Type	Case	Pc W	BVCBO	hFE @ Ic	1-99	100-up
2N3445	TO-3	117	80	20- 60 @ 3A	12.00	8.00
2N3446	TO-3	117	100	20- 60 @ 3A	18.00	12.00
2N3447	TO-3	117	80	40-120 @ 5A	19.50	13.00
2N3448	TO-3	117	100	40-120 @ 5A	29.95	19.50
2N3487	TO-61	117	80	20- 60 @ 3A	42.00	28.00
2N3491	TO-61	117	100	40-120 @ 3A	63.00	42.00
2N3492	TO-61	117	120	30- 90 @ 5A	75.00	50.00

8-AMP SILICON PNP POWER TRANSISTORS

Type	Case	Pc W	BVCBO	hFE @ Ic	1-99	100-up
MJ2255	TO-3	120	40‡	15- @ 5A	2.70	1.80
MJ2256	TO-3	120	60	15- @ 5A	3.05	2.05
MJ2257	TO-3	120	80	15- @ 5A	4.40	2.95

10-AMP GERMANIUM PNIP TRANSISTORS

Type	Case	Pc W	BVCBO	hFE @ Ic	1-99	100-up
2N1073	TO-41	85	40	20- 60 @ 5A	2.40	1.78
2N1073A	TO-41	85	80	20- 60 @ 5A	3.60	2.67
2N1073B	TO-41	85	120	20- 60 @ 5A	4.50	3.30
2N2528	TO-3	85	80	20- 50 @ 3A	7.10	4.75
2N2527	TO-3	85	120	20- 50 @ 3A	9.30	6.20
2N2528	TO-3	85	160	20- 50 @ 3A	14.85	9.90

10-AMP GERMANIUM PNP POWER TRANSISTORS

2N627	TO-3	90	40	10- 30 @ 10A	2.85	1.90
2N628	TO-3	90	60	10- 30 @ 10A	3.35	2.25
2N629	TO-3	90	80	10- 30 @ 10A	5.30	3.55
2N630	TO-3	90	100	10- 30 @ 10A	6.05	4.05

10-AMP SILICON PNP POWER TRANSISTORS

2N3789	TO-3	150	60	25- 90 @ 1A	8.90	5.95
2N3790	TO-3	150	80	25- 90 @ 1A	10.65	7.10
2N3791	TO-3	150	60	50-150 @ 1A	12.35	8.25
2N3792	TO-3	150	80	50-150 @ 1A	14.85	9.90

Add Prefix "MP", i.e. MP3789 for lugs, priced slightly higher.

10-AMP SILICON NPN POWER TRANSISTORS

2N3232	TO-3	117	60	15- 75 @ 3A	3.75	2.50
2N3235	TO-3	117	55	20- 70 @ 4A	3.75	2.50
2N3713	TO-3	150	80	25- 90 @ 1A	4.40	2.95
2N3714	TO-3	150	100	25- 90 @ 1A	4.70	3.15
2N3715	TO-3	150	80	50-150 @ 1A	4.85	3.25
2N3716	TO-3	150	100	50-150 @ 1A	6.75	4.50
MJ413	TO-3	125	400	20- 80 @ 0.5A	6.50	4.82
MJ423	TO-3	125	400	30- 90 @ 1A	8.00	5.93
MJ431	TO-3	125	400	15- 35 @ 2.5A	37.50	27.78

Add prefix "MP", priced slightly higher.

Motorola Transistors

POWER TRANSISTORS (Continued)

15 AMP POWER GERANIUM PNP TRANSISTORS

For solid lugs, add prefix "MP."

Type	Case	PdW	BVCBO	hFE@IC	1-99	100-999
2N173	TO-36	150	60	35- 70@ 5A	3.40	2.50
2N174	TO-36	150	80	35- 70@ 5A	3.60	2.67
2N277	TO-36	150	40	35- 70@ 5A	2.25	1.66
2N278	TO-36	150	50	35- 70@ 5A	2.80	2.07
2N441	TO-36	150	40	35- 70@ 5A	1.85	1.25
2N442	TO-36	150	50	20- 40@ 5A	1.95	1.30
2N443	TO-36	150	60	20- 40@ 5A	1.90	1.39
2N1100	TO-36	150	100	25- 50@ 5A	4.50	3.34
2N1358	TO-36	150	80	25- 50@ 5A	4.15	3.06
†2N1553	TO-3	90	40	30- 60@10A	1.85	1.35
†2N1554	TO-3	90	60	30- 60@10A	2.30	1.70
†2N1555	TO-3	90	80	30- 60@10A	2.75	2.05
†2N1556	TO-3	90	100	30- 60@10A	4.00	2.95
†2N1557	TO-3	90	40	50-100@10A	2.15	1.58
†2N1558	TO-3	90	60	50-100@10A	2.80	2.06
†2N1559	TO-3	90	80	50-100@10A	3.25	2.40
†2N1560	TO-3	90	100	50-100@10A	4.45	3.30

● NEW 20 AMP GERMANIUM PNP POWER SWITCH

*DC POWER dissipation limit.

2N2833	TO-3	85*	120	25-100@10A	4.85	3.25
2N2834	TO-3	85*	140	25-100@10A	5.25	3.50

25-AMP GERMANIUM PNP POWER TRANSISTORS

2N1162	TO-3	90	50	15- 65@25A	4.45	3.30
2N1163	TO-41	90	50	15- 65@25A	4.45	3.30
2N1185	TO-41	90	80	15- 65@25A	6.35	4.70
2N1167	TO-41	90	100	15- 65@25A	7.55	5.60
2N2912	8	75	15	75/ @10A	8.10	5.40

30-AMP GERMANIUM PNP POWER TRANSISTORS

2N2152	TO-36	170	45	50-100@ 5A	3.80	2.40
2N2153	TO-36	170	60	50-100@ 5A	5.55	3.70
2N2154	TO-36	170	75	50-100@ 5A	10.10	6.75
2N2156	TO-36	170	45	80-160@ 5A	4.10	2.75
2N2157	TO-36	170	60	80-160@ 5A	6.35	4.25
2N2158	TO-36	170	75	80-160@ 5A	10.85	7.25

● NEW 30 AMP PNP SILICON POWER TRANSISTORS

2N4398	TO-3	200	40	15-60 @15A	11.25	7.50
2N4399	TO-3	200	60	15-60 @15A	13.50	9.05

Type	Case	PdW	BVCBO	hFE@Ic	1-99	100-999
2N1970	TO-36	170	100	17-40@ 5	2.35	1.73
2N1980	TO-36	170	50	50-100@ 5	4.50	3.00
2N1981	TO-36	170	70	50-100@ 5	5.50	3.70
2N1982	TO-36	170	90	50-100@ 5	7.80	5.20
2N2075	TO-36	170	80	20- 40@ 5A	5.20	3.84
2N2076	TO-36	170	70	20- 40@ 5A	3.60	2.67
2N2077	TO-36	170	50	20- 40@ 5A	2.85	2.12
2N2078	TO-36	170	40	20- 40@ 5A	1.90	1.39
2N2079	TO-36	170	80	35- 70@ 5A	7.20	5.34
2N2080	TO-36	170	70	35- 70@ 5A	5.10	3.78
2N2081	TO-36	170	50	35- 70@ 5A	3.15	2.32
2N2082	TO-36	170	40	35- 70@ 5A	2.40	1.78
2N2490	TO-36	170	70	20- 40@ 5A	1.88	1.39
2N2491	TO-36	170	60	35- 70@ 5A	2.63	1.95
2N2492	TO-36	170	80	25- 50@ 5A	3.38	2.50
2N2493	TO-36	170	100	25- 50@ 5A	6.00	4.45

50-AMP GERMANIUM PNP POWER TRANSISTOR

Type	Case	PdW	BVCBO	hFE@IC	1-99	100-999
2N2728	TO-36	170	15	40-130@ 5A	11.25	7.50

60-AMP GERMANIUM PNP POWER TRANSISTORS

2N4048	TO-36	170	45	60-120@15A	5.60	3.75
2N4049	TO-36	170	60	60-120@15A	7.50	5.00
2N4050	TO-36	170	75	60-120@15A	9.30	6.20
2N4051	TO-36	170	45	80-180@15A	6.45	4.30
2N4052	TO-36	170	60	80-180@15A	8.25	5.50
2N4053	TO-36	170	75	80-180@15A	10.10	6.75
2N4276	TO-3	106	30	15- 25@50A	3.50	2.35
2N4277	TO-3	106	30	15- 25@50A	4.20	2.80
2N4278	TO-3	106	45	15- 25@50A	4.65	3.10
2N4279	TO-3	106	45	15- 25@50A	5.30	3.55
2N4280	TO-3	106	60	15- 25@50A	5.70	3.80
2N4281	TO-3	106	60	15- 25@50A	6.80	4.55
2N4282	TO-3	106	75	15- 25@50A	7.05	4.70
2N4283	TO-3	106	75	15- 25@50A	8.45	5.65
MP500	TO-36	170	45	30-60 @15A	5.70	3.80
MP504	TO-36	170	45	50-100@15A	6.60	4.40
MP506	TO-36	170	75	50-100@15A	13.85	9.25

MILLIWATT TRANSISTORS

GENERAL PURPOSE AUDIO TRANSISTORS

Type	Case	Pc.mW	BV cbo	IcmA	hFE	1-99	100-999
2N320	TO-5	225	.....	500	34-65	.59	.39
2N321	TO-5	225	.....	500	53-121	.65	.43
2N322	TO-5	225	.....	500	34-65	.42	.28
2N323	TO-5	225	.....	500	53-121	.59	.39
2N324	TO-5	225	.....	500	72-198	.63	.42
2N381	TO-5	225	50	400	35-65	.82	.55
2N382	TO-5	225	50	400	60-95	1.12	.75
2N383	TO-5	225	50	400	75-120	1.42	.95
2N398	TO-5	50	105	100	20	1.03	.69
2N398A	TO-5	150	105	200	20	1.12	.75
2N460	TO-5	225	45	400	0.94‡0.972	1.50	1.00
2N461	TO-5	200	45	100	.968-985‡	1.52	1.01
2N465	TO-5	200	45	100	27	1.50	1.00
2N466	TO-5	200	35	100	56	1.65	1.10
2N467	TO-5	200	35	100	112	2.10	1.40
2N508	TO-5	225	.....	500	99-198	.69	.46
2N524	TO-5	225	.....	500	25-42	1.02	.68
2N525	TO-5	225	.....	500	34-65	1.02	.68
2N526	TO-5	225	.....	500	53-90	1.04	.69
2N527	TO-5	225		500	72-121	1.23	.82
2N651	TO-5	200	45	500	50-120	1.65	1.10
2N652	TO-5	200	45	500	100-225	2.17	1.45
2N652A	TO-5	200	45	500	100-225	2.25	1.50
2N653	TO-5	200	30	250	30-70	1.65	1.10
2N654	TO-5	200	30	250	50-125	1.80	1.20
2N655	TO-5	200	30	250	100-250	1.95	1.30
2N1008	TO-5	200	20	300	40-150	.75	.50
2N1008A	TO-5	200	40	300	40-150	.83	.55
2N1008B	TO-5	200	60	300	40-150	.92	.61
2N1187	TO-5	200	60	500	50-120	2.60	1.75
2N1188	TO-5	200	60	500	100-225	3.15	2.10
2N1189	TO-5	200	45	500	60	1.50	1.00
2N1191	TO-5	200	40	200	30-70	1.12	.75
2N1192	TO-5	200	40	200	50-125	1.12	.75
2N1193	TO-5	150	40	200	100-250	1.50	1.00
2N1194	TO-5	200	40	200	190-500	1.65	1.10
2N1408	TO-5	200	50	200	10	.83	.55

Type	Case	Pc. mW	BV cbo	Ic mA	hFE	1-99	100-999
2N1413	TO-5	225	35	500	23-65	.73	.49
2N1414	TO-5	200	.....	500	34-65	.78	.52
2N1415	TO-5	225	.....	500	53-90	.92	.61
2N1706	TO-5	225	50	400	50-150	.66	.44
2N1924	TO-5	225	.....	500	34-65	1.57	1.04
2N1925	TO-5	225	.....	500	53-90	1.77	1.18
2N1926	TO-5	225	.....	500	72-121	2.08	1.39
2N2042	TO-5	225	105	200	20-80	1.85	1.25
2N2042A	TO-5	200	55	200	20-50	2.25	1.50
2N2043	TO-5	200	105	200	45-180	2.25	1.50
2N2171	TO-5	225	50	400	110-250	1.27	.85
2N3427	TO-5	200	45	500	100-350	1.34	.89
2N3428	TO-5	200	45	500	150-400	1.50	1.00
MA100	TO-5	200	60	500	30	1.00	.67
MA200	TO-5	150	105	200	20	.58	.39
MA201	TO-5	150	105	200	20	.67	.45
MA202	TO-5	150	105	200	40	.67	.45
MA203	TO-5	150	105	200	20	.75	.50
MA204	TO-5	150	90	200	20	.58	.39
MA205	TO-5	150	75	200	20	.50	.33
MA206	TO-5	150	60	200	20	.42	.28
MA881	TO-5	200	60	500	30	.72	.48
MA882	TO-5	200	60	500	40	.80	.52
MA883	TO-5	200	60	500	75	.89	.59
MA884	TO-5	200	60	500	125	.98	.65
MA885	TO-5	200	50	500	15‡/40	.50	.33
MA886	TO-5	200	50	500	30‡/70	.59	.39
MA887	TO-5	200	50	500	50‡/120	.68	.45
MA888	TO-5	200	50	500	100‡/225	.75	.50
MA889	TO-5	200	50	500	190‡/400	.84	.56
MA909	TO-5	150	75	200	20-	.63	.42
MA910	TO-5	150	90	200	20-	.75	.50
MA1703	TO-5	200	25	500	100/350	1.17	.78
MA1704	TO-5	200	25	500	150/400	1.34	.89
MA1706	TO-5	200	15	500	100/350	1.00	.67
MA1707	TO-5	200	15	500	150/400	1.17	.78

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PRICES FOR QUANTITIES ARE COMPETITIVE WITH THE MANUFACTURER

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

Motorola High-Frequency Transistors

HIGH FREQUENCY MESA GERMANIUM TRANSISTORS

*Epitaxial transistor. †Stud-mounted.

Type	Case	Pd mV	Vcb (Coil Base)	mA	1-99	100-999
2N700	TO-17	75	25	50	7.35	4.90
2N705	TO-18	150	15	50	1.80	1.20
2N711	TO-18	150	12	50	1.12	.75
2N711A	TO-18	150	15		1.35	.90
2N711B	TO-18	150	18		1.42	.95
2N741	TO-18	150	15	100	2.18	1.45
2N741A	TO-18	150	15	100	3.30	2.20
2N827	TO-18	150	20		2.50	1.65
2N828*	TO-18	300	15	200	3.30	2.20
2N838	TO-18	150	30	100	5.40	3.60
2N962*	TO-18	150	20	100	1.18	.79
2N964*	TO-18	150	25	100	1.57	1.04
2N965*	TO-18	150	20		1.44	.96
2N966	TO-18	150	20	100	1.40	.93
2N967*	TO-18	150	12	100	1.25	.83
2N968	TO-18	150	15		1.53	1.02
2N970	TO-18	150	12	100	.89	.59
2N972	TO-18	150	15	100	1.60	1.07
2N974	TO-18	150	12	100	.94	.63
2N1141*	TO-5	300	35	100	4.83	3.22
2N1142*	TO-5	300	30		4.20	2.80
2N1143*	TO-5	300	25		3.50	2.33
2N1195*	TO-5	250	30		3.95	2.63
2N1204*	TO-5	250	20		1.65	1.10
2N1204A	TO-5	300	20		1.65	1.10
2N1494A†	TO-31	500	20	500	2.17	1.45
2N1495	TO-5	250	40	500	3.30	2.20
2N1496†	TO-31	300	25	500	3.80	2.55
2N1692	24	350	25	250	22.50	17.00
2N2096†	25	500	25	500	1.65	1.10

Type	Case	Pd mW	Vcb Coil Base	mA	1-99	100-999
2N2097†	25	500	40	500	3.30	2.20
2N2099	TO-5	300	25	500	2.17	1.45
2N2100	TO-5	300	40	500	3.80	2.55
2N2257	TO-18	300	7	100	1.27	.85
2N2258*	TO-18	150	7		1.12	.75
2N2259*	TO-18	150	7		1.27	.85
2N2273	TO-18	150	25		2.45	1.65
2N2382	TO-5	300	45	500	5.15	3.45
2N2415	TO-17	75	15	20	6.00	4.00
2N2416	TO-17	75	15	20	3.35	2.25
2N2630	TO-18	300	18	100	3.22	2.15
2N2635	TO-18	150	30		1.75	1.15
2N2929	TO-5	300	25	100	6.75	4.50
2N2956*	TO-18	150	40		2.63	1.75
2N2957*	TO-18	150	25		3.37	2.25
2N3127	TO-72	100	25	50	5.10	3.40
2N3279	TO-18	100	30		4.50	3.00
2N3280	TO-18	100	30		4.10	2.75
2N3282	TO-18	100	30		2.15	1.45
2N3283	TO-18	100	25		1.50	1.00
2N3284	TO-18	100	25		1.42	.95
2N3285	TO-18	100	20		1.12	.75
2N3286	TO-18	100	20		.97	.65
2N3323	TO-18	150	35		.90	.60
2N3324	TO-18	150	35		.82	.55
2N3325	TO-18	150	35		.75	.50
2N3783	TO-18	150	30	20	30.00	20.00
2N3784	TO-18	150	30	20	15.00	10.00
2N3785	TO-18	150	15	20	6.75	4.50
2N3883	TO-5	750	30	200	1.35	.90

SILICON EPITAXIAL PNP

Type	Case	Pd mW	Vcb (V)	mA	1-99	100-999
2N721	TO-18	400	50		1.46	1.27
2N722	TO-18	400	50		1.46	1.27
2N869	TO-18	360	25		5.85	3.90
2N995	TO-18	360	20		5.85	3.90
2N1131	TO-5	600	50		1.46	1.27
2N1132	TO-5	600	50		1.46	1.27
2N1132B	TO-5	600	70	600	16.70	11.15
2N1991	TO-5	600	30		3.95	2.96
2N2303	TO-5	600	50	500	8.25	5.50
2N2800	TO-5	800	50	800	6.75	4.50
2N2801	TO-5	800	50	800	7.10	4.75
2N2838	TO-31	500	50	800	7.10	4.75
2N2894	TO-18	360	12	200	6.00	4.00
2N2904	TO-5	800	60	800	1.90	1.65
2N2904A	TO-5	600	60	600	10.50	7.00
2N2905	TO-5	600	60	600	1.90	1.65
2N2905A	TO-5	600	60	600	12.00	8.00
2N2906	TO-18	400	60	600	1.90	1.65
2N2907	TO-18	400	60	600	1.90	1.65
2N3133	TO-5	600	50	600	4.95	3.30
2N3134	TO-5	600	50	600	5.85	3.90
2N3135	TO-18	400	50	600	4.95	3.30
2N3136	TO-18	400	50	600	5.85	3.90
2N3137	TO-5	600	40	150	11.10	7.40
2N3244	TO-5	800	40	1000	15.75	10.50
2N3245	TO-5	800	50	1000	15.75	10.50
2N3248	TO-18	360	12		3.90	2.60
2N3249	TO-18	360	12		4.65	3.10
2N3304	TO-18	300	6		4.50	3.80
2N3307	TO-18	200	40		10.50	7.06
2N3467	TO-5	1000	40	1000	9.75	6.50
2N3485	TO-46	400	60	600	8.70	5.80
2N3486	TO-46	400	60	600	10.20	6.80
2N3494	TO-5	600	80	100	9.75	6.50
2N3495	TO-5	600	120	100	12.75	8.50
2N3496	TO-18	400	80	100	9.75	6.50
2N3497	TO-18	400	120	100	12.75	8.50
2N3546	TO-18	360	15		5.25	3.50
2N3634	TO-5	1000	140	1000	13.20	8.80
2N3635	TO-5	1000	140	1000	14.40	9.60
2N3636	TO-5	1000	175	1000	19.40	12.95

Type	Case	Pd mW	Vcb (V)	mA	1-99	100-999
2N3637	TO-5	1000	175	1000	21.30	14.20
2N3743	TO-5	1000	300	30	29.25	19.50
2N3762	TO-5	1000	40	1000	7.50	5.00
2N3763	TO-5	1000	60	1000	7.50	5.00
2N3764	TO-46	1000	40	1000	8.25	5.50
2N3765	TO-46	1000	60	1000	8.25	5.50
2N3798	TO-18	360	60	50	6.15	4.10
2N3799	TO-18	360	60	50	6.75	4.50
2N3905	29	310	40	10	.75	.50
2N3906	29	310	40	10	.82	.55
2N4125	29	310	30	2	.52	.35
2N4126	29	310	25	2	.60	.40
2N4260	TO-18	200	15	10	12.35	8.25
2N4261	TO-18	200	15	10	14.60	9.75
MF3304	TO-18	200	18		6.75	4.50
2N4402	TO-92	310	40	600	.82	.55
2N4403	TO-92	310	40	600	.97	.65
2N4411	TO-72	150	15	25	18.00	12.00
2N4890	TO-5	1000	60	700	1.12	.75
2N4957	TO-72	200	30	30	20.25	13.50
2N4958	TO-72	200	30	30	10.35	6.90
2N4959	TO-72	200	30	30	6.75	4.50
2N5086	TO-92	310	50	50	.75	.50
2N5087	TO-92	310	50	50	.81	.54
MM3726	TO-5	1000		1500	6.75	4.50
MM4048	TO-18	360	45	50	4.10	2.75
MPS3638	TO-92	310	25	500	.46	.31
MPS3638A	TO-92	310	25	500	.76	.51
MPS3639	TO-92	200	6.0	80	.54	.36
MPS3640	TO-92	200	12	80	.57	.38
MPS3702	TO-92	310	25	200	.45	.30
MPS3703	TO-92	310	30	200	.49	.33
MPS6516	TO-92	310	40	100	.60	.40
MPS6517	TO-92	310	40	100	.63	.42
MPS6518	TO-92	310	40	100	.67	.45
MPS6519	TO-92	310	25	100	.75	.50
MPS6522	TO-92	310	25	100	.90	.60
MPS6523	TO-92	310	25	100	.97	.65
MPS6533	TO-92	310	40	600	.78	.52
MPS6534	TO-92	310	40	600	.81	.54
MPS6535	TO-92	310	30	600	.66	.44

NPN EPITAXIAL PASSIVATED TRANSISTORS (SILICON)

Type	Case	PdmW	BVCBO	1-99	100-up
2N697	TO-5	60	60	.52	.46
2N702	TO-18	300	25	6.75	4.50
2N703	TO-18	300	25	6.75	4.50
2N706	TO-18	300	25	.46	.40
2N706A	TO-18	300	25	1.18	.79
2N706B	TO-18	300	25	1.48	.99
2N707	TO-18	300	56	6.30	4.20
2N708	TO-18	360	40	.49	.43
2N718	TO-18	400	60	.46	.40
2N718A	TO-18	500	75	.79	.68

Type	Case	PdmW	Vcb	1-99	100-up
2N731	TO-18	500	60	1.30	.86
2N744	TO-18	300	20	2.90	1.95
2N834	TO-18	300	40	2.00	1.35
2N915	TO-18	360	70	4.95	3.30
2N916	TO-18	360	45	4.35	2.80
2N918	TO-18	200	30	3.30	2.20
2N929	TO-18	300	45	3.60	2.40
2N930	TO-18	300	45	4.35	2.90
2N956	TO-18	500	75	.85	.74

(Continued on next page.)

Motorola High Frequency Transistors

NPN EPITAXIAL PASSIVATED SILICON TRANSISTORS (Cont'd)

Type	Case	PdmW	BVCBO	1-99	100-up
2N1613	TO-5	800	75	.60	.57
2N1711	TO-5	800	75	.65	.61
2N1893	TO-5	800	120	2.45	1.65
2N1959	TO-5	600	60	4.45	2.95
2N2192	TO-5	800	60	4.20	2.80
2N2192A	TO-5	800	60	4.40	2.95
2N2192B	TO-5	800	60	12.45	8.30
2N2193	TO-5	800	80	2.90	1.95
2N2193A	TO-5	800	80	3.15	2.10
2N2193B	TO-5	800	80	10.80	7.20
2N2194	TO-5	800	60	2.18	1.45
2N2194A	TO-5	800	60	2.40	1.60
2N2194B	TO-5	800	60	8.25	5.50
2N2195	TO-5	600	45	1.38	.92
2N2195A	TO-5	600	45	1.53	1.02
2N2195B	TO-5	600	45	2.40	1.60
2N2218	TO-5	800	60	.93	.82
2N2219	TO-5	800	60	1.07	.93
2N2219A	TO-5	800	75	6.00	4.00
2N2221	TO-18	500	60	1.07	.93
2N2221A	TO-18	500	75	5.25	3.50
2N2222	TO-18	500	60	1.07	.93
2N2222A	TO-18	500	75	6.00	4.00
2N2224	TO-5	800	65	3.75	2.50
2N2257	TO-18	300	7	1.27	.85
2N2368	TO-18	360	40	1.07	.93
2N2369	TO-18	360	40	1.07	.93
2N2410	TO-5	800	60	4.50	3.00
2N2538	TO-5	800	60	5.85	3.90
2N2540	TO18	500	60	5.85	3.90
2N2845	TO18	360	60	4.95	3.30
2N2846	TO-5	800	30	4.95	3.30
2N2847	80-18	360	60	5.10	3.40
2N2848	TO-5	800	60	5.10	3.40
2N2948	TO-3	25W	40	20.25	13.50
2N2949	TO-107	500	60	10.50	7.00
2N2950	TO-102	700	60	11.25	7.50
2N2951	TO-5	800	60	4.50	3.00
2N2952	TO-18	500	60	4.95	3.30
2N2958	TO-5	600	60	2.25	1.50
2N2959	TO-5	600	60	2.70	1.80
2N3009	TO-52	360	40	1.98	1.32
2N3013	TO-52	360	40	7.00	4.69
2N3014	TO-52	360	40	3.60	2.40
2N3015	TO-5	800	60	1.93	1.29
2N3019	TO-5	800	140	6.00	4.00
2N3020	TO-5		140	5.70	3.80
2N3053	TO-5	5W	60	.83	.57
2N3114	TO-5	800	150	6.00	4.00
2N3115	TO-18	400	60	1.95	1.30
2N3116	TO-18	400	60	2.40	1.60
2N3137	TO-5	800	40	11.10	7.40
2N3210	TO-18	360	40	.83	.55
2N3211	TO-18	360	40	1.27	.85
2N3227	TO-5	1000	60	9.75	6.50
2N3252	TO-5	1000	75	9.75	6.50
2N3253	TO-18	200	40	7.50	5.00
2N3287	TO-18	200	25	2.25	1.50
2N3291	23	500	60	10.50	7.00
2N3292	TO-18	200	25	2.10	1.40
2N3293	TO-18	200	20	1.80	1.20
2N3294	TO-18	200	20	1.65	1.10
2N3298	TO-18	300	25	2.40	1.60
2N3303	94	600	25	13.50	9.00
2N3309	TO-39	1 W	50	5.25	3.50
2N3375	TO-60	11.6W	65	14.85	9.90
2N3444	TO-5	1 W	80	12.00	8.00
2N3493	TO-18	150	12	14.25	9.50
2N3498	TO-5	1 W	100	6.60	4.40
2N3499	TO-5	1 W	100	7.40	4.95
2N3500	TO-5	1 W	150	11.25	7.50
2N3501	TO-5	1 W	150	12.60	8.40
2N3506	TO-5	1 W	60	11.55	7.70
2N3507	TO-5	1 W	80	13.20	8.80
2N3509	TO-46	400	40	5.40	3.60
2N3510	TO-52	360	40	1.42	.95
2N3511	TO-52	360	40	1.80	1.20
2N3733	TO-60	23 W	65	34.20	22.80
2N3734	TO-5	1 W	50	6.00	4.00
2N3735	TO-5	1 W	50	6.00	4.00
2N3736	TO-46	500	75	6.60	4.40
2N3737	TO-46	500	75	6.60	4.40
2N3742	TO-5	1 W	300	12.60	8.40
2N3866	TO-39		55	4.30	2.85
2N3903	29	310	60	.75	.50
2N3904	29	310	60	.82	.55

Type	Case	PdmW	BVCBO	1-99	100-up
2N3924	TO-39	7 W	36	5.15	3.42
2N3925	24	10 W	36	8.70	5.80
2N3926	TO-60	11.6W	36	14.85	9.90
2N3927	TO-60	23 W	36	20.25	13.50
2N3946	TO-39	1 W	36	5.15	3.42
2N3947	TO-60	2.8W	65	34.20	22.80
2N3948	TO-39	1 W	36	5.15	3.42
2N3950	TO-69	2.8W	65	34.20	22.80
2N3959	TO-18	400	20	10.50	7.00
2N3960	TO-18	400	20	13.10	8.75
2N3961	TO-102	10 W	65	8.70	5.80
2N4012	TO-60	11.6W	65	24.75	16.50
2N4072	TO-18	350	40	3.00	2.00
2N4073	TO-5	1.5W	40	4.50	3.00
2N4123	TO-92	310	40	.52	.35
2N4124	TO-92	310	30	.60	.40
2N4264	TO-92	310	30	.60	.40
2N4265	TO-92	310	30	.67	.45
2N4400	TO-92	310	60	.82	.55
2N4401	TO-92	310	60	.97	.65
2N4409	TO-92	310	80	.67	.45
2N4410	TO-92	310	120	.96	.64
2N5088	TO-92	310	35	.75	.50
2N5089	TO-92	310	30	.98	.65
MM1500	TO-107	3.5W	30	42.00	28.00
MM1501	TO-107	3.5W	30	27.00	18.00
MM1803	TO-5	800	50	11.70	7.80
MM1812	TO-5	1 W	175	3.75	2.50
MM1941	TO-18	300	30	1.95	1.30
MM2258	TO-5	1 W	120	3.90	2.60
MM2259	TO-5	1 W	175	4.20	2.80
MM2260	TO-5	1 W	175	4.50	3.00
MM2483	TO-18	360	60	4.50	3.00
MM2484	TO-83	360	60	5.25	3.50
MM3724	TO-5	1 W	30	5.25	3.50
MM3725	TO-5	1 W	50	5.60	3.75
MPS706	TO-92	300	25	.45	.30
MPS834	TO-92	300	40	.52	.35
MPS918	TO-92	200	30	1.30	.87
MPS2369	TO-92	310	40	.53	.39
MPS2711	29	310	18	.40	.27
MPS2712	29	310	18	.43	.29
MPS2713	29	310	18	.48	.32
MPS2714	29	310	18	.51	.34
MPS2715	29	310	18	.57	.38
MPS2716	29	310	18	.60	.40
MPS2923	29	310	25	.43	.29
MPS2924	29	310	25	.51	.34
MPS2925	29	310	25	.60	.40
MPS2926	TO-92	310	18	.40	.27
MPS3392	29	310	25	.51	.34
MPS3393	29	310	25	.40	.27
MPS3394	29	310	25	.39	.26
MPS3395	29	310	25	.58	.39
MPS3396	29	310	25	.54	.36
MPS3397	29	310	25	.48	.32
MPS3398	29	310	25	.57	.38
MPS3563	29	310	30	.57	.38
MPS3693	TO-92	310	45	.55	.37
MPS3694	TO-92	310	45	.57	.38
MPS3704	TO-92	310	50	.61	.41
MPS3705	TO-92	310	50	.87	.58
MPS3706	TO-92	310	40	.52	.35
MPS3707	TO-92	310	30	.60	.40
MPS3708	TO-92	310	30	.48	.32
MPS3709	TO-92	310	30	.45	.30
MPS3710	TO-92	310	30	.49	.33
MPS3711	TO-92	310	30	.54	.36
MPS3826	TO-92	310	60	.54	.36
MPS3827	TO-92	310	60	.58	.39
MPS6507	TO-92	310	30	1.12	.75
MPS6511	TO-92	310	30	1.05	.70
MPS6512	TO-92	310	40	.54	.36
MPS6513	TO-92	310	40	.57	.38
MPS6514	TO-92	310	40	.60	.40
MPS6515	TO-92	310	40	.64	.43
MPS6520	TO-92	310	40	.82	.55
MPS6521	TO-92	310	40	.90	.60
MPS6530	TO-92	310	60	.72	.48
MPS6531	TO-92	310	60	.75	.50
MPS6532	TO-92	310	50	.60	.40
MPS6568	TO-92	310	20	1.50	1.00
MPS6569	TO-92	310	20	1.11	.74
MPS6570	TO-92	310	20	.96	.64

Tc=25°C

AUDIO 2-WATT

Type	Case	P. Watts	BVCBO hFE	Typical hFE	1-99	100-up
2N176	TO-3	90	45	45	1.20	.87
2N554	TO-3	40	50	50	.60	.40
2N555	TO-3	40	50	50	.75	.50
2N669	TO-3	90	90	90	1.42	.95

AUDIO 4-WATT

Type	Case	P. Watts	BVCBO hFE	Typical hFE	1-99	100-up
2N350A	TO-3	40	30	30	1.65	1.10
2N351A	TO-3	40	45	45	1.70	1.15
2N376A	TO-3	40	60	60	1.85	1.25

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

FIELD-EFFECT TRANSISTORS

N-CHANNEL JUNCTION FIELD EFFECT TRANSISTORS

Type	Case	rds(on) Ohms	Yfs min/max μmhos	V(BR) GSS Min(V)	mA Idss min/max	1-99	100-999
2N3821	TO-72	250†	1500/4500	50	0.5/2.5	11.15	7.45
2N3822	TO-72	250†	3000/6500	50	2.0/10	8.85	5.90
2N3823	TO-72	—	3500/6500	30	4.0/20	6.05	4.05
2N3824	TO-72	250†	.....	50	.....	7.20	4.80
2N4220	TO-72	500#	1000/4000	30	0.5/3.0	2.85	1.90
2N4220A	TO-72	500#	1000/4000	30	0.5/3.0	4.35	2.90
2N4221	TO-72	400#	2000/5000	30	2.0/6.0	2.85	1.90
2N4221A	TO-72	400#	2000/5000	30	2.0/3.0	4.35	2.90
2N4222	TO-72	300#	2500/6000	30	5.0/15	2.85	1.90
2N4222A	TO-72	300#	2500/6000	30	5.0/15	4.35	2.90
2N4223	TO-72	—	3000/7000	30	3.0/18	5.85	3.90
2N4224	TO-72	—	2000/7500	30	2.0/20	3.65	2.45
2N4416	TO-72	—	4500/7500	30	5.0/15	5.00	3.35
3N124	TO-72	1000#	500/2000	50	0.2/2.0	4.35	2.90
3N125	TO-72	750#	800/2400	50	1.5/4.5	4.35	2.90
3N126	TO-72	500#	1200/3600	50	3.0/9.0	4.35	2.90
MFE2000	TO-72	—	2500/6000	25	4.0/10	4.00	2.65
MFE2001	TO-72	—	4000/8000	25	8.0/20	4.45	2.95
MFE2093	TO-72	2500#	250/500	50	0.1/0.7	2.85	1.90
MFE2094	TO-72	1600#	350/700	50	0.4/1.4	2.85	1.90
MFE2095	TO-72	1300#	400/800	50	1.0/3.0	2.85	1.90
MFE2097	TO-39%	—	10,000/20,000	50	15/50	7.35	4.90
MFE2098	TO-39%	—	14,000/25,000	50	40/100	7.35	4.90
MFE2133	TO-39%	60†	12,000/-	30	25/-	14.70	9.80
MPF102	TO-92	—	2000/7500	25	2.0/20	.90	.60
MPF103	TO-92	—	1000/5000	25	1.0/5.0	1.00	.67
MPF104	TO-92	—	1500/5500	25	2.0/9.0	1.00	.67
MPF105	TO-92	—	2000/6000	25	4.0/16	1.00	.67
MPF106	TO-92	—	2500/6000	25	4.0/10	1.35	.90
MPF107	TO-92	—	4000/8000	25	8.0/20	1.50	1.00

† Max Limit # Typical Limit % TO-39 with 1½" Leads

INSULATED GATE FIELD EFFECT TRANSISTORS

2N3796	TO-18	—	900/1300	N*	0.5/0.3	13.50	9.00
2N3797	TO-18	—	1500/2100	P	2.0/6.0	16.50	11.00
2N4351	TO-18	300	1000/—	N	10#	6.75	4.50
2N4352	TO-18	600	1000/—	N	5#	6.75	4.50
MFE3001	TO-72	—	700/3500	N	0.5/6.0	5.85	3.90
MFE3002	TO-72	100	.....	N	-/10#	8.10	5.40
MFE3003	TO-72	200	.....	P	-/10#	8.10	5.40
MFE3004	TO-72	—	2000/—	N	2.0/10	6.40	4.25
MFE3005	TO-72	—	2000/—	N	2.0/10	6.75	4.50
MPF157	TO-92	—	2000/—	N	2.0/10	1.20	.80
MPF158	TO-92	—	2000/—	N	2.0/10	1.50	1.00
MPF159	TO-92	300	1000/—	N	-/10#	4.15	2.75
MPF160	TO-92	600	1000/—	P	-/10#	4.15	2.75

In nA Units. *Channel designations.

● *NEW* P-CHANNEL JUNCTION FIELD EFFECT TRANSISTORS

MFE2002	TO-72	—	3500/6500	30	4.0/20	6.10	4.05
MFE4001	TO-72	—	1500/4000	40	1.0/4.0	11.10	7.40
MFE4002	TO-72	—	2000/5000	40	3.0/9.0	6.45	4.30
MFE4003	TO-72	—	2500/6000	40	5.0/15	8.10	5.40
MFE4004	TO-72	—	1500/4000	60	1.0/4.0	11.85	7.90
MFE4005	TO-72	—	2000/5000	60	3.0/9.0	7.20	4.80
MFE4006	TO-72	—	2500/6000	60	5.0/15	8.85	5.90
MPF151	TO-92	—	1000/4000	40	1.0/5.0	1.00	.67
MPF152	TO-92	—	1500/5000	40	2.0/9.0	.75	.50
MPF153	TO-92	—	2000/6000	40	4.0/16	1.00	.67
MPF154	TO-92	—	1000/4000	60	1.0/5.0	1.50	1.00
MPF155	TO-92	—	1500/5000	60	2.0/9.0	1.20	.80
MPF156	TO-92	—	2000/6000	60	4.0/16	1.50	1.00

● *NEW* SILICON PN UNIJUNCTION TRANSISTORS, CASE 22A, CASE 29

For use in pulse and timing circuits, sensing, trigger, and oscillator circuits. Ta = 25°C. Ie = 50 mA. Vb2E = 30V.

Type	Case	Standoff Ratio Min/Max	Valley Current Iv mA	Power Diss. mW	1-99	100-999
2N2646	22A	.56/.75	4.0	300	1.05	.70
2N2647	22A	.68/.82	8.0	300	3.00	2.00
2N3980	22A	.68/.82	1.0	360	3.40	2.25
2N4851	22A	.56/.75	2.0	360	1.10	.75

Type	Case	Standoff Ratio Min/Max	Valley Point Iv mA	Power Diss. mW	1-99	100-999
2N4852	22A	.70/.85	4.0	300	1.10	.75
2N4853	22A	.70/.85	6.0	300	2.25	1.50
2N4870	29(9)	.70/.85	2.0	300	.96	.64
2N4871	29(9)	.70/.85	4.0	300	.96	.64

TEXTBOOKS AND HANDBOOKS

SEMICONDUCTOR DATA BOOK. 1536 page book includes the latest Motorola devices, max ratings, complete elec-mech specs, case outlines, and more. EIA registered type number index and short form spec table.
52F860. NET **3.95**

POWER CIRCUITS TEXTBOOK. 196-page guidebook offers working circuits or design ideas when using semi's, for power inverters and converters. RF transmission, automotive ignition systems, light and motor control.
52F861. NET **2.00**

SILICON RECTIFIER HANDBOOK. Highlights computing single and multi-phase circuit values; heat sinking proper device cooling; voltage and current surge protection 216 pp.
52F856. NET **1.50**

SWITCHING TRANSISTOR HANDBOOK. 365 pages. Provides design procedures for saturated-mode and avalanche mode circuits.
52F862. NET **2.50**

INTEGRATED CIRCUITS TEXTBOOK. 385 pp. Covers both IC design, philosophy and practical production know-how.
52F102. NET **12.50**

MEG-A-LIFE—HIGH RELIABILITY ASSURANCE FROM MOTOROLA

MEG-A-LIFE II Program is designed to provide the aerospace and industrial equipment manufacturer with a practical means of meeting demands of high-reliability assurance, low cost, and short lead time. The high reliability specifications demanded under the Meg-A-Life program require the application of some form of 100% electrical screening and sample life and also environmental tests. The lot acceptance testing is the same as Group A, B, and C test of the military specification applicable to particular zener or reference diodes. Great flexibility is assured by the three standard levels offered. A variety of optional tests may be specified to meet the buyer's needs and desires.

MEG-A-LIFE II, LEVEL 3, presents the highest level of reliability assurance. Level 3 products meet applicable military specifications and are given a 240-hour power burn-in to stabilize characteristics. Further electrical testing assures that devices meet electrical specs of MIL Group A. Level 3 devices are supported by complete test data, including results from the actual acceptance lot from which the devices are supplied.

MEG-A-LIFE II, LEVEL 2, are zener and reference diodes which receive the same 100% screens (including the 240-hour power burn-in) as the Level 3, but the acceptance test data is from a recent lot which passed MIL tests.

MEG-A-LIFE II, LEVEL 1, are similar to the Level 2 units, but not subjected to the 240-hour burn-in.

HIGH RELIABILITY ZENER DIODES

Types	1-99	100-999
1N746A ML1 thru 1N759A ML1	3.05	2.30
1N746A ML2 thru 1N759A ML2	4.10	3.10
1N746A ML3 thru 1N759A ML3	4.65	3.50
1N962B ML1 thru 1N984B ML1	3.25	2.45
1N962B ML2 thru 1N984B ML2	4.30	3.25
1N962B ML3 thru 1N984B ML3	5.70	4.30
1N985B ML1 thru 1N992B ML1	4.05	3.05
1N985B ML2 thru 1N992B ML2	5.05	3.80
1N985B ML3 thru 1N992B ML3	6.20	4.65
1N2804B ML1 thru 1N2838B ML1	10.95	8.25
1N2804B ML2 thru 1N2838B ML2	13.30	10.00
1N2804B ML3 thru 1N2838B ML3	17.30	13.00
1N2839B ML1 thru 1N2846B ML1	18.30	13.75
1N2839B ML2 thru 1N2846B ML2	20.60	15.50
1N2839B ML3 thru 1N2846B ML3	28.40	21.35
1N2970B ML1 thru 1N3011B ML1	7.65	5.75
1N2970B ML2 thru 1N3011B ML2	9.95	7.50
1N2970B ML3 thru 1N3004B ML3	10.45	7.85
1N3005B ML3 thru 1N3011B ML3	12.65	9.50

Types	1-99	100-999
1N3012B ML1 thru 1N3015B ML1	14.10	10.60
1N3012B ML2 thru 1N3015B ML2	17.75	13.35
1N3012B ML3 thru 1N3015B ML3	21.40	16.10
1N3016B ML1 thru 1N3044B ML1	4.05	3.05
1N3016B ML2 thru 1N3044B ML2	5.70	4.30
1N3016B ML3 thru 1N3044B ML3	6.00	4.50
1N3045B ML1 thru 1N3051B ML1	5.00	3.75
1N3045B ML2 thru 1N3051B ML2	7.30	5.50
1N3045B ML3 thru 1N3051B ML3	9.55	7.20
1N3821A ML1 thru 1N3828A ML1	3.00	2.25
1N3821A ML2 thru 1N3828A ML2	4.65	3.50
1N3821A ML3 thru 1N3828A ML3	7.05	5.30
1N3993A ML1 thru 1N4000A ML1	8.05	6.05
1N3993A ML2 thru 1N4000A ML2	10.35	7.80
1N3993A ML3 thru 1N4000A ML3	14.65	11.00
1N4370A ML1 thru 1N4372A ML1	3.05	2.30
1N4370A ML2 thru 1N4372A ML2	4.10	3.10
1N4370A ML3 thru 1N4372A ML3	4.65	3.50

Motorola Meg-A-Life Listing and Lab Kits

MEG-A-LIFE II HIGH RELIABILITY TEMPERATURE COMPENSATED REFERENCE DIODES

Type	1-24	25-99	100-999 Mixed	100-999 Sgl.
1N821 ML1	3.50	3.00	2.65	2.40
1N821 ML2	5.65	4.85	4.30	3.90
1N821 ML3	5.85	5.05	4.45	4.05
1N823 ML1	4.35	3.75	3.30	3.00
1N823 ML2	6.50	5.60	4.95	4.50
1N823 ML3	7.25	6.25	5.50	5.00
1N825 ML1	6.50	5.60	4.95	4.50
1N825 ML2	8.70	7.50	6.60	6.00
1N825 ML3	10.00	8.60	7.60	6.90
1N827 ML1	11.60	10.00	8.80	8.00
1N827 ML2	13.75	11.85	10.45	9.50
1N827 ML3	17.40	15.00	13.20	12.00
1N829 ML1	17.05	14.70	12.90	11.75
1N829 ML2	19.20	16.55	14.55	13.25
1N829 ML3	31.15	26.85	23.65	21.50
1N935B ML1	4.25	3.70	3.25	2.95
1N935B ML2	.45	5.55	4.90	4.45
1N925B ML3	8.20	7.05	6.20	5.65
1N937B ML1	7.85	6.75	5.95	5.40
1N937B ML2	10.00	8.60	7.60	6.90
1N937B ML3	12.20	10.50	9.25	8.40
1N938B ML1	10.75	9.25	8.15	7.40
1N938B ML2	12.90	11.10	9.80	8.90
1N938B ML3	16.55	14.25	12.55	11.40
1N939B ML1	28.05	24.20	21.30	19.35
1N939B ML2	30.25	26.05	22.95	20.85
1N939B ML3	33.85	29.20	25.70	23.35
1N941B ML1	4.35	3.75	3.30	3.00
1N941B ML2	6.50	5.60	4.95	4.50
1N941B ML3	10.45	9.00	7.90	7.20
1N943B ML1	7.90	6.80	6.00	5.45
1N943B ML2	10.05	8.70	7.65	6.95
1N943B ML3	15.95	13.75	12.10	11.00
1N944B ML1	18.05	15.55	13.70	12.45
1N944B ML2	20.20	17.45	15.35	13.95
1N944B ML3	20.65	17.80	15.65	14.25
1N3154 ML1	3.25	2.80	2.45	2.25
1N3154 ML2	4.95	4.25	3.75	3.40
1N3154 ML3	6.10	5.25	4.60	4.20
1N3155 ML1	4.15	3.55	3.15	2.85
1N3155 ML2	6.10	5.25	4.60	4.20
1N3155 ML3	7.55	6.50	5.70	5.20
1N3156 ML1	6.80	5.85	5.15	4.70
1N3156 ML2	8.70	7.50	6.10	6.00
1N3156 ML3	12.20	10.50	9.25	8.40
1N3157 ML1	8.20	7.05	6.20	5.65
1N3157 ML2	10.15	8.75	7.70	7.00
1N3157 ML3	15.35	13.25	11.65	10.60

MEG-A-LIFE HIGH RELIABILITY POWER TRANSISTORS

Type	1-99	100-999
2N174A	3.80	2.79
2N1163A	5.08	3.75
2N1536A	2.20	1.65
2N1537A	4.45	3.30
2N1539A	2.05	1.52
2N1540A	2.10	1.62
2N1544A	2.22	1.64
2N1545A	2.35	1.75
2N1546A	2.95	2.20
2N1547A	3.45	2.55
2N1552A	6.30	4.20
2N1553A	2.35	1.75
2N1554A	2.85	2.10
2N1555A	3.45	2.55
2N1556A	4.65	3.45
2N1557A	2.70	2.00
2N1560A	5.00	3.70
2N2076A	4.75	3.17
2N2153A	6.30	4.20
2N2156A	4.85	3.25
MP500A	7.10	4.75
MP506A	16.85	11.25
2N524A	1.32	.88
2N525A	1.32	.88
2N652A	2.55	1.70

MEG-A-LIFE HIGH RELIABILITY SILICON HIGH FREQUENCY TRANSISTORS

2N2218 ML1	3.50	2.35
2N2218 ML2	4.10	2.75
2N2218 ML3	4.85	3.25
2N2218A ML1	5.40	3.60
2N2218A ML2	6.00	4.00
2N2218A ML3	6.75	4.50
2N2219 ML1	3.50	2.35
2N2219 ML2	4.10	2.75
2N2219 ML3	4.85	3.25
2N2219A ML1	6.15	4.10
2N2219A ML2	6.75	4.50
2N2219A ML3	7.50	5.00
2N2221 ML1	3.50	2.35
2N2221 ML2	4.10	2.75
2N2221 ML3	4.85	3.25
2N2221A ML1	5.40	3.60
2N2221A ML2	6.00	4.00
2N2221A ML3	6.75	4.50
2N2222 ML1	3.50	2.35
2N2222 ML2	4.10	2.75
2N2222 ML3	4.85	3.25
2N2222A ML1	6.15	4.10
2N2222A ML2	6.75	4.50
2N2222A ML3	7.50	5.00
2N2481 ML1	2.75	1.85
2N2481 ML2	3.35	2.25
2N2481 ML3	4.10	2.75
2N2904 ML1	7.65	5.10
2N2904 ML2	8.25	5.50
2N2904 ML3	9.00	6.00
2N2904A ML1	10.65	7.10
2N2904A ML2	11.25	7.50
2N2904A ML3	12.00	8.00
2N2905 ML1	9.15	6.10
2N2905 ML2	9.75	6.50
2N2905 ML3	10.50	7.00
2N2905A ML1	12.15	8.10
2N2905A ML2	12.75	8.50
2N2905A ML3	13.50	9.00
2N2906 ML1	7.35	4.90
2N2906 ML2	7.95	5.30
2N2906 ML3	8.70	5.80
2N2906A ML1	10.20	6.80
2N2906A ML2	10.80	7.20
2N2906A ML3	11.55	7.70
2N2907 ML1	8.85	5.90
2N2907 ML2	9.45	6.30
2N2907 ML3	10.20	6.80
2N2907A ML1	11.70	7.80
2N2907A ML2	12.30	8.20
2N2907A ML3	13.05	8.70
2N3250 ML1	4.05	2.70
2N3250 ML2	4.65	3.10
2N3250 ML3	5.40	3.60
2N3250A ML1	4.65	3.10
2N3250A ML2	5.25	3.50
2N3250A ML3	6.00	4.00
2N3251 ML1	4.80	3.20
2N3251 ML2	5.40	3.60
2N3251 ML3	6.15	4.10
2N3251A ML1	5.40	3.60
2N3251A ML2	6.00	4.00
2N3251A ML3	6.75	4.50

ZENER DIODE AND RECTIFIER HANDY LABS

ZENER DIODE LAB KIT — MZK100

100 premium quality 1-watt surmetic zener diodes. Assortment of 37 voltage types (3.3 to 100 volts) stocked in compact 15-drawer cabinet.

Nom. Volt.	Unit Cost 5% tol.	No. in Kit	Value 100-up
3.3	1.45 (100-up)	4	5.80
3.6		4	5.80
3.9		2	2.90
4.3		2	2.90
4.7		3	4.35
5.1		4	5.80
5.6		4	5.80
6.2	1.45 (100-up)	4	5.80
6.8		4	5.80
7.5		3	4.35
8.2		5	7.25
9.1		3	4.35
10		5	7.25
11		1	1.45
12		4	5.80
13		2	2.90
15		5	7.25
16		2	2.90
18		5	7.25
20		4	5.80
22		2	2.90
24		3	4.35
27		2	2.90
30		3	4.35
33		2	2.90
36		2	2.90
39	1.45 (100-up)	1	1.45
43		1	1.45
47		1	1.45
51		2	2.90
56		2	2.90
62		1	1.45
68		2	2.90
75		2	2.90
82		1	1.45
91		1	1.45
100		2	2.90
Total		100	145.00

9¾x7½x6⅛ Styr. Cab. 3.00

TOTAL 148.00

MZK-100 YOUR COST **79.00**

You save 69.00

RECTIFIER HANDY LAB KIT MODEL MRK-200

84 first-quality rectifiers and molded bridges (*) in ratings needed for lab and benchwork—0.25 A to 35 A; 200 to 3000 V.

Type No.	Ratings Amps	Ratings V	No. in Kit	Cost (1-99)
MR994	0.25	3000	4	31.80
IN4003	1.0	200	8	4.80
IN4004	1.0	400	12	8.05
IN4007	1.0	1000	4	7.20
IN4721	3.0	200	4	2.68
IN4722	3.0	400	8	7.75
IN4725	3.0	1000	4	25.40
MR1122	12.00	200	4	4.72
MR1124	12.00	400	8	12.00
MR1128	12.00	800	4	22.40
IN1186	35.0	200	4	13.80
IN1188	35.0	400	4	23.40
IN1190	35.0	600	4	27.60
MDA920-4	1.0	200	2	4.50
MDA920-6	1.0	400	2	4.80
MDA942-3	1.5	200	2	5.30
MDA942-5	1.5	400	2	6.20
MDA952-3	6.0	200	1	4.45
MDA952-5	6.0	400	1	6.00
MDA962-3	10.0	200	1	4.85
MDA962-5	10.0	400	1	6.40
Total			84	234.10

Value of Styrene Cabinet 3.00

TOTAL VALUE 237.10

MRK-200. YOUR COST **94.50**

You save 142.60

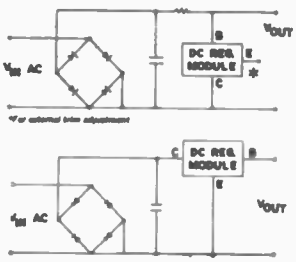
Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

DC SERIES REGULATOR MODULES

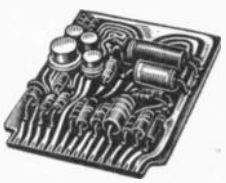
Revolutionary! Brand new DC Series Regulator Modules places a complete DC voltage regulator in one small, compact TO-3 transistor package. "Miniaturized" card-type and hand wired circuits. Each module contains a complete silicon, solid state comparator amplifier assembly —weighs only ½ ounce! 1-amp modules come as series regulators of 5, 6, 12, 18, and 24 volts, or as shunt regulators of 5, 6, 9, and 12 volts. TO-3 configuration fits all standard socket and heat sinks.

Load Regulation: No load to full load, ±1%.
Maximum Power Dissipation: 25 watts with 25°C case.
Temperature Coefficient: 0.04% per °C typical.
Output Noise: 500 μV RMS typical with no external filter.
Maximum Output Current: 1 amp.
AC Output Impedance: 20 Hz to 10 KHz = 0.1 max, 20 Hz to 40 KHz = 0.25 max. Typically less than 0.1 from 20 Hz to 40 KHz with output filter capacitor.
Operating Temperature: —30°C to +125°C case.
Weight: 0.5 ounce.

APPLICATION SCHEMATICS



AVAILABLE IN TO-3 CASE OR CARD-TYPE ASSEMBLY.



1 AMP DC SERIES REGULATOR MODULES

Type No.	Nominal Output V @ 50% Load*	Input Volt. Range	1-24	25-99
BN-4000	6 V	10-31 V	30.00	24.50
BN-4001	12 V	16-37 V	30.00	24.50
BN-4002	18 V	22-40 V	30.00	24.50
BN-4003	24 V	28-40 V	30.00	24.50
1 AMP DC SHUNT REGULATOR MODULES				
BN-4004	6 V	30 mA+	37.00	30.00
BN-4005	9 V	30 mA+	37.00	30.00
BN-4006	12 V	30 mA+	37.00	30.00
5 VOLT, 1 AMP SERIES DC REGULATOR MODULES				
BN-4008	5 V	9-30 V	30.00	24.50
5 VOLT, 1 AMP SHUNT DC REGULATOR MODULES				
BN-4009	5 V	30 mA+	37.00	30.00

* 3% Setting Tolerance. + Minimum Input Current.

HIGH FREQUENCY-HIGH POWER SILICON NPN TRANSISTORS

Type No.	Case	Vceo V	Ic A	Pc W	Cur. Gain hFE	Cur. Gain Ic in A	1-99	100-999
2N3055	TO-3	60	15	115	20-70	4	2.48	1.71
2N3771	TO-3	40	30	150	15-60	15	4.95	3.42
2N3772	TO-3	60	30	150	15-60	10	4.95	3.42
2N3852	TO-59	40	5	30	50-150	1	17.00	11.00
2N4000	TO-5	80	1	15	30-120	.5	10.20	6.75
2N4225	TO-5	40	3	5	25 min	2	5.40	3.60
2N4226	TO-5	60	3	5	20 min	2	6.45	4.30
2N4237	TO-5	40	1	5	30 min	.5	2.25	1.50
2N4238	TO-5	60	1	5	30 min	.5	2.75	1.85
2N4239	TO-5	80	1	5	30 min	.5	3.05	2.05
2N4300	TO-5	80	2	15	30-120	1	12.75	8.50

PNP ALLOY POWER TRANSISTORS

(a) Vcer @ RBE = 30 ohms; (b) Power gain in db. *Vces

2N234A	TO-3	25(a)	3	25	25(b)	0.42	1.13	.75
2N235A	TO-3	35(a)	3	25	30-40(b)	0.76	1.50	1.00
2N235B	TO-3	35(a)	3	25	30-40(b)	0.42	1.80	1.20
2N255	TO-3	14(a)	3	25	19(b)	0.5	.75	.50
2N256	TO-3	....	3	25	22(b)	0.5	1.26	.70
2N301	TO-3	32*	3	25	30(b)	0.5	1.26	.84
2N301A	TO-3	32*	3	25	30(b)	0.5	2.82	2.10
2N456	TO-3	40*	5	50	10 min	5	1.80	1.20
2N457	TO-3	20	7	50	10 min	5	2.18	1.45
2N553	TO-3	40	4	25	40 min	0.5	3.35	2.23
2N554	TO-3	30(a)	3	25	25(b)	0.42	.90	.67
2N555	TO-3	30*	3	65	20 min	0.5	1.13	.75
2N1021A	TO-3	100	7	150	30-90	5	3.10	2.05
2N1136	TO-3	30	5	90	50-100	3	2.48	1.65
2N1136A	TO-3	55	5	90	50-100	3	3.23	2.15
2N1136B	TO-3	65	5	90	75-150	3	4.50	3.00
2N1137	TO-3	30	5	90	75-150	3	2.85	1.90
2N1137A	TO-3	55	5	90	75-150	3	3.98	2.65
2N1137B	TO-3	65	5	90	100-200	3	5.70	3.80
2N1138	TO-3	30	5	90	100-200	3	3.23	2.15
2N1146	TO-3	20	20	90	60-150	5	2.75	1.80
2N1146A	TO-3	30	20	90	60-150	5	3.10	2.25
2N1529A	TO-3	20	5	90	20-40	3	1.80	1.35
2N1544	TO-3	20	3	90	75-150	3	1.65	1.24
2N1547	TO-3	50	3	90	75-150	3	2.75	2.05

PNP ALLOY HIGH POWER TRANSISTORS AND INVERTERS

2N677	TO-3	20	10	90	20-60	10	3.00	2.00
2N677A	TO-3	30	15	90	20-60	10	3.60	2.40
2N677B	TO-3	60	15	90	20-60	10	7.13	4.75
2N678B	TO-3	60	15	90	50-100	10	10.50	7.00

DIFFUSED ALLOY POWER DAP® TRANSISTORS

Type No.	Case Type	Vcbo V	Ic A	Pc W	Current Gain hFE	Current Gain Ic in A	1-99	100-999
2N1430	TO-41	80	10	50	30-100	5	10.35	6.90
2N1651	TO-41	60	25	100	20 min	25	5.25	3.50
2N1652	TO-41	100	25	100	20 min	25	12.00	8.00
2N2285	TO-3	60	25	100	20 min	25	5.25	3.50
2N2288	TO-3	40	10	60	20-60	5	2.65	1.78
2N2289	TO-3	80	10	60	20-60	5	4.00	2.67
2N2294	TO-41	40	10	60	50-120	5	2.78	1.85
2N2357	TO-41	60	50	170	15 min	50	11.25	7.50
2N2467	TO-5	60	3	5	30-90	0.5	6.00	4.00
2N2469	TO-5	200	3	5	30-90	0.5	11.25	7.50

ENCAPSULATED NPN SILICON POWER TRANSISTORS

The Bendix B-5000 plastic Encapsulated Silicon power transistor is a new concept in solid state power handling. This reliable low-cost device is taking over many new applications where silicon power formerly could not be considered.

B-5000

Type	Case Type	Vceo V	IC A	Pc W	Current Gain hFE	Current Gain Ic in A	1-99	100-999
B-5000	B-5000	35	3	25	30-250	0.5	.99	.75

MOUNTING HARDWARE

Type	For Case Type	1-99	100-999	1000-up
210-6500	TO-3 Copper	.50	.25	.20
210-6518	TO-3 Steel	.40	.20	.16

SILICON NPN AMPLIFIER TRANSISTORS

Type No.	Case Type	Vceo V	Ic A	Pc W	Current Gain hFE	Current Gain Ic in A	1-99	100-999
B-170000	TO-3	40	6	60	30 min.	1	2.35	1.55
B-170001	TO-3	40	10	90	20 min.	3	2.40	1.60
B-170002	TO-3	40	15	120	12 min.	5	2.50	1.65
B-170003	TO-3	70	6	60	30 min.	1	2.40	1.60
B-170004	TO-3	70	10	90	20 min.	3	2.50	1.65
B-170005	TO-3	70	15	120	12 min.	5	2.55	1.70
B-170006	TO-3	100	6	60	30 min.	1	2.80	1.85
B-170007	TO-3	100	10	90	20 min.	3	2.90	1.95
B-170008	TO-3	100	15	120	12 min.	5	3.45	2.30

SILICON NPN REGULATOR TRANSISTORS

Type No.	Case Type	Vecto V	Ic A	Pc W	Current Gain hFE	Current Gain Ic in A	1-99	100-999
B-170009	TO-3	40	6	60	30 min.	1	2.35	1.55
B-170010	TO-3	40	10	90	20 min.	3	2.25	1.50
B-170011	TO-3	40	15	120	12 min.	5	2.35	1.55
B-170012	TO-3	70	6	60	30 min.	1	2.25	1.50
B-170013	TO-3	70	10	90	20 min.	3	2.35	1.55
B-170014	TO-3	70	15	120	12 min.	5	2.40	1.60
B-170015	TO-3	100	6	60	30 min.	1	2.70	1.80
B-170016	TO-3	100	10	90	20 min.	3	2.85	1.90
B-170017	TO-3	100	15	120	12 min.	5	3.40	2.25

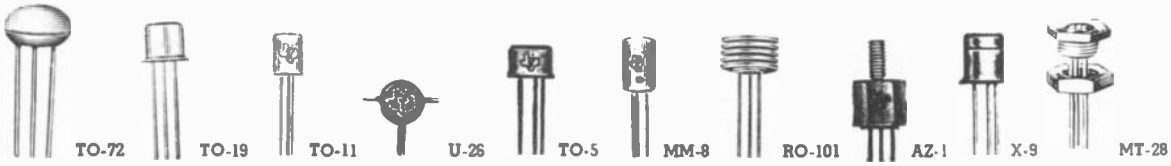
SILICON NPN TRANSISTORS

Type No.	Case Type	Vecto V	Ic A	Pc W	Current Gain hFE	Current Gain Ic in A	1-99	100-999
B-170018	TO-3	40	6	60	30 min.	1	2.20	1.45
B-170019	TO-3	40	10	90	20 min.	3	2.35	1.55
B-170020	TO-3	40	15	120	12 min.	5	2.40	1.60
B-170021	TO-3	70	6	60	30 min.	1	2.35	1.55
B-170022	TO-3	70	10	90	20 min.	3	2.40	1.60
B-170023	TO-3	70	15	120	12 min.	5	2.55	1.74
B-170024	TO-3	100	6	60	30 min.	1	2.80	1.85
B-170025	TO-3	100	10	90	20 min.	3	2.95	1.95
B-170026	TO-3	100	15	120	12 min.	5	3.40	2.25

5 AMPERE HIGH VOLTAGE SILICON NPN POWER TRANSISTORS

B-176000	TO-3	200	5	50	25 min	0.1	4.43	2.95
B-176004	TO-3	325	5	50	25 min	0.1	6.38	4.25
B-176008	TO-3	325	5	50	25 min	0.1	9.38	6.25
B-176012	TO-3	325	5	50	25 min	0.1	21.45	14.30

Texas Instruments Semiconductors



GERMANIUM CONSUMER TRANSISTORS

Type	Case	Coll Volt v	Max Cre. pf	Max rb'Cc psec	fT Mc Typ	1-99	100-999
TI400	TO-18	18	1	15	500	.92	.61
TI401	TO-18	18	1	15	500	.92	.61
TI402	TO-18	18	1	15	500	.92	.61
TI403	TO-18	18	1	15	500	.92	.61

All are Epitaxial Mesa. Power Diss., 75 mw, free air. Ic=50 ma.

GERMANIUM HI-FREQ. SMALL SIGNAL TRANSISTORS

Type	Case	Pwr Diss. Free Air Mw	Ic mA	Coll. Volt. v	fT/Mc Min.	1-99	100-999
T1XM101	TO-72	75	-50	-15		19.00	12.65
T1XM103	U-26	40	20	12		82.50	55.00
T1XM104	U-26	40	20	12		52.50	35.00
T1XM301	TO-5	150	10	20		5.95	3.97
2N1141	TO-11	300	100	35		4.75	4.73
2N1141A	TO-11	300	100	35	500	13.70	9.14
2N1142	TO-11	300	100	30	.....	4.05	2.70
2N1142A	TO-11	300	100	30	400	6.29	4.18
2N1143	TO-11	300	100	25		3.34	2.22
2N1143A	TO-11	300	100	30	400	5.86	3.91
2N1195	TO-11	225	40	30	400	3.95	2.63
2N2996†	TO-18	75	50	15	400	1.48	.99
2N2997†	TO-18	75	50	30	400	3.38	2.25
2N3371	TO-5	150	100	25		5.43	3.62
2N3995	TO-11	300	100	20		8.85	5.95

All mesa except (†) epitaxial mesa.

GERMANIUM ALLOY PNP GENERAL PURPOSE AMPLIFIERS

Type	Case	Pd mW	Ic mA	Coll. Volt v	hFE Min	1-99	100-999
2N650A	TO-5	200	500	45	33	1.69	1.13
2N651A	TO-5	200	500	45	45	1.69	1.13
2N652A	TO-5	200	500	45	80	2.25	1.50
2N658	TO-5	250	1000	30	25	1.28	.85
2N659	TO-5	250	1000	30	40	1.30	.87
2N660	TO-5	250	1000	30	60	1.48	.99
2N661	TO-5	250	1000	30	80	1.71	1.14
2N662	TO-5	250	1000	30	30	1.40	.93
2N1273	TO-5	150	150	15	30	.42	.28
2N1274	TO-5	150	150	25	30	.50	.33
2N1370	TO-5	150	150	25	50	.72	.48
2N1371	TO-5	150	150	45	50	1.14	.76
2N1372	TO-5	250	200	25	30	.81	.54
2N1378	TO-5	250	200	45	30	1.29	.86
2N1373	TO-5	250	200	25	50	1.20	.80
2N1374	TO-5	250	200	45	50	1.02	.68
2N1375	TO-5	250	200	25	75	1.38	.92
2N1376	TO-5	250	200	45	75	1.29	.86
2N1377	TO-5	250	200	12	95	1.50	1.00
2N1379	TO-5	250	200	25	95	1.44	.96
2N1380	TO-5	250	200	12	30	.66	.44
2N1381	TO-5	250	200	25	30	.72	.48
2N1382	TO-5	200	200	25	50	.99	.66
2N1383	TO-5	200	200	25	30	.92	.61

GERMANIUM POWER TRANSISTORS

Type	Case	Ic α	Pd 25°C Case	V(br) cbo	hFE Min.	1-99	100-999
T1156L	MM-8	3	25	30	25	2.25	1.50
T1158L	MM-8	3	25	60	25	2.62	1.75
T1158AL	MM-8	3	25	80	25	3.30	2.20
T1160	RO-101	3	20	60	20	3.90	2.60
T1161	RO-101	3	20	80	20	5.85	3.90
T1162	RO-101	3	20	100	20	7.65	5.10
2N250A	TO-3	7	90	40	25	1.90	1.73
2N251A	TO-3	7	90	60	25	1.88	1.25
2N456A	TO-3	7	150	40	30	1.80	1.20
2N456B	TO-3	7	150	40	30	1.80	1.20
2N457A	TO-3	7	150	60	30	2.18	1.45
2N457B	TO-3	7	150	60	30	2.18	1.45
2N458A	TO-3	7	150	80	30	2.63	1.75
2N458B	TO-3	7	150	80	30	2.63	1.75
2N511	TO-3	7	150	40	20	4.05	2.70
2N511A	TO-3	25	150	60	20	4.73	3.15
2N511B	TO-3	25	150	80	20	5.18	3.45
2N513B	TO-3	25	150	80	20	8.70	5.80
T1539	AZ-1	3 5	25	80	30	7.65	5.10

(Continued in next column)

GERMANIUM POWER TRANSISTORS (Continued)

Type	Case	Ic α	Pd 25°C Case	V(br) cbo	hFE Min.	1-99	100-999
T1540	AZ-1	3.5	25	80	4[illegible]	7.88	5.25
2N1021	TO-3	7	150	100	30	3.08	2.05
2N1022	TO-3	7	150	120	30	3.60	2.40
2N1022A	TO-3	7	150	120	30	3.60	2.40
2N1038	X-9	3	20	40	20	2.85	1.90
2N1039	X-9	3	20	60	20	3.75	2.50
2N1040	X-9	3	20	80	20	5.70	3.80
2N1041	X-9	3	20	100	20	7.50	5.00
2N1042	AZ-1	3.5	20	40	20	4.50	3.00
2N1046	TO-3	20	50	100	60	8.25	5.50
2N1539	TO-3	5	150	40	50	1.50	1.12
2N1540	TO-3	5	150	60	50	1.58	1.18
2N1541	TO-3	5	150	80	50	1.85	1.38
2N1542	TO-3	5	150	100	50	2.35	1.75
2N1543	AZ-1	3	20	40	20	3.60	2.65
2N1907	TO-3	20	60	100	30	7.88	5.25
2N1908	TO-3	20	60	130	30	11.25	7.50
2N2552	AZ-1	3	20	40	20	3.00	2.00
2N2553	AZ-1	3	20	60	20	3.90	2.60
2N2554	AZ-1	3	20	80	20	5.85	3.90
2N2556	AZ-1	3	20	40	20	3.05	2.05
2N2557	AZ-1	3	20	60	20	3.95	2.65
2N2560	AZ-1	3.5	20	40	20	4.45	2.95
2N2564	X-9	3.5	20	40	20	4.30	2.80
2N2565	X-9	3.5	20	60	20	5.65	5.63
2N2659	X-9	3	15	50	30	1.80	1.20
2N2660	X-9	3	15	70	30	2.35	2.33
2N2661	X-9	3	15	90	30	2.85	1.90
2N2662	AZ-1	3	15	50	30	1.95	1.30
2N2663	AZ-1	3	15	70	30	2.50	2.48
2N2664	AZ-1	3	15	90	30	3.00	2.00
2N2665	X-9	3	15	50	30	2.40	1.60
2N2666	X-9	3	15	70	30	3.10	3.08
2N2667	X-9	3	15	90	30	3.75	2.50
2N2670	AZ-1	3	15	90	30	3.90	2.60
TI3027	TO-3	7	150	45	40	1.20	.80
TI3028	TO-3	7	150	60	40	1.43	.95
TI3029	TO-3	7	150	80	30	1.65	1.10
TI3030	TO-3	7	150	100	30	1.88	1.25
TI3031	TO-3	7	150	120	30	2.03	1.35
2N3146	TO-3	15	150	150	25	4.60	3.50

GERMANIUM SWITCHING TRANSISTORS

Type	Case	Pwr Diss mw	Coll. Curr. ma	Coll. Volt v	fhfb MHz Min	1-99	100-999
2N388	TO-5	150	200	25	5	.50	.35
2N388A	TO-5	150	200	40	5	1.03	.69
2N395	TO-5	150	250	30	3	.50	.33
2N396	TO-5	150	250	30	5	.61	.41
2N404	TO-5	150	100	25	4	.42	.28
2N404A	TO-5	150	150	40		.58	.39
2N427	TO-5	150	400	30		.92	.61
2N428	TO-5	150	400	30		1.23	.82
2N594	TO-5	150	300	20		2.76	1.83
2N595	TO-5	150	300	20		4.25	2.83
2N596	TO-5	150	300	20		5.65	3.77
2N705	TO-18	150	50	15		1.04	.69
2N711‡	TO-18	150	50	12		.89	.59
2N711A‡	TO-18	150	100	15	150	.89	.59
2N711B‡	TO-18	150	100	15	150	.94	.63
2N797‡	TO-18	150	150	20	600	4.27	2.85
2N960‡	TO-18	150	100	15	300	.96	.64
2N961‡	TO-18	150	100	12	300	.91	.61
2N962‡	TO-18	150	100	12	300	.86	.57
2N963‡	TO-18	150	100	12		.83	.55
2N964‡	TO-18	150	100	12	300	.99	.66
2N965‡	TO-18	150	100	15	300	.94	.63
2N966‡	TO-18	150	100	12	300	.89	.59
2N967‡	TO-18	150	100	12		.87	.58
2N968‡	TO-18	150	200	12	300	.90	.60
2N969‡	TO-18	150	200	15	300	.84	.56
2N970‡	TO-18	150	200	12	300	.81	.54

† Bidirectional. All alloy except (‡) Epitaxial Mesa.

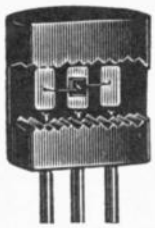
The new TI items on this page are equipped with the following cases:
AZ-1 signifies a ROUND WELDED TRIODE WITH STUD HEAT SINK;
X-9 signifies a TALL ROUND WELDED TRIODE WITH INTERNAL HEAT SINK;
MM-8 signifies a ROUND WELDED TRIODE WITH CYLINDRICAL HEAT SINK.

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

GERMANIUM SWITCHING TRANSISTORS (Continued)

Type	Case	Pwr Diss mW	Coll. Curr. mA	Coll. Volt v	fhfb Mc Min	1-99	100-999
2N971‡	TO-18	150	200	12	300	.80	.53
2N972‡	TO-18	150	200	7	300	.93	.62
2N973‡	TO-18	150	200	15	300	.89	.59
2N974‡	TO-18	150	200	12	300	.83	.55
2N975‡	TO-18	150	200	12	300	.81	.54
2N985‡	TO-18	150	200	7	300	2.83	1.89
2N1302§	TO-5	150	300	13	3	.45	.31
2N1303§	TO-5	150	300	25	3	.45	.30
2N1304§	TO-5	150	300	30	5	.53	.37
2N1305	TO-5	150	300	30	5	.52	.35
2N1306§	TO-5	150	300	25	10	.74	.49
2N1307	TO-5	150	300	30	10	.66	.44
2N1308§	TO-5	150	300	25	15	1.08	.72
2N1309	TO-5	150	300	30	15	1.07	.72
2N1404	TO-5	150	300	25	4	.58	.39
2N1605§	TO-5	150	100	25	4	.72	.48
2N1808	TO-5	150	300	25	4	.58	.39
2N1994†	TO-5	150	300	30	3	2.23	1.55
2N1997	TO-5	250	500	45		1.77	1.18
2N1998	TO-5	250	500	35		1.88	1.25
2N1999	TO-5	250	500	30		2.07	1.38
2N2000	TO-5	300	1000	50	2	2.50	1.67
2N2001	TO-5	300	1000	30	6	2.17	1.45
2N2635‡	TO-18	150	100	30	150	.94	.63

†Bi-directional. All Alloy except (‡) Epitaxial Mesa, (*) Alloy diffused. All NPN except ($) PUP

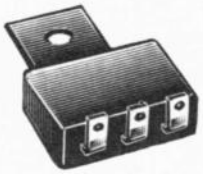


"SILECT"

HIGH RELIABILITY PLASTIC ENCAPSULATED TRANSISTORS

- **Plastic packages**
- **One-piece construction**
- **Heat and moisture resistant**
- **Reduce cost of electronic systems**

Cutaway model at left shows simple, rugged TO-92 package. The solid, one piece construction provides excellent protection for active element and fine connecting wires, assuring stable performance under condition of severe shock or vibration. The plastic compound meets MIL-STD 202-C, for moisture protection. The model at right shows the TAB-PAC package, which is used in the TAB-PAC SILECT power transistors. Provides 10 watts at 75°C case temperature.



GENERAL PURPOSE — AUDIO

Type	Nearest Equiv.	Pw mW	Veco V	Mfr's Type	1-99	100-999
2N3702	2N2904	300	25	PNP	.45	.30
2N3703	2N2904	300	30	PNP	.39	.26
2N3704	2N2217	300	30	NPN	.60	.41
2N3705	2N2217	300	30	NPN	.57	.38
2N3706	2N2217	300	20	NPN	.52	.35

SILICION FIELD EFFECT — FET

Type	Channel	Pd mW	B VGSS V	IGSS Na	1-99	100-999
2N3819	N	200	—25	2	.90	.60
2N3820	P	200	20	20	2.95	1.95

POWER

Type	Case	IC A	Pd w	V (br) V	hfe Min	1-99	100-999
TIP14	*	4.0	10	60	30	1.50	.95
TIP24	*	2.0	10	70	19	1.50	.95

* TAB PAK. T1P14 is high frequency (min. ft. 40 mc.); T1P24 for AF.

GENERAL PURPOSE — LOW NOISE

Type	Nearest Equiv.	Pw mW	Veco V	Mfr's Type	1-99	100-999
2N4058	2N2605	250	30	PNP	.99	.67
2N4059	2N2604	250	30	PNP	.76	.51
2N4060	2N2604	250	30	PNP	.81	.54
2N4061	2N2604	250	30	PNP	.82	.55
2N4062	2N2605	250	30	PNP	.90	.60
2N3707	2N929	250	30	NPN	.60	.37
2N3708	2N929	250	30	NPN	.48	.32
2N3709	2N929	250	30	NPN	.48	.32
2N3710	2N929	250	30	NPN	.49	.33
2N3711	2N929	250	30	NPN	.54	.36

HIGH FREQUENCY AMPLIFIER

Type	Nearest Equiv.	Pw mW	Veco V	Mfr's Type	1-99	100-999
2N3825	.....	250	15	NPN	.58	.39
2N3826	2N929	200	15	NPN	.54	.36
2N3827	2N929	200	60	NPN	.58	.39
2N4254	.....	.....	....	.....	.90	.60
2N4255	.....	.....	....	.....	.85	.57
TI407	2N918	200	12	NPN	.59	.39
TI408	2N918	200	12	NPN	.57	.38
TI409	2N918	200	12	NPN	.54	.36

HIGH-VOLTAGE SWITCHING

Type	Case	Pd Free Air mW	Coll. Curr. mA	Coll. Volt v	Min hFE	fhfb Mc	1-99	100-999
2N398	TO-5	50	100	105	20	0.8	.90	.60
2N398A	TO-5	150	200	105	20	0.8	.98	.65
2N1310	TO-5	120	100	90	20	2.4	4.50	3.00
2N1311	TO-5	120	100	75	...	...	3.23	2.15
2N1312	TO-5	120	100	50	20	2.6	1.77	1.18

HIGH FREQUENCY — SWITCHING

Type	Case	Max Ic a	Pd 25°C Case	V(br)cbc v	hFE Min.	1-99	100-999
2N1907	TO-3	20	60w	100	30	7.88	5.25
2N1908	TO-3	20	60w	130	30	11.25	7.50

● *NEW* SMALL SIGNAL TYPES

Type	Case	PD mW	Coll. Cur. mA	Coll. Volt. V	1-99	100-999
TIA01	TO-5	125	150	60	.32	.21
TIA02	TO-5	125	150	40	.32	.21
TIA03	TO-5	125	150	25	.32	.21
TIA04	TO-5	125	150	25	.32	.21
TIA05	TO-5	125	150	20	.32	.21
TI400	TO-18	75	50	18	.92	.61
TI401	TO-18	75	50	18	.92	.61
TI402	TO-18	75	50	18	.92	.61
TI403	TO-18	75	50	18	.92	.61
2N2188	HH	125	30	40	1.28	.85
2N2189	HH	125	30	40	1.64	1.09
2N2190	HH	125	30	40	1.47	.98
2N2191	HH	125	30	60	1.85	1.23

NOTE: HH indicates a Flangeless case.

SILICON PHOTOCONDUCTIVE LIGHT SENSORS

Type	Case	Bias Volt. V Max.	Max. Dark Current @ 25°C ±50 volts in μa	Max. Dark Current @ 100°C ±50 volts in μa	Min.* Light Current @ 25°C ±10 volts in μa	1-99	100-999
1N2175	CC	±50	.5	100	100	6.40	5.05
H-11	CC	±50	.5	....	40	4.00	2.80
H-35	CC	±50	.5	....	60	5.00	3.50
H-38	CC	±50	10.0	....	100	4.00	2.80
H-60	CC	±50	.5	100	100	8.00	5.60
H-61	CC	±50	.5	100	200	9.00	6.25
H-62	CC	±50	.5	100	300	13.50	10.00
LS-400	CC	.....	.025	....	1000	10.30	9.10
LSX-600	CC	.....	.025	....	800	9.00	7.60

GALLIUM ARSENIDE VARACTOR DIODES

Type	Case	Min. Cap. @ Vr=O v pf	Min. Cutoff fr. @ Vr=2 v, Gc	1 99	10-99	100-999
TDKV01	SS	35	100	125.00	100.00	90.00
TDKV02	SS	.35	150	150.00	120.00	100.00
TDKV03	SS	.35	200	225.00	200.00	175.00
TDKV04	SS	.35	300	525.00	475.00	375.00

NEWARK GROWS WITH
YOUR GROWING NEEDS
PHONE — WRITE — WIRE
FOR LATEST SEMICONDUCTOR PRICES

Texas Instruments Semiconductors

DO-7

M-71

TO-5

F-30

TO-18

MT-10

TO-3

MT-13

MT-21

LS600
LSX515
LSX900

TO-53

X-15

MT-5

A-21

TO-92

PLANAR SILICON PHOTO DEVICES

Type LS-400. Microminiature. Designed for photo switch-switching, tape-read-out, differential amplifiers, and proportional control. VR, 30 volts.; BVR, 50 volts at 100 ua; BVF, 8 volts at 100 ua. **Type LSX600.** Ideally suited for line read-out application, and high density matrix equipment. Velocity indicators, encoders, tape and card readers. Coll. Emit. v., 50 v; emit-coll. v., 7 v.

Type	Case	Lt. Cur. S VDC	Dk. Curr. 30 VDC	P.	1-99	100-999
LS400	M-71	1.0 ma	.025 μa	50 ma	10.30	9.10
LS600	LSX600	0.8 ma	.025 μa	50 ma	9.00	7.60
LSX515	LSX515	.9 ma	1.0 μa	.....	14.95	11.30
LSX900	LSX900	.9 ma	6.0 μa	.....	85.00	73.00

SILICON-VOLTAGE-VARIABLE-CAPACITANCE DIODES

Type	Case	@Vr=4 v Ct pf	V(br) V	1-99	100-999
A-580	DO-7	22	35	7.00	5.25
A-581	DO-7	22	60	11.00	7.50
A-582	DO-7	27	35	7.00	5.25
A-583	DO-7	27	60	13.00	10.00
A-584	DO-7	33	35	7.00	5.25
A-586	DO-7	39	35	8.00	6.25
A-587	DO-7	39	60	13.00	10.00
A-588	DO-7	47	35	10.00	7.25
A-589	DO-7	47	60	17.00	13.00
TIV300†	A-21	7	15	1.00	.80
TIV301†	A-21	12	15	1.00	.80
TIV302†	A-21	20	15	1.25	1.00
TIV303†	A-21	33	15	1.25	1.00

Mfg. Process: all Si epitax except (†) Si diff¼ Q=60-100.

SILICON MONOLITHIC DARLINGTON POWER TRANSISTOR

Type	Case	V(br)ceo v	Min. hFE	Switching Time T-on	Switching Time T-off	1-99	100-999
2N3836	X-15	60	2000	5 ms	1 μs	66.00	44.00
2N3837	X-15	80	2000	5 ms	1 μs	99.00	66.00

SILICON PNP DUAL TRANSISTORS

Type	Case	Equiv. Triode	Pd w	μv/C°	1-99	100-999
2N2807	MT-5	2N2412	0.5	....	22.50	15.00
2N3806	MT-5	2N3798			14.25	9.50
2N3807	MT-5	2N3799			15.75	10.50
2N3808	MT-5	2N3798			21.00	14.00
2N3809	MT-5	2N3799			22.50	15.00
2N3810	MT-5	2N3798			26.25	17.50
2N3811	MT-5	2N3799			27.75	18.50

All are Planar except (†) Epitaxial Planar.

HIGH FREQUENCY — SWITCHING — POWER

Type	Case	Ic Max α	Pd 100°C	V (br) ceo V	hFE Min	1-99	100-999
2N1907	TO-3	20	60	100	30	7.90	5.25
2N1908	TO-3	20	60	130	30	11.30	7.50
2N1046	TO-3	20	50	100	60	8.25	5.50

SILICON NPN DUAL PLANAR TRANSISTORS

Type	Case	Equiv. Triode	Pd w	μv/C°	1-99	100-999
2N2223	MT-5	2N1711	0.6	25	10.00	6.70
2N2641	MT-5	2N929	0.6		9.00	6.00
2N2642	MT-5	2N930	0.6	20	28.25	17.50
2N2643	MT-5	2N930	0.6	20	25.00	16.70
2N2913	MT-5	2N2483			9.90	6.60
2N2914	MT-5	2N2484			12.00	8.00
2N2915	MT-5	2N2483			22.50	15.00
2N1916	MT-5	2N2484			25.50	17.00
2N2917	MT-5	2N2483			21.00	14.00
2N2918	MT-5	2N2484			24.75	16.50
2N2919	MT-5	2N2483			24.00	16.00
2N2920	MT-5	2N2484			27.00	18.00

Type	Case	Equiv. Triode	Pd w	μv/C°	1-24	25-99	100-999
2N3043	MT-5	2N930			44.00	38.00	29.40
2N3052	MT-5	2N914			27.00	23.40	18.00

SILICON COMPUTER DIODES

Type	Case	V(br) v	Max Ir @ 25°C μa	@ 100°C μa	If @ Iv ma	1-99	100-999
1N251	A-21	40	0.1	10	5	.32	.21
1N625	A-21	30	1	30	4	.40	.26
1N626	A-21	50	1	30	4	.40	.26
1N627	A-21	100	1	30	4	.51	.34
1N628	A-21	150	1	30	4	.61	.40
1N629	A-21	200	1	30	4	.68	.44
1N643	A-21	200	0.025	10	10	.98	.65
1N658	A-21	120	.05	...	100	1.48	.98
1N659	A-21	60	5	25	6	.56	.36
1N660	A-21	110	5	50	6	.65	.34
1N661	A-21	240	10	100	6	.98	.68
1N662	A-21	100	20	100	10	.25	.15
1N663	A-21	100	5	50	100	.65	.52
1N914	A-21	100	0.025	50	10	.32	.21
1N914A	A-21	100	0.025	50	20	.37	.24
1N914B	A-21	100	0.025	50	100	.77	.52
1N916	A-21	100	0.025	50	10	50	.32
1N916A	A-21	100	0.025	50	20	.56	.37
1N916B	A-21	100	0.025	50	30	.72	.48
1N3064	A-21	75	.01	100	10	.24	.14
1N3070	A-21	200	0.1	100	100	1.22	.98
TID12	A-21	100	0.025	50	200	4.00	2.60
TID14	A-21	100	0.025	50	150	3.50	2.10
TID16	A-21	100	0.025	50	100	2.35	1.80

SILICON POWER TRANSISTORS

Type	Case	Ic max α	Pd 100°C Case	V(br) ceo V	hFE Min	1-99	100-999
2N389	TO-53	3	45	60	15	21.00	14.00
TI486	TO-5	.75	15	60	20	4.90	3.25
TI487	MT-21	.75	15	60	20	5.60	3.75
2N498	TO-5	.5	4	100	12	2.12	1.41
2N656	TO-5	.5	4	60	30	2.03	1.35
2N657	TO-5	.5	4	100	30	2.20	1.47
2N675A	TO-5	.5	4	100	30	9.00	6.00
2N1047	MT-5	1	23	80	12	14.30	9.55
2N1048	MT-5	1	23	120	12	18.10	12.05
2N1049	MT-5	1	23	80	30	16.75	11.15
TI1133	MT-10	7.5	80	75	30	14.70	9.80
TI1151	MT-10	7.5	80	100	20	22.95	15.30
TIP-14	.....	4	10	60	30	1.50	.95
TIP-24	.....	2	10	70	19	1.50	.95
2N1714	TO-5	.75	10	60	20	6.00	4.00
2N1715	TO-5	.75	10	60	20	8.25	5.50
2N1716	TO-5	.75	10	100	40	7.50	5.00
2N1718	MT-13	.75	10	60	20	6.75	4.50
2N1719	MT-13	.75	10	60	20	9.00	6.00
2N1720	MT-13	.75	10	100	40	8.25	5.50
2N1721	MT-13	.75	10	100	40	12.00	8.00
2N1725	MT-10	7.5	50	80	50	43.50	29.00
2N2151*	H	2	30	80	40	24.75	16.50
2N2989†	TO-5	1	15	80	60	10.20	6.75
2N2990†	TO-5	1	15	100	60	13.10	8.75
2N2991†	MT-13	1	15	80	25	9.00	6.00
2N2992†	MT-13	1	15	100	25	12.00	8.00
2N2993†	MT-13	1	15	80	60	10.90	7.25
2N2994†	MT-13	1	15	100	60	13.90	9.25
2N3418*	TO-5	5	10	60	20	12.45	8.30
2N3419	TO-5	5	10	80	20	14.10	9.40
2N3420*	TO-5	5	10	60	40	13.35	8.90
2N3421*	TO-5	5	10	80	40	16.95	11.30
2N3846	MT-10	20	150	200	15	90.00	60.00
2N3848	MT-10	20	150	200	15	125.00	85.00
2N3997	TO-18	5	30	80	80	54.00	36.00
2N3998	TO-48	5	30	80	40	30.00	20.00
2N3999	TO-48	5	30	80	80	42.00	28.00
2N4000	TO-5	1	15	80	30	10.20	6.75
2N4001	TO-5	1	15	100	40	13.10	8.75
2N4002	MT-10	30	100	80	20	112.50	75.00
2N4003	MT-10	30	100	100	20	148.00	99.00
2N4004	U-26	20	40	80	30	112.50	75.00
2N4005	U-26	20	40	100	30	148.00	99.00
2N4300	TO-5	2	15	80	30	12.75	8.50
2N4301	TO-18	10	50	80	30	58.50	39.00

All Mesa except (*) Epitaxial Planar and (†) Planar.

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

SILICON NPN GENERAL PURPOSE TRANSISTORS

Type	Case	Vcbo v	Pd w	hFE Min.	1-99	100-999
TI482*	TO-5	20	0.6	20	2.15	1.65
TI483*	TO-5	40	0.6	20	2.40	1.85
TI484*	TO-5	40	0.6	40	2.95	2.25
2N696*	TO-5	60	0.6	20	.52	.46
2N697*	TO-5	60	0.6	40	.52	.46
2N698*	TO-5	120	0.8	20	1.57	1.05
2N699*	TO-5	120	0.6	40	1.57	1.05
2N702*	TO-18	25	0.3	20	6.75	4.50
2N718*	TO-18	60	0.4	40	.46	.40
2N718A*	TO-18	75	0.5	40	.79	.68
2N720*	TO-18	120	0.4	40	1.83	1.22
2N720A*	TO-18	120	0.5	40	2.48	1.65
2N730*	TO-18	60	0.5	20	.99	.66
2N731*	TO-18	60	0.5	40	1.30	.86
2N910*	TO-18	100	0.5	75	2.37	1.58
2N911*	TO-18	100	0.5	35	5.55	3.70
2N956*	TO-18	75	0.5	100	.85	.74
2N1420*	TO-5	60	0.6	100	.65	.56
2N1507*	TO-5	60	0.6	100	1.20	.80
2N1613*	TO-5	75	(0.8)	40	.79	.68
2N1711*	TO-5	75	0.8	100	.85	.74
2N1893*	TO-5	120	0.8	40	1.32	.88
2N1973*	TO-5	100	0.8	75	2.37	1.58
2N2192A†	TO-5	60	0.8	100	4.45	2.95
2N2193†	TO-5	60	0.8	40	2.95	1.95
2N2193A†	TO-5	60	0.8	40	3.15	2.10
2N2194A†	TO-5	60	0.8	20	2.40	1.60
2N2217†	TO-5	60	0.8	20	3.02	2.01
2N2218†	TO-5	60	0.8	40	1.00	.88
2N2218A†	TO-5	60	0.8	40	5.25	3.50
2N2219†	TO-5	60	0.8	100	1.00	.88
2N2219A†	TO-5	60	0.8	100	6.00	4.00
2N2220†	TO-18	60	0.5	20	3.02	2.01
2N2221A†	TO-18	60	0.5	40	5.25	3.50
2N2222†	TO-18	60	0.5	100	1.07	.93
2N2222A†	TO-18	60	0.5	100	6.00	4.00
2N2243†	TO-5	60	0.8	40	4.80	3.20
2N2243A†	TO-5	60	0.8	40	5.10	3.40
2N3036†	TO-5	120	0.8	50	5.50	3.70
2N3114†	TO-5	150	0.8	30	6.00	4.00
2N3712	TO-5	150	.8	30	3.00	2.00
TIS22	X-31	45	.15	40	4.20	2.80
TIS23	X-31	45	.15	100	4.65	3.10
TIS24	X-31	60	.15	100	6.45	4.30

*Mfg. Proc., Planar. †Mfg. Proc., Epitaxial Planar.

TO-18

TO-5

OV-6

TO-11

TO-46

X 31

SILICON NPN SWITCHING TRANSISTORS

Type	Case	Min ft Mc	Pd mw	Rated Vceo Max Ts V	Rated Vceo Max Ts nsec	1-99	100-999
TIS44	TO-92	200	250	20	60	.49	.37
TIS45	TO-92	300	250	15	25	.60	.45
TIS46	TO-92	300	250	15	40	.63	.47
TIS47	TO-92	400	250	15	18	.60	.45
TIS48	TO-92	500	250	15	23	.64	.48
TIS49	TO-92	500	250	15	18	.75	.55
TIS51	TO-92	400	250	12	18	.63	.48
TIS52	TO-92	350	250	20	20	.65	.49
TIS55	TO-92	350	250	15	18	.60	.46
TI485	TO-18	100	300	14		3.25	2.50
2N706	TO-18	200	300	15	60	.99	.66
2N706A	TO-18	200	300	15	25	1.19	.79
2N706B	TO-18	200	300	15	25	1.49	.99
2N708	TO-18	300	360	15	25	1.32	.88
2N709	TO-18	600	300	6	6	2.48	1.65
2N743	TO-18	282	300	12	14	6.20	4.15
2N744	TO-18	282	300	12	18	2.90	1.95
2N753	TO-18	200	300	15	35	1.97	1.31
2N914	TO-18	300	360	15	20	1.04	.84
2N2368	TO-18	400	360	15	10	2.31	1.54
2N2369	TO-18	500	360	15	13	2.40	1.60
2N369A	TO-18	500	360	15	13	3.45	2.30
2N2410	TO-5	200	800	40	40	4.50	3.00
2N2481	TO-18	300	360	15	20	3.90	2.60
2N2537	TO-5	250	800	30	20	4.95	3.30
2N2358	TO-5	250	800	30	20	5.85	3.90
2N2539	TO-18	250	500	30	20	4.95	3.30
2N2540	TO-18	250	500	30	20	5.85	3.90
2N2692	TO-18	150	300	30	500	15.00	10.00
2N2693	TO-18	150	300	30	900	7.75	5.50
2N2694	TO-18	150	300	20	1800	5.25	3.50
2N3009	TO-18	350	360	15	18	1.98	1.32
2N3010	TO-18	600	300	6	6	1.90	1.27
2N3011	TO-18	400	360	12	13	1.98	1.32
2N3013	TO-18	350	360	15	18	7.00	4.69
2N3724	TO-5	300	800	30	60	8.50	5.50

SILICON NPN SWITCHING TRANSISTORS (CONT'D)

Type	Case	Min ft Mc	Pd mw	Rated Vceo Max Ts V	Rated Vceo Max Ts nsec	1-99	100-999
2N3725	TO-5	300	800	50	60	11.50	7.50
2N3014	TO-18	350	360	20	18	3.60	2.40
2N3015	TO-5	250	800	30	60	3.50	2.00
2N3033	TO-18	-	300	100	5	45.00	30.00
2N3035	TO-18	-	300	50	40	12.50	8.30
2N3444	TO-5	150	800	50	50	12.00	8.00
2N3829	TO-18	350	360	20	40	6.00	4.00
2N3830	TO-18	-	1	50	40	13.50	9.00
2N3831	TO-18	-	1	40	10	9.00	6.00
2N3832	TO-18	-	200	6	.....	7.50	5.00
2N4418	AAA	500	250	15	12	.64	.48
2N4419	AAA	500	250	12	14	.60	.45
2N4420	AAA	350	250	20	15	.65	.49
2N4421	AAA	350	250	12	18	.60	.45
2N4422	AAA	350	250	15	20	.60	.46

All Epitaxial Planar except (*) Mesa. AAA means Pin-Circle SILECT Case.

TO-18

TO-46

A-62

TO-3

M-77

M-245

TO-5

TO-49

TO-48

NPN SILICON GROWN-JUNCTION TRANSISTORS

Type	Case	Polarity	Rated Vcbo v	Pd 250°C mw	1-99	100-999
2N117	A-62	NPN	30	150	8.15	5.45
2N118	A-62	NPN	45	150	8.15	5.45
2N332	TO-5	NPN	45	150	4.65	3.10
2N332A	TO-5	NPN	45	500	4.90	3.30
2N333	TO-5	NPN	45	150	4.65	3.10
2N333A	TO-5	NPN	45	500	4.90	3.30
2N334	TO-5	NPN	45	150	4.65	3.10
2N335	TO-5	NPN	45	150	4.90	3.30
2N335A	TO-5	NPN	45	500	5.20	3.50
2N336	TO-5	NPN	45	150	5.95	3.95
2N336A	TO-5	NPN	45	500	6.25	4.20
2N542	TO-5	NPN	45	200	6.30	4.20
2N1149	A-62	NPN	45	150	8.65	5.75
2N1151	A-62	NPN	45	150	8.65	5.75
2N1278	TO-5	NPN	40	150	4.75	3.15
TI480	TO-49	NPN	50	150	1.55	1.20
TI481	TO-49	NPN	80	600	1.90	1.45
TI492	TO-5	NPN	40	600	1.55	1.20
TI493	TO-5	NPN	40	150	1.90	1.45
TI494	TO-5	NPN	40	125	2.50	1.90
TI495	TO-5	NPN	40	125	3.00	2.30
TI496	TO-49	NPN	70	125	1.75	1.35

SILICON PNP GENERAL PURPOSE TRANSISTORS

Type	Case	Vcbo v	Pd. mw	Min. hFE	1-99	100-999
2N327A	TO-5	50		9	2.25	1.50
2N328A	TO-5	50		18	4.50	3.00
2N329A	TO-5	50		36	6.50	4.35
2N721	TO-18	50		20	1.46	1.27
2N995	TO-18	20		35	5.85	3.90
2N1131	TO-5	50	600	20	5.60	3.75
2N1132	TO-5	50	600	30	5.60	3.75
2N2696	TO-18	25	360	30	7.50	5.00
2N2904	TO-5	60	600	40	1.90	1.65
2N2904A	TO-5	60	600	40	10.50	7.00
2N2905	TO-5	60	600	100	1.90	1.65
2N2905A	TO-5	60	600	100	12.00	8.00
2N2906	TO-18	60	400	40	1.90	1.65
2N2906A	TO-18	60	400	40	10.50	6.70
2N2907	TO-18	60	400	100	1.90	1.65
2N2907A	TO-18	60	400	100	11.55	7.70
2N3485	TO-46	60		40	8.70	5.80
2N3485A	TO-46	60		40	12.00	8.00
2N3486	TO-46	60		100	10.20	6.80
2N3486A	TO-46	60		100	13.50	9.00
2N3502	TO-5	45		100	8.70	5.80
2N3503	TO-5	60		100	11.55	7.70
2N3504	TO-18	45		100	8.70	5.80
2N3505	TO-18	60		100	11.55	7.70

Texas Instrument Semiconductors

SILICON PNP SWITCHING TRANSISTORS

Type	Case	Min ft MHz	Pd 25°C mw	Rated Vceo v	Ts Max. nsec.	1-99	100-999
2N726*	TO-18	140	300	20	....	3.00	2.00
2N727*	TO-18	140	300	20	....	3.15	2.10
2N2411	TO-18	140	300	20	90	3.15	2.10
2N2412	TO-18	140	300	20	90	6.00	4.00
2N2894	TO-18	400	360	12	(90)	1.95	1.30
2N3012	TO-18	400	360	12	(75)	1.95	1.30
2N3244	TO-5	175	300	40	....	15.75	10.50
2N3245	TO-5	150	300	50	....	15.75	10.50
2N3304	TO-18	500	300	6	....	8.25	5.50
2N3829	TO-18	350	300	20	....	6.00	4.00
2N4423	....	400	300	12	....	.76	.51

All Epitaxial Planar Except (*) Mesa.

SILICON NPN AVALANCHE SWITCH — EPITAXIAL MESA

Type	Case	Output v	Vbe v	V(br)cer v	Toa nsec	1-99	100-999
2N3033	TO-18	45	1.5	100	5	45.00	30.00
2N3035	TO-18	20	1.5	50	5	12.50	8.30

SCR TRIGGER DIODES — PEAK CURRENT, 1 AMP.

Type	Case	Avg. Pwr. mW	V(br)f	V (br)f	1-99	100-999
TI42	A-62	100	32 v	32 v	.87	.58
TI43	A-62	100	32 v	32 v	1.02	.68

SILICON NPN LOW-LEVEL AMPLIFIER

Type	Case	Ic Range mA	Vceo v	Min fr MHz	1-99	100-999
TIS22	WWW	.001-50	45	30	4.20	2.80
TIS23	WWW	.001-50	45	60	4.65	3.10
2N735	TO-18	1-30	60	60	2.50	1.65
2N736	TO-18	1-30	60	60	2.50	1.65
2N736A	TO-18	1-30	80	100	2.50	1.65
2N739	TO-18	1-30	80	60	2.70	1.40
2N740	TO-18	1-30	80	60	2.70	1.40
2N759	TO-18	.1-100	.	50	1.75	1.17
2N759A	TO-18	1-30	60	50	1.83	1.22
2N760	TO-18	.1-30	45	50	1.80	1.20
2N760A	TO-18	.1-30	60	50	1.83	1.22
2N780	TO-18	.03-10	45	60	4.50	3.00
2N929*	TO-18	.01-30	45	30	3.60	2.40
2N930*	TO-18	.01-30	45	30	3.87	2.65
2N1565	TO-5	1-30	60	60	2.50	1.65
2N1566	TO-5	.1-30	60	60	2.50	1.65
2N1566A	TO-5	.1-30	80	100	2.50	1.65
2N2483*	TO-18	.01-10	60	60	3.60	2.40
2N2484*	TO-18	.001-10	60	60	3.87	2.65
2N2586	TO-18	.001-10	45	45	6.00	4.00
2N3117	TO-18	.001-50	.	60	6.00	4.00
2N4104	TO-18	.001-50	.	90	6.00	4.00

All Mesa except (*) Planar.

SILICON NPN HIGH FREQ. AMPLIFIER-OSCILLATOR

Type	Case	Min ft MHz	Pd mw	Cobo pf	1-24	25-99	100-999
TIXS12	.	1400	200	10	155.00	128.00	105.00
TIXS13	.	1200	200	10	155.00	128.00	105.00
TIXS39	TO-5	800	200	6	125.00	100.00	85.00

Type	Case	Min ft MHz	Pd mw	Cobo pf	1-99	100-999
TIS56	TO-18	500	200	0.32	2.70	1.80
TIS57	TO-18	500	200	0.32	1.80	1.20
2N916	TO-18	300	360	6	3.65	2.90
2N917	TO-18	500	200	1.7	4.95	3.30
2N918	TO-18	600	200	1.7	5.25	3.50
2N2863	TO-5	150	800	13	1.50	1.00
2N2865	TO-18	600	200	2.5	3.45	2.30
2N2883	TO-5	400	200	10	30.00	20.00
2N2884	TO-5	400	200	10	39.00	26.00

Type	Case	Min ft MHz	Pd mw	Cobo pf	1-24	25-99	100-999
TIX3016A	X-15		200	1.7	50.00	43.50	29.00

Type	Case	Min ft MHz	Pd mw	Cobo pf	1-99	100-999
2N3570	TO-18	1500	200	0.75	21.90	14.60
2N3571	TO-18	1200	200	0.85	7.35	4.90
2N3572	TO-18	1000	200	0.85	5.90	3.95
2N4252	TO-18	600	200	0.45	1.85	1.23
2N4253	TO-18	600	200	0.45	1.60	1.00
2N4254	TO-92	600	200	0.65	.90	.60
2N4255	TO-92	600	200	0.65	.85	.57
2N4874	TO-5	900	200	3.5	5.85	3.90
2N4875	TO-5	800	200	3.5	4.95	3.42
2N4876	TO-5	650	200	3.5	4.20	2.80

All Epitaxial Planar except (*) Planar.

A number of NEW TI Cases have been listed on this page.
AAA indicates a PIN CIRCLE Mounting;
III indicates a PRESS FIT CASE for Thyristor;
WWW indicates a CHIP PAK;
GG indicates a CUP CASE for Thyristor.

SILICON PNP LOW-LEVEL AMPLIFIER—EPITAXIAL PLANAR

Type	Case	Ic Range ma	Vceo v	fhfb MHz	1-99	100-999
2N2604	TO-46	.01-10	45	30	6.00	4.00
2N2605	TO-46	.01-10	45	30	6.60	4.40
2N2861	TO-18	.01-10	20	60	8.50	5.65
2N2862	TO-18	.01-10	20	45	6.00	4.00
2N3798	TO-18	.001-50	....	100	6.15	4.10
2N3799	TO-18	.001-50	....	100	6.75	4.50
2N3962	TO-18	.001-200	....	40	3.80	2.65
2N3963	TO-18	.001-200	....	40	6.00	4.00
2N3964	TO-18	.001-200	....	50	6.00	4.00
2N3965	TO-18	.001-200	....	50	7.50	5.00

SILICON CONTROLLED RECTIFIERS

Type	Case	Io a	wv Fwd.-Rev.	1-99	100-999
TIC20	III	6	200	6.82	4.55
TIC21	III	6	300	7.50	5.00
TIC22	III	6	200	6.98	4.65
TIC23	III	6	300	7.66	5.11
TIC28	G	6	50	1.20	.85
TIC29	G	6	100	1.35	.90
TIC30	G	6	200	1.45	.98
TIC31	G	6	400	2.75	1.95
TI40A0	TO-3	5	50	1.70	1.18
TI40A1	TO-3	5	100	1.85	1.28
TI40A2	TO-3	5	200	2.05	1.52
TI40A3	TO-3	5	300	3.65	2.45
TI40A4	TO-3	5	400	5.50	3.55
TIC44	AAA	430	30	.84	.56
TIC45	AAA	430	60	1.00	.67
TIC46	AAA	430	100	1.08	.72
TIC47	AAA	430	200	1.26	.84
TI-145A0	TO-5	0.56	50	1.60	1.10
TI145A1	TO-5	0.56	100	1.75	1.25
TI145A2	TO-5	0.56	200	1.95	1.35
2N682	TO-48	16	50	4.13	2.75
2N682A	TO-48	18	50	4.55	3.03
2N685	TO-48	16	200	6.60	4.40
2N685A	TO-48	18	200	7.25	4.84
2N686	TO-48	16	250	7.01	4.68
2N687	TO-48	16	300	14.60	9.75
2N688	TO-48	16	400	17.10	11.40
2N689A	TO-48	18	500	22.60	15.10
2N876	TO-18	0.20	15	2.25	1.50
2N877	TO-18	0.20	30	3.00	2.00
2N878	TO-18	0.20	60	3.30	2.20
2N879	TO-18	0.20	100	5.40	3.60
2N880	TO-18	0.20	150	6.30	4.20
2N881	TO-18	0.20	200	7.50	5.00
2N884	TO-18	0.20	15	6.00	4.00
2N885	TO-18	0.20	30	9.00	6.00
2N886	TO-18	0.20	60	10.95	7.30
2N887	TO-18	0.20	100	13.35	8.90
2N888	TO-18	0.20	150	19.13	12.75
2N889	TO-18	0.20	200	36.00	24.00
2N1595	TO-5	1	50	3.00	2.00
2N1596	TO-5	1	100	4.50	3.05
2N1597	TO-5	1	200	9.35	6.20
2N1600	TO-3	3	50	5.10	3.40
2N1602	TO-3	3	200	9.45	6.30
2N1771	TO-3	4.7	50	4.65	3.10
2N1772	TO-3	4.7	100	5.75	3.85
2N1774	TO-3	4.7	200	8.15	5.45
2N1849B	TO-48	16	400	15.60	10.40
2N2653	TO-18	140*	400	24.00	16.00
2N2679	TO-18	0.35	30	15.50	10.25
2N2687	TO-18	0.28	30	2.25	1.50
2N2688	TO-18	0.28	60	2.50	1.70
2N2689	TO-18	0.28	100	3.75	2.50
2N2690	TO-18	0.28	200	6.75	4.50
2N3001	TO-18	0.250	30	3.63	2.42
2N3002	TO-18	0.250	60	3.90	2.60
2N3003	TO-18	0.290	100	6.54	4.36
2N3004	TO-18	0.250	200	9.08	6.05
2N3005	TO-18	0.250	30	3.30	2.20
2N3006	TO-18	0.250	60	3.63	2.42
2N3007	TO-18	0.250	100	5.99	3.96
2N3008	TO-18	0.250	200	8.25	5.50
2N3936	TO-3	7	100	7.35	4.90
2N3937	TO-3	7	200	14.60	9.75
2N3938	TO-3	7	300	18.75	12.50
2N3939	TO-3	7	400	26.25	17.50
2N3940	TO-3	7	500	30.00	20.00
TI3010	M-245	5	50	1.73	1.30
TI3011	M-245	5	100	1.93	1.45
TI3012	M-245	5	200	2.15	1.60
TI3013	M-245	5	300	2.93	2.20
TI3014	M-245	5	400	4.66	3.50
TI3037	TO-48	18	50	9.00	6.40
TI3038	TO-48	18	100	10.00	7.00
TI3039	TO-48	18	200	14.00	9.35
TI3040	TO-48	18	300	19.00	13.50
2N3555	TO-11	1	30	7.45	4.95
2N3556	TO-11	1	60	8.95	5.95
2N3560	TO-5	1	60	6.15	4.10
2N3562	TO-5	1	200	9.50	6.33

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

S-19

A-62

DO-3

C-3

SILICON VOLTAGE REGULATOR DIODES

Type	Case	V(br) I(br)t volts	Z(br)@ I(br)t ohms	Vr(1)Static Rev. Cur. mA	Pd watts	1-99	100-999
1N702	A-62	2.0-3.2	60	75	400	1.05	.85
1N703	A-62	3.0-3.9	55	50	400	1.05	.85
1N709	A-62	6.2	4.1	.....	400	1.05	.85
1N717	A-62	13.0	11	.....	400	2.35	1.75
1N718	A-62	15.0	13.0	.....	400	2.35	1.75
1N719	A-62	16.0	15.0	.....	400	2.35	1.75
1N720	A-62	18.0	17.0	.....	400	2.35	1.75
1N721	A-62	20.0	20.0	.....	400	2.35	1.75
1N722	A-62	22.0	24.0	.....	400	2.35	1.75
1N723	A-62	24.0	28.0	.....	400	2.35	1.75
1N724	A-62	27.0	35.0	.....	400	2.35	1.75
1N725	A-62	30.0	42.0	.....	400	2.35	1.75
1N726	A-62	33.0	50.0	.....	400	2.35	1.75
1N746	A-62	3.3	28	10	400	1.05	.85
1N747	A-62	3.6	24	10	400	1.05	.85
1N748	A-62	3.9	23	10	400	1.05	.85
1N749	A-62	4.3	22	2	400	1.05	.85
1N750	A-62	4.7	19	2	400	1.05	.85
1N751	A-62	5.1	17	1	400	1.05	.85
1N752	A-62	5.6	11	1	400	1.05	.85
1N753	A-62	6.2	7	0.1	400	1.05	.85
1N754	A-62	6.8	5	0.1	400	1.05	.85
1N755	A-62	7.5	6	0.1	400	1.05	.85
1N756	A-62	8.2	8	0.1	400	1.05	.85
1N757	A-62	9.1	10	0.1	400	1.05	.85
1N758	A-62	10.1	17	0.1	400	1.05	.85
1N759	A-62	12.0	30	0.1	400	1.05	.85
1N761	A-62	4.3-5.4	55	.....	400	1.05	.85
1N763	A-62	6.2-8.0	8	.....	400	1.05	.85
1N767	A-62	13.5-18	120	.....	400	2.10	1.60
1N768	A-62	17-21	200	.....	400	2.10	1.60
1N769	A-62	20-27	300	.....	400	2.10	1.60
1N957	A-62	6.8	4.5	150	400	1.05	.85
1N958	A-62	7.5	5.5	75	400	1.05	.85
1N959	A-62	8.2	6.5	50	400	1.05	.85
1N960	A-62	9.1	7.5	25	400	1.05	.85
1N961	A-62	10	8.5	10	400	1.05	.85
1N962	A-62	11	9.5	5	400	1.50	1.00
1N963	A-62	12	11.5	5	400	1.50	1.00
1N964	A-62	13	13	5	400	1.50	1.00
1N965	A-62	15	16	5	400	1.50	1.00
1N966	A-62	16	17	5	400	1.50	1.00
1N967	A-62	18	21	5	400	1.50	1.00
1N968	A-62	20	25	5	400	1.50	1.00
1N969	A-62	22	29	5	400	1.50	1.00
1N970	A-62	24	33	5	400	1.50	1.00
1N971	A-62	27	41	5	400	1.50	1.00
1N972	A-62	30	49	5	400	1.50	1.00
1N3506	A-62	3.3	24	4	400	1.10	.90
1N4370	A-62	2.4	30	100	400	1.05	.85
1N4371	A-62	2.7	30	75	400	1.05	.85
1N4372	A-62	3.0	30	50	400	1.05	.85

X-20

S-11

DO-3

A-3

A-31

DO-10

DO-29

DO-4

SILICON POWER REGULATOR 10 WATT DOUBLE ANODE

Type	Case	Vz Nominal v	Izt mA	Max. Zz @ 25°C ohms	1-99	100-999
1N1816	S-11	13	500	2	5.10	4.50
1N1824	S-11	30	250	4	5.10	4.50
1N1826	S-11	36	150	5	5.10	4.50
1N2008	S-11	100	50	40	5.10	4.50

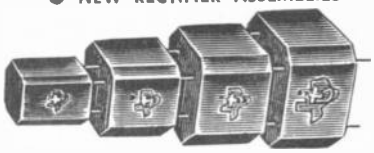
SILICON POWER REGULATORS 50 WATT, SINGLE ANODE
DIAMOND REGULATOR CASE

Type	Nominal Zener Volts	Izt mA	Max. Zz @ Iz @ 25°C Ohms	1-99	100-999
1N2804	6.8	1850	0.2	5.40	4.25
1N2805	7.5	1700	0.3	5.40	4.25
1N2806	8.2	1500	0.4	5.40	4.25
1N2807	9.1	1370	0.5	5.40	4.25
1N2808	10	1200	0.6	5.40	4.25
1N2809	11	1100	0.8	5.40	4.25
1N2810	12	1000	1	5.40	4.25
1N2811	13	960	1.1	5.40	4.25
1N2812	14	890	1.2	5.40	4.25
1N2813	15	830	1.4	5.40	4.25
1N2814	16	780	1.6	5.40	4.25
1N2815	17	740	1.8	5.40	4.25
1N2816	18	700	2	5.40	4.25
1N2817	19	660	2.2	5.40	4.25
1N2818	20	630	2.4	5.40	4.25
1N2819	22	570	2.5	5.40	4.25
1N2820	24	520	2.6	5.40	4.25
1N2821	25	500	2.7	5.40	4.25
1N2822	27	460	2.8	5.40	4.25
1N2823	30	420	3	5.40	4.25
1N2824	33	380	3.2	5.40	4.25
1N2825	36	350	3.5	5.40	4.25
1N2826	39	320	4	5.40	4.25
1N2827	43	290	4.5	5.40	4.25
1N2828	45	280	4.5	5.40	4.25
1N2829	47	270	5	5.40	4.25
1N2830	50	250	5	5.40	4.25
1N2831	51	245	5.2	5.40	4.25
1N2832	56	220	6	5.40	4.25
1N2833	62	200	7	5.40	4.25
1N2834	68	180	8	5.40	4.25
1N2835	75	170	9	5.40	4.25
1N2836	82	150	11	5.40	4.25
1N2837	91	140	15	5.40	4.25
1N2838	100	120	20	5.40	4.25
1N2839	105	120	25	6.05	5.04
1N2840	110	110	30	6.05	5.04
1N2841	120	100	40	6.05	5.04
1N2842	130	95	50	6.05	5.04
1N2843	150	85	75	6.05	5.04
1N2844	160	80	80	6.05	5.04
1N2845	180	68	90	6.05	5.04
1N2846	200	65	100	6.05	5.04

SILICON POWER REGULATOR 10 WATT SINGLE ANODE

1N2970	S-11	6.8	370	1.2	3.60	2.40
1N2972	S-11	8.2	305	1.5	3.60	2.40
1N2974	S-11	10	250	3.0	3.60	2.40
1N2976	S-11	12	210	3.0	3.60	2.40
1N2977	S-11	13	190	3.0	3.60	2.40
1N2982	S-11	18	140	4.0	3.60	2.40
1N2984	S-11	20	125	4.0	3.60	2.40
1N2985	S-11	22	115	5.0	3.60	2.40
1N2986	S-11	24	105	5.0	3.60	2.40
1N2989	S-11	30	85	8.0	3.60	2.40
1N2991	S-11	36	70	10	3.60	2.40
1N2993	S-11	43	60	12	3.60	2.40
1N2997	S-11	51	50	15	3.60	2.40
1N2999	S-11	56	45	16	3.60	2.40
1N3000	S-11	62	40	17	3.60	2.40
1N3001	S-11	68	37	18	3.60	2.40
1N3002	S-11	75	33	22	3.60	2.40
1N3003	S-11	82	30	25	3.60	2.40
1N3004	S-11	91	28	35	3.60	2.40
1N3005	S-11	100	25	40	3.60	2.40
1N3007	S-11	110	23	55	3.60	2.40
1N3008	S-11	120	20	75	3.60	2.40
1N3009	S-11	130	19	100	3.60	2.40
1N3012	S-11	160	16	200	4.05	2.70
1N3014	S-11	180	14	260	4.05	2.70
1N3015	S-11	200	12	300	4.05	2.70

● NEW RECTIFIER ASSEMBLIES


A B C D

Double ended stud case. 500 mA av. rect. current. Peak inverse voltages to 2000 volts.

Type	Vr Rating Volts	Pack	1-9	10-29	30-99	100-999
1N3183	350	A	5.60	4.70	4.25	3.80
1N3184	500	A	5.60	4.70	4.25	3.80
1N3185	700	B	11.20	9.35	8.45	7.60
1N3186	1000	B	11.20	9.35	8.45	7.60
1N3187	1500	C	16.75	14.00	12.65	11.40
1N3188	2000	D	22.40	18.70	16.85	15.20

Texas Instruments Semiconductors

SILICON POWER REGULATOR 1 WATT SINGLE ANODE

Type	Case	Vz Nominal V	Izt mA	Max. Zz @25°C Ohms	1-99	100-999
1N3016	A-31	6.8	37	3.5	2.36	2.05
1N3017	A-31	7.5	34	4.0	2.36	2.05
1N3018	A-31	8.2	31	4.5	2.36	2.05
1N3019	A-31	9.1	28	5.0	2.36	2.05
1N3020	A-31	10	25	7.0	2.36	2.05
1N3021	A-31	11	23	8.0	2.36	2.05
1N3022	A-31	12	21	9.0	2.36	2.05
1N3023	A-31	13	19	10.0	2.36	2.05
1N3024	A-31	15	17	14.0	2.36	2.05
1N3025	A-31	16	15.5	16.0	2.36	2.05
1N3026	A-31	18	14.0	20.0	2.36	2.05
1N3027	A-31	20	12.5	22.0	2.36	2.05
1N3028	A-31	22	11.5	23.0	2.36	2.05
1N3029	A-31	24	10.5	25.0	2.36	2.05
1N3030	A-31	27	9.5	35.0	2.36	2.05
1N3031	A-31	30	8.5	40.0	2.36	2.05
1N3032	A-31	33	7.5	45.0	2.36	2.05
1N3033	A-31	36	7.0	50.0	2.36	2.05
1N3034	A-31	39	6.5	60.0	2.36	2.05
1N3035	A-31	43	6.0	70.0	2.36	2.05
1N3036	A-31	47	5.5	80.0	2.36	2.05
1N3037	A-31	51	5.0	95.0	2.36	2.05
1N3040	A-31	68	3.7	150	2.36	2.05
1N3041	A-31	75	3.3	175	2.36	2.05

SILICON RECTIFIERS

Type	Case	Vr Max. V.	Amps Io	Ir mA	1-99	100-999
1N253	DO-4	100	3.0	0.01	1.05	.70
1N254	DO-4	200	3.0	0.01	1.13	.75
1N255	DO-4	400	3.0	0.01	1.58	1.05
1N256	DO-4	600	3.0	0.01	2.16	1.44
1N332	DO-4	400	1.2	0.2	1.72	1.15
1N333	DO-4	400	0.6	0.2	1.72	1.15
1N338	DO-4	100	3.0	0.2	1.05	.70
1N342	DO-4	400	0.6	0.5	1.72	1.15
1N347	DO-4	100	3.0	0.5	1.05	.70
1N440B	DO-4	100	0.75	0.3μa	.66	.44
1N441B	DO-4	200	0.75	0.75μa	.69	.46
1N443B	DO-4	400	0.75	1.5μa	.97	.65
1N444B	DO-4	500	0.65	1.75μa	1.05	.70
1N536	DO-1	50	0.75	0.01	.45	.30
1N537	DO-1	100	0.75	0.01	.49	.33
1N538	DO-1	200	0.75	0.01	.52	.35
1N539	DO-1	300	0.75	0.01	.60	.40
1N540	DO-1	400	0.75	0.01	.67	.45
1N547	DO-1	600	0.75	0.01	.96	.64
1N611	DO-4	300	1.0	0.025	1.42	.95
1N1086	DO-3	500	0.75	0.01	.76	.51
1N1086	DO-3	600	0.75	0.01	.97	.64
1N1101	DO-3	200	0.75	0.3	.63	.42
1N1105	DO-3	600	0.75	0.3	.97	.64
1N1115	S-11	100	1.5	0.4	1.05	.70
1N1116	S-11	200	1.5	0.3	1.12	.75
1N1118	S-11	400	1.5	0.3	1.72	1.15
1N1119	S-11	500	1.5	0.3	1.80	1.20
1N1124	DO-4	200	3.0	0.01	2.10	1.24
1N1124A	S-11	200	3.3	0.01	1.86	1.24
1N1125	DO-4	300	3.0	0.01	2.27	1.50
1N1126	DO-4	400	3.0	0.01	3.45	2.30
1N1128A	DO-4	600	3.3	0.1	5.20	3.47
1N1130	DO-4	1500	0.3	0.5	5.70	3.80
1N1487	DO-1	100	0.75	0.3	.49	.33
1N1488	DO-1	200	0.75	0.3	.52	.35
1N1489	DO-4	300	0.75	0.3	.60	.40
1N1581	DO-4	50	10.0	0.3	1.10	.72
1N1582	DO-4	100	10.0	0.3	1.20	.80
1N1583	DO-4	200	10.0	0.3	2.25	1.50
1N1585	DO-4	400	10.0	0.3	4.05	2.70
1N1612	DO-4	500	15.0	0.3	1.07	.72
1N1613	DO-4	100	15.0	0.3	1.20	.80
1N1614	DO-4	200	15.0	0.3	1.87	1.25
1N1615	DO-4	400	15.0	0.3	3.71	2.48
1N1616	DO-4	600	15.0	0.3	5.36	3.58
1N1692	DO-3	100	0.75	0.3	.49	.33
1N1693	DO-3	200	0.75	0.3	.52	.35
1N1694	DO-3	300	0.75	0.3	.80	.40
1N1695	DO-3	400	0.75	0.3	.67	.45
1N1696	DO-3	500	0.75	0.3	.76	.51

NEWARK GROWS WITH
YOUR GROWING NEEDS
PHONE — WRITE — WIRE
FOR LATEST SEMICONDUCTOR PRICES

SILICON RECTIFIERS (CONTINUED)

Type	Case	Vr (Max.) V	Ia α	Ir mA	1-99	100-999
1N1697	DO-3	600	0.75	0.3μa	.97	.64
1N2069	A-3	200	0.75	10μa	.45	.30
1N2070	A-3	400	0.75	10μa	.57	.38
1N2071	A-3	600	0.75	10μa	.72	.48
1N3874	DO-10	5	6*	15μa	7.50	5.00
1N3875	DO-10	100	6*	15μa	8.03	5.35
1N3876	DO-10	200	6*	15μa	10.50	7.00
1N3877	DO-10	300	6*	15μa	14.62	9.75
1N3878	DO-10	400	6*	15μa	17.28	11.50
1N3879	DO-3	50	6*	15μa	5.25	3.50
1N3882*	DO-4	300	6	15μa	12.38	8.25
1N3883*	DO-4	400	6	15μa	15.00	10.00
1N3884*	DO-10	50	12	5	8.55	5.70
1N3886*	DO-10	200	12	5	12.00	8.00
1N3888*	DO-10	400	12	5	19.90	13.25
1N3889*	DO-4	50	12	5	6.30	4.20
1N3890*	DO-4	100	12	5	6.75	4.50
1N3891*	DO-4	200	12	5	7.75	6.50
1N3892*	DO-4	300	12	5	14.65	9.75
1N3893*	DO-4	400	12	5	17.60	11.75
1N4364	DO-3	100	0.75	1.0μa	.45	.30
1N4365	DO-3	200	0.75	1.0μa	.48	.32
1N4366	DO-3	300	0.75	1.0μa	.56	.37
1N4367	DO-3	400	0.75	1.0μa	.66	.44
1N4368	DO-3	500	0.75	1.0μa	.72	.48
1N4369	DO-3	600	0.75	1.0μa	.90	.60
1N4374	DO-3	1500	0.75	300μa	7.50	5.00
1N4458	DO-3	800	....	....	7.00	4.80
1N4459	DO-3	1000	....	....	8.45	5.65

*Io at 100°C.

SILICON PNP ALLOY REPLACEMENT TRANSISTORS

Type	Case	Pd mw	B Vceo V	Icbo Na	hFE Min.	1-99	100-999
2N328A	TO-5	500	35	100	18	4.50	3.00
2N329A	TO-5	500	30	100	36	6.50	4.35

GROWN JUNCTION TETRODE TRANSISTORS

Type	Case	Rated Vcbo V	hFE	Power Diss TA=25°C mW	1-99	100-999
3N34	TO-12	30	30	125	5.00	4.00
3N35	TO-12	30	70	125	22.50	15.00

MEDIUM — POWER GROWN JUNCTION TRANSISTORS

2N340	TO-11	85	9-90	1	8.64	6.48
2N341	TO-11	125	9-90	1	14.00	10.49
2N343	TO-11	60	28-90	1	14.72	11.03
2N1155	..	80	9 Min.	0.75	10.52	7.92
2N1156	..	120	9 Min.	0.75	14.12	10.58

SILICON BIDIRECTIONAL TRIODE THYRISTORS

Type	Case	Block Volts V	α Anode Curr.	IGT mA	VGT V	1-99	100-999
TIC20	M-246	200	6	100	3	6.82	4.55
TIC21	M-246	300	6	100	3	7.50	5.00
TIC22	TO-48	200	6	100	3	6.98	4.65
TIC23	TO-48	300	6	100	3	7.66	5.11

HIGH FREQUENCY SILICON RECTIFIERS

Type	Case	Vrm V	Io α	Ir mA	Trr nsec.	1-99	100-999
1N3909	DO-5	50	30	80	200	30.00	22.60
1N3910	DO-5	100	30	80	200	41.50	31.20

SILICON DOUBLE-EMITTER CHOPPERS

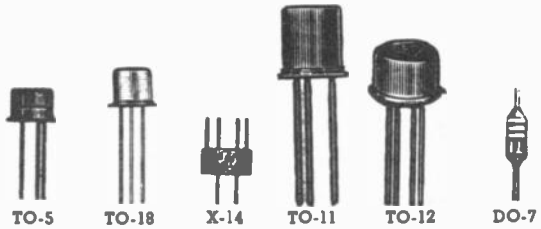
Type	Case	Offset Voltage μv	Max IEIE2 na	Max ΔVEIE2E/ΔTA μv	1-99	100-999
3N74*	TO-18	50	±100	75	15.00	10.00
3N75*	TO-72	100	±100	125	12.00	8.00
3N108	TO-18	30	± 10	50	29.50	19.65
3N109	TO-18	150	± 10	150	24.00	16.00

All PNP except (*) NPN

P-CHAN DUAL FIELD-EFFECT CHOPPER

Type	Case	Ciss Input Cap. pf.	Min. V(BR)GSS V	Max ID (off) na	Min Yfs μm	1-99	100-999
TI805	TO-18	12	25	2.0	6K	30.00	20.00

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040



SILICON CHOPPER TRANSISTORS

Type	Case	Vec(off) Offset Voltage μv	Min V(br)eco v	MAX IEB na	1-99	100-999
2N2432*	TO-18	500	15	2.0	8.10	5.40
2N2432A	TO-18	400	18	2.0	5.10	5.40
2N2944	TO-46	300	10	0.1	5.50	3.68
2N2944A	TO-46	600	10	0.1	6.30	4.20
2N2945	TO-46	500	20	0.2	5.00	3.35
2N2945A	TO-46	500	15	0.1	6.00	4.00
2N2946	TO-46	800	35	0.5	5.75	3.85
2N2946A	TO-46	800	20	0.02	7.35	4.90
2N4138	TO-46	.....	15	2.0	12.00	8.00

All Epitaxial Planar and PNP except (*) Planar and NPN.

SILICON FIELD EFFECT N-CHANNEL TRANSISTORS

Type	Case	min Yfs μmho	min V(br)gss Volts	Max Ciss pf	1-99	100-999
TIXS33	TO-72	12000	30	20	33.60	22.50
TIS34	TO-92	3500	30	6	1.10	.75
TIXS35	TO-12	10000	30	12	39.30	26.50
TIXS36	TO-12	10000	30	12	36.30	24.50
2N3819	TO-92	800	25	8	.90	.60
2N3821	TO-72	1500	50	6	9.65	7.45
2N3822	TO-72	3000	50	6	7.50	5.90
2N3824	TO-72	. . .	50	6	6.25	4.80
2N3909	TO-72	1000	20	32	3.75	2.40

SILICON FIELD-EFFECT TRANSISTORS

Type	Case	IDSS ma	Min. Yfs mho	Min. V(BR) GSS V	1-99	100-999
TIS58†	TO-92	2.5-8	1300	25	.99	.67
TIS59†	TO-92	6-25	2300	25	.96	.64
TIS41†	TO-18	. . . .	3.5K	30	6.40	4.85
TIS42†	TO-92	. . . .	.....	25	4.95	3.25
2N2386	TO-5	. . .	1000	20	3.75	2.40
2N2497	TO-5	1-3	1000	20	8.45	5.95
2N2498	TO-18	2-6	1500	20	7.50	5.75
2N2499	TO-18	5-15	2000	20	8.45	5.95
2N2500	TO-18	1-6	1000	20	13.20	10.50
2N3328	TO-18	1 max	100	20	10.50	7.00
2N3330	TO-18	2-6	1500	20	7.25	5.75
2N3331	TO-18	5-15	2000	20	7.45	5.95
2N3332	TO-18	1-6	1000	20	13.20	10.50
2N4856†	TO-18	. . .	. . .	40	7.75	5.95
2N4857†	TO-18	. . .	. . .	40	6.95	5.45
2N4858†	TO-18	. . .	. . .	40	7.25	5.55
2N4859†	TO-18	. . .	. . .	30	6.95	5.40
2N4860†	TO-18	. . .	. . .	30	6.35	4.90
2N4861†	TO-18	. . .	. . .	30	6.50	5.00

All P chan. polarity, planar except (†) N-channel.

● *NEW* SWITCHING GROWN JUNCTION

Type	Case	Vcbo Volts	hFE	Pd mW	1-99	100-999
2N337	TO-5	45	20-55	125	4.85	3.20
2N338	TO-5	45	45-150	125	5.50	3.65

● *NEW* GROWN JUNCTION TETRODE

3N34	TO-12	30	30	125	5.00	4.05
3N35	TO-12	30	70	125	22.50	15.00

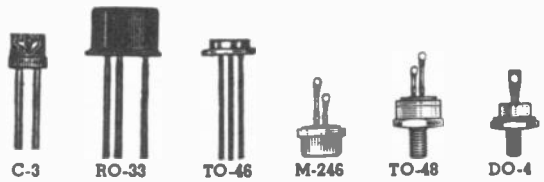
SILICON DUAL FIELD EFFECT TRANSISTORS

Type	Case	Elements	1-24	25-99	100-999
2N3838	Axial Lead Rect.	PNP/ NPN	30.15	26.13	20.10
Type	**Case**		**1-24**	**1-99**	**100-999**
2N4854	Low Profile Dual		.....	13.50	9.00
2N4855	Low Profile Dual		.... .	10.80	7.20

CONSUMER TYPE (CASE TO-92)

Type	Case	Nearest Equival.	PD mW	1-99	100-999
μTIS37	TO-92	.....	200	.88	.59
μTIS38	TO-92	.....	200	.83	.55
μTIS56	TO-18	.....	200	2.70	1.80
μTIS57	TO-18	.....	200	1.80	1.20

AAA indicates a Pin Circle SILECT case.



SILICON GROWN UNIJUNCTION TRANSISTORS

Type	Case	Rated Veb2 Volts	Intrinsic Standoff Ratio	1-99	100-999
TIS43	TO-49	30	.55 - .80	1.08	.72
2N489	TO-5	60	.51 - .62	7.10	4.75
2N490	TO-5	60	.51 - .62	7.80	5.20
2N491	TO-5	60	.56 - .68	8.40	5.60
2N491B	TO-5	60	.56 - .68	10.40	6.95
2N492	TO-5	60	.56 - .68	9.80	6.55
2N493	TO-5	60	.62 - .75	10.75	7.20
2N494C	TO-5	60	.62 - .75	14.95	9.90
2N1671*	TO-5	30	.47 - .62	2.95	1.98
2N1671A*	TO-5	30	.47 - .62	3.20	2.14
2N1671B*	TO-5	30	.47 - .62	3.55	2.36
2N2160	TO-5	30	.47 - .82	1.49	.99
2N3980	TO-18	30	.68 - .82	7.35	4.90
2N4891	AAA	30	.55 - .82	1.05	.72
2N4892	AAA	30	.51 - .69	1.25	.85
2N4893	AAA	30	.55 - .82	1.10	.75
2N4894	AAA	30	.74 - .86	1.20	.80
2N4947	TO-18	30	.51 - 69	2.03	1.35
2N4948	TO-18	30	.55 - .82	1.47	.98
2N4949	TO-18	30	.74 - .86	2.78	1.85

Peak Emitter current, 2A Rated Bbb. 65V except (*) 35V.
AAA indicates a Pin Circle SILECT case.

MINIATURE TRANSISTORS

Type	Case	Equivalent (Dual/Single)	Pd mW	1-99	100-999
TIS22	CP†	2N929	150	4.20	2.80
TIS23	CP†	2N930	150	4.65	3.10
TIS24	CP†	2N2484	150	6.45	4.30
2N850	TO-50	2N753	300	7.10	4.75
2N852	TO-50	2N744	300	9.43	6.30
2N2387	TO-50	2N929	450	11.55	7.70
2N2396	TO-50	2N697	450	11.55	7.70

				1-24	25-99	100-999
2N3043	X-14	2N2642/2N930		44.00	38.00	29.40
2N3049	X-14	2N2804/2N2412	triode	50.90	44.00	34.00

GENERAL PURPOSE SILICON DIODES

Type	Case	Vr	FWDI ma. DC	Max IR μa	Pd mW	1-99	100-999
1N456	DO-7	25	40	.025	500	.35	.23
1N457	DO-7	60	20	.025	500	.44	.29
1N458	DO-7	125	7	.025	500	.47	.31
1N459	DO-7	175	3	.025	500	.48	.32
1N461	DO-7	25	15	.5	200	.34	.23
1N462	DO-7	60	5	.5	200	.36	.24
1N463	DO-7	175	1	.5	200	.44	.29
1N464	DO-7	125	3	.5	200	.45	.30
1N482	DO-7	30	100*	.25	500	.48	.32
1N482A	DO-7	30	200	.025	500	.48	.32
1N483A	DO-7	60	200	.025	500	.51	.32
1N484	DO-7	125	100*	.25	500	.51	.32
1N484A	DO-7	125	200	.025	500	.51	.32
1N485	DO-7	75	100*	.25	500	.58	.38
1N485B	DO-7	175	200	.025	500	.58	.38
1N486B	DO-7	225	200	.05	500	.78	.52
600	C-3	27	3	1.0	500	1.94	1.58
601	C-3	45	10	.025	150	3.60	2.94
622	C-3	150	7	.2	150	3.70	3.03
624	C-3	220	3	.2	150	3.75	3.07
1N645	DO-7	225	400	.2	600	1.40	.80
1N646	DO-7	300	400	.2	600	1.60	1.05
1N647	DO-7	400	400	.2	600	1.70	1.10
1N648	DO-7	500	400	.2	600	1.80	1.20
1N649	DO-7	600	400	.2	600	2.25	1.40

* Measured at 1.1 v.

IMPORTANT NOTE:

CP indicates the new TI Chip Pak.

RCA Transistors

TO-1

TO-5

TO-18

TO-40

TO-72

TO-104

C

D

J

K

SILICON NPN SMALL SIGNAL TYPES

Type	Case	Pt Ta @ 25°C Watts	Vcbo Volts	Vceo Volts	Ic Amps	fT MHz	1-99	100-999
40231	TO-104	0.5	18	18	0.1	60	.47	.32
40232	TO-104	0.5	18	18	0.1	60	.53	.37
40233	TO-104	0.5	18	18	0.1	60	.60	.42
40234	TO-104	0.5	18	18	0.1	60	.42	.29
2N718A	TO-18	0.5	75	32	1	60	1.08	.72
2N720A	TO-18	0.5	120	80	1	50	1.32	.88
2N2895	TO-18	0.5	120	65	1	120	1.41	.97
2N2896	TO-18	0.5	140	90	1	120	2.06	1.43
2N2897	TO-18	0.5	60	45	1	100	1.16	.80
2N697	TO-5	0.6	60	40	0.5	100	.63	.42
2N699	TO-5	0.6	120	80	1	50	1.44	.94
2N4074	TO-104	0.5	40	40	0.3	80	.73	.51
40397	TO-104	0.5	25	25	0.2	80	.66	.46
40398	TO-104	0.5	25	25	0.2	80	.60	.42
40399	TO-104	0.5	18	18	0.2	80	.55	.38
40400	TO-104	0.5	18	18	0.2	80	.50	.35
2N3241A	TO-104	0.5	30	25	*	175	.73	.51
2N3242A	TO-104	0.5	40	40	*	175	.83	.57
40450	J	0.5	30	25	*	175	.80	.55
40451	J	1	40	40	*	175	.90	.62
40452	J	1	40	40	0.3	80	.80	.55
40453	J	1	25	25	0.2	80	.73	.51
40454	J	1	25	25	0.2	80	.66	.46
40455	J	1	18	18	0.2	80	.62	.43
40456	J	1	18	18	0.2	80	.57	.39
40458	TO-104	0.5	60	40	1	175	.78	.54
40459	J	1	60	40	1	175	.85	.59
2N1613	TO-5	0.8	75	50	1	60	.75	.50
2N1711	TO-5	0.8	75	50	1	70	.99	.68
2N1893	TO-5	0.8	120	80	0.5	50	1.16	.77
40407	TO-5	1	.....	50	0.7	100	.81	.56
40408	TO-5	1	.....	90	0.7	100	1.08	.75
2N2102	TO-5	1	120	65	1	120	1.24	.86
2N2270	TO-5	1	60	45	1	60	.99	.69
2N2405	TO-5	1	120	90	1	120	1.82	1.25
2N3053	TO-5	1	60	40	0.7	100	.83	.57
40311	TO-5	1	.....	30	0.7	100	.73	.51
40314	TO-5	1	.....	40	0.7	100	.78	.54
40315	TO-5	1	.....	35	0.7	100	.75	.52
40317	TO-5	1	.....	40	0.7	100	.78	.54
40321	TO-5	1	.....	300	1	.....	1.24	.86
40323	TO-5	1	.....	18	0.7	100	.70	.48
40326	TO-5	1	.....	40	0.7	.....	.78	.54
40327	TO-5	1	.....	300	1	.....	1.24	.86
40360	TO-5	1	.....	70	0.7	100	1.03	.71
40361	TO-5	1	.....	70	0.7	100	1.04	.72
40385	TO-5	1	450	350	1	.....	9.50	6.55
40392	C	7	60	40	0.7	100	.91	.63
2N3439	TO-5	1	450	350	1	15	3.71	2.57
2N3440	TO-5	1	300	250	1	15	1.82	1.25
2N4063	C	10	450	350	1	15	3.80	2.62
2N4064	C	10	300	250	1	15	1.90	1.31
40346	TO-5	1	.....	175	1	10	1.14	.79
40412	TO-5	1	.....	250	1	10	1.06	.73
40409	D	3	.....	90	0.7	100	1.14	.79
40389	D	3.5	60	40	0.7	100	.91	.63
40390	D	3.5	300	250	1	15	2.15	1.48

GERMANIUM PNP SMALL SIGNAL TYPES, AF

Type	Case	Pt Ta @ 25°C mw	Vcbo Volts	Ic mA	fhfb MHz	1-99	100-999
2N175	TO-40	50	—10	— 2	0.85	1.64	1.13
2N220	TO-1	50	—10	— 2	0.85	1.52	1.05
2N591	TO-1	85	—32	— 40	0.7	.48	.34
2N2613	TO-1	120	—30	— 50	10	.55	.38
2N2614	TO-1	120	—40	— 50	10	.50	.35
40263	TO-1	120	—20	— 50	10	.42	.29
40395	TO-1	120	—20	— 50	10	.38	.27
40359	TO-1	120	—20	— 50	10	.32	.22
40490	TO-1	120	—25	— 20	60	.25	.17
40829	TO-1	125	—25	—100	1.5	.38	.27
2N104	TO-40	150	—30	— 50	0.7	1.65	1.14
2N215	TO-1	150	—30	— 50	0.7	1.73	1.20
2N405	TO-40	150	—20	— 35	0.65	.37	.25
2N406	TO-1	150	—20	— 35	0.65	.33	.23
2N109	TO-40	165	—35	—150	.....	.60	.41
2N217	TO-1	165	—35	—150	.....	.52	.36

SILICON MOS FET

Type	Case	Pt mW	Vds Volts	Id mA	Igss pA	1-99	100-999
40461	TO-72	150	25	*	0.1	11.55	8.00

*limited by dissipation

SILICON PNP SMALL SIGNAL TYPES

Type	Case	Pt TA Watts	VCEO Volts	Ic Amp	fT MHz	1-99	100-999
40406	TO-5	1	—50	—0.7	100	1.36	.94
40319	TO-5	1	—40	—0.7	100	1.32	.92
40362	TO-5	1	—70	—0.7	100	1.46	1.01
2N4036	TO-5	1	—65	—1	60	1.62	1.12
2N4037	TO-5	1	—40	—1	60	1.31	.91
2N4314	TO-5	1	—65	—1	60	1.41	.97
40394	C	1	—40	—1	60	1.39	.96
40410	D	3	—90	—0.7	100	1.64	1.13
40391	D	3.5	—40	—1	60	1.39	.96

SILICON NPN POWER TYPES

Pt (Ta) up to 1 Watt

Type	Case	Pt. Tc @ 25°C Watts	Vcbo Volts	Vceo Volts	Ic Amp	hFE typ MHz	1-99	100-999
40354	TO-104	.....	.....	150	0.05	100	1.18	.81
40355	J	.....	.....	150	0.05	100	1.24	.86
40407	TO-5	.....	.....	50	0.7	100	.81	.56
40408	TO-5	.....	.....	90	0.7	100	1.08	.75
2N2895	TO-18	1.8	120	65	1	.....	1.41	.97
2N2896	TO-18	1.8	140	90	1	.....	2.06	1.43
2N2897	TO-18	1.8	60	45	1	.....	1.16	.80
2N699	TO-5	2	120	80	1	.....	1.44	.94
2N4074	TO-104	2	.....	40	0.3	80	.73	.51
40397	TO-104	2	.....	25	0.2	80	.66	.46
40398	TO-104	2	.....	25	0.2	80	.60	.42
40399	TO-104	2	.....	18	0.2	80	.55	.38
40400	TO-104	2	.....	18	0.2	80	.50	.35
2N1613	TO-5	3	75	50	1	.....	.75	.50
2N1711	TO-5	3	75	50	1	.....	.99	.66
2N1893	TO-5	3	120	80	0.5	.....	1.16	.77
40409	D	3	.....	90	0.7	100	1.14	.79
2N1479	TO-5	5	60	40	1.5	1.3	2.15	1.48
2N1480	TO-5	5	100	55	1.5	1.3	2.31	1.60
2N1481	TO-5	5	60	40	1.5	1.3	2.48	1.71
2N1482	TO-5	5	100	55	1.5	1.3	3.30	2.28
2N1700	TO-5	5	60	40	1	0.04	1.90	1.31
2N2102	TO-5	5	120	65	1	.....	1.24	.86
2N2270	TO-5	5	60	45	1	.....	.99	.69
2N2405	TO-5	5	120	90	1	.....	1.82	1.25
2N3053	TO-5	5	60	60	0.7	100	.83	.57
40311	TO-5	5	.....	30	0.7	100	.73	.51
40314	TO-5	5	.....	40	0.7	100	.78	.54
40315	TO-5	5	.....	35	0.7	100	.75	52
40317	TO-5	5	.....	40	0.7	.....	.78	.54
40321	TO-5	5	.....	300	1	.....	1.24	.86
40323	TO-5	5	.....	18	0.7	.....	.70	.48
40326	TO-5	5	.....	40	0.7	100	.78	.54
40327	TO-5	5	.....	300	1	.....	1.24	.86
40347	TO-5	8.75	60	40	1.5	1.1	.66	.46
40348	TO-5	8.75	90	65	1.5	1.1	1.06	.73
40349	TO-5	8.75	160	140	1.5	1.1	1.56	1.08
40360	TO-5	5	.....	70	0.7	100	1.03	.71
40361	TO-5	5	.....	70	0.7	100	1.04	.72
40385	TO-5	5	450	350	1	.....	9.50	6.55

SILICON NPN POWER TYPES

Pt. (Ta) above 1 to 5.8 Watts

Type	Case	Pt Ta @ 25°C Watts	Vcbo Volts	Ic Amps	hFE min	hFE mA	1-99	100-999
40389	D	3.5	60	0.7	50	150	.91	.63
40390	D	3.5	30	1	40	20	2.15	1.48
40392	C	.....	60	0.7	50	150	.91	.63
40423	E	3.8	300	0.15	50	50	1.11	.77
40425	E	3.8	300	0.15	30	30	1.06	.73
40427	E	3.8	300	0.15	20	20	1.01	.70
40422	TO-66	.....	300	0.15	50	50	1.03	.71
40424	TO-66	.....	300	0.15	30	30	.98	.68
40426	TO-66	.....	300	0.15	20	20	.93	.64
40347V1	D	4.4	60	1.5	20	450	.75	.52
40348V1	D	4.4	90	1.5	30	300	1.14	.79
40349V1	D	4.4	160	1.5	25	150	1.64	1.13
2N3439	TO-5	1	450	1	40	20	3.71	2.57
2N3440	TO-5	1	300	1	40	20	1.82	1.25
2N4063	C	.....	450	1	40	20	3.80	2.62
2N4064	C	.....	300	1	40	20	1.90	1.31
40346	TO-5	1	.....	1	25	10	1.14	.79
40412	TO-5	1	.....	1	40	30	1.06	.73
40347V2	C	.....	60	1.5	20	450	.75	.52
40348V2	C	.....	90	1.5	30	300	1.14	.79
40349V2	C	.....	160	1.5	25	150	1.64	1.13

Continued on next page

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

TO-7 TO-8 TO-36 TO-40 TO-63 TO-3 TO-104 C D E

SILICON NPN POWER TYPES (CONT'D)

Type	Case	Pt Tc @25°C Watts	Vcbo Volts	Ic amps	hFE min	hFE mA	1-99	100-999
2N4296	TO-66	20	350	1	50	50	2.48	1.71
2N4297	TO-66	20	350	1	75	50	2.89	2.00
2N4298	TO-66	20	500	1	25	50	3.71	2.57
2N4299	TO-66	20	500	1	50	50	4.13	2.85
40250V1	E	.....	50	4	25	1.5A	1.32	.92
40372	E	.....	90	4	25	0.5	1.49	1.03
40373	E	.....	160	3	20	0.5	2.56	1.77
40374	E	.....	250	2	10	1	2.97	2.05
40375	E	.....	120	7	50	500	6.68	4.62
2N1483	TO-8	25	60	3	20	750	2.89	2.00
2N1484	TO-8	25	100	3	20	750	3.63	2.51
2N1485	TO-8	25	60	3	35	750	4.46	3.08
2N1486	TO-8	25	100	3	35	750	6.77	4.67
2N1701	TO-8	25	60	2.5	20	300	2.31	1.60
2N3441	TO-66	25	160	3	20	500	2.48	1.71
2N3054	TO-66	29	90	4	25	500	1.41	.97
40250	TO-66	.....	50	4	25	1.5A	1.24	.86
40310	TO-66	.....	.....	4	20	1A	.99	.69
40312	TO-66	.....	.....	4	20	1A	1.03	.71
40316	TO-66	.....	.....	4	20	1A	.99	.69
40324	TO-66	29	.....	4	20	1A	.99	.69

SILICON NPN POWER TYPES

Pt (Tc) above 29 to 150 watts

Type	Case		Vcbo Volts	Ic amps			1-99	100-999
2N3583	TO-66	35	250	2	10	10	2.48	1.71
2N3584	TO-66	35	375	2	25	1	4.95	3.42
2N3585	TO-66	35	500	2	25	1	13.20	9.10
2N3878	TO-66	35	120	7	50	0.5	6.60	4.56
2N3879	TO-66	35	120	7	40	0.5	8.25	5.70
2N4240	TO-66	35	500	2	30	0.75	2.89	2.00
40313	TO-66	35	.....	2	40	0.5	2.23	1.54
40318	TO-66	35	.....	2	50	0.5	2.10	1.45
40322	TO-66	35	.....	2	75	0.5	2.15	1.48
40328	TO-66	35	.....	2	20	1	2.19	1.52
40364	TO-66	35	.....	7	35	0.5	6.44	4.45
40464	TO-3	40	35	5	40	1	1.40	.97
40465	TO-3	40	40	5	70	1	1.65	1.14
40466	TO-3	40	50	5	70	1	2.06	1.43
2N4395	TO-3	62.5	60	5	75	1	2.06	1.43
2N4396	TO-3	62.5	80	5	60	1	2.48	1.71
2N1487	TO-3	75	60	6	15	1.5	4.54	3.14
2N1488	TO-3	75	100	6	15	1.5	4.95	3.42
2N1489	TO-3	75	60	6	25	1.5	7.43	5.13
2N1490	TO-3	75	100	6	25	1.5	8.25	5.70
2N1702	TO-3	75	60	5	15	0.8	4.54	3.14
2N3055	TO-3	115	100	15	20	4	2.48	1.71
40363	TO-3	115	.....	15	20	4	2.31	1.60
2N3442	TO-3	117	160	10	20	3	4.54	3.14
40251	TO-3	117	50	15	15	8	2.48	1.71
40325	TO-3	117	.....	15	12	8	2.31	1.60
2N4348	TO-3	120	140	10	15	5	4.54	3.14
2N2015	TO-36	150	100	10	15	5	9.08	6.25
2N2016	TO-36	150	130	10	15	5	9.90	6.85
2N2338	TO-36	150	60	7.5	15	3	6.60	4.56
2N3771	TO-3	150	50	15	15	15	4.95	3.42
2N3772	TO-3	150	100	10	15	10	4.95	3.42
2N3773	TO-3	150	160	16	15	8	7.84	5.42
40411	TO-3	150	.....	30	35	4	4.79	3.31

SILICON PNP POWER TYPES

Pt (Tc): up to 7 Watts

Type	Case	Pt TA @25°C Watts	Vcbo Volts	Ic amps	ft typ. MHz	1-99	100-999
40394	C	1	—60	—1	.....	1.39	.96
40406	TO-5	1	.....	—0.7	100	1.36	.94
40410	D	3	.....	—0.7	100	1.64	1.13
40391	D	3.5	—60	—1	.....	1.39	.96
40319	TO-5*	1	.....	—0.7	100	1.32	.92
40362	TO-5	1	.....	—0.7	100	1.46	1.01
2N4036	TO-5	1	—90	—1	.....	1.62	1.12
2N4037	TO-5	1	—60	—1	.....	1.31	.91
2N4314	TO-5	1	—90	—1	.....	1.41	.97

GERMANIUM NPN POWER TYPES

Pt (Ta): up to 100 mW

Type	Case	Pt @25°C mW	Vcbo Volts	Ic mA	Icbo max. uA	1-99	100-999
2N647	TO-1	100	25	100	14	1.08	.75
2N649	TO-1	100	20	100	14	.86	.60

GERMANIUM PNP, NPN SYMMETRIC POWER TYPES

Pt (Tc): up to 300 mW

Type	Case	PT @25°C mW	Vcbo Volts	Ic amps	Icbo max uA	1-99	100-999
40396	TO-1	300	—18	—0.5	—14	.83	.57
40396	TO-1	300	18	0.5	14	.....	.....

Package includes both a positive and negative 40396.

MEDIUM GERMANIUM PNP POWER TYPES

Pt (Tc): 0.65 to 30 Watts

Type	Case	Pt Tc @25°C watts	Vcbo Volts	Ic amps	hFE min	hFE A Ic	1-99	100-999
40253	TO-1	0.65	—25	—0.5	50	—0.4	.53	.37
2N407	TO-40	.....	—20	—70	.....	—0.05	.42	.29
2N408	TO-1	.....	—20	—70	.....	—0.05	.38	.27
2N270	TO-7	.....	—25	—0.75	.....	—0.15	.70	.48
2N1183	TO-8	7.5	—45	—3	20	—0.4	1.82	1.25
2N1183A	TO-8	7.5	—60	—3	20	—0.4	2.31	1.60
2N1183B	TO-8	7.5	—80	—3	20	—0.4	2.89	2.00
2N1184	TO-8	7.5	—45	—3	40	—0.4	2.48	1.71
2N1184A	TO-8	7.5	—60	—3	40	—0.4	2.81	1.94
2N1184B	TO-8	7.5	—80	—3	40	—0.4	4.13	2.85
2N176	TO-3	10	—40	—3	.....	—0.5	1.31	.90
2N2147	TO-3	12.5	—75	—5	100	—1	1.57	1.08
2N2148	TO-3	12.5	—60	—5	60	—1	1.07	.74
40022	TO-3	12.5	—32	—5	38	—1	.83	.57
40050	TO-3	12.5	—40	—5	50	—1	.99	.69
40051	TO-3	12.5	—50	—5	50	—1	1.21	.84
40254	TO-3	12.5	—32	—5	30	—1	.78	.54
40421	TO-3	12.5	—75	—5	62	—1	1.28	.88
40462	TO-3	12.5	—40	—5	50	—1	1.16	.80
2N2869/ 2N301	TO-3	30	—60	—10	50	—1	1.52	1.05
2N2870/ 2N301A	TO-3	30	—80	—10	50	—1	3.15	2.18
2N1905	TO-3	30	—100	—6	50	—1	4.13	2.85
2N1906	TO-3	30	—130	—6	75	—1	6.60	4.56

SILICON NPN HIGH VOLTAGE TYPES

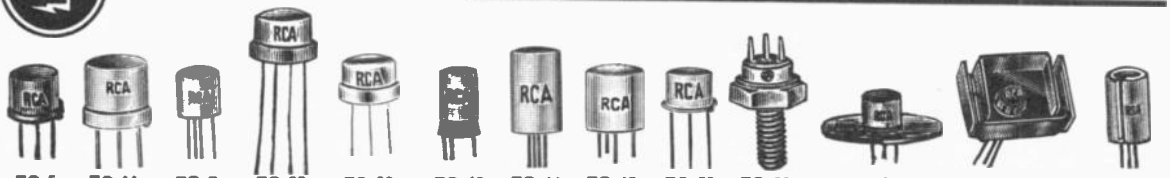
Vcbo: 120 to 500 Volts

Type	Case		Vcbo Volts	Ic amps			1-99	100-999
2N2102	TO-5	5	120	1	10	0.01	1.24	.86
2N2405	TO-5	5	120	1	35	10	1.82	1.25
2N3878	TO-66	35	120	7	50	500	6.60	4.56
2N3879	TO-66	35	120	7	40	500	8.25	5.70
40375	E	.....	120	1	50	500	6.68	4.62
2N2016	TO-36	150	130	10	15	5A	9.90	6.85
40354	TO-104	.....	.....	0.05	.....	10	1.18	.81
40355	J	.....	.....	0.05	.....	10	1.24	.86
2N3441	TO-66	29	160	3	20	500	2.48	1.71
2N3442	TO-3	117	160	10	20	3A	4.54	3.14
2N3773	TO-3	150	160	30	15	8A	7.84	5.42
40349	TO-5	5	160	1	25	150	1.56	1.08
40373	E	29	160	3	20	500	2.56	1.77
40346	TO-5	5	175	1	25	10	1.14	.79
2N3583	TO-66	35	250	2	40	100	2.48	1.71
40374	E	35	250	2	40	100	2.97	2.05
2N3440	TO-5	10	300	1	40	20	1.82	1.25
2N4064	C	10	300	1	40	20	1.90	1.31
40390	D	.....	300	1	40	20	2.15	1.48
40422	TO-66	8	300	.15	50	50	1.03	.71
40423	E	.....	300	.15	50	50	1.11	.77
40424	TO-66	8	300	.15	30	50	.98	.68
40425	E	.....	300	.15	30	50	1.06	.73
40426	TO-66	8	300	.15	20	50	.93	.64
40427	E	.....	300	.15	20	50	1.01	.70
2N4296	TO-66	20	350	1	50	50	2.48	1.71
2N4297	TO-66	20	350	1	75	50	2.89	2.00
2N3584	TO-66	35	375	2	25	1A	4.95	3.42
2N3439	TO-5	5	450	1	40	20	3.71	2.57
2N4063	C	10	450	1	40	20	3.80	2.62
2N3585	TO-66	35	500	2	40	100	13.20	9.10
2N4298	TO-66	20	500	1	25	50	3.71	2.57
2N4299	TO-66	20	500	1	50	50	4.13	2.85

GERMANIUM PNP HIGH VOLTAGE TYPES

Type	Case	Vcbo (peak) Volts	Pt @55°C Watts	Ic amps	Vce (sat) max V	Vce (sat) Ic amps	1-99	100-999
2N3730	TO-3	—200	10	—3	—2	—0.7	1.24	.86
40440	TO-3	—200	5	—10	—0.75	—6	1.32	.92
2N3731	TO-3	—320	5	—10	—1.5	—6	1.62	1.12
2N4346	TO-3	—320	5	—10	—0.75	—6	2.31	1.60
40439	TO-3	—320	5	—10	—1.5	—6	1.98	1.37

RCA Semiconductors



SILICON NPN SMALL SIGNAL TYPES UHF-VHF

fT (min): to 1000 MHz

Type	Case	ft min MHz	ft typ MHz	Vcbo Volt	Ic mA	1-99	100-999
2N4068	TO-104	50	.....		200	1.57	1.09
2N4069	J	50	.....	Vceo =	200	1.64	1.13
40354	TO-104	50	100	150V	50	1.18	.81
40355	J	50	100		50	1.24	.86
2N3053	TO-5	100	.....	60	700	.83	.57
40392	C	100	.....	60	700	.91	.63
2N2102	TO-5	120	.....	120	1000	1.24	.86
40405	TO-52	300	850	40	500	2.06	1.43
2N918	TO-72	600	.....	30	50	3.30	2.20
2N2708	TO-72	700	.....	35	*	2.89	2.00
2N3478	TO-104	750	900	30	*	1.90	1.31
2N4259	TO-104	750	.....	40	*	1.90	1.31
40238	TO-104	.....	800	45	50	.64	.44
40240	TO-104	.....	800	45	50	.61	.42
40242	TO-104	.....	.....	45	50	.74	.51
40243	TO-104	.....	.....	45	50	.68	.47
40244	TO-104	.....	.....	45	50	.53	.36
40245	TO-104	.....	.....	45	50	.63	.43
40246	TO-104	.....	.....	45	50	.61	.42
40235	TO-104	.....	1000	45	50	.79	.55
40236	TO-104	.....	1000	45	50	.71	.49
40237	TO-104	.....	1000	45	50	.54	.38
2N3932	TO-104	750	.....	30	*	1.41	.97
2N3933	TO-104	750	.....	40	*	1.62	1.12
2N3600	TO-72	850	.....	30	*	4.13	2.85
2N2857	TO-72	1000	.....	30	40	4.95	3.42
2N3839	TO-72	1000	.....	30	40	16.50	11.40

*Limited by dissipation

SILICON PNP SMALL SIGNAL TYPE

fT (min): 60 MHz

Type	Case	hFE min	hFE Vce Volts	Pt Ta @25°C Watts	Vcbo Volts	Ic Amps	1-99	100-999
2N4036	TO-5	40	—10	1	—90	—1	1.62	1.12
2N4037	TO-5	50	—10	1	—60	—1	1.31	.91
40391	D	50	—10	3.5	—60	—1	1.39	.96
40394	C	50	—10	1	—60	—1	1.39	.96
2N4314	TO-5	50	—10	1	—90	—1	1.41	.97

GERMANIUM PNP SMALL SIGNAL TYPES RF

fT: to 132 MHz fhfb: to 140 MHz

Type	Case	typ MHz fT	typ MHz fhfb	Vcbo Volt	Ic Amps	Pt mW	1-99	100-999
2N139	TO-40	14	4.7	—16	—15	80	1.16	.80
2N410	TO-1	14	6.7	—13	—15	80	.43	.30
2N140	TO-40	16.5	10	—16	—15	80	1.24	.86
2N219	TO-1	16.5	10	—16	—15	80	1.24	.86
2N411	TO-40	16.5	10	—13	—15	80	.52	.36
2N412	TO-40	16.5	10	—13	—15	80	.48	.34
2N274	TO-44	.....	30	—40	—10	120	1.24	.86
2N1224	TO-33	.....	30	—40	—10	120	1.24	.86
2N1226	TO-33	.....	30	—60	—10	120	1.49	1.03
2N1395	TO-33	.....	30	—40	—10	120	1.49	1.03
2N1524	TO-1	.....	33	—24	—10	80	.40	.28
2N1525	TO-40	.....	33	—24	—10	80	.43	.30
2N1526	TO-1	.....	33	—24	—10	80	.41	.28
2N1527	TO-40	.....	33	—24	—10	80	.47	.32
2N1638	TO-1	.....	40	—34	—10	80	.45	.31
2N1631	TO-40	.....	45	—34	—10	80	.53	.37
2N1632	TO-1	.....	45	—34	—10	80	.49	.34
2N1637	TO-1	.....	45	—34	—10	80	.52	.36
2N372	TO-7	132	.....	—24	—10	80	.96	.67
2N370	TO-7	132	.....	—24	—10	80	.98	.68
2N1180	TO-45	.....	100	—30	—10	80	.71	.50
2N384	TO-44	.....	100	—40	—10	120	1.65	1.14
2N1225	TO-33	.....	100	—40	—10	120	1.41	.97
2N1396	TO-33	.....	100	—40	—10	120	1.65	1.14
2N1397	TO-33	.....	120	—40	—10	120	2.15	1.48
2N1177	TO-45	.....	140	—30	—10	80	.91	.63
2N1179	TO-45	.....	140	—30	—10	80	.90	.62
2N1178	TO-45	.....	140	—30	—10	80	.90	.62

MOS (FET) SILICON INSULATED GATE N-CHANNEL SMALL SIGNAL TYPE

yfs: to 5000 mho

Type	Case	min μmho	NF at 20 MHz db	VDS Volts	Pt @25°C mW	1-99	100-999
40481	TO-104	1600	5.9	25	150	11.55	8.00
3N128	TO-104	5000	4	20	*	1.46	1.01

*Limited by dissipation

SILICON NPN POWER TYPES

Poe: 0.01 to 30 Watts

Type	Case	Poe min Watts	ft typ MHz	Pt Tc @25°C Watts	Vcev Volt	1-99	100-999
2N1491	TO-5	0.01	380	3	30	1.82	1.25
40080	TO-39	0.1	350	0.5		1.08	.75
40405	TO-52	0.2	850	1	40	2.06	1.43
40081	TO-39	0.4	350	2	60	1.41	.97
2N1493	TO-5	0.5	380	3	100	7.01	4.85
2N3118	TO-5	1	.....	4	85	4.95	3.42
2N3866	TO-39	1	800	5		2.97	2.05
2N4427	TO-39	1	.....	3.5		2.15	1.48
40280	TO-39	1	550	7	36	4.62	3.19
40291	TO-60	2	500	11.6	50	14.85	10.25
2N3553	TO-39	2.5	500	7	65	4.37	3.02
2N4012	TO-60	2.5	500	11.6	65	23.95	16.55
40082	TO-39	3	200	5	60	5.03	3.48
40446	Flange	3	.....	10	60	5.94	4.10
2N4440	TO-60	5	500	11.6	65	20.65	14.25
2N3375	TO-60	7.5	.....	11.6	65	14.52	10.02
2N2876	TO-60	10	200	17.5	80	14.50	10.05
2N3632	TO-60	13.5	400	23	65	19.64	13.58
2N3733	TO-60	14.5	400	23	65	33.00	22.80
40340	TO-60	25	125	70	60	33.00	22.80
2N5102	TO-60	.....	.....	70	100	24.75	17.10
2N5108	TO-39	.....	.....	3.5	.....	14.70	10.15
2N5109	TO-39	.....	1500	3.5	.....	3.47	2.40

LOW AND MEDIUM SPEED SWITCHING

GERMANIUM PNP LOW LEVEL TYPES

fT (min): to 50 MHz

Type	Case	Cobo max pF	hFE min	hFE Ic mA	Vcbo Volts	Ic mA	1-99	100-999
2N1303	TO-5	20	20	—10	—30	—300	.45	.30
2N404	TO-5	20	30	—12	—25	—100	.42	.28
2N404A	TO-5	20	30	—12	—40	—150	.58	.39
2N396	TO-5	20	30	—10	—30	—200	.61	.41
40403	TO-5	20	30	—10	—30	—200	.62	.43
2N1305	TO-5	20	40	—10	—30	—300	.52	.35
2N1307	TO-5	20	60	—10	—30	—300	.65	.43
2N1309	TO-5	20	80	—10	—30	—300	1.04	.72
2N1384	TO-11	.....	20	—200	—30	—500	2.06	1.43
2N1300	TO-5	12	30	—10	—13	—100	.91	.63
2N1301	TO-5	12	40	—40	—13	—100	1.49	1.03
2N1683	TO-5	12	50	—10	—13	—100	1.90	1.31

GERMANIUM NPN LOW LEVEL TYPES

Type	Case	Cobo max pF	hFE min	hFE Ic mA	Vcbo Volts	Ic mA	1-99	100-999
2N585	TO-5	25	20	20	25	200	.99	.69
2N1302	TO-5	20	20	10	25	300	.45	.31
2N1605A	TO-5	20	40	20	40	100	1.09	.76
2N1090	TO-5	25	30	20	25	400	1.21	.84
2N388	TO-5	20	60	30	25	200	.50	.35
2N388A	TO-5	20	60	30	40	200	.99	.69
2N1304	TO-5	20	40	10	25	300	.53	.37
2N1091	TO-5	25	40	20	25	400	1.52	1.05
2N1306	TO-5	20	80	10	25	300	.71	.50
2N1308	TO-5	20	80	10	25	300	1.04	.72

MEDIUM SPEED SILICON NPN LOW LEVEL TYPES

fT (min): 15 to 175 MHz

Type	Case	hFE min	hFE Ic mA	Vcbo Volts	Ic Amps	Pt Tc @25°C Watts	1-99	100-999
2N3439	TO-5	40	20	.....	1	10	3.71	2.57
2N3440	TO-5	40	20	.....	1	10	1.82	1.25
2N3583	TO-66	40	40	250	2	35	2.48	1.71
2N3584	TO-66	25	1A	375	2	35	4.95	3.42
2N3585	TO-66	25	1A	500	2	35	13.20	9.10
2N4063	C	40	20	.....	1	10	3.80	2.62
2N4064	C	40	20	.....	1	10	1.90	1.31
2N4240	TO-66	30	750	.....	2	35	2.89	2.00
40374	E	40	100	.....	2	5.8	2.97	2.05
40390	D	40	20	.....	1	3.5	2.15	1.48
2N697	TO-5	40	150	60	0.5	2	.63	.42
2N699	TO-5	40	150	120	1	2	1.44	.94
2N720A	TO-18	40	150	120	1	1.8	1.32	.88
2N1893	TO-5	40	150	.....	0.5	3	1.16	.77
40452	TO-104	75	10	40	300	2	.80	.55
40453	TO-104	165	10	25	200	2	.73	.51
40454	TO-104	75	10	25	200	2	.66	.46
40455	TO-104	165	10	18	200	2	.62	.43
40456	TO-104	75	10	18	200	2	.57	.39
40458	TO-104	100	10	60	1	0.5	.78	.54
40459	TO-104	100	10	60	1	1	.85	.59

(Continued on Next Page)

Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

TO-3

TO-5

TO-8

TO-11

TO-18

TO-33

TO-39

TO-66

TO-72

TO-104

C

SILICON NPN LOW LEVEL TYPES (CONT'D)

Type	Case	hfe min	hfe IC mA	Vcbo Volts	Ic Amps	Pt @25°C Watts	1-99	100-999
2N718A	TO-18	40	150	75	1	1.8	1.08	.72
2N1613	TO-5	40	150	75	1	3	.75	.50
2N2270	TO5	50	150	60	1	5	.99	.69
2N3878	TO-66	20	4A	120	7	35	6.60	4.56
2N3879	TO-66	20	4A	120	7	35	8.25	5.70
40375	E	20	4A	120	7	5.8	6.68	4.62
2N1711	TO-5	100	150	75	1	3	.99	.66
2N2897	TO-18	40	150	60	1	1.8	1.16	.80
2N3053	TO-5	50	150	60	0.7	5	.83	.57
40389	D	50	150	60	0.7	3.5	.91	.63
40392	C	50	150	60	0.7	7	.91	.63
2N2102	TO-5	40	150	120	1	5	1.24	.86
2N2405	TO-5	60	150	120	1	5	1.82	1.25
2N2895	TO-18	60	150	120	1	1.8	1.41	.97
2N2896	TO-18	60	150	140	1	1.8	2.06	1.43
40450	TO-104	100	10	30	*	2	.80	.55
40451	TO-104	125	10	40	*	2	.90	.62

*Limited by dissipation

MEDIUM SPEED SWITCHING SILICON PNP LOW LEVEL TYPES

Type	Case	hfe min	hfe IC mA	Vcbo Volts	Ic Amps	fT (min): to 60 MHz Pt @25°C Watts	1-99	100-999
2N4036	TO-5	40	—150	—90	—1	7	1.62	1.12
2N4037	TO-5	50	—150	—60	—1	7	1.31	.91
2N4314	TO-5	50	—150	—90	—1	7	1.41	.97
40391	D	50	—150	—60	—1	3.5	1.39	.96
40394	C	50	—150	—60	—1	7	1.39	.96

SILICON NPN HIGH SPEED LOGIC SWITCHING

Type	Case	hfe min	hfe IC mA	Vcbo Volts	Ic Amps	Pt @25°C Watts	1-99	100-999
2N3119	TO-5	50	100	100	0.5		5.36	3.71
2N3011	TO-18	30	10	30	0.2		1.25	.86
2N709	TO-18	20	10	15	*		1.65	1.14
2N2475	TO-18	30	20	15	*		2.56	1.71

SILICON NPN HIGH VOLTAGE HIGH CURRENT TYPES FOR MEMORY DRIVER APPLICATIONS

Type	Case	hfe min	hfe IC mA	Vcbo Volts	Ic Amps	Pt @25°C Watts	1-99	100-999
2N3512	TO-5	10	500	60		0.8	1.82	1.25

GERMANIUM PNP FOR MEMORY DRIVER APPLICATIONS

Type	Case	hfe min	hfe IC mA	Vcbo Volts	Ic Amps	Pt @25°C Watts	1-99	100-999
2N1384	TO-11	20	—200	—30	—500	240	2.06	1.43

GERMANIUM PNP HIGH VOLTAGE TYPES

Type	Case	hFE min	hFE Ic mA	Vcbo Volts	ft min kHz	Pt Ta mW	1-99	100-999
2N398	TO-5	20	—5	—105	20	50	.99	.69
2N398A	TO-5	20	—5	—105	40	150	1.08	.75
2N398B	TO-5	20	—5	—105	—	250	1.24	.86

MOS (FET) SILICON INSULATED GATE N-CHANNEL

Type	Case	Pt mW	Vds Volts	Id mA	Ta °C	yfs umho	1-99	100-999
40460	TO-72	150	±25	*	150	3000	10.75	7.40

SILICON NPN LOW SPEED SWITCHING POWER TYPES

Type	Case	Pt Ta @25°C Watts	Vceo Volts	Ic Amps	hfe min	hfe Ic mA	1-99	100-999
40407	TO-5	1	50	0.7	40	1	.81	.56
40408	TO-5	1	90	0.7	40	10	1.08	.75
2N718A	TO-18	0.5	32	1	40	150	1.08	.72
2N720A	TO-18	0.5	80	1	40	150	1.32	.88
2N2895	TO-18	0.5	65	1	60	150	1.41	.97
2N2896	TO-18	0.5	90	1	60	150	2.06	1.43
2N2897	TO-18	0.5	45	1	40	150	1.16	.80
2N697	TO-5	0.6		0.5	40	150	.63	.42
2N699	TO-5	0.6		1	40	150	1.44	.94
2N1613	TO-5	0.8		1	40	150	.75	.50
2N1711	TO-5	0.8		1	100	150	.99	.66
2N1893	TO-5	0.8	80	0.5	40	150	1.16	.77
40409	D	3		0.7	50	150	1.14	.79
40389	D	3.5	40	0.7	50	150	.91	.63
40390	D	3.5		1	40	20	2.15	1.48
2N1479	TO-5		40	1.5	20	200	2.15	1.48
2N1480	TO-5		55	1.5	20	200	2.31	1.60
2N1481	TO-5		40	1.5	35	200	2.48	1.71
2N1482	TO-5		55	1.5	35	200	3.30	2.28
2N1700	TO-5		40	1	20	100	1.90	1.31
2N2102	TO-5	1	65	1	40	150	1.24	.86
2N2270	TO-5	1	45	1	50	150	.99	.69
2N2405	TO-5	1	90	1	60	150	1.82	1.25

Continued in next column

SILICON NPN TYPES (CONT'D)

Type	Case	Pt Ta @25°C Watts	Vceo Volts	Ic Amps	hFE min	hFE Ic mA	1-99	100-999
2N3053	TO-5	1	40	0.7	50	150	.83	.57
40311	TO-5	1	30	0.7	70	50	.73	.51
40314	TO-5	1	30	0.7	70	50	.78	.54
40315	TO-5	1	40	0.7	70	50	.75	.52
40317	TO-5	1	40	0.7	40	10	.78	.54
40321	TO-5	1		1	25	20	1.24	.86
40323	TO-5	1	18	0.7	70	50	.70	.48
40326	TO-5	1	40	0.7	40	10	.78	.54
40327	TO-5	1		1	40	20	1.24	.86
40347	TO-5	1	40	1	20	450	.66	.46
40348	TO-5	1	65	1	30	300	1.06	.73
40349	TO-5	1	140	1	25	150	1.56	1.08
40360	TO-5	1	70	0.7	40	10	1.03	.71
40361	TO-5	1		0.7	70	50	1.04	.72
40385	TO-5	1	350	1	40	20	9.50	6.55
40250V1	E	5.8	40	4	25	1.5A	1.32	.92
40372	E	5.8	55	4	25	500	1.49	1.03
40374	E	5.8	175	2	40	100	2.97	2.05
40375	E	5.8	50	7	20	4A	6.68	4.62
40392	C	—	40	0.7	50	150	.91	.63

SILICON NPN LOW SPEED SWITCHING POWER TYPES

Type	Case	Pt Tc Watts	Vceo Volts	Ic Amps	hFE min	hFE Ic Amps	1-99	100-999
2N3439	TO-5	10	350	1	40	0.02	3.71	2.57
2N3440	TO-5	10	250	1	40	0.02	1.82	1.25
2N4063	C	10	350	1	40	0.02	3.80	2.62
2N4064	C	10	250	1	40	0.02	1.90	1.31
40346	TO-5	10	175	1	25	0.01	1.14	.79
40412	TO-5	10	250	1	40	0.03	1.06	.73
2N4296	TO-66	20	250	1	50	0.05	2.48	1.71
2N4297	TO-66	20	250	1	75	0.05	2.89	2.00
2N4298	TO-66	20	350	1	25	0.05	3.71	2.57
2N4299	TO-66	20	350	1	50	0.05	4.13	2.85
2N1483	TO-8	25	40	3	20	0.75	2.89	2.00
2N1484	TO-8	25	55	3	20	0.75	3.63	2.51
2N1485	TO-8	25	40	3	35	0.75	4.46	3.08
2N1486	TO-8	25	55	3	35	0.75	6.77	4.67
2N1701	TO-8	25	40	2.5	20	0.3	2.31	1.60
2N3441	TO-66	25	140	3	20	0.5	2.48	1.71
2N3054	TO-66	29	55	4	25	0.5	1.41	.97
40250	TO-66	29	40	4	25	1.5	1.24	.86
40310	TO-66	29	35	4	20	1	.99	.69
40312	TO-66	29		4	20	1	1.03	.71
40316	TO-66	29		4	20	1	.99	.69
40324	TO-66	29	35	4	20	1	.99	.69
2N3583	TO-66	35	175	2	40	0.1	2.48	1.71
2N3584	TO-66	35	250	2	25	1	4.95	3.42
2N3585	TO-66	35	300	2	25	1	13.20	9.10
2N4240	TO-66	35	300	2	30	0.75	2.89	2.00
2N3878	TO-66	35	50	7	20	4	6.60	4.56
2N3879	TO-66	35	75	7	20	4	8.25	5.70
40313	TO-66	35		2	40	0.1	2.23	1.54
40318	TO-66	35		2	40	20	2.10	1.45
40322	TO-66	35		2	40	20	2.15	1.48
40328	TO-66	35		2	20	1	2.19	1.52
40364	TO-66	35		7	35	0.5	6.44	4.45
40464	TO-3	40	35	5	40	1	1.40	.97
40465	TO-3	40	40	5	70	1	1.65	1.14
40466	TO-3	40	50	5	70	1	2.06	1.43
2N4395	TO-3	62.5	40	5	75	1	2.06	1.43
2N4396	TO-3	62.5	60	5	60	1	2.48	1.71
2N1487	TO-3	75	40	6	15	1.5	4.54	3.14
2N1488	TO-3	75	55	6	15	1.5	4.95	3.42
2N1489	TO-3	75	40	6	25	1.5	7.43	5.13
2N1490	TO-3	75	55	6	25	1.5	8.25	5.70
2N1702	TO-3	75	40	5	15	0.8	4.54	3.14

SILICON NPN LOW SPEED SWITCHING POWER TYPES

Type	Case	Pt Tc Watts	Vceo Volts	Ic Amps	hFE min	hFE Ic Amps	1-99	100-999
2N4347	TO-3	100	120	5	20	2	2.97	2.05
2N3055	TO-3	115	60	15	20	4	2.48	1.71
40363	TO-3	115		15	20	4	2.31	1.60
2N3442	TO-3	117	140	10	20	3	4.54	3.14
40251	TO-3	117	40	15	15	8	2.48	1.71
40325	TO-3	117	35	15	12	8	2.31	1.60
2N4348	TO-3	120	120	10	15	5	4.54	3.14
2N2015	TO-36	150	50	10	15	5	9.08	6.25
2N2016	TO-36	150	65	10	15	5	9.90	6.85
2N2338	TO-36	150	40	7.5	15	15	6.60	4.56
2N3771	TO-3	150	40	15	15	15	4.95	3.42
2N3772	TO-3	150	60	10	15	10	4.95	3.42
2N3773	TO-3	150	140	16	15	8	7.84	5.42
40411	TO-3	150		16	35	4	4.79	3.31

DO-1

DO-4

DO-5

TO-48

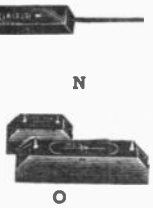
A

B

F

G

H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SILICON PNP LOW SPEED SWITCHING POWER TYPES

Pt (tc) = 7W; Ta = 3.5W

Type	Case	Pt Ta Watts	Vceo Volts	Ic Amps	hfe min	hfe Ic mA	1-99	100-999
40406	TO-5	1	—50	—0.7	30	—0.1	1.36	.94
40410	D	3	—90	—0.7	50	—150	1.64	1.13
40391	D	3.5	—40	—1	50	—150	1.39	.96
40319	TO-5	.....	—40	—0.7	35	—50	1.32	.92
40362	TO-5	.....	—70	—0.7	35	—50	1.46	1.01
40394	D	.....	—40	—1	50	—150	1.39	.96

GERMANIUM PNP LOW SPEED SWITCHING POWER TYPES

Pt (tc) = 30W.

Type	Case	Pt Tc/Tmf Watts	Vcdv Volts	Ic Amps	hfe min	hfe Ic Amps	1-99	100-999
2N586	TO-7	0.25	—25	—0.25	30	—0.25	1.73	1.20
2N1183	TO-8	7.5	—20	—3	20	—0.4	1.82	1.25
2N1183A	TO-8	7.5	—30	—3	20	—0.4	2.31	1.60
2N1183B	TO-8	7.5	—40	—3	20	—0.4	2.89	2.00
2N1184	TO-8	7.5	—20	—3	40	—0.4	2.48	1.71
2N1184A	TO-8	7.5	—30	—3	40	—0.4	2.81	1.94
2N1184B	TO-8	7.5	—40	—3	40	—0.4	4.13	2.85
2N1905	TO-3	30	—100	—6	50	—1	4.13	2.85
2N1906	TO-3	30	—130	—6	75	—1	6.60	4.56

VCEO: 120 TO 350V SILICON NPN HIGH VOLTAGE TYPES

Type	Case	VCEO Volts	Pt Ta Watts	ft min MHz	hfe min	hfe Ic mA	1-99	100-999
2N4390	TO-104	120	0.5	50	20	20	.75	.52
2N4068	TO-104	150	0.5	50	30	30	1.57	1.09
2N4069	J	150	1	50	30	30	1.64	1.13
40354	TO-104	150	0.5	50	....	10	1.18	.81
40355	J	150	1	50	....	10	1.24	.86
40346	TO-5	.....	.....	10	25	10	1.14	.79
40346V1	D	.....	4	10	25	10	1.14	.85
40346V2	C	.....	.....	10	25	10	1.23	.85
40412	TO-5	.....	.....	10	40	30	1.06	.73
40412V1	D	.....	4	10	40	30	1.14	.79
40412V2	C	.....	.....	10	40	30	1.14	.79

SILICON DIFFFUSED JUNCTION TYPE RECTIFIERS

Consumer, Low-Power Industrial and Military Applications

Type	Case	If (av) Amps	If (av) at °C	Vrm	Vfm max Volts	Irm(dyn) max mA	1-99	100-999
IN3754	A	0.125	65	100	1	0.3	.32	.22
IN3755	A	0.125	65	200	1	0.3	.33	.23
IN3756	A	0.125	65	400	1	0.3	.35	.24
40265	A	0.125	65	400	1	0.4	.35	.24
IN3563	B	0.3	75	1000	1.2	0.2	.94	.65
IN3196	B	0.4	75	800	1.2	0.2	.74	.51
IN3256	B	0.4	75	800	1.2	0.2	.78	.54
IN3193	B	0.5	75	200	1.2	0.2	.35	.24
IN3194	B	0.5	75	400	1.2	0.2	.38	.27
IN3195	B	0.5	75	600	1.2	0.2	.53	.36
IN3253	B	0.5	75	200	1.2	0.2	.38	.26
IN3254	B	0.5	75	400	1.2	0.2	.41	.29
IN3255	B	0.5	75	600	1.2	0.2	.56	.39
IN443B	DO-1	0.75	50	400	1.5	1.5μA	.98	.65
IN537	DO-1	0.75	50	100	1.1	5μA	.50	.33
IN538	DO-1	0.75	50	200	1.1	5μA	.53	.36
IN539	DO-1	0.75	50	300	1.1	5μA	.60	.40
IN540	DO-1	0.75	50	400	1.1	5μA	.68	.46
IN547	DO-1	0.75	50	600	1.2	5μA	.96	.64
IN1095	DO-1	0.75	50	500	1.2	5μA	.88	.59
IN1763A	DO-1	0.75	75	400	1.2	0.1	.42	.28
IN1764A	DO-1	0.75	75	500	1.2	0.1	.51	.35
IN2858A	DO-1	0.75	75	50	1.2	0.1	.33	.23
IN2859A	DO-1	0.75	75	100	1.2	0.1	.36	.25
IN2860A	DO-1	0.75	75	200	1.2	0.1	.40	.28
IN2863A	DO-1	0.75	75	500	1.2	0.1	.58	.40
IN2864A	DO-1	0.75	75	600	1.2	0.1	.69	.48
40266	DO-1	2	105	100	3	10	.29	.20
40267	DO-1	2	105	200	3	10	.33	.23

SILICON DIFFUSED JUNCTION TYPES

Type	Case	If (av) Amps	If (av) at Oc	Vrm	Vfm max Volts	Irm(dyn) max mA	1-99	100-999
IN1812	DO-4	5	135	50	1.5	1	1.07	.72
IN1613	DO-4	5	135	100	1.5	1	1.24	.83
IN1614	DO-4	5	135	200	1.5	1	1.90	1.27
IN1615	DO-4	5	135	400	1.5	1	3.71	2.48
IN1616	DO-4	5	135	600	1.5	1	5.36	3.58
IN1342B	DO-4	6	150	100	0.65	0.45	1.32	.88
40108	DO-4	10	150	50	0.6	2	.99	.69
40109	DO-4	10	150	100	0.6	2	1.16	.80
40110	DO-4	10	150	200	0.6	1.5	1.57	1.09
40112	DO-4	10	150	400	0.6	1	2.48	1.71
40113	DO-4	10	150	500	0.6	0.85	3.14	2.17
40114	DO-4	10	150	600	0.6	0.75	3.71	2.57
IN1199A	DO-4	12	150	50	0.55	3	1.24	.83
IN1200A	DO-4	12	150	100	0.55	2.5	1.41	.94
IN1202A	DO-4	12	150	200	0.55	2	2.48	1.65
IN1204A	DO-4	12	150	400	0.55	1.5	4.46	2.97
40213	DO-5	18	150	500	0.65	1.75	3.63	2.51
40214	DO-5	18	150	600	0.65	1.5	4.21	2.91
IN1198A	DO-5	20	150	600	0.6	1.5	7.01	4.68
IN1183A	DO-5	40	150	50	0.65	2.5	2.15	1.43
IN1184A	DO-5	40	150	100	0.65	2.5	2.48	1.65
IN1186A	DO-5	40	150	200	0.65	2.5	3.55	2.37
IN1189A	DO-5	40	150	500	0.65	2	7.43	4.95
IN1190A	DO-5	40	150	600	0.65	1.8	8.65	5.80

SILICON HIGH VOLTAGE TYPE RECTIFIER STACKS

Type	Case	Vrm rep Volts	Ifm rep Amps	Ifm surge Amps	Vfm max Volts	Irm dyn Amps	1-29	30-UP
CR101	O	1265	5	20	1.2	0.3	5.75	5.47
CR201	N	1900	3	10	1.8	0.1	3.10	2.96
CR102	O	2530	5	20	2.4	0.3	7.20	6.85
CR103	O	3165	5	20	3	0.3	8.15	7.75
CR203	N	3165	3	10	3	0.1	4.80	4.56
CR104	O	4430	5	20	4.2	0.3	9.60	9.10
CR204	N	4800	3	10	3.6	0.1	5.75	5.47
CR105	O	5065	5	20	4.8	0.3	10.55	10.05
CR106	O	6330	5	20	6	0.3	12.00	11.40
CR206	N	6330	3	10	6	0.1	6.95	6.60
CR208	N	8000	3	10	6	0.1	8.40	8.00
CR108	O	8230	5	20	7.8	0.3	13.90	13.20
CR210	N	10000	3	10	7.2	0.1	10.10	9.60
CR110	O	10130	5	20	9.6	0.3	16.30	15.50
CR212	N	12000	3	10	9	0.1	12.00	11.40

SILICON RECTIFIERS—PLUG IN TYPES

Type	Case	Features	Replaces	1-4	5-18
CR273/8008	Q	Hermetically sealed—	8008	60.00	56.70
CR274/872A	R	needs no warm up	872, 872A	60.00	56.70
CR275/866A/3B28	S	time	866, 866A, 3B28	22.00	20.79

SILICON CONTROLLED RECTIFIERS

Type	Case	If (RMS) Amps	Vrm nonrep Volts	Vrm rep Volts	Vfbom rep Volts	Ifm surge Amps	1-99	100-999
2N3528	TO-8	2	330	200	600	60	1.63	1.12
2N3529	TO-8	2	660	400	600	60	2.31	1.60
2N4102	TO-8	2	700	600	700	60	3.05	2.11
2N3228	TO-8	5	330	200	600	60	1.62	1.12
2N3525	TO-66	5	660	400	600	60	2.31	1.60
2N4101	TO-66	5	700	600	700	60	3.05	2.11
40378	H	7	330	200	600	80	1.62	1.12
40379	H	7	660	400	600	80	2.31	1.60
2N3669	TO-3	8	330	200	600	200	3.27	2.26
2N3670	TO-3	8	660	400	600	200	4.92	3.40
2N4103	TO-3	8	700	600	700	200	9.90	6.85
2N685	TO-48	25	300	200	200	150	6.60	4.40
2N687	TO-48	25	400	300	300	150	7.43	4.95
2N689	TO-48	25	600	500	500	150	10.30	6.90
2N690	TO-48	25	720	600	600	150	11.95	8.00
2N3870	G	35	150	100	700	350	4.70	3.25
2N3871	G	35	330	200	700	350	5.12	3.53
2N3872	G	35	660	400	700	350	7.18	4.96
2N3873	G	35	700	600	700	350	10.50	7.25
2N3896	F	35	150	100	700	350	4.95	3.42
2N3897	F	35	330	200	700	350	5.36	3.71
2N3898	F	35	660	400	700	350	7.43	5.13
2N3899	F	35	700	600	700	350	10.75	7.40

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

RCA

TO-3 TO-66 M A

SILICON GATED BIDICECTIONAL TRIACS

Type	Case	Gate Igp Amps	Gate Power in Watts pGM	PG(AV)	Vbom rep Volts	im surge Amps	1-99	100-999
40429	TO-66	1	20	0.2	200	80	2.48	1.71
40430	TO-66	1	20	0.2	400	80	3.27	2.26

GERMANIUM DAMPER DIODES FOR TV DEFLECTIONS

Type	Case	Vrm peak Volts	Vr cont. Volts	ifm peak Amps	If(av) Amps	1-99	100-999
40442	TO-3	200	40	10	7	.83	.57
1N4785	TO-3	320	60	10	7	1.08	.75

GERMANIUM TUNNEL SMALL SIGNAL TYPE DIODES

Type	Case	Ip min mA	Ip max mA	Cap max pF	Vf min mV	Vf max mV	1-99	100-999
1N3858	M	9.5	10.5	8	510	580	6.52	4.50
1N3129	M	19	21	20	474	575	7.59	5.24
1N3859	M	19	21	....	530	600	8.17	5.64
1N3862	M	0.1	1	4	..		7.67	5.30

GERMANIUM COMPENSATING DIODES

For temperature and voltage variations. * Peak.

Type	Case	ifm *mA	If(av) mA	Vrm Volts	1-99	100-999
1N2326	A	200	100	—1	.50	.35
40428	A	200	100	—0.5	.29	.20

● NEW SK SERIES REPLACEMENT SEMICONDUCTORS

For replacement purposes in line-and-battery-operated portable radios, phonographs, tape recorders, TV receivers, and af Amplifiers. Usually installed w/o changes in mechanical mtng. arrangements, circuit wiring, or operating conditions. Transistors replace more than 6500 types. Rectifiers replace over 2300 selenium and silicon rectifiers. *Description and application apply to both items. † Means drift-field. RF, IF amplifiers are applications of the SK3006, SK3007, SK3008, and SK3011.

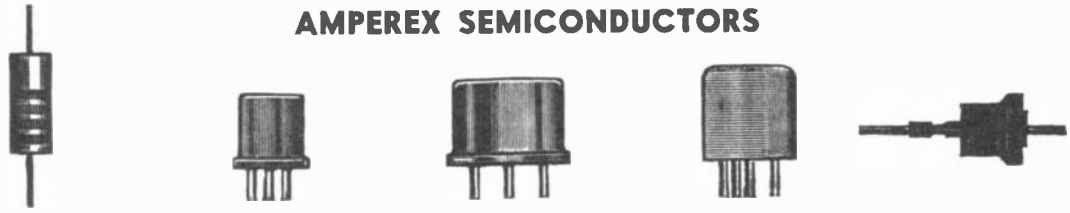
SILICON CONTROLLED RECTIFIERS

Type	DC Output mA Description	Application	NET
SK3016 PRV 500	750 CAP.	Color and b&w TV, radio	.48
SK3017A PRV 600	1000 Res. or Ind	receivers, hi-fi and amp equipment	.51

TRANSISTORS

Type	Description	Application	NET
SK3003*		AF output, driver, and	.99
SK3004*	GE, pnp, alloy	low-level amp. stages	.99
SK3005	GE, pnp, alloy	RF, IF amps; converter	1.17
SK3006	Ge, pnp, †	RF, IF amps; converter stages of fm, AM/FM rec.	1.26
SK3007	Ge, pnp, †	. . . all wave receivers	1.26
SK3008	Ge, pnp, †	. . . stages in car and batteried receivers	1.23
SK3009	Ge, pnp, alloy	Output of car radios, hi-fi amp equipment	2.34
SK3010	Ge, npn, alloy	Class A V. Amp	1.26
SK3011	Ge, npn, alloy	Stnd. radio receivers	1.62
SK3012	Ge, pnp, alloy	Audio stages of car radio	4.38
SK3013	Ge, pnp, alloy	2 SK 3009 transistors	4.68
SK3014	Ge, pnp, †	Output stages of car radios; hi-fi amp mat.	3.15
SK3015	Ge, pnp, †	2 SK 3014 transistors	6.30
SK3018	Si, npn, planar	VHF-TV, FM tuners; TV-IF, FM-IF amps	1.35
SK3019	Si, npn, planar	UHF-TV oscillator	1.47
SK3020	Si, npn, planar	AF Amp, Driver	1.08
SK3021	Si, npn, diff.	AF otpt. stages in radios, TV receivers	1.71

AMPEREX SEMICONDUCTORS



A B C D E

GERMANIUM DIODES—GENERAL PURPOSE

Type	IF (ma)	VR (Volts)	(mA)	(Volts)	IR (ma)	1-99	100-999
1N34	50	60	5	1	30	.35	.23
1N617	50	115	7	1	11	.59	.39

SILICON DIODES

POWER RECTIFIERS, High Voltage, Medium Current

Type	IF (Amps)	VR (Volts)	IFM (Amps)	VRM (Volts)	1-99	100-999
BY100S	0.45	800	5.0	1250	.69	.46

VOLTAGE VARIABLE CAPACITANCE DIODES

Type	VR (V)	PO (mw)	CO at —4V (pf)	Q at MHz	Cap. Change Ratio (f=0.5 MHz)	1-99	100-999
1N3182	20	163	33	65	0.7 (VR=10V) (VR—4V)	.68	.45

RF LARGE SIGNAL AND POWER, PNP

Type	Vcb (V)	Ic (ma)	Pc (25°C Amb.) (Watts)	fT MHz	Gain (db)	1-99	100-999
2N2512	70	50	0.26	175	.....	1.34	.89

MF-HF SMALL SIGNAL, GERMANIUM, PNP * ft at Mc

Type	VCB (V)	(ma)	PC (mw)	hie at KHz	fhfb MHz	1-99	100-999
2N2084	40	10	125	100	100	1.34	.90
2N2495	35	10	100	70	180	2.10	1.40
2N2654	32	10	100	50	250	1.42	.96
2N2671	32	10	100	150	100	.84	.56
2N2672	32	10	100	150	75*	.67	.45

LOW LEVEL LOW NOISE AF AMPLIFIERS SILICON, NPN

Type	VCE V	hFE at IC Min.	hFE at IC μa	fT MHz	mW Diss. 25°C Amb.	1-99	100-999
A321	30	80	10	60	300	1.06	.71
A322	30	300	10	60	300	1.20	.80
A323	60	20	1.0	60	300	1.62	1.08
A324	60	45	1.0	60	300	2.00	1.33

HF-VHF SMALL SIGNAL, SILICON, NPN

Type	mW Diss. 25°C Amb.	VCE V	hFE	fT MHz	Cre pf	Gpe at f db	MHz	1-99	100-999
A415	165	50	150	200	.55	19	100	.75	.50
A466	150	40	60	400	.015	17	200	.92	.61
A467	150	40	60	350	.015	38	45	.92	.61
A473	230	40	150	550	.023	40	45	.92	.61

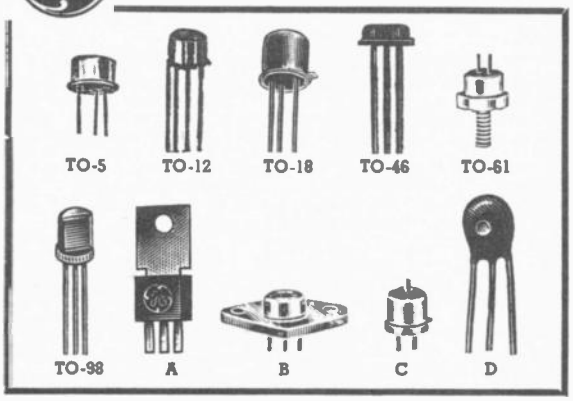
GERMANIUM TRANSISTORS AF SMALL SIGNAL, PNP AND NPN (*NPN)

Type	Vce (V)	Ic (ma)	Pc (mw)	hie (KHz)	fT (MHz)	1-99	100-999
2N1516	20	10	83	100	.....	1.65	1.10
2N1517	20	10	83	100	.....	1.84	1.23
2N2207	70	50	260	200	175	1.42	.96
2N2428	32	100	500	130	1.7	.56	.37
2N2429	32	100	500	220	2.3	.57	.38
2N2430*	32	0.5	0.4	100	.....	.57	.38
2N2431	32	1.0	1.6	90	.....	.62	.42

UHF-SMALL SIGNAL, GERMANIUM, PNP

Type	VCBO (V)	VEBO (V)	IC (ma)	Power Tamb = 25°C (mw)	NF 800 MHz (db)	GA 800 MHz (db)	1-99	100-999
2N3399	20	0.3	7	25	7.5	11.5	2.55	1.70

Semiconductors



ECONOMY SILICON PLANAR PASSIVATED NPN TRANSISTORS —

Type	hFE	hfe @ 1 Hz	Vceo	MHz ft	CQB PF	1-99	100-999
2N2711	30-90	.....	18	120	7	.45	.30
2N2712	75-125	.....	18	120	7	.48	.32
2N2713	30-90	.....	18	120	7	.51	.34
2N2714	75-225	.....	18	120	7	.53	.35
2N2923	115 typ.	90-180	25	120	9	.48	.32
2N2924	155 typ.	150-300	25	120	9	.53	.35
2N2926	.....	35-470	18	120	9	.45	.30
2N3390	400-800	.....	25	120	4.5	.94	.62
2N4424	180-540	.....	40	120	6.0	.69	.46
2N4425	180-540	.....	40	120	6.0	.86	.58
2N3391	250-500	.....	25	160	7	.65	.43
2N3391A	250-500	.....	25	160	7	.75	.50
2N3392	150-300	.....	25	140	7	.53	.35
2N3393	90-180	.....	25	140	7	.45	.30
2N3394	55-110	.....	25	140	7	.42	.28
2N3395	150-500	.....	25	140	7	.59	.39
2N3396	90-500	.....	25	140	7	.54	.36
2N3397	55-500	.....	25	140	7	.51	.34
2N3398	55-800	.....	25	140	7	.59	.39
2N3402	75-225	180	25	160	8	.75	.50
2N3403	180-540	330	25	160	8	.80	.53
2N3404	75-225	150	50	160	8	.80	.53
2N3405	180-540	300	50	160	8	.91	.63
2N3414	75-225	180	25	160	8	.45	.30
2N3415	180-540	330	25	160	8	.51	.34
2N3416	75-225	150	50	160	8	.65	.43
2N3417	180-540	300	50	160	8	.74	.51
2N3605	30 Min.	.....	14	350	4	.58	.39
2N5028	25-120	.....	25	250	8.0	.69	.48
2N3606	30 Min.	.....	14	350	4	.45	.30
2N5029	40-120	.....	15	500	4.0	.69	.48
2N3607	30 Min.	.....	14	350	4	.40	.27
2N3662	20 Min.	7-21	12	1100	1.3	.74	.50
2N5030	30 Min.	.....	15	400	4.0	.60	.40
2N3721	.....	60-660	18	120	7	.39	.26
2N3843A	20-40	.....	30	60 Min.	3	.59	.39
2N3844A	35-70	.....	30	90 Min.	3	.62	.42
2N3845A	60-120	.....	30	120 Min.	3	.66	.44
2N3854	35-70	.....	18	300	2.5	.51	.34
2N3854A	35-70	.....	30	300	2.5	.54	.36
2N3855	60-120	.....	18	350	2.5	.53	.35
2N3855A	60-120	.....	30	350	2.5	.57	.38
2N3856	100-200	.....	18	350	2.5	.57	.38
2N3856A	100-200	.....	30	350	2.5	.62	.42
2N3858	60-120	.....	30	125	2.7	.48	.32
2N3859	100-200	.....	30	140	2.7	.49	.33
2N3860	150-300	.....	30	170	2.7	.54	.36
2N3663/	20 Min.	.....	12	900	1.2	.80	.53
2N3843	20-40	.....	30	135	2.8	.54	.36
2N3844	35-70	.....	30	135	2.8	.57	.38
2N3845	60-120	.....	30	135	2.8	.62	.42
2N3858A	60-120	.....	60	135	2.5	.58	.39
2N3859A	100-200	.....	60	135	2.5	.60	.40
2N3877	20 Min.	.....	70	135	2.5	.56	.38
2N3877A	20 Min.	.....	85	135	2.5	.63	.42
2N3900	250-500	.....	18	120	7.0	.60	.40
2N3900A	250-500	.....	18	120	7.0	.70	.47
2N3973	35-100	.....	30	350	5.2	.63	.42
2N3974	55-200	.....	30	350	5.2	.70	.46
2N3975	35-100	.....	30	350	5.2	.58	.39
2N3976	55-200	.....	30	350	5.2	.60	.40
2N4054	30-90	.....	300	28	6.0	1.56	1.04
2N4055	30-90	.....	250	28	6.0	1.44	.96
2N4056	30-90	.....	200	28	6.0	1.20	.80
2N4057	30-90	.....	150	28	6.0	1.08	.72
2N4256	100-500	.....	30	200	2.7	.69	.46
2N3605A	30 Min.	.....	15	300	6.0	.69	.46
2N3606A	30 Min.	.....	15	300	6.0	.48	.32
15G6	20 Min.	.....	12	500	1.2	.66	.44
2N5027	25-120	.....	25	250	8.0	.60	.40
D16K1	60 Typ.	.....	30	650	1.4	.94	.62
D16K2	60 Typ.	.....	30	650	1.4	.98	.66
D16K3	60 Typ.	.....	30	650	1.4	1.06	.70

ECONOMY NPN PLANAR DUAL DIODES — TO-98

Type	Description	VR	1-99	100-999
1N4951/F16U1	VF=0.85 V Max. @ 1 mA	20V	.42	.28
1N4952/F16U2	PT=200 mW, Co=1.1PF Typ.	50V	.48	.52
F16U3	.54≤VF≤.66 @ 1 mA	20V	.63	.41
F16U4	PT=200 mW, Co=1.1PF Typ.	50V	.72	.48
F16H1	Common anode IzM=15mA, Vz=5.6-6.8V	.....	.96	.64

SILICON GROWN DIFFUSED NPN TRANSISTORS — TO-5

(‡) Pulsed measurement. (#) Typical.

Type	Max. Diss. MW	Min. BVcbo	hFE	hfe	1-99	100-999
2N335	150	45	45	37-90	4.95	3.30
2N335A	500	45	45	37-90	5.25	3.50
2N336	150	45	75	76-333	6.00	4.00
2N337	125	45	35	55#	4.85	3.20
2N338	125	45	75	99#	5.50	3.65
2N478	200	15	.....	40-100	3.60	2.40
2N1417	150	15	.....	30-200	.90	.60
2N1418	150	30	.....	30-200	.98	.65

SILICON MESA PASSIVATED NPN POWER TRANSISTORS

Typical ft, 15 M Hz (‡) @ 25°C Case temp. (#) Vcer.

Type	Fig.	Min. Volts Vceo	Min. Volts Vcex	Max. Watts 25°C	Watts Dissip. @ 100°C Case	hFE	1-99	100-999
2N656	TO-5	60	.....	0.8	4‡	30- 90	2.03	1.35
2N657	TO-5	100	.....	0.8	4‡	30- 90	2.20	1.47
2N1657A	TO-5	100	.....	1.0	5‡	30- 90	2.92	1.94
2N2106	TO-5	60#	.....	1.0	.....	12- 56	1.97	1.32
2N2107	TO-5	60#	.....	1.0	.....	30- 90	2.09	1.39
2N2108	TO-5	60#	.....	1.0	.....	75-200	2.10	1.40
2N2196	B	60#	80	2.0	10	30- 90	4.50	3.00
2N2197	B	60#	80	2.0	10	75-200	4.62	3.25
2N2201	B	100	120	2.0	10	30- 90	6.90	4.60
2N2726	TO-5	200#	.....	1.0	5‡	30- 90	2.10	1.40
2N2727	TO-5	200#	.....	1.0	5‡	75-150	4.27	2.85
D7A30	TO-5	40	.....	1.0	5‡	12- 38	1.01	.67
D7A31	TO-5	30	.....	1.0	5‡	30- 90	1.08	.72
D7A32	TO-5	30	.....	1.0	5‡	75-200	2.25	1.50

NPN PASSIVATED MESA POWER TRANSISTORS — TO-61

Stud. Mtd. Vce=15V; Ic=2 amp. + Vce=5V; Ic=500 mA
#Max. Pt. @ 25°C case.

Type	hFE Min. Max.	Vceo V	Max. Pt @ 100°C case (watts)	Max. Pt @ 25°C air (watts)	1-99	100-999
2N1618	15-75*	100	60#	3	35.00	23.50

NPN SILICON PLANAR PASSIVATED AMPLIFIERS — TO-18

Type	Min. Vceo	Min. Vebo	Max. SAT Vbe	Max. SAT Vce	hFE	1-99	100-999
2N760	45	8	.....	1.0	76-333	1.80	1.20
2N760A	60	8	.....	1.0	76-333	1.83	1.22
2N915	50	5	0.9	1.0	40-160	5.08	3.39
2N930	45	5	1.0	1.0	100-300	4.00	2.67
2N2484	60	6	.....	0.35	100-500	4.00	2.67

MICROTAB NPN PLANAR AMPLIFIERS — Fig. D

The new microtab transistor series are extremely small in size (.070x.070x.085") and perform the same as their larger counterparts. They are ideal where microminiature transistors are required such as instrumentation or hybrid circuits.

Type	hFE Min.	hFE Max.	Nearest Equiv.	1-99	100-999
D26E-1	100/300 @10 uA.		2N930	3.60	2.40
D26E-2	40/90 @100 uA.		.....	2.30	1.20
D26E-3	70/145 @100 uA.		2N929	2.20	1.45
D26E-4	115/220 @100 uA.		2N2483	2.25	1.50
D26E-5	180/330 @100 uA.		2N2484	2.95	1.95
D26E-6	40/330 @100 uA.		.....	1.55	1.05
D26G-1	6 @100 MHz		2N918	3.25	2.17

SWITCHES AND AMPLIFIERS — NPN PLANAR EPITAXIAL — TO-5

Type	Min. Vceo	Min. Vebo	Max. SAT Vbe	Max. SAT Vce	hFE	1-99	100-999
2N2192	40	5	1.3	0.35	100-300	4.20	2.80
2N2192A	40	5	1.3	0.25	100-300	4.45	2.95
2N2193	50	8	1.3	0.35	40-120	2.95	1.95
2N2195	25	5	1.3	0.35	20 min.	1.38	.92
2N2868	40	5	1.3	0.25	40-120	1.68	1.12
2N2351*	50	8	1.3	0.35	40-120	3.55	2.35
2N2364A*	80	7	1.3	0.25	40-120	5.70	3.80

NEWARK Can Supply All General Electric Semiconductors

NPN SILICON (PEP) AMP/DRIVER/SWITCH—*TO-5, †TO-18

Type	Min. Vceo	Min. Vebo	Max. Sat Vbe	Max. Sat Vce	hFE	1-99	100-999
2N2218*	30	5	.....	0.4	40-120	1.37	.91
2N2219*	30	5	.....	0.4	100-300	1.37	.91
2N2222†	30	5	.....	0.4	100-300	1.37	.91
2N2537*	30	5	1.3	0.45	50-150	4.95	3.30
2N2538*	30	5	1.3	0.45	100-300	5.85	3.90
2N2539*	30	5	1.3	0.45	50-150	4.95	3.30
2N2540†	30	5	1.3	0.45	100-300	5.85	3.90
2N2845†	30	5	1.2	0.4	30-120	4.95	3.30
2N2846*	30	5	1.2	0.4	30-120	4.95	3.30

NPN SILICON PLANAR PASSIVATED TRANSISTORS — TO-5

Type	Max. Watts 25°C.	Max. Volts Vce (SAT)	Max. Volts Vbe (SAT)	Min. Vcer Volts	hFE	Min. hFE	1-99	100-999
2N696	0.6	1.5	1.3	40	20- 60	.....	.75	.50
2N697	0.6	1.5	1.3	40	40-120	.....	.75	.50
2N699	0.6	5.0	1.3	80	40-120	35-100	1.32	.88
2N1613	0.8	1.5	1.3	50	40-120	30-100	1.01	.67
2N1711	0.8	1.5	1.3	50	100-300	50-200	1.08	.72
2N1893	0.8	5.0	1.3	100	40-120	30-100	1.57	1.05

ECONOMY GENERAL PURPOSE PNP AMPLIFIER — TO-5

Type No.	hFE	hFE @ 1Khz	Vceo	Ft Mhz	Cob pF	1-99	100-999
D29A4	30-90	.....	25	340	8	.58	.39
D29A5	75-225	.....	25	340	8	.72	.48

PLANAR EPITAXIAL PNP SWITCHES AND AMPLIFIERS — TO-5

Type No.	Min. Vceo	Min. Vebo	Max. Vbe	Max. Vce	hFE	1-99	100-999
2N2904	40	5	1.3	.4	40-120	2.48	1.65
2N2904A	40	5	1.3	.4	40-100	7.43	4.95
2N2905	40	5	1.3	.4	100-300	2.48	1.65
2N2905A	40	5	1.3	.4	100-300	7.43	4.95
2N3502	40	5	1.3	.4	100-300	2.78	1.85
2N3503	40	5	1.3	.4	100-300	7.88	5.25
2N2906	40	5	1.3	.4	40-120	2.48	1.65
2N2906A	40	5	1.3	.4	40-120	7.43	4.95
2N2907	40	5	1.3	.4	100-300	2.48	1.65
2N2907A	40	5	1.3	.4	100-300	7.43	4.95
2N3504	40	5	1.3	.4	100-300	2.78	1.85
2N3505	40	5	1.3	.4	100-300	7.88	5.25

NPN SILICON (PEP) HIGH SPEED SWITCHES — TO-18

Type	Min. Vceo	Min. Vebo	Max. SAT Vbe	Max. SAT Vce	hFE	1-99	100-999
2N706	.....	3	0.9	0.6	20 min.	.60	.39
2N706A	15	5	0.9	0.6	20-60	.63	.42
2N708	15	5	0.8	0.4	30-120	.63	.42
2N709	6	4	0.85	0.3	20-120	1.65	1.14
2N709A	6	4	0.85	0.3	30-90	3.36	2.24
2N834	.....	5	0.9	0.25	25 min.	.98	.65
2N914	15	5	0.8	0.25	30-120	.95	.63
2N2368	15	4.5	0.85	0.35	20-60	2.31	1.54
2N2369	15	4.5	0.85	0.35	40-120	2.40	1.60
2N2784	6	4	0.85	0.26	40-120	4.32	2.70
2N3010	6	4	1.3	0.380	25-125	1.90	1.27

NPN SILICON PLANAR PASSIVATED TRANSISTORS — TO-18

2N718	.....	5	1.3	1.5	40-120	.93	.62
2N720A	80	7	1.3	5.0	40-120	1.57	1.05

Fig. C—GERMANIUM RATE GROWN NPN TRANSISTORS

(‡) Conversion gain at 1600 Hz. (#) Vcer @ R=10K.

Type	Max. Dissip. mW	Min. Vceo Volts	Power Gain at 455 Hz db	hFE	1-99	100-999
2N78	65	15	26.0-31.0	45-135	2.49	1.66
2N78A	65	20	26.0-31.0	45-135	2.75	1.83
2N167A	65	30	.....	17-90	5.16	3.44
2N169	65	15#	24.0-31.0	34-200	1.59	1.06
2N169A	65	25#	27.0-31.0	34-200	2.42	1.61
2N1694	75	20	.....	15-45	.99	.66

GERMANIUM ALLOY PNP TRANSISTORS

(*) VRT (**) BVCEO † hfe min.

Type	Fig.	Max. Dissip. mW	Min. Volts BVcer	hFE	Typ. fhfb MHz	1-89	100-999
2N43A	C	240	30	34- 65	1.3	4.13	2.75
2N123	C	150	15**	30-150	8.0	3.68	2.45
2N188A	C	200	25	34- 65	1.2	1.65	1.10
2N190	C	200	25	34- 65	1.0	.83	.55
2N191	C	200	25	53-121	1.2	.90	.60
2N241A	C	200	25	50-125	1.3	.98	.65
2N319	TO-5	225	20	25- 42	2.0	.44	.29
2N320	TO-5	225	20	34- 65	2.5	.59	.39
2N321	TO-5	225	20	53-121	3.0	.65	.43
2N322	TO-5	200	18	34- 65	3.0	.42	.28
2N323	TO-5	200	18	53-121	3.5	.59	.39

CONTINUED NEXT COLUMN

GERMANIUM ALLOY PNP TRANSISTORS (Cont'd)

Type	Fig.	Max. Dissip. mW	Min. Volts BVcer	hFE	Typ. fhfb MHz	1-99	100-999
2N324	TO-5	200	18	72-198	4.0	.72	.48
2N396A	TO-5	200	20**	30-150	8.0	.62	.41
2N404	TO-5	150	24*	.....	8.0	.42	.28
2N404A	TO-5	150	35*	.....	8.0	.58	.39
2N414	TO-5	150	15**	30-120	7.0	.42	.29
2N508	TO-5	200	16	100-200	4.5	.69	.46
2N508A	TO-5	200	25	100-200	4.5	.81	.54
2N524	TO-5	225	30	25- 42	2.5	.59	.39
2N525	TO-5	225	30	34- 65	3.0	.80	.53
2N526	TO-5	225	30	53- 90	3.5	1.00	.67
2N527	TO-5	225	30	72-121	4.0	1.00	.67
2N1097	TO-5	200	16	34- 90	3.0	.57	.38
2N1175	TO-5	200	25	70-140	4.0	.93	.62
2N1175A	TO-5	200	25	70-140	4.0	1.35	.90
2N1303	TO-5	150	25*	20 min.	7.0	.45	.30
2N1305	TO-5	150	20*	40-200	8.0	.52	.35
2N1307	TO-5	150	15*	60-300	12.0	.66	.44
2N1414	TO-5	200	25	34- 65	3.6	.69	.46
2N1415	TO-5	200	25	53- 90	4.0	.80	.53
2N1924	TO-5	225	40	34- 65	3.0	1.35	.90
2N1925	TO-5	225	40	53- 90	3.5	1.56	1.04
2N1926	TO-5	225	40	72-121	4.0	1.82	1.21

SILICON REFERENCE AMPLIFIER TRANSISTORS TO-12 CASE

Type	Vceo	Max. Temp. Coeff. KT	Ref. Volt V.ref. (V)	hFE	1-99	100-999
RA1	45	.02% 1°C	7.0 ± 10%	10-120	4.50	3.00
RA1A	45	.005% 1°C	7.0 ± 10%	10-120	7.95	5.30
RA1B	45	.002% 1°C	7.0 ± 10%	10-120	14.10	9.40
RA2	45	.02% 1°C	7.0 ± 5%	40-120	7.95	5.30

PLANAR SILICON CONTROLLED SWITCHES (SCS)

TO-18 4 lead pkg. *Measured @ Vac=40V: RL=800 ohms; Rgc=10K. †Measured @ Vac=40V; RL=800 ohms.

Type No.	Anode Blk'g Voltage (V)	If @ 25°C mA	Vgfa* (V)	Max.† Igfc (μA)	Vgfc* (V)	EACH 1-99	EACH 100-999
3N81	65	200	.4 to .8	1.0	.4 to .65	3.40	2.25
3N82	100	200	.4 to .8	1.0	.4 to .65	4.95	3.30
3N83	70	50	.....	150	.4 to .80	2.13	1.42
3N84	40	175	.....	10	.4 to .65	1.98	1.32
3N85	100	175	.....	10	.4 to .65	3.30	2.20
3N86	65	200	.4 to .8	1.0	.4 to .65	6.00	4.00

ECONOMY SILICON UNILATERAL SWITCHES — TO-98

Planar integrated triode thyristor for SCR triggers, frequency dividers, ring counters, and over-voltage sensors.

Type No.	Vacr Volts	If Cont. mA	Vs Volts	Is μA	1-99	100-999
2N4987	30	175	6-10	500	.84	.56
2N4988	30	200	7.5-9.0	150	1.23	.82
2N4989	30	200	7.5-8.2	300	1.73	1.15
2N4990	30	175	7.0-9.0	200	.89	.59

SILICON BILATERAL SWITCHES — TO-98

Planar integrated bilateral thyristor with good symmetry, and a monolithic structure. Ideal for low voltage SCR.

Type No.	If cont. mA	Vs Volts	Is μA	Ib @ 5V μA	1-99	100-999
2N4991	175	6-10	500	1.0	.93	.62
2N4992	200	7.5-9.0	120	0.1	1.35	.90

COMPLEMENTARY UNIJUNCTION — TO-18

Ultra stable and uniform unijunction for oscillators, timers and frequency dividers.

Type No.	Interbase K Ohms	Ieo @ 5V nA	Vebi (sat) @ 50 mA Volts	1-99	100-999
D5K1	5-15	10	1.5	6.95	4.64

SILICON UNIJUNCTION TRANSISTORS — TO-5

† Tj=25°C *TO-18 pkg.

Type	Min. Emit. Rev. Volts	Max. IP μa	Max. IEO μA	rBBO Ohms	1-99	100-999
2N489	60	12	2.0	4.7- 6.8	7.10	4.75
2N490	60	12	2.0	6.2- 9.1	7.80	5.20
2N491	60	12	2.0	4.7- 6.8	8.40	5.60
2N491A	60	12	2.0	4.7- 6.8	8.90	5.95
2N491B	60	6	5	4.7- 6.8	10.40	6.95
2N492	60	12	2.0	6.2- 9.1	9.90	6.60
2N492B	60	6	5	6.2- 9.1	11.90	7.95
2N493	60	12	2.0	4.7- 6.8	10.75	7.20
2N494	60	12	2.0	6.2- 9.1	10.90	7.30
2N494C	60	2	.02	6.2- 9.1	14.95	9.95
2N1671	30	25	12†	4.7- 9.1	2.95	1.97
2N1671A	30	25	12†	4.7- 9.1	3.20	2.13
2N1671B	30	6	5	4.7- 9.1	3.55	2.36
2N2160	30	25	12†	4.0-12.0	1.49	.99
2N2419*	60	12	2.0	4.7- 6.8	8.40	5.60
2N2646*	30	25	12	4.7- 9.1	1.05	.70
2N2647*	30	2	0.2	4.7- 9.1	3.00	2.00

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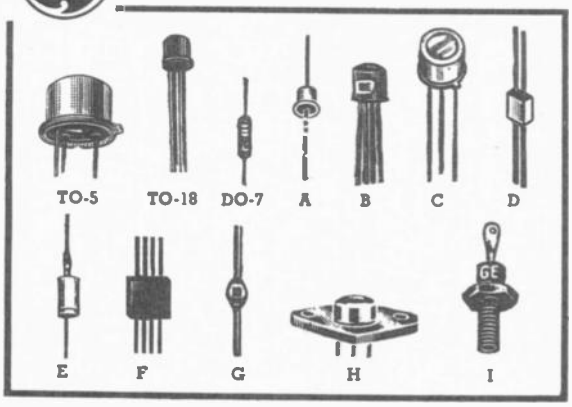
Semiconductors



SILICON UNIJUNCTION TRANSISTORS CONTINUED — TO-S

Type	Min. Emit. Rev. Volts.	Max Ip uA	Max. Ieo uA	rBBO Ohms	1-99	100-999
2N2840*	30	10	1.0	4.7- 9.1	6.35	4.25
D5E35*	30	.....	12	4.7- 9.1	1.35	.90
D5E36*	30	.....	1.0	4.7- 9.1	2.67	1.78

SILICON NPN DIFFERENTIAL AMPLIFIERS — TO-S

Type	Min. Vceo	hFE	hFE1/hFE2	Max. Icbo@Vcb nA	Max. Icbo@Vcb Volts	1-99	100-999
2N2480	40	30-350	0.8-1.0	50	60	12.75	8.50
2N2639	45	65 Min.	0.9-1.0	10	45	22.00	14.70
2N2641	45	65 Min.	.....	10	45	7.20	4.80
2N2910	25	80 Min.	0.8-1.0	.....	.....	12.75	9.35
D12A8	30	30 Min	0.9-1.0	25	30	5.65	3.75

DARLINGTON AMPLIFIERS — TO-18

Type	Vceo	IcmA	IbmA	PTmW	hFE @ 5V, 2mA	1-	100-999
D16P1	12	220	20	320	2K-70K	.68	.45
D16P2	12	200	20	320	7K-70K	.70	.47
D16P3	20	200	20	320	2K-70K	.76	.50
D16P4	20	200	20	320	7K-70K	.78	.52

DO-7 — SILICON SIGNAL DIODES

(*) @ 25°C.

Type	Min. Sat. Volts	Max. Rev. Cur., μA at Volts	Max. Fwd. Cur. mA at Volts	Max. Rev. Recovery, Nanosec	1-99	100-999
1N251	40	0.2 at -10	5 at 1.0	150	.65	.43
1N963A	40	0.1 at -40	20 at 1.0	4	1.17	.78
1N904	30	0.1 at -30	10 at 1.0	4	.99	.66
1N914	100	0.025 at -20	10 at 1.0	4	.35	.24
1N914A	100	0.025 at -20	20 at 1.0	4	.40	.26
1N914B	100	0.025 at -20	100 at 1.0	4	.80	.54
1N916	100	0.025 at -20	10 at 1.0	4	.52	.34
1N3064	75	0.1 at -50	10 at 1.0	4	.67	.44

SILICON SIGNAL MILI-HEATSINK DIODES — DHD PKG.

Type No.	Description	1-99	100-999
1N4531	MHD version of 1N914	.59	.39
1N4534	MHD version of 1N3606	1.20	.80
1N4536	MHD version of 1N4009	.59	.39

SILICON SIGNAL DOUBLE-HEATSINK DIODES — (DHD)

-DO-7—Recommended for new designs (+) Stabistor.

Type No.	Max. Vbr. Volts	Max. Fwd Cur., mA @ Volts	Max. Rev. Recovery, Nanosec	1-9	100-999
1N4148	DHD version of N914			.35	.24
1N4150	DHD version of 1N3600			2.10	1.39
1N4151	DHD version of 1N3604			.63	.42
1N4152	DHD version of 1N3605			.67	.43
1N4153	DHD version of 1N3606			.95	.62
1N4154	DHD version of 1N4009			.37	.23
1N4156+	30	10 @ 1.58v	.....	.75	.50
1N4157+	30	10 @ 2.32v	.....	1.04	.69
1N4305	DHD version of 1N3063			.53	.35
1N4444	70	10 @ .82v	7.0	1.51	.99
1N4446	DHD version of 1N914A			.40	.26
1N4447	DHD version of 1N916A			.58	.38
1N4448	DHD version of 1N914B			.80	.54
1N4449	DHD version of 1N916B			.80	.54
1N4451	40	10 @ .72v	10	1.28	.85
1N4452	40	10 @ .83v	20	1.64	1.09
1N4454	DHD version of 1N3064			.35	.24
1N4606	85	200 @ 1.0v	15	1.27	.83

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SILICON SIGNAL DOUBLE-HEATSINK DIODES—(DHD) Cont'd.

Type No.	Max. Vbr. Volts	Max. Fwd. Cur mA @ Volts	Max. Rev. Recovery Nanosec	1-99	100-999
1N4608	85	450 @ 1.0v	15	1.44	.94
1N4727	30	10 @ 0.83v	.....	.40	.26
2N2453A	30	10 @ 1.61v	.....	32.50	21.60
1N4830+	30	10 @ 2.35v	.....	.93	.62
1N4864	125	10 @ 0.82v	9	1.37	.91

SELECTED SILICON SIGNAL DIODES

Rev. recov. with If at 10 mA, Vr @ —6 volts and load resistance at 100 ohms. 2 nanoste. (#) Millivolts.

Type	Fig.	Max. Fwd. V @ Cur., mA	Max. Rev. V	1-99	100-999
1N3604	DO-7	1.0 at 50	50	.83	.56
1N3605	DO-7	880# at 20	30	.72	.48
1N3606	DO-7	880# at 20	50	1.00	.67
1N4009	DO-7	1.0 at 30	25	.42	.28
IN4726	DO-7	850# at 10	20	.42	.28

SELECTED GERMANIUM SIGNAL DIODES — Fig. A

(*) point contact

Type	PRV Volts	If max. mA	Application	1-99	100-999
1N34*	75	50	Gen Pur.	.33	.22
1N34A*	75	50	Gen Pur.	.33	.22
1N60	30	50	Video Det.	.30	.20
1N63*	125	40	High Volt.	.42	.28
1N64	25	50	Video Det.	.35	.23
1N69*	75	40	Gen. Pur.	.35	.23
1N87A	30	50	Video Det.	.24	.16
1N90*	75	30	Gen. Pur.	.33	.22
1N116*	75	30	Low Leak	.53	.35
1N191*	90	30	Computer	.32	.21
1N279	39	80	High Cond.	.33	.22
1N281	75	75	High Cond.	.35	.23
1N295A	40	35	Video Det.	.36	.24
1N541	45	10	A.M. Det.	.30	.20
1N542	Matched pair of 1N541		F.M. Det.	.62	.41

GERMANIUM TUNNEL DIODES — DO-18

Switching, 2 milli-μsecs; self-resonant frequencies cover the S band. For the TD-1 thru TD-5A types the Peak point voltage is 65 mU typical; valley point, 355 mU typical. Forward voltage, 500 mv typical. Peak point current ±10% except, (*) ±2.5%. (‡) —G in mhos x 10^{-3}. ** Gallium arsenide.

Type	Cur. mA Ip	Cur. mA Iv	Max. pF	Neg. Cond. ‡	1-99	100-999
1N3712(TD-1)	1.0	0.18	10	8 typ.	3.30	2.20
1N3713(TD-1A)	1.0*	0.14	5	8.5 ±1	5.00	3.30
1N3714(TD-2)	2.2	0.48	25	18 typ.	2.90	1.95
1N3716(TD-3)	4.7	1.04	50	40 typ.	2.25	1.50
1N3717(TD-3A)	4.7*	0.60	25	41 ±5	3.90	2.60
1N3718(TD-4)	10.0	2.20	90	80 typ.	2.25	1.50
1N3719(TD-4A)	10.0*	1 40	50	65 ±10	3.90	2.60
1N3720(TD-5)	22.0	4.80	150	180 typ.	1.60	1.05

GERMANIUM TUNNEL DIODES — ULTRA HIGH SPEED SWITCHING — DO-18

Type	Current mA. Ip 10%	Current mA. Iv	Max. pF	Typ. Rise Time in p/sec.	1-99	100-999
TD-251	2.2	0.31	3.0	430	7.50	5.00
TD-251A	2.2	0.31	4.0	160	12.00	8.00
TD-252	4.7	0.60	4.0	320	7.50	5.00
TD-252A	4.7	0.60	1.0	74	12.00	8.00
TD-253	10.0	1.40	9.0	350	6.00	4.00
TD-253A	10.0	1.40	5.0	190	9.00	6.00
TD-253B	10.0	1.40	2.0	68	12.00	8.00
TD-254A	22.0	3.80	4.0	64	12.00	8.00
TD-255	50.0	8.50	25.0	100	7.50	5.00
TD-255A	50.0	8.50	5.0	35	12.00	8.00
TD-256	100	17.50	35.0	57	7.50	5.00
TD-256A	100	17.50	6.0	22	12.00	8.00

GERMANIUM BACK DIODES — Fig. A

Subminiature axial package. *Vfl equal to 90 mv (±10 mU). †At If2 equal to 3 If1.

Type	Fwd. Rating If1* mA	Fwd. Rating V2†	Max. Rev. Peak Point Cur. mA	Min. Rev. Voltage Vr1. mV	1-99	100-999
BD-1	10.0	120	1.0	440	5.00	3.30
BD-2	5.0	130	0.5	420	5.00	3.30
BD-3	2.0	170	0.2	400	3.00	2.00
BD-4	1.0	170	0.1	380	5.00	3.30

LIGHT ACTIVATED SILICON CONTROLLED SWITCH — Fig. B (.230 x .225")

Type	PRV (V)	Ifwd (mA)	1-99	100-999
LIV/LACS	40	170	3.15	2.10

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

PHOTO TRANSISTOR LIGHT DETECTOR

Type	Vceo-Vcbo (v)	1-99	100-999
L14A502	45	6.00	4.00

ECONOMY PHOTO-DARLINGTON AMPLIFIER

Type	BVceo	Sensitivity	1-99	100-999
L14B	12 V Min.	250 μA/Watt Min.	1.45	.97

LIGHT ACTIVATED SCR'S — FIG. C

Max. required gate signal to fire from direct electrical supply is 0.8V 220 uA @ 25°C. Tj.

Type	PRV & Vbo (V)	Max. Idc @ °C	1-99	100-999
L8U	25	.44A @ 25° amb	4.50	3.00
L8F	50	.44A @ 25° amb	4.90	3.25
L9U	25	.44A @ 25° amb	4.95	3.30
L9F	50	.44A @ 25° amb	5.40	3.80

PULSED LASERS

Type	Max If	Wavelength A '	Power Dissip.	1-9
H1D1	200 Apk	9000	1.3	95.00

GERMANIUM LOW CURRENT RECTIFIERS — DO-3

Max. peak 1-hz surge, 25 amps. aver.

Type	PRV Volts	Max. Idc mA @ 55°C	Max. Rev. Cur.. mA	Max. Drop Volts @ Full Load	Max. Oper. Temp.	1-99	100-999
1N91	100	150	1.35	.22	95°C	.90	.60
1N92	200	100	0.95	.19	95°C	1.95	1.30
1N93	300	75	0.6	.18	95°C	2.70	1.80
1N368	200	100	.03†	.48	85°C	2.55	1.70

SILICON SUBMINIATURE GLASS RECTIFIER DIODES

Meet military requirements. Max. full load drop iv at 25°C. Max. oper. temp. 175°C for 1N645 series, 200° for 1N3544 series. *Full hz ave. † @ 150°C ‡ @ 175°C.

Type	PRV Volts Repetitive	PRV Volts Transient	Max. Idc mA at 25°C	Max. Rev. Cur. μA at 100°C*	1-99	100-999
1N645	225	275	400	15	1.40	.93
1N647	400	480	400	20	1.80	1.20
1N648	500	600	400	20	1.95	1.30
1N649	600	720	400	25	2.50	1.65
1N676	100	120	200	.2mA†	.93	.62
1N677	100	120	400	.2mA†	1.05	.70
1N681	300	360	200	.2mA†	1.53	1.02

SILICON LOW CURRENT FLANGELESS RECTIFIERS—Fig. E

Type	PRV Volts	Max. Idc mA	Max. Idc Amb. °C	Max. Full Load Drop V.	Max. Full Load Drop At °C	Max. Oper. Temp. °C	1-99	100-999
1N2610	100	850	25	.5	150	175	1.02	.68
1N2611	200	850	25	.5	150	175	1.14	.76
1N2612	300	850	25	.5	150	175	1.52	1.01
1N2613	400	850	25	.5	150	175	1.71	1.14
1N2614	500	850	25	.5	150	175	1.92	1.28
1N2615	600	850	25	.5	150	175	2.30	1.53
1N3189	200	1.0A	100*	1.0	25	175	2.70	1.80
1N3639	200	750	25	.6	100	100	.57	.38
1N3640	400	750	25	.6	100	100	.72	.48
1N3641	600	750	25	.6	100	100	1.05	.70
1N3642	800	500	25	.6	100	100	1.46	.97

*Low thermal tie point impedance

SILICON LOW CURRENT RECTIFIERS—DO-3

Type	PRV Volts	Max. Idc mA	Max. Idc Amb. °C	Max. Full Load Drop V.	Max. Full Load Drop At °C	Max. Oper. Temp. °C	1-99	100-999
1N440	100	300	50	1.5	25	150	.66	.44
1N440B	100	750	50	1.5	25	165	.66	.44
1N441	200	300	50	1.5	25	150	.69	.46
1N441B	200	750	50	1.5	25	165	.69	.46
1N442B	300	750	50	1.5	25	165	.79	.53
1N443	400	300	50	1.5	25	150	.98	.65
1N443B	400	750	50	1.5	25	165	.98	.65
1N445B	600	650	50	1.5	25	150	1.43	.95
1N536	50	750	50	1.1	25	165	.45	.30
1N537	100	750	50	1.1	25	165	.50	.33
1N538	200	750	50	1.1	25	165	.53	.35
1N539	300	750	30	1.1	25	165	.60	.40
1N540	400	750	25	1.1	25	165	.68	.45
1N547	600	750	25	1.1	25	165	.96	.64
1N560	800	600	25	1.1	25	150	1.50	1.00
1N599	50	600	25	1.5	200 mA	150	.47	.31
1N600	100	600	25	1.5	200 mA	150	.49	.33
1N600A	100	600	25	1.5	200 mA	150	.63	.42
1N603	300	600	30	1.5	200 mA	150	.60	.40
1N605	500	600	30	1.5	200 mA	150	.76	.51
1N1095	500	750	50	1.1	25	150	.77	.51
1N1096	600	750	50	1.1	25	150	.96	.64

CONTINUED NEXT COLUMN

SILICON LOW CURRENT RECTIFIERS — DO-3 (Cont'd)

Type	PRV Volts	Max. Idc mA	Max. Idc Amb. °C	Max. Full Load Drop V.	Max. Full Load Drop At °C	Max. Oper. Temp. °C	1-99	100-999
1N1487	100	750	25	1.2	25	140	.49	.33
1N1489	300	750	25	1.2	25	140	.60	.40
1N1490	400	750	25	1.2	25	140	.67	.45
1N1491	500	750	25	1.2	25	125	.76	.51
1N1492	600	750	25	1.2	25	120	.96	.64
1N1692	100	600	50	1.2	25	115	.45	.30
1N1693	200	600	50	1.2	25	115	.48	.32
1N1694	300	600	50	1.2	25	115	.56	.37
1N1695	400	600	50	1.2	25	115	.66	.44
1N1696	500	600	50	1.2	25	115	.72	.48

1-AMP GLASS PACKAGED SILICON RECTIFIER — Fig. G

All diffused structure; storage temperature, —65°C to +175°C

Type	PRV Volts	Fwd. Cur. Io	Max. ½ Hz. Surge	Max. V Drop @25°C	Max. Ir μA @ 25°C	1-99	100-999
A14F	50	1.0A	50A	1.0V	5	.37	.26
A14A	100	1.0A	50A	1.0V	5	.42	.28
1N5959/A14B	200	1.0A	50A	1.0V	5	.46	.31
A14C	300	1.0A	50A	1.0V	5	.54	.36
1N5060/A14D	400	1.0A	50A	1.0V	5	.56	.37
A14E	500	1.0A	50A	1.0V	5	.68	.45
1N5061/A14M	600	1.0A	50A	1.0V	5	.75	.50
1N5062/A14N	800	1.0A	50A	1.0V	5	1.12	.75

STUD-MOUNTED SILICON LAW CURRENT RECTIFIERS — Fig. I

Max. temp. 150°C. (*) 170°C (†) 155°C.

Type	PRV V.	Idc Max. Cur.	Idc Case °C	Load Drop V.	Load Drop At	1-99	100-999
1N1115*	100	1.5A	85	.65	150° C	1.05	.70
1N1116*	200	1.5A	85	.65	150° C	1.12	.75
1N1117*	300	1.5A	85	.65	150° C	1.43	.95
1N1119†	500	1.3A	85	.65	150° C	1.80	1.20
1N1120†	600	1.3A	85	.65	150° C	2.40	1.60

SILICON MEDIUM CURRENT DIODES-FAST RECOVERY—Fig. I

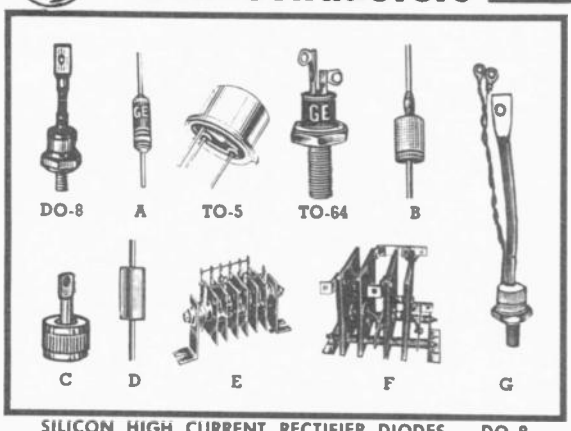
††3 microseconds max. recovery time; 150°C Stud.
†200 Nanoseconds max. recovery time; 100°C case
#100 Nanoseconds max. recovery time; 135°C case; § @ 25°C

Type	PRV Volts Repetitive	PRV Volts Transient	Max. Idc Amps	Max. Peak I-cy. Surge Amps	Max. Drop Full Load V.	1-99	100-999
IN3879R†	50	.....	6	75	1.4§	4.20	2.80
IN3889†	50	.....	12	150	1.4§	5.03	3.35
IN3891†	200	.....	12	150	1.4§	7.80	5.20

SILICON MEDIUM CURRENT RECTIFIERS — DO-4

Ins. kit with all but A40 and A44. Max. oper. temp.: 200°C except (§) 175°C.

Type	PRV Volts Repetitive	PRV Volts Transient	Max. Idc Amps	Max. Ihs Amps	Max. Drop V.	1-99	100-999
1N250A§	200	.....	20	350	1.5	2.48	1.65
1N250C§	220	.....	20	350	.6	2.78	1.85
1N1184	100	.....	35	500	.65	2.40	1.60
1N1186	200	.....	35	500	.65	3.45	2.30
1N1187	300	.....	35	500	.65	5.13	3.42
1N1188	400	.....	35	500	.65	5.85	3.90
1N1190	600	.....	35	500	.65	6.90	4.60
1N1196A§	400	.....	20	350	6.0U	4.95	3.30
1N1199A	50	100	12	240	.55	1.25	.83
1N1200A	100	200	12	240	.55	1.41	.94
1N1202A	200	350	12	240	.55	2.63	1.75
1N1206A	600	800	12	240	.55	6.38	4.25
1N1341A	50	100	6	150	.64	1.13	.75
1N1342A	100	200	6	150	.64	1.28	.85
1N1346A	400	600	6	150	.64	4.11	2.74
1N1348A	600	800	6	150	.64	5.93	3.95
1N1612	50	100	5	150	.64	1.08	.72
1N1614	200	350	5	150	.64	1.91	1.27
1N1615	400		5	150	.64	3.75	2.50
IN2154	50	100	25	400	.6	2.39	1.59
IN2155	100	200	25	400	.6	3.00	2.00
IN2156	200	350	25	400	.6	4.38	2.92
IN2157	300	450	25	400	.6	5.25	3.50
IN2158	400	600	25	400	.6	5.92	3.95
IN2159	500	700	25	400	.6	6.15	4.10
IN2160	600	800	25	400	.6	6.30	4.20
IN3208§	50	.....	15	250	1.5	1.73	1.15
IN3209§	100	.....	15	250	1.5	1.77	1.18
IN3211§	300	.....	15	250	1.5	2.40	1.60
IN3212§	400	.....	15	250	1.5	2.90	1.93
IN3569§	100	150	1.25	35	.5	1.34	.89
IN3570§	200	275	1.25	35	.5	1.62	1.08
IN3571§	300	400	1.25	35	.5	2.10	1.40
A40F§	50	.....	15	300	.75	1.73	1.15
A40B§	200	.....	15	300	.75	1.82	1.21
A40M§	600	.....	15	300	.75	4.20	2.80
A44B§	200	.....	15	300	.75	1.16	.77
A44C§	300	.....	15	300	.75	1.28	.85



SILICON HIGH CURRENT RECTIFIER DIODES — DO-8

Max. Idc, 100 amps at 130°C, stud, single phase. Max. 1-hz. surge, 1600 amps. Max. operating temp., 200°C.

Type	PRV Volts: Repetitive	PRV Volts: Transient	Max. Fwd. Drop at 100A, ave. 1-ph. 130°C	1-99	100-499
IN3290	300	400	0.6 volt	14.15	10.80
IN3291	400	525	0.6 volt	15.40	11.90

SILICON CONTROLLED AVALANCHE RECTIFIER DIODES

Self-protection against voltage transients. Can dissipate considerable power in reverse direction. Can be series operated at high voltage often without equalizing resistors.

Type	PRV	Min. Aval. V @ 25°C	Max. Idc.	1-99	100-999
A7G	150	200	500mA*	1.95	1.30
A7B	200	300	500mA*	1.95	1.30
A7E	500	600	500mA*	1.95	1.30
IN4528	800	1000	35A‡	12.30	8.20
IN4529	1000	1250	35A‡	13.50	9.00
IN4530	1200	1500	35A‡	17.25	11.50

*310 W, peak transient reverse surge, +1140W, ‡12Kw.

LOW CURRENT SCR'S

(§) at 25° junction. (*) at 125°C junction. (†) at 150°C junction.

Type	Fig.	PRV & Vbo Volts	Max. Irms Amps.	Max. Irms Temp. °C	Max. Req. Gate Sig. V	Max. Req. Gate Sig. Cur.	1-99	100-999
2N2322	TO-5	25	1.6	87 case	0.8	200μA§	3.00	2.00
2N2323	TO-5	50	1.6	87 case	0.8	200μA§	3.30	2.20
2N2324	TO-5	100	1.6	87 case	0.8	200μA§	5.40	3.60
2N2325	TO-5	150	1.6	87 case	0.8	200μA§	7.95	5.30
2N2326	TO-5	200	1.6	87 case	0.8	200μA§	10.35	6.90
2N2327	TO-5	250	1.6	87 case	0.8	200μA§	12.95	8.65
2N2328	TO-5	300	1.6	87 case	0.8	200μA§	16.00	10.65
2N2322A	TO-5	25	1.6	87 case	0.6	20μA§	3.60	2.40
2N2323A	TO-5	50	1.6	87 case	0.6	20μA§	4.00	2.65
2N2324A	TO-5	100	1.6	87 case	0.6	20μA§	6.60	4.40
2N2326A	TO-5	200	1.6	87 case	0.6	20μA§	12.40	8.25
2N2345	TO-5	50	1.6	58 case	0.8	20μA§	9.15	6.10
2N2346	TO-5	100	1.6	58 case	0.8	20μA§	13.35	8.90
2N2348	TO-5	200	1.6	58 case	0.8	1.0mA§	18.90	12.60
C6U	TO-5	25	0.6	25 Amb.	0.8	1.0mA§	1.57	1.05
C6F	TO-5	50	0.6	25 Amb.	0.8	1.0mA§	1.65	1.10
C6A	TO-5	100	0.6	25 Amb.	0.8	1.0mA§	1.87	1.25
C6G	TO-5	150	0.6	25 Amb.	0.8	1.0mA§	1.98	1.32
C6B	TO-5	200	0.6	25 Amb.	0.8	1.0mA§	2.07	1.38
C611U	.....	25	1.6	104 case	0.8	1.0mA§	2.10	1.40
C611F	.....	50	1.6	104 case	3.0	1.0mA§	2.20	1.45
C611A	.....	100	1.6	104 case	0.8	1.0mA§	2.40	1.60
C611G	.....	150	1.6	104 case	0.8	1.0mA§	2.50	1.67
C611B	.....	200	1.6	104 case	0.8	1.0mA§	2.60	1.73
2N1595	TO-5	50	1.6	88 case	0.8	10 mA§	3.00	2.00
2N1597	TO-5	200	1.6	88 case	3.0	10 mA§	9.35	6.25
C15F	TO-64	50	7	70 stud	2.5	25 mA§	1.88	1.25
C15A	TO-64	100	7	70 stud	2.5	25 mA§	2.10	1.40
C15G	TO-64	150	7	70 stud	2.5	25 mA§	2.14	1.45
C15B	TO-64	200	7	70 stud	2.5	25 mA§	3.75	2.50
2N1771	TO-64	50	6	70 stud	2	8 mA*	4.65	3.10
2N1771A	TO-64	50	7	115 stud	2	8 mA†	7.00	4.65
2N1772	TO-64	100	6	70 stud	2	8 mA*	5.77	3.85
2N1772A	TO-64	100	7	115 stud	2	8 mA†	9.00	6.00
2N1773	TO-64	150	6	70 stud	2	8 mA*	6.97	4.65
2N1773A	TO-64	150	7	115 stud	2	8 mA†	11.10	7.40
2N1774	TO-64	200	6	70 stud	2	8 mA*	8.17	5.45
2N1774A	TO-64	200	7	115 stud	2	8 mA†	13.50	9.00
2N1775A	TO-64	250	7	115 stud	2	8 mA†	15.75	10.50
2N1776A	TO-64	300	7	115 stud	2	8 mA†	18.40	12.25
2N1777A	TO-64	400	7	115 stud	2	8 mA†	23.65	15.75
C20F	.....	50	7.4	80 stud	1.5	25 mA§	1.77	1.18
C20A	.....	100	7.4	80 stud	1.5	25 mA§	1.92	1.28

CONTINUED NEXT COLUMN

LOW CURRENT SCR'S CONTINUED

Type	Fig.	Vbo Volts	Amps.	Temp. °C.	Gate Sig. V	Gate Sig. Cur.	1-99	100-999
C20B	.....	200	7.4	80 stud	1.5	25 mA§	1.98	1.32
C20C	.....	300	7.4	80 stud	1.5	25 mA§	2.64	1.76
C20D	.....	400	7.4	80 stud	1.5	25 mA§	3.00	2.00
C22U	C	25	7.4	80 stud	1.5	25 mA§	1.41	.94
C22F	C	50	7.4	80 stud	1.5	25 mA§	1.47	.98
C22A	C	100	7.4	80 stud	1.5	25 mA§	1.62	1.08
C22B	C	200	7.4	80 stud	1.5	25 mA§	1.68	1.12
C22C	C	300	7.4	80 stud	1.5	25 mA§	2.34	1.56
C22D	C	400	7.4	80 stud	1.5	25 mA§	2.70	1.80

2.0 AMPERE SILICON LOW CURRENT SCR'S

Type	PRV & Vbo	Max. Idc Amp.	Max. Temp. °C Oper.	Max. Temp. °C Stor.	Max. Req'd Gate Signal @ 25°C Tj	1-99	100-999
C106A1 C106A2 C105A3 C106A4	100	2.0	110°	125°	0.8V,200μA	1.13	.75
C106B1 C106B2 C106B3 C106B4	200	2.0	110°	125°	0.8V,200μA	1.28	.85
C106F1 C106F2 C106F3 C106F4	50	2.0	110°	125°	0.8V,200μA	1.05	.70
C106G1 C106G2 C106G3 C106G4	150	2.0	110°	125°	0.8V,200μA	1.23	.82
C106Y1 C106Y2 C106Y3 C106Y4	30	2.0	110°	125°	0.8V,200μA	.90	.60

SILICON MEDIUM CURRENT CONTROLLER RECTIFIERS TO-64 AND FIG. C*

Type	Vbo Volts	A.	At °C Stud	Gate Signal V.	Gate Signal mA	Gate Signal Tj	1-99	100-999
2N681	25	25	18	3	40	25°C	3.30	2.20
2N682	50	25	57	3	25	125°C	4.10	2.75
2N683	100	25	57	3	25	125°C	5.60	3.75
2N685	200	25	57	3	25	125°C	6.60	4.40
2N686	250	25	57	3	25	125°C	6.95	4.65
2N687	300	25	57	3	25	125°C	14.60	9.75
2N688	400	25	57	3	25	125°C	17.10	11.40
2N689	500	25	57	3	25	125°C	20.60	13.75
2N692	800	25	57	3	25	125°C	36.00	24.00
2N3649	50	25	40	Fast Turnoff of 15 u sec		25°C	9.85	6.55
2N3650	100	25	40			25°C	10.75	7.15
2N3651	200	25	40			25°C	15.30	10.20
2N3652	300	25	40			25°C	23.10	15.40
2N3653	400	25	40			25°C	28.05	18.70
2N1846	200	16	25	3.5	50	100°C	5.78	3.85
2N1848	300	16	25	3.5	50	100°C	11.65	7.75
C36N	800	16	25	3.5	50	100°C	30.00	20.00
2N1847A	250	25	40	3.5	80	25°C	6.60	4.40
2N1850A	500	25	40	3.5	80	25°C	18.40	12.25
C37B	200	16	60	3.5	80	25°C	5.75	3.85
C38B	200	35	57	3	40	25°C	19.50	13.00
C38D	400	35	57	3	40	25°C	34.15	22.75
C40G	150	25	57	guar. 12 μsec or less turn off time			14.50	9.65
C40B	200	25	57				17.40	11.60
C141A	500	25	40	Designed specifically for fast turn-off of 10μ sec. For inverter applic.			10.35	6.90
C141B	100	25	40				11.25	7.50
C141C	200	25	40				16.10	10.70
C141D	300	25	40				24.20	16.10
C141F	400	25	40				29.25	19.50
C30A	100	25	70	1.5	25	25°C	4.95	3.30
C30B	200	25	70	1.5	25	25°C	5.75	3.85
C31B	200	25	70	1.5	9	25°C	6.45	4.30
C30C	300	25	70	1.5	25	25°C	7.40	4.95
C31C	300	25	70	1.5	9	25°C	8.10	5.40
C30D	400	25	70	1.5	25	25°C	9.35	6.25
C31D	400	25	70	1.5	9	25°C	10.25	6.85
C32U*	25	25	70	1.5	25	25°C	3.35	2.25
C32F*	50	25	70	1.5	25	25°C	3.75	2.50
C32A*	100	25	70	1.5	25	25°C	4.55	3.05
C32B*	200	25	70	1.5	25	25°C	5.40	3.60
C32C*	300	25	70	1.5	25	25°C	7.05	4.70
C33C*	300	25	70	1.5	9	25°C	7.70	5.15
C32D*	400	25	70	1.5	25	25°C	9.00	6.00
C33D*	400	25	70	1.5	9	25°C	9.90	6.60
C137M	600	35	18	Designed		25°C	37.50	25.00
C137N	800	35	18	For		25°C	48.00	32.00
C137P	1000	35	18	Power		25°C	66.50	44.30
C137PB	1200	35	18	Switch.		25°C	93.50	62.30

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HIGH CURRENT SCR'S — FIG. G

Type	Vbo Volts	Max. Irms A	Max. Irms @° Stud	V Gate Signal	1-24	25-99
C45E	500	55	84	3	60.25	47.15
C50A/2N1911	100	110	60	3	28.80	22.30
C50N	800	110	60	3	145.00	112.00
C150M	600	110	70	3	117.00	91.80
C150P	1000	110	70	3	244.00	191.00
C150PC	1200	110	70	3	373.00	292.00
C155A	100	110	60	....	43.00	33.70
C155C	300	110	60	....	75.90	59.40
C155E	500	110	60	....	121.00	94.50
C180A	100	235	80	3	82.50	70.50
C180E	500	235	80	3	176.00	149.00
C180N	800	235	80	3	292.00	248.00
C180P	1000	235	80	3	364.00	310.00
C180PB	1200	235	80	3	450.00	382.00
C185A	100	235	80	3	99.00	84.50
C185C	300	235	80	....	144.00	130.00
C185E	500	235	80	....	211.00	179.00
C290M	600	470	63	3.5	262.00	224.00
C290PB	1200	470	63	3.5	582.00	500.00
					1-99	100-999
C145E	500	55	87	3	46.00	34.50
C145M	600	55	87	3	54.00	40.50
C145N	800	55	87	3	75.50	56.60
C145P	1000	55	87	3	106.00	79.50
C145PA	1100	55	87	3	124.00	93.00
C145PB	1200	55	87	3	144.00	108.00

TRIAC — BI DIRECTIONAL TRIODE SWITCHES — FIG. C

Type	VBV (V)	Load Current @ Temp.	Gate Signal @ 25°C Tj	1-99	100-999
SC40F	± 50	6A@75°C Case	±3V @ ±50mA	2.64	1.76
SC40A	±100	6A@75°C Case	±3V @ ±50mA	2.84	1.89
SC40B	±200	6A@75°C Case	±3V @ ±50mA	3.03	2.02
SC40E	±500	6A@75°C Case	±3V @ ±50mA	4.31	2.87
SC41F	± 50	6A@75°C Case	±3V @ ±50mA	2.19	1.46
SC41A	±100	6A@75°C Case	±3V @ ±50mA	2.39	1.59
SC41B	±200	6A@75°C Case	±3V @ ±50mA	2.58	1.72
SC41E	±500	6A@75°C Case	±3V @ ±50mA	3.86	2.57
SC45F	± 50	10A@75°C Case	±3V @ ±50mA	3.38	2.25
SC45A	±100	10A@75°C Case	±3V @ ±50mA	3.65	2.43
SC45B	±200	10A@75°C Case	±3V @ ±50mA	3.93	2.62
SC45E	±500	10A@75°C Case	±3V @ ±50mA	5.64	3.76
SC46F	± 50	10A@75°C Case	±3V @ ±50mA	2.93	1.95
SC46A	±100	10A@75°C Case	±3V @ ±50mA	3.20	2.13
SC46B	±200	10A@75°C Case	±3V @ ±50mA	3.48	2.32
SC46E	±500	10A@75°C Case	±3V @ ±50mA	5.19	3.46
SC40D	±400	6A@75°C Case	±3V @ ±50mA	3.86	2.57
SC41D	±400	6A@75°C Case	±3V @ ±50mA	3.41	2.27
SC45D	±400	10A@75°C Case	±3V @ ±50mA	4.98	3.32
SC46D	±400	10A@75°C Case	±3V @ ±50mA	4.53	3.02
SC50F	± 50	15A@75°C Case	±3V @ ±50mA	5.00	3.33
SC50A	±100	15A@75°C Case	±3V @ ±50mA	5.40	3.60
SC50B	±200	15A@75°C Case	±3V @ ±50mA	5.80	3.87
SC50D	±400	15A@75°C Case	±3V @ ±50mA	7.40	4.93
SC50E	±500	15A@75°C Case	±3V @ ±50mA	8.50	5.67
SC51F	± 50	15A@75°C Case	±3V @ ±50mA	4.55	3.03
SC51A	±100	15A@75°C Case	±3V @ ±50mA	4.95	3.30
SC51B	±200	15A@75°C Case	±3V @ ±50mA	5.36	3.57
SC51D	±400	15A@75°C Case	±3V @ ±50mA	6.93	4.63
SC51E	±500	15A@75°C Case	±3V @ ±50mA	8.05	5.37

STANDARD TRIAC POWER CONTROL ASSEMBLIES

Type	VRMS	Max. Amps.	Description	1-99	100-999
S100A1	120	6	Basic Variable Voltage	6.90	4.60
S100A2	240	6		8.55	5.95
S100A3	120	10		7.45	4.95
S100A4	240	10		9.85	6.55
S100B1	120	6	Ext. Large Variable Voltage	7.80	5.20
S100B2	240	6		9.75	6.50
S100B3	120	10		8.35	5.55
S100B4	240	10		10.70	7.15
S100C1	120	6	Ext. Large Variable Voltage with RFI Suppression	8.80	5.85
S100C2	240	6		10.80	7.20
S100C3	120	10		9.30	6.20
S100C4	240	10		11.70	7.80
S100D1	120	6	Combined Variable Voltage and Static Switch	8.20	5.45
S100D2	240	6		10.20	6.80
S100D3	120	10		8.70	5.80
S100D4	240	10		11.20	7.45
S100E1	120	6	Blower Speed Control wtih set low speed	8.80	5.85
S100E2	240	6		10.80	7.20
S100E3	120	10		9.30	6.20
S100E4	240	10		11.70	7.80
S100F1	120	6	Basic Variable Voltage with RFI Suppression	8.20	5.45
S100F2	240	6		10.20	6.80
S100F3	120	10		8.70	5.80
S100F4	240	10		11.20	7.45
S100G1	120	6	AC Static Switch	5.70	3.80
S100G2	240	6		7.75	5.15
S100G3	120	10		6.25	4.15
S100G4	240	10		8.65	5.75

ZERO-VOLTAGE SWITCHING AC POWER CONTROLLERS

Type	VPMS (60hz)	Min-(Max)	Line Voltage (Peak)	Power Dissipation (Max. Watts)	1-99	100-999
S200A1	120	4.2-10	200	15.0	18.00	12.00
S200A2	240	4.2-10	400	17.8	20.90	13.95
S200A3	120	4.2-15	200	21.8	20.30	13.55
S200A4	240	4.2-15	400	23.6	24.75	16.50

DIAC — BI-DIRECTIONAL TRIGGER DIODE

For gate trigger of TRIA's or SCR's .°10 μ sec. duration, 120 Hz rep. rate.

Type	VBV (V) Min. Max.	IBR μA	Peak Current @ 50°C amb	1-99	100-999
ST2	±28 ±36	±200 Max.	±2A Max.*	1.02	.68

SILICON AVALANCHE ZENER DIODES — FIG. B

Tolerance ±10% of voltage listed; for ±5%, order same type with suffix A (e.g. 1N1776A).

Type	Nom. Vzt @ Izt	Max. Dyn. Imped., Ohms (Zzt) @ Izt	Typ. Temp. Coef., % Voltage Reg./°C	1-99	100-999
Z4X5.1B	5.1	7.0	0.013	2.40	1.60
1N1766	6.2	1.5	.030	2.40	1.60
1N1771	10.0	3.5	.062	3.00	2.00

LOW COST 1 WATT SILICON ZENER DIODES — FIG. B

Axial lead all welded package. Test current IZT 20 mA Specs at 25° C. Tolerance ±20% of voltage listed, for ±10%, order same type with suffix B (e.g. Z4XL6-2B).

Type	Vzt @ Izt	Max. Dyn. Imp. Zzt. @ Izt.	Temp. Coef. % °C Typ.	Max. Izm mA @ 50°C Amb.	1-99	100-999
Z4XL6.2	6.2	9 ohm	.030	123	.75	.50
Z4XL7.5	7.5	12 ohm	.044	101	.75	.50
Z4XL9.1	9.1	15 ohm	.056	83	.75	.50
Z4XL12	12.0	24 ohm	.071	63	.75	.50
Z4XL14	14.0	30 ohm	.077	54	.75	.50
Z4XL16	16.0	40 ohm	.082	47	.75	.50
Z4XL18	18.0	50 ohm	.085	43	.75	.50
Z4XL20	20.0	60 ohm	.088	38	.75	.50
Z4XL22	22.0	72 ohm	.090	34	.75	.50

RECTIFIER STACKS

FIGS. E AND F

GERMANIUM LOW CURRENT STACKS

TYPE 4JA211

Small and lightweight, with excellent regulation. May be arranged in stacks of up to 12 fins for more than 160 various circuit configurations. Output up to 6 amps at 55° C ambient. Up to 630 PRV.

SILICON LOW CURRENT STACKS

TYPE 4JA411, 4JA1011

High temperature operation, up to 150° C. Ratings up to 18 amps at 25° C ambient, up to 3360 PRV. Offer high efficiency plus excellent regulation. Hundreds of stack combinations for a variety of circuit conditions. 4JA10011 35 amp. one cycle surge rating.

SCR COMBINATION STACKS

Packaged building blocks include silicon controlled rectifiers, compatible rectifiers, heat sinks, interconnections and all hardware. Installation requires only mounting bolts and connections.

SERIES C3512 and 13, C4012 and 13, C1012 and 13, C1112 and 13, C1212 and 13

Rated up to 13.65 amps per fin free convection cooled, up to 23.5 amps per fin forced cooled at 25° C ambient. In two fin sizes, 3"x3: and 5"x5", and five SCR types.

SERIES C15014, C18015

Provide up to 102 amps per fin free convection cooled at 30° C ambient. Specially designed aluminum extrusion for maximum **heat dissipatlon when used with C150 or C180, SCR. Available in hundreds of circuit configurations.**

SILICON MEDIUM CURRENT STACKS WITH 5" FIN

TYPE 4JA3512

Square fin assembly for optimum use of 1N2154 series, 25 amp cell. Provides wide range of power applications with DC outputs up to 108 amps at 55° C ambient, up to 1800 PRV.

SILICON MEDIUM CURRENT STACKS

TYPES 4JA2011, 4JA2511, 4JA3511

For wide range of power applications. Type 4JA2011 provides up to 32 amps at 55° C ambient, up to 1800 PRV. Type 4JA2511 gives up to 50 amps at 55° C ambient, up to 1800 PRV. Type 4JA3511 gives up to 65 amps at 55° C ambient, up to 1800 PRV.

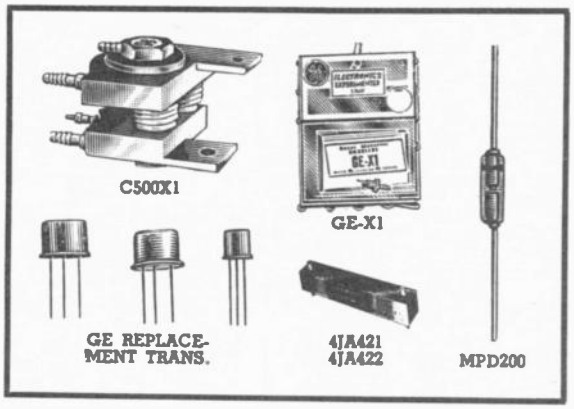
SILICON HIGH CURRENT STACKS

TYPE 4JA7012, 4JA7013

Lightweight stacks provide up to 165 amps DC at 40° C ambient up to 1000 PRV. Type 4JA7012 uses 5"x5"x⅛" flat copper fin heat sink. Type 4JA7013 has 7"x7"x⅜" flat aluminum fin.

For Ordering Information Concerning G.E. Rectifier Stocks See Following Page

CONTINUED NEXT PAGE



RECTIFIER STACKS CONTINUED
TYPES 4JA7014, 4JA9015

Designed for free convection cooled applications which require a maximum amount of current in a relatively small space. Fin is anodized aluminum, 4" x 4" x 5".

TYPE 4JA9013

DC outputs up to 420 amps at 40° C ambient, up to 1000 PRV Free convection cooled with 7" x 7" x 3/8".

TYPES 4JA421, 4JA422 POTTED RECTIFIER CIRCUITS

Rectangular design with solder lug. Available in wide variety of circuit configurations. Use Types 1N536-540, 1N1095 silicon cells.

Type	Current up to	Ambient Temp.	PRV. up to
4JA421	0.65 amp	25° C	10,000
4JA422	1.50 amps	25° C	2,000

TYPES A723 AND A725 HIGH VOLT SERIES

A7 Controlled Avalanche Rectifiers available in convenient pre-assembled, potted assemblies with wire lead terminals. Available up to 10,000 PRV. Up to 820 ma at 50°C ambient. Self-protected against normal voltage transients. Available in many circuit configurations. Type A723 is rectangular block series. A725 is axial lead cartridge series.

Ordering rectifier stacks: order by series type number (e.g. 4JA1011) and include required current, voltage, transient voltage, max. ambient temp., phases, circuit configurations, and load. SCR series specify connection and/or supply circuit diagram.

THYRECTOR DIODES, TRANSIENT VOLTAGE SUPPRESSORS

Type	Max. RMS Input V.	Pk. Amps 0.1 ms	L. In.	1-49	50-999
6RS20SP1B1	30	20	15/16	.69	.52
6RS20SP2B2	60	20	15/16	.80	.60
6RS20SP3B3	90	20	15/16	.91	.69
6RS20SP4B4	120	20	15/16	1.03	.78
6RS20SP5B5	150	20	15/16	1.15	.87
6RS20SP6B6	180	20	1 3/64	1.26	.95
6RS20SP7B7	210	20	1 3/64	1.38	1.04
6RS20SP8B8	240	20	1 3/64	1.50	1.13
6RS20SP9B9	270	20	1 3/64	1.62	1.22
6RS20SP10B10	300	20	1 3/64	1.73	1.31
6RS21SA1D1	25	30	1 1/4	1.87	1.33
6RS21SA2D2	50	30	1 5/16	2.00	1.45
6RS21SA3D3	75	30	1 3/8	2.20	1.63
6RS21SA4D4	100	30	1 1/2	2.38	1.70
6RS21SA5D5	125	30	1 9/16	2.55	1.85
6RS21SA6D6	150	30	1 5/8	2.75	1.97
6RS21SA7D7	175	30	1 3/4	2.90	2.10
6RS21SA8D8	200	30	1 13/16	3.10	2.25
6RS21SA9D9	225	30	1 7/8	3.30	2.40
6RS21SA10D10	250	30	1 15/16	3.47	2.55
6RS21SA11D11	275	30	2 1/16	3.65	2.70
6RS21SA12D12	300	30	2 1/8	3.85	2.88
6RS21SA20D20	500	30	2 3/4	5.25	4.30

UNIVERSAL REPLACEMENT TRANSISTORS

Highly dependable low cost transistors which are designed as general replacements for most types of transistors used in radio and Hi-Fi sets. Av. Wt., 2 oz.

Type	Use	Application	NET
GE-1	PNP	Mixer/oscillator converter.RF and IF amplifier	1.20
GE-2	PNP	AF Amplifier	1.02
GE-3	PNP	AF power amplifier	2.34
GE-4	PNP	AF high power amplifier	4.44
GE-5	NPN	Mixer/oscillator converter.RF and IF amplifier	1.68
GE-6	NPN	Mixer/oscillator converter.RF amplifier	1.83
GE-7	NPN	IF amplifier	1.77
GE-8	NPN	AF amplifier	1.29
GE-9	PNP	Mixer/oscillator converter.RF and IF amplifier	1.26
GE-10	NPN	AM Amplifier, Driver Output	1.20
GE-11	NPN	TV, FM, IF amplifier & UHF oscillator	1.53

GE-504A UNIVERSAL RECTIFIER—DO-3

A silicon rectifier with a 60 amp surge rating. PRV is 600 volts; max. Idc, lamp. Shpg. wt., 2 oz.

Type GE504A. NET ..... **.66**

EXPERIMENTAL/HOBBYIST ELECTRONIC COMPONENTS

Featuring electronic components for the experimenter, with schematic diagrams for building battery charger, tachometer, SGR ignition system, flashers, stereo amplifier, all-band receiver, plug-in speed control for tool or appliances, light dimmer, and other items. Most of these projects are described in the new Electronic Components Hobby Manual listed below.

Type	DESCRIPTION	Net
GE-X1	SILICON CONTROLLED RECTIFIER. 117-volt solid state switch. Controls up to 4.7 amps.	2.60
GE-X2A	LIGHT ACTIVATED POWER switch. It will conduct up to 1/4 ampere, up to 25 volts.	2.80
GE-X3	HIGH CURRENT SILICON CONTROLLED RECTIFIER. For up to 13 amps @ 50 PIV.	4.00
GE-X4	CONVENTIONAL HIGH CURRENT SILICON RECTIFIER. 20 amp rating. For up to 200 PIV.	1.60
GE-X5	HIGH SENSITIVITY SILICON CONTROLLED RECTIFIER. For special circuits up to 1.6 amps and 50 volts. Activated by extremely low signal power (a momentary sig. power of 200 micro watts or less).	2.30
GE-X6	PHOTO CONDUCTIVE CELL. Cadmium sulfide end-illuminated. Up to 250V peak. AC/DC.	1.40
GE-X7	REED SWITCH. Carries from 15 volt-amperes to micro-amps. External magnetic acuation.	.80
GE-X8	MED. SPEED, NPN TRANSISTOR. Germanium. For low level switching and amp.	.70
GE-X9	MED. SPEED, PNP TRANSISTOR. Germanium alloy. For medium powe ramplification and switching at low frequency.	.70
GE-X10	UNIJUNCTION TRANSISTOR. Three-terminal semiconductor. Has low value of firing current, stable negative resistance, stable firing current, high pulse current capability.	1.35
GE-X11	ZENER DIODE. Rated 8.2 volts at 1 watt.	1.80
GE-X12	TRIAC—With schematic for building remote control for appliances.	4.50
GE-X13	DIAC—With schematic for building lamp dimmer or AC motor control.	1.60
GE-X14	THYRECTOR—With schematic for building dual voltage power supply.	1.15
GE-X15	THERMISTOR—With schematic for building adj. temp. alarm.	3.45
GE-X16	SILICON CONTROLLED RECTIFIER — With schematic for building battery-operated fluorescent light.	3.45
2N107	AUDIO PNP TRANSISTOR. Alloy junction.	.75
	AUDIO PNP TRANSISTOR. Low voltage, high frequency transistor.	.75
2N170	UNIJUNCTION TRANSISTOR.	1.02
C2	10,000 T #39 Wire-825Ω.	1.60

GE MANUALS

GE Controlled Rectifier Manual—Third Edition; detailed data.
52F674. NET **2.00**

GE Transistor Manual—Seventh Edition; full of information.
52F675. NET **2.00**

Electronic Components Hobby Manual. 199 pages, covers fundamentals, electrical theory, troubleshooting, device symbols and 35 projects for your car, entertainment, home and workshops.
52F678. NET **1.50**

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

GENERAL ELECTRIC

ECONOMY PLASTIC ENCAPSULATED TRANSISTORS — PLANAR PASSIVATED

General Electric Transistor Industrial Kit No. D16KT1300. Ideal for prototype design at roughly one-third the cost. Contains 106 transistors from 10 transistor families and includes 26 different types: 2N2926, 2N3391-94, 2N3402, 2N3414-16, 2N3605-07, 2N3662-63, 2N3854A-56A, 2N3858A-59A, 2N3860, 2N3877-77A, 2N3975-76 D16U3/D16U4. Four of each type except eight of 2N2926. Complete with printed specifications.

D16KT1300. NET **25.00**

SILICON MULTI-PELLET DIODES

Planar epitaxial passivated with tightly controlled conductance, controlled stored charge, and low leakage. Two, three or four pellets mounted in series in a subminiature double heatsink package. Useful as low voltage regulator diodes, amplifier non-linear bias elements, signal limiters or level shifting diodes in transistor logic circuits, and DC coupling devices in DC amplifiers and digital circuits such as multivibrators. Max. reverse current 30 volts at 25° C nA: 30. Min. breakdown at 5 uA V. MPD200—30; MPD300—60; MPD400—90.

Type	Forward Voltage @0.010 mA	Forward Voltage @100 mA	Stored Charge at 1 mA Min. pC	Stored Charge at 1 mA Max. pC	1-99	100-999
MPD200	0.90-1.00	1.60-1.76	75	400	1.21	.81
MPD300	1.40-1.54	2.40-2.65	75	400	1.49	.99
MPD400	1.82-2.01	3.16-3.49	60	300	1.62	1.08

SOLID STATE AC SWITCH

Economical solid state control of AC power. Water cooled C500X1 switches 1.5 megawatt loads. Blocking Volts: 1800 Max. Avg Power Watts: 1850.

Type	I rms AMP	Peak I. 1 Hz Surge	Water Flow gpm	1-9	10-24	25-Up
C500X1	1200	7000	1	1000.00	750.00	500.00

35 AMP SILICON CONTROLLED RECTIFIERS

Type No.	Amps.	1-99	100-999
C35U	35	6.50	2.20
C35F	35	7.30	4.85
C35A	35	8.05	5.35
C35B	35	11.10	7.40
C35D	35	17.10	11.40

STANDARD TRIAC SUB-ASSEMBLIES

Power control circuits ready-to-use. Sub-assemblies can be built or added for control of incandescent lights, motors, resistance heaters, etc. Use of these sub-assemblies offers quick solutions to control problems without investment in engineering time. Each sub-assembly is 2 inches high, and 3 inches long complete with electrically isolated heatsink. *RFI suppressed.

Type	Description	Cur./Volt. Amp./V.	1-99	100-999
S100A1	Basic Variable	6/120	6.90	4.60
S100A2	Voltage Control	6/240	8.95	5.95
S100A3	Resistance	10/120	7.45	4.95
S100A4	Heat Control	10/240	9.85	6.55
S100B1	Extended Range	6/120	7.80	5.20
S100B2	Variable Voltage	6/240	9.75	6.50
S100B3	Circuit	10/120	8.35	5.55
S100B4		10/240	10.70	7.15
S100C1	Extended Range	6/120	8.80	5.85
S100C2	Variable Voltage	6/240	10.80	7.20
S100C3	Circuit*	10/120	9.30	6.20
S100C4		10/240	11.70	7.80
S100D1	Combination	6/120	8.20	5.45
S100D2	Variable Voltage	6/240	10.20	6.80
S100D3	Circuit and	10/120	8.70	5.80
S100D4	Static Switch*	10/240	11.20	7.45
S100E1	Blower Motor	6/120	8.80	5.85
S100E2	Speed Control	6/240	10.80	7.20
S100E3	with Set Low	10/120	9.30	6.20
S100E4	Speed*	10/240	11.70	7.80
S100F1	Basic Variable	6/120	8.20	5.45
S100F2	Voltage Circuit	6/240	10.20	6.80
S100F3	with RFI	10/120	8.70	5.80
S100F4	Suppression*	10/240	11.20	7.45
S100G1		6/120	5.70	3.80
S100G2	AC Static Switch	6/240	7.75	5.15
S100G3		10/120	6.25	4.15
S100G4		10/240	8.65	5.75

NEWARK

YOUR ONE POINT SOURCE

SPRAGUE

SPAT PNP CHOPPERS—SILICON

Junct. Temp. 140°C

Type	Case	Veb	—Veco (volts)	Pd @ 25°C	—Ic (mA)	1-99	100-999
2N2164	TO-5	12V	8	150mW	50	7.40	5.50
2N2165	TO-5	30V	30	150mW	50	5.70	4.25
2N2185	TO-18	30V	30	150mW	50	15.00	11.00
2N2280	TO-18	10V	6	150mW	50	4.50	3.30
2N3317	TO-18	30V	30	150mW	50	12.75	9.45
2N3318	TO-18	15V	15	150mW	50	7.40	5.50
2N3319	TO-18	10V	6	150mW	50	3.75	2.80

SPAT PNP SWITCH & AMPLIFIERS—SILICON

Type	Case	Junction	—Vcb (volts)	—Vce (volts)	Pd @ 25°C	—Ic (mA)	1-99	100-999
2N1118	TO-5	140°C	25	25	150mW	50	11.15	8.25
2N861	TO-18	140°C	25	25	150mW	50	6.00	4.40
2N863	TO-18	140°C	15	15	150mW	50	4.50	3.30
2N864	TO-18	140°C	6	6	150mW	50	5.70	4.25
2N865	TO-18	140°C	10	6	150mW	50	8.25	6.05
2N2377	TO-18	140°C	25	25	150mW	50	11.15	8.25
2N2378	TO-18	140°C	10	10	150mW	50	11.15	8.25

SEPT PLANAR—CHOPPERS SWITCHES & AMPLIFIERS—SILICON

Type	Structure	Case	BVceo V	BVebo V	Voff mV	V5 (ohms)	1-99	100-999
2N2330	NPN	TO- 5	30	5	0.75	....	4.35	2.90
2N2331	NPN	TO-18	30	5	0.75	....	4.35	2.90
2N2944	PNP	TO-46	15	15	6	20	5.50	3.68
2N2945	PNP	TO-46	25	25	1	35	5.00	3.35
2N2946	PNP	TO-46	40	40	2	45	5.50	3.68
2N3217	PNP	TO-46	15	15	1.25	20	2.55	1.70
2N3218	PNP	TO-46	25	25	1.5	35	2.25	1.50
2N3219	PNP	TO-46	40	40	2.5	45	2.55	1.70
2N3977	PNP	TO-46	15	15	1.25	20	3.30	2.20
2N3978	PNP	TO-46	25	25	1.5	35	3.00	2.00
2N3979	PNP	TO-46	40	40	2.5	45	3.30	2.20

NPN DIFFERENTIAL AMPLIFIERS — SILICON

Type	Structure	BVcbo V	Case 6 Lead	hFE @ Ic min.	hFE @ Ic max.	hFE @ Ic µA	hFE1 hFE2	1-99	100-499
2N2480	NPN	75	TO-5	20	....	100	20%	12.00	8.00
2N2642	NPN	45	TO-5	100	300	10	10%	25.50	17.00
2N2903	NPN	60	TO-5	60	....	10	10%	15.00	10.00

ECDC & MADT PNP HIGH SPEED SWITCHES—GERMANIUM

Type No.	Case	Junction Temp.	Vcb (volts)	Pt (mW)	Ic (mA)	1-99	100-999
2N501	TO-1	15	—	60mW	50	6.35	4.65
2N769	TO-18	12	—	35mW	100	6.75	4.95
2N779A	TO-18	15	—	60mW	100	3.50	2.55
2N976	TO-18	15	10	100mW	100	4.35	3.20
2N982	TO-18	20	15	60mW	100	3.65	2.70
2N984	TO-18	15	10	60mW	100	1.00	.75
2N1499A	TO-9	20	—	60mW	100	1.40	1.05
2N1500	TO-9	15	—	60mW	50	6.95	5.10
2N1754	TO-9	13	—	50mW	100	1.35	.95
2N2048	TO-9	20	15	150mW	100	1.80	1.32
2N2400	TO-18	12	7	150mW	100	1.25	.95
2N2401	TO-18	15	10	150mW	100	1.45	1.05
2N2402	TO-18	15	12	150mW	100	2.25	1.65
2N3320	TO-18	15	10	75mW	100	3.50	2.60
2N3321	TO-18	12	7	75mW	100	2.25	1.65

MADT PNP COMMUNICATIONS TYPES—GERMANIUM

2N502	TO-9	85°C	20	60	100	2.90	2.15
2N502A	TO-9	100°C	30	75	100	3.45	2.50
2N502B	TO-9	100°C	30	75	100	3.75	2.80
2N588	TO-1	85°C	15	30	50	1.45	1.05
2N1726	TO-9	100°C	20	60	50	1.15	.85
2N1727	TO-9	100°C	20	60	50	1.00	.75
2N1745	TO-9	100°C	20	60	50	1.80	1.32
2N1728	TO-9	100°C	20	60	50	1.10	.80
2N1747	TO-9	100°C	20	60	50	1.00	.75
2N1748	TO-9	100°C	25	60	50	1.05	.80
2N1748A	TO-9	100°C	25	60	50	1.15	.85
2N1749	TO-9	100°C	40	75	10	1.45	1.05

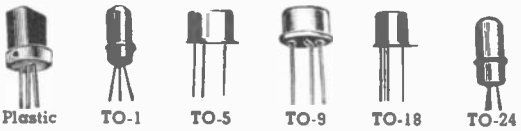
MAT & SBT PNP SWITCH—GERMANIUM

Type No.	Case	Junction	Vcb (volts)	Pt (mW)	Pd @ 25°C	Ic (mA)	1-99	100-999
2N231.	TO-24	85°C	4.5	4.5	9mW	3	1.15	.85
2N344	TO-24	85°C	5	5	20mW	5	3.45	2.50
2N345	TO-24	85°C	5	5	20mW	5	4.35	3.15
2N346	TO-24	85°C	5	5	20mW	5	5.85	4.25
2N393	TO-24	100°C	6	6	25mW	50	4.35	3.15

NEWARK—For Dependable Service

SPRAGUE
THE MARK OF RELIABILITY

Transistors



SEPT PLANAR LOW LEVEL—LOW NOISE AMPLIFIERS—SILICON

Type Number	Case TO-	Structure	Vcbo	hFE @ Ic Min	hFE @ Ic Max.	hFE @ Ic μA	NF db (max.)	1-99	100-999
2N4383	5	NPN	40	100	500	10	2	1.35	.90
2N4384	18	NPN	40	100	500	10	2	1.35	.90
2N4385	5	NPN	40	40	500	10	3	.85	.56
2N4386	18	NPN	40	40	500	10	3	.85	.56
2N4412	5	PNP	40	100	500	10	2	2.00	1.35
2N4412A	5	PNP	60	100	500	10	2	2.15	1.45
2N4413	18	PNP	40	100	500	10	2	2.00	1.35
2N4413A	18	PNP	60	100	500	10	2	2.15	1.45
2N4414	5	PNP	40	40	500	10	2	1.25	.85
2N4414A	5	PNP	60	40	500	10	2	1.40	.95
2N4415	18	PNP	40	40	500	10	2	1.25	.85
2N4415A	18	PNP	40	40	500	10	2	1.40	.95

SEPT — NPN PLANAR EPITAXIAL HIGH SPEED — SILICON

Type	Case TO-	Pd (W)	BVcbo V	hFE @ Ic=150mA	Vce (max)	1-99	100-999
2N2218	5	0.8	60	40-120	0.4	1.07	.93
2N2218A	5	0.8	75	40-120	0.3	3.75	2.50
2N2219	5	0.8	60	100-300	0.4	1.07	.93
2N2219A	5	0.8	75	100-300	0.3	4.35	2.90
2N2220	18	0.5	60	20-60	0.4	3.35	2.25
2N2221	18	0.5	60	40-120	0.4	1.07	.93
2N2221A	18	0 5	75	40-120	0 3	3.75	2.50
2N2222	18	0 5	60	100-300	0.4	1.07	.93
2N2222A	18	0 5	75	100-300	0.3	4.35	2.90
2N2477	5	0.6	60	40	0.4	3.30	2.20
2N2538	5	0 8	60	100-300	0.45	5.85	3.90
2N2845	18	0.36	60	30-120	0.4	4.95	3.30
TN-53	5	0 8	45	50	0.5	.95	.63
TN-54	18	0.5	45	50	0.5	.95	.63
TN-59	5	0.8	30	100	0.4	.75	.50
TN-60	18	0.5	30	100	0.4	.75	.50
TN-61	5	0.8	30	50	0.4	.65	.43
TN-62	18	0 5	30	50	0.4	.65	.43

SEPT PNP PLANAR EPITAXIAL HIGH SPEED MEDIUM CURRENT — SILICON

Type	Case	BVcbo V	BVceo V	hFE c Ic=150mA	ft	1-99	100-999
2N2904	TO-5	60	40	40-120	200	1.90	1.65
2N2904A	TO-5	60	60	40-120	200	10.50	7.00
2N2905	TO-5	60	40	100-300	200	1.90	1.65
2N2905A	TO-5	60	60	100-300	200	12.00	8.00
2N2906	TO-18	60	40	40-120	200	1.90	1.65
2N2906A	TO-18	60	60	40-120	200	10.05	6.70
2N2907	TO-18	60	40	100-300	200	1.90	1.65
2N2907A	TO-18	60	60	100-300	200	11.55	7.70

PNP PLANAR DUAL EMITTER CHOPPERS—SILICON DUET

Type	Case 4 Lead	BVeeo V	BVebo V	BVeco V	Vo μV	ree (ohms)	1-99	100-999
3N90	TO-72	30	30	30	50	100	11.25	7.50
3N92	TO-72	30	30	30	200	100	4.50	3.00
3N105	TO-72	15	15	15	250	100	7.50	5.00
3N106	TO-72	30	30	30	250	100	9.00	6.00
3N107	TO-72	50	50	50	250	100	12.00	8.00
3N123	TO-72	25	25	25	250	100	3.30	2.20

PNP PLANAR FOR ALLOY REPLACEMENTS—SILICON

Type	Case	Vcb V	Ic (mA)	1-99	100-999
2N328A	TO-5	50	100	4.50	3.00
2N329A	TO-5	50	100	6.50	4.35
2N1024	TO-5	18	100	2.70	1.80
2N1026	TO-5	40	100	5.00	3.35
2N1027	TO-5	18	100	3.00	2.00
2N1028	TO-5	12	100	2.90	1.95
2N1035	TO-5	50	50	4.05	2.70
2N1036	TO-5	50	50	5.10	3.40
2N1037	TO-5	50	50	4.50	3.00
2N1917	TO-5	25	50	6.60	4.40
2N1918	TO-5	25	50	5.30	3.55
2N1919	TO-5	40	50	8.80	5.25

MADT PNP GERMANIUM TRANSISTORS FOR UHF

Type	Case	Junction Temp.	Vcb V	Pt mW	Ic mA	1-99	100-999
2N1742	TO-9	125°C	20	60	50	2.93	2.15
2N1744	TO-9	125°C	20	60	50	2.25	1.65
2N2360	TO-12	125°C	20	60	50	2.40	1.80
2N2361	TO-12	125°C	20	60	50	2.25	1.65
2N2362	TO-12	125°C	20	60	50	2.10	1.55
2N2398	TO-12	125°C	20	60	50	3.45	2.50
2N2399	TO-12	125°C	20	60	50	3.35	2.45

NEW SPRAGUE ECONOLINE MOLDED PLASTIC

NPN SILICON PLANAR TRANSISTORS

Designed for maximum economy and excellent performance for many applications of consumer and industrial equipment.

SMALL SIGNAL AMPLIFIERS—AUDIO TO 30 M Hz

Type Number	hFE Min.	hFE Max.	Vceo	Pd mW	fT MHz	1-99	100-999	1000-9999
2N2711	30	90	18	200	120	.45	.30	.20
2N2712	70	225	18	200	120	.48	.32	.22
2N2923	90	180	25	200	120	.48	.32	.22
2N2924	150	300	25	200	120	.53	.35	.24
2N2925	235	470	25	200	120	.60	.40	.29
2N2926	35	470	18	200	120	.45	.30	.20
2N3391	250	500	25	200	120	.65	.43	.32
2N3391A	250	500	25	200	120	.75	.50	.37
2N3392	150	300	25	200	120	.53	.35	.25
2N3393	90	180	25	200	120	.45	.30	.20
2N3394	55	110	25	200	120	.42	.28	.19
2N3395	150	500	25	200	120	.59	.39	.29
2N3396	90	500	25	200	120	.54	.36	.26
2N3397	55	500	25	200	120	.51	.34	.24
2N3398	55	800	25	200	120	.58	.38	.29
2N3721	60	660	18	200	120	.39	.26	.18
2N3900	250	500	25	200	120	.60	.40	.30
2N3900A	250	500	25	200	120	.70	.47	.35

LARGE SIGNAL AMPLIFIERS & MEDIUM SPEED SWITCHES

Type Number	hFE Min.	hFE Max.	Vceo	Pd mW	fT MHz	1-99	100-999	1000-9999
2N2713	30	90	18	200	120	.51	.34	.23
2N2714	75	225	18	200	120	.53	.35	.24
2N3402	75	225	25	900	200	.75	.50	.37
2N3403	180	540	25	900	200	.80	.53	.40
2N3404	75	225	50	900	200	.80	.53	.40
2N3405	180	540	50	900	200	.91	.63	.48
2N3414	75	225	25	360	200	.45	.30	.23
2N3415	180	540	25	360	200	.51	.34	.25
2N3416	75	225	50	360	200	.65	.43	.32
2N3417	180	540	50	360	200	.74	.51	.41
2N3973	35	100	30	360	200	.63	.42	.31
2N3974	55	200	30	360	200	.70	.46	.35
2N3975	35	100	30	360	200	.58	.39	.29
2N3976	55	200	30	360	200	.60	.40	.30
2N4256	100	500	30	200	200	.69	.46	.35
2N4951	60	200	30	360	250	.67	.45	.34
2N4952	100	300	30	360	250	.72	.48	.36
2N4953	200	600	30	360	250	.80	.53	.40
2N4954	60	600	30	360	250	.59	.39	.29

HIGH FREQUENCY AMPLIFIERS AND OSCILLATORS — 262.5 KHz TO 100 MHz

Type Number	hFE Min.	hFE Max.	Vceo	Pd mW	fT MHz	1-99	100-999	1000-9999
2N3843	20	40	30	200	60	.54	.36	.26
2N3843A	20	40	30	200	60	.59	.39	.27
2N3844	35	70	30	200	90	.57	.38	.27
2N3844A	35	70	30	200	90	.62	.42	.28
2N3845	60	120	30	200	126	.62	.42	.28
2N3845A	60	120	30	200	126	.66	.44	.30
2N3854	35	70	18	200	100	.51	.34	.24
2N3854A	35	70	30	200	100	.54	.36	.26
2N3855	60	120	18	200	130	.53	.35	.25
2N3855A	60	120	30	200	130	.57	.38	.27
2N3856	100	200	18	200	140	.57	.38	.27
2N3856A	100	200	30	200	140	.62	.42	.28
2N3858	60	120	30	200	90	.48	.32	.22
2N3858A	60	120	60	200	90	.59	.39	.27
2N3859	100	200	30	200	90	.49	.33	.23
2N3859A	100	200	60	200	90	.60	.40	.28
2N3860	150	300	30	200	90	.54	.36	.26

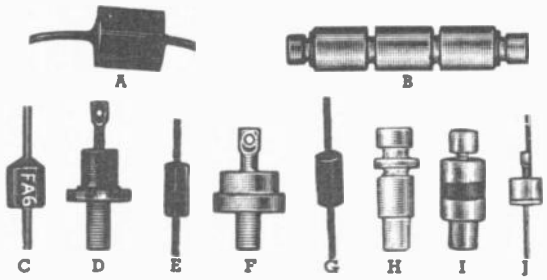
HIGH-VOLTAGE INDICATOR DRIVERS

Type Number	hFE Min.	hFE Max.	Vceo	Pd mW	fT MHz	1-99	100-999	1000-9999
2N3877	20	250	70	200	- - - -	.56	.38	.28
2N3877A	20	250	85	200	- - - -	.63	.42	.31

COMPLETE INFORMATION & ENGINEERING BULLETIN IMMEDIATELY AVAILABLE UPON REQUEST

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

Avalanche Regulators & Rectifiers Sarkes Tarzian



Silicon rectifiers for high temperature applications. All are now avalanche type. They provide "built in" protection against reverse transient overvoltage spikes. Use of avalanche type rectifiers eliminates need for protective components and circuitry normally used to protect standard rectifiers. Elimination of such crutch type components, reduces costs, saves space.

LOW CURRENT SILICON RECTIFIERS

Type	JEDEC	Fig.	Piv	Max. Dc/Amp.	1-24	25-99	100-up
10M	1N1081	I	100		.60	.55	.51
30M	1N1083	I	300	1.0 amp @	.70	.61	.57
M 500	1N1084	I	400	55°C ambient	.75	.63	.59
60M	.....	I	600		.85	.70	.66
F2	1N2482	C	200		.33	.29	.27
F4	1N2483	C	400	1.0 amp @	.35	.30	.28
F6	1N2484	C	600	55°C ambient	.37	.32	.29
F8	.....	C	800		.52	.44	.41
F10	.....	C	1000		.79	.67	.63
E1	1N4002	E	100		.33	.29	.27
E2	1N4003	E	200		.33	.29	.27
E4	1N4004	E	400	1.0 Amp	.35	.30	.28
E6	1N4005	E	600	At	.37	.32	.29
E8	1N4006	E	800	55°C	.52	.44	.41
E10	1N4007	E	1000		.79	.67	.63
G1	.....	G	100		.35	.30	.28
G2	.....	G	200		.37	.32	.29
G4	.....	G	400		.43	.37	.35
G6	.....	G	600	1.0 Amp	.47	.40	.37
G8	.....	G	800	At	.62	.53	.49
G10	.....	G	1000	55°C	.95	.82	.76
20C	1N2811	J	200		.37	.32	.29
60C	1N2815	J	600		.47	.40	.37
80C	.....	J	800		.62	.53	.49
100C	.....	J	1000		.95	.82	.76
10LA	1N1085A	H	100		3.24	2.86	2.66
20LA	1N1086A	H	200	2.0 amp @	4.00	3.43	3.20
30LA	1N1087A	H	300	55°C ambient	4.67	4.00	3.73
40LA	1N1088A	H	400		5.35	4.67	4.27
3AF1	.....	A	100		.60	.53	.49
3AF2	.....	A	200	3.0 amp @	.65	.57	.53
3AF4	.....	A	400	55°C ambient	.85	.72	.67
3AF6	.....	A	600		1.25	1.07	1.00
120SM	1N1109	B	1200	.425 amp	4.00	3.43	3.20
280SM	1N1113	B	2800	.325 amp	7.35	6.30	5.87
F15	.....	C	1500	.6 Amps 25°C	1.15	1.00	.93
F20	.....	C	2000	.4 Amps 25°C	1.50	1.29	1.20
F25	.....	C	2500	.4 Amps 25°C	2.00	1.72	1.60

MEDIUM CURRENT SILICON RECTIFIERS

Type	JEDC	Fig.	PIV	DC Max.	1-24	25-99	100-up
20H3P	1N1344	D	200	6	1.20	1.03	.96
40H3P	1N1346	D	400	6	1.50	1.29	1.20
60H3P	1N1348	D	600	6	2.12	1.82	1.69
ST260P	1N1206	D	600	12	2.34	2.00	1.86
ST410P	.....	F	100	35	1.75	1.50	1.39
ST440P	1N1188	F	400	35	4.14	3.55	3.30
ST460P	1N1190	F	600	35	4.89	4.19	3.90
20J2	1N1622	....	200	10	2.80	2.40	2.24
40J2	1N1624	....	400	10	4.24	3.62	3.40
ST5A10P	.....	F	100	50 Amp	3.25	2.78	2.60
ST5A20P	.....	F	200	50 Amp	3.78	3.23	3.00
ST5A40P	.....	F	400	50 Amp	5.28	4.52	4.20
ST5A60P	.....	F	600	50 Amp	7.80	6.68	6.20

SILICON TUBE REPLACEMENT RECTIFIERS

Type	PIV	Replaces	1-24	25-99	100-up
1N1237	1600	OZ4, 5X4, 5Y4, 6AX5, 6X5	12.00	10.30	9.60
1N1238	1600	5AU4, 5AW4, 5A24, 5T4, 5U4, 5Y3	12.00	10.30	9.60
S5130	10,400	5A4	22.50	19.30	18.00
1N2389	1600	5U4, 5AU4, 5AW4, 5AZ4, 5T4, 5Y3	6.10	5.23	4.87
S5343	7000	816, 836, 3B28	18.10	15.50	14.50
S5991	1600	5AU4, 4AW4, 5AZ4, 5T4, 5U4, 5Y3	3.50	3.00	2.80

HIGH VOLTAGE CARTRIDGE-TYPE SILICON RECTIFIERS

All units are encapsulated in epoxy sealed phenolic tubes, 3/8" diameter. Gold-plated leads 2" long, .032" diameter.

Type	Max. PIU	Max. DCMA	Length	1-24	25-99	100-499
HVC180	1800	250	9/16"	3.35	2.86	2.66
HVC240	2400	250	11/16"	3.60	3.08	2.87
HVC300	3000	200	3/4"	3.85	3.28	3.07
HVC400	4000	200	7/8"	4.00	3.44	3.20
HVC500	5000	200	1"	4.15	3.67	3.34
HVC600	6000	150	1 1/16"	4.55	3.92	3.66
HVC650	6500	150	1 3/16"	5.00	4.29	4.00
HVC750	7500	150	1 5/16"	5.40	4.64	4.34
HVC840	8400	100	1 3/8"	5.85	5.00	4.66
HVC1000	10000	100	1 3/4"	7.10	6.07	5.66
HVC1200	12000	.75	1 15/16"	8.35	7.15	6.66
HVC1500	15000	.75	2 5/16"	10.40	8.94	8.34
HVC2100	21000	.50	3"	14.60	12.50	11.67

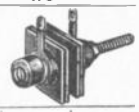
"CENTRE-KOOLED" SELENIUM RECTIFIERS

Featuring center cooling by means of spacers. Each spacer acts as an individual spring to guarantee constant assembly pressure. Higher leakage resistance assured by protective end plates of bakelite. Color coded for polarity identification. All rated at 130 volts. Av. wt., 6 oz.

Type	DC mA	Net
75	75	.81
100	100	1.02
150	150	1.02
200	200	1.26
300	300	1.32
400	400	1.68
500	500	1.74
10	10	.54
50	50	.70

KLIPVOLT SUPPRESSORS

Reduces transient voltages to as low a value as possible without changing circuit characteristics or adding excessive cost. S-594 has mounting stud on each end and others have single stud. Peak discharge current 2.5 amps.



Type	Max. Clamping Voltage	Rated RMS Volts	Klipvolt Overall Length*	1-9	10-99	100-up
S-488	170	70	1 1/8"	1.60	1.15	1.02
S-490	340	140	1 3/8"	2.20	1.58	1.41
S-492	510	210	1 11/16"	2.80	2.02	1.80
S-493	680	280	2"	3.35	2.44	2.18
S-594	1190	490	3 3/16"	5.03	4.53	4.02

SINGLE PHASE BRIDGE RECTIFIERS

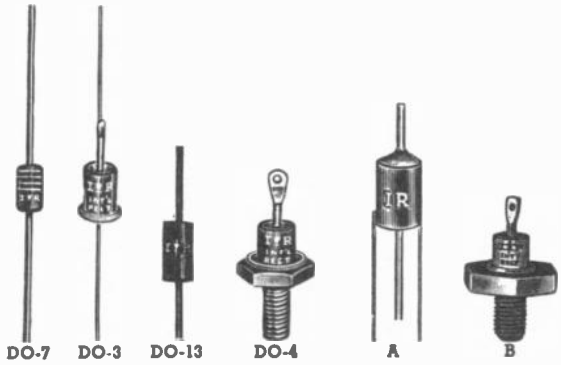
Compact efficient assemblies for quick easy installation in single phase full wave bridge applications. All offer the built-in transient protection advantage of avalanche characteristics. Ratings: 2.0 Z to 6A. 200 to 900 PIV. (Higher current and PIV ratings available on special request.)

Type	DC Output Current	Max. RMS Max. Piv.	1-24	25-99	100-Up
S-6211	2.0	200	2.12	1.82	1.69
S-6211-1	2.0	400	2.34	2.00	1.86
S-6211-2	2.0	600	2.56	2.19	2.04
S-6211-3	2.0	800	3.21	2.75	2.55
S-5959	2.5	200	1.94	1.66	1.54
S-5959-1	2.5	400	2.22	1.90	1.77
S-5959-2	2.5	600	2.44	2.09	1.94
S-5959-3	2.5	800	3.06	2.62	2.43
S-6121	6.0	100	4.01	3.43	3.19
S-6121-1	6.0	200	4.21	3.60	3.35

1 WATT ECONOMY LINE ZENER DIODES

Type	Fig.	Vz	Toler.	1-24	25-99	100-Up
VR6	E	6	±10%			
VR7	E	7	±10%			
VR8.5	E	8.5	±10%			
VR10	E	10	±10%			
VR12	E	12	±10%			
VR14	E	14	±10%			
VR18	E	18	±10%			
VR20	E	20	±10%			
VR24	E	24	±10%	.62	.53	.49
VR28	E	28	±10%			
VR33	E	33	±10%			
VR39	E	39	±10%			
VR47	E	47	±10%			
VR56	E	56	±10%			
VR67	E	67	±10%			
VR80	E	80	±10%			
VR90	E	90	±10%			
VR105	E	105	±10%			
VR110	E	110	±10%			
VR120	E	120	±10%			
VR130	E	130	±10%	.82	.70	.65
VR150	E	150	±10%			
VR160	E	160	±10%			
VR180	E	180	±10%			
VR200	E	200	±10%			

International Rectifier Semiconductors



SUBMINIATURE GLASS SILICON ZENER DIODES

DO-7—250Mw—1N702—1N725 SERIES

These devices have ±10% tolerance. Add "A" to type number for ±5% tolerance.

Type	Ez Zener Volt @ Izt. Nom. volt	It test current mA	1-99	100-999	100 Mix
1N702	2.6	5			
1N703	3.4	5			
1N704	4.1	5			
1N705	4.8	5			
1N706	5.8	5		No Suffix	
1N707	7.1	5			
1N708	5.6	25			
1N709	6.2	25	1.83	1.47	1.63
1N710	6.8	25			
1N711	7.5	25			
1N712	8.2	25			
1N713	9.1	12			
1N714	10.0	12			
1N715	11	12			
1N716	12.0	12			
1N717	13.0	12		Suffix A	
1N718	15.0	12			
1N719	16.0	12			
1N720	18.0	12	2.55	2.03	2.25
1N721	20.0	4			
1N722	22.0	4			
1N724	27.0	4			
1N725	30.0	4			

DO-7—400 MW SILICON GLASS ZENER DIODES

These devices have ±10% tolerance. Add "A" to type number for ±5% tolerance.

Type	Va@Iz Nom. V.	Izt mA	1-99	100-999	100 Mix
1N746	3.3	20			
1N747	3.6	20			
1N748	3.9	20		No Suffix	
1N749	4.3	20	1.40	1.12	1.25
1N750	4.7	20			
1N751	5.1	20			
1N752	5.6	20			
1N753	6.2	20			
1N754	6.8	20			
1N755	7.5	20		Suffix A	
1N756	8.2	20	1.68	1.34	1.49
1N757	9.1	20			
1N758	10.0	20			
1N759	12.0	20			

DO-7—400Mw—1N957—1N973 SERIES

These devices have ±20% tolerance. Add "A" to type number for ±10% tolerance. Add "B" to type number for ±5% tolerance.

Type	Va@Iz Nom. V	Izt mA	1-99	100-999	100 Mix
1N957	7.5	16.5			
1N960	8.2	15.0		No Suffix	
1N961	10	12.5	1.40	1.15	1.28
1N966	11	11.5			
1N963	12	10.5			
1N964	13	9.5			
1N965	15	8.5		Suffix A	
1N1509	16	7.8	1.50	1.25	1.38
1N968	20	6.2			
1N969	22	5.6			
1N970	24	5.2			
1N971	27	4.6		Suffix B	
1N972	30	4.2	1.75	1.50	1.63
1N973	33	3.8			

DO-7—400 Mw GLASS 1N3510-1N3530 SERIES

These devices have ±5% tolerance.

Type	Vz @ Iz	Vz @ Iz Max. Ohms	Iz mA	1-99	100-999	100 Asst.
1N3510	4.7	16	20			
1N3511	5.1	14	20			
1N3512	5.6	8	20			
1N3513	6.2	3	20			
1N3514	6.8	3	20			
1N3515	7.5	4	10			
1N3516	8.2	5	10			
1N3517	9.1	6	10			
1N3518	10	7	10			
1N3519	11	8	10			
1N3520	12	10	10	2.80	2.25	2.50
1N3521	13	12	5			
1N3522	15	14	5			
1N3523	16	16	5			
1N3524	18	18	5			
1N3525	20	20	5			
1N3526	22	35	5			
1N3527	24	38	5			
1N3528	27	40	4			
1N3529	30	48	4			
1N3530	33	50	3			
1N4370A	2.4	30	20	2.30	1.85	
1N4371A	2.7	30	20	2.30	1.85	
1N4372A	3.0	29	20	2.30	1.85	

DO-3—750 MW SILICON ZENER DIODES

These devices have ±10% tolerance. Add "A" to type number for ±5% tolerance.

Type	Vz @ Iz	Vz @ Iz Max. Ohms	Iz mA	1-99	100-999	100 Mix
1N1508	4.7	13	30		No Suffix	
1N1509*	5.6	11	26			
1N1510	6.8	3	22	2.75	2.10	2.45
1N1511	8.2	3	18			
1N1512	10	3.2	15			
1N1513	12	6.5	12		Suffix A	
1N1514	15	10.5	10			
1N1515	18	16	8	3.45	2.65	3.05
1N1516	22	40	6			
1N1517	27	82	5			

SILICON ZENER DIODES

1 WATT GLASS ZENER DIODES—DO-7

Each device available in ±20% tolerance (add T20 to IR type no.), ±10% (add T10), and ±5% (add T5).

Type	Vz @ Iz	Iz @ mA	Zz @ Iz	1-99	100-999
G3.0	3.0	82	12		
G3.3	3.3	76	10		
G3.6	3.6	69	10		
G3.9	3.9	64	9		
G4.3	4.3	58	9	"T5"	
G4.7	4.7	53	8		
G5.1	5.1	49	7	1.90	1.40
G5.6	5.6	45	5		
G6.2	6.2	41	3		
G6.8	6.8	37	3	"T10"	
G7.5	7.5	34	4		
G8.2	8.2	31	4.5	1.25	.93
G9.1	9.1	28	5		
G10	10	25	7		
G11	11	23	8	"T20"	
G12	12	21	9		
G13	13	19	10	.95	.73
G15	15	17	14		
G16	16	15.5	16		
G18	18	14	20		
G20	20	12.5	22		
G22	22	11.5	23		
G24	24	10.5	25		
G27	27	9.5	35		
G30	30	8.5	40		

DO-3—1-WATT SILICON ZENER DIODES

These devices have ±10% tolerance. Add "A" to type number for ±5% tolerance.

Type	Vz @ Iz	Vz @ Iz Max. Ohms	Iz mA	1-99	100-999	100 Asst.
1N1518	3.9	10	50			
1N1519	4.7	13	40		No Suffix	
1N1520	5.6	10.2	35			
1N1521	6.8	4.2	30	2.70	2.20	2.40
1N1523	10	4.0	20			
1N1524	12	6.0	15		Suffix A	
1N1525	15	13	13			
1N1526	18	25	10	3.50	2.75	3.00
1N1527	22	32	9			
1N1528	27	45	7			

SILICON ZENER DIODE LISTING CONTINUED NEXT PAGE

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

DO-4—3.5-WATT SILICON ZENER DIODES

Size: 1.160" overall L. 7/16" across hex flats. 10-32 stud mounting. These devices have ±10% tolerance. Add "A" to type number for ±5% tolerance.

Type	Vz @ Iz	Vz @ Iz Max. Ohms	Iz mA	1-99	100-999	100 Mix
1N1588	3.9	4.5	150		No Suffix	
1N1589	4.7	4.0	125			
1N1590	5.6	3.0	110	3.80	3.05	3.40
1N1591	6.8	0.9	100			
1N1592	8.2	1.5	80		Suffix A	
1N1593	10	2.5	70			
1N1594	12	3.0	50			
1N1595	15	5.5	40	4.55	3.65	4.05
1N1597	22	14	30			
1N1598	27	24	25			

1 WATT ZENER VOLTAGE REGULATORS (FLANGELESS)—DO-13

These zener regulators are designed primarily for continuous feeding in automated assembly processes. All of the units are process-selected so that they may assure extremely sharp zener "knees" and excellent voltage regulation over the entire operating temperature range. These devices have ±20% tolerance. Add "A" to type number for ±10% tolerance.

Type	Vz @ Izt	Izt mA	Zzt @ Izt	1-99	100-999
1N3821	3.3	76	10		
1N3822	3.6	69	10	No Suffix	
1N3823	3.9	64	9		
1N3824	4.3	58	9	2.00	1.60
1N3825	4.7	53	8		
1N3826	5.1	49	7	Suffix A	
1N3827	5.6	45	5		
1N3828	6.2	41	2	2.50	2.00
1N3829	6.8	37	1.5		

1ZC SERIES 1 WATT FLANGLESS ZENERS—DO-13

Hermetically sealed. These devices have ±10% tolerance. Also available in 5% and 20% tolerance; add T5 for 5%; T20 for 20%.

Type	Vz Volts	Izt mA	Zzt (ohms)	1-99	100-999
1ZC3.9T10	3.9	50	210		
1ZC4.3T10	4.3	50	190		
1ZC4.7T10	4.7	40	175	"T10"	
1ZC5.1T10	5.1	40	160	1.34	1.02
1ZC5.6T10	5.6	35	145		
1ZC6.2T10	6.2	35	130		
1ZC6.8T10	6.8	30	120		
1ZC7.5T10	7.5	30	110		
1ZC8.2T10	8.2	25	100		
1ZC9.1T10	9.1	25	90		
1ZC10T10	10	20	80		
1ZC11T10	11	20	75		
1ZC12T10	12	15	65		
1ZC13T10	13	15	60	"T10"	
1ZC15T10	15	13	55		
1ZC16T10	16	13	50	1.12	.85
1ZC18T10	18	10	45		
1ZC20T10	20	10	40		
1ZC22T10	22	9	35		
1ZC24T10	24	9	30		
1ZC27T10	27	7	30		
1ZC30T10	30	7	25		

1 WATT FLANGELESS—HERMETICALLY SEALED ZENERS—Fig. A

For applications where cost, space, sharp knees and low zener impedance are important. .200 OD. To designate the desired tolerance when ordering, simply add the suffix T5, T10, or T20 to the type number.

Type	Vz @ Izt	Zzt @ Izt	Izt mA	1-99	100-999
1ZM3.3	3.3	10	76		
1ZM3.6	3.6	10	69	5% TOL.	
1ZM3.9	3.9	9	64	1.50	1.10
1ZM4.3	4.3	9	58	10% TOL.	
1ZM4.7	4.7	8	53	1.20	.90
1ZM5.1	5.1	7	49	20% TOL.	
1ZM5.6	5.6	5	45	.90	.70
1ZM6.2	6.2	2	41		
1ZM6.8	6.8	3.5	37		
1ZM7.5	7.5	4.0	34		
1ZM8.2	8.2	4.5	31	5% TOL.	
1ZM9.1	9.1	5	28	1.20	.90
1ZM10	10	7	25		
1ZM11	11	8	23	10% TOL.	
1ZM12	12	9	21	.90	.70
1ZM13	13	10	19		
1ZM15	15	14	17	20% TOL.	
1ZM16	16	14.5	16	.80	.60
1ZM18	18	14.0	20		
1ZM20	20	12.5	22		

INTERNATIONAL RECTIFIER ZENERS ARE LIFETIME GUARANTEED

1 WATT FLANGELESS TYPE—DO-13

These devices have ±20% tolerance. Add "A" to type number for ±10% tolerance. Add "B" to type number for ±5% tolerance.
(*) indicates types stocked in 5% and 10% tolerances only.
(**) indicates types stocked in 10% tolerances only.
(†) indicates types stocked in 20% and 10% tolerances only.

Type	Voltage @ Izt (Vz) Volts	Current (Izt) mA	Max. Impedance Zzt @ Izt Ohms	Max. Impedance Zzk @ Izt Ohms	1-99	100-999	100 Mix
1N3016	6.8	37	3.5	700			
1N3017	7.5	34	4.0	700			
1N3018**	8.2	31	4.5	700			
1N3019	9.1	28	5.0	700			
1N3020	10	25	7	700			
1N3021	11	23	8	700		No Suffix	
1N3022	12	21	9	700			
1N3024	15	17	14	700	2.57	2.05	2.28
1N3025	16	15.5	16	700			
1N3026	18	14	20	750			
1N3027	20	12.5	22	750			
1N3028	22	11.5	23	750			
1N3029	24	10.5	25	750			
1N3030	27	9.5	35	750		Suffix A	
1N3031	30	8.5	40	1.000			
1N3032	33	7.5	45	1.000	2.76	2.25	2.30
1N3033	36	7.0	50	1.000			
1N3034	39	6.5	60	1.000			
1N3035**	43	6.0	70	1.500			
1N3036†	47	5.5	80	1.500			
1N3037	51	5.0	95	1.500			
1N3038	56	4.5	110	2.000		Suffix B	
1N3039*	62	4.0	125	2.000			
1N3040*	68	3.7	150	2.000	3.32	2.70	3.01
1N3041	75	3.3	175	2.000			
1N3042	82	3.0	200	3.000			
1N3043	91	2.8	250	3.000			
1N3044	100	2.5	350	3.000			
1N3045*	110	2.3	450	4.000		No Suffix	
1N3046*	120	2.0	550	4.500	2.45	1.95	2.25
1N3047	130	1.9	700	5.000		Suffix A	
1N3048	150	1.7	1,000	6,000	2.85	2.30	2.56
1N3049*	160	1.6	1,100	6,500		Suffix B	
1N3050†	180	1.4	1,200	7,000	4.20	3.35	3.70
1N3051**	200	1.4	1,500	8,000			

10 WATT SILICON ZENER DIODES—DO-4

Size: 1.160" overall L. x 7/16" across hex flats. 10-32 stud mounting with washer and nut. All these devices ±10% tolerance. Add "A" to type number for ±5% tolerance.
(*) indicates types stocked in 5% tolerance only.

Mfr.'s Type	Vz @ Iz	Zz @ Iz mA	Iz mA	1-99	100-999	100 Mix
1N1599	3.9	1.5	500			
1N1600	4.7	0.9	400		No Suffix	
1N1601	5.6	0.6	350	5.95	4.75	5.40
1N1602	6.8	0.4	300			
1N1603*	8.2	0.6	250			
1N1604*	10	1.0	200		Suffix A	
1N1605	12	2.0	170			
1N1606	15	2.9	140			
1N1607	18	4.0	110	8.00	6.40	7.10
1N1608*	22	6.0	90			
1N1609*	27	10.0	70			

10 WATT ZENER VOLTAGE REGULATORS—DO-4

These devices have ±20% tolerance. Add "A" for ±10% tolerance. Add "B" for ±5% tolerance.
For reverse polarity add "R" to type number.
(*) indicates types stocked in 20% and 5% tolerances only.
(**) indicates types stocked in 20% and 10% tolerances only.

1N2970	6.8	1.2	370			
1N2971	7.5	1.3	335			
1N2972	8.2	1.5	305			
1N2973*	9.1	2.0	275			
1N2974*	10	3	250		No Suffix	
1N2975	11	3	230			
1N2976	12	3	210	3.00	2.40	2.68
1N2977	13	3	190			
1N2978	14	3	180			
1N2979	15	3	170			
1N2980**	16	4	155			
1N2981	17	4	145		Suffix A	
1N2982	18	4	140			
1N2984*	20	4	125	3.30	2.65	2.95
1N2986	24	5	105			
1N2987*	25	6	100			
1N2988	27	7	95			
1N2989	30	8	85			
1N2991*	36	10	70		Suffix B	
1N2992*	39	11	65			
1N2993	43	12	60	4.25	3.30	3.80
1N2994**	45	13	55			
1N2999	56	16	45			
1N3001	68	18	37			
1N3002	75	22	33			

CONTINUED NEXT PAGE

10 WATT ZENER VOLTAGE REGULATORS — DO-4 Cont.

Type	Vz @ Iz Nom. Volts	Zz @ Iz Max. Ohms	Iz mA	1-99	100-999	100 Mix
				No Suffix		
1N3003	82	25	30			
1N3004	91	35	28	3.00	2.40	2.68
1N3005	100	40	25		Suffix A	
1N3007	110	55	23			
1N3009	130	100	19	3.30	2.65	2.95
1N3010	140	125	18		Suffix B	
1N3011	150	175	17	4.25	3.30	3.80
				No Suffix		
1N3012	160	16	200	3.40	2.70	3.00
				Suffix A		
1N3013	175	14	250	4.90	3.90	4.35
				Suffix B		
1N3015	200	12	300	7.75	6.20	6.90
1N3993*	3.9	2.0	640			
1N3994*	4.3	1.5	580		No Suffix	
1N3995*	4.7	1.2	530	5.60	4.10	.....
1N3996*	5.1	1.1	490			
1N3997*	5.6	1.0	445			
1N3998*	6.2	1.1	405		Suffix A	
1N3999*	6.8	1.2	370	7.20	5.75	.....
1N4000*	7.5	1.3	335			

*All these devices have ±10% tolerance. Add "A" to type number for ±5% tol. 1N3993 thru 1N4000 have reverse polarity.

SUBMINIATURE GLASS SILICON ZENER VOLTAGE REGULATORS 50 WATT STUD MOUNTED TYPES—Fig. B

These devices have ±20% tolerance. Add "A" to type number for ±10% tolerance. Add "B" to type number for ±5% tolerance. These devices available with reverse polarity. Add "R" to type number. Same prices apply for 1N3305 thru 1N3340.
(*) indicates types stocked in 20% and 5% tolerances only.

Type	Nom. Zener Voltage	Zener Current Ma	Max. I Zz ohms	Max. I Zz 1 Ma ohms	1-99	100-999	100 Mix
1N3305	6.8	1850	0.2	500			
1N3306	7.5	1700	0.3	250			
1N3307*	8.2	1500	0.4	250			
1N3308	9.1	1370	0.5	250			
1N3309*	10	1200	0.6	250		No Suffix	
1N3310*	11	1100	0.8	250			
1N3311	12	1000	1.0	250			
1N3312*	13	960	1.1	250			
1N3313	14	890	1.2	250			
1N3314	15	830	1.4	250	5.50	4.25	4.87
1N3315	16	780	1.6	250			
1N3316*	17	740	1.8	250			
1N3317*	18	700	2.0	250			
1N3318*	19	660	2.2	250			
1N3319*	20	630	2.4	250			
1N3320*	22	570	2.5	250		Suffix A	
	24	520	2.6	250			
1N3322*	25	500	2.7	250			
1N3323	27	460	2.8	250			
1N3324	30	420	3.0	300			
1N3325	33	380	3.2	300	7.25	5.75	6.50
1N3326*	36	350	3.5	300			
1N3327*	39	320	4.0	300			
1N3328	43	290	4.5	400			
1N3329*	45	280	4.5	400			
1N3330*	47	270	5.0	400		Suffix B	
1N3331	50	250	5.0	500			
1N3332*	51	245	5.2	500			
1N3333*	52	240	5.5	500			
1N3334*	56	220	6	500			
1N3335*	62	200	7	600	9.90	8.00	8.95
1N3336*	68	180	8	600			
1N3337*	75	170	9	600			
1N3338*	82	150	11	700			
1N3339*	91	140	15	800			
1N3340	100	120	20	900			

AXIAL LEAD TOP HAT SILICON RECTIFIERS—DO-3

Oper. Temp. Range: —65 to 115°C. Max. DC output (@ 50°C) and reverse current rating (@ 100°C) are full cycle average values. (Fig. D on following page.)

Type	PRV	Maximum Amps DC	Maximum I. mA	1-99	100-999
IN1692	100	.600	0.5	.45	.30
IN1693	200	.600	0.5	.48	.32
IN1695	400	.600	0.5	.66	.44

TOP HAT

Hermetically sealed. Rated at 50°C. Fig. D. DO-1

SD91	100	.600	.2	.53	.35
SD94	400	.600	2	.89	.60

CONTINUED NEXT COLUMN

TOP HAT CONTINUED

Type	PRV	Maximum Amps DC	Maximum I mA	1-99	100-999
SD95	500	.600	.2	.99	.67
SD91A	100	.750	.2	.59	.39
SD92A	200	.750	.2	.68	.46
SD93A	300	.750	.2	.86	.57
SD94A	400	.750	.2	.96	.64
SD95A	500	.750	2	1.06	.71

AIAL LEAD TOP HAT SILICON RECTIFIERS — DO-3

Oper. Temp. Range: —65 to +165°C Max. DC output @ 50°C and reverse current (max.) rating @ 25 C) are full cycle average values.

10B1	100	1.3A	0.01	.50	.37
10B2	200	1.3A	0.01	.55	.40
10B4	400	1.3A	0.01	.80	.64
10B10	1000	1.3A	0 01	2.05	1.64

10C SERIES SILICON RECTIFIERS—DO-13

Flangeless low leakage hermetically sealed, 1.3 amp. (1300 mA) type. Peak reverse voltage ratings to 1000 volts. Rated at 50°C.

Type	Peak Reverse Voltage Rating (V)	1-99	100-999
10C1	100	.32	.29
10C2	200	.35	.32
10C3	300	.38	.36
10C4	400	.42	.38
10C5	500	.47	.43
10C6	600	.52	.46
10C8	800	.75	.65
10C10	1000	1.70	1.20

MINIATURE SILICON RECTIFIERS—DO-27 1 AMP TYPE @ 75°C

Type	PRV	Maximum Amps DC	Maximum I. mA	1-99	100-999
5A2	200	1.0	0.20	.50	.33
5A3	300	1.0	0.10	.59	.39
5A5	500	1.0	0.05	.78	.52
5A6	600	1.0	0.05	.87	.58
5A8	800	1.0	0.05	2.00	1.18
5A10	1000	1.0	0.05	2.45	1.43

MINIATURE ENCAPSULATED 10D SERIES

Incorporate new diffusion and encapsulation techniques to provide higher current ratings for their size than any device in the field. Assure high efficient current operation. 150x.140" dia.

Type No.	DC OUTPUT PRV	DC OUTPUT IMA	DC OUTPUT 1 mA	1-99	100-999
10D2	200	1000	.2	.50	.33
10D3	300	1000	.1	.55	.40
10D4	400	1000	.05	.68	.45
10D6	600	1000	.05	.87	.58
10D8	800	1000	.05	2.00	1.18
10D10	1000	1000	.05	2.45	1.43

HI VOLTAGE SILICON RECTIFIERS

Hermetically sealed, pigtail construction. High efficiency ratings and excellent reliability at —55 to 150°C ambient. Ratings are 75°C into resistive load.

Type	Fig.	P.I.V.	RMS	D.C. Output mA	1-99	100-999
IN1130*	H	1500	1050	300	6.22	4.15

*High temperature, stud mounted miniature type. Reverse leakage 0.1 MA. Max. forw. voltage drop 4.5V. For type 1N1130 stud is cathode.

PLUG-IN SILICON RECTIFIERS

Oper. Temp. Range: —60° to +170°C. Max. DC output (@ 75 C) and reverse current rating (@ 100°C) are full cycle average values. Case dimensions are 1"x0.250" dia. approx. These units are plug-in replacements for JEDEC types 1N446-1N449.

Type	Fig.	PRV	Maximum DC Amps	Maximum I mA	1-99	100-999
IN1082	E	200	0.5	0.2	.75	.60
IN1083	E	300	0.5	0.2	.85	.68
5MA6	E	600	1.0	0.2	1.70	1.35
5MA8	E	800	1.0	0.2	2.70	1.95
5MA10	E	1000	1.0	0.2	3.40	2.40
25-2003	Snap-In Holder, single				.12	.10
25-2004	Snap-In Holder, dual				.25	.20
25-2005	Snap-In Holder, quad				.90	.75

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

International Rectifier Semiconductors IOR

SILICON ZENER VOLTAGE REFERENCE ELEMENTS—DO-7

Highly stable and rugged reference elements designed to meet the exacting requirements of elements and standards over a wide temperature range.

Type	Vz @ Izt	Zzt @ Izt	1-99
IN935	9.0	20	1.60
IN935A	9.0	20	1.80
IN935B	9.0	20	2.45
IN936	9.0	20	1.90
IN936A	9.0	20	2.45
IN936B	9.0	20	2.90
IN937	9.0	20	3.70
IN937A	9.0	20	4.25
IN937B	9.0	20	4.90
IN938	9.0	20	4.80
IN938A	9.0	20	5.20
IN938B	9.0	20	6.90
IN939	9.0	20	12.40
IN939A	9.0	20	17.50
IN939B	9.0	20	18.85

1N935 thru 1N939: △z @ 0°, +25°, +75°C. 1N935B thru 1N939B; △Vz @ −55°, +25°, +100°, +150 C. 1N935A thru 1N939A △Vz @ −550, +25°, +100°C.

Type	Vz @ Izt	Zzt @ Izt	1-99	100-999
1N429	6.2	20	5.00	4.10
1N821	6.2	15	2.38	1.90
1N821A	6.2	10	2.60	2.10
1N823	6.2	15	3.10	2.50
1N825	6.2	15	5.00	4.00
1N3496	6.2	15	3.70	2.50
1N3497	6.2	15	5.75	4.50
1N3498	6.2	15	9.00	7.00
1N3499	6.2	15	19.00	15.50

• Izt=7.5 ma (bias current). DO-7 case, except 1N429.

Type	Vz @ Izt	Zzt @ Izt•	1.99	100-999
1N430•	8.4	11.0	15.50	12.40
1N1530A••	8.4	15.0	23.40	18.65

Izt=10 ma (bias current). • 1N430 Fig. F. •• 1N530 Fig. G.

AXIAL LEAD TOP HAT SILICON RECTIFIERS—DO-1

Oper. Temp. Range: —65 to 150°C. Max. DC output (FCA) (@ 50°C). Reverse current rating (DC) (@ 25°C). Fig. B on following page —65°C to +165°C for 1N443B. Reverse current @ 55°C for 1N443B.

IN440	100	.300	0.30	.66	.44
IN443B	400	.750	1.50	1.10	.73

1.5 AMPERE SILICON RECTIFIERS—PLASTIC DO-27 PACKAGE

Designed for industrial and consumer applications. Transfer-molding techniques are used to produce a moisture-resistant, high strength package capable of stable, long term operation.

Type	PRV	DC Volts	1-99	100-999
1N4816	50	50	.25	.20
1N4817	100	100	.30	.24
1N4818	200	200	.35	.28
1N4819	300	300	.40	.32
1N4820	400	400	.44	.35
1N4821	500	500	.48	.38
1N4822	600	600	.55	.44
1N5052	700	700	.78	.62
1N5053	800	800	.94	.75
1N5054	1000	1000	1.28	1.02

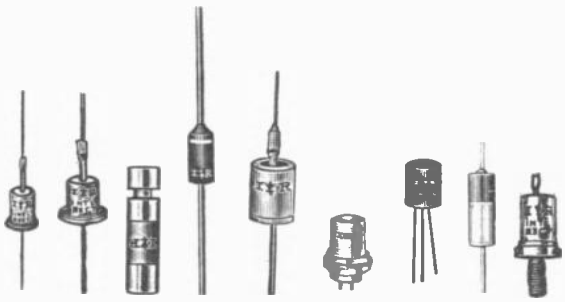
2 AMPERE SILICON RECTIFIERS—PLASTIC DO-27 PACKAGE

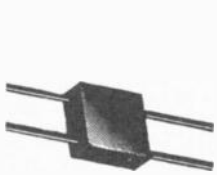
Type	PRV	DC Volts	1-99	1000-999
20A05	50	50	.45	.32
20A1	100	100	.50	.35
20A2	200	200	.55	.39
20A3	300	300	.60	.43
20A4	400	400	.70	.50
20A5	500	500	.80	.56
20A6	600	600	.90	.63
20A8	800	800	1.30	.91
20A10	1000	1000	1.60	1.10

BATTERY CHARGING RECTIFIERS

DC output 0-14 V. Maximum AC input 36 Volts.

Type	DCA Out.	Size	1-9	10-99
J14C04	0.4	1⅛x1x1¼"	1.04	.80

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HIGH TEMPERATURE SILICON DIODES

Hermetically sealed; operating range —65° to +165°C. Very low voltage drop and leakage. Rating shown is for 50°C. At 150°C output is 250/175 mA.

Type	Fig.	PRV	Max. DC, mA Resist.	Max. DC, mA Capac.	1-99	100-999
IN536	D	50	750	550	.45	.30
IN538	D	200	750	550	.53	.35
IN540	D	400	750	550	.68	.45
IN547	D	600	750	550	.96	.64
IN1095	D	500	750	550	.76	.51
IN1096	D	600	750	550	.96	.64

SILICON POWER RECTIFIERS

3 AND 6 AMP SERIES STUD MOUNTED

10-32NF-2A, with DO-4 outline. For commercial applications where temperature does not exceed 50°C. Add "R" to type no. for reverse polarity.

Type	PRV	RMS Input Volt Res. Load	DC out. Amps	1-99	100-999
3F20D	200	140	3	.82	.74
3F40D	400	280	3	1.43	1.27
3F60D	600	420	3	3.16	2.84
3F80D	800	560	3	4.89	4.40
3F100D	1000	707	3	6.34	5.71
6F20D	200	140	6	1.31	1.16
6F40D	400	280	6	2.35	2.09
6F60D	600	420	6	2.97	2.67
6F80D	800	560	6	3.16	2.84
6F100D	1000	707	6	5.97	5.37

12 AMP. STUD-MOUNTED SILICON RECTIFIERS—DO-4

Oper. Temp. Range: —65°C to 190°C. Max. DC output (@ up to 150°C) and reverse current rating (@ 150°C base temp.) are full hz average values. Types listed may be used to replace 1N1199-1206 Series.

Type	PRV	Max. DC Output A.	Max. Rev. ImA	1-99	100-999
1N1199A	50	12.0	6.0	1.25	.83
1N1200A	100	12.0	6.0	1.40	.94
1N1201A	150	12.0	6.0	1.80	1.20
1N1202A	200	12.0	6.0	2.60	1.75
1N1203A	300	12.0	6.0	3.50	2.35
1N1204A	400	12.0	6.0	4.50	3.00
1N1205A	500	12.0	6.0	5.25	3.50
1N1206A	600	12.0	6.0	6.10	4.10

15 AMPERE STUD MOUNTED

1N3208-1N3212. Stud size: ¼-28UNF-2A. Add "R" to type number for reverse polarity.

Type	PRV	1-99	100-999
1N3208	50	1.05	.75
1N3209	100	1.30	.90
1N3210	200	1.80	1.20
1N3211	300	2.35	1.60
1N3212	400	2.85	1.90

IOR International Rectifier Semiconductors

DO-4

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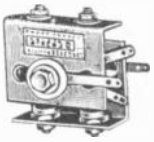
DO-5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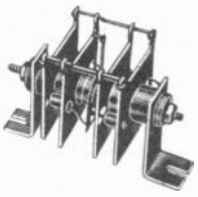
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16 AMP. SILICON STUD-MOUNTED RECTIFIERS—DO-4

Oper. Temp. Range: —65°C to 190°C. Max. DC output (@ up to 150°C) and reverse current rating (@ 175°C base temp.) are full cycle average values.

JEDEC Type	Mfr's Type	PRV	Maximum DC Amps	Maximum I. mA	1-99	100-999
1N3615	16F5	50	16.0	3.0	1.38	.94
1N3616	16F10	100	16.0	2.5	1.54	1.05
1N3618	16F20	200	16.0	2.0	3.03	2.04
1N3620	16F40	400	16.0	1.5	4.90	3.15
1N3622	16F60	600	16.0	1.0	6.70	4.30
1N3624	16F100	100	16.0	0.6	10.70	6.90

40 AMPERE STUD MOUNTED SERIES

Stud size: ¼-28UNF-2A. Add "R" to type number for reverse polarity.

Type	PRV	1-99	100-999
40HF5	50	1.15	.80
40HF10	100	1.45	1.05
40HF20	200	2.00	1.40
40HF30	300	2.55	1.85
40HF40	400	3.05	2.20
40HF50	500	3.85	2.80
40HF60	600	4.55	3.30
40HF80	800	7.05	5.05
40HF100	1000	9.90	7.20

60 AMPERE STUD MOUNTED SERIES

1N2128A-1N2135A. Stud size: ¼-28UNG-2A. Add "R" to type number for reverse polarity.

JEDEC Type	Mfr's Type	PRV	Amps	1-99	100-999
1N2128A	25H5	50	60	2.30	1.80
1N2131A	25H20	200	60	3.65	2.60
	70H60	600	70	7.80	5.25
	70H100	1000	70	13.25	9.30

150 AMPERE STUD MOUNTED SERIES

Stud size: ½-20UNF-2A glass to metal design. 151K series has stud size ⅜-24UNF-2A ceramic design. Add "R" to type number for reverse polarity.

JEDEC Type	Mfr's Type	PRV	1-99
1N3111	150L5	50	7.00
1N3085	150L10	100	8.00
1N3086	150L20	200	10.75

*Max. peak reverse currents are approx. 50% higher than the respective 151K series.

250 AND 275 AMPERE STUD MOUNTED SERIES

Stud size: ¾-16UNF-2A and DO-9 outline. Add "R" to type number for reverse polarity.

JEDEC Type	PRV	Amps	1-99
1N2054	50	250	12.40
1N2055	100	250	13.90
1N2057	200	250	18.90
1N2064	600	250	36.00
1N4052	600	275	52.15
1N4056	1000	275	79.50

SUBMINIATURE SILICON RECTIFIERS

.140 dia. x .150 length encapsulated.

Type	PRV	Max. RMS Input	I Surge Amps	1-9	10-99	100-999
4D4	400	280	20	.55	.40	.31
4D6	600	420	20	.65	.55	.40
4D8	800	560	20	.75	.65	.55

Type	PRV	Max. RMS Input	I Surge Amps	1-4	5-9	10-99	100-999
8D4	400	280	40	.59	.50	.44	.40
8D6	600	420	40	.67	.59	.53	.48
8D8	800	560	40	1.00	.85	.70	.61
8D10	1000	800	40	1.25	1.00	.90	.80

Fig. O—SILICON POWER RECTIFIERS

Type	Max. Rep PRV	Max. DC Amps.	NET
1N2057	200	250 amps	18.90
1N2061	400	@ Tc=	23.95
1N2068	1000	135°C.	61.00

SILICON BRIDGE RECTIFIER ASSEMBLIES

Pre-engineered and completely assembled single phase bridge rectifier stacks. Sealed to withstand high temperature and humidity.

Type	PRV	Working Volts	Typical Volts	NET 1-9	10-99
B12F30	300	105	65	14.80	12.35
B12F50	500	175	110	19.55	16.35
B70HB5	50	17.5	9.5	13.75	12.38
B70HB10	100	35	20	16.35	14.72
B70HB20	200	70	43	22.00	18.70
B70HB30	300	105	65	26.60	22.65
B70HB40	400	140	87	32.70	27.80
B70HB50	500	175	110	40.20	34.20

SILICON CONTROLLED RECTIFIERS

3 AMP JEDEC 2N1600-1604 TYPES

3-junction, hermetically sealed devices. **Gate excitation values shown are required to assure firing of all units. Notes: *JEDEC registered values. Oper. Temp. —65°C to +125°C.

Type	PRV	Max. Avg. Forward Current, Amps	Gate Excitation Requirements Max. @ 25°C Volts	mA**	1-99	100-999
2N1600	50*	3*	3*	10*	5.10	3.40
2N1601	100*	3*	3*	10*	5.70	3.95
2N1602	200*	3*	3*	10*	9.45	6.30
2N1603	300*	3*	3*	10*	13.50	9.00
2N1604	400*	3*	3*	10*	16.80	10.80

Newark Grows With Your Growing Needs

NOW

TEN STOCKING WAREHOUSES

FOR EFFICIENT SERVICE

* * *

See Front Cover For Branch Nearest You!

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

SILICON POWER RECTIFIERS (Continued)

A B

Fig. A—5 AMP JEDEC 2N1770-1774 TYPES

3-junction hermetically sealed devices. **Gate excitation values shown are required to assure firing of all units. Notes: *JEDEC registered values. Oper. Temp. —65°C to +125°C.

Type	PRV	Max. Avg. Forward Current, Amps	Gate Excitation Requirements Max. @ 25°C Volts	mA**	1-99	100-999
2N1772	100*	4.7*	1.35	15	5.72	3.80
2N1773	150*	4.7*	1.35	15	6.92	4.60
2N1774	200*	4.7*	1.35	15	8.12	5.40

Fig. A—5 AMP 2N1770A-1777A JEDEC TYPES

3-junction, hermetically sealed devices. **Gate excitation values shown are required to assure firing of all units. Notes: *JEDEC registered values. Oper. Temp. —65°C to +150°C.

2N1772A	100*	4.7*	1.35	15	8.95	5.95
2N1773A	150*	4.7*	1.35	15	11.05	7.35
2N1774A	200*	4.7*	1.35	15	13.45	8.95
2N1775A	250*	4.7*	1.35	15	15.50	10.45
2N1776A	300*	4.7*	1.35	15	18.35	12.20
2N1777A	400	4.7*	1.35	15	23.60	15.50

Fig. B—10 AMP. 2N1844A-2N1849A JEDEC TYPES

3-junction, hermetically sealed device. **Gate excitation values shown are required to assure firing of all units. NOTES: *JEDEC registered values. Oper. Temp. 65°C to +125°C.

2N1844A	100*	10*	2.5	75	6.85	4.55
2N1846A	200*	10*	2.5	75	8.05	5.35
2N1849A	400*	10*	2.5	75	9.45	6.30

Fig. B—16 AMP. JEDEC 2N683-2N692 TYPES

3-junction hermetically sealed devices. **Gate excitation values shown are required to assure firing of all units. Notes: *JEDEC registered values. Oper. Temp. —65°C to +125°C.

2N683	100*	16*	2.0	40	8.00	5.30
2N685	200*	16*	2.0	40	11.05	7.35
2N686	250*	16*	2.0	40	12.40	8.25
2N688	400*	16*	2.0	40	17.05	11.35
2N689	500*	16*	2.0	40	20.55	13.70
2N690	600*	16*	2.0	40	23.20	15.45
2N691	700*	16*	2.0	40	31.45	20.95
2N692	800*	16*	2.0	40	35.95	23.95

16 TO 150 AMPERE ALLOY DIFFUSED EPITAXIAL SCR'S

Type	PRV	Max. Fwd. Cur. Amps.	Gate Excitation Requirements Volts	mA	1-99	100-999
16RC60	600	16	2	40	11.95	8.00
71RA60	600	70	2.5	150	105.00	81.70
71RA100	1000	70	2.5	150	220.00	141.55
151RA60	600	150	2	150	177.00	124.50
151RA100	1000	150	2	150	328.00	225.00

COLOR TV RECTIFIERS

61-8968 is used as a voltage booster rectifier, and the 61-8969 is used as a focus rectifier normally replacing the 1V2.

Type	Description	1-4	5-9	10-99	100-999
61-8968	800 PRV	1.15	1.03	.93	.84
61-8969	6,500 PRV	2.95	2.65	2.35	1.95

POWER RANGE SELENIUM RECTIFIERS

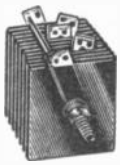
Wide range of rectifying application includes power supplies and voltage regulation, plate voltages and filament supply, plating and electrolysis, battery charging, relays, circuit breakers and numerous communication systems.

Type	Output Amps DC	Output Volts DC	AC Volts	Fig.	Net 1-9	10-99
J29B04	0	0.4	36	C	1.70	1.44
J29B1	to	1.5	36	C	2.48	2.10
J29B5	29	4.8	36	C	7.02	5.94
J29B8		8.4	36	C	10.25	8.25
J29B17	0	17.0	36	C	15.35	12.99
J58B5	to	4.8	72	C	13.98	11.83
J58B8	58	8.4	72	C	19.38	16.40
J116B04		0.4	144	C	6.08	5.15
J116B1	0	1.5	144	C	8.91	7.54
J116B5	to	4.8	144	C	26.48	22.41
J116B8	116	8.4	144	C	37.13	31.42
J135B04	o to	0.4	180	C	7.70	6.26
J135B1	135	1.5	180	C	10.86	9.19

For forced air cooling at 800 LFM, multiply all above ratings by three.

SELENIUM BRIDGE RECTIFIERS (Continued)

Series KY
Series KZ
Series KSA
Series KSL
Series KSP



Series J

IR-KLIP-SEL SURGE PROTECTORS

PREFERRED NON-POLARIZED STACK TYPES

.25 Amp Peak I

Type	Max. RMS	V. Cl.	1-9	10-99	100-999
KY5DPF	130	310	1.27	1.12	.97
KY6DPF	156	375	1.36	1.20	1.04
KY10DPF	260	625	1.74	1.53	1.33
1 Amp Peak I					
KZ1DPF	26	63	.98	.86	.75
KZ5DPF	130	310	1.53	1.35	1.17
KZ6DPF	156	375	1.74	1.53	1.33
KZ9DPF	234	565	2.00	1.76	1.53

PREFERRED NON-POLARIZED CARTRIDGE TYPES

3 Amp Peak I

Type	Max. RMS	V. Cl.	1-9	10-99	100-999
KSA1DAF	26	63	1.04	.91	.79
KSA2DAF	52	125	1.24	1.09	.95
KSA5DAF	130	310	1.84	1.62	1.40
KSA6DBF	166	375	2.04	1.80	1.56
KSA9DBF	234	565	2.64	2.33	2.02
KSA14DBF	364	890	3.87	3.41	2.96
15 Amp Peak I					
KSL1DAF	26	63	2.97	2.62	2.27
KSL2DAF	52	125	3.57	3.15	2.76
KSL5DAF	130	310	5.95	5.25	4.55
KSL6DBF	156	375	6.71	5.92	5.13
KSL11DBF	286	735	10.28	9.07	7.86
KSP11DBF	286	735	26.14	23.06	19.99

MINIATURE SELENIUM RECTIFIERS

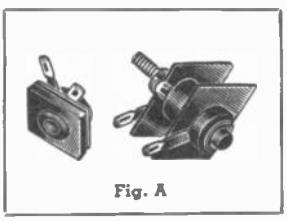


Fig. A

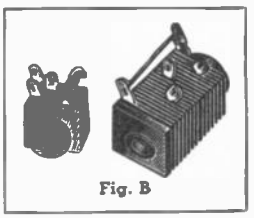


Fig. B

Stable voltage for bias supplies, solenoid and relay supplies, small battery chargers. Conservatively rated and easy to install.

Single Plate Half Wave Rectifiers

Type	Max. DC MA	Max. RMS Volts	Dimensions Plate Size	Fig.	Max. Depth	1-9	10-99	100-999
Q1H	65	36	.67"	A	7/16"	.38	.29	.23
A1H	100	36	1"	A	7/16"	.43	.43	.30
B1H	150	36	1.2"	A	7/16"	.40	.40	.28
C1H	250	36	1.5"	A	7/16"	.42	.42	.29
M1H	500	36	2.0"	A	7/16"	.56	.56	.34
Full Wave Bridge Rectifiers								
Q1B	100	36	.67"	B	3/4"	.55	.41	.33
Q4B	100	130	.67"	B	15/16"	1.56	1.56	.94
A1B	180	36	1"	B	3/4"	1.22	1.22	.82
B1B	300	36	1.2"	B	3/4"	1.28	1.28	.86
C1B	600	36	1.5"	B	3/4"	1.46	1.46	1.00
M1B	1200	36	2"	B	3/4"	1.72	1.72	1.03

1.8 AMP MOLDED BRIDGES—FIG. D.

Type	PVR Max. Volts Rep.	Trans.	RMS Inpt. Volts	DC Output Res. Load Volts	1-99	100-999
18DB2A	200	350	100	85	2.50	2.25
18DB3A	300	450	150	130	2.60	2.35
18DB4A	400	600	200	175	2.75	2.48
18DB5A	500	700	250	220	2.90	2.60
18DB6A	600	800	300	265	3.05	2.75
18DB7A	700	900	350	310	3.35	3.00
18DB8A	800	1000	400	355	3.60	3.24
18DB10A	1000	1250	500	445	5.40	4.85

INTERNATIONAL RECTIFIER

10 AMP MOLDED BRIDGES—Fig. C

Type	Max. PVR Volts	RMS Inpt. Volts	DC Output Res. Load Volts	DC Output Cap. Load Volts	1-99	100-999
2AFB05AP	50	18	15	18	4.05	3.25
2AFB1AP	100	35	30	35	4.30	3.45
2AFB2AP	200	70	60	70	5.15	4.15
2AFB3AP	300	105	90	105	5.55	4.50
2AFB4AP	400	140	120	140	6.50	5.30
2AFB5AP	500	175	150	175	8.00	6.40
2AFB6AP	600	420	360	420	9.95	8.00

SILICON PLUG-IN TUBE REPLACEMENTS

Solid state rectifiers replace medium and high voltage tubes. Rugged construction, long life, no warm-up time, no filament supply required, low operating temperature. *High altitude types.

Type	Max. L."	Max. D."	Replaces Tube Types	1-9	10-99
ST-2*	2.65	1.25	5Y3, 5AU4, 5AW4, 5AZ4		
ST-2A			5T4, 5U4, 5V4, 5W4. 5Z4		
			5931, 6087, 6106	5.50	4.95
	2.65	1.25	5R4	7.85	7.10
ST-14C*	1.50	1.25	5AU4, 5AW4, 5AZ4, 5T4	4.20	3.75
			5U4, 5V4, 5W4, 5Y3, 5Z4		

*ST-2 is rated at 750 MA. ST-14 is rated at 600 MA.

PHOTOCELLS AND SUN BATTERIES—FIG. B

Selenium cells are used extensively in light meters and other photographic and optical devices. Silicon cells have higher light conversion efficiency particularly in sunlight.

SELENIUM CELLS—FIG. B

Type B2M. ½x¾". NET ..... 1-99 ..... 1.50 100-999 ..... 1.35
Type B3M. In plastic case. NET ..... 1-99 ..... 1.75 100-999 ..... 1.55

SILICON CELLS—FIG. B

Type	Description	1-9	10-99
S1M	In molded plastic case	2.25	2.00
S3M	Contains 2 elements in series	3.95	3.51
S4M	Same as S1M but twice the current	3.95	3.51
S5M	High efficiency type	4.95	4.40

CADMIUM SULPHIDE PHOTO CELL—FIG. B

Type CS-120 "Light Sensitive" resistors for activating relays. For door-openers, burglar alarms, traffic and industrial counters, turning on lights, etc. Maximum voltage 120 AC or DC; 0.2 Watt. Shpg. wt., ¼ lb. Size: 1⅛x1⅛x3/16".

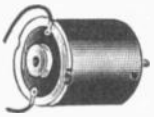
Type CS-120. NET. 1-9 ..... 2.35
10-99 ..... 2.35 100-999 ..... 1.57

Fig. B

PHOTO CELL KIT

DD-190. Special Value package contains four selenium photo cells with outputs from one-third to one-half volt and 0.5 to 3 milliamps in bright sunlight. Free 24 page manual included.
Type DD-190. NET ..... 1-9 ..... .99 10-99 ..... .89

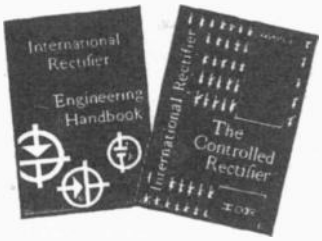
TYPE EP50 EXPERIMENTAL MOTOR



Experimental Motor has anti-friction bearings for operating directly from S4M or two S1M solar cells. The working voltage is from 0.35 to 1.50 volts.

Type	1-9	10-up
EP50	3.95	2.40

INTERNATIONAL RECTIFIER HANDBOOKS



RECTIFIER ENGINEERING HANDBOOK
Type HB-10. 125 pages of practical information on rectifier engineering data.
53F087. NET . 2.00

CONTROLLED RECTIFIER HANDBOOK
Type HB-40. 110 pages containing the basic theory on the principles and uses of SCR'S.
53F091. NET ... 2.50

RAYTHEON

SILICON PNP PLANEX TRANSISTORS

Type	BVCEO Volts	BVEBO Volts	hFE	COB PF	Case	1-99	100-999
2N327A	40	20	9	110	TO-5	2.25	1.50
2N328A	35	20	18	110	TO-5	5.75	4.31
2N721	35	5	20	45	TO-18	5.04	3.75
2N722	35	5	30	45	TO-18	5.04	3.75
2N858	40	25	10	12	TO-18	3.70	2.50
2N859	40	25	25	9	TO-18	5.75	4.00
2N860	25	20	10	9	TO-18	2.40	1.80
2N861	25	20	25	9	TO-18	3.00	2.00
2N862	15	10	12	9	TO-18	2.20	1.60
2N863	15	10	25	9	TO-18	2.40	1.80
2N935	40	20	9	.....	TO-18	2.40	1.80
2N936	35	20	18	.....	TO-18	5.75	4.00
2N937	30	20	36	.....	TO-18	9.00	6.50
2N938	35	40	9	.....	TO-18	3.65	2.80
2N939	35	40	18	.....	TO-18	6.00	4.50
2N940	35	40	36	.....	TO-18	10.50	8.20
2N941	8	25	25	14	TO-18	9.75	7.50
2N1024	15	18	9	10	TO-5	3.50	2.70
2N1025	35	40	9	10	TO-5	3.90	3.00
2N1026	35	40	22	10	TO-5	6.50	5.00
2N1027	15	18	18	10	TO-5	3.90	3.00
2N1028	10	12	9	10	TO-5	3.90	3.00
2N1034	40	20	9	110	TO-5	3.55	2.70
2N1035	35	20	18	110	TO-5	6.10	4.69
2N1036	30	20	34	110	TO-5	6.95	5.35
2N1037	35	20	9	110	TO-5	6.30	3.75
2N1118A	25	10	15	12	TO-5	9.55	7.10
2N1131	35	5	20	45	TO-5	5.60	3.75
2N1132	35	5	30	45	TO-5	5.60	3.75
2N1623	20	20	9	70	TO-5	2.16	1.65
2N2604	45	6	60	4	TO-46	6.00	4.00
2N2605	45	6	150	4	TO-46	6.60	4.40
2N2944	10	15	200	10	TO-46	9.00	6.00
2N2945	20	25	100	10	TO-46	7.50	5.00
2N2946	35	40	70	10	TO-46	9.60	6.40
2N3910	50	50	40	8	TO-46	7.50	5.25
2N3911	40	40	60	8	TO-46	7.75	5.40
2N3912	30	30	90	8	TO-46	8.00	5.70
2N3913	50	50	40	8	TO-18	12.40	10.00
2N3914	40	40	60	8	TO-18	6.75	4.50
2N3915	30	30	90	8	TO-18	7.75	5.50
RT4318	50	50	40	8	TO-5	5.20	4.00
RT4319	40	40	60	8	TO-5	6.75	4.50
RT4320	30	30	90	8	TO-5	7.75	5.50
2N4060	15	3	20	1.7	TO-18	6.80	4.50

PLANEX DUAL AND DARLINGTON AMPLIFIERS

Type	BVECO Volts	VBE, VBE2mV	hFE	Case	1-99	100-999
2N997	40	.....	4000	TO-18	13.50	9.10
2N998	60	.....	1600	TO-18	10.90	8.80
2N999	60	.....	4000	TO-18	14.50	9.70
2N2453	30	3.0	80	RO-52	30.00	20.00
2N2480A	40	5.0	100	RO-52	12.90	10.35
2N2639	45	5.0	55	RO-52	20.16	16.20
2N2640	45	10.0	55	RO-52	15.12	12.15
2N2642	45	5.0	110	RO-52	30.00	20.00
2N2643	45	10.0	110	RO-52	22.40	18.00
2N2652	60	3.0	35	RO-52	14.00	11.25
2N2652A	60	3.0	100	RO-52	16.25	13.05
2N2903A	30	5.0	60	RO-52	25.50	17.00

NPN PLANEX GENERAL PURPOSE TRANSISTORS

Type	BVCEO Volt	COB Pf	hFE	Case Size	1-99	100-999
2N657	100	14	30	TO-5	2.20	1.47
2N696	40	35	40	TO-5	0.93	0.62
2N697	40	35	75	TO-5	1.10	0.75
2N698	80	35	15	TO-5	1.57	1.05
2N699	80	35	40	TO-5	1.57	1.05
2N718A	50	25	40	TO-18	1.50	1.00
2N760A	60	35	70	TO-18	2.70	1.80
2N871	80	15	100	TO-18	5.25	3.20
2N1613	50	25	40	TO-5	1.50	1.00
2N1711	50	25	100	TO-5	1.66	1.10
2N1893	80	15	80	TO-5	2.45	1.65
2N1987	25	45	20	TO-5	4.15	3.20
2N1990	45	45	20	TO-5	3.60	2.60
2N2102A	65	20	40	TO-5	9.45	6.30
2N2194A	40	20	40	TO-5	2.40	1.60
2N2195	25	20	20	TO-5	1.38	0.92
2N2195A	25	20	20	TO-5	1.53	1.02
2N2270	45	15	50	TO-5	0.88	0.70
2N2405	90	15	60	TO-5	4.10	2.75
2N3019	80	12	100	.....	6.00	4.00
2N3020	80	12	40	.....	5.70	3.80
2N3056	60	12	40	.....	7.95	5.30
2N3057	60	12	100	.....	8.40	5.60
2N3700	80	12	100	.....	6.00	4.00
2N3701	80	12	40	.....	5.70	3.80

PHOTO DARLINGTON PHOTO SENSITIVE PLANEX TRANSISTOR

Type	Light Sensitivity	Current Gain	1-99	100-999
RM3002	25 micro A/Ft. Candle	5000	25.70	16.40

SILICON PLANEX NPN SWITCHING TRANSISTOR

Type	Max. Storage Time N. Sec.	Max. Coll. Diss. mW	hFE	CASE	1-99	100-999
2N708	75	360	30	TO-18	1.20	0.80
2N2218	68	300	40	TO-5	3.00	2.00
2N2218A	225	800	40	TO-5	4.75	3.50
2N2219	68	800	100	TO-5	3.95	2.65
2N2219A	225	800	100	TO-5	6.75	4.50
2N2368	15	360	40	TO-18	2.30	1.54
2N2369	18	360	80	TO-18	2.40	1.60
2N2369A	13	360	80	TO-18	3.45	2.30
2N2481	20	360	40	TO-18	2.63	1.75
2N3011	13	360	120	TO-18	1.48	1.19
2N3252	40	1000	30	TO-5	9.75	6.50
2N3253	40	1000	25	TO-5	9.75	6.50
RT3333	5	800	100	TO-5	10.00	6.70
RT3333A	3	800	100	TO-5	12.50	9.00

SILICON PLANEX NPN HIGH FREQUENCY

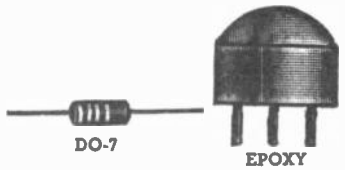
Type	BVceo	COB PF	FT Mhz	Case	1-99	100-999
2N915	50	3.5	400	TO-18	4.50	3.04
2N916	25	6	480	TO-18	3.65	2.90
2N917	15	1.7	800	TO-18	4.95	3.30
2N918	15	1.7	960	TO-18	5.25	3.50
2N929	45	8	30	TO-18	3.60	2.40
2N929A	45	4.0	100	TO-18	4.50	3.00
2N930	45	8	30	TO-18	3.87	2.65
2N2481	15	5	300	TO-18	2.83	1.75
2N2484	60	6	60	TO-18	5.25	3.50
2N2708	20	1.5	700	TO-18	4.38	3.50
2N2809	15	.7	1000	TO-18	12.50	8.30
2N2809A	15	.7	1300	TO-18	15.50	10.40
2N2810	10	.7	1000	TO-18	11.20	7.50
2N2810A	10	.7	1300	TO-18	13.70	9.15
2N2843	60	6	60	TO-18	7.50	5.00

SWITCHING DIODES—DO-7

Type	Bv volts	Recovery time tRR max. n sec.	Max. rev. cur. IR μA	Max. rev. cur. IR mA	1-99	100-999
IN789	30	10	20	1.0	.65	.51
IN903	40	10	40	5.0	1.02	.68
IN904	30	10	30	.10	.99	.66
IN914	100	4.0	.025	.10	.45	.30
IN914A	100	4.0	.025	.05	.50	.33
IN3062	75	4.0	.10	.10	3.00	2.00
IN3064	75	2.0	.10	.10	.40	.26
IN3065	75	2.0	.10	.10	3.75	2.50
IN3066	75	4.0	.10	.10	2.80	1.90
IN3069	50	50	.10	.10	1.20	.80
IN3298	40		.001	.003	3.50	2.65
IN3729/ RD500	600	500	.10	.005	4.45	3.48
IN3730/ RD750	60	15	.10	.01	3.50	2.65

SILICON CONTROLLED RECTIFIERS

Type	Piv Volts	Max. Amp. Current	Gate Fire Max. V	Case	1-99	100-999
2N1595	50	1.6	3.0	TO-5	3.00	2.00
2N1596	100	1.6	3.0	TO-5	4.60	3.05
2N1597	200	1.6	3.0	TO-5	9.35	6.25



GENERAL PURPOSE DIODES—DO-7

Type	Bv volts	Max. F.C. @ 25 C Ma	Max. Rev. at 25 C IR μa	Max. Rev. at 25 C VR volts	1-99	100-999
IN456	35	40	.025	25	.36	.28
IN456A	30	100	.025	25	.36	.28
IN457	70	20	.025	60	.44	.35
IN457A	70	100	.025	60	.44	.35
IN458	150	7.0	.025	125	.50	.38
IN458A	150	100	.025	125	.50	.38
IN459	200	3.0	.025	175	.66	.51
IN459A	200	100	.025	175	.66	.51
IN461	35	15	.50	25	.35	.26
IN461A	30	100	.50	25	.35	.26
IN462	80	5.0	.50	60	.38	.28
IN462A	70	100	.025	60	.38	.28
IN463A	200	1.0	.50	175	.46	.36
IN482	36	100	.25	30	.58	.44
IN483	70	100	.25	60	.61	.47

SILICON PLANEX PNP SWITCHING TRANSISTORS

Type	Storage Time N Sec	COB pf	hFE	Case	1-99	100-999
2N2801	225	25	225	TO-5	7.10	4.75
2N2837	225	25	90	TO-18	6.75	4.50
2N2838	225	25	225	TO-18	7.10	4.75
2N2904A	80	8	120	TO-5	10.50	7.00
2N2905	80	8	300	TO-5	9.00	6.00
2N2905A	80	8	300	TO-5	12.00	8.00
2N2906	80	8	120	TO-18	7.20	4.80
2N2906A	80	8	120	TO-18	10.05	6.70
2N2907	80	8	300	TO-18	8.75	5.80
2N2907A	80	8	300	TO-18	11.55	7.70
2N3010	12	3	25	TO-18	6.16	4.95
2N3133	150	10	120	TO-5	4.95	3.30
2N3134	150	10	300	TO-5	5.85	3.90
2N3135	150	10	120	TO-18	4.95	3.30
2N3136	150	10	300	TO-18	5.85	3.90
2N3248	60	8	50	TO-18	3.90	2.60
2N3249	60	8	100	TO-18	4.65	3.10
2N3250	175	6	150	TO-18	3.90	2.60
2N3250A	175	6	150	TO-18	4.50	3.00
2N3251	200	6	300	TO-18	4.65	3.10
2N3251A	200	6	300	TO-18	5.25	3.50
2N3485	80	8	120	TO-46	8.70	5.80
2N3485A	80	8	120	TO-46	12.00	8.00
2N3486	80	8	300	TO-46	10.50	6.80
2N3486A	80	8	300	TO-46	13.50	9.00
2N3671	80	8	220	TO-5	9.00	6.00
2N3672	80	8	220	TO-18	9.00	6.00

NPN SILICON PLANEX EPOXY TRANSISTORS

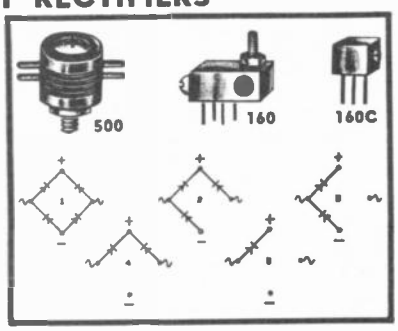
Type	BVcbo Base	BVcbo Emitter	BVebo	1-99	100-999
2N3563	30	12	2	.75	.50
2N3564	30	15	4	.85	.58
2N3565	30	25	6	.62	.43
2N3566	40	30	5	.60	.41
2N3567	40	40	5	.65	.45
2N3568	80	60	5	.68	.45
2N3569	80	40	5	.75	.50
2N3638	-25	-25	-4	.46	.31
2N3638A	-25	-25	-4	.70	.54
2N3639	-6	-6	-4	.60	.43

CONANT COLOR-CODED INSTRUMENT RECTIFIERS

Series 500. Designed for use in apparatus drawing up to 30 milliamps. Reverse voltage, 2.25 DC. Disc diameter, 500'. Active area, .15 square inches.

Series 160 and 160-C. Designed for applications requiring better than average frequency response. Recommended for conventional circuits using meter movements drawing up to 5 milliamps. Disc dia., .166". Active area, .019 square inches.

Mfrs. Type	Series	Body Color	Internal Circuit	No. of Term	Forward DC MA	Av. Output DC MA	NET
M	500	Yellow	1	4	60	30	2.06
HS	500	Black	3	3	60	30	1.50
T	500	Red	4	3	60	30	1.50
H	500	Green	5	2	60	30	1.18
B	160	Yellow	1	4	10	10	2.06
BHS	160	Black	3	3	10	5	1.50
BT	160	Red	4	3	10	5	1.50
BH	160	Green	5	2	10	5	1.18
B-C	160-C	Yellow	1	4	10	5	2.06



Sylvania Semiconductors

SILICON ALLOY DIODES—DO-7

Low leakage, excellent stability. Ratings at 25°C. * indicates MIL approval.

Type	PIV	Fwd. Cur @ I.O.U. (ma)	Reverse Current μa max.	1-99	100-999	1000-up
1N456	30	40	.025@-25V	.42	.28	.18
1N456A	30	100	.025@-25V	.42	.28	.18
1N457*	70	20	.025@-60V	.45	.30	.19
1N457A	70	100	.025@-60V	.45	.30	.19
1N458*	150	7	.025@-125V	.48	.32	.21
1N458A	150	100	.025@-125V	.48	.32	.21
1N459*	200	3	.025@-175V	.51	.34	.21
1N459A	200	100	.025@-175V	.51	.34	.21
1N461	30	15	.5 @-25V	.42	.28	.18
1N461A	30	100	.5 @-25V	.42	.28	.18
1N462	70	5	.5 @-60V	.44	.29	.19
1N462A	70	100	.5 @-60V	.44	.29	.19
1N463	200	1	.5 @-175V	.54	.36	.22
1N463A	200	100	.5 @-175V	.54	.36	.22
1N464	150	3	.5 @-125V	.53	.35	.21
1N464A	150	100	.5 @-125V	.53	.35	.21
1N482	40	100 @ 1.1V	.25 @-30V	.66	.40	.19
1N482A	40	100	.025@-30V	.69	.46	.19
1N482B	40	100	.025@-30V	.69	.46	.19
1N483	80	100 @ 1.1V	.025@-60V	.70	.47	.19
1N483B	80	100	.025@-60V	.70	.47	.19
1N484	150	100 @ 1.1V	.25 @-125V	.70	.47	.22
1N484A	150	100	.025@-125V	.70	.47	.22
1N484B	150	100	.025@-125V	.70	.47	.22
1N485	200	100	.025@-175V	.90	.60	.24
1N485A	200	100	.025@-175V	.90	.60	.24
1N485B	200	100 @ 1V	.025@-175V	.90	.60	.24
1N486A	250	200	.05 @-225V	.90	.60	.26
1N486B	250	200	.05 @-225V	.90	.60	.26
1N487	330	100 @ 1.1V	.25 @-300V	1.05	.70	.35
1N487A	330	100	.1 @-300V	1.41	.94	.38
1N488	420	100 @ 1.1V	.25 @-380V	1.17	.78	.45
1N488A	420	100	.1 @-380V	1.78	1.19	.49
1N625	....	4 @ 1.5V	1.0 @-30V	.43	.29	.18
1N626	.....	4 @ 1.5V	1.0 @-35V	.45	.30	.19
1N627	.....	4 @ 1.5V	1.0 @-75V	.60	.39	.21
1N628	.....	4 @ 1.5V	1.0 @-125V	.72	.47	.22
1N629	.....	4 @ 1.5V	1.0 @-175V	.81	.54	.24
1N643A	200	100	1.0 @-100V	1.50	1.00	.22
1N658	120	100	.05 @-50V	1.76	1.20	.27
1N659	....	6	.05 @-60V	.58	.39	.17
1N662*	80	10	1.0 @-10V	.92	.44	.24
1N663*	80	100	5.0 @-75V	1.20	.80	.26
1N816	6	100	.1 @-6V	.52	.35	.18
1N816W*	6	100	.1 @-6V	.52	.35	.18
D6823	70	100	.005@-60V	.48	.32	.21
D6823A	70	100	.001@-125V	.52	.35	.22
D6824A	150	100	.001@-125V	.56	.38	.23
D6825	200	100	.005@-175V	.57	.38	.23
D6825A	200	100	.001@-175V	.60	.40	.24

SILICON UHF MIXER DIODES

Type	Case	Piv	Back VDC	Fwd. mA	(μA max) Ir	1-99	100-999	1000-up
1N82	DO-7	5	—3	25	3000@-3V	.60	.42	.25
1N82A	DO-7	5	—3	25	3000@-3V	.82	.61	.51
1N82AG	DO-7	5	—3	25	3000@-3V	.91	.71	.61

SILICON DIFFUSED EPOXY BULLET RECTIFIERS

Hi temperature; Hi conductance for general purpose. Ratings at 25°C.

Type	Case	PRV (V)	Max. DC output mA at 25°C	1-99	100-999	1000-up
1N2069	DO-27	200	750	.65	.43	.29
1N2069A	DO-27	200	750	.67	.45	.30
1N2070	DO-27	400	750	.71	.47	.31
1N2070A	DO-27	400	750	.72	.47	.31
1N2071	DO-27	600	750	.87	.50	.33
1N2071A	DO-27	600	750	.92	.59	.39
1N2482	DO-27	200	750	.65	.43	.29
1N2483	DO-27	400	750	.69	.46	.31
1N2484	DO-27	600	750	.71	.47	.31
SR200B	DO-27	300	200	.65	.42	.27
SR500B	DO-27	400	500	.68	.45	.29
SR1692	DO-27	100	600	.61	.41	.27

CONTROLLED AVALANCHE SILICON DIFFUSED EPOXY RECTIFIERS—RATINGS 25°C.

Type	Case	PRV	RMS Input Voltage	Max. DC FWD Volt. Drop At 1000 mA	1-99	100-999	1000-up
SR6587	DO-27	200	140	1.0	1.20	.80	.40
SR6588	DO-27	400	280	1.0	1.29	.86	.43
SR6589	DO-27	600	420	1.0	1.38	.92	.46
SR6590	DO-27	800	560	1.0	2.07	1.38	.69
SR6591	DO-27	1000	710	1.0	3.30	2.20	1.10

● NEW—SILICON DOUBLE DIFFUSED ALL GLASS RECTIFIER

DO-29

Case hermetically sealed. Will withstand extremely high reverse power transients. .350" x .150" Dia.

Type	Vr (v)	Io. (mA)	1-99	100-999	1000-Up
1N4383	200	10	.48	.38	.27
1N4384	400	10	.58	.41	.30
1N4385	600	10	.78	.54	.35
1N4585	800	10	1.20	.80	.65
1N4586	100	10	2.70	1.80	1.62

GERMANIUM POINT CONTACT DIODES

DO-7

For use in Audio, IF, RF & UHF range. *Indicates matched pair.

Type	PRV	Fwd. (mA)	1-99	100-999	1000-up
1N34A	75	50	.30	.23	.14
1N35*	75	225	1.58	1.21	.99
1N38A	120	50	.49	.38	.16
1N48	85	50	.30	.20	.14
1N54A	75	50	.42	.32	.17
1N55A	170	50	.40	.31	.14
1N58A	120	50	.55	.41	.23
1N60	30	50	.30	.23	.18
1N63	125	50	.36	.28	.22
1N64	25	50	.30	.23	.18
1N65	85	50	.48	.35	.30
1N67A	100	30	.28	.21	.14
1N69A	75	40	.30	.23	.18
1N81A	55	30	.48	.36	.30
1N90	75	30	.33	.22	.14
1N115	70	25	.64	.50	.40
1N116	75	45	.49	.36	.13
1N120	70	25	.46	.36	.29
1N126A	75	30	.30	.24	.11
1N127A	125	30	.42	.28	.16
1N128	50	30	.32	.25	.12
1N191	90	30	.35	.28	.15
1N192	70	45	.34	.26	.14
1N198	100	30	.35	.28	.15
1N198A	100	30	.35	.28	.15
1N198B	100	30	1.03	.78	.64
1N294	70	50	.34	.26	.15
1N295	50	30	.35	.27	.15
1N297	100	35	.34	.26	.14
1N298	85	50	.45	.30	.27
1N805	50	35	.29	.20	.16

GERMANIUM BONDED DIODES—DO-7

For general purposes and computer applications;. (*) indicates MIL approval.

Type	PIV (volts)	Ifwd (mA)	1-99	100-999	1000-up
1N98	100	60	.31	.24	.12
1N99	100	60	.50	.39	.16
1N100	100	60	.32	.27	.12
1N118	75	60	.23	.20	.13
1N270*	100	90	.32	.25	.11
1N276*	100	40	.31	.24	.12
1N277*	125	75	.34	.26	.14
1N279	35	80	.29	.22	.17
1N281	75	75	.31	.24	.14
1N283	25	100	.51	.40	.15
1N497	30	80	.39	.30	.14
1N498	60	80	.44	.35	.15
1N500	80	100	.53	.41	.15
1N631	90	60	.80	.63	.50
1N633	90	60	.83	.65	.35
1N695	20	100	.30	.24	.14
1N770	30	40	.48	.38	.16
1N995	15	30	.60	.45	.18
1N3125	50	100	.51	.40	.32

MICROWAVE VIDEO DETECTORS

Type	Freq. Band	1-9	10-99	100-249
1N358A	L-X	19.25	16.50	15.15
1N630R	L-X	53.50	45.80	42.00
1N830A	1000hz	3.85	3.30	3.00
1N833A	X	13.95	11.95	10.95
1N1611	X	4.30	3.68	3.40
1N3143	X	5.60	4.80	4.40

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Colif. 90301

SYLVANIA DIODES

MICROWAVE MIXER DIODES

* Indicates MIL. approval, + indicates comparative DB Noise figure where if amp. nose equals 1.5 —indicates Hi temp. for package —02.

Type No.	Fig.	Free Band	+Noise (DB)	1-9	10-99	100-999
1N21B	A	S	10.3	.68	.58	.53
1N21C	A	S	8.3	1.02	.88	.81
1N21D	A	S	7.3	2.10	1.80	1.65
1N21F	A	S	6.0	7.15	6.10	5.60
1N21G	A	S	5.5	11.90	10.40	9.35
1N21WE*	A	S	7.0	4.35	3.72	3.40
1N23B	A	X	11.5	.67	.58	.54
1N23C	A	X	9.5	1.02	.88	.81
1N23D	A	X	7.8	2.10	1.80	1.65
1N23E	A	X	7.5	3.50	3.00	2.75
1N23G	A	X	6.5	11.90	10.40	9.35
1N26*	B	K	13.1	6.50	5.60	5.10
1N26B	B	K	10.0	27.25	23.70	.....
1N26C	B	K	9.5	31.15	27.80	.....
1N53	B	KA	13.1	23.20	19.80	.....
1N78B*	B	KU	8.8	7.00	6.00	5.50
1N78F	B	KU	7.5	56.00	48.00	.....
1N1132	B	X	9.5	20.00	17.20	.....

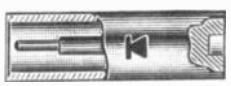


Fig. A

Fig. B

HI SPEED SILICON EPITAXIAL PLANAR DIODES—DO-7

Rec. time 4n secs. except 1N251 & 1N252-150n secs. 1N3731-3n secs.

Type	DIV (V)	Avg. IFWD (ma)	1-99	100-999	1000-up
1N251	40	40	.65	.43	.18
1N252	40	40	.85	.43	.18
1N906	20	50	.90	.60	.30
1N914	100	75	.45	.30	.18
1N914B	100	75	1.35	.90	.22
1N916A	100	75	.75	.50	.32
1N3605	40	50	.72	.48	.26

NEWARK — YOUR DEPENDABLE SOURCE FOR ALL YOUR ELECTRONIC NEEDS

NEWARK Saves You Time and Money

ERIE RECTIFIERS

FULL WAVE RECTIFIER ASSEMBLIES

Fig. A
- Full Wave Bridge Rectifier Circuit

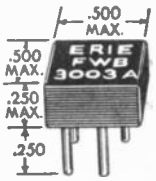
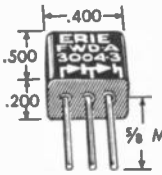


Fig. B
- Full Wave Voltage Doubler Circuit



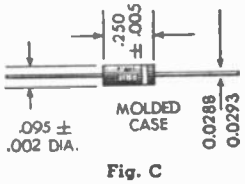


Fig. C

A miniature series of bridge and doubler modules designed for printed circuit applications. Double seal assures moisture resistance to environmental specs of MIL-STD-750A, FWB types (bridge rectifiers) measure ½x½x¼", with pin leads ¼" long; FWD types (doublers) measure .50x.40x.20" with ⅝" pin leads.

FULL WAVE BRIDGE RECTIFIERS—Fig. A

Type	PIV Wkng. Volt.	Rms Volts	Max. Fwd. Cur., 25°C.	1-99	100-999
FWB3001A	100	70	1.5A	1.80	1.45
FWB3002A	200	140	1.5A	1.80	1.50
FWB3003A	300	210	1.5A	1.90	1.60
FWB3004A	400	280	1.5A	2.00	1.75
FWB3005A	500	350	1.5A	2.25	1.80
FWB3006A	600	420	1.5A	2.50	1.90
FWB3008A	800	560	1.5A	2.75	2.30
FWB3010A	1000	700	1.5A	3.00	2.50

FULL WAVE DOUBLER RECTIFIERS—Fig. B

Type	PIV Wkng. Volt.	Rms Volts	Max. Fwd. Cur., 25°C.	1-99	100-999	1000-5000
FWDA3001A	100	35	.750A	.97	.69	.59
FWDA3002A	200	70	.750A	.98	.70	.60
FWDA3003A	300	105	.750A	.99	.71	.61
FWDA3004A	400	140	.750A	1.00	.72	.62
FWDA3005A	500	175	.750A	1.01	.73	.63
FWDA3006A	600	210	.750A	1.09	.78	.67
FWDA3008A	800	280	.750A	1.18	.84	.73
FWDA3010A	1000	350	.750A	1.57	1.12	.88

MINIATURE SILICON DIFFUSED RECTIFIERS — Fig. C

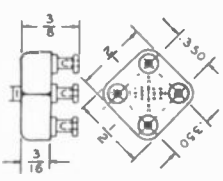
General-purpose diffused silicon rectifiers featuring high forward conductance, low leakage currents, and reliable performance. Unique methods of encapsulating the rectifier assure permanent resistance to parameter degradation due to moisture diffusion. Meet or exceed environmental testing per MIL-STD-750A. Surge current rating: 25A. Operating temperature range: —55 to +100°C. Body size: .250x.095"; 1.110" leads.

.75 AMP MAX. FWD. CURRENT

Type	PIV	Max. Ir @ 25°CR. μA	1-99	100-999	1000-5000
ED3001A	100	10	.45	.30	.21
ED3002A/1N2069	200	10	.50	.33	.22
ED3003A	300	10	.58	.39	.23
ED3004A/1N2070	400	10	.61	.45	.27
ED3005A	500	10	.64	.49	.28
ED3006A/1N2071	600	10	.66	.51	.29
ED3008A	800	10	.72	.57	.415
ED3010A	1000	10	.76	.61	.455

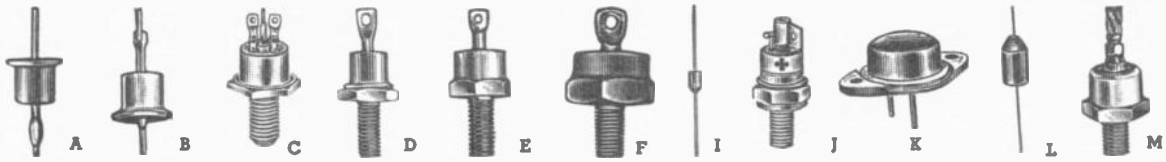
● *NEW* UNIVERSAL FULL WAVE BRIDGE RECTIFIERS

Miniature series of bridge and doubler modules designed for printed circuit applications. Rate at average rectifier currents of .5, .75, and 1.0 Ampere. Double seal insures moisture resistance to MIL-STD-750A, Method 1021.1. Reverse current (μa) per leg @ PIV @ 25°C: 20. **Note on ordering: No suffix** letter attached to the type number means that Io = 1.0 Amp @ 25°C, Vf = 1.5 Volts. **"A" suffix** attached to type number means that Io = 1.5 Amp @ 25°C, Vf = 1.3 Volts. **"B" suffix** attached by the customer to type number indicates Io = 2.0 Amp, Vf = 1.1 Volts.



Type	Avalanche V/leg @ 100 μA	PIV Work. Volts	Max Applied rms V	1-99	100-999
FWBTS3001	120	100	70 V	1.70	1.25
FWBTS3002	250	200	140 V	1.75	1.30
FWBTS3003	350	300	210 V	1.85	1.40
FWBTS3004	450	400	280 V	1.95	1.50
FWBTS3005	550	500	350 V	2.05	1.60
FWBTS3006	650	600	420 V	2.15	1.70
FWBTS3008	850	800	560 V	2.60	2.10
FWBTS3010	1100	1000	700 V	3.00	2.50

Westinghouse Semiconductors



SILICON RECTIFIERS, LOW POWER

Type	Fig.	PRV	Max. IDC Resistive Load	1-99	100-999
1N1217B	B	50	1.6A @ 140°C Case	.40	.25
1N1218B	B	100		.45	.30
1N1220B	B	200		.50	.33
1N1222B	B	400		.75	.50
1N1224B	B	600		.95	.65
1N1226B	B	800		1.39	.95
1N536	A	50	750 MA. @ 50°C Ambient	.40	.29
1N537	A	100		.45	.30
1N538	A	200		.50	.33
1N539	A	300		.60	.45
1N540	A	400		.75	.50
1N547	A	600		.95	.65
1N560	A	800	600 MA. @ 30°C Ambient	1.39	.95
1N561	A	1000		3.32	2.21
1N1095	A	500	750 MA. @ 35°C Ambient	.76	.51
1N1096	A	600	750 MA. @ 30°C Ambient	.93	.63
1N4816	I	50	1.5 Amp. @ 40°C Case	.28	.22
1N4817	I	100		.32	.26
1N4818	I	200	1.5 Amp @ 40°C Case	.38	.30
1N4819	I	300		.42	.34
1N4820	I	400		.46	.37
1N4821	I	500		.50	.40
1N4822	I	600		.58	.46
1N2610		100		1.10	.75
1N5052	L	700	1.5 Amp @ 40°C Ambient	.80	.64
1N5053	L	800		.96	.77
1N5054	L	1000		1.30	1.04
386-1AY	Y	50	1.0 Amp @ 50°C Ambient	1.35	.90
1N5004	Y	100		1.65	1.08
386-1CY	Y	150		1.74	1.20
1N5005	Y	200		1.85	1.26
386-1FY	Y	300		2.40	1.62
1N5006	Y	400		2.60	1.81
386-K	Y	500		3.00	2.05
1N5007	Y	600		3.55	2.40

SILICON RECTIFIERS, MEDIUM POWER

Type	Fig.	PRV	Max. IDC Resistive Load	1-99	100-999
1N1612	D	50	10 Amp @ 150°C Case	1.13	.77
1N1613	D	100		1.30	.88
1N1614	D	200		1.96	1.32
1N1615	D	400		4.18	2.80
1N1616	D	600		6.08	4.07
1N1341A	D	50	6 Amp @ 150°C Case	1.13	.75
1N1341AR	D	50		1.13	.75
1N1342A	D	100		1.28	.85
1N1342AR	D	100		1.28	.85
1N1343A	D	150		1.64	1.09
1N1343AR	D	150		1.64	1.09
1N1344A	D	200		2.22	1.45
1N1344AR	D	200		2.22	1.45
1N1345A	D	300		3.17	2.11
1N1345AR	D	300		3.17	2.11
1N1346A	D	400		4.11	2.74
1N1346AR	D	400	6 Amp @ 150°C Case	4.11	2.74
1N1347A	D	500		4.97	3.31
1N1347AR	D	500		4.97	3.31
1N1348A	D	600		5.93	3.95
1N1348AR	D	600		5.93	3.95
1N1199A	D	50	12 Amp @ 150°C Case	1.25	.83
1N1199AR	D	50		1.25	.83
1N1200A	D	100		1.41	.94
1N1200AR	D	100		1.41	.94
1N1201A	D	150		1.82	1.21
1N1201AR	D	150		1.82	1.21
1N1202A	D	200		2.63	1.75
1N1202AR	D	200		2.63	1.75
1N1203A	D	300		3.60	2.40
1N1203AR	D	300		3.60	2.40
1N1204A	D	400		4.58	3.05
1N1204AR	D	400		4.58	3.05
1N1205A	D	500		5.33	3.55
1N1205AR	D	500		5.33	3.55
1N1206A	D	600		6.30	4.25
1N1206AR	D	600		6.30	4.25
1N1191,R	F	50	18 Amp @ 140°C Case	1.65	1.10
1N1192,R	F	100		1.72	1.15
1N1193,R	F	150		2.10	1.40
1N1194,R	F	200		2.45	2.10
1N1195,R	F	300		3.98	3.00

(Continued, Next Column)

SILICON RECTIFIERS, MEDIUM POWER (Cont'd)

Type	Fig.	PRV	Max. IDC Resistive Load	1-99	100-999
1N1196,R	F	400	18 Amp @ 140°C Case	5.00	3.30
1N1197,R	F	500		5.85	4.10
1N1198,R	F	600		6.50	4.40
1N248	F	50	15 Amp @ 150°C Case	2.00	1.33
1N248A	F	50		2.00	1.33
1N248B	F	50		2.00	1.33
1N249	F	100		2.45	1.69
1N249A	F	100		2.45	1.69
1N249B	F	110		2.45	1.69
1N250B	F	220		3.63	2.42
1N1183	F	50	35 Amp @ 140°C Case	1.95	1.30
1N1184	F	100		2.40	1.60
1N1185	F	150		2.90	1.95
1N1186	F	200		3.45	2.30
1N1187	F	300		5.13	3.42
1N1188	F	400		5.85	3.90
1N1189	F	500		6.05	4.30
1N1190	F	600		6.60	4.60
1N1183A	F	50	40 Amp @ 150°C Case	2.40	2.10
1N1183AR	F	50		2.40	2.10
1N1183,R	F	50		1.95	1.30
1N1184,R	F	100		2.40	1.60
1N1185,R	F	150		2.90	1.95
1N1186,R	F	200		3.45	2.30
1N1187,R	F	300		5.13	3.42
1N1188,R	F	400		5.85	3.90
1N1189,R	F	500		6.05	4.30
1N1190A	F	600		7.60	5.10
1N1190AR	F	800		7.60	5.10
1N1190,R	F	600		6.60	4.60

RECTIFIERS — OEM LINE

Type	Fig.	PRV	Max. IDC Resistive Load	1-99	100-999
368-A	E	50	15 Amp @ 125°C Case	.73	.61
368-B	E	100		.78	.64
368-C	E	150		.86	.66
368-D	E	200		1.03	.69
368-F	E	300	15 Amp @ 125°C Case	1.22	.80
368-H	E	400		1.43	.90
368-K	E	500		1.68	1.05
368-M	E	600		1.97	1.22

FAST RECOVERY RECTIFIERS

Type	Fig.	PRV	Max. IDC Resistive Load	1-99	100-999
1N3879	E	50	6 Amp.	20.30	19.50
1N3880	E	100		39.00	25.95
1N3881	E	200		47.50	31.60
1N3882	E	300		53.80	35.90
1N3883	E	400		60.00	40.00

SILICON—RECTIFIERS, HIGH POWER

1N1396	M	50	70 Amp @ 150°C Case	5.50	4.65
1N1397	M	100		6.80	5.75
1N1398	M	150		8.90	7.40
1N1399	M	200		11.15	8.90
1N1400	M	300		12.65	10.35
1N1401	M	400		13.70	11.35
1N1402	M	500	100 Amp.	15.25	12.65
1N1403	M	600		17.95	14.85
1N3260	N	50	160 Amp @ 125°C Case	7.50	6.35
1N3261	N	100		8.55	7.25
1N3262	N	150		11.30	9.83
1N3263	N	200		14.85	12.60
1N3264	N	250		17.10	14.10
1N3265	N	300		17.95	14.70
1N3266	N	350		18.75	15.45
1N3267	N	400		19.55	16.20
1N3268	N	500		21.75	17.95
1N3269	N	600		25.60	21.00
1N3270	N	700		28.90	23.80
1N3271	N	800		32.05	26.45
1N3272	N	900		35.30	28.90
1N3273	N	1000		38.55	32.00
1N3274	N	1200		42.00	35.20
1N3275	N	1400		46.20	38.85
1N3276	N	1600		50.95	43.05

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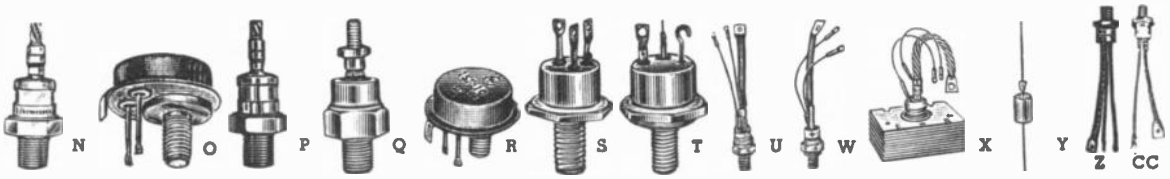

SILICON RECTIFIERS—HIGH POWER (Cont'd)

Type	Fig.	PRV	Max. IDC Res. Load	1-24	25-99
IN4055	P	900	275 Amp.	72.00	57.50
IN4056	P	1000		79.50	63.00
IN4587	M	100	150 Amps @ 110°C	8.10	6.90
IN4588	M	200		13.35	11.35
IN4589	M	300		15.25	12.50
IN4590	M	400		16.60	13.80
IN4591	M	500		18.50	15.25
IN4592	M	600		21.80	17.85
IN4593	M	800		27.20	22.50
IN4594	M	1000		32.80	27.20
IN4595	M	1200		55.00	40.00
IN4596	M	1400		75.00	50.00
1N4044-R	N	50	275 Amp @ 120 C Case	13.00	11.25
1N4045-R	N	100		20.00	15.75
1N4046-R	N	150		23.40	18.50
1N4047-R	N	200		28.00	21.40
1N4048-R	N	250		30.00	23.00
1N4049-R	N	300		32.40	24.75
1N4050-R	N	400		35.50	27.00
1N4051-R	N	500		44.00	34.00
1N4052-R	N	600		52.25	40.25
1N4053-R	N	700		58.50	45.00
1N4045-R	N	800		20.00	15.75
770ZD-R	N	1200		96.00	81.00
760ZH-R	N	1400		109.00	104.00
760ZM-R	N	1600		125.00	120.00

SILICON POWER TRANSISTORS—OEM LINE

Type	Fig.	Vce	Ic Max.	DC I Gain	1-99	100-999
151-04	R	40	6A	11 Min. Vce=4V Ic=1.5A	5.55	4.35
151-06	R	60			8.40	6.55
151-08	R	80			11.30	8.70
151-10	R	100			14.30	11.10
152-04	R	40	6A	18 Min. Vce=4V Ic=1.5A	6.45	5.00
152-06	R	60			9.50	7.40
152-08	R	80			12.60	9.80
152-10	R	100			15.75	12.25
153-12	N	120	7.5A	Vce=4V Ic=1.5A	16.15	12.40
153-14	N	140			18.20	14.00
153-18	N	180			23.10	17.80
153-20	N	200			26.10	20.00
154-08	N	80	7.5A	25 Min. Vce=4V Ic=1.5A	12.60	9.80
154-10	N	100			15.75	12.25
154-12	N	120			18.60	14.30
154-14	N	140			20.90	16.10
154-16	N	160			23.60	18.20
154-18	N	180			26.60	20.25
2N3429	C	50	7.5A	10 Min. Ic=5A	29.00	21.60
2N3430	C	100			38.00	28.30
2N3431	C	150			51.00	37.70
2N3432	C	200			67.00	50.00
2N3433	C	250			89.00	66.50
					1-24	25-99
2N3470	....	50	10A	100 Min. Ic=10A	44.00	29.00
2N3471	....	100			61.00	41.00
2N3472	....	150			83.00	55.00
2N3473	....	200			112.00	75.00
2N3474	....	50	10A	400 Min. Ic=10A	73.00	48.00
2N3475	....	100			99.00	66.00
2N3476	....	150			132.00	88.00
2N3477	....	200			183.00	122.00
					1-99	100-999
153-04	C	40	7.5A	15 Min. Ic=1.5A	5.55	4.35
153-06	C	60			8.40	6.55
153-08	C	80			11.30	8.70
153-10	C	100			14.30	11.10
153-16	C	160			20.50	15.70
153-22	C	220			29.50	22.60
153-24	C	240			34.10	25.75
153-26	C	260			38.80	29.30
153-28	C	280			44.00	33.40
154-04	C	40	7.5A	25 Min. Ic=1.5A	6.45	5.00
154-06	C	60			9.50	7.40
154-20	C	200			28.80	22.00
154-22	C	220			32.60	24.80
154-24	C	240			37.10	28.30
154-26	C	260			42.25	32.20
154-28	C	280			48.10	36.70

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SILICON POWER TRANSISTORS—OEM LINE (Cont'd)

Type	Fig.	Vce	Ic Max.	DC I Gain	1-99	100-999
2N3055*	K	60	15A	Pd @ 25 C *115W 117W	2.89	2.00
2N3232	K	60	7.5A		3.75	2.50
2N3233	K	100	7.5A		4.50	3.25
2N3234	K	160	7.5A		5.75	4.35
2N3235	K	55	15A		3.75	2.50
2N3442	K	140	10A		4.95	3.42
2N3236	K	90	30A	Pd @ 25 C *200W 150W	8.65	5.77
2N3237*	K	75			13.65	9.10
2N3238	K	80			8.40	5.60
2N3239	K	80			11.76	6.50
2N3240	K	160			16.07	10.71
2N3771	K	40			5.78	3.99
2N3772	K	60			5.78	3.99
2N3773	K	140			7.84	5.42
164-04	CC	40	20A	25 Min. Vce=4V Ic=5A	19.40	14.05
164-06	CC	60			21.50	15.50
164-08	CC	80			23.50	16.90
164-10	CC	100			25.50	18.35
164-12	CC	120			28.50	20.50
164-14	CC	140			31.50	22.65
164-16	CC	160			34.50	24.80
164-18	CC	180	20A	25 Min. Ic=5A	37.50	27.00
164-20	CC	200			40.50	29.20
2N1015	O	30	7.5A	10 Min. Vce=4V Ic=2A	19.00	14.00
2N1015A	O	60			25.00	18.60
2N1015B	O	100			34.00	25.20
2N1015C	O	150			44.00	33.00
2N1015D	O	200			58.00	43.00
2N1015E	O	250			77.00	57.30
2N1016	O	30	7.5A	10 Min. Vce=4V Ic=5A	21.00	16.00
2N1016A	O	60			29.00	21.60
2N1016B	O	100			38.00	28.30
2N1016C	O	150			51.00	37.70
2N1016D	O	200			67.00	50.00
2N1016E	O	250			89.00	66.50
2N2226	O	50	10A	100 Min. Vce=6V	44.00	29.00
2N2227	O	100			61.00	41.00
2N2228	O	150			83.00	55.00
2N2229	O	200			112.00	75.00
2N2230	O	50	10A	400 Min. Vce=6V Ic=10A	73.00	48.00
2N2231	O	100			99.00	66.00
2N2232	O	150			132.00	88.00
2N2233	O	200			183.00	122.00
2N2742	O	200	20A	10 Min. Vce=4V Ic=10A	122.00	102.00
2N2748	O	200	20A	10 Min. Vce=4V Ic=15A	134.00	112.00
2N2754	O	200	20A	10 Min. Vce=4V Ic=20A	147.00	124.00
2N2757	Z	50	30A	10 Min. Vce=4V Ic=10A	57.00	48.00
2N2758	Z	100			74.00	62.00
2N2759	Z	150			95.00	80.00
2N2760	Z	200			122.00	102.00
2N2761	Z	250			158.00	130.00
2N2763	Z	50	30A	10 Min. Vce=4V Ic=15A	63.00	52.00
2N2764	Z	100			82.00	68.00
2N2765	Z	150			105.00	87.00
2N2766	Z	200			134.00	112.00
2N2769	Z	50	30A	10 Min. Vce=4V Ic=20A	70.0	59.00
2N2770	Z	100			90.00	76.00
2N2771	Z	150			115.00	98.00
2N2772	Z	200			147.00	124.00

SILICON CONTROLLED RECTIFIERS

Fig. AA—16 AMPERE HALF WAVE—25 AMPERE RMS

Type	Vfb	I surge Pk. ½ Cyc. Surge	1-99	100-999
2N681	25	150 Amp	6.50	4.35
2N682	50		7.30	4.85
2N683	100		8.05	5.35
2N684	150		9.40	6.25
2N685	200		11.10	7.40
2N686	250		12.45	8.30
2N687	300		14.60	9.75
2N690	25		23.25	15.50

Westinghouse Semiconductors

SILICON CONTROLLED RECTIFIERS

Fig. CC—35 AMPERES HALF WAVE 55 AMPERES RMS

Type	Vfb	I surge Pk. ½ Hz Surge	1-99	100-999
*211A	50	700 Amp	18.60	14.60
*211B	100		21.50	18.80
*211C	150		25.10	18.60
*211D	200		28.50	22.30
*211F	300		38.00	29.70
			1-24	25-99
218A	50	1100 Amp	19.50	15.50
218B	100		22.50	18.00
218C	150		28.50	20.50
218D	200		30.00	23.50
218F	300		40.00	31.50
218H	400		52.50	41.00
218K	500		63.50	49.50
218M	600		78.50	60.00
218P	700		94.00	74.00
218S	800		113.50	89.50
218V	900		132.00	104.50
218Z	1000		156.00	123.50
218ZB	1100		182.50	137.00
218ZD	1200		205.50	154.50

SILICON CONTROLLED RECTIFIERS

Type	Vfb	I surge Pk. ½ Hz Surge	1-99	100-999
*211H	400	700 Amp	50.15	39.25
211M	600		73.15	57.25
211S	800		108.00	85.05
211Z	1000		148.75	117.50

GATE CONTROLLED SILICON RECTIFIER SWITCH

Type	Vfb	Turn-off Time	1-99	100-999
242ZB	100	1 amp reverse gate pulse will turn off 8 amps peak forward current in 5μ sec.	15.75	14.30
242ZD	200		22.85	19.25
242ZH	400		37.50	32.20
242ZM	600		51.50	44.25

SILICON CONTROLLED RECTIFIERS HIGH POWER

Type	VBO	I surge Pk. ½ Hz	1-24	25-99
2N1806	600	1000 Amp.	97.50	75.50
809S	800		145.00	112.00
809Z	1000		210.00	155.00

SILICON CONTROLLED RECTIFIERS— 35 AMPERES

Type	VBO	I surge Pk. ½ Hz	1-24	25-99
213A	50	500 Amp.	22.40	17.90
213B	100		27.00	20.35
213D	200		33.00	26.30
213F	300		42.80	34.00
213H	400		57.50	45.00
213K	500		68.00	53.75
213M	600		82.25	64.75
213S	800		132.00	105.50
213V	900		141.00	113.00
213Z	1000		165.00	132.00

SILICON CONTROLLED RECTIFIERS— 70 AMPERES

Type	VBO	I surge Pk. ½ Hz	1-24	25-99
212A	50	750 Amp.	32.80	25.00
212B	100		37.00	28.50
212D	200		47.20	37.00
212F	300		61.60	48.40
212H	400		84.00	63.00
212K	500		97.50	76.00
212M	600		117.00	91.20
212S	800		259.00	149.50
212V	900		305.00	175.00
212Z	1000		360.00	206.00

MEDIUM POWER RECTIFIERS 5 AMPERES

Type	VBO	I surge Pk. ½ Hz	1-99	100-999
407A	50	125 Amp.	.64	.43
407B	100		.67	.45
407C	150		.74	.50
407D	200		.85	.57
407F	300		1.06	.71
407H	400		1.15	.77
407K	500		1.38	.93
407M	600		1.71	1.15

(Continued, next column)

● NEW MEDIUM POWERED RECTIFIERS (Cont'd)

10 AMPERES

Type	VBO	I surge ½ Hz	1-99	100-999
408A	50	175 Amp.	.67	.45
408B	100		.70	.47
408C	150		.78	.52
408D	200		.90	.60
408F	300		1.11	.75
408H	400		1.22	.82
408K	500		1.45	.97
408M	600		1.80	1.23

15 AMPERES

409A	50	250 Amp.	.71	.47
409B	100		.74	.50
409C	150		.82	.55
409D	200		.95	.64
409F	300		1.17	.78
409H	400		1.28	.86
409K	500		1.53	1.03
409M	600		1.90	1.27

20 AMPERES RATING

417A	50	350 Amp.	1.30	.87
417B	100		1.70	1.14
417C	150		2.05	1.37
417D	200		2.30	1.54
417F	300		3.60	2.41
417H	400		4.20	2.81
417K	500		5.00	3.35
417M	600		6.00	4.02

25 AMPERES RATING

418A	50	400 Amp.	1.63	1.09
418B	100		1.86	1.25
418C	150		2.16	1.45
417D	200		2.40	1.61
418F	300		4.10	2.75
418H	400		4.85	3.25
418K	500		5.65	3.79
418M	600		6.50	4.36

40 AMPERES RATING

Type	VBO	I surge ½ Hz	1-99	100-999
419A	50	500 Amp.	1.70	1.14
419B	100		1.95	1.31
419C	150		2.25	1.51
419D	200		3.00	2.01
419F	300		4.70	3.15
419H	400		5.50	3.69
419K	500		6.30	4.22
419M	600		6.75	4.52

1.5 AMPERES RATING

384A	50	50 Amp.	.24	.20
384B	100		.29	.24
384D	200		.33	.28
384F	300		.38	.32
384H	400		.42	.35
384K	500		.46	.38
384M	600		.52	.44
384P	700		.74	.62
384S	800		.89	.75
384Z	1000		1.22	1.02

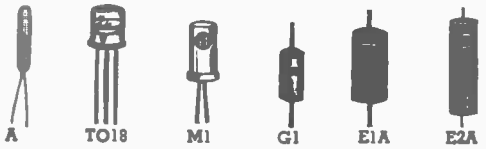
3.0 AMPERES RATING

398A	50	200 Amp.	.46	.31
398B	100		.50	.34
398D	200		.62	.42
398F	300		.70	.47
398H	400		.82	.55
398K	500		.94	.63
398M	600		1.08	.72
398P	700		1.28	.86
398S	800		1.60	1.07
398Z	1000		2.04	1.37

● NEW MEDIUM POWER THYRISTORS 35 AMPERES

Type	Volts	Amps Isurge	Max A. Irms	1-24	25-99
251A	50	1200 Amp.	63 Amp.	18.60	14.60
251B	100			21.50	16.80
251C	150			25.10	19.60
251D	200			28.50	22.30
251F	300			38.00	29.70
251H	400			50.15	39.25
251K	500			60.25	47.15
251M	600			73.15	57.25
251P	700			89.70	70.20
251S	800			108.00	85.05
251V	900			128.00	99.50
251Z	1000			148.75	117.50
251ZB	1100			174.00	130.50
251ZD	1200			196.00	147.00
251ZF	1300			222.00	167.50
251H	1400			247.00	187.50

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507



ZENER LOW VOLTAGE DIODES

Temp.: —55 to +175°C. Ratings at 25°C. Er tol.: ±5%.

Type	Case	Er @ 20 mA (Volts)	Max. Ib (μa @ V)	Power (W)	1-99	100-999
HS-6	G1	.74	20@ .35	.5	1.30	.85
HS-7	E1A	1.40	20@ .7	1	3.50	2.10
HS-8	E1A	1.55	20@ .7	1	3.50	2.10
HS-10	E2A	2.10	20@1	1.4	5.00	3.10
HS-14	E2A	3.10	20@1.4	1.75	6.00	3.70

200 MW ZENER "DOUBLE ANODE" DIODES—M-1 CASE

Rated at 25°C. Temp.: —65 to +150°C. Available in ±5% tol.

Type	Ez @ 5 ma Min.	Ez @ 5 ma Max.	Ib Max. μa	Ib Max. Eb	1-99	100 Mixed 10/Type	100-999
1N471	3.0	3.9	50	1			
1N472	3.7	4.5	5	1			
1N473	4.3	5.4	5	1.5	4.75	4.30	3.80
1N474	5.2	6.4	5	1.5			
1N475	6.2	8.0	5	3.5			

150 MW GENERAL PURPOSE ZENER DIODES—M1 CASE

Rated @ 25°C. Ez, 5V min., 7V max. Temp.: —55 to +100°C.

Type No.	Description	Max. Zx Ohms	1-99	100-999
RS-6	Single Anode	15	1.80	1.35
RT-6	Double Anode	20	1.80	1.35

GENERAL PURPOSE 150 MW SILICON DIODES—M1 CASE

Max. power rating: 150 mw @ 25°C. Derate 1 mw/°C over 25°C. Oper. range: —65 to +150°C, except * —55 to +100°C. **Vf @ 0.015 ma. is 0.5V ±10%.

Type	Eb Max. V.	Ez Min. V.	If Min. mA	1-99	100 Mixed 10/Type	100-999
1N137A	36	40	3	2.75	2.50	2.06
1N138A	18	20	5	2.75	2.50	2.06
1N200	6.8	7.5	50	3.25	2.95	2.44
1N210	47	52	3.5	3.25	2.95	2.44
1N214	100	110	1.2	3.25	2.95	2.44
1N216	150	170	0.7	3.25	2.95	2.44
1N222	470	520	1.5	3.25	2.95	2.44
HB1*	6.8	7.5	17	.44	..	.44
HB2*	18	20	5	.44	..	.44
HB3*	36	40	2.7	.44	..	.44

150 MW ZENER SINGLE ANODE DIODES—M1 CASE

Rated @ 25°C. Temp.: -65 to +150°C. Available in ±5% tol.

Type	Ez @ 2 mA Min.	Ez @ 2 mA Max.	Max. Rev. μA @ 25°C	Max. Rev. μA @ 100°C	Eb	1-99	100 Mixed 10/Type	100-999
1N1313	7.5	10	0.5	5	6.8	3.10	2.70	2.35
1N1314	9	12	0.5	5	8.2	3.10	2.70	2.35
1N1315	11	14.5	0.5	5	10	3.10	2.70	2.35
1N1317	17	21	0.5	5	15	3.10	2.70	2.35
1N1322	43	54	0.1	10	39	3.10	2.70	2.35
1N1323	52	64	0.1	10	47	3.10	2.70	2.35

150 MW ZENER "DOUBLE ANODE" DIODES—M1 CASE

Rated @ 25°C. Temp.: —65 to +150°C. Available in ±5% tol.

1N225	7.5	10	0.5	5	6.8	5.75	5.20	4.31
1N226	9	12	0.5	5	8.2	5.75	5.20	4.31
1N227	11	14.5	0.5	5	10	5.75	5.20	4.31
1N228	13.5	18	0.5	5	12	5.75	5.20	4.31
1N231	25	32	0.1	10	22	6.25	5.65	4.69
1N232	30	39	0.1	10	27	6.25	5.65	4.69

250 MW ZENER LOW VOLTAGE SILICON DIODES—M1 CASE

Rated @ 25°C. Temp.: —65 to +200°C. AVA. ±5% and ±1%.

Type	Ez @ 5mA Min.	Ez @ 5mA Max.	Ib Max. μA	Ib Max. Eb	1-99	100 Mixed 10/Type	100-999
1N465	2.0	3.2	75	1			
1N466	3.0	3.9	50	1			
1N467	3.7	4.5	5	1	3.25	2.90	2.45
1N468	4.3	5.4	5	1.5			
1N469	5.2	6.4	5	1.5			
1N470	6.2	8.0	5	3.5			

NEWARK CAN SUPPLY ALL HOFFMAN SEMICONDUCTORS

250 MW ZENER GLASS DIODES—G1 CASE

Rated @25°C. Temp. range:—65° to +175°C. Tolerance: ±5%. Delete suffix "A" for 10% tolerance.

Type	Ez@5mA Min.	Ez@5mA Max.	Max. Z. @ 10 mA (Ohms)	1-99	100 Mixed 10/Type	100-999
1N702A	2.0	3.2	60	1.75	1.55	1.50
1N706A	5.2	6.4	20			
1N707A	6.2	8.0	10			
1N762	5.2	6.4	20		10%	
1N763	6.2	8.0	8			
1N764	7.5	10	15	1.55	1.40	1.30
1N765	9	12	50			
1N766	11	14.5	70		5%	
1N767	17	18	120			
1N768	13.5	21	200	2.20	2.00	1.65
1N769	20	27	300			

250 MW GLASS ZENER DIODES—G1 CASE

Rated @ 25°C. These devices have ±5% tolerance. Delete suffix "A" from type number for±10%tolerance. *5%price same as above, 10% price is shown.

Type No.	Ez @ Iz Volts	Iz ma	1-99	100 Mixed 10/Type	100-999
1N708A	5.6	25			
1N709A	6.2	25			
1N710A	6.8	25			
1N711A	7.5	25			
1N712A	8.2	25			
1N713A	9.1	12		5%	
1N714A	10	12			
1N715A	11	12	1.75	1.55	1.50
1N716A	12	12			
1N717A	13	12			
1N718A	15	12		10%	
1N719A	16	12			
1N720A	18	12	1.50	1.35	1.25
1N721A	20	4			
1N724A	27	4			
1N725A	30	4			
1N727A*	36	4	1.65	1.50	1.45
1N733A	62	2		5%	
1N735A	75	2	1.75	1.55	1.50
1N736A	82	2		10%	
1N737A	91	1	1.50	1.35	1.25
1N738A	100	1		5%	
1N740A	120	1	3.10	2.80	2.60
1N742A	150	1		10%	
			2.15	1.95	1.85

SILICON TUNNEL DIODES

Hermetically sealed TO-18 package, with weldable gold plated Kovar leads. Used for many small signal applications.

Type	I @ 25°C (mA)	1-99	100-999
1N2927	0.50	15.00	11.25
1N2927A	0.50	19.00	13.35
1N2928	2.50	12.50	9.40
1N2928A	2.50	17.50	13.10
1N2929	5.0	11.10	8.30
1N2929A	5.0	17.50	13.10
1N2930	15.0	11.10	8.30
1N2930A	15.0	17.50	13.10
1N2931	25.0	11.10	8.30

NPN PHOTO DUO-DIODE—TYPE 1N2175

The 1N2175 is a sub-miniature, symmetrically diffused silicon photo readout device. The two junctions are symmetrical so that either diode terminal can be baised either positively or negatively. Due to this unique design, AC or DC bias voltage can be used. The samll size and high light sensitivity of this unit makes it particularly useful in high speed readout of punched cards.

Type 1N2175. NET 1-99 .....11.50 100-999 .....8.00

400 MW GLASS ZENER DIODES—G1 CASE

Rated @25°C. Temp. range: —65° to +175°C. ±5% Ez tolerance. Also available in ±10% tolerance.

Type	Ez@Iz (V)	Iz mA	Max. Zx @ Iz	Ohms Zz	1-99	100-299 Mix	100-200
1N957B	6.8	18.5	4.5	700			
1N958B	7.5	16.5	5.5	700			
1N959B	8.2	15	6.5	700	2.75	2.55	2.20
1N961B	10	12.5	8.5	700			
1N963B	12	10.5	11.5	700			
1N965B	15	8.5	16.0	700			
1N968B	20	6.2	25	750			
1N969B	22	5.6	29	750	2.75	2.55	2.20
1N971B	27	4.6	41	750			
1N972B	30	4.2	49	1000			
1N976B	43	3.0	93	1500			
1N984B	91	1.4	400	3000	2.75	2.55	2.20
1N985B	100	1.3	500	3000			
1N986B	110	1.1	750	4000	3.45	3.15	2.75
1N992B	200	0.65	2500	8000			

Hoffman Semiconductors

400 MW GLASS ZENER DIODES—G1 CASE

Rated @25°C. Tol.: ±5%. Temp. range: —65° to +175°C. Delete suffix "A" from type number for ±10% tolerance.

Type	Ez@Iz= 20mA V.	Ib @ Eb= —1V @25°C (uA)	Ib @ Eb= —1V @ 150°C (uA)	1-99	100-299 Mix	100 299
1N746A	3.3	10.0	30			
1N749A	4.3	2.0	30		5%	
1N750A	4.7	2.0	30			
1N751A	5.1	1.0	20	1.75	1.55	1.50
1N752A	5.6	1.0	20			
1N753A	6.2	0.1	20			
1N754A	6.8	0.1	20		10%	
1N756A	8.2	0.1	20			
1N757A	9.1	0.1	20	1.50	1.35	1.10
1N758A	10.0	0.1	20			
1N759A	12.0	0.1	20			

1.5 WATT MICROMINIATURE SILICON ZENER REGULATORS

Electrical specifications @ 25° Air Ambient. All are ±5% Tol. Operating temp.: —65°C to +175°C. Power dissipation: —1.5 Watts @ 30°C Air Ambient, leads heat sinked 3/8" from the body of the diode. Power derating: —10.4mW/°C above 30°C. Available in voltages to 200 volts on special order.

JEDEC Type	Vz@Izt Volts	Izt mA	Ir@Vr μA	Vr Volts	1-49	50-249	250-999
1N4464	9.1	28.0	.3	5.46			
1N4467	12	21.0	.2	9.6			
1N4469	15	17.0	.05	12.0			
1N4472	20	12.5	.05	16.0	3.95	2.95	2.80
1N4474	24	10.5	.05	19.2			
1N4475	27	9.5	.05	21.6			
1N4477	33	7.5	.05	26.4			

400 mW LOW VOLTAGE ZENER REGULATORS-G1-CASE

Max power dissipation: 400mW @ 50°C ambient (derate 3.2 mW/C above 50°C ambient.) Operating and storage temp.: —65°C to 175°C. Standard types ± 10% tol.; A, ±5% tol.

Type	Nominal Zener Voltage Vz@20mA (volts)	1-99	100-999
1N4370	2.4	1.75	1.30
1N4370A	2.4	2.45	1.85
1N4371	2.7	1.75	1.30
1N4371A	2.7	2.45	1.85
1N4372	3.0	1.75	1.30
1N4372A	3.0	2.45	1.85

400MW ZENER REGULATORS—G1 CASE

Rated @ 25°C.

Type	Ez @ IZ (V)	IZ (mA)	Ohms @ IZ	1-99	100 mixed 10/Type	100-999
1N961A	10	12.5	8.5	2.20	2.00	1.65
1N966A	16	7.8	17.0			
1N969A	22	5.6	29			

TEMPERATURE COMPENSATED ZENER REFERENCE DIODES

Electrical characteristics at 7.5 ma except ‡ at 10 ma. *Symmetrical types, meet specifications in both polarities.

Type	Case	Nom. Volt ±5%	Temp. Range °C	Max. Dyn. Z Ohms	1-99	100 Mixed 10/Type	100-999
1N429	M1	6.2	—55-+100	20	5.40	4.85	4.10
1N821	G1	6.2	—55-+100	15	2.55	2.40	1.90
1N822*	G1	6.2	—55-+100	15	7.85	7.10	5.90
1N823	G1	6.2	—55-+100	15	3.35	3.00	2.50
1N824*	G1	6.2	—55-+100	15	9.60	8.65	7.20
1N935	G1	9.0	0-+75	20	2.15	1.95	1.60
1N936	G1	9.0	0-+75	20	2.55	2.30	1.90
1N936B	G1	9.0	—55-+150	20	3.85	3.45	2.90
1N938	G1	9.0	0-+75	20	6.40	5.75	4.80
1N938A	G1	9.0	—55-+100	20	7.00	6.30	5.20
1N938B	G1	9.0	—55-+150	20	9.20	8.30	6.90
1N1737	E3A	18.6	—55-+100	60	10.50	9.45	7.90
1N430‡	M3	8.4	—55-+100	15	16.00	14.40	12.35
1N430A‡	M3	8.4	—55-+100	15	24.00	21.60	18.70
1N1530‡	P1	8.4	—55-+100	15	15.60	14.00	12.40
1N1530A‡	P1	8.4	—55-+100	15	23.40	21.00	18.70

TUNNEL DIODE TRIGGER AND SILICON CONTROLLED RECTIFIER SWITCHING SYSTEM

Type	Fwrd. & Rev. block. voltage ratings	1-99	100-999
K-1008	50 volts	6.30	4.75

UNI-TUNNEL DIODES-TO-18-CASE

Meets environmental exposures of MIL-S-19500 and MIL-STD-750. Excellent temperature stability from —65°C to +150°C.

Type	Ir (max) @ 25°C (mA) Max. Rev. Cur.	Max. Frwd. Cur.	1-99	100-999
1N3539	1.25	1.0	12.50	9.40
1N3539A	1.25	1.0	19.00	13.35
1N3540	2.50	2.0	7.50	5.70
1N3540A	2.50	2.0	9.00	6.75
1N3541	6.25	2.5	7.50	5.70
1N3541A	6.25	2.5	9.00	6.75
1N3542	12.5	3.0	7.50	5.70
1N3542A	12.5	3.0	9.00	6.75
1N3543	25.0	5.0	7.50	5.70
1N3543A	25.0	5.0	9.00	6.75

MICROMINIATURE SILICON TUNNEL DIODES

Designed for switching applications where space limitations are a major factor. Hermetically sealed DO-17 axial leaded package. Contaminant free construction. No epoxy paste or varnishes. Meets MIL-S-19500 and MIL-STD-750 requirement. Max. operating range: —65°C to +150°C.

Type	Max. Fwrd. current If (max.) @ 25°C (mA)	Max. Rev. current Ir (max.) @ 25°C (mA)	1-99	100-999
1N4393	.25	.50	11.85	8.88
1N4394	.50	1.0	9.60	7.20
1N4395	1.0	2.0	8.15	6.10
1N4396	2.0	4.0	8.15	6.10
1N4397	4.5	9.0	8.15	6.10
1N4398	10.0	20.0	8.15	6.10
1N4399	15.0	30.0	8.15	6.10

SILICON UNI-TUNNEL DIODES—TO-18 CASE

Electrical characteristics @ 25°C. Typ. temp. coeff. 0.1 mv/°C @ If min. and 1.3 mv/°C @ Ir max. Typ. Ls 4 mμH with 3/32" leads. Typ. Vr 0.8 @ 1 mg. Temp: —85 to +200°C.

Type	Min. If @ .25V (mA)	Max. Ratings Diss. (mw)	If (mA)	Ir (mA)	1-99	100-999
HU-5	0.5	.9	2.5	1	7.50	5.70
HU-5A	0.5	.9	2.5	1	9.00	6.75
HU-10	1.0	1.8	5.0	2	7.50	5.70
HU-25A	2.5	4.5	12.5	5	9.00	6.75
HU-50	5.0	9.0	25.0	10	7.50	5.70
HU-100	10.0	18.0	50.0	20	7.50	5.70

A

M1A

DO-4

TO3

TO5

ONE WATT ZENER REGULATORS—M1A CASE

Units with suffix "B" rated at 30°C, no suffix, 25°C. Temp. range: —65 to +175°C. Suffix "B" indicates ±5% tol., no suffix, ±10%. All units available in ±10% or ±5% on special order.

Type	Ez @ Iz	Iz mA	1-99	100 Mixed 10/Type	100-999
1N1766	6.2	100	2.60	2.35	2.05
1N1766A	6.2	100	2.85	2.55	2.25
1N1767	6.8	100	2.60	2.35	2.05
1N1767A	6.8	100	2.85	2.55	2.25
1N1768	7.5	100	2.60	2.35	2.05
1N1769	8.2	100	2.60	2.35	2.05
1N1770	9.1	50	2.60	2.35	2.05
1N1771	10	50	2.60	2.35	2.05
1N1771A	10	50	2.85	2.55	2.25
1N1772	11	50	2.60	2.35	2.05
1N1773	12	50	2.60	2.35	2.05
1N1773A	12	50	2.85	2.55	2.25
1N1775	15	50	2.60	2.35	2.05
1N1775A	15	50	2.85	2.55	2.25
1N1776	16	50	2.60	2.35	2.05
1N1777	18	50	2.60	2.35	2.05
1N1777A	18	50	2.85	2.55	2.25
1N1778	20	15	2.60	2.35	2.05
1N1778A	20	15	2.85	2.55	2.25
1N1779	22	15	2.60	2.35	2.05
1N1780	24	15	2.60	2.35	2.05
1N1781	27	15	2.60	2.35	2.05
1N1782	30	15	3.00	2.70	2.30
1N1783	33	15	3.00	2.70	2.30
1N1795	100	5	3.00	2.70	2.30

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

ONE WATT ZENER REGULATORS — M1A CASE

Type	Ez @ Iz	Iz mA	1-99	100 Mixed 10/Type	100-999
1N3016B	6.8	37			
1N3020B	10	25			
1N3022B	12	21			
1N3023B	13	19			
1N3024B	15	17	3.60	3.20	2.70
1N3027B	20	12.5			
1N3029B	24	10.5			
1N3031B	30	8.5			
1N3032B	33	7.5			
1N3033B	36	7.0	3.60	3.20	2.70
1N3051B	200	1.2	4.35	3.92	3.80

10 WATT* ZENER REGULATORS—DO-4 CASE

*@ 75°C. Other specifications @ 25°C. Temp. range: —65° to +175°C. ±10% Ez tolerance. Except "A & B" suffix which indicates 5% tol. Top terminal positive with respect to stud, reverse polarity and other Ez tolerance, available on special order.

Type	Ez @ Iz	Iz mA	1-99	100 Mixed 10/Type	100-999
1N1804	6.2	1000	4.50	4.05	3.60
1N1807	8.2	1000			
1N1360	24	150			
1N1366	43	150			
1N1368	51	150			
1N1369	56	150	4.80	4.30	3.60
1N1370	62	50			
1N1372	75	50			
1N1812	150	50			

Type	Ez @ Iz	Iz mA	1-99	100 Mixed 10/Type	100-299
1N2970B	6.8	370	3.55	3.20	2.65
1N2976B	12	210	5.30	4.75	3.97
1N2985B	22	115	5.30	4.75	3.97
1N2992B	39	65	5.15	4.55	3.85
1N2997B	51	50			
1N3005B	100	25	5.30	4.75	3.97
1N3015B	200	14			

10 WATT ZENER REGULATOR—DO-4 CASE

Terminal negative with respect to stud. Also available in 5% Ez tolerance.

Type	Ez @ Iz (V) ± 10%	Iz mA	1-99	100 Mixed 10/Type	100-999
1N2045	9.0-12.0	500	6.60	5.95	4.95

50 WATT ZENER REGULATORS—TO-3 CASE

Anode connected to base. ±5% Ez tolerance. Also available in ±10% or ±20% tolerance and in reverse polarity.

Type	Ez @ Iz±5%	Iz mA	Max. Ez @ Iz (Ohms)	1-99	100 Mixed 10/Type	100-999
1N2809B	11	1100	0.8	10.60	9.54	8.46
1N2823B	30	420	3.0			

1 WATT MICROMINIATURE ZENER REGULATORS

These devices have ±5% tolerance.

Type	Case	mA	Vz @ Izt	1-99	100-999
HW6.8B	G2	37.0	6.8	1.65	1.25
HW7.5B	G2	34.0	7.5	1.65	1.25
HW8.2B	G2	31.0	8.2	1.65	1.25
HW9.1B	G2	28.0	9.1	1.65	1.25
HW10B	G2	25.0	10.0	1.65	1.25

1 Watt Microminiature Zener Reg. Cont.

Type	Case	mA	Uz @ Izt	1-99	100-999
HW11B	G2	23.0	11.0	1.65	1.25
HW12B	G2	21.0	12.0	1.65	1.25
HW13B	G2	19.0	13.0	1.65	1.25
HW15B	G2	17.0	15.0	1.65	1.25
HW16B	G2	15.5	16.0	1.65	1.25
HW18B	G2	14.0	18.0	1.65	1.25
HW20B	G2	12.5	20.0	1.65	1.25
HW22B	G2	11.5	22.0	1.65	1.25
HW24B	G2	10.5	24.0	1.65	1.25
HW27B	G2	9.5	27.0	1.65	1.25
HW30B	G2	8.5	30.0	1.65	1.25
HW33B	G2	7.5	33.0	1.65	1.25
HW36B	G2	7.0	36.0	1.65	1.25
HW39B	G2	6.5	39.0	1.65	1.25
HW43B	G2	6.0	43.0	1.65	1.25
HW47B	G2	5.5	47.0	1.65	1.25
HW51B	G2	5.0	51.0	1.65	1.25
HW56B	G2	4.5	56.0	1.65	1.25
HW62B	G2	4.0	62.0	1.65	1.25
HW68B	G2	3.8	68.0	1.65	1.25
HW75B	G2	3.3	75.0	1.65	1.25
HW82B	G2	3.0	82.0	1.65	1.25
HW91B	G2	2.8	91.0	1.65	1.25

1 AMP SILICON CONTROLLED RECTIFIERS

Hermetically sealed devices in TO-5 package. All diffused silicon planar construction. Operating temp. range: —65°C to +150°C. Max. peak pulse current: 15 amps one cycle.

Type	Frwd. Breakover V. and Reverse Wkg. Voltage	1-99	100-999
2N2345	50 volts	8.95	6.70

PNPN SILICON CONTROLLED RECTIFIERS—TO-5 CASE

Absolute maximum ratings (@80°.): avg. FWD. current 1 amp; peak recurrent forward current, 3.3 amp; surge current, 1 cycle @ 60 cps, 15 amp; Temp. range —65 to +125°C. Specs. (@ 25°C.) min. BVf. BVr, 120% rated voltage (—65 to +125°C.); max. If (off), Ir, .25 ma; max. Vf@ If=1 amp, 2V; max. Igt, 10 ma; max. Vgt, 3V; max. Ih, 25 ma. All ratings below for case temp. —65 to +125°C

Type	Vf (off)	Vr	Peak Gate Current	1-99	100-999
2N1595	50	50	100 ma	2.70	2.00
2N1596	100	100	100 ma	4.10	3.05
2N1597	200	200	100 ma	8.40	6.30

200mA SILICON CONTROLLED RECTIFIERS

Sensitivity miniature units ideally suited for use in critical logic and control circuits where space is limited. All diffused silicon planar constructed. Hermetically sealed TO-18 package. Operating temp.: —65°C to +150°C.

Type	Frwd. Breakover V and Reverse Wkg. Voltage	1-99	100 999
2N877	30 volts	6.80	5.10
2N878	60 volts	7.95	5.95
2N884	15 volts	8.00	6.00
2N885	30 volts	8.70	6.50
2N886	60 volts	9.80	7.35
2N887	100 volts	11.90	8.95

1.6 AMP SILICON CONTROLLED RECTIFIERS

Hermetically sealed devices in TO-5 package. All diffused silicon planar construction. Operating temp. range: —65°C to +150°C.

Type	Frwd. Breaker V and Reverse Wkg. Voltage	1-99	100-999
2N2323	50	3.10	2.30
2N2326	200	9.34	7.00
2N2327	250	11.50	8.65

SEMICONDUCTOR GUIDE IS CURRENT AS OF AUGUST 15, 1967

PRICES FOR QUANTITIES ARE COMPETITIVE WITH THE MANUFACTURER

OEM PRICES. ORDERS WILL BE BILLED AT PRICES IN EFFECT AT THE TIME OF SHIPMENT.

Hughes Aircraft Semiconductors

DO-7

HDS

C2

TO-18

TO-72

TO-5

Coax

CI

Cartridge

SILICON CAPACITORS — DO-7

Type	Cap. uuf	Max. Volts	Cap. Range	Min. Q @ 50 Mhz	1-99	100-999
1N950	35	130	6.88	7	12.00	9.00
1N951	50	80	12-120	7	12.00	9.00
1N952	70	60	20-170	7	6.00	4.50
1N953	100	25	46-240	7	4.50	3.25
1N954	35	25	14-88	7	3.00	2.25
1N955	50	25	22-120	7	3.00	2.25
1N956	70	25	32-170	7	3.50	2.50

SILICON PLANAR EPITAXIAL DIODES — HDS

Double heat sink construction. Dumet leads. (300Mw Diss.) Fast Recovery—Typ 2-4 nano Sec.

Type	PIV	If (ma)	Irev (μa)	@V	1-99	100-999
HDS-10	100	250	.050	50	1.20	.90
HDS-11	100	150	.050	50	.85	.64
HDS-12	100	75	.050	50	.65	.49
HDS-50	75	250	.100	50	.98	.49
HDS-51	75	150	.100	50	.62	.31
HDS-52	75	75	.100	50	.50	.25
HDS-100	100	250	.050	50	1.84	.92
HDS-110	100	150	.050	50	.77	.39
HDS-120	100	75	.050	50	.66	.33

SILICON ULTRA FAST COMPUTER DIODES—DO-7

Rated at 25°C. Max. Rev. Recovery time to 1 mA in 0.5 Nano Sec Min. fwd. I @ IVDC (mAdc): 2, except (*) 5.

Type	Max. Rev. Cur. @ -5VDC μA @ 25°C	@ 100° C	Min. BV @ 100 VDC (Adc)	1-99	100-999
*HD-5000	0.2	2	20	2.85	2.14
*HD-5001	1	10	20	2.55	1.91
HD-5004	1	20	15	.90	.68

SILICON PLANAR EPITAXIAL DIODES HDS

2 nansecond recovery. HDS is double stud—.160"x.075". Ratings @ 25°C.

Type	BV (V) @ 100 μA	Min FD. Current @ IV mA	Max. Reverse Current μA	@ V	1-99	100-999
1N625	30	4 @ 1.5	.10	20	.54	.33
1N626	50	4 @ 1.5	1.0	35	.70	.53
1N627	100	4 @ 1.5	1.0	75	1.26	.95
1N811	20	1	1.0	10	.70	.53
1N814	40	2	0.1	20	1.47	1.10
1N815	15	100 @ 1.5	.5	5	.91	.68
1N903	40	10	.1	40	1.40	1.05
1N903A	40	20	.1	40	1.47	1.10
1N904A	30	20	.1	20	1.40	1.05
1N906	20	10	.1	20	.98	.74
1N914	100	10	.025	20	1.89	1.42
1N915	65	50	.025	20	2.17	1.63
1N916	100	10	.025	50	1.54	1.16
1N993	15	100 @ 1.2	1.0	6	.96	.72
1N3064	75 @ 5	10	0.1	50	2.24	1.68
1N3605	40 @ 5	20 @ .88	.05	30	2.59	1.94
1N4009	35 @ 5	30	.1	25	1.68	1.26
1N4150	50	10	.10	10	1.30	.65
1N4151	50	50	.05	50	.80	.40
1N4152	30	.10 @ .55	.05	30	1.14	.57
1N4153	50	.10 @ .55	.05	50	1.27	.64
1N4154	25	30 @ 1	.10	25	.44	.22
1N4306	50	.10 @ .55	.05	50	7.00	5.25
1N4308	5	2	100	5	1.05	.80
1N4390	20	5	.2	5	2.85	2.15
1N4391	20	2	.2	5	2.15	1.60
1N4392	15	2	1	5	1.55	1.20

Type	BV	Min. Fwd. I @ IV (mA)	Max. Rev. I mA	@ V	1-99	100-999
1N4444	50	.10 @ .55	.05	50	1.44	.72
1N4446	75	20 @ 1	.025	20	.66	.33
1N4448	75	100 @ 1	.025	20	.90	.45
1N4450	30	1.0 @ .64	.05	30	1.07	.54
1N4606	85	1.0 @ .66	.10	50	1.44	.72
1N4607	85	1.0 @ .61	.10	50	2.50	1.25

DO-7—GERMANIUM ULTRA FAST SWITCHING, HIGH CONDUCTANCE DIODES COMPUTER TYPE

Type	Piv (v) @ 100 μA	Min. Fd. current IV(Ma)	R.E. %	Trr (Ns)	1-99	100-999
1N695	20	100	....	.....	.77	.58
1N695A	25	100	....	6	.98	.74
1N995	15	10@.5	....	.....	.60	.45
1N3287	6	100	....	.....	.36	.27
1N3686	80	200	....	30	.70	.53
HD1811	30	100@.75	60	9	.77	.58
HD1812	10	100	60	9	.39	.29
HD1840	30	100@.7	65	6	.98	.74
HD1841	20	100@.7	65	6	.88	.66
HD1842	6	100	60	6	.49	.37
HD1870	15	100@.7	75	3.5	.98	.74
HD1872	6	100	75	3.5	.63	.47
HD2236	30@500	.....	50	.....	.48	.36

GERMANIUM DIODES—DO-7

Ratings for table below are 25°C. IFWD @ + IV.

Type	Min. PIV (V)	Min. Fwd. (mA) @ ±1 V	Max. Rev. 1(R) @ V(R) (μA)	(V)	1-99	100-999
1N67A	100	4	50	50	.58	.44
1N90	75	5	500	50	.33	.22
1N95	75	10	800	50	.50	.33
1N96	75	20	800	50	.59	.44
1N96A	75	40	500	50	.59	.44
1N98	100	20	100	50	.48	.38
1N98A	100	40	100	50	.48	.38
1N99	100	10	50	50	.50	.39
1N100	100	20	50	50	.50	.39
1N100A	100	40	50	50	.50	.39
1N116	75	5	100	50	.53	.40
1N118	75	20	100	50	.60	.48
1N270	80	200	100	50	.32	.25
1N273	100	30	20	20	.68	.51
1N276	60	40	100	50	.31	.24
1N277	100	100	250	50	.34	.26
1N281	60	100	500	50	.31	.24
1N288	85	40	350	50	.53	.40
1N289	85	20	50	50	.66	.50
1N291	120	40	100	100	.84	.63
1N771B	100	400	500	100	1.28	.96
1N772	80	100	50	50	.70	.53
1N772A	80	200	50	50	.76	.57
1N774	70	100	150	50	.64	.48
1N775	70	100	250	50	.58	.44
1N776	30	50	500	30	.32	.24
1N777	70	100	125	50	.66	.50
1N781	40	10 @ .45	5	10	.90	.68
1N781A	40	10 @ .35	5	10	.90	.68
1N949	50	10 @ .34	10	10	1.00	.75
1N3125	55	5 @ .40	10	40	.80	.60

DO-7—SILICON VOLTAGE REGULATOR DIODES

250mW types. Rated at 25°C unless otherwise stated.

Type	Zener Breakdown Voltage (Vz or Ez) Min.	Nom.	Max.	D.C. Test Current (Iz) (mA)	1-99	100-999
1N702	2.0	2.6	3.2	5	1.80	1.35
1N703	3.0	3.45	3.9	5	1.80	1.35
1N705A	4.6	4.85	5.1	5	2.30	1.70
1N706	5.2	5.8	6.4	5	1.80	1.35
1N706A	5.51	5.8	6.09	5	2.30	1.70
1N709	5.58	6.2	6.82	25	1.80	1.35
1N710	6.12	6.8	7.48	25	1.80	1.35
1N711A	7.12	7.5	7.88	25	2.30	1.70
1N712	7.38	8.2	9.02	25	1.80	1.35
1N712A	7.79	8.2	8.61	25	2.30	1.70
1N713A	8.64	9.1	9.56	25	2.30	1.70
1N714	9.0	10	11.0	12	1.80	1.35
1N714A	9.5	10	10.5	12	2.30	1.70
1N715	9.9	11	12.1	12	1.80	1.35
1N716	10.8	12	13.2	12	1.80	1.35
1N716A	11.4	12	12.6	12	2.30	1.70
1N717A	12.35	13	13.65	12	2.30	1.70
1N718	13.5	15	16.5	12	2.10	1.58
1N718A	14.25	15	15.75	12	2.53	1.90
1N719A	15.2	16	16.8	12	2.53	1.90
1N720	16.2	18	19.8	12	2.10	1.58
1N720A	17.1	18	18.9	12	3.21	2.41
1N721	18.0	20	22.0	4	1.98	1.49
1N721A	19.0	20	21.0	4	2.53	1.90
1N722A	20.9	22	23.1	4	2.53	1.90

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

Hughes Aircraft Semiconductors

HUGHES
Creating a new world with electronics
HUGHES AIRCRAFT COMPANY
SEMICONDUCTOR DIVISION
NEWPORT BEACH, CALIFORNIA

SILICON VOLTAGE REGULATOR DIODES—CASE C-1

250mW types. 0.5w and 1 watt types also available.

Type	Zener Breakdown Voltage (Vz or Ez) Min.	Nom.	Max.	D.C. Test Current (Iz) (mA)	1-99	100-999
1N465	2.0	.....	3.2	5	3.00	2.25
1N465A	2.47	.....	2.73	5	3.50	2.60
1N467A	3.89	.....	4.31	5	3.50	2.60
1N468	4.3	.....	5.4	5	3.00	2.25
1N469	5.2	.....	6.4	5	3.00	2.25
1N469A	5.51	.....	6.09	5	3.50	2.60
1N470A	6.74	.....	7.46	5	3.50	2.60
1N1313	7.5	.....	10.0	0.2	3.00	2.25
1N1313A	8.31	.....	9.19	0.2	3.50	2.60
1N1314	9.0	.....	12.0	0.2	3.00	2.25
1N1317	17.0	.....	21.0	0.2	3.00	2.25
1N1319	25.0	.....	32.0	0.2	3.00	2.25
1N1319A	27.07	.....	29.93	0.2	3.50	2.60

DO-7—SILICON VOLTAGE REGULATOR DIODES

Rated at 400mW

Type	Brk. Voltage (Vz) Min.	Nom.	Max.	Current (Iz) (mAdc)	1-99	100-499
1N752	5.04	5.6	6.16	20	1.80	1.35
1N755	6.75	7.5	8.25	20	1.80	1.35
1N756	7.38	8.2	9.02	20	1.80	1.35
1N756A	7.79	8.2	8.61	20	2.30	1.70
1N757A	8.645	9.1	9.555	20	2.30	1.70
1N758	9.00	10.0	11.00	20	1.80	1.35
1N758A	9.50	10.0	10.50	20	2.30	1.70

LOWER DYN. IMPEDANCE — 4.5 TO 16.0 OHMS

Type	Vz Min.	Xz Nom	Vz Max.	Iz	1-99	100-999
1N957	5.44	6.8	8.16	18.5	1.35	1.01
1N958	6.00	7.5	9.00	16.5	1.40	1.05
1N959	6.65	8.2	9.84	15.0	1.40	1.05
1N960	7.28	9.1	10.02	14.0	1.40	1.05
1N961	8.00	10.0	12.00	12.5	1.40	1.05
1N962	8.80	11.0	13.20	11.5	1.40	1.05
1N963	9.60	12.0	14.40	10.5	1.40	1.05
1N964	10.4	13.0	15.6	9.5	1.40	1.05
1N965	10.0	15.0	16.5	8.5	1.40	1.05
1N966	14.4	16.0	19.6	7.8	1.40	1.05
1N967	15.4	18.0	23.4	7.0	1.40	1.05
1N968	16.0	20.0	24.0	6.2	1.40	1.05
1N969	17.6	22.0	26.4	5.0	1.40	1.05
1N969B	20.9	22.0	23.1	5.0	1.75	1.31
1N970	19.2	24	28.8	5.2	1.40	1.50
1N970A	21.6	24	26.4	5.2	1.50	1.13
1N970B	22.8	24	25.2	5.2	1.70	1.28
1N971	21.6	27	32.4	4.6	1.40	1.05
1N971A	25.65	27	28.35	4.6	1.50	1.13
1N972	24.0	30	36.0	4.2	1.40	1.05
1N972A	27.0	30	33.0	4.2	1.50	1.13
1N973	25.6	32	38.4	3.8	1.40	1.05
1N973A	28.8	32	35.2	3.8	1.50	1.13
1N973B	30.4	32	33.6	3.8	1.70	1.28
1N974	28.8	36	43.2	3.4	2.10	1.58
1N974A	32.4	36	39.6	3.4	2.30	1.73
1N974B	34.2	36	37.8	3.4	2.90	2.18
1N975B	36.1	38	39.9	3.2	2.90	2.18
1N976B	40.85	43	45.15	3.0	2.95	2.20
1N977	44.65	47	49.35	2.7	2.15	1.60
1N977B	44.6	47	49.35	2.7	2.95	2.20
1N978	.....	51	.....	2.5	2.15	1.60
1N978A	45.9	51	56.5	2.5	2.35	1.75
1N978B	48.45	51	53.5	2.5	2.95	2.20
1N979	.....	56	.....	2.2	2.15	1.60
1N979A	50.4	56	61.6	2.2	2.35	1.75
1N979B	53.2	56	58.8	2.2	2.95	2.20
1N980	.....	62	.....	2.0	2.15	1.60
1N980A	55.8	62	68.2	2.0	2.35	1.75
1N980B	58.9	62	65.1	2.0	2.95	2.20
1N981	.....	68	.....	1.8	2.15	1.60
1N981A	61.2	68	74.8	1.8	2.35	1.75
1N981B	64.6	68	71.4	1.8	2.95	2.20
1N982A	.....	75	.....	1.7	2.35	1.75
1N982B	71.2	75	78.7	1.7	2.95	2.20
1N983A	73.8	82	90.2	1.5	2.35	1.75
1N983B	77.9	82	86.1	1.5	2.95	2.20
1N984A	80.9	91	100.1	1.4	2.35	1.75
1N984B	86.4	91	95.5	1.4	2.95	2.20
1N985A	90	100	110	1.3	3.00	2.25
1N985B	90	100	110	1.3	3.65	2.75
1N986A	99	110	122	1.1	3.00	2.25
1N986B	99	110	122	1.1	3.65	2.75
1N987A	108	120	132	1.0	3.00	2.25
1N987B	108	120	132	1.0	3.65	2.75
1N988A	117	130	143	.95	3.00	2.25
1N988B	117	130	143	.95	3.65	2.75
1N989A	135	150	165	1.0	3.00	2.25
1N989B	135	150	165	1.0	3.65	2.75
1N990A	144	160	176	.80	3.00	2.25
1N990B	144	160	176	.80	3.65	2.75
1N991A	162	180	198	.68	3.00	2.25
1N992B	162	180	198	.65	3.65	2.75

SILICON VOLTAGE REGULATOR DIODES — 1 WATT

BC Tolerance ± 10 % Case C2 — .375" x .200"

Type	Brk. Voltage (VZ) Min.	Nom.	Max.	Current (Iz) (mAdc)	1-99	100-499
1N1767	.....	6.8	.....	100	2.40	1.80
1N1768	.....	7.5	.....	100	2.40	1.80
1N1769	.....	8.2	.....	100	3.00	2.25
1N1770	.....	9.1	.....	100	3.00	2.25
1N1771	.....	10.0	.....	50	3.00	2.25
1N1772	.....	11.0	.....	50	3.00	2.25
1N1773	.....	12.0	.....	50	3.00	2.25
1N1774	.....	13.0	.....	50	3.00	2.25
1N1775	.....	15.0	.....	50	3.00	2.25
1N1776	.....	16.0	.....	50	3.00	2.25
1N1777	.....	18.0	.....	50	2.80	2.10
1N1778	.....	20.0	.....	50	2.80	2.10
1N1779	.....	22.0	.....	15	2.80	2.10
1N1780	.....	24.0	.....	15	2.80	2.10
1N1781	.....	27.0	.....	15	2.80	2.10
1N1782	.....	30.0	.....	15	2.85	2.14
1N1783	.....	33.0	.....	15	2.85	2.14
1N1784	.....	36.0	.....	15	2.85	2.14
1N1785	.....	39.0	.....	15	2.85	2.14
1N1786	.....	43.0	.....	15	2.85	2.14
1N1787	.....	47.0	.....	15	2.85	2.14
1N1788	.....	51.0	.....	15	2.85	2.14
1N1789	.....	56.0	.....	15	2.85	2.14
1N1790	.....	62.0	.....	5	2.85	2.14
1N1791	.....	68.0	.....	5	2.85	2.14
1N1792	.....	75.0	.....	5	2.85	2.14
1N1793	.....	82.0	.....	5	2.85	2.14
1N1794	.....	91.0	.....	5	2.85	2.14
1N1795	.....	100.0	.....	5	2.85	2.14
1N1796A	104.5	110.0	115.5	5	3.25	2.44
1N1797A	114.0	120.0	126.0	5	3.25	2.44
1N1799A	142.5	150.0	157.5	5	2.85	2.14
1N1800	.....	160.0	.....	5	1.20	.90
1N1801	.....	180.0	.....	5	1.20	.90
1N1802	.....	200.0	.....	5	1.20	.90

10 W. SILICON VOLTAGE REGULATOR DIODES — DO-4

Type	Zener Breakdown Voltage (Vz or Ez) Min.	Nom.	Max.	D.C. Test Current (Iz) (mA)	1-99	100-999
1N1351	.....	10	.....	500	4.90	3.68
1N1352	.....	11	.....	500	4.90	3.68
1N1353	.....	12	.....	500	4.90	3.68
1N1354	.....	13	.....	500	4.90	3.68
1N1355	.....	15	.....	500	4.90	3.68

Note: 1N1356 thru 1N1375R also available.

SILICON RECTIFIERS

DO-14 SILICON CURRENT RECTIFIERS

Type	PIV	Max If (Ma) at 25°C	Max Fd V Drop at 25°C	1-99	100-999
1N645	225	400	1.0	1.40	1.05
1N645A	225	400	1.0	1.40	1.05
1N646	300	400	1.0	1.65	1.24
1N646A	300	400	1.0	1.65	1.24
1N647	400	400	1.0	1.80	1.35
1N647A	400	400	1.0	1.80	1.35
1N648	500	400	1.0	1.95	1.46
1N648A	500	400	1.0	1.95	1.46
1N649	600	200	....	2.50	1.88

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Hughes Aircraft Semiconductors

● *NEW* SILICON RECTIFIERS (CONTINUED)

6-AMP DO-4 STUD MOUNTED SILICON RECTIFIERS

Type	PIV	Max Fd V Drop	Ir @ PIV (mA)	1-99	100-999
1N3987	700	1.5	1.0 @ 150°C	8.25	6.19
1N3988	800	1.5	0.8 @ 150°C	9.10	6.83
1N3989	900	1.5	0.7 @ 150°C	11.05	8.29
1N3990	1000	1.5	0.7 @ 150°C	12.00	9.00

12 AMP DO-4 STUD MOUNTED SILICON RECTIFIERS

1N3670	700	.....	.....	6.75	5.15
1N3671	800	.....	.....	7.90	5.70
1N3672	900	.....	.....	8.50	6.20
1N3673	1000	.....	.....	9.10	6.50

.25 AMP SILICON RECTIFIERS, LOW POWER DO-14

Type	PIV	Max. DC V Drop	8 Ms Surge	Irev (mA)	1-99	100-999
1N4253	1500	3.5 V	6.3 A	.001	1.89	1.42
1N4254	1500	3.5 V	6.3 A	.001	1.80	1.35
1N4255	2000	3.5 V	6.3 A	.001	2.70	2.03
1N4256	2500	3.5 V	6.3 A	.001	3.60	2.70
1N4257	3000	3.5 V	6.3 A	.001	4.20	3.15

.50 AMP SILICON RECTIFIERS, MEDIUM POWER, DO-14

Type	PIV	Max. DC Voltage Drop	8 ms Surge	Irev (mA)	1-99	100-999
1N4250	800	1.2 V	30 A	.010	1.10	.83
1N4251	1000	1.7 V	5 A	.010	1.75	1.31
1N4252	1200	1.7 V	5 A	.010	1.50	1.13

1 AMP SILICON RECTIFIERS, CASE C2

Type	PIV	Max. DC Voltage Drop	8 ms NR Surge (Amps)	Irev uA	1-99	100-999
1N4245	200	1.2 V	25 A	.025	.38	.29
1N4246	400	1.2 V	25 A	.025	.46	.35
1N4247	600	1.2 V	25 A	.025	.56	.42
1N4248	800	1.2 V	25 A	.025	1.11	.83
1N4249	1000	1.2 V	25 A	.025	1.11	.83

2 AMP MINIATURE, AXIAL SILICON RECTIFIERS, CASE C2

1N5170	30	1.2 V	200	25	.36	.27
1N5171	50	1.2 V	200	25	.46	.35
1N5172	100	1.2 V	200	25	.50	.38
1N4517	200	1.2 V	200	25	.57	.43
1N5173	300	1.2 V	200	25	.65	.49
1N5174	400	1.2 V	200	25	.81	.61
1N5175	500	1.2 V	200	25	.90	.68
1N5176	600	1.2 V	200	25	1.13	.85
1N5177	800	1.2 V	200	25	2.00	1.50
1N5178	1000	1.2 V	200	25	2.50	1.88

3 AMP MINIATURE, AXIAL SILICON RECTIFIERS CASE C2

1N4139	50	1.2 V	200	25	.36	.27
1N4140	100	1.2 V	200	25	.39	.29
1N4141	200	1.2 V	200	25	.44	.33
1N4142	400	1.2 V	200	25	.64	.48
1N4143	600	1.2 V	200	25	.87	.65
1N4144	800	1.2 V	200	25	1.30	.98
1N4145	1000	1.2 V	200	25	1.50	1.13
1N4146	1200	1.2 V	200	25	2.00	1.50

SILICON BRIDGE RECTIFIER ASSEMBLIES

Bridges, vacuum tube replacements, fuse clip types, special purpose, space, missile, commercial and other rectifier types also available.

TRANSISTORS

PNP SILICON TRANSISTORS—GENERAL PURPOSE ALLOY

LOW SATURATION RESISTANCE, HIGH BREAKDOWN VOLTAGE, —65C° to 160°C (TO-5)

Type	Diss. (mW)	BV CBO (V)	BV EBO (V)	hfe min	hfe max	1-99	100-999
2N327A	385	-50	-20	9	22	2.25	1.49
2N1036	275	50	20	34	88	10.23	7.67
2N328A	385	-50	-20	18	44	4.50	3.00
2N329A	385	-50	-20	36	88	6.00	4.50
2N1034	275	50	20	9	22	4.35	3.25
2N1228	400	-15	-15	14	typ	3.10	2.33
2N1229	400	-15	-15	30	typ	3.10	2.33
2N1230	400	-35	-35	14	typ	8.65	6.50
2N1231	400	-35	-35	30	typ	10.65	8.00
2N1233	400	-60	-60	30	typ	17.50	13.13
2N1234	400	-110	-110	14	typ	20.50	15.38
2N1244†	1W	-110	-110	14	typ	27.65	20.75
2N1275	400	-100	-80	15	typ	6.50	4.88
2N1623	400	-50	-20	25	typ	2.16	1.62
2N2551	400	-150	-150	15	45	29.75	22.31

SILICON NPN PLANAR TRANSISTORS, SMALL SIGNAL

400 mW Type	Case	hFE min	hFE max	BV CBO	min fT MHz	Application	1-99	100-999
2N2523	TO-46	40	120	60	45	Amplifier	3.75	2.50
2N2524	TO-46	100	300	60	45	Amplifier	5.40	3.60
2N3340	TO-46	40	.....	30	70	Switch	7.20	4.80
2N2518	TO-46	40	100	125	175	High-Volt	10.80	8.30
2N2519	TO-46	80	200	80	200	High-Volt	6.45	4.30
2N2515	TO-46	40	100	80	175	Med-Volt	8.12	6.13
2N2516	TO-46	80	200	80	200	Med-Volt	8.79	6.76
2N2520	TO-46	18	90	60	150	Med-Volt	10.30	7.93
2N2521	TO-46	36	90	60	175	Med-Volt	10.70	8.24
2N2522	TO-46	76	333	60	200	Med-Volt	4.35	2.90
2N2459	TO-46	40	80	100	135	Med-Volt	9.62	7.40
2N2460	TO-46	70	130	100	200	Med-Volt	10.50	8.08
2N2461	TO-46	120	180	100	225	Med-Volt	12.90	9.90
2N2462	TO-46	170	230	60	250	Med-Volt	13.20	10.10

PNP transistors are available as specific complementary types upon request for above NPN types.

PNP SILICON PLANAR TRANSISTORS—GENERAL PURPOSE

Temperature: -65 to +200°C. Case style TO-5, except (*) TO-18.
†Mil-Types available.

Type	Diss mW	BVcbo @ -100 A	BVebo @ -1mA	BVceo @ -10mA	hFE	1-99	100-999
2N1131†	750	-50	-5	-35	20-45	5.00	3.75
2N1132†	750	-50	-5	-35	30-90	5.85	4.39
2N721*	400	-50	-5	-40	20-45	6.00	4.50
2N722*	400	-50	-5	-35	30-90	6.00	4.50
2N1991	750	-30	-5	-20	15-60	3.85	2.96
2N2303	600	-50	-5	-35	75-200	7.33	5.50

SILICON NPN DIFFERENTIAL AMPLIFIERS TO-71, TO-78 CASES

6 Lead Type	PD mW	BVcbo Volt	Icbo Nano A	hFE @ Ic min	hFE @ Ic max.	μA	hFE1 hFE2	1-99	100-999
2N2839	600	45	10	50	300	10	10%	22.00	14.70
2N2840	600	45	10	50	300	10	20%	16.50	11.00
2N2842	600	45	10	100	300	10	10%	25.50	17.00
2N2843	600	45	10	100	200	10	20%	18.00	12.00
2N2722	600	45	10	50	250	1	10%	21.00	14.00

SILICON NPN DUAL TRANSISTORS—TO-71, TO-78 CASES

2N2841	600	45	10	50	300	10	.....	9.00	6.00
2N2844	600	45	10	100	300	10	.....	10.50	7.00
								1-99	100-499	500-999
2N2913	600	45	10	60	240	10	.....	9.90	6.60	5.94
2N2914	600	45	10	150	600	10	.....	12.00	8.00	7.20

SILICON NPN DARLINGTON AMPLIFIERS TO-18

Type	PD mW	BVcbo	Icbo mA	hFE2 min	hFE2 max.	Ic mA	Vce2	fT MHz	1-99	100-999
2N2723	500	80	10	2000	10000	10	5	150	19.50	13.00
2N2724	500	80	10	7000	50000	10	5	175	21.00	14.00
2N2725	500	80	10	2000	10000	.1	5	200	28.50	19.00

SILICON POWER TRANSISTORS — NPN

Type	Case	Ic	hFE	Vce SAT	BVcbo Volts	Vbe SAT	1-99	100-999
2N4862	TO-46	2A	50-150	.20V	140	1.2V	12.00	10.00
2N4863	TO-5	2A	50-150	.20V	140	1.2V	10.00	8.00
2N4864	TO-66	2A	50-150	0.2 V	140	1.2V	13.00	11.00
2N2657	TO-5	5A	40-120	0.5 V	80	1.5V	26.00	17.35
2N2658	TO-5	5A	40-120	0.5 V	100	1.5V	32.40	21.60
2N3469	TO-5	5A	100-300	0.5 V	35	1.5V	13.50	9.00
2N2697	Stud	5A	40-120	0.5 V	80	1.5V	34.00	22.75
2N2698	Stud	5A	40-120	0.5 V	100	1.5V	40.50	27.00
2N2632	TO-62	5A	40-120	0.25V	90	1.2V	46.00	30.85
2N2633	TO-62	5A	40-120	0.25V	120	1.2V	62.00	41.20
2N2634	TO-62	5A	40-120	0.25V	150	1.2V	79.00	52.65
2N2877	TO-111	5A	20-60	0.25V	80	1.2V	32.40	21.60
2N2878	TO-111	5A	40-120	0.25V	80	1.2V	40.50	27.00
2N2879	TO-111	5A	20-60	0.25V	100	1.2V	40.50	27.00
2N2880	TO-111	5A	40-120	0.25V	100	1.2V	48.60	32.40
2N3744	TO-111	5A	20-60	0.25V	60	1.2V	32.40	21.60
2N3745	TO-111	5A	20-60	0.25V	80	1.2V	34.30	22.85
2N3746	TO-111	5A	20-60	0.25V	100	1.2V	42.40	28.25
2N3747	TO-111	5A	40-120	0.25V	60	1.2V	37.80	25.20
2N3748	TO-111	5A	40-120	0.25V	80	1.2V	42.40	28.25
2N3749	TO-111	5A	40-120	0.25V	100	1.2V	52.50	33.65
2N3750	TO-111	5A	100-300	0.25V	60	1.2V	46.80	31.30

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Semiconductors and Mounting Hardware

HUGHES

TRANSISTORS (CONT'D)

SILICON POWER TRANSISTORS—NPN (CONT'D)

Type	Case	Ic	hFE	Vce SAT	BVcbo Volts	Vbe SAT	1-99	100-999
2N3750	TO-111	5A	100-300	0.25 V	60	1.2 V	46.80	31.30
2N2811	TO-61	10A	20-60	0.5 V	80	1.2V	57.00	38.00
2N2812	TO-61	10A	40-120	0.5 V	80	1.2V	72.00	48.00
2N2813	TO-61	10A	20-60	0.5 V	120	1.2V	75.00	50.00
2N2814	TO-61	10A	40-120	0.5 V	120	1.2V	90.00	60.00
2N4150	TO-5	10A	40-120	0.6 V	100	1.5V	50.00	34.00
2N4070	TO-41	10A	40-120	0.6 V	120	1.5V	25.00	16.00
2N4071	TO-41	10A	40-120	0.6 V	120	1.5V	50.00	34.00
2N3598	TO-3	15A	20-70	1.1 V	100	1.8V	2.89	1.95
2N3599	TO-3	15A	15-60	2.0 V	50	2.7V	5.78	3.99
2N3772	TO-3	10A	15-60	1.4 V	100	2.2V	5.78	3.99
2N3773	TO-3	8A	15-60	1.4 V	160	2.2V	7.84	5.20
2N3597	TO-63	10A	40-120	0.5 V	60	1.5V	78.30	52.20
2N3599	TO-63	10A	40-120	0.5 V	80	1.5V	94.50	63.00
2N3598	TO-63	10A	40-120	0.5 V	100	1.5V	110.00	73.80
2N3149		50A	10	1.5 V	80	2.5V	320.00	240.00
2N3150		50A	10	1.5 V	100	2.5V	360.00	270.00
2N3151	Hex	50A	10	1.5 V	150	2.5V	400.00	340.00
2N4865	Stud	70A	10-40	2.5 V	100	2.5V	380.00	320.00
2N4866		70A	10-40	2.5 V	140	2.5V	420.00	360.00

GERMANIUM PNP HIGH POWER TRANSISTORS

Type	Case	BVcbo	Ic	hFE	Vce SAT Volt	1-99	100-999
2N538	Stud	80	2A	20-50	0.6	5.40	3.60
2N538A	Stud	80	2A	20-50	0.6	5.70	3.80
2N539	Stud	80	2A	30-75	0.6	7.39	4.70
2N539A	Stud	80	2A	30-75	0.6	7.65	5.10
2N540	Stud	80	2A	45-113	0.6	7.80	5.20
2N2266	Stud	100	5A	25-75	0.75	10.35	6.90
2N2267	Stud	120	5A	25-75	0.75	11.85	7.90
2N4242	TO-3	80	5A	40-08	0.2	2.25	1.50
2N4244	TO-3	40	5A	40-80	0.2	1.47	.98
2N4247	TO-3	40	5A	60-120	0.2	1.62	1.08
2N574	Stud	60	10A	9-22	0.2	13.50	9.00
2N574A	Stud	80	10A	9-22	0.2	16.20	10.80
2N575	Stud	60	25A	10	0.5	16.90	11.25
2N575A	Stud	80	25A	10	0.5	20.25	13.50
2N1157	Stud	60	40A	10	0.8	21.60	14.40
2N1157A	Stud	80	40A	10	0.8	25.95	17.30
2N2730	TO-68	80	65A	15	0.45	23.50	7.50
2N2731	TO-68	60	65A	15	0.45	17.50	11.65
2N2732	TO-68	40	65A	15	0.45	11.25	15.65

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ALCON

INTEGRATED CIRCUIT SOCKET

● ***NEW*** **LOW COST TO-5 SOCKET**

Molded phenolic base with up to 12 leads (.125" spacing) for TO-5 can integrated circuits. Brass Cad. plated terminals. W mntg. ears: $1\frac{3}{8}$x$\frac{5}{8}$x$1\frac{5}{64}$; w/o. $\frac{5}{8}$x$\frac{5}{8}$x$1\frac{5}{64}$.

Stk. No.	Terminals	1-49	50-99	100-249	250-499	500-up
40F4046	Solder	.34	.28	.23	.19	.16
40F4047	Printed Cir.					

● ***NEW*** **IN LINE SOCKET**

Accepts any standard 14-lead dual-in-line integrated circuit. Molded phenolic base; phos. bronze cadmium plated terminals. .100" spacing. Size: solder term. with mntg. ears—$1\frac{7}{16}$x$1\frac{3}{16}$x$\frac{9}{32}$"; Printed cir. w/o mtng. ears—$1\frac{3}{16}$x$\frac{1}{2}$x$\frac{9}{32}$".

Stk. No.	Terminals	1-49	50-99	100-249	250-499	500-up
40F4048	Solder	.38	.31	.25	.21	.18
40F4049	Printed Cir.					

RCA

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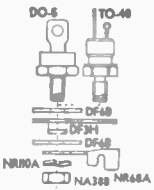
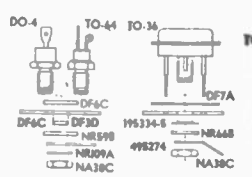
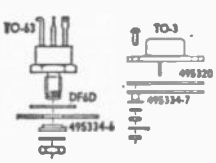
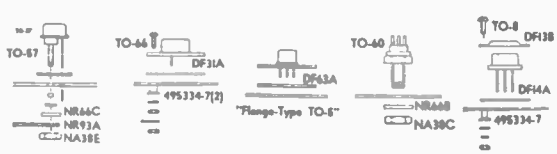






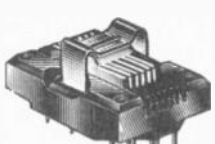


Stock No.	Pkg. Outline	Part No.	Description	No. Parts in Pkg.	Per Pkg.
58F311		NA38C	Nut	25	.38
58F318	DO-4	NR109A	Lock Washer	25	.27
58F303	&	DF6C	Insulator-Mica	50	.68
58F300	TO-64	DF3D	Insulator-Teflon*	50	1.62
58F313		NR59B	Connector	50	1.19
58F310		NA38B	Nut	25	.52
58F319	DO-5	NR110A	Lock Washer	25	.30
58F316	&	NR68A	Connector	25	1.44
58F301	TO-48	DF3H	Insulator-Teflon*	50	1.79
58F302		DF6B	Insulator-Mica	50	.85
58F320	TO-1 & TO-18	SA2100	Heat Sink Clip	100	1.15
58F321	TO-3	495320	Insulator-Mica	100	2.40
58F325		495334-7(2)	Washer-Nylon	100	1.64
58F309	TO-5 Flange	DF63A	Insulator-Mica	100	1.70
58F306		DF13B	Mounting-Clamp	25	1.09
58F307	TO-8	DF14A	Insulator-Mica	100	1.96
58F325		495334-7(2)	Washer-Nylon	100	1.64

*DuPont Registered Trademark.

Stock No.	Pkg. Outline	Part No.	Description	No. Parts In Pkg.	Per Pkg.
58F311	TO-36	NA38C	Nut	25	.38
58F314		NR66B	Washer	25	.27
58F322		495274	Connector	25	.54
58F323		495334-5	Bushing-Delrin*	25	1.72
58F305		DF7A	Insulator-Mica	25	.92
58F317	TO-57	NR93A	Connector	50	.94
58F315		NR66C	Washer	50	.44
58F312		NA38E	Nut	50	.68
58F311	TO-60 (7/16 Dbl.	NA38C	Nut	25	.38
58F314	Ended Stud)	NR66B	Washer	25	.27
58F304	TO-63	DF6D	Insulator-Mica	100	1.62
58F324		495334-6	Insulator-Teflon*	100	11.14
58F308	TO-66 (TO-8 Diamond TO-8 with Ears Small TO-3)	DF31A	Insulator-Mica	100	1.77
58F325		495334-7	Washer-Nylon	100	1.64

CAMBION



FLAT PACK HOLDERS

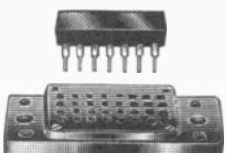
Accepts any std. 14-lead flat pack.

Molded diallyl base; raised platforms prevent moisture trapping. Available with .025" gold plated pins for soldering, or plug-in, or .025 square wire wrapped contacts. Size: 1.200" x .776" x .625" (less pins).

Stk. No.	Type No.	Contact Type	1-9	10-49	50-99
40F3996	3773-1	.025" dia. pin plug	2.40	2.25	1.95
40F3997	3774-1	.025" sq. wire wrap	3.15	2.80	2.50

IN-LINE SOCKETS

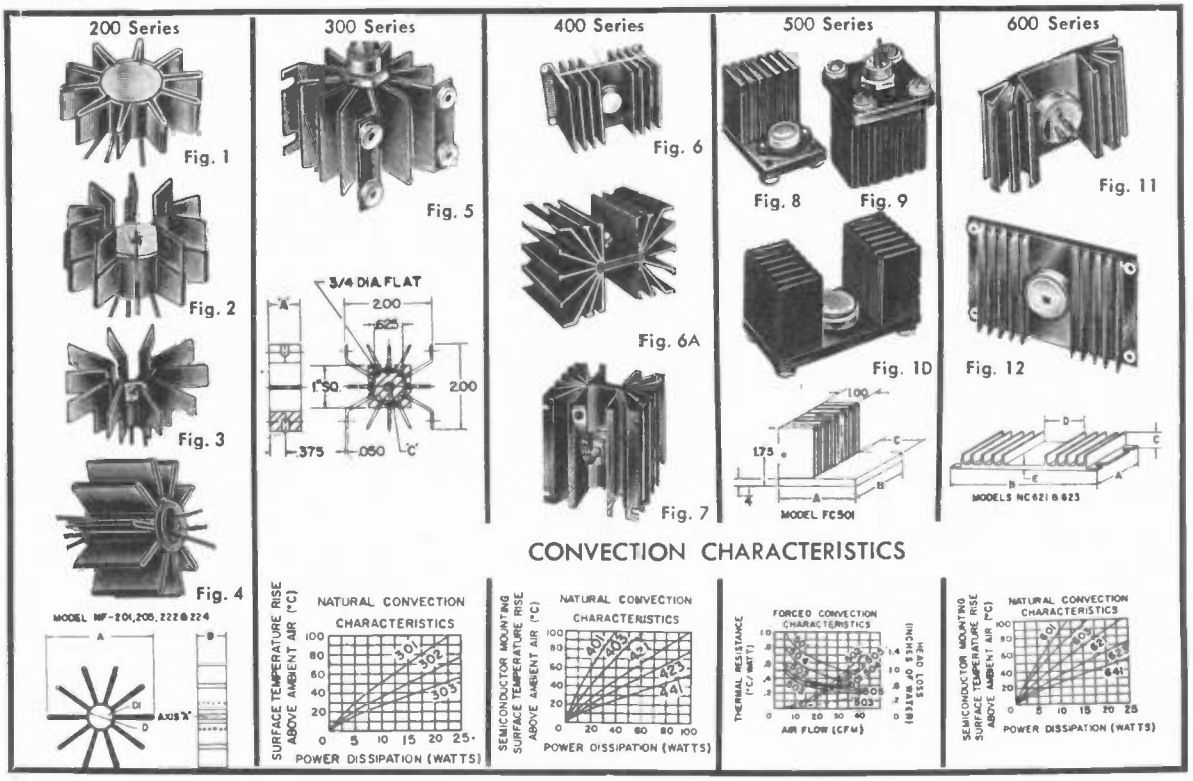
Molded diallyl — .100" contact spacing. Patented gold plated jacks with ribbon insert for use with .200" or .300" standard 14/16 flat pin modules. Size: 1.500" by .600"; molded height .275".



Stk. No.	Type No.	Socket Contact	1-9	10-49	50-99
40F3998	3793-2-0316	Solder Terminals	3.30	3.00	2.60
40F3999	3795-2-0316	Sol. Pot Terminals	4.60	4.20	3.70
40F4007	3797-2-0316	Wire Wrap Terms.	3.60	3.30	2.90
40F4008	3799-2-0316	.025 Pin Plug	3.30	3.00	2.60

DELTA DIVISION

Wakefield Semiconductor Cooling Units



200 SERIES FEATHERWEIGHT COOLERS

Flexfin design. Spring action provides contact of large area to assure repeatable thermal performance. Beryllium copper.

Stk. No.	Type	Fig.	Dia.	L	Fits Case Dia.	1-49	50-499	500-999	1000-4999
58F527	NF201	1	.64	.19	.161/.195	.27	.21	.16	.11
58F388	NF202	1	.49	.20	.161/.195	.25	.20	.15	.10
58F528	NF203	2	.64	.38	.161/.195	.29	.22	.17	.12
58F387	NF204	1	.55	.20	.275/.335	.25	.20	.15	.10
58F529	NF205	1	.72	.19	.275/.335	.27	.21	.16	.11
58F530	NF207	2	.72	.38	.275/.335	.29	.22	.17	.12
58F531	NF209	3	1.26	.44	.275/.335	.34	.29	.23	.18
58F441	NF211	1	.82	.19	.444/.524	.27	.21	.15	.10
58F442	NF213	2	.82	.38	.444/.524	.29	.22	.17	.12
58F443	NF215	3	1.38	.44	.444/.524	.34	.29	.23	.18
58F499	NF222	4	.64	.38	.161/.195	.38	.30	.24	.19
58F498	NF224	4	.72	.44	.275/.335	.38	.30	.24	.19

58F532. 160 tool for Models 201, 3, 4, 5, 7, 9 ..... 1.50
58F389. 161 Installation tool for Models 211, 213, 215 ..... 1.50

300 SERIES RADIAL RECTIFIER COOLERS

Radial fin coolers for rectifier or stud mounting transistor applications. Adaptable to stack arrangements. Uses standard teflon insulating washers. Accommodates press-fitted and stud-mounted rectifiers and transistors up to 11/16" hex case. Semiconductor mounting surface and one mounting foot unanodized. Type no. suffix indicates mtg. accommodations: see following page for key.

Stk. No.	Type	Fig.	H	W	D	1-49	50-99	100-249	250-499	500-999
58F497	NC301L	5	.75	2.00	2.00	1.55	1.30	1.05	.90	.80
58F496	NC301M	5	.75	2.00	2.00	1.55	1.30	1.05	.90	.80
58F495	NC301N	5	.75	2.00	2.00	1.55	1.30	1.05	.90	.80
58F494	NC301R	5	.75	2.00	2.00	1.55	1.30	1.05	.90	.80
58F444	NC301RR	5	.75	2.00	2.00	1.55	1.30	1.05	.90	.80
58F533	NC301K	5	.75	2.00	2.00	1.25	1.05	.85	.70	.63
58F493	NC302M	5	1.50	2.00	2.00	1.65	1.40	1.15	1.04	1.00
58F492	NC302N	5	1.50	2.00	2.00	1.65	1.40	1.15	1.04	1.00
58F491	NC302R	5	1.50	2.00	2.00	1.65	1.40	1.15	1.04	1.00
58F534	NC302K	5	1.50	2.00	2.00	1.35	1.15	.95	.80	.77
58F489	NC302NN	5	1.50	2.00	2.00	1.95	1.65	1.35	1.20	1.10
58F488	NC302RR	5	1.50	2.00	2.00	1.95	1.65	1.35	1.20	1.10
58F487	NC303N	5	3.00	2.00	2.00	1.90	1.60	1.33	1.26	1.22
58F486	NC303R	5	3.00	2.00	2.00	1.90	1.60	1.33	1.26	1.22
58F535	NC303K	5	3.00	2.00	2.00	1.60	1.35	1.10	.95	.85
58F485	NC303NN	5	3.00	2.00	2.00	2.20	1.85	1.50	1.39	1.33
58F484	NC303RR	5	3.00	2.00	2.00	2.20	1.85	1.50	1.39	1.33

400 SERIES NATURAL CONVECTION COOLERS

Optimum fin design provides many semiconductor applications. Model NC441 with cooling area of 400 sq. in. provides thermal resistance of .54° c/w @ 100 watts. Type NC-433 has 70°C. rise at 100W power dissipation. Type no. suffix refers to mounting specs: see chart on following page.

Stk. No.	Type	Fig.	H	W	D	1-49	50-99	100-249	250-499	500-999
58F500	NC401A	6	1.50	4.81	1.25	1.55	1.27	1.07	.92	.81
58F501	NC401B	6	1.50	4.81	1.25	1.55	1.27	1.07	.92	.81
58F449	NC401E	6	1.50	4.81	1.25	1.78	1.45	1.22	1.06	.92
58F502	NC401K	6	1.50	4.81	1.25	1.29	1.06	.88	.76	.67
58F503	NC403A	6	3.00	4.81	1.25	1.78	1.45	1.23	1.07	.95
58F504	NC403B	6	3.00	4.81	1.25	1.78	1.45	1.23	1.07	.95
58F451	NC403C	6	3.00	4.81	1.25	1.78	1.45	1.23	1.07	.95
58F505	NC403K	6	3.00	4.81	1.25	1.52	1.24	1.05	.90	.83
58F506	NC421A	6	3.00	4.81	2.63	2.51	2.05	1.73	1.49	1.37
58F507	NC421B	6	3.00	4.81	2.63	2.51	2.05	1.73	1.49	1.37
58F453	NC421C	6	3.00	4.81	2.63	2.51	2.05	1.73	1.49	1.37
58F508	NC421K	6	3.00	4.81	2.63	2.24	1.84	1.54	1.32	1.25
58F509	NC423A	6	5.50	4.81	2.63	3.66	2.98	2.52	2.26	2.17
58F510	NC423B	6	5.50	4.81	2.63	3.66	2.98	2.52	2.26	2.17
58F511	NC423K	6	5.50	4.81	2.63	3.40	2.77	2.33	2.13	2.05
58F331	NC433H	6A	5.50	4.37	3.00	5.40	4.30	3.60	3.20	3.00
58F332	NC433J	6A	5.50	4.37	3.00	5.40	4.30	3.60	3.20	3.00
58F333	NC433W	6A	5.50	4.37	3.00	5.40	4.30	3.60	3.20	3.00
58F334	NC433K	6A	5.50	4.37	3.00	4.90	3.90	3.26	2.90	2.60
58F461	NC441J	7	5.50	4.75	4.50	6.41	5.24	4.37	3.86	3.70
58F462	NC441W	7	5.50	4.75	4.50	6.41	5.24	4.37	3.86	3.70
58F521	NC441K	7	5.50	4.75	4.50	5.92	4.84	4.03	3.56	3.42

500 SERIES COPPERCOOL

For maximum performance under medium air pressure conditions. Semiconductors of any mounting style may be used. Type number suffix refers to mounting specifications: see chart on following page.

Stk. No.	Type	Fig.	H	W	D	1.49	50-99	100-249
58F512	FC501A	8	1.75	1.75	2.25	5.61	5.20	4.96
58F513	FC501B	8	1.75	1.75	2.25	5.45	4.86	4.64
58F514	FC501K	8	1.75	1.75	2.25	5.06	4.51	4.24
58F515	FC502A	10	1.75	3.50	1.75	8.03	7.47	7.13
58F516	FC502B	10	1.75	3.50	1.75	7.87	7.14	6.82
58F517	FC502K	10	1.75	3.50	1.75	7.48	6.71	6.33
58F463	FC503A	10	1.75	3.50	3.50	13.42	12.05	11.28
58F464	FC503B	10	1.75	3.50	3.50	13.26	11.88	11.11
58F522	FC503K	10	1.75	3.50	3.50	12.87	11.55	10.84
58F523	FC504K	9	1.75	1.75	1.75	4.76	4.53	4.33
58F524	FC505K	9	1.75	1.75	2.00	6.71	6.00	5.73

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

Wakefield Semiconductor Cooling Units

DELTA DIVISION

600 SERIES CIRCUIT BOARD COOLERS

Externally mounted applications. Models 601 and 603 especially designed to accommodate the TO-8. Models 621, 623 and 641 accept all standard transistor case styles and case sizes up to 1¼". Shpg. wt., 16 oz.

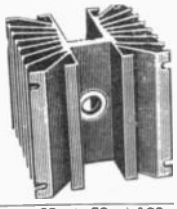
Stk. No.	Type	Fig.	H	W	D	1-49	50-99	100-249	250-490
58F536	NC601K	11	1.25	2.24	.56	1.10	.90	.70	.55
58F466	NC603T	11	2.00	2.24	.56	1.50	1.20	.95	.80
58F537	NC803K	11	2.00	2.24	.56	1.20	.95	.75	.60
58F348	NC-611	7a	.75	1.00	1.00	.90	.83	.76	.68
58F482	NC621A	12	1.50	4.81	.46	1.65	1.35	1.10	.95
58F481	NC621B	12	1.50	4.81	.46	1.65	1.35	1.10	.95
58F538	NC621K	12	1.50	4.81	.46	1.35	1.10	.90	.75
58F460	NC623A	12	3.00	4.81	.46	1.80	1.50	1.20	1.05
58F479	NC623B	12	3.00	4.81	.46	1.80	1.50	1.20	1.05
58F539	NC623K	12	3.00	4.81	.46	1.50	1.25	1.00	.85
58F467	NC641A	11	3.00	4.12	1.00	1.95	1.60	1.30	1.10
58F468	NC641B	11	3.00	4.12	1.00	1.95	1.60	1.30	1.10
58F540	NC641K	11	3.00	4.12	1.00	1.65	1.35	1.10	.90

SERIES 680 CIRCUIT BOARD COOLERS

Provides optimum natural convection cooling per unit volume occupied above the circuit board. Mounting in any position is possible since it permits free air flow in any direction. All have 1.81" sq. base with 1.50" bwtn. mtg. holes. 1.3 to 1.9 oz.

Stk. No.	Type	Hght. (in.)	1-49	50-99	100-249	250-499
58F401	NC680-.5A	.50	.91	.85	.80	.76
58F400	NC680-.5B					
58F399	NC680-.5K					
58F398	NC680-.75A	.75	.92	.87	.84	.80
58F397	NC680-.75B					
58F396	NC680-.75K					
58F395	NC680-1.0A	1.00	1.06	1.00	.96	.92
58F394	NC680-1.0B					
58F393	NC680-1.0K					
58F392	NC680-1.25A	1.25	1.12	1.06	1.02	.97
58F391	NC680-1.25B					
58F390	NC680-1.25K					

GN and WN EXTRUSIONS



Hex Mounting: 1157 accepts 1 1/16" rectifiers, 1251 accepts 1¼" rectifiers, 1244 accepts 1 1/16" rectifiers, 1245 accepts 1¼" rectifiers, 1541 accepts 1¾" rectifiers. ⅛-20 tapped mountings. 1.8 to 5.8 lbs.

Stk. No.	Type	H.	W.	D.	1-24	25-49	50-99	100-199
58F413	GN-1157-5-H	5.00	4.125	4.125	6.22	5.92	5.65	5.18
58F414	GN-1157-5-J	5.00	4.125	4.125	6.22	5.92	5.65	5.18
58F415	GN-1157-5-K	5.00	4.125	4.125	5.86	5.58	5.33	4.88
48F416	GN-1251-5.5-W	5.50	5.00	5.00	8.52	8.10	7.74	7.10
58F417	GN-1251-5.5-K	5.50	5.00	5.00	8.16	7.77	7.42	6.80
58F418	WN-1244-5-H	5.00	4.00	4.00	4.85	4.38	4.18	3.83
58F419	WN-1244-5-J	5.00	4.00	4.00	4.85	4.38	4.18	3.83
58F420	WN-1244-5-K	5.00	4.00	4.00	4.50	4.22	4.04	3.70
58F421	WN-1245-6-W	6.00	5.00	5.00	7.56	7.11	6.87	6.30
58F422	WN-1245-6-K	6.00	5.00	5.00	6.92	6.59	6.21	5.77
58F423	WN-1541-6-Z	6.00	6.25	6.25	10.36	9.86	9.42	8.63
58F424	WN-1541-6-Y	6.00	6.25	6.25	10.36	9.86	9.42	8.63
58F425	WN-1541-6-K	6.00	6.25	6.25	9.74	9.28	8.85	8.12
58F426	WN-1541-9-Z	9.00	6.25	6.25	14.82	14.11	13.47	12.35
58F427	WN-1541-9-Y	9.00	6.25	6.25	14.82	14.11	13.47	12.35
58F428	WN-1541-9-K	9.00	6.25	6.25	14.08	13.41	12.80	11.73

SERIES MN KING SIZE HEAT SINKS AND INSERTS

Designed to mount and cool multicell 240/650 amp rectifiers as large as 3½"x3½" square plate types. MN-2159 inserts for added heat dissipation. 3.1 to 11 lbs.

Stk. No.	Type	Dimensions (in.)	1-9	10-24	25-49	50-99
58F409	MN2131-3.5K	3.5x9.25x6.75	8.16	7.42	6.80	6.53
58F408	MN2131-6K	6.0x9.25x6.75	13.78	12.53	11.50	11.02
58F407	MN2131-12K	12.0x9.25x6.75	24.86	22.60	20.72	19.90
58F406	MN2159-3.5K	3.5x3.37x3.43	2.00	1.82	1.67	1.60
58F405	MN2159-6K	6.0x3.37x3.43	3.22	2.93	2.68	2.58
58F404	MN2159-12K	12.0x3.37x3.43	6.16	5.60	5.13	4.83
58F403	109	1.5x7.5x1.5	Fiberglass Mtg. blt. .95 ea			

MOUNTING DIMENSIONS AND SPECIFICATIONS

- Type Number Suffix Denotes Mounting
- Double Suffix Denotes 2 Mountings

Fig. A—TO-3

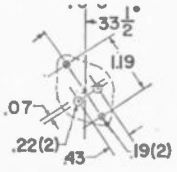
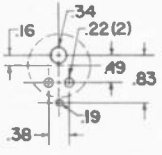


Fig. B—TO-6 & 36

Fig. C—2N1015 ETC.



L- 8-32 X 1/2 DEEP
M-10-32 X 5/8 DEEP
N-1/4-28 X 5/8 DEEP

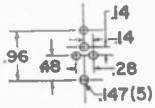
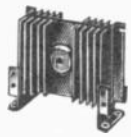


Fig. T—TO-8

EXTRUSION 3-FT. LENGTHS ± ¼"

Stk. No.	Type	For Cooler Type	W.	Dpth.	1-4	5-9	10-24
58F429	300	NC-301-303	2.00	2.00	6.60	5.50	4.95
58F430	400	NC-401-403	4.81	1.25	8.50	7.15	6.30
58F431	420	NC-421-423	4.81	2.63	14.00	12.10	10.45
58F432	440	NC-441	4.75	4.50	22.55	18.25	17.05
58F433	600	NC-601-603	2.24	.56	3.55	3.00	2.75
58F434	620	NC-621-623	4.81	.46	6.30	5.50	4.65
58F435	640	NC-641	4.12	1.00	8.25	7.15	6.30
58F436	1157	GN-1157-5	4.12	4.12	28.05	24.20	21.15
58F437	1251	GN-1251-5.5	5.00	5.00	35.45	30.50	26.95
58F438	1244	WN-1244-5	4.00	4.00	28.25	24.20	21.15
58F439	1245	WN-1245-6	5.00	5.00	35.75	30.80	26.95
58F440	1541	WN-1541-6 & 9	6.25	6.25	56.10	47.10	42.60
58F411	2131	MN-2131	6.75	9.25	69.00	59.40	52.50
58F410	2159	MN-2159 Insert	3.44	3.38	14.00	12.10	10.45

VERTICAL MTG. BRACKETS



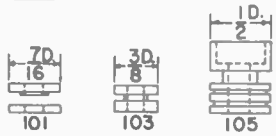
Meet vibration of Mil 202B. NC401 & 403 use #111, NC421 & 423 use #113. Two brackets required per sink. To insulate use teflon insulator #103. Shpg. wt., 10 oz.

Stk. No.	Type	1-99	100-499
58F525	111	.16	.14
58F526	113	.20	.17

THERMAL COMPOUND

For use between semiconductor and heat sink. Also used for thermoelectric modules.

Stk. No.	Type	Quan.	1-199	200-Up
58F470	122	2 oz.	1.95	1.40
			1-49	50-Up
58F471	128	8 oz.	5.10	3.55
			1-4	5-9
58F402	1280	5 lb.	30.00	22.50



TEFLON INSULATORS

Insulate heat sinks from chassis, eliminating mica insulators between sink and semiconductor. ⅛ to 3½ oz.

Stk. No.	Type	For Heat Sink Type	No. Reqd.	NET
58F519	101	501	3 pr.	.00 pr.
		502, 503, 504, 505	4 pr.	.09 pr.
58F518	103	401	3	.05 ea.
		402, 403, 421, 423	4	.05 ea.
		621, *623, 641	4	.05 ea.
58F469	105	441	4	.20 ea.
58F412	107	301	2	.20 ea.
		302, 303	4	.20 ea.
		401	3	.20 ea.
		403, 421, 423	4	.20 ea.
		621, 623, 641	4	.20 ea.

DELTA BOND 152 THERMALLY CONDUCTIVE ADHESIVE

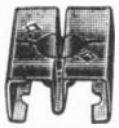
Type 152. High conductivity adhesive used: As general adhesive, for bonding semi-conductors to chassis heat sinks, fabricating heat sinks or thermal linds, for permanent bonding of all materials with highly thermal conductive interface. Porous and nonporous surfaces. Excellent dielectric strength. Bond shear strength, 1" overlap psi, 30 immersion in water unaffected. Temp. range —70°F to +300°F.

Stock No.	Type No.	Size	1-9	10-24	25-49	50-99
58F345	152-1	1 oz.	2.25	2.00	1.85	1.75
58F386	152-2	7½ oz.	5.00	4.75	4.50	4.25

Semiconductor Cooling Units and Ovens

WAKEFIELD

SNAP-ON CIRCUIT BOARD HEAT SINKS



Series 140 supplements the Series 200 Featherweight Heat Sinks. Types 140, 141, and 142 fit popular press fit diodes and SCR's as well as JEDECTO-8. Case dia. ranges from .480 to .505. Provides thermal resistance as low as 10°c/w. Material: highest thermally conductive aluminum. Finish: black anodize is standard. Wt.: 140—.14 oz.; 141—.20 oz.; 142—.42 oz.

Stock No.	Type	Size	1-499	500-999	1000-2499	2500-4999
58F376	140	1.035 x .520 x .930	.14	.12	.105	.095
58F377	141	1.035 x .520 x 1.415	.155	.135	.12	.11
58F378	142	1.035 x .520 x 3.00	.185	.175	.165	.159

CIRCUIT BOARD COOLER FOR TO-5 TRANSISTORS

Type 150. Ideal for use where space is limited. Requires only 0.375 in.² area. In applications permitting 1⅜" height above the circuit board, this lightweight, economical Cooler has good performance characteristics with TO-5 cases: case rise 34°C @ 1 w with black anodized finish. Wt.: .10 oz.

Stock No.	Type	Size	1-499	500-999	1000-2499	2500-4999
58F379	150	1.375 x 1.00 x .375	.061	.051	.041	.036

THERMAL CLAMP FOR TO-1 CASES

Type 255. For push/pull driver or low power output applications. Gives retention of cases to chassis or heat sink. 2 cases can be mounted. 3°C/w per TO-1 transistor or 1½° C/w for both. Mtg. ctr.; .687, tols. ±.001 or ±.005. Material: 1100 aluminum alloy. Finish: none. Wt.: .10 oz.

Stock No.	Type	Size	1-499	500-999	1000-2499	2500-4999
58F380	255	1.726 x .375 x .476	.063	.053	.043	.038

● *NEW* SERIES 258 THERMAL LINK

Thermal Link for fused glass diode. Copper solder points are isolated from, but bonded to the aluminum U-form. Dielectric coating extends down the legs to provide long creepage path. 100% tested at 1000V hypot. Incr. cur. rating: 3 to 5 times. Screw mounted. Wt.: .05 oz.

Stk. No.	Type	Size	1-24	25-49	50-99	100-499
58F335	258	.50 x .34 x .25"	1.00	.95	.90	.85

● *NEW* SERIES 257 HEAT-SINK/RETAINER

TYPE 257-S

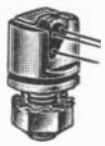
TYPE 257-R

257-S is a retainer and heat sink. 257-R is a TO-5 retainer. Allows separate mountings of TO-5 transistor and socket. 257-S—.005 oz. 257-R—.003 oz.

Stk. No	Type	Size	100 Pcs. Per Pkg. 1-4	5-9	10-24	25-49
58F336	257-S	17/16 x ½ x 3/16"	4.90	3.90	2.90	2.40
58F337	257-R	½ x 3/16"	4.70	3.70	2.70	2.20

THERMAL RETAINERS FOR TO-5 CASES

254S



254S1

254T

254P
254D

The TO-5 case style, including the Kovar header type, is best heat sinked at the bottom face of the flange, and all Series TR-254 Heat Sinks provide this preferred method. All five types intended as thermal links from transistor case to a cooler or chassis member acting as the heat sink. Type 254-SI has built-in electrical insulation. Material: Type 254-SI; 6061-T6 aluminum with gold irridite finish.

Stock No.	Types	Weight Oz.	1-99	100-499	500-999	1000-2499	2500-4999
58F381	254-S	.25	.18	.15	.135	.12	.11
58F382	254-SI	.25	.25	.21	.19	.17	.155
58F383	254-T	.20	.20	.17	.15	.135	.125
58F384	254-P	.45	.13	.115	.105	.095	.085
58F385	254-D	.20	.21	.18	.16	.145	.135

● *NEW* SERIES 256 BRASS CLIPS

Type 256-ST

Type 256-DT

Type 236-D

Clips for use as electrostatic shields and/or thermal retainers. For one or two plastic T1 or other plastic transistor or .20" dia. and .16" across the flat. Dual clip maintains 2 transistors at the same temperature.

Ttock No..	Type	Dia. x Length	Weight Oz.	Packages of 1000 1-2	3-4	5-9	10-24
58F338	256-ST	.20" x .16"	.0005	16.25	14.50	13.00	11.50
58F339	256-DT	.20" x .31"	.0007	17.25	15.50	14.00	12.50
58F340	256-D	.20" x .31"	.0006	16.25	14.50	13.00	11.50

● *NEW* SERIES 170 INSULATING WAFERS

For TO-3 transistors. Features thermally conductive dielectric coating providing excellent thermal path between the case and heat sink. Shipped on a carrier holding 40 wafers. Scored for fast, easy breakoff from the carrier.

Stock No.	Type	Finish Description	Pkgs. of 100 Pcs. 1-9	10-24	25-49
58F341	170	Hard Coat	11.50	9.50	8.00
58F342	170	Delta Coate 151H	10.50	8.50	7.00

● *NEW* THERMAL SPRING RETAINERS FOR TO-18 CASES

2 TO-18 spring retainers bonded together with Delta Bond to obtain electrical separation and to provide equalized case temp. Copper finish. Cadm. plated. Weights: .014 to .018 oz.

Stk. No.	Type	Size	1-49	50-99	100-249	250-499	500-999
58F343	259-1	.355 x .230 x .187	.40	.35	.30	.28	.25
58F344	259-2	.565 x .230 x .187	.40	.35	.30	.28	.25

NEWARK Maintains Ten Giant Warehouses to Insure Fastest Delivery From Stock.

KLIXON

SELF-REGULATING COMPONENT OVENS

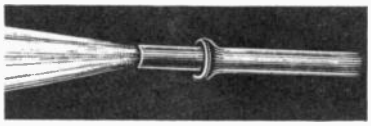
Statitemp Series. Provides a stable thermal environment .Temperature gain (defined as ratio of change in ambient temp. to change in control temp. at constantvoltage and component dissipation, as measured by the temp. dependent characteristic of the component) is 30:1 for 115°C. types, 15:1 for 80° models. Low power drain; unaffected by component current. Operate from 24VDC. Aver. wt. approx. 5 gms.

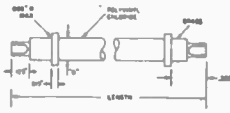
For temperature stabilization of DO-7 and DO-5 semi. components.

Stock No.	Type	Fits	Oper. Temp.	Watts	1-4	5-9	10-24	25-99
59F1085	3ST1-1	DO-7	115°	3.4	6.45	4.52	3.53	3.19
59F1086	3ST1-2	DO-7	80°	3.4	6.45	4.52	3.53	3.19
59F1087	4ST1-1	TO-5	115°	6.5	7.20	5.05	3.94	3.55
59F1088	4ST1-2	TO-5	80°	6.5	7.20	5.05	3.94	3.55
59F1089	5ST1-1	TO-18	115°	6.5	6.45	4.52	3.53	3.19
59F1090	5ST1-2	TO-18	80°	6.5	6.45	4.52	3.53	3.19

FIBER OPTICS

● *NEW* FIBER OPTICS "LIGHT WIRES"





Permits transmission of light beams around corners and thru intricate bends. Numerous applications exist in aerospace R & D, photography, electro-optics, automation, and production systems. Extremely useful in optimizing photocell performance by channelling light onto photosensitive surfaces; may be used as "transmission lines" for modulated light signals, eliminating the need for complex, delicate systems of lenses and prisms. Each "wire" is made of a bundle of 100 to 1,000,000 tiny 40μ diam.) fibers; each fiber consists of a core covered with a cladding of slightly lower index of refraction — light is channelled from one end of the bundle to the other by a process of total internal reflection. Because of this core/clad combination, dirt, oil, tar, and most other contaminants will have practically no adverse effect on light transmission. To provide mechanical protection, the bundles are encased in PVC or crush resistant aluminum tubing and furnished with brass end fittings. Will transmit the visible and near-infrared portions of the spectrum, but are not practical in the UV region. Temp. range: —40 to +200°F.

PVC SHEATHING

Type	"A" Bundle Dia.	Min. Bend Radius	"B" +.000 —.003	"C" +.000 —.005	"D" Sheath O.D.
32-01	1/16"	1/2"	.128	.185	1/8"
32-03	1/8"	3/4"	.216	.278	7/32"

1/16" BUNDLE DIAMETER

Stk. No.	Type	Length	1-9	10-99	100-up
99F900	32-01-03	3"	6.00	5.40	4.80
99F901	32-01-06	6"	6.25	5.62	5.00
99F902	32-01-12	12"	6.50	5.85	5.20
99F903	32-01-18	18"	6.75	6.08	5.40
99F904	32-01-24	24"	7.00	6.30	5.60
99F905	32-01-30	30"	7.25	6.52	5.80
99F906	32-01-36	36"	7.50	6.75	6.00
99F907	32-01-48	48"	8.00	7.20	6.40
99F908	32-01-60	60"	8.50	7.65	6.80

1/8" BUNDLE DIAMETER

Stk. No.	Type	Length	1-9	10-99	100-up
99F909	32-03-06	6"	6.75	6.08	5.40
99F910	32-03-12	12"	7.50	6.75	6.00
99F911	32-03-18	18"	8.25	7.45	6.60
99F912	32-03-24	24"	9.00	8.10	7.20
99F913	32-03-30	30"	4.75	8.77	7.80
99F914	32-03-36	36"	10.50	9.45	8.40
99F915	32-03-48	48"	12.00	10.80	9.60
99F916	32-03-60	60"	13.50	12.15	10.70
99F917	32-03-72	72"	15.00	13.50	12.00

CRUSH RESISTANT ALUMINUM TUBING

Type	"A" Bundle Dia.	Min. Bend Radius	"B" +.000 —.003	"C" +.000 —.005	"D" Sheath. O.D.
32-13	1/8"	1 3/4"	.216	.321	.275
32-15	1/4"	2 1/2"	.324	.500	.463

1/8" BUNDLE DIAMETER

Stk. No.	Type	Length	1-9	10-99	100-up
99F918	32-13-06	6"	7.25	6.52	5.80
99F919	32-13-12	12"	8.00	7.20	6.40
99F920	32-13-18	18"	8.75	7.87	7.00
99F921	32-13-24	24"	9.50	8.55	7.60
99F922	32-13-30	30"	10.25	9.22	8.20
99F923	32-13-36	36"	11.00	9.90	6.80
99F924	32-13-48	48"	12.50	11.25	10.00
99F925	32-13-60	60"	14.00	12.60	11.20
99F926	32-13-72	72"	15.50	13.95	12.40

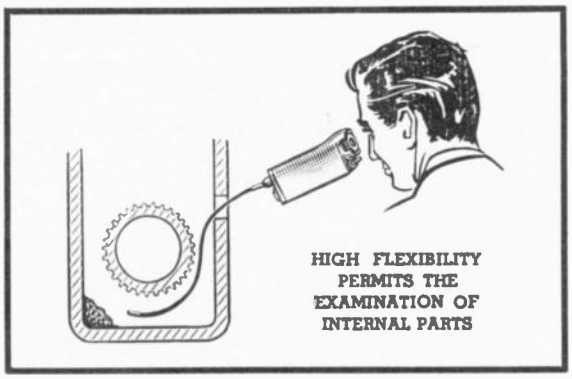
1/4" BUNDLE DIAMETER

Stk. No.	Type	Length	1-9	10-99	100-up
99F927	32-15-06	6"	14.00	12.60	11.20
99F928	32-15-12	12"	16.00	14.40	13.80
99F929	32-15-18	18"	18.00	16.20	14.40
99F930	32-15-24	24"	20.00	18.00	16.00
99F831	32-15-30	30"	22.00	19.80	17.60
99F932	32-15-36	36"	25.00	22.50	20.00
99F933	32-15-48	48"	30.00	27.00	24.00
99F934	32-15-60	60"	40.00	36.00	32.00
99F935	32-15-72	72"	50.00	45.00	40.00

● *NEW* FIBER OPTICS "FLEXISCOPE"

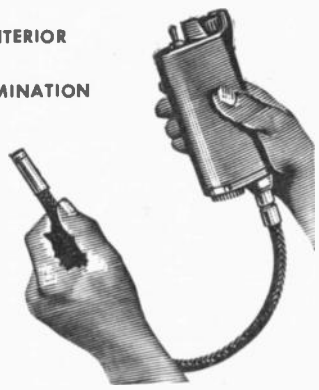
Permits examination of internal details in areas where periscopic instruments are useless. Probe fits into any 1/2"D or larger opening, and can be bent around curves, threaded thru the most complex systems, even tied in a knot, without affecting its image-transmitting capability. Two bulbs in the probe provide illumination of the area under inspection. The probes connect to a rugged metal casing containing the focusable viewing eyepiece, batteries (use transformer adapter and transformer for applications requiring high-intensity or continuous-duty illumination) and switch. Example applications: insert into spark plug holes to inspect cylinder walls and piston heads without tearing down engine; check for defective teeth in gearboxes; examine interior surfaces of pipes; attach probe to shake table and hold viewer stationary to observe component failure during vibration testing. Resists shock, corrosion, dirt, grease, oil, and water. Inexpensive, replaceable faceplate protects the end of the probe. Comes with bulbs, batteries, spare faceplate, probe wrench, and manual. Less probe.

90F936. NET. 75.00



Stk. No.	Type	Description	Each
99F937	32-71-02	Scope, Semi-Rigid Probe, 24"	250.00
99F938	32-71-12	Scope, Semi-Rigid Probe, 36"	350.00
99F939	32-71-03	Scope, Flexible Probe, 24"	250.00
99F940	32-71-11	Scope, Flexible Probe	350.00
99F941	32-71-04	Face Plate	.25
99F942	32-71-05	Right Angle Attachment	35.00
99F943	32-71-06	Transformer Adapter	30.00
99F944	71-72-40	Variable Transformer	14.00
99F945	32-71-09	Leather Case	35.00
99F946	32-32-71	2 Bulbs	5.00

- EXAMINE INTERIOR SURFACES
- AMPLE ILLUMINATION
- RUGGED



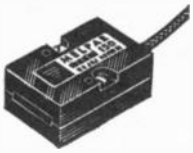
● *NEW* EXPERIMENTAL KIT

Special kit for experimenters, designers and engineers. Explore first-hand the wide range of applications for Fiber Optics. Kit contains four standard light wires (1 each 32-01-06, 32-02-12, 32-03-18, and 32-13-24) plus ten feet of continuous light wire, 12 ferrules, and crimping tool, for fabricating custom-made light wires of any desired length.

99F947. NET. 40.00

Readers, Choppers, Oscillators & Solar Cells

MELPAR, INC.



● NEW PHOTOELECTRIC READER

Consists of light source, lens and photocell. Utilizes the advantages of detection by reflected light. Lamp, 6v at 0.2 amp; dc recommended; nominal life 10,000 hr at 5.4v. Photocell; nominal input, 20vdc. Max. inupt, 300 vdc. 50 mv max. dissipation. Nom. response: 7250 angstroms, std. Maximum counting rate on std. unit; 300 counts per second. Versatile; counts, cues, sorts and inspects. Features small size (0.6 cu. in.), and insensitivity to ambient light.

Stk. No.	Description	1-3	4-9	10-24	25-49	50-Up
99F850	150 Reader	24.50	21.00	18.50	17.00	16.00

● NEW MODEL 200 PHOTOELECTRIC READER

Companion to the 150, designed for use in automatic control systems where target detection at ranges from 1" to 100' is required. See specifications above.

Stk. No.	Description	1-9	10-24	25-49	50-Up
99F851	200 Reader	36.95	32.95	29.95	28.95

● NEW PHOTOELECTRIC CONTROL UNITS

Transistorized photoelectric control units provide high reliability at low cost for automatic control systems using the companion photoelectric readers 150, and 200. These control units feature long life, ease of maintenance and highly simplified installation. In one compact unit are contained a power supply, amplifier and controlled switching.

Model 155. Control unit companion to the 150 photoelectric reader. Input power: 115V, 60HZ, 6W. The control relay is SPDT, 115V 2A non-inductive. The maximum operating rate is 1000/Min. Complete with 5' cord. Case size: 4" x 2⅞" x 1½".
Model 205. Control unit companion to the 200 photoelectric reader. Input power: 115V, 60HZ, 17W. The control relay is SPDT, 115V 2A non-inductive. Maximum operating rate: 1000/Min. 5' cord included. Case size: 6¼" x 3¾" x 2".

Stk. No.	Type	1-3	4-9	10-24	25-49	50-Up
99F852	155A	44.95	39.95	36.95	34.95	33.95
99F853	205	49.95	43.95	39.95	37.95	36.95

● NEW SERIES LIGHT L10 CHOPPER

Economical light chopper used for light beam modulation, pulsing, scanning, sweeping, and control. Exclusive features: Compact size, jeweled bearing, lower power input, wide angle of excursion (up to 20°), optical quality, high reflectivity and replaceable mirror and bearings. Specifications: Input power: Sine wave, 1½ v. (typical). Power consumption: 25 milliwatts. Mirror finish: aluminized front surface or optical mirror. Mirror size, 1 Cm^2. Frequency to 500 Hz std. Size 1 29/32" x 1 15/32" x .8".

Stk. No	Description	1-3	4-9	10-24	25-49	50-Up
99F854	L10 Chopper	55.95	47.95	38.95	33.95	29.95

● NEW TUNING FORK OSCILLATORS

A combination of tuning fork and high gain amplifier circuit which generates a sine or sq. wave output with the application of dc voltage. Accuracy; .005%± @ 0 to 65°C std., —40° to +100° operational. Input voltage: 12VDC. Output: Square wave, approx. 50% p-p min. of output voltage into 10K external load. The terminals are solder hooks which can be cut off to pin for printed circuit mounting. Typical applications: lab. std., test equipment, motor control, timers, etc. Stable, rugged and reliable.

Four tuning fork oscillators available:

Stk. No.	Model	HZ	1-9	10-24	25-49	50-Up
99F855	10HDN6	60*	89.95	74.00	66.00	64.00
99F856	10N4	400	59.95	47.00	40.00	38.00
99F857	10N10	1000	59.95	47.00	40.00	38.00
99F858	10N24	2400	59.95	47.00	40.00	38.00

The 10HDN5 is 1 29/32" x 1 15/32" x 1 21/32".
All others are 1 29/32" x 1 15/32" x .4".
* Divided to 60HZ from 480 HZ.

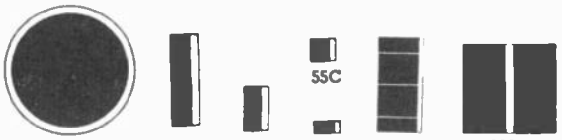
● NEW MEL-INK PERMANENT MARKING COMPOUND

Typical uses include identifying nomenclature on printed circuit boards, sheet metal chassis, and most components. Non-conducting.
Type M-100A. Epoxy based compound eliminates smeared stencils, resists the action of ultrasonic solutions and intensive salt spray. Can be sprayed on metals, plastics, glass and wood. Meets or exceeds MIL-STD-130 without a protective coating.
Type M-300. Hard-setting epoxy with a viscosity suitable for machine and hand stamping, as well as silk screening. Prevents smearing of stamped information on completion of the curing cycle. Excellent solvent resistance.

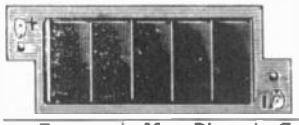
Type	Stk. No.	Color	Stk. No.	Color	Pints 1-48	Pints 49-96
M-100A	99F859	Black	99F860	White	8.00	7.25
M-100A	99F861	Red	99F865	Brown	10.50	9.50
M-100A	99F862	Green	99F866	Orange	10.50	9.50
M-100A	99F863	Violet	99F867	Yellow	10.50	9.50
M-100A	99F864	Gray	99F868	Blue	10.50	9.50

Type	Stk. No.	Color	Stk. No.	Color	Lbs. 1-48	Lbs. 49-96
M-300	99F869	Black	99F870	White	10.00	9.00

HOFFMAN SILICON CELLS



SILICON SOLAR MODULES



Output measured with tungsten source with a color temp. of 2800°K at a light level corresponding to 100-mw/cm^2 of sunlight. Cell temperature is at 28°C.

Type	Max. Dim.	Current @ 2V	1-99	100-999
HSSP-2-40	2.5 x 1"	42 ma	5.50	4.10

ENCAPSULATED READOUT CELLS

Output—1250 ft. — candles color temp. 2800°K, 55°C into 1000 ohm load resist. Dark reverse current—IV, 55°C, 1 ft.-candle max. Size: .5x.08". Active area: 13x .05". Oper. Temp.: —65°C to +150°C. 2" leads.

Type	Output mv min.	Output μa min.	Dark Rev. μa max.	1-99	100-999
EA7E1	300	300	5	6.75	5.10
EA7E2	300	300	10	6.00	4.50
EA7E3	250	250	10	5.10	3.80

HIGH EFFICIENCY SOLAR CELLS

Speed of response 10 microseconds or less, depending on load resistance. Light source: a solar simulator with spectral distribution of space sunlight as determined by F.S. Johnson of NLR with intensity equiv. to 140 mw/cm^2 earth orbit sunlight. Size: 0.4 x 0.8"; active area, 0.28 sq. in.

Type	Output (mv)	Output (mA)	Power (mW)	1-9	100-999
N120CG-8L	430	45.5	19.6	3.85	3.25
N120CG-9L	430	51.5	22	4.35	3.65
N120CG-10L	430	56.9	24.5	5.05	4.25
N120CG-11L	430	62.7	27	7.45	6.25
N120CG-12L	430	68.2	29.4	14.65	12.25

STANDARD SOLAR CELLS

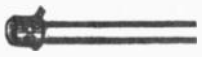
Operating and storage temp. range —65°C to +175°C. Speed of response 10 microseconds or less depending on load resistance. Spectral response 0.4 to 1.15 microns, peak at 0.85 microns. Measured at tungsten light source with a color temp. of 2800° K @ a light level which corresponds to 100 mw/CM^2 of sunlight as correlated by means of a standard solar cell. Cell test temp. is 28°C.

Type No.	Nominal Dim. (inches)	Active Area (sq. in.)	Loud Output mA	1-99	100-999
2A	1.125 dia.	.79	95	7.50	6.00
52C	0.2x0.8	.12	16	3.60	2.80
51C	0.2x0.4	.06	7.8	2.50	2.00
55C	0.2x0.2	.03	3.8	1.50	1.20
58C	0.2x0.1	.014	1.8	1.00	.80
110C	0.4x0.4	.14	17.8	1.90	1.50
58C-L	0.2x0.1	.014	1.8	1.25	1.05
110C-L	0.4x0.4	.14	17.8	2.15	1.75

BROAD-AREA CADMIUM-SULFIDE (CdS) PHOTOCELLS

TO-8

SQ2520


SQ2535

4413

7163

GLASS-METAL TYPES

1" — DIAMETER TYPES

Type	Max. DCV or Peak ACV	Power Dissip. Watt Continuous Service	Resistance at 2 Footcandles Ohms	1-99	100-999
4451	600	0.75	160,000	1.37	.95
4450	600	0.75	25,000	1.37	.95
SQ2502	600	0.75	5,500	1.90	1.31
SQ2503	600	0.75	17,000	1.32	.92
7163	600	0.75	10,000	1.21	.84
4448	600	0.75	8,000	1.32	.92
4404	600	0.75	5,500	1.32	.92
4453	600	0.75	4,000	1.28	.88
4403	250	0.75	1,800	1.21	.84

½" — DIAMETER TYPES (Modified TO-8 Case)

Type	Max. DCV or Peak ACV	Power Dissip. Watt Continuous Service	Resistance at 2 Footcandles Ohms	1-99	100-999
SQ2525	250	0.2	14,000		
SQ2521	250	0.2	8,000	1.82	1.25
SQ2526	110	0.2	3,000		
SQ2527	110	0.2	1,600		
SQ2520	110	0.2	700		

¼" — DIAMETER TYPES (Modified TO-5 Case)

Type	Max. DCV or Peak ACV	Power Dissipation Watt Continuous Service	Resistance at 2 Footcandles Ohms	1-99	100-999
SQ2534	150	0.03	6,750,000	1.65	1.14
SQ2529	300	0.05	800,000	1.65	1.14
SQ2508	200	0.05	60,000	1.90	1.31
SQ2519	300	0.05	9,000	1.65	1.14
SQ2536	110	0.05	3,000	1.49	1.03

1/5" — DIAMETER TYPES (Modified TO-18 Case)

Type	Max. DCV or Peak ACV	Power Dissipation Watt Continuous Service	Resistance at 2 Footcandles Ohms	1-99	100-999
SQ2535	50	0.02	25,000	2.39	1.65

ALL-GLASS TYPES

½" — DIAMETER TYPES

Type	Max DC or Peak ACV	Power Dissip. Watt. Cont. Service	Res. at 2 Footcandles Ohms	1-99	100-999
SQ2523	110	0.2	3,000	2.10	1.45
SQ2524	110	0.2	1,600	2.10	1.45
4425	110	0.2	700	2.10	1.45

¼" — DIAMETER TYPES

Type	Max DC or Peak ACV	Power Dissip. Watt. Cont. Service	Res. at 2 Footcandles Ohms	1-99	100-999
SQ2528	300	0.05	800,000	1.73	1.20
7412	200	0.05	60,000	2.06	1.43
4413	110	0.05	17,000	2.39	1.65
4402	300	0.05	9,000	1.67	1.15

BROAD-AREA CADMIUM-SULFO-SELENIDE PHOTOCELLS

GLASS-METAL TYPES

1" DIAMETER TYPES

Type	Max DC or Peak ACV	Power Dissip. Watt. Cont. Service	Res. at 2 Footcandles Ohms	1-99	100-999
SQ2546	110	0.75	720	1.90	1.31

½" — DIAMETER TYPE (Modified TO-8 Case)

SQ2545	75	0.2	900	1.90	1.31
SQ2545V1	110	0.2	1400	1.90	1.31

¼" DIAMETER TYPE (MODIFIED TO-5 CASE)

Type	Max DC or Peak ACV	Power Dissip. Watt. Cont. Service	Res. at 2 Footcandles Ohms	1-99	100-999
SQ2544	60	0.05	2,400	1.90	1.31
SQ2544V1	110	0.2	6,000	1.90	1.31

1/5" — DIAMETER TYPE (Modified TO-18 Case)

SQ2543	75	0.2	8,000	2.06	1.43

GENERAL ELECTRIC PHOTOCONDUCTIVE CELLS

Hermetically sealed after evacuation and back filled with dry air to reduce the moisture content to approx. .015%. Cells come in three basic sizes, four power ratings, and multiple resistance ratings. Wide range enables the designer to select a maximum power dissipation of 75, 250, 300 or 600 mw. By using cells to operate many devices directly, amplifying stages can be eliminated and overall circuits greatly simplified. Cells have very high sensitivity and spectral response peaks in the visible light range. Near maximum response obtained over large portion of the spectral region. All are in glass-metal packages. Have flexible leads and small size to dissipation ratio. No external shields required. May be used for annunciators, anemometers, camera aperture control. * Dia. excludes flange.

Type	Wave Light. Spec. Res.	Max. pwr. dis. mw	Max. Appl. Volts	Resistance @2('-C)	Resistance @100('-C)	Amb. Temp. Rng. C.	Max. dia*	1-249	250-up
A-33	5500 ± 700Ang.	75	30	6300Ω	360Ω	—40° to +65°	.330"	1.34	.96
A33P1	5500 Amg.	50	30	6300Ω	360Ω	—40° to +65°	.330"	.75	.54
A-35	5500 ± 700Ang.	75	50	12000Ω	900Ω	—40° to +65°	.330"	1.34	.96
A-36M1	5500 ± 700Ang.	75	60	30000Ω	1000Ω	—40° to +65°	.330"	1.67	1.20
B-46	6100 ± 600Ang.	250	60	1250Ω	100Ω	—40° to +65°	.510"	1.42	1.02
B-425	6100 ± 600Ang.	250	250	9100Ω	400Ω	—40° to +65°	.510"	1.42	1.02
†C-425P1	7300 ± 600Ang.	50	250	15000Ω	600Ω	—40° to +65°	.470"	.75	.54
B425P1	6100Ang.	200	250	9100Ω	400Ω	—40° to +65°	.510"	.75	.54
B430	6100 ± 500Ang.	250	300	15000Ω	600Ω	—40° to +65°	.470"	1.42	1.02
B-1035	6100Ang.	300	350	6500Ω	400Ω	—40° to +65°	1.120"	1.59	1.14
B1035M1	6100Ang.	600	350	12000Ω	500Ω	—40° to +65°	1.120"	1.47	1.06
B1035M2	6100Ang.	600	350	5500Ω	300Ω	—40° to +65°	1.120"	1.47	1.06
B-1035M3	6100 ± 500Ang.	600	350	2750Ω	200Ω	—40° to +65°	1.120"	1.47	1.06
7427	5800 ± 500Ang.	350	350	2850Ω		—40° to +65°	0.6"	2.61	1.87

† Plastic encapsulated (not hermetically sealed), cadmium-selenide device.

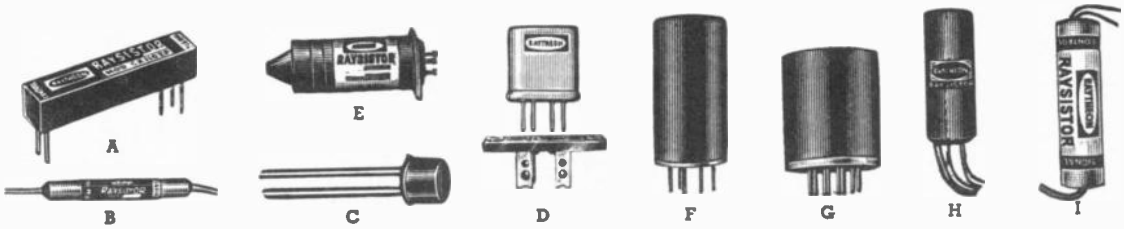
PHOTOCONDUCTIVE CELL-LAMP COMBINATION

Photoconductor-lamp combination includes cadmium-sulfide (PL5C1 is cadmium-selenide) photoconductive cell and a variable illumination source enclosed in a light-tight package. Photoconduction is controlled by varying the voltage to the light source. Intended to be used for circuit isolation as a potentiometer free of moving-contact noise, and for low-level switching.

Stk. No.	Type	Lamp Volts Current	Max. Volts	Resistance 20%V	Resistance 90%V	Temp.	1-249	250-up
22F1707	PL5B	5V-60Ma.	250	40 Kr	200 r	—40° - +65°	4.18	3.00
22F1708	PL5C	5V-60Ma.	200	20 Kr	220 r	—40° - +65°	4.18	3.00

RAYTHEON Raysistors & Photoconductive Cells

RAYTHEON RAYSISTORS



• Ideal replacement for Switches — Relays — Potentiometers

Four terminal optoelectronic device which performs a variety of control functions, providing noise-free control of AC or DC signals over a wide dynamic range without transients or contact (or wiper) chatter. Since there are no moving parts, the Raysistor is exceptionally rugged and has inherently long life in typical applications as variable resistors, solid state switches, relays and voltage or signal isolators. Unit operates on the principle of controlled light acting on a photoresistive element. No electrical or mechanical connection exists between the control and signal circuit. * With Socket.

		CONTROL LAMP		SIGNAL — PHOTOCELL						
				Resistance in Ohms				Typical Switching Time (Seconds)		
Model	Fig.	Voltage	Current (MA)	On Max.	Off 50V Min.	Volt Max.	Max Power (MW)	On	Off	1-9 / 10-24
CK1101	B	1200[2]	1-3[3]	1000	10^7	60	75	.0012	.060	11.00 / 10.75
CK1101P	A									9.00 / 8.80
CK1102	B	0-1	0-50	700	10^6	60	50	.020	.300	11.00 / 10.75
CK1102P	A									9.00 / 8.80
CK1103	B	0-5	0-175	150	10^6	60	50	.020	.800	11.00 / 10.75
CK1103P	A									9.00 / 8.80
CK1104	B	0-25	0-37	150	10^6	60	50	.010	.450	11.00 / 10.75
CK1104P	A									9.00 / 8.80
CK1105	E	120	3.0	10K	10^6	300	250	.030	2	24.50 / 20.00
CK1108	E	0-6.0	0-200	250	10^6	300	250	.030	1.0	24.50 / 20.00
CK1111	B	120[2]	1-3[3]	30K	2.5×10^7	300	75	.002	.105	11.00 / 10.75
CK1111P	A									9.00 / 8.80
CK1112	B	0-10	0-17	700	10^6	60	50	.030	.400	11.00 / 10.75
CK1112P	A									9.00 / 8.80
CK1114	D	0-1	0-15	850	10^6	60	50	.018	.060	8.75 / 7.15
CK1115	D	0-4	0-53	200	10^7	200	100	.020	.300	8.75 / 7.15
CK1116	D	0-4	0-12	350	10^7	200	100	.010	.300	9.35 / 7.75
CK1121*	C	0-5	0-55	150	10^7	200	100	.004	.250	4.00 / 3.25
CK1122*	C	0-10	0-17	1000	10^7	200	100	.030	.225	4.00 / 3.25
CK1123*	C	0-25	0-36	150	10^7	200	100	.010	.300	4.00 / 3.25
CK1124*	C	150[2]	.1-1.5	3000	10^7	200	100	.005	.100	4.00 / 3.25
CK2000*	D	0-25	0-37	40	10^6	100	100	.030	.300	5.00 / 4.05
CK2003*	C	0-10	0-17	225	10^7	150	100	.035	.250	4.60 / 3.85
CK2006*	C	0-12	0-17	1500	10^6	150	100	.040	1.5	4.60 / 3.85
CK2008	A	120B	1-3C	300	10^7	150	100	.0015	.060	11.60 / 9.60
CK2009	D	0-4	0-55	135	10^7	200	100	.020	.300	9.60 / 7.75
CK2010	D	0-6	0-25	270	10^7	200	100	.020	.300	23.15 / 17.55
CK2011	E	0-120	0-25	300	10^6	250	250	.050	.700	27.00 / 25.00
CK2014	D	0-3	0-47	500	10^7	200	100	.050	.700	30.00 / 26.40
CK2015*	C	0-25	0-37	1500	10^8	200	100	.015	.075	4.60 / 3.85
CK2016*	C	150[1]	.2-1.2	1000	10^6	150	100	.010	.250	4.60 / 3.85
CK2018*	C	0-5	0-55	150	10^9	200	100	.010	.175	4.00 / 3.25
CK2019*	C	0-10	0-17	1000	10^6	150	100	.040	1.5	4.60 / 3.85
CK2020*	C	0-10	0-17	1500	10^6	150	100	.040	1.5	8.00 / 6.50
CK2021*	C	0-10	0-17	500	10^7	150	100	.040	.250	8.00 / 6.50
CK2028*	C	0-25	0-37	200*	10^6	100	100	.050	1.5	6.00 / 5.25
CK2029	I	0-10	0-35	2000	10^8	250	250	.020	.160	18.00 / 14.00
CK2030	E	0-10	0-17	700	10^7	250	250	.040	.450	24.50 / 20.00
CK2031										9.60 / 7.75
CK2032	I	0-10	0-17	420	10^7	250	250	.040	.250	18.00 / 14.00
CK2033	F	0-10	0-17	Tracking 3500	10^7	200	100	.050	1.5	5.90 / 5.50
CK2034	H	0-25	0-37	300	10^6	100	100	.060	1.4	8.00 / 6.50
CK2035	I	120	1-3C	1000	10^7	250	200	.010	.125	18.00 / 14.00
CK2036	H	0-10	0-17	3000	10^7	200	100	.040	.250	8.60 / 6.50
CK2037	D	0-4	0-55	1000	10^8	200	100	.040	1.5	8.75 / 7.15
CK2042	G	0-10	0-17	1500	10^6	150	100	.050	1.5	7.90 / 7.50
CK2043	G	0-25	0-37	300	10^6	150	100	.040	1.3	7.90 / 7.50
CK2046	D	0-1	0-17	350	10^6	100	100	.030	.090	9.60 / 7.75
CK2051*	C	0-10	0-17	2000	10^6	200	100	.040	.350	4.00 / 3.25
CK2052*	C	0-25	0-37	300	10^6	200	100	.018	1.2	4.00 / 3.25
CK2053*	D	0-5	0-55	1250	1	200	0.1	0.020	1.2	4.00 / 3.25

THE RAYSISTOR — APPLICATIONS. Complete twenty-seven page book fully covering Raytheon Raysistors—applications, technical specifications, advantages. Generous use of charts and schematics. Size: 8½ x 11". Shpg. wt., 4 oz.
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RAYTHEON PHOTOCELL

Hermetically-sealed solid-state light dependent resistor using a cadmium selenide photosensitive material designed for use in optoelectronic control circuitry. Fast switching speed suitable for chopper and other control and switching appliances requiring operation up to one kilocycle. Coupled with a high voltage capability, provides a very low noise variable resistor which is ohmic over a wide range of voltage and illumination. The TO-5 package permits use of standard mounting hardware.

	Resistance in Ohms						Response Time at 100 ft. cdles.					
	On at 100 ft. Cdles.		Off at 100 V		Volt.	Max. Pwr.	Off to 10K		On to 10 meg.			
Type	Typ.	Max.	Typ.	Min.	Max.	(MW)	Typ.	Max.	Typ.	Max.	1-9	10-24
EM1502	750	1250	10^9	10^8	200	100	0.5ms	1.5ms	15ms	50ms	2.20	1.90

RAYTHEON

¼" GLASS VIAL PHOTOCELLS

Are hermetically sealed in glass cases and are available with cadmium selenide and cadmium sulfide sensors. Rugged mechanical construction, small size and light weight provide ease in mounting. Wide range of characteristics and high voltage capability provide a low noise, completely ohmic light dependent variable resistor, useful over a wide range of voltage and illumination. Cadmium selenide cells, having faster switching speeds are especially suitable for chopper and other control or switching applications requiring operation up to one kilocycle per second. Color response covers the visual light range and extends well into the infra-red. Cadmium sulfide cells, having a lower temperature coefficient, are especially suitable where stability over a wide temperature range is required. The improved temperature stability and more linear response to illumination makes this type particularly good for applications requiring better stability in hostile environments.

Type	Sensitive Material	Resistance @ 100 ft. C (ohms)	Min. Off Resistance	Response Time		Maximum Voltage	Power Diss. Max.	1-9	10-24
				Rise	Fall				
CK1201	CdSe	150	100 Meg.	3 ms	60 ms	50v	75 mw	1.75	1.65
CK1202	CdSe	300	100 Meg.	3 ms	60 ms	50v	75 mw		
CK1203	CdSe	500	100 Meg.	3 ms	60 ms	100v	100 mw		
CK1204	CdSe	750	100 Meg.	3 ms	60 ms	100v	100 mw		
CK1205	CdSe	1000	100 Meg.	2 ms	40 ms	200v	200 mw		
CK1206	CdSe	1250	100 Meg.	2 ms	40 ms	200v	200 mw		
CK1207	CdSe	10000	1000 Meg.	1 ms	5 ms	200v	200 mw		
CK1221	CdS	600	1 Meg.	3 ms	1.7 sec.	50v	50 mw	1.50	1.35
CK1222	CdS	1000	10 Meg.	3 ms	1.5 sec.	50v	75 mw		
CK1223	CdS	1500	10 Meg.	3 ms	1.5 sec.	50v	75 mw		
CK1224	CdS	2000	100 Meg.	3 ms	1.5 sec.	100v	100 mw		
CK1225	CdS	2500	100 Meg.	2 ms	1.0 sec.	100v	100 mw		
CK1226	CdS	25000	100 Meg.	1.5 ms	.6 sec.	300v	100 mw		

PHOTOCELLS TO-5 PACKAGE

Same as above, but hermetically sealed in a metal case.

Type	Sensitive Material	Resistance @ 100 ft. C (ohms)	Min. Off Resistance	Response Time		Maximum Voltage	Power Diss. Max.	1-9	10-24
				Rise	Fall				
CK1241	CdSe	150	100 Meg.	3 ms	60 ms	50v	75 mw	2.20	1.90
CK1242	CdSe	300	100 Meg.	3 ms	60 ms	50v	75 mw		
CK1243	CdSe	500	100 Meg.	3 ms	60 ms	100v	100 mw		
CK1244	CdSe	750	100 Meg.	3 ms	60 ms	100v	100 mw		
CK1245	CdSe	1000	100 Meg.	2 ms	40 ms	200v	200 mw		
CK1246	CdSe	1250	100 Meg.	2 ms	40 ms	200v	200 mw		
CK1247	CdSe	10000	1000 Meg.	1 ms	5 ms	200v	200 mw		
CK1261	CdS	600	1 Meg.	3 ms	1.7 sec.	50v	50 mw		
CK1262	CdS	1000	10 Meg.	3 ms	1.5 sec.	50v	75 mw		
CK1263	CdS	1500	10 Meg.	3 ms	1.5 sec.	50v	75 mw		
CK1264	CdS	2000	100 Meg.	3 ms	1.5 sec.	100v	100 mw		
CK1265	CdS	2500	100 Meg.	2 ms	1.0 sec.	100v	100 mw		
CK1266	CdS	25000	100 Meg.	1.5 ms	.6 sec.	300v	100 mw		

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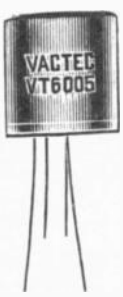
VACTEC PHOTO CELLS



VT 6005

● *NEW* VACTROL PHOTOCELL LAMP CONTROL MODULE

Package capable of circuit board mounting, for electronic amplifier use. Epoxy sealed metal enclosure. .100" standard lead centers. Minimum off-res: 100 megohms. Dia. 9/16". VT-6005 equal to the Clairex CLM4006; VT10030 like the CML5012.

Stock No.	Type	Max. on Ohms	Rise	Max. Lamp V	1-49	50-499	500-2499
61F1012	VT6005	50	60 ms	6	2.00	1.60	1.35
61F1013	VT10150	1.5K	115 ms	10	2.00	1.60	1.35
61F1014	VT10030	300	120 ms	10	2.00	1.60	1.35
61F1015	VT1.5040	400	130 ms	1.5	2.00	1.60	1.35

● *NEW* SELENIUM PHOTOVOLTAIC CELLS

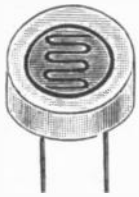
Constructed of steel Selenium, molecular layers of CdS and CdO. #30AWG vinyl coated wire leads on unmounted cells. May tolerate 100°C. "L" in type indicates soldered leads. Type A — long-lived, most resistant to chemical fumes, more sensitive to shorter wavelengths; Type B — for higher current output and less fatigue. * indicates 100 Ft-C, 150 Ohms, 75"F, light source 28508K. ** means Epoxy (clear). *** Hermetic, glass to metal case.

Stock No.	Type	Case	Output Min. Microamp	1-9	10-99	100-999
61F1000	RX10LA	.375 Diam	20	1.50	1.20	1.00
61F1001	R1LA	1.13 Diam	220	2.25	1.90	1.65
61F1002	S1LA	44 x 1.69	80	1.60	1.20	1.05
61F1003	S100LA	.89 x 1.69	360	2.35	1.90	1.65
61F1004	S100LB	.89 x 1.69	360	2.35	1.90	1.65
61F1005	R10M1A	1¾ Diam	360	8.00	6.40	5.00

Stock No.	Type	Case	Output Min. Microamp	1-9	10-99	100-999
61F1006	R75EB**	2" Diam	400	15.00	12.00	10.00
61F1007	R75EA**	2" Diam	400	15.00	12.00	10.00
61F1008	RX80HA***	1.1" Diam	130	8.00	6.40	5.00
61F1009		1.1" Diam	130	8.00	6.40	5.00
61F1010	S100EA**	13/32 x 1 29/32"	360	7.50	6.00	4.65
61F1011	S100EB**	13/32 x 1 29/32"	360	7.50	6.00	4.65

VACTEC Photo Cells

VT100



VT100E

VT200

VT300

● *NEW* CdS AND CdSe VT PHOTOCONDUCTIVE CELLS

Cells ideal for circuit board mounting. Second digit indicates spectral peak 0=CdS5650A, 1=CdS7350A, 2=CdS5150A, 3=CdS5150A, 4=CdSe6750A, example: VT312 is type 1CdSe7350A. All have a maximum voltage of 300 except (*) 200 and (†) 100 (**) in tab head indicates the minimum dark resistance (in ohms) 5 seconds after 2 Ft-C.

VT-100 (NON-HERMETIC. MAX. POWER: 200 mW.)

Stock No.	Type	2 Ft-C Res. in K ohms	Min. Res. **2 Ft-C.	1-99	100-999
61F1016	VT-10L*	1.6	100K	.75	.50
61F1017	VT-101*	3	300K		
61F1018	VT-101H*	6	1 meg		
61F1019	VT-102L	9	5 meg		
61F1020	VT-102	16	5 meg		
61F1021	VT-103L	32	10 meg		
61F1022	VT-103	66	20 meg		
61F1023	VT-104	136	50 meg		
61F1024	VT-111*	2.3	500K		
61F1025	VT-111H*	4.6	1 meg		
61F1026	VT-112L	9.2	5 meg		
61F1027	VT-112	22	50 meg		
61F1028	VT-113L	44	100 meg		
61F1029	VT-113	60	100 meg		
61F0030	VT-121*	3	300K		

Stock No.	Type	2 Ft-C Res. in K Ohms	Min. Res. ** 2 FT-C.	1-99	100-999
61F1031	VT-121H*	6	1 meg	.75	.50
61F1032	VT-122L	9	5 meg		
61F1033	VT-122	16	5 meg		
61F1034	VT-123L	32	10 meg		
61F1035	VT-123	66	20 meg		
61F1036	VT-124	136	50 meg		
61F1037	VT-132*	10	5 meg		
61F1038	VT-133L*	14	5 meg		
61F1039	VT-133*	28	10 meg		
61F1040	VT-14L*	.6	100 K		
61F1041	VT-141*	1.2	500 K		
61F1042	VT-141H*	2.4	1 meg		
61F1043	VT-142L	4.8	1 meg		
61F1044	VT-142	7	5 meg		
61F1045	VT-143L	14	10 meg		
61F1046	VT-143	28	10 meg		

** Minimum dark resistance (ohms) 5 sec after 2-Ft-C.

VT-100E (EPOXY ENCAPSULATED. 200 mW MAXIMUM POWER)

Stock No.	Type	2 Ft-C Res. in K ohms	Min. Res. **2 Ft-C.	1-99	100-999
61F1047	VT-101E†	3.3	300 K	.90	.60
61F1048	VT-101HE†	6.6	1 meg		
61F1049	VT-102LE	9.9	1 meg		
61F1050	VT-102E	17.6	1 meg		
61F1051	VT-111E*	2.5	500 K		
61F1052	VT-111HE*	5.0	1 meg		
61F1053	VT-112LE	10.0	5 meg		
61F1054	VT-112E	24.2	20 meg		
61F1055	VT-121E†	3.3	300 K		

Stock No.	Type	2 Ft-C Res. in K ohms	Min. Res. **2 Ft-C.	1-99	100-999
61F1056	VT-121HE†	6.6	1 meg	.90	.60
61F1057	VT-122LE	9.9	1 meg		
61F1058	VT-122E	17.6	1 meg		
61F1059	VT-133LE*	15.4	5 meg		
61F1060	VT-133E*	30.8	5 meg		
61F1061	VT-14LE*	.66	100 K		
61F1062	VT-141E*	1.32	500 K		
61F1063	VF-141HE*	2.64	1 meg		
61F1064	VT-142LE*	5.3	1 meg		

VT-200 (50mW MAXIMUM POWER. TO-18 HERMETICALLY SEALED.)

Stock No.	Type	Clairex Equival.	2 Ft-CRes. in K Ohms	Min. Res. **	1-99	100-999
61F1065	VT-201†	.....	4.3	500 K	1.20	1.00
61F1066	VT-202†	CL905L	8	750 K		
61F1067	VT-202H†	.....	15	1 meg		
61F1068	VT-204L	CL905N	88	10 meg		
61F1069	VT-204	CL905	110	20 meg		
61F1070	VT-205	CL905H	1000	200 meg		
61F1071	VT-211†	.....	2.3	500 K		
61F1072	VT-211H†	CL603AL	3.5	1 meg		
61F1073	VT-212L†	CL903L	6	5 meg		
61F1074	VT-213L†	.....	16	10 meg		
61F1075	VT-213	.....	22	50 meg		
61F1076	VT-213H	CL903AN	32	50 meg		
61F1077	VT-214L	CL903N	64	100 meg		
61F1078	VT-214	CL903	140	200 meg		

Stock No.	Type	Clairex Equival.	2 Ft-C Res. in K Ohms	Min. Res. **	1-99	100-999
61F1079	VT-223H	CL902L	65	5 meg	1.20	1.00
61F1080	VT-224	CL902N	500	50 meg		
61F1081	VT-225	CL902	1000	200 meg		
61F1082	VT-232†	CL905HL	100	50 meg		
61F1083	VT-233L†	.....	150	50 meg		
61F1084	VT-233†	.....	350	100 meg		
61F1085	VT-234†	CL905HN	700	200 meg		
61F1086	VT-235	CL905H	1400	200 meg		
61F1087	VT-241†	CL604L	2	500 K		
61F1088	VT-241H†	.....	4	1 meg		
61F1089	VT-242L†	CL604M	8	1 meg		
61F1090	VT-242†	CL904N	15	10 meg		
61F1091	VT-242H†	CL904	30	10 meg		

Note: Series CL600's have all glass packages.

VT-300 (MAXIMUM POWER: 125 mW.TO-5 HERMETICALLY SEALED)

Stock No.	Type	Clairex Equival.	2 Ft-CRes. in K Ohms	Min. Res. **	1-99	100-999
61F1092	VT-30L*	.....	1.8	100 K	1.20	1.00
61F1093	VT-301*	CL705L	3	200 K		
61F1094	VT-301H*	.....	6	1 meg		
61F1095	VT-302L	.....	10	1 meg		
61F1096	VT-302	.....	16	5 meg		
61F1097	VT-303L	CL705HL	32	10 meg		
61F1098	VT-303	.....	70	10 meg		
61F1099	VT-304	CL705	144	50 meg		
61F1100	VT-305	.....	1000	200 meg		
61F1101	VT-311L*	CL703L	2.1	500 K		
61F1102	VT-312H	CL703M	30	50 meg		
61F1103	VT-313L	CL703A	60	100 meg		
61F1104	VT-314	CL703	140	200 meg		
61F1105	VT-321H*	.....	7.8	1 meg		
61F1106	VT-322L	CL702L	15.6	5 meg		
61F1107	VT-325	CL702	1000	200 meg		

Stock No.	Type	Clairex Equival.	2 Ft-CRes. in K Ohms	Min. Res. **	1-99	100-999
61F1108	VT-333L*	.....	14	5 meg	1.20	1.00
61F1109	VT-333*	CL705HL	28	10 meg		
61F1110	VT-34L*	CL704L	.6	100 K		
61F1112	VT-341*	.....	1.2	500 K		
61F1113	VT-341H*	.....	2.4	1 meg		
61F1114	VT-342	CL704M	7	5 meg		
61F1115	VT-343L	.....	14	10 meg		
61F1116	VT-343	CL704	28	10 meg		
DUAL ELEMENT CELLS—MAX. POWER: 50 mW EACH ½						
61F1117	VT-302/2*	CL702L/2	16	5 meg	2.00	1.50
61F1118	VT-303L/2*	CL702L/2	32	5 meg		
61F1119	VT-312/2*	.....	5	1 meg		
61F1120	VT-313L/2*	.....	10	1 meg		
61F1121	VT-34L/2*	CL704L/2	1.5	100 K		
61F1122	VT-341/2*	.....	3	200 K		

VT-500 (500 mW MAXIMUM POWER. TO-8 HERMETICALLY SEALED.)

Stock No.	Type	Clairex Equival.	2 Ft-CRes. in K Ohms	Min. Res. **	1-99	100-999
61F1123	VT-50L*	CL505L	1.3	100 K	1.20	1.00
61F1124	VT-501*	.....	2.6	200 K		
61F1125	VT-502L	CL505	8	1 meg		
61F1126	VT-502	.....	16	5 meg		
61F1127	VT-511H	.....	4.6	1 meg		
61F1128	VT-512L	CL503	9.2	10 meg		
61F1129	VT-522L	CL502L	9	1 meg		

Stock No.	Type	Clairex Equival.	2 Ft-CRes. in K Ohms	Min. Res. **	1-99	100-999
61F1130	VT-522	.....	18	5 meg	1.20	1.00
61F1131	VT-523L	CL502	36	10 meg		
61F1132	VT-54L*	CL5M4L	.25	100 K		
61F1133	VT-541*	.....	.5	500 K		
61F1134	VT-542L	CL504	1.5	1 meg		
61F1135	VT-542	.....	2	1 meg		

Note: CL504 and 502 have ½" all glass package.

RCA — GE — SYLVANIA

Receiving Tubes May Be Assorted for Quantity Prices

Tube Type	Assorted 1-5	Assorted 6-49	Assorted 50-99	Not Asst. 100-Up
0Z4	1.27	1.15	1.02	.92
0Z4A	1.22	1.10	.98	.88
0Z4G	1.22	1.10	.98	.88
1A3	3.07	2.77	2.46	2.21
1A5GT	2.00	1.80	1.60	1.44
1AD2	1.42	1.28	1.14	1.03
1AY2	1.30	1.17	1.04	.94
1BC2	1.45	1.30	1.16	1.04
1DN5	2.20	1.98	1.76	1.58
1G3GT/1B3GT	1.37	1.24	1.10	.99
1J3	1.37	1.24	1.10	.99
1K3/1J3	1.37	1.24	1.10	.99
1L6	6.27	5.64	5.02	4.52
1N5GT	2.45	2.20	1.96	1.76
1R5	1.62	1.46	1.30	1.17
1S2A/DY87	1.27	1.15	1.02	.92
1S4	2.05	1.84	1.64	1.48
1S5	1.52	1.37	1.22	1.10
1T4	1.52	1.37	1.22	1.10
1U4	1.52	1.37	1.22	1.10
1U5	1.32	1.19	1.06	.95
1V2	1.10	.99	.88	.79
1X2A	1.45	1.30	1.16	1.04
1X2A/1X2B	1.45	1.30	1.16	1.04
1X2B/1X2A	1.45	1.30	1.16	1.04
2A3	4.95	4.45	3.96	3.56
2AF4B/2DZ4	1.90	1.71	1.52	1.37
2AH2	1.70	1.53	1.36	1.22
2AS2	1.50	1.35	1.20	1.08
2AV2	1.17	1.06	.94	.85
2AX2	1.10	.99	.88	.79
2BJ2	2.10	1.89	1.68	1.51
2BN4A	1.37	1.24	1.10	.99
2CW4	2.30	2.07	1.84	1.66
2CY5	1.65	1.48	1.32	1.19
2DS4	2.30	2.07	1.84	1.66
2DV4	3.22	2.90	2.58	2.32
2DZ4	Use 2AF4B/2DZ4			
2EG4	2.30	2.07	1.84	1.66
2EN5	1.60	1.44	1.28	1.15
2ER5	1.65	1.48	1.32	1.19
2FH5	1.57	1.42	1.26	1.13
2FQ5	Use 2GK5			
2FS5	2.42	2.18	1.94	1.75
2GK5	1.92	1.73	1.54	1.39
2GU5	2.25	2.02	1.80	1.62
2HA5	1.92	1.73	1.54	1.39
2HQ5	1.92	1.73	1.54	1.39
3A2	2.75	2.47	2.20	1.98
3A3A/3B2	1.60	1.44	1.28	1.15
3AF4A/3DZ4	1.90	1.71	1.52	1.37
3AL5	.97	.88	.78	.70
3AT2	1.52	1.37	1.22	1.10
3AU6	1.10	.99	.88	.79
3AV6	1.10	.99	.88	.79
3B2/3A3	Use 3A3A/3B2			
3BA6	1.17	1.06	.94	.85
3BC5	1.22	1.10	.98	.88
3BC5/3CE5	1.22	1.10	.98	.88
3BN4A	1.52	1.37	1.22	1.10
3BN6	1.90	1.71	1.52	1.37
3BU8	1.77	1.60	1.42	1.28
3BY6	1.50	1.35	1.20	1.08
3BZ6	1.07	.97	.86	.77
3CA3	1.60	1.44	1.28	1.15
3CB6	1.07	.97	.86	.77
3CE5	Use 3BC/3CE5			
3CF6	1.27	1.15	1.02	.92
3CS6	1.45	1.30	1.16	1.04
3CY5	1.95	1.75	1.56	1.40
3DG4	2.15	1.93	1.72	1.55
3DK6	1.15	1.03	.92	.83
3DT6A	1.17	1.06	.94	.85
3DZ4	Use 3AF4A/3DZ4			
3EA5	1.77	1.60	1.42	1.28
3EH7	1.77	1.60	1.42	1.28
3EJ7	1.77	1.60	1.42	1.28
3ER5	1.65	1.48	1.32	1.19
3FH5	1.62	1.46	1.30	1.17
3FS5	2.15	1.93	1.72	1.55
3GK5	1.92	1.73	1.54	1.39
3GS8/3BU8	1.77	1.60	1.42	1.28
3HM5/3HA5	1.92	1.73	1.54	1.39
3HQ5	1.92	1.73	1.54	1.39
3JC6A	1.65	1.48	1.32	1.19
3KT6	1.40	1.26	1.12	1.01
3Q4	1.67	1.51	1.34	1.21
3Q5GT	2.92	2.63	2.34	2.11
3S4	1.70	1.53	1.36	1.22
3V4	1.30	1.17	1.04	.94
4AU6	1.35	1.21	1.08	.97
4AV6	1.12	1.01	.90	.81
4BC8	1.92	1.73	1.54	1.39
4BL8	1.20	1.08	.96	.86
4BN6	2.02	1.82	1.62	1.46
4BQ7A	2.07	1.87	1.66	1.49
4BS8	2.12	1.91	1.70	1.53
4BU8	1.85	1.66	1.48	1.33
4BU8/4GS8	1.85	1.66	1.48	1.33
4BZ6	1.05	.94	.84	.76
4BZ7	1.92	1.73	1.54	1.39
4CB6	1.10	.99	.88	.79
4CS6	1.52	1.37	1.22	1.10
4CY5	1.35	1.21	1.08	.97
4DE6	1.25	1.12	1.00	.90
4DK6	1.27	1.15	1.02	.92
4DT6A	1.17	1.06	.94	.85
4EH7	1.77	1.60	1.42	1.28
4EJ7	1.77	1.60	1.42	1.28
4ES8	2.02	1.82	1.62	1.46
4EW6	1.45	1.30	1.16	1.04
4GK5	1.95	1.75	1.56	1.40
4GM6	1.10	.99	.88	.79
4CS8	Use 4BU8/4GS8			
4GS8/4BU8	1.85	1.66	1.48	1.33
4GX7	1.80	1.62	1.44	1.30
4GZ5	1.77	1.60	1.42	1.28
4HA5	1.47	1.33	1.18	1.06
4HA7	1.52	1.37	1.22	1.10
4HC7	1.52	1.37	1.22	1.10
4HM6	1.55	1.39	1.24	1.12
4HQ5	1.92	1.73	1.54	1.39
4HS8	1.67	1.51	1.34	1.21
4HT6	1.27	1.15	1.02	.92
4JC6	1.80	1.62	1.44	1.30
4JD6	1.80	1.62	1.44	1.30
4JH6	1.22	1.10	.98	.88
4KE8	2.60	2.34	2.08	1.87
4LJ8	2.05	1.84	1.64	1.48
5AM8	2.02	1.82	1.62	1.46
5AN8	2.22	2.00	1.78	1.60
5AQ5	1.20	1.08	.96	.86
5AR4/GZ34	2.12	1.91	1.70	1.53
5AS4A	1.72	1.55	1.38	1.24
5AS8	2.20	1.98	1.76	1.58
5AT8	1.90	1.71	1.52	1.37
5AU4	1.82	1.64	1.46	1.31
5AV8	2.02	1.82	1.62	1.46
5AZ4	2.65	2.38	2.12	1.91
5B8	2.75	2.47	2.20	1.98
5BC3	1.57	1.42	1.26	1.13
5BE8	1.55	1.39	1.24	1.12
5BK7A	1.87	1.69	1.50	1.35
5BQ7A	2.00	1.80	1.60	1.44
5BR8	2.10	1.89	1.68	1.51
5BT8	1.55	1.39	1.24	1.12
5BT8	1.55	1.39	1.24	1.12
5BW8	1.60	1.44	1.28	1.15
5CG8	1.67	1.51	1.34	1.21
5CL8A	2.02	1.82	1.62	1.46
5CQ8	2.05	1.84	1.64	1.48
5CZ5	2.22	2.00	1.78	1.60
5DH8	2.75	2.47	2.20	1.98
5DJ4	1.77	1.60	1.42	1.28
5EA8	1.90	1.71	1.52	1.37
5ES8/YCC189	2.75	2.47	2.20	1.98
5EU8	1.82	1.64	1.46	1.31
5EW6	1.52	1.37	1.22	1.10
5FG7	1.30	1.17	1.04	.94
5FV8	1.62	1.46	1.30	1.17
5GH8A	2.05	1.84	1.64	1.48
5GJ7	1.47	1.33	1.18	1.06
5GM6	1.40	1.26	1.12	1.01
5GX6	1.22	1.10	.98	.88
5GX7	1.80	1.62	1.44	1.30
5HA7	1.52	1.37	1.22	1.10
5HB7	1.37	1.24	1.10	.99
5HG8	1.85	1.66	1.48	1.33
5HZ6	1.37	1.24	1.10	.99
5J6	1.62	1.46	1.30	1.17
5JK6	1.92	1.73	1.54	1.39
5KD8	1.25	1.12	1.00	.90
5KE8	2.60	2.34	2.08	1.87
5KZ8	1.22	1.10	.98	.88
5LJ8	2.05	1.84	1.64	1.48
5T8	2.22	2.00	1.78	1.60
5U4G	1.05	.94	.84	.76
5U4GB	1.05	.94	.84	.76
5U8	1.55	1.39	1.24	1.12
5U9/LCF201	1.27	1.15	1.02	.92
5V3A	1.75	1.57	1.40	1.26
5V4GA	1.92	1.73	1.54	1.39
5V6GT	1.70	1.53	1.36	1.22
5X8	1.87	1.69	1.50	1.35
5Y3GT	.87	.79	.70	.63
5Y4GA	1.22	1.10	.98	.88
5Y4GT	1.70	1.53	1.36	1.22
5Z3	1.97	1.78	1.58	1.42
6A7	4.00	3.60	3.20	2.88
6A8	3.55	3.19	2.84	2.56
6AB4	1.22	1.10	.98	.88
6AC5GT	2.92	2.63	2.34	2.11
6AC7	2.87	2.59	2.30	2.07
6AC10	1.85	1.66	1.48	1.33
6AD10	3.45	3.10	2.76	2.48
6AF3	1.55	1.39	1.24	1.12
6AF4A	1.87	1.69	1.50	1.35
6AF6G	3.15	2.83	2.52	2.27
6AF9	1.52	1.37	1.22	1.10
6AF11	2.37	2.14	1.90	1.71
6AG5	1.42	1.28	1.14	1.03
6AG7	3.25	2.92	2.60	2.34
6AG9	2.57	2.32	2.06	1.85
6AG11	2.07	1.87	1.66	1.49
6AH4GT	1.62	1.46	1.30	1.17
6AH6	2.20	1.98	1.76	1.58
6AK5	2.25	2.02	1.80	1.62
6AL3	1.30	1.17	1.04	.94
6AL5	.95	.85	.76	.68
6AL7GT	3.47	3.13	2.78	2.50
6AL11	2.07	1.87	1.66	1.49
6AM4	2.77	2.50	2.22	2.00
6AM8A	1.62	1.46	1.30	1.17
6AN4	3.07	2.77	2.46	2.21
6AN8A	1.97	1.78	1.58	1.42
6AQ5A	1.12	1.01	.90	.81
6AQ6	1.35	1.21	1.08	.97
6AQ7GT	2.05	1.84	1.64	1.48
6AQ8	1.50	1.35	1.20	1.08
6AR5	1.22	1.10	.98	.88
6AR8	2.42	2.18	1.94	1.75
6AR11	2.05	1.84	1.64	1.48
6AS5	1.37	1.24	1.10	.99
6AS8	2.00	1.80	1.60	1.44
6AS11	2.55	2.29	2.04	1.84
6AT6	1.02	.92	.82	.74
6AT8A	2.00	1.80	1.60	1.44
6AU4GTA	1.70	1.53	1.36	1.22
6AU5GT	2.32	2.09	1.86	1.67
6AU6A	.97	.88	.78	.70
6AU6WA	USE 6AU6WB			
6AU8A	2.20	1.98	1.76	1.58
6AV5GA	2.60	2.34	2.08	1.87
6AV6	.87	.79	.70	.63
6AV11	2.20	1.98	1.76	1.58
6AW8A	1.80	1.62	1.44	1.30
6AX3	1.30	1.17	1.04	.94
6AX4GTB	1.25	1.12	1.00	.90
6AX5GT	1.62	1.46	1.30	1.17
6AX8	1.75	1.57	1.40	1.26
6AY3	1.45	1.30	1.16	1.04
6AY11	2.05	1.84	1.64	1.48
6AZ8	2.75	2.47	2.20	1.98
6B8	3.42	3.08	2.74	2.47
6B10	1.67	1.51	1.34	1.21
6BA3	1.52	1.37	1.22	1.10
6BA6	1.05	.94	.84	.76
6BA7	2.92	2.63	2.34	2.11
6BA8A	2.10	1.89	1.68	1.51
6BA11	2.05	1.84	1.64	1.48
6BC4	2.75	2.47	2.20	1.98
6BC5/6CE5	1.12	1.01	.90	.81
6BC7	1.80	1.62	1.44	1.30
6BC8	1.87	1.68	1.50	1.35
6BD6	1.17	1.06	.94	.85
6BD11	2.52	2.27	2.02	1.82
6BE3	1.42	1.28	1.14	1.03

Receiving Tubes

RCA — GE — SYLVANIA

Receiving Tubes May Be Assorted for Quantity Prices.

Tube Type	Assorted 1-5	Assorted 6-49	Assorted 50-99	Not Asst. 100-Up
6BE6	1.20	1.08	.96	.86
6BF5	1.67	1.51	1.34	1.21
6BF6	.97	.88	.78	.70
6BF11	2.45	2.20	1.96	1.76
6BG6G	3.05	2.74	2.44	2.20
6BG6GA	3.07	2.77	2.46	2.21
6BH3	1.40	1.26	1.12	1.01
6BH6	1.37	1.24	1.10	.99
6BH8	2.10	1.89	1.68	1.51
6BH11	1.95	1.75	1.56	1.40
6BJ3	1.40	1.26	1.12	1.01
6BJ6	1.37	1.24	1.10	.99
6BJ7	1.47	1.33	1.18	1.06
6BJ8	1.80	1.62	1.44	1.30
6BK4B	3.77	3.40	3.02	2.72
6BK5	1.75	1.57	1.40	1.26
6BK7B	1.77	1.60	1.42	1.28
6BL7GTA	2.30	2.07	1.84	1.66
6BL8	1.20	1.08	.96	.86
6BM8/ ECL82	1.45	1.30	1.16	1.04
6BN4A	1.70	1.53	1.36	1.22
6BN6	1.67	1.51	1.34	1.21
6BN8	1.67	1.51	1.34	1.21
6BN11	2.05	1.84	1.64	1.48
6BQ5/EL84	1.32	1.19	1.06	.95
6BQ6GA/ 6CU6	2.05	1.84	1.64	1.48
6BQ6GTB/ 6CU6	2.05	1.84	1.64	1.48
6BQ7A	1.87	1.69	1.50	1.35
6BR8A	2.00	1.80	1.60	1.44
6BS3A	1.65	1.48	1.32	1.19
6BS8	1.87	1.69	1.50	1.35
6BU8	1.70	1.53	1.36	1.22
6BV8	1.50	1.35	1.20	1.08
6BW4	1.37	1.24	1.10	.99
6BW8	1.67	1.51	1.34	1.21
6BW11	2.20	1.98	1.76	1.58
6BX7GT	2.80	2.52	2.24	2.02
6BY5GA	2.40	2.16	1.92	1.73
6BY6	1.50	1.35	1.20	1.08
6BY8	1.35	1.21	1.08	.97
6BZ6	1.05	.94	.84	.76
6BZ7	1.87	1.69	1.50	1.35
6BZ8	2.10	1.89	1.68	1.51
6C4	.97	.88	.78	.70
6C5	2.67	2.41	2.14	1.93
6C6	3.92	3.53	3.14	2.83
6C9	2.75	2.47	2.20	1.98
6C10	1.85	1.66	1.48	1.33
6CA4	1.15	1.03	.92	.83
6CA5	1.50	1.35	1.20	1.08
6CA7	2.67	2.41	2.14	1.93
6CB5A	4.67	4.21	3.74	3.37
6CB6A/6CF6	1.05	.94	.84	.76
6CD6GA	2.75	2.47	2.20	1.98
6CE5	USE 6BC5/6CE5			
6CF6/ 6CG3/6CD3	USE 6CB6A/6CF6 1.70	1.53	1.36	1.22
6CG7/6FQ7	1.17	1.06	.94	.85
6CG8A	1.62	1.46	1.30	1.17
6CH8	2.80	2.52	2.24	2.02
6CJ3	1.80	1.62	1.44	1.30
6CK3	1.30	1.17	1.04	.94
6CK4	1.77	1.60	1.42	1.28
6CL3	1.75	1.57	1.40	1.26
6CL6	1.90	1.71	1.52	1.37
6CL8A	1.95	1.75	1.56	1.40
6CM6	1.67	1.51	1.34	1.21
6CM7	1.37	1.24	1.10	.99
6CM8	2.02	1.82	1.62	1.46
6CN7	2.10	1.89	1.68	1.51
6CQ4	1.77	1.60	1.42	1.28
6CQ8	1.75	1.57	1.40	1.26
6CR6	1.47	1.33	1.18	1.06
6CS6	1.35	1.21	1.08	.97
6CS7	1.40	1.26	1.12	1.01
6CU5	1.35	1.21	1.08	.97
6CU6/ 6BQ6GA	2.05	1.84	1.64	1.48
6CU6/ 6BQ6GTB	6BQ6GTB/6CU6			
6CU8	2.20	1.98	1.76	1.58
6CW4	2.30	2.07	1.84	1.66
6CW5	1.22	1.10	.98	.88
6CX8	2.12	1.91	1.70	1.53
6CY5	1.80	1.62	1.44	1.30
6CY7	1.52	1.37	1.22	1.10
6CZ5	2.05	1.84	1.64	1.48
6D6	3.67	3.31	2.94	2.65
6D10	1.92	1.73	1.54	1.39
6DA4	1.52	1.37	1.22	1.10
6DB5	2.50	2.25	2.00	1.80
6DC6	1.77	1.60	1.42	1.28
6DC8	1.52	1.37	1.22	1.10
6DE4	1.60	1.44	1.28	1.15
6DE6	1.20	1.08	.96	.86
6DE7	1.82	1.64	1.46	1.31
6DG6GT	1.92	1.73	1.54	1.39
6DK6	1.17	1.06	.94	.85
6DL5	1.47	1.33	1.18	1.06
6DM4	1.67	1.51	1.34	1.21
6DN6	3.50	3.15	2.80	2.52
6DN7	1.67	1.51	1.34	1.21
6DQ4	1.22	1.10	.98	.88
6DQ5	3.92	3.53	3.14	2.83
6DQ6B	2.10	1.89	1.68	1.51
6DQ6B/ 6GW6	2.10	1.89	1.68	1.51
6DR7	2.15	1.93	1.72	1.55
6DS4	2.30	2.07	1.84	1.66
6DS5	1.82	1.64	1.46	1.31
6DT5	1.77	1.60	1.42	1.28
6DT6A	1.12	1.01	.90	.81
6DT8	1.87	1.69	1.50	1.35
6DV4	3.22	2.90	2.58	2.32
6DW4B	1.75	1.57	1.40	1.26
6DW5	1.92	1.73	1.54	1.39
6DX8	1.45	1.30	1.16	1.04
6DZ4	1.87	1.69	1.50	1.35
6DZ7	4.35	3.91	3.48	3.13
6E5	2.82	2.54	2.26	2.03
6EA7	2.60	2.34	2.08	1.87
6EA8	1.50	1.35	1.20	1.08
6EB8	2.20	1.98	1.76	1.58
6EF4	3.80	3.42	3.04	2.74
6EH5	1.45	1.30	1.16	1.04
6EH7	1.92	1.73	1.54	1.39
6EH8	1.50	1.35	1.20	1.08
6EJ7	1.77	1.60	1.42	1.28
6EM5	1.67	1.51	1.34	1.21
6EM7	2.45	2.20	1.96	1.76
6EQ7	1.47	1.33	1.18	1.06
6ER5	1.77	1.60	1.42	1.28
6ES5	1.42	1.28	1.14	1.03
6ES8	2.72	2.45	2.18	1.96
6ET7	2.00	1.80	1.60	1.44
6EU7	1.35	1.21	1.08	.97
6EU8	1.67	1.51	1.34	1.21
6EV5	1.42	1.28	1.14	1.03
6EV7	1.37	1.24	1.10	.99
6EW6	1.17	1.06	.94	.85
6EW7	3.00	2.70	2.40	2.16
6EZ5	2.02	1.82	1.62	1.46
6EZ8	1.77	1.60	1.42	1.28
6F5	2.75	2.47	2.20	1.98
6F6	2.90	2.61	2.32	2.09
6F6GT	2.90	2.61	2.32	2.09
6F8G	4.22	3.80	3.38	3.04
6FA7	1.47	1.33	1.18	1.06
6FD7	2.65	2.38	2.12	1.91
6FE5	1.70	1.53	1.36	1.22
6FG5	2.67	2.41	2.14	1.93
6FG7	1.85	1.66	1.48	1.33
6FH5	1.57	1.42	1.26	1.13
6FH8	2.02	1.82	1.62	1.46
6FJ7	1.87	1.69	1.50	1.35
6FM7	1.62	1.46	1.30	1.17
6FM8	1.42	1.28	1.14	1.03
6FQ5A	1.92	1.73	1.54	1.39
6FQ7	1.17	1.06	.94	.85
6FQ7/6CG7	1.17	1.06	.94	.85
6FS5	2.05	1.84	1.64	1.48
6FV6	2.10	1.89	1.68	1.51
6FV8A	1.65	1.48	1.32	1.19
6FW5	1.92	1.73	1.54	1.39
6FY5/EC97	1.37	1.24	1.10	.99
6FY7	1.60	1.44	1.28	1.15
6G11	2.20	1.98	1.76	1.58
6GB5	1.90	1.71	1.52	1.37
6GC5	2.10	1.89	1.68	1.51
6GE5	1.92	1.73	1.54	1.39
6GF5	1.75	1.57	1.40	1.26
6GF7A	2.42	2.18	1.94	1.75
6GH8A	1.60	1.44	1.28	1.15
6GJ5A	2.80	2.52	2.24	2.02
6GJ7	1.55	1.39	1.24	1.12
6GK5	1.92	1.73	1.54	1.39
6GK6	1.50	1.35	1.20	1.08
6GL7	2.90	2.61	2.32	2.09
6GM5	1.52	1.37	1.22	1.10
6GM6	1.37	1.24	1.10	.99
6GN8	2.15	1.93	1.72	1.55
6GQ7	1.87	1.69	1.50	1.35
6GT5	2.70	2.43	2.16	1.94
6GU5	2.05	1.84	1.64	1.48
6GU7	1.60	1.44	1.28	1.15
6GV5	2.07	1.87	1.66	1.49
6GV8/ECL85	1.55	1.39	1.24	1.12
6GW6	2.10	1.89	1.68	1.51
6GW6/ 6DQ6B	2.10	1.89	1.68	1.51
6GW8/ ECL86	1.52	1.37	1.22	1.10
6GX6	1.30	1.17	1.04	.94
6GX7	1.80	1.62	1.44	1.30
6GY5	2.30	2.07	1.84	1.66
6GY6	1.30	1.17	1.04	.94
6GY8	1.77	1.60	1.42	1.28
6H6	2.15	1.93	1.72	1.55
6HA5/6HM5	1.92	1.73	1.54	1.39
6HB5	2.10	1.89	1.68	1.51
6HB6	2.22	2.00	1.78	1.60
6HB7	1.82	1.64	1.46	1.31
6HE5	1.85	1.66	1.48	1.33
6HF5	3.65	3.28	2.92	2.63
6HF8	2.00	1.80	1.60	1.44
6HG5	1.35	1.21	1.08	.97
6HG8	2.05	1.84	1.64	1.48
6HJ5	2.90	2.61	2.32	2.09
6HJ8	1.55	1.39	1.24	1.12
6HK5	1.95	1.75	1.56	1.40
6HL8	1.52	1.37	1.22	1.10
6HM5	1.92	1.73	1.54	1.39
6HM5/6HA5	1.92	1.73	1.54	1.39
6HM6	1.47	1.33	1.18	1.06
6HQ5	2.25	2.02	1.80	1.62
6HR5	1.27	1.15	1.02	.92
6HR6	1.37	1.24	1.10	.99
6HS5	3.87	3.49	3.10	2.79
6HS6	1.37	1.24	1.10	.99
6HS8	1.92	1.73	1.54	1.39
6HZ6	1.37	1.24	1.10	.99
6HZ8	2.75	2.47	2.20	1.98
6J5	2.05	1.84	1.64	1.48
6J5GT	2.05	1.84	1.64	1.48
6J6A	1.45	1.30	1.16	1.04
6J7	2.60	2.34	2.08	1.87
6J10	2.50	2.25	2.00	1.80
6J11	2.40	2.16	1.92	1.73
6JB6	2.92	2.63	2.34	2.11
6JC6A	1.87	1.69	1.50	1.35
6JC8	1.52	1.37	1.22	1.10
6JD6	1.65	1.48	1.32	1.19
6JE6A	4.25	3.82	3.40	3.06
6JE8	1.85	1.66	1.48	1.33
6JF6	3.10	2.79	2.48	2.23
6JG6A	3.25	2.92	2.60	2.34
6JH6	1.22	1.10	.98	.88
6JH8	2.15	1.93	1.72	1.55
6JK8	2.02	1.82	1.62	1.46
6JM6A	2.07	1.87	1.66	1.49
6JN6	1.92	1.73	1.54	1.39
6JN8	1.82	1.64	1.46	1.31
6JS6	3.65	3.28	2.92	2.63
6JT6A	2.47	2.23	1.98	1.78
6JT8	2.00	1.80	1.60	1.44
6JU8A	1.75	1.57	1.40	1.26
6JV8	2.20	1.98	1.76	1.58
6JZ6	2.32	2.09	1.86	1.67
6JZ8	1.77	1.60	1.42	1.28
6K6GT	1.35	1.21	1.08	.97
6K7	2.50	2.25	2.00	1.80
6K8	3.85	3.46	3.08	2.77
6K11/6Q11	1.82	1.64	1.46	1.31
6KA8	2.12	1.91	1.70	1.53
6KD6	3.85	3.46	3.08	2.77
6KD8	Use 6U8A/6K08			
6KE8	2.82	2.54	2.26	2.03
6KL8	1.47	1.33	1.18	1.06

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

RCA — GE — SYLVANIA

Receiving Tubes May Be Assorted For Quantity Prices

Tube Type	Assorted 1-5	6-49	50-99	Not Asst. 100-Up
6KM6	4.10	3.69	3.28	2.95
6KM8	1.72	1.55	1.38	1.24
6KR8	2.12	1.91	1.70	1.53
6KT6	1.50	1.35	1.20	1.08
6KT8	2.12	1.91	1.70	1.53
6KU8	2.40	2.16	1.92	1.73
6KV8	2.92	2.63	2.34	2.11
6KY8A	3.62	3.26	2.90	2.61
6KZ8	1.70	1.53	1.36	1.22
6L4	Refer to Manual 1D1020			
6L6	4.40	3.96	3.52	3.17
6L6GC	2.27	2.05	1.82	1.64
6L7	3.47	3.13	2.78	2.50
6LB8	2.35	2.11	1.88	1.69
6LC8	2.10	1.89	1.68	1.51
6LE8	3.10	2.79	2.48	2.23
6LF8	1.92	1.73	1.54	1.39
6LJ8	2.05	1.84	1.64	1.48
6LM8	2.07	1.87	1.66	1.49
6LN8	1.20	1.08	.96	.86
6LQ8	2.52	2.27	2.02	1.82
6LT8	1.27	1.15	1.02	.92
6LU8	2.37	2.14	1.90	1.71
6LX8/LCF802	1.30	1.17	1.04	.94
6LY8	1.77	1.60	1.42	1.28
6MD8	2.42	2.18	1.94	1.75
6M11	2.27	2.05	1.82	1.64
6N7	2.52	2.27	2.02	1.82
6N7GT	2.60	2.34	2.08	1.87
6Q7	2.95	2.65	2.36	2.12
6S4A	1.17	1.06	.94	.85
6S8GT	2.07	1.87	1.66	1.49
6SA7	2.42	2.18	1.94	1.75
6SA7GT	2.20	1.98	1.76	1.58
6SB7Y	2.97	2.68	2.38	2.14
6SC7	2.30	2.07	1.84	1.66
6SF5	1.85	1.66	1.48	1.33
6SF7	3.15	2.83	2.52	2.27
6SG7	2.35	2.11	1.88	1.69
6SH7	2.67	2.41	2.14	1.93
6SJ7	2.07	1.87	1.66	1.49
6SJ7GT	1.77	1.60	1.42	1.28
6SK7	2.12	1.91	1.70	1.53
6SK7GT	2.75	2.47	2.20	1.98
6SL7GT	1.77	1.60	1.42	1.28
6SN7GTB	1.35	1.21	1.08	.97
6SQ7	2.00	1.80	1.60	1.44
6SQ7GT	2.00	1.80	1.60	1.44
6SR7	2.12	1.91	1.70	1.53
6T4	2.57	2.32	2.06	1.85
6T8A	1.67	1.51	1.34	1.21
6T9	1.85	1.66	1.48	1.33
6T10	2.12	1.91	1.70	1.53
6U5	3.70	3.33	2.96	2.66
6U8A/6KD8	1.55	1.39	1.24	1.12
6U9/ECF201	1.45	1.30	1.16	1.04
6U10	1.82	1.64	1.46	1.31
6V4/EZ80	.75	.67	.60	
6V3A	2.27	2.05	1.82	1.64
6V6	3.17	2.86	2.54	2.29
6V6GTA	1.20	1.08	.96	.86
6W4GT	1.15	1.03	.92	.83
6W6GT	1.47	1.33	1.18	1.06
6X4	.90	.81	.72	.65
6X5GT	1.20	1.08	.96	.86
6X8A	1.57	1.42	1.26	1.13
6X9/ECF200	1.45	1.30	1.16	1.04
6Y6G	Use 6Y6GA			
6Y6GA/6Y6G	2.02	1.82	1.62	1.47
6Y6GT	1.77	1.60	1.42	1.28
6Y9	1.55	1.39	124	1.12
6Z10/6J10	2.50	2.25	2.00	1.80
7A4	3.52	3.17	2.82	2.54
7A7	3.57	3.22	2.86	2.57
7AG7	3.95	3.55	3.16	2.84
7AU7	1.22	1.10	.90	.88
7B4	3.40	3.06	2.72	2.45
7B7	3.82	3.44	3.06	2.75
7B8	2.80	2.52	2.24	2.02
7C5	1.67	1.51	1.34	1.21
7C7	1.70	1.53	1.36	1.22
7EY6	1.67	1.51	1.34	1.21
7F7	3.75	3.37	3.00	2.70
7F8	4.12	3.71	3.30	2.97
7HG8	1.47	1.33	1.18	1.06
7N7	3.55	3.19	2.84	2.56
7V7	2.32	2.09	1.86	1.67
7X7	3.82	3.44	3.06	2.75
8AR11	2.17	1.96	1.74	1.57
8AU8	1.92	1.73	1.54	1.39
8AW8A	2.00	1.80	1.60	1.44
8B10	1.67	1.51	1.34	1.21
8BA8A	1.72	1.55	1.38	1.24
8BH8	1.67	1.51	1.34	1.21
8BN8	1.85	1.66	1.48	1.33
8BM11	1.95	1.75	1.56	1.40
8BQ5	1.37	1.24	1.10	.99
8BQ11	2.15	1.93	1.72	1.55
8BU11	2.05	1.84	1.64	1.48
8CG7/8FQ7	1.17	1.06	.94	.85
8CM7	1.35	1.21	1.08	.97
8CN7	1.52	1.37	1.22	1.10
8CS7	1.52	1.37	1.22	1.10
8CW5	1.27	1.15	1.02	.92
8CX8	2.20	1.98	1.76	1.58
8EB8	2.05	1.84	1.64	1.48
8EM5	1.70	1.53	1.36	1.22
8ET7	2.07	1.87	1.66	1.49
8FQ7	1.30	1.17	1.04	.94
8FQ7/8CG7	1.17	1.06	.94	.85
8GJ7	1.62	1.46	1.30	1.17
8GN8	2.07	1.87	1.66	1.49
8GU7	1.60	1.44	1.28	1.15
8JU8A	1.67	1.51	1.34	1.21
8JV8	2.00	1.80	1.60	1.44
8KA8	2.12	1.91	1.70	1.53
8LC8	2.12	1.91	1.70	1.53
8LT8	1.35	1.21	1.08	.97
9A8/PCF80	1.20	1.08	.96	.86
9AU7	1.32	1.19	1.06	.95
9BJ11	2.40	2.16	1.92	1.73
9BR7	1.57	1.42	1.26	1.13
9EA8	1.52	1.37	1.22	1.10
9GV8	1.50	1.35	1.20	1.08
9KX6	2.07	1.87	1.66	1.49
9KC6	2.17	1.96	1.74	1.57
9KZ8	1.47	1.33	1.18	1.06
9U8A	1.55	1.39	1.24	1.12
10AL11	2.27	2.05	1.82	1.64
10C8	2.57	2.32	2.06	1.85
10CW5	1.27	1.15	1.02	.92
10DE7	1.75	1.57	1.40	1.26
10DR7	2.22	2.00	1.78	1.60
10DX8	1.45	1.30	1.16	1.04
10EG7	2.17	1.96	1.74	1.57
10EM7	2.45	2.20	1.96	1.76
10GF7A	2.17	1.96	1.74	1.57
10GK6	1.52	1.37	1.22	1.10
10GN8	2.00	1.80	1.60	1.44
10HF8	2.32	2.09	1.86	1.67
10JA8	1.87	1.69	1.50	1.35
10JT8	2.02	1.82	1.62	1.46
10JY8	1.82	1.64	1.46	1.31
10KR8	2.12	1.91	1.70	1.53
10KU8	2.42	2.18	1.94	1.75
10LB8	2.35	2.11	1.88	1.69
10LE8	2.95	2.65	2.36	2.12
10LW8	2.12	1.91	1.70	1.53
10LZ8	1.47	1.33	1.18	1.06
11AR11	2.05	1.84	1.64	1.48
11BQ11	2.05	1.84	1.64	1.48
11BT11	2.70	2.43	2.16	1.94
11CY7	1.80	1.62	1.44	1.30
11HM7	2.15	1.93	1.72	1.55
11JE8	1.92	1.73	1.54	1.39
11KV8	2.95	2.65	2.36	2.12
11LQ8	2.95	2.65	2.36	2.12
11Y9	1.55	1.39	1.24	1.12
12AB5	1.75	1.57	1.40	1.26
12AC6	1.05	.94	.84	.76
12AD6	1.40	1.26	1.12	1.01
12EA6A	1.37	1.24	1.10	.99
12AF3	1.92	1.73	1.54	1.39
12AF6	1.57	1.42	1.26	1.13
12AL5	1.15	1.03	.92	.83
12AL8	3.07	2.77	2.46	2.21
12AL11	2.10	1.89	1.68	1.51
12AQ5	1.35	1.21	1.08	.97
12AT6	.87	.79	.70	.63
12AT7	1.42	1.28	1.14	1.03
12AU6	1.00	.90	.80	.72
12AU7A	1.17	1.06	.94	.85
12AV5GA	2.52	2.27	2.02	1.82
12AV6	.90	.81	.72	.65
12AV7	1.80	1.62	1.44	1.30
12AW6	1.55	1.39	1.24	1.12
12AX3	1.50	1.35	1.20	1.08
12AX4GTB	1.35	1.21	1.08	.97
12AX7A	1.25	1.12	1.00	.90
12AY3A	1.32	1.19	1.06	.95
12AY7	2.42	2.18	1.94	1.75
12AZ7A	1.47	1.33	1.18	1.06
12B4A	1.60	1.44	1.28	1.15
12BA6	.90	.81	.72	.65
12BA7	2.95	2.65	2.36	2.12
12BD6	1.17	1.06	.94	.85
12BE3	1.52	1.37	1.22	1.10
12BE6	.97	.88	.78	.70
12BF6	1.05	.94	.84	.76
12BF11	2.17	1.96	1.74	1.57
12BH7A	1.45	1.30	1.16	1.04
12BK5	1.87	1.69	1.50	1.35
12BL6	1.47	1.33	1.18	1.06
12BN6	1.82	1.64	1.46	1.31
12BQ6GTB/12CU6	2.05	1.84	1.64	1.48
12BQ6GA	2.10	1.89	1.68	1.51
12BQ6GTB/12CU6	2.10	1.89	1.69	1.51
12BR7	1.52	1.37	1.22	1.10
12BS3A	1.67	1.51	1.34	1.21
12BT3	1.42	1.28	1.14	1.03
12BV7	1.65	1.48	1.32	1.19
12BW4	1.37	1.24	1.10	.99
12BY7A	1.60	1.44	1.28	1.15
12BZ6	1.20	1.08	.96	.86
12BZ7	2.07	1.87	1.66	1.49
12CA5	1.42	1.28	1.14	1.03
12CN5	1.62	1.46	1.30	1.17
12CR6	1.47	1.33	1.18	1.06
12CU5/12C5	1.37	1.24	1.10	.99
12CX6	1.37	1.24	1.10	.99
12D4	1.37	1.24	1.10	.99
12DB5	1.30	1.17	1.04	.94
12DK6	1.15	1.03	.92	.83
12DQ6B	2.12	1.91	1.70	1.53
12DQ6B/12GW6	2.12	1.91	1.70	1.53
12DQ7	1.62	1.46	1.30	1.17
12DS7	2.02	1.82	1.62	1.46
12DT5	1.55	1.39	1.24	1.12
12DT8	1.77	1.60	1.42	1.28
12DU7	2.20	1.98	1.76	1.58
12DW7	1.52	1.37	1.22	1.10
12DY8	3.97	3.58	3.18	2.86
12DZ6	1.80	1.62	1.44	1.30
12EC8	1.70	1.53	1.36	1.22
12ED5	1.35	1.21	1.08	.97
12EK6	1.77	1.60	1.42	1.28
12EN6	1.70	1.53	1.36	1.22
12EQ7	1.37	1.24	1.10	.99
12F8	1.62	1.46	1.30	1.17
12FK6	1.27	1.15	1.02	.92
12FM6	1.30	1.17	1.04	.94
12FQ8	2.60	2.34	2.08	1.87
12FV7	1.70	1.53	1.36	1.22
12FX5	1.35	1.21	1.08	.97
12FX8A	1.92	1.73	1.54	1.39
12GA6	1.35	1.21	1.08	.97
12GC6	1.97	1.78	1.58	1.42
12GE5	2.05	1.84	1.64	1.48
12GJ5A	2.45	2.20	1.96	1.76
12GN7A	1.95	1.75	1.56	1.40
12GT5	2.67	2.41	2.14	1.93
12GW6/12DQ6B	2.12	1.91	1.70	1.53
12H6	2.22	2.00	1.78	1.60
12HG7	2.07	1.87	1.66	1.49
12HE7	3.40	3.06	2.72	2.45
12HL7	1.95	1.75	1.56	1.40
12J5	2.05	1.84	1.64	1.48
12J5G7	2.40	2.16	1.92	1.73
12J8	2.17	1.96	1.74	1.57
12JB6A	3.10	2.79	2.48	2.23
12JN6	1.95	1.75	1.56	1.40
12JN8	1.85	1.66	1.48	1.33
12JT6A	2.47	2.23	1.98	1.78
12K5	1.72	1.55	1.38	1.24
12K7GT	3.30	2.97	2.64	2.38

Receiving Tubes

RCA — GE — SYLVANIA

Receiving Tubes May Be Assorted for Quantity Prices

Tube Type	Assorted 1-5	6-49	50-99	Not Asst. 100-Up
12KL8	1.22	1.10	.98	.88
12L6GT	1.77	1.60	1.42	1.28
12R5	1.67	1.51	1.34	1.21
12SA7	2.45	2.20	1.96	1.76
12SA/GT	2.45	2.20	1.96	1.76
12SC7	2.60	2.34	2.08	1.87
12SF5	1.92	1.73	1.54	1.39
12SF7	3.10	2.79	2.48	2.23
12SG7	2.35	2.11	1.88	1.69
12SH7	2.70	2.43	2.16	1.94
12SJ7	2.15	1.93	1.72	1.55
12SK7	2.22	2.00	1.78	1.60
12SL7GT	2.22	2.00	1.78	1.60
12SK7GT	2.07	1.87	1.66	1.49
12SN7GTA	1.40	1.26	1.12	1.01
12SQ7	2.22	2.00	1.78	1.60
12SQ7GT	2.22	2.00	1.78	1.60
12V6GT	2.22	2.00	1.78	1.60
12W6GT	2.22	2.00	1.78	1.60
12X4	.97	.88	.78	.70
13CW4	2.52	2.27	2.02	1.82
13DE7	1.75	1.57	1.40	1.26
13DR7	1.92	1.73	1.54	1.39
13EM7/15EA7	2.67	2.41	2.14	1.93
13FD7	2.52	2.27	2.02	1.82
13FM7	1.50	1.35	1.20	1.08
13GB5	1.65	1.48	1.32	1.19
13GF7	2.35	2.11	1.88	1.69
13J10	Use 3Z10/13J10			
13V10	2.05	1.84	1.64	1.48
14BL11	2.55	2.29	2.01	1.84
14BR11	2.40	2.16	1.92	1.73
14GT8	1.72	1.55	1.38	1.24
14JG8	1.55	1.39	1.24	1.12
15AF11	2.37	2.14	1.90	1.71
15BD11	2.42	2.18	1.94	1.75
15CW5	1.22	1.10	.98	.88
15DQ8	1.47	1.33	1.18	1.06
15FM7	1.70	1.53	1.36	1.22
15FY7	1.77	1.60	1.42	1.28
15KY8	2.37	2.14	1.90	1.71
15LE8	3.82	3.44	3.06	2.75
16A8	1.47	1.33	1.18	1.06
16AQ3/XY88	1.35	1.21	1.08	.97
16GK6	1.52	1.37	1.22	1.10
16GY5	2.42	2.18	1.94	1.75
17AX3	1.30	1.17	1.04	.94
17AX4GTA	1.52	1.37	1.21	1.10
17AY3	1.32	1.19	1.06	.95
17BE3/17BZ3	1.45	1.30	1.16	1.04
17BF11	2.27	2.05	1.82	1.64
17BH3	1.42	1.28	1.14	1.03
17BQ6GTB	2.60	2.34	2.08	1.87
17BS3A	1.67	1.51	1.34	1.21
17BZ3	Use 17BE3/17BZ3			
17C5	Use 17CU5/17C5			
17C9	3.57	3.22	2.86	2.57
17CK3	1.30	1.17	1.04	.94
17CU5/17C5	1.35	1.21	1.08	.97
17D4	1.52	1.37	1.22	1.10
17De4	1.60	1.44	1.28	1.15
17DM4A	1.70	1.53	1.36	1.22
17EW8	1.37	1.24	1.10	.99
17GE5	2.17	1.96	1.74	1.57
17GJ5	2.75	2.47	2.20	1.98
17GT5	2.22	2.00	1.78	1.60
17GV5	2.10	1.89	1.68	1.51
17GW6/17DQ6B	2.12	1.91	1.70	1.53
17H3	1.37	1.24	1.10	.99
17JB6A	2.75	2.47	2.20	1.98
17JG6A	3.15	2.83	2.52	2.27
17JM6	2.10	1.89	1.68	1.51
17JN6	1.95	1.75	1.56	1.40
17JZ8	1.77	1.60	1.42	1.28
17JT6A	2.47	2.23	1.98	1.78
17KV6	3.65	3.28	2.92	2.63
17LD8	Use 15KY8A			
17X10	2.25	2.02	1.80	1.62
18A5	1.95	1.75	1.56	1.40
18FW6A	1.22	1.10	.98	.88
18FX6A	1.20	1.08	.96	.86
17FY6A	1.10	.99	.88	.79
18GD6A	1.47	1.33	1.18	1.06
19AU4GTA	1.77	1.60	1.42	1.28
19BG6GA	3.32	2.99	2.66	2.39
19CL8A	1.85	1.66	1.48	1.33
19EA8	2.22	2.00	1.78	1.60
19EZ8	2.25	2.02	1.80	1.62
19GQ7	1.90	1.71	1.52	1.37
19HR6	1.22	1.10	.98	.88
19HS6	1.20	1.08	.96	.86
19HV8	1.77	1.60	1.42	1.28
19J6	1.85	1.66	1.48	1.33
19JN8	1.52	1.37	1.22	1.10
19KG8	1.55	1.39	1.24	1.12
19Q9	1.52	1.37	1.22	1.10
19T8	2.02	1.82	1.62	1.46
19X8	2.05	1.84	1.64	1.48
20AQ3/LY88	1.40	1.26	1.12	1.01
20EZ7	1.70	1.53	1.36	1.22
21GY5	2.32	2.09	1.86	1.67
21HB5	2.17	1.96	1.74	1.57
21JV6	2.10	1.89	1.68	1.51
21JZ6	2.20	1.98	1.76	1.58
21KA6	2.22	2.00	1.78	1.60
21LR8	3.00	2.70	2.40	2.16
22BH3A	1.55	1.39	1.24	1.12
22BW3	1.52	1.37	1.22	1.10
22DE4	1.70	1.53	1.36	1.22
22JF6	3.42	3.08	2.74	2.47
22JG6A	2.95	2.65	2.36	2.12
22JU6	2.87	2.59	2.30	2.07
22KM6	4.10	3.69	3.28	2.95
23Z9	2.35	2.11	1.88	1.69
24JE6A	4.25	3.82	3.40	3.06
25AV5GA	2.82	2.54	2.26	2.03
25AX4GT	1.52	1.37	1.22	1.10
25BK5	1.70	1.53	1.36	1.22
25BQ6GTB/25CU6	2.20	1.98	1.76	1.58
25C5	1.47	1.33	1.18	1.06
25CA5	1.80	1.62	1.44	1.30
25CD6GB	2.87	2.59	2.30	2.07
25DN6	2.97	2.68	2.38	2.14
25EC6	3.07	2.77	2.46	2.21
25EH5	1.62	1.46	1.30	1.17
25F5A	1.92	1.73	1.54	1.39
25L6GT	1.47	1.33	1.18	1.06
25W4GT	1.85	1.66	1.48	1.33
25Z6GT	1.92	1.73	1.54	1.39
27GB5/PL500	1.85	1.66	1.48	1.33
31JS6A	3.65	3.28	2.92	2.63
32ET5A	1.20	1.08	.96	.86
33GT7	3.47	3.13	2.78	2.50
33GY7A	3.02	2.72	2.42	2.18
33JV6	2.10	1.89	1.68	1.51
33W4	.62	.56	.50	.45
34GD5A	1.47	1.33	1.18	1.06
35B5	1.60	1.44	1.28	1.15
35C5	1.05	.94	.84	.76
35EH5	1.70	1.53	1.35	1.22
35GL6	1.45	1.30	1.16	1.04
35L6GT	1.37	1.24	1.10	.99
35Y4	2.25	2.02	1.80	1.62
35Z3	2.35	2.11	1.88	1.69
35Z4GT	1.27	1.15	1.02	.92
35Z5GT	1.10	.99	.88	.79
36AM3B	1.12	1.01	.90	.81
38HE7	3.32	2.99	2.66	2.39
38HK7	3.27	2.95	2.62	2.36
40KD6	4.05	3.64	3.24	2.92
42	2.42	2.18	1.94	1.75
42KN6	3.60	3.24	2.88	2.59
43	3.60	3.24	2.88	2.59
50A1	3.40	3.06	2.72	2.45
50A5	2.92	2.63	2.34	2.11
50B5	1.47	1.33	1.18	1.06
50C5	1.10	99	.88	.79
50DC4	1.20	1.08	.96	.86
50EH5	1.15	1.03	.92	.83
50FE5	2.22	2.00	1.78	1.60
50FK5	1.10	.99	.88	.79
50HC6	1.20	1.08	.96	.86
50HK6	1.07	.97	.86	.77
50L6GT	1.42	1.28	1.14	1.03
50X6	2.92	2.63	2.34	2.11
50Y6GT	2.17	1.96	1.74	1.57
50Y7GT	2.12	1.91	1.70	1.53
60FX5	1.47	1.33	1.18	1.06
80	2.40	2.16	1.92	1.73
84/6Z4	2.60	2.34	2.08	1.87
EM84/6FG6	1.67	1.51	1.34	1.21
ECL86/6GW8	1.52	1.37	1.22	1.10
PCF86/7HG8	1.47	1.33	1.18	1.06
117L7/M7HT	4.77	4.30	3.82	3.44
117W7GT	6.42	5.79	5.14	4.63
117P7GT	6.42	5.79	5.14	4.63
117Z3	2.25	2.02	1.80	1.62
117Z6GT	3.35	3.01	2.68	2.41
5879	2.22	2.00	1.78	1.60
6973	2.12	1.91	1.70	1.53
7025	1.55	1.39	1.24	1.12
7027A	3.37	3.04	2.70	2.42
7189	1.42	1.28	1.14	1.03
7199	2.22	2.00	1.78	1.60
7247	1.60	1.44	1.38	1.15
7355	1.55	1.39	1.24	1.12
7408	1.67	1.51	1.34	1.21
7543	1.45	1.30	1.16	1.04
7581A	2.27	2.05	1.82	1.64
7591A	1.40	1.26	1.12	1.01
7695	2.20	1.98	1.76	1.58
7734/6GE8	2.72	2.45	2.18	1.96
7868	1.92	1.73	1.54	1.39
8136	1.27	1.15	1.02	.92
8084	1.97	1.78	1.58	1.42
8417	2.82	2.54	2.26	2.03
8425A/6AU6A	1.27	1.15	1.02	.92
8426A/12AU6	1.40	1.26	1.12	1.01

BARBER-COLMAN

TUBE COOLING FAN

Model DYAB6167-3. High speed motor and fan for cooling power tubes and boosting current ratings of vacuum capacitors. Shaded Pole motor is not radio interfering. Size: 2 1/16 x 2 3/16 x 1 5/8". Shaft 1/8" dia. For 110v. 50-60 cycles AC. Wt. 1 lb.

Stock No.	Model	1-9	10-24	25-49	50-Up
28F998	DYAB6167-3	6.50	5.62	5.36	4.09

You Can Depend on NEWARK

For Complete Stocks—

Lowest Prices — Fastest Service

and the Latest in

Industrial Electronics

PAMOTOR MINIATURE AXIAL FANS

Long life-20,000 + operational hours. Continuous Duty at 45°C without maintenance. Higher air delivery at greater static pressures. All metal construction. Shaded-Pole and Induction type motors. Impedance protected 50-60-400-cycle operation. 3½", 4½" & 5½" models with air-delivery from 50 to 300 CFM. Universal 4⅛" mounting on all 4½" models. Conforms to applicable portions of Mil Specs and U/L standards. One year warranty against defects in workmanship and material.

3½" INDUCTION TYPES (158-65 CFM) SPECIFICATIONS

Stk. No.	Mod.	Cap.	V.	Cy.	CFM	RPM	W.	Weight	1-9	10-24	25-49
57F1000	3000	4 mfd	115	50/60	58/65	2800/3200	14/15	1 lb. 2 oz.	17.45	17.20	15.70
57F1002	3050	1 mfd	220	50/60	58/65	2800/3200	14/15	1 lb. 2 oz.	16.95	16.85	15.25

4½" INDUCTION TYPES (50-125 CFM) SPECIFICATIONS

57F1004	100A	6 mfd	115	50/60	100/125	2900/3400	25	2 lb. 10 oz.	29.95	26.95	23.95
57F1006	1100	.75 mfd	115	400	100	3200	33	2 lb. 10 oz.	39.95	37.95	31.95
57F1009	1300	2 mfd	220	50/60	110/125	2900/3400	25	2 lb. 10 oz.	26.95	26.95	23.95
57F1011	2000	4 mfd	115	50/60	110/130	2900/3500	25	2 lb. 1 oz.	29.95	26.95	23.95
57F1013	2050	2 mfd	220	50/60	116/134	2900/3500	26	2 lb. 1 oz.	29.95	26.95	23.95

4½" SHADED-POLE TYPES (90-105 CFM) SPECIFICATIONS

Stock No.	Mod.	V.	Cy.	CFM	RPM	W.	Weight	1-24	25-49	50-99	100-499
57F1015	1500	115	50/60	90/105	2850/3400	27/25	2 lb. 10 oz.	11.95	10.75	9.60	8.90
57F1017	1550	220	50/60	90/105	2850/3400	27/25	2 lb. 10 oz.	11.95	10.75	9.60	8.90
57F1019	2500	115	50/60	95/115	2850/3400	27/25	2 lb. 1 oz.	11.95	10.75	9.60	8.90
57F1021	2550	220	50/60	95/115	2850/3400	27/25	2 lb. 1 oz.	11.95	10.75	9.60	8.90

5½" SHADED-POLE TYPES (260-300 CFM) SPECIFICATIONS

57F1023	6500	115	60	300	3000	54	2 lb. 7 oz.	26.95	23.95	20.95	19.45
57F1024	6550	50	50	260	2700	45	2 lb. 7 oz.	26.95	23.95	20.95	19.45

IMC MAGNETICS CORP.

● NEW IMC MINI BOXER FAN

Model MWS2107F. A New IMC bearing design that assures constant lubricant flow, extra long life, and cool, quiet operation. Provides a low profile cooling, and meets a wide variety of custom cooling and circulating requirements. Only 3⅝" square and 1½" in depth with a unit weight of 1.6 lbs. Mini Boxer Fan can be mounted inside of the unit around utilizing the flanges at either end. No filter or screen kits available. phase, 60 hz. Supplied with mounting kit. See (accessories) for screen and filter kits.

Stk. No.	VAV	HZ	Watts	Amps	RPM	CFM	1-9	10-24	25-49	50-99	100-249
60F1642	115	60/50	19	0.24	3300	46/38	14.40	13.00	11.65	10.30	9.61

STANDARD BOXER FAN

Standard model delivers 115 cfm free air from any operating position. Only 4 11/16" square and 1½" deep with rugged, all metal frame for greater heat dissipation and longer fan life. Heavy duty terminals, easily accessible with reversible air-flow. Up to 5 years at + 70 F for standard models. Lightweight 1 lb., 8 oz. Shpg. wt. 2 lbs. See (accessories) below for filter and screen kits.

Stk. No.	Type	1-9	10-24	25-49	50-99	100-249
60F1600	WS2107F	14.60	13.20	11.85	10.50	9.80

LOW SPEED BOXER

For many industrial and commrecial applications where low noise operation is essential, such as audio equipment. Free air delivery 66 cfm. Rated for 115 VAC, 1 phase, 50/60 cps. See (accessories) below for filter and screen kits.

60F1625	WS2107-2	15.00	14.10	12.75	11.30	10.55

HI FI BOXER

Model WS2107-9. Very low noise level for hi-fi equipment. Free air delivery 50 cfm; will exhaust avg. enclosure 10-30 times per minute. Metal housing resists breakage and acts as efficient heat sink. Impeller aerodynamically efficient 5-blade design. 115 VAC, 1 phase, 60 hz. Supplied with mounting kit. See (accessories) below for screen and filter kits.

60F1639. NET. 14.85

ACCESSORIES

Stk. No.	Type	Description	NET	Stk. No.	Type	Description	NET
60F1623	69-74	Plug & Cord	.60	60F1606	69-94*	Filter Kit	3.15
60F1624	65-175	Finger Guard	.75	60F1607	69-95*	Screen Kit	1.65
60F1637	69-93	Slim Line Filter	1.50	60F1638	69-93-1†	Slim Line Screen	1.50
60F1643	69-79-1	Mounting Brackets	.50				

* With mounting brackets † Mounted directly to cabinets, or using mounting brackets.

IMCair PROPELLER FANS

For applications where high air flow and low noise operation is required. Precision-built shaded pole motor. Flush mounting with shaft in any operating position. All single phase. Size: Model FE8, FI8, 10" dia. x 2½" deep—5 13/16" with motor clearance. Models FE6, FI6, ⅛" dia. x 2" deep—4½" with motor clearance. For operation from 115 volt, 50-60 cycles. Shpg. wt. Models FE6 and FI6: 3 lbs. Models FE8 and FI8: 5½ lbs.

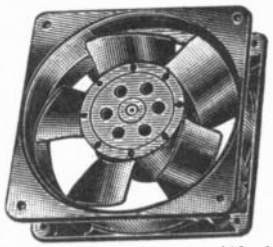
Stock No.	Type	cfm	Amps	1-4	5-9	10-24	25-49	50-99
60F1613	FE6 Exhaust	205	.6	15.25	13.75	12.95	12.25	11.45
60F1614	FI6 Intake	225	.6	15.25	13.75	12.95	12.25	11.45
60F1615	FE8 Exhaust	485	1	26.35	24.75	23.75	21.05	19.75
60F1616	FI8 Intake	485	1	26.35	24.75	23.75	21.05	19.75

IMCair CENTRIFUGAL BLOWERS — Models B2 and B3

Designed for applications where low air flows are required at relatively high pressures. Compactly designed, metal housings will not distort under heat. Continuous duty operation, single phase shaded pole motor with bearing life of 10,000 hours at 125° F. Size: B2, 7/8" h. x 4¾" w. x 3½" d. B3, 5⅝" h. x 5⅞" w. x 5" d. For operation from 115 volts, 50-60 cycles. Shpg. wt.: B2, 2½ lbs.; B3, 3½ lbs.

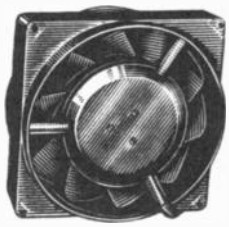
Stock No.	Blower Type	cfm	Amps	1-4	5-9	10-24	25-49	50-99
60F1617	B2	24	0.45	13.75	12.75	11.90	11.40	10.90
60F1618	B3	87	0.5	26.35	24.75	23.75	22.75	21.80

● NEW 4500 SHADED-POLE

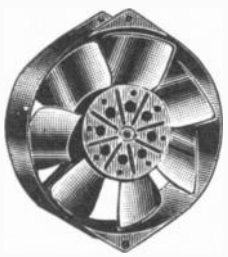


Low-noise level provides 115 cfm with less than 37.5 dB SIL. Voltage: 117 volts. Operates over range of 105 to 125 VAC at dual frequency of 50/60 Hz. Input Power: 19" watts. Size: 4 11/16x4 11/16x 1½". Wt. 1 lb. 4 oz.

Stk. No.	Model	1-24	25-49	50-99	100-499
57F1025	4500	10.95	9.85	8.95	8.55

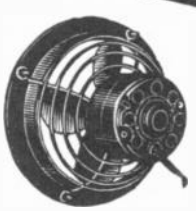


4½" Models 1000A, 1100, 1200, 1300

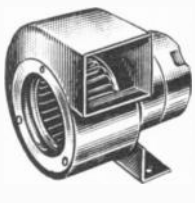


5½" Models 6500, 6550

"IMC Boxer Fan"



FE Series Fans



B Series Blower

Industrial & Special Purpose Tubes

Abbreviation	Manufacturer	Abbreviation	Manufacturer	Abbreviation	Manufacturer	Abbreviation	Manufacturer
AME	Amperex	GL	Genelex Gold Lion	RAY	Raytheon	THE	Thermosen
COS	Cossar	MUL	Mullard	RCA	Radio Corporation of America	VIC	Victoreen
DUM	Dumont	10M	Mullard "10M"	SYL	Sylvania	WES	Westinghouse
EIM	Eimac	NE	National Electr.				
GE	General Electric	NU	National Union				

Tube Type	Mfr.	1-4	5-18	19-49	50-99
PL-R1	RAY	34.00	.....	.....	.....
OA2	AME	1.32	1.25	1.19	1.12
OA2	GE	1.32	1.25	1.19	1.12
OA2	RAY	1.32	1.25	1.19	1.12
OA2	RCA	1.32	1.25	1.19	1.12
OA2	SYL	1.32	1.25	1.19	1.12
OA2	WES	1.32	1.25	1.19	1.12
OA2WA	RAY	3.35	3.20	3.00	2.86
OA2WA	RCA	3.35	3.20	3.00	2.86
OA2WA	WES	3.35	3.20	3.00	2.86
OA2WA	SYL	3.35	3.20	3.00	2.86
OA3	GE	1.54	1.46	1.38	1.30
OA3	RCA	1.54	1.46	1.38	1.30
OA3	SYL	1.54	1.46	1.38	1.30
OA3/VR75	WES	1.54	1.46	1.38	1.30
OA3A	RCA	1.54	1.46	1.38	1.30
OA3A/OA3	RAY	1.54	1.46	1.38	1.30
OA4G	GE	1.86	1.76	1.67	1.58
OA4G	RCA	1.86	1.76	1.67	1.58
OA5	SYL	6.96	.....	.....	.....
OB2	AME	1.37	1.30	1.24	1.16
OB2	GE	1.37	1.30	1.24	1.16
OB2	RAY	1.37	1.30	1.24	1.16
OB2	RCA	1.37	1.30	1.24	1.16
OB2	SYL	1.37	1.30	1.24	1.16
OB2	WES	1.37	1.30	1.24	1.16
OB2WA	RAY	2.40	2.28	2.16	2.04
OB2WA	RCA	2.40	2.28	2.16	2.04
OB2WA	SYL	2.40	2.28	2.16	2.04
OB2WA	WES	2.40	2.28	2.16	2.04
OB3	GE	2.35	2.23	2.12	2.00
OB3	SYL	2.35	2.23	2.12	2.00
OB3/VR90	WES	2.35	2.23	2.12	2.00
OB3A/OB3	RAY	2.35	2.23	2.12	2.00
OC2	RAY	1.50	1.42	1.35	1.28
OC2	RCA	1.50	1.42	1.35	1.28
OC3	GE	1.50	1.42	1.35	1.28
OC3	RCA	1.50	1.42	1.35	1.28
OC3	SYL	1.50	1.42	1.35	1.28
OC3/VR105	WES	1.50	1.42	1.35	1.28
OC3A	RCA	1.50	1.42	1.35	1.28
OC3A/OC3	RAY	2.70	2.55	2.43	2.30
OC3W	TUN	6.65	6.28	5.98	1.27
OD3	GE	1.44	1.37	1.30	1.22
OD3	RCA	1.44	1.37	1.30	1.22
OD3	SYL	1.44	1.37	1.30	1.22
OD3/VR150	WES	1.44	1.37	1.30	1.22
OD3A	RCA	1.44	1.37	1.30	1.22
OD3A/OD3	RAY	1.35	1.28	1.22	1.15
OD3W	TUN	6.65	6.28	5.98	5.65
OE3	AME	10.15	9.58	9.14	8.63
OE3/85A1	AME	7.25	6.85	6.52	5.80
OG3	AME	2.30	2.19	2.07	1.95
1AD4	RAY	2.80	2.66	2.52	.....
1AE4	RAY	4.50	4.25	4.05	3.82
1AG4	RAY	7.30	6.90	6.57	6.20
1AG5	RAY	2.05	1.94	1.84	1.74
1AH4	TUN	1.35	1.28	1.21	1.15
1AK4	RAY	7.30	6.90	6.57	6.20
1B85	VIC	13.71	.....	.....	.....
1C21	RCA	4.15	3.94	3.74	3.52
1CP1	COS		(Use COS 1CP31)		
1CP31	COS	29.45	27.25	25.50	.....
1DP	NU	20.00	18.90	18.00	17.00
1DP1	NU	21.00	.....	.....	.....
1DP11	NU	21.00	.....	.....	.....
1D21/SN4	SYL	7.30	7.10	6.90	.....
1EP1	RCA	25.75	24.46	23.18	21.89
1EP11	RCA	28.10	26.55	25.29	23.88
1L4	RCA	1.50	1.43	1.35	1.28
1P21	RCA	54.35	51.36	48.92	46.20
1P22	RCA	15.80	14.93	.....	.....
1P23	RAY	3.32	3.14	2.99	2.82
1P28	RCA	21.50	20.32	19.39	.....
1P28A	RCA	27.90	26.37	.....	.....
1P29	RCA	7.65	7.23	6.89	.....
1P30	RAY	7.08	6.69	6.37	6.02
1P37	RCA	6.50	6.14	5.85	5.53
1P39	SYL	3.15	2.98	2.84	2.68
1P39	RCA	3.15	2.98	2.84	.....
1P40	GE	4.10	3.87	3.69	3.49
1P40	RCA	4.80	4.54	4.32	4.08
1P41	RCA	6.00	5.67	5.40	5.10
1P42	RCA	17.95	16.96	16.16	15.26
1Z2	TUN	8.00	7.56	7.20	6.80
VG1A/1	DUM	29.40	27.78	26.46	24.99
VG1A/2	DUM	28.25	24.81	23.62	22.31

Tube Type	Mfr.	1-4	5-18	19-49	50-99
VG1A/3	DUM	26.25	24.81	23.62	22.31
VG1A/4	DUM	26.25	24.81	23.62	22.31
2-01C	EIM	18.00	17.01	.....	.....
2-25A	EIM	27.00	25.52	.....	.....
2AP1A	RCA	19.00	17.96	17.10	16.24
2AS15A	THE	10.00	9.00	8.00	7.00
2BP1	RCA	20.10	18.85	18.09	17.09
2BP1	SYL	31.60	29.86	28.44	.....
2BP11	RCA	21.50	20.32	19.35	18.27
2C39A	EIM	20.75	19.61	18.68	17.64
ML-2C39A	RAY	20.75	19.61	18.68	17.64
2C39A	RCA	20.75	19.81	18.68	17.64
2C39A	SYL	20.75	19.61	18.68	17.64
2C39A	GE	20.75	19.61	18.68	17.64
2C39A/V1	RCA	20.75	19.61	18.68	17.64
2C39B	GE	32.15	30.28	28.93	27.33
2C39WA	RCA	29.00	27.41	26.10	24.65
ML-2C39WA	RAY	20.75	19.61	18.68	17.64
2C39WA	EIM	29.00	27.40	26.10	24.65
2C39WA	SYL	29.00	27.40	26.10	24.65
2C40A	GE	34.00	32.30	30.60	.....
2C40	RCA	29.30	27.69	26.37	24.90
2C40	SYL	29.30	27.69	26.37	24.90
2C40A	RCA	34.00	32.30	30.60	.....
2C43	GE	27.50	26.00	.....	.....
2C43	RCA	26.95	25.60	.....	.....
2C51	SYL	3.65	3.45	.....	.....
2C53	N.U.	9.15	8.85	8.40	.....
2D21	AME	1.29	1.23	1.16	1.10
2D21	GE	1.29	1.23	1.16	1.10
2D21	RAY	1.29	1.23	1.16	1.10
2D21	RCA	1.29	1.23	1.16	1.10
2D21	SYL	1.25	1.18	1.13	1.06
2D21	WES	1.29	1.23	1.16	1.10
2E24	RCA	6.80	6.43	.....	.....
WL-2E24	WES	6.15	5.81	5.54	5.23
2E26	RCA	4.00	3.78	3.60	3.40
2E26	SYL	4.00	3.78	3.60	3.40
2E31	RAY	7.30	6.90	6.57	6.20
2E32	RAY	7.30	6.90	6.57	6.20
2F21	RCA	380.00	.....	.....	.....
2GK5	AME	1.93	1.82	1.74	1.64
2J42	SYL	120.00	.....	.....	.....
RK2J55	RAY	306.00	.....	.....	.....
2K25	RAY	38.00	.....	.....	.....
2K26	RCA	65.00	.....	.....	.....
2K28	RAY	88.00	.....	.....	.....
2K48	RAY	116.00	.....	.....	.....
2SM15A	THE	12.00	11.00	9.60	8.40
TBL2/400	AME	250.00	.....	.....	.....
TBL2/500	AME	270.00	.....	.....	.....
2X2A	GE	3.85	3.64	3.47	3.27
2X2A	RCA	4.30	4.06	3.87	3.66
2X2A	SYL	3.85	3.64	3.47	3.27
3-400Z/8163	EIM	34.00	.....	.....	.....
3-1000Z/8164	EIM	78.00	.....	.....	.....
3A4	RCA	1.25	1.19	1.13	1.06
3A5	RAY	2.03	1.93	1.83	1.73
3A5	RCA	2.03	1.93	1.83	1.73
3ACP1A	SYL	43.40	41.01	39.06	36.89
3ADP1	SYL	61.60	58.21	55.44	52.36
3AP1A	RCA	27.20	25.70	24.48	23.12
3AQP1	RCA	34.35	32.46	30.92	29.20
3ASP1	SYL	49.45	46.73	44.51	44.51
3AYP1	DUM	70.00	.....	.....	.....
3B4	RAY	3.80	3.54	3.42	3.23
3B4WA	RAY	5.85	5.53	5.28	4.97
3BWA	RCA	5.85	5.53	5.26	4.97
3B22/1C	WES	10.85	10.25	9.76	9.22
3B24W	GE	11.25	10.89	.....	.....
RK3B24W	RAY	10.55	9.97	9.76	.....
3B28	RCA	7.50	7.09	6.75	6.38
3B28	WES	6.60	6.23	5.94	5.61
3BGP1	SYL	63.70	60.20	57.33	.....
3BMP1	SYL	55.95	52.87	50.35	47.56
3BP1A	RCA	24.70	23.34	22.23	21.00
3C23	GE	11.98	11.38	10.78	10.18
NL-3C23	NE	11.98	11.38	10.78	10.18
3C23	RCA	11.98	11.38	10.78	10.18
3C23	WES	11.98	11.38	10.78	10.18
3C33	RCA	35.75	33.78	32.18	30.30
3CPN10A/7815	EIM	30.75	29.06	27.67	26.14
3CPN10A5	RAY	30.75	29.06	27.67	26.14
3CPN10A/7815	SYL	30.75	29.06	27.67	26.14
3CW5000A1	EIM	290.00	.....	.....	.....
3CW5000A3	EIM	250.00	.....	.....	.....
3CW5000F1	EIM	270.00	.....	.....	.....

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

Tube Type	Mfr.	1-4	5-18	19-49	50-99
3CW5000F3	EIM	260.00	.....	.....	.....
3CX100A5/7289	EIM	26.50	25.27	.....	.....
3CX100A5	RAY	30.75	29.06	.....	.....
3CX2500A3	EIM	200.00	.....	.....	.....
3CX2500A3	SYL	200.00	.....	.....	.....
3CX2500F3	EIM	205.00	.....	.....	.....
3CX2500F3	SYL	210.00	.....	.....	.....
3CX3000A1	EIM	210.00	.....	.....	.....
3CX3000A1	SYL	210.00	.....	.....	.....
3CX3000F1	EIM	220.00	.....	.....	.....
3CX3000F1	SYL	220.00	.....	.....	.....
3D22A	RCA	34.30	32.41	.....	.....
3E29	RCA	21.50	20.32	19.35	.....
3ER5	AME	1.65	1.56	1.48	1.40
3GP1A	DUM	50.00	.....	.....	.....
3GK5	AME	1.93	1.82	1.74	1.64
NL-C3J/AL-No	NE	18.40	17.39	16.56	15.64
NL-C3J/L	NE	14.20	13.42	12.78	12.07
C3JL	RCA	14.20	13.42	12.78	12.07
3JP1	DUM	42.70	40.35	.....	.....
3JP1	RCA	26.85	25.36	24.16	22.82
3JP1A	DUM	42.70	40.35	.....	.....
3JP7	RCA	28.30	26.74	25.47	24.06
3KP1	DUM	46.75	.....	.....	.....
3KP1	RCA	27.90	26.51	25.11	.....
3KP1	SYL	31.60	29.86	28.44	.....
3MP1	SYL	28.00	26.46	25.20	23.80
3RP1	DUM	38.70	.....	.....	.....
3RP1	RCA	17.95	16.96	16.16	15.26
3RP1	SYL	27.05	25.56	24.35	22.99
3RP1A	DUM	40.70	.....	.....	.....
3RP1A	RCA	27.65	26.13	.....	.....
3RP1A	SYL	33.10	31.28	.....	.....
3RP7A	RCA	27.65	26.13	24.89	23.50
3SP1	SYL	47.95	45.31	.....	.....
3WP1	DUM	41.00	.....	.....	.....
3WP1	RCA	50.05	47.30	.....	.....
3WP1	SYL	38.40	36.29	.....	.....
3WP2	DUM	41.00	.....	.....	.....
3WP11	RCA	30.05	28.40	27.05	25.54
3X2500A3/8161	EIM	Recommend Sub. 3CX2500A3			
3X2500A3/8161	SYL	Use 3CX2500A3			
3X2500F3/8251	SYL	Use 3CX2500F3			
3X2500F3/8251	EIM	Use 3CX2500FC			
3X3000A1/8238	SYL	210.00	.....	.....	.....
3X3000A1/8238	EIM	Use 3CX3000A1			
3X3000F1/8239	RCA	215.00	.....	.....	.....
3X3000F1/8239	SYL	Use 3CX3000F1			
3X3000F1/8239	EIM	Recommend Sub. 3CX3000F1			
4-65A/8165	AME	27.00	25.65	.....	.....
4-65A/8165	EIM	27.00	25.65	.....	.....
4-B31	RAY	32.83	31.03	29.55	27.91
4-65A	EIM	27.00	25.65	.....	.....
4-65A	AME	27.00	25.65	.....	.....
PL-4-65A/8165	PEN	27.00	25.65	.....	.....
4-125A	AME	36.00	34.20	32.40	30.60
A-125A/4D21	EIM	36.00	.....	.....	.....
4-125A/4D21	RCA	36.00	34.20	32.40	30.60
4-250A	AME	46.50	44.18	41.85	39.53
4-250A/5D22	EIM	46.50	44.18	41.85	39.53
4-250A/5D22	RAY	46.50	44.18	41.85	39.53
4-250A/5D22	RCA	46.50	44.18	41.85	39.53
4-400A	AME	48.00	45.60	.....	.....
4-400A/8438	EIM	48.00	45.60	.....	.....
4-400A/8438	RCA	48.00	45.60	.....	.....
PL-4-400A/8438	PEN	48.00	45.60	.....	.....
4-1000A/8166	EIM	131.50	.....	.....	.....
4-1000A/8166	RCA	131.50	.....	.....	.....
PL-4-1000A/8166	RAY	131.50	.....	.....	.....
4B24/3C	WES	11.80	11.15	10.62	10.03
4B32	AME	13.50	12.76	12.15	11.48
4B32	TUN	12.60	11.91	11.34	10.71
4CX250B/7203	AME	35.60	33.82	.....	.....
4CX250B/7203	EIM	35.60	33.82	.....	.....
4CX250B/7203	RCA	35.60	33.82	.....	.....
4CX250B/7203	SYL	35.60	33.82	.....	.....
4CX250F/7204	AME	39.35	37.19	.....	.....
4CX250F/7204	RCA	39.35	37.19	.....	.....
4CX250F/7204	SYL	39.35	37.19	.....	.....
4CX250F/7204	EIM	39.35	37.19	.....	.....
4CX250K/8245	EIM	64.00	60.80	.....	.....
4CX250K/8245	SYL	64.00	60.80	.....	.....
4CX250R/7580W	AME	45.00	42.52	.....	.....
4CX250R/7580W	EIM	44.50	42.85	.....	.....
4CX300A/CK8167	RAY	28.50	26.93	25.65	24.33
4CX300A/8167	EIM	54.00	51.03	.....	.....
4CX300A/8167	RCA	54.00	51.03	.....	.....
4CX300A/8167	SYL	54.00	51.03	.....	.....
4CX350A/8321	EIM	48.50	46.08	.....	.....
4CX350F/8322	EIM	51.50	48.67	.....	.....
4CX1000A/8168	EIM	181.00	.....	.....	.....
4CX1000A/8168	RCA	181.00	.....	.....	.....
4CX1000A/8168	SYL	181.00	.....	.....	.....
4CX1000K/8352	EIM	193.00	.....	.....	.....
4CX3000A/8169	EIM	420.00	.....	.....	.....

Tube Type	Mfr.	1-4	5-18	19-49	50-99
4CX5000A/8170	EIM	495.00	.....	.....	.....
4CX5000A/8170	RCA	495.00	.....	.....	.....
4CX5000A/8170	SYL	495.00	.....	.....	.....
ML-4CX5000A/8170	RAY	495.00	.....	.....	.....
4CX10000D/8171	EIM	575.00	.....	.....	.....
4CX10000D/8171	RCA	550.00	.....	.....	.....
4CX10000D	RAY	550.00	.....	.....	.....
4CX15000A/8281	RCA	695.00	.....	.....	.....
PL-4D21A	RAY	41.00	.....	.....	.....
PL-4E27A	RAY	45.00	42.53	.....	.....
4E27A/5-125B	EIM	45.00	42.53	.....	.....
4E27A/5-125B	RCA	45.00	42.53	.....	.....
4EH7	AME	1.78	1.68	1.60	1.51
4EJ7	AME	1.78	1.68	1.60	1.51
4GK5	AME	1.95	1.84	1.75	1.66
4PR60B/8252	EIM	107.00	.....	.....	.....
4PR60B/8252	SYL	107.00	.....	.....	.....
4PR65A/8187	EIM	43.00	40.64	.....	.....
4W20000A/8173	SYL	2030.00	.....	.....	.....
4X150A/7034	AME	23.15	21.99	.....	.....
4X150A/7034	EIM	23.15	21.99	.....	.....
4X150A/7034	RCA	25.00	23.75	.....	.....
4X150D/7035	AME	37.50	35.43	.....	.....
4X150D/7035	EIM	29.00	27.41	.....	.....
4X150D/7035	RCA	27.50	26.37	.....	.....
4X250B	EIM	35.60	33.64	32.04	30.21
4CX250B	AME	35.65	33.69	32.08	30.30
4X250F	AME	35.65	33.69	32.08	30.30
4X500A	AME	128.50	.....	.....	.....
4X500A	RCA	128.50	.....	.....	.....
4X500A	SYL	127.50	.....	.....	.....
4X500A	EIM	127.50	.....	.....	.....
PL-4X500A	RAY	125.00	.....	.....	.....
5A6	RAY	6.65	6.28	5.98	5.65
5ABP1	RCA	35.75	.....	.....	.....
5ABP1	SYL	48.75	46.07	43.88	.....
5ABP1AM	DUM	53.00	.....	.....	.....
5ADP1	SYL	48.75	46.07	43.88	41.44
5ADP1	DUM	48.00	.....	.....	.....
5ADP1	RCA	35.00	33.08	.....	.....
5ADP1AM	DUM	53.00	.....	.....	.....
5ADP2	DUM	48.00	.....	.....	.....
5ADP2	SYL	48.75	.....	43.88	.....
5ADP7	DUM	48.00	46.07	.....	.....
5ADP7	RAY	70.00	66.15	.....	.....
5ADP7	SYL	48.75	46.07	43.88	.....
5ADP7A	SYL	50.65	47.86	.....	.....
5ADP11	DUM	48.00	.....	.....	.....
5ADP31	RCA	35.75	33.78	32.18	30.39
5AH7A	SYL	39.30	37.14	.....	.....
5AMP1A	SYL	57.05	53.91	51.35	48.50
5AQP1A	SYL	50.65	47.86	.....	.....
5AQP1A	DUM	61.00	.....	.....	.....
5AQP2A	DUM	61.00	.....	.....	.....
5AQP7A	SYL	50.65	47.86	.....	.....
5AQP7A	DUM	61.00	.....	.....	.....
5AUP24	RCA	150.00	.....	.....	.....
5AZP24	RCA	127.00	.....	.....	.....
5BGP2A	SYL	95.95	90.67	86.36	.....
5BGP2M	DUM	80.50	.....	.....	.....
5BHP2A	SYL	101.30	.....	.....	.....
5BHP7A	SYL	101.30	.....	.....	.....
5BP1A	RCA	35.05	33.10	.....	.....
5BP1A	DUM	42.00	.....	.....	.....
5CBP2	DUM	72.50	.....	.....	.....
5CP1A	RCA	38.85	36.71	34.97	33.02
5CP7A	DUM	52.40	.....	.....	.....
5CP11A	DUM	51.10	.....	.....	.....
5DBP1	DUM	105.00	.....	.....	.....
5FP4A	SYL	38.10	36.00	34.29	.....
5FP4A	RCA	35.00	33.08	31.50	20.75
5FP7A	RCA	40.05	37.85	.....	.....
5LP1A	DUM	55.00	.....	.....	.....
5R4GYA	GE	2.05	1.94	1.84	1.74
5R4GYB	RAY	2.03	1.93	1.83	1.73
5R4GYB	RCA	2.03	1.93	1.83	1.73
5R4GYB	SYL	2.03	1.93	1.83	1.73
5R4GYB	WES	2.03	1.93	1.83	1.73
5R4WGA	RAY	9.65	9.12	8.69	8.20
5R4WGB	RAY	14.20	13.41	12.78	12.07
5UP1	RCA	21.50	.....	.....	.....
5UP1	SYL	31.65	.....	.....	.....
5UP7	RCA	26.25	24.81	.....	.....
5UP31	RCA	22.25	21.03	20.03	18.91
5WP11	RCA	99.40	93.93	.....	.....
5Y3WGTA	SYL	4.05	3.83	3.64	.....
5ZP16	RCA	91.95	86.89	.....	.....
6AC7W	RCA	5.45	5.15	4.90	4.63
6AD4	SYL	3.40	3.21	3.06	2.89
6AG7Y	RCA	2.80	2.65	.....	.....
6AH6WA	RAY	7.56	7.14	.....	.....
6AH6WA	RCA	7.60	7.18	.....	.....
6AH6WA	SYL	7.60	7.18	.....	.....
6AJ5	SYL	3.85	3.64	3.46	3.27
6AJ5	RAY	3.85	3.64	3.46	3.27

Industrial & Special Purpose Tubes

Tube Type	Mfr.	1-4	5-18	19-49	50-99
6AJ8	10M	2.65	2.50	2.39	2.25
6AK5W	RAY	2.41	2.28	2.17	2.05
6AK5WB	TUN	5.45	5.15	4.90	4.63
6AK5WB	GE	5.45	5.15	4.90	4.63
6AK6	RCA	1.40	1.32	1.26	1.19
6AN5	GE	4.20	3.97	...	....
6AN5	RAY	4.20	3.97	...	....
6AN5	RCA	4.20	3.97	.....	.....
6AN5	SYL	4.20	3.97	.....	.....
6AN5WA	RAY	10.80	10.21	.....	.....
6AQ5A	10M	2.15	2.03	1.93	1.83
6AQ5A	AME	1.00	.95	.90	.85
6AR6	RAY	5.75	5.46	.....	.....
6AR8	TUN	5.75	5.46	.....	.....
6AR8	GE	2.42	2.18	1.94	1.75
6AS6	RAY	3.43	3.26	3.09	2.92
6AS6	RCA	3.43	3.26	3.09	2.92
6AS6	WES	3.43	3.26	3.09	2.92
6AS7G	RCA	4.93	4.68	4.44	4.19
6AS7GA	GE	4.93	4.68	4.44	4.19
6AU6A	10M	2.05	1.94	1.84	1.74
6AU6A	AME	.98	.93	.88	.83
6AV6WB	RCA		Use 6AV6WB		
6AU6WB	SYL	2.70	2.57	2.43	2.30
6BF7W	SYL	4.20	3.97	3.78	3.57
6BL6	RAY	75.00	.....	.....	.....
6BM6	RAY	75.00	.....	.....	.....
6BQ5A	10M	2.15	2.03	1.93	1.83
6C21	EIM	99.00	93.56	89.10	84.15
6D4	GE	2.70	2.57	2.43	2.30
6D4	SYL	2.70	2.57	2.43	2.30
6D4	RCA	2.70	2.57	2.43	2.30
6DJ8	GE	1.80	1.70	.....	.....
6DJ8	RCA	1.80	1.70	.....	.....
6DJ8	SYL	1.80	1.70	.....	.....
6DJ8/ECC88	AMP	1.80	1.70	.....	.....
6DJ8/ECC88	MUL	2.13	2.01	1.92	1.81
6EU7	10M	2.35	2.22	2.11	2.00
6F4	RCA	14.40	13.61	12.96	12.24
6GK5	10M	2.40	2.27	2.16	2.04
C6H-1	WES	29.10	27.50	26.19	24.74
6H6WGT	TUN	8.20	7.75	7.38	6.97
6J4	RCA	4.02	3.82	3.60	3.42
6J4WA	RCA	5.60	5.29	5.04	4.76
6J4WA	SYL	5.60	5.29	5.04	4.76
6J6/ECC91	10M	2.55	2.41	2.25	2.17
6J6A	AME	1.33	1.27	1.20	1.14
6J6A	10M	2.55	2.41	2.29	2.17
6J6WA	RCA	5.35	5.06	4.82	4.55
C6J/5C21	RCA	28.10	26.70	.....	.....
NL-C6J/K-NE	NE	32.50	30.71	29.25	27.63
NL-C6J/KP	NE	29.45	27.83	26.50	25.03
6L4	RCA		Refer To Manual ID1020		
6L6W	TUN	5.75	5.43	5.17	4.89
6Q5G	DUM	10.50	.....	.....	.....
6SJ7WGT	SYL	2.70	2.55	2.43	2.30
6SJ7Y	RCA	2.15	2.03	1.93	1.83
6SL7WGT	SYL	3.15	2.99	.....	.....
6SN7WGT	SYL	2.35	2.22	2.11	2.00
6SU7GTY	TUN	4.90	4.63	.....	.....
6T8A	10M	2.80	2.65	2.52	2.38
6V6GTY	SYL	1.45	1.37	1.30	1.23
6X4W	RAY	1.60	1.52	.....	.....
6X4W	RCA	1.60	1.52	.....	.....
6X4W	SYL	1.60	1.52	.....	.....
6X4WA	SYL	2.85	.....	.....	.....
6X5WGT	SYL	1.55	1.46	1.39	1.32
7AK7	SYL	8.15	7.70	7.33	6.93
7CP4	RCA	74.35	70.36	66.92	63.20
GL-7D21	GE	790.00	.....	.....	.....
7MP7	SYL	69.15	.....	.....	.....
7NP4	RCA	1085.00	.....	.....	.....
7TP4	RCA	75.00	71.63	.....	.....
7UP7	SYL	59.30	56.04	53.37	.....
7VP1	RCA	31.45	.....	.....	.....
B8.700.67	AME	1.06	1.00	.95	.90
B8.700.86	AME	.32	.30	.29	.27
8D21	RCA	2165.00	.....	.....	.....
8HP4	RCA	48.30	45.64	43.47	41.06
8KP4	SYL	44.00	41.58	39.60	.....
8NP4	RCA	36.95	34.92	33.26	31.40
8QP4	RCA	50.65	47.86	45.59	43.05
9C21	RCA	1865.00	.....	.....	.....
9C25	RCA	1735.00	.....	.....	.....
10KP7	RAY	58.00	54.81	.....	.....
10SP4	RCA	85.00	80.75	.....	.....
10SP4	SYL	72.00	68.04	64.80	.....
12A6/ABC91	RCA	3.36	3.19	3.02	2.86
12AV6	10M	1.95	1.84	1.76	1.66
12AT7WA	RAY	2.53	2.40	.....	.....
12AT7WA	RCA	2.53	2.40	2.28	2.15
12AT7WA	SYL	2.53	2.40	2.28	2.15
12AT7WB	RAY	2.52	.....	.....	.....
12AT7WB	SYL	2.52	.....	.....	.....
12AU7A	10M	2.20	2.08	1.98	1.87
12AX7A	10M	2.20	2.08	1.98	1.87

Tube Type	Mfr.	1-4	5-18	19-49	50-99
12DW7	10M	2.55	2.41	2.29	2.17
12DW7	MUL	1.53	1.45	1.37	1.29
12SW7	RCA	1.49	1.41	1.34	1.27
12SX7GT	RCA	2.53	2.39	2.28	2.15
12SY7	RCA	2.67	2.52	2.40	2.27
1320	SYL	185.00	.....	.....	.....
17DWP4	RCA	25.65	24.24	23.08	21.80
17DWP4	SYL	29.90	28.26	26.91	25.42
KY21A	EIM	33.80	31.94	30.42	.....
NL-KY21A	NE	26.75	25.41	24.28	.....
RX21A	EIM	32.80	31.00	.....	.....
NL-RX21A	NE	25.75	24.34	.....	.....
25T	EIM	37.00	34.97	.....	.....
25T	SYL	28.50	27.08	.....	.....
26A6	RCA	3.70	3.50	3.33	3.15
26A7GT	RCA	7.70	7.28	6.93	6.55
26C6	RCA	3.05	2.88	2.74	2.59
26D6	RCA	3.05	2.88	2.74	2.59
ECC33	MUL	2.45	2.32	2.21	2.08
ECC33	AME	2.30	2.19	2.07	1.96
EL33/6AG6	MUL	2.00	1.89	1.80	1.70
EL34/6CA7	MUL	2.60	2.47	2.34	.....
EL34/6CA7	AME	2.68	2.55	2.41	.....
EL34/6CA7MP	AME	5.60	5.32	.....	.....
EL34/6CA7MP	MUL	6.18	5.87	.....	.....
EM34/6CD7	AME	1.95	1.84	1.75	1.66
GZ34/5AR4	AME	2.13	2.01	1.92	1.81
GZ34/5AR4	MUL	2.13	2.01	1.92	1.81
35T	EIM	41.00	38.75	.....	.....
EL37	AME	3.35	3.17	.....	.....
EL37	MUL	3.35	3.17	.....	.....
EL37MP	AME	6.90	6.52	6.21	5.87
EL37MP	MUL	6.90	6.52	6.21	5.87
EF50	MUL	3.08	2.91	2.77	2.62
EF50	AME	6.05	5.75	5.45	5.14
52AVP	AME	105.00	.....	.....	.....
53AVP	AME	89.00	.....	.....	.....
54AVP	AME	160.00	.....	.....	.....
54UVP	AME	1050.00	.....	.....	.....
E55L/8233	AME	13.25	12.52	11.92	11.26
VX55	VIC	34.58	.....	.....	.....
56AVP	AME	295.00	.....	.....	.....
56CVP	AME	350.00	.....	.....	.....
56UVP	AME	550.00	.....	.....	.....
57AVP	AME	645.00	.....	.....	.....
58AVP	AME	535.00	.....	.....	.....
58UVP	AME	1980.00	.....	.....	.....
60AVP	AME	1395.00	.....	.....	.....
KT66	MUL	3.88	3.67	3.49	3.30
KT66-MP	MUL	8.43	7.97	7.59	7.17
DM70/1M3	AME	1.13	1.07	1.02	.96
Z70W/7709	AME	3.30	3.12	2.97	2.30
Z70U/7710	AME	1.95	1.84	1.76	1.35
Z71U/7711	AME	2.85	2.69	2.57	2.00
CEM75K	DUM	43.85	.....	.....	.....
CEM75N	DUM	38.25	.....	.....	.....
CEM75P	DUM	38.25	.....	.....	.....
EABC80	AME	1.60	.....	.....	.....
EABC80/6AK8	10M	2.80	2.65	2.52	2.38
EABC80/6AK8	MUL	1.68	.....	.....	.....
EC80/6Q4	AME	4.90	4.63	4.41	4.17
ECF80/6BL8	10M	3.05	2.88	2.74	2.59
ECF80/6BL8	AME	1.88	1.79	1.69	1.60
ECF80/6BL8	MUL	1.87	1.78	1.68	1.59
ECL/6AB8	AME	1.53	1.45	1.38	1.30
ECL80/6AB8	10M	2.75	2.60	2.47	2.34
ECL80/6AB8	MUL	1.63	1.54	1.47	1.39
EF80/6BX8	AME	1.53	1.45	1.38	1.30
EM80/6BR5	AME	1.50	1.42	1.35	1.28
EM84/6FG5	MUL	1.68	1.59	1.51	1.43
EZ80/6V4	AME	.75	.71	.67	.64
EZ80/6V4	MUL	.75	.71	.67	.64
PCF80/9A8	10M	3.25	3.07	2.92	2.76
PCF80/9A8	AME	1.70	1.62	1.53	1.45
PCF80/9A8	MUL	1.88	1.79	1.69	1.60
XCF80/4BL8	AME	1.20	1.13	1.08	1.02
EC81/6R4	AME	3.95	3.73	3.55	3.36
ECC81/12AT7	10M	2.55	2.41	2.29	2.17
ECC81/12AT7	AME	1.43	1.35	1.29	1.22
ECC81/12AT7	MUL	1.43	1.35	1.29	1.22
ECC82/12AU7	AME	1.35	1.28	1.21	1.15
ECH81/6AJ8	MUL	1.35	1.28	1.21	1.15
ECH81/6AJ8	10M	2.65	2.50	2.39	2.25
ECH81/6AJ8	AME	1.40	1.32	1.26	1.19
EM81/6DA5	AME	1.25	1.18	1.12	1.06
EY81/6R3	AME	1.15	1.09	1.04	.98
EZ81/6CA4	AME	1.15	1.09	1.04	.98
EZ81/6CA4	MUL	1.15	1.09	1.04	.98
EZ81/6CA4	GE		Use GL5728		
FG-81A	10M	2.20	2.08	1.98	1.87
ECC82/12AU7	AME	1.15	1.09	1.03	.97
ECC82/12AU7	MUL	1.18	1.12	1.06	1.00
ECL82/6BM8	AME	1.45	1.38	1.30	1.23
ECL82/6BM8	MUL	1.45	1.38	1.30	1.23
ECL82MP/6BM8MP	MUL	3.40	3.21	3.06	2.89
PCF82/9U8	AME	1.55	1.46	1.39	1.32
UCL82/50BM8	AME	1.43	1.35	1.28	1.21

Industrial & Special Purpose Tubes

Tube Type	Mfr.	1-4	5-18	19-49	50-99
UCL82/50BM8MP	AME	3.20	3.02	2.88	2.72
83	RCA	1.98	1.80	1.70	1.61
ECC83/12AX7	10M	2.20	2.08	1.98	1.87
ECC83/12AX7A	AME	1.20	1.14	1.08	1.02
ECC83/12AX7	MUL	1.20	1.14	1.08	1.02
ECH84/6JX8	AME	1.28	1.21	1.15	1.08
ECL84/6DX8	10M	2.85	2.69	2.56	2.42
ECL84/6DX8	AME	1.45	1.37	1.30	1.23
EL84/6BQ5	10M	2.15	2.03	1.93	1.83
EL84/6BQ5	AME	1.33	1.26	1.20	1.13
EL84/6BQ5	MUL	1.33	1.26	1.20	1.13
EL84/6BQ5MP	AME	2.93	2.78	2.64	2.49
EL84/6BQ5MP	MUL	2.90	2.75	2.61	2.47
EM84/6FG6	MUL	1.65	1.57	1.49	1.40
EY84/6374	MUL	2.48	2.36	2.23	2.11
LCL84/10DX8	AME	1.38	1.31	1.24	1.17
PL84/15CW5	10M	2.50	2.36	2.25	2.13
PL84/15CW5	AME	1.33	1.26	1.20	1.13
UL84/45B5	AME	1.28	1.21	1.15	1.09
UL84/45B5MP	AME	2.95	2.79	2.65	2.51
XL84/6BQ5	AME	1.38	1.30	1.24	1.17
85A1/8Z3	AME	7.25	6.85	6.52	5.80
85A2/0G3	AME	2.30	2.19	2.07	1.95
ECC85/6AQ8	10M	2.40	2.27	2.15	2.04
ECC85/6AQ8	AME	1.50	1.42	1.35	1.28
ECC85/6AQ8	MUL	1.50	1.42	1.35	1.28
ECL85/6GV8	AME	1.55	1.46	1.39	1.32
HCC85/17EW8	AME	1.38	1.31	1.24	1.17
PCC85/9AQ8	AME	1.43	1.35	1.29	1.22
XCL85/9GV8	AME	1.87	1.77	1.68	1.59
EC86/6CM4	AME	2.60	2.46	2.34	2.21
ECC86/6GM8	AME	2.18	2.06	1.96	1.85
ECF86/6HG8	10M	3.10	2.93	2.79	2.64
ECF86/6HG8	AME	2.05	1.94	1.84	1.74
ECL86/6GW8	AME	1.53	1.46	1.38	1.31
ECL86/6GW8	MUL	1.53	1.46	1.38	1.31
EF86/6267	10M	2.50	2.36	2.25	2.13
EF86/6267	AME	1.30	1.23	1.17	1.10
EF86/6267	MUL	1.30	1.23	1.17	1.10
EL86/6CW5	AME	1.55	1.47	1.40	1.32
LCF86/5HG8	AME	1.85	1.75	1.67	1.57
PCF86/7HG8	10M	2.65	2.50	2.38	2.25
PCF86/7HG8	AME	1.48	1.41	1.33	1.26
XL86/8CW5	AME	1.53	1.45	1.38	1.30
DY87/1S2A	AME	1.45	1.37	1.30	1.23
EM87/6HU6	AME	1.60	1.51	1.44	1.36
EC88/6DL4	AME	2.60	2.46	2.34	2.21
ECC88/6DJ8	10M	3.10	2.93	2.79	2.64
ECC88/6DJ8	AME	1.80	.....	.....	.....
ECC88/6DJ8	MUL	2.13	2.01	1.91	1.81
EY88/6AL3	AME	1.45	1.38	1.31	1.23
KT88	GOL	8.95	.....	.....	.....
KT88-MP	GOL	14.90	.....	.....	.....
KT88	MUL	5.90	5.58	5.53	5.02
KT88-MP	MUL	12.48	11.79	11.23	10.61
XY88/16AQ3	AME	1.35	1.28	1.21	1.15
EBF89/6DC8	10M	2.65	2.50	2.38	2.25
EBF89/6DC8	AME	1.53	1.45	1.38	1.30
EBF89/6DC8	MUL	1.53	1.45	1.38	1.30
EBF89/6DA6	10M	2.65	2.50	2.39	2.25
EBF89/6DA6	AME	1.40	1.32	1.26	1.19
EBR89/6DA6	MUL	1.40	1.32	1.26	1.19
90NB3/900V	AME	27.00	23.00	19.50	15.00
90NB4/900V	AME	27.00	23.00	19.50	15.00
90C1	AME	2.25	2.13	2.02	.....
90C1	MUL	2.25	2.13	2.03	1.91
DA90/1A3	AME	3.07	2.90	2.76	2.61
DCC90/3A5	AME	2.75	2.61	2.48	2.34
EBC90/6AT6	AME	1.03	.98	.93	.88
EBC90/6AT6	10M	2.00	1.89	1.80	1.70
EBC90/6AT6	MUL	.90	.85	.81	.77
EC90/6C4	10M	2.85	2.69	2.56	2.42
EC90/6C4	MUL	1.75	1.66	1.58	1.49
EH90/6CS6	AME	1.22	1.15	1.10	1.04
EH90/6CS6	MUL	1.22	1.15	1.10	1.04
EK90/6E6	10M	2.10	1.98	1.89	1.79
EK90/6BE6	MUL	1.20	1.14	1.08	1.02
EK90/6BE6	AME	1.20	1.14	1.08	1.02
EL90/6AQ5	10M	2.15	2.03	1.93	1.83
EL90/6AQ5	MUL	1.00	.95	.90	.85
EL90/6AQ5MP	AME	2.35	2.22	2.12	2.00
EZ90/6X4	AME	.90	.85	.81	.77
EZ90/6Z4	MUL	.80	.76	.72	.68
HBC90/12AT6	AME	.87	.82	.78	.74
HBC90/12AT6	MUL	.87	.82	.78	.74
HZ90/12X4	AME	.97	.92	.87	.83
DAF91/1S5	AME	1.45	1.38	1.31	1.23
DF91/1T4	AME	1.53	1.45	1.38	1.30
DK91/1R5	AME	1.63	1.55	1.47	1.39
EAA91/6AL5	AME	.88	.83	.79	.75
EB91/6AL5	10M	1.95	1.84	1.75	1.66
EBC91/6AV6	10M	1.95	1.84	1.75	1.66
EBC91/6AV6	AME	.88	.83	.79	.75
EF91/6AM6	MUL	1.55	1.47	1.40	1.32
EL95/6DL5	MUL	1.48	1.40	1.33	1.26
HBC91/12AV6	10M	1.95	1.84	1.75	1.66

Tube Type	Mfr.	1-4	5-18	19-49	50-99
ECC91/6J6	10M	2.55	2.41	2.29	2.17
DAF92/1U5	AME	1.45	1.38	1.31	1.23
DF92/1L4	AME	1.80	.....	.....	.....
DL92/3S4	AME	1.70	1.62	1.53	1.45
DL93/3A4	AME	1.80	1.71	1.62	1.53
EF93/6BA6	10M	2.00	1.89	1.80	1.78
EF93/6BA6	AME	1.05	.99	.95	.89
EF93/6BA6	MUL	.95	.90	.85	.81
DL94/3V4	AME	1.30	1.24	1.17	1.11
EF94/6AU6	10M	2.05	1.94	1.84	1.75
EF94/6AU6	MUL	.98	.93	.88	.83
HF94/12AU6	AME	1.00	.95	.90	.85
DL95/3Q4	AME	1.67	1.58	1.50	1.42
EC95/6ER5	10M	2.40	2.27	2.16	2.04
EC95/6ER5	AME	1.78	1.68	1.60	1.51
EC95/6ER5	MUL	1.78	1.68	1.60	1.51
EF95/6AK5	10M	3.25	3.07	2.92	2.76
EF95/6AK5	AME	2.25	2.14	2.03	1.91
EF95/6AK5	MUL	2.25	2.14	2.03	1.91
EL95/6DL5	10M	2.55	2.41	2.29	2.17
EL95/6DL5	AME	1.48	1.40	1.33	1.26
EL95/6DL5	MUL	1.48	1.40	1.33	1.26
XC95/2ER5	AME	1.65	1.56	1.48	1.40
DL96/3C4	AME	1.22	1.15	1.10	1.04
EC97/6FY5	10M	2.35	2.22	2.11	2.00
EC97/6FY5	AME	1.38	1.30	1.24	1.17
EC97/6FY5	MUL	1.38	1.30	1.24	1.17
FG-97	GE	62.00	58.59	55.80	52.70
XC97/2FY5	AME	1.28	1.21	1.15	1.09
FG-98A	GE	77.00	72.77	69.30	65.45
100L	AME	54.30	.....	.....	.....
100TH	EIM	26.00	24.57	.....	.....
ML-102A	RAY	174.00	.....	.....	.....
FG-105	GE	59.00	55.76	.....	.....
NL-FG-105	NE	59.00	55.76	.....	.....
105	RCA	59.00	55.76	.....	.....
AX105/FG105	AME	53.33	50.40	48.00	.....
NU116	NU	15.00	14.18	13.50	12.75
NU142P	NU	40.00	37.80	36.00	34.00
150AVP	AME	74.00	.....	.....	.....
150B2/6354	AME	2.55	2.41	2.29	2.17
150C1	AME	4.50	.....	.....	.....
150CVP	AME	90.00	.....	.....	.....
150UVP	AME	225.00	.....	.....	.....
EC157/8108	AME	155.30	.....	.....	.....
EC158/8436	AME	335.00	.....	.....	.....
PL-169A	RAY	41.00	.....	.....	.....
NU162	NU	2.50	2.36	2.25	2.13
NU170P	NU	53.00	50.09	47.70	45.05
FG-172	GE	129.00	.....	.....	.....
172	RCA	129.00	.....	.....	.....
PL175A	RAY	54.00	51.03	.....	.....
PL177A	RAY	38.00	35.91	.....	.....
PL177WA	RAY	41.00	38.75	.....	.....
EF183/6EH7	10M	2.60	2.46	2.34	2.21
EF183/6EH7	AME	1.93	1.83	1.72	1.62
EF183/6EH7	MUL	1.93	1.83	1.72	1.62
PL-183	RAY	35.00	.....	.....	.....
XF183/3EH7	AME	1.78	1.68	1.60	1.51
EF184/6EJ7	10M	2.60	2.46	2.34	2.21
EF184/6EJ7	AME	2.30	2.07	1.96	1.73
EF184/6EJ7	MUL	1.93	1.83	1.72	1.82
XF184/3EJ7	AME	1.78	1.68	1.60	1.51
PL186	RAY	36.00	.....	.....	.....
PL187	RAY	60.00	.....	.....	.....
ECC189/6ES8	10M	3.50	3.31	3.15	2.98
ECC189/6ES8	MUL	2.73	2.58	2.46	2.32
XCC189/4ES8	AME	2.03	1.93	1.83	1.73
PL190	RAY	60.00	.....	.....	.....
PL-191	RAY	30.00	.....	.....	.....
PL-203B	RAY	57.00	.....	.....	.....
207	RCA	400.00	.....	.....	.....
PL210	RAY	480.00	.....	.....	.....
SK-220A	SYL	185.00	.....	.....	.....
SK-220-B-G	SYL	155.00	.....	.....	.....
SK-221A	SYL	170.00	.....	.....	.....
SK-221B-G	SYL	160.00	.....	.....	.....
SK-22A	SYL	160.00	.....	.....	.....
250B	EIM	42.00	.....	.....	.....
250TH	EIM	45.00	.....	.....	.....
250TL	EIM	45.00	.....	.....	.....
254W	RAY	34.00	32.13	.....	.....
AX260	AME	150.00	.....	.....	.....
CR273/8008	RCA	60.00	56.70	.....	.....
CR274/872A	RCA	60.00	56.70	.....	.....
CR275/866A/3B28	RCA	22.00	20.79	.....	.....
PL290	RAY	420.00	.....	.....	.....
ML-298A	RAY	3200.00	.....	.....	.....
300PC	AME	150.00	.....	.....	.....
Z303C	AME	11.00	10.40	9.90	9.15
304TH	EIM	83.00	78.44	74.70	70.55
304TH	SYL	75.00	70.88	67.50	63.75
304TL	SYL	75.00	70.88	67.50	63.75
304TL	EIM	83.00	78.44	74.70	70.55
SA309	SYL	20.40	.....	.....	.....
310PC	AME	150.00	.....	.....	.....

Industrial & Special Purpose Tubes

Tube Type	Mfr.	1-4	5-18	19-49	50-99
ML-342A	RAY	1030.00	.....	.....	.....
ML-342AA	RAY	1300.00	.....	.....	.....
ML-356-5771	RAY	700.00	.....	.....	.....
ML-357B	RAY	390.00	.....	.....	.....
393A	GE	13.25	12.59	.....	.....
NL-393A	NE	13.25	12.59	.....	.....
400PC	AME	36.00	.....	.....	.....
407A	RCA	5.90	5.61	5.31	5.01
407A	SYL	5.90	5.61	5.31	5.01
408A	SYL	4.95	4.70	4.45	4.21
408A	RCA	4.95	4.70	4.45	4.21
GL-414	GE	294.00	.....	.....	.....
414	WES	280.00	.....	.....	.....
450TH	EIM	85.00	.....	.....	.....
450TL	EIM	85.00	.....	.....	.....
QKH456/7040	RAY	577.00	.....	.....	.....
PL466E	SYL	3.55	.....	.....	.....
481B	WES	10.90	10.30	9.81	9.27
EL-500/6GB5	AME	1.90	1.81	1.71	1.62
PL500/27GB5	AME	1.82	1.72	1.64	1.55
XL500/13GB5	AME	1.90	.....	.....	.....
501R	AME	283.00	.....	.....	.....
502A	WES	2.28	2.17	2.05	1.94
Z502S	AME	13.65	12.90	12.29	10.50
CK512AX	RAY	4.15	3.92	.....	.....
CK526AX	RAY	7.30	6.90	.....	.....
QKK531	RAY	68.00	.....	.....	.....
QKK532	RAY	68.00	.....	.....	.....
CK533AX	RAY	4.20	3.97	.....	.....
CK534AX	RAY	4.20	3.97	.....	.....
QKK549	RAY	68.00	.....	.....	.....
Z550M/8453	AME	14.50	13.70	13.05	12.00
575A	GE	21.00	19.85	18.90	.....
575A	EIM	20.15	19.04	.....	.....
NL-575A	NE	20.15	19.04	.....	.....
575A	RCA	21.00	19.85	18.90	.....
575A	WES	20.15	19.04	.....	.....
579B	RCA	20.50	19.48	18.45	.....
579B	SYL	20.50	19.48	18.45	.....
579B	WES	20.50	19.48	18.45	.....
CK587	RAY	14.60	13.80	.....	.....
592/3-200A3	EIM	55.00	51.98	.....	.....
NL-604	NE	11.80	11.15	.....	.....
604	RAY	11.80	11.15	.....	.....
604/7014	RCA	11.80	11.15	.....	.....
NL-604L	NE	13.00	12.29	.....	.....
NL-606	NE	23.50	22.21	.....	.....
NL-606L	NE	21.40	20.22	.....	.....
606/7016	WES	21.40	20.33	.....	.....
NL-615	NE	10.05	9.55	9.05	8.54
615/7018	RCA	10.05	9.55	9.05	8.54
615/7018	WES	10.05	9.55	9.05	8.54
616	RAY	11.90	.....	.....	.....
NL-616	NE	11.90	.....	.....	.....
NL-616L	NE	14.30	.....	.....	.....
NL-617	NE	15.00	.....	.....	.....
NL-619	NE	10.00	.....	.....	.....
NL-623	NE	13.35	12.68	12.02	11.34
624	WES	79.00	74.66	71.10	67.15
627	RCA	27.50	.....	.....	.....
627	WES	27.50	.....	.....	.....
629	RCA	18.25	17.34	.....	.....
629	WES	18.25	17.34	.....	.....
NL-632B	NE	33.00	31.35	29.70	28.05
632B	RCA	33.00	31.35	29.70	28.05
632B	WES	33.00	31.35	29.70	28.05
NL-635/7019	NE	13.00	12.35	.....	.....
635/7019	RCA	13.00	12.35	.....	.....
635/7019	WES	13.00	12.35	.....	.....
NL-635L/7020	NE	13.50	12.76	.....	.....
NL-635P/6930	NE	14.15	13.37	.....	.....
NL-649/5834	NE	12.40	11.72	.....	.....
NL-660	NE	13.00	12.29	.....	.....
NL-660L/7786	NE	13.50	12.76	.....	.....
NL-664L	NE	27.50	25.99	.....	.....
672A	GE	39.85	37.86	.....	.....
672A	RCA	39.85	37.86	.....	.....
672A	SYL	39.85	37.86	.....	.....
672A	WES	39.85	37.86	.....	.....
NL-673	NE	20.15	19.04	.....	.....
673	EIM	20.15	19.04	.....	.....
673	RCA	21.00	19.84	.....	.....
673	WES	20.15	19.14	.....	.....
676	RCA	63.80	.....	.....	.....
677	RCA	63.80	.....	.....	.....
NL-677	NE	63.80	.....	.....	.....
678	GE	49.50	46.78	44.55	42.10
NL-678	NE	49.50	46.78	44.55	42.10
678	WES	49.50	46.78	44.45	42.10
710/6011	GE	12.70	12.06	.....	.....
NL-710/6011	NE	12.70	12.06	11.43	.....
710/6011	RAY	12.70	12.06	11.43	.....
710/6011	RCA	12.00	11.34	10.80	.....
710/6011	SYL	12.00	11.34	10.80	.....
710L/7518	GE	14.00	13.33	12.78	.....
NL-710L/7518	NE	14.20	13.42	12.78	.....
710/7509A	WES	14.20	13.42	12.78	.....
NL-714	NE	10.00	9.50	.....	.....
714/7021	RCA	10.00	9.50	.....	.....
NL-716	NE	12.50	11.81	.....	.....
716/6855	RCA	12.50	11.81	.....	.....
NL-732	NE	120.00	.....	.....	.....
NL-734/5544	NE	22.50	21.26	20.25	19.13
NL-740/6856	NE	23.25	21.97	.....	.....
NL-740L/7022	NE	24.35	23.01	.....	.....
NL740P/6857	NE	24.35	23.01	.....	.....
750TL	EIM	224.00	.....	.....	.....
760/6858	GE	28.10	26.70	.....	.....
NL-760	NE	28.10	26.70	.....	.....
760	RAY	28.10	26.70	.....	.....
760/6858	RCA	28.10	26.70	.....	.....
NL-760P	NE	29.40	27.93	.....	.....
760P/6859	GE	29.40	27.93	.....	.....
NL-770L	NE	49.80	47.06	.....	.....
NL-770P	NE	54.35	51.36	.....	.....
ECCLL800/CHK8	RCA	6.50	.....	.....	.....
ECF801/6GJ7	AME	1.55	1.47	1.40	1.32
LCF801/5GJ7	AME	1.48	1.41	1.33	1.26
PCF801/8GJ7	AME	1.62	1.54	1.46	1.38
NL-803	NE	8.00	.....	.....	.....
Z803U/6779	AME	5.75	5.43	5.18	4.00
Z805U/7714	AME	7.50	7.09	6.75	5.45
807	AME	3.40	3.21	3.06	2.89
807	RCA	3.60	3.40	3.24	3.06
807	SYL	3.40	3.21	3.06	2.89
807	WES	2.95	2.79	2.65	2.51
810	RCA	28.60	27.03	.....	.....
811A	RCA	7.15	6.76	6.44	6.08
811A	GE	7.00	6.62	6.30	5.95
811A	WES	7.00	6.62	6.30	5.95
812A	GE	7.45	7.04	6.71	6.33
812A	RCA	7.60	7.18	6.84	6.46
813	RCA	24.25	23.15	22.05	.....
813	WES	24.30	23.09	21.37	.....
814	RCA	Recommended sub 828			
815	SYL	35.75	33.78	32.17	30.28
816	GE	3.60	3.40	3.24	3.06
816	RCA	3.90	3.69	3.51	3.32
816	SYL	3.60	3.40	3.24	3.06
816	WES	3.00	2.84	2.10	.....
827B	RCA	470.00	.....	.....	.....
828	RCA	34.50	32.60	31.05	29.32
829B	GE	19.85	18.75	17.87	16.67
829B	RCA	19.85	18.75	17.87	16.87
829B	WES	19.85	18.75	17.87	16.87
830B	RCA	21.45	20.27	19.30	.....
832A	RCA	16.65	15.74	14.99	14.15
832A	WES	16.65	15.74	14.99	14.15
833A	AME	65.00	61.43	58.50	55.25
833A	RCA	65.10	61.52	58.59	55.34
833A	WES	58.20	.....	.....	.....
836	RCA	12.65	12.02	11.38	10.75
837	RCA	13.95	13.18	12.56	11.86
NL840	NE	8.00	.....	.....	.....
845	RCA	28.40	26.84	25.56	24.14
849	AME	231.00	.....	.....	.....
857B	AME	240.00	.....	.....	.....
GL-857B	GE	207.00	.....	.....	.....
857B	RCA	265.00	.....	.....	.....
857B	WES	218.50	.....	.....	.....
860	RCA	64.35	60.82	54.70	57.92
866A	GE	3.25	3.07	2.93	2.76
866A	RCA	3.50	3.31	3.15	2.98
866A	SYL	3.25	3.07	2.93	2.76
866A	WES	3.10	2.92	2.79	.....
866AX	AME	3.90	3.71	3.51	.....
868	RCA	6.30	5.95	.....	.....
GL-869B	GE	123.50	.....	.....	.....
869B	EIM	138.00	.....	.....	.....
869BL	EIM	138.00	.....	.....	.....
869B	RCA	155.00	.....	.....	.....
NL-869B	NE	138.00	.....	.....	.....
NL869B	WES	138.00	.....	.....	.....
869BL	AME	155.00	.....	.....	.....
872A	GE	9.90	9.36	8.91	8.42
872A	RCA	10.85	10.31	9.77	9.22
872A	NE	9.90	9.36	8.91	8.42
872AX	AME	10.85	10.31	9.77	9.22
ML-880	RAY	595.00	.....	.....	.....
880	RCA	760.00	.....	.....	.....
884	GE	2.28	2.17	2.05	1.94
884	RCA	2.28	2.17	2.05	1.94
889A	RCA	290.00	.....	.....	.....
889RA	RCA	435.00	.....	.....	.....
889RA/5667	SYL	435.00	.....	.....	.....
ML-891	RAY	275.00	.....	.....	.....
ML-891R	RAY	430.00	.....	.....	.....
891R	RCA	490.00	.....	.....	.....
892	GE	345.00	.....	.....	.....
892	RCA	342.00	.....	.....	.....
892	WES	315.00	.....	.....	.....
ML-892	RAY	270.00	.....	.....	.....

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

Tube Type	Mfr.	1-4	5-18	19-49	50-99
892R	RCA	440.00	.....	.....	.....
EC900/6HA5	AME	1.93	1.82	1.74	1.64
LC900/3HA5	AME	1.93	1.83	1.74	1.64
PC900/4HA5	AME	1.48	1.41	1.33	1.26
Z900T/5823	AME	3.45	3.26	3.11	2.40
902A	RCA	21.45	20.27	19.30	18.23
QKK910	RAY	292.50	.....	.....	.....
917	RCA	9.30	8.79	8.37	7.91
918	RCA	6.30	5.95	.....	.....
919	RCA	9.65	9.12	8.69	8.20
920	RCA	10.75	10.16	9.68	.....
921	RCA	5.20	4.91	4.68	4.42
922	RCA	3.80	3.59	.....	.....
922	SYL	3.80	3.59	.....	.....
923	RCA	4.70	4.44	.....	.....
923	SYL	4.70	4.44	.....	.....
925	RCA	5.00	4.73	4.50	.....
926	RCA	5.20	4.91	4.68	.....
927	RCA	6.00	5.67	.....	.....
929	RCA	3.45	3.26	.....	.....
930	GE	3.80	3.61	3.42	3.23
930	RCA	4.95	4.68	4.46	2.21
931A	RCA	12.30	11.62	11.00	10.46
931A	WES	12.30	11.62	11.00	10.46
931-VA	RCA	12.95	12.24	.....	.....
934	RCA	5.75	5.43	5.18	4.89
935	RCA	14.20	13.47	12.78	.....
955	RCA	7.05	6.70	.....	.....
959	RCA	13.85	13.16	.....	.....
QKK965	RAY	292.00	.....	.....	.....
991	RCA	1.01	.95	.91	.....
1000T	EIM	172.00	.....	.....	.....
1000T	SYL	169.00	.....	.....	.....
XP1000	AME	86.00	.....	.....	.....
XP1002	AME	275.00	.....	.....	.....
XP1004	AME	350.00	.....	.....	.....
CK1005	RAY	1.35	1.28	1.22	1.15
CK1007	RAY	1.45	1.37	1.31	1.23
ZZ1000/8228	AME	2.90	2.68	2.44	2.15
NL-1009A	NE	155.00	.....	.....	.....
XP1010	AME	47.00	.....	.....	.....
XP1011	AME	103.00	.....	.....	.....
CK1005	RAY	1.35	1.28	1.22	1.15
CK1007	RAY	1.47	1.37	1.31	1.23
CK1020	RAY	12.45	11.77	.....	.....
XP1020	AME	585.00	.....	.....	.....
CK1021	RAY	12.45	11.77	.....	.....
NL-1022A	NE	116.00	.....	.....	.....
CK1026	RAY	4.80	4.54	.....	.....
XP1030	AME	107.00	.....	.....	.....
ZM1030	AME	9.95	9.40	8.96	8.00
XP1031	AME	147.00	.....	.....	.....
XP1032	AME	980.00	.....	.....	.....
ZM1032	AME	9.95	9.40	8.96	8.00
CK1034	RAY	9.15	8.65	8.24	7.78
CK1038	RAY	9.15	8.65	8.24	7.78
XP1040	AME	595.00	.....	.....	.....
CK1047	RAY	4.20	3.97	3.78	3.57
NL-1051A	NE	65.00	61.43	.....	.....
1051A	SYL	65.00	61.43	.....	.....
1052A	SYL	99.00	93.56	89.10	84.15
NL-1052A	NE	99.00	93.56	.....	.....
NL-1052AP	NE	99.00	93.56	.....	.....
NL-1053	NE		(Order NL-5553B)		
1061	SYL	65.00	61.43	.....	.....
CK1061	RAY		(Use CK5787A)		
NL-1061	NE	65.00	61.43	.....	.....
NL-1061P	NE	65.00	61.43	.....	.....
NL-1062	NE	99.00	93.56	.....	.....
NL-1062P	NE	99.00	93.56	.....	.....
NL-1063	NE	284.00	.....	.....	.....
NL-1081	NE	75.00	.....	.....	.....
NL-1081P	NE	76.20	.....	.....	.....
NL-1082	NE	107.00	.....	.....	.....
NL-1082P	NE	108.30	.....	.....	.....
NL-1091	NE	75.00	.....	.....	.....
NL-1091P	NE	76.20	.....	.....	.....
NL-1092	NE	107.00	.....	.....	.....
NL-1092P	NE	108.00	.....	.....	.....
XP1110	AME	90.00	.....	.....	.....
XP1111	AME	95.00	.....	.....	.....
XP1112	AME	95.00	.....	.....	.....
XP1113	AME	78.00	.....	.....	.....
R1131C	SYL	21.00	20.41	19.44	.....
CK1201	RAY	1.75	1.65	.....	.....
CK1202	RAY	1.75	1.65	.....	.....
CK1203	RAY	1.75	1.65	.....	.....
CK1204	RAY	1.75	1.65	.....	.....
CK1205	RAY	1.75	1.65	.....	.....
CK1206	RAY	1.75	1.65	.....	.....
CK1207	RAY	1.75	1.65	.....	.....
1219/5670	SYL	3.70	.....	.....	.....
1220/5654	SYL	3.05	.....	.....	.....
CK1221	RAY	1.50	1.35	.....	.....
CK1222	RAY	1.50	1.35	.....	.....
CK1223	RAY	1.50	1.35	.....	.....

Tube Type	Mfr.	1-4	5-18	19-49	50-99
CK1224	RAY	1.50	1.35	.....	.....
CK1225	RAY	1.50	1.35	.....	.....
CK1226	RAY	1.50	1.35	.....	.....
1236C	THE	13.00	12.50	10.40	9.10
CK1241	RAY	2.20	1.90	.....	.....
CK1242	RAY	2.20	1.90	.....	.....
CK1243	RAY	2.20	1.90	.....	.....
CK1244	RAY	2.20	1.90	.....	.....
CK1245	RAY	2.20	1.90	.....	.....
CK1246	RAY	2.20	1.90	.....	.....
CK1247	RAY	2.20	1.90	.....	.....
1252/6U8A	SYL	2.00	.....	.....	.....
1258	TUN	31.80	30.05	28.62	27.03
CK1261	RAY	2.20	1.90	.....	.....
CK1262	RAY	2.20	1.90	.....	.....
CK1263	RAY	2.20	1.90	.....	.....
CK1264	RAY	2.20	1.90	.....	.....
CK1265	RAY	2.20	1.90	.....	.....
CK1266	RAY	2.20	1.90	.....	.....
K1328	DUM	595.00	.....	.....	.....
ME1400	MULL	6.70	6.33	6.03	5.70
1500T	EIM	320.00	.....	.....	.....
1612	RCA	5.77	5.48	.....	.....
1613	RCA	3.30	3.12	2.97	2.81
1614	RCA	4.93	4.68	4.43	4.19
1616	RCA	15.10	14.27	.....	.....
1619	RCA	6.23	5.29	.....	.....
1620	RCA	7.55	7.17	6.80	6.42
1621	RCA	3.85	3.66	.....	.....
1622	RCA	5.35	5.08	4.82	4.55
1624	RCA	9.45	8.93	8.51	8.03
1625	RCA	5.50	5.20	4.95	4.68
1629	RCA	2.04	1.94	1.84	1.74
PL1810C	SYL	3.55	.....	.....	.....
PL1823P	SYL	5.85	.....	.....	.....
1946	RCA	15.00	14.18	13.50	12.75
1947	RCA	43.60	41.20	39.24	37.06
1949	RCA	22.05	20.81	19.85	18.74
CK2000	RAY	5.00	4.05	.....	.....
CK2003	RAY	4.60	3.85	.....	.....
CK2006	RAY	4.60	3.85	.....	.....
CK2008	RAY	11.60	9.60	.....	.....
CK2009	RAY	9.60	7.75	.....	.....
CK2010	RAY	23.15	17.55	.....	.....
CK2011	RAY	27.00	25.00	.....	.....
CK2014	RAY	30.00	26.40	.....	.....
CK2015	RAY	4.60	3.85	.....	.....
CK2016	RAY	4.60	3.85	.....	.....
CK2018	RAY	4.00	3.25	.....	.....
CK2019	RAY	4.60	3.85	.....	.....
CK2020	RAY	8.00	6.50	.....	.....
2020	RCA	85.00	80.33	76.50	72.25
CK2021	RAY	8.00	6.50	.....	.....
CK2028	RAY	6.00	5.25	.....	.....
CK2029	RAY	18.00	14.00	.....	.....
CK2030	RAY	24.50	20.00	.....	.....
CK2031	RAY	9.60	7.75	.....	.....
CK2032	RAY	18.00	14.00	.....	.....
CK2033	RAY	5.90	5.50	.....	.....
CK2034	RAY	8.00	6.50	.....	.....
CK2035	RAY	18.00	14.00	.....	.....
CK2036	RAY	8.00	6.50	.....	.....
CK2037	RAY	8.75	7.15	.....	.....
CK2042	RAY	7.90	7.50	.....	.....
CK2043	RAY	7.90	7.50	.....	.....
CK2046	RAY	9.60	7.75	.....	.....
2050	GE	2.37	2.25	2.13	2.01
2050	WES	2.37	2.25	.....	.....
2050	RCA	2.37	2.25	2.13	2.01
2050	SYL	2.37	2.25	2.13	2.01
2050A	GE	2.03	1.92	1.83	1.73
2050A/2050	RAY	2.21	2.06	1.91	1.76
2050A	RCA	2.03	1.92	1.83	1.73
2050W	RAY	7.50	7.09	6.75	6.38
CK2051	RAY	4.00	3.25	.....	.....
CK2052	RAY	4.00	3.25	.....	.....
CK2053	RAY	4.00	3.25	.....	.....
K2060	DUM	5300.00	.....	.....	.....
2060	RCA	47.20	44.60	42.48	41.72
2061	RCA	55.80	52.73	50.22	47.43
2062	RCA	54.35	51.36	48.92	46.20
2063	RCA	110.00	.....	.....	.....
2064	RCA	130.00	.....	.....	.....
2064B	RCA	125.00	.....	.....	.....
2065	RCA	155.00	.....	.....	.....
2067	RCA	155.00	.....	.....	.....
K2112	DUM	1260.00	.....	.....	.....
K2216	DUM	300.00	.....	.....	.....
K2224/7702	DUM	2520.00	.....	.....	.....
K2225	DUM	1295.00	.....	.....	.....
2399	TUN	14.30	13.51	12.87	12.16
*SQ2502	RCA	1.90	1.80	1.71	1.62
*SQ2503	RCA	1.35	1.28	1.21	1.15
*SQ2504	RCA		(Use 4448)		
*SQ2505	RCA		(Use 4403)		
*SQ2506	RCA		(Use 7163)		

Industrial & Special Purpose Tubes

Tube Type	Mfr.	1-4	5-18	19-49	50-99
*SQ2508	RCA	1.90	1.80	1.71	1.62
*SQ2516	RCA		(Use Sub SQ 2534)		
*SQ2519	RCA	1.65	1.56	1.48	1.40
*SQ2520	RCA	1.80	1.70	1.62	1.53
*SQ2521	RCA	1.80	1.70	1.62	1.53
*SQ2523	RCA	2.10	1.98	1.89	1.79
*SQ2524	RCA	2.10	1.98	1.89	1.79
*SQ2525	RCA	1.80	1.70	1.62	1.53
*SQ2526	RCA	1.80	1.70	1.62	1.53
*SQ2527	RCA	1.80	1.70	1.62	1.53
*SQ2528	RCA	1.70	1.61	1.53	1.45
**SQ2529	RCA	1.65	1.56	1.48	1.40
*SQ2534	RCA	1.65	1.56	.....	.....
ZB3200	AME	475.00	.....	.....	.....
NL-4031	NE	33.00	31.19	29.70	28.05
4037A	RCA	28.15	26.60	25.33	.....
4055	RCA	33.70	31.85	30.33	28.65
R4330	SYL	29.10	27.50	26.19	24.74
R4340	SYL	60.50	57.17	54.45	51.43
4401V1	RCA	1320.00	.....	.....	.....
4402	RCA	1.70	1.61	1.53	1.45
4403	RCA	1.25	1.18	1.13	1.06
4404	RCA	1.35	1.28	1.21	1.14
4409	RCA	5.35	5.06	4.81	4.55
4413	RCA	2.35	2.22	2.11	2.00
4415/S	RCA	1400.00	.....	.....	.....
4416/S	RCA	1400.00	.....	.....	.....
4423	RCA	2.05	1.94	1.84	1.74
4424	RCA		(Replaced by 4425)		
4425	RCA	2.05	1.94	1.84	1.74
4438	RCA	105.00	.....	.....	.....
4439	RCA	115.00	.....	.....	.....
4440	RCA	105.00	.....	.....	.....
4441	RCA	155.00	.....	.....	.....
4441A	RCA	320.00	.....	.....	.....
4448	RCA	1.35	1.28	1.21	1.15
4449A	RCA	1750.00	.....	.....	.....
4450	RCA	1.40	1.32	1.26	1.19
4451	RCA	1.40	1.32	1.26	1.19
4453	RCA	1.30	1.23	1.17	1.10
4459	RCA	490.00	.....	.....	.....
4460	RCA	205.00	.....	.....	.....
4461	RCA	260.00	.....	.....	.....
4463	RCA	310.00	.....	.....	.....
4464	RCA	340.00	.....	.....	.....
4465	RCA	420.00	.....	.....	.....
4471	RCA	17.25	16.31	15.52	14.66
4472	RCA	22.95	21.68	20.65	19.50
4473	RCA	97.25	91.90	82.66	81.52
4478	RCA	93.00	83.70	.....	.....
4486	RCA	1095.00	.....	.....	.....
4488	RCA	120.00	.....	.....	.....
4489	RCA	21.45	20.27	19.31	18.23
4492	RCA	1650.00	.....	.....	.....
4493	RCA	1055.00	.....	.....	.....
4494	RCA	1055.00	.....	.....	.....
4495	RCA	1055.00	.....	.....	.....
4499	RCA	29.35	27.74	26.42	24.95
4500	RCA	430.00	.....	.....	.....
4503	RCA	470.00	.....	.....	.....
4510	RCA	37.15	35.11	33.44	31.58
4513	RCA	1320.00	.....	.....	.....
4516	RCA	165.00	.....	.....	.....
4517	RCA	83.65	79.05	75.30	71.10
4518	RCA	100.00	94.50	90.00	85.00
4522	RCA	1025.00	.....	.....	.....
4523	RCA	125.00	.....	.....	.....
4524	RCA	145.00	.....	.....	.....
4525	RCA	205.00	.....	.....	.....
4526	RCA	750.00	.....	.....	.....
4536	RCA	2165.00	.....	.....	.....
4536V1	RCA	2350.00	.....	.....	.....
4600A	RCA	345.00	.....	.....	.....
4604	RCA	8.85	8.27	7.88	7.44
4614	RCA	310.00	.....	.....	.....
4615	RCA			(Use 8596)	
4620	RCA			(Use 857B)	
4621	RCA	130.00	.....	.....	.....
4632	RCA	1085.00	.....	.....	.....
NL-5030	RCA	10.50	.....	.....	.....
NL-5030	NE	10.50	.....	.....	.....
GL-5513	GE	620.00	.....	.....	.....
CK5517	RAY	4.20	3.97	.....	.....
GL-5518	GE	1400.00	.....	.....	.....
ML-5530	RAY	450.00	.....	.....	.....
ML-5531	RAY	795.00	.....	.....	.....
ML-5541	RAY	690.00	.....	.....	.....
5544	AME	44.40	41.96	39.96	37.74
GL-5544	GE	32.50	.....	.....	.....
5545	AME	48.75	46.06	43.87	41.44
GL-5549	GE	653.50	.....	.....	.....
GL-5550	GE	49.00	.....	.....	.....
NL-5550	NE	49.00	.....	.....	.....
5550	RCA	49.00	.....	.....	.....
5550/681	WES	49.00	.....	.....	.....
GL-5551A	GE	65.00	.....	.....	.....

Tube Type	Mfr.	1-4	5-18	19-49	50-99
5551A	RCA	65.00	.....	.....	.....
5551A/652	WES	65.00	.....	.....	.....
GL-5552	GE	99.00	.....	.....	.....
5552A	RCA	99.00	.....	.....	.....
5552A/651	WES	99.00	.....	.....	.....
GL-5553B	GE	245.00	.....	.....	.....
NL-5553B	NE	245.00	.....	.....	.....
5553B	SYL	245.00	.....	.....	.....
GL-5554	GE	215.00	.....	.....	.....
GL-5555	GE	316.00	.....	.....	.....
NL-5555	NE	316.00	.....	.....	.....
5555/653B	WES	348.50	.....	.....	.....
GL-5556	GE	54.25	.....	.....	.....
5556	RCA	54.25	.....	.....	.....
5557	GE	9.50	9.02	8.55	.....
5557	WES	8.50	9.02	8.55	.....
5557	RCA	9.50	9.02	8.55	.....
5557/FG17	AME	11.10	10.48	8.88	.....
NL-5557/FG17/715	NE	9.50	9.02	8.55	.....
5558	GE	17.50	16.63	.....	.....
5558	RCA	17.50	16.63	.....	.....
NL-5558/FG32	NE	17.50	16.54	.....	.....
5559	AME	23.00	21.73	.....	.....
5559	GE	23.00	21.73	.....	.....
5559	RCA	23.00	.....	.....	.....
NL-5559/FG57	NE	23.00	.....	.....	.....
5560	GE	33.00	31.25	29.70	.....
NL-5560 FG95	NE	33.00	31.25	29.70	.....
5560	RCA	33.00	31.25	29.70	.....
5560/FG95	SYL	33.00	31.25	29.70	.....
5561	RCA	59.00	.....	.....	.....
5563A	GE	51.25	.....	.....	.....
5563A	RCA	50.00	.....	.....	.....
NL-5563A	NE	50.00	.....	.....	.....
GL-5564	GE	935.00	.....	.....	.....
ML-5575/100	RAY	225.00	.....	.....	.....
5575/100/616	WES	225.00	.....	.....	.....
ML-5576/200	RAY	245.00	.....	.....	.....
5576/200	SYL	245.00	.....	.....	.....
5576/200	WES	245.00	.....	.....	.....
5581	RCA	4.85	4.58	4.37	4.12
5582	RCA	6.30	5.95	5.67	.....
5583	RCA	8.75	8.27	7.88	7.44
5586	AME	417.00	.....	.....	.....
ML-5604	RAY	570.00	.....	.....	.....
5604	WES	570.00	.....	.....	.....
5606A	DUM	322.00	.....	.....	.....
ML-5606	RAY	288.00	.....	.....	.....
5606	WES	288.00	.....	.....	.....
ML-5619	RAY	423.00	.....	.....	.....
GL-5630	GE	1940.00	.....	.....	.....
5632/C3J	GE	12.70	12.09	.....	.....
NL-5632/C3J	NE	12.70	12.09	.....	.....
5632/C3J	RCA	12.70	12.09	.....	.....
5632/C3J	SYL	12.70	12.09	.....	.....
5632/C3J	WES	12.70	12.09	.....	.....
5636	GE	6.10	5.76	5.49	5.19
5636	RCA	6.10	5.76	5.49	5.19
5636	SYL	6.10	5.76	5.49	5.19
CK5639A	RAY	5.25	4.96	4.72	4.46
5639	RCA	5.25	4.96	4.72	4.46
5639	SYL	5.25	4.96	4.72	4.46
5642	GE	3.53	.....	.....	.....
5642	RCA	3.53	.....	.....	.....
5643	TUN	6.37	6.02	5.73	5.41
CK5643	RAY	6.37	6.02	5.73	5.41
5651	AME	1.78	1.69	1.60	1.51
5651	GE	1.78	1.69	1.60	1.51
CK-5651	RAY	1.78	1.69	1.60	1.51
5651	RCA	1.78	1.69	1.60	1.51
5651A	RCA	1.78	1.69	1.60	1.51
5651	SYL	1.90	1.80	1.71	1.62
5651	WES	1.78	1.69	1.60	1.51
CK-5651WA	RAY	3.75	3.54	3.38	3.19
5651WA	RCA	6.60	6.24	5.94	5.61
5652	RCA	8.75	8.27	7.88	7.44
5653	RCA	5.45	5.15	.....	.....
5653	RAY	2.80	2.66	.....	.....
CK-5654	RAY	2.41	2.28	2.16	2.04
5654	RCA	2.41	2.28	2.16	2.04
GB5654	SYL	2.41	2.28	2.16	2.04
5654/6AK5W	AME	2.45	2.33	2.21	2.08
5654/6AK5W	GE	2.45	2.33	2.21	2.08
5654/6AK5W	RAY	2.45	2.33	2.21	2.08
5654/6AK5W	RCA	2.45	2.33	2.21	2.08
5654/6AK5W/6096	RCA	2.45	2.33	2.21	2.08
5654/6AK5W	WES	2.45	2.33	2.21	2.08
CK5656	RAY	16.56	15.65	.....	.....
5658	AME	595.00	.....	.....	.....
ML-5658	RAY	595.00	.....	.....	.....
5663	GE	2.10	2.00	1.89	1.79
5663	RCA	2.10	2.00	1.89	1.79
5665/C16J	GE	52.50	49.88	.....	.....
5665/C16J	RCA	52.50	49.88	.....	.....
5665/C16J	WES	52.50	49.88	.....	.....
NL-5665/C16J	NE	52.50	49.88	.....	.....

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

Industrial & Special Purpose Tubes

Tube Type	Mfr.	1-4	5-18	19-49	50-99
5666	AME	280.00	.....	.....	.....
ML-5666	RAY	280.00	.....	.....	.....
5667	AME	370.00	.....	.....	.....
ML-5667	RAY	370.00	.....	.....	.....
ML-5668	RAY	350.00	.....	.....	.....
5668	WES	350.00	.....	.....	.....
ML-5669	RAY	515.00	.....	.....	.....
5670	GE	2.45	2.33	2.21	2.08
CK5670	RAY	2.45	2.33	2.21	2.08
5670	SYL	2.45	2.33	2.21	2.08
CK5670WA	RAY	2.45	2.33	2.21	2.08
5670WA	RCA	2.45	2.33	2.21	2.08
5671	RCA	1825.00	.....	.....	.....
5672	RCA	2.27	2.16	.....	.....
5672	TUN	2.27	2.16	.....	.....
5672	RAY	2.27	2.16	.....	.....
CK5675	RAY	16.05	15.17	14.44	13.64
5675	RCA	8.95	8.50	8.05	7.60
CK567	RAY	3.05	2.90	.....	.....
5678	TUN	3.05	2.90	.....	.....
CK5678	RAY	2.27	2.11	.....	.....
5678	RCA	2.27	2.11	.....	.....
5678	TUN	2.27	2.11	.....	.....
ML-5681	RAY	2175.00	.....	.....	.....
ML-5682	RAY	2625.00	.....	.....	.....
NL-5684-NE	NE	16.70	15.78	15.03	.....
NL-5684/C3J/A	NE	13.10	12.46	11.80	.....
5684/C3JA	RCA	13.10	12.46	11.80	.....
NL-5684A-NE	NE	17.90	16.92	16.11	.....
5685/C6JA	RCA	29.00	27.41	26.10	24.65
5686	NE	3.37	3.20	3.03	2.86
CK5686	RAY	3.37	3.20	3.03	2.86
5686	RCA	3.37	3.20	3.03	2.86
5687	GE	4.00	3.80	3.60	3.40
CK5687	RAY	4.00	3.80	3.60	3.40
5687	RCA	4.05	3.85	3.65	3.45
5687	SYL	4.05	3.85	3.65	3.45
5687WA	GE	5.70	5.42	5.14	4.85
CK5687WA	RAY	5.70	5.42	5.14	4.85
5691	GE	8.75	8.27	7.87	7.43
5691	RCA	8.75	8.27	7.87	7.43
5691	WES	8.75	8.27	7.87	7.43
5692	RCA	8.25	7.80	7.43	7.01
5692	GE	8.25	7.80	7.43	7.01
5692	SYL	8.25	7.80	7.43	7.01
5692	WES	8.25	7.80	7.43	7.01
5693	GE	6.60	6.24	5.94	5.61
5693	RCA	6.60	6.24	5.94	5.61
5693	WES	6.60	6.24	5.94	5.61
5696A	GE	1.95	1.84	1.75	1.66
5696	RCA	1.95	1.84	1.75	1.66
5696	SYL	1.95	1.84	1.75	1.66
CK5702	RAY	4.20	3.99	.....	.....
CK5702WA	RAY	6.48	6.15	.....	.....
CK5702WB	RAY	9.55	9.02	.....	.....
CK5703	RAY	3.05	2.88	.....	.....
CK5703WA	RAY	7.07	6.71	.....	.....
5703WA	TUN	7.07	6.71	.....	.....
CK5703WB	RAY	8.79	8.31	.....	.....
CK5704	RAY	5.10	4.82	4.59	4.34
CK5704WA	RAY	8.05	7.61	7.25	6.84
5713	RCA	620.00	.....	.....	.....
5718	RCA	3.65	3.47	.....	.....
5718	SYL	3.65	3.47	.....	.....
5719	GE	3.15	2.98	2.83	2.68
5719	RCA	3.15	2.98	2.83	2.68
5719	SYL	3.15	2.98	2.83	2.68
GL-5720/FG-33	GE	34.75	32.84	31.27	29.54
RK5721	RAY	116.00	.....	.....	.....
5722	SYL	8.35	7.89	7.52	7.10
GB5725	SYL	3.15	2.98	2.83	2.68
5725/6AS6W	RCA	3.12	2.95	2.81	2.65
5725/6AS6W	GE	3.12	2.95	2.81	2.65
CK5725/6AS6W	RAY	3.15	2.98	2.83	2.68
5726	RCA	1.55	1.47	1.40	1.32
5726	SYL	1.55	1.47	1.40	1.32
5726/6AL5W	AME	1.70	.....	.....	.....
5726/6AL5W	GE	1.55	1.47	1.40	1.32
CK5726/6AL5W	RAY	1.55	1.47	1.40	1.32
5726/6AL5W	RCA	1.55	1.47	1.40	1.32
5726/6AL5W/6097	RCA	1.55	1.47	1.40	1.32
5726/6AL5W	WES	1.55	1.47	1.40	1.32
5727	RCA	2.90	2.76	2.61	2.47
5727	AME	2.90	2.76	2.61	2.47
GB5727	SYL	2.90	2.76	2.61	2.47
5727/2D21W	AME	2.50	2.36	2.65	2.13
5727/2D21W	GE	2.90	2.76	2.61	2.47
5727/2D21W	RAY	2.90	2.76	2.61	2.47
5727/2D21W	RCA	2.90	2.76	2.61	2.47
5727/2D21W	SYL	2.90	2.76	2.61	2.47
5727/2D21W	WES	2.90	2.76	2.61	2.47
5734	RCA	22.05	20.95	19.83	.....
5736	DUM	199.50	.....	.....	.....
5736	GE	205.00	.....	.....	.....
5736	SYL	205.00	.....	.....	.....
5736	WES	190.00	.....	.....	.....

Tube Type	Mfr.	1-4	5-18	19-49	50-99
CK5744WA	RAY	7.05	.6.66	6.34	5.99
CK5744WB	RAY	8.96	8.47	8.06	7.62
5749/6BA6W	GE	2.20	2.09	1.98	1.87
5749	RCA	2.20	2.09	1.98	1.87
5749/6BA6W	RCA	2.20	2.09	1.98	1.87
5749	SYL	2.20	.....	.....	.....
5750	RCA	3.45	3.28	3.11	2.93
5750/6BE6W	GE	3.45	3.28	3.11	2.93
5750	SYL	3.45	.....	.....	.....
5751	GE	2.55	2.42	2.30	2.17
CK5751	RAY	2.55	2.42	2.30	2.17
5751	RCA	2.55	2.42	2.30	2.17
5751	SYL	2.55	2.42	2.30	2.17
CK5751	RAY	2.55	2.42	2.30	2.17
CK5751WA	RAY	2.55	2.42	2.30	2.17
5751WA	RCA	2.55	2.42	2.30	2.17
CK5755	RAY	9.30	8.79	.....	.....
5762/7C24	GE	240.00	.....	.....	.....
5762/7C24	RCA	240.00	.....	.....	.....
5763	RCA	2.45	2.32	2.20	2.08
5763	SYL	2.45	2.32	2.20	2.08
5770	RCA	1465.00	.....	.....	.....
GL-5779	GE	172.00	.....	.....	.....
CK5783	RAY	4.19	3.96	3.77	3.56
5783	RCA	4.19	3.96	3.77	3.56
CK5783WA	RAY	7.07	6.68	6.36	6.01
CK5784WA	RAY	9.13	8.63	8.22	7.76
CK5784WB	RAY	15.33	14.49	13.80	13.03
5786	RCA	265.00	.....	.....	.....
CK5787	RAY	5.00	4.73	4.50	4.25
CK5787A	RAY	5.45	5.15	4.90	4.63
CK5787WA	RAY	4.91	4.64	4.42	4.17
GL-5788	GE	545.00	.....	.....	.....
5796	SYL	17.25	16.30	15.52	14.66
5800/VX-41A	VIC	39.32	.....	.....	.....
5814A	GE	2.35	2.23	2.12	2.00
CK5814A	RAY	2.35	2.23	2.12	2.00
5814A	RCA	2.35	2.23	2.12	2.00
5814A	SYL	2.35	2.23	2.12	2.00
5814A	WES	2.35	2.23	2.12	2.00
CK5814WA	RAY	2.40	2.28	2.16	2.04
5814WA	RCA	2.40	2.28	2.16	2.04
5819	RCA	73.50	69.46	.....	.....
GL-5820A	GE	995.00	.....	.....	.....
5820A	RCA	995.00	.....	.....	.....
5820A/L	RCA	1800.00	.....	.....	.....
5820A/R	GE	995.00	.....	.....	.....
5822A	WES	116.00	.....	.....	.....
5823	RCA	1.72	1.63	1.55	1.46
5823	SYL	1.72	1.63	1.55	1.46
5823	WES	1.72	1.63	1.55	1.46
5824	GE	3.60	3.40	3.24	2.06
5824	WES	3.60	3.40	3.24	3.06
5825	RCA	26.45	25.00	23.81	22.48
CK5829	RAY	4.20	3.97	3.78	3.57
CK5829WA	RAY	7.48	7.07	6.73	6.36
GL-5830	GE	540.00	.....	.....	.....
5840	GE	5.35	5.08	4.82	4.55
CK5840	RAY	5.35	5.08	4.82	4.55
5840	RCA	5.35	5.08	4.82	4.55
5840	SYL	5.35	5.08	4.82	4.55
5841	VIC	10.01	.....	.....	.....
5842	AME	7.35	6.95	6.61	6.25
CK5842	RAY	7.35	6.95	6.61	6.25
AX5842	AME	8.70	8.22	7.83	7.39
5842/417A	RCA	7.35	6.95	6.61	6.25
CK5842WA	RAY	15.29	14.45	13.76	13.00
5844	GE	2.30	2.19	.....	.....
5844	RCA	2.30	2.19	.....	.....
5845	SYL	9.95	.....	.....	.....
CK5847	RAY	9.55	9.02	.....	.....
5847	AME	9.55	9.02	.....	.....
5847/404A	RCA	9.55	9.02	.....	.....
5855	GE	85.00	80.33	76.50	72.25
5855	SYL	85.00	80.33	76.50	72.25
5861/TD03	MULL	3.75	3.54	3.38	3.19
5866	AME	24.30	22.96	21.87	20.66
5867A	AME	35.25	.....	.....	.....
5867A	EIM	30.60	.....	.....	.....
5868	AME	65.65	.....	.....	.....
5869	AME	28.80	27.21	25.92	.....
5870	AME	105.00	.....	.....	.....
CK5876	RAY	10.25	9.69	9.22	8.71
5876A	RCA	7.30	6.90	6.57	6.21
WL-5877	WES	19.95	18.85	17.96	16.96
5879	GE	2.20	2.08	1.98	1.87
CK5879	RAY	1.95	1.85	1.76	.....
5879	SYL	1.95	1.85	1.76	.....
5881	GE	3.10	2.93	2.79	2.64
5881	SYL	3.10	2.93	2.79	2.64
WL-5881	WES	3.10	2.93	2.79	2.64
CK5886	RAY	5.00	4.75	.....	.....
5887/22994	WES	19.95	.....	.....	.....
CK5889	RAY	21.65	20.46	.....	.....
5893	RCA	20.75	19.61	18.67	17.64
5894	AME	25.00	23.63	22.50	21.25

Industrial & Special Purpose Tubes

Tube Type	Mfr.	1-4	5-18	19-49	50-99
5895	AME	13.70	12.95	12.33	11.65
5896	GE	3.80	3.59	3.42	3.23
5896	RCA	3.80	3.59	3.42	3.23
5899	GE	5.55	5.27	5.00	4.72
5899	RCA	5.55	5.27	5.00	4.72
5899	SYL	5.55	5.27	5.00	4.72
CK5902	RAY	4.80	4.56	4.32	4.08
5902	RCA	4.80	4.56	4.32	4.08
5902	SYL	4.80	4.56	4.32	4.08
CK5902WA	RAY	8.72	8.24	7.85	7.41
5904	SYL	7.90	7.47	7.11	6.72
5915	RCA	1.62	1.54	1.46	1.38
5920	AME	3.20	3.02	2.88	2.72
5923	AME	165.00	.....	.....	.....
5924A	AME	294.75	.....	.....	.....
5931	SYL	6.80	.....	.....	.....
5932	SYL	11.30	10.69	.....	.....
5933	SYL	12.35	11.73	.....	.....
5933WA	SYL	16.50	15.59	.....	.....
5946	RCA	125.00	.....	.....	.....
5963	GE	1.36	1.29	1.22	1.16
CK5963	RAY	1.36	1.29	1.22	1.16
5963	RCA	1.36	1.29	1.22	1.16
5963	SYL	1.36	1.29	1.22	1.16
5963	WES	1.36	1.29	1.22	1.16
5964	GE	1.55	1.47	1.40	1.32
5964	RCA	1.55	1.47	1.40	1.32
5965A	GE	1.92	1.82	1.73	1.63
5965	RCA	1.92	1.82	1.73	1.63
5965	SYL	1.92	1.82	1.73	1.63
5966	SYL	42.00	39.69	37.80	35.70
5966	WES	42.00	39.69	37.80	35.70
CK5971	RAY	7.30	6.90	6.57	6.21
RK5976	RAY	68.00	.....	.....	.....
NL-5992	NE	15.75	14.88	14.17	13.39
5998	TUN	12.95	13.24	11.65	11.01
6005	RCA	3.23	3.06	2.91	2.75
GB6005	SYL	3.23	3.06	2.91	2.75
6005/6AQ5W	GE	3.23	3.06	2.91	2.75
6005/6AQ5W	RCA	3.23	3.06	2.91	2.75
6005/6AQ5W/6095	RCA	3.23	3.06	2.91	2.75
6007	AME	1.72	1.63	1.55	1.46
6008	AME	2.50	.....	.....	.....
6012	GE	7.65	7.27	6.89	6.50
6012	RCA	7.65	7.27	6.89	6.50
6012	SYL	7.65	7.27	6.89	6.50
GL-6014/C1K	GE	11.80	11.15	10.62	10.03
NL-6014/5683/C1K	NE	11.80	11.15	10.62	10.03
6014/C1K	RAY	11.80	11.15	10.62	10.03
6014/C1K	RCA	11.80	11.15	10.62	10.03
6014/5683/C1K	WES	11.80	11.15	10.62	10.03
CK6021	RAY	3.50	3.33	3.15	2.98
6021	RCA	3.50	3.33	3.15	2.98
6021	SYL	3.50	3.33	3.15	2.98
CK6021WA	RAY	8.72	8.24	7.85	7.41
CK6029	RAY	7.30	6.90	6.57	6.20
6032A	RCA	170.00	.....	.....	.....
GL-6039	GE	2070.00	.....	.....	.....
6046	GE	1.55	1.46	1.39	1.32
CK6072	RAY	3.90	3.71	3.51	3.32
6072	RCA	3.90	3.71	3.51	3.32
6072A	GE	3.90	3.71	3.51	3.32
CK6072A	RAY	3.90	3.71	3.51	3.32
6073	RCA	3.00	2.85	.....	.....
6073/0A2	RCA	3.35	3.17	3.01	2.85
6074	RCA	3.45	3.28	3.11	.....
6074/0B2	RCA	3.70	3.50	3.33	3.15
6075	AME	250.00	.....	.....	.....
6076	AME	305.00	.....	.....	.....
6076	RCA	305.00	.....	.....	.....
6076/QY5/30000A	MULL	305.00	.....	.....	.....
6079	AME	70.00	.....	.....	.....
6080	GE	5.33	5.06	4.80	4.53
CK6080	RAY	5.33	5.06	4.80	4.53
6080	RCA	5.33	5.06	4.80	4.53
6080	SYL	5.33	5.06	4.80	4.53
CK6080WA	TUN	10.80	.....	.....	.....
6080	WES	5.33	5.06	4.80	4.53
CK6080WA	RAY	10.80	.....	.....	.....
6080WA	RCA	10.80	.....	.....	.....
6082	RCA	5.60	5.32	.....	.....
6083	AME	16.50	15.59	14.85	13.20
6084	AME	3.30	3.12	2.97	2.81
6085	AME	3.30	3.12	2.97	2.81
6087/5Y4WGTB	GE	5.75	5.46	5.17	4.89
CK6088	RAY	3.35	3.17	3.02	2.85
6098/6AR6WA	TUN	13.45	12.71	12.10	11.43
6101	RCA	5.35	5.08	.....	.....
6101/6J6WA	RCA	5.35	5.08	.....	.....
6101	SYL	5.35	.....	.....	.....
6111	GE	3.70	3.52	3.33	3.15
CK6111	RAY	3.70	3.52	3.33	3.15
6111A	RCA	3.70	3.52	3.33	3.15
6111	SYL	3.70	3.52	3.33	3.15
CK6111WA	RAY	8.72	8.24	7.83	7.41
6112	GE	4.15	3.94	3.74	3.53
CK6112	RAY	4.15	3.94	3.74	3.53
6112	RCA	4.15	3.94	3.74	3.53
6112	SYL	4.15	3.94	3.74	3.53
CK6112WA	RAY	6.24	5.90	5.62	5.30
6130/3C45	RCA	19.85	.....	.....	.....
6134	GE	5.70	5.39	5.13	4.85
6135	GE	2.40	2.27	2.16	2.04
6135	SYL	2.40	.....	.....	.....
6136	RCA	2.70	2.57	2.43	2.30
6136	GE	2.70	2.57	2.43	2.30
6136	SYL	2.70	2.57	2.43	2.30
6136/6AU6WB	GE	2.70	2.57	2.43	2.30
6146A	AME	4.35	4.13	3.92	3.70
6146A	GE	4.35	4.13	3.92	3.70
CK6146	RAY	4.35	4.13	3.92	3.70
6146A	RCA	4.35	4.13	3.92	3.70
CK6146B/8298A	RAY	5.20	4.94	4.68	4.42
CK6146A	RAY	4.35	4.13	3.92	3.70
6146A	SYL	4.35	4.13	3.92	3.70
6146A	WES	4.35	4.13	3.92	3.70
6146B	SYL	5.20	4.94	4.68	4.42
6146B	AME	5.20	4.94	4.68	4.42
6146B/8298A	WES	5.20	4.94	4.68	4.42
6146B/8298A	RCA	5.20	4.94	4.68	4.42
6146W/7212	RCA	6.75	6.41	6.08	5.74
6155	AME	37.50	35.44	.....	.....
6155	RCA	37.50	35.44	.....	.....
6156	AME	44.85	42.38	40.36	38.13
6156	RCA	42.60	40.26	38.34	36.21
6159	AME	4.80	4.56	4.32	4.08
6159	RCA	4.80	4.56	4.32	4.08
6159B	RCA	5.15	4.87	4.64	4.38
6159A	SYL	4.80	4.56	4.32	4.08
6159W/7357	RCA	9.15	8.65	8.24	7.78
6161	RCA	125.00	.....	.....	.....
6166	RCA	825.00	.....	.....	.....
6166A/7007	RCA	1020.00	.....	.....	.....
ML6166A/7007	RAY	1020.00	.....	.....	.....
6173	RCA	13.35	.....	.....	.....
CK6174	RAY	4.60	4.35	4.14	3.91
6181	RCA	1110.00	.....	.....	.....
6186	RCA	3.85	3.66	.....	.....
6186/6AG5WA	RCA	3.85	3.66	.....	.....
6186	SYL	3.85	3.66	.....	.....
6189	RCA	3.70	3.52	3.33	3.15
6189/12AU7WA	RAY	3.70	3.52	3.33	3.15
6189/12AU7WA	RCA	3.70	3.52	3.33	3.15
6189	SYL	3.70	3.52	3.33	3.15
6189/12AU7WA	WES	3.70	3.52	3.33	3.15
6197	RCA	2.30	2.19	2.07	1.96
6199	RCA	151.50	48.67	.....	.....
6201	AME	2.95	2.80	2.66	2.51
6201	RCA	2.95	2.80	2.66	2.51
6201	SYL	2.55	2.42	2.29	2.17
6201/12AT7WB	GE	2.55	2.42	2.29	2.17
CK6201/12AT7WA	RAY	2.95	2.80	2.66	2.51
6202	RCA	2.69	2.54	2.42	2.29
6202/6X4WA	GE	4.10	3.87	3.69	3.49
6203	GE	4.10	3.87	3.69	3.49
CK6205	RAY	5.35	5.06	4.81	4.55
6205	RCA	6.40	6.05	5.76	5.44
6205	SYL	5.90	5.58	5.31	5.02
6206	RCA	7.25	6.85	6.52	6.16
6211	AME	3.20	3.02	2.88	2.72
6211A	GE	2.15	2.04	1.94	1.83
6211	RCA	2.15	2.04	1.94	1.83
CK6213	RAY	5.67	5.36	5.10	4.82
6216	GE	4.00	3.78	3.60	3.40
6217	RCA	72.00	.....	.....	.....
6218	AME	8.65	8.17	7.78	7.35
6227	AME	3.05	2.88	2.74	2.59
GL-6228	GE	3696.00	.....	.....	.....
CK6247	RAY	11.20	10.58	10.08	9.52
CK6247WA	RAY	21.55	20.36	19.39	18.32
GL6251	GE	2790.00	.....	.....	.....
6252	AME	25.00	23.20	21.60	.....
ML-6256	RAY	335.00	.....	.....	.....
ML-6257	RAY	345.00	.....	.....	.....
6257	SYL	330.00	.....	.....	.....
ML-6258	RAY	385.00	.....	.....	.....
6263A	RCA	13.05	12.33	11.74	11.09
6264A	RCA	13.85	13.09	12.46	11.77
CK6265	RAY	4.10	3.87	3.69	3.49
6268	AME	41.00	38.74	.....	.....
6279	AME	47.55	44.93	42.79	.....
6291	DUM	63.00	59.54	.....	.....
6292	DUM	63.00	59.54	.....	.....
6293	RCA	5.95	5.65	5.36	5.06
6299	GE	56.00	.....	.....	.....
6326	RCA	515.00	.....	.....	.....
6328	RCA	13.65	12.90	12.28	11.60
CK6336A	RAY	19.04	18.08	17.14	16.18
6336A	RCA	19.04	18.08	17.14	16.18
6339	AME	33.75	31.89	30.37	28.69
6342A	RCA	62.20	.....	.....	.....
6350	RCA	1.85	1.76	1.67	1.57

Tube Type	Mfr.	1-4	5-18	19-49	50-99
6350	SYL	1.85	1.76	1.67	1.57
6360	RCA	4.95	4.68	4.45	.....
6360A	AME	4.95	4.68	4.45	.....
6362	DUM	133.00	.....	.....	.....
6363	DUM	122.50	115.76	.....	.....
6364	DUM	161.00	152.15	.....	.....
6365	DUM	64.40	60.86	57.96	.....
6366	DUM	175.00	.....	.....	.....
6370	AME	16.50	15.59	14.85	14.03
6375	AME	8.40	7.94	7.56	7.14
6381	RCA	(Prices On Request Only)			
6386	GE	7.38	7.01	6.64	6.27
6386	RCA	7.38	7.01	6.64	6.27
6397	GE	8.30	7.84	7.47	7.06
CK6397	RAY	8.30	7.84	7.47	7.06
6405/1640	RCA	9.15	8.65	8.24	7.78
CK6414	RAY	3.65	3.45	3.28	3.10
6417	RCA	3.33	3.16	.....	.....
CK6418	RAY	3.20	3.02	2.88	2.72
CK6419	RAY	7.30	6.90	6.57	6.21
ML-6420	RAY	445.00	.....	.....	.....
ML-6421	RAY	525.00	.....	.....	.....
ML-6421F	RAY	545.00	.....	.....	.....
ML-6422	RAY	450.00	.....	.....	.....
ML-6423	RAY	525.00	.....	.....	.....
ML-6423F	RAY	545.00	.....	.....	.....
ML-6424	RAY	518.00	.....	.....	.....
6425F	SYL	675.00	.....	.....	.....
ML-6426	RAY	720.00	.....	.....	.....
CK6438	RAY	9.15	8.65	8.24	7.78
6442	GE	30.00	.....	.....	.....
ML-6442	RAY	39.00	.....	.....	.....
6448	RCA	5675.00	.....	.....	.....
6463	AME	3.50	3.33	3.15	2.97
6463	GE	1.90	1.81	1.71	1.62
6467	DUM	63.00	59.54	.....	.....
6472	RCA	14.75	13.94	13.28	12.54
CK6476	RAY	13.37	.....	.....	.....
6476A	SYL	14.95	.....	.....	.....
6485	GE	2.05	.....	.....	.....
CK6485	RAY	2.05	.....	.....	.....
6499	RCA	360.00	.....	.....	.....
6508	AME	100.50	75.60	72.00	68.00
GL-6512	GE	310.00	.....	.....	.....
GL-6513	GE	420.00	.....	.....	.....
GL-6514	GE	575.00	.....	.....	.....
GL-6515	GE	1060.00	.....	.....	.....
CK6519	RAY	7.30	6.90	6.57	6.21
6521/R	RCA	690.00	.....	.....	.....
6524	RCA	24.45	23.11	22.01	20.78
CK6528	RAY	21.55	20.47	19.40	18.32
6528	TUN	21.55	20.47	19.40	18.32
CK6533	RAY	13.25	12.52	11.92	11.26
6544	DUM	910.00	.....	.....	.....
PL-6549	RAY	39.00	36.86	.....	.....
CK6550	RAY	4.95	4.68	4.45	4.21
6550	RCA	4.58	4.36	4.13	3.90
6550	SYL	4.95	4.65	4.45	4.21
6550	TUN	4.95	.....	4.45	4.21
6550MP	TUN	9.25	8.74	8.32	7.86
6550V1	RCA	9.25	8.74	8.32	7.86
6562/5794A	RCA	Price on request only			
P16569	PEN	43.00	40.64	.....	.....
6570	RCA	10.75	10.16	9.68	.....
ML-6576	RAY	900.00	.....	.....	.....
PL-6580	RAY	53.00	50.09	.....	.....
6617	AME	470.00	.....	.....	.....
6618	AME	710.00	.....	.....	.....
CK6626/OA2WA	RAY	3.35	3.16	3.01	2.85
6626/OA2WA	RCA	3.35	3.16	3.01	2.85
CK6627/OB2WA	RAY	2.35	2.22	2.11	2.00
6655A	RCA	59.35	56.09	.....	.....
6660	GE	1.01	.95	.91	.86
CK6660/6BA6	RAY	1.01	.95	.85	.86
6660/6BA6	RCA	1.01	.95	.85	.86
6660/6BA6	WES	1.01	.95	.85	.86
6661	GE	1.34	1.27	1.21	1.14
CK6661/6BH6	RAY	1.34	1.27	1.21	1.14
6661/6BH6	RCA	1.34	1.27	1.21	1.14
6661/6BH6	SYL	1.34	1.27	1.21	1.14
6661/6BH6	WES	1.34	1.27	1.21	1.14
6662	GE	1.29	1.22	1.16	1.10
CK6662/6BJ6	RAY	1.29	1.22	1.16	1.10
6662/6BJ6	RCA	1.29	1.22	1.16	1.10
6662/6BJ6	WES	1.29	1.22	1.16	1.10
6663	GE	.92	.87	.....	.....
CK6663/6AL5	RAY	.92	.87	.....	.....
6663/6AL5	RCA	.92	.87	.....	.....
6663/6AL5	WES	.92	.87	.....	.....
6664	GE	1.12	1.06	1.01	.95
6664/6AB4	RCA	1.12	1.06	1.01	.95
6664/6AB4	WES	1.12	1.06	1.01	.95
6669	GE	1.06	1.00	.95	.90
CK6669/6AQ5	RAY	1.06	1.00	.95	.90
6669/6AQ5A	RCA	1.06	1.00	.95	.90
6669/6AQ5A	SYL	1.06	1.00	.95	.90
6669/6AQ5	WES	1.06	1.00	.95	.90
6676	GE	1.06	1.00	.95	.90
6676/6CB6A	RCA	1.06	1.00	.95	.90
6676/6CB6A	WES	1.06	1.00	.95	.90
6677	GE	1.85	1.76	1.67	1.57
CK6677/6CL6	RAY	1.85	1.76	1.67	1.57
6677/6CL6	RCA	1.85	1.76	1.67	1.57
6677/6CL6	SYL	1.85	1.76	1.67	1.57
6676/6CL6	WES	1.85	1.76	1.67	1.57
6678	GE	1.62	1.54	1.46	1.38
CK6678/6U8A	RAY	1.62	1.54	1.46	1.38
6678/6U8A	RCA	1.62	1.54	1.46	1.38
6678/6U8A	SYL	1.62	1.54	1.46	1.38
6678/6U8A	WES	1.62	1.54	1.46	1.38
6679	GE	1.50	1.43	1.35	1.28
CK6679/12AT7	RAY	1.50	1.43	1.35	1.28
6679/12AT7	RCA	1.50	1.43	1.35	1.28
6679/12AT7	SYL	1.50	1.43	1.35	1.28
6679/12AT7	WES	1.50	1.43	1.35	1.28
6680	GE	1.22	1.16	1.10	1.04
CK6680/12AU7	RAY	1.22	1.16	1.10	1.04
6680/12AU7	RCA	1.22	1.16	1.10	1.04
6680/12AU7	SYL	1.22	1.16	1.10	1.04
6680/12AU7	WES	1.22	1.16	1.10	1.04
6681	GE	1.26	1.19	1.13	1.07
CK6681/12AX7	RAY	1.26	1.19	1.13	1.07
6681/12AX7	SYL	1.26	1.19	1.13	1.07
6681/12AX7	WES	1.26	1.19	1.13	1.07
6686	AME	4.10	3.87	3.69	3.49
6687	AME	2.79	.....	.....	.....
6688	AME	6.80	6.43	6.12	5.78
6688/E180F	MULL	6.80	6.43	6.12	5.78
CK6688	RAY	8.75	8.27	7.87	7.44
6688A	AME	6.80	6.43	6.12	5.78
6688A	RCA	6.80	6.43	6.12	5.78
CK6688A	RAY	8.75	8.27	7.87	7.44
6689	AME	3.85	3.64	3.46	3.27
6693	AME	27.90	26.37	25.11	.....
6696A	EIM	1105.00	.....	.....	.....
ML-6696	RAY	1090.00	.....	.....	.....
ML-6696A	RAY	1105.00	.....	.....	.....
ML-6697	RAY	1320.00	.....	.....	.....
ML-6697A	RAY	1320.00	.....	.....	.....
6756	AME	600.00	.....	.....	.....
6759	AME	315.00	.....	.....	.....
CK6763	RAY	4.20	3.97	3.78	3.57
6771	GE	71.90	.....	.....	.....
ML-6771	RAY	71.90	67.95	64.71	61.12
PL-6775	PEN	51.00	48.20	.....	.....
CK6792	RAY	13.50	12.76	12.15	11.48
6786	AME	230.00	.....	.....	.....
CK6802	RAY	11.43	.....	.....	.....
6802	SYL	11.43	.....	.....	.....
6806	RCA	6975.00	.....	.....	.....
6807	GE	32.35	.....	.....	.....
6808	GE	32.90	.....	.....	.....
6808	GE	35.50	33.55	31.95	30.18
6810A	RCA	195.00	.....	.....	.....
6814	RCA	5.90	5.58	5.31	5.02
6816	RCA	52.90	.....	.....	.....
6829	GE	6.10	5.76	5.49	5.19
CK6829	RAY	6.10	5.76	5.49	5.19
6842	NU	14.30	13.51	12.87	12.16
NL-6844A	NE	11.00	10.40	9.90	9.35
6850	RCA	22.10	20.88	19.89	18.78
6861	RCA	955.00	.....	.....	.....
GL-6878	GE	3200.00	.....	.....	.....
6879	SYL	13.37	12.63	12.03	11.36
6883	AME	4.30	4.09	3.87	3.66
CK6883	RAY	4.30	4.09	3.87	3.66
6883	RCA	4.30	4.09	3.87	3.66
6883B/8032A/8552	RCA	4.30	4.09	3.87	3.66
6884	RCA	40.00	.....	.....	.....
6887	RCA	1.40	1.32	1.26	1.19
6893	RCA	NEAREST TYPE 2E26 OR 6883B/8032A/8552			
6893	WES	4.50	4.25	4.05	3.83
6894	EIM	25.00	23.63	.....	.....
NL-6894	NE	25.00	23.63	.....	.....
6894	RCA	25.70	24.29	23.13	21.85
6895	EIM	25.00	23.63	22.50	21.25
NL-6895	NE	25.00	.....	.....	.....
6895	RCA	25.70	24.29	23.13	21.85
6897	GE	32.15	29.54	.....	.....
6897	RCA	32.15	29.54	.....	.....
6935	DUM	140.00	.....	.....	.....
6903	RCA	370.00	.....	.....	.....
6907	AME	25.00	23.63	22.50	21.25
6909	RAY	11.43	.....	.....	.....
6909	SYL	11.43	.....	.....	.....
CK6910	RAY	13.37	.....	.....	.....
6910	SYL	13.37	.....	.....	.....
6911	DUM	145.00	.....	.....	.....
6914	RCA	(Price On Request Only)			
6914A	RCA	(Price On Request Only)			
6922	AME	4.87	4.60	4.38	4.14

Industrial & Special Purpose Tubes

Tube Type	Mfr.	1-4	5-18	19-49	50-99
6922	RAY	4.87	4.60	4.38	4.14
6922	RCA	4.87	4.60	4.38	4.14
6922	SYL	4.87	4.60	4.38	4.14
6923	AME	11.00	.....	.....	.....
6935	DUM	140.00	.....	.....	.....
6939	AME	12.00	11.34	10.80	10.20
CK6939	RAY	12.00	11.34	10.80	10.20
6942	GE	960.00	.....	.....	.....
6953	RCA	7.80	7.37	7.02	.....
6960	AME	186.00	.....	.....	.....
6961	AME	210.00	.....	.....	.....
6977	AME	2.48	.....	.....	.....
6977	SYL	2.48	.....	.....	.....
6979	AME	42.50	40.16	38.25	36.13
NL-6989-NE	NE	33.90	32.21	.....	.....
NL-6989/C6J/KL	NE	29.45	27.98	.....	.....
7007/6166A	GE	1020.00	.....	.....	.....
ML-7007	RAY	1020.00	.....	.....	.....
7007/6166A	RCA	1005.00	.....	.....	.....
NL-7009	NE	19.00	17.97	17.10	16.15
7016	WES	21.40	19.85	18.30	16.77
7018	WES	10.05	9.01	7.97	6.93
7019	WES	13.00	12.00	11.00	10.01
7025	MUL	1.40	1.32	1.26	1.19
7025	10M	2.35	2.22	2.11	2.00
7033	DUM	1295.00	.....	.....	.....
7034/4X150A	EIM	25.00	23.63	22.50	21.25
7035/4X150D	EIM	27.90	26.37	25.11	24.32
7038	GE	170.00	.....	.....	.....
7038	RCA	175.00	.....	.....	.....
7038	SYL	175.00	.....	.....	.....
7043	RCA	6.75	6.38	6.08	.....
CK7044	RAY	3.18	3.01	2.86	2.70
7044	RCA	2.70	2.55	2.43	2.30
7044	SYL	2.70	2.55	2.43	2.30
7046	RCA	570.00	.....	.....	.....
7054	RCA	1.54	1.46	1.39	1.30
7055	RCA	1.00	.95	.....	.....
7056	RCA	.92	.87	.83	.78
7057	RCA	1.95	1.84	1.75	1.66
7058	RCA	1.26	1.19	1.13	1.07
7059	RCA	1.48	1.41	1.33	1.26
7060	RCA	1.75	1.66	1.58	1.49
7061	RCA	1.29	1.23	1.16	1.09
7062	AME	2.39	2.26	2.15	2.03
7062/E180CC	MULL	2.39	2.26	2.15	2.03
7077	GE	39.05	.....	.....	.....
7090	AME	225.00	.....	.....	.....
7091	AME	425.00	.....	.....	.....
7092	AME	125.00	.....	.....	.....
NL-7094	NE	30.00	.....	.....	.....
7094	RCA	35.45	33.50	31.91	30.13
7102	RCA	115.00	.....	.....	.....
7117	RCA	12.65	.....	.....	.....
7119	AME	2.95	2.48	2.30	2.03
7136	AME	27.90	26.37	25.11	.....
GL-7151	GE	750.00	.....	.....	.....
NL-7153	NE	14.50	13.70	13.05	12.33
7155	SYL	13.37	13.63	12.03	11.36
7163	RCA				
7163V1	RCA	Listed in Semi-Conductor			
7163V2	RCA				
7167	GE	1.41	1.33	1.27	1.20
7167	RCA	1.41	1.33	1.27	1.20
7167	SYL	1.45	1.37	1.31	1.23
GL-7171	NE	60.00	56.70	54.00	51.00
NL-7171	NE	81.50	77.02	73.35	69.28
7183	RCA	1025.00	.....	.....	.....
7189	AME	1.38	1.28	1.21	1.15
7189MP	MUL	3.47	3.28	3.12	2.95
7198A	GE	1625.00	.....	.....	.....
7200	RCA	190.00	.....	.....	.....
7203/4CX250B	EIM	35.60	33.64	32.04	30.26
7203/4CX250B	RCA	35.60	33.64	32.04	30.26
7204/4CX250B	EIM	39.35	.....	.....	.....
7204/4CX250F	RCA	39.35	.....	.....	.....
7211	EIM	75.00	70.88	67.50	63.75
7213	RCA	410.00	.....	.....	.....
7214	RCA	440.00	.....	.....	.....
7226	GE	315.00	.....	.....	.....
7233	GE	2.40	2.27	2.16	2.04
7234	NU	15.65	15.35	.....	.....
7235	NU	10.00	9.80	9.65	.....
7237	AME	200.00	.....	.....	.....
7239	GE	7.25	6.85	6.53	6.16
CK7246	RAY	7.64	7.22	6.88	6.49
7247	IUM	2.55	2.41	2.29	2.17
7247	MUL	1.68	1.51	1.44	1.36
7255	WES	210.00	.....	.....	.....
7258	SYL	2.75	2.60	2.48	2.34
7262A	RCA	215.00	.....	.....	.....
7262A	GE	215.00	.....	.....	.....
7263A	GE	370.00	.....	.....	.....
7263A	RCA	370.00	.....	.....	.....
7264	RCA	265.00	.....	.....	.....
7265	RCA	375.00	.....	.....	.....

Tube Type	Mfr.	1-4	5-18	19-49	50-99
7266	GE	35.44	.....	.....	.....
7268A	DUM	1610.00	.....	.....	.....
7271	RCA	34.00	32.13	30.60	28.90
7289	GE	30.75	29.06	27.67	26.14
7289/3CX100A5	EIM	30.75	29.06	27.67	26.14
ML-7289	RAY	30.75	29.06	27.67	26.14
7292	AME	425.00	.....	.....	.....
7293A	RCA	1150.00	.....	.....	.....
7293	GE	1050.00	.....	.....	.....
7293A/R	GE	1050.00	.....	.....	.....
7295	GE	1440.00	.....	.....	.....
7295B	RCA	1440.00	.....	.....	.....
7295C	RCA	1975.00	.....	.....	.....
7296	GE	49.61	47.13	.....	.....
7296B	GE	1440.00	.....	.....	.....
7306A/5684/C3JA	WES	13.10	12.38	11.79	11.14
7307A/6011/710	WES	12.70	12.00	11.43	10.80
7308	AME	5.20	4.91	4.33	3.83
7308	RCA	5.20	4.91	4.68	4.42
7315	DUM	994.00	.....	.....	.....
7315	RCA	1320.00	.....	.....	.....
7316	AME	1.40	1.32	.....	.....
7325	GE	170.00	.....	.....	.....
7325	SYL	185.00	.....	.....	.....
7326	RCA	410.00	.....	.....	.....
GB7327	SYL	12.45	.....	.....	.....
7360	RCA	3.77	3.58	3.39	.....
7377	AME	19.60	18.52	17.64	16.66
7378	AME	49.50	46.78	44.56	42.08
7389B	RCA	1440.00	.....	.....	.....
7389B/L	RCA	1975.00	.....	.....	.....
7391	GE	67.00	63.32	60.30	56.95
7404	RCA	Refer to Manual			
7412	RCA	12.10	1.98	1.89	1.79
7448	DUM	1106.00	.....	.....	.....
7457	RCA	65.25	61.66	58.72	55.46
7459	AME	271.50	.....	.....	.....
7462	GE	39.05	36.90	35.14	33.19
7467	RCA	(Replaced by SQ2516)			
ML-7479A	RAY	920.00	.....	.....	.....
ML-7480	RAY	1590.00	.....	.....	.....
ML-7482	RAY	4455.00	.....	.....	.....
7486	GE	39.05	36.90	35.14	33.19
7509A/7101	WES	14.20	13.41	.....	.....
7513	RCA	1320.00	.....	.....	.....
7513/S	RCA	1400.00	.....	.....	.....
7513/S-4513/S	RCA	1400.00	.....	.....	.....
7513/V1	RCA	1400.00	.....	.....	.....
7527	AME	47.25	44.65	40.18	35.72
7534	AME	17.50	16.54	15.76	.....
GB7550	SYL	13.25	.....	.....	.....
7551	RCA	3.37	3.20	3.03	.....
7552	RCA	47.65	45.03	42.88	40.50
7553	RCA	57.00	53.86	51.30	48.45
7554	RCA	40.00	38.50	.....	.....
NL-7556A-NE	NE	19.60	18.52	17.64	16.66
7558	RCA	3.49	3.32	3.14	2.97
ML-7560	RAY	4455.00	.....	.....	.....
7580	AME	40.75	38.51	36.67	34.64
7580	RCA	24.30	22.96	21.87	.....
7586	RCA	3.35	3.18	3.02	2.85
7587	RCA	5.20	4.94	4.68	4.42
7588	GE	101.59	.....	.....	.....
7609	AME	137.50	.....	.....	.....
7609	RCA	27.90	.....	.....	.....
7625	GE	39.05	36.90	35.14	33.19
7629	GE	1700.00	.....	.....	.....
7629A	RCA	1700.00	.....	.....	.....
7629A/R	GE	1700.00	.....	.....	.....
7643	AME	4.95	4.68	4.45	4.21
7644	GE	65.00	.....	.....	.....
7645	AME	12.00	11.34	10.80	10.20
7649	RCA	70.00	66.15	63.00	59.50
7650	RCA	240.00	.....	.....	.....
7651	RCA	260.00	.....	.....	.....
7664	DUM	280.00	.....	.....	.....
GL-7669	GE	65.00	61.43	58.50	55.25
7669	WES	65.00	61.43	58.50	55.25
GL-7670	GE	77.20	72.95	69.48	65.62
GL-7671	GE	99.00	93.56	.....	.....
7671	WES	99.00	93.56	.....	.....
GL-7673	GE	245.00	.....	.....	.....
NL-7673	NE	245.00	.....	.....	.....
NL-7673P	NE	245.00	.....	.....	.....
GL-7681	GE	155.00	.....	.....	.....
7693	AME	3.75	3.54	3.37	3.19
7694	AME	3.75	3.54	3.37	3.19
7697	GE	170.00	.....	.....	.....
7698	EIM	75.00	70.88	67.50	63.75
ML-7698	RAY	88.50	83.63	79.65	75.23
7699	AME	13.50	12.76	12.15	11.48
GL-7703	GE	170.00	.....	.....	.....
7703	WES	190.00	.....	.....	.....
7717/6CY5	RCA	1.39	1.31	1.25	1.18
7720	GE	39.05	36.90	35.14	33.19
NL-7723-NE	NE	13.10	12.38	11.79	11.14

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

Industrial & Special Purpose Tubes

Tube Type	Mfr.	1-4	5-18	19-49	50-99
NL-7723/610	NE	11.40	10.77	10.26	9.69
7725	GE	13.50	12.76	12.15	11.48
7735A	GE	165.00	.....	.....	.....
7735A	SYL	170.00	.....	.....	.....
7735B	GE	170.00	.....	.....	.....
7735B	RCA	170.00	.....	.....	.....
7737	AME	7.20	.....	.....	.....
7746	RCA	200.00	.....	.....	.....
7753	AME	152.00	.....	.....	.....
7764	RCA	125.00	.....	.....	.....
7767	RCA	125.00	.....	.....	.....
7768	GE	111.04	.....	.....	.....
7784	GE	65.00	.....	.....	.....
NL-7786-NE	NE	15.50	14.65	13.95	13.18
7788	AME	9.75	9.21	8.77	8.29
7800	AME	760.00	.....	.....	.....
7804	AME	400.00	.....	.....	.....
7805	AME	375.00	.....	.....	.....
7806	AME	780.00	.....	.....	.....
7807	AME	640.00	.....	.....	.....
7815	GE	30.75	29.06	27.67	26.14
7815/3CPN10A5	EIM	30.75	29.06	27.67	26.14
ML-7815	RAY	30.75	29.06	27.67	26.14
7841	GE	35.44	33.49	31.90	30.12
7842	RCA	65.25	61.68	58.72	55.46
7843	RCA	34.35	32.46	30.92	29.20
7844	RCA	52.00	49.14	46.80	44.20
7850	RCA	240.00	.....	.....	.....
7854	AME	29.25	27.64	.....	.....
ML-7855	RAY	60.00	56.70	54.00	51.00
7868	DUM	135.00	.....	.....	.....
Z7866	GE	1975.00	.....	.....	.....
7867	TUN	2.95	2.79	2.66	2.51
7870	RCA	120.00	.....	.....	.....
7887	SYL	6.70	6.32	.....	.....
7888	SYL	5.25	4.99	.....	.....
Z7888	GE	1800.00	.....	.....	.....
7895	RCA	3.35	3.18	3.02	2.85
7898	RCA	1.34	1.27	1.21	1.14
7899	AME	788.80	.....	.....	.....
Z7899	GE	1800.00	.....	.....	.....
7900	AME	306.25	.....	.....	.....
Z7899	GE	1800.00	.....	.....	.....
7905	RCA	3.85	3.68	3.47	3.27
7910	GE	82.69	.....	.....	.....
Z7911	GE	75.00	.....	.....	.....
7913	GE	122.85	.....	.....	.....
NL-7977/4032	NE	33.00	31.19	29.70	.....
7983	AME	6.30	5.95	5.67	.....
7984	GE	5.35	5.06	4.82	.....
7986/5866A	AME	26.00	24.57	23.40	20.80
CK7994	RAY	17.05	16.11	15.35	14.49
CK7995	RAY	17.05	16.11	15.35	14.49
CK7996	RAY	14.00	13.23	.....	.....
27911	GE	75.00	.....	.....	.....
8000	RCA	25.00	23.63	22.50	21.25
8005	RCA	17.75	.....	.....	.....
8008	RCA	11.80	11.15	10.62	10.03
8008	SYL	11.80	11.15	10.62	10.03
8008	WES	10.85	10.25	9.77	9.22
NL-8008	NE	9.90	9.36	8.91	8.42
8008AX	AME	10.85	10.25	9.77	9.22
8013A	RCA	19.80	18.71	17.82	16.83
8020(100R)	EIM	26.50	25.04	.....	.....
8020	RCA	26.50	25.04	.....	.....
8020AX	AME	24.00	22.68	21.60	20.40
8032	RCA	4.95	4.70	4.46	4.21
8035	SYL	11.10	.....	.....	.....
NL-8037/5031	NE	15.75	14.88	14.17	13.39
8042	AME	9.00	8.51	8.10	.....
8051	RCA	575.00	.....	.....	.....
8053	RCA	107.25	.....	.....	.....
8054	RCA	125.00	.....	.....	.....
8055	RCA	170.00	.....	.....	.....
8056	RCA	5.00	4.75	4.50	4.25
8058	RCA	13.25	12.59	11.93	11.26
8062	DUM	135.00	.....	.....	.....
8072	RCA	2.10	18.99	18.00	17.00
8077/7054	RCA	1.50	1.43	1.35	1.28
8078	AME	81.00	76.55	72.90	.....
8081	GE	40.16	37.95	36.14	34.14
8082	GE	40.16	37.95	36.14	34.14
8083	GE	40.16	37.95	36.14	34.14
NL-8091	NE	22.50	.....	.....	.....
8092A	RCA	1870.00	.....	.....	.....
8092A/S	RCA	1870.00	.....	.....	.....
GL-8092A	GE	1870.00	.....	.....	.....
8092A/R	GE	1870.00	.....	.....	.....
8093A/R	RCA	1320.00	.....	.....	.....
GL-8093A	GE	1120.00	.....	.....	.....
8092A/R	GE	1320.00	.....	.....	.....
ML-8094/199	RAY	335.00	.....	.....	.....
CK8096	RAY	21.52	20.34	19.37	18.29
8100	SYL	1.40	1.32	.....	.....
8102	GE	1.45	.....	.....	.....
8106	GE	1.55	1.46	1.39	1.32
8117	AME	30.55	28.87	27.50	.....
8118	AME	38.50	36.38	34.65	32.73
8121	RCA	27.95	.....	.....	.....

Tube Type	Mfr.	1-4	5-18	19-49	50-99
8122	RCA	31.50	.....	.....	.....
8124	DUM	690.00	.....	.....	.....
8134	RCA	275.00	.....	.....	.....
8134/V1	RCA	370.00	.....	.....	.....
8142	SYL	1.40	1.32	1.26	1.19
8143	SYL	1.40	1.32	1.26	1.19
8156	GE	3.90	3.69	3.51	3.22
8163	AME	39.00	.....	.....	.....
8165/4-65A	RCA	27.00	25.65	.....	.....
8167/4CX300A	RCA	54.00	51.03	.....	.....
8168/4CX1000A	RCA	181.00	.....	.....	.....
8170/4CX5000	RCA	495.00	.....	.....	.....
ML-8170/4CX5000A	RAY	495.00	.....	.....	.....
ML-8170W/4CX5000R	RAY	705.00	.....	.....	.....
ML-8171/4CX10000D	RAY	550.00	.....	.....	.....
8177	AME	1250.00	.....	.....	.....
8179	AME	145.00	.....	.....	.....
PL8187	RAY	43.00	40.64	.....	.....
PL8188	RAY	64.00	60.48	.....	.....
PL8189	RAY	156.00	.....	.....	.....
8203	RCA	3.80	3.59	3.42	3.23
PL8212	SYL	3.55	.....	.....	.....
PL8224	SYL	3.55	.....	.....	.....
8226	RCA	83.00	78.44	74.70	70.55
8228/ZZ1000	AME	2.90	2.78	2.61	2.47
8233	AME	13.25	12.52	11.92	11.26
8254	AME	17.00	.....	.....	.....
8268	AME	170.00	.....	.....	.....
8269	AME	204.00	.....	.....	.....
8270	AME	78.00	.....	.....	.....
ML-8281/4CX1500A	RAY	695.00	.....	.....	.....
8295A	RAY	160.00	.....	.....	.....
PL-8295/172	RAY	157.00	.....	.....	.....
8318A	SYL	1.54	1.46	1.39	1.31
8345	SYL	1.40	1.32	1.26	1.19
8346	SYL	1.40	1.32	1.26	1.19
8347	SYL	1.40	1.32	1.26	1.19
8348	AME	7.75	7.32	.....	.....
8353	SYL	11.10	.....	.....	.....
8003	RCA	3.45	3.26	3.10	2.93
ML-8403	RAY	115.00	.....	.....	.....
8408	AME	13.50	12.76	12.15	.....
8416	AME	4.90	.....	.....	.....
CK8421	RAY	15.75	14.88	14.18	13.39
NL-8421/5092	NE	15.75	14.88	14.17	13.39
NL-8422/59991	NE	15.75	14.88	14.17	13.39
CK8422	RAY	15.75	14.88	14.18	13.39
NL-8423/6091	NE	19.00	18.39	17.78	17.16
NL-8423/6091	NE	19.00	18.39	17.78	17.16
PL-8432	RAY	164.00	.....	.....	.....
PL8438	RAY	48.00	45.60	.....	.....
8453/Z550M	AME	14.50	13.70	13.05	12.00
8462	RCA	35.75	33.78	32.18	30.39
8475A	SYL	1.54	1.46	1.39	1.31
8477A	SYL	1.54	1.46	1.39	1.31
8480	RCA	760.00	.....	.....	.....
8480/V1	RCA	1140.00	.....	.....	.....
8482	AME	78.00	73.71	70.20	62.40
8484	SYL	175.00	.....	.....	.....
8501	RCA	1045.00	.....	.....	.....
NL-8502/4021	NE	33.00	31.19	29.70	28.05
8507	GE	215.00	.....	.....	.....
8507	RCA	215.00	.....	.....	.....
8511	GE	315.00	.....	.....	.....
8520/587	RAY	(Double Brand Not Available Use CK587)			
8521	RCA	575.00	.....	.....	.....
8532/6J4WA	RCA	5.60	5.29	5.04	4.76
8541	GE	310.00	.....	.....	.....
8567	RCA	910.00	.....	.....	.....
8571	RCA	310.00	.....	.....	.....
8572	RCA	215.00	.....	.....	.....
GL8572	GE	215.00	.....	.....	.....
8573	RCA	275.00	.....	.....	.....
GL8573	GE	275.00	.....	.....	.....
8575V1	RCA	320.00	.....	.....	.....
PL8576	RAY	395.00	.....	.....	.....
8582A	SYL	1.54	1.46	1.39	1.31
8596	RCA	106.00	.....	.....	.....
8604	GE	310.00	.....	.....	.....
8627	RCA	14.15	13.37	12.73	12.03
8628	RCA	5.00	4.73	4.50	4.25
8632	NU	20.00	18.90	18.00	17.00
8644	RCA	370.00	.....	.....	.....
8645	RCA	475.00	.....	.....	.....
8673	RCA	1800.00	.....	.....	.....
8673/S	RCA	1915.00	.....	.....	.....
8674	RCA	1800.00	.....	.....	.....
8674/S	RCA	1915.00	.....	.....	.....
8685	RCA	1440.00	.....	.....	.....
8748	RCA	1975.00	.....	.....	.....
8749	RCA	1975.00	.....	.....	.....
9001	RCA	5.38	5.11	4.84	4.57
9002	RCA	4.14	3.93	3.73	3.52
9003	RCA	5.38	5.08	4.84	4.57
9005	RCA	5.38	5.08	4.84	4.57
9006	RCA	2.70	1.96	2.43	2.30
NL-50911	NE	15.75	14.88	14.17	13.39

Industrial & Special Purpose Tubes

INDUSTRIAL RECEIVING-TYPE PREMIUM TUBES

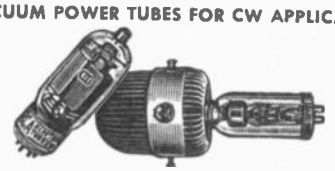
PREMIUM TUBES. For critical industrial and other equipment requiring exceptional stability of tube characteristics, long tube life, and reliable performance. RCA Premium Tubes, superior to their corresponding commercial prototypes, are subjected to special test and controls on critical characteristics, environmental test (such as shock, fatigue, vibration, altitude) and also to special life test.

Type	Prototype	1-4	5-18	19-49	50-99
5670	2C51, 5670WA	2.45	2.33	2.21	2.08
5691	6SL7GT	8.75	.....	.....	.....
5692	6SN76TB	8.25	.....	.....	.....
5693	6SJ7	6.60	.....	.....	.....
5726	6AL5, 6AL5W, 5726/5W, 5726/6097, 6097	1.55	1.47	1.40	1.32
5727/ 2D21W	5727	2.90	2.76	2.61	2.47
5749	6BA6, 5749/6W	2.20	2.09	1.98	1.87
5751	5751WA, 5751W1	2.55	2.42	2.30	2.17
5814A	5814, 5814WA, 5815WB	2.35	2.28	2.16	2.00

Type	Prototype	1-4	5-18	19-49	50-99
6005	6AQ5A, 6005/5A, 6005/6095, 6095	3.23	3.06	2.91	2.75
6080WA	6AS7G, 6080	10.80	.....	.....	.....
6186/ 6AG5WA	6AG5, 6AG5WA, 6186	3.85	3.66	.....	.....
6189	12AU7, 6189/7A	3.70	3.52	3.33	3.15
6626/ OA2WA	0A2, 0A2WA, 6073, 6973/0A2	3.35	.....	.....	.....
8532/ 6J4WA	6J4, 6J4WA, 6J4WA	5.60	5.29	5.04	4.76
0A2WA	0A2, 6073, 6073/0A2	3.35	3.20	3.00	2.86
0B2WA	0B2, 6074, 6074/0B2	2.40	2.28	2.16	2.04
5R4GYB	5R4GY	2.03	.....	.....	.....
6AU6WB	6AU6A, 6AU6WA, 6136	2.70	2.57	2.43	2.30
6J6WA	6J6, 6099, 6101, 6101/6J6WA	5.35	.....	.....	.....
6X4W	6X4	1.60	.....	.....	.....
12AT7WA	12AT7/ECC81, 6201	2.53	2.40	2.28	2.15
5651A	5651	1.78	.....	.....	.....
5651WA	5651, 5651A	6.60	.....	.....	.....
5654	6AK5, 6AK5W, 5654/W, 5654/6096, 6095	2.41	2.28	2.16	2.09

Created by the Hand of Experience

RCA VACUUM POWER TUBES FOR CW APPLICATIONS—TYPICAL CLASS C TELEGRAPHY SERVICE (CCS)



891R

6146A

6161

7650

RCA manufactures one of the world's largest lines of power tubes. The complete line ranges from small, low-power, glass-envelope types to huge, super-power, ceramic-metal types.

Type	Description	Filament or Heater Volts/Amp	1-4	5-18	19-49	50-99
2C39A	Triode	6.3/1	20.75	19.71	18.68	17.64
2C39A/V1	Triode	6.3/1	20.75	19.71	18.68	17.64
2C39WA	Triode	6.0/11.0	29.00	27.41	26.10	24.65
2C40	Lighthouse Triode	6.3/1 6.3/0.75	29.30	27.69	26.37	24.90
2C40A	Lighthouse Tri.	6.3/0.75	34.00	32.13	30.60	28.70
2C43	Lighthouse Tri.	6.3/0.75	26.95	25.60	.....	.....
2E24	Quick Heating BeamPowerTube	6.3f/0.65	6.80	6.43	6.12	5.78
2E26	Beam Power	6.3/0.8	4.00	3.78	3.60	3.40
2K26	Klystron		65.00	61.43	58.50	55.25
4-125A/ 4D21	Beam Power	5f/6.5	36.00	34.20	32.40	30.60
4-250A/ 5D22	Beam Power	5f/14.5	46.50	44.18	41.85	39.53
4E27A/ 5-125B	Beam Power	5f/7.5	45.00	42.52	40.50	38.25
4X500A	Beam Power	5f/12.2 to 13.7	128.50	.....	.....	.....
9C5	Triode	6f/2B5	1735.00	.....	.....	.....
807	Beam Power	6.3/0.9	3.60	3.40	3.24	3.06
810	Triode	10f/4.5	28.60	27.03	.....	.....
811A	Triode	6.3f/4	7.15	6.76	6.44	6.08
812A	Triode	6.3f/4	7.60	7.18	6.84	6.46
813	Beam Power	10f/5	24.25	23.15	22.05	.....
827R	Pentode	7.5f25	470.00	.....	.....	.....
828	Beam Power	10f/3.25	34.50	34.50	31.05	29.32
829B	Twin Beam Power	6.3/2.25 12.6/1.125	19.85	18.75	17.87	16.87
832A	Win Beam Power	6.3/1.16 12.6/0.8	16.65	15.74	14.99	14.15
833A	Triode	10f/10	65.10	61.52	58.59	55.34
837	Pentode	12.6/0.7	13.95	13.18	12.56	11.86
845	Triode	10f/3.25	28.00	26.84	25.50	24.14
880	Triode	12.6f/320	760.00	.....	.....	.....
891R	Triode	22f/60	490.00	.....	.....	.....
892	Triode	22f/60	3.4200	.....	.....	.....
892R	Triode	22f/60	440.00	.....	.....	.....
1624	Beam Power	2.5/2	9.45	8.93	8.51	8.03
1625	Beam Power	12.6/0.45	5.50	5.20	4.95	4.68
4604	Quick Heating Beam Power	6.3/0.65	8.70	8.27	7.88	7.44
4621	Cermolox For RF Pulse App.	6.3/3.2	130.00	.....	.....	.....
4632	Cermolox	5.5/31	1085.00	.....	.....	.....
5556	Triode	4.5f/1.1	54.25	.....	.....	.....
5671	Triode	11f/285	1825.00	.....	.....	.....
5713	Triode	3.3/11.5	620.00	.....	.....	.....
5762/ 7C24	Triode	12.6f/29	240.00	.....	.....	.....
5770	Triode	11f/285	1465.00	.....	.....	.....

Type	Description	Filament or Heater Volts/Amp	1-4	5-18		50-99
5771	Triode	7.5f/170	700.00	.....	.....	.....
5786	Triode	11f/12.5	265.00	.....	.....	.....
5946	Triode	6.3/3.4	125.00	.....	.....	.....
6076	Beam Power	6.3/32.5	305.00	.....	.....	.....
6146A	Beam Power	6.3/1.25	4.35	4.13	3.92	3.70
6146B/ 8298A	Beam Power	6.3/1.125	5.20	4.94	4.68	4.42
6146W	Beam Power	6.3/1.25	6.75	6.38	6.08	5.74
6155	Beam Power	5f/6.5	36.00	34.20	.....	.....
6156	Beam Power	5f/14.1	42.60	40.25	38.34	36.21
6159B	Beam Power	26.5/0.3	5.15	4.87	4.64	4.38
6159W	Beam Power	26.5/0.3	9.15	8.65	8.24	7.78
6161	Triode	6.3/3.4	125.00	.....	.....	.....
6166	Beam Power	5f/168	825.00	.....	.....	.....
6166A/ 7007	Beam Power	5f/174	1005.00	.....	.....	.....
6181	Beam Power	120 max./1.6	1110.00	.....	.....	.....
6448	Beam Power	1.35f/1000	5675.00	.....	.....	.....
6524	TwinBeamPower	6.3/1.25	24.45	23.11	22.01	20.78
6806	Beam Power	1.35f/1000	6975.00	.....	.....	.....
6816	Cermolox Tube	6.3/2.1	52.90	.....	.....	.....
6850	Twin Beam Power	12.6/0.625	22.10	20.88	19.89	18.78
6883	Beam Power	12.6/0.625	4.30	4.09	3.87	3.66
6883B/ 8032A/ 8552	Beam Power	12.6/0.562	5.40	4.86	4.59	4.10
6884	Cermolox Tube	26.5/0.52	40.00	.....	.....	.....
6897	Lighthouse Triode	6.3/1.03	32.15	29.54	.....	.....
7094	Beam Power	6.3/2.85	35.45	33.50	31.91	30.13
7203/ 4CX250B	Beam Power	6/2.6	35.60	33.64	32.04	30.26
7204/ 4CX250B	Beam Power	26.5/0.58	39.35	.....	.....	.....
72131	Cermolox	5.5/17.3	410.00	.....	.....	.....
7214	Cermolox For RF Pulse App.	5.5/17.3	440.00	.....	.....	.....
7271	Beam Power	13.5/1.25	34.00	34.13	30.60	28.90
7457	Cermolox	6.3/3.2	65.25	61.66	58.73	55.46
7649	Cermolox For RF Pulse App.	6.3/3.2	70.00	66.15	63.00	59.50
7650	Cermolox Tube	6.3/7.5	240.00	.....	.....	.....
7651	Cermolox For RF Pulse App.	6.3/7.5	260.00	.....	.....	.....
7842	Cermolox Tube	6.3/3.2	65.25	61.66	58.72	55.46
7843	Cermolox	26.5/0.52	34.35	32.46	30.92	29.20
7844	Cermolox	6.3/2.1	52.00	49.14	46.80	44.20
8000	Triode	110f/4.5	25.00	23.63	22.50	21.25
8005	Triode	10f/3.25	17.75	.....	.....	.....
8032	Beam Power	13.5/0.585	4.95	4.70	4.46	4.21

Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

RCA VACUUM POWER TUBES FOR CW APPLICATIONS—TYPICAL TELEGRAPHY SERVICE (CCS) Cont'd.

Type	Description	Filament or Heater Volts/Amp	1-4	5-18	19-49	50-99
8072	Beam Power	13.5/1.3	20.10	18.90	18.00	17.80
8121	Beam Power	13.5/1.3	27.95	.....	.....	.....
8122	Beam Power	13.5/1.3	31.50	.....	.....	.....
8165/4-65A	Beam Power	6/3.2 to 3.8	27.00	25.65	.....	.....
8166/4-1000A	Beam Power	7.5f/20 to 22.7	131.50	.....	.....	.....
8167/4CX300A	Beam Power	6.0/2.2 to 3.2	54.00	51.03	48.60	45.90
8168/4CX1000A	Beam Power	6.0/8.1 to 9.9	181.00	.....	.....	.....
8170/4CX5000A	Beam Power	7.5/73 to 78	495.00	.....	.....	.....
8171/4CX10000D	Cermolox Beam Power	7.5/73 to 78	550.00	.....	.....	99 .....
8226	Cermolox Triode	6.3/3.2	83.00	78.43	74.70	70.65
8239/3X3000F1		54	215.00	.....	.....	.....
8281/4CX15000A	Beam Power	6.3/152 to 168	695.00	.....	.....	.....
8438/4-400A	Beam Power	5/14.5	48.00	45.60	.....	.....
8462	Beam Power	2.9f/4.6	35.75	33.70	32.18	.....
8501	Cermolox Tube	6.3/3.2	1045.00	.....	.....	30.39
8596	Cermolox	6.3/3.2	106.00	78.43	74.70	.....
			106.00	.....	.....	.....

MERCURY VAPOR TYPES—HALF-WAVE RECTIFIERS

Type	Max. Plate or Anode Rate @ 60 cps: Condensed Mercury °C	PIV	Peak Amp.	AV. Amp.	Fault Amp.†	1-4	5-18	19-49	50-99
575A	20 to 50	15000	6	1.5	100	21.00	19.85	18.90	.....
	20 to 60	10000	7	1.75	100				
615/7018/635/7019	35 to 80	2000	10	2.5	250	10.05	9.55	9.05	8.54
	0 to 100	1000	77	6.4	770	13.00	12.35	18.90	.....
673	20 to 50	15000	6	1.5	100				
	20 to 60	10000	7	1.75	100				
	20 to 50*	15000*	10*	2.5*	100*				
	20 to 60*	10000*	10*	2.5*	100*	21.00	19.84	.....	17.85
816	20 to 60	7500	0.5	0.125	5	3.90	3.69	3.51	3.32
857B	25 to 60	22000	40	6.4	400	265.00		.....	.....
		10000	40	10	400				
866A	20 to 60	10000	1	10	20				
	20 to 70	5000	1	0.25	20				
	20 to 80	2500	2	0.25	20	3.50	3.31	3.15	2.98
869B	30 to 40	20000	10	0.5	100				
	30 to 50	15000	10	2.5	100	155.00		.....	.....
	30 to 60	10000	10	2.5	100				
872A	20 to 60	10000	5	2.5	50				
	20 to 70	5000	5	1.25	50	10.85	10.31	9.77	9.22
5558	35 to 60	5000	15	1.25	200				
	35 to 80	2000	15	2.5	200	17.50	16.63	.....	.....
5561	.....	3000	40	6.4	.....				
		10000	16	4.0	.....	59.00	55.76	53.10	50.15
6894	.....	20000	8.3	4.0	100				
		15000	8.3	1.8	100				
		10000	8.3	1.8	100	25.70	24.29	23.13	21.85
6895	20 to 50	20000	8.3	1.8	.....				
	20 to 55	15000	8.3	1.25	.....				
	20 to 60	10000	8.3	1.25	.....	25.70	24.29	23.13	21.85
8008	20 to 60	10000	5	1.8	.50				
	20 to 70	5000	5	1.8	.50	11.80	11.15	10.62	10.03

GAS TYPES—HALF WAVE TYPES

Following Low-and-Intermediate Power Rectifiers and Detector Diodes are available: 5R4GYB, 6X4W, 83, 2076/5R4GYB, 5642, 5726, 5726/6AL5W, 5726/6AL5W/6097, 5896, 6202, 6663/6AL5, 6887, 7055, 9005, 9006.

Type	Max. Plate or Anode Rat.—For Supply Freq. of 60 cps‡: Temp. Range Condensed Mercury °C	Peak Inverse Volts	Peak Amp.	Av. Amp.	Fault Amp. (†)	1-4	5-18	19-49	50-99
3B28	—75 to +90°a	10000	1	0.25	20	7.50	7.09	6.75	6.38
		5000	2	0.5	20				

(†) Duration of 0.1 second max. (a) Ambient temp.

VACUUM TYPES—HALF WAVE TYPES

Type	Anode Bearings: Peak Inverse Volts	Peak Amp.	Av. Amp.	1-4	5-18	19-49	50-99
2X2A	12500	0.06	0.0075	4.30	4.06	3.87	3.66
579B	20000	0.27	0.025	20.50	19.48	18.45	.....
836	5000	1	0.25	12.65	12.02	11.38	10.75
1616	6000	0.8	0.13	15.10	14.27	.....	.....
5825	60000	0.04	0.002	26.45	25.00	23.81	22.48
8013A	40000	0.15	0.02	19.80	18.71	17.82	16.83
8020	40000	1.5	0.1	26.50	25.04	.....	.....

MERCURY VAPOR—FULL WAVE RECTIFIER

Type	Max. Plate or Anode Rat.—For Supply Freq. of 60 cps: Temp. Range Condensed Mercury °C	PIV	Peak Amp.	AV. Amp.	Fault Amp. (†)	1-4	5-18	19-49	50-99
604/7014	0 to 90	900	10	2.5	150	11.80	11.21	.....	.....

† Duration of 0.1 second, max.

THYRATRONS

HIGH-POWER TRIGGER TUBES

TRIODES (Mercury-Vapor Types)

Tube Type	Temp. Range	Peak Anode Volts	Peak Anode Amps.	1-4	5-18	19-49	50-99
3C23	—40 to +80a	1250	6	11.98	11.38	10.78	10.18
627		2500	2.5	27.50	26.00	24.75	23.38
676		750	77**	63.80	60.29	57.42	54.23
677		10000	16**	63.80	60.29	57.42	54.23
710/6011	—40 to +80	1500	30**	12.00	11.34	10.80	.....
714/7021	—40 to +80	1250	3	10.00	9.50	.....	.....
716/6855		1250	8.0**	12.50	11.81	11.25	10.63
760/6858	—40 to +80	1500	77**	28.10	26.70	.....	.....
5557	40 to 60	5000	1				
	40 to 80	2500	2				
	40 to 90	1250	3	9.50	9.02	8.55	
5559	40 to 80	1000	15**	23.00	.....	.....	
5563A	25 to 50	20000	6.4				
	25 to 55	15000	10				
	25 to 50*	20000*	11.5*				
	25 to 55*	15000*	11.5*	50.00	.....	.....	.....

TETRODE (GAS TYPE)

Tube Type	Range Temp.	Peak Anode Volts	Peak Anode Amp.	1-4	5-18	19-49	25-99
3D22A	—75 to 90a	650	8	34.30	32.41	.....	.....

a Ambient Temp.

TRIODES (Gas Types)

Tube Type	Range Temp.	Peak Anode Volts	Peak Anode Amps.	1-4	5-18	19-49	50-99*
629	—40 to +70	350	0.2	18.25	17.34	.....	.....
6130/3C45	—50 to +90a	3000	35	19.85	.....	.....	.....
C1K/6014	—55 to +70a	1000	8	11.80	11.15	10.62	10.03
C3J/5632	—55 to +75a	900	30	12.70	12.07	.....	.....
C3JA/5684	—55 to +75a	1000	30	13.10	12.46	11.80	.....
C3JL	—55 to +75a	900	30	14.20	13.42	12.78	12.07
C6J/5C21	—55 to +75a	750	77	28.10	26.70	.....	.....
C6JA/5685		1000	77	29.00	27.41	26.10	24.65
C16J/5665	—55 to +75a	1000	160	52.50	49.88	.....	.....

TETRODES (Mercury-Vapor Types)

105		10000	16	59.00	55.76	53.10	50.15
172		750	77	129.00	.....	.....	.....
632B	40 to 80	1500	30	33.00	31.35	29.70	28.05
672A	40 to 80	2500	40**	39.85	37.86	.....	.....
5560	40 to 80	1000	150**	33.00	31.25	20.70	.....

** Cathode a Ambient Temp. † Quadrature operation

SAVE WORK! Make Newark Your Complete One-Point Stock Source!
SAVE MONEY! Quantity Prices Competitive with Manufacturer!

Industrial & Special Purpose Tubes

RCA INDUSTRIAL RECEIVING-TYPE NUVISTOR TUBES

• High Reliability • Low Drain • Low Noise • Small Size

Type	Heater Volts/MA	Transcond. μmhos	Max. Plate Dissip. Watts	Nuvistor Base	1-4	5-18	19-49	50-99
7586	6.3/135	11500	1	5-Pin	3.35	3.18	3.02	2.85
7587	6.3/150	10600	2.2	5-Pin	5.20	4.94	4.68	4.42
7895	6.3/135	9400	1	5-Pin	3.35	3.18	3.02	2.85
8056	6.3/135	7500	0.45	5-Pin	5.00	4.73	4.50	4.25
8058	6.3/135	12400	1.5	5-Pin	13.25	12.59	11.93	11.26
8203	6.3/160	6000	1.5	5-Pin	3.80	3.59	3.42	3.23
8393	13.5/ 60	11500	1	5-Pin	3.45	3.26	3.10	2.93
8627	6.3/150	13000	2.5	5-Pin	14.15	13.37	12.73	12.03
8628	6.3/100	3100	0.3	5-Pin	5.00	4.73	4.50	4.25

VIDICONS FOR SPACE, MILITARY, AND INDUSTRIAL SERVICE

MAGNETIC FOCUS-AND-DEFLECTION TUBES

1" — DIAMETER TYPE

Type	Typical Faceplate Illum. Footcandles	Typical Signal-Output Current μAmp	Limiting Resolution TV Lines	1-4
4500	0.1	0.4	650	430.00

1½" — DIAMETER TYPE

8521	3	0.4	1500	575.00

ELECTROSTATIC-FOCUS MAGNETIC-DEFLECTION TUBE

1½" — DIAMETER TYPE

Type	Typical Faceplate Illum. Footcandles	Typical Signal-Output Current μAmp	Limiting Resolution TV Lines	1-4
8480	10	0.5	1400	760.00

RUGGEDIZED ELECTROSTATIC-FOCUS MAGNETIC-DEFLECTION TUBES

1" — DIAMETER TYPES

Type	Typical Faceplate Illum. Footcandles	Typical Signal-Output Current μAmp	Limiting Resolution TV Lines	1-4
8567	1	0.2	750	910.00

RUGGEDIZED MAGNETIC FOCUS-AND-DEFLECTION TUBES

1" — DIAMETER TYPES

Type	Typical Faceplate Illum. Footcandles	Typical Signal-Output Current μAmp	Limiting Resolution TV Lines	1-4
7263A	1	0.2	750	370.00
4503	1	0.2	1000	470.00

IMAGE ORTHICONS FOR MILITARY AND INDUSTRIAL SERVICE

2" — DIAMETER TYPES

Type	Typical Faceplate Illum. Footcandles	Amplitude Resp. at 400 TV Lines Per Cent	typ. Signal-to-No Radio Bandwidth 4.5 MHz	Net Each
8685	7.5×10^{-2}	25	30:1	1440.00

3" — DIAMETER TYPES

Type	Typical Faceplate Illum. Footcandles	Amplitude Resp. at 400 TV Lines Per Cent	Typ. Signal-to-No Radio Bandwidth 4.5 MHz	Net Each
4401V1	1.4×10^{-2}	60	45:1	1320.00
7629A	4×10^{-3}	50	32:1	1700.00
8092A	7×10^{-3}	60	37:1	1870.00

VIDICONS

For TV film studio pickup service and closed-circuit TV applications. Available in deflection and focus methods, ruggedized or non-ruggedized tubes, conventional or low power "dark heaterrs", photo-conductive surfaces, and tube size.

VIDICONS FOR BROADCAST-STUDIO FILM-PICKUP SERVICE

MAGNETIC FOCUS-AND-DEFLECTION TUBES

1" — DIAMETER TYPES

Type	Typical Faceplate Illum. Footcandles	Typical Signal-Output Current μAmp	Limiting Resolution TV Lines	Net Each
7038	100	0.3	750	175.00
8572	100	0.3	1000	215.00

1½" — DIAMETER TYPE

8051	50	0.5	1500	575.00

ELECTROSTATIS-FOCUS, MAGNETIC-DEFLECTION TUBES

1" — DIAMETER TYPE

Type	Typical Faceplate Illum. Footcandles	Typical Signal-Output Current μAmp	Limiting Resolution TV Lines	Net Each
8134/V1	1	0.265	800	370.00

1½" — DIAMETER TYPES

8480	50	0.5	1400	765.00
8480V1	50	0.5	1400	1140.00

VIDICONS FOR LIVE TELEVISION AND INDUSTRIAL SERVICE

MAGNETIC FOCUS-AND-DEFLECTION TUBES

1" — DIAMETER TYPES

Type	Typical Faceplate Illum. Footcandles	Typical Signal-Output Current μAmp	Limiting Resolution TV Lines	Net Each
4478	1	0.265	700	93.00
4488	1	0.270	700	120.00
7262A	1	0.2	750	215.00
7735B	1	0.275	750	170.00
8507	1	0.2	1000	215.00
8573	1	0.2	1000	275.00

ELECTROSTATIC-FOCUS, MAGNETIC-DEFLECTION TUBES

1" — DIAMETER TYPES

Type	Typical Faceplate Illum. Footcandles	Typical Signal-Output Current μAmp	Limiting Resolution TV Lines	Net Each
4493	Trio for Chroma channels of color cameras		500	1055.00
4494			500	1055.00
4495			500	1055.00
8134	1	0.265	800	275.00

LOW AND INTERMEDIATE-POWER TRIGGER TUBES

TRIODES

Tube Type	Heater Volts/Amp.	Peak Anode Volts	Average Cathode Amp.	1-4	5-18	19-49	50-99
6D4	6.3/0.25	±450	0.025	2.70	2.55	2.43	2.30
884	6.3/0.6	±350	0.075	2.28	2.17	2.05	1.94

COLD-CATHODE TYPE POWER TRIGGER TUBES

Tube Type	Peak Anode Volts	Average Cathode Amp.	1-4	5-18	19-49	50-99
0A4G	±225	0.025	1.86	1.76	1.67	1.58
1C21	.....	0.025	4.15	3.94	3.74	3.52
5823	±200	0.025	1.72	1.63	1.55	1.46

TETRODES

Tube Type	Heater Volts/ Amp.	Peak Anode Volts	Avg. Cathode Amp.	1-4	5-18	19-49	50-99
2D21	6.3/0.6	+ 650					
		−1300	0.1	1.29	1.23	1.16	1.10
2D21W	6 3/0.6	+ 650					
		−1300	0.1	2.90	2.76	2.61	2.47
2050	6.3/0.6	+ 650					
		−1300	0.1	2.37	2.25	2.13	2.01
2050A	6.3/0.6	+ 650					
		−1300	0.1	2.03	1.92	1.83	1.73
5663	6.3/0.15	± 500	0.020	2.10	2.00	1.89	1.79
5696	6.3/0.15	± 500	0.025	1.95	1.84	1.75	1.66
5727	6.3/0.6	+ 650					
		−1300	0.1	2.90	2.76	2.61	2.47
5727/ 2021W	For Data See Mil. Spec.						

Newark Can Supply All RCA Tubes Available from Stock

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

RCA VACUUM AND GAS PHOTODIODES

VACUUM PHOTODIODES

Side-On Types

Type	Spectral Resp.	Luminous Sensitivity (2870°K) μAmp/Lumen	Max. Anode Dark Cur'nt at 25°C μAmp	1-4	5-18	19-49	50-99
1P39	S-4	52	0.005	3.15	2.98	2.84	.....
917	S-1	20	0.005	9.30	8.79	8.37	7.91
919	S-1	20	0.005	9.65	9.12	8.69	8.20
925	S-1	52	0.0125	5.00	4.73	4.50	.....
929	S-4	30	0.0125	3.45	3.26	.....	.....
934	S-4	35	0.005	5.75	5.43	5.18	4.89
935	S-5	20	0.0005	14.20	13.42	12.78	.....
5653	S-4	45	0.25	5.45	5.15	4.91	4.63
6570	S-1	30	0.013	10.75	10.16	9.68	.....

Side-On Cartridge Types

922	S-1	20	0.005	3.80	3.59	.....	.....
926	S-3	6.5	0.005	5.20	4.91	.....	.....

Side-On Non-Directional Types

7043	S-4	45	0.0125	6.75	6.38	6.08	...

SIDE-ON COMPOSITE ANODE TYPE

5652	S-4	45	0.01	8.75	8.27	7.88	7.44

HEAD-ON COMPOSITE ANODE TYPE

1P42	S-9	37	0.005	17.95	16.96	16.16	15.26

GAS PHOTODIODES

Side-On Types Except (*) Side-On Cartridge (†) Head-On

Type	Spectral Resp.	Luminous Sensitivity (2870°K) μAmp/Lumen	Max. Gas Amplification Factor	1-4	5-18	19-49	50-99
1P29	S-3	40	9.0	7.65	7.23	6.89	6.50
1P37	S-4	135	5.5	6.50	6.14	5.85	5.53
1P40	S-1	135	10.0	4.80	4.54	4.32	4.08
868	S-1	90	8.0	6.30	5.95	.....	.....
918	S-1	150	10.5	6.30	5.95	.....	.....
923	S-1	135	10.0	4.70	4.44	.....	.....
927	S-1	125	10.0	6.00	5.67	.....	.....
930	S-1	135	10.0	4.95	4.68	4.46	4.21
4409	S-4	135	5.5	5.35	5.06	4.81	4.55
5581	S-4	135	5.5	4.85	4.58	4.37	4.12
5583	S-4	135	5.5	8.75	8.27	7.88	7.44
6405/1640	S-1	35	2.5	9.15	8.65	8.24	7.78
6953	S-1	200	10.0	7.80	7.37	7.02	.....
921	S-1*	135	10.0	5.20	4.91	4.68	4.42
5582	S-4*	120	5.5	6.30	5.95	5.67	.....
1P41	S-1†	90	8.5	6.00	5.67	5.40	5.10

SIDE-ON TWIN-UNIT TYPE

Type	Spectral Resp.	Luminous Sensitivity 2870 K) Amp/Lumen	Max. Gas Amplification Factor	1-4	5-18	19-49	50-99
920	S-1	90	8.5	10.75	10.16	9.68	9.14

RCA CAMERA TUBES

A broad choice of tube design features are available: field or non-field mesh design; glass, thin-film semiconductive, or special long-life targets; precision construction; anti-ghost image section design; microdamp construction; tube size; and matched sets for color pickup.

IMAGE ORTHICONS FOR LIVE BLACK-AND-WHITE TELEVISION

2" — DIAMETER TYPE

Type	Typical Faceplate Illum. Footcandles	Amplitude Response at 400 TV Lines Per Cent	Typical Signal-to-Noise Ratio Bandwidth 4.5 MHz	Net Each
8685	7.5 x10-2	25	30:1	1440.00
4401V1	1.4 x10-2	60	45:1	1320.00
5820A	2 x10-2	60	45:1	995.00
5820A/L	2 x10-2	60	45:1	1800.00
7293A	2 x10-2	60	45:1	1150.00
7513	5 x10-2	55	55:1	1320.00
8092A	7 x10-3	60	37:1	1870.00
8673	3.5 x10-2 (max.)	55	45:1	1800.00
7674	2.2 x10-2 (max.)	60	40:1	1800.00

4½" — DIAMETER TYPES

7295B	5 x10-2	75	70:1	1440.00
7389B	6 x10-2	75	93:1	1440.00
7389B/L	6 x10-2	75	93:1	1975.00

ORTHICONS

For Color Pickup at Black-and-White Studio Lighting Levels

Unmatched Picture Quality in Black and-White Pickup

IMAGE ORTHICONS FOR LIVE COLOR TELEVISION

—3" — DIAMETER TYPES (MATCHED TRIOS FOR COLOR)

Type	Typical Faceplate Illum. Footcandles	Amplitude Resp. at 400 TV Lines Per Cent	Typ. Signal-To-No Ratio Bandwidth 4.5 MHz	Net Each
7513/S	2.5 x10-2	55	55:1	1400.00
4513/S	2.5 x10-2	55	55:1	1870.00
8092A/S	7 x10-2	60	37:1	1870.00
4416/S	1 x10-2	55	37:1	1400.00
8673/S	1.75x10-2 (m	55	45:1	1915.00
8674/S	1.1 x10-2 (m	60	40:1	1915.00

3" — DIAMETER TYPES

Type	Typical Faceplate Illum. Footcandles	Amplitude Resp. at 400 TV Lines Per Cent	Typ. Signal-To-No Ratio Bandwidth 4.5 MHz	Net Each
7513	2.5 x10-2	55	55:1	1320.00
8673	1.75x10-2 (m	55	45:1	1800.00
8674	1.1 x10-2 (m	60	40:1	1800.00

4½" — DIAMETER TYPES FOR LUMINANCE CHANNEL

4492	5 x10-2	75	70:1	1850.00
4536	.....	.....	.....	2165.00
4536V1	.....	.....	.....	2350.00

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Industrial & Special Purpose Tubes

NEW LONG-LIFE BIALKALI PHOTOCATHODE IMAGE ORTHICONS

Superior Color — Black & White TV Pickup

- **High sensitivity over the visible spectrum**
- **Electronically conducting glass target**
- **Improved "anti-ghost" image section**
- **Field mesh connection**

Type 8673. High capacitance target assembly and designed specifically for color or black & white telecasting at the light levels available in color TV studios.

Type 8673 (Black & White)..... **1800.00**
Type 8673/S (Color)..... 1915.00

Type 8674. Has higher sensitivity than 8673 and is intended for color and black & white studio or remote TV pickup at light levels available in black and white TV studios.

Type 8674 (Black & White)..... **1800.00**
Type 8674/S (Color)..... 1915.00

NEW RCA 8685 IMAGE ORTHICONS

For Portable, Broadcast, Scientific or Industrial TV Pickup Service

- **2" Diameter—Ideal for compact TV cameras**
- **Bialkali Photocathode—High sensitivity over the entire visible spectrum**
- **Electronically conducting glass target achieves non-sticking pictures and long life**
- **Constant sensitivity and resolution throughout tube life**
- **Separate field mesh connection**
- **Low power "dark-heater" requires only 0.6 watts**

Elimination of infrared response prevents color masking by the infrared—allows gray-scale rendition of colors in realistic tonal gradations. Specifically designed to operate with 16mm film camera optics.

Type 8685..... **1440.00**

3 Major Advantages of RCA BIALKALI PHOTOCATHODE TUBES For Upgrading Systems Capabilities

1. Higher Quantum Efficiency
2. Lower Dark Current
3. Improved Pulse Height Resolution

RCA-8575 Photomultiplier Tube featuring Bialkali Photocathode Construction.

Directly Interchangeable Replacement Types For Most Popular Sizes from ¾" to 5"

New Type	Replaces	Nom. Size	Description	Anode Luminous Sensitivity 2370°K (A/lm)	Anode Dark Current (A)	Q.E.	EACH
4516	RCA-7767	¾"	Head-on type having fast time characteristics. For use in probes, and biological tracer studies.	27	2×10^{-10} @ 7A/lm	22% @ 4000A	165.00
4517	RCA-6199	1½"	Head-on, flat-face types having small size for use in portable scintillation counters.	33	3×10^{-10} @ 7A/lm	22% @ 4000A	79.00
4518	RCA-6342A	2"	Head-on, flat-face types. Especially useful for fast coincidence scintillation counting.	33	3×10^{-10} @ 7A/lm	22% @ 4000A	93.00
4523	RCA-8053	2"	Head-on, flat-face types having venetian-blind dynode structure. For general scintillation counting applications.	27	5×10^{-10} @ 13A/lm	22% @ 4000A	125.00
4524	RCA-8054	3"	Head-on, flat-face types having venetian-blind dynode structure. For general scintillation counting applications.	27	1×10^{-9} @ 13A/lm	22% @ 4000A	145.00
4525	RCA-8055	5"	Head-on, flat-face types having venetian-blind dynode structure. For general scintillation counting applications.	27	1.5×10^{-9} @ 13A/lm	24% @ 4000A	190.00
and the standard of the industry RCA-8575		2"	Head-on type having an in-line electrostatically focused dynode structure, very low noise, and fast time characteristics.	300	1×10^{-9} @ 200A/lm	28% @ 3850A	315.00

RCA CATHODE-RAY TUBES AND SPECIAL-PURPOSE KINESCOPES

OSCILLOGRAPH-TYPE CATHODE-RAY TUBES

Flat-Faceplate Types

Type	Anode Volts	Deflection Factor VDC/" DJ1 & DJ2	DJ3 & DJ4	1-4	5-18	19-49	50-99
1EP1	1000	210-310	240-350	25.75	24.33	23.18	21.89
1EP11	1000	210-310	240-350	28.10	26.56	25.29	23.89
3RP1A	2000	146-198	104-140	27.65	26.13	.....	.....
3RP7A	2000	146-198	104-140	27.65	26.13	24.89	23.50
3WP1	2000	83-101	57-70	30.05	28.40	.....	.....
3WP11	2000	83-101	57-70	30.05	28.40	27.05	25.54
4499	2000	84-106	67-83	29.35	27.74	26.42	24.95

Curved-Faceplate Types

Type	Anode Volts	Deflection Factor VDC/" DJ1 & DJ2	DJ3 & DJ4	1-4	5-18	19-49	50-99
2AP1A	1000	195-266	167-225	19.00	17.96	17.10	16.15
2BP1	1000	115-115	74-100	20.10	18.99	18.09	17.09
2BP11	1000	115-115	74-100	21.50	20.32	19.35	18.28
3AP1A	1500	91-137	87-131	27.20	25.70	24.18	23.12
3AQP11	1000	73-99	26-35	24.20	22.87	21.78	20.57
3BP1A	2000	170-230	125-170	24.70	23.34	22.23	21.00
3KP1	2000	100-136	76-104	27.90	26.37	25.11	.....
3RP1	2000	146-198	104-140	17.95	16.96	16.16	15.26
5BP1A	2000	70-96	64-88	35.05	33.12	31.55	29.79
5UP7	2000	56-77	46-62	26.25	24.81	23.63	22.31
5UP31	2000	57-77	46-62	22.25	21.03	20.03	18.91
5UP1	2000	56-77	46-62	17.95	.....	.....	.....
7VP1	3000	93-123	75-102	31.45	.....	.....	.....
902A	600	110-166	96-141	21.45	20.27	19.30	18.23
2" Dia.	P1						

FLYING-SPOT CATHODE-RAY TUBES

Type	Face-Plate	Anode Volts	Deflection Angle Approx.	1-4	5-18	19-49	50-99
5AUP24	Flat	27000	40°	150.00	.....	.....	.....
5ZP18	Flat	27000	40°	92.25	87.18	.....	.....

PROJECTION KINESCOPES

5AZP4	Curved	36000	50°	127.00	.....	.....	.....
7NP4	Curved	75000	35°	1,085.00	.....	.....	.....
4486	Curved	75000	35°	1,095.00	.....	.....	.....

POST-DEFLECTION ACCELERATOR

Flat-Faceplate Types except (*) Curved-Faceplate

Type	Post Accel. Volts	Deflection Factor Volts dc/in. DJ1 & D2	DJ3 & DJ4	1-4	5-18	19-49	50-99
5ABP1	4000	53-72	36-48	35.75	.....	.....	.....
5ADP1	4000	53.4-66.6	40.6-50	35.75	33.78	.....	.....
5ADP31	4000	53.4-66.6	40.6-30	35.75	33.78	32.18	30.39
4490*							
7" Dia. P31	6000	133-153	99-115	36.85	34.82	33.17	31.32
4491*							
8" Dia. P31	6000	107-29	88-101	41.50	39.22	37.35	35.28
4510	3000	69-91	57-73	37.15	35.11	33.44	31.58
3JP1*	4000	170-230	125-170	26.85	25.36	24.16	22.82
3JP7*	4000	170-230	125-170	28.30	26.74	25.47	24.06
4489*	6000	130	102	21.45	20.27	19.31	18.23
5CP1A*	4000	78-106	66-90	.....	.....	.....	.....

SPECIAL-PURPOSE KINESCOPE

TRANSCRIBER KINESCOPE

Type	Face-Plate	Anode Volts	Deflection Angle Approx.	1-4	5-18	19-49	50-99
5WP11	Flat	27000	50°	99.40	93.93	.....	.....

VIEW-FINDER KINESCOPE

5FP4A	Curved	6000	53°	31.45	.....	.....	.....

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

Industrial & Special Purpose Tubes

RCA CATHODE-RAY TUBES AND SPECIAL-PURPOSE KINESCOPES (Cont'd)

MONITOR KINESCOPES

Type	Post Accel. Volts	Deflector Factor Volts dc/in. DJ1 & D2	DJ3 & DJ4	1-4	5-18	19-49	50-99
7CP4	Curved	6000	57°	74.35	70.26	66.92	63.20
7TP4	Curved	10000	50°	75.80	71.63	.....	.....
8HP4	Curved	11000	90°	48.30	45.65	43.47	47.05
8NP4	Curved	16000	90°	36.95	34.92	33.26	31.40
8QP4	Curved	16000	90°	50.65	47.86	45.59	43.05
10SP4	Curved	14000	50°	85.00	80.33	.....	.....
14BAP4	Curved	18000	70°	36.25	34.26	32.62	30.81
17DWP4	Curved	18000	70°	26.65	24.24	23.08	21.80
21EYP4	Curved	18000	72°	31.85	30.10	28.67	27.07

MAGNETIC FOCUS & DEFLECTION TYPE

Type	Face-plate	Anode Volts	Deflection Angle Approx.	1-4	5-10	19-49	50-99
5FP7A	Curved	7000	53°	40.05	37.85	36.05	34.04

MONOSCOPE

Type	Face-plate	Anode Volts	Deflection Angle Approx.	NET
2F21			Indian Head Pattern types for supplying signal to test video performance of TV transmitters and receivers	300.00

RCA PHOTOMULTIPLIER TUBES

927

929

931A

6342A

6810A

(**) RCA's New Bialkali Versions (*) Ruggedized

SIDE-ON TYPES

Tube Type	No. of Stages	Spectral Resp.	Luminous Sen. (2870 K) Amp/Lumen	Max. Equiv. Anode-Dark-Current Input (25°C) Lumen	1-4	5-18	19-49	50-99
1P21	9	S-4	80	5x10-9	54.35	51.36	48.92	46.20
1P22	.....	S-8	3	3.75x10-7	15.80	14.93	14.22	13.43
1P28	9	S-5	100	1.25x10-9	21.50	20.32	18.39	18.37
1P28A	.....	S-5	200	1.25x10-9	27.90	26.37	25.11	23.38
931A	9	S-4	24	2.5x10-9	12.30	11.62	11.00	10.46
4471	9	S-4	100	2.5x10-9	17.25	16.31	15.52	14.66
4472	9	S-4	100	2.5x10-9	22.95	21.68	20.65	18.50
4473	9	S-4	160	5x10-10	97.25	91.60	82.66	81.52
6328	.....	S-4	35	.....	13.65	12.90	12.29	11.60
6472	.....	S-4	35	.....	14.75	13.94	13.28	12.54
7117	9	S-4	35	2x10-9	12.65	.....	.....	.....
7200	.....	S-19	40	2x10-9	190.00	.....	.....	.....
8571	9	S-4	44	1x10-10	310.00	.....	.....	.....

HEAD-ON TYPES

2020	.....	S-11	6	2.25x10-9	85.00	80.33	78.50	72.25
2060	.....	S-11	45	2.5x10-9	47.20	44.60	42.48	41.72
2061	.....	S-11	.....	2x10-9	55.80	52.73	50.22	47.43
2062	.....	S-11	120	2x10-9	54.35	51.36	48.92	46.20
2063	.....	S-11	.....	.....	110.00	.....	.....	.....
2064	.....	S-11	43	7.8x10-10	130.00	.....	.....	.....
2064B	.....	S-11	.....	.....	125.00	.....	.....	.....
2065	.....	S-11	.....	.....	155.00	.....	.....	.....
2067*	.....	S-11	15	3x10-9	155.00	.....	.....	.....
4438*	.....	S-11	27	2.5x10-9	105.00	.....	.....	.....
4439	10	S-11	27	2.5x10-9	105.00	.....	.....	.....
4440*	.....	S-11	27	2.5x10-9	105.00	.....	.....	.....
4441	10	S-11	27	2.5x10-9	155.00	.....	.....	.....
4441A*	.....	S-11	27	2.5x10-9	320.00	.....	.....	.....
4459	.....	S-20	100	1.3x10-9	490.00	.....	.....	.....
4460*	.....	S-11	7.5	2x10-9	205.00	.....	.....	.....
4461*	.....	S-11	10	2x10-9	260.00	.....	.....	.....
4463	.....	S-20	25	1x10-9	310.00	.....	.....	.....
4464	.....	S-20	25	1x10-9	340.00	.....	.....	.....
4465	.....	S-20	25	1x10-9	420.00	.....	.....	.....
4516**	.....	S-11	27	2.9x10-11 (typ.)	165.00	.....	.....	.....
4517**	.....	S-11	33	4.3x10-11 (typ.)	83.65	79.05	75.30	71.10
4518**	.....	S-11	33	3x10-11 (typ.)	100.00	94.50	90.00	85.00
4522**	.....	S-11	.....	.....	1025.00	.....	.....	.....
4523**	.....	S-11	27	3.8x10-11 (typ.)	125.00	.....	.....	.....
4524**	.....	S-11	27	7.7x10-11 (typ.)	145.00	.....	.....	.....
4525**	.....	S-11	27	1.1x10-10 (typ.)	205.00	.....	.....	.....
4526**	.....	S-11	.....	.....	750.00	.....	.....	.....
5819	10	S-11	100	2x10-9	64.25	61.04	.....	.....
6199	10	S-11	45	2.5x10-9	47.20	44.60	.....	.....
6217	.....	S-10	100	2.5x10-8	72.00	68.04	64.80	61.20
6342A	10	S-11	31	2x10-9	57.20	.....	.....	.....
6655A	10	S-11	120	2x10-9	54.00	.....	.....	.....
6810A	14	S-11	3000	2x10-9	195.00	.....	.....	.....
6903	.....	S-13	90	2x10-9	370.00	.....	.....	.....
7046	.....	Extended	1750	1.2x10-8	570.00	.....	.....	.....
7102	10	S-1	4.5	1.5x10-6	110.00	.....	.....	.....
7254	.....	S-11	4200	2x10-9	285.00	.....	.....	.....
7285	14	S-20	1200	8x10-10	375.00	.....	.....	.....
7326	10	S-20	88	1.4x10-9	410.00	.....	.....	.....
7746	.....	S-11	1200	3.5x10-9	200.00	.....	.....	.....
7764	.....	S-11	0.6	3x10-8	125.00	.....	.....	.....
7767	10	S-11	16	5x10- 9	120.00	.....	.....	.....
7850	.....	S-11	26000	2.5x10-9	240.00	.....	.....	.....
8053	.....	S-11	42	7.8x10-10	107.25	.....	.....	.....
8054	10	S-11	19	7.2x10-10	125.00	.....	.....	.....
8055	10	S-11	43	7.2x10-10	170.00	.....	.....	.....
8575	12	.....	2800	5x10-12 (typ.)	315.00	.....	.....	.....
8575V1**	.....	.....	.....	.....	320.00	.....	.....	.....
8644	.....	S-20	12	6x10-10	370.00	.....	.....	.....
8645	.....	S-20	12	6x10-10	475.00	.....	.....	.....

Industrial & Special Purpose Tubes

GL-5551A

GL-6808

GL-7038

GL-7629 A/R

IGNITRONS—RESISTANCE WELDING CONTROL SERVICE

Tube Type	Size	Length	Diameter	1-4	5-18	19-49	50-99
GL-5550	A	5 1/16"	2 3/4"	49.00	.....	.....	.....
GL-5551-A	B	13"	2 3/4"	65.00	.....	.....	.....
GL-7669*	B	8 11/16"	2 3/4"	65.00	61.43	58.50	55.25
GL-5552-A	C	14"	4 1/4"	99.00	.....	.....	.....
GL-7671*	C	9 1/2"	4 1/4"	99.00	93.56	.....	.....
GL-7681**	J-C	17 1/2"	4 1/4"	155.00	.....	.....	.....
GL-5553-B	D	19 1/2"	5 5/8"	245.00	.....	.....	.....
GL-7673*	D	12 13/16"	5 5/8"	245.00	.....	.....	.....
GL-7151	E	19 3/4"	9 1/8"	750.00	.....	.....	.....
GL-5554		17"	4"	215.00	.....	.....	.....
GL-5555		17 15/16"	5 1/2"	316.00	.....	.....	.....
GL-5564		31 1/4"	9"	850.00	.....	.....	.....

*Coaxial; **Jumbo

IGNITRONS—POWER RECTIFIER SERVICE

Tube Type	Ave. I Amps	Length	Diameter	1-4	5-18	19-49	50-99
GL-5554	100	17"	4 1/8"	215.00	.....	.....	.....
GL-6512	.10	17"	4 1/8"	310.00	.....	.....	.....
GL-5555	200	17 15/16"	5 3/4"	318.00	.....	.....	.....
GL-6513	200	17 15/16"	5 3/4"	420.00	.....	.....	.....
GL-5788	200	19 1/4"	5 3/4"	545.00	.....	.....	.....
GL-6514	200	19 1/4"	5 3/4"	575.00	.....	.....	.....
GL-5564	400	31 1/4"	9 1/8"	935.00	.....	.....	.....
GL-6515	400	31 1/4"	9 1/8"	1060.00	.....	.....	.....
GL-6878	675	30 1/2"	13 1/4"	3200.00	.....	.....	.....
GL-5630	50	22 5/16"	5 3/4"	1940.00	.....	.....	.....
GL-6228	150	42"	9"	3696.00	.....	.....	.....
GL-5779	10	8 1/4"	2 1/2"	172.00	.....	.....	.....

IGNITRONS—CAPACITOR DISCHARGE SERVICE

GL-7171		8 3/4"	2 5/32"	60.00	56.70	54.00	51.00
GL-7703		7 5/8"	2 1/4"	170.00	.....	.....	.....

VIDICONS

Tube Type	Description	1-4
GL-7038	For film pickup applications . . . monochrome or color . . . a direct replacement for the 6198A	170.00
GL-7038v	For use in Chroma channel of the GE Model PE24 camera.	170.00
GL-7325	High sensitivity for live pickup . . . lower lag at low light . . . ideal for industrial use	170.00
GL-7735A	Highest sensitivity, lowest lag at low light levels . . . for studio or remote pickup	165.00
GL-7735B	Hightest sensitivity, lowest lag at low light levels, for studio or remote pickup, has higher resolution.	170.00
GL-7697	For cameras with automatic sensitivity control . . . similar to 7735A	170.00
GL-7226	Low heater power . . . for transistorized cameras . . . good live pickup	315.00
GL-7262A	Low heater rating of 0.6 watt . . . excellent sensitivity and low lag at low light	215.00
GL-7263A	Specially designed to withstand severe shock, vibration and high humidity	370.00
GL-8484		170.00
GLZ-7911	Designed for televising live scenes in educational, commercial, industrial and closed circuit television applications; high sensitivity and low lag photoconductive surface.	75.00
GL-8507	Separate Field Mesh 7735A	215.00
GL-8541	For transistorized cameras . . . similar to GL-8507 except 0.6 watt rating . .high sensitivity, low lag	310.00
GL-8572	Broadcast film pickup Sep. field mesh of 7038.	215.00
GL-8572v	Luminance Channel GE Camera Model PE240	215.00
GL-8604	Similar to 8572, except low heater power.	310.00
GL-8573	Live industrial—high sensitivity, short length, low heater power. Sep. field mesh.	275.00

ANTI-MICROPHONIC IMAGE ORTHICONS

Tube Type	Description	1-4
5820A/R	Anti-Microphonic	995.00
7293A/R	Close Spacing—Anti-Microphonic	1050.00
7295	4½" Tube—Anti-Microphonic	1440.00
7629A/R	Anti-Microphonic	1700.00
Z7866	Anti-Microphonic — extra long life — color	1975.00
8092A/R	Anti-Microphonic	1870.00
8093A/R	Anti-Microphonic	1120.00

IMAGE ORTHICONS

Tube Type	Target	Field Mesh	Sig/Noise	1-4
5820A	Glass	NO	50:1	995.00
7293	Glass	YES	50:1	1050.00
GL-7629A	Magnesium-Oxide	NO	40:1	1700.00
GLZ7888	Glass	YES	65:1	1800.00
GLZ7899	Glass	NO	65:1	1800.00
GL8092A	Magnesium-Oxide	YES	40:1	1870.00
GL-8093A	Glass	YES	55:1	1120.00

PLANAR TRIODE TUBES

Type	Max. Plate Diss.-Watts w/cooling	Tested Max. Freq Mc.	1-4	5-18	19-49	50-99
2C39B	100	2500	32.15	30.38	28.93	27.33
2C40A	6.5	3000	34.00	32.30	30.60	.....
2C43	12	3000	27.50	26.00	.....	.....
6299	2.0	3000	56.00	.....	.....	.....
6442	8.0	5000	39.00	.....	.....	.....
7289	100	3000	30.75	29.06	27.67	26.14
7391	2.2	6000	67.00	63.32	60.30	56.95
7815	10.0	3000	30.75	29.06	27.67	26.14
3CX100A5	100	2500	32.00	.....	.....	.....
6771	6.25	4000	71.90	.....	.....	.....

THYRATRONS

Type	Peak Forward Anode Volts	Peak Inverse Anode Volts	Average Cathode Amperes	1-4	5-18	19-49	50-99
GL-3C23	1,250	1,250	1.5	11.98	11.38	10.78	10.18
6D4	350	350	.025	2.70	2.57	2.43	2.30
2D21	650	1,300	0.1	1.29	1.23	1.16	1.10
FG-81-A	500	500	0.5	32.50	30.71	29.25	27.63
FG-97	1,000	1,000	0.5	62.00	58.59	55.80	52.70
FG-98-A	500	500	0.5	77.00	72.77	69.30	65.45
FG-105	2,500	2,500	6.4	59.00	56.05	.....	.....
FG-172	2,000	2,000	6.4	129.00	.....	.....	.....
GL-303-A	1,250	1,250	1.5	13.25	12.59	.....	.....
GL-414	3,000	3,000	5.0	294.00	.....	.....	.....
GL-672-A	2,500	2,500	3.2	39.85	37.66	.....	.....
GL-678	10,000	15,000	1.6	49.50	46.78	44.55	42.10
2050	.....	.....	.....	2.37	2.25	2.13	2.01
2050-A	650	1,300	0.1	2.03	1.92	1.83	1.73
GL-5544	1,500	1,500	3.2	32.50	.....	.....	.....
GL-5557 (FG17)	2,500	5,000	0.5	9.50	9.02	8.55	.....
GL-5559 (FG57)	1,000	1,000	2.5	23.00	21.73	.....	.....
GL-5580 (FG95)	1,000	1,000	2.5	33.00	31.35	29.70	.....
GL-5563-A	20,000	20,000	1.6	51.25	.....	.....	.....
GL-5632 (C3-J)	9,000	1,250	2.5	12.70	12.09	.....	.....
5663	500	500	0.02	2.10	2.00	1.89	1.79
GL-5665 (C16-J)	1,000	1,250	0.02	52.50	49.88	.....	.....
GL-5720 (FG-33)	1,000	1,000	2.5	34.75	32.84	31.27	29.54
5727 (2D21-W)	650	1,300	0.1	2.90	2.76	2.61	2.47
GL-5830 (FG41)	10,000	10,000	12.5	570.00	.....	.....	.....
GL-5855	1,500	1,500	18	85.00	80.33	76.50	.....
GL-6011/ 710	1,000	1,250	2.5	12.70	12.06	.....	.....
6012	650	1,300	0.5	7.65	7.27	6.89	6.50
GL-6014 (C1E)	1,000	1,250	1	11.80	11.15	10.62	10.03
GL-6807	1,500	1,500	6.4	32.35	.....	.....	.....
GL-6808	1,500	1,500	6.4	32.90	.....	.....	.....
GL-6809	1,500	1,500	6.4	35.50	33.55	31.95	30.18
GL-6858 (760)	1,500	1,500	6.4	28.10	26.70	.....	.....
GL-6859 (760-P)	1,500	1,500	6.4	29.80	27.93	.....	.....
GL-7518 (710-L)	1,000	1,250	2.5	14.00	13.49	12.78	.....
GL-7725	3,500	3,500	2.5	13.50	12.76	12.15	11.48

LET NEWARK SUPPLY ALL YOUR ELECTRONIC NEEDS!

Ten Stocking Warehouses, Coast-to-Coast

Special Purpose Tubes, Fans, Sockets, Finger Stock

GENERAL ELECTRIC

CERAMIC TUBES

Tube Type	1-4	5-18	19-49	50-99
6897	32.15	29.54	.....	.....
7077	39.05	.....	.....	.....
7286	35.44	.....	.....	.....
7296	49.81	47.13	.....	.....
7462	39.05	36.90	35.14	33.19
7486	39.05	36.90	35.14	33.19
7588	101.59	.....	.....	.....
7625	39.05	36.90	35.14	33.19
7644	65.00	.....	.....	.....
7720	39.05	36.90	35.14	33.19
7768	111.04	.....	.....	.....
7784	65.00	.....	.....	.....
7841	35.44	33.49	31.90	30.12
7910	82.69	.....	.....	.....
7913	122.65	.....	.....	.....
8081	40.16	33.49	31.90	30.12
8082	40.16	33.49	31.90	30.12
8083	40.16	33.49	31.90	30.12

5-STAR HIGH RELIABILITY TUBES

5-Star Tube Type	Replaces Tube Type	Tube Function and Application	MIL-E-1 Specification	1-4	5-18	19-49	50-99
5654	6AK5	Sharp-cutoff RF pentode	5654M/6AK5W	2.45	2.33	2.21	2.08
5670	2C51	Medium-mu twin triode; general purpose	5670	2.45	2.33	2.21	2.08
5725	6AS6	Dual-control pentode; gated amplifier or mixer	5725/6AS6W	3.12	2.95	2.81	2.65
5726	6AL5	Twin-diode; detector or low-current rectifier	5726/6AL5W	1.55	1.47	1.40	1.32
5727	2D21	Thyratron; grid-controlled rectifier or pulse modulator	5727/2D21W	2.90	2.76	2.61	2.47
5749	6BA6	Remove cutoff RF pentode	5749/6BA6W	2.20	2.09	1.98	1.87
5750	6BE6	Pentagrid converter	5750/6BE6W	3.45	3.28	3.11	2.93
5751	12AX7	High-mu twin triode; AF voltage amplifier	5751, 5751WA, 5751W(1)	2.55	2.42	2.30	2.17
5814-A	12AU7	Medium-mu twin triode; general purpose	5814-W, 5814WB	2.35	2.23	2.12	2.00
5840	.....	Sharp-cutoff RF pentode	5840, 6205	5.35	5.08	4.82	4.55
5844	.....	Medium-mu twin triode; computer service	5844 (Sig. C.)	2.30	2.19	.....	.....
5899	.....	Semi-remote-cutoff RF pentode	5899M, 6206M	5.55	5.27	5.00	4.72
5963	.....	Medium-mu twin triode; computer service	5963 (Navy)	1.36	1.29	1.22	1.16
5965A	.....	Medium-mu twin triode; computer service	.....	1.92	1.82	1.73	1.63
6005	6AQ5	Beam power amplifier	6005M/6AQ5W	3.23	3.06	2.91	2.75
6046	25LG-GT	Beam power amplifier; relay energizer	.....	1.55	1.46	1.39	1.32
6072-A	12AY7	Medium-mu twin triode; AF preamplifier	6072-A	3.90	3.71	3.51	3.32
6087	5Y3GT	Twin diode; full wave rectifier	5Y3WGTB (Navy)	5.75	5.46	5.17	4.89
6111	.....	Medium-mu twin triode; general purpose	6111	3.70	3.52	3.33	3.15
6112	.....	High-mu twin triode; AF voltage amplifier	6112	4.15	3.94	3.74	3.53
6136	6AU6	Sharp-cutoff RF pentode	6AU6WB	2.70	2.57	2.43	2.30
6201	12AT7	High-frequency twin triode; RF amplifier or oscillator	12AT7WA, 12AT7WB (Navy)	2.55	2.42	2.29	2.17
6202	6X4	Twin diode; full wave rectifier	6X4WA	4.10	3.87	3.69	3.49
6203	.....	Twin diode; full wave rectifier	6203	4.10	3.95	3.69	3.49
6211A	.....	Medium-mu twin triode- computer service	6211 (Navy)	2.15	2.04	1.94	1.83
6386	.....	Medium-mu remote-cutoff twin triode; RF amplifier or mixer	6386 (Navy)	7.38	7.01	6.64	6.27
6463	.....	Medium-mu twin triode; computer service	.....	1.90	1.81	1.71	1.62
6829	5965	Medium-mu twin triode; general purpose	6829M	6.10	5.76	5.49	5.19

COMMUNICATION TUBES

Type	Replaces Tube Type	Allowable V Variation	1-4	5-18	19-49	50-99
6660	6BA6	±20%	1.01	.95	.91	.86
6661	6BH6	±20%	1.34	1.27	1.21	1.14
6662	6BJ6	±20%	1.29	1.22	1.16	1.10
6663	6AL5	±20%	.92	.87	.....	.....
6664	6AB4	±20%	1.12	1.06	1.01	.95
6669	6AQ5A	±20%	1.06	1.00	.95	.90
6676	6CB6A	±20%	1.06	1.00	.95	.90
6677	6CL6	±20%	1.85	1.76	1.67	1.57
6678	6U8A	±20%	1.62	1.54	1.46	1.38
6679	12AT7	±20%	1.50	1.43	1.35	1.28
6680	12AU7	±20%	1.22	1.16	1.10	1.04
6681	12AX7	±20%	1.26	1.19	1.13	1.07

BROADCAST POWER TUBES

Transmitting Triodes and Tetrodes and Power Rectifiers

Tube Type	Description	Max Plate Input (W)	1-4
GL-7D21	Tetrode	3000	790.00
GL-5513	Triode	3600	620.00
GL-5518	Triode	12,000	1400.00
GL-5549	Triode	10,000	653.50
GL-6039	Triode	16,000	2070.00
GL-6251	Tetrode	50,000	2790.00
GL-6942	Tetrode	2500	960.00
GL-857B	Mercury Rect.	10 amp.	207.00
GL-869B	Mercury Rect.	2.5 amp.	123.50

To Serve You Better — Ten Stocking Warehouses from Coast-to-Coast
Use the Services of the Facility Nearest You — See Front Cover

EIMAC PRODUCTS

PREFORMED CONTACT FINGER STOCK
(AVAILABLE IN 3' LENGTHS ONLY) *Double sided

Stk. No.	Type	Width	NET	Stk. No.	Type	Width	NET
28F977	CF-100	17/32"	5.35	28F836	CF-600*	2¼"	8.60
28F834	CF-200*	13/16"	6.20	28F837	CF-700	17/32"	5.80
28F978	CF-300	31/32"	5.80	28F838	CF-800	23/32"	5.80
28F835	CF-400*	1 17/32"	7.70	28F839	CF-900	31/64"	5.35
28F979	CF-500	1⅜"	6.20				

HEAT DISSIPATING CONNECTORS

Size indicates conductor diameter.

Stk. No.	Type	Size	NET	Stk. No.	Type	Size	NET
28F980	HR-1	.055	1.10	28F983	HR-6	.370	1.20
28F981	HR-2	.065	1.20	29F002	HR-7	.130	1.65
28F982	HR-3	.075	1.20	29F003	HR-8	.578	1.65
29F000	HR-4	.105	1.20	29F004	HR-9	.572	2.80
29F001	HR 5	.130	1.20	29F005	HR-10	.514	1.65

CHIMNEYS FOR AIR SYSTEM SOCKETS

Stk. No.	Type	NET	Stk. No.	Type	NET
38F997	SK-406 FOR 4-400A-4-250A, 4-125A-4006	6.50	38F991	SK-806 FOR 4CX1000A	8.50
38F998	SK-506 FOR 4-100A-4006	12.00	38F259	SK-906 FOR 4X500A	15.00
38F999	SK-606 FOR 4X150A/4006, 4X150A&D 4X250B, 4X250F-4CX250B	.75			

VACUUM SWITCHES AND COILS

Stk. No.	Type	NET	Stk. No.	Type	NET
38F261	VS-2	20.50	38F263	24V coil	10.25
38F262	12V coil	10.25			

AIR SYSTEM SOCKETS

Stk. No.	Type	NET	Stk. No.	Type	NET
38F992	SK-300, FOR 4CX5000A	103.00	38F248	SK-710 FOR 4CX300A	36.40
38F993	SK-410, FOR 4-400A	9.00	38F249	SK-740, FOR 4CN15A 4CX300A	10.70
38F994	SK-510, FOR 4-1000-A-4001	9.00	38F250	SK-760 FOR 4CN15A-4CX300A	10.70
38F995	SK-600, FOR 4X250F-4X150A/400 4X150D-4X250B 4CX250B-4W300B	12.00	38F251	SK-770, FOR 4CN-15A, 4CX300A Screen pin grounded	10.70
38F996	SK-610, FOR 4X150D-4X150A/4011 4CX250B-4X250B 4X250F-4W300B	13.60	38F990	SK800B FOR 4CX1000A	54.00
38F247	SK-700 4CX300A	36.40	38F252	SK-810B FOR 4CX1000A	56.00
			38F253	SK900, FOR 4X500A	68.50

Special Purpose & Industrial Tubes

DIODES AND RECTIFIERS

Type	Description	1-4	5-18	19-49	50-99
2-01C	Diode, 5V, .3A Fil. 1kV max. peak inverse v.	18.00	17.01	.....	.....
2-25A	High vacuum diode for high peak inverse voltage rectifier circuits.	27.00	25.52	.....	.....
250R	As above exc. 5V, 10.5A Fil. 60kV max. inv. v. 250 MA avg. 2.5A peak pl. current.	42.00	.....	.....	.....
575A	Half wave mercury-vap. rect. 5V 11.5A fil.	20.15	19.04	.....	.....
673	Half wave mercury-vap. rect. 5V 11.5A fil.	20.15	19.04	.....	.....
869B	Half wave mercury-vap. rect. 5V 21A fil.	138.00	.....	.....	.....
869BL	Half wave mercury-vap. rect. 5V 21A fil.	138.00	.....	.....	.....
6894	Half wave mercury-vap. rect. 5V 11A fil.	25.00	23.63	.....	.....
8020/100R	As 250R exc. 5V, 6.5A Fil. 40kV max. inv. v. 100MA avg. 1.5A peak pl. curr.	26.50	25.04	.....	.....
KY21A	Grid controlled mercury vapor-rect. 2.5V, 10A Fil. 750 MA avg. 3 peak pl. curr.	33.80	31.94	30.42	.....
RX21A	Half-wave mercury vapor-rect. 2.5V, 10A Fil. 750 MA avg. 3A peak pl. curr.	32.80	31.00	.....	.....

TRIODES

2C39A	High mu, ceramic-metal plan. triode 100W pl. diss. 6.3V 1A Fil. 1000V max. pl.	20.75	19.61	18.68	17.64
2C39WA	Suited for use in grid-isolated VHF and UHF circuits.	29.00	27.40	26.10	24.65
3-400Z/8163	Small 0-bias pwr. triode providing 1kW pep as a low distortion class B linear.	34.00	.....	.....	.....
3-1000Z/8164	Larger vers. of 3-400Z. 7 5V 21A Fil. No bias with plate v. below 3000V.	78.00	.....	.....	.....
3CPN10A5/7815	High mu ceramic-metal planar triode for pulse serv. to 3 GC 6V 1A Fil.	30.75	29.06	27.67	26.14
3CX100A5/7289	Improved version of 2C39.	26.50	25.27	.....	.....
3CX2500A3	Ceramic Med.-mu pwr. triode, forced air cooled. 7500W output up to 110MHz with 4000 plate v. 7.5V 54A Fil. 2500W plate diss.	200.00	.....	.....	.....
3CX2500F3	Same as 3CX2500A3 exc. flexible leads to simplify grid & fil. conn. Ceramic type.	205.00	.....	.....	.....
3CX3000A1	Ceramic-metal replacement for discontinued glass metal type 3X3000A1	210.00	.....	.....	.....
3CX3000F1	Ceramic-metal replacement for discontinued glass metal type 3X3000F1	220.00	.....	.....	.....
6C21	Pulse-modulator triode. Radiation and forced air cooled. 8.2V 18A Fils. 30kV max. pl. v. 15A max. pulse pl. curr., 300W pl. diss.	99.00	93.56	89.10	84.15
100TH	High-mu pwr. triode. Full ratings to 40 MHz 5V, 6.3A Fil. 100W plate diss.	28.00	24.57	.....	.....
250TH	High-mu pwr. triode. 1KW in class C with 39W drive. 5V 10.5A Fil. 250W plate diss.	45.00	.....	.....	.....
250TL	Low-mu version of 250TH.	45.00	.....	.....	.....
304TH	Med.-mu pwr. triode. Up to 1200W class C with 53W drive. No forced air below 40 MHz 5 or 10V, 25 or 12.5A. Fil. 3000V max. on pl. 300W pl. diss.	83.00	78.44	74.70	70.55
304TL	Low-mu version of 304TH.	83.00	78.44	74.70	70.55
450TH	High-mu pwr. triode, up to 1800W class C with 46W drive, cooled by pl. radiation and convection. Ratings to 40 MHz 7.5V 12A Fil. 6000V max. on pl. 450W pl. diss.	85.00	.....	.....	.....
450TL	Low-mu version of 450TH.	85.00	.....	.....	.....
592/3-200A3	Med.-mu pwr. triode. Ratings to 150 MHz. Cooled by radiation and forced air. 10V 5A Fil. 3500V max. on plate 200W plate dissipation.	55.00	51.98	.....	.....
750TL	Med.-mu pwr. triode. 7.5V 23A Fil. 10kV max. on plate. 750W plate dissipation.	224.00	.....	.....	.....
25T	Med.-mu triode. Full Ratings 60 MHz 6.3V 3A Fil. 2000V max. pl. v. 25W plate diss.	37.00	34.97	.....	.....
35T	High-mu triode. Full Ratings to 100MHz 5V 4A Fils. 2000 max. pl. v. 35W plate diss.	41.00	38.75	.....	.....
1000T	High-mu pwr. triode. 3000W class C 60W drive. Forced air cooled. 7.5V 16.5A Fil.	172.00	.....	.....	.....
5867A	Pwr. triode, 350 W PL .Diss. 5V. 15A. fil.	30.60	.....	.....	.....
6696A	Hi Pwr. triode,, 60 KW PL. Diss. 13V. 220A fil.	1105.00	.....	.....	.....
7211	Same mech. as 2C39 but 1/3 larger elect. 6.3V 1.3A Fil. 100W pl. diss.	75.00	70.88	67.50	63.75
7289/3CX100A5	Same as 3CX100A5.	30.75	29.06	27.67	26.14
7698	Same as 7211 except has no air cooler on anode.	75.00	70.88	67.50	63.75
7815/3CPN10A5	Same as 3CPN10A5.	30.75	29.06	27.67	26.14

TETRODES & PENTODES

4-65A/8165	Pwr. tetrode. Full Ratings to 150MHz 6V 3.8 Fil. 3kV max. on pl. 65W pl. diss.	27.00	25.65	.....	.....
4-125A/4D21	Rad. beam pwr. tetrode. Ratings to 120 MHz 375W class C with 2.5W drive. 5V 7A Fil. 3000V max. on pl. 125W plate dissipation.	36.00	34.20	32.40	30.60
4-250A/6D22	Compact pwr. tetrode. Forced air cooled. Full Ratings to 110 MHz 1kW Class C with 2.5W drive. 5V 14.5A Fil. 4000V max. on pl. 250W pl. diss.	46.50	44.18	41.85	39.53
4-400A/8438	Compact pwr. tetrode. Forced air cooled. Full Ratings to 110 MHz 1100W Class C with 6 W drive. 5V 14.5A Fil. 4000 V max. on pl. 400 W pl. diss.	48.00	45.60	.....	.....
4-1000A/8166	Rad. beam pwr. titiode. Forced air cooled. Ratings to 110 MHz 3400W Class C with 15W drive. 7.5V 21A Fil. 6000V max. on pl. 1000W pl. diss.	131.50	.....	.....	.....
4CX250B/7203	Compact pwr. tetrode. Air cooled. 6V 3A Fil. 2000V max. on plate. 250W pl. diss.	35.60	33.82	.....	.....
4CX250K/8245	Compact pwr. Tetrode. Coaxial construc. for cavity oper. Forced air cooled. Ratings to 500 MHz. Useful to 1500 MHz 6V 3A Fil. 2kV max. on pl. 250W pl. diss.	64.00	60.80	.....	.....
4CX250R/7580W	Rugged compact pwr. tetrode. Forced air cooled. Ratings to 500 Mc. 6V 3A Fil. 2000V max. on plate. 250W plate dissipation.	44.50	42.85	.....	.....
4CX300A/8167	Pwr. tetrode. Air cooled. 6V 3A Fil. 2500V max. on pl., 300W pl. diss.	54.00	51.03	.....	.....
4CX350A/8321	Like 4CX250B but higher gain and power. Ratings to 500 MHz. Forced air cooled. 6V 3.6A Fil. 2000V max. on plate. 350W pl. diss.	48.50	46.08	.....	.....
4CX350F/8322	Same as 4CX350A/8321 except has 26.5V 800 MA Fil.	51.50	48.67	.....	.....
4CX1000A/8168	Pwr. tetrode. Forced air cooled. Excellent high gain and low distortion Ratings to 110 MHz 6V 10A Fil. 3000V max. on plate. 1000W pl. diss.	181.00	.....	.....	.....
4CX1000K/8352	Ident. to 4CX1000A, but gives better UHF performance to over 400 Mc.	193.00	.....	.....	.....
4CX3000A/8169	Pwr. tetrode. Ratings to 150 MHz 10V 48.5A Fil. 3KW pl. diss.	420.00	.....	.....	.....
4CX5000A/8170	High pwr. tetrode. Forced air cooled. 16KW class C with 150W drive. Ratings to 110 MHz 7.5V 78A Fil. 7500V max. on pl. 5000W pl. diss.	495.00	.....	.....	.....
4CX10000D/8171	Electrically ident. to 4CX5000A/8170, but larger anode radiator to reduce cooling air requir. or permit up to 10KW pl. diss.	575.00	.....	.....	.....
4E27A/5-125B	Pwr. pentode with neutralization requir. simplified or eliminated. Ratings to 75 MHz 375W class C with 2W drive. 5V 7.5A Fil. 4kV max. on pl. 125W pl. diss.	45.00	42.75	.....	.....
4PR60B/8252	Pulse mod. tetrode. Replaces 715C and 5D21. Supersedes 4PR60A. 300KW pulse pwr with less than 1KW drive. 26V 2A Fil. 20kV max. on pl. 60W pl. diss.	107.00	.....	.....	.....
4PR65A/8187	Tetrode for pulse mod., amp., or osc. 6V 3.8A Fil. 15kV max. on pl. 65W pl. diss.	43.00	40.64	.....	.....
4X150A/7034	Compact pwr. tetrode. Air cooled. 6V 3A Fil. 2kV max. on pl. 250W pl. diss.	23.15	21.99	.....	.....
4X500A	Pwr. Tetrode for VHF. 500 W. PL. Diss. 5V. 14A. fil.	127.50	.....	.....	.....
7203/4CX250B	Identical to 4CX250B/7203.	35.60	33.82	.....	.....

UHF-TV POWER AMPLIFIER KLYSTRON

4KM70LA	4 cavity, 12.5 KW output, for channels 14 to 36.	5880.00	.....	.....	.....
4KM100LA	4 cavity, 25 KW output, for channels 14 to 36.	9030.00	.....	.....	.....
4KM150LA	4 cavity, 50 KW output, for channels 14 to 36.	11550.00	.....	.....	.....

SAVE WORK! Make Newark your Complete 1-Point Stock Source!
SAVE TIME! At Newark—fast, efficient service always!
SAVE MONEY! Quantity Prices Competitive with Manufacturer!

Amperex Industrial & Special Purpose Tubes

TRIODE

Tube Type	1-4	5-18	19-49	50-99
833A	65.00	61.43	58.50	55.25
ZB3200	475.00	.....	.....	.....
5658	595.00	.....	.....	.....
5667	370.00	.....	.....	.....
5842	7.35	6.95	6.61	6.25
5866	24.30	22.96	21.87	20.66
5867A	35.25	.....	.....	.....
5868	65.65	.....	.....	.....
5920	3.20	3.02	2.88	2.72
5923	165.00	.....	.....	.....
5924A	294.75	.....	.....	.....
6085	3.30	3.12	2.97	2.81
6201	2.95	2.80	2.66	2.51
6211	3.20	3.08	2.88	2.72
6463	3.50	3.33	3.15	2.97
6922	4.87	4.60	4.38	4.14
6977	2.50	.....	.....	.....
7062	2.39	2.26	2.15	2.03
7092	125.00	.....	.....	.....
7119	2.95	2.48	2.30	2.03
7237	200.00	.....	.....	.....
7308	5.20	4.91	4.68	4.42
7316	1.40	1.32	.....	.....
7459	271.50	.....	.....	.....
7643	4.95	4.68	4.45	4.21
7753	152.00	.....	.....	.....
7800	760 00	.....	.....	.....
7804	400.00	.....	.....	.....
7805	375.00	.....	.....	.....
7806	780.00	.....	.....	.....
7807	640.00	.....	.....	.....
7899	760.00	.....	.....	.....
7900	306.25	.....	.....	.....
7986/5868A	26.00	24.57	23.40	22.10
8108/EC157	155.30	.....	.....	.....
8254	17.00	.....	.....	.....
8268	170.00	.....	.....	.....

UHF TRIODE

Tube Type	1-4	5-18	19-49	50-99
TBL2/400/8119	250.00	.....	.....	.....
TBL2/500/8120	270.00	.....	.....	.....
8163	39.00	.....	.....	.....
8177	1250.00	.....	.....	.....

BEAM DEFLECTION TUBE

Tube Type	1-4	5-18	19-49	50-99
6218	8.65	8.17	7.78	7.35

BEAM POWER TUBE

Tube Type	1-4	5-18	19-49	50-99
6159	4.80	4.56	4.32	4.08
8042	9.00	8.51	8.10	.....

INDICATOR

Tube Type	1-4	5-18	19-49	50-99
ZM1030	9.95	9.95	9.95	8.00
ZM1032	9.95	9.95	9.95	8.00

AMPLIFIER

Tube Type	1-4	5-18	19-49	50-99
6687	2.79	.....	.....	.....
7737	7.20	.....	.....	.....

CATHODE

Tube Type	1-4	5-18	19-49	50-99
Z803U/6779	5.75	5.43	5.18	4.00
6779/Z803U	5.75	5.43	5.18	4.00
8453/Z550M	14.50	13.70	13.05	12.32

PENTODE

Tube Type	1-4	5-18	19-49	50-99
E55L/8233	13.25	12.52	11.92	11.26
5654/6AK5W	2.45	2.33	2.23	2.08
5847	9.55	9.02	.....	.....
6007	1.72	1.63	1.55	1.46
6008	2.50	.....	.....	.....
6083	16.50	15.59	14.85	14.03
6084	3.30	3.12	2.97	2.81
6227	3.05	2.88	2.74	2.59
6375	8.40	7.94	7.56	7.14
6686	4.10	3.87	3.69	3.49
6688	6.80	6.43	6.12	5.78
6688A	6.80	6.43	6.12	5.78
6689	3.85	3.64	3.46	3.27
7189	1.35	1.28	1.21	1.15
7534	17.50	16.54	15.76	.....
7693	3.75	3.54	3.37	3.19
7694	3.75	3.54	3.37	3.19
7737	7.20	.....	.....	.....
7788	9.75	9.21	8.77	8.29
8233	13.25	12.52	11.92	11.26

TETRODE

Tube Type	1-4	5-18	19-49	50-99
4-65A	27.00	25.65	.....	.....
4-125A	36.00	.....	.....	.....
4-250A	46.50	44.18	41.85	39.53
4-400A	48.00	45.36	.....	.....
4CX250B/7203	35.65	33.69	32.08	30.30
4CX250R/7580W	45.00	42.52	.....	.....
4X150A/7034	23.15	21.99	.....	.....
4X500A	128.50	.....	.....	.....
6155	37.50	35.44	.....	.....
6156	44.85	42.38	40.36	38.13
6883	4.30	4.09	3.87	3.66
7378	49.50	46.78	44.56	42.08
7527	47.25	44.65	42.52	40.16
7609	29.35	.....	.....	.....
8179	145.00	.....	.....	.....

TWIN TETRODE

Tube Type	1-4	5-18	19-49	50-99
5894	25.00	23.63	22.50	21.25
6252	25.00	23.63	22.50	.....
6360A	4.95	4.68	4.45	.....
6907	25.00	23.63	22.50	21.25
6939	12.00	11.34	10.80	10.20
7377	19.60	18.52	17.64	16.66
7699	13.50	12.76	12.15	11.48
7854	29.25	27.64	.....	.....
8118	38.50	36.38	34.65	32.73

RECTIFIER

Tube Type	1-4	5-18	19-49	50-99
857B	240.00	.....	.....	.....
866AX	3.90	3.68	3.51	.....
869B	155.00	.....	.....	.....
869BL	155.00	.....	.....	.....
872AX	10.85	10.25	9.76	9.22
6693	27.90	26.37	25.11	.....
7136	27.90	26.37	25.11	.....
8008AX	10.85	10.25	9.77	9.22
8020AX	24.00	22.68	21.60	20.40
8270	78.00	.....	.....	.....

PLUMBICON

Tube Tvpe	1-4	5-18	19-49	50-99
55875	1475.00	.....	.....	.....
55875R	1475.00	.....	.....	.....
55875G	1475.00	.....	.....	.....
55875B	1475.00	.....	.....	.....

VOLTAGE REFERENCE TUBE

Tube Type	1-4	5-18	19-49	50-99
OE3	7.25	6.85	6.52	6.16
OE3/85A1	7.25	6.85	.....	.....
OG3	2.30	2.19	2.07	1.95
OG3/85A2	2.30	2.19	.....	.....
85A1/OE3	7.25	6.85	.....	.....
85A2/OG3	2.30	2.19	.....	.....
5651	1.78	1.69	1.60	1.51
8228/ZZ/1000	2.90	2.78	2.61	2.47

THYRATRON

Tube Type	1-4	5-18	19-49	50-99
2D21	1.29	1.23	1.16	1.10
AX105/FG105	53.33	50.40	48.00	.....
AX260	150.00	.....	.....	.....
5544	44.40	41.96	39.96	37.74
5545	48.75	46.06	43.87	41.44
5557/FG17	11.10	10.48	8.88	.....
5559	23.00	.....	.....	.....
5727	2.90	2.76	2.61	2.47
5869	28.80	27.22	25.96	.....
5870	105.00	.....	.....	.....
6268	41.00	.....	.....	.....
6279	47.55	44.93	42.79	.....
6786	230.00	.....	.....	.....
8482	78.00	73.71	70.20	66.30

VOLTAGE REGULATOR

Tube Type	1-4	5-18	19-49	50-99
OA2	1.32	1.25	1.19	1.12
OB2	1.37	1.30	1.24	1.16
90C1	2.25	2.13	2.02	.....
150B2/6354	2.55	2.41	2.29	2.17
6354/150B2	2.55	2.41	2.29	2.17

SPECIAL INDUSTRY TUBES

Tube Type	Description	1-4	5-18	19-49	50-99
Z70U/7710	Submin. Cold Cathode	1.95	1.84	1.76	1.35
Z70W/7709	Submin. Cold Cathode	3.30	3.12	2.97	2.30
Z71U/7711	Submin. Cold Cathode	2.85	2.69	2.57	2.00
Z303C	Cold Cathode Dec. Counter	11.00	10.40	9.90	9.15
Z502S	Cold Cathode Dec. Counter	13.65	12.90	12.29	10.50
Z550M/8453	Cold Cathode	14.50	13.10	13.05	12.00
Z803U/6779	Cold Cathode	5.75	5.43	5.18	4.00
Z805U/7714	Cold Cathode	7.50	7.09	6.75	5.45
Z900T/5823	Min. Glow	3.45	3.26	3.11	2.40
ZM1030	Disch. Triode Bi-Quin.Num. Indic. (Red)	9.95	9.40	8.96	8.00
ZM1032	Bi-Quin.Num. Indic.(Clear)	9.95	9.40	8.96	8.00
B8.700/67	Socket for Z550M	1.06	1.00	.95	.90
B8.700.86	Socket for 6GB5, 8233, 8278, 8458	.32	.30	.29	.27

TRIGGER TUBE

Tube Type	1-4	5-18	19-49	50-99
Z70U/7710	1.95	1.84	1.76	1.35
Z70W/7709	3.30	3.12	2.97	2.30
Z71U/7711	2.85	2.69	2.57	2.00
Z805U/7714	7.50	7.09	6.75	5.45

To Serve You Better — Ten Stocking Warehouses from Coast-to-Coast

Use the Services of the NEWARK Facility Nearest You

RAYTHEON · · MACHLETT Special Purpose Tubes

MACHLETT

ML-6697

ML-7289

Type	1-4	5-18	19-49	50-99
ML2C39A	20.75	19.71	18.68	17.64
ML2C39WA	20.75	19.61	18.67	17.64
ML3CPN10A5	30.75	29.06	27.67	26.14
ML3CX100A5	30.75	29.06	.....	.....

Type	1-4	5-18	19-49	50-99
ML-4CX5000A	495.00	.....	.....	.....
ML-4CX1000OD	550.00	.....	.....	.....

Type	1-4	5-18	19-49	50-99
ML102A	174.00	.....	.....	.....
ML5575/100	225.00	.....	.....	.....
ML5576/200	245.00	.....	.....	.....
ML8094/199	335.00	.....	.....	.....
ML298A	3200.00	.....	.....	.....
ML342A	1030.00	.....	.....	.....
ML342AA	1300.00	.....	.....	.....
ML356/5771	700.00	.....	.....	.....
ML357B	390.00	.....	.....	.....
ML880	595.00	.....	.....	.....
ML891	275.00	.....	.....	.....
ML891R	430.00	.....	.....	.....
ML892	270.00	.....	.....	.....

ML-5530

Type	1-4	5-18	19-49	50-99
ML5530	450.00	.....	.....	.....
ML5530H	450.00	.....	.....	.....
ML5531	795.00	.....	.....	.....
ML5541	690.00	.....	.....	.....
ML5604	570.00	.....	.....	.....
ML5606	288.00	.....	.....	.....
ML5619	423.00	.....	.....	.....
ML5658	595.00	.....	.....	.....
ML5666	280.00	.....	.....	.....
ML5667	370.00	.....	.....	.....
ML5668	350.00	.....	.....	.....
ML5669	515.00	.....	.....	.....
ML5681	2175.00	.....	.....	.....
ML5682	2625.00	.....	.....	.....
ML6166A/7007	1020.00	.....	.....	.....
ML6256	335.00	.....	.....	.....
ML6257	345.00	.....	.....	.....
ML6258	385.00	.....	.....	.....
ML6420	445.00	.....	.....	.....
ML6421	525.00	.....	.....	.....
ML6421F	545.00	.....	.....	.....
ML6422	450.00	.....	.....	.....
ML6423	525.00	.....	.....	.....
ML6423F	545.00	.....	.....	.....
ML6424	518.00	.....	.....	.....

ML-102A

ML-7007

Type	1-4	5-18	19-49	50-99
ML6426	720.00	.....	.....	.....
ML6442	39.00	.....	.....	.....
ML6576	900.00	.....	.....	.....
ML6696	1090.00	.....	.....	.....
ML6697	1320.00	.....	.....	.....
ML6697A	1320.00	.....	.....	.....
ML6771	71.90	67.95	64.71	61.12
ML7007	1020.00	.....	.....	.....
ML7289	30.75	29.06	27.67	26.14
ML7479A	920.00	.....	.....	.....
ML7480	1590.00	.....	.....	.....
ML7482	4455.00	.....	.....	.....
ML7560	4455.00	.....	.....	.....
ML7698	88.50	83.63	79.65	75.23
ML7815/ 3CPN10A5	30.75	29.06	27.67	26.14
ML7855	60.00	56.70	54.00	51.00
ML8403	115.00	.....	.....	.....

Type	1-4	5-18	19-49	50-99
ML-8170/4CX5000A	495.00	.....	.....	.....
ML-8170W/4CX5000R	705.00	.....	.....	.....
ML-8171/4CX10000D	550.00	.....	.....	.....
ML-8281/4CX1500A	695.00	.....	.....	.....

PENTA LAB

PL-175A

PL-177A

PL-8295/PL172

PL-8432

PL-195

Power tetrodes, except: § power triodes, # high vacuum rectifier, † beam pentodes. Beam pentodes feature patented Penta vane-type suppressor grid—used by leading manufacturers of commercial, military, and Amateur single-sideband equipment.

Tube Type	Fil. V.	Fil. Amp.	Plate Diss. Max. Watts	Plate Volts Max.	Plate Ma Max.	Screen Volts Max.	1-4	5-18
PL-4-400A/ 8438	5.0	14.5	400	4000	350	.....	48.00	45.60
PL-4D21 (4-125A)	5.0	6.5	125	3000	225	600	36.00	34.02
PL-4D21A	5.0	6.5	175	3000	225	600	41.00	.....
PL-4E27A	5.0	7.5	125	4000	200	750	45.00	42.75
PL-4-250A/ 5D22	5.0	14.5	250	4000	350	.....	46.50	44.18
175A†	5.0	14.5	400	4000	350	800	54.00	51.03
177A†	6.0	3.2	75	2000	175	600	38.00	35.91
177WA†	6.0	3.2	75	2000	175	600	41.00	38.75
PL210	6.0	85.0	5000	7500	2500	1500	480.00	.....
254W§	5.0	7.5	100	4000	225	25μ	34.00	32.13
6549†	6.0	3.2	75	2000	175	600	39.00	36.86
6569§	5.0	14.5	250	4000	300	45μ	43.00	40.64

PL-177WA is ruggedized; PL-8295A and PL-8432 are ceramic for increased reliability, decreased cooling requirements, ability to tolerate high temperatures, severe shock and vibration. Figures: A—8295A; B—6569; C—177WA; D—175A.

Tube Type	Fil. V.	Fil. Amp.	Plate Diss. Max. Watts	Plate Volts Max.	Plate Ma Max.	Screen Volts Max.	1-4	5-18
6580§	5.0	14.5	400	4000	350	45μ	53.80	50.09
6775	5.0	14.5	400	4000	350	800	52.00	49.14
PL-4-65A/ 816S	6.0	3.5	65	2000	150	.....	27.00	25.65
PL-4-1000A/ 8166	7.5	21	1000	6000	700	.....	131.50	.....
PL-8295/ 172	6.0	8.2	1000	3000	1000	600	157.00	.....
8295A†	6.0	8.2	1000	3000	1000	600	160.00	.....
8432†	6.0	8.2	1000	3000	1000	600	164.00	.....
PL8576	6.0	17.0	3000	5000	2000	1000	395.00	.....
PL8438	5.0	14.5	400	4000	350	800	48.00	45.60
PL8187	6.0	3.5	65	15,000	1A Pk	2000	43.00	40.64
PL8188	5.0	14.5	400	20,000	4A Pk	2500	64.00	60.48
PL8189	7.5	21.0	1000	30,000	8A Pk	2500	156.00	.....

VACUUM SWITCHES

Type	Volt. Max.	Max. Ampere AC or DC	Max. Ampere Pulse	Coil	Net
PL-81	21,000	6	150	Not supplied; requires 1100 ampere turns	34.00
PL-169A	21,000	30	500	Not supplied; requires 1900 ampere-turns	41.00
PL-183	21,000	6	.....	Mounted enclosed coil assembly supplied	35.00
PL-186	21,000	6	.....	Not supplied; requires 1000 ampere-turns	36.00

Type	Volt. Max.	Max. Ampere AC or DC	Max. Ampere Pulse	Coil	Net
PL-187	21,000	30	500	Integral; 28V, 500 Ma., DC	60.00
PL-190	21,000	6	150	Integral; 28V, 250 Ma., DC	60.00
PL-191	21,000	6	..	Not supplied; requires 1000 ampere-turns	30.00
PL-203B	21,000	6	..	Mounted enclosed coil assembly supplied	57.00

COSSOR

CATHODE RAY TUBES

Tube Type	1-4	5-18	19-49	50-99
1CP1	Use 1CP31			
1CP31	29.45	27.25	25.50	.....

THERMOSEN

KALOTRONS

Tube Type	1-9	10-24	25-99	100-249
2AS15A	10.00	7.50	6.50	5.50
2SM15	12.00	9.00	7.80	6.60
1236C	13.00	9.75	8.45	7.15

You Can Depend on NEWARK
for Everything
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RAYTHEON

GENERAL PURPOSE INDUSTRIAL TUBES

Tube Type	1-4	5-18	19-49	50-99
0A2	1.32	1.25	1.19	1.12
0B2	1.37	1.30	1.24	1.16
0B2WA	2.40	2.28	2.12	2.00
0C2	1.50	1.42	1.35	1.28
2D21	1.29	1.23	1.16	1.10
6AS6	3.43	3.26	3.09	2.92
2050A/2050	2.21	2.06	1.91	1.76
CK5651	1.78	1.69	1.60	1.51
CK5654	2.41	2.28	2.16	2.04
CK5670	2.45	2.33	2.21	2.08
CK5686	3.37	3.20	3.03	2.86
CK5687	4.00	3.80	3.65	3.45
CK5751	2.55	2.42	2.30	2.17
CK5814A	2.35	2.23	2.12	2.00
CK5879	1.95	1.85	1.76	.....
CK5902	4.80	4.56	4.32	4.08
CK6021	3.50	3.33	3.15	2.98
CK6080	5.33	5.06	4.80	4.53
CK6146	4.35	4.13	3.92	3.70
CK6146A	4.35	4.13	3.92	3.70
CK6265	4.10	3.87	3.69	3.49
CK6414	3.65	3.45	3.28	3.10
CK6660/6BA6	1.01	.95	.91	.86
CK6661/6BH6	1.34	1.27	1.21	1.14
CK6662/6BJ6	1.29	1.22	1.16	1.10
CK6663/6AL5	.92	.87	.....	.....
CK6669/6AQ5	1.06	1.00	.95	.90
CK6677/6CL6	1.85	1.76	1.67	1.57
CK6678/6U8A	1.62	1.54	1.46	1.38
CK6679/12AT7	1.50	1.43	1.35	1.28
CK6680/12AU7	1.22	1.16	1.10	1.04
CK6681/12AX7	1.26	1.19	1.13	1.07

INDUSTRIAL TUBES

Tube Type	1-4	5-18	19-49	50-99
CK6146B/8298A	5.20	4.94	4.68	4.42
0A2WA	3.35	3.20	3.00	2.86
0A3A/0A3	1.54	1.46	1.38	1.30
0B3A/0B3	2.35	2.23	2.12	2.00
0C3A/0C3	2.70	2.55	2.43	2.30
0D3A/0D3	1.35	1.28	1.22	1.15
1AD4	2.80	2.66	2.52	.....
1AE4	4.50	4.25	4.05	3.82
1AG4	7.30	6.90	6.57	6.20
1AG5	2.05	1.94	1.84	1.74
1AK4	7.30	7.10	6.90	.....
1P23	3.32	3.14	2.99	2.82
1P30	7.08	6.69	6.37	6.02
2E31	7.30	6.90	6.57	6.20
2E32	7.30	6.90	6.57	6.20
3A5	2.03	.....	.....	.....
3B4	3.80	3.59	3.42	3.23
3B4WA	5.85	5.53	5.26	4.97
RK3B24W	10.55	9.97	.....	.....
RK3B24WA	10.95	10.40	9.87	.....
4B31	32.83	31.03	29.55	27.91
4CX300	28.50	26.93	25.65	24.23
4-250A	46.50	44.18	41.85	39.53
5A6	6.65	6.28	5.98	5.65
5ADP7	70.00	66.15	.....	.....
5R4WGA	9.65	9.12	8.69	8.20
5R4WGB	14.20	13.41	12.78	12.07
6AH6WA	7.56	7.14	.....	.....
6AK5W	(Use CK5654/6AK5W)			
6AN5	4.20	3.97	.....	.....
6AN5WA	10.80	10.21	.....	.....
6AR6	5.75	5.46	.....	.....
6X4W	1.60	1.52	.....	.....
10KP7	58.00	54.81	.....	.....
12AT7WA	2.53	2.40	.....	.....
CK512AX	4.15	3.92	.....	.....
CK526AX	7.30	6.90	.....	.....
CK533AX	4.20	3.97	.....	.....
CK534AX	4.20	3.97	.....	.....
CK587	14.60	13.80	.....	.....
CK1005	1.35	1.28	1.22	1.15
CK1007	1.45	1.37	1.31	1.23
CK1020	12.45	11.77	.....	.....
CK1021	12.45	11.77	.....	.....

INDUSTRIAL TUBES (Cont.)

Tube Type	1-4	5-18	19-49	50-99
CK1026	4.80	4.54	.....	.....
CK1034	9.15	8.65	8.24	7.78
CK1038	9.15	8.65	8.24	7.78
CK1047	4.20	3.97	3.78	3.57
CK1061	(Use CK5878A)			
CK5517	4.20	3.97	.....	.....
CK5639	5.25	4.96	4.72	4.46
CK5643	6.37	6.02	5.73	5.41
CK5651WA	3.75	3.54	3.38	3.19
CK5654/6AK5W	2.41	2.28	2.16	2.04
CK5656	16.56	15.65	.....	.....
CK5670WA	2.45	2.33	2.21	2.08
CK5672	2.27	2.16	.....	.....
CK5675	16.05	15.17	14.44	13.64
CK5676	3.05	2.90	.....	.....
CK5678	2.27	2.11	.....	.....
CK5687WA	4.00	3.80	3.60	3.40
CK5702WA	6.48	6.15	.....	.....
CK5702WB	9.55	9.02	.....	.....
CK5703WA	7.07	6.71	.....	.....
CK5703WB	8.79	8.31	.....	.....
CK5704	5.10	4.82	4.59	4.34
CK5704WA	8.05	7.61	7.25	6.84
CK5725/6AS6W	3.15	2.99	2.83	2.68
CK5726/6AL5W	1.55	1.47	1.40	1.32
CK5727/2D21W	2.90	2.76	2.61	2.47
CK5744WA	7.05	6.66	6.34	5.99
CK5744WB	8.96	8.47	8.06	7.62
CK5751WA	2.55	2.42	2.30	2.17
CK5783	4.19	3.96	3.77	3.56
CK5783WA	7.07	6.68	6.36	6.01
CK5784WA	9.13	8.63	8.22	7.76
CK5787	5.00	4.73	4.50	4.25
CK5787A	5.45	5.15	4.90	4.63
CK5787WA	4.91	4.64	4.42	4.17
CK5814WA	2.40	2.28	2.16	2.04
CK5829	4.20	3.97	3.78	3.57
CK5829WA	7.48	7.07	6.73	6.36
CK5840	5.35	5.08	4.82	4.55
CK5842	7.35	6.95	6.61	6.25
CK5842WA	15.29	14.45	13.76	13.00
CK5847	9.55	9.02	.....	.....
CK5876	10.25	9.69	9.22	8.71
CK5886	5.00	4.75	.....	.....
CK5889	21.65	20.46	.....	.....
CK5902WA	8.72	8.24	7.85	7.41
CK5971	7.30	6.90	6.57	6.21
CK6021WA	8.72	8.24	7.85	7.41
CK6029	7.30	6.90	6.57	6.20
CK6072	3.90	3.71	3.51	3.32
CK6080	5.33	5.06	4.08	4.53
CK6080WA	10.80	.....	.....	.....
CK6088	3.35	3.17	3.02	2.85
CK6111	3.70	3.52	3.33	3.15
CK6111WA	8.72	8.24	7.83	7.41
CK6112	4.15	3.94	3.74	3.53
CK6112WA	6.24	5.96	5.62	5.30
CK6174	4.60	4.35	4.14	3.91
CK6189/12AU7WA	3.70	3.52	3.33	3.15
CK6201/12AT7WA	2.95	2.80	2.66	2.51
CK6205	5.35	5.06	4.81	4.55
CK6213	5.67	5.36	5.10	4.82
CK6247	11.20	10.58	10.08	9.52
CK6247WA	21.55	20.36	19.39	18.32
CK6336A	19.04	18.08	17.14	16.18
CK6397	8.30	7.84	7.47	7.06
CK6418	3.20	3.02	2.88	2.72
CK6419	7.30	6.90	6.57	6.21
CK6438	9.15	8.65	8.24	7.78
CK6476	13.37	.....	.....	.....
CK6485	2.05	.....	.....	.....
CK6519	7.30	6.90	6.57	6.21
CK6528	21.55	20.47	19.40	18.32
CK6533	13.25	12.52	11.92	11.26
CK6550	4.95	4.68	4.45	4.21
CK6626	3.35	3.16	3.01	2.85
CK6627	2.35	2.22	2.11	2.00
CK6688	8.75	8.27	7.87	7.44
CK6688A	8.75	8.27	7.87	7.44
CK6963	4.20	3.97	3.78	3.57
CK6792	13.50	12.76	12.15	11.48

INDUSTRIAL TUBES (Cont.)

Tube Type	1-4	5-18	19-49	50-99
CK6802	11.43	.....	.....	.....
CK6829	6.10	5.76	5.49	5.19
CK6883	4.30	4.09	3.87	3.66
CK6909	11.43	.....	.....	.....
CK6910	13.37	.....	.....	.....
CK6922	4.87	4.60	4.38	4.14
CK6939	12.00	11.34	10.80	10.20
CK7044	3.18	3.01	2.86	2.70
CK7246	7.64	7.22	6.88	6.49
5R4GYB	2.03	1.93	1.83	1.73
CK7994	17.05	16.11	15.35	14.49
CK7995	17.05	16.11	15.35	14.49
CK7996	14.00	13.23	.....	.....
CK8096	21.52	20.34	19.37	18.29
CK8421	15.75	14.88	14.18	13.39
CK8422	15.75	14.88	14.18	13.39
CK8520	(Use CK587)			

INDUSTRIAL CONTROL TUBES

Tube Type	1-4	5-18	19-49	50-99
604	11.80	11.15	.....	.....
710/6011	12.70	12.06	11.43	.....
760	28.10	26.70	.....	.....
6014/C1K	11.80	11.15	10.62	10.03

KLYSTRONS

Tube Type	1-4	5-18	19-49	50-99
RK2K25	38.00	.....	.....	.....
RK2K28	88.00	.....	.....	.....
RK2K48	116.00	.....	.....	.....
QKK531	68.00	.....	.....	.....
QKK532	68.00	.....	.....	.....
QKK549	68.00	.....	.....	.....
QKK910	292.50	.....	.....	.....
QKK965	292.50	.....	.....	.....
RK5976	68.00	.....	.....	.....

MICROWAVE POWER TUBES

Tube Type	1-4	5-18	19-49	50-99
RK2J55	306.00	.....	.....	.....
QKH456	577.00	.....	.....	.....
CK5656	16.56	15.65	.....	.....
CK5963	1.36	1.29	1.22	1.16
CK6072A	3.90	3.71	3.51	3.32

VICTOREEN

COUNTER TUBE—BETA/GAMMA

Tube Type	1-4	5-18	19-49	50-99
1B85	13.71	.....	.....	.....

CORONA DISCHARGE

Tube Type	1-4	5-18	19-49	50-99
5841	10.01	.....	.....	.....

ELECTROMETER TETRODE

Tube Type	1-4	5-18	19-49	50-99
5800	39.32	.....	.....	.....

NATIONAL UNION

PENTODE REGULATOR

Type	1-4	5-18	19-49	50-99
6842	14.30	13.51	12.87	12.16
NU116	15.00	14.18	13.50	12.75
2C53	9.15	8.85	8.40	.....
7234	15.65	15.35	.....	.....
7235	10.00	9.80	9.65	.....

TRIODE AMPLIFIER

1DP1	21.00	.....	.....	.....
8632	20.00	18.90	18.00	17.00

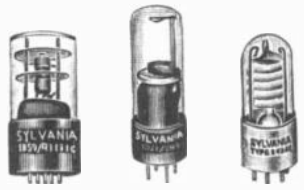
MINIATURE CATHODE RAY

1DP	20.00	18.90	18.00	17.00
NU142P	40.00	37.80	36.00	34.00
NU170P	53.00	50.09	47.70	45.05

REFERENCE DIODE

NU162	2.50	2.36	2.25	2.13

Industrial & Special Purpose Tubes



POWER AMPLIFIER

Tube Type	1-4	5-18	19-49	50-99
2C39A	20.75	19.71	18.68	17.64
2C39WA	29.00	27.40	26.10	24.65
2C40	29.30	27.69	26.37	24.90
2E26	4.00	3.78	3.60	3.40
3CX3000A1	210.00	.....	.....	.....
4X500A	127.50	.....	.....	.....
25T	28.50	27.08	.....	.....
304TH	75.00	70.88	67.50	63.75
304TL	75.00	70.88	67.50	63.75
807	3.40	3.21	3.06	2.89
5667(889RA)	370.00	.....	.....	.....
5763	2.45	2.32	2.20	2.08
5881	3.10	2.93	2.79	2.64
6146A	4.35	4.13	3.92	3.70
6146B	5.20	4.94	4.68	4.42
6159A	4.80	4.56	4.32	4.08
6257	330.00	.....	.....	.....
6550	4.95	4.65	4.45	4.21

THYRATRON

Tube Type	1-4	5-18	19-49	50-99
2D21	1.25	1.18	1.13	1.06
6D4	2.70	2.57	2.43	2.30
672A	39.85	37.86	.....	.....
884	2.28	2.17	2.05	1.94
2050	2.37	2.25	2.13	2.01
5560/FG95	33.00	31.35	29.70	.....
GB5696	1.95	1.85	1.75	.....
5727	2.90	2.76	2.61	2.47
5727/2D21W	2.90	2.76	2.61	2.47
5796	17.25	16.30	15.52	14.66
5823	1.72	1.63	1.55	1.46
6012	7.65	7.27	6.89	6.50

VOLTAGE REGULATOR

Tube Type	1-4	5-18	19-49	50-99
OA2	1.32	1.25	1.19	1.12
OA3	1.54	1.46	1.38	1.30
OB2	1.37	1.30	1.24	1.16
OB2WA	2.40	2.28	2.16	2.04
OB3	2.35	2.23	2.12	2.00
OC3	1.50	1.42	1.35	1.28
OD3	1.44	1.37	1.30	1.22

STROBOTRONS

1D21/SN4	7.30	7.10	6.90	.....
SA309	20.40	.....	.....	.....

GLOW MODULATOR

R1131C	21.00	20.41	19.44	.....

PENTODE

Tube Type	1-4	5-18	19-49	50-99
6AH6WA	7.60	7.18	.....	.....
6AJ5	3.85	3.64	3.46	3.27
5636	6.10	5.76	5.49	5.19
5639	5.25	4.96	4.72	4.46
GB5654	2.41	2.28	2.16	2.04
GB5725	3.15	2.99	2.83	2.68
5902	4.80	4.56	4.32	4.08
5932	11.30	10.69	.....	.....
5933	12.35	11.73	.....	.....
5933WA	16.50	15.59	.....	.....
GB6005	3.23	3.06	2.91	2.75
6661/6BH6	1.34	1.27	1.21	1.14
6669/6AQ5A	1.06	1.00	.95	.90
6677/6CL6	1.85	1.76	1.67	1.57
6678/6U8A	1.62	1.54	1.46	1.38

GRID CONTROL RECTIFIER

C3J/5632	12.70	12.07	.....	.....

GAS PRESSURE MEASURING TUBE

5966	42.00	39.69	37.80	35.70

VIDICONS

7038	175.00	.....	.....	.....
7325	185.00	.....	.....	.....
7735A	170.00	.....	.....	.....
8484	175.00	.....	.....	.....

DUO-TRIODE

Tube Type	1-4	5-18	19-49	50-99
6BF7W	4.20	3.97	3.78	3.57
6SL7WGT	3.15	2.99	.....	.....
6SN7WGT	2.35	2.22	2.11	2.00
12AT7WA	2.53	2.40	2.28	2.15
GB407A	5.90	5.61	5.31	5.01
5670	2.45	2.33	2.21	2.08
GB5687	4.05	3.85	3.65	3.45
5692	8.25	7.83	7.43	7.01
5751	2.55	2.42	2.30	2.17
5814A	2.35	2.23	2.12	2.00
6021	3.50	3.33	3.15	2.98
6080	5.33	5.06	4.80	4.53
6111	3.70	3.52	3.33	3.15
6112	4.10	3.94	3.74	3.53
GB6201	2.55	2.42	2.29	2.17
6350	1.85	1.76	1.67	1.57
6679/12AT7	1.50	1.43	1.35	1.28
6680/12AU7	1.22	1.16	1.10	1.04
6681/12AX7	1.26	1.19	1.13	1.07
6922	4.87	4.60	4.38	4.14
6977	2.50	.....	.....	.....
7044	2.70	2.55	2.43	2.30
7887	6.70	6.32	.....	.....
7888	5.25	4.99	.....	.....

PENTODE

Tube Type	1-4	5-18	19-49	50-99
6SJ7WGT	2.70	2.55	2.43	2.30
6V6GTY	1.45	1.37	1.30	1.23
7AK7	8.15	7.70	7.33	6.93
GB408A	4.95	4.70	4.45	4.21
5879	1.95	1.85	1.76	.....
GB6136	2.70	2.57	2.43	2.30

KLYSTRONS

SK-221A	170.00	.....	.....	.....
SK221B-K	160.00	.....	.....	.....
SK-220A	165.00	.....	.....	.....
SK-220B-G	155.00	.....	.....	.....

DUODIODE

Tube Type	1-4	5-18	19-49	50-99
5R4GYB	2.03	1.93	1.83	1.73
5Y3WGTA	4.05	3.83	3.64	.....
GB5726	1.55	1.47	1.40	1.32
5963	1.36	1.29	1.22	1.16
5965	1.92	1.82	1.73	1.63

IGNITRON

Tube Type	1-4	5-18	19-49	50-99
1051A	65.00	61.43	.....	.....
1052A	99.00	93.56	89.10	84.15
1061	65.00	61.43	.....	.....
5553B	245.00	.....	.....	.....

DIODE

Tube Type	1-4	5-18	19-49	50-99
5651	1.90	1.80	1.71	1.62

RECTIFIER

Tube Type	1-4	5-18	19-49	50-99
579B	20.50	19.48	18.45	.....
816	3.60	3.40	3.24	3.06
5576/200	245.00	.....	.....	.....
8008	11.80	11.15	10.62	10.03

SUBMINIATURE TRIODE

Tube Type	1-4	5-18	19-49	50-99
6AD4	3.40	3.21	3.06	2.89
5718	3.65	3.47	.....	.....
5719	3.15	2.98	2.83	2.68
5904	7.90	7.47	7.11	6.72

SUBMINIATURE TRIODE

Tube Type	1-4	5-18	19-49	50-99
5840	5.35	5.08	4.82	4.55
5899	5.55	5.27	5.00	4.72
5920	4.80	4.56	4.32	4.08
6205	5.90	5.58	5.31	5.02

TETRODE

Tube Type	1-4	5-18	19-49	50-99
7167	1.45	1.23	1.31	1.37

FLASH TUBES

Tube Type	1-4	5-18	19-49	50-99
R4330	29.10	27.50	26.19	24.74
R4340	60.50	57.17	54.45	51.43

SYLVANIA PHOTOCONDUCTOR LAMP (P/L) ASSEMBLIES

Units combine Sylvania Photoconductors and Long Life Lamps. Used as a relay and switch replacements in musical, T.V., and remote control applications.

Type	Max. DC Volt	Light Resist (OHMS)	Dark Resist Megohm	Lamp Rating	NET
PL466E	400	35	0.3	6v at 35-45 ma	3.55
PL1810C	300	800	10.0	10v at 15-20 ma	3.55
PL8212E	300	700	10.0	12v at 35-45 ma	3.55
PL8224C	300	1500	10.0	24v at 15-20 ma	3.55
PL1823P	300	2750	10.0	90v breakdown 59v operating at 0.3 ma	5.85

PHOTOCONDUCTORS—For Light Control Applications

T-4 Bulb All Glass, Hermetically Sealed except (*) T-2 Bulb.

Type	2 Ft. Candle Res. (Ohms)	Min. Dark Res. (Ohms)	Max. Volts DC/AC Peak	Max. Dissipation	1-4	5-18	19-49	50-99
8100	5,000	500,000	400 V	300 MW	1.40	1.32	1.26	1.19
8142	1,500	200,000	400 V	300 MW	1.40	1.32	1.26	1.19
8143	9,000	900,000	400 V	300 MW	1.40	1.32	1.26	1.19
8345	750	75,000	400 V	300 MW	1.40	1.32	1.26	1.19
8346	3,000	300 000	400 V	300 MW	1.40	1.32	1.26	1.19
8347	16,000	1.6 Megs	400 V	300 MW	1.40	1.32	1.26	1.19
8318A*	32,000	10.0	300 V	75 MW	1.54	1.46	1.39	1.31
8475A*	2 000	0.2	200 V	75 MW	1.54	1.46	1.39	1.31
8477A*	8,000	0.8	300 V	75 MW	1.54	1.46	1.39	1.31
8582A*	128,000	10.0	300 V	75 MW	1.54	1.46	1.39	1.31

PHOTO TUBES

Type	Max. Anode V.	Spec. Range A.U.	Vacuum or Gas	Cathode Resp.	Sensitivity a Lumen O Cycle	1-4	5-18	19-49	50-99
1P39	250	3000-6700	V	S4	45	3.15	2.98	2.84	2.68
922	500	4000-12000	V	S1	20	3.80	3.59	.....	.....
923	90	4000-12000	G	S1	135	4.70	4.44	.....	.....

SYLVANIA DECADE COUNTER TUBES

Type	Input Freq. (Kpps)	Base	Bulb	1-4	5-18	19-49	50-99
8035/ CT4251	0-50	13 Pin*	T9	11.10	.....	.....	.....
6476A	0-4	Mod. Duo Decal**	T11	14.95	.....	.....	.....
6802	0-4	Octal.	T9	11.43	.....	.....	.....
6879	0-5	7 Pin Min.	T5½	13.37	12.63	12.03	11.36
6909	0-100	Octal	T9	11.43	.....	.....	.....
6910	0-100	Mod. Duo Decal**	T11	13.37	.....	.....	.....
7155	0-100	7 Pin Min.	T5½	13.37	12.63	12.03	11.36
8353	0-4	13 Pin*	T9	11.10	.....	.....	.....

**Uses Sylvania 7460-0008 socket *Uses Sylvania 70-780-1 socket

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

SYLVANIA

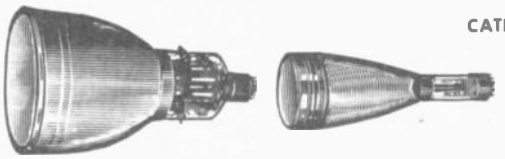
GOLD BRAND TUBE TYPES

Features exceptional stability maximum uniformity, extreme physical ruggedness, 10,000 hour design life For critical commercial and industrial service. These qualities are designed and built in.

Sylvania GB Replacement	Prototype	NET
GBOA2WA	OA2	3.35
GBOB2WA	OB2	2.40
GB5Y3WGTA	5Y3GT	4.05
GB1252/6U8A	6U8A	2.00
GB6J4WA	6J4	5.60
GB6SL7WGT	6SL6GT	3.15
GB6SN7SGT	6SN7GT	2.35
GB6X4WA	6X4	2.85
GB6X5WGT	6X5GT	1.55
GB7AK7	.....	8.15
GB407A	407A	5.90
GB408A	408A	4.95
GB5654	6AK5	2.41
GB1219/5670	Replacement for 2C51 & 5670	3.70
GB1220/5654	.....	3.05
GB5670	2C51	2.45
GB5687	5687	4.00
GB5725	6AS6	3.15

Sylvania GB Replacement	Prototype	NET
GB5726	6AL5	1.55
GB5727	2D21	2.90
GB5749	6BA6	2.20
GB5750	6BE6	3.45
GB5751	12AX7	2.55
GB5814A	12AU7	2.35
GB5931	5U4G, GB	6.80
GB5932	6L6G, GA, GB, GC	11.30
GB5933	807	12.35
GB6005	6AQ5	3.23
GB6080	6AS7G, GA	5.33
GB6101	6J6	5.35
GB6135	6C4	2.40
GB6136	6AU6	2.70
GB6186	6AG5	3.85
GB6189	12AU7	3.70
GB6201	12AT7	2.55
GB7327	.....	12.45
GB7550	.....	13.25

CATHODE RAY TUBES



Line width measured at the center face by the shrinking raster method at the current or brightness specified. Reference MIL-E-1, Par. 4.12.6.1. The brightness shown for 3" and 5" round tubes is for 2"x2" raster size. Useful scan is limited on this axis to a value less than full screen dimension. All voltages are measured with respect to cathode.

Type	Shape	Anode (KV)	Length	1-4	5-18	19-49	50-99
2BP1*	Circle	2.75	7⅝"	31.60	29.86	28.44	
3ACP1A	Circle	2.2	10"	43.40	41.01	39.06	36.89
3ADP1	Circle	3.3	10"	61.60	58.21	55.44	52.36
3ASP1	Rectangle	3.0	8 15/16"	49.45	46.73	44.51	
3BGP1	Rectangle	2.75	9¼"	63.70	60.20	57.33	
3BMP1	Circle	2.2	10"	55.95	52.87	50.35	47.56
3KP1*	Circle	2.75	11½"	31.60	29.86	28.44	.....
3MP1	Circle	2.75	9⅛"	28.00	26.46	25.20	23.80
3RP1*	Circle	2.75	9⅛"	27.05	25.56	24.35	22.99
3SP1	Rectangle	3	9⅛"	47.95	45.31	.....	.....
3WP1*	Circle	2.75	11½"	38.40	36.29	.....	.....
5ABP1	Circle	2.86	16¾"	48.75	46.07	43.88	
5ADP1	Circle	6.6	16¾"	48.75	46.07	43.88	41.44
5ADP2*	Circle	2.86	16¾"	48.75	46.07	43.88	
5ADP7	Circle	2.86	16¾"	48.75	46.07	43.88	

Type	Shape	Anode (KV)	Length	1-4	5-18	19-49	50-99
5ADP7A	Circle	2.86	16¾"	50.65	47.86		
5AHP7	Circle	11	11⅛"	Order 5AHP7A			
5AMP1A	Circle	6.6	17⅝"	57.05	53.91	51.35	48.50
5AQP1	Circle	—	16¾"	Order 5AQP1A			
5AQP7	Circle	—	16¾"	Order 5AQP7A			
5BGP2	Circle	2.2	17½"	95.95	90.67	86.36	
5BHP2A	Circle	2.2	18½"	101.30			
5BHP7A	Circle	2.2	18¼"	101.30			
5FP4A	Circle	8.8	10⅝"	38.10	36.00	34.29	
5UP1	Circle	2	14¾"	31.65			
7UP7	Circle	—	13½"	59.30	56.04	53.31	
8KP4	Rectangle	18	11 15/16"	44.00	41.58	39.60	
10SP4	Circle	22	16⅝"	72.00	68.04	64.80	
17DWP4	Rectangle	22	19 5/16"	29.90	28.26	26.91	25.42
SC2854	Circle	11	11⅛"	72.00	55.05	52.43	49.51

AMGLO INDUSTRIAL FLASHTUBES

U-35-B

ARA-400

H-88.0

HD-2

MT55

ST-25

FLASHTUBES

Flashtubes ideal for aircraft strobe beacons, photographic speedlight, etc. Operating volt: 450-900. Max. Input: 125 joules/ flash. Max. Power: 10 watts. Output: 4500 Lumen sec at 125 joules; 10 joules—1 million lumens.

Stk. No.	Type	Description	1-9	10-49
62F2200	H-88-0	Tube only	9.25	8.35
62F2201	H-88-T	With Trig. Band	9.80	8.80
62F2202	H-88-B4	With 4 Pin Plug In-Base	10.50	9.50

HD SERIES REFLECTIVE BASE FLASHTUBES

Ultra high efficiency, increase in reflector working area. Neoprene mounting. Xenon filled pyrex tube with pyrex cover for up to 100,000 flashes.

Stock No.	Type	Description	Max. Input	1-9	10-49
62F2203	HD-1	U-shaped	50J/ 450V	12.00	10.80
62F2204	HD-2	1-turn Helical	150J/ 450V	13.00	11.70
62F2205	HD-2A	2-turn Helical	200J/ 900V	14.85	13.35

U-35 SERIES STROBOSCOPIC TUBES

Use 1-2 MFD for high flashing rates and 2-4 MFD at rates to 30 per second. Volt 300-600 VDC. Max. Joules Flash — 50 Joules Trigger coil ST-25 Min self-ion. V: 1500

Stk. No.	Type	Description	1-9	10-49
62F2207	U-35-O	Tube only	8.15	7.35
62F2208	U-35-T	With Trig Band	8.70	7.80
62F2209	U-35-B	As above Mounts in 78S6 socket	9.25	8.35
62F2210	U-35-BS	Similar to U-35-B Silver stripe to facilitate trig.	9.75	8.75

ENERGY STORAGE CAPACITORS

CE52545C. 525 MFD. 450 Volt. 53 Joules storage.
62F2215. 1-9 13.00 10-49 11.70

CE10045C. 100 MFD at 450 VDC. 10 Joules storage.
62F2216. 1-9 6.00 10-49 5.40

TRIGGER TRANSFORMERS

Stk. No.	Type	Application	1-9	10-49	50-99
62F2221	ST25	For V-35/H-38 HD Series	2.95	2.65	2.35
62F2220	MT55	4 lead output 24KV peak	5.95	5.45	4.35

POWER SUPPLIES

AC-5000. 0-5000 V adjustable energy storage charging supply. Charge 800 J. in 10.5 sec. Input: 115 VAC.
62F2218. EACH **295.00**

TAC-101. Trig Box. 12000 V output. External trig. & Scope trig. outputs.
62F2219. EACH **49.95**

Aluminum construction 86% reflective efficiency. 4-pin plug-in base (78S4 socker). T in part no. denotes ST-25 trigger coil in bases. Uses H-88 tube. 350-600 VDC. 150 Joules max. input.

FLAT FIELD REFLECTOR ASSEMBLIES

ARA400SD-H88-P4. Flat field Semi-diffused finish for photographic or industrial use Reflector dia: 4-7/32" depth, 3-⅞". Voltage 350-600 VDC. Tube used: H-88.
62F2211. 1-9 ..... **19.00** **10-49** **17.10**

ARA-400-S-H-88-TP4. 4" Reflector with trigger coil & bright fin. for stroboscopic use where "hot spot" is desired.
62F2212. 1-9 ..... **22.50** **10-49** **20.25**

ARA-400-S-H-88-P4. As above without trigger coil.
62F2213. 1-9 ..... **20.00** **10-49** **18.00**

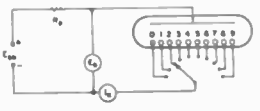
ARA300SD-88-TP4. 3" Reflector with trigger coil. Semi-diffused finish for use as a many wheel balancer type of equipment.
62F2214. 1-9 ..... **20.75** **10-49** **18.67**

National Electronics Special Purpose Tubes

READOUT TUBES

Cold cathode neon glow discharge tubes for in-line display of numbers, letters or symbols. Red-orange neon glow has best readability even under high ambient light. Simplicity, ruggedness and long life for effective display at low cost. No variation in colors or intensity, readout tubes are the only active display that will not fade with age. Manufactured under license from Burroughs Corp.

NL7977/4032



Tube Fundamental Circuit

NL-7094

MINIATURE — 0.3" NUMERAL HEIGHT

Type No.	Ionization Voltage	Cat. Current Peak (Max.)	Supply Voltage (Ebb)	Type	Socket	Display	Oz.	1-4	5-18	19-49	50-99
NL-7977/4032	170 Vdc	2.0 ma	170V, 250V, 300V	Long Life	RTS-3	Numeral 0-9	.14	33.00	31.19	29.70	.....
NL-7009	170 Vdc	2.0 ma	170V, 250V, 300V	Std. Life	RTS-3	Numeral 0-9	.14	19.00	17.97	17.10	16.15
NL-8502/4021	120 Vdc	2.0 ma	120V	Std. Life - LV	RTS-3	Numeral 0-9	.14	33.00	31.19	29.70	28.05
NL-4031	170 Vdc	2.0 ma	170V, 250V, 300V	Long Life	RTS-3	Symbol ±	.14	33.00	31.19	29.70	28.05

STANDARD — 0.6" NUMERAL HEIGHT

NL-5030	160 Vdc	4.0 ma	180V,250V, 300V	Long Life		Numeral 0-9	.5	10.50	.....	.....	.....
NL-803	170 Vdc	3.5 ma	170V, 250V, 300V	Long Life	RTS-11	Numeral 0-9	.5	8.00	.....	.....	.....
NL-840	170 Vdc	3.5 ma	170V, 250V, 300V	Long Life	RTS-11	Numeral 0-9	.5	8.00	.....	.....	.....
NL-8422/5991	170 Vdc	3.5 ma	170V, 250V, 300V	Long Life - Rect.	RTS-4, 10	Numeral 0-9	.3	15.75	14.88	14.17	13.39
NL-8037/5031	170 Vdc	3.5 ma	170V, 250V, 300V	Long Life	RTS-1,2,6,8,9	Numeral 0-9	.4	15.75	14.88	14.17	13.39
NL-8421/5092	170 Vdc	3.5 ma	170V, 250V, 300V	Long Life -W-A	RTS-1, RTS-2	Numeral 0-9	.4	15.75	14.88	14.17	13.39
NL-6844A	170 Vdc	4.0 ma	170V, 250V, 300V	Std. Life	RTS-1, RTS-2	Numeral 0-9	.4	11.00	10.40	9.90	9.35
NL-5992	170 Vdc	3.5 ma	170V, 250V, 300V	Long Life - Rect.	RTS-4, 10	Symbol ±	.3	15.75	14.88	14.17	13.39
NL-50911	170 Vdc	3.5 ma	170V, 250V, 300V	Long Life -WA	RTS1, RTS-2	Symbol ±	.4	15.75	14.88	14.17	13.39

SUPER — 0.8" NUMERAL HEIGHT

NL-8423/6091	170 Vdc	4.5 ma	170V, 250V, 300V	Long Life WA	RTS-1, RT-2	Numeral 0-9	.6	19.00	18.39	17.78	17.16
NL-7153	250 Vdc	5.0 ma	170V, 250V, 300V	Std. Life	RTS-1, RT-2	Numeral 0-9	.6	14.50	13.70	13.05	12.33

LARGE —1.375" NUMERAL HEIGHT

NL-8091	170 Vdc	6.5 ma	170V, 250V, 300V	Long Life WA	RTS-5	Numeral 0-9	1.7	22.50	.....	.....	.....

JUMBO — 2" NUMERAL HEIGHT

NL-7094	170 Vdc	7.5 ma	200V, 250V, 300V	Long Life WA	RTS-5	Numeral 0-9	4	30.00	.....	.....	.....

SOCKETS FOR ABOVE

Stock No.	Type	NET EACH
28F668	RTS-1	.90
28F672	RTS-2*	4.75
28F669	RTS-3	1.00

*Same as RTS-1 except Comm. Grade.

Stock No.	Type	NET EACH
28F670	RTS-4	.90
28F671	RTS-5	1.25
28F692	RTS-6	.85
28F693	RTS-8	.90

Stock No.	Type	NET EACH
28F694	RTS-9	.90
28F695	RTS-10	.90
28F696	RTS-11	.90

SPECIAL PURPOSE INDUSTRIAL TUBES

NL-1062

NL-6895

NL-760

FULL WAVE RECTIFIER

Tube Type	1-4	5-18	19-49	50-99
NL-604	11.80	11.15	.....	.....
NL-604L	13.00	12.29	.....	.....
NL-606	23.50	22.21	.....	.....
NL-606L	21.40	20.22	.....	.....
NL-872A	9.90	9.36	8.91	8.42

HIGH VOLTAGE HALF WAVE RECTIFIER

Tube Type	1-4	5-18	19-49	50-99
NL-RX21A	25.75	24.34	.....	.....
NL-575A	20.15	19.04	.....	.....
NL-673	20.15	19.04	.....	.....
NL-6894	25.00	23.63	.....	.....
NL-6895	25.00	.....	.....	.....
NL-8008	9.90	9.36	8.91	8.42

HALF WAVE RECTIFIER

Tube Type	1-4	5-18	19-49	50-99
NL-610/7723	11.40	10.77	10.26	9.69
NL-615	10.05	9.50	9.05	8.54
NL-623	13.35	12.62	12.02	11.34
NL-635/7019	13.00	12.29	.....	.....
NL-635L/7020	13.50	12.76	.....	.....
NL-635P/6930	14.15	13.37	.....	.....
NL-649/5834	12.40	11.72	.....	.....
NL-660	13.00	12.29	.....	.....
NL-660L/7786	13.50	12.76	.....	.....
NL-664L	27.50	25.99	.....	.....
NL-5558/FG32	17.50	16.54	.....	.....
NL-7723-Ne	13.10	12.38	11.79	11.14
NL-7786-Ne	15.50	14.65	13.95	13.18

IGNITRON

Tube Type	1-4	5-18	19-49	50-99
NL-1009A	155.00	.....	.....	.....
NL-1022A	116.00	.....	.....	.....
NL-1081	75.00	.....	.....	.....
NL-1081P	76.20	.....	.....	.....
NL-1082	107.00	.....	.....	.....
NL-1082P	108.30	.....	.....	.....
NL-1091	75.00	.....	.....	.....
NL-1091P	76.20	.....	.....	.....
NL-1092	107.00	.....	.....	.....
NL-1092P	108.00	.....	.....	.....
NL-5550	49.00	.....	.....	.....
NL-5555	316.00	.....	.....	.....
NL-1051A	61.43	.....	.....	.....
NL-1051AP	61.43	.....	.....	.....
NL-1061	61.43	.....	.....	.....
NL-1061P	61.43	.....	.....	.....
NL-1052A	93.56	.....	.....	.....
NL-1052AP	93.56	.....	.....	.....
NL-1062	93.56	.....	.....	.....
NL-1062P	93.56	.....	.....	.....
NL-1053A	284.00	.....	.....	.....
NL-1063	284.00	.....	.....	.....
NL-5553B	245.00	.....	.....	.....
NL-7673	245.00	.....	.....	.....
NL-7673P	245.00	.....	.....	.....

HIGH VOLTAGE THYRATRON

Tube Type	1-4	5-18	19-49	50-99
NL-KY21A	26.75	25.41	24.28	.....
FG-105	59.00	55.76	.....	.....
NL-678	49.50	46.78	45.68	42.10
NL5563A	50.00	.....	.....	.....

You Can Depend on NEWARK for Everything In Industrial Electronics

THYRATRON

Tube Type	1-4	5-18	19-49	50-99
NL-C3J/L	14.20	13.42	12.78	12.07
NL-C3J/AL-Ne	18.40	17.39	16.56	15.64
NL-3C23	11.98	11.38	10.78	10.18
NL-C6J/K-Ne	32.50	30.71	29.25	27.63
NL-C6J/KP	29.45	27.83	26.50	25.03
NL-393A	13.25	12.59	.....	.....
NL-632B	33.00	31.35	29.70	28.05
NL-710/6011	12.70	12.06	11.43	.....
NL-710L/7518	14.20	13.42	12.78	.....
NL-714	10.00	9.50	.....	.....
NL-716	12.50	11.88	.....	.....
NL-677	63.80	.....	.....	.....
NL-732	120.00	.....	.....	.....
NL-734/5544	22.50	21.26	20.25	19.13
NL-740/6856	23.95	21.97	.....	.....
NL-740L/7022	24.35	23.01	.....	.....
NL-740P/6857	24.35	23.01	.....	.....
NL-760	28.10	26.70	.....	.....
NL-760P	29.40	27.93	.....	.....
NL-770L	49.80	47.06	.....	.....
NL-770P	54.35	51.36	.....	.....
NL-5557/FG17/715	9.50	9.02	8.55	.....
NL-5559/FG57	23.00	.....	.....	.....
NL-5560/FG95	33.00	31.35	29.70	.....
NL-5632/C3J	12.70	12.07	.....	.....
NL-5665/C16J	52.50	49.88	.....	.....
NL-5684/C3J/A	13.10	12.46	11.80	.....
NL-5684-Ne	16.70	15.78	15.03	.....
NL-5684A-Ne	17.90	16.92	16.11	.....
NL-6014/C1K	11.80	11.15	10.62	10.03
NL-6989/C6J/KL	29.45	27.98	.....	.....
NL-6989-Ne	33.90	32.21	.....	.....
NL-7556A-Ne	19.60	18.52	17.64	16.66

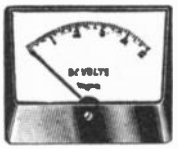
HIGH VOLTAGE RECTIFIER

5.0 Amperes D.C.—20 Amperes Peak. Long life mercury vapor.

Tube Type	1-4	5-18	19-49	50-99
NL-869B	138.00	.....	.....	.....

"Wide-Vue" Panel Meters Simpson

All have self-shielded type movement. DC Ammeters up to 50 amps are self-contained. All meters are accurate ±2% of FS .Model 1227 and model 1257 mount in 2.17" dia. hole. Models 1329, 1349, and 1359 mount in 2.75" dia. holes. Plastic Covers for maximum protection of meter face. Average shpg. wt., 1 lb.



DC VOLTMETERS — Self-Shielding type Movements

Range Volts	Approx. Resis.	Model 1227 2½"	1-9	10-24	25-49	50 up	Model 1327 3½"	1-9	10-24	25-49	50-up	Model 1329 4½"	1-9	10-24	25-49	50-up
0-5		55F1143					55F1146					55F1166				
0-8		.....					55F1147					55F1167				
0-10		55F1500					55F1550					55F1600				
0-15	1000	55F1501					55F1551					55F1601				
0-25	Ohms	55F1502	16.50	14.85	14.03	13.20	55F1552	17.10	15.39	14.53	13.68	55F1602	18.75	16.87	15.95	14.99
0-30	per	55F1503					55F1553					55F1603				
0-50	Volt	55F1504					55F1554					55F1604				
0-100		55F1505					55F1555					55F1605				
0-150		55F1506					55F1556					55F1606				
0-200		.....					55F1148					55F1168				
0-250		.....					55F1149					55F1169				
0-300	2000	.....					.....					.....				
0-500	Ohms	55F1508	17.10	15.39	11.43	13.68	55F1558	17.85	16.06	15.16	14.27	55F1608	19.35	17.41	16.44	15.47
0-750	per	55F1144	21.00	18.90	17.85	16.80	55F1164	17.85	16.06	15.16	14.27	55F1170	19.35	17.41	16.44	15.47
0-1000	Volt	55F1145	21.30	19.17	18.10	17.04	55F1165	22.20	19.98	18.87	17.76	55F1171	23.70	21.33	20.15	18.96

*Require external shunt

DC AMMETERS — Self-Shielding type Movements

Range Amps.	Ohms	Model 1227 2½"	1-9	10-24	25-49	50-up	Model 1327 3½"	1-9	10-24	25-49	50-up	Model 1329 4½"	1-9	10-24	25-49	50-up
0-1	.050	55F1172					55F1559					55F1609				
0-1.5	.033	55F1173					55F1181					55F1191				
0-2	.025	55F1174					55F1560					55F1610				
0-3	.0166	55F1175					55F1561					55F1611				
0-5	.010	55F1512					55F1562					55F1612				
0-10	.005	55F1513					55F1563					55F1613				
0-15	.0033	55F1176	15.75	14.17	13.38	12.59	55F1564	16.50	14.85	14.03	13.20	55F1614	17.85	16.06	15.16	14.27
0-25	.0025	55F1177					55F1565					55F1615				
0-30	.0017	.....					55F1182					55F1192				
0-50	.001	55F1178					55F1566					55F1616				
0-100*	10.0	55F1179					55F1183					55F1193				
0-150*	10.0	55F1180					55F1184					55F1194				
0-200*	10.0	.....					55F1185					55F1195				
0-300*	10.0	.....					55F1186					55F1196				
0-500*	10.0	.....					55F1187					55F1197				

DC MILLIVOLTMETERS

Range Ma.	Ohms	Model 1227 .94"	1-9	10-24	25-49	50-Up	Model 1327 1.12"	1-9	10-24	25-49	50-Up	Model 1329 2.00"	1-9	10-24	25-49	50-Up
0-50	10	55F1637	15.60	14.04	13.26	12.48	55F1638	16.35	14.71	13.89	13.07	55F1639	17.85	16.06	15.16	14.27

DC MILLIAMMETERS — Self-Shielding type Movements

Range Ma.	Approx. Resis.	Model 1227 2½"	1-9	10-24	25-49	50-up	Model 1327 3½"	1-9	10-24	25-49	50-up	Model 1329 4½"	1-9	10-24	25-49	50-up
0-1	42 ohms	55F1517					55F1567					55F1617				
0-3	46 ohms	55F1198					55F2501					55F2506				
0-5	20 ohms	55F1518	15.45	13.90	13.12	12.35	55F1568	16.05	14.44	13.64	12.83	55F1618	17.10	15.39	14.53	13.68
0-10	2.2 ohms	55F1519					55F1569					55F1619				
0-15	2.2 ohms	55F1199					55F2502					55F2507				
0-20	2.2 ohms	.....					55F2503					55F2508				
0-25	6.0 ohms	55F1520					55F1570					55F1620				
0-50	3.0 ohms	55F1521					55F1571					55F1621				
0-100	1.5 ohms	55F1522					55F1572					55F1622				
0-150	1.0 ohms	55F1523					55F1573					55F1623				
0-200	.75 ohm	55F1524	15.75	14.17	13.38	12.59	55F1574	16.50	14.85	14.03	13.20	55F1624	17.85	16.06	15.16	14.27
0-250	.60 ohm	55F2500					55F1575					55F1625				
0-300	.50 ohm	55F1526					55F1576					55F1626				
0-500	.30 ohm	55F1527					55F1577					55F1627				
0-750	.20 ohm	.....					55F2504					55F2509				
0-1000	.05 ohm	.....					55F2505					55F2510				

DC MICROAMMETERS — Self-Shielding type Movements

Range Microamp.	Approx. Resis.	Model 1227 2½"	1-9	10-24	25-49	50-Up	Model 1327 3½"	1-9	10-24	25-49	50-Up	Model 1329 4½"	1-9	10-24	25-49	50-Up
0 50	1820	55F1529	19.95	17.95	16.95	15.95	55F1579	20.40	18.36	17.34	16.32	55F1629	22.05	19.84	18.72	17.63
0-100	1820	55F1530	17.85	16.06	15.16	14.27	55F1580	18.75	16.87	15.93	14.99	55F1630	20.85	18.76	17.71	16.67
0-200	1120	55F1531	16.35	14.71	13.89	13.07	55F1581	17.10	15.39	14.53	13.68	55F1631	18.75	16.87	15.99	14.99
0-500	69	55F1532	16.05	14.44	13.64	12.33	55F1582	16.80	15.12	14.28	13.44	55F1632	18.15	16.33	15.42	14.51
25-0-25	2000	.....	.....	.....	.....	.....	55F2512	20.55	18.49	17.46	16.43	55F2516	22.20	19.98	18.87	17.76
50-0-50	2000	55F1533	18.15	16.33	15.42	14.51	55F1583	18.75	16.87	15.93	14.99	55F1633	21.00	18.90	17.85	16.80
100-0-100	1000	.....	.....	.....	.....	.....	55F2513	17.25	15.52	14.65	13.79	55F2517	19.05	17.14	16.18	15.23
500-0-500	46	.....	.....	.....	.....	.....	55F2514	16.35	14.71	13.89	13.07	55F2518	17.25	15.52	14.65	13.79

DC GALVANOMETERS

Top-quality Simpson panel meters meet exacting requirements. Models 1227 and 1327 Wide-Vue type with 2.5" and 3.04" scale length respectively and self-shielding type movement. Model 27 has Iron-Vane type external movement. When ordering for use on steel panel, specify panel thickness and add $1.65 for recalibration. Model 27 scale length 1.8". All are accurate within 2% F.S., have rect. faces. Range 50-0-50. Average shipping wt., 1 lb.

Sensitivity-Microamps	Res. Ohms	Model 1227 2½"	1-9	10-24	25-49	50-Up	Model 1327 3½"	1-9	10-24	25-49	50-Up
500-0-500	46	55F1548	15.45	13.90	13.12	12.35	55F1598	16.35	14.71	13.89	13.07
75-0-75	2000	55F1549	16.80	15.12	14.28	13.44	55F1599	18.15	16.33	15.42	14.51

Simpson Panel Meters

"WIDE VUE" PANEL INSTRUMENTS

TAUT-BAND "WIDE VUE" DC MICROAMMETERS

These panel meters have 25% fewer parts thus reducing chance of failure; built to conform to Simpson's rigid quality and performance standards. Performance tested for equivalent of 30 years of actual use without a single failure. Higher sensitivity with lower resistance; high accuracy with better repeatability. Accuracy ±2%. Spade pointer with case construction of molded black phenolic base with high temp. black plastic cover. Supplied with mounting and terminal hardware. Shipping weight: 6 oz. (1227 T), 8 oz. (1327 T), 10 oz. (1329 T).

Range Microamps	Ohms. Res.	2½" Model 1227 T Stk. No.	1-9	10-24	25-49	50-up
10	4900	55F2223	32.10	28.89	27.27	25.68
15	1960	55F2224	29.10	26.19	24.73	23.28
25	1960	55F2225	27.60	24.84	23.40	22.08
50	960	55F2226	21.75	19.57	18.48	17.39
100	503	55F2227	19.65	17.68	16.69	15.71
200	234	55F4328	18.45	16.61	15.68	14.76

Range Microamps	Ohms. Res.	3½" Model 1327 T Stk. No.	1-9	10-24	25-49	50-up
5	5750	55F4329	38.10	34.29	32.37	30.48
10	4900	55F2228	33.45	30.10	28.42	26.75
15	1960	55F2229	30.00	27.00	25.50	24.00
25	1960	55F2230	28.95	26.06	24.61	23.16
50	1100	55F2231	22.20	19.98	18.87	17.76
100	500	55F2232	20.40	18.36	17.34	16.32
200	234	55F4330	19.20	17.28	16.32	15.36

Range Microamps	Ohms. Res.	4½" Model 1329 T Stk. No.	1-9	10-24	25-49	50-up
5	5750	55F4331	40.50	36.45	34.42	32.40
10	4900	55F2233	36.15	32.53	30.72	28.91
15	1960	55F2234	32.70	29.43	27.79	26.16
25	1960	55F2235	31.50	28.35	26.77	25.20
50	1100	55F2236	23.85	21.46	20.27	19.08
100	500	55F2237	22.50	20.25	19.12	18.00
200	234	55F4332	21.15	19.03	17.97	16.91

Range Microamps	Ohms. Res.	8" Model 728 T Stk. No.	1-9	10-24	25-49	50-up
25	1960	55F4333	36.30	32.67	30.85	29.04
50	1100	55F4334	31.95	28.75	27.15	25.55
100	500	55F4335	30.90	27.81	26.26	24.72

AC VOLTMETERS — Iron Vane Type Movements

Range Volts	Approx. Resis.	Model 1257 2½"	1-9	10-24	25-49	50-up	Model 1357 3½"	1-9	10-24	25-49	50-up	Model 1359 4½"	1-9	10-24	25-49	50-up
0-5	33	.....	...	...	...	...	55F2524	15.60	14.04	13.26	12.48	55F2531	17.55	15.79	14.91	14.03
0-10	133	55F1534	15.00	13.50	12.75	12.00	55F1584	15.60	14.04	13.26	12.48	55F1634	17.55	15.79	14.91	14.03
0-15	300	.....	...	...	...	...	55F2525	15.60	14.04	13.26	12.48	55F2532	17.55	15.79	14.91	14.03
0-25	833	55F2522	15.00	13.50	12.75	12.00	55F2526	15.60	14.04	13.26	12.48	55F2533	17.55	15.79	14.91	14.03
0-50	3,333	55F2523	15.00	13.50	12.75	12.00	55F2527	15.60	14.04	13.26	12.48	55F2534	17.55	15.79	14.91	14.03
0-100	16,666	.....	...	...	...	...	55F2528	16.35	14.71	13.89	13.07	55F2535	17.55	15.79	14.91	14.03
0-150	25,000	55F1535	15.60	14.04	13.26	12.48	55F1585	16.80	15.12	14.28	13.44	55F1635	17.85	16.06	15.16	14.27
0-250	41,166	.....	...	...	...	...	55F2529	16.80	15.12	14.28	13.44	55F2536	17.85	16.06	15.16	14.27
0-300	50,000	55F1536	15.60	14.04	13.26	12.48	55F1586	16.80	15.12	14.28	13.44	55F1636	17.85	16.06	15.16	14.27
0-500	83,333	.....	...	...	...	...	55F2530	21.30	19.17	18.10	17.04	55F2537	22.80	20.52	19.38	18.24

*Require external current trans.

AC AMMETERS — Iron Vane Type Movements

Range Amps	Approx. Resis.	Model 1257 2½"	1-9	10-24	24-59	50-up	Model 1357 3½"	1-9	10-24	25-49	50-up	Model 1359 4½"	1-9	10-24	25-49	50-up
0-1	.287	55F2580	14.10	12.69	11.99	11.28	55F1537	15.00	13.50	12.75	12.00	55F1587	17.40	15.66	14.79	13.92
0-1.5	.185	55F2581	14.10	12.69	11.99	11.28	55F2588	15.00	13.50	12.75	12.00	55F2595	17.40	15.66	14.79	13.92
0-2	.115	.....	...	...	...	...	55F2589	15.00	13.50	12.75	12.00	55F2596	17.40	15.66	14.79	13.92
0-3	.027	.....	...	...	...	...	55F2590	15.00	13.50	12.75	12.00	55F2597	17.40	15.66	14.79	13.92
0-5	.012	55F2582	14.10	12.69	11.99	11.28	55F1538	15.00	13.50	12.75	12.00	55F1588	17.40	15.66	14.79	13.92
0-10	.0031	55F2583	14.10	12.69	11.99	11.28	55F1539	15.00	13.50	12.75	12.00	55F1589	17.40	15.66	14.79	13.92
0-15	.0022	55F2584	14.10	12.69	11.99	11.28	55F1540	15.00	13.50	12.74	12.00	55F1590	17.40	15.66	14.79	13.92
0-25	.0003	55F2585	14.85	13.36	12.61	11.87	55F1541	15.45	13.90	13.12	12.35	55F1591	17.85	16.06	15.16	14.27
0-50	.0006	55F2586	14.85	13.36	12.61	11.87	55F1542	15.45	13.90	13.12	12.35	55F1592	17.85	16.06	15.16	14.27
0-75	.0005	.....	...	...	...	...	55F1008	16.80	15.12	14.28	13.44	55F1009	19.20	17.28	16.32	15.36
0-100*	.012	.....	...	...	...	...	55F2591	15.00	13.50	12.75	12.00	55F2598	17.40	15.66	14.79	13.92
0-150*	.012	.....	...	...	...	...	55F2592	15.00	13.50	12.75	12.00	55F2599	17.40	15.66	14.79	13.92
0-200*	.012	.....	...	...	...	...	55F2593	15.00	13.50	12.75	12.00	55F2600	17.40	15.66	14.79	13.92
0-300*	.012	55F2587	14.10	12.69	11.99	11.28	55F2594	15.00	13.50	12.75	12.00	55F2601	17.40	15.66	14.79	13.92

AC MILLIAMMETERS — Iron Vane Type Movements

Range Ma.	Approx. Resis.	Model 1257	1-9	10-24	25-49	50-up	Model 1357	1-9	10-24	25-49	50-up	Model 1359	1-9	10-24	25-49	50-up
0-50	80	.....	...	...	...	...	55F2539	15.00	13.50	12.75	12.00	55F2543	17.40	15.66	14.79	13.92
0-100	20	.....	...	...	...	...	55F2540	15.00	13.50	12.75	12.00	55F2544	17.40	15.66	14.79	13.92
0-250	5	.....	...	...	...	...	55F2541	15.00	13.50	12.75	12.00	55F2545	17.40	15.66	14.79	13.92
0-500	.9	55F2538	14.10	12.69	11.99	11.28	55F2542	15.00	13.50	12.75	12.00	55F2546	17.40	15.66	14.79	13.92

AC VOLTMETERS — RECTIFIER TYPE — Self Shielding Type Movements

Rectifier type instruments accurate to ±3%. Models 1247, and 1257 mount in 2.17" dia. holes. Models 1347, and 1357 mount in 2.73" dia. hole. Models 1349, and 1359 mount in 2.75" dia. holes. Cover is clear methyl methacrylate. Avg. Shpg. wt.: 1 lb.

Range Volts	Approx. Res./Ohms	Model 1247 2½"	1-9	10-24	25-49	50-up	Model 1347 3½"	1-9	10-24	25-49	50-up	Model 1349 4½"	1-9	10-24	25-49	50-up
0-5	2000 Ohms	55F712	19.65	17.57	16.70	15.72	55F2602	22.50	20.25	19.12	18.00	55F2607	24.90	22.41	21.16	19.92
0-10	per	55F713	19.65	17.57	16.70	15.72	55F2603	22.50	20.25	19.12	18.00	55F2608	24.90	22.41	21.16	19.92
0-15	Volt	.....	...	...	...	...	55F2604	22.50	20.25	19.12	18.00	55F2609	24.90	22.41	21.16	19.92
0-50		.....	...	...	...	...	55F2605	22.50	20.25	19.12	18.00	55F2610	24.90	22.41	21.16	19.92
0-150		55F714	19.65	17.57	16.70	15.72	55F1543	22.50	20.25	19.12	18.00	55F1593	24.90	22.41	21.16	19.92
0-300		55F715	19.65	17.57	16.70	15.72	25F2606	22.50	20.25	19.12	18.00	55F2611	24.90	22.41	21.16	19.92

WIDE VUE VOLUME LEVEL INDICATORS — DECIBEL METERS

Self shielding meter movement. Zero power level: 6 MW. 500 ohm line.

Reference Level (ohms)	Resis.	Model 1247 2½"	1-9	10-24	25-49	50-up	Model 1347 3½"	1-9	10-24	25-49	50-up	Model 1349 4½"	1-9	10-24	25-49	50-up
600	5000	55F2519	22.05	19.84	18.72	17.63	55F1545	23.40	21.06	19.89	18.72	55F1595	24.15	21.73	20.52	19.31

VOLUME LEVEL INDICATORS — VU METERS

Scale	VU Range	Model 1247 2½"	1-9	10-24	25-49	50-up	Model 1347 3½"	1-9	10-24	25-49	50-up	Model 1349 4½"	1-9	10-24	25-49	50-up
A	—20 to	55F716	26.10	23.49	22.19	20.88	55F1546	28.85	24.16	22.81	21.47	55F2520	29.10	26.19	24.73	23.28
B	+3	.....	...	...	...	...	55F1547	28.85	24.16	22.81	21.47	55F2521	29.10	26.19	24.73	23.28

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

1½" WIDE-VUE PANEL INSTRUMENTS

Simpson's popular Wide-Vue styling is now available in 1½" size in DC, AC rectifier type, and as VU Models 1212 and 1214 have the Simpson self-shielded movement (calibrations not affected by stray magnetic fields). 1212 accurate to 2% of full scale. 1214 accurate to 3% of full scale at 25°C. Both models mount in 1.50" dia. holes. Size: 1.76"x1.76"x1.32". Scale length is 1.5" at 90° Arc (38.1 mm). Standard calibration either magnetic or non-magnetic panel with lance type pointer. Base constructed of molded black phenolic plastic with high temperature cover. All models are supplied complete with the necessary mounting and terminal hardware. 8-32 studs are used for terminals. Average shipping weight, 3½ oz.

MODEL 1212 1½" DC VOLTMETERS

Range	Div.	Ohms/ Volt	Stock No.	1-9	10-24	25-49	50-up
0-5	50	1000	55F436				
0-10	50	1000	55F437				
0-15	75	1000	55F438				
0-25	50	1000	55F439	15.30	13.77	13.00	12.24
0-30	60	1000	55F440				
0-50	50	1000	55F441				
0-100	50	1000	55F442				
0-150	75	1000	55F443				

MODEL 1212 1½" DC MILLIVOLTMETERS

0-50	50	10	55F446	14.10	12.69	11.99	11.28

MODEL 1212 1½" DC AMMETERS

0-1	50	.050	55F447				
0-2	40	.025	55F448				
0-3	60	.0166	55F449	15.30	13.77	13.00	12.24
0-5	50	.010	55F466				
0-10	50	.005	55F467				

MODEL 1214 1½" AC VOLTMETERS—RECTIFIER TYPE

0-5	50	1000	55F468				
0-10	50	1000	55F469	21.15	19.03	17.97	16.91
0-150	75	1000	55F470				
0-300	60	2000	55F471				

VU METERS

Range	Model 1214 1½"	1-9	10-24	25-49	50-up
A-Scale	55E472	23.70	21.33	20.15	18.96

MODEL 1212 1½" DC MICROAMMETERS

Range	Div.	Ohms	Stock No.	1-9	10-24	25-49	50-up
0-50	50	2000	55F473	19.35	17.41	16.44	15.47
0-100	50	2000	55F474	17.25	15.52	14.65	13.79
0-200	40	1000	55F475	15.60	14.04	13.26	12.48
0-500	50	200	55F476	15.30	13.77	13.00	12.24
25-0-25	....	2000	55F477	19.50	17.55	16.57	15.60
50-0-50	....	2000	55F478	17.40	15.66	14.99	13.92
100-0-100	....	1000	55F479	15.75	14.17	13.38	12.59
500-0-500	....	46	55F480	15.00	13.50	12.75	12.00

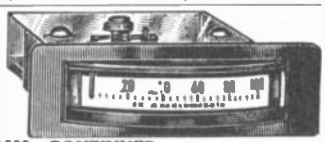
MODEL 1212 1½" DC MILLIAMMETERS

0-1	50	46	55F481				
0-5	50	23	55F482	14.85	13.36	12.61	11.87
0-10	50	2.2	55F483				
0-15	75	2.2	55F484				
0-25	50	6.0	55F485				
0-50	50	3.0	55F486				
0-100	50	1.5	55F487				
0-150	75	1.0	55F488	15.30	13.77	13.00	12.24
0-200	40	.75	55F489				
0-250	50	.60	55F490				
0-300	60	.50	55F491				
0-500	50	.30	55F492	15.45	13.90	13.12	12.35

EDGEWISE PANEL METERS

Core magnet meter movement. Self shielded. Needs ½ the panel area of usual 2½" meter; yet comparable scale length (1⅞). Complete mtg. hardware. DC acc.: 2% of full scale. Standard scale—Black numbers on a white background. Dustproof, molded lucite case.

Accurate comparative readings by mounting meters side by side. Saves space—makes every square inch count. Quick, simple mounting. Meters are supplied complete with mounting hardware. Terminals: Solder (ammeters, stud). Shpg. wt., 5 ozs.



MODEL 1522

Range DC	Stock No.	1-9	10-24	25-49	50-up
0-10 volts	55F2628				
0-15 volts	55F2629	18.15	16.33	15.42	14.51
0-50 volts	55F1122				
0-150 volts	55F1123				
0-500 volts	55F1124	18.45	16.60	15.67	14.75
0-5 amperes	55F1125	19.20	17.28	16.32	15.36
0-25 amperes	55F2632	19.20	17.28	16.32	15.36
0-1 milliamperes	55F1126				
0-5 milliamperes	55F2634	18.00	16.20	15.30	14.40
0-10 milliamperes	55F1127				

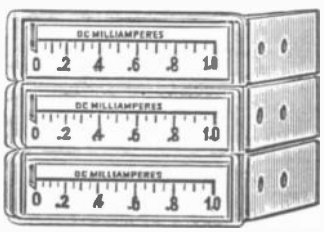
MODEL 1522—CONTINUED

Range DC	Stock No.	1-9	10-24	25-49	50-up
0-25 microamperes	55F2641	27.00	24.30	22.95	21.60
0-50 microamperes	55F1130	23.55	21.19	20.01	18.83
0-100 microamperes	55F1131	21.15	19.03	17.97	16.91
0-200 microamperes	55F2642	19.20	17.28	16.32	15.36
0-500 microamperes	55F2643	18.60	16.74	15.81	14.88

MODEL 1542

VU Meter "A" scale	55F1132	30.00	27.00	25.50	24.00
VU Meter "B" scale	55F1133	30.00	27.00	25.50	24.00
0-150 AC volts Rect. 1000 Ohms per volt	55F1141	23.25	20.92	19.75	18.59
0-300 AC volts Rect. 1000 Ohms per volt	55F1142	23.25	20.92	19.75	18.59

EDGEWISE PANEL METERS STACK HORIZONTALLY OR VERTICALLY



New miniature edgewise panel meter features unique Self-Shielding core magnet which eliminates the need for protruding barrel. Sharp, modern, extremely compact. Meter scale extending nearly full width and height of meter. Optimum scale display area allowing for easy-to-read numerals.

DC VOLTMETERS

Range	App. Res.	Model 1921 1½"	1-9	10-24	25-49	50-up	Model 1622 2½"	1-9	10-24	25-49	50-up
0-10	5000/v.	55F4300					55F4314				
0-15	5000	55F4301					55F4315				
0-25	5000	55F4302	19.35	17.41	16.44	15.47	55F4316	20.55	18.49	17.46	16.43
0-50	5000	55F4303					55F4317				
0-150	5000	55F4304					55F4318				
0-500							55F4319	20.70	18.63	17.56	16.56

DC MILLIAMMETERS

0-1	18	55F4306					55F4320				
0-5	2	55F4307	19.05	17.14	16.18	15.23	55F4321	20.40	18.36	17.34	16.32
0-10	5	55F4308					55F4322				
0-25	2	55F4309					55F4323				
0-50	1	55F4310	19.95	17.95	16.95	15.95	55F4324	21.15	19.03	17.97	16.91
0-100	.5	55F4311					55F4325				
0-500	.1	55F4312					55F4326				

DC MILLIVOLTMETERS

0-50	400/v.	55F4313	20.25	18.23	17.21	16.20	55F4327	21.45	19.31	18.23	17.16

DC MICROAMMETERS

Micro Amps	Approx. Resis.	Model 1921 1½"	1-9	10-24	25-49	50-up	Micro Amps	Approx. Resis.	Model 1622 2½"	1-9	10-24	25-49	50-up
0- 25	7760	55F4336	24.90	22.41	21.16	19.92	0- 25	7760	55F4341	25.95	23.35	22.05	20.75
0- 50	2020	55F4337	24.60	22.14	20.91	19.68	0- 50	2020	55F4342	25.65	23.08	21.79	20.51
0-100	1060	55F4338	22.05	19.84	18.72	17.63	0-100	1060	55F4343	23.40	21.06	19.89	18.72
0-200	310	55F4339	20.25	18.22	17.20	16.19	0-200	310	55F4344	21.45	19.30	18.22	17.15
0-500	63	55F4340	19.65	17.68	16.69	15.71	0-500	63	55F4345	20.85	18.76	17.71	16.67

AC VOLTMETERS—RECT. TYPE

AC Volts Rect. Type	Approx. Ohms	Model 1941 1½"	1-9	10-24	25-49	50-up	AC Volts Rect. Type	Approx. Ohms	Model 1642 2½"	1-9	10-24	25-49	50-up
0-150	5000	55F4346	24.15	21.73	20.52	19.31	0-150	5000	55F4347	25.35	22.81	21.04	20.27

Simpson Panel Meters

● *NEW* "DESIGNER" SERIES

Model 523

Breaking away from traditional panel-meter styling, these instruments have space-saving rectangular faces. On crowded panels, where height is limited, a clean, crisp, uncluttered design is presented. Rugged, dependable pivot - and - jewel movements provide ± 2% full-scale accuracy. Knife-edge pointers permit extra-precise readings. All models come in molded black phenolic cases with glass windows, and are supplied with all necessary mounting and terminal hardware. Dimensional data: Model 523 (3½" nominal width) requires only 2.438" panel height and occupies 1.811" behind-panel depth; scale length is 62 mm. Model 524 (4½" nom. width) is 2.84" high and 1.811" behind-panel; scale length 90 mm. Shipping wt: 11½ oz. for Model 523, 12 oz. for Model 524.

DC MICROAMMETERS

Range	Model 523 3½ Inch	1-9	10-24	25-49	50-Up	Model 524 4½ Inch	1-9	10-24	25-49	50-Up
0-25	55F717	27.75	24.98	23.59	22.20	55F723	30.15	27.14	25.63	24.12
0-50	55F718	22.80	20.52	19.38	18.24	55F724	24.30	21.87	20.66	19.44
0-100	55F719	21.60	19.44	18.36	17.38	55F725	23.10	20.79	19.64	18.48
0-200	55F720	18.90	17.01	16.07	15.12	55F726	20.40	18.36	17.34	16.32
50-0-50	55F721	21.60	19.44	18.36	17.38	55F727	22.95	20.66	19.51	18.36
100-0-100	55F722	19.05	17.15	16.19	15.24	55F728	20.55	18.50	17.47	16.44

DC MILLIAMMETERS

0-1	55F729	17.70	15.93	15.05	14.16	55F731	19.05	17.15	16.19	15.24
0-100	55F730	18.00	16.20	15.30	14.40	55F732	19.50	17.55	16.58	15.60

DC AMPERES

0-10	55F733	18.15	16.34	15.43	14.52	55F734	19.65	17.69	16.69	15.72

DC VOLTS

0-15	55F735	18.30	16.47	15.56	14.64	55F739	19.80	17.82	16.83	15.84
0-30	55F736	18.30	16.47	15.56	14.64	55F740	19.80	17.82	16.83	15.84
0-50	55F737	18.30	16.47	15.56	14.64	55F741	19.80	17.82	16.83	15.84
0-150	55F738	18.30	16.47	15.56	14.64	55F742	19.80	17.82	16.83	15.84

AC AMPERES

Range	Model 553 3½ Inch	1-9	10-24	25-49	50-Up	Model 544 4½ Inch	1-9	10-24	25-49	50-Up
0-5	55F743	17.55	15.80	14.92	14.04	55F751	19.05	17.15	16.19	15.24
0-10	55F744	17.55	15.80	14.92	14.04	55F752	19.05	17.15	16.19	15.24
0-50	55F745	17.55	15.80	14.92	14.04	55F755	19.05	17.15	16.19	15.24

AC VOLTS

0-150	55F746	18.90	17.01	16.07	15.12	55F756	20.25	18.23	17.21	16.20
0-300	55F747	18.90	17.01	16.07	15.12	55F763	20.25	18.23	17.21	16.20

VU METER

Range	Model 543 3½ Inch	1-9	10-24	25-49	50-Up	Model 544 4½ Inch	1-9	10-24	25-49	50-Up
"A" Scale	55F748	28.95	26.06	24.61	23.16	55F764	31.20	28.08	26.52	24.69

● *NEW* RUGGED SEAL CONTACTLESS METER RELAYS

- **Single or Dual Control, With "Fail-Safe" Feature**
- **Foolproof Optical Actuation**

For alarm control or limit applications on equipment designed for unattended operation. Intended for applications in which utmost reliability of operation on small differential or small power is desired. Set points are adjusted thru external, front-adjusted gear drive. Set point is indicated by separate lance pointers. Sensing is accomplished thru an infinite life lamp and photoconductors. A solid-state switching circuit and DPDT slave relay are provided (internally) for each control point. Control circuitry is "fail-safe": control relays open in event of power failure. Slave relays will switch 10 amps at 115 VAC (resistive load). Control point adjustment: the single-control model is adjustable over the complete arc; The double-control model has low limit variable from 0-95% while the high limit can be located from 5 to 100% of arc; control points can be adjusted within 5 of each other. Meter indication is continuous unaffected by control point setting; calibration accuracy is ± 2% of full scale. Control point differential: difference between "on" and "off" is within 0.5% FS. DC power for control circuitry is provided by an external power supply furnished with each double control relay; operates from 115 V, 50-500 cycle AC; single control models have self contained power supply. Average shpg. wt., 1 lb.

DC MICROAMMETERS

Range	3½" Model 3323XA Single Control Stk. No.	3323XA Single Control NET	3323XA Double Control Stk. No.	3323XA Double Control NET	4½" Model 3324XA Single Control Stk. No.	3324XA Single Control NET	3324XA Double Control Stk. No.	3324XA Double Control NET	4"x6" Model 3326XA Single Control Stk. No.	3326XA Single Control NET	3326XA Double Control Stk. No.	3326XA Double Control Net
0-50	55F749	105.90	55F753	133.35	55F2467	108.90	55F757	136.35	55F761	111.90	55F765	139.35
0-100	55F750	102.75	55F754	130.65	55F2462	105.75	55F758	133.65	55F762	108.75	55F766	136.65
0-200	....	....	....	....	55F2463	105.75	55F759	133.50	....	....	....	....
0-500	....	....	....	....	55F2464	105.75	55F760	133.50	....	....	....	....

DC MILLIAMMETERS

0-1	55F769	101.70	55F770	129.45	55F2465	104.70	55F771	132.45	55F772	137.70	55F773	135.45

DC MILLIVOLTMETERS

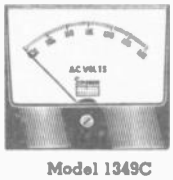
0-50	55F774	102..00	55F775	134.28	55F2466	105.00	55F776	137.25	55F777	138.00	55F778	140.25

AC AMMETER

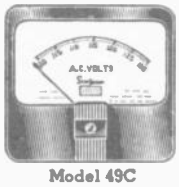
0-5	....	....	....	....	55F781	115.50	55F782	150.00	....	....	....	....

SEGMENTAL VOLTMETERS (Expanded Scale 100-130 AC Volts)

Model 1347C



Model 1349C



Model 49C

Units used primarily in monitoring AC line voltages. Operating Frequency: 20-2000 cps. Accuracy: ±.5% of center scale value at 25°C, and 60 cps sine wave. Sen.: 160 to 100 ohms/volt end scale values. Decreases as voltage increases. Av. Shpg. wt., 1 lb.

MODEL 1347C—3½" RECT. WIDE VIEW

Stock No.	Scale Length	1-9	10-24	25-49	50-up
55F1006	3 14"	49.50	44.55	42.07	39.60

MODEL 1349C—4½" RECT. WIDE VIEW

55F2659	3 93"	49.65	44.68	42.19	39.71

MODEL 49C—4½" RECT. STANDARD

55F1007	3.5"	49.50	44.55	42.07	39.60

MULTI-RANGE MODEL 1349

Stk. No.	Model	Scale Length	1-9	10-24	25-49	50-up
55F245	1349	3 93"	61.50	55.35	52.28	49.20

FRONT ADJUSTABLE METER RELAYS
SINGLE CONTACT TYPE MODEL 29XA

D'Arsonval Type Relays. Externally adjusted limit setting contacts are non-lock and intended for circuits w/external lock provisions or for light duty non-lock. applications. Accuracies: ± 2% of full scale. Contacts: Gold Alloy. For use @ 15VDC, 10ma max., on resistive or diode protected inductive loads. Size: 2.75" D., body, 5" L. Av. shpg. wt. 1 lb.

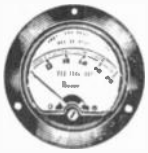
Stk. No.	Range	Description	Ohms	1-9	10.24	25-49	50-up
55F2653	0-50	DC Microammeter	5200	53.55	48.19	45.51	42.83
55F2654	0-100	DC Microammeter	1800	51.15	46.03	43.47	40.91
55F2655	0-200	DC Microammeter	1000	48.00	43.20	40.80	38.40
55F2656	0-500	DC Microammeter	280	47.25	42.52	40.15	37.79
55F2657	0-1	DC Milliammeter	140	46.20	41.58	39.27	36.96
55F2658	0-50	DC Millivoltmeter	10	46.35	41.71	39.39	37.07

Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

LABORATORY QUALITY "JEWELED BEARING" PANEL METERS

Model 27

Model 29


Model 25

All DC meters have the Simpson self-shielded movement (Calibration not affected by stray magnetic fields or magnetic mounting.) *External Multipliers, Model 183, are furnished on 3½" and 4½" DC meters 1000 volts and higher. All others are self-contained. DC ammeters are self-contained for ranges up to and including 50 amperes. † Higher ranges DC ammeters (50MV) listed are calibrated for 5 ft. leads and require external shunts. Accuracy: ±2% of full scale; Scale Length: Model 25 & 27—2.5" (63.7mm), Model 29—3.9" (99.0mm). Average shpg. wt. 1 lb.

DC VOLTMETERS

Range	Model 27 3½" Rect.	Model 25 3½" Rnd.	1-9	10-24	25-49	50-Up	Model 29 4½" Rect.	1-9	10-24	25-49	50-Up
0 5	55F039	55F1010	17.10	15.39	14.53	13.68	55F167	18.75	16.87	15.94	15.00
0-10	55F041	55F1012	17.10	15.39	14.53	13.68	55F168	18.75	16.87	15.94	15.00
0-15	55F042	55F1013	17.10	15.39	14.53	13.68	55F251	18.75	16.87	15.94	15.00
0-25	55F038	55F1014	17.10	15.39	14.53	13.68	55F169	18.75	16.87	15.94	15.00
0 30	55F080	55F1112	17.10	15.39	14.53	13.68	55F145	18.75	16.87	15.94	15.00
0 50	55F043	55F1015	17.10	15.39	14.53	13.68	55F183	18.75	16.87	15.94	15.00
0 100	.....	.....	.....	.....	.....	.....	55F252	18.75	16.87	15.94	15.00
0-150	55F045	55F1017	17.10	15.39	14.53	13.68	55F170	18.75	16.87	15.94	15.00
0-250	55F046	55F1018	17.10	15.39	14.53	13.68	55F253	18.75	16.87	15.94	15.00
0 300	55F047	55F1019	17.10	15.39	14.53	13.68	55F184	18.75	16.87	15.94	15.00
0-500	55F050	55F1020	17.85	16.06	15.17	14.28	55F185	19.35	17.41	16.44	15.47
0-750	55F081	55F1113	17.85	16.06	15.17	14.28	55F146	19.35	17.41	16.44	15.47
0-1000*	55F051	55F1021	22.20	19.98	18.87	17.76	55F186	23.70	21.33	20.15	18.96
0-1500*	55F052	55F1022	22.50	20.25	19.12	18.08	55F187	24.00	21.60	20.40	19.20
0-2000*	55F053	55F1023	22.95	20.65	19.50	18.26	55F254	24.45	22.00	20.77	19.55
0-2500*	55F037	.....	23.25	20.92	19.76	18.60	55F200	24.75	22.27	21.03	19.79
0-3000*	55F054	55F1025	23.55	21.19	20.01	18.84	55F255	25.05	22.54	21.28	20.03
0-5000*	55F055	55F1026	24.15	21.73	20.52	19.32	55F201	25.65	23.08	21.79	20.51

DC MICROAMMETERS

Range	Model 27 3½" Rect.	Model 25 3½" Rnd.	1-9	10-24	25-49	50-Up	Model 29 4½" Rect.	1-9	10-24	25-49	50-Up
0-50	55F071	55F1031	20.40	18.36	17.34	16.32	55F176	22.05	19.85	18.74	17.64
0-100	55F072	55F1032	18.75	16.87	15.93	14.99	55F177	20.85	18.77	17.72	16.68
0-200	55F073	55F1033	17.10	15.39	14.53	13.68	55F178	18.75	16.78	15.94	15.00
0-500	55F074	55F1034	16.80	15.12	14.28	13.44	55F179	18.15	16.33	15.43	14.52
25-0-25	55F075	55F1035	20.55	18.49	17.46	16.43	55F163	22.20	19.98	18.87	17.76
50-0-50	55F076	55F1036	18.75	16.87	15.93	14.99	55F164	21.00	18.90	17.85	16.80
100-0-100	55F077	55F1037	17.25	15.52	14.65	13.79	55F165	19.05	17.15	16.19	15.24
500-0-500	55F078	55F1038	16.35	14.71	13.89	13.07	55F166	17.25	15.53	14.66	13.80

DC MILLIAMMETERS

Range	Model 27 3½" Rect.	Model 25 3½" Rnd.	1-9	10-24	25-49	50-Up	Model 29 4½" Rect.	1-9	10-24	25-49	50-Up
0-1	55F000	55F1040	16.05	14.44	13.64	12.83	55F171	17.10	15.39	14.54	13.68
0-5	55F001	55F1041					55F257				
0-10	55F002	55F1042					55F204				
0-25	.....	55F1043	16.50	14.85	14.03	13.20	55F188	17.85	16.06	15.30	14.40
0-50	55F004	55F1044					55F258				
0-100	55F005	55F1045					55F172				
0-150	55F006	55F1046					55F173				
0-200	55F007	55F1047					55F174				
0-250	55F008	55F1048					55F206				
0-300	55F009	55F1049					55F207				
0-500	55F010	55F1050					55F189				
0-1000	55F011	55F1051					55F208				

DC AMMETERS — Self contained Shunt through 50 amps

†Require External Shunt

Range	Model 27 3½" Rect.	Model 25 3½" Rnd.	1-9	10-24	25-49	50-Up	Model 29 4½" Rect.	1-9	10-24	25-49	50-Up
0-1	55F060	55F1055	16.50	14.85	14.02	13.20	55F209	17.85	16.06	15.16	14.27
0-1.5	55F083	55F1115					55F238				
0-2	55F061	55F1056					55F259				
0-3	55F062	55F1057					55F260				
0-5	55F063	55F1058					55F210				
0-10	55F064	55F1059					55F211				
0-15	55F084	55F1116					55F239				
0-25	55F065	55F1060					55F261				
0-50	55F068	55F1061					55F212				
0-75†	55F085	55F1117					55F240				
0-100†	55F086	55F1118					55F241				
30-0-30	55F066	55F1062	17.40	15.66	14.79	13.92	55F262	18.30	16.47	15.55	14.64
50-0-50	55F067	55F1063	17.40	15.66	14.79	13.92	55F263	18.30	16.47	15.55	14.64

DC MILLIVOLTMETERS

Range	Model 27 3½" Rect.	Model 25 3½" Rnd.	1-9	10-24	25-49	50-Up	Model 29 4½" Rect.	1-9	10-24	25-49	50-Up
0-50	55F1000	55F1002	16.35	14.71	13.81	13.07	55F1004	17.85	16.06	15.16	14.27
0-100	55F1001		16.35	14.71	13.81	13.07	55F1005	17.85	16.06	15.16	14.27

VOLUME LEVEL METERS

Self Shielding Meter Movement. Type A scale stressing level in VU for monitoring. Imp. is 3900 at "O" V.U. deflection. Average shpg. wt., 1lb.

Stk. No.	Model	Scale	Overall Depth	Overall Width	1-9	10-24	25-49	50-Up
55F160	47	2.6"	3.24"	3.00"	26.85	24.17	22.82	21.48
55F161	142	3½"	2.28"	4.25"	29.10	26.19	24.74	23.28
55F162	142,as above, illum. face				31.80	28.62	27.03	25.44

Simpson Panel Meters

LABORATORY QUALITY AC INSTRUMENTS

Manufactured to high standards of accuracy to insure long life and excellent performance. All instruments listed below have moving iron vane type movements —no rectifiers are used. Reasonable accuracy with any waveform; with sinusoidal input the accuracy is guaranteed to ± 3% of full scale. External resistors furnished with meters having a range of 500 volts or higher. All models mount in 2¾" holes. Other dimensions same as DC counterparts. Mounting template and hardware furnished with all meters. Average shipping weight, 1 lb.

Model 55

Model 57, 59

AC VOLTMETERS

Range	Model 57 3½" Rect.	Model 55 3½" Rnd.	1-9	10-24	25-49	50-Up	Model 59 4½" Rect.	1-9	10-24	25-49	50-Up
0-1.5	.....	.....					55F281				
0-5	55F109	55F1066					55F215				
0-10	55F111	55F1067	15.60	14.04	13.26	12.48	55F190	17.55	15.80	14.92	14.04
0-15	55F112	55F1068					55F180				
0-25	55F272	55F1641					.....	.....	.....	.....	.....
0-50	55F113	55F1069					55F216	17.55	15.80	14.92	14.04
0-150	55F115	55F1071					55F181	17.85	16.06	15.17	14.28
0 250	55F273	55F1642	16.80	15.12	14.28	13.44	.....	.....	.....	.....	.....
0-300	55F116	55F1072					55F191	17.85	16.06	15.16	14.27
0-500	55F117	55F1073	21.30	19.17	18.10	17.04	55F192	22.80	20.52	19.38	18.24
0-750	55F274	55F1643	23.10	20.79	19.63	18.48	.....	.....	.....	.....	.....
0-1000	55F275	55F1644	24.75	22.27	21.03	19.79	.....	.....	.....	.....	.....

AC MILLIAMMETERS

0-50	55F100	55F1076					55F218				
0-100	55F101	55F1077	15.00	13.50	12.75	12.00	55F213	17.40	15.66	14.79	13.92
0-250	55F102	55F1078					55F214				
0-500	55F103	55F1079					55F199				

†Require External Transformer

AC AMMETERS

0-1	55F130	55F1085					55F182				
0-1 5	.....	.....					55F193				
0-2	55F131	55F1086					55F256				
0-3	55F132	55F1087	15.00	13.50	12.75	12.00	55F194	17.40	15.66	14.79	13.92
0-5	55F133	55F1088					55F195				
0-10	55F134	55F1089					55F196				
0-15	55F156	55F1119					55F282				
0-25	55F135	55F1090	15.45	13.91	13.13	12.36	55F197	17.85	16.07	15.17	14.28
0 50	55F136	55F1091	15.45	13.91	13.13	12.36	55F219	17.85	16.07	15.17	14.28
0-75†	55F157	55F1120	15.00	13.50	12.75	12.00	55F283	17.40	15.66	14.79	13.92
0-100†	55F158	55F1121	15.00	13.50	12.75	12.00	55F284	17.40	15.66	14.79	13.92

SQUARE RUGGED AND SEALED METERS

3½", 4½" Models

Metal cased panel instruments are ideal for use in field test equipment or wherever rigorous environmental conditions are encountered. They are completely sealed, commercially ruggedized, glass window, metal cased and shielded, not affected by steel panel mounting. The movement shielded by steel enclosure will not be affected by magnetic panel materials or stray R F. Accuracy: ±2% F.S. @ 25° and 60 cy. Sine Wave. For durability and long service life the meters are of metal construction Scale Length: Size 3½"=2.9" (74 mm); Size 4½"=3.9" (101 mm); Size 4"x6"=4.7" (120 mm). Average shpg. wt. 1 lb.

Range	Full Scale Accuracy	Model 3323 3½ Inch Stk. No.	1-9	10-24	25-49	Model 3324 4½ Inch Stk. No.	1-9	10-24	25-49	Model 3326 4x6 Inch Stk. No.	1-9	10-24	25-49
0-1.5 DC Volts	2%	55F4034				55F4053				55F4072			
0-10 DC Volts	2%	55F4035				55F4054				55F4073			
0-15 DC Volts	2%	55F4036				55F4055				55F4074			
0-25 DC Volts	2%	55F4037	20.85	18.76	17.17	55F4056	22.65	23.08	21.79	55F4075	24.75	22.27	21.03
0-50 DC Volts	2%	55F4038				55F4057				55F4076			
0-100 DC Volts	2%	55F4039				55F4058				55F4077			
0-500 DC Volts	2%	55F4040				55F4059				55F4078			
0-5 DC Amperes	2%	55F4041	21.15	19.03	17.97	55F4060	22.95	20.65	19.50	55F4079	25.50	22.94	21.66
0-10 DC Amperes	2%	55F4042	21.15	19.03	17.97	55F4061	22.95	20.65	19.50	55F4080	25.50	22.94	21.66
0-1 DC Milliamps	2%	55F4043	19.95	17.95	16.95	55F4062	21.75	19.57	18.48	55F4081	24.30	21.87	20.65
0-100 DC Milliamps	2%	55F4044	21.45	19.30	18.22	55F4063	22.95	20.65	19.50	55F4082	25.50	22.94	21.66
0-50 DC Microamps	2%	55F4045	27.00	24.30	22.95	55F4064	28.80	25.92	24.48	55F4083	31.50	28.35	26.77
0-100 DC Microamps	2%	55F4046	24.45	22.00	20.77	55F4065	26.25	23.08	21.79	55F4084	29.10	26.19	24.73

Range	Accuracy	Model 3343				Model 3344				Model 3346			
0-150 AC Volts	2%	55F4047	25.05	22.54	21.28	55F4066	26.55	23.89	22.56	55F4085	29.10	26.19	24.73
0-300 AC Volts	2%	55F4048	25.05	22.54	21.28	55F4067	26.55	23.90	22.77	55F4086	29.10	26.19	24.73
0-1 AC Amperes	2%	55F4049	31.35	28.21	26.69	55F4068	32.70	29.43	27.79	55F4087	35.40	31.86	30.09
0-5 AC Amperes	2%	55F4050	31.35	28.21	26.69	55F4069	32.70	29.43	27.80	55F4088	35.40	31.86	30.09
0-1 AC Milliamps	2%	55F4051	24.75	22.27	21.03	55F4070	26.25	23.63	22.31	55F4089	31.35	28.22	26.65
0-100 AC Microamps	2%	55F4052	26.25	23.62	22.30	55F4071	27.30	24.57	23.20	55F4090	29.85	26.86	25.36

RUGGED SEAL SEGMENTAL PANEL METERS

4" x 6" Models

Segmental Voltmeters make it possible to measure very small changes in input conditions. Significant portion of the overall voltage or frequency range is expanded to occupy full scale length. Thus, only that segment of the range that is important appears. AC Segmental Voltmeters are available in either average sensing or true R.M.S. sensing units. When working with sine wave currents or when other measurements will be made with average sensing equipment averages sensing meters are preferred. When working with distorted waveforms true R.M.S. sensing meter would probably be preferred. Average shpg. wt. 1 lb.

AC Volts	Centerscale Voltage	Accuracy of Centerscale	Model 3383 3½ Inch Stk. No.	1-9	10-24	Model 3384 4½ Inch Stk. No.	1-9	10-24	Model 3386 4x6 Inch Stk. No.	1-9	10-24
100-130	115	±1.0	55F4000			55F4006			55F4012		
105-125	115	±0.6	55F4001	71.40	64.26	55F4007	78.75	70.87	55F4013	84.15	75.73
110-120	115	±0.3	55F4002			55F4008			55F4014		

DC Volts	Centerscale Voltage	Accuracy of Centerscale	Model 3323 3½ Inch Stk. No.	1-9	10-24	Model 3324 4½ Inch Stk. No	1-9	10-24	Model 3326 4x6 Inch Stk. No.	1-9	10-24
24-30	27	±0.5	55F4003	59.50	53.59	55F4009	66.90	60.21	55F4015	72.00	64.80

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

WATTMETERS — DYNAMOMETER TYPE

Self contained, dynamometer-type. Measure DC and single-phase AC power to 250 cps. Normally calibrated for non-magnetic panels. Available in magnetic panel calibration. Frequency range of 25-125 cycles. Mount in 2¾" holes. Scale length. 2.3 inches. Accuracy 2% of full scale. Shpg. wt. 1 lb.

Model 77

MODEL 77—3½" RECTANGULAR METER

Stk. No.	Range	Max. Amps	Max. Volts	1-9	10-24	25-49	50-Up
55F226	0-75	1.0	150	33.45	30.10	28.42	26.75
55F227	0-150	2.0	150				
55F228	0-300	4.0	150				
55F229	0-750	10.0	150				
55F1137	0-600	4.0	300	36.30	32.67	30.85	29.04
55F230	0-1500	10.0	300				
55F1138	0-3000	20.0	300				

MODEL 79—4½" RECTANGULAR METER

Stk. No.	Range	Max. Amps	Max. Volts	1-9	10-24	25-49	50-up
55F232	0-75	1.0	150	41.70	37.53	35.44	33.36
55F233	0-150	2.0	150				
55F234	0-300	4.0	150				
55F235	0-750	10.0	150				
55F1139	0-600	4.0	300	44.55	40.09	37.86	35.63
55F236	0-1500	10.0	300				
55F1140	0-3000	20.0	300				

COMPENSATED WATTMETERS

MODEL 77—3½" RECTANGULAR METER

Dynamometer movement calibrated for either magnetic or non-magnetic panels; frequency 25 to 125 cycles.

Stk. No.	Range	Max. Amps	Max. Volts	1-9	10-24	25-49	50-Up
55F012	0-10	.175	300	53.55	48.20	45.51	42.84
55F013	0-20	.400	300				
55F014	0-20	.175	500				
55F015	0-30	.650	300				
55F016	0-30	.300	500				
55F017	0-50	.500	500				

MODEL 79—4½" RECTANGULAR METER

55F032	0-10	.175	300	55.65	50.08	47.30	44.52
55F033	0-20	.400	300				
55F034	0-20	.175	500				
55F035	0-30	.650	300				
55F036	0-30	.300	500				
55F018	0-50	.500	500				

3½" ELAPSED TIME PANEL METERS

Widely used by research labs, manufacturing plants, broadcasting stations, etc., to keep life and performance records based on operating time. Meters use self-starting synchronous motors. They indicate up to 99999.9, then recycle and begin again at 00000.0. Model 55-3½" round. Model 57-3½" rectangular. Case depth for all models: 2 9/16".

Stk. No.	Type	Range	1-9	10-24	24-49	50-up
55F2472	55ET	120V-60	22.95	20.65	19.50	18.35
55F2473	55ET	230V-60	23.25	20.92	19.75	18.59
55F2474	57ET	120V-60	22.95	20.65	19.50	18.35
55F2475	57ET	230V-60	23.25	20.93	19.76	18.60

EXTERNAL PORTABLE SHUNTS FOR DC AMMETERS

Adjusted for a 50 millivolt drop for use with switchboard and panel meters where external shunts are required. Price includes 5" leads. Shpg. wt. 1 lb.

Stk. No.	Mfr's. No.	Amps	1-9	10-24	25-49	50-Up
55F294	6700	1	10.05	9.04	8.52	8.03
55F295	6703	5				
55F264	6704	10				
55F265	6705	15				
55F296	6707	25				
55F297	6708	30				
55F266	6709	50				
55F267	6711	75				
55F2569	6713	100				
55F2570	6715	200				

SWITCHBOARD SHUNTS

55F268	6500	100	10.50	9.04	8.53	8.03
55F2571	6503	150	10.80	9.72	9.18	8.64
55F2572	6504	200	10.80	9.72	9.18	8.64
55F2573	6506	300	10.80	9.72	9.18	8.64
55F298	6508	500	15.60	14.04	13.26	12.48

CURRENT TRANSFORMERS FOR AC AMMETERS

Inserted one turn primary type for use with switchboard and panel ammeters where external transformers are required.

Stk. No.	Mfr's. No.	Pri.	Sec.	1-9	10-24	25-49	50-Up
55F269	1293	50 amps	5	24.45	22.01	20.78	19.56
55F2575	1306	75 amps	5	18.00	16.20	15.30	14.40
55F270	1297	100 amps	5	14.85	13.36	12.61	11.87
55F2576	1298	150 amps	5	13.20	11.88	11.22	10.56
55F2577	1299	200 amps	5	13.20	11.88	11.22	10.56
55F2578	1300	300 amps	5	14.85	13.36	12.61	11.87
55F2579	1301	500 amps	5	18.00	16.20	15.30	14.40

● NEW MODEL 29 AND MODEL 3324 4½" PYROMETERS & THERMOCOUPLES

Model 29

Model 3324

Simpson now presents two versions: Standard bakelite Model 29 and Model 3324 Rugged Seal for extreme conditions. Models compensated for ambient temperature changes and include copper circuit compensation. Also calibrated for use with iron constantan thermocouples. Pyrometers of —150 to +250°F (—100 to +120°C) are calibrated for 5 ohm thermocouple resistance. All other units are calibrated for 10 ohm thermocouple resistance. Furnished with an external adjustable series resistor to permit use of lower resistance thermocouples in the field. Shpg. wt.: ½ lb.

Model 29 Stk. No.	Range °F	Range °C	Sens. MA	1-9	10-24	25-49	50-up
55F700	—150 to +250	—100 to +120	.20	33.00	29.70	28.05	26.40
55F701	0 to 300	—20 to +150	.20	33.00	29.70	28.05	26.40
55F702	0 to 500	—20 to +260	.35	33.00	29.70	28.05	26.40
55F703	0 to 750	—20 to +400	.30	33.00	29.70	28.05	26.40
Model 3324							
55F704	—150 to ±250	—100 to +120	.20	45.00	40.50	38.25	36.00
55F705	0 to 300	—20 to +150	.20	45.00	40.50	38.25	36.00
55F706	0 to 500	—20 to +260	.35	42.00	37.80	35.70	33.60
55F707	0 to 750	—20 to +400	.30	42.00	37.80	35.70	33.60

● NEW THERMOCOUPLES

All thermocouples are iron-constantan, calibrated to 5 or 10 ohms, ±1% per table.

TYPES 21221 and 21224. Iron constantan thermocouple wire in stainless steel overbraid for rugged service application where flexing or abrasion could cause deterioration of standard units. **TYPES 21222 and 21223.** Glass cloth overbraid. Suited for most general purpose use or for permanent mounting in protected sheaths or conduit. Shipping weight: ¼ lb.

Stock No.	Mfr. No.	Resistance	1-9	10-24	25-49	50-up
55F708	21221	5 ohms	12.75	11.47	10.84	10.20
55F709	21222	10 ohms	4.50	4.05	3.83	3.60
55F710	21223	10 ohms	3.75	3.38	3.19	3.00
55F711	21224	10 ohms	23.25	20.93	19.76	18.60

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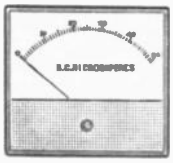
Panel Meters



G SERIES PANEL INSTRUMENTS

Three sizes; 2½", 3½", and 4¼" models with black molded plastic cases and clear molded plastic fronts. An all new meter design that features flexibility and interchangeability, with optional mounting bezel for behind panel mounting. Self shielded, exact, reliable—DC instruments have the famous Triplett BAR-RING movements—more torque, faster response, greater ruggedness. Provides a dominant scale with plenty of dial area for multiple scales. DC Scale lengths: 4½ in., 4.035", 3½ in., 3.163", 2½ in., 2.536". AC Scale lengths: 4½ in., 3.43", 3½ in., 2.688", 2½ in., 2.155".

1000 OHMS/V DC VOLTMETERS

Range	Model 220-G 2½"	1-9	10-24	25-up	Model 320-G 3½"	1-9	10-24	25-up	Model 420-G 4½"	1-9	10-24	25-up
0-10	55F4100				55F4104				55F4108			
0-50	55F4101	13.70	12.33	11.64	55F4105	14.20	12.78	12.07	55F4109	15.60	14.04	13.26
0-150	55F4102				55F4106				55F4110			
0-300	55F4103				55F4107				55F4111			

DC MILLIVOLTMETERS

Range	Model 220-G 2½"	1-9	10-24	25-Up	Model 320-G 3½"	1-9	10-24	25-Up	Model 420-G 4½"	1-9	10-24	25-Up
0-50	55F4112	12.60	11.43	10.71	55F4113	13.40	12.06	11.39	55F4114	14.80	13.32	12.58

DC MICROAMMETERS

Range	Model 220-G 2½"	1-9	10-24	25-Up	Model 320-G 3½"	1-9	10-24	25-Up	Model 420-G 4½"	1-9	10-24	25-Up
0-50	55F4116	18.90	17.01	16.06	55F4121	19.70	17.73	16.74	55F4126	21.10	18.99	17.93
0-100	55F4117	16.50	14.85	14.02	55F4122	17.30	15.57	14.70	55F4127	18.70	16.83	15.90
0-200	55F4118	14.10	12.69	11.98	55F4123	14.90	13.41	12.66	55F4128	14.90	13.41	12.66
50-0-50	55F4119	16.50	14.85	14.02	55F4124	17.30	15.57	14.70	55F4129	18.70	16.83	15.90

DC MILLIAMMETERS

Range	Model 220-G 2½"	1-9	10-24	25-up	Model 320-G 3½"	1-9	10-24	25-up	Model 420-G 4½"	1-9	10-24	25-Up
0-1	55F4130				55F4136				55F4142			
0-5	55F4131	12.60	11.34	10.71	55F4137	13.40	12.06	11.39	55F4143	13.90	12.51	11.81
0-10	55F4132				55F4138				55F4144			
0-50	55F4133				55F4139				55F4145			
0-100	55F4134	13.00	11.70	11.05	55F4140	14.80	13.32	12.58	55F4146	15.20	13.68	12.92
0-500	55F4135				55F4141				55F4147			

DC AMMETER

Range	Model 220-G 2½"	1-9	10-24	25-up	Model 320-G 3½"	1-9	10-24	25-Up	Model 420-G 4½"	1-9	10-24	25-Up
0-1	55F4148	13.00	11.70	11.05	55F4152	13.90	12.51	11.81	55F4156	15.20	13.68	12.92
0-5	55F4149	13.70	12.33	11.64	55F4153	14.20	12.78	12.07	55F4157	15.60	14.04	13.26
0-10	55F4150	13.70	12.33	11.64	55F4154	14.20	12.78	12.07	55F4158	15.60	14.04	13.26
0-50	55F4151	13.70	12.33	11.64	55F4155	14.20	12.78	12.07	55F4159	15.60	14.04	13.26

AC VOLTMETERS

Range	Model 230-G 2½"	1-9	10-24	25-up	Model 330-G 3½"	1-9	10-24	25-Up	Model 430-G 4½"	1-9	10-24	25-Up
0-10	55F4160	13.10	11.79	11.14	55F4164	14.00	12.60	11.90	55F4168	14.80	13.32	12.58
0-150	55F4161	14.50	13.05	12.32	55F4165	15.20	13.68	12.92	55F4169	16.10	14.49	13.68
0-250	55F4162	15.10	13.59	12.83	55F4166	16.00	14.40	13.60	55F4170	16.60	14.94	14.11
0-300	55F4163	15.80	14.22	13.43	55F4167	16.50	14.85	14.02	55F4171	17.30	15.97	14.70

AC AMMETERS

Range	Model 230-G 2½"	1-9	10-24	25-up	Model 330-G 3½"	1-9	10-24	25-Up	Model 430-G 4½"	1-9	10-24	25-Up
0-5	55F4172				55F4177				55F4182			
0-10	55F4173				55F4178				55F4183			
0-25	55F4174	13.10	11.79	11.13	55F4179	14.00	12.60	11.90	55F4184	14.80	13.32	12.58
0-30	55F4175				55F4180				55F4185			
0-50	55F4176				55F4181				55F4186			

AC MILLIAMMETERS

Range	Model 230-G 2½"	1-9	10-24	25-up	Model 330-G 3½"	1-9	10-24	25-Up	Model 430-G 4½"	1-9	10-24	25-Up
0-10	55F4187				55F4191				55F4195			
0-100	55F4188	13.10	11.79	11.13	55F4192	14.00	12.60	11.90	55F4196	14.80	13.32	12.58
0-250	55F4189				55F4193				55F4197			
0-500	55F4190				55F4194				55F4198			

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Whether ordering in quantity for production or in small lots for specialized use, make Newark your headquarters for every electronic component.—Get the exact part you need from an inventory of over 70,000 units! Top Quality, Lowest Prices, Fastest Service.

Panel Meters

TRIPLETT

G/P SERIES PORTABLE INSTRUMENT FOR SCHOOL OR LAB

• Diodes protect against instantaneous overloads on DC movements.
Now you can make all types of electrical measurements right in your own lab or shop set-up with these new economically priced portable instruments. ±2% accuracy on DC and AC Iron Vane Type. ±3% accuracy on AC Rectifier Type and Ohms.

• Bar-Ring construction in DC movements assures self-shielding.
Five-way binding posts. Knife-edge pointers. Rugged case and movement construction safeguards against rough handling. Overload protection of all models guards against electrical damage from misuse. Case dim. 4¼"x3⅞"x4¼".

DC 320G/P METERS

DC VOLTMETERS

Stk. No.	Ranges	NET
55F4199	0-1-5-25	30.80
55F4200	0-25-100-500	31.50
55F4201	0-6-60-600	31.50

DC MILLIVOLTMETER

Stk. No.	Ranges	NET
55F4209	0-50-100-250	30.40

DC MILLIAMMETERS

Stk. No.	Ranges	NET
55F4205	0-25-1-5	30.00
55F4206	0-25-100-500	30.40
55F4207	0-1-10-100	30.40

DC AMMETERS

Stk. No.	Ranges	NET
55F4208	0-1-5-25	30.80

DC MICROAMMETERS

Stk. No.	Ranges	NET
55F4202	0-10-50-250	58.90
55F4203	0-50	28.70
55F4204	500-25-0-25-500	32.50

AC VOLTMETER RECTIFIER TYPE 350-G/P

Stk. No.	Description and Range	NET
55F4210	0-6-60-600V at 1000Ω/V	50.00

MILLIAMMETERS AND AMMETERS AC IRON VANE TYPE 330-G/P

55F4211	0-120-600V and 0-12Ma	41.60
55F4212	0-5-25V and 0-250Ma	31.10
55F4213	0-150V	32.30
55F4214	0-1 Ampere	24.70
55F4215	0-5 Ampere	23.40
55F4216	0-25 Ampere	23.40

AC OHMMETERS 320-G/P

Stk. No.	Description and Range	NET
55F4217	0-1K-100K (in. 1.5V battery, test leads)	34.10
55F4218	0-1Meg-100Meg (5K-500K) 30V Battery	39.40

R.F. VOLT METER 340-G/P

55F4219	0-2.5V (240 ohms per volt)	47.40

WATTMETER 360-G/P

55F4220	0-150 Watts (Max. 150 volts 2 amperes)	50.10

T AND S PANEL METERS

Ideal for communications equipment and industry. All feature polished jewel bearings. DC meters are of the D'Arsonval type, with exclusive Bar-Ring self-shielded construction and one piece die-cast frame. AC instruments are of the moving van type, and have a light moving system. Long life under adverse conditions. Meters are accurate within ±2%.

327-T

321-T—331-S

METER DIMENSIONS (All Shpg. Wts. 1 lb.)

Mfr's. Type	Flange Shape	Flange Size	Body Dia.	Body Depth	Scale Length
327T	Square	3x3"	2¾"	1"	2.49"
321T	Round	3½" Dia.	2¾"	15/16"	2.49"
331S	Round	3½" Dia.	2¾"	15/16"	2.22"

D.C. MILLIVOLTMETERS

Range	Model 327T	1-5	6-11	12-Up
0-50	55F672	13.40	12.06	11.39
0-100	55F673	13.40	12.06	11.39

Range	Model 321T	1-5	6-11	12-Up
0-50	55F674	13.40	12.06	11.39
0-100	55F675	13.40	12.06	11.39

D.C. MICROAMMETERS

Range	Model 327T	1-9	10-24	25-49
0-20	55F630	29.70	26.73	25.24
0-50	55F631	19.70	17.73	16.75
0-100	55F632	17.30	15.57	14.70
0-200	55F633	14.90	13.41	12.67
0-500	55F634	14.30	12.87	12.15
50-0-50	55F2092	17.30	15.57	14.71

Range	Model 321T	1-9	10-24	25-49
0-20	55F1241	19.70	17.73	16.75
0-50	55F1242	17.30	15.57	14.70
0-100	55F1243	14.90	13.41	12.67
0-200	55F1244	14.20	12.78	12.07
0-500	55F1251	14.30	12.87	12.16
50-0-50	55F2090	17.30	15.57	14.71

D.C. AMMETERS

Range	Model 327T	1-9	10-24	25-49
0-1	55F580	13.90	12.51	11.81
0-5	55F582	14.20	12.78	12.07
0-10	55F583	14.20	12.78	12.07
0-25	55F585	14.20	12.78	12.07
0-30	55F586	14.20	12.78	12.07
0-50	55F587	14.20	12.78	12.07

D.C. AMMETERS

Range	Model 321T	1-9	10-24	25-49
0-1	55F1246	13.90	12.51	11.81
0-5	55F1248	14.20	12.78	12.07
0-10	55F1249	14.20	12.78	12.07
0-25	55F1245	14.20	12.78	12.07
0-30	55F1252	14.20	12.78	12.07
0-50	55F1253	14.20	12.78	12.07

D.C. MILLIAMMETERS

Range	Model 327T	1-9	10-24	25-49
0-1	55F596	13.40	12.06	11.39
0-10	55F522	13.40	12.06	11.39
0-25	55F523	13.90	12.51	11.81
0-50	55F524	13.90	12.51	11.81
0-100	55F526	13.90	12.51	11.81
0-500	55F531	13.90	12.51	11.81

Range	Model 321T	1-9	10-24	25-49
0-1	55F1227	13.40	12.06	11.39
0-10	55F1229	13.40	12.06	11.39
0-25	55F1230	13.90	12.51	11.81
0-50	55F1231	13.90	12.51	11.81
0-100	55F1233	13.90	12.51	11.81
0-500	55F1238	13.90	12.51	11.81

D.C. VOLTMETERS

Range	Model 327T	1-9	10-24	25-49
0-10	55F593	14.20	12.78	12.07
0-15	55F541	14.20	12.78	12.07
0-25	55F542	14.20	12.78	12.07
0-50	55F543	14.20	12.78	12.07
0-100	55F544	14.20	12.78	12.07
0-150	55F545	14.20	12.78	12.07
0-500	55F547	15.00	13.50	12.75

D.C. VOLTMETERS

Range	Model 321T	1-9	10-24	25-49
0-10	55F1201	14.20	12.78	12.07
0-15	55F1200	14.20	12.78	12.07
0-25	55F1202	14.20	12.78	12.07
0-50	55F1203	14.20	12.78	12.07
0-100	55F1204	14.20	12.78	12.07
0-150	55F1205	14.20	12.78	12.07
0-500	55F1209	15.00	13.50	12.75

A.C. VOLTMETERS

Range	Model 331S	1-9	10-24	25-49
0-10	55F1255	14.00	12.60	11.90
0-150	55F1258	15.20	13.68	12.92
0-250	55F1283	16.00	14.40	13.60
0-300	55F1259	16.50	14.85	14.02

A.C. AMMETERS

Range	Model 331S	1-9	10-24	25-49
0-1	55F496	14.00	12.60	11.90
0-5	55F497	14.00	12.60	11.90
0-10	55F1269	14.00	12.60	11.90
0-15	55F1328	14.00	12.60	11.90
0-25	55F1270	14.00	12.60	11.90
0-30	55F498	14.00	12.60	11.90
0-50	55F1272	14.00	12.60	11.90

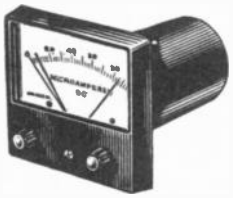
A.C. MILLIAMMETERS

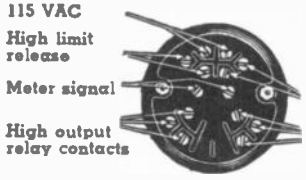
Range	Model 331S	1-9	10-24	25-49
0-250	55F579	14.00	12.60	11.90
0-500	55F588	14.00	12.60	11.90

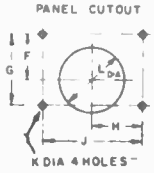
NEWARK saves you time and money!
You place one purchase order . . . instead of dozens.

api Meter Relays

COMPACK OPTICAL METER RELAY CONTROLLER

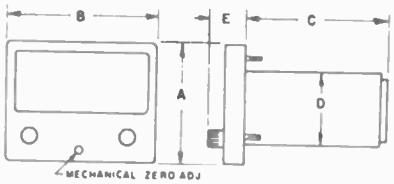






	503-K	603-K
A	4.27 Max.	4.36 Max.
B	4.71 Max.	5.75 Max.
C	5.500 Max.	5.500 Max.
D	2.79 Max.	2.79 Max.
E	1.39 Max.	1.39 Max.
F	2.020 ±.010	2.150 ±.010
G	3.560 ±.005	3.000 ±.005
H	2.00 ±.010	2.625 ±.010
J	4.000 ±.005	5.250 ±.005
K	.161 ±.005	.161 ±.005
L	2.82 ±.01	2.82 ±.01

- **Solid state circuitry, fail-safe wiring**
- **Taut Band movements in most ranges**
- **Fully continuous reading**
- **Complete package—no external components**
  - **Unaffected by ambient light**
  - **Gear drive-slip clutch set pointers**



CONTROL DESCRIPTIONS

ON-OFF CONTROLS

Models 503-KH (Single set point) and 503-KD (Double set point). Compacks packaged complete with power supply, control circuitry and load relays coupled to an Optical Meter Relay. Screw type terminal connections are at rear of meter barrel. (ill.) All circuit components wired fail safe below set point on KH and between set points on KD. Units easily converted from automatic on-off control to push button reset latching circuit. SPDT relay contacts-load rating: 5 A. resistive at 115 VAC. Dial arc: 4". *Taut Band movement.

‡ AC Load Compack Meter range is 47 Ma AC, matching secondary of current transformers (below). Dial reads 0-150% Load. Operates with any transformer listed. Use to monitor or control by measuring motor lead. Be sure to order appropriate transformer for each unit. Above 50 Amps. two transformers are required; the full load range plus a 5 amp. unit (55F4622) to step down between the large transformer and the meter. Wt. 2 lbs.

ON-OFF TEMPERATURE CONTROL

Models 603-KH (single set point) and 603-KD (double set point). Same circuit description as 503-KH & KD with addition of electrical cold junction compensation, automatic thermocouple break protection & copper error correction. Medium resistance thermocouple actuated pyrometers. Taut Band. Damped against vibration. Dual Fahrenheit-Centigrade mirrored scales. Dial arc 5". Adjustable for thermocouples 0-10 ohms. For control or alarm applications. Wt. 2 lbs.

TIME PROPORTIONING-TEMPERATURE CONTROL

Model 603-KTP. Compensation and Thermocouple break protection same as 603-KH & KD but control circuit provides proportional control from relay output. Ratio of relay on time to "off" time proportional to deviation from set point. PR Band approx. 3%. Time cycle settable to 5, 10, or 15 seconds. Capable of straight line control better than ±1 degree F. Taut Band, damped against vibration. Wt. 2 lbs.

COMPACKS

503-KH SINGLE SET POINT

Stock No.	Range	1-9	10-24
55F4500	*10 μa DC	126.00	113.40
55F4501	*50 μa DC	110.00	99.00
55F4502	*100 μa DC	105.00	94.50
55F4503	1 ma DC	99.00	89.10
55F4504	*10 mv DC	109.00	98.10
55F4505	50 mv DC	101.00	90.90
55F4506	‡AC load	104.00	93.60
55F4507	*50 μa AC	114.00	102.60
55F4508	1 ma AC	103.00	92.70

503-KD DOUBLE SET POINT

Stock No.	Range	1-9	10-24
55F4509	*10 μa DC	151.00	135.90
55F4510	*50 μa DC	135.00	121.50
55F4511	*100 μa DC	130.00	117.00
55F4512	*50/0/50 μa DC	130.00	117.00
55F4513	*5/0/5 μa DC	151.00	135.90
55F4514	1 ma DC	124.00	111.60
55F4515	*10 mv DC	134.00	120.60
55F4516	50 mv DC	126.00	113.40
55F4517	‡AC load	129.00	116.10
55F4518	*50 μa AC	139.00	125.10
55F4519	1 ma AC	128.00	115.20

TRANSFORMERS FOR AC LOAD COMPACK (‡)—SPECIFY RANGE

Stk. No.	Prim. Range (Amps)	Each
55F4621	3	5.00
55F4622	5	
55F4623	7.5	
55F4624	10	
55F4625	15	
55F4626	25	
55F4627	30	

Stk. No.	Prim. Range (Amps)	Each
55F4628	50	5.00
55F4642	75	15.00
55F4643	100	15.00
55F4644	150	15.00
55F4645	200	15.00
55F4646	250	15.00
55F4647	300	15.00

COMPACKS

Range F°	Range C°	TC	Type	603-KH High set point Stock No.	603-KH 1-9	603-KH 10-24	603-KD Double set point Stock No.	603-KD 1-9	603-KD 10-24
0/300	0/150	1/C	J	55F4520	125.00	112.50	55F4526	150.00	135.00
0/500	0/260	1/C	J	55F4521	123.00	110.70	55F4527	148.00	133.20
0/750	0/400	1/C	J	55F4522	123.00	110.70	55F4528	148.00	133.20
0/1000	0/500	1/C	J	55F4523	123.00	110.70	55F4529	148.00	133.20
0/1200	0/650	1/C	J	55F4648	123.00	110.70	55F4649	148.00	133.20
0/1500	0/800	C/A	K	55F4524	120.00	108.00	55F4530	145.00	130.50
0/2500	0/1370	C/A	K	55F4525	120.00	108.00	55F4531	145.00	130.50

MODEL 603— KTP TIME PROPORTIONING TEMPERATURE CONTROL

Stock No.	Range F°	Range C°	TC	Type	1-9	10-24
55F4532	0/300	0/150	1/C	J	151.00	135.90
55F4533	0/500	0/260	1/C	J	149.00	134.10
55F4534	0/750	0/400	1/C	J	149.00	134.10
55F4535	0/1000	0/500	1/C	J	149.00	134.10
55F4536	0/2500	0/1370	C/A	K	146.00	131.40

50 MILLIVOLT SHUNTS-COMMERCIAL TYPE

Stk. No.	Amps DC	1-9	10-24	25-49
55F4650	1	15.00	12.75	12.00
55F4651	5			
55F4652	10			
55F4653	25			
55F4654	50			
55F4655	75			
55F4656	100			
55F4657	150			
55F4658	250			

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

SUPER CALIBRATED TAUT BAND PANEL METERS

This listing offers the largest available selection of Taut Band meters in two different calibration types: 0.5% Tracking and 1% Accuracy. Choice of 4½ in. or 5½ in size. All have high sensitivity self shielding bar ring movements, Taut Band suspension, frictionless design allows near perfect repeatability. Easily converted from front panel mount to recessed Stylist mount with bezel kit

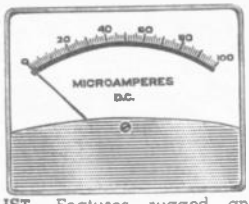
TRACKING VS ACCURACY

Most electronic meter applications require better tracking (electrical linearity) instead of full scale accuracy. Tracking is a meter's ability to divide a full scale indication. Example. a 100 micro-amp. 1% tracking meter with a 100 division scale. Used in a VTVM may require 102 micro-amps to indicate full scale. Exactly ½ that full scale indication (51 micro-amps) should put the pointer at 50 divisions ±1 and 25.5 micro-amps at 25 division ±1. Tracking is more important in any application where zero or full scale indication is electrically set; tachometers pH meters, thermistor bridge temp. meters, etc. Meters with good full scale accuracy are used for absolute measurements like volts, amps, thermocouple temp. readings, etc. 502-1 & 602-1¼ 1% accuracy. 602-11. 0.5% tracking. 2% accuracy. All have mirrored scales and knife edge pointers.

METER DIMENSIONS

Model	Height	Width	Barrel Dia.	Barrel Depth
502	4.15	4.60	2.79"	1.85"
602	4.25"	5.62	2.79"	1.85"
503	4.27"	4.71"	2.79"	1.86"
603	4.36"	5.75"	2.79"	1.86

STYLIST. Crisp clean lines for easier readings. Panel hides bottom third of meter, increasing dial area.



PANELIST. Features rugged anti-static plastic case. Standard meter dimensions.

STYLIST BEZEL KITS

With addition of bezels, Panelist Models 502 and 602 become respectively, Stylist Models 1502 and 1602.

Panel Cutout: 1502 (4.81x2.78") 1602 (5.86x3.14")

55F4633. Model 1502 ..... **For 502—1, 11** **1.50**

55F4634. Model 1602 ..... **For 602—1, 11** **1.75**

PANELIST—.5 TRACKING 2% ACCURACY

Range DC	Ohms	502-11	1-9	10-24
10 μa	4300	55F4587	51.00	43.35
20 μa	2900	55F4588	36.50	55.25
50 μa	1000	55F4589	31.25	26.56
100 μa	1050	55F4590	29.75	25.29
5/0/5 μa	4300	55F4591	51.50	43.77
50/0/50 μa	1050	55F4592	31.25	26.56
500 μa	210	55F4593	29.25	24.86
1 Ma	100	55F4594	29.25	24.86
10 MV	40	55F4595	34.50	29.32

Range DC	Ohms	602-11	1-9	10-24
10 μa	4300	55F4596	52.25	44.41
20 μa	2900	55F4597	37.75	32.09
50μa	1000	55F4598	32.50	27.62
100μa	1050	55F4599	31.00	26.35
5/0/5 μa	4300	55F4600	52.75	44.84
50/0/50 μa	1050	55F4601	31.50	26.77
500 μa	210	55F4602	30.50	25.92
1 Ma	100	55F4603	30.50	25.92
10 MV	40	55F4604	30.75	26.14

PANELIST—1% ACCURACY

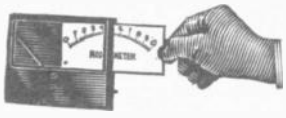
DC Range	Ohms	502-1	1-9	10-24
10 μa	4300	55F4569	46.00	39.00
20 μa	2900	55F4570	31.50	26.77
50 μa	1000	55F4571	26.25	22.31
100 μa	1050	55F4572	24.75	21.04
5/0/5 μa	4300	55F4573	46.30	39.35
50/0/50 μa	1050	55F4574	25.25	21.46
500 μa	210	55F4575	24.25	20.51
1 Ma	100	55F4576	24.25	20.51
10 MV	40	55F4577	29.50	25.07

DC Range	Ohms	602-1	1-9	10-24
10 μa	4300	55F4578	47.25	40.16
20 μa	2900	55F4579	32.75	27.84
50μa	1000	55F4580	27.50	23.37
100μa	1050	55F4581	26.00	22.10
5/0/5 μa	4300	55F4582	47.75	40.59
50/0/50 μa	1050	55F4583	26.50	22.52
500 μa	210	55F4584	25.50	21.67
1 Ma	100	55F4585	25.50	21.67
10 MV	40	55F4586	30.75	26.14

MOD METER

1% tracking movements in all DC ranges. 2% on AC. Scales slide quickly into a sealed capsule which accurately positions scale and seals the movement from contamination. Makes possible a drastic reduction in meter inventory. Use multiplier resistors, current shunts, or transformers to produce an infinite number of voltmeters and ammeters from just 3 or 4 Mod-Meters. Each meter has a built-in mirror plate for use with slotted scales. 47 maAC meter requires use of AC trans. on facing page.

Detailed lettering instructions are enclosed. Meters supplied with 100 division blank scales and will operate with any of scales listed. A lettering kit below allows production of finished scales in 10 minutes. Rugged taut band construction. Black phenolic cases.



Model 503-S

Stock No.	Range	1-9	10-24
55F4666	0-1 MA DC	28.00	23.80
55F4667	500/0/500 μa DC	28.50	24.22
55F4668	0/1/ MA AC	32.00	27.20
55F4672	0/47 Ma AC	32.00	27.20
55F4673	0/100 μa DC	28.50	24.22
55F4674	50/0/50 μa DC	29.00	24.65
55F4675	0/50/ μa DC	30.00	25.50
55F4676	0/10 μa DC	48.75	41.44
55F4677	10/0/10 μa DC	35.75	30.39
55F4669	0/50 MV DC	29.25	24.86
55F4670	50/0/50 MV DC	29.75	25.29
55F4671	0/10 MV DC	33.25	28.26

503-S (SCALES)

Divisions	Stock Number Plain	Stock Number Mirror	1-9	10-24
40	55F4690	55F4700		
50	55F4691	55F4701		
60	55F4692	55F4702		
70	55F4693	55F4703		
75	55F4694	55F4704		
80	55F4695	55F4705		
100	55F4696	55F4706	1.00	
150	55F4967	55F4707		
Blank	55F4968	55F4708		
Arc	55F4699	55F4709		
20/0/20*	55F4740	55F4745		
25/0/25*	55F4741	55F4746		
30/0/30*	55F4742	55F4747		
50/0/50*	55F4743	55F4748		

* For use with O-center meter.

Russell Ind. Multiple Dial Marking Kit #DM-1. **Stk. No. 30F427. NET** 4.95

Model 603-S (SCALES)

Stock No.	Range	1-9	10-24
55F4678	0/1 MA DC	29.25	24.86
55F4679	500/0/500 μa DC	29.75	25.29
55F4680	0/1 MA AC	33.25	28.26
55F4684	0/47 Ma AC	33.25	28.26
55F4685	0/100 μa DC	29.75	25.29
55F4686	50/0/50 μa DC	30.25	25.71
55F4687	0/50 μa DC	31.25	26.56
55F4688	0/10 μa DC	50.00	42.50
55F4689	10/0/10 μa DC	37.00	31.45
55F4681	0/50 MV DC	30.50	25.92
55F4682	50/0/50 MV DC	31.00	26.35
55F4683	0/10 MV DC	34.50	29.32

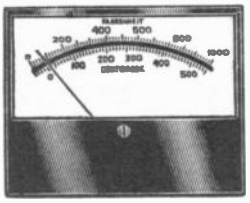
Model 603-S

Divisions	Stock Number Plain	Stock Number Mirror	1-9	10-24
40	55F4710	55F4720		
50	55F4711	55F4721		
60	55F4712	55F4722		
70	55F4713	55F4723		
75	55F4714	55F4724		
80	55F4715	55F4725		
100	55F4716	55F4726	1.00	.85
150	55F4717	55F4727		
Blank	55F4718	55F4728		
Arc	55F4719	55F4729		
20/0/20*	55F4730	55F4735		
25/0/25*	55F4731	55F4736		
30/0/30*	55F4732	55F4737		
50/0/50*	55F4733	55F4738		

* For use with O-center meter.

API

MODEL 503 PYROMETER 2% ACCURACY



Thermocouple pyrometers are medium resistance, have automatic bi-metal cold junction correction and copper error compensation. External resistor adjusts for varying thermocouple resistance up to 10 ohms. Mirror scale reading in Fahrenheit and Centigrade. I/C is Iron Constantan; Cu/c—Copper Constantan; C/A—Chromel alumel. Knife edge pointers. Dial arc is 4". Phenolic case. See table for dimensions. Shpg. wt.: 1 lb.

Stock No.	Range F°	Range C°	TC	Type	NET
55F4605	—75/+225	—60/+110	I/C	J	36.75
55F4606	0/300	0/150	I/C	J	35.75
55F4607	0/500	0/260	I/C	J	34.00
55F4608	0/750	0/400	I/C	J	34.00
55F4609	0/1000	0/500	I/C	J	33.50
55F4610	0/1500	0/800	C/A	K	33.50
55F4611	0/2000	0/1100	C/A	K	29.50
55F4612	0/2500	0/1370	C/A	K	29.50

MODEL 603-1 PYROMETER 1% ACCURACY

Same as Model 503 but with a larger case, 1% accuracy.

55F4613	0/300	0/150	I/C	J	46.75
55F4614	0/500	0/260	I/C	J	46.75
55F4615	0/750	0/400	I/C	J	46.75

MODEL D-1 PORTABLE PYROMETER

Pocket size thermocouple actuated pyrometers designed for checking laboratory ovens, oil baths, appliances, refrigerators, air conditioners, solder pots, furnaces, etc. Features Taut Band frictionless meter, highy resistant to shock. Mirrored dial reads in F° and C°. Movements have bi-metal cold junction correction and copper error compensation. Tough vinyl covered case has aluminum trim (5½x3¾"). Supplied complete with plastic handled chromel constantin needle probe, 3 ft. leads. Shpg. wt.: 1 lb.

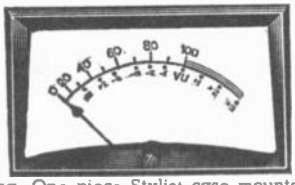
Stock No.	Temperature Range F°	Temperature Range C°	Each
55F4616	—100/+600	—70/+310	47.50
55F4617	0/300	0/150	47.50
55F4618	0/500	0/260	47.50
55F4619	0/750	0/400	47.50
55F4620	0/1000	0/500	47.50

MODEL B PYROMETER

Ideal unit for checking temperature of solder pots, furnaces, ovens, ranges, refrigerators and other appliance! Meter has rugged taut band movement. Dials calibrated in both Fahrenheit and Centigrade. Sealed phenolic case, mirrored 5" dial with knife pointer, glass window. Complete with wood grain case, 5' thermocouple, 8½x6½; wt. 3 lbs.
Thermocouples: Iron Constantan (I/C), Chromel-Constantan (CR/C), and Chromel Alumel (C/A).

Stock No.	Thermo-Couple	Temperature Range F	Temperature Range C	NET
55F4636	I/C	0/300	0/150	59.65
55F4637	I/C	0/500	0/260	52.15
55F4638	I/C	0/750	0/400	57.15
55F4635	Cu/C	—100/1000	—100/500	56.65
55F4640	C/A	0/1500	0/800	57.75
55F4641	C/A	0/2500	0/1370	53.50

STYLIST VU METERS



Model 361 and Model 561. VU Meters, for measuring amplitude of audio signals. Two scales, **Type A** scale; for recording uses. **Type B** scale emphasizing percent modulation for broadcasting. One piece Stylist case mounts thru rectangular panel cutout. Illuminated from behind thru a lucite window at top of case. 6 volt illumination bracket is included. Conforms to ASA C16.5-1954 specs.

MODEL 361

Stk. No.	Scale	Type	Size	1-9	10-14
55F4662	A	361	3 31/32" x 1 7/8"	31.00	26.35
55F4663	B	361			
55F4664	A	561	4 13/16" x 2¾"	30.60	26.00
55F4665	B	561			

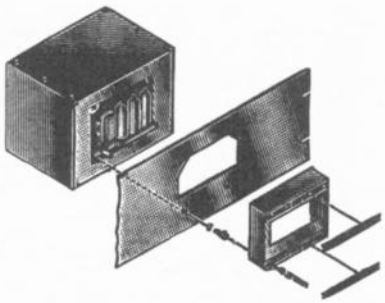
OPEN THERMOCOUPLES

5' thermocouples. I/C: Iron & Constantan 20 gauge solid, fiberglass insulated. C/A: Chromel Alumel, 14 gauge ceramic asbestos insulation. Cu/c: Copper-Constantan, 20 gauge, fiberglass insulation.

Stk. No.	Model	Type	Ohms	1-9	10-24
55F4659	2055-12	J-I/C	1.79	3.90	3.30
55F4660	2056-1	T-Cu/c	1.49	3.90	3.30
55F4661	2054-7	K-C/A	0.74	6.00	5.10

WESTON

● *NEW* MODEL 1270 DIGITAL PANEL METER



"all electronic" digital panel meter designed to provide the user with the accuracy of digital presentation and the reliability to solid state circuitry. Meter has simplicity of panel meter with inherent advantages of digital devices. Versatility permits it to be easily adapted for most applications and will provide an up-dating of existing panels. Provides linearity, stability, and easy readability. Instrument is a general purpose, 3-digit Nixie device suitable for various current and voltage measurements; can also be used with a variety of transducers. Slope adjustment—transforms input signal into direct engineering unit terms. Range may be adjusted up to 50%. High pulse print command is produced. Remote command—may be achieved by contact closure or application of a 5 volt pulse. Output is compatible with industrial RTL micrologic or its equal. The A/D conversion may be adjusted over a maximum range of ± 8 counts around a nominal 999 counts for a 1 VDC input. Standard display is 2 readings/second with optional 10 readings/second. Sample rate is 14 times/second. Input: power—120 VAC, 60 hz. Output— print command—1.5 VDC pulse; 1-2-4-8 BCD code. Power drain—12 watt overall.
Accuracy —0.1% ±1 digit. Resolution —1 part in 1000 (100uv on 100 MV range) Rejection—Common Mode 100 db; Series Mode 35 db @ 60 hz. Stability—0.05%. Calibration—Venier range adjustment from front of panel. Dim.—Front: 3 5/16"H x 4⅛"W x 1⅛"T; Back: 4 3/16"H x 6¼"W x 4⅛"T. Approx. shpg. wt. 2 lbs. Available after 10/15.

STANDARD RANGES

Stk. No.	Description	NET
62F1478	0-100 MV @ 10K ohms (DC Voltage)	312.00
62F1479	0-1.00 V @ 100K ohms (DC Voltage)	312.00
62F1480	0-10.00 V @ 1 megohm (DC Voltage)	312.00
62F1481	0-100 V @ 1 megohm (DC Voltage)	312.00
62F1482	0-1000 V @ 1 megohm (DC Voltage)	312.00
62F1483	0-10ua @ 10K ohms (DC Current)	312.00
62F1484	0-100ua @ 1,1150 ohms (DC Current)	312.00
62F1485	0-1 ma @ 99 ohms (DC Current)	312.00
62F1486	0-10 ma @ 10 ohms (DC Current)	312.00
62F1487	0-100 ma @ 1 ohm (DC Current)	312.00

Weston Panel Meters

PIVOT-JEWEL PANEL INSTRUMENTS 1900 SERIES

The 1900 Series is an integrated line of a-c and d-c panel instruments, providing selected sizes, scales, and ranges. All instruments are provided with zero correctors. Clear plastic fronts. Specially treated Alnico 5 magnets provide long term reliability and stability. Spring back jewels with locking nuts for fine adjustment. 3½" size has scale length (100° arc) of 2.7". 4½" size has scale length (100° arc) of 3.9". Lance pointers on all models except 1946, which has knife-edge pointer. 2% accuracy with plain scales and lance pointers or 1% accuracy with mirrored scales and knife-edge-pointers.

D-C (CORMAG) MICROAMMETERS

Range ua	1931 3½"	1-9	10-24	25-49	1941 4½"	1-9	10-24	25-49
50	55F2900	20.40	18.40	16.35	55F2921	21.50	19.35	17.20
100	55F2901	19.15	17.25	15.30	55F2922	19.35	18.10	16.10
200	55F2902	18.30	16.45	14.65	55F2923	19.35	18.10	16.10
500	55F2903	17.25	15.50	13.80	55F2924	18.30	16.45	14.65

D-C (CORMAG) MILLIAMMETERS

Range ma	1931 3½"	1-9	10-24	25-49	1941 4½"	1-9	10-24	25-49
1	55F2904	16.15	14.55	12.95	55F2925			
10					55F2926			
50	55F2906	16.15	14.55	12.95	55F2927	17.25	15.50	13.80
100	55F2907	16.15	14.55	12.95	55F2928			
500	55F2908	16.15	14.55	12.95	55F2929			

Ranges of 50ma and up are shunted and have a drop of 100mv.

D-C (CORMAG) AMMETERS—MV DROP 50

Range amps	1931 3½"	1-9	10-24	25-49	1941 4½"	1-9	10-24	25-49
2	55F2910							
5	55F2911	16.15	14.55	12.95	55F2931	17.25	15.50	13.80
10	55F2912				55F2932			

Approx. MV Drop 50.

D-C (CORMAG) VOLTMETERS

Range volts	1931 3½"	1-9	10-24	25-49	1941 4½"	1-9	10-24	25-49
10	55F2913				55F2934			
15	55F2914				55F2935			
30	55F2915				55F2936			
50	55F2916	17.00	15.30	13.60	55F2937	18.10	16.25	14.45
100	55F2917				55F2938			
150	55F2918				55F2939			
300	55F2919				55F2940			
500	55F2920				55F2941			

1000 Ohms per Volt Nominal Resistance

A-C (IRON VANE) MILLIAMMETERS

Range ma	1934 3½"	1-9	10-24	25-49	1944 4½"	1-9	10-24	25-49
50	55F2947				55F2959			
100	55F2948	15.70	14.10	12.55		16.50	14.85	13.20
500	55F2949				55F2961			

Frequency: 25 to 500 cycles.

A-C (IRON VANE) AMMETTERS

Range amps	1934 3½"	1-9	10-24	25-49	1944 4½"	1-9	10-24	25-49
1	55F2950				55F2962			
2					55F2963			
5	55F2952	15.70	14.10	12.55	55F2964	16.50	14.85	13.20
10					55F2965			

Frequency: 25 to 500 cycles.

A-C (IRON VANE) VOLTMETERS

Range volts	1934 3½"	1-9	10-24	25-49	1944 4½"	1-9	10-24	25-49
15	55F2954				55F2966			
150		16.50	14.85	13.20	55F2967	17.30	15.55	13.80
300	55F2956				55F2968			

D-C (EXTERNAL MAGNET) MICROAMMETERS

Range ua	1936 3½"	1-9	10-24	25-49	1946 4½"	1-9	10-24	25-49
50					55F2943	32.65	29.35	26.10

Type 1946: mirrored scale. knife-edge pointer, 1% accuracy.

RECTIFIER TYPE A-C (CORMAG) VOLTMETERS

Range volts	1932 3½"	1-9	10-24	25-49	1942 4½"	1-9	10-24	25-49
150	55F2944	22.15	19.75	17.70	55F2945	21.70	19.53	17.36

1000 Ohms per Volt Nominal Resistance.

PANEL METERS

Weston meters feature ±2% accuracy in series 301, 302 and 304 panel meters. Available in 3½" round and 3½" square types. Meters can be mounted on non-magnetic or magnttic panels affecting their readings. Bakelite Cases completely sealed against dust. Spring back jewels with locking nuts for fine adjustments. Superior response time with minimum power consumption. Scale length: 2½". Terminal length 19/32". Shpg. wt. 1 lb.

AC VOLTMETERS (25-125 HERTZ)

Range	Type 304 Round	Type 304 Square	Resis. Ohms	1-9	10-24	25-49
5	55F 3002	...	10			
10	55F 3003	55F 3048	10	15.10	13.60	12.10
50	55F 3004	55F 3049	45			
100		55F 3050		15.10	13.60	12.05
150	55F 3006	55F 3051	130	15.45	13.95	12.35
300	55F 3007	55F 3052	260	15.45	13.95	12.35
500	55F 3008	55F 3053	260	18.75	16.85	15.00

AC AMMETERS (25-500 HERTZ)

1	55F 3009	55F 3054	.125			
5	55F 3010	55F 3055	.002	14.70	13.25	11.75
10	55F 3011	55F 3056	.001			
50	55F 3012	55F 3057	.			

AC MILLIAMMETERS (RECTIFIER TYPE)

Range	Type 302 Round	Type 302 Square	Resis. Ohms	1-9	10-24	25-49
150	55F 2999	55F 3044	1000/V.	22.35	19.95	17.70

AC MILLIAMMETERS (25-500 HERTZ)

Range	Type 304 Round	Type 304 Square	Resis. Ohms	1-9	10-24	25-49
50		55F 3058	82	14.70	13.25	11.75
500	55F 3014	55F 3059	.65	14.70	13.25	11.75

AC MILLIAMMETER (RECTIFIER TYPE)

Range	Type 302 Round	Type 302 Square	Resis. Ohms	1-9	10-24	25-49
1	55F 3000	55F 3045	470	22.15	19.95	17.70

DC VOLTMETERS

Range	Type 301 Round	Type 301 Square	Resis. Ohms	1-9	10-24	25-49
5	55F 2970	55F 3015				
10	55F 2971	55F 3016				
15	55F 2972	55F 3017	1000			
30	55F 2973	55F 3018	ohms	15.95	14.35	12.75
50	55F 2974	55F 3019	per			
100	55F 2975	55F 3020	volt			
150	55F 2976	55F 3021				
300	55F 2977	55F 3022		16.50	14.85	13.20

DC AMMETERS

1	55F 2986	55F 3031		15.40	13.95	12.35
5	55F 2987	...		15.40	13.95	12.35
15	55F 2988	55F 3033		16.50	14.85	13.20
50	55F 2989	55F 3034		16.50	14.85	13.20
50-0-50	55F 2990	...		16.50	14.85	13.20

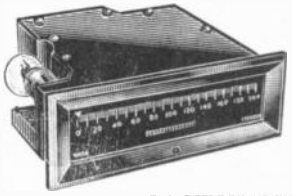
DC MILLIAMMETERS

Range	Type 301 Round	Type 301 Square	Resis. Ohms	1-9	10-24	25-49
1	55F 2991	55F 3036	88			
5	55F 2992	55F 3037	8			
10	55F 2993	55F 3038	2.5			
50	...	55F 3039	2	15.40	13.85	12.35
100	55F 2995	55F 3040	1			
150	55F 2996	.....	.66			
200	55F 2997	.....	.5			
300	55F 2998	.....	.....			

DC MICROAMMETERS

50	55F 2979	55F 3024	4800	21.70	19.35	17.40
100	55F 2980	55F 3025	1230	18.50	16.15	14.80
200	55F 2981	55F 3026	600	15.95	14.35	12.75
500	55F 2982	55F 3027	230	15.95	14.35	12.75
25-0-25	55F 2983	55F 3028	4800	21.70	19.55	17.40
50-0-50	55F 2984	55F 3029	1230	18.50	16.65	14.80
500-0-500	...	55F 3030	88	15.40	13.85	12.35

Weston Meters & Accessories



SERIES 1201 EDGEWISE PROJECTED MOVING POINTER PANEL METERS

A true flat scale edgewise instrument at a price comparable to mechanical pointer types. Since the pointer is projected on the same plane as the scale divisions, parallax errors are eliminated. All-glass optical system. Self-shielding CORMAG movement—these units can be mounted side-by-side with no loss of accuracy, are unaffected by panel material, normal magnetic fields. With lamp (5V, 2.86A AC/DC req.); bulb life 10,000 hrs. Choice of horizontal or vertical mounting. All units white markings on black background, ±1% full-scale accuracy, except *±2%. Scale length 4½". Wt. 1 lb.

DC MILLIAMMETERS

Range, ma	Resis. (ohms)	Horiz. Mtg. Type 1201	Horiz. Mtg. Stock No.	Vert. Mtg. Type 1201	Vert. Mtg. Stock No.	1-9	10-24	25-49
1	18.8	-4911001	55F3200	-4912001	55F3205	59.40	53.45	47.50
10	2.3	-4911010	55F3201	.....	.....	59.40	53.45	47.50
20	5.0	-4911020	55F3202	.....	.....	59.40	53.45	47.50
50	2.0	-4911050	55F3203	.....	.....	61.00	54.90	48.80
500	0.2	-4911500	55F3204	.....	.....	62.05	55.85	49.65

DC MICROAMMETERS

50	2300	-5911050	55F3210	.....	.....	65.80	59.20	52.65
100	640	-5911100	55F3211	.....	.....	64.20	57.80	51.35
200	415	-5911200	55F3212	.....	.....	62.60	56.35	50.10
500	88	-5911500	55F3213	.....	.....	61.00	54.90	48.80
50-0-50	640	-5911750	55F3214	-5912750	55F3219	64.20	57.78	51.36

DC VOLTMETERS

Range, Volts	Ohms/ Volts	Horiz. Mtg. Type 1201	Horiz. Mtg. Stock No.	Vert. Mtg. Type 1201	Vert. Mtg. Stock No.	1-9	10-24	25-49
1	1000	-1911001	55F3220	.....	.....	62.05	56.35	50.10
5	1000	-1911005	55F3221	.....	.....	62.05	56.35	50.10
10	1000	-1911010	55F3222	.....	.....	62.05	56.35	50.10
20	1000	-1911020	55F3223	.....	.....	62.05	56.35	50.10
100	1000	-1911100	55F3224	.....	.....	62.05	56.35	50.10
500	1000	-1911500	55F3225	.....	.....	62.05	55.85	49.65

AC VOLTMETERS* (Rectifier Type)

Range, Volts	Ohms/ Volts	Horiz. Mtg. Type 1201	Horiz. Mtg. Stock No.	Vert. Mtg. Type 1201	Vert. Mtg. Stock No.	1-9	10-24	25-49
150	1000	-1921150	55F3232	.....	.....	67.95	61.15	54.35
300	1000	-1921300	55F3233	.....	.....	68.50	61.65	54.75

WESTON SERIES 1209 PROJECTED MOVING SCALE PANEL METERS

- Large Scale in a Small Package
- Self-Shielded "Cormag" Movement
- 1% Accuracy
- Eliminates Parallax Errors
- Self-Illuminated

This moving-scale instrument provides an 8" meter scale in only 2½ inches of panel width. Simple, foolproof optical system projects moving scale onto a coated window. Because the hairline is on the same plane as the scale image, these meters may be read at oblique angles without parallax errors associated with pointer-type meters. With standard #44 pilot lamp (requires 6-8 volts AC/DC, .25 amp). Lamps are easily replaced from front of panel. All units feature ± 1% accuracy and employ Weston "Cormag" self-shielded movements. Scales have 100 divisions, choice of white markings on black background or black on white. Solder terminals. HxWxD: 3x2⅜x4²⁷⁄₆₄".

DC MILLIAMMETERS

Range	Resis. (Ohms)	Black Background Type No.	Black Background Stk. No.	White Background Type No.	White Background Stk. No.	1-9	10-24	25-49
1	21	1209-4912001	55F3106	1209-4911001	55F3111	59.40	53.45	45.50
2	8.6	1209-4912002	55F3107	1209-4911002	55F3112	59.40	53.45	45.50
5	3.96	1209-4912005	55F3108	1209-4911005	55F3113	59.40	53.45	45.50
20	2.2	1209-4912020	55F3109	1209-4911020	55F3114	59.40	53.45	45.50
50	2.0	1209-4912050	55F3110	1209-4911050	55F3115	61.00	54.90	48.80

DC MICROAMMETERS

Range	Resis. (Ohms)	Black Background Type No.	Black Background Stk. No.	White Background Type No.	White Background Stk. No.	1-9	10-24	25-49
50	5700	1209-5912050	55F3116	1209-5911050	55F3121	65.80	59.20	52.65
100	1160	1209-5912100	55F3117	1209-5911100	55F3122	64.20	57.80	51.53
200	231	1209-5912200	55F3118	1209-5911200	55F3123	62.60	56.30	50.10
500	73	1209-5912500	55F3119	1209-5911500	55F3124	61.00	54.90	48.80
50-0-50	1160	1209-5912003	55F3120	1209-5911003	55F3125	64.20	57.80	51.60

DC VOLTMETERS

Range	Ohms/V	Black Background Type No.	Black Background Stk. No.	White Background Type No.	White Background Stk. No.	1-9	10-24	25-49
1	1000	1209-1912001	55F3126	1209-1911001	55F3133	62.05	55.85	49.65
2	1000	1209-1912002	55F3127	1209-1911002	55F3134	62.05	55.85	49.65
5	1000	1209-1912005	55F3128	1209-1911005	55F3135	62.05	55.85	49.65
10	1000	1209-1912010	55F3129	1209-1911010	55F3136	62.05	55.85	49.65
50	1000	1209-1912050	55F3130	1209-1911050	55F3137	62.05	55.85	49.65
100	1000	1209-1912100	55F3131	1209-1911100	55F3138	62.05	55.85	49.65
500	1000	1209-1912500	55F3132	1209-1911500	55F3139	62.05	55.85	49.65

DC MILLIVOLTMETERS

Range	Resis. (Ohms)	Black Background Type No.	Black Background Stk. No.	White Background Type No.	White Background Stk. No.	1-9	10-24	25-49
50*	5	1209-9912050	55F3104	1209-9911050	55F3105	61.00	54.90	48.80

*Adjusted for standard 0.065 ohm (5 ft.) shunt leads.

TAUT-BAND DC PANEL METERS—SERIES 1930 AND 1940

3½" DC MICROAMMETERS—2% ACC.

Range	Model 1931T Plastic	Model 1931T Bakelite	Res. Ohms	EACH 1-9	EACH 10-24	EACH 25-49
0-50μa	55F3060	55F3063	2350	22.45	20.25	18.00
0-100μa	55F3061	55F3064	538	21.10	18.95	16.85
0-200μa	55F3062	55F3065	440	20.10	18.10	16.10

3½" DC MILLIAMMETERS—2% ACC.

0-1 ma	55F3082	55F3087	29	17.75	16.00	14.20
0-50 ma	55F3084	55F3089	2.0	17.75	16.00	14.20

3½" DC VOLTMETERS—2% ACC.

0-50v	55F3069	55F3077	1000/v	18.60	16.75	14.90
0-150v	55F3071	55F3079	1000/v	18.60	16.75	14.90

MOUNTING BEZELS FOR TAUT-BAND AND PIVOT-JEWEL METERS

Made for meters with clear plastic fronts only. Flat black enamel finish. For ⅛-3⁄16" panels. With hardware, template.

Stk. No.	Type	Description	1-9	10-24	25-49
55F2898	1984870	Half Bezel for 1931/2/4/6/8	1.40	1.25	1.10
55F2899	1984880	Half Bezel for 1941/2/4/6/8	1.45	1.30	1.15

4½" DC MICROAMMETERS—1% ACC.

Range	Model 1941T Plastic	Model 1941T Bakelite	Res. (ohms)	1-9	10-24	25-49
50*	55F3236	55F3240	870	35.95	32.35	28.75
100*	55F3237	55F3241	320	35.00	31.50	28.00
200	55F3238	55F3242	350	28.15	25.55	22.50
500	55F3239	55F3243	40	26.55	23.85	21.25

*Type 1946T.

Super-sensitive, dependable taut-band movements. Available with black bakelite (illus.) or clear plastic front; screwdriver zero adjust. 3½" types (1931T) ±2% accuracy, with lance pointer. 4½" types (1941T, 1946T) ±1%, with knife-edge pointer and mirror scale. All types require 1.91" behind panel. Approx. shpg. wt., 12 oz.

4½" DC MILLIAMMETERS—1% ACC.

Range	Model 1941T Plastic	Model 1941T Bakelite	Res. (ohms)	1-9	10-24	25-49
1	55F3244	55F3250	12.5	25.55	23.30	22.85
5	55F3245	55F3251	3.0	25.55	23.30	22.85
10	55F3246	55F3252	2.4	25.55	23.30	22.85
50	55F3247	55F3253	2.0	25.55	23.30	22.85
100	55F3248	55F3254	1.0	25.55	23.30	22.85
500	55F3249	55F3255	0 2	25.55	23.30	22.85

4½" DC AMMETERS—1% ACC.

1	55F3256	55F3258	Approx.	25.55	23.30	22.85
5	55F3257	55F3259	50	25.55	23.30	22.85

**Use with external shunt and .065-ohm leads.

4½" DC VOLTMETERS—1% ACC.

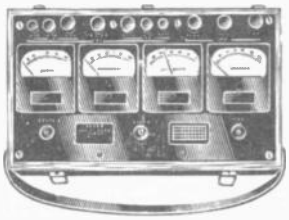
2	55F3260	55F3265		26.40	23.75	21.10
10	55F3261	55F3266	1000	26.40	23.75	21.10
50	55F3262	55F3267	ohms	26.40	23.75	21.10
150	55F3263	55F3268	per	26.40	23.75	21.10
500	55F3264	55F3269	volt	26.40	23.75	21.10

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

Weston Test Instruments

PORTABLES & MULTIMETERS

● *NEW* AC INDUSTRIAL ANALYZER



Model 639-9900002. An accurate self-contained power analyzer for those engaged in general industrial testing and installation work. Measures AC current & voltage in single or polyphase circuits. Uses 4"x 4½" instruments: Voltmeter, ammeter, power factor meter, and wattmeter. Ammeter has adjustable pointer stop for measuring instantaneous current surges. Ranges: 600/300/150 V, 125/25/5 amps., 100/50/25/20/10/5/4/2/1 kw. Power factor: .30 lag through unity to .80 lead. Freq: 25-125 hz. Size: 18⅞"x10⅞"x6⅞". Shpg. wt. 32 lbs.

62F1475. NET. **920.25**

● *NEW* INDUSTRIAL CIRCUIT TESTER

Model 785-9900008. Multipurpose industrial analyzer with 28 ranges. Current and potential leads connected simultaneously. DC sensitivity: 20,000 ohms/volts. AC sensitivity: 1000 ohms/volt. DC accuracy: ±2%. AC accuracy: ±3%. Binding post available at 100 millivolts. Ranges: DC V: 1/10/50/200/500/K; AC V: 5/15/30/150/300/750; DC amps: 50 micro, 1/10/100 milli, 1/10; AC amps: .5/1/5/10; Ohms: 3k/30k/300k/3M/30M-full scale, 25/250/2.5k/25k/250/-center scale. In polished wood carrying case. Size: 13"x12½"x5½". Shpg. wt. 13½ lbs.

62F1476. NET. **217.25**

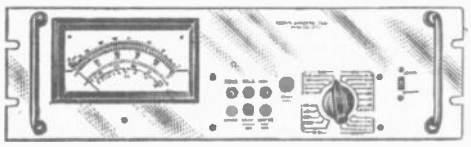
● *NEW* INSULATION TESTER

Model 799-9900001. Self-contained tester for measurements up to 10,000 megohms at low voltage with a maximum test potential of 50 volts DC. A shield connection and lead are provided to eliminate error due to leakage currents. Supplied with three test leads with insulated clips, tube, and batteries. Comes with a handsome polished wood carrying case, instructions, and carrying strap. Range: 0-10,000 megohms (logrithmic scale). Size: 3⅜"x5¼"x5". Shpg. wt. 3.8 lbs.

62F1477. NET. **116.25**

MODEL 80 SERIES MULTI-RANGE ANALYZERS

Model 81



Model 80-R

Model 80

The first multimeter design in years incorporating features wanted by the man on the bench. Extremely easy to read, these units offer maximum operating convenience, ruggedness, and unusually high accuracy (1% on most ranges). Portable types have panel and scale slanted at an ideal viewing angle. All types have 5½" meters with a unique refractive anti-parallax face. With fuse and diode overload protection, polarity reversing switch. Model 80 types supplied with test leads. Model 81 and 82 types less leads, with 5-way binding post terminals spaced to accept standard double banana plugs. Model 80-R is for standard 19"x5¼" rack mounting; portable models measure 8¹⁄₁₆"x6⅝"x7⅜". Approx. wt., 3 lbs.

MODEL 80-R RACK MOUNTING VOM

Non-custom made rack mounting 1% VOM. Ranges: DC volts, 5KV/1KV/250/100/50/25/10/2.5/1/.25 (at 20K ohms/volt); AC volts, 5KV/1KV/500/250/50/10/2.5 (at 5000 ohms/volt; DC current, 10/1 amps/100/10/1 ma/50 ua; ohms. 5 ranges from 2K to 20 megohms; DB scale, —10 to +10 DB .1% accuracy on ohms and DC scales; AC scales, 1.5%; 1 & 5KV scales, 2% DC and 2.5% AC.

62F1092. Type 80-9008002. **NET** **94.50**

MODEL 80 VOM

Identical electrically to Model 80-R, but for portable or bench service.

62F1085. Type 80-9008001. **NET** **89.50**

MODEL 81 DC VOLTMETER

Ranges: 1000/250/100/50/25/10/5/2.5/1/.25 at 20,000 ohms/volt. Accuracy is ± 1% (except ± 2% on 1000 volt range).

62F1086. Type 81-9008102. **NET** **73.25**

MODEL 81 DC MILLIAMMETER/AMMETER

Ranges: 10/3/1 amps/300/100/30/10 ma (10 ma range has 50 mv drop for use with external shunts). Accuracy is ± 1%

62F1087. Type 81-9008101. **NET** **73.25**

MODEL 81 DC MICROAMMETER/MILLIMETER

Ranges: 100/30/10/3/1/.3/.1 Ma. Accurracy is 1% on all ranges.

62F1088. Type 81-90081003. **NET** **73.25**

MODEL 82 AC VOLTMETER

Ranges 1000/500/250/50/10/2.5 volts at 5000 ohms/volts. Overall accuracy is 1.5%; use of film resistors and selected germanium diodes results in temperature and frequency error less than 1% for a change of 10°C, and frequencies from 25-2000 hz. Ranges below 250V are usable to 15 khz.

62F1089. Type 82-9008201. **NET** **76.50**

MODEL 82 AC MILLAMMETER/AMMETER

Ranges: 5/2/1 amperes/500/200/100/50 ma. Transformer-rectifier circuit causes losses less than 1.5 va for 5 amp range at 60 hz Accuracy: 2%, 60-400 hz 1.5% from 25-100 hz usable to 5 khz.

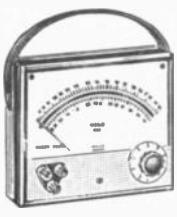
62F1090. Type 82-9008202. **NET** **76.50**

MODEL 9959 CARRYING CASE

Leather carrying case with handle, for portable Models 80, 81 and 82.

62F1091. Type PN250753. **NET** **10.50**

PORTABLE/PANEL MULTI-RANGE INSTRUMENTS



Models 911 & 912. Features CORMAG self-shielding mechanism, with spring back jewels. Large, easy to read 7.2" mirroback scale with maximum natural illumination. Employs long-life components, including precision metal film resistors. Accuracy: ±1% of full scale on DC Voltmeters (±2% of FS on 300 and 1000 volts DC) ±2% of full scale value on rectifier type AC voltmeters (±3% on 1000 volt range). Heavy duty, grey finished steel case. Front-clear plastic. 7½x6½x2⅜".

Model 911 DC Voltmeter. Range: 1/3/10/30/100/300/1000 V @ 20,000 ohms/V.
62F1229. NET. **73.25**

Model 911 DC Ammeter. 1/3/10 amps, 10/30/100/300 milliamps.
62F1230. NET. **73.25**

Model 911 DC Milliammeter. .1/ 3/1/3/10/30/100 milliamps.
62F1231. NET. **73.25**

Model 912 AC Voltmeter. Range: 3/10/30/100/300/1000 V @ 5000 ohms/V.
62F1232. NET. **84.00**

Model 912 AC Rectifier Ammeter. Range 5/2/1/0.5/0.2/0.1/0.05 amps.
62F1225. NET. **84.00**

Buy at Factory Competitive Prices at NEWARK

Weston Portable Meters

PORTABLE METERS

Model 901. Features a curved, shadow reducing, wide angle window that is non-breakable and specially treated against electrostatic effects. Self-shielded permanent magnet moving coil type. Accurate within 0.25 of 1%. Has 5½" hand calibrated mirror scale and knife edge pointer. Size: 7½x3¼x3⅜". Wt. 5 lbs.

DC VOLTMETER—5000 ohms/volt

Stock No.	Range	Scale Div.	NET
62F1136	750/300/150/ 75/30/15/3	150	210.75

DC AMMETER

62F1344	50mv/20/5/2	100	191.50

DC MILLIAMMETERS

62F1146	1000/500/200/ 100/50/20/10	100	199.00

Model 904. Same as Model 901, except 0.5 of 1% accuracy, Radial vane, Moving Iron type.

AC VOLTMETERS. Stnd. Freq. 50-450 cps.

Stock No.	Range	Scale Div.	NET
62F1143	750/300/150/ 75/30/15/7.5/3	150	285.75

AC AMMETERS. Std. Freq. 25-1000 cps.

62F1149	50/20/10/5/2/1	100	249.25

AC CLAMP VOLT-AMP & AMP METERS

Model 633. Ideal maintenance tool for on-the-job testing. Measures AC current through any given conductor (up to 2" diameter) without breaking the circuit. Accuracy within 3%. Insulated for 750-volt service. 13⅝x4¾x2½". Shipping weight, 4½ lbs.

62F1111. Type A-1. 500-250-100-50-25-10 amps. **NET** **141.75**

62F1112. Type A-2. 1000-500-250-100-25-10 amps. **NET** **141.75**

62F1113. Type A-3. 2000-1000-500-250-100-50 amps. **NET** **141.75**

Type VA-1. 1000-250-100-25-10 amps. 700-250-175 volts.
62F1118. NET **151.50**

LEATHER CARRYING CASE for above units.
62F1119. NET **14.50**

POCKET CLAMP AC VOLT-AMMETER

Model 749. Measures AC current and voltage without breaking circuit. Accommodates conductors up to 1" round or 1¾x⅜" rectangular. Features: core magnet shock mounted mechanism with spring back jewels, large smooth action trigger; shatterproof wraparound plastic window; bright red pointer for easy reading; positive action range selector switch. AC Voltage ranges 0-150, 300, and 600; Current ranges, 0-6, 15, 30, 60, 150 and 300 amperes. Fully insulated for 750 V service. Bakelite case. With carrying case, voltage test leads with insulated battery clips. Shpg. wt., 2½ lbs.

62F481. NET **55.25**

62F482. Type 9886. Plug in adapter for above. **6.50**

Model 433. Self-shielded permanent magnet moving iron type. Accurate within 0.75 of 1%. 5½" mirror scale and knife edge pointer. 7½ x 3¼ x 3⅜". Shpg. wt. 5 lbs.

AC AMMETERS.
Stand. Freq. 25-500 hz

Stk. No.	Range	Scale Div.	NET
62F1345	50/20/5	100	161.50
62F436	5	100	102.25
62F437	10/5	100	117.75
62F438	10/5/1	100	161.50
62F1131	30/7.5/3	150	161.50
62F1099	3/1.5/0.75	150	161.50
62F1098	20/5/2	100	161.50
AC VOLTMETERS. Stand. Freq. 25-125 hz			
62F439	150	150	109.25
62F1105	150/75	150	110.25
62F441	300/150	150	110.25
62F442	600/300/150	150	129.50
62F1097	10/5	150	110.25
62F1096	750/300/150	100	129.50
AC MILLIAMMET'S. Std. Freq. 25-500 hz			
62F1106	300/150	150	115.50
AC MILLIAMMET'S. Std. Freq. 25-1000 hz			
62F1095	100/50	100	122.00
62F1094	500/250	100	122.00

DIRECT CURRENT PORTABLE

Model 931. Compact, light weight and accurate (within 0.5 of 1%). Hand calibrated mirror scale and knife-edge pointer. Self shielded permanent magnet moving coil type. Scale length, 4.04". Black bakelite case with handle. Size: 5½ x 5 x 3¼". Shpg. wt., 4 lbs.

DC VOLTMETERS—1000 ohms/volt

Stock No.	Range	Scale Div.	NET
62F1100	150/15/3	150	116.50
62F431	750/300/150	150	116.50
5000 ohms/volt			
62F1121	75/30/7.5	150	130.50
62F1132	300/150/3	150	130.50
62F1122	750/300/150	150	130.50
DC AMMETERS			
62F1133	10/5/1	100	117.75
62F432	30/15/3	150	117.75
62F1145	50/25/10	100	117.75
DC MILLIAMMETERS			
62F1134	15/1.5/0.15	150	127.25
62F1102	150/15/1.5	150	114.50
62F435	1500/150/15	150	114.50
62F1101	3000/300/30	150	114.50

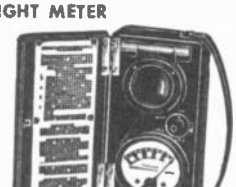
MODEL 432 WATTMETER

Alternating current at freq. from 25 to 125 hz. Current ranges self contained up to 300 V 50 amp. Current circuit at 5 amp, 60 hz 65 watt. Size: 3¼x5x5¼". Shipping weight 3¼ lbs. (*) For low power factor use.

- **A true electrodynamometer**
- **Only weighs 1.5 kgs.**

Stk. No.	Type 432-	Normal Volts	Max. Volts	Normal Amps	Max. Amps	Watts Max.	Watts Min.	NET
62F1346	9901001	150/75	200/100	1	1.5	150	75	222.50
62F1347	9901011	300/150	400/200	50	75	15 kw	7.5 kw	222.50
62F1348	9902007	300/150	400/200	10/5	15/7.5	3/1.5 kw	1.5/.75 kw	222.50
62F1349	9902013	300/150	400/200	5/2.5	7.5/3.75	1500/750	750/375	240.78
62F1470	9902009*		300/150		5/2.5	300/150	150/75	255.75
62F1471	9902010*		300/150		10/5	600/300	300/150	255.75
62F1472	9902007	300/150	400/200	10/5	3/1.5 kw	3/1.5 kw	1.5/.75 kw	222.50
62F1473	9902004	300/150	400/200	5/2.5	7.5/3.75	1500/750	750/375	222.50
62F1474	9901015	300/150	400/200	5	7.5	1.5 kw	75 kw	240.75

LIGHT METER



Model 614 Foot-Candle Meter. For measurements requiring a wide range of light values. Any type of commercial lighting can be measured directly with this compact Foot-Candle Meter. The photo-electric (Phottronic) cell is mounted on a hinge, so that it will pick up measurements from a wall or ceiling without unnecessary moving of the meter. Three ranges: 0 to 100 —0 to 250 and 0 to 500 foot candles each with a separate scale. With Viscor and cosine correction filters. Entirely self-contained in a sturdy bakelite case. Size: 7x3⅜x2½". Shpg. wt. 2 lbs.

62F474. NET **175.50**

MODEL 1092 SENSITROL RELAY

Operates on low input. Can be set close to any DC value from 0-50 micro-amps at drop of 0-100 millivolts. Can be connected to make on either increasing or decreasing current-zero right to left. Handles 100 milliamps at 120 VAC or DC w/o chatter. Once set, will repeat within narrow limits (±0.2 microamps attainable). 3½" rd. flush case—1½" D. Weight, 3 ozs.

62F1093. NET **32.50**

LIGHT MEASURING INSTRUMENTS

Model 703. Type 7 Sightmeter. Handy pocket-size sightmeter for industrial and office use. Pocket size for convenience in using and carrying. Will function accurately in any position. Range is 0 to 100 foot candles (with Viscor and cosine correction filter). 1 lb.

62F467. NET **73.75**

Model 703-3A. As above, but 0-75 foot-candles and unfiltered.
62F1124. NET **55.75**

Model 9959. Leather carry. case for above.
62F125. NET **9.50**

Model 9924. Multiplier disk (x10). Extends range to 10 times normal full scale value. Not usable with cosine corrected instruments.
62F1137. NET **2.25**

Model 980 Mark II Analyzer.

20,000 ohm/dcv vom Accuracy 2% dc, 3% ac. Ranges: ACV 1.6, 8, 40, 160, 400, 1600 at 1,000 ohm/v. DCV 1.6, 8, 40, 160, 400, 800, 4000 at 20,000 ohm/v. DC ma 1.6, 8, 80, 800. DB —15 to 54 DC Amps 8. DC Mics: 80. Ohms: 5 decade ranges 1K to 10 meg full scale. 25 ohms to 250K center scale. Black plastic case. Sizes: 7¼ex6¼x3". Shpg wt., 3 lbs.

62F476. NET **57.25**

Combination cover and stand. Stores all test leads.
62F1142. NET **6.00**

• *NEW* FAIRCHILD MODEL 7050 3½ DIGIT DIGITAL MULTIMETER

- Meosures Volts ond Ohms
- Six Somples per Second
- Integroted Circuit Reliobility
- Optionol DC Current Meosurement
- Automotic Polority Adjustment
- 0.1% Accurocy
- Disploy Storoge
- Infinite Disploy Time

The latest design concepts are incorporated in this accurate, compact instrument, ideal for production, quality control, servicing and educational applications. Use of integrated circuits results in exceptionally low cost and high dependability. Rugged and easy to operate: overload protection (1000V may be applied to any voltage range without damage) and automatic polarity switching permit use by students or untrained personnel. Measures DC volts and ohms; optional external shunts provide DC current ranges. Dual slope integrating technique combines the noise rejection capabilities of integration with the accuracy and stability of automatic comparison to an internal standard; 6 sample/second measurement speed assures fast response time. Readout: three digits and one over-range digit (equivalent to 50% over-ranging with no degradation of accuracy), plus decimal point and polarity indicators. Other features include input impedance greater than 1000 megohms on most sensitive range, floating input which may be operated 500V above ground, readout storage (non-blinking display) and remote controlled infinite display time. DC Voltage ranges: 0-1.5 (1 mv resolution) at 1000 megohms min. input impedance, 0-1S, 0-150, 0-1000V at 10 megohms; accuracy ±0.1% of reading, ±1 digit. Resistance ranges: 0-1.5K (1 ohm resolution), 0-15K, 0-1S0K, 0-1.5 megs, 0-15 megs. Size 3¼ x 6¼ x 7¼"; shpg. wt., 4 lbs. requires 115 VAC, 50-400 hz, 7 watts.

Stk. No.	Type	1-4	5-9	10-24	25-up
62F1040	7050	299.00	275.00	260.00	249.00

Only 3¼" High x 6¼" Wide x 7¼" Deep — Weighs Less Than 4 Lbs.

ACCESSORIES

Current shunts are for use with 1.5V range; resistance tolerance ±0.1%, except (*) 0.3%.

Stk. No.	Type	Description	NET
62F1043	09045091	150 μa shunt 10k Ω res.	10.00
62F1044	09045101	1.5 MA shunt 1k Ω res.	10.00
62F1045	09045111	15 MA shunt 100 Ω res.	10.00
62F1046	09045121	150 MA shunt 10 Ω res.	10.00
62F1047	09045131*	1.5 Amp shunt 1 Ω res.	20.00
62F1048	93000259	Complete Set of Shunts Above	45.00
62F1041	93000256	Rack mount for 1 or 2—7050's	30.00
62F1049	93000258	Tilt Stand/Handle	16.00

SIMPSON CHART RECORDING INSTRUMENTS

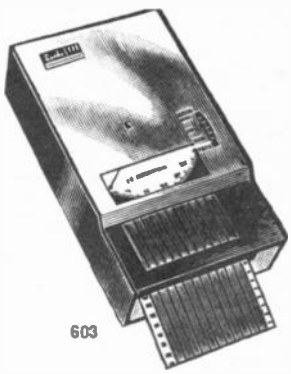
• *NEW* 603 SERIES SINGLE RANGE CHART RECORDERS

• Portable or Rack Mount **• High Speed 3-12-24-36 IPH**

Accurate, compact, and extremely easy to operate, these units use 3" wide pressure sensitive chart paper for trouble-free inkless recording. Meter scale permits use as indicating instrument when not recording. Movement is shockproof annular type with taut-band suspension moving-coil system. The movement is self-shielding to eliminate the effects of stray magnetic fields. Chart speed selector enables the operator to choose one of four paper speeds (3, 12, 24, and 36 inches per hour) while the recorder is in operation; it is not necessary to shut down or disassemble the unit to change speeds. Cycle indicator device permits use as an event recorder. Self-starting synchronous motor for chart drive. DC indication accuracy is ±1.5%, recording accuracy ±2.5% full scale. AC types have ±3% FS indication and ±4% recording accuracy; frequency response flat ±2% from 50 to 20,000 hz. Color-coded power and test leads cannot be plugged into the wrong socket. Unbreakable polycarbonate case measures 7½ x 4$\frac{9}{16}$ x 2$\frac{25}{32}$". Unit is suitable for portable use, or may be rack mounted (necessary hardware supplied). Wt., 2½ lbs.

Stock No.	Type No.	Range	NET
62F1786	20091	0-50 microamps DC	107.00
62F1787	20002	0-100 microamps DC	102.00
62F1788	20003	0-250 microamps DC	98.00
62F1789	20005	0-1 milliamps DC	90.00
62F1790	20025	0-15 Volts DC	97.00
62F1791	20030	0-150 Volts DC	96.00
62F1792	20070	0-5 Volts AC	102.00
62F1793	20080	0-150 Volts AC	102.00
62F1794	20085	0-300 Volts AC	104.00

Available In Low Speed Model ¼, 1, 2 and 3 inches/hr.



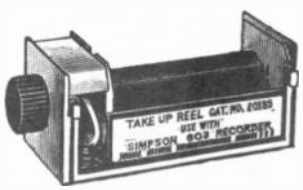
603

ACCESSORIES FOR 603

Automatic Take-up Reel. Prevents 603 recorder from spewing yards of chart paper onto table, floor, etc. Permits unattended operation. Just slips onto front of recorder.
62F1795 Type 20195. **NET** **15.00**

Carrying Case. Sturdy vinyl case protects 603 recorders.
62F1796 Type 20196. **NET** **20.00**

Pressure Sensitive Chart Paper. 6 rolls per box, each roll 63 feet long.
62F1797 Type 20097. 50 divisions.
62F1798 Type 20098. 60 divisions.
62F1799 Type 20099. 75 divisions.
NET per box. **13.55**



Take-up Reel

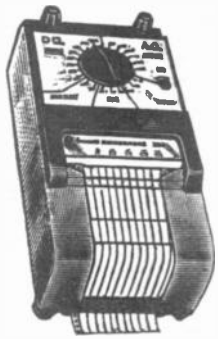
604 "MULTICORDER" RECORDING MULTIMETER

• 22 Ranges—AC and DC **• Inkless Recording** **• Three Chart Speeds**

Accurately measures and permanently records a wide range of voltage and current values. The ideal instrument for university and industrial research labs, and other situations where permanent records of varied measurements are needed. Inkless recording using fast sequential impressions on pressure-sensitive paper — no pen-and-ink maintenance problems. Three chart speeds: 1"/3"/12" per hr.; impressions made every 2 sec. High torque, shock-proof taut-band meter movement. Ranges: DC volts: 0-.1, .5, 2.5, 10, 25, 100, 250, 500, at 20,000 ohms/v. AC volts; 0-10, 25, 100, 250, 500 at 5000 ohms/v. DC microamperes 0-50, 250; DC ma: 0-1, 5, 25; DC amps: 0-1, .25, 1.0. AC current: 0-2 ma. Chart drive: self-starting synchronous motor. operates from 115 VAC 60 cps. Chart paper width, 2.3". Unique marking system indicates range in use, avoids confusion. Accuracy of recording: ±2.5% F.S. AC response flat from 15-10,000 cps. Temp. deviation: 1% of reading per 10°C., max. Size: 9¾x4¾x4:. Complete with No. 7500 test leads and two rolls of chart paper. Wt. 5½ lbs.
62F1689. NET **200.00**

Type 02612. Additional Chart Paper.
62F1690. Per roll. **NET** **2.50**
Box of 10, **NET** **19.50**

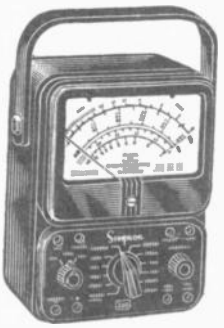
Type 0683. Special Gear Unit, 30/60/90 in./hr.
62F1691. NET **30.00**



604

Simpson 260 Series VOMs

260 VOM SERIES 5



- New Ruggedness From Spring Back Jewels
- Greater Repeatability
- Diode Overload Protection
- Higher Accuracy ±2% DC ±3% AC
- Input Protected With an Internal 1 Amp Fuse

Simpson 260. Volt-Ohm-Milliammeter. Handier, more sensitive, more accurate Polarity Reversing Switch for faster, easier DC measurements. Full-Wave Bridge Rectifier System gives more accurate VAC measurements. Easy access to all components. Ranges—VDC (20,000 ohms-per-volt); 0-250 MV, 0-2-5 V, 0-10V 0-50V, 0-250V, 0-1000V, 0-5000V, VAC (5000 ohms-per-volt): 0-2 5V, 0-10V, 0-50V, 0-50V, 0-250V, 0-1000V, 0-5000V; VAF (0.1 uf internal series capacitor): 0-2.5V, 0-10V, 0-50V, 0-250V; DB Vol. (0 DB to 1 MW across 600-ohm line): —20 to +10DB, —8 to +22DB, +6 to 36DB, 20 to 50DB; 600-ohm line): —20 to 10DB, —8 to 22DB, 6 to +36DB, +20 to +50DB; DC Resistance: 0-2000 ohms (12 ohms center), 0-2000,000 ohms (1200 ohms center); Direct Current: 0-50 μa, 0-1 MA, 0-10 MA 0-100 MA 0-500 MA, 0-10 amp Size: 5"x7"x3⅛". 3½ lbs. with Leads.
62F300. NET **58.00**

62F305. 260 Series 5M. As above but mirror scale. **NET** **60.00**

ROLL-TOP SIMPSON 260 RT

Lightweight carry-anywhere unit, same as Model 260 above, but has bakelite roll-top cover and convenient test-lead compartment. Shipping weight, 9 lbs. Note: "Add-A-Tester" adapters (listed below) cannot be used with the roll top model.
62F303. NET **64.00**

See Simpson accessory listing for cases and test leads for above units

OVERLOAD PROTECTED 260-5P

A virtually "goof-proof" overload protected version of the world famous 260 VOM. The 260-5P incorporates electronic circuit protection which senses overload conditions and trips a protective relay. The entire tester is protected — even when 110 volts is applied to the 1 milliamp or 50 milliamps range, no damage is caused. No chance of "fooling" this protection, either as with some other "burnout proof" V O M.'s It can't be reset — even momentarily — until the overload has been removed. A "must" for labs, schools, shops or wherever mortality rate of V.O.M.'s is apt to be high Complete with test leads and operator's manual Size: 5¼ x 7 x 3⅛. Wt. 9½ lbs.
62F1191. NET **88.00**

270-3 INCREASED ACCURACY VOM

- Taut-band Movement
- Knife-edge Pointer
- Temperature Compensated
- Mirror Scale

30-range multi-scale instrument. Includes all of the excellent features of the world-famous 260, plus a mirrored scale; knife-edge pointer; and printed circuit. It offers dependability and repeatability, ruggedness, and the higher accuracy necessary for many production and laboratory applications. The instrument has an easy-to-read 4½" meter at top of front panel. 3 operating controls and 8 circuit jacks are located directly below the meter. 7 DC voltage ranges (at 20,000 ohms per volt) are: 0-250 MV, 2.5V, 10V, 50V, 250V, 1000V, and 5000V. 6 AC ranges (at 5,000 ohms per volt) include: 0-2.5V, 0-10V, 0-50V; 0-250V, 0 1000V, and 0-5000V. 4 AF output voltages with 0.1μf internal series capacitor are 0-2.5V, 0-10V, 0-50V, 0-250V. Three resistanceranges: 0-2000 ohms center), 0-200,000 ohms (1200 ohms center), and 0-20 megohms (120,000 ohms center. 4 volume levels include —20 to +10 db., —8 to +22 db., +6 to +36 db., and +20 to +50 db. Variable resistance to ohmmeter circuit is used to compensate for aging of internal batteries. Heavy bakelite case is black with reinforced walls for maximum durability. Entire instrument slips inand out of case in one piece. Size: 5¼x7x3⅛". Shpg. wt., 4.2 lbs.
62F380. NET **70.00**

Model 261. Same as 270. but with pivot-and-jewel movement.
62F309. NET **68.00**

270-3RT ROLL TOP VOM

Same as Model 270 above. but has safety bakelite roll top case.
62F381. NET **76.00**

250 LOW MILLIVOLT DROP VOM

- **FITS 260 LINE ADAPTERS AND ACCESSORIES**
- **TAUT-BAND MOVEMENT**

Perfect VOM for transistor circuitry. Model 250 contains all of the built-in features of Simpson's well-known model 260. and includes low millivolt drop on current ranges. Has provision for using the entire line of "add-a-tester" aadpters, high voltage probes, and other 260 series accessories. Ranges: DC volts: 0-50, 0-2050 mv; 0-2.5, 10, 250, 500, 1000 volts at 20K-ohms/v.; AC volts 0-2.5, 10- 50, 250, 500, 1000 volts at 5,000 ohms/v. DC microamperes: 0-50 (with both 50 and 250 mv drop); DC ma: 0-1, 10, 100, 500 (50 mv drop); DC amps; 0-10 (50 mv drop). AC volts: 0-2.5, 10, 50, 250, 500, 1000; DB (1 mw into 600 ohms ref. level): —20 to +10; —8 +50. Resistance: 0-2K, 200K. 20 meg-:o +22; +6 to +36; +20 to ohms. Self-shielding, diode-protected, taut-band movement. Complete with test leads and operator's manual. Size: 5¼x7x3⅛". Wt. 3½ lbs.
62F1692. NET **63.00**

"ADD-A-TESTER" ADAPTERS FOR 260 SERIES

- **Self-powered, Self-contained — Just Plug In**

657 Milliohmmeter. Measures resistances from .001 to 1.0 ohms, independent of contact resistance. Won't overheat small resistors.
62F393. NET **48.00**

650 Transistor Tester. Beta ranges: 0-10, 50, 250, ±5%; ICO: 0-100 μa, ±3% acc. (better acc. when used with 270 VOM)
62F382. NET. **38.00**

651 DC VTVM. Measures 0-.5, 1, 2.5, 5, 10, 25, 50, 100, 250, 500 VDC, ±3% (±2% with 270). Input impedance greater than 10 megohms.
62F383. NET. **45.00**

652 Temperature Tester. Temperature ranges: —50°F to +100°F. and +100°F to +250°F. Accuracy: with 260 ±2% (nominal). Three lead positions provided. Thermistor sensing element. Size: 3⅝"x5 5/16"x2⅞". Shipping weight: 1 lb.
62F384. NET **43.00**

653 AC Ammeter. Ranges: 0-0 25/1/2.5/12.5/25 amperes. Accuracy: ±1%, with 260 ±5% nominal. Frequency range: 50 cycles to 300 cycles. Case size: 3⅝x5 5/16x2⅞". Shpg. wt. 1 lb.
62F385. NET **26.00**

654 Audio Wattmeter. Load ranges: 4 8, 16, 600 oms. Wattage: Continuhous 25 watts (8,600 ohms), 50 watts (4, 16 ohms); intermittent 50 watts (8,600 ohms), 100 watts (4, 16 ohms). Accuracy: ±5%, with 260 ±10% nominal. Direct reading scale from 17 microwatts to 100 watts. Size: 3⅝"x5 5/16"x2⅝". Shipping weight: 1 lb.
62F386. NET **28.00**

661 DC Ammeter. Multi-range, excellent accuracy of reading. Applications: automotive accessories (servicing), automotive electrical system, DC supplies, industrial.
62F1194. NET **28.00**

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

SIMPSON 160 "HANDI-VOM"

This compact version of the world-famous 260 gives you the ranges, conveniences, and sensitivity of a full-sized VOM in a palm-sized package. Self-shielded taut-band movement assures high accuracy and freedom from influence of external magnetic fields. Recessed range switch never gets in the way. With diode overload protection, and polarity reversing switch — may be safely operated by inexperienced personnel or students. Low DC voltage ranges make this tester ideal for solid state R&D and troubleshooting. Ranges: DCV: 0-1¼, 1, 2.5, 10, 50, 250, 500, 1000 at 20,000 ohms per volt; ACV: 0-2.5, 10, 50, 250 500, 1000 at 5000 ohms/V; DC microamps: 0-50; DC ma: 0-1, 10, 100, 500; DB: —20 to +10, —8 to +22, +6 to +36, +20 to +50 ("O" reference: 1 mw into 600 ohms); resistance: x1, x10, x100, x1000, x10K (30 ohms center-scale). Accuracy: ±3% FS on DC ranges, ±4% on AC. AC frequency response is flat within +1 DB 30-1 mhz on the 2.5 and 10V ranges, to 150 khz on the 50V range, and to 50 khz on the 250V range. Size, only 4⁹⁄₁₆ x 3⁵⁄₁₆ x 1¾; wt., 12 oz. With leads.

62F1723. NET **50.00**

MICRO-TESTERS

"MIDGETESTER" VOLT-OHMMETER

Model 355. VOM, ideal for radio, appliance and TV servicemen. Sensitivity 10,000 ohms per volt on both AC/DC. Accuracy 3% on DC, 5% on AC of full scale voltages. Ranges: AC/DC volts 0-3, 12, 60, 300, 1200; Ohms 0-10K, 100K, 1 meg, 10 meg. Compactness and sensitivity made possible by 100-micro-amp self-shielded core meter movement. Sturdy, polished styrene case. Size 2¾x4½x1". Complete with set of probe leads and instruction manual. Shpg. wt., 1 lb.

62F335. NET **47.00**

Model 355

Model 240-3

Model 362

Model 387

240-3 COMPACT AC-DC VOM

Designed for radio testing. Sensitivity 1000 ohms-per-volt on AC and DC Ranges: DCV, 0-15-150-300-750-3000; ACV, 0-15-150-750-3000; ma, 0-15-150-750; ohms 0-3000 (center scale 30), 0-300,000 (center scale 3,000). Accuracies: DC volts +3% F.S.; AC volts ±5% F.S.; DC Resistance ±3% of arc from absolute value of resistance measured. Complete with testleads and operator's manual. Black bakelite case. 3x5⅞x2½". Shpg. wt., 3 lbs.

62F313. NET **40.00**

370 AC AMMETER

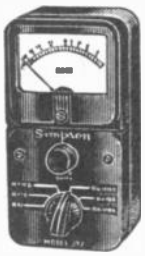
Built-in current transformer. Measures current drain of appliances, motors, heating elements, radios. etc. Ranges: 0-1-2.5-5-10-25 amperes. Bakelite case, 3x5⅞x2½". 60 Hertz application. Less leads. Wt. 3 lbs.

62F319. NET **35.00**

372 WIDE-RANGE OHMMETER

0.2 ohm—50 megohms. Ohms adjuster compensates for battery variation. 85 micro-amp. sensitivity. Range: 0-500-5000-50,000-500,000 oms & 0-5-50 megaohms. 3x5⅞x2½". Batteries & leads. 3 lbs.

62F318. NET **35.00**



Model 372

373 PORTABLE DC MILLIAMMETER

General purpose tester. Valuable in many applications such as plate and screen grid measurements on vacuum tubes. Accuracy ±3% of full scale. Provides DC current measurements from 1 to 1,000 MA Ranges: 0-1, 5, 10, 25, 50. 100, 250, 1000 milli-amperes, 3x5⅞x2½". Shpg. wt. 3 lbs.

62F323. NET **35.00**

390 AC VOLT-AMP-WATTMETER

For measuring AC/DC volts, AC amps, and AC watts with one meter. Built for continuous full-load operation. Tests power consumption on all types of appliances. Ranges: 0-150-300 ACV; 0-3-15 amps.;0-300-600-1500-3000 W. 60 Hz operation, 3" meter. 3x5⅞x2½". With plugs and leads. Wt., 4 lbs.

62F317. NET **60.00**

Model 390

374 DC MICROAMMETER

Basic movement sensitivity 50 microamperes with self contained shunts for all other ranges. Can be used with external resistors or multipliers as a high sensitivity voltmeter at 20,000 ohms per volt. Can be shorted out of circuit by use of "short" selector knob. 0-50, 100, 250, 500, 1000 μa. 3x5⅞x2½". Shpg. wt., 3 lbs.

62F361. NET **35.00**

362 LOW OHMMETER

Two ranges. Very accurate readings from 0.1 to 25 ohms. Ideal to check motor armatures and fields; switch and relay contact resistances; shorts between generator windings and grounds; shorts in TV and radio chassis wiring; industrial electrical equipment. Accuracy ±3% full scale. Complete with test leads. Shpg. wt., 3 lbs.

62F368. NET **35.00**

378 AC MILLIAMMETER

(Self-contained current transformer.) Five separate ranges make it suitable for a wide variety of testing; 0-5, 25, 100, 250, 1000 ma. 3x5⅞x2½". Shpg. wt.. 3 lbs.

62F365. NET **35.00**

379 BATTERY TESTER

Provides accurate indications of the condition of all standard flashlight; Transistor-Radio andl Hearing Aid batteries. With leads. 3x5⅞x2½". Shpg. wt. 3 lbs.

62F366. NET **35.00**

APPLIANCE TESTER
387 DC MILLIVOLTMETER

Checks safety thermocouples on gas-fired units—Furnaces — Boilers—Heaters—Hot Water Heaters'—Dryers—Refrigerators. Gas unit servicing faster, accurate, simply place the probe across the thermocouple terminals and test for the correct value. Ranges are 10, 30, 100, 300 and 1000 millivolts. Accuracy 3% fullscale from 50° to 120° F. 3x5⅞x2½". With leads and operator's manual. Shpg. wt., 3 lbs.

62F367. NET **35.00**

371 AC VOLTMETER

Designed primarily for testing voltages applied to motors, heating equipment and many other industrial applications. Accuracy: ±3% of full scale. 0-150, 0-300, 0-600 volts. Size: 3x5⅞x2½". Shpg. wt., 3 lbs.

62F360. NET **35.00**

375 DC AMMETER

Provides a complete range from a fraction of an amp to 2.5 amps without the necessity of using auxiliary external shunts. 0-1, 2.5, 5, 10, 25 amps. 3x5⅞x2½". Wt., 3 lbs.

62F362. NET **35.00**

NEWARK GROWS WITH THE INDUSTRY!

Newark's Constantly Expanding Its Operations to Assure You

• **Greater Efficiency** • **Fastest Service** • **Widest Selection**

VACUUM TUBE VOLTMETERS

312 EXTRA HIGH IMPEDANCE WIDE SCALE VTVM

- **16 Megohm Input Impedance**
- **500 mv Solid-State Test Range**
- **Easy-to-Read Seven Inch Scale**

The input resistance of this instrument is 16 megohms, not 11 megs as in most other VT-VM's. 40% higher input impedance means 40% less circuit loading and correspondingly greater accuracy in readings. Extra-large, easy to read seven-inch scale. Has 500 mv scale to meet today's solid state testing requirements. Specially designed circuit protects the meter against burnout. Voltage ranges: DC 0-500 mv, 0-1.5, 5, 15, 50, 150, 500, 1500 volts at 16 megohms input resistance. AC RMS: 0-1.5, 5, 15, 50, 150, 500, 1500 volts at 1 meg minimum input impedance; peak-to-peak; 0-4, 14, 40, 140, 400, 1400, 4000 volts. Resistance ranges R x 1 x 10 x 100, x 1K, x 10K, x 100K, x 1 meg, 10 ohms center scale. Accuracies are ±3% of full-scale value on all voltage ranges, ±3% of arc on resistance. Frequency response is flat ±3% from 51 cps to 3 megacycles on AC voltage ranges through 150 volts; with special RF probe, range can be extended to 250 mc. Operates from 105/125 VAC, 50/60 cycles. Modern smartly designed case measures 7¾ x 6¾ x 3¾". Comes complete with No. 0150 AC/ohms/DC probe and operator's manual. Wt. 4¾ lbs.

62F1688. NET **90.00**

311 VACUUM TUBE VOLT-OHMMETER

Multirange all purpose VTVM. Accessory RF probe extends range to 100 mhz. High voltage breakdown exceeds 2000 volts. ACCURACY: VDC ±3% of full scale; VAC ±5% of full scale; DC Resistance ±3% of linear arc. RANGES: VDC and VAC 0-1.5, 5, 15, 50, 150, 500, 1500 volt. AF Voltage: 0-1.5, 5, 15, 50, 150, 500, 1500. RF Voltage (with probe): 0-1.5, 5, 15, 50, 150 (50 cps to 100 MC.) Peak-to-Peak voltage: 0-4, 14, 40, 140, 400, 1400, 4000; resistance: 7 ranges. Complete with No. 7594 AC/DC/Ohms probe, No. 0733 ground lead and operator's manual. Size: (HWD) 7½"x5⅝"x4½". Shpg. Wt. 6 lbs.

62F375. NET **85.00**

715 HIGH SENSITIVITY AC VTVM

Sensitivity: 10 millivolts full scale on lowest range. Input impedance: Minimum of one megohm at 1 KC. Frequency response: flat within one decibel between 10 cps and 400 KC. Meter scale provides DB markings on both the voltage range positions. AC rms volts 0-0.1, 0.03, 0.1, 0.3, 1.0, 3.0, 10, 30, 100 and 300. Decibels total range, —52 to +52 DBM (at Zero DBM reading is one millivolt across 600 ohms). Scale reads —12 DB to +2 DB. Accuracy on all ranges: ±5% of full scale. Unit requires 110-125 VAC, 50-60 cycles. 7½"W x 5½"H x 3"D. Gray hammertone finish. Complete with operator's manual, and shielded input cable. Shpg. Wt. 3 lbs.

62F1182. NET **75.00**

303 VACUUM TUBE VOLT-OHMMETER

10 megohm input imp. on DC. Zero-center scale for FM discriminator adjustment. AC & DCV: 0-1200, in 5 ranges, AF volts 0-1.2-12-60, flat to 100 khz, resistance to 1000 megs, in 5 ranges; DB —20 to +63, 5 ranges. 4½" meter. Polarity switch. With all necessary probes and manual. For 105-125 VAC. 7x5¼x3⅛", 6½ lbs.

62F304. NET **90.00**

303 RT. As above, in roll top case.

62F327. NET **91.00**

OSCILLOSCOPES AND CAPACITOR CHECKER

466 5" PORTABLE OSCILLOSCOPE

A small, handy scope designed to take on practically any radio-TV service job. Vertical amplifier. ±1 db 15c to 100kc, 6 db down at 250 kc, usable to 1 mc. Maximum vertical deflec. sensitivity: 30 mv/inch. Sweep range 15c to 80 kc. Maximum input voltage 400 v peak. Calibrating voltage (at 117.5 VAC source voltage) 1 v. peak-to-peak, ±10%. Horizontal amplifier has flat response within ±1 db, 15c to 20 kc; down 6 db at 100 kc. Maximum horizontal deflection sensitivity is 0.7 volt/inch. Sensitivity with Z-axis (intensity) modulation. 20 volts rms extinguishes beam. Input resistance (with attenuator set at x1) 0.1 megohm (with attenuator at x100) 0.5 megohm input capacitance, 40 mmf. Operates from 117 VAC 50/60 cycle, 50 watts. Supplied complete with input cable No. 0100 and operator's instruction manual. Unit weighs 19 lbs., shpg. wt. 40 lbs. Size: 7⅞"x12"x16⅛".

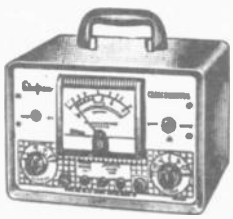
62F347. NET **180.00**

458 7" COLORSCOPE

- **Response Flat ‡ db to 4.5 MHz**
- **Better than 40mv/in Vertical Sensitivity**

Specially designed for color TV trouble shooting. Frequency response is flat within ±1 db to 4.5 mhz under wideband operation; color burst frequencies are faithfully displayed with greater than 40 mv (rms)/inch vertical sensitivity. On narrow band operation; response is flat within ±2 db, 10 to 300,000 hz, sensitivity greater than 15 mv/inch. Has horizontal sweep to 250 khz, and 1v p-p calibrating voltage. Seven-inch CRT is a boon for the myopic. With vernier and compensated decimal step attenuator; provision is made for Z-axis modulation. 105/125 VAC, 50/60 cycle. Size, 11x16½x14½"; wt., 29 lbs., shpg. wt. 38 lbs. Complete with operator's manual.

62F339. NET **390.00**



383A "CAPACOHMETER" CAPACITOR CHECKER

- **In-Circuit check, under load conditions**
- **Pulse technique detects marginal units**

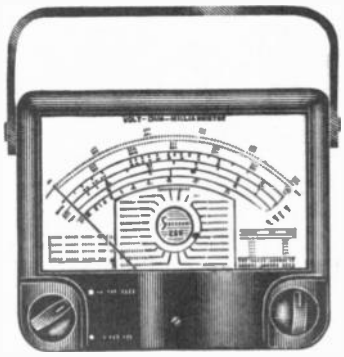
In-circuit capacitor leakage tester utilizes a pulse technique to detect many "marginal" capacitors. Measures the leakage resistance of defective paper, micra or ceramic capacitors; indicates directly the capacitance of good ones over a range of 10.0 mf to 10.0 mf. All measurements are made under load conditions. Avoid tedious adjustment of bridge circuitry and balancing controls. Borderline capacitors which cause costly "callbacks" are detected immediately with the pulse test. Operates from 105/125 VAC, 50-60 cycle. Comes complete with test leads. Shpg. wt. 12 lbs.

62F345. NET **130.00**

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

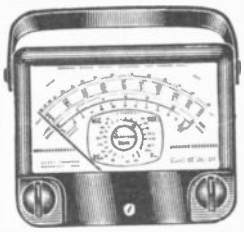
263 DUAL SENSITIVITY 7" VOM

- **20,000 or 10,000 ohms/V DC**
- **10,000 or 5000 ohms/V AC**
- **±1½% Accuracy on DC ranges**
- **Diode Overload Protection**



Dual sensitivity Volt-Ohm-Milliammeter with accuracies of ±1.5% DC and ±3% AC full-scale. Overlapping ranges offer greater accuracy expressed as a percentage of reading. Diode overload protection prevents movement burnout on overloads as great as 200,000%; fuse provides additional input protection. Uses 1½-volt alkaline battery to insure greater stability on low ohms scale. External battery compartment makes battery replacement easier. Measures DC volts 0-.15/ 75/3/7.5/30/75/300/750/3000 at 20K Ω/V, 0-.3/1.5/6/15/60/150/600/1500/6000 at 10K Ω/V; AC volts 0-2.5/7.5 30/150/750 Ω at 10K V, 0-5/15/60/300/1500 at 5K Ω/V; DC μa 0-75 at 150 mv drop, 0-150 at 300 mv; DCMA 0-.75/7.5/75/750 at 150 mv, 0-1.5/15/150 at 300 mv; DC amps 0-7.5 and 0-1.5/15; resistance 0-50 megohms in 6 ranges; DB —20 to +75½ in 10 ranges. Accuracies: ±1.5% on DC current and voltage to 1500V (2.5% on high voltage scales) and ±3% on AC; resistance ±3° of arc on xl scale, ±2.5° of arc on higher scales. Scale length 6.2 inches; knife-edge pointer. Size, 6 x 7¼ x 3". Complete with No. 0115 test leads and operator's manual. Wt. 4 lbs.
62F1193. NET. 88.00

269-2 100,000 OHMS/V VOM



Improved high-impedance VOM incorporates self-shielded meter movement with spring-backed jewels, eliminating shock and vibration damage. Measures 0-4000 VDC in 8 ranges (100KΩ/V) 0-800 VAC in 6 ranges (5KΩ/V), DC μa 0-160, DC MA 0-160, DC amps 0-8, DB —12 to +45½, resistance 0-200 megs in 6 ranges (12 ohms center-scale for better coverage). Accuracy ±2%, except ±3% on AC and high DC volts ranges, and ±2½° of arc on resistance (±3° on low ohms). External battery compartment makes battery replacement easier. Input protected by an internal 1.5 amp fuse. Scale length 6.2 inches. Size, 6 x 7¼ x 3", wt , 4 lbs. Comes complete with No. 0115 test leads, 4000V probe extension and operators manual.

62F330. NET. 90.00

267 & 268 7-INCH VOMs

Model 267. General-purpose large scale volt-ohm-milliammeter. Internal 1 amp fuse protects input. Measures 0-1000 VDC (20KΩ/v) in 7 ranges, 0-1000 VAC (5KΩ/V) in 6 ranges, 0-50 μa (mu), 0-120 ma (3 ranges), and 0-12 amps DC. Also has four DB scales covering —12 to +50, and three resistance ranges to 20 megohms (12 ohms center-scale). Accuracy ±3% on DC scales, except 2% on microamperes, and ±5% AC. Resistance accuracy ±3° on Rxl scale, ±2½° on higher ranges. Comes complete with No. 7500 test leads (alligator clips) and operator's manual. Size 6 x 7¼ x 3", net wt., 4 lbs.
62F395. NET. 65.00

Model 268. Same features as Model 267 above, but with slightly different coverage: DCV 0-1200 (6 ranges), ACV 0-1200 (6 ranges), DCμa (mu) 0-60, DCma 0-120)3 ranges), DCA 0-12, DB —12 to +50. Resistance scales same as 267.
62F394. NET. 65.00

TEMPERATURE METERS

388-3L THERM-O-METER

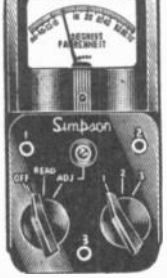
The Therm-o-meter measures the temperature of air, gases, liquids, or solids by means of thermocouple type leads from —50°F to +100°F. Both Fahrenheit & Centigrade readings can be made in 15 to 30 sec. and up to a distance of 7½". A selector switch on the 388-3L connects any one of the three leads into the meter circuit. The lead wires are small enough to pass through a closed door and gasketing. The meter movement is self-shielding. A compensator circuit automatically corrects room temperature effects from 60 to 100° F. With one general purpose lead, battery, and operator's manual. 7 15/16x6x2 15/16". Shipping weight. 4 lbs.
62F350. NET 75.00

DUAL RANGE THERM-O-METER

Model 389-3L may be used to measure temperatures of gases, liquids, or solids in many fields; frozen food packaging, ice manufacturing, freezer storage, refrigeration, photo processing, air conditioning, and numerous others. Using the three leads, readings may be made in three different locations at once. There are two ranges. A low from —50°F. and a high from 100°F to 250°F. Accuracy is within 3°F in any position, near center of scale within 2°F or better. Compensation for room temperature effects. Large easy to read 7" meter. Self shielded core magnet, minimizes heavy electrical interference. Includes sensing probes with thermistors, tip and 15' lead, and batteries. Black bakelite case. 7 15/16x6x2 15/16". Wt., 6 lbs.
62F391. NET 70.00

385-3L TEMPERATURE METER

- **Temperature Checks from —50° to +70°F**
- **Light Weight, Portable**
- **Takes Three Separate Inputs**



Simpson 385-3L is ideal for those fast, accurate temperature checks from —50°F to +70°F. Light weight, portable, fits easily in your hand. Three lead model. Takes temperature readings in three different locations with a simple flick of the selector knob. Standard Model has Fahrenheit scale. Supplied with one No. 0010, 15 ft. thermistor lead and operator's manual. Size: 3" x 5⅞" x 2½". Wt., 1½ lbs.
62F1195. Type 385-3L. NET 40.00

255 VOM WITH TEMPERATURE SCALE

Ideal for heating and utility servicemen. This tester includes the VOM functions of the popular model 260, as well as providing a temperature measurement range of +100 to +1050°F. Has low millivolt drop on the DC ranges; ideal for checking transistorized equipment. DC ranges: 0-50, 0-250 millivolts; 0-2.5, 0-10, 0-50, 0-250, 0-1000 volts; 0-50 microamperes (with both 50 and 250 mv drop); 0-1, 0-10, 0-100, 0-500 MA with 50 mv drop. AC ranges: voltage: 0-2.5, 0-10, 0-50, 0-250, 0-1000; amps: adapter available to read to 500 amps. Resistance ranges: 0-2K, 0-200, 0-20 megohms. Diode-protected taut-band movement. Complete with test leads, 5 ft. thermocouple lead and operator's manual. Size: 5¼ x 7 x 3⅛"; wt. 3½ lbs.
62F1693. NET. 90.00

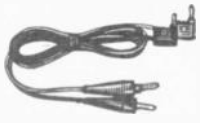
Simpson Test Equipment and Accessories

ACCESSORIES FOR SIMPSON TEST EQUIPMENT

4299
Microtester Ever-Redy Carrying Case

Model 0805 Ever-Redy Carrying Case

Model 5262 Ever-Redy Carrying Case



7500
Banana Plugs & Alligator Clips for 260-3

0190
General Purpose Thermocouple Leads

CARRYING CASES

Model 1818. Leather carrying case for models 250, 260, 261, and 270.
62F301. NET 10.00

Model 0805. Ever-Redy carrying case for Models 250, 260, 261, 270, and 303. Leather.
62F302. NET 12.00

Model 5262. Ever-Redy carrying case for Models 262, 267, 268, 269, 388-3L, 389-3L. Vinyl.
62F329. NET 12.00

Model 6355. Ever-Redy carrying case for Model 355. Leather.
62F354. NET 5.00

Model 4299. Ever-Redy carrying case for all Microtesters. Leather.
62F326. NET 10.00

Model 8073. For 385-3L-Ever-Redy. Leather.
62F1733. NET 10.00

Model 2225. Carrying Case for Model 160 "HANDI-VOM".
62F1682. NET 9.50

Model 4236. Ever-Redy Vinyl Case for Models 250, 251, 260, 270 and 303.
62F1683. NET 14.00

Model 0577. Vinyl Case for Model 312 high-impedance VTVM.
62F1684. NET 15.00

Model 02611. Ever-Redy Carrying Case for Model 604 "Multicorder" Recording Multimeter.
62F1685. NET 25.00

Model 0249. Roll Top Safety Case for 260-4, 261, 263, 270.
62F1737. NET 10.00

Model 0549. New Utility Vinyl Case.
62F1697. NET 18.00

Model 0574. Probe Case.
62F1696. NET 5.00

PROBES—Miscellaneous Type

Model 0073. High Frequency. For Model 303.
62F342. NET 10.00

Model 0731. 311 VTM. High Frequency.
62F1745. NET 15.00

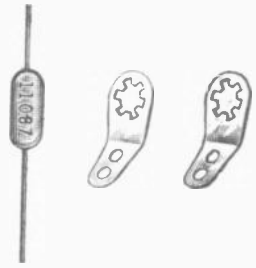
Model 0732. 311 VTVM High Voltage
62F1746. NET 15.00

Model 7594. 311 VTVM DC-AC Ohms.
62F1747. NET 10.00

Model 0155. High Voltage. For Model 312 VTVM.
62F1695. NET 15.00

Model 0152. High Frequency. For Model 312 VTVM.
62F1694. NET 10.00

METER SAFE/GUARD



Model 12621. Fast, easy to install. Provides meter movement protection for series 1, 2, 3, or 4, 260 (or any other 20,000 ohm per volt VOM). Prevents electrical damage to the meter movement, regardless of the polarity, even with currents of as much as 200 milliamperes applied. Use with AC or DC. Has low leakage, sharp knee characteristics.
62F1698. NET **1.95**

LEADS

Model 2055. Probe Tip Leads for 160 "HANDI-VOM".
62F1686. NET 2.75

Model 7500. Banana Plugs and Alligator Clip. For Model 260. Series 3, 4, 261, 270.
62F370. NET 2.50

Model 7538. Banana Plugs and Test Prods. For Model 260, Series 3, 267, and 268.
62F325. NET 3.00

Model 8600. Test Prods. For Model 355.
62F353. NET 2.50

Model 0010. 15 foot Thermistor Lead. For Model 385-3L and 389-3L
62F396. NET 7.00

Model 0216. 30 foot Thermistor Lead. For model 385-3L, 389-3L.
62F397. NET 8.00

Model 0190. General Purpose Thermocouple. For Model 388-3L.
62F352. NET 6.00

Model 0187. Surface Temperature Thermocouple (300° F MAX.) For Model 388-3L.
62F351. NET 10.00

Model 8381. Test Prods and Elbow Terminals. For Models 230, 240, 260-2, 372.
62F369. NET 3.00

Model 8379. Test Prods and Spade Terminals. For all Microtesters.
62F399. NET 3.00

Model 8375. Alligator Clips and Elbow Terminals. For Models 230, 240, 260-2, and 372.
62F343. NET 2.50

Model 8376. Alligator Clips and Spade Terminals. For 370, 371, 373, 374, 375, 376, 377, 378.
62F1725. NET 2.50

Model 8463. Combination Test Prods with Removable Alligator Clips and Elbow Terminals. For 262, 269.
62F1726. NET 3.00

TEMPERATURE TEST LEADS AND PROBES

Model 0789. Free Air Temp. Probe. For Model 385-3L 389-3L. 652-3L, 260 Adaptor.
62F308. NET 10.00

Model 0790. Surface Temperature Probe. For Models 385-3L, 389-3L, 652-3L, 260 Adapter
62F398. NET 7.00

PROBES—High Voltage Types

Model 0150. DC/AC Ohms. For Model 312 VTVM.
62F1699. NET 10.00

Model 0074. 30,000 volts. For Model 303.
62F341. NET 15.00

Model 0507. 10,000 V. For 260 Series 3, 4, 4M, 261, 267, 270-2.
62F1727. NET 15.00

Model 0508. 25,000 V. For 260 Series 3, 4, 4M, 261, 267, 270-2.
62F346. NET 15.00

Model 0509. 50,000 V. For 260 Series, 3, 4, 4M, 261, 267, 270-2.
62F1729. NET 15.00

Model 0158. 30KV@10K/V. 15V@20K/V. The #0141 is for the New 263 Dual Sensitivity VOM
62F1748. NET 15.00

Model 0119. 16,000 volts. For 269 Series-2.
62F1731. NET 15.00

Model 0157. 40,000 volts. For 269 Series-2
62F1749. NET 15.00

RCA TEST EQUIPMENT

POWER LINE MONITOR

- **Invaluable to repair and laboratory shops, where the current of power line must be known at all times.**

Model WV-120A. The RCA Power Line Monitor is designed for use by radio-TV repair shops, laboratories, and industries where it is important to know the power line voltage at all times. Used in conjunction with the RCA WP-25A Isotop isolation transformer on a 50-60 cycle power line, the WV-120A is a valuable aid in selecting line voltages for such applications as TV servicing, test instrument calibration, and the operation of electronic equipment that requires a known line voltage supply. Size: $3\frac{13}{16}$x5x$3\frac{1}{16}$". Ship. Wt. 2½ lbs.
62F058. Model WV-120A. **NET** **16.50**

COLOR-BAR/DOT-CROSSHATCH GENERATOR

Model WR-64B. Produces time-tested color bar signals needed for adjusting and troubleshooting color TV circuits as well as dot and crosshatch patterns for adjusting convergence in color receivers, and for adjusting linearity and overscan in both color and black and white receivers. Crystal-controlled RF Oscillator for stable picture carrier. Crystal-controlled synchronizing pulses. Crystal-controlled sound carrier for accurate adjustment of receiver fine tuning. Fixed number of dots and lines for ease in checking overscan. PATTERN control (Color-Bar/Dot/Crosshatch). CHROMA control to check receiver color sync-lock action. FUNCTION control with OFF—STANDBY—PATTERN—PATTERN + SOUND positions. Convenient panel switches for shorting out the red, blue, or green guns of the color picture tube. Complete with RF output cable, cable-carrying bracket attachment, three leads for connection to red, blue, and green grid connections, and instruction booklet. Width 13½", height 10", depth 8", weight 13¼ lbs.

62F085. Model WR-64B. Factory wired and tested. **NET** **189.50**

CRYSTAL-CALIBRATED MARKER GENERATOR

Model WR-99A. Supplies a fundamental frequency RF carrier of crystal accuracy for use in aligning and trouble-shooting TV (color and black and white) and FM receivers and other electronic equipment operating in the range of 19 to 260 MHz in 8 bands on fundamental frequencies. Built-in crystal calibrator, heterodyne detector, amplifier and speaker provides calibrating beates at 1 MHz or 10 MHz intervals throughout entire tuning range which is covered by 8 bands. A built-in 4.5 Mc crystal provides necessary accuracy for alignment of intercarrier-if amplifier and discriminators. At least 0.1 volt output VFO ranges; 0.05 volt crystal frequencies, into a termination of 90 ohms. Provides signals for adjusting vertical or horizontal linearity. Precision matched impedance/resistance pad attentuator, 0-60 dB in 5 db steps. Special modulation input available for re-transmission Provision for use as Heterodyne Frequency Meter. Provides dual markers 4.5 MHz apart for bandwidth checks and RF alignment. Triple markers for sound-if alignment and bandwidth checks. Adjustable dial pointer for accurate registration with crystal-calibration check points. Wt. 21 lbs.

62F054. Model WR-99A. Factory wired and tested. **NET** **256.50**

TELEVISION/FM SWEEP GENERATOR

Model WR-69A. For visual alignment of both TV and FM receivers. Has preset switch positions for all VHF TV channels, the FM broadcast band, and TV video, chrominance, and IF frequencies. VHF output is on fundamental frequencies only; no beat notes or harmonics are used. Exceptionally good linearity is provided by a precision vibrator capacitor. Continuously adjustable sweep width and flat output make for accurate sweep response displays. Special sample-voltage terminal on panel permits use with marker-adder units in alignment. Dual-piston attentuator provides smooth even attentuation over 60 dB range for TV and FM channels and 70 dB range for IF and video. IF/Video output frequency continuously tunable from 50 KHz to 50MHz in 6 ranges. Sweep-frequency bandwidth continuously adjustable from 50 KHz to 20 MHz on IF/Video and FM; 12 MHz max. on TV channels. Return trace blanking. Two continuously adjustable bias voltages, 0 to —12 volts, available on front panel. Width 13⅜", height 10", depth 7", weight 16 lbs.

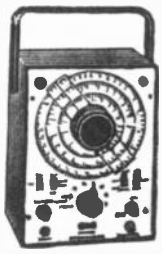
62F071. Model WR-69A. Factory wired and tested. **NET** **295.00**

RF/IF/VF MARKER ADDER

Model WR-70A. For RF, IF, and video sweep alignment of both color and black and white TV receivers. Provides sharp, easy-to-read markers for alignment. A choice of four different marker shapes is available, permitting use of marker type best suited to the response curve. Designed for use with conventional marker and sweep generators and the WR-59 and WR-69 series TV sweep generators. Marker signal is added to the sweep-response curve after the sweep signal is taken out of the receiver under test. Eliminates or reduces distortion of sweep curve by the marker. Permits trap alignment without marker "suckout." Hi-Q markers — high in amplitude, narrow in width. Power supply voltage stabilized for rock-steady trace display. Wt. 11 lbs.

62F072. Model WR-70A. Factory wired and tested. **NET** **87.00**

RF SIGNAL GENERATOR WITH SWEEP FEATURES

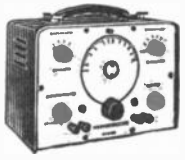


Model WR-50B. Designed for maintenance, troubleshooting and instructional purposes. Provides an accurate source of CW or amplitude-modulated signals from 85 KHz to 40 MHz. Suited for aligning and signal tracing AM, FM, Hi-Fi and Citizens' Band and amateur radio receivers. A 400-cycle output provides a practical means for checking audio amplifier circuits. Built-in crystal calibrating oscillator circuit with front panel crystal socket. Permanently attached shielded RF output cable. Built-in DC blocking capacitors. Two-step RF attenuator switch plus a continuously variable attenuator control. Vernier tuning. Sweep output is provided at 455 KHz and 10.7 MHz for sweep alignment both AM and FM IF circuits. A return-trace blanking circuit is included to provide a zero reference line. Width 5⅜", height 7¾", depth 4¾", weight 5 lbs.

62F086. Model WR-50B. Factory wired and tested. **NET** **65.00**

62F089. Model WR-50B(K). As above KIT FORM. **NET** **45.00**

AUDIO SIGNAL GENERATOR SINE/SQUARE WAVE OUTPUT



Model WA-44C. For measurement of frequency response characteristics of audio amplifiers, and testing of loudspeakers and enclosures or finding impedance of LC combinations. Switch selection for sine-wave or squarewave output. Simple one-scale dial. Separate 60 cps line frequency output for intermodulation distortion measurements. Wide frequency range, 20 Hz to 200,000 cps. Less than ½ of 1% distortion over the audio-frequency range. Operated from a 50/60 cycle, 105-125 volt source; covers in four bands a range from 20 Hz to 200,000 Hz. The circuit of the sine-wave function consists of a "Bridged-T" oscillator with a cathode follower output stage. The square-wave output is developed by using the sine-wave oscillator output to drive a clipping and shaping circuit. Produces a stable signal with an amplitude variation of not more than ±1.5 dB. Total harmonic distortion is limited to 0.5% over the range of 30 Hz to 15 KHz. Width 10¹¹⁄₁₆" height 7", depth 6⅛", weight 10½ lbs.

62F013. Model WA-44C. NET **98.50**

COLOR PICTURE TUBE TESTER

Model WT-115A. Designed specifically for testing TV color picture tubes, tests each gun for emission quality interelectrode leakage, and shorts. Readily portable large, 3-color, sensitive meter with two scales: Red/green "quality" scale, with reference marks from 0 to 10, separate yellow scale to indicate interelectrode leakage. Sensitive meter and cut-off adjustment control for evaluating the true emission of each gun. Neon shorts indicator. AC line-voltage adjustment for accurate measurements. Test procedure includes 2-minute and 4-minute tests for determining warm-up performance of tube. Tests color picture tube in-set or out-of-set. Built-in cable and socket assembly. Wt. 8 lbs.

62F1780. Model WT-115A. NET **89.50**

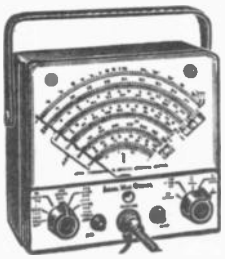
STEREO FM SIGNAL SIMULATOR

Model WR-52A. Designed to generate signals required for service, alignment, and maintenance of mono and stereo FM receivers and multiplex adaptors. Provides the following signals: Composite stereo output for either right or left channel; FM stereo output for either channel (100 MHz FM carrier is adjustable to permit selection of a quiet point in the FM band, RF deviation is adjustable 0-75 KHz; Monaural FM output (a switch is provided to disable the 19 KHz oscillator for low-distortion mono output); 100 MHz sweep output to check receiver RF/IF alignment (sweep rate is 60 Hz, sweep width is adjustable 0-750+KHz; Audio signals of 400 Hz, 1 and 5 KHz. Crystal-controlled 19 KHz and 38 KHz signals for multiplex circuit adjustments; 67 and 72 KHz output signals for SCA trap circuit adjustments; special internal test signal to check phase adjustment of stereo signal. Direct unterminated cable is used with composite stereo and audio signal outputs, and a terminated cable for RF output to 75 or 300 ohm antenna input. Complete with connecting cables. Size 13½x10x8"; shpg. wt., 21 lbs.

62F1785. NET **284.00**

RCA Test Equipment

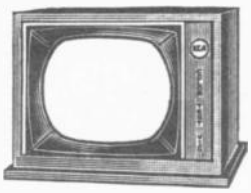
SENIOR VOLTOHMYST



Model WV-98C. Provides direct reading of peak-to-peak voltages of complex waveforms found in video, sync, and deflection circuits. Measures 0.2 to 4200 volts in 7 overlapping ranges, RMS values of sine waves from 0.1 — 1500 VDC, 0.2 Ω to 1000M Ω Input resistance: 11 megohms. Freq. response: 30Hz to 250 MHz with WG-301A Crystal Diode Accessory probe — +1 dB to 30 Hz to 3 MHz (1.5 and 5 VAC ranges). Electronic protection against burnout. Size: 7 x 6½ x 3¾". Shpg. wt. 8 lbs.

62F060. Model WV-98C. **NET.** **84.00**
62F074. Model WV-98C(K). As above, kit. **NET.** **57.95**

● *NEW* RCA MARK II COLOR TEST JIG



Model 10J102. Includes all the most wanted features and top quality conveniences that servicemen have asked for. May be used with associated cables for servicing RCA 90° rectangular receiver chasis, as well as round receivers manufactured within the past 10 years. An automatic degaussing assembly gives you the same quality feature found in all late model RCA TV color chassis. Rubber channeled hand holds. Rugged, cobalt gray baked enamel finish cabinet is completely assembled, and ready for operation.
99F2001. Model 10J102. **NET.** **99.50**

● *NEW* CABLES

Model 13B111. Kinescope socket etxension cable for use with CTC17 and CTC19 Color TV Chassis to connect to the RCA Color Test Jig. 11A1015A.
57F2003. NET. **4.80**

Model 13B112. Deflection yoke extension cable for use with CTC17 and CTC19 Color TV Chassis to connect to RCA Color Test Jigs.
57F2004. NET. **1.75**

Model 13B113. Kinescope socket extension cable, for use with CTC17 and CTC19 series color TV receivers to extend Kinescope Socket Cable.
57F2005. NET. **4.05**

Model 212096. RS coaxial cable with female connectors on each end. With WR70A.
58F2000. NET. **10.05**

Model 220X1. Kinescope socket extension cable for use with color TV receivers using 70° deflection picture tube.
57F2007. NET. **3.90**

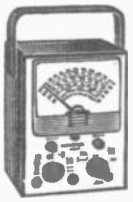
Model 221X1. Deflection yoke extension cable for use with RCA 600 and 700 Color TV Receivers (CTC4 and CTC5). Can also be used as Convergence Magnet Extension Cable when servicing CTC7, CTC9, CTC10, CTC11, CTC12, CTC15, CTC16, and CTC20 Chassis.
57F2008. NET. **1.85**

Model 228X1. Deflection yoke extension cable for use with CTC-7, -9, -10, -11, -12, -15, -16, -20 series Color TV chassis.
57F2009. NET. **2.75**

Model 13A100. High voltage extension cable. Same use as Model 228X1. Except not for CTC-7, -9 and -10.
57F2002. Model 13A100. **NET.** **2.50**

Model 205W1. Degaussing coil for demagnetizing color TV kinescope and chassis. With 110 V power cord and plug.
57F2006. Model. 205W1. **NET.** **10.63**

VOLTOHMYST



Model WV-77E. Flat frequency response ±5% from 40 Hz to 5MHz on the 1.5, 5 and 15 volt RMS ranges and the 4, 14, and 40 volt peak-to-peak ranges. Measures DC from 0.02 volt to 1500 volts, RMS AC from 0.1 volt to 15,000 volts, and resistance from 0.2 ohm to 1000 megohms—all in seven overlapping ranges. Full-scale accuracy is ±3% on DC and ±5% on AC. Fuse in ohms circuit prevents burnout. Ultra-slim probes and extra-flexible cables are included. Instruction sheet is provided.
62F075. Model WV-77E. **NET.** **52.00**
62F076. Model WV-77E(K). As above, kit. **NET.** **38.00**

SUPER PORTABLE OSCILLOSCOPE

Model WO-33A. This 3" Oscilloscope is the "all purpose" scope. All bandwidth you need for servicing color TV, video broadcast monitors and cameras; and for square-wave testing of audio and ultrasonic equipment. All the gain you need for low-level audio work. With vertical amplifier in narrow-band position. Sensitivity is 3 RMS millivolts/inch; bandwidth within —3dB, 20 Hz to 150 KHz. Wide band position: sensitivity 100 rms millivolts/inch; bandwidth within —3dB. 5.5 Hz to 5.5 MHz. Sweep circuit: sawtooth range from 15 Hz to 75Hz sync; external, ± internal; line sweep —160° adjustable phase; sync range to 4.5 MHz. Size: 6½x8¾x10¼". Shipping wt. 16 lbs.
62F049. Model WO-33A. **NET.** **139.00**
62F048. Model WO-33A(K). **NET.** **99.00**

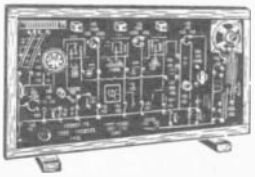
AC VACUUM-TUBE VOLTMETER

Model WV-76A. A high-sensitivity ACVTVM for hi-fi and other audio applications. Designed for measuring AC voltages from 0.0002 volt to 500 volts over the frequency range of 10 Hz to 1.5 MHz. Offers nine overlapping AC voltage ranges from 10 millivolts to 100 volts full scale. Provides approximately 38 dB gain throughout the frequency range from 10 Hz to 500 KHz with probe in "Low-Cap" position and 10 Hz to 1.5 Hz with probe in "Direct" position. Probe and cables are supplied in "Direct" position probe measures up to 100 volts; in "Low-Cap" position, probe can be used to measure up to 500 volts or +56 dB. Size: 5⅜x7⅜x4¾". Ship. wt. 6 lbs.
62F088. Model WV-76A. **NET.** **79.95**

VOLT-OHM MILLIAMMETER

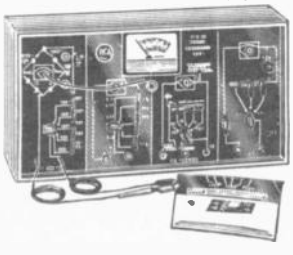
Model WV-38A. Extra large 5¼" meter. Protected meter movement. Has an input resistance of 20,000 Ω/V on DC; 5,000 Ω/V on AC; ±3% of full scale on DC, ±5% of full scale AC. Regular scales: 2.5, 10, 50, 250, 1000, 5000 VAC/VDC; 50 μ amp, 1, 10, 100, 500 mA, 10 amp (DC); plus extra scales of 250 mV and 1 volt DC. Resistance ranges 0-20 meg Ω in 3 ranges. Size: 5"x6⅞x3⅛". Ship. wt., 4 lbs.
62F052. Model WV-38A. **NET.** **52.00**
62F051. Model WV-38A(K). As above, kit. **NET.** **38.00**
62F053. Model WG-270A. Carrying case. **NET.** **4.95**

TRANSISTOR RADIO DYNAMIC DEMONSTRATOR KITS



- **Special silver-plated spring connectors provide mechanical and electrical connection . . . assure easy component installation.**
- **Inherent operational simplicity assures ease of service checks and tests . . . exceptionally easy component substitution.**

The RCA WE-93A (K) and WE-92A (K) are AM superheterodyne transistor radio receivers converted into kit form for educational and instructional purposes. Once assembled they become actual operating AM receivers. Designed to provide the student with easy-to-follow, step-by-step instruction, the RCA Transistor Radio Dynamic Demonstrators are extremely easy to assemble. No previous kit assembly experience is required. The circuit diagram is drawn in an easily understood manner. The wiring diagram on the reverse side helps avoid mistakes. Ship. wt. 22 lbs.
62F1782. Model WE-93A (K). 12 x 24". **NET.** **39.95**
62F1783. Model WE-92A (K). 24 x 48". **NET.** **69.50**



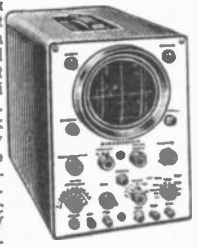
V-O-M DYNAMIC DEMONSTRATION KIT

Model WE-95A (K). A dynamic aid for teaching the principles of meter and metering circuits an actual test instrument that can be used to test and service. Size: 12x 24x5¾". Shpg. wt. 10 lbs.
62F1781. Model WE-95A (K). **NET.** **37.95**

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

5" OSCILLOSCOPE

- **Flat response from 10 cps to 4.5 Mc**
- **Adjustable sweep oscillator has excellent linearity**

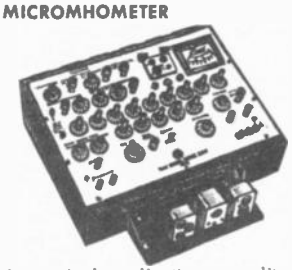


Model WO-91B. The RCA WO-91B is a reliable, heavy duty, precision instrument especially suited for use in production and servicing both black and white and color TV receivers, monitors, broadcast equipment, TV distribution systems, hi-fi systems and communications equipment. A multi-scale graph screen makes peak to peak voltage measurements as easy as with a VTVM. Applications include waveforms analysis, square wave testing, and observation of circuit and vacuum tube characteristics. A 2-stage sync separator makes it easy to check TV horizontal and vertical sweep synchronization. Complete with WG-300B Direct/Low cap. probe and cable, ground cable, alligator clip, clip insulator, green-graph screen, instruction book. Size: 9x13½x16½". Ship. wt., 35 lbs.

62F058. NET **269.00**

ELECTRON-TUBE MICROMHOMETER

- **Measures transconductance up to 100,000 micromhos in six ranges.**
- **Meter completely burnout proof.**

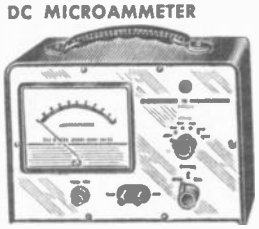


Model WT-100A. A precision laboratory measuring instrument which tests tubes under typical operating conditions as specified in the tube manufacturers' technical manuals. It is particularly useful in production line testing, design and development work, pre-selecting for critical applications, quality control programs, and preventive maintenance. Measurements performed: AC heater current from 0.02 ampere to 10 amperes; DC filament current up to 250 ma. voltage drop across rectifier tubes and semiconductor diodes; transconductance from 10 micromhos to 100,000 micromhos. Within the range of its facilities it will test: vacuum tubes-diodes, triodes, tetrodes, pentodes, heptodes, hexodes, octodes, and multi unit types; gas tubes-thyratrons, voltage regulators, cold-cathode and hot cathode rectifiers; semi-conductor diodes—small dry-disc rectifiers, germanium and silicon diode types. Size: 23½x8x18½". Ship. wt., 65 lbs.

62F055. NET **989.00**

ULTRA-SENSITIVE DC MICROAMMETER

- **Six direct-current ranges for measuring current from 0.0002 to 1000 microamperes.**
- **Voltage drop for full scale deflection only 0.5 volts.**
- **Low Drain Tubes**

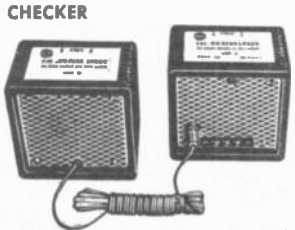


Model WV-84C. Application: a battery operated vacuum tube microammeter designed for measuring minute direct currents, for making current and voltage measurements in electrolysis and corrosion investigations, and for checking currents in light meters, ultra-violet and infrared detectors, and spectrophotometric devices. When used as a voltmeter, suited to measurements in circuits where loading is a critical factor. Size: 7½x8¾x10¾x6½". Ship. wt, 10 lbs.

62F006. NET **110.00**

PHASE CHECKER

- **Sound powered.**
- **Permits dynamic check of output phasing.**



Model WG-360A. Checks the phasing of low frequency and mid-range speakers in hi-fi, stereo, and PA systems. One of the principal applications for the WG-360A is in checking the phasing between the speaker assemblies of the left and right-hand channels in stereo systems. Provides an overall dynamic check on phasing, including everything from input source to soundwave output from speakers. Size: 5½x6¾x5". Ship. wt., 5 lbs.

62F1784. NET **14.95**

TV ISOTAP

Model WP-25A. Speeds up servicing (especially useful in service shop for duplicating various line-voltage conditions found in homes), prevents damage to test equipment. May be used as a high-medium-low voltage isolation transformer. Supplies outputs of 130, 115, & 105AC volts at max. load. Tapped to match line voltage from 105 to 130 in 5 volt steps. Ship. wt.: 13 lbs.

62F047. NET **27.50**

TV BIAS SUPPLY KIT

Model WG-307B (K). Provides three output voltages, and is designed for use in servicing and aligning color and black and white TV receivers. Three separate output voltages, adjustable from 0 to —15 volts are provided for application in RF, IF, and AGC bias circuits. Ship. wt., 2 lbs.

62F027. NET **11.95**

PROBES AND RESISTORS

Model WG-289. High voltage probe. For use with WV-77A, WV-77B, WV-77C, WV-97A, WV-87A, and WV-87B, WV-98B, WV-98C, Volt-Ohmysts. Ship. wt., ½ lb.

62F020. NET **13.50**

Model WG-297. High voltage probe. Similar to above, for use with RCA model WV-77E, WV-77E (K), WV-38A, WV-38A (K). Shipping wt., 8 oz.

62F057. NET **11.95**

Model WG-206. Megohm multiplier resistor. For VTVM's having 11 megohm input. Shipping wt., 2 oz.

62F082. NET **3.50**

Model WG-210. Megohm resistor. Multiplies 5,000 volt DC range of 20,000 ohms per volt VOM's by a factor of 10.

62F083. NET **3.50**

Model WG-211. Megohm resistor. Multiplies 250 volt DC range of 20,000 ohms per volt VOM's by a factor of 100.

62F084. NET **3.50**

Model WG-299D. DC/AC Ohms probe and cable. For use with Volt-ohmysts except WV-77E and WV-77E (K).

62F061. NET **9.00**

Model WG-354A. Capacitance-type voltage divider probe. The WG-354A used with the WG-300B probe and cable extends the range of oscilloscopes so that signal pulse amplitudes up to 5000 volts can be observed.

62F067. NET **7.50**

Model WG-350A. Probe for use with WO-33A for demodulation and signal tracing of radio/TV, RF, and IF signals.

62F092. NET **5.25**

Model WG-302A. RF/IF/VF signal tracing probe. "Slip-on" type high frequency probe designed for use with WG-300A and B to permit visual signal tracing for rapid isolation of trouble in radio receivers and in TV IF and video stages.

62F064. NET **9.00**

Model WG-351A. Crystal diode probe for extending RF measuring capability of the WV-77C, WV-77E and WV-77E (K) to 100 Mc.

62F059. NET **5.25**

Model WG-300B. Direct/low capacitance probe and cable. For use with RCA WO-91A, & B WO-88A and WO-78B scopes.

62F062. NET **11.00**

Model WG-301-A. Crystal diode probe. Slip on type used with WG-299 to increase frequency range to 250 Mc.

62F063. NET **8.25**

RF MODULATOR

Model WG-304B. Checks frequency of TV receivers. Permits modl. of rf marker signal. Size: 7x5½x4½".

62F028. NET **18.00**

VIDEO MULTIMARKER

Model WG-295C. Seven absorption markers at preset frequencies for marking video response curves in color TV receivers. Size: 7x5½x4½". Ship. wt., ½ lb.

62F044. NET **32.50**

● *NEW* RCA ADAPTERS

Model WG-352A. Diode Probe. For use with RCA VOM in rf applications from 100kHz to 100MHz. Provides output which can be read directly from the meter scales.

62F1650. NET. **2.95**

Model WG-356A Balanced RF Diode Probe. For use with oscilloscope for checking the bandpass and gain characteristics of VHF TV rf preamplifiers. Frequency range: Up to 250 MHz.

62F1651. NET. **3.95**

WG357A IF Diode Probe. Unbalanced detector demodulator for use with an oscilloscope in displaying the sweep output from an if/video sweep generator. Usable up to 100 MHz Also used to observe the rf/if response of individual amplifier stages.

62F1652. NET. **3.95**

WG-361A Current Measuring Adaptor. For use with any VTVM having a 0.5 VDC range. 6 current ranges: 0-50 μA, 0-500 μA 0-5 MA, 0-50 MA, 0-0.5 Amp, 0-5 Amp.

62F1653. NET. **4.95**

Model 630-M

HIGH IMPEDANCE VOLT-OHM-MICROAMMETER

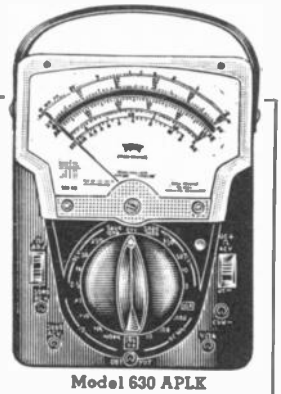
Model 630-M. The input impedance of a VTVM with the convenience of a VOM. The 630-M's sensitivity is derived from the singular achievement of its basic 0-1 DC micro-ampere movement. The 630-M incorporates no amplifiers, has no zero drift, no warm-up, and no power requirements. 1,000,000 ohms per volt, DC for greater accuracy on high resistance circuits. 20,000 ohms per volt AC. 1 mu-a Suspension Meter Movement: no pivots, bearings, or rolling friction. Extremely rugged. Greater sensitivity and repeatability. 61 ranges, usable with frequencies through 100 hz. Temperature compensated. ±1½% DC accuracy, ±3% AC. Current measurements from 20 nanoamperes. Voltage measurements from 5 mv. VDC: 0-.6-3-12-60-300 at 500,000 ohms/volt. 0-.3-1.5-6-30-150 at 1,000,000 ohms/volt. 0-1200 at 125,000 ohms/volt. 0-6-600 at 250,000 ohms/volt. VAC: 0-3-12-60-300-1200 at 10,000 ohms/volt. 0-1.5-6-30-150-600 at 20,000 ohms/volt. DB: —20 to +63 in 10 ranges. DC MICROAMPERES: 01 at 300 MV. 0-60-600 at 300 MV. 0-120 at 600 MV. DC MILLIAMPERES: 0-6-60-600 at 300 MV. 0-1.2-12-120-1200 at 600 MV. DC AMPERES: 0-6 at 300 MV. 0-12 at 600 MV. OHMS: 0-1K-10K-100K (4.4-44-440 at center scale). MEGOHMS: 0-1-10-100- (4400-44,000-440,000 ohms center scale.) Shpg. wt. 5 lbs.

62F1776. NET **210.00**

HIGH ACCURACY VOLT-OHM-MILLIAMMETER

Model 630-APLK. Transistorized Electronic Switching Circuit guards against accidental burnouts! Comprehensive overload protection. Polarity reversing switch and suspension Meter Movement. One selector switch minimizes chance of incorrect settings. Transistorized overload sensing device does not load circuit under test, eliminating possibility of damaging circuit components. Rugged 0-50 microampere suspension type movement. Diode network across meter protects against instantaneous transient voltages. Automatically checked by using X100K ohms range. One 20 position range switch turns in either direction to obtain desired range. Special meter shorting feature on "OFF" position for high damping when moving tester. Accuracy ±1½% on DC, ±3% AC. Flush mounted controls, jacks and meter. DC VOLTS: 0-2.5-10-50-250-1,000-5,000 at 20,000 ohms/volt 0-0.25 at 100 microamperes. AC VOLTS: 0-3-10-50-250-1,000-5,000 at 5,000 ohms/volt. DC MICROAMPERES: 0-100 at 250 Mv. DC MILLIAMPERES: 0-10-100-1,000 at 250 Mv. DC AMPERES: 0-10 at 250 Mv. Ohms: 0-1,000-10,000 (4.4-44 at center scale). Megohms: 0-1-100 (4,400-440,000 at center scale). Output Volts (AC): 0-3-10-50-250 at 5,000 ohms/volt; jack with condenser in series with AC ranges. Case: Molded, fully insulated; 3 11/32" x 5½" x 7½". Shpg. wt., 5 lbs.

62F1777. NET **100.00**



Model 630 APLK

VOLT-OHM-MILLIAMMETER

Model 630-PLK. Transistorized relay circuit provides protection from burn-outs; overload sensing device does not load circuit under test. Life of transistor circuit battery is nearly that of shelf life. Automatically checked by using X100K ohms range. 20 position range switch turns in either direction. Patented Bar-Ring Movement provides self-shielding; not affected by stray magnetic fields; usable with frequencies through 500 hz Sensitivity: 20,000 ohms VDC, 5,000 ohms VAC. Resistors directly connected to switch to form a simplified unit. Jacks located on lower corners of panel, permitting greater accessibility to control knob. Banana type leads for low-contact resistance at jacks. Leads are 50 inches long, test prods with removable alligator clips. DC Volts: 0-2.5-10-50-250-1,000-5,000 at 20,000 ohms/volt; 0-0.25 at 100 microamperes. AC Volts: 0-3-10-50-250-1,000-5,000 at 5,000 ohms/volt. Decibles: —20 to +11 +21, +35, +49, +61, +75; "O" DB at 1 MW on 600 ohm line. DC Microamperes: 0-100 at 250 Mv. DC Milliamperes: 0-10-100-1000 at 250 Mv. DC Amperes: 0-10 at 250 Mv. Ohms: 0-1000-10,000 (4.4-44 at center scale). Megohms: 0-1-100- (4,400-440,000 at center scale). Output Volts (AC): 0-3-10-50-250-1000 at 5000 ohms/volt; jack with condenser in series with AC ranges. ±2% DC, ±3% AC accuracy. Size: 3 11/32"x5½"x7½". Shipping weight, 5 pounds.

62F1775. NET **89.00**

Model 630-PLK

DE LUXE, EASY-TO-READ VOMS!

Model 630-PL. Volt-Ohm-Milliammeter Instant vision, wider spread scales. Outstanding linear ohm scale; low reading 0.1 ohm; high to 100 megs. One switch selects any range; reduces wrong settings, burnouts. Useable with frequencies through 500Kc. DC polarity reversing switch. High sensitivity. Accuracy: ±2% DC; ±3% AC. Ranges —V DC: 0-2.5-10-50-250 at 160 Microamperes V AC: 0-3-10-50-250-1000-5000 at 50 ohms/V; DB: —20 to +11, +21, +35, +49, +61, +75; "O" DB at 1 MW on 600-ohm line; DCua: 0-100 at 250 MV. DC MA: 0-10-100-1000 at 250 MV; DC Amp.: 0-10 at 250 MV; ohms 0-10000-10,000 (4.4-44 at cir scale); megohms: 0-1-100 (4400-440,000 at cir scale); V AC output: 0-3-10-50-250-1000 at 5000 ohms/V, jack w. condenser in series with AC ranges. Case-molded fully insul. Leads, alligator clips, rubber feet batteries. 3 11/32x5½x7½. Shpg. wt. 4½ lbs.

62F241. NET **58.00**

Model 630-APL. Volt Ohm- Milliammeter. Labtype featuring ½% resistors, mirrored scales. ±1½% DC accuracy. Other features samt as 630PL.

62F242. NET **68.00**

Model 630-PL

200,000 OHMS/VOLT-OHM-MILLIAMMETER

Model 630-NS. Has 62 ranges. 200,000 ohms per volt DC for greater accuracy on high resistance circuits .20,000 ohms. per volt AC. Suspension Meter Movement. Molded insulated case. DC Volts: 0-0.6-3-12-60-300--1200 at 100,000 Ohms/Volt 0.3-1.5-6-30-150-600 at 200,000 Ohms/Volt. 0-0.150 at 60 microamperes AC Volts: 0-3-12-60-300-1200 at 10,000 Ohms/Volt. 0-1.5-6-30-150-600 at 2000 Omhs/Volt. Accuracy ±1½° DC, ±3% AC. 3 11/32x5½x7½". Wt. 5 lbs.

62F168. NET **105.00**

Model 630-NA. As above except 10,000 and 20,000 ohms/V DC and 5000 and 10,000 ohms/V AC. 70 ranges.

62F228. NET **89.00**

Model 630-NS

Model 630

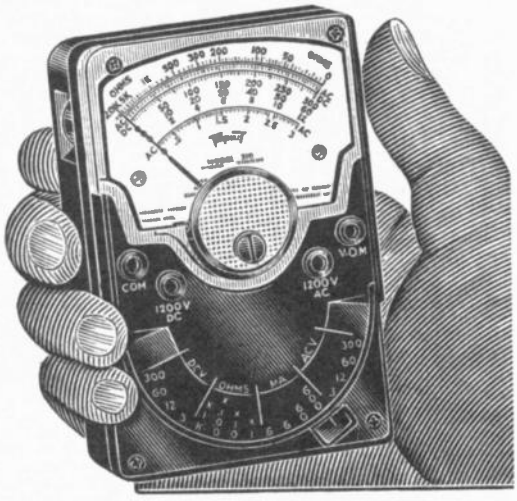
VOLT-OHM-MILLIAMMETER

Model 630. Reads DC volts to 6,000 in six ranges at 20,000 ohms/volt. AC volts in corresponding ranges at 5000 ohms/volt. DC current ranges are: 0-60 microamperes. 0-1.2-12-120 mils. 0-12 amps. Measures ohms 0-1.000-10,000 and megohms 0-1-100. Also reads db from —20 to +77 in six ranges. One switch selects any range. 5½" scale; 50 microamp movement. Resistors are precision wire-wound or carbon film. With batteries test leads. 3 11/32" x5½"x7½". ±2% DC, ±3% AC accuracy. Shipping weight 4½ lbs.

62F212. NET **58.00**

Deluxe Model 630-A. Laboratory version of Model 630 VOM above. Has same ranges and sensitivity, but comes equipped with 4⅜" mirror scale and knife-edge pointer. ±1½% DC, ±3% AC accuracy.

62F211. NET **68.00**



HAND-SIZE VOM
20,000 OHMS/VOLT DC SCALE

Model 310. Complete miniaturized VOM with selector range switch. An interchangeable test prod fits into tester top, becoming common probe and freeing one of your hands for other work. Self-shielded for use in magnetic field. Unbreakable plastic meter window. Rugged, high-torque, barring instrument. Standard sensitivity, 20,000 ohms per volt DC and 5,000 ohms per volt AC. Accuracy, 3% DC, 4% AC. RANGES: VDC 0-3-12-60-300-1,200 (at 20,000 ohms per volt). VAC 0-3-12-60-300-1,200 (at 5,000 ohms per volt). OHMS: 0-20,000-200,000. MEGHOMS: 0-2-20. DC MICROAMPERES: 0-600 at 250 millivolts. DC MILLIAMPERES: 0-6-60-600 at 250 millivolts. CASE: molded, fully insulated, 2¾"x4¼"x1⅝". Complete with leads, battery, and instruction manual. Shipping weight 2 lbs.
62F230 ..... **42.00**

Model 310-C. Same as model 310, but has 15,000 ohms per volt on AC, 600 volt ranges in place of 1200v. range of 310. Lever range switch, reversing switch for DC. **Range switch fully enclosed. 14 oz.**
62F292. NET **53.00**
62F231. No. 369. Carrying case for above. **NET**..... 4.00

AC CLAMP-ON AMMETER ADAPTER FOR 310 VOM

Model 101

Model 10

Model 10. Checks all line loads instantly, accurately, safely—without breaking the circuit or interrupting work. Easy range switch. RANGES: 0-6-12-30-60-120-300. Clips around single wire to read AC amperes direct. Use with Adapter 101 to divide instantly two-conductor cords. A lever securely locks the Model 10 to Model 310 when used in combination. Model 10 can be left attached to Model 310 when the latter tester is used as an AC-DC VOM only. The only necessary change is to remove the lead plug from the Model 310 VOM jack and insert it in the jack provided in the Model 10 housing. Case is black molded plastic with engraved white markings. Ideal for checking wiring circuits, motor loads, appliance loads. Its use expanded with leads below.
62F235. NET **18.00**

No. 611. Long lead attachment for using Model 10 as clamp-on ammeter with any VOM having a 3-volt AC scale at 5,000 ohms per volt, such as 630, 630-A, 630-NA, 630-PL, 630-APL, 631, etc.
62F236. NET **3.00**

No. 311. Long lead to separate No. 10 from No. 310 for easy reading in awkward spots.
62F237. NET **3.00**

No. 101. Line Separator dividing 2 conductor cords and increasing No. 10 sensitivity 10X & 20X.
62F238. NET **7.50**

Model 379. Carrying case for No. 310 and No. 10 in combination.
62F239. NET **7.50**

VOM AND CLAMP-ON AMMETER SET

Model 100. Complete set includes Model 310 VOM, Model 10 Clamp-on Ammeter Adapter, Model 101 Line Separator, Model 379 Leather Case, and Model 311 Leads.
62F249. NET **74.00**

LAB VOM WITH 7" MIRROR SCALE SUSPENSION MOVEMENT

Model 800. 70 ranges with 1½% DC accuracy including DC Polarity Reversing Switch. Overload protection; temperature, frequency compensated. Long mirror scale easily read, preventing misreadings due to parallax. DC volts at 20,000 and 10,000 ohms per volt, AC at 10,000 and 5,000 ohms per volt. 3% AC accuracy to 1200 volts. RANGES: DC volts: 0-.6-3-12-60-300-1200-6000 at 10,000 ohms per volt. 0-.3-1.5-6-30-150-600-3000 at 20,000 ohms per volt. 0-.120 at 60 microamperes. AC volts: 0-3-12-60-300-1200-6000 at 5,000 ohms per volt. 0-1.5-6-30-150-600-3000 at 10,000 ohms per volt. DB: —20 to +70 in 12 ranges. DC MICROAMPERES: 0-60-600 at 120 MV. 0-120 at 240 MV. DC MILLIAMPERES: 0-6-60-600 at 120 MV. 0-1.2-12-120-1200 at 240 MV. DC AMPERES: 0-6 at 120 MV. 0-12 at 240 MV. OHMS: 0-1K-10K-100K (4.4-40-440 ohms at center scale. Case: 7½"x6¼"x3⅞". Shipping weight 7 lbs.
62F291. NET **105.00**

VACUUM TUBE VOLTMETER

Model 850. Long 7" easy-to-read scale. For transistor circuits, .5 DCV range. Hi-stability: meter connected in cathode circuit of 12AU7. Accurate within ±3% on AC or DC. Ohms accurate within ±3% of full scale based on DC scale. Line voltage: 115 VAC 50-60 cycles. Grounded plug. RANGES: 8 DCV ranges: 0-.5-1.5-5-15-50-150-500-1500. 7 AC RMS volts ranges: 0-1.5-5-15-50-150-500-1500. Seven peak-to-peak volts ranges: 0-4-14-140-400-1400-4000. Seven resistance ranges: 0-100-10,000-100,000-1 Meg- 10- Meg. 100- Meg. 1000 Meg-ohms. FREQUENCY RANGE: 15 hz to 3 Mhz (Up to 250 with accessory diode probe available extra). INPUT IMPEDANCE: DCV 11 megohms; ACV minimum of .83 megohms. Case: Molded black case completely insulated. 7⅝"x6⅞"x3¾". Shpg. wt., 7 lbs.
62F290. NET **89.00**

VTVM AND VOM TEST METER

Model 631. Two fundamental units at the price of a single tester. Combines wide range testing facilities of 2 testers in one compact unit. Molded compartment houses resistors, rectifier, etc. By using VOM for general testing, and VTVM when needed, the unit makes a VTVM with long battery life. 5½" meter. Adjusted to 50 microamperes at 250 MV. Has good temperature compensation. VOM ranges AC-DC volts: 0-3-12-60-300-1200 at 20,000 ohms/volt DC, 5,000 ohms/volt AC. Microamps 0-60 at 250 MV; DC milliamperes: 0-1.2-12-120-1200 at 250 MV. DC ampere ranges: 0-12 at 250 MV. DB ranges: —20, +11, +23, +37, +21, +63; Ohms: 0-1500-15000; Megohms: 0-1.5-150; Output Condenser in series with AC volts: VTVM ranges-DC volts 0-1.2-6-30-120. With 2-22½ volt Burgess leads. Accuracy: ±3% DC, ±4% AC ±4% VTVM. Alligator clips, rubber feet. 3 11/32 x 5½x7½". Shpg. wt., 4 lbs.
62F227. NET **78.00**

● NEW SOLID STATE VOLT-OHMMETER

Model 600. Lightweight and transistorized test instrument which has the portability of a VOM with the high input impedance of a VTVM, wide frequency ranges and low cost battery power. Features include: a brushed aluminum front panel with black range markings; molded case of high impact material; a carrying handle of extruded aluminum which doubles as a stand; removable back permits easy access to the working circuitry. One compact probe is used for all functions. The probe has a built-in switch which places a resistor in series with the instrument on DC voltage readings. The easily readable meter is 5" wide, Typical battery life is 4000 hours, in normal operation. Battery complement consists of: 3—1.5 V batteries (1 D, 2 AA) and 1—9 V transistor battery. Batteries included. Frequency range: 15 hz to 2 Mhz. 11 Megohm resistance on all DC ranges except .4 and .8. AC impendance is minimum of .75 megohms. Plug-in ground lead insures good grounding of the circuit under test. Ranges: DC—0-0.4-0.8-1.6-4-8-16-40-160-400-1600; AC—0-4-8-16-40-160-400-800; Resistance—0-1,000-10,000-100,000-1 Meg.—10 Meg. Size: 3 3/16" x 5 1/8" x 6 1/2". Weight: 2 1/2 lbs.

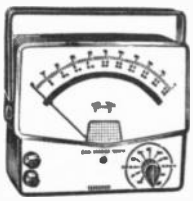
62F1769. NET. **78.00**

COMPACT VOM

Model 666-R. Pocket size VOM. 1,000 ohms-per-volt sensitivity on both AC and DC voltage ranges. Has flush-mounted 3" microammeter. Scale, 2 29/32" long at top arc. Ranges: DC and AC volts, 0-10-50-250-1,000-5,000 at 1,000 ohms per volt; DC ma. 0-10-100; DC amps, 0-1; ohms, 0-3,000-300,000; megs, 0-3. Complete with batteries, test leads, banana plugs, and alligator clips 3 1/16 x 5/8 x 2 9/16". Shpg. wt. 2 1/2 lbs.

62F209. NET. **42.00**

825 PORTABLES



Model 825. For general testing. Feature self-shielded Triplett BAR-RING magnet with a suspension movement. Overload protection diodes on DC Model. Wire-wound ±.05% accuracy resistors. Accuracy is ±1/2 of 1% of full scale deflection in horizontal position at 77F. Scale length is 6.84", features anti-parallax mirror and knife-edge pointer. Brushed aluminum panel. Heavy, molded black case 7 1/2x6 1/4x3 3/8".

DC VOLTMETER. 0-.5-1-2-5-10-20-50-100-200 volts at 50,000 Ohms Per Volt. 0-500 at 20,000 Ohms Per Volt. 0-1000 at 10,000 Ohms Per Volt.

62F1772. NET **200.00**

DC MILLIAMP/AMMETER. 0-1-2-5-10-20-50-100-200-500 milliamps at 50 millivolts. 0-1-2-5-10 amperes at 50 millivolts.

62F1773. NET **168.00**

DC MICRO/MILLIAMMETER. 0-20-50-200-500 microamps at 300 to 500 millivolts. 0-1-2-5-10-20-50 milliamps at 500 millivolts

62F1774. NET **178.00**

CARRYING CASES AND REPLACEMENT LEADS

Model 639. Black cowhide leather case. Space for tester and accessories. For Models 630, 630-A, 630-M, 630-NA, 630-NS, 630-PL, 630-APL, 630-PLK, and 631.

62F213. NET **12.00**

Model 639-P. Same as 639, but lined with 3/8" sponge rubber padding for maximum protection of tester.

62F234. NET **17.00**

Model 639-N. Black Leather case with center cover flaps, permits complete access to tester without removal from case. For Models 630, 630-A, 630-NA, 631, 630-PL, 630-APL, 630-NS, 630-M, and 630-PLK.

62F233. NET **12.00**

Model 669. Black leather case with strap handle, space for tester, leads, accessories. For 666-R.

62F210. NET **8.00**

T-79-127. Rubber replacement leads for Models 630, 630-A, 666-R, 630-PL, 630-APL, 630-PLK, 630-NA, 630-NS, 630-M, and 631.

62F245. NET **3.00**

T-79A-153. Replacement leads for Model 310 and 310C.

62F246. NET **3.00**

TRANSISTOR ANALYZER

Model 3490A. Designed to test all types of PNP and NPN transistors. Tests: Tetrode (using separate power supply), D.C. Beta, A.C. Beta, ICEO Leakage, ICO Leakage, IEO Leakage, Zenar diode test Diode and rectifier tests, SCR tests. Punch thru, Saturation, Floating, Potential, and Alpha. Provisions for many different parameters. Common base or emitter configuration. Input current meter reads emitter or base current at all times. Hi-power silicon full wave rectifiers deliver up to 30 Amp DC collector current and 1 Amp input current. Gray leatherette case with removable cover. Etched aluminum panel. Meters: 0-200 ua, 0-100 ua, 0-5 ua suspension types. 15 7/16x18 13/16x8. Shpg. wt., 30 lbs.

62F202. NET. **420.00**

SIGNAL GENERATOR

Model 3432A. Shielded for AM-FM radio, monochrome and color TV servicing. Complete frequency coverage in 7-calibrated ranges from 160 KC to 110 MC on fundamentals (220 MC using harmonics) with no skips. Circuit selector provides internally modulated signal variable from 0 to 100% at 400 cycles; variable amplitude of external modulation 40 to 15,000 cycles; unmodulated signal and variable audio at 400 cycles. Cathode follower output. 3-position step type attenuator for R-F selection. For 115 volts 50-60 cycles AC.

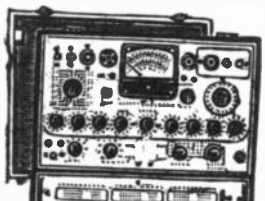
Stk. No.	Type	Size	Weight	Each
62F200	3432A	15 11/32x11 1/32x6 1/4	12 lbs.	137.00

POWER AND SIGNAL TRANSISTOR TESTER

Model 2590. Provides for testing ICEO (at 9.5v); ICBO (at 9.5v) and BETA (at 3v) on both NPN and PNP transistors. Checks leakage and forward currents of Diodes. Etched aluminum natural finish front panel. Banana plugs for connecting to tester jacks at the other end. SCALES—0-1 MA for Signal Transistor ICEO; 0-100 MA for Power Transistor ICEO; 0-500 UA for Signal Transistor ICBO; 0-1 MA for Power Transistor ICBO; 0-100 Beta Range. 115 volts, 50-60 hz. AC. 11 5/8x8 5/8x5 1/8. Shpg. wt., 9 lbs.

62F289. NET **68.00**

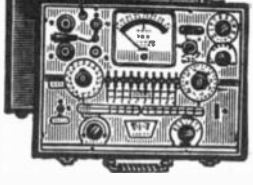
TUBE ANALYZER



Model 3444. Measures true Gm without extra compensating factors using proper value DC electrode potentials 5 KC-AC signal source and a vacuum tube microammeter. Low 33-ohm plate impedance. Plots tube characteristic curve, contains noise test jacks. Filtered DC short and leakage measurement from 0 to 10 megohms at 85 volts. Direct reading Gm ranges: 1,000, 3,000, 10,000 and 30,000 microhms. Signal potentials @ 5 khz 1.000, 0.333, 0.100 and 0.333 volt. 5 and 50 ma DC plate current ranges. Roll cart incl. Power input required: 117V AC. 50-60 hz.

Stk. No.	Type	Size	Weight	Each
62F274	3444	15 9/16x18 13/16x7 3/4	27 lbs.	368.00

FLEXIBLE TUBE TESTER



Model 3414. Rejects burned out tubes without waiting for filament to heat. Full range filament voltages from 0.65V to 117V in 23 steps. Quick-change roll chart included. Neon indicator shorts test.Sockets: 8 prong octal, 8 prong loctal, 7 prong miniature, 9 pin subminiature. Aluminum panel. For 117 VAC. 50-60 cycles. Size: 15 7/8x11 1/2 x6 1/4". Shpg. wt. 14 lbs.

62F206. NET **126.00**

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

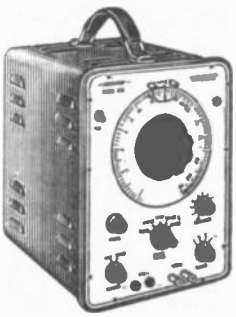
Precision Apparatus Test Equipment

● *NEW* SWEEP GENERATOR AND MARKER ADDER

Model E-410C. A wide range, frequency modulated signal source combined with complete Marker Adder circuitry. Designed for the alignment and maintenance of TV, FM and other high frequency wideband receivers and circuits. Sweep generator solves marker visibility and overloading problems by incorporating built-in Marker Adder circuitry. Allows Absolute control of marker width and amplitude. Frequency coverage: Band A: 3 to 7 MHz. Band B: 6 to 14 MHz. Band C: 13 to 33 MHz. Band D: 35 to 85 MHz. Band E: 80 to 213 MHz. Band E5: 400 to 1080 MHz. Internal blanking. Automatic gain control provides flat output over entire band. Extra shielding prevents radiation leakage. Operates 117 VAC 50/60 standard. 220 VAC, 50/60 Hz also available. Furnished with a 4.5 mc crystal and 5 output cables. 13" x 8½" x 7". Shipping weight: 15 lbs.

63F073. NET **169.95**

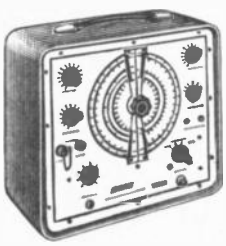
WIDE RANGE SINE AND SQUARE-WAVE GENERATOR



Model E-310. Used for amplifiers, PA, transmitter modulation response tests, input and output impedance measurements, ultrasonic voltage source, and loudspeaker resonance tests. All tubes preaged to assure long term stability of calibration. Logarithmic, etched dial scale with Vernier and Fast tune dials provides accurate resetability. Frequency Range: Sine and square waves from 5 Hz to 600 kHz in 5 decimal bands. Output Level: Sine Wave, 10 V. RMS into 600 ohms; Square Wave, 10 V. P-P, 4 position step attenuator and continuous amplitude control. Calibration Accuracy: ±2% or 1 Hz. Distortion: Less than 1% from 5 kHz to 600 kHz. Supply Voltage: 117 VAC 50/60 Hz standard; 220 V. AC 50-60 Hz. available. Heavy-gauge, steel case, blue-grey ripple and aluminum panel and tuning dial. 11½"x9"x11¼". Ship. wt. 24 lbs.

63F065. NET **199.95**

MULTI-BAND SIGNAL MARKING GENERATOR



Model E-200C. Exceptionally stable and accurate, this general purpose RF signal generator serves in conjunction with PRECISION Sweep Signal Generators or other similar sweep signal generators. Frequency coverage: 88 kc to 440 mc (to 110 mc on fundamental). 6½" brushed aluminum dial: direct reading in 10 bands up to 440 mc —1% accuracy. 0-1000 point vernier scale: direct reading to 1 part in 1000 for hand-calibration & frequency spotting. Circuit: 6AU6 in stable ECO circuit; 6U8 sine-wave audio oscillator-modulator; 5Y3 full wave rectifier. 400-cycle sine wave audio oscillator. Dual-shielded RF attenuators. Four types of signals: Unmodulated RF; 400 cps; modulated RF; Externally modulated RF; 400 cps audio output. Built-in AVC-AGC bias substitution. 117V, 50/60 cycles, AC. 13"x11½"x6⅝". Weight: 16 lbs.

63F066 NET **139.95**

VACUUM TUBE VOLTMETER

Model V7S. For general use in schools, labs, production lines, radio-TV and appliance service shops. Polarity reversal switch for time saving diode leakage checks and other work in semiconductor circuitry. Transit switch position for meter movement protection. Built in battery eliminator. No ohmeter battery required. Single high-impact Cycolac Dual Purpose Uni-Probes for withstanding rugged production service, and lab use. Inherent protection from its vacuum tube insures no harm from application of a wrong input voltage. DC Volts: ±0-1.5, 5, 15, 50, 500, 1500. AC V. (RMS) 0-1.5, 5, 15, 50, 150, 500, 1500. Resistance: Full Scale 1000; 10,000; 100,000, 1, 10, 100, 1,000 Megohm. Mid-scale 10, 100, 1000, 10,000. 100,000 ohm, 1 meg. 10 meg. Accuracy: ±5% full scale AC and ±3% full scale DC. Operates on 117 V. 50/60 Hz. Dimensions: 7½"x5⅜"x4¼". Weight: 6 lb.

63F067. NET **59.95**

● *NEW* DC TO 5 MHz WIDE BAND OSCILLOSCOPE

Model S-55A. Features both DC and AC coupling, 5 sweep ranges to 500 KHz, built-in regulated calibration voltage, automatic synchronization and an illuminated screen graticule. High sensitivity DC push-pull vertical amplifier circuitry and large cathode ray tube screen area, adapts the system to rapid TV and FM alignment procedures, and provide low-distortion display of non-sinusoidal waveforms. Especially applicable to labs, schools, production lines, and service shops. Vertical amplifiers (3-stage, push-pull) sport the following sensitivities: DC: 70 millivolts/inch; AC: 25 millivolts/inch. Frequency response (Sine wave): DC — within 3 db from DC to 4.5 MHz; within 5 db at 5 MHz. AC — within 3 db from 1 Hz to 4.5 MHz; within 5 db at 5 MHz. Intensity modulation: Input on front panel. Blanking on negative signal excursion.

63F074. NET **169.95**

WIDE BAND OSCILLOSCOPE

Model ES-550B. For general purpose use for lab., schools, production line, and service shop; for color and b&w TV servicing. For multiplex alignment and solid state and vacuum tube equipment. Has 5mc wide vertical frequency response and 5" scope screen, 3-position vertical & horizontal step attenuator, freq. compensated: x100, x10, x1., response: 10 Hz. to 5 mHz. 3000-V. intensifier anode potential: amplified Auto-Sync Circuit. Four-way sync selection (internal neg., internal pos., external, and line) Direct-reading P-P voltage calibrator permits oscilloscope tube used as vacuum-tube voltmeter. Vertical pattern reversing switch, linear multi-vibrator sweep circuit 10 Hz to 100 kHz; automatically synchronized 30 Hz & 7875 Hz. sweep for TV sync-pulse analysis; amplified sweep retrace blanking. Built-in 60 Cps, phasing & blanking controls. Vertical sensitivity: 10 mv RMS for 1" display. Power input: 117 VAC 60 Hz standard; High contrast filter-type illuminated graticule. Dimensions: 18½" x14½"x8¼". Shipping weight 47 lbs.

63F068. NET **279.95**

PROBE SET FOR MODEL ES550B

Model SP5. Oscilloscope probes including high impedance low capacity, crystal demodulating, resistive, and direct probe. Shipping wt. 5 lbs.

63F069. NET **29.95**

VOLT-OHM-MILLIAMMETER

Model 120. For general use in schools, laboratories, production lines, and radio-TV and appliance service-shops. Has 61 ranges (+ & —) Extra-high 6000 V. range, Extra-low ohms, current and voltage range, Mirrored, No-Parallax scale standard without extra cost. Transit meter movement protection Polarity reversing switch. DC V. (20,000 ohms/V.) 0-0.3, 1.2, 3, 12, 60, 300, 600, 1200. 6000. AC V. (5,000 ohms/V.) 0-1.2, 3, 12, 60, 300, 600, 1200, 6000. AC Output Ranges: 0-1.2, 3, 12, 60, 300, 600 V. (Built-in 600 V. blocking capacitor) Response: ±1 db from 15 Hz —100 kHz, useable response beyond 500 kHz on low voltage ranges. DB Scales: 8 wide-frequency db ranges —20 to +77 db; Resistance Full-scale 200, 2000, 200,000 ohms. Dc Polarity reversing switch for ease of measurement and quick front-to-back diode check. Precision 1% Multipliers and shunts: extra wide-vision meter with polished mirrorred scale. Model 120 VOM complete with batteries, test leads and technical manual which describes the device in detail. Dimensions: 7"x5⅜"x3⅛". Shipping Weight: 4 lbs.

63F070. NET **56.00**

ACCESSORIES FOR VTVM'S

Model AV-2A. High-Voltage Probe. Increases DC voltage range up to 60,000 volts. Shipping wt. 1 lb.

63F071. NET **12.95**

Model AV-1A. R. F. Probe Increases frequency range up to 250 mHz. Shipping wt. 1 lb.

63F072. NET **7.95**

SENCORE Test Equipment

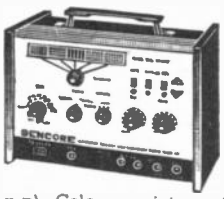
STANDARD TEST EQUIPMENT

IN-CIRCUIT TRANSISTOR TESTER

Model TR-139. Checks Transistors or diodes in-circuit without disconnecting a single lead. The same procedure is used for in-circuit and out of circuit testing. Transistors can be matched, sorted, and selected for specific required values of beta and ICBO. True AC beta reading on a large 6-inch meter. Measures the ratio of AC signal on the base of the transistor to that obtained on the collector. Beta reading slightly more accurate when checked out of the circuit. Gives leakage current (ICBO) of any transistor directly on the meter. Checks both rectifiers and diodes either in or out of the circuit. In-circuit test gives a "go or no go" indication. Out of circuit testing measures the actual front to back conduction in microamps. A special circuit protects even the most delicate transistors and diodes, even if the leads are accidentally hooked up to the wrong terminals in the transistor. Clip type test leads included. Plug in jacks on front panel for adaptation to other applications. Large 6" face sensitive 200 microamps. Zener diode regulated power supply. All steel case, leatherette covered. 9"x7½"x6". Weight 8 lbs.

62F748. NET **89.50**

● *NEW* CA122B ANALYZER



Model CA122B. Produces ten standard keyed color bars (RCA type), 14 horizontal lines, 10 vertical lines, crosshatch, white dot (adjustable) patterns. Variable RF output, channels 2-6; calibrated-variable. IF output, 20-50Mc. For tuner substitution or injection directly into any IF stage. Unmolded video, chroma, horizontal and vertical syncpulses (all +30 V p-p). Color gun interrupters using lead-piercing alligator clips; 4.5 Mc crystal output for audio IF; 900 hz audio for injection at any stage up to the speaker. Vacuum tube operated for proper impedance match when injecting signals into high impedance circuits. All steel case and chrome panel with large lead compartment features functional modern styling. Size: 10"x 14"x8". Weight, 15 lbs.

62F1450 NET **182.50**

● *NEW* MODEL FE14

Model FE14. Field effect solid state volt ohm and milliamp meter. Features extremely high input impedance on AC & DC. Peak to peak scales for measuring complete waveforms as well as RMS scales for sine. Uses field effect transistors in differential circuit. Meter: 4½", 100 microamp ±2%, diode protected and insulated from input. Accessories: High Voltage Probe (39A19) extends 300 volt range to 30KV (Not Supplied). Size: 5x7 5/16 x 3 1/16. Wt., (Less Batteries) 3¼ lbs.

62F1451 NET **59.95**

● *NEW* MODEL BE113 DUAL TV BIAS SUPPLY

Model BE113. Single or two separate 0 to 20 volts DC bias supplies without interaction. Well filtered; effectively pure DC with less than 1/10 of 1% ripple-calibration accuracy better than equivalent battery tolerance. Size: 4x2x2". Wt. 1 lb.

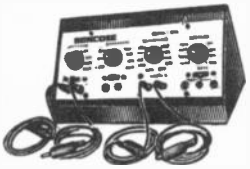
62F1452 NET **12.75**

TR-115 TRANSISTOR CHECKER

Test transistors for leaks,opens and shorts. (Out of circuit only) Ratio check as well as Beta, good-bad. Equivalent check data for Japanese type and all American made transistors. Size: 5"x4½"x2½". Shipping wt., 2 lbs.

62F735. NET **24.95**

● *NEW* MODEL RC146



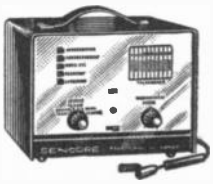
Model RC146. Seventy-five frequently used values of carbon resistors, capacitors, electrolytics, power resistors, and universal selenium and silicon rectifiers for fast on the spot substitution. Power resistors of 20 watts from 2.5 to 15,000 ohms and a universal .5 amp silicon and selenium rectifier make the RC 146 the utmost in parts substitution. The "Handy 75". Overall size 10¼" x 4¾" x 4¾". Shipping weight, 3½ lbs.

62F732 NET **44.95**

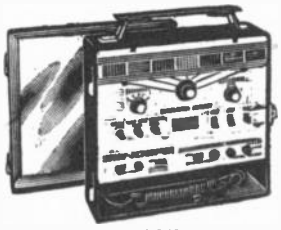
Model RC145. As above with 53 frequently used values. Weight, 3 lbs.

62F1453 NET **34.95**

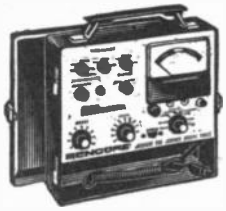
COLOR TV TEST EQUIPMENT



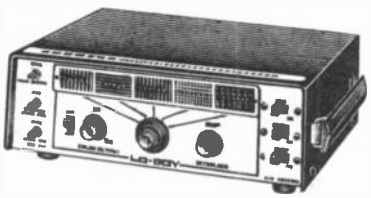
CG126



CG141



CR143



CG10

● *NEW* CG126 STANDARD COLOR GENERATOR

Model CG126. Portable generator produces ten standard keyed color bars (RCA type), dots (size adjustable), crosshatch, 10 vertical and 14 horizontal lines. RF output injected into channel 4 through antenna terminals, output can be retuned for channels 3 or 5. Reserve chroma output of up to 200% available to force signal through defective circuits; counting circuits retimed right on TV set. Size, 11" x 9" x 6". Wt., 10 lbs.

62F1454 NET **109.95**

● *NEW* CG141 DELUXE COLOR GENERATOR

Model CG141. Provides all standard patterns, including standard RCA color bars with chrome control, crosshatch, adjustable size dots, horizontal lines, and vertical lines for centering rasters and checking overall dynamic convergence. Recommended 4.5 MHz crystal controlled signal modulated into FR for setting fine tuning on a receiver. Color gun interruptors with switches on front panel. Composite video output on front panel for injection of any pattern into chroma section to eliminate front end noise and isolate defects in receiver. Positive or negative picture phase, 7 volts peak to peak, to drive chroma circuits in latest sets. Lightweight and housed in a vinyl covered steel case with removable protective lid. 10x9x3½". Wt., 9 lbs.

62F746 NET **149.95**

CR143 CRT CHAMPION

Model CR143. Compact, lightweight instrument checks black-and-white, color and new rectangular color picture tubes for emission, interelement shorts, control grid cut-off, gas and expected life. Two replaceable plug-in cables: one color, one black-and-white with all necessary sockets. Three rejuvenation positions insure user any length to save a faulty tube or equalize gun currents in color tubes. Filtered DC avoids damage and reading errors. Size: 10x9x3½". Wt., 11 lbs.

62F422 NET **99.50**

LO-BOY COLOR BAR GENERATOR

Model CG10. Compact easy-to-use design provides 10 standard RCA type color bar patterns, full crosshatch, 10 vertical and 14 horizontal lines, and adjustable white dots . . . all with a flick of a switch. Interlace control stops dot bounce. All-silicon solid state construction for low warm-up time; eliminates need for internal timer controls (brought out to front panel for simple operator adjustment). Uses long-life C cells with regulated output; permits wear down from 12 V to 9 V with full circuit response. All-steel, low silhouette design with tough vinyl finish. Wt. 7 lbs.

62F745 Model CG 10. **NET** **89.95**

62F1455 Model CG 12. AC operated. **NET** **109.95**

HICKOK TEST EQUIPMENT

WIDE BAND SERVICE TECHNICIAN'S OSCILLOSCOPE

Model 677. Designed to provide service technicians with a high quality instrument at low cost. Has calibrated screen with full astigmatic correction to facilitate use in both waveform and peak to peak observations and measurements. Has preset horizontal and vertical sweep positions. Vertical amplifier has frequency response flat to within 3 db from 5 hz to 4.5 Mhz. Sensitivity 40 MVRMS. Horizontal amplifier has response within 3 db from 5 hz to 350 khz. Power input: 117VAC, 50/60 hz, 90 watts fused. Size: 14"x9½"Wx18½"D. Shpg. wt., 36 lbs.

62F1750. NET **219.95**

BURNOUT-PROOF VOM

Model 455A. A versatile, compact portable volt-ohm-milliammeter, YOU CAN'T BURN IT OUT! An interlocked combination of relay, fuse and neon lamp protects against any conceivable overload. Sensitivity: 20,000 ohms per volt DC and AC. AC and DC ranges: 3, 15, 60, 150, 600, 1200 volts. Resistance: 0-100 megohms in 4 ranges. Accuracy of ±3% DC, ±5% AC, and ±3 of arc on resistance scale is provides in the Model 455A. Features: single function range selector switch; batteries instantly accessible—snapped in or out; attractive streamlined, high impact phenolic case. Center scale ranges: 5, 500, 5,000, 500,000 ohms. Size 8½" x 5⅞" x 3" Ship. wt. 3¾ lbs.

62F134. NET **89.50**

Case for above. Made of durable neoprene.

62F195. NET 12.50

LABORATORY OSCILLOSCOPE

Model 770A. 5" wide-band and general purpose oscilloscope. Calibrated 4Mhz DC vertical amplifier with 8-step and vernier attenuator. Three operational modes of internal sweep generator: free-running, driven, and automatic. Eighteen direct reading calibrated sweep rates from 0.5 sec/div to 1 usec/div. 5 times sweep magnifier, accuracy within ±3%. Model has vertical and horizontal deflection systems and incorporates sweep magnification on internal sweep functions. Internal calibrating signal provides 60 hz square wave. Flat-faced, post-accelerated CRT. Illuminated, calibrated graticule. Works with 105-125 volts, 50/60 hz; 130 watts furnished complete with operating manual. 60 hz line sweep adjustable over about 180°. Shipping weight, 53 lbs.

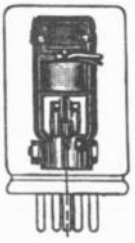
62F1760. NET **635.00**

AM-FM SWEEP AND MARKER GENERATOR

Model 288AX. Provides the necessary signal voltages for servicing AM and FM receivers as well as TV receivers. A crystal controlled 100khz and 1000khz oscillator provides an accurate frequency standard. A wide choice of frequency ranges, sweep widths and methods of modulation plus a new ultrasonic range of 35khz to 110 khz, make this a versatile generator. High output voltage permits visual stage by stage alignment of IF stages, limiter, and discriminator on both AM and FM receivers. Power and voltage measurements, as well as determination of resonance in alignment work, are materially aided by a self-contained decibel meter with range of —10 to +38 db. Sweep synchronizing voltage is brought out to front panel. Output control; vernier control w/decade steps of 1, 10, 100. Pwr. requirements: AC 110v, 50-70 hz. Complete w/crystal, cable assm. meter leads instruction book, 16x13x7". Wt., 33 lbs.

62F1752. NET **355.00**

JAMES COMMERCIAL CHOPPER



Model C-1800. Commercial type chopper for modulating low level microvolt and millivolt signals. For use in DC amplifiers, recorders, experimental analog instrumentation and comparitors. Non-resonant reed assembly insures stable operation over environmental changes of temperature, vibration and shock experienced in test and control equipment. Its residual noise and drift have been minimized by careful material selection and advance techniques. Chopper is designed to maintain operational specifications with considerable driving frequency variations. SPDT with 150 ±15 degree closure. Drive is 6.3 volts RMS at 50-70 hz., octal base. Noise less than 8 mv. RMS into 1 megohm. Size 1½" dia by 2½".

- 50 to 70 Hz
- S.P.D.T.
- Long Life

62F405. NET **13.50**

Lots of 10 and Up 12.50

Model C1201. 9- pin DPDT.

63F115. NET **42.00**

SENCORE TEST EQUIPMENT

S-INCH-WIDE OSCILLOSCOPE

PS127. Deluxe 5" portable scope offers the finest in appearance and performance. Vertical amplifier sensitivity, .017 v. rms for 1" wideband deflection without band-switching; response flat within 1 db, 10 Hz to 5.2 MHz 3 db down at 6.2 MHz. Attenuator controls directly calibrated in p-p volts for fast reading. High input impedance for minimum circuit loading. Waveforms may be viewed in TV horizontal or vertical output with low capacity probe. Horizontal amplifier sweep range, 5-5000KHz in five overlapping steps with response from 10 Hz to 1 ms within 3 db. External inputs for horizontal sweep and sync, and intensity modulation. Cuts to half power when unit is not in use and provides instant warmup when needed. Direct vertical peak to peak voltage readout that is always accurate. Voltages are read right off the front panel. Measures any voltage on display with no confusing band-switching, and faster than using a VTVM. All steel case with brushed chrome front panel. Size: 11"x9"x15½". Wt., 22 lbs.

62F747. NET **199.50**

TC142 MIGHTY MITE V

Model TC142. For checking all kinds of tubes, including foreign, Novars, Nuvistors, and Compactrons and 10 Pin Decals, 3000 in all. Checks gri dleakage as high as 100 megohms and gas condition.s Checks cathode current at operating levels and shorts or leakage up to 150,000 ohms between all elements. Streamlined steel case with easy grip handle. Size: 10x9x3½". Wt. 9 lbs.

62F427 NET **74.50**

FS-134 FIELD STRENGTH METER

Completely transistorized, battery powered portable. Frequency of 50-100MHz, 160-230MHz, 460MHz, 900-MHz (channel 2-channel 83) Sensitivity Zero adjustment nullifies noise. Input 75 ohms (300 with matching 0-6db. Band width 500KHz 4" logarithmic scale calibrated in 60 db range, 2-2000 MV range. Other controls include fine tuning, audio level, calibration. Indicates FM and AM signals. Size: 10x9x5". Shpg wt., 9 lbs.

62F743. NET **199.50**

HICKOK Test Equipment

INDUSTRIAL AND COMMUNICATIONS TUBE TESTER

Model 752A. Portable mutual conductance tube tester providing fast and accurate evaluation of an electron tube. Tests VR tubes for firing point, regulating voltage, and current range. Takes 4, 5, 6, 7, 9, and 10-pin miniature, 7-pin in-line and 8-pin round subminiature acorn, Compactron, Novar 5 and 7-pin Nuvistor tubes. Gm ranges: 0-1500; 3000; 6000; 15,000; 30,000 micromhos. Inter-element leakage indicated on meter, sensitivity 10 megohms. Test voltages: Filament, 0-117 VAC in 19 steps; signal, 0.25, 0.5, 1.25, 2.5 VAC; plate, 75 and 150 VDC; screen 56 and 130 VDC; Grid bias variable 0 to —40 VDC; extra negative supply, —40 VDC; diode test, 20 V RMS; 0Z4 test; 287 V RMS. Cathode activity/life test. Dual section tubes tested without setup change. Self-bias test jacks on panel. Bias and line fusing. Illuminated meter and roll chart. Roll chart lists over 1600 types. Power requirements: 105-125 volts 50-60HZ, 40-70 watts. Complete with leads and instructions. Size: 16¾Hx18⅜Wx7½"D. Shpg. wt., 27 lbs.

62F198. NET **385.00**

INDUSTRIAL AND LABORATORY TUBE TESTER

Model 580A. Has features found in Hickok's Cardmatic testers. Complete range of test settings. Gm measurements under duplication of operating conditions. Tube sockets: 4, 5, 6, 7 pin, octal, loctal 7, 9, 10 pin miniature, 7 & 8 pin subminiature, compractron, novar and 5, 7 pin nuvistor. Four μmho ranges to 60,000 μmhos. Gas test circuit, sensitive to .05 μamps. Push button test of dual section tubes. Safety switches interlocking to prevent tube damage due to improper setting. Inter-element leakage indicated directly on meter with maximum sensitivity of 50 megohms. For operation from 105-125v., 60 Hz, 60 watts. 19x15½x7". Shpg. wt., 35 lbs.

62F1755. NET **585.00**

PORTABLE LAB TUBE TESTER

Model 539C. Industrial and laboratory portable Gm tube tester. Tube sockets: 4, 5 6, 7-pin, octal, loctal, 7, 9, and 10-pin miniature, 7-pin inline and 8-pin miniature. Compactron, Novar, 5 and 7-pin Nuvistor. Socket savers provided for 7 and 9-pin and octal. Gm ranges: 60,000; 30.000; 15,000; 6000; 3000; 600 micromhos. Rectifier diode and VR ranges Inter-element leakage indicated on meter or neon lamp, sensitivity: 50 megohms. Test voltages: filament, 0-117 VC in 20 steps; signal, .025, 0.5, 1, 2.5 RMS; plate, 66 and 150 VDC; screen, 56 and 130 VDC; fixed bias variable 0 to —40 VDC. Self bias terminals on panel. Roll chart has data for latest industrial and entertainment tubes. Gas test measures grid current detecting the most minute amount of gas in a tube. Cathode reserve can be determined to indicate future life of the tube. Three 1% accuracy Hickok meters: Gm. VR voltage and leakage; line voltage; twin range bias meter. Size 16¾Wx18⅜Lx7½"D. For 105/125 VAC, 50/400 HZ, 40 watts. Black leatherette, portable case. Shpg. wt., 35 lbs.

62F133. NET **545.00**

HIGH SPEED GM TUBE AND TRANSISTOR TESTER

Model 6000A. Tests all the new tubes including Compactrons, Novars, Nuvistors, and 10-pin headers. A high speed, extremely accurate tester. Instant line adjust and automatic short indication. Covers 3.000 to 15,000 μmhos in 3 ranges. Shows gas evaluation. Able to determine the reserve capacity of tubes which could cause trouble in the future. A filament continuity button to check for open filaments. Filament voltage from 0.6 to 117 volts in 19 steps. Complete with removable socket plate that accommodates practically all tubes in use today. (7-pin, octal, loctal, 7- and 9-pin noval, Novar, Compactron, Nuvistors, 10-pin "headers.") Inter-element leakage registered instantly on 5 neon lamps, identifying elements involved. Red leatherette portable case size: 16¾"x11¾"x7½". Panel gold anodized. For 105-125 VAC, 60 HZ, 40 watts. Shpg. wt., 21 lbs.

62F171. NET **259.50**

DYNAMIC BETA IN-CIRCUIT TRANSISTOR TESTER

Model 890. Unique circuit measures AC Beta with equal accuracy in or out of circuit. Measures parameters: AC Beta; Rin (transistor input resistance); Z Ohms (base-emitter circuit impedance); Ic. Measures AC Beta, Ic and Icbo out-of-circuit. In-circuit AC Beta measurement accuracy ±5% (150 ohms minimum circuit impedance). Portable and completely self-contained. Utilizing on AC bridge principal with the transistor input circuit elements as one arm of the bridge, the total impedence is nulled. With the circuit impedances as low as 150 ohms, this effectively removes these elements from the circuit. Useful for incoming inspection of transistorized products and sub-assemblies. Beta Ranges: 0-50, 0-100, 0-200. Furnished complete with test cable. AC Test Signal: Variable 1000 HZ sine wave-Calibration setting at 5 ua. 100 mv, protected against overload. Portable carrying. 6½"H, 9"D, 10¾"W. Wt. 8 lbs.

62F102. NET **155.00**

PORTABLE TRANSISTOR TESTER

Model 870. Features two units in one. Measures large signal DC Beta on power transistors as well as small signal AC Beta on low and medium power transistors. Has variable collector voltage. Collector test current is variable up to 2 amps, permitting Beta measurements on power transistors rated at 5 amps or more Tech Spec: Beta ranges 0-100 & 0-300, extendable to 600. Beta test collector voltage variable from 0-5 volts. Accuracy within 5% for both AC & DC Beta. Requirements—115 volts AC, 40 watts. Ic variable, 5 ma up to 2 amps. Vce variable, 0-5 volts. Input sensitivity of A-C bridge circuit amplifier is 50 milli-volts peak-to-peak or 17.6 millivolts Rms for full deflection of meter. Size: 7⅞x11¾x14½". Shpg. wt., 22 lbs.

62F149. NET **375.00**

LABORATORY VTVM AND CAPACITANCE METER

Model 209C. Ranges: DC volts, 0.5, 1.5, 5.0, 15, 50, 150, 500, 1500 volts; AC volts, 1.5, 5.0, 15, 50, 150, 500, 1500 volts; DC current, 0.5, 1.5, 5.0, 15, 50, 150, 500, 1500 ma; Ohms, x1, x10, x100, x1K, x10K, x100K, x1M; Capacity, x10, x1, x0.1, x0.01, x0.001ufd, x10 and x100uufd. Frequency response: within 3 db. 10 HZ to 200μHz. Accuracy: ±3%, full scale Ohms and capacity, ±3° of arc. Power supply is self contained and is safe for all transistor and diode usage. The VTVM is grounded. Large 9" meter. Complete with AC and DC probe assemblies, test leads, and instruction book. Furnished in enameled steel portable case. Size: 11"Hx15"Wx7½"D. Power requirements, 117 volts ±10% 50-60 HZ, 10 watts. Shpg. wt., 20 lbs.

62F106. NET **184.50**

PORTABLE VTVM

Model 470A. High sensitivity range for transistor bias testing. AC and DC ranges are: 0-.5, 1.5, 5, 15, 50, 150, 500, 1500 volts. Peak to peak ranges: 0-1.4, 4, 14, 40, 140, 400, 1400, 4000 volts. Resistance ranges (center scale = 10). X1, X10, X100, X1000, X10,000, X100,000, X1 meg. X10 meg. Input resistance: DC volts, 17.7 megohms; AC volts 17.7 megohms paralleled with approximately 150 mmf. Frequency range: 15 Hz to 2.5μ Hz. Includes 48" long removable test lead and probe. Has range switch for use on AC, DC and Ohms range: 15 Hz to 2.5 ma. Includes 48" long removable test lead and probe. Has range switch for use on AC, DC and Ohms ranges; and 48" long common lead. For 115 VAC, 50/60 HZ 15 watts. 6⅜"x7½"x4½". Shpg. wt., 10 lbs.

62F196. NET **89.50**

HICKOK ADAPTER

Model CA-4. Adapter for testing compactrons, 10-pin "headers," 9-pin novars and Nuvistors. For use with all current Hickok manual tube testers. Wt., 6 lbs.

62F101. NET **59.50**

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

FULLY TRANSISTORIZED DIGITAL MEASURING SYSTEM

MAIN FRAME

- **Contains digital display system and power supply**
- **Obsolescence-proof plug-in design**

Model DMS-3200. The main frame contains the digital display system, power supplies, and an access port for plug-ins of the DP series. A three-digit display makes maximum use of the high accuracy capability of the analog-to-digital converters in the system. The display is fully electronic, using bi-quinary type neon display tubes. Reliability and long life are achieved through the use of solid-state circuitry throughout and all transistors and diodes are silicon type. Counter has a response of 1 Mhz, assuring reliable count and readout of input pulse trains. A self contained power supply supplies all operating voltages for the main frame circuitry as well as plug in units. All critical voltages are zener-regulated. A combination of sturdy die-cast front and rear panels along with heavy-duty extruded aluminum side sections provides a rugged, yet light weight housing. Both top and bottom sections can be removed for full access to all components and printed circuit boards. Front panel carrying handles help make it an ideal portable instrument. Flip down stand for improved viewing angle is another added feature. Size: 9¼W x 6⅜H x 12⅞"D. Weight: 10 lbs.

Stock No.	Type No.	1-9	10-24
62F1761	DMS-3200	320.00	304.00

PLUG-IN MODULES

- **Add plug-in modules for variety of applications**
- **Slips into main frame for one unit convenience**
- **Save money — Only buy units you need.**

Model DP-100. Voltmeter plug-in provides digital display of DC voltages from 0.1 millivolt to 1000 volts when used with DMS-3200 Main Frame. Accuracy specification of ±0.1% F. S. Five ranges: 0.00 to 99.9 millivolts; .000 to .999 volts; 0.00 to 9.99 volts; 00.0 to 99.9 volts; 000.0 to 999. volts. Excellent AC rejection for accurate and rapid 100 milliseconds reading time. Photo chopper stabilization assures no drift or zero offset. Size: 3H x 8¼W x 10"D. Weight: 3¼ lbs.

Stock No.	Type No.	1-9	10-24
62F1762	DP-100	175.00	166.25

Model DP-140. Event counter and slave plug-in unit. As an event counter the DP-140/DMS-3200 combination permits display of a totalized count of events in production counting applications. Random events can be converted to pulses and counted and displayed with this system. The count can be returned 000 at any time. As a slave plug-in, a multi-pin connector on the panel of the DP-140 permits it to be driven from a DMS-3200/DP-150 combination. When operated in this way, decimal point location is automatically positioned properly and readout is directly in hz or Khz. Fully transistorized. Sensitivity: 100 mv minimum. Includes interconnection cable. Size: 3H x 8¼W x 10"W. Weight: 2¾ lbs.

Stock No.	Type No.	1-9	10-24
62F1766	DP-140	75.00	71.25

Model DP-150. 1 Mhz Counter plug-in. Provides a digital display of both frequency and period measurements when used with DMS-3200 Main Frame. Sinewaves, squarewaves, pulses, or other complex waveforms, with frequencies of 00.1 hz up to 1.0 Mhz and periods of 0.1 msec. to 999 seconds, may be measured. Provision for event totalizing and manual reset input; 1 megohm shunted with 40 pf, overload protected. Has provision for internal check at 1 hz, 1 Khz, and 100 Khz. Size: 3H x 8¼W x 10"D. Weight 3½ lbs.

Stock No.	Type No.	1-9	10-24
62F1763	DP-150	195.00	175.00

Model DP-170. Ohmmeter Plug-in, when used with the DMS-3200 Main Frame, provides digital display of resistance measurements from 0.01 ohms to 1,000 meg-ohms. The wide range of resistance measurements, coupled with accuracy of ±0.1% F.S. ±0.2% of reading, makes this a remarkable unit. Four terminals are provided so that lead resistance does not cause inaccuracies on extremely low resistance measurements. In addition a guard terminal is provided so that spurious leakages in components are automatically balanced out. Aluminum case. Size: 3" x 8¼" x 10". Shpg. wt. 3½ lbs.

Stock No.	Type	1-9	10-24
62F1764	DP-170	240.00	238.00

Model DP-200. Capacity meter Plug-in when used with the DMS-3200 Main Frame, provides digital display of capacity measurements from 1 picofarad to 9,999 microfarads. Design is all solid state. Eight ranges: 000. to 999, picofarads.; 0.00 to 9.99 nanofarads; 00.0 to 99.9 nanofarads; 000. to 999. nanofarads; 0.00 to 9.99 microfarads; 00.0 to 99.9 microfarads; 000. to 999. microfarads; and 0.00 to 9.99 millifarads. Size: 3" x 8¼" x 10". Ship. wt. 3½ lbs.

Stock No.	Type	1-9	10.24
62F1765	DP-200	240.00	228.00

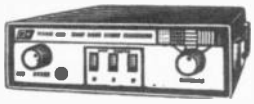
DMS-3200 MAIN FRAME
SHOWN WITH DP-100 DC VOLTMETER

PLUG-IN
MODULES

COLOR GENERATOR

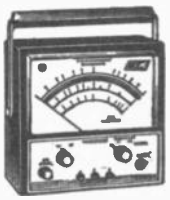
Model 1245. For quick and easy checking and adjustment of: convergence, demodulator alignment, color sync, color fit, horizontal and vertical size, linearity and overscan. Small, lightweight solidstate. Dots only one raster line high and .25μ sec. wide. Free of retrace lines. Station quality waveforms for absolescence protection and least convergence time through minimizing needs for brightness, contrast and fine tuning readjustment. Precise waveforms permit accurately setting color of killer control without a B&W telecast. Built-in gun killer works on any picture tube Output is at RF with more than 5,000 μ V of signal on Channel 3, 4 or 5. This generator provides crystal-controlled keyed rainbow color bar display; dot, crosshatch, horizontal line and vertical line patterns. Size 2⅞" h x 8½" d x 8⅞" w. Shpg. wt., 3 lbs.
62F561. NET **134.95**

● *NEW* COLOR GENERATOR



Model 1242. Output is at RF with more than 5,000 microvolts of signal on Channels 3 and 4 (factory-tuned to Channel 3). The generator has a transformer-type power supply with zener and power transistor regulation. A pilot light indicates power on. The transistorized generator provides gun killer controls that will work with any picture tube. Size of generator is 2"H x 6¾"W x 9¾"D. Generator has cable compartment for all leads. Operates from 105-125 VAC, 60 hz. Shipping weight, 2½ lbs.
62F596 NET **99.95**

● *NEW* DYNAMIC TRANSISTOR ANALYST

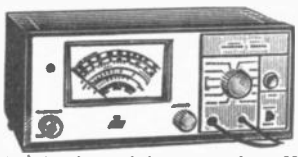


Model 161. In-circuit testing for AC Beta. With same procedure, 161 makes out-of-circuit test; including: Icbo (current leakage) and front-to-back conduction of diodes and rectifiers. Special circuitry protects all parts, even if leads are connected incorrectly. 7" mirrored meter insures accurate readings on three separate scales. Two ranges check AC Beta from 2 to 500. For leakage tests, Icbo range is 0 to 5000 microamps, on an expanded scale. Just flick a switch to find out if an unknown is an NPN or PNP type. Included with analyst are: the new edition of Howard Sams' Transistor Specification Handbook and the B&K Basic Course on Transistors. Entire package comes with: personalized handle, test leads, and instruction manuals. For 117 VAC, 60 hz. Size: 7⅛"H x 7¼"W x 3⅝"D. Shpg. wt., 6 lbs.
62F597 NET **89.95**

TV ANALYST

Model 1076. Provides RF and IF test pattern signals to trouble shoot. Check resolution, bandwidth, shading and contrast capabilities with test pattern in flying spot scanner. 4.5 mc, 400 cycle FM modulated sound signal. Sync signal adjustable to ±50 volts. Sweep pulses; yolk and transformer test; high voltage indicator. White dot, crosshatch and color bar patterns for color sets. Bias supply and AGC keying pulse. 17"x10¼"x10". Shpg. wt., 36 lbs.
62F555. NET **329.95**

B & K CAPACITOR ANALYST



Model 801. Measures capacitance and leakage resistance both in-circuit and out-of-circuit. Designed to operate on 105-125 volts 60 cycle AC, but will operate from 90 to 140VAC after a 2 min. warm-up. Can detect "shorts" in normal circuits where the capacitor tested is shunted by more than 25 ohms. Detects "Opens" in circuits where the capacitor tested is more than 25 pfd or shunting resistance is more than 50 ohms. Unique circuit determines how capacitor stores energy and returns it to the circuit. Spots marginal electrolytics that need replacement and predicts the life expectancy of electrolytic capacitor of 3 volts or more. Meter movement is protected against overloads. Easy to test low-voltage transistor circuit capacitors as well as those in vacuum-tube circuits. Electrolytic tests up to 2000 mfd, using a balanced bridge. One knob makes it easy to select the desired function and range. Simplified internal design, easily portable. Weight, 8¾ lbs.
62F588. Model 801. NET **109.95**

DYNAMIC MUTUAL CONDUCTANCE TUBE TESTER

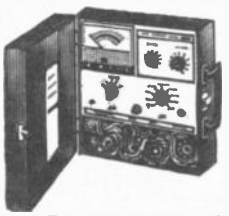
- Multiple socket selection
- Simplified switch selection

Model 707. Provides multiple socket selection to quick check most TV and radio tubes. Simplified switch selection. Includes provisions for future new sockets. Tests all types of tubes. Automatic compensation for line voltage variation. 4½" meter with "Replace-Good" scale. Lists common tube types on socket panel. Complete reference chart in cover. 7, 9, and 10 pin straighteners on panel. Checks each section of multi-section tubes separately. Tests for all shorts, grid emission, leakage and gas. Grid emission test is adjustable, with sensitivity to over 100 megohms. Makes quick "life" test. Professional, dynamic mutual conductance tube tester that combines multiple-socket speed with high Gm accuracy— plus obsolescence protection. Size: 16 ⅛ x 15¾ x 5⅞". Shpg. wt., 15½ lbs.
62F589 ..... **189.95**

DYNA-JET TUBE TESTER

Model 606. This multiple socket design has reduced the number of settings for testing each tube from 17 required in many other types of testers to only 4. You can test for all shorts, grid emissions, leakage and gas; and check cathode emission the accurate way—under simulated load conditions! With the really portable Model 606, you won't reject the good tubes, and you'll quickly find the bad ones, reducing call backs, selling more tubes, and increasing service profit. You'll find "tough dogs" and weak tubes with the exclusive adjustable grid emission test, which has the sensitivity of over 100 megohms. Molded tube sockets have phosphor bronze contacts for long, trouble-free life. Simplified heater voltage setting with power-on indicator. Each section of a multiple section tube is checked. Size 11"w x 8½"h x 4⅞"d. Operates from 105-125v., 50-60 hz. A.C. Shipping wt., 8 lbs.
62F562. NET **79.95**

CRT TESTER AND REJUVENATOR



Model 465. Tests and rejuvenates black & white and color TV picture tubes without removing tube from set. Provides correct filament voltage (0-13 v.) for all tubes. Tests and rejuvenates all hi G-2 and low G-2 tubes including those requiring a G-2 voltage as low as 25 volts. Tests new rectangular color tubes. Corrects each color gun separately. Uses DC on all tests. 4½" meter and neon bulb indicators for easy reading. Leatherette 10½"x11½"x4½" luggage type case. For 117 VAC, 50/60 hz. Shpg. wt., 10 lbs.
62F563. NET **89.95**

● *NEW* "PROFESSIONAL" VTVM

Model 177. DC Volts: ±0-0.5, 1.5, 5, 15, 50, 500, 1500. AC Volts: (RMS) 0-0.5, 1.5, 5, 15, 50, 150, 500, 1500. AC Volts: (peak-to-peak) 0-4, 14, 40, 140, 400, 40K. Response: ±1db. 40 hz to 3mhz. Resistance: Full Scale: 1K, 10K, 100K ohms; 1, 10, 100, 1K, 10K, 100K megohms. Mid-scale: 10, 100, 1K ohms; 1, 10 megohms. Input Resistance: 11 meg (1 meg in probe). Accuracy: ±3% full scale DC, & 5% full scale AC. Zero center scale. Single AC/OHMS/DC test probe with switch and ground lead. VTTM has metal case and carrying case with handle. Operates on 117V 50/60 hz. Size: 7⅛"H x 7¼"W x 3⅝"D. Shpg. wt., 7 lbs.
62F598. NET **79.95**

VOLT OHM MILLIAMMETER

Model 120. The most comprehensive unit of its type ever offered in its price range. It features 61 ranges and functions specifically designed for use in industry, laboratories, maintenance shops and schools. 20,000 ohms per volt DC. 5000 ohms per volt AC. Rugged 50 microamp meter: ±2% accuracy. Extra-low resistance and voltage ranges. Wide frequency response AC and db ranges. Mirrored scale, burn-out proof meter. Size: 7"x 5⅜"x3⅜". Shpg. wt., 4 lbs.
62F564. NET **56.00**

H. H. Smith Test Leads, Prods and Adapters

ALL-PURPOSE TEST LEAD KIT

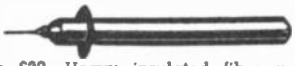
Type 610. 48" of 5000 volt heavy duty rubber covered test lead wire. Plastic handles with solderless prods. Other end supplied with standard #204 banana plugs which are interchangeable with the phone tips, alligator clips, or spade lugs which are supplied. Shpg. wt., 6 oz.
35F929. NET **1.80**

SOLDERLESS TEST PROD—THREADED TYPE

Type 302. Wire fits through handle and body of plug then wrapped around screw portion and tightened with knurled nut provided. Brass, nickel plated tip with 4" molded plastic handle. Shpg. wt., 3 oz.

Stk. No.	Type	Color	Net
35F930	302	Red	.30
35F638	302	Black	.30

R.F. TEST PROBE



Type 630. Heavy insulated fibre probe. Large inside diameter enables use of coax cable or 1N34 crystal for R.F. Probes. Heavy duty removable tip. Shpg. wt., 3 oz.

Stk. No.	Type	Color	Net
35F931	630	Red	.72
35F639	630	Black	.72

PHONO NEEDLE TEST PRODS

Type 318. Brass, nickel plated body with steel nickel plated needle. Removable chuck for replacing broken needles. Red or Black machined handle. 5½" long, ⅜" dia. Wt., 3 oz.
35F906. BLACK. **NET** ..... **.33**
35F907. RED. **NET** ..... .33

Type 317. As above with red or black molded plastic handle. 4" long, ⅜" dia. Wt., 3 oz.
35F939. Black. **NET** ..... **.30**
35F940. Red. **NET** ..... **.30**

ALLIGATOR CLIP TEST LEAD

Type 647. Heavy duty lead wire with steel, cadmium plated clips. Clips have handles of molded Butyrate in red and black. Elbows are in corresponding red and black and of molded Thermosetting plastic. Safe and easy to use. Prices are per pair.
35F860. NET **1.20**

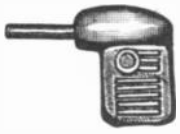
SOLDERLESS TEST PROD

Molded Butyrate handle, type 3 class (MIL-L-P349A). Brass, nickel plated plug; rating of 12 amps AC for 10°C temp. rise. Threaded type. Wire fits through handle and body of plug.

Stk. No.	Type	Color	Overall	NET
35F680	303R	Red	6¾"	.33
35F681	303B	Black	6¾"	.33

Order from NEWARK'S Complete Inventory

MOLDED METER TIP PLUG



Type 235. Molded meter type plug molded in two halves for easy assembling with screw and nut. Brass nickel plated tip fits in all standard tip jacks. Available in Red and Black. New styling is attractive and facilitates easy handling.

Stk. No.	Type	Each	10 For	100 For
39F964	Black	.27	2.43	20.25
39F963	Red	.27	2.43	20.25

UNIVERSAL TEST LEADS

Fifty leads in one! One lead can make any required test lead combination. All parts adapt into prod handle or tip handle. Shpg. wt., 3 oz.
39F887. No. 699. ..... **3.00**

SOLDERLESS TIP TEST LEADS

Plastic handles colored red and black. 4" long, ⅜" diameter. Flexible kinkless rubber covered wire leads 50" long also colored red and black. Shpg. wt. 3 oz.
39F872. No. 600. Phone tips ... **.87**
39F873. No. 601. Spade lugs ... .87
39F874. No. 602. Alligator clips ... .93

HIGH TENSION TEST LEADS

Sturdy attractive test leads with heavy duty probes, and 48" of quality high tension kinkless test lead wire. Fibre handles. Test lead wire is heavy type with .248 outside diameter. Voltage breakdown is 22,000V. Shpg. wt., 3 oz.

Type 620. With Phone Tips.
Type 622. With Alligator Clips.

Stk. No.	Type	NET
35F928	620	1.98
35F944	622	2.40

HEAVY DUTY TEST PRODS

Model 319. This threaded type prod has a large diameter well which will enable soldering of heavy duty wire directly into plug. Body is nickel plated brass. The handle is made of 4" molded plastic. The overall size is 5⅜". Shipping wt. 3 oz.
35F908. Red. **NET** ..... **.30**
35F909. Black. **NET** ..... **.30**

Model 329. A threaded type prod with a large diameter well to enable soldering of heavy duty wire directly into plug. Body is nickel plated brass. Handle is 5½" machined plastic. Overall size is 6¹¹⁄₁₆". Shipping weight 4 oz.

Stk. No.	Type	Color	Each	10 For	100 For
35F842	329	Red	.33	2.97	24.75
35F843	329	Black	.33	2.97	24.75

TEST LEAD KIT

Type 611. Kit supplied with one pair of test leads. One end test prods, other end ins. banana plugs. Needle tip prods. Fittings: Two each: phone tips, alligator clips, spade lugs.
35F682. NET **1.80**

METER TIP TEST LEAD

Test leads with 50" of rubber covered kinkless test lead wire. Molded plastic fingergrip tips on one end and 4" plastic test prod handles on other end. Supplied in two types: solderless tip or needle tip prod handles.
35F932. 625 Solderless Prods. per pr. **1.35**
35F933. 626 Needle Tip Prods, per pr. **1.35**

METER TEST LEADS

Type 685. Solderless prod with banana meter tip. Body of nickel plated brass. Price per pair.
35F862. NET **1.50**

"SLIM JIM" TEST LEADS

Type 688. Long slim probes, fully insulated with vinyl tubing to prevent shock or shorting. Perfect for those hard to get at spots. Supplied with molded meter tip ends and 50" rubber coated kinkless lead wire. Shpg. wt., 5 oz.
35F934. NET **1.14**

SOLDERLESS TEST LEADS

Type 603. The insulated handles and insulated plugs are both of the solderless type construction. Flexible kinkless rubber covered leads are 50" long. This type offers convenience at a low price, in addition to safety. Shpg. wt., 5 oz.
35F936. NET **1.26**

SLIM HANDLE TEST LEADS

Type 670. Slim red and black tenite handles only 5⁄16" O.D. with solder type phone tips on other end. Flexible, kinkless rubber covered wire 50" long. An extremely sturdy, but low cost serviceable and safe pair of leads. Shpg. wt., 5 oz.
35F937. NET ..... **.66**

SLIM HANDLE TEST LEAD

Type 678. Fibre handles colored red and black with O.D. only ¼", with insulated tips. Flexible, kinkless rubber covered wire only 50" long. Threaded phone tips. Perfect for testing in cramped space. Shpg. wt., 4 oz.
35F938. NET **1.26**

ALLIGATOR CLIP TEST LEAD PAIR

Heavy duty test lead wire with Cadmium plated steel alligator clips on both ends. Prices are per pair. Average shpg. wt. 4 oz.

Stk. No.	Type	Length	NET
35F942	604	12"	.57
35F943	605	24"	.63
35F944	606	36"	.72
35F945	607	48"	.81

ALLIGATOR CLIP TEST LEADS

Type 672. Heavy duty test leads with steel, cadmium plated clips. Lead comes in re-usable clear plastic hinged box and with 50 in. of extra-flexible rubber-covered kinkless wire. Prices are per pair.
35F861. NET **1.26**

rustrak Chart Recorders-Accessories

SINGLE CHANNEL RECORDERS

Miniaturized automatic chart recorders for lab use. Continuous, distortion-free rectilinear recording. Records information every 2 seconds, at 1" per hour. Accuracy is 2% of full scale. Meter sensitivity: 1 ma. Rated 750v. maximum peak. Drive mechanism for 115v., 60 cycle AC. AC voltmeter movements operate up to 500 cps. Size: 5⅝x3⅝x4⅛". Portable and panel hardware supplied. Shipping weight, including paper roll, 5½ lbs. (*Access window permits making notes on charts.)

DC MILLIAMMETER MODEL 88

ma		Glass Window		Acc. Window	
Range	Ohm	Stk. No.	Each	Stk. No.	Each
0-1	1C	62F1250	83.50	62F1252	88.50
.5-0-.5	1M	62F1253	88.00	62F1951	93.00
0-50		62F1950	88.00	62F1952	93.00

DC MICROAMMETER MODEL 88

ma		Glass Window		Acc. Window	
Range	Ohm	Stk. No.	Each	Stk. No.	Each
0-50*	54C	62F1326	98.50	62F1953	103.50
0-1C*	46C	62F1286	93.50	62F1954	98.50
0-2C*	22C	62F1284	89.50	62F1955	94.50

DC VOLTMETER MODEL 88

ma		Glass Window		Acc. Window	
Range	Ohm	Stk. No.	Each	Stk. No.	Each
0-1V	1M/V	62F1270	88.00	62F1958	93.00
0-15V	1M/V	62F1956	88.00	62F1959	93.00
0-150V	1M/V	62F1957	88.00	62F1960	93.00

DC MILLIVOLTMETER MODEL 88

ma		Glass Window		Acc. Window	
Range	Ohm	Stk. No.	Each	Stk. No.	Each
0-10mV	10	62F1327	94.50	62F1961	99.50
0-25mV	12.5	62F1328	94.50	62F1962	99.50
0-1CmV	100	62F1269	83.50	62F1963	99.50

AC VOLTMETERS MODELS 98B, *93, †88B

V	Glass Window		Acc. Window	
Range	Stk. No.	Each	Stk. No.	Each
†0-150V	62F1264	92.95	62F1965	97.95
*70-135V	62F1277	96.95	62F1966	101.95
70-135V	62F1964	104.95	62F1967	109.95
140-270V	62F1978	104.95	62F1980	109.95
280-540V	62F1979	104.95	62F1981	109.95

MULTI-CHANNEL RECORDERS

Dual Channel Recorders. Same as single channel recorders, but contain two galvanometers for readings from two separate signal sources on the same chart papers. Shpg. Wt.: 5½ lbs.

62F-	Type	Range Channel 1	Range Channel 2	Each
1332	91	0-1 maDC	0-1 maDC	130.50
1333	91	0-100 μaDC	0-100 maDC	144.50
1969	120B	0-5 amp AC	100-140	159.50
1982	120B	0-5 amp AC	200-280	159.50
1983	120B	0-5 amp AC	400-560	159.50

Model 92 4-Channel Event Recorder. Provides 4 individual channels of on-off data. Supplied with access window. Requires 24 VDC input power for pen actuators (not supplied). 2 RPM or 1 inch/hr. gear supplied. Other gear trains available (see below). Shpg. Wt.: 5½ lbs.
62F1223. NET **92.00**

Model 921 Power Supply. Operates from 120 VAC source to supply 24 VDC for pen actuators in recorder above.
62F1325. NET **15.00**

Model 920 Amplifier. Transistorized, will power one actuator of recorder above. For low millivolt AC signals such as voice transducers, magnetic load changes, etc. Shpg. Wt.: 5 lbs.
62F1970. NET **79.50**

● NEW MODEL 122 PYROMETER

Miniature pyrometer is complete with I/C & C/A thermocouple sensors. Accuracy: 2% of a span. Cold junction compensation for thermocouples over 65°F ambient range. Push-button calibration. 5⅜ x 3⅜ x 5⅞". Weight: 4 lbs.

62F1971. 0-400°F. NET **165.00**
62F1984. 0-2400°F. NET **165.00**

NEWARK Saves You Time and Money—One Purchase Order To One Source

TEMPERATURE RECORDER

Model 133. A self-contained temperature recording instrument which produces a high resolution, accurate recording of temperatures. Used with Thermistor probes. Standard 1" per hr. 1/16" per hr., to 450" per hr. on order. 105-130V, 60 cycles. Accuracy 2% of span. Stability ½% of span. Temperature range —50°F to 300°F on special order. Shpg. wt. 5½ lbs.

Stk. No.	Type	Temp Span	Net
62F1216	133	90-115°F	180.00
62F1217	133	30-105°F	180.00
62F1218	133	100-200°F	180.00

NICKEL WIRE PROBE RECORDER

Model 144. Temperature recording instrument for high resolution accurate recording of temps. from —100°F to 600°F. Sensing device of fine nickel wire. Thirty standard spans available on special order; 115V, 60 hz. Model 144 supplied with Model 1442 probe & 15 ft. extension cable. Model 1441 & 1442 probes interchangeable with standard extension cable Model 1441 utility probe of 304 stainless steel; will withstand pressure of 150 p.s.i. Model 1443 stainless high pressure fitting for inserting Model 1441 probe to pressure vessel.

Stk. No.	Type	Temp. Span	Net
62F1335	144	0-100°F	185.00
62F1336	144	150-250°F	185.00
62F1973	144	0-300°F	185.00
62F1337	144	0-500°F	185.00
62F1338	1441	Probe	39.50
62F1974	1442	Probe, —100 to +500°F	12.00
62F1339	1443	Pressure fitting	3.00

● NEW MODEL 162 PRESSURE RECORDER

Single channel pressure recorder marks pressure of gases and liquids using the principle of a C-type Bourbon tube. Operates on 115 volts AC, 60 hz.

Stk. No.	Range	Price
62F1975	0-50 psi	89.50
62F1976	0-100 psi	89.50
62F1977	0-300 psi	89.50

ACCESSORIES FOR CHART RECORDERS

EXTRA GEAR TRAIN UNITS

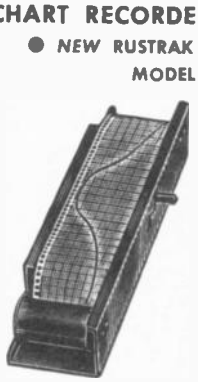
Can be interchanged in field in seconds

Stk. No.	Description	NET
62F1320	⅛ inch per hour	
62F1321	½ inch per hour	
62F1322	1 inch per hour	
62F1256	2 inches per hour	
62F1257	3 inches per hour	5.00
62F1258	6 inches per hour	
62F1259	10 inches per hour	Ea.
62F1323	12 inches per hour	
62F1260	15 inches per hour	
62F1281	30 inches per hour	
62F1324	60 inches per hour	

CHART PAPER 63 FOOT ROLL

Stk. No.	Description	Each
62F1262	Style A—50 divisions	2.25
62F1263	Style B—75 divisions	2.25
62F1289	Style C—65 divisions	2.25
62F1244	Style D—20 (dual chan)	2.25
62F1329	Style E—1 div. (event rec)	2.25
62F1968	Style F—15 (dual chan)	2.25

● NEW RUSTRAK CHART VIEWER MODEL 168



Now view 12" spans of recording chart paper at one time! Model 168 accommodates strip-chart papers from 1⅞" to 3" wide. Easily rotates in either direction through use of clutch mechanism. Standard mandrel takes chart paper with ⅝" I.D. core. Sets on non-skid, marproof pads. Very compact: 14" long x 3½" wide. Weight: 3½ lbs.
62F1972. NET **38.50**

RACK MOUNTING PANELS

Stk. No.	Rack Ntg. Panel	Each
12F1280	2 unit	15.00
12F1287	3 unit	15.00
12F1288	4 unit	15.00

DC AMPLIFIERS

Amplifiers are chopper stabilized vacuum tube types, which increase the versatility of the chart recorders. 5 thousand ohm; 5V max. output. Amplifiers are the same size as recorders. General sensitivity ratings are for a one milliamper recorder or galvanometer. Frequency response from DC to 5 hz. Using a 200 microampere galvanometer increases the sensitivity 5 times. Shpg. wt. 5 lbs.

MULTIPLIER BOX

Model 111A. Consists of multipliers and shunts with a selector switch. Standard Rustrak 1 MA recorder will give the following readings when used in conjunction with this box: 1-5-10-50-100-500-1000 volts or milliamperes DC.
62F1237. NET **49.50**

Model 111B. Same as above, but has readings. 3-15-30-75-150-300-750V or Ma. DC.
62F1236. NET **49.50**

To Serve You Better ——— Stocking Warehouses from Coast-to-Coast
Use the Services of the NEWARK Facility Nearest You — See Front Cover.

AMPROBE SNAP-AROUND VOLT-AMP-OHMMETERS

The most popular and asked for tools of their type. Only one volt or amp range is revealed in its unbreakable plastic window at any one time. Rotary scale eliminates guesswork and reading errors. Currents may be measured instantly and accurately. Pointer-lock freezes needle at the reading with the flick of a switch. Allows you to take readings in darkness or hard to see areas and then read away from the conductor. A valuable tool in balancing circuits, tracing faults and grounds, and diagnosing operating troubles without shutting down equipment. Built-in 25 ohm mid scale ohmmeter on RS-3 and RS-1000. Accuracy within ±3% FS. One hand operation. With case and leads.

Stk. No.	Type	Volts	Amps	Net
62F659	RS-1	0-150/600 AC	0-6/15/40/100 AC	43.85
62F706	RS-2	0-150/300 AC	0-6/15/40/100 AC	43.85
62F658	RS-3	0-150/300/600 AC	0-6/15/40/100/300 AC	57.50
62F707	RS-300	0-150/300/600 AC	0-6/15/40/100/300 AC	52.50
62F708	RS-1000	0-150/300/600 AC	0-15/40/100/300/1000 AC	76.50

AMPROBE JR. YO MODELS AND KITS

The only voltage testers in their price class that measure voltage, current and resistance; furnished with test leads. Also comes as Amprobe Jr. Test-Master Kit consisting of a specially designed leather case containing the YO Amprobe Jr., an Amprobe A-45L Energizer, battery attachment and test leads. The New YO precision instruments measure instantly and accurately on a calibrated scale. Ohm-meter range: 25 ohms mid-scale; frequency: 60 cycles A.C. (*Indicates Test-Master Kits).

Stk. No.	Type	Ammeter Range	2 Voltage Ranges	Net
62F950	YO 525	0-25	0-150/600	27.50
62F951	YO 550	0-50	0-150/600	
62F952	YO 500	0-100	0-150/600	
62F954	YO 50	0-50	0-125/250	
62F956	TM-YO 525*	0-25	0-150/600	37.85
62F957	TM-YO 550*	0-50	0-150/600	
62F958	TM-YO 500*	0-100	0-150/600	
62F959	TM-YO 25 *	0-25	0-125/250	
62F960	TM-YO 50 *	0-50	0-125/250	
62F961	TM-YO 100*	0-100	0-125/250	

Type P-1. Carrying case for above "YO" models and also "V" models listed elsewhere on this page.
62F969. NET **3.25**

TEST MASTER KITS

TM33. The TM Kit keeps all instruments in a leather carrying case. Has a built-in tool compartment. Contains one RS-3, A-50-1 Deca-Tran, A-45L.
62F661. NET **94.50**

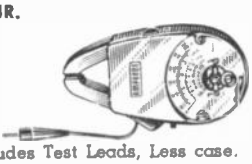
Type TM43. Contains one RS-3, Deca-Tran A50-1, Phase Sequence Adapter PSA-1, A45L.
62F983. NET **103.85**

Type TM53. Contains one RS-3, PSA-1, A45L.
62F984. NET **76.85**

ENERGIZER

Model A-45L. Permits current readings on permanently wired low-current equipment by simplifying series connection. Increases ammeter sensitivity 5x or 10x for more precise reading directly at outlets by splitting double conductor line cords while equipment is connected to line. Cap.: 10 amps. With pouch.
62F977. NET **6.75**

AMPROBE JR.



The only voltage testers in their price class that also measures amperage. They are precision instruments that measure instantly and accurately on a calibrated scale ±3% full scale (not just an indication). Amperage ranges to 100 amps and voltage scales to 600 volts are available. Price includes Test Leads, Less case.

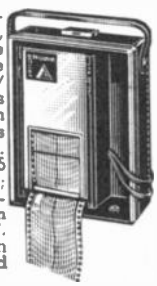
Stk. No.	Type	Ranges	Net
62F963	Y25	0-25 Amps A.C. 0-125/250 Volts A.C.	22.50
62F964	Y50	0-50 Amps A.C. 0-125/250 Volts A.C.	
62F966	Y525	0-25 Amps A.C. 0-150/600 Volts A.C.	
62F967	Y550	0-50 Amps A.C. 0-150/600 Volts A.C.	
62F968	Y500	0-100 Amps A.C. 0-150/600 Volts A.C.	
62F969	P-1	Carrying case for above models	3.25

AMPROBE® JUNIOR LINE-PROBE

Versatile four-in-one pocket sized tester. Can trace up to 10 circuits at one time. Measures voltage (± 3% FS), quick and easy current reading, and checks for continuity. AC amps: 0-50. Furnished with 10 station markers, 2 station marker holders, voltage leads, fused battery attachment and case.

Stock No.	Type	Volts, AC	NET
62F970	ALP50	0-125/250	38.50
62F971	ALP550	0-150/600	38.50

AMPROBE RECORDERS



Rugged, compact instruments in their own genuine leather case. Designed for high accuracy, dependability, and ease of operation. Small size and easy loading plus a unique design feature permits them to be used either as monitoring/recording devices or as indicating instruments making these recorders extremely versatile. Can be used as round the clock trouble shooters without the need for an operator to be present. Power requirements: 115VAC, 60 cycles, 2.5 watts. Accuracy: AC amps and volts ±3% FS; AC expanded scale volts ±1.25% FS; Temperature ±3%F on +20°F to +100°F; ±4°F on −50°F to +20°F; ±5°F on +50°F to 250°F. Chart Speed is 12"/hr. Supplied with 1 roll each of the necessary strip charts. Other chart speed available. Weight 20 oz.

*With resistance bulb thermometer (FL-RBT-1)
**With A60FL Transducer
***With A-70FL Transducer

Stk. No.	Type	Description	Range	Net
62F678	LAA81	Ammeter***	0-10/50/250/500 Amps AC	109.85
62F679	LAA82	Ammeter**	0-5/25/100/250 Amps AC	104.85
62F680	LAV2X	Voltmeter	95-130/190-260 V., AC	103.85
62F979	LAV3X	Voltmeter	95-130/190-260/380-520 V., AC	124.85
62F698	LAV8600	Voltmeter	0-150/300/600 V., AC	108.85
62F685	LAVA81	Voltmeter/Ammeter***	95-130/190-260 V., AC 0-10/50/250/500 Amps, AC	153.85
62F686	LAVA82	Voltmeter/Ammeter**	95-130/190-260 V., AC 0-5/25/100/250 Amps, AC	148.85
62F980	LAVA83	Voltmeter/Ammeter***	95-130/190-260/380-520 V., AC 0-10/50/250/500 Amps, AC	169.85
62F981	LAVA84	Voltmeter/Ammeter**	95-130/190-260/380-520 V., AC 0-5/25/100/250 Amps, AC	164.85
62F681	LT8100	Thermometer*	−50 to +100°F/+50 to 250°F.	113.85
62F674	ADV220	Motor Volt Adapter	Permits Rec. Mtr. to operate on 220 V., AC	4.85

STRIP CHARTS FOR ABOVE RECORDERS

Perforated and printed 2 colors. Individually boxed 30' rolls.

Stk. No.	Type	Description	Net
62F704	830AV600	Use with model LAV8600.	1.50 per roll
62F689	850A	Use with models LAA81, LAA82, LAVA81, LAVA82, LAVA83, LAVA84.	
62F690	835X3A	Use with models LAV2X, LAV3X, LAVA81, LAVA82, LAVA83, LAVA84.	
62F691	823T1	Use with model LT8100 (−50°F/+100°F).	
62F692	833T2	Use w/model LT8100 (+50°F/+250°F).	

Depend on NEWARK for the Latest Top-Quality Equipment.

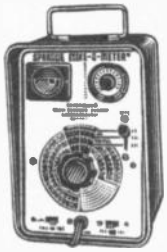
- **Complete On-the-Shelf Stocks**
- **Lowest Prices**
- **Fast Service**

Test Equipment

SPRAGUE TEST EQUIPMENT

● *NEW*

MODEL M-3 COMPACT CAPACITOR ANALYZER



Handy instrument outmodes troublesome methods of checking capacitors with ammeters, voltmeters, and wattmeters, and then referring to charts to establish results of different meter readings. A twist of the dial tells you whether capacitors are good or bad, giving you actual capacitance and power factor measurements by the accurate, Wein Bridge method. Safe operation assured by automatic discharge of capacitor when test switch is released. For use on 110-125 VAC, 50-60 hz. Rugged steel case finished in blue. Shpg. wt.6 lbs.

62F628. NET. **39.95**

Model TCA-1

TRANSFARAD CAPACITOR ANALYZER

Model TCA-1. Specifically designed to safely test capacitors used in transistor and other low volt, circuits. Capacitance and power fatcor are measured without danger of overheating. Low AC bridge. Cap.: 1 mmfd to 2000 mfd. in 5 ranges. Power factor: 0-50%. Dual regulation of power supply assures shorttime stability. Specially processed etched circuits and complete encapsulation of critical bridge null amp. insure long time stability. Sensitivity control for magic eye null detector permits accurate measurement of small capacitances. Cap. discharged after testing. Shpg. wt. 28 lbs.

62F633. NET. **197.50**

Model TO-6

MODEL TO-6 TEL-OHMIKE

Capacitor analyzer measuring up to 2000 mf in five overlapping ranges. 1.35 AC test voltage for use with capacitors in transistorized circuits. 10,000 Megohm at 30 volts for low-voltage check and 50,000 megohm at 150 volts for high voltage check. Electrolytics checked directly on 4-range Ma. scale (0-60Ma) Magic eye tube for balancing. 3-ranges of DC polarization, variable to 600VDC. Instant discharge automatically protects the user. Charcoal-gray panel with white designations. 8⅞x14⅝x6⅛". For operation from 115VAC 50-60 Hz. Shpg. wt. 13 lbs.

62F632. NET **99.50**

CLAROSTAT TEST EQUIPMENT

POWER RESISTOR DECADE

Model 240C. This handy power resistor box permits changing resistance values in a working circuit at the flip of a switch. Saves time and work in developing new circuits where some values are unknown. Ideal for checking voltage regulation of power supplies, since load can be varied over a wide range. Handles any value from 1 to 999,999 ohms, in steps of 1 ohm. Power rating is 225 watts. Maximum voltage should not exceed 1,000 VDC or 660 VAC. Housed in ventilated metal cabinet. Size: 13" x 8½" x 5¾". Shpg. wt. 11 lbs.

62F730. NET. **110.00**

PRECISION RESISTANCE DECADE BOX

Used whenever accurate steps of resistance values are required. Two-piece molded housing. Temp. coefficient less than 100 ppm. Temp. 40°C at rated current. Approx. shpg. wt. 3 oz. per individual unit.

Stk. No.	Type	Total Res. of Decade	Res. Per Step	Accuracy	Max. Current	NET
62F723	260-1	0.9	0.1	±5%	1 amp	3.95
62F724	260-2	9.0	1.0	±1%	350 ma	3.95
62F725	260-3	90	10	±1%	100 ma	3.95
62F726	260-4	900	100	±1%	35 ma	3.95
62F727	260-5	9K	1K	±1%	10 ma	3.95
62F728	260-6	90K	10K	±1%	3.5 ma	3.95
62F729	260-7	900K	100K	±1%	1.0 ma	3.95

MILLEN TEST EQUIPMENT

GRID-DIP METER

Model 90651. Uses the calibrated RF oscillator principle. 2" G.E. meter reads oscillator grid current. Common use: To find resonant freq of non-energized tuned circuits. Other uses: Receiver tuned circuit align., determination of transmitter tuned circuit freq. with power off, oscillating detector. Range: 1.7-300 MHz. 105-125 v., 60 Hz with polypropylene carrying case which protects coils/probes and meter. 7x3⅜x3⅜". Wt., 3½ lbs.

97F220. NET. **78.50**

97F221. 90651-C. Case only **5.47**

Type 46721. Link probe. 220 KHz to 65 MHz.

97F231. NET. **2.22**

97F232. 46702 coil. 925-2000 KHz.
97F233. 46703 coil. 500-1050 KHz.
97F234. 46704 coil. 325-600 KHz.
97F235. 46705 coil. 220-350 KHz.
97F238. 46706 coil. 165-225 KHz.
All coils listed above. **NET EACH.** ... **9.40**

BEZELS AND FILTERS FOR CR TUBE

Made of black molded phenolic. With rubber cushion except*, green plastic filter scale and hardware. Wt. ½ lb.

No.	Type	For	NET
97F290	80071*	1" CR Tube	1.90
97F282	80072	2" CR Tube	2.28
97F283	80073	3" CR Tube	5.42
97F284	80075	5" CR Tube	10.50

BASIC OSCILLOSCOPE UNITS

Millen's complete self-contained portable oscilloscopes are basic components for permanent incorporation into more specialized equipment. As transmitter modulation monitors, no additional equipment or accessories are required. The well known trapezoidal monitoring patterns are secured by feeding modulated carrier voltage from a pickup loop directly to the vertical plates of the cathode ray tube and audio modulating voltage to the horizontal plates. By the addition of such units as sweeps, pulse generators, amplifiers, servo sweeps, etc., all of which can be conveniently and neatly constructed on companion rack panels, the original basic scope unit can be expanded to serve any conceivable application. Sensitivity: vertical 100 volts P to P; horizontal, 120 volts P to P. Controls: intensity, Focus, Horizontal Centering, Vertical Centering, Power and Horizontal Input Selector. For 105-125 volts, 60 Hz AC. Less CR tube. Shpg. wt., 13 lbs.

Model 90902. 2" **scope. Size, 19x3½x9¼".** Uses tube types 2BP1 or 2BP11.

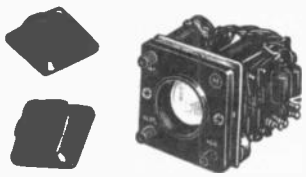
97F280. NET. **80.00**

Model 90903. 3" scope. Size, 19x5¼x13½". Uses tube types 3KP1, 3KP4, 3KP7, 3KP11.

97F280. NET. **94.00**

Model 90905. 5" scope for 5UP1. Size, 19x7x16".

97F281. NET. **142.50**



1" OSCILLOSCOPE

90901. A miniature panel mounting **basic cathode ray oscilloscope. Uses a** 1CP31 CRT. Vertical deflection sensitivity of 1.7 volts r.m.s. per mm deflection or 4.7 volts peak to peak per mm deflection. Horizontal sensitivity is 2.5 volts r.m.s. per mm deflection or 6.9 volts peak to peak per mm deflection. The 1CP31 is a fixed focus tube so no focus control is required. Intensity and centering controls but no amplifiers, sweep, or power supply. Size 2¾x2¾x4⅝". Shpg. wt., 1 lb.

97F285. Less CR Tube. **NET**..... **26.40**

1CP31. Tube. To be used with 90901.

NET **29.95**

POWER SUPPLY FOR OSCILLOSCOPE

90202. Especially for use with model 90901. Input: 117 volts 50/60 Hz. Output: 750 volts DC at 3 ma. and 6.3 volts AC at 600 ma. Octal plug for input and output. Entire assembly is encapsulated. Size: 2x2⅛x5" high. Wt., 1¾ lbs.

97F291. NET. **26.30**

CATHODE RAY TUBE SHIELDS

No.	Type	For Tubes	NET
97F286	80042	2BP1	8.32
97F287	80043	3DP1 & 3BP1	11.00
97F288	80045	5BP1, 5GP1, 5HP1, 5NP1	24.70
97F289	80055	5CP1	24.70

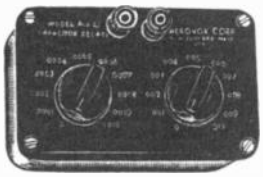
Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

AEROVOX DECADE BOXES

• Provide Accurate Standards of Resistance, Capacitance & Inductance

Type ALD-42

Type ARD-15



Type ACD-23

Type ARD-41

All units provide accurate standards of resistance, capacitance, and inductance. Ideal for laboratory and experimental use. Decade boxes of the highest quality are available in ranges most needed for electronic and electrical laboratories for a price below that of equivalent quality standards. Boxes are available in 11 units; 4 resistance decades, 3 capacitance decades, and 4 inductance decades. Face plates are black with white numerals for maximum legibility. Heavy duty construction of seamless, drawn steel and gray enamel housing insure trouble free operation and unimpaired accuracy. Resistance model **ARD-41** is housed in special high impact plastic case which is capable of rugged handling.

In "Use" column of the following table, C indicates the Capacitance Decade Box, L the Inductance Decade Box, and R the Resistance Decade Box. Except for ALD-42 the Capacitance Decade Boxes have operating ranges of 400 to 20,000 cps. ALD-42 has a range of 400 to 5,000 cps. The new decade box, ARD-41, has a range of 0 to 1.1 megohms in 1 ohm steps, combining all the three other resistance decades into one compact box. Multiple-dial Capacitance Decade Boxes have the highest value multiplier to the left so that readings are instantly visible.

CAPACITANCE

Stock No.	Mfr. Type	Use	Dielectric	Dials	Range	Steps	Accuracy ± 1st Dial	Accuracy ± 2nd Dial	Rating 1st Dial	Rating 2nd Dial	NET
62F1300	ACD-13	C	Mica	2	0 to .011 mfd.	0.0001 mfd.	3%	3%	600 VDC 220 VAC	600 VDC 220 VAC	14.50
62F1301	ACD-23	C	Oil-Paper	2	0 to 1.1 mfd.	0.01 mfd.	3%	3%	600 VDC 220 VAC	600 VDC 220 VAC	16.50
62F1302	ACD-33	C	Oil-Paper	1	0 to 10.0 mfd.	1.0 mfd.	3%	3%	600 VDC 220 VAC	....	27.25

INDUCTANCE

62F1303	ALD-12	L	Toroidal	1	0 to 10 mh.	1.0 mh.	2%	.....	250 MaDC	.....	29.90
62F1304	ALD-22	L	Toroidal	1	0 to 100 mh.	10.0 mh.	2%	.....	79 MaDC	.....	
62F1305	ALD-32	L	Toroidal	1	0 to 1.0 hy.	100.0 mh.	2%	.....	25 MaDC	.....	
62F1306	ALD-42	L	Toroidal	1	0 to 10.0 hy.	10.0 hy.	2%	.....	8 MaDC	.....	32.90

RESISTANCE

62F1307	ARD-15	R	Wire-Wound	2	0 to 110 ohms	1.0 ohm	5%	3%	1.0 Amp.	0.5 Amp.	15.15
62F1308	ARD-23	R	Wire-Wound	2	0 to 11 K	100 ohm	3%	3%	100 Ma.	50 Ma.	
62F1309	ARD-31	R	Carbon Deposited	2	0 to 1.1 meg	10 K ohm	1%	1%	5 Ma.	2 Ma.	
62F1310	ARD-41	R	Wire-Wound & Metal Film	6	0 to 1.1 meg	1.0 ohm	1%	1%	1st Dial 2 Ma. 2nd Dial 5 Ma. 3rd Dial 15 Ma.	4th Dial 50 Ma. 5th Dial 150 Ma. 6th Dial 500 Ma.	44.50

CORNELL-DUBILIER TEST EQUIPMENT

CDC

CDA

CDE

RDA

CDT

CAPACITOR AND RESISTOR DECADES

CDE decade instrument boxes provide a reliable and accurate source of precision selected values for breadboarding and substitution. Featuring common size heat and shock-resistant phenolic individual boxes, direct-reading value ranges, six-way molded nylon terminal posts, and calibration chart for capacitance boxes, these handy units are widely used in electronic and electrical application work. Size: 3 1/16 x 5 x 3 5/16, weight 2 lbs.

Stock No.	Model	Cap Mfd.	Steps Mfd.	1-9	10-24	25-49	50-up
62F629	CDA	0.011	0.0001	14.95	13.60	12.50	11.55
62F645	CDB	1.1	0.01	16.35	14.95	13.75	12.65
62F646	CDC	10.0	1.0	27.25	24.95	22.90	21.10
62F647	CDE	150	10	14.20	13.20	11.95	11.05

Stock No.	Model	Res. Ohms	Steps Mfd.	1-9	10-24	25-49	50-up
62F655	RDA	1-110	1	15.35	14.05	12.90	11.90
62F656	RDB	100-11K	100	15.65	14.30	13.15	12.15
62F654	RDC	10K-1meg	10K	15.65	14.30	13.15	12.15

CDT TANTALUM BOX

CDT decade capacitors provide a reliable source of precision selected capacitance for substitution purposes in a wide variety of applications. Features CDE capacitors, smooth range selection, & heat- and shock-resistant phenolic cases. Capacitance tol: ±5% (10-100 mfd.), ±10% (100-1000 mfd.). Capacitor Dielectric: Polarized Tantalum Foil—10-100 mfd. Plain; 100-1000 mfd. etched. Max. Voltage: 50 VDC Polarized. Capacitance, mfd.: Min.—10; Max.—1100; Step—10. 2 Rotary Switches. Shpg. wt. 7 lbs.

62F638. NET 99.50

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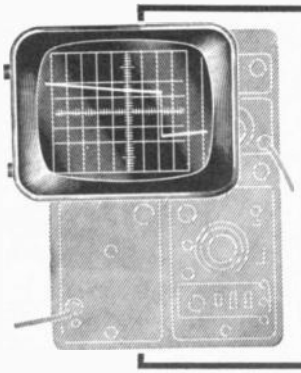
Test Equipment



EDNA-LITE

- SPECIAL NEW LOW PRICE
- 5" CRT OPTICAL IMAGE EXPANDER

Model OS-STV-2. Stereoramic Oscilloscope Image Expander attaches simply, quickly to all standard 5" lab type oscilloscopes, including Tektronix, Hewlitt-Packard, etc. Supplied complete with mounting bezel. Size: 8x8x6". Shpg. wt., 9 lbs.
62F097. NET **99.00**

Model OS-STV-3. Same as Model OS-STV-2 except with swivel type mount and bezel.
62F098. NET **105.00**

Model OS-STV-GS. Polarizing Glare Shield to eliminate extraneous light and remove interference from viewing area. Attaches instantly directly to front of Image Expander. Shpg. wt., 4 lbs.
62F096. NET **19.95**

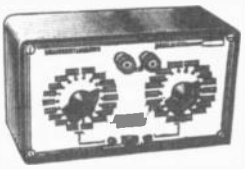
Model OS-STV-CC. Storage Case for Image Expander. Completely portable. Made of durable fibre with extra metal protected corners. Size: 9⅝x9⅜x7⅛". Shipping wt., 5 lbs.
62F099. NET **14.95**

EICO

● *NEW SOLID STATE ELECTRONIC KITS*

Create with your own hands a wide variety of electronic devices. Easy to build electronic kits that require no technical knowledge or experience to enjoy building. All kits are completely professional. Only the complexity has been reduced. Kits feature: solid state circuitry, printed circuit boards and step by step instructions for easy assembly. Projects are expandable by adding kits together. Your imagination is the only limitation.

Stock No.	Type	Kit Description	Transistors	NET
63F017	EC-100	Electronic Siren	3	4.95
63F018	EC-101	Electronic Burglar Alarm	3	6.95
63F019	EC-102	Electronic Fire Alarm	3	6.95
63F020	EC-200	Electronic Intercom	2	3.95
63F021	EC-300	Audio Power Amplifier	3	4.95
63F022	EC-400	Electronic Metronome	2	3.95
63F023	EC-500	Tremolo	3	8.95
63F024	EC-600	Electronic Light Flasher	2	3.95
63F025	EC-700	Electronic "Mystifier"		4.95
63F026	EC-800	Photo Cell Nite Lite	2	4.95
63F027	EC-900	Power Supply		7.95
63F028	EC-1000	Electronic Code Osc.	2	2.50

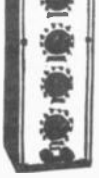


MODEL 1100-K EIA RESISTANCE SUBSTITUTION BOX KIT

Permits rapid substitution of a wide range of EIA resistance values in an operating circuit to determine the resistance required for best performance . . . determines the value of unmeasurable resistors. 36 EIA 1 watt, 10% resistors, arranged in Hi and Lo decades give resistance ranges of 15 ohms-10 megs in decade multiples of 15, 22, 33, 47, 68 and 100 ohms 5-way jack-top binding posts for connection of practically any type of test lead. Molded black bakelite cabinet with 2 color deep etched aluminum panel. With all parts, less solder and leads. Size 3¾x6½x3½". Wt., 2 lbs.
62F809. NET **8.95**
Model 1100W. As above but Factory wired.
62F807. NET 13.95

MODEL 1020K POWER AND BIAS SUPPLY KIT

Power supply includes power transformer, full-wave silicon diode rectifier circuit, heavy R-C filtering, plus two power transistors in a unique cascaded filter circuit. Ripple is reduced to 1/200 of 1% at full load. Provides continuously variable output voltage to 30 volts monitored by a dual range voltmeter (0-6, 0-30 VDC). Max. load current varies from 150 ma. in the 1-12V range to 300 ma. in the 24-30V range. Uses include hum-free operation of sensitive transistor radios, hearing aids, preamp, instruments. As a variable bias supply for transistors or tubes in circuit development; to offset AVC and AGC voltages in the alignment of TV and radio receivers or to cut off the color burst amplifier in color TV adjustment. Grey case. Size: 5x4x5½". Wt. 5 lbs.
62F856. NET **25.95**
Model 1020. As above but Factory wired.
62F857. NET **34.95**



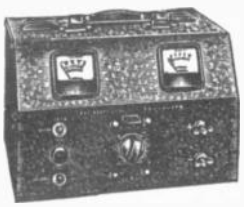
1171-K RESISTANCE DECADE BOX KIT

Permits changing resistance in a working circuit at the flip of a switch. May be used alone or in conjunction with the model 950-K RC bridge. Supplies resistance values from 0 to 99,999 ohms. Uses ½% resistors. Separate comparator position and binding posts permit instant substitution. Steel case, 3½x12x3". With diagrams, instructions and all parts; less solder and leads. Wt., 3 lbs.
62F795. Kit. NET **24.95**
Model 1171. As above but Factory wired.
62F802. NET **34.95**

MODEL 1064K BATTERY ELIMINATOR AND CHARGER KIT

Delivers smooth, undistorted DC necessary for servicing transistorized equip., or for any application where minimum ripple, is essential. Two DC voltage ranges: 0-8v. and 0-16v. Automatic switching of appropriate ammeter range as you select either of the 2 voltage ranges. Separate volt meter and dual-range ammeter for more accurate reading. 105-125v. AC, 50/60 Hz; 150 watts. Grey steel cabinet. Size: 8½x5¾x7½". Same current, ripple ratings as Model 1060. Wt. 16 lbs.
62F870. NET **49.95**
Model 1064. As above but Factory wired.
62F871. NET 59.95

MODEL 1060-K BATTERY ELIMINATOR AND CHARGER KIT



Battery substitute for operation and servicing of battery operated transistorized, also "hybrid" and vac.-tube equip. Separate output ammeter and voltmeter. Has extra low ripple filter. Output 0-8V, @ 10 amps continuous, 0-16V @ 6 amps continuous 0.3% ripple @ 2 amps. Size: 8¾"x:0½"x7¾". With instructions, less leads 18 lbs.
62F852. NET **42.95**
Model 1060. As above but Factory wired and tested.
62F853. NET 52.95

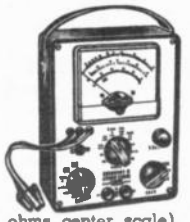
1120K CAPACITOR SUBSTITUTION BOX

Enables rapid substitution of a wide range of RETMA capacitance values from .0001 to 0.22 mfd. in an operating circuit to determine value needed for optimum performance and to find value of badly damaged or illegible capacitors. Minimum accuracy 10%. Convenient 5-way, jack top binding posts. Size: 3¾" high x 6½" wide x 3½" deep. Shipping weight, 2 lbs. Less leads.
62F840. NET **7.95**
Model 1120W. As above but Factory wired.
62F841. NET **12.95**

MODEL 1180-K CAPACITANCE DECADE BOX KIT

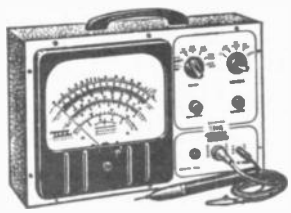
Has a range of 100 mmf to .111 mfd. Features ±1% silver mica condensers. High quality ceramic wafer switches, low-loss dielectric terminal board and 5-way binding posts. Rated at 500 VDC. Steel cabinet 9x3½x3½". Less solder and leads. Shpg. wt., 3 lbs.
62F797 NET **17.95**
Model 1180. As above but Factory wired.
62F798. NET **24.95**

TRANSISTOR AND CIRCUIT TESTER KIT



Model 680K. Transistor and circuit tester providing accurate measurement of basic transistor and diode characteristics required for quality testing, plus VOM facilities. Measures: DC current 0-50 ua, 0-500 ua, 0-5 ma, 0-50 ma, 0-500 ma; DC voltage 0-5 V, 0-50 V; resistance 0-2K (12 ohms center scale), 0-200K (1200 ohms center scale), 0-20 megohms (120K center scale); ICBO and ICEO for signal and power transistors; DC beta 2-30, 20-300; AC beta (indirectly). Overall accuracy: 3%. 3½" clear plastic face 50 ua meter. Polished bakelite case and brushed aluminum panel. 6¾Hx5¼Wx3"D. Uses 4 size AA, 1 size C batteries. With instructions. Shpg. wt., 3 lbs.
62F881. NET **25.95**
Model 680. As above, factory wired and tested.
62F882. NET 39.95

MODEL 249-K DELUXE PEAK-TO-PEAK VTVM KIT

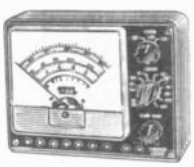


Has the same ranges and exclusive design features as the Eico Model 232 including the 1% precision resistors, external calibration, zero center for alignment purposes, one zero adjustment for all functions and ranges, and readability of a large 7½" meter. Satin finish etched panel with contrasting knobs. Complete with all parts less solder. Size: 8½x 13x5". For 110-120 V. 50/60 hz. AC Shpg wt, 10 lbs. With Uni-Probe.
62F813. NET **39.95**
Model 249. As above but factory wired and tested. Ready to use.
62F814. NET 59.95

MODEL 565-K 20,000 OHMS/VOLT MULTIMETER KIT

New extra-sensitive 20,000 ohms per volt instrument kit featuring 31 different full scale ranges. AC-DC and output volts: 0-2.5, 10, 50, 250, 1000, 5000 (DC at 20,000 ohms per volt, AC at 1,000 ohms per volt). DC current: 0-100 microamps, 10 ma, 100 ma, 500 ma, 10 amp. Ohms: 0-2000, 200,-000, 20 meg. 5 db ranges: —12 to +55. Large 4½" meter with 50 microamp D'Arsonval movement. Hand-calibrated and tested rectifier. High impact bakelite case, 6¾x5¼x3". With diagrams, instructions, all necessary parts; less solder. With batteries less heads. Wt . 3 lbs.
62F773. NET **24.95**
Model 565. As above, but factory wired.
62F774. NET 29.95

MODEL 567K VOM KIT



Engineered for maximum versatility not only for the high voltages used in vacuum tube circuits, but its 0.25 volt range, makes it ideal for use in semiconductor circuits. 4½" 50uA sensitive meter is protected against accidental overload damage. DC voltage measurements can be made from 0.005 to 5000v, while DC cvurrent can be read 1 uA to 10 amperes; AC voltages read to 5000V from 10 to 50,000 Hz with dB range from —12 to +55dB. Black makelite case. 6¾x5¼x3". 3 lbs.
62F908. NET **34.95**
Model 567. As above but factory wired and tested.
62F909. NET 44.95

MODEL 566-K 1000 OHMS/VOLT MULTIMETER KIT

High-efficiency instrument with 38 full scale ranges. AC-DC and output volts: 0 to 1, 5, 10, 50, 100, 500 and 5000 with 1,000 ohms per volt sensitivity on both AC and DC ranges. AC/DC current: 0-1 ma, 10 ma, 0.1 amp, 1 amp. Ohms: 0-5,000, 100,000, 1-meg. 6 db ranges: —20 to +69. Large 4½" 400 μa D'Arsonval meter movement. Features new low minimum battery-drain ohm ranges. Dual rectifier has separate low and high voltage calibration in AC ranges. High-impact bakelite case, 6¾x5¼x3". With instructions, battery, less leads, less solder. Shpg. wt., 3 lbs.
62F775. NET **16.95**
Model 566. As above, but factory-wired and tested. Wt., 3 lbs.
62F776. NET 22.95

AC VOLT-WATT METER KIT

Model 261K. Excellent for audio design and production line applications. Provides measurements of amplifier gain/response, amplifier power output, network response and output level. Specs. VOLTMETER: Ranges: 0.01, 0.03, 0.1, 0.3, 1, 3, 10, 30, 100, 300, 1000 RMS volts. Frequency reponse: ± 0 db 10 hz-150 khz, —3 db at 500 hz, Input Impedance: 2 Megohm; Accuracy: ±4%. Specs, WATTMETER: Ranges: 0.15 mw, 1.5 mw, 15mw, 150mw, 1.5W, 15W, 150W; Frequency Response: ± 0 db, 10 hz—100 khz. Accuracy: ±5%; Internal loads: 4, 16, 600 ohms for 40W and 8 ohms for 80W. External Loads: 4, 8, 16, 600 all to 150W. The DB scale reads directly in dbm on 600 ohms load (—20 to +2 db). Relative voltage db on the same scale (0 db = 0.774 volt). Successive power ranges are 10 dbm apart. Power: 105/125V, 50/60 hz. 15W. Size: (HWD) 8½x5¾x7". With instructions. Shpg. wt., 7 lbs.
62F868. NET **49.95**
Model 261, As above, factory wired and tested.
62F867. NET 79.95

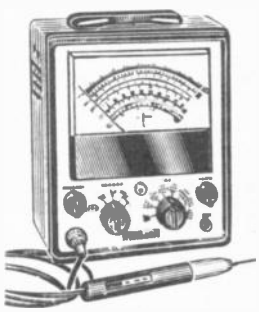
MODEL 250K AC VTVM AND AMPLIFIER KIT

Model 250K. High sensitivity, wide-band AC VTVM and AMPLIFIER of laboratory accuracy and quality. It measures AC voltage from 100 microvolts to 300 volts in 12 ranges. A function selector switch on the panel converts the instrument to a wide-band amplifier with a gain of 60 db on the 1 MV range, and a maximum output of 5 volts RMS. Stabilized power supply incorporate voltage regulator; DC-biased filaments and hum-adjust pot. Voltmeter voltage ranges: 1, 3, 10, 30, 100, 300 RMS m.v. and 1, 3, 10, 30, 100, 300 RMS volts. Max. Hum and Noise. —40 db @ 2 mv in. Amplifier max. output v. 5 RMS v. Power Reg. 105-125 VAC, 50/60 hz. 15 watts drain. Grey steel cabinet. Kit complete with instructions. Size: (HWD) 8½"x5¾"x7" Wt., 9 lbs.
62F874. Model 250K. Kit. **NET** **49.95**
62F875. Model 250. Factory wired and tested. **NET** 79.95

MODEL 232-K PEAK-TO-PEAK VTVM KIT

Features high circuit stability and accuracy. Uses 1% precision resistors throughout. Directly measures p-p voltage of complex and sine waves on scales of 0-4, 14, 42, 140, 420, 1,400 and 4,200 volts. Resis. ranges: 0-1,000 megs in 7 steps. 7 non-skip ranges on the 4 functions of: +DC volts, —DC volts, AC volts, Ohms. Frequency response: 30 Hz to 3 mc. Up to 250 mc with PRF-11 probe. DC-RMS sine voltage ranges: 0-1.5-5-15-50-150-500-1,500 volts. 4½" meter in a burnout-proof circuit. Zero center for TV-FM discriminator alignment. Input impedance 11 megohms. Calibrates without removal of cabinet. Complete with all parts, less solder. Compact in size: 8½x5x5". For 110-120 V. 50-60 Hz AC. Kit complete with instructions. Wt., 5 lbs. With Uni-Probe, ground lead and battery.
62F811. NET **29.95**
Model 232. As above but factory wired and tested. Ready to use.
62F812. NET 49.95

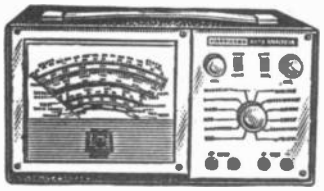
MODEL 235K VTVM KIT



Excellent for servicing all FM, AM, mono/color TV, and precision electronic equipment; especially qualified for the exacting measurements found in solid-state circuitry. Measures as little as 0.01 v on large easy-to-read 6" meter on its' ½ volt scale. Both peak-to-peak and RMS AC voltages are read on separate scales in 7 overlapping ranges up to 4.2KV. Frequency response: 30Hz to 3MHz. High input impedance (more than 11 megohms) assures negligible circuit loading in precision DC voltage measurements from 0.0. volt to 1.5KV in 8 overlapping ranges. Features: ceramic switches to assure non-arcing at all inputs, 1% tol. resistors, zero center for TV-FM sound detector alignment, and others. 8½" x 7½" x 5". 9 lbs.
62F906. NET **49.95**
Model 235. As above but factory wired and tested.
62F907. NET 64.95

EICO® Test Equipment & Kits

● *NEW* 888 SOLID STATE UNIVERSAL ENGINE ANALYZER KIT



• Tunes Up and Trouble-Shoots Any Car or Boat

Totally portable, compactly self contained, self powered engine analyzer. Useful for all 6- or 12-volt; 4, 6, or 8 cylinder engine; negative or positive ground. Checks storage battery, generator, alternator, voltage regulator, alternator diodes, starter, starter solenoid, distributor, points, condenser, ignition coil, spark plugs, dwell angle, carburetor, all electrical wiring and accessories. Includes dwell angle meter function, tachometer function and voltmeter function with 2 accurate scales for 0-3.2 V and 0-16 V. Ammeter and ohmeter function are also offered. Requires 4 "D" batteries, a sturdy metal cabinet ,and a "how to use" manual with both test and calibration leads. 5¾ x 11½ x 5". Weight 6 lbs.

62F902. Model 888K. Kit. **NET** **44.95**

62F903. Model 888. As above, factory wired & tested. **NET** **59.95**

MODEL 378K AUDIO GENERATOR KIT

Extreme versatility and positive error elimination are now yours for any application where a stable, accurate audio sine wave must be used. Precisely metered output controlled by 8 position decade and fine attenuators. Highly accurate, switch - selected frequencies from 1hz to 110 Khz in 1 hz steps. Positive setting detent switches need no interpretation. Frequency accuracy: ±5%. Distortion less than 0.1% (20hz-20kc). Output voltage ranges: 0-3, 10v into hi-z (10k min.); 0-.003, .01, .03, .1, .3, 1V into ext. 600Ωload—or with int. load into ext. hi-z. Output meter accuracy: ±5% of full scale. Power requirements: 120V, 50/60 hz, 40 Watts. Size: (HWD); 8½" x 12½" x 9". Weight, 16 pounds.

62F900. Kit. **NET** **49.95**

Model 378. As above, factory wired & tested.

62F901. NET **69.95**

MODEL 536K 1000 OHMS/VOLT MULTIMETER KIT

1000 ohms/volt multimeter kit with extra-extended ranges from 0 to 1 volt up to 0-5000 volts, 31 different full scale ranges. AC-DC volts: 0 to 1, 5, 10, 50, 100, 500, 5000. DC current: 0-1 ma, 10 ma; 0.1 amp, 1 amp. Ohms: 0-5,000, 100,000, 1 meg. 6 db ranges: —20 to +69. Large 3" 400 μa meter movement. Low minimum battery-drain ohm ranges. Dual rectifier has separate low and high voltage calibration in AC ranges. High-impact bakelite case, 6¼x3¾x2¾". With instructions and battery less solder and leads. Shpg. wt. 3 lbs.

62F778. NET **14.95**

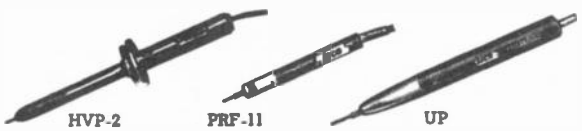
Model 536. As above, but factory-wired and tested. Wt., 2 lbs.

62F777. NET **18.95**

Type 610. Test lead kit for above.

35F929. NET **1.80**

TEST PROBES



HVP-2 **PRF-11** **UP**

MODEL HVP-2 HIGH VOLTAGE PROBE

HV probe extends range of VTVM's and VOM's to 30,000 volts.

62F815. With 740 meg. multiplier resistor for use with Model 221 or other 25 meg. VTVM's.

NET **6.95**

62F850. With 1090 meg. multiplier resistor for use with Models 222, 232, 249 or other 11 meg. VTVM's.

NET **6.95**

VTVM PROBES

Model PRF-11. An RF probe for all VTVM's except 221. ½ lb

62F816. Kit. **NET** **3.95**

62F817. Wired. **NET** **4.95**

Model PRF-25. An RF probe for use with Model 221. ½ lb.

62F818. Kit. **NET** **3.95**

62F819. Wired. **NET** **4.95**

MODEL UP UNI-PROBE

Dual-Purpose AC/DC/Ohms Probe. Supplied less series isolating resistor or connector. Use 1 meg. for all VTVM's except 221, use 15 meg. for 221. VTVM's except 221 take MC1F connector; 221 must be modified.

62F864. Kit. **NET** **4.95**

62F865. Wired. **NET** **6.95**

MODEL 944-K FLYBACK TRANSFORMER & YOKE TESTER KIT

• Checks inductive windings on chokes, transformers, coils, relays!

Quickly and accurately troubleshoots horizontal circuits of TV receivers. Allows positive check of flybacks and yokes, in or out of the set. Has three separate colored "Good-Bad" scales on a large easy to read 4½" meter which operates on the extremely sensitive grid-dip principle. Shows up a single shorted turn. Checks inductive windings on many transformers, chokes, coils, solenoids, relays, etc. May be used as a proportional AC ohmmeter. Gray wrinkle steel case. 7x5x4". With all parts, 105-125 V. 60 hz. AC. 5 lbs.

62F832. Kit. Complete with instructions. NET **25.95**

62F833. Model 944. As above, but wired and tested. **NET 34.95**

DELUXE MODEL 147-K MULTI-SIGNAL TRACER KIT

Transformer operated for isolation and safety. High gain RF and low gain audio with both visual and aural monitors, magic eye indicator and 5" PM speaker. Calibrated wattmeter circuit (fused) reveals abnormal total wattage consumption, open, or intermittent filament circuit, etc. Permits RF, IF and AF signal tracing in FM, AM and TV sets. Noise localizer circuit. Size 8x10x4¾". 105-125 volts AC, 50-60 hz., 40 watts. Kit. Complete with instructions. Shpg. wt. 10 lbs.

62F809. NET **29.95**

Model 147. As above, but factory wired and tested.

62F810. NET **49.95**

UTILITY TESTER KIT MODEL 540-K

• Neon lamp AC leakage test circuit

• Multi-range AC/DC voltmeter

A versatile instrument that can be used as a multi-range AC/DC voltmeter, an ammeter, an ohmmeter, a wattmeter, and a leakage detector. 3½" meter. All voltage ranges (0-7.5-15-150-300 volts) and current range (0-15 amps) are AC/DC. 0-1000 direct reading ohms. Neon lamp ac leakage test circuit permits continuity check of resistors between 1000 ohms and 2 megohms and capacitors above .0005 mfd. Direct reading of power line voltage up to 300 volts AC/DC. Panel outlet permits metering current up to 15 amps drawn by any appliance. Provides "good-bad" readings on 6 or 12 volt storage batteries. Size: 3¾x6½x3½". With instructions. 3 lbs.

62F846. NET **12.95**

Model 540. As above, factory wired and tested.

62F847. NET **15.95**

IMPORTANT NOTE:

All probes supplied less connector — requires MC1F for EICO VTVM's (except 221).

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

MODEL 965 FARADOHM BRIDGE/ANALYZER

Model 965. Nine-range low-voltage (0.45 VAC) capacitance-resistance bridge safely measures even 1-volt electrolytics. Capacitance range 5 pf-5000 μf; resistance range .5 ohm-500 megs. Metered bridge balance, leakage test voltage (6 DC VTVM ranges; 1.5-500V), leakage current (11 DC VTAM ranges: 0.15 μA 15 mA). DC VTVM (10 megohm input Z) and DC VTAM (75 mu drop) both externally usable. Electronically filtered leakage test supply with less than 8.5% ripple and V/A metering is ideal for transistor/diode testing supplying transistor circuit breadboards, or as a transistor battery eliminator. Complete overload protection. Requires 115 VAC, 60hz, 32 watts. 8½x12x9"; wt. 18 lbs.

62F782. Model 965. Wired and tested. **NET** **129.95**

Model 965

MODEL 369-K TV/FM SWEEP MARKER GENERATOR KIT

The EICO 369 feeds sweep signal only to i.f. strip being aligned. At the output end of the circuit a demodulator cable picks off the signal, demodulates it, and feeds the demodulated signal to a mixer stage inside the generator where the markers are added. It means that a TV technician can align TV and FM i.f. strips faster and more accurately. Five Ranges: 75-220 Mhz; 36-95 Mhz; 16-42 Mhz; 6-16 Mhz and 3-7.5 Mhz. All five ranges are fundamentals and tuning the desired frequency is simplified by a 6:1 vernier dial and a 330° scale. Output impedance is 50 ohms. A 6BQ7-A sweep oscillator and rf output cathode follower, a 12AT7 variable and crystal marker oscillator, a 12AX7 blanking diode and first agc amplifier, a 6DR7 second agc amplifier and agc series regulator. For 110-120v A.C. Shpg. wt. 18 lbs.

62F894. NET **99.95**

62F895. Model 369. Factory wired. **NET** 149.95

Model 369-K

MODEL 667-K DYNAMIC TUBE AND TRANSISTOR TESTER KIT

A mutual conductance tester with a peak emission test to give a single reading of tube quality. Spots bad transistors by gain and leak tests. Tests 5 & 7-pin Nuvistors; 7 & 8-pin subminiature, 7, 9, 10-pin miniature, octal, loctal, electronary and VR tubes; compactrons, novars, and pilot lights. 4½" meter indicates leakage betwen elements or Beta current amplifications of NPN, PNP transistors. Multi-circuit lever switch sets up plate, screen, and voltage controls. 13 pushbuttons alternate element setup of tube. Steel case. 12" x 15" x 4½". Wt. 22 lbs.

62F889. NET **79.95**

62F890. Model 667. Factory wired. **NET** 129.95

Model 667-K

MODEL CRU UNIVERSAL CRT TEST ADAPTER

In conjunction with testers 667 and 628. Tests black and white (& color CRT's,) 70, 90 & 110°. Checks tubes without removal from set. Complete with 4-foot interconnecting test cable.

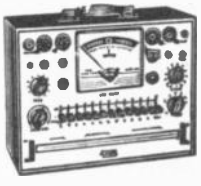
62F891. NET **9.95**

MODEL 628-K TUBE TESTER KIT

Simple test set-up procedure for checking emission, shorted elements, open elements, and continuity. 13 individual lever-type element switches for complete flexibility. 4½" meter with 3-color REPLACE-WEAK-GOOD scale, 0 to 100 scale for matching. Tests 7-9- and 10-pin miniatures, octal, loctal, 5- and 7-pin nuvistors novars, and compactrons. Types tested include series string, magic eye VR's. Adapter available for testing CRT's, both color and black and white. New 3-column wide roll chart for extra tube listing capacity. Snap-out chart window. Pilot light test socket (contact type). Line adjust control. Type of Tube Merit Test: Cathode conductance (emission). Tube Merit Indicator: Size (HWD): 9½" x 12½" x 4¼". Shpg. wt., 11 lbs.

62F892. NET **44.95**

62F893. Model 628. Factory wired. **NET** 59.95



Model 628-K

TEST ADAPTER KIT

Adapts Models 628 and 667 tube testers for testing 4, 5, 6 or 7 pin tubes. (Older types).

62F765. Model 615K Kit. NET **5.95**

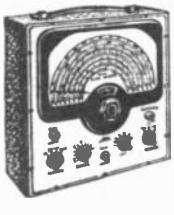
62F766. Model 615. Factory Wired. **NET** 11.95

MODEL 315-K SIGNAL GENERATOR KIT

Boosted range oscillator circuit covering the full range of 75 hz to 150 hz. 4-step RF shielded output attenuator. Seven separate calibrated scales with accuracy better than 1%. Internal 400 Hz pure sine wave audio signal generator modulates RF and is available for external audio testing with AF attenuator. Provision for external modulation. 0-100 vernier scale. Triple shielding for extremely low leakage output; copper plated chassis fully shielded from cabinet; specially shielded attenuation controls; line filter specially shielded. Uses: 6C4, 7F7, 6X5, VR-150. Steel case, 13x12x7". With diagrams, instructions, all parts; less solder. For 105-125 v., 50-60 Hz. Wt. 18 lbs.

62F759. NET **59.95**

62F760. NET. Factory wired 79.95



Model 315-K

MODEL 377-K AUDIO GENERATOR KIT

Sine wave coverage from 20-200,000 Hz in 4 ranges individually calibrated on panel. Complete square wave coverage from 60-50,000 Hz (5% round-off at 50 kc), read on same scales as sine wave. Response ±1.5 db from 60 Hz to 150 hz. Wien bridge-type oscillator for high power output. Continuously variable power output: 100 mw into rated load (10 volts across 1,000 ohm load). Rated load impedance. 1000 ohm resistance. Distortion only 1%. Hum less than 0.4% of output. All bridge resistors 1% accurate. Uses: 1-6X5, 1-6SJ7, 2-6K6, 1-6SN7, 105-125 v., 50-60 Hz. Calibration accuracy: ±3% or 1 cps. Aluminum panel, gray steel case, 11⅛x7⅝x7⅛". Shpg. wt., 13 lbs.

62F769. NET **39.95**

62F770. NET Factory wired. 54.95

Model 377-K

324-K RF SIGNAL GENERATOR KIT

For IF-RF alignment signal tracing, trouble-shooting of AM, FM and TV. Marker generator for alignment of hi freq. TV IF's. Extended fundamental freq. range from 150 Mhz to 145 Mhz in 6 bands. 7th calibrated harmonic band from 111 to 435 Mhz. Colpitts RF oscillator, directly plate-modulated by cathode follower. With all parts; full instructions. 8x10x4¾". 10 lbs.

62F838. NET **32.95**

62F839. NET Factory wired. 44.95

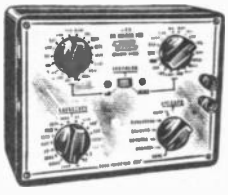
Model 324-K

R-C COMBINATION BOX KIT

Model 1140-K. Combines Model 1100-K and Model 1120-K in one box for selection of either R alone, C alone, or series or parallel combinations of R and C (1350 combinations). Includes all EIA resistance values from 15 ohms to 10 megohms and all EIA capacitance values from .0001 to 0.22 mfd. Min. accuracy ±10%; resistors 1 watt carbon and capacitors silver-mica or molded/impregnated plastic, most rated at 600 volts. May be substituted in operating circuit to determine RC combination value, or just R or C value, needed for optimum performance. 5-way jack top binding posts. Satin-aluminum front panel. Shipping weight, 3 lbs.

62F860. NET **14.95**

62F861. Model 1140. Wired and tested. **NET** 23.95



Model 1140-K

EICO® Test Equipment and Kits

MODEL 427K GEN. PURPOSE 5" OSCILLOSCOPE KIT

The Model 427K gen. purpose oscilloscope; 4-position frequency compensated vertical input attentuator. Internal zener-diode calibration voltage. Astigmatism, Focus and Intensity Controls on panel. Sharp, clean trace free of blooming. Instantaneous, drift free V & H positioning. Vert. amp. direct-coupled and pushpull throughout (6 stages in 3-push-pull pairs). Vert. Amp: +1, —3db from DC to 500kc, —6db at 1 Mc; sensitivity 10my P-P or 3.5mv rms/cm. Horiz. Amp: +1, —3db from 2 cps to 450kc; sensitivity 0.5 v P-P or 0.18 v rms per cm. Sweep Circuit: Recurrent sweeps from 10 cps to 100 kc in 4 overlapping ranges: min ratio of forward sweep time to retrace time 15:1 sync may be int pos. int neg. 60 hz or ext. Power Req: 105-125 v 60 hz 55W drain. Dim: 12½x8½x16 7/16". Kit is complete with all parts instructions and diagrams. Shpg. wt. 23 lbs.

62F885. NET **89.95**

62F886. Model 427. Factory wired and tested. **129.95**

MODEL 430K-3" OSCILLOSCOPE KIT

Compact and lightweight general purpose with 3" flat face CRT and mu-metal neck shield. V Ampl: Flat from 2 c/s to 500kc. Sensitivity 25 mv/cm rms. 2 position LO-HI 100/1 frequency compensated coarse attentuator; input impedance 1M ohm shunted by 30 pf. H Ampl; +1, —3db 2 hz to 300kc. Sensitivity 0.25 v/cm. Recurrent sweeps from 10 c/s to 100 kc in four overlapping ranges external or internal synchronization; synchronization is fully automatic on all ranges; full retrace blanking; 60 c/s sine wave sweep, and EXT HORIZONTAL input available at switch positions of the SWEEP RANGE switch. Intensity modulation (Z-axis) input impedance 2M ohms 25 pf 3V RMS required for blanking beam. Power 105-125Vac, 60 watts. Size (HWD) 8½x5¾x11½". Shpg. wt., 15 lbs.

62F896. NET **79.95**

Model 430. Same as above but, factory wired.

62F897. NET 109.95

MODEL 435K DC WIDEBAND 3" OSCILLOSCOPE KIT

Dc to 4.5Mc flat response for reproduction of 3.58 Mc. sync burst and oscillator signal in color television servicing. Distortionless V&H trace and retrace blanking. Directly coupled push-pull vertical amplifier, eliminating low frequency shift and distortion in wave forms. Zener diode control of square wave calibration. Sweep range 10 cps. to 100Kc. in four ranges with vernier adjustment. Automatic sync limiter and amplifier. V-amp. +1 —3 db from Dc to 4.5 Mc response and 18Mv/Cm RMS (50MvP-P) sensitivity Input 1 megohm shunted by 35 pf Square wave 200 Mv P-P ±5%. Vert. attenuator 1, 10,100 and 1000 positions. 3V blanking at 2.2 megohms. Sawtooth output 10V at 10 to 100 Kc P-P Variable output impedance to 300 ohms. 9 tubes plus silicon diode and Zener diode with WX5013P1 3" anti-bloom CRT. 8½x5¾x12⅝". Shpg. wt., 18 lbs. Model 435K.

62F779. NET. **109.95**

Model 435. As above, but factory wired and tested.

62F780. NET 159.95

5" OSCILLOSCOPE KIT 460-K

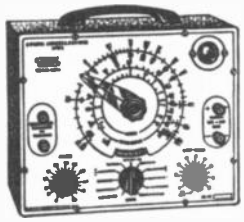
Tops for color, black and white use. +1 —3db from DC to 4.5 mc., usable to 10 mc., featuring DC amplifiers. Vert. Sens. 25 mv/in. push pull thru-out. Sweep freq.: 10 cps to 100 kc, low sweep with ext. condenser. Automatic sync limiter and amp. eliminates sync voltage adjustment. 60 cps variable phase sine sweep. Pre-set TV V&H Filter screen with variable illumination. 4 freq. compensated attenuator positions up to 1000:1 on either direct or capacitive coupled input On front: int. mod., saw tooth output, 60 cps, ext. sync., ext. cap. jacks. For 105-125 v. Shpg. wt., 28 lbs.

62F842. NET **99.95**

Model 460. As above, but factory wired and tested.

62F843. NET 139.95

MODEL 950-K RC BRIDGE/R-C-L COMPARATOR KIT

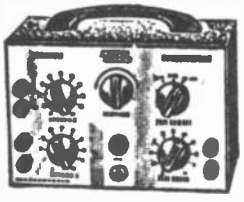


Measures and tests all resistors from 0.5 ohm to 500 megohms, and all capacitors from 10 mmfd to 5000 mfd Comparator Range for comparison of resistance, capacitance and inductance with a complementary component as a standard; has wide range of 400:1. Has continuously variable 0-500 volts DC source for capacitor leakage testing. For 110 volts, 60 cycles AC. In rugged steel case; 10x8x4¾". With all parts; less solder and leads. Wt. 9 lbs.

62F794. NET **25.95**

62F799. Model 950. As above, wired and tested. **NET** 34.95

MODEL 488K ELECTRONIC SWITCH KIT



Allows simultaneous observation of 2 patterns on a single scope screen. Direct comparison of voltage and current amplitudes, waveforms, frequencies and phase relationship. Separate amplitude control for each pattern. Continuously variable with negligible phase distortion. Positioning control permits superimposing. Each of the 3 switching rate ranges is continuously variable. Low: 10-100 hz. Med.: 50-400 hz. Hi: 250-2000 hz. Sinussoidal frequency response of 0-30,000 hz (useful to 300,000 hz at —2 db. 400 v. peak-to-peak maximum input. Input imped. of 100,000 ohms. Output imped. 50,000 ohms. With all parts except leads. Size: 6x8x6". Shpg. wt., 7 lbs.

62F830. Kit form. **NET** **25.95**

Model 488. As above but factory wired.

62F831. NET 39.95

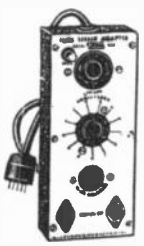
MODEL 955K IN-CIRCUIT BRIDGE-TYPE CAPACITOR TESTER

Permits out-of-circuit or in-circuit short check with shunt res. as low as 1 ohm. Reliable up to 2000ut 60 hz test freq. Max. test volt 6.3 v AC (open leads), dec. with dec. imp. Open test of capacitors as small as 15 uuf with inst. adjusted normally. For in-circuit testing, shunt res. may be as low as 35 ohms for capacitors above 250mmf (7K ohm at 15uuf). Capacity Meas.: From 0.1 to 50uf ±10% accuracy at any point on the capacity dial in either in-circuit or out-of-circuit meas. Oper. freq. of the bridge is 60 hz. Line Voltage: 105 to 130 v. AC, 60 hz 8 w drain. Dim: 8½"x5¾x"x6". With instructions less solder. Shpg. wt., 6 lbs.

62F883. Model 955K. Kit. **NET** **19.95**

62F884. Model 955. Wired & Tested. **NET** 39.95

MODEL 610 TUBE TESTER ADAPTER



Adapts Eico tube testers for the following new construction tube types: 5-pin Nuvistor, 7-pin Nuvistor, Novar, 10-pin miniature, and Compactron 12-pin. Cable from adapter plugs into 9-pin socket of tube tester. Cap terminal on adapter accepts grid cap lead from tube tester. Included are roll chart supplements for both the 625 and 666 tube types listed above. Housed in a steel case with aluminum panel 1¼x2½x6". Shpg. wt., 1 lb.

62F879. Model 610K. Kit. NET **5.95**

Model 610. As above but factory wired.

62F880. NET 11.95

SCOPE PROBES

Demodulator Probe. Shpg. wt., ¼ lb.

62F824. Model PSDK Kit. NET 3.95

62F825. Model PSD Wired. NET 5.95

Low-Capacity Probe. Shpg. wt., ¼ lb.

62F826. Model PLCK Kit. NET 3.95

62F827. Model PLC Wired. NET 5.95

Direct Probe. Shpg. wt., ¼ lb.

62F828. Model PDK Kit. NET 2.95

62F829. Model PD Wired. NET 3.95

Depend on NEWARK for the Latest Top-Quality Test Equipment.

Scope, Meters and Power Pack

INDUSTRIAL MEASUREMENTS AND CONTROLS CORP.

SOLID STATE OSCILLOSCOPE

- DC response
- Triggered sweep
- Extended frequency response
- Calibrated sweep times
- Calibrated vertical attenuator

Model S-3. Ideal for industrial maintenance departments, traveling servicemen and lab use. Input impedance; 1 megohm shunted by 20 uuf. Display tube, 3" flat face with external graticule. Vertical sensitivity, .05 V/div. linear over 8 divisions (2"); Attenuator freq. compensated—10 steps, .05V to 50V/div., 3% accuracy. Freq. response—DC to 6 mc. Rise time @ 2 div. amplitude .075 usec. @ 4 div. 0.1 usec. Horizontal; Sweep speeds—1 usec./div. to 500 milliseconds/div. in 18 steps. Accuracy capability better than ±3%. 1 usec. to 50 MS/div. ±10% 100 to 500 MS/div.; Continuously variable uncalibrated sweep speeds; 5X Multiplier increases max. sweep rate to 0.2 usec./div. Trigger Modes; Free run; Internal + or —slope; External + or — slope, trigger level is adjustable; Automatic sweep stability—when in triggered mode trace is definitely triggered at the slope and level set; Trigger delay — delay between signal reaching the trigger level and start of sweep is approximately 0.75 usec. Power Supply: 15 watts @ 105-135 VAC line. Overall size. 14" x 6" x 8¾". Shipping weight, 20 lbs.
62F1070. NET **450.00**

J-B-T TEST EQUIPMENT

COLD ZONE TESTER

Model 8380-RT. Place thin, flat resistance bulb inside any type of cooling equipment; close the door on the polyethylene ribbon lead; allow the bulb temp. to stabilize; and get a directing from —40°F to 120°F. Red pointer; 2⅛" scale arc, readable to ±2°; accuracy within standards of ±5°. Tester comes in gray vinyl case, 5"x5"x4½". Complete with 8 foot thin, fast responding bulb and 7½ volt standard battery.
55F693. NET **19.50**

EXTRA RESISTANCE BULBS

Model SA-309. Plastic, moisture-sealed 8' polyethylene ribbon lead.
55F689. NET **4.50**

Model SA-162. Copper clad element, 14 ft. polyethylene ribbon lead, and spade terminals. Interchangeable with SA-309.
55F690. NET **6.50**

LIGHTING LEVEL INDICATOR

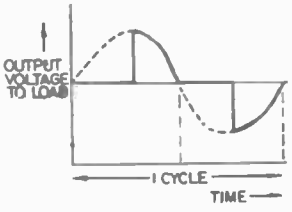
Model 7902-FC. Handy pocket-size meter, 3¼"x2⅛"x1⅛", for checking lighting level of various work areas. Simply place meter on working surface, and it quickly shows if the light level is adequate for efficient operation, or if eye strain or fatigue may result because the level is too high or too low. Also usd by custodial maintenance staffs, lamp and fixture manufacturers, and others concerned with providing suitable lighting. With certain modifications the indicator has applications in some phases of photography. The light meter was developed in colaboration with utility members of Edison Electric Institute for their light promotion courses.
55F696. NET **9.75**

PILLAR CORPORATION

Terminal connectors are standard on all "PILLAR" Power-Pac

● *NEW* STATIC A.C. POWER CONTROLLER

Features:
- **All solid state AC power controlled**
- **Rugged design fully protected**
- **Ample overload capacity**
- **High surge rating**
- **Variable voltage DC available with additional rectifiers**



The basic A.C. CONTROLLER-PAC is an all static power controller, designed for operation on 120V-240V, 60 hz. Power supplied by means of phase controlled solid state switches Static power switching and control elements employed to provide a reliable and efficient power switch or proportional power controller.

Figure 1 indicates the principle of operation. Input control signal may be derived by means of a simple relay closure, a potentiometer setting, or an isolated low level D.C. control signal. At full input power, a 60 hz sine wave is impressed upon the load; at lower power levels, output wave is like SCR phase controller.

Completely self contained in a single compact package, measuring 7 15/16" x 6¾" x 3⅜" for 15 amp models and 7 11/16" x 6¾" x 6¾" for 30 amp models. Line power and load connections, as well as input control connections, are the only external terminations necessary for the operation. Full rated up to 40°C, derated at .25A/°C over this temp.

Figure 1

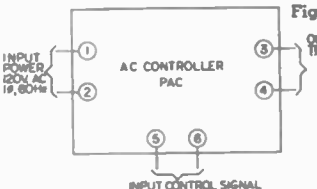


Figure 2

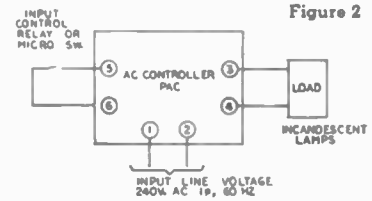
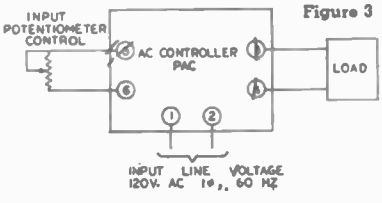


Figure 3



● *NEW* CONTROL CONFIGURATIONS

C-1 INPUT. Simple relay or contact closure, not isolated from AC line. Contact rating required of input switch is 2 mA with less than 50 mA peak requirement.

C-1 OUTPUT. From 0 to 98% of input V when input control switch is closed.

C-3 INPUT. Potentiometer adjustment with potentiometer, rated, 2 W, use 250K ohms for 120V & 800K ohms for 240V.

C-3 OUTPUT. Output V comes onto load as a function of input potentiometer setting.

APPLICATION EXAMPLES FIG. 2

System application requires that full power be applied instantly to the load when the input control relay is closed. No power should be applied to the load when the input control relay is open.

APPLICATION EXAMPLES FIG. 3

Control the power to a UNIVERSAL motor from "OFF" to full "ON" (120 volts, 6 amps, 60 hz). as a function of an input potentiometer setting.

FOUR MOUNTING HOLES 0.281" dia. between centers are 4" and 7¼". Mounting feet available to allow proper ventilation, and must be used, if unit is operated on a bench top.

120V-60 HZ INPUT
15 AMP RMS

Stock No.	Type/ Controller	1-9	10-24	25-Up
35F2300	120ACC015/C1	44.35	42.13	39.92
35F2301	120ACC015/C3	52.75	50.11	47.48
30 AMP RMS				
35F2302	120ACC030/C1	67.10	63.74	60.39
35F2303	120ACC030/C3	78.75	74.81	70.88

240V-60 HZ INPUT
15 AMP RMS

35F2304	240ACC015/C1	58.35	55.43	52.52
35F2305	240ACC015/C3	66.75	63.41	60.08
30 AMP RMS				
35F2306	240ACC030/C1	96.10	91.29	86.49
35F2307	240ACC030/C3	107.75	102.36	96.98

35F2308. Legs for Bench Mtg. 15 amp
NET **2.22**

35F2309. Legs for Bench Mtg. 300 amps
NET **3.35**

SOLA ELECTRIC SB
DIVISION OF SOLA BASIC INDUSTRIES

Constant Voltage Transformers

CVS HARMONIC NEUTRALIZED TYPE TRANSFORMERS

Contain less than 3% total rms harmonic content in the output. For all AC applications where harmonics can affect operation. Features built-in harmonic neutralizing circuits. No filters required. Regulation is ±1% for an input range of ±15% of nominal voltage. (*) 95-130/175-235/190-260. (**) 190-260/380-520. (***) an input range of 95-130/190-260. (†) 95-130.

Fig. A

Fig. B

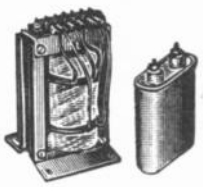


Fig. C

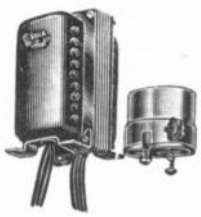
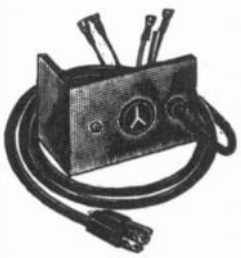


Fig. D



Adapter Kits

60 HERTZ SINGLE PHASE

No.	Type	V Out.	VA	Lbs.	Fig.	Adapt.	Size Inches	1-4	5-9	10-49
5F1100	23-13-030-2†		30	8	A	d	6 1/8 x 5 5/16 x 4	28.35	25.52	24.10
5F987	23-13-060-2†		60	10	A	d	6 15/16 x 5 5/16 x 4	33.60	30.24	28.56
5F1102	23-23-060-2**		60	10	A	d	6 15/16 x 5 5/16 x 4	36.75	33.08	31.24
5F988	12-22-112-2**	118	120	14	A	d	8 1/8 x 5 3/16 x 6	43.05	38.75	38.59
5F1103	23-23-112-2***		120	14	A	d	8 1/8 x 5 3/16 x 6	46.20	41.58	39.27
5F943	23-22-125		250	28	A	b	9 5/8 x 7 1/16 x 5 3/8	58.80	52.92	49.98
5F1104	23-23-125**		250	29	A	b	9 5/8 x 7 1/16 x 5 3/8	63.00	56.70	53.55
5F944	23-22-150***		500	45	A	c	12 3/8 x 6 7/16 x 6 9	91.35	82.22	77.65
5F1105	23-26-150**		500	46	A	c	12 3/8 x 6 7/16 x 6 9	97.65	87.89	83.00
5F467	23-25-175*		750	54	A	c	16 13/16 x 6 7/16 x 9	126.00	113.40	107.10
5F945	23-25-210*		1000	72	A	....	17 7/8 x 6 7/16 x 9	153.30	137.97	130.31
5F1106	23-26-210**	118/236	1000	72	A	....	17 7/8 x 6 7/16 x 9	153.30	137.97	130.31
5F468	23-25-215*		1500	128	B	....	19 3/8 x 6 9 1/2 x 10 11/16	204.75	184.26	174.04
5F993	23-25-220*		2000	140	B	....	19 7/8 x 9 1/2 x 10 11/16	278.25	250.42	236.51
5F1107	23-26-220**		2000	148	B	....	19 7/8 x 9 1/2 x 10 11/16	278.25	250.43	236.51
5F994	23-25-230-3*		3000	194	B	....	21 7/8 x 9 1/2 x 10 11/16	373.80	336.42	317.73
5F1108	23-26-230**		3000	196	B	....	21 7/8 x 9 1/2 x 10 11/16	373.80	336.42	317.73
5F1127	23-25-250*		5000	335	B	....	20 13/16 x 9 1/2 x 10 11/16	583.80	525.42	496.23
5F1128	23-26-250**		5000	342	B	....	20 13/16 x 9 1/2 x 10 11/16	583.80	525.42	496.23
5F469	23-28-275**		7500	502	B	....	20 13/16 x 9 3/8 x 11 1/32	876.30	788.67	737.21

50 HERTZ SINGLE PHASE

5F414	2313-560-22†		60	11	A	d	7 1/4 x 5 13/16 x 4	38.85	34.97	33.02
5F415	23-23-560-2**		60	11	A	d	7 1/4 x 5 13/16 x 4	42.00	37.80	35.70
5F416	23-22-612***	118	120	21	A	b	8 3/4 x 7 9/16 x 5 3/8	49.35	44.42	41.95
5F417	23-22-625***		250	35	A	c	11 5/16 x 6 7/16 x 9	67.20	60.48	57.12
5F418	23-22-650-1**		500	53	A	c	13 x 6 7/16 x 9	105.00	94.50	89.25
5F419	23-25-710*		1000	120	B	....	18 7/8 x 9 1/2 x 10 11/16	176.40	158.76	149.94
5F420	23-25-720*	118/236	2000	170	B	....	20 5/8 x 9 1/2 x 10 11/16	320.25	288.23	272.21
5F421	23-25-730*		3000	227	B	....	26 5/16 x 9 1/2 x 10 11/16	495.25	396.33	364.86

400 HERTZ SINGLE PHASE

5F1109	43-13-060†		60	5	C	....	5 3/4 x 3 3/8 x 2 3/8	42.00	37.80	35.70
5F1110	43-13-112†		120	7	C	....	5 3/4 x 3 3/8 x 2 3/8	57.75	51.98	49.09
5F1111	43-13-125†	118	250	11	C	....	7 13/16 x 4 5/8 x 3 3/4	78.75	70.88	66.94
5F1112	43-13-150†		500	13	C	....	7 13/16 x 4 5/8 x 3 3/4	98.70	88.83	83.90
5F1113	43-13-210†		1000	20	C	....	8 3/8 x 6 x 5	133.35	120.02	113.35

FIG. D ELECTRONIC POWER TYPES

Available in electronic-power component types providing a regulated source of plate and filament voltages. The CVF series provides 6.0 or 6.3 volts of output regulated within ±1% over line variations of ±15%. The series CVE series, a combination of the plate and filament types, regulates within ±3%. Both series, which include filaments with stabilized voltage supplies, operates reliably, feature long component life, and need less servicing than competitor's materials.

CVE PLATE — FILAMENT SERVICE 60 HERTZ

Stk. No.	Type	Rectifier Tube	D.C. Input V to filter	Filament Windings 6.3	Filament Windings 5.0 V	Volt Range	Lbs.	Dimensions Inches	1-4	5-9	10-49
5F486	7104	5Y3	275v D.C. @ 50 M.A.	2.5 amps C.T.	2A	100-130	6	3 1/8 x 4 13/16 x 3 9/16	14.04	12.64	11.23
5F487	7106	5Y3	385v D.C. @ 110 M.A.	3.0 amps C.T.	2A	100-130	8	3 1/8 x 4 13/16 x 3 15/16	17.28	15.55	13.82
5F488	7107	5U4	380v D.C. @ 250 M.A.	No. 1:40 amps No. 2:80 amps unregulated	3A	100-130	19	4 1/2 x 7 x 4 7/8	32.40	29.16	25.92

50 HERTZ

5F489	71B04	5Y3	175v D.C. @ 50 M.A.	2.5 amps C.T.	2A	100-130	6	3 1/8 x 4 13/16 x 3 5/16	16.20	14.58	12.96
5F490	71MB04					180-250	6	3 1/8 x 4 13/16 x 3 5/16	16.20	14.58	12.96
5F491	71B06		385v D.C. @ 110 M.A.	3.0 amps C.T.	2A	100-130	10	3 1/8 x 4 13/16 x 4 5/16	19.44	17.50	15.55
5F492	71MB06					180-250	10	3 1/8 x 4 13/16 x 4 5/16	19.44	17.50	15.55

CVF — FILAMENT SERVICE 60 HERTZ

Stk. No.	Type	Voltage Rating Reg. Out.	Voltage Rating Input Range	Out. Cap. amps	VA	Wt. Lbs.	Dimension Inches	1-4	5-9	10-49
5F973	20-01-015	6.0V	95-130	2.50	15	4	4 5/8 x 3 1/2 x 2 5/8	16.80	15.12	14.28
5F717	20-06-015	6.0V	95-130	2.50	15	3	2 11/32 x 4 5/16 x 2 7/16	15.75	14.18	13.39
5F974	20-02-015	6.3V	95-130	2.38	15	4	4 5/8 x 3 1/2 x 2 5/8	16.80	15.12	14.28
5F482	20-03-015	6.3V	95-130	2.38	15	4	2 7/16 x 4 3/4 x 3 3/8	23.10	20.79	19.64
5F718	20-04-015	6.3V	95-130	2.38	15	3	2 11/32 x 4 5/16 x 2 7/16	15.75	14.18	13.39
5F976	20-04-030	6.3V		5.0	32	6	3 1/8 x 4 13/16 x 3 1/8	17.85	16.07	15.17
5F977	20-04-065	6.3V	95-130X	10.0	63	8	3 1/8 x 4 13/16 x 3 21/16	23.10	20.79	19.64
5F978	20-04-095	6.3V	190-260	15.0	95	11	3 1/8 x 4 13/16 x 4 11/16	27.30	24.57	23.21
5F980	20-04-116	6.3V		25.0	158	23	4 1/2 x 7 x 5 11/16	39.90	35.91	33.92
5F483	20-02-515	6.3V	95-130	2.38	15	4	4 5/8 x 3 1/2 x 2 5/8	18.90	17.01	16.07
5F484	20-04-530	6.3V	95-130X190-260	5.0	32	7	3 1/8 x 4 13/16 x 3 5/16	21.00	18.90	17.85
5F485	20-04-565	6.3V	95-130X190-260	10.0	63	9	3 1/8 x 4 13/16 x 4 1/16	26.25	23.63	22.31

CORD/RECEPTACLE ADAPTER KITS

Used when input and output receptacle is preferred.

Stk. No.	Type	Circuit	Adapter Code	EACH
5F985	999-994	2-wire	a	2.50
5F986	999-018	3-wire	a	3.75
5F160	999-005	2-wire	b	2.50
5F987	999-019	3-wire	b	3.75

Stk. No.	Type	Circuit	Adapter Code	EACH
5F161	999-009	2-wire	c	3.25
5F998	999-020	3-wire	c	3.75
5F957	999-104	2-wire	d	3.75
5F958	999-105	3-wire	d	3.75

Transformers & Power Supplies

SOLA ELECTRIC SB
DIVISION OF SOLA BASIC INDUSTRIES

TYPE CVN NORMAL HARMONIC TYPE TRANSFORMERS

CVN type transformers provide the same ±1% regulation as the sinusoidal series. Contain an average of 20% rms harmonic content and are especially recommended for electrical loads not affected by harmonics, such as solenoids, relays, filaments, and where rectification is required. †indicates 95-130. (*) indicates 95-130/175-235/190-260. (**) indicates an input voltage of 190-260/380-520. (***) indicates 95-130/190-260. (††) indicates 190-260.

FIG. A

FIG. B

Fig. C

Fig. D

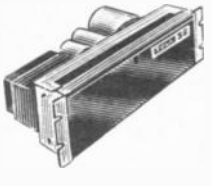


Fig. E

60 HERTZ

Stock No.	Type	Output Volts	Cap VA	Dimensions Inches	Adapter Kit Code	Fig.	lbs.	1-4	5-9	10-49
5F989	20-10-015†	118	15	4⅝x3½x2⅝	...	C	4	16.80	15.12	14.28
5F470	20-11-015†	118	15	2⁷/₁₆x4¾x3⅜	....	.	4	23.10	20.79	19.64
5F719	20-14-015†	118	15	2¹¹/₃₂x4⅝	....	D	3	15.75	14.18	13.39
5F953	20-14-030†	118	30	2¹¹/₃₂x4⅝	....	D	5	17.85	16.07	15.17
5F981	20-13-030-2†	118	30	5⅞x5⅝x4	d	A	7	23.10	20.79	19.64
5F982	20-13-060-2†	118	60	6¹¹/₃₂x5⅝x4	d	A	10	28.35	25.52	24.10
5F954	20-14-060†	118	60	3⅛x4¹³/₁₆	.	D	8	24.15	21.74	20.53
5F955	20-14-112†	118	120	3½x4¹³/₁₆	..	D	11	24.41	32.55	29.30
5F983	20-13-112-2†	118	120	7⅜x5⅝x4	d	A	12	37.80	34.02	32.13
5F471	20-21-112-2††	236	120	7⅜x5⅝x4	d	A	13	28.35	37.80	34.02
5F984	20-13-115†	118	150	8¾x7⅛x5⅜	b	A	22	45.15	40.64	38.38
5F911	20-13-125†	118	250	11⅛x6⁷/₁₆x6¹⁵/₁₆	c	A	25	55.65	50.09	47.30
5F472	20-22-125***	118	250	11½x6⁷/₁₆x6¹⁵/₁₆	c	A	25	55.65	50.09	47.30
5F473	20-23-125***	118	250	11⅛x6⁷/₁₆x6¹⁵/₁₆	c	A	25	55.65	50.09	47.30
5F912	20-13-150†	118	500	12⅝x6⁷/₁₆x6¹⁵/₁₆	c	A	36	87.15	78.44	74.08
5F474	20-22-150***	118	500	12⅝x6⁷/₁₆x6¹⁵/₁₆	c	A	36	87.15	78.44	74.08
5F475	20-23-150**	118	500	12⅝x6⁷/₁₆x6¹⁵/₁₆	c	A	36	87.15	78.44	74.08
5F476	20-24-150	236	500	12½x6⁷/₁₆x6¹⁵/₁₆	c	A	38	87.15	78.44	74.08
5F477	20-26-150**	118x 236	500	12⅝x6⁷/₁₆x6¹⁵/₁₆	c	A	37	87.15	78.44	74.08
5F913	20-13-210†	118	1000	15½x6⁷/₁₆x6¹⁵/₁₆	..	A	48	144.90	130.41	123.17
5F478	20-20-210††	118	1000	15⅛x6⁷/₁₆x6¹⁵/₁₆	..	A	48	144.90	130.41	123.17
5F479	20-22-210***	118	1000	15⅛x6⁷/₁₆x6¹⁵/₁₆	..	A	48	144.90	130.41	123.17
5F990	20-25-220*	118x	2000	20x9½₂x10¹¹/₁₆	....	B	128	263.55	237.20	224.02
5F991	20-25-230*	236	3000	22x9½₂x10¹¹/₁₆	....	B	170	357.00	231.30	303.45
5F720	20-27-250**		5000	21x12⅝x14⅜	...	B	290	555.45	499.91	472.13
5F480	20-26-310**		10000	21x12⅝x14⅜	...	B	590	1048.95	944.06	891.61

80 HERTZ

Stock No.	Type	Volts	Amps	VA	Load Regulations 20% F.L.	50% F.L.	PANEL HT.	WT.	1-4	5-9	10-24
5F1114	281513-1	6	10	60	9	7	3½	27	150.00	135.00	120.00
5F152	282123	6	15	90	9	7	5¼	*38	175.00	157.50	140.00
5F1115	281515-1	12	5	60	7	5	3½	18	115.00	103.50	92.00
5F153	282124	12	10	120	7	5	5¼	*31	150.00	135.00	120.00
5F1116	281515-1	18	5	90	5	4	3½	20	120.00	108.00	96.00
5F155	282125	18	10	180	7	5	5¼	*45	175.00	157.50	140.00
5F924	281024-1	24	6	144	5	4	5¼	30	145.00	130.50	116.00
5F156	282126	24	10	240	6	4	5¼	*48	180.00	162.00	144.00
5F1117	281203	24	15	360	5	4	8¾	64	250.00	225.00	200.00
5F157	282127	24	25	600	6	4	7	*72	335.00	291.50	258.00
5F1118	28626	28	8	224	6	4	5¼	42	180.00	162.00	144.00
5F158	282128	28	15	420	7	5	7	*55	250.00	225.00	200.00
5F925	281048	48	4	192	3.5	2.5	5¼	32	135.00	121.50	108.00
5F1119	281561	48	10	480	4	2	5¼	48	185.00	166.50	148.00
5F159	282129	48	20	960	3	2	8¾	*95	275.00	247.50	220.00
5F926	281125	125	2	250	2.5	1.5	5¼	44	145.00	130.50	116.00
5F927	281150	150	2	300	2	1.5	5¼	48	145.00	130.50	116.00
5F928	281200	200	1	200	3	2	5¼	39	140.00	126.00	112.00
5F929	281250	250	1	250	3	2	5¼	45	150.00	135.00	120.00

FIG. E. FIXED CONSTANT VOLTAGE DC POWER SUPPLIES

Will withstand high transient overload without damage or output voltage drop. Output regulation ±1% or less over 100-130v. input range. 1% repple except 281200 and 281250 which are ½%. Load regulation less than 4% from 20% to full load. Efficiency approx. 75%. Output impedance approx. .5 ohm. Mounted on standard 19x5¼x9¾" rack panel. Input 100-300, 60 hz. AC.

CV MULTI-TAP TRANSFORMER

112 rectifier outputs from one transformer with live regulation of ±1% or less. Eliminates tandem-hook-ups and special transformers for proto-typing, lab work, and short production runs.

A power source to both AC and DC outputs. Typical AC outputs (Regulated): 3.;4,27.2, 24.0, 22.0, 1.4, 36.0, 14.9, 13.4, 12.6, 11.6, 10.8.

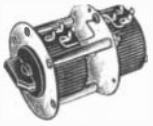
Stock No.	Type	VA RATING	AC Volts	Dimensions	Lbs.	1-4	5-9	10-49
5F964	73-13-040	40	9.3-28.9	4¹¹/₁₆x3⅛x5⅞"	6	26.00	23.40	22.10
5F965	73-13-075	75	10.3-30.0	4¹¹/₁₆x3⅛x5⅞"	8	34.00	30.60	28.90
5F966	73-13-115	150	10.8-31.4	6¹³/₁₆x4⅜x5⅞"	13	47.00	42.30	39.95
5F967	73-13-122	225	10.1-30.1	6¹³/₁₆x4⅜x5⅞"	18	58.00	52.20	49.30
5F968	73-13-130	300	10.2-30.8	6¹³/₁₆x4⅜x8"	22	68.00	61.20	57.80
5F969	73-13-145	450	9.4-30.2	6¹³/₁₆x4⅜x8⁵/₁₆"	30	94.00	84.60	79.90

Superior Transformers

POWERSTAT VARIABLE VOLTAGE TRANSFORMERS

Type 146-246

Type 10B



Type 10B-2, 12-2

Type 116B, 117B, 216B

Type 21, 22

SERIES 146-246 HIGH-CURRENT VARIABLE TRANSFORMERS

Rated over 4 KVA, constant impedance load. 146 types are for 120VAC. 50/60 cycle input, deliver 30 amps to constant Z loads (35 amps without overvoltage). Type 246. 120 VAC 50/60 Hz input, delivers 15 amps up to 150 V; 240 V input, delivers 19 amps to 240 V. Size: 9 11/16"wx10 17/32" deep, except *11" deep. † requires T6053 choke. Feature POWERKOTE coils.

Stk. No.	Type	Volts	Phase	KVA	Lbs.	1-5	6-24	25-99
5F1232	146	0-120	single	4.2	38	94.00	84.60	79.90
Stk. No.	**Type**	**Volts**	**Phase**	**KVA**	**Lbs.**	**Ea.**	**2-49**	.....
5F1233	*146-2	0-120	1-paral†	8.4	76			
		0-240	1-series	8.4				
		0-120	3-delta	7.3		208.00	176.80	.....
						1-5	6-24	25-99
5F1234	246	0-240	single	4.6	38	94.00	84.60	79.90

SERIES 10B

Type 2PF10 is encased, all others open Type 10B is single unit, 10B-2 is two-gang for either 240V, single-phase or 120V, †3-phase operation. 10B-3 is 3-gang, wye connected for 240V, 3-phase operation. *60 cps. #50/60 Hz. All rated 1.75 amps, 2.25 amps when mounted on metal panel except 2PF10 1.0 amp.

Stk. No.	Type	Volts	KVA	Lbs.	Dia. x Lt.	1-11	12-99
5F893	2PF10	0-132*	.132	3.3	3 1/2x3 3/8"	20.00	17.00
5F800	10B	0-120#	.27	2.4	2 9/16x2 1/16"	10.00	8.50
		0-132*	.30				
Stk. No.	**Type**	**Volts**	**KVA**	**Lbs.**	**Dia. x Lt.**	**Ea.**	**2-49**
5F775	10B-2	0-240#	.54	5.6	3 7/8x5 1/8"	30.00	25.00
		0-264*	.59				
		0-120#†	.47				
		0-132*†	.51				
5F724	10B-3	0-240*	.94	8.3	3 7/8x8 1/8"	48.00	40.80

SERIES 12

Current ratings: (all types) .9a on metal panel, otherwise .75a (constant-Z load); .7a on metal panel, otherwise .5a (constant-current load). Size: same as types 10B, 10B-2, 10B-3 respectively. All are for 250 V 50-2000 Hz input except *480 V.

Stk. No.	Type	Volts	Phase	KVA	1-11	12-99
5F1229	12	0-240	single	0.22	16.00	13.60
					Ea.	2-49
5F1230	12-2	0-480	1-series*	0.43	41.00	34.85
		0-240	3-delta	0.37		
5F1231	12-3	0-480	3-Y*	0.75	66.00	56.10

SERIES 21

Open construction. 21-2 is 2-gang, 21-3 is 3-gang. 120V, single phase except † 120V 3-phase and ‡ 240V 3-phase. 50/60 cycle except #60 Hz. Rating 5 amps (onstant-Z local), exc. *4.5A. 16 lbs.

Stk. No.	Type	Volts	KVA	Depth	Dia.	1-5	6-24	25-99
5F809	21	0-120	0.78					
		0-140*	0.63	4 13/16"	5 7/8"	15.00	12.75	.....

Shpg. wt. 5F776, 12 lbs.; 5F725, 17 lbs.

Stk. No.	Type	Volts	KVA	Dept.	Dia.	Ea.	2-49
5F776	21-2	0-240	1.6	9"	5 7/8"	43.00	36.55
	*	0-280	1.3				
		0-120†	1.4				
	*	0-140†	1.1				
5F725	21-3	0-240‡	2.7	12 1/16"	5 7/8"	69.00	58.65
	*	0-280‡#	2.2				

22 SERIES POWERSTAT VARIABLE TRANSFORMERS

Zero wave-form distortion, open construction, back-of-panel mounting. Operating frequency: 50-2000 hz. Shpg. wt.; Type 22-2, 12 lbs., Type 22-3, 17 lbs. †1 phase series. *3 phase Open Delta. △3 phase Wye. All have POWERKOTE coils.

Stk. No.	Type	Volts	KVA	Depth	Dia.	1-5	6-24	25-99
5F895	22	0-240	0.54	4 13/16"	5 7/8"	20.00	18.00	17.00
		0-280	0.63					

Stk. No.	Type	Volts	KVA	Depth	Dia.	Each	2-49
5F896	22-2	0-480	†1.1	9"	5 7/8"	55.00	48.75
		0-560	†1.3				
		0-240	*0.94				
		0-280	*1.1				
5F897	22-3	0-480	△1.9	12 7/16"	.....	87.00	73.95
		0-560	△2.2				

SERIES 116B-117B

All 120V input except #240V. "U" types uncased for panel mtg.—all others encased for wall or bench mtg. Types ending in -2 are 2-gang, those ending in -3 are 3-gang. D—Delta-wired, Y—Wye-wired. S—Series-wired. All units are plug-in except those with "T" or "V" suffix, which are for permanent installation. Type 3PF have polarized 2-blade plug; 3PN, NEMA std. 3-blade plug; 2PF or no suffix, std. 2 blade plug; approx. 6" deep per gang, 4 5/8" dia., Series 116B rated 10A, 117B rated 12A, const. current loads. All units 4 1/4" sq. All 50/60 cps., except 116T-3, 116BU-3 and 117B units, 60 Hz. All models feature POWERKOTE All above rated 1.8 KVA; all 60 Hz. 12 lbs.

Stk. No.	Type	Volts	Phase	KVA	1-11	12-99
5F801	116B	0-140	1	1.4	28.00	23.80
5F857	3PN116B	0-140	1	1.4	33.00	28.05

Shpg. wt. for 116BT-2, 24 lbs.; 116BT-3, 36 lbs.; 116BU-2, 21 lbs.; 116BU-3, 30 lbs.

Stk. No.	Type	Volts	Phase	KVA	Ea.	2-49
5F777	116BT-2	0-280#	1S	2.8	63.00	53.55
		0-240#	1S	2.4		
		0-140	3D	2.4		
		0-120	3D	2.1		
5F790	116BT-3	0-280#	3Y	4.8	94.00	79.90
		0-240#	3Y	4.2		
5F733	116BU-2	0-280#	1S	2.8	53.00	45.05
		0-240#	1S	2.4		
		0-140	3D	2.4		
		0-120	3D	2.1		
5F736	116BU-3	0-280#	3Y	4.8	74.00	62.90
		0-240#	3Y	4.2		

Stk No.	Type	Volts	Phase	KVA	1-11	12-up
5F807	116BU	0-140		1.4		
		0-120		1.2	20.00	17.00

Shpg. wt. of above: 11 lbs. All single phase.

Stk. No.	Type	Volts	Phase	Lbs.	1-5	6-24	25-99
5F888	117B-T	0-120	1	12	28.00	25.20	23.80
					1-11	12-99	
5F739	2PF117B	0-120	1		33.00	28.05	.....
5F740	3PN117B	0-120	1		36.00	30.60	.....

All above rated 1.8 KVA; all 60 Hz. 12 lbs.

Stk. No.	Type	Volts	Phase	KVA	Ea.	2-49
5F741	117BT-2	0-240#	1S	3.6		
		0-120	3D	3.1	67.00	56.95
5F742	117BT-3	0-240#	3Y	6.2	100.00	85.00

Above all 60 cps. Shpg. wt. 24 lbs., for 117BT-2; 36 lbs., for 117BT-3.

Stk. No.	Type	Volts	Phase	KVA	1-5	6-24	25-99
5F743	117BU	0-120	1S	1.8	22.00	19.80	18.70

All 60 cps. Shpg. wt., 24 lbs.

Stk. No.	Type	Volts	Phase	KVA	Ea.	2-49
5F746	117BU-2	0-240#	1S	3.6		
		0-120	3D	3.1	55.00	46.75
5F749	117BU-3	0-240#	3Y	6.2	77.00	65.45

All 60 cps. Max. for const.-cur. load KVA shown max for const.-imp. load.

SERIES 216B

"U" types uncased for panel mtg.—all others encased for wall or bench mtg. Type 3PN have NEMA std. 3-blade plug; KVA shown max. for const.-imp. load. #Max KVA at max. output voltage. **Input 120V. ##Input 240V. ‡Input 480V. All units approx. 6" deep per gang. 4 5/8" dia., except sq. units are 4 1/4" sq. With POWERKOTE coils. Shpg. wt., 12 lbs.

Stk. No.	Type	Volts	Phase	KVA	1-11	12-99
5F802	216B	0-280##	1	1.2		
		0-280**	1	#.42	32.00	27.20
5F669	3PN216B	Xfmr. same as 216			38.00	32.30

Stk. No.	Type	Volts	Phase	KVA	1-5	6-24	25-99
5F672	216B-U	0-280**	1	#.42			
		0-280##	1	.98			
		0-240##	1	.84	24.00	21.60	20.40

Shpg. wt. 11 lbs.

Superior Variable Transformers

"POWERSTAT" VARIABLE TRANSFORMERS

An autotransformer of toroidal core design with a movable brush-tap riding on the Gold-plated bared portion of the winding.. Delivers from 0 to or above line voltage. Operating temp. rise is less than 50°C above ambient. Special Gold plated plating and polishing process produces a glass-smooth commutator surface which is forever free of oxides.

(F) with fuses in the output brush leads and terminal boards enclosed. Knock-outs in enclosures permit wiring with BX or equivalent. (T) terminal boards enclosed. (2PF) parallel blade plug. (3PN) standard 3-blade plug. (-2) 2-gang. (-3) 3-ganged. Single phase except where otherwise noted. All 136-236 and 1156-1256 units have POWERKOTE coils for greater stability.

Type 136B
Type 236B

Type 1156D

Type 1256D

136B SERIES

22 Amps output except #44A; 120V input except (°) 240V 50/60 hz, except (+) 60.

Stk. No.	Type	Volts	KVA	Lbs.	1-5	6-24	25-99
5F812	136B	0-140	3.1	25			
		0-120	2.6	25	59.00	53.10	50.15

Stk. No.	Type*	Volts	KVA	Lbs.	1-11	12-99
5F696	2PF136B	Same as 136B		27	76.00	64.60
5F699	3PN136B	Same as 136B		27	76.00	64.60

Stk. No.	Type	Description	Lbs.	1-5	6-24	25-99
5F694	136BT	Same as 136B	26	65.00	58.50	55.25
5F695	F136B	Same as 136B	26	68.00	61.20	57.80

Stk. No.	Type	Volts	Phase	KVA	Lbs.	Ea.	2-49
5F778	136B-2	0-140	1P#	6.2	52		
		0-120	1P#	5.3	52		
		0-280°	1S	6.2	52	139.00	118.15
		0-240°	1S	5.3	52		
		0-140	3D	5.3	52		
		0-120	3D	4.6	52		
5F619	F136B-2	Same as 136B-2			53	159.00	135.15
5F792	136B-3+	0-280°	3Y	10.7	76		
		0-240°	3Y	9.1	76	201.00	170.85

SERIES 1256D

Max. amps. output 28.0 txcept (+) 56.0 50/60 hz all one phase; 1256D-2P Parallel, 1256D-2S series.

Stk. No.	Type	Output In. V.	Output Volts	Output Max. KVA	Wt. Lbs.	Ea.	2-49
5F806	1256D	240	0-280	7.8	79	140.00	119.00
5F780	1256D-2P+	240	0-280	15.7	160	309.00	262.65

236B SERIES

Max output amps 10 50/60 hz except (°) 60 only.

Stk. No.	Type	Output Inp. V.	Output V.	Output Max. KVA.	Wt. Lbs.	1-5	6-24	25-99
5F813	236B	120	0-280	1.2	25			
		240	0-280	2.8	25			
		240	0-240	2.4	25	59.00	53.10	50.15

Stk. No.	Type	Output Inp. V.	Output V.	Output Max. KVA.	Wt. Lbs.	1-11	12-99
5F624	2PF236B	.....	Same as 236B		27	76.00	64.60

Stk. No.	Type	Description	Wt. Lbs.	1-5	6-24
5F623	F236B	Same as 236B	26	68.00	57.80

Stk. No.	Type	Phase	Output In. V.	Output Volts	Output Max. KVA.	Wt. Lbs.	Ea.	2-49
5F782	236B-2	1 series	240	0-560	2.4	52		
		1 series	480	0-560	5.6	52		
		1 series	480	0-480	4.8	52	139.00	118.15
		3 delta	120	0-280	2.1	52		
		3 delta	240	0-280	4.8	52		
		3 delta	240	0-240	4.2	52		

SERIES 1156D

Max. amps output 50.

5F808	1156D	1	120	0-140	7.0	79	140.00	119.00
5F779	1156D-2S	1	240	0-280	14.0	152	291.00	247.35
5F794	1156D-3Y	3 WYE	240	0-280	24.2	225	511.00	434.35

PARALLELING CHOKE

Stk. No.	Type	Application	1-5	6-24
5F635	T5000	For 136B-2 and 236B-2	18.00	15.30

SERIES 217B

Input 240V. ‡ 480V. † Max., const. Imp.

Stk. No.	Type	Volts	Phase	KVA	Lbs.	1-5	6-24	25-99
5F681	2PF217B	0-240##	1S	1.2	12	37.00	31.45	.....
5F856	217BT	0-240##	1S	1.2	12	31.00	27.90	26.35
5F685	217BU	0-240##	1S	1.2	11	26.00	23.40	22.10

Stk. No.	Type	Volts	Phase	KVA	Lbs.	Ea.	2-49
5F683	217B-2	0-480†	1S	3.4			
		0-240##	3D	2.9	24	73.00	62.05
5F684	217B-3	0-480†	3Y	5.4	36	109.00	92.65

TRANSFORMER REPLACEMENT BRUSHES

Stk. No.	Type	Series	1-5	6-24	25-99
5F703	RB-10B	10B	1.00	.90	.88
5F704	RB-21	21	1.50	1.35	1.28
5F705	RB-116	116	1.75	1.58	1.49
5F707	RB-216	216	1.75	1.58	1.49

Stk. No.	Type	Series	1-5	6-24	25-99
5F709	RB-1126	1126	4.00	3.60	3.40
5F710	RB-1226	1226	4.00	3.60	3.40
5F711	RB-136	136	2.00	1.80	1.70
5F712	RB-236	236	2.00	1.80	1.70

Stk. No.	Type	Series	1-5	6-24	25-99
5F713	RB-1156	1156	4.00	3.60	3.40
5F714	RB-1156-B	1156C	4.00	3.60	3.40
5F715	RB-1256	1256	4.00	3.60	3.40
5F716	RB-1256-B	1256C	4.00	3.60	3.40

METERED KNOB ASSEMBLIES FOR BACK OF PANEL MOUNTED UNITS

Can be combined with standard cataloged POWERSTAT variable transformers that are designed or adaptable for back panel mounting. Easily adapted for retrofitting existing installations. Large functionally designed knob turns freely while meter remains stationary. Accurate voltmeter insensitive to stray magnetic fields. Consists of metered knob, mounting screws and complete wiring and installation instructions.

VS150—Where 120 volt duty is required. Has 0-150 meter scale.

VS300—Where 240 volt duty is required. Has 0-300 meter scale.

Stk. No.	Type	1-11 Net Ea.	12-99 Net Ea.
6F118	VS150	32.00	27.20
6F119	VS300	32.00	27.20

METERED KNOB POWERSTAT® VARIABLE TRANSFORMERS

Designed for back-of-panel or general utility mounting. Excellent for use in laboratories, and inspection and test applications where voltage must be controlled without the necessity of installing a separate way of measuring voltage. Have knobs which include a stationary direct-reading voltmeter; Accuracy of ±3% of full scale. 240 volt types have 0-300 volt scales. 120 volt types have 0-150 volt scales.

VS116B — VS216B SERIES — 12 LBS.

Stk. No.	Type	Input Volts	Output Volts	Output Constant Current Load Max. Amps	Output Constant Current Load Max. KVA	1-11 Ea. Net	12-99 Net Ea.
6F120	VS116B	120	0-120	10.0	1.2	60.00	51.00
6F121	VS216B	240	0-240	3.5	0.84	64.00	54.40

VS126, VS226 SERIES — 18 LBS.

6F122	VS126	120	0-120	15	1.8	74.00	62.90
6F123	VS226	240	0-240	7.5	1.8	74.00	62.90

VS136B, VS236B SERIES — 26 LBS.

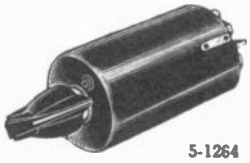
6F124	VS136B	120	0-120	22	2.6	91.00	77.35
6F125	VS236B	240	0-240	10	2.4	91.00	77.35

You Can Depend on NEWARK For Complete Stocks — Lowest Prices

Superior Transformers

POWERSTAT 400/800 HZ TRANSFORMERS

5-1262



5-1264

For high-frequency uses in aircraft, ships, missiles, and industry. Single- and three-phase 400/800 hz, manual and motor-driven air-cooled 28-120-, and 480-v models in 56 VA to 7.3 KVA ratings. Operate at —55° to +40° ambient at full rated load (reducing to +80°C); altitudes to 50,000 ft.: up to 95% rel. humidity; vibration, shock and inclination per MIL-T-17113; corrosion resistance per QQM-115-A and other military specs. Manual units knob-operated, but screw-driver slot method of turning optional for HS and HMQ single phase. Open construction unless specified * enclosed. † indicates square frame construction. Specify mtg. when ordering.

FOR 28, 115, 120- AND 240-VOLT SINGLE-PHASE SERVICE

Stk. No.	Type	Line Volt.	Output Volts	Output Amps.	Wt. Lbs.	1-5	6-24	25-99
5F860	3HS02UK	28	0-28	2.0	0.9	45.00	40.50	38.25
6F152	5-1258	115	0-28	2.5	1.0	91.00	81.00	77.35
6F153	5-1262	115	0-28	8.0	2.0	107.00	96.30	90.95
6F154	5-1264	115	0-5	6.0	1.0	120.00	108.00	102.00
6F155	5-1266	115	0-5	12.0	1.0	128.00	115.20	108.80
5F864	1HS01UK	120	0-120/140	1.0	1.3	40.00	36.00	34.00
6F156	1HMQ03UK†	120	0-120/140	3.0	2.8	48.00	43.20	40.80
6F157	1HMQ07UK†	120	0-120/140	7.5	3.8	54.00	48.60	45.90
5F871	1HL15UK	120	0-120/140	15.0	14.0	117.00	105.30	99.45
5F875	2HL09UK	240	0-240/280	9.0	15.4	117.00	105.30	99.45

FOR 240-VOLT THREE-PHASE SERVICE

Stk. No.	Type	Output Volts	Output Amps.	Wt. Lbs.	NET EACH	2-49
5F878	2HL15UK-3Y	0-240/280	15.0	41.0	295.00	265.50

VARIABLE TRANSFORMER WITH ISOLATED SECONDARY

Powerstat type LW-136B is a double wound assembly. The one phase unit can be connected for either 120-volt or 240-volt, 50/60 cycle input; source of 0-30 volts isolated output; either a 120-volt or 240-volt line corrector; or either a 120-volt or 240-volt limited range "buck-boost" variable transformer. The three-phase, three-gang unit can be connected for either 240-volt or 480-vole, 60 hz input or source of 0-60 volts isolated output; either a 240-volt or 480-volt line corrector; or either a 240-volt or 480-volt limited range "buck-boost" variable transformer. Gray enamel finish. Shpg. wt., LW136B—25 lbs. LW136B-3—77 lbs. Features POWERKOTE coils.

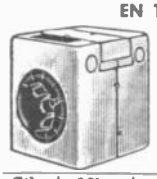
MODEL LW136B—FOR 50/60 HZ, 1-PHASE SERVICE

Stk. No.	Line Volt.	Output Volts	Output Amps	KVA	1-5	6-24	25-99
5F881	120	0-30	25	.75	85.00	76.50	72.25
	120	15-0-15	35	.52			
	240	0-30	25	.75			
	240	15-0-15	35	.52			
	120	105-135	35	4.7			
	107-137	120	35	4.2			
	240	225-255	35	8.9			
	226-256	240	35	8.4			

MODEL LW136B-3—FOR 60 HZ, 3-PHASE SERVICE

Stk. No.	Line Volt.	Output Volts	Output Amps	KVA	NET EACH	2-49
5F889	240	210-270	35	16.4	278.00	236.00
	219-264	240	35	14.6		
	480	450-510	35	30.9		
	452-512	480	35	29.1		

EN TYPE VARIABLE TRANSFORMERS



Deliver continuously adjustable voltage from AC power lines. Wide flexibility in application and mounting position. May be bench, floor, wall, front-of-panel or back-of-panel mounted. Rugged enclosures are dust-tight for operator and unit protection but also easily removable for easy inspection. Single units below. 6 13/16Hx5¾Wx6"D. Wt., 15 lbs.

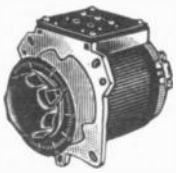
Stk. No.	Mfr. Type	Input V.	Input Freq.	OUTPUT V.	OUTPUT Amp.	OUTPUT KVA	1-5	6-24	25-99
5F835	EN116B	120	50/60	0-140	8	1.1	40.00	36.00	34.00
5F836	EN117B	120	60	0-120	14.5	1.7	42.00	37.80	35.70

MULTI-PURPOSE POWERSTAT

Type 5-1011. Miniaturized for 400/1600 hz, 1 phase service has connections for use as limited range variable transformer, low voltage output variable transformer, and line corrector. As limited ranae variable transformer with 115-volt input, may connect for output of 83-113 V, 2.6 amp., 0.29 max. KVA; 98-130 V, 2.6 amp. 0.34 max. KVA; or 116-149 V, 2.6 amp., 0.39 max. KVA. As low voltage output variable transformer with 115 V, input may connect for an output of 0-26 V, 2.6 amp., 0.068 max. KVA. As line corrector may connect to correct to output of 115 volts, 2.6 amp., 0.30 max. KVA from input of 90-113 volts, 104-133 volts or 117-149 volts. Only 1 13/16" in dia., 2 11/16" depth behind panel. Wt., 1 lb.

Stk. No.	Type	Net Ea.
5F894	5-1011	54.00

40 VOLT POWERSTATS



Meets high current, low voltage power supply applications. Manual type with open construction. Input: 40 V, 60 hz. Output: 0-40 V. POWERKOTE coils.

Stk. No.	Type	Max. Amps.	Max. KVA	1-11	12-99	.....
5F754	10B-40	7	.28	13.00	11.05	.....
				1-5	6-24	25-99
5F755	21-40	18	.72	18.00	16.20	15.30
5F756	116BU40	25	1.0	26.00	23.40	22.10

SUPERIOR TYPE UC1MB VOLTBOX

Type UC1MB

Type UC1MB. Voltbox. For AC variable voltage testing up to 10 amps. Has Powerstat, direct reading voltmeter. Input: 120 volts, 50/60 hz. Output: 0-140 volts, 1.4 KVA. Includes renewable fuse, 6-foot cord-plug. Size: 7 7/8x8½". Sh. wt., 17 lbs.

Stk. No.	Type	1-5	6-24	25-99
5F820	UC1MB	80.00	72.00	68.00

SUPERIOR POWERSTAT VARIABLE VOLTAGE TRANSFORMERS

Rotation of brush tap delivers a continuously-adjustable voltage from AC power lines over range efrom zero to or above line voltage. Manual and motor-driven, open and enclosed air-cooled types are available for 120, 240 and 480 volt, 25, 50/60 cycle, single and three phase service in rating from 1.8 KVA to 2.1 KVA. Current rating available over entire range of output voltage. Zero waveform distortion, negligible maintenance. gold-alloy plated commutator, excellent regulation, POWERKOTE coils. ††Uncased.

FOR 120 VOLT, 50/60 Hz SINGLE-PHASE

Stk. No.	Mfr's Type	OUTPUT Volts	OUTPUT Amps.	KVA	Wt. lbs.	1-5	6-24	25-99
5F766	126	0-140	15	2.1	15	42.00	37.80	35.70
5F767	126U††	0-140	15	2.1	14.5	37.00	33.30	31.45
5F768	226	0-280	7.5	2.1	15	42.00	37.80	35.70
5F769	226U††	0-280	7.5	2.1	14.5	37.00	33.30	31.45

FLEXIFORMER PACKAGED TRANSFORMERS PRIMARY

Model TP150. This transformer is a self-contained toroidal primary coil incased in durable high impact plastic; the center opening permits hand-winding the proper number of secondary turns for the desired turns ratio. The primary consists of a strip-wound silicon-steel core having a coil of 400 turns of copper wire. Input rating: 120V, 50/60 hz at 150VA. As a current transformer, maximum primary current is 400A. With 5-way binding posts for connections. Size, 6 x 5¾ x 4⅜"; shpg. wt., 6 lbs.

5F770. 1-1 NET EACH **30.00**

12-99 NET EACH **25.50**

Model TP1000. Similar to above, except rated 1000VA at 120V 50/60 hz. Maximum input voltage: 175V, 60c- 145V, 50c.

5F645. 1-11 NET EACH **85.00**

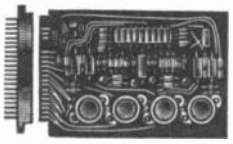
12-99 NET EACH **73.75**

NEWARK — dependable service

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

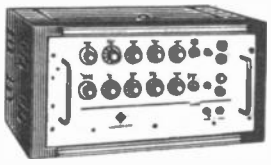
Superior Regulators & Transformers

● NEW TRANSLATOR MODULES



Plug-in printed circuit board with logic capability for stepping motor in increments of 1.8°. Requires 30V, center-tapped dc supply with max. ripple of 5%. Depending on regulation of power supply, voltage may have to be varied to maintain rated voltage to motor. The units can be triggered by a 10-15 V negative change of voltage with min. pulse width of 50 msec. Input imped. 500Ω. STM1800V is similar to STM1800 but with built-in oscillator adjustable to drive motor to speeds from 4 steps/sec. up to max. motor speed. Dropping resistors are needed with all motors. Shpg. wt. 1 lb.

Stock No.	Type Number	Net Each
5F750	STM1800	55.00
5F751	STM1800V	65.00



2SP1800-4

2SP1800B-4

● NEW SLO-SYN PRESET INDEXERS

SLO-SYN Preset Indexers are used for controlling indexing operations in applications using bifilar SLO-SYN motors for positioning. They automatically provide correct switching sequence needed to drive motors the required number of steps and have provisions for actuating external equipment needed to perform related operations. Dials on control panel can be set to provide desired number of steps. May be operated in any ambient temp. from 0°C to +40°C. Dropping resistor required. Shpg. wt. 19 lbs. except * 63 lbs. and † 64 lbs.

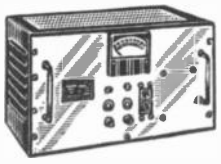
Stk. No.	Type	Count Range	Input Amp.	Each
5F752	SP1800B-3	0-999	1.25	685.00
5F753	SP1800B-4	0-9,999	1.25	725.00
5F757	SP1800B-5	0-99,999	1.25	785.00
5F758	2SP1800-3*	0-999	1.4	1,250.00
5F898	2SP1800-4†	0-9,999	1.4	1,330.00

IES SERIES VOLTAGE REGULATOR

Regulates output voltage through controlled firing of inverse parallel pair of SCR's connected in the shunt leg of an autotransformer. Solid state circuitry and smaller, lighter units are featured. No vacuum tubes, motors, blowers or relays are used. Wide operating frequency range: 50 or 60 cycles ±10%. Maintains output voltage within 100 millivolt rms band for any combination of input voltage and load current changes and for changes in load power factor from 1.0 to 0 lagging. Distortion will not exceed 3%. Speed of response instantaneous for most applications. Time constant response: 30 milliseconds. Operated at ambient temperatures from 0 to 50°C. Temperature coefficient: 0.01%/°C; output voltage will change 0.01% for a degree C change. Mounted in cabinet. All except Type IES9115 have cabinets which can also be rack mounted by removing the feet. Provisions for remote sensing. Also features a removable plug-in circuit board. High VA efficiency (up to 95%). Includes an overcurrent protection circuit which senses the magnitude of flowing current in SCR leg and removes gate drive from SCR's when current exceeds pre-set magnitude.

Stock No.	Type	Max. Output Amps	Rated Output KVA	Shpg. Wt. Lbs.	EACH	2-49
6F126	IES91005	4.4	0.5	57	370.00	314.50
6F127	IES9101	8.7	1.0	72	430.00	365.50
6F128	IES9103	26.1	3.0	136	660.00	561.00
6F129	IES9106	52.2	6.0	181	820.00	697.00
6F130	IES9115	130	15.0	382	1740.00	1479.00
6F131	IES9203	13	3.0	126	750.00	637.50
6F132	IES9206	26.1	6.0	171	860.00	731.00
6F133	IES9215	65	15.0	372	1740.00	1479.00

Type EMT. Electro-Mechanical Transistorized Series. Motor driven "Powerstat" variable transformer, detector circuit & auxiliary transformer. No critical adjustments. Operating sensitivity adjustable to within ±1%. 50/60 cycle AC service. Cabinet mntg. except rack (*) & wall (**). 1 phase except 3 phase (***).



Stock No.	Type	Max. Output Amps	Rated Output KVA	Shpg. Wt. Lbs.	EACH	2-49
6F106	EMT4102B	20.0	2.3	90	475.00	403.75
6F107	EMT4106C	57.0	6.6	135	550.00	467.50
6F108	EMT4106CR*	57.0	6.6	135	520.00	442.00
6F109	EMT4106CW**	57.0	6.6	135	550.00	467.50
6F110	EMT4112B	114.0	13.0	135	550.00	467.50
6F111	EMT4112BR	114.0	13.0	135	520.00	442.00
5F815	EMT4115B	144.0	16.6	300	700.00	595.00
5F819	EMT4207B	36.0	8.3	200	600.00	510.00
5F832	EMT4228C	130.0	29.9	350	750.00	637.50
6F112	EMT6210YB***	33.0	13.1	460	1055.00	896.75
6F113	EMT6220YB***	63.0	25.1	460	1200.00	1020.00
6F114	EMT6245YB***	145.0	57.8	975	1620.00	1377.00

SLO-SYN SYNCHRONOUS/STEPPING MOTORS

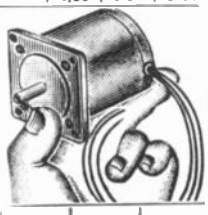
Standard Types. Rugged bi-directional motors that can be used either as AC constant-speed motors or DC stepping motors. Rated for continuous duty at 40°C max. Types with suffix P1, P2, etc. have planetary gear speed reduction assemblies mounted on motor to lower speed and increase torque; assemblies are in dustproof enclosure, employ nylon gears. Types with RC suffix have built-in phase shift network for single-phase operation; other units operate from 2-phase current, require external RC network for 1-phase use (see below for components). Avg. shpg. wt., 6½ lbs.

Stk. No.	Type	Speed (RPM)	Max. Amps	Torque (oz.-in)	1-5	6-24	25-99
6F134	SS25	72.000	0.1	25	46.00	41.40	39.10
6F143	TS50	200.000	0.3	50	60.00	54.00	51.00
6F144	TS52*	200.000	0.2	50	60.00	54.00	51.00
5F847	SS50	72.000	0.3	50	40.00	36.00	34.00
5F849	SS50P1	16.6	0.3	120	60.00	54.00	51.00
6F116	SS50P2	3.32	0.3	600	60.00	54.00	51.00
5F844	SS150	72.900	0.4	150	48.00	43.20	40.80
5F636	SS150P2	3.323	0.4	2000	68.00	61.20	57.80
5F637	SS150P3	.665	0.4	2000	78.00	70.20	66.30
5F638	SS150P4	.133	0.4	2000	88.00	79.20	74.80
5F639	SS150P5	.027	0.4	2000	98.00	88.20	83.30
5F641	SS150-P2RC	3.323	0.4	2000	87.00	78.30	73.95
5F642	SS150-P3RC	.665	0.4	2000	97.00	87.30	82.45

All types above for 120V 50/60c. except *240V, 50/60c.

COMPONENT PARTS FOR SINGLE PHASE AC OPERATION

Stk. No.	Type	Description	1-5	6-24	25-99
5F845	R-SS50/ SS150	Auxiliary resistor for above 250 ohms 25 watts	1.25	1.12	1.06
5F846	C-SS150	Auxiliary capacitor for above 3.75 mfd. 330 VAC	3.50	3.15	2.89
5F848	C-SS50	Capacitor for SS50 2.6 mfd.	4.50	4.05	3.83

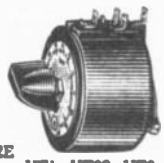


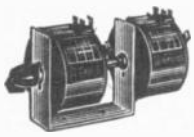
Bifilar Type Synchronous Stepping Motors. Used as a DC stepping device in a wide variety of control functions, automatic and semi-automatic. Maintenance-free; well suited for use in remotely-operated applications, where access for regular servicing is not possible. 200 Steps/Rev. except †72 steps. Avg. shpg. wt., 1½ lbs.

Stk. No.	Type	DC Volts	Amps/ Winding	1-5	6-24	25-99
5F1218	SS25-1002	5.9	0.88	71.00	63.90	60.35
5F1219	SS25-1001	11.8	0.44	71.00	63.90	60.35
6F138	TS50-1001†	3.0	4.0	84.00	75.60	71.40
6F139	SS50-1009	5.5	1.3	65.00	58.50	55.25
6F140	SS250-1002	9.0	1.55	93.00	83.70	79.05
6F141	SS250-1027	4.6	3.1	93.00	83.70	79.05
6F142	SS400-1021	5.3	3.4	125.00	112.50	106.25

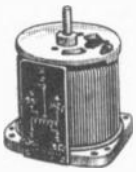
OHMITE "V.T." VARIABLE TRANSFORMERS

VT02E
In Case VT1, VT02, VT3

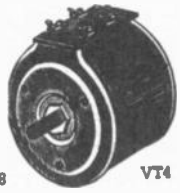




VT02-2



VT8



VT4

VT20

Six sizes for a wide range of electrical ratings. Excellent regulation at any point within the rated load. Output free of wave form distortion. Deliver full rated current at any brush setting. Have overvoltage feature, except those marked "No Overvoltage", and high-current low-voltage to meet transistorized power supplies and high current applications.

All units single phase except Two-in-Tandem. All may be used to over 400 hz. Screw terminals and solder lugs on all models except types VT1, VT02, and VT3 which have solder lugs and accept push on connectors and have 3/8-32 threaded bushings for single mount. Shafts may be extended from the brush or base side. VT20 has a collet shaft lock for repositioning without scoring shaft. Dials on overvoltage models calibrated for overvoltage and normal line connection. Knob, dial, mounting hardware supplied.

SINGLE TRANSFORMERS—UNCASED

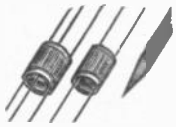
Stk. No.	Type	Input Volts	Hz	Max. Out Amps	Max. Out Volts	Description	Size	Wt. Lbs.	1-9	10-24	25-49	50-99
5F562	VT1	120	60	1.0	0-120/132	Basic 1.0A model	2 7/8"D.x2 1 1/16"L.	1.5	8.00	7.20	6.80	6.40
5F563	VT1N	120	60	1.2	0-120	No overvoltage	2 7/8"D.x2 1 1/16"L.	1.5	8.00	7.20	6.80	6.40
5F650	VT02	120	60	1.75	0-120/132	Basic 1.75A model	2 7/8"D.x3 3/16"L.	2.25	9.00	8.10	7.65	7.20
5F570	VT02N	120	60	2.0	0-120	No overvoltage	2 7/8"D.x3 3/16"L.	2.25	9.00	8.10	7.65	7.20
5F571	VT2LN	40	60	5	0-40	Hi-amps, Low-volts	2 13/16"D.x3"L.	2.4	11.00	9.90	9.35	8.80
5F586	VT3	120	60	2.6	0-120/132	Basic 2.6A model	2 7/8"D.x3 1 1/16"L.	3.0	10.50	9.45	8.93	8.40
5F587	VT3N	120	60	3.0	0-120	No overvoltage	2 7/8"D.x3 1 1/16"L.	3.0	10.50	9.45	8.93	8.40
5F651	VT4	120	50	3.5	0-120/140	Basic 3.5A model	3 9/16"D.x4 1 1/16"L.	5.25	14.00	12.60	11.90	11.20
5F572	VT4LN	40	50	12.0	0-40	High-amps, Low-volts	3 9/16"D.x4 1 1/16"L.	5.25	16.00	14.40	13.60	12.80
5F577	VT4N	120	50	4.75	0-120	No overvoltage	3 9/16"D.x4 1 1/16"L.	5.25	14.00	12.60	11.90	11.20
5F652	VT8	120	50	7.5	0-120/140	Basic 7.5A model	4 7/8"D.x5 1 1/16".	10.25	18.00	16.20	15.30	14.40
5F573	VT8LN	40	50	22	0-40	High-amps, low-volts	4 7/8"D.x5 1 1/16".	10.25	20.00	18.00	17.00	16.00
5F576	VT8N	120	50	10	0-120	No overvoltage	4 7/8"D.x5 1 1/16".	10.25	18.00	16.20	15.30	14.40
5F574	VT20	120	50	20	0-120/140	Basic 20A model	7 1/2"W.x8 1/16"D.x5 5/8"H.	22	50.00	45.00	42.50	40.00
5F581	VT20N	120	50	25	0-120	No overvoltage	7 1/2"W.x8 1/16"D.x5 5/8"H.	22	50.00	45.00	42.50	40.00
5F588	VT20H	240	50	9	0-240/280	Basic 240 V. Input	7 1/2"W.x8 1/16"D.x5 5/8"H.	22	52.00	46.80	44.20	41.60
5F589	VT20HN	240	50	11	0-240	No overvoltage	7 1/2"W.x8 1/16"D.x5 5/8"H.	22	52.00	46.80	44.20	41.60

SINGLE TRANSFORMERS—CASED

5F654	VT02E	120	60	1.4	0-132	Fixed Mtg.	3 3/8"W.x2 1/2"D.x4 1/4"H.	2.8	14.00	12.60	11.90	11.20
5F659	VT02F	120	60	1.75	0-132	Portable	3 3/8"W.x2 1/2"D.x4 1/4"H.	3.2	15.50	13.95	13.18	12.40
5F578	VT4FC	120	50	3.5	0-140	3 wire type ASA cord	4 7/8"W.x4 1/2"D.x6 1/4"H.	7.8	23.50	21.15	19.98	18.80
5F579	VT8FC	120	50	7.5	0-140	Same as VT4FC	5 17/32"W.x5 1/4"D.x7 3/8"H.	13.8	27.50	24.75	23.38	22.00
5F580	VT8GC	120	50	6.0	0-120/140	Same as VT4FC	5 9/16"W.x5 1/4"D.x7 3/8"H.	14.2	31.00	27.90	26.35	24.80
5F582	VT8G	120	50	6.0	0-120/140	Laboratory Portable	5 9/16"W.x5 1/4"D.x7 3/8"H.	14.2	28.00	25.20	23.80	22.40
5F575	VT20B	120	50	20	0-120/140	Basic protective enclosure. Fixed mtg.	7 5/8"W.x8 1/8"D.x6 1/8"H.	22.5	55.00	49.50	46.75	44.00
5F583	VT20NB	120	50	25	0-120	No overvoltage Encl.	7 5/8"W.x8 1/8"D.x6 1/8"H.	22.5	55.00	49.50	46.75	44.00

TWO IN TANDEM ASSEMBLIES

Stk. No.	Type	Input Volts	Hz	Max. Out Amps	Max. Out Volts	Description	Size	Wt. Lbs.	1-4	5-12	13-24	25-49
5F653	VT02-2	240	60	1.75	0-240/264	Series conn.	2 7/8"W.x4 1/4"H.x5 1/32"	5.25	27.00	24.30	22.95	21.60



SPRAGUE

TRIGATE PULSE TRANSFORMERS FOR LOW-COST SCR CIRCUIT APPLICATORS

For SCR triggering applications where excellent low cost performance is required. Balanced pulse characteristics and energy transfer from primary to secondary and tertiary windings. Min. saturation effect. Fast pulse rise time and increased current capability to prevent SCR di/dt failure. Transformer leads polyuretiane insulated magnet wire. May be soldered directly to terminals or other circuit components without need for removal of wire insulation. For operation over temp. range of —10°C to +70°C.

Stk. No.	Type	Min. LP (μH)	Turns Ratio	Typ. LL(H)	Typ. CC (pH)	Max. R(D)CP	Max. R(D)CS	Typ. Vsec. Output Winding	60 Hz Dielectric Test (V. RMS)	Max. 60 Hz A-C	1-14	15-49	50-99	100-249	250-499	500-999
60F288	11Z12	200	1:1	2	500	1.5	1.5	2000	1600	240	2.80	2.20	1.44	1.04	.96	.88
60F289	11Z13	300	1:1:1	2	500	1.5	1.5	2000	1600	240	3.08	2.42	1.58	1.44	1.06	.97

NEWARK NOW HAS TEN GREAT WAREHOUSES AROUND THE COUNTRY TO GIVE YOU QUALITY PRODUCTS CONVENIENTLY.

MAKE NEWARK YOUR DEPENDABLE SOURCE FOR ALL ELECTRONIC COMPONENTS

Whether ordering in quantity for production or in small lots for specialized use, make Newark your headquarters for every electronic component. — Get the exact part you need from an inventory of over 70,000 units! Top Quality, Lowest Prices, Fastest Service.

Voltage Regulation & Control Devices

G-E "VOLT-PAC" VARIABLE TRANSFORMER

Provides continuously adjustable output voltage. Handles short duration current surges up to 10 times rated current and overload current up to 2 times rated current for approximately ¼ hour without overheating. Maximum output currents applicable up to 100% voltage. Core consists of high grade strip wound silicon steel, plus moulded phenolic winding form to insulate coil from form. Types for 50-60 cycles, except (*) for 60 cycles only. Cased units with enclosed terminal boards, plug-and cord-set units, motor-operated units, multiple-core units, three-phase units, and automatic control units are available through Newark.

120V INPUT — UNCASED, SINGLE CORE

All units provide 0-140V overvoltage output except * 0-132V, † no overvoltage, 0-120V only. "Max. amps": output into constant-Z load at or below 120V; at overvoltage "rated" current should not be exceeded. Uncased, with exposed terminals.

Stock No.	Type No.	Max. Amps.	Rated Amps.	Shpg. Wt.	1-9	10-24	25-99	100-Up
5F1000	9T92Y1*	3.2	2.5	2½	10.00	9.00	8.10	7.30
5F1002	9T92Y5	5.8	4.0	4½	15.00	13.50	12.15	10.95
5F1003	9T92Y7	10.8	7.5	9¾	19.00	17.10	15.34	13.87
5F1007	9T92Y8†	13.0	10.0	9¾	20.00	18.00	16.20	14.60
5F1005	9T92Y9	11.5	9.0	9¾	20.00	18.00	16.20	14.60
5F1008	9T92Y10†	14.5	11.5	9¾	24.00	21.60	19.44	17.52
5F1009	9T92Y27	19.0	15.0	17	37.00	33.30	29.97	27.01
5F1011	9T92Y28	21.7	18.0	17	47.00	42.30	38.07	34.31
5F1025	9T92Y37	34.0	30.0	17	89.00	80.10	72.09	64.97
5F1026	9T92Y38	37.0	37.0	30	110.00	99.00	89.10	80.30
5F1027	9T92Y49	55.0	50.0	60	136.00	122.40	110.16	99.28
5F1028	9T92Y50	60.0	60.0	60	205.00	184.50	166.05	149.65

120/240V INPUT — UNCASED SINGLE CORE

Similar to above. 0-280V overvoltage output. except * 240V input, 0-240V output only.

5F1017	9T92Y12*	5.8	4.0	9¾	24.00	21.60	19.44	17.52
5F1015	9T92Y13	5.0	3.5	9¾	24.00	21.60	19.44	17.52
5F1018	9T92Y14*	6.8	....	9¾	26.00	23.40	21.06	18.98
5F1019	9T92Y29	10.1	7.0	17	37.00	33.30	29.97	27.01
5F1021	9T92Y30	11.0	8.5	17	47.00	42.30	38.07	34.31
5F1029	9T92Y39	14.0	14.0	16	89.00	80.10	72.09	64.97
5F1030	9T92Y40	16.0	16.0	30	108.00	97.20	87.48	78.84
5F1031	9T92Y51	33.0	30.0	60	136.00	122.40	110.16	99.27
5F1032	9T92Y52	35.0	35.0	60	205.00	184.50	166.05	149.65

120V INPUT — CASED, SINGLE CORE

Identical to units at left, except enclosed (terminals exposed).

Stock No.	Type No.	Max. Amps.	Rated Amps.	Shpg. Wt.	1-9	10-24	25-99	100-Up
5F1004	9T92Y7G2	10.8	7.5	10½	24.00	21.60	19.44	17.52
5F1006	9T92Y9G2	11.5	9.0	10½	25.00	22.50	20.25	18.25
5F1010	9T92Y27G2	19.0	15.0	18¾	42.00	37.80	34.02	30.66
5F1012	9T92Y28G2	21.7	18.0	18¾	52.00	46.80	42.12	37.96
5F1033	9T92Y37G2	34.0	30.0	30	94.00	84.60	76.14	68.62

240V INPUT — UNCASED, TRIPLE CORE

Similar to units at left, but triple core for tandem or 3-phase operation. 0-280V output; uncased, exposed terminals.

Stock No.	Type No.	Max. Amps.	Rated Amps.	Shpg. Wt.	1-9	10-24	25-99	100-Up
5F1034	9T92Y19	10.8	7.5	30	61.20	57.80	54.40	51.00
5F1035	9T92Y33	19.0	15.0	51	117.00	110.50	104.00	97.50
5F1036	9T92Y34	21.7	18.0	51	148.50	140.25	132.00	123.75

120V INPUT — SINGLE CORE PLUG-IN TYPE

Cord-and-plug input, standard 2-blade socket output, except * output accepts standard grounding plug. Fully enclosed.

Stock No.	Type No.	Max. Amps.	Rated Amps.	Shpg. Wt.	1-9	10-24	25-99	100-Up
5F1037	9T92Y90	10.8	7.5	11	26.00	23.40	21.06	18.98
5F1038	9T92Y86*	10.8	7.5	11	30.00	27.00	24.30	21.90
5F1039	9T92Y91	11.5	9.0	11	27.00	24.30	21.87	19.71
5F1040	9T92Y87*	11.5	9.0	11	32.00	28.80	25.92	23.36

AC VOLTAGE STABILIZERS

Static-magnetic transformer-type units provide voltage maintained within ± 1% while input fluctuates ±15%. Unfiltered output waveform is relatively flat-topped, with 15-20% harmonic content; filtered types provide near-sinusoidal output, maximum harmonic content 3%. **All units are for single-phase, 60 cycle AC only; stabilized output 118V except as noted. Completely enclosed, with enclosed terminals, except** units rated below 250 V-A have insulated **cable leads.**

Unfiltered Types. All have 118V output except * 118/236V.

Stock No.	Type	Rated V-A	Input Volts	Wt., Lbs.	1-4	5-9	10-24	25-49
5F1041	9T91Y4070	15	95-130	5	14.70	13.08	12.20	11.46
5F1042	9T91Y4090	30	95-130	6	16.80	14.95	13.94	13.10
5F1043	9T91Y4110	60	95-130	7	22.10	19.67	18.34	12.24
5F1044	9T91Y4130	120	95-130	15	30.50	27.15	25.32	23.79
5F1045	9T91Y4140	250	95-130	24	50.90	45.30	42.25	39.70
5F1046	9T91Y4142	250	190-260	24	50.90	45.30	42.25	39.70
5F1047	9T91Y4150	500	95-130	37	79.80	71.02	66.23	62.24
5F1048	9T91Y4152	500	190-260	37	79.80	71.02	66.23	62.24
5F1049	9T91Y4155	500	380-520	37	79.80	71.02	66.23	62.24
5F1050	9T91Y4170	1000	95-130	55	122.00	108.58	101.26	95.16
5F1051	9T91Y4172	1000	190-260	55	122.00	180.58	101.26	95.16
5F1052	9T91Y4183*	2000	95-130/175-235/190-260	95	246.00	218.94	204.18	191.88
5F1053	9T91Y4184	2000	190-260/380-520	95	242.00	215.38	200.86	188.76

Harmonic Filtered Types. 118V output.

5F1054	9T91Y7140	250	95-130	36	52.50	46.73	43.58	40.95
5F1055	9T91Y7150	500	95-130	43	82.40	73.34	68.39	64.27
5F1056	9T91Y7170	1000	95-130	80	126.00	112.14	104.58	98.28
5F1057	9T91Y7172	1000	190-260	80	126.00	112.14	104.58	98.28

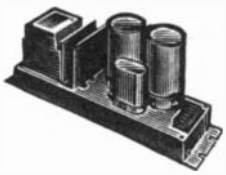
Cord/Receptacle Types. Standard 2-blade plug and cord input, socket output. 118V output.

Stock No.	Type	Rated V-A	Volts Input	Wt. Lbs.	1-4	5-9	10-24	25-49
5F1058	9T91Y4090G19	30	95-130	7	18.90	16.82	15.69	14.74
5F1059	9T91Y4110G19	60	95-130	7	24.20	21.54	20.09	18.88

Filament Types. Current-limiting characteristic protects tube filaments from surges. Unenclosed. Output: 6.3V, unfiltered.

Stock No.	Type	Rated V-A	Input Volts	Wt. Lbs.	1-4	5-9	10-24	25-49
5F1060	9T91Y367	15	95-130	2	13.90	12.37	11.54	10.84
5F1061	9T91Y369	31.5	95-130/190-260	2½	15.80	14.06	13.11	12.32
5F1062	9T91Y370	63	95-130/190-260	3	20.70	18.42	17.18	16.15

REGULATED DC POWER SUPPLIES



Furnish fixed DC output voltage within ± 1% tolerance while input AC voltage varies ± 15%. All units feature rugged magnetic and semiconductor circuitry and are designed for chassis or standard 19" rack mounting. Short-circuit current is limited to approximately twice the rated value. Can be installed with either polarity grounded. Input voltage range: 97-130VAC, 60 cps, 40°C ambient. Output ripple level 1% rms max. Efficiency 70-85% for normal output levels; efficiency may decrease for unusually low output levels.

Stock No.	Type	Output V	Output A	Wt. lbs.	1-4	5-9	10-24
5F1063	9T66Y51	12	5.0	16	135.00	121.50	108.00
5F1064	9T66Y53	12	15.0	25	162.00	145.80	129.60
5F1065	9T66Y987	24	2.5	16	117.50	105.75	94.00
5F1066	9T66Y988	24	6.0	25	138.50	124.65	110.80
5F1067	9T66Y989	24	10.0	28	161.00	144.90	128.80
5F1068	9T66Y990	24	20.0	45	210.00	189.00	168.00
5F1069	9T66Y83	28	8.0	25	153.00	137.70	122.40
5F1070	9T66Y93	48	4.0	25	122.00	109.80	97.60
5F1071	9T66Y94	48	10.0	35	180.00	162.00	144.00
5F1072	9T66Y980	125	2.0	26	134.00	120.60	107.20
5F1073	9T66Y981	150	2.0	28	144.00	129.60	115.20

Write NEWARK For Information On The Complete Line Of GE Voltage Regulation & Control Devices.

STACO INCORPORATED — Auto Transformers

E1010VAW

E171

A

B

C

D

E

F

G

H

STACO VARIABLE AUTOTRANSFORMERS

Wide selection of autotransformers designed to deliver variable output voltages with high efficiency, reliability, and minimum maintenance. The optimum core and coil design used in these transformers result in higher current ratings and greater overload capabilities. Units are designed to deliver output voltages of zero to line voltage, or zero to 17%. Above line voltage. Terminals permit connection for increasing voltage in either clockwise or counterclockwise rotation of knob. Regulation is substantially independent of the load; zero wave form distortion. Moderate temperature rise. Precious metal plating of the commutator surface eliminates oxidation and deterioration. All units are designed for 50/60Hz operation unless otherwise noted. *60Hz only at over-voltage, factory connection for line voltage output. **60Hz operation only.

120 VOLT SINGLE PHASE PANEL MOUNTING

Stk. No.	Type	Old Type #	Fig.	Volts	Amps	KVA	Size	Lbs.	1-6	7-12	13-24	25-49
5F300	121	100BU	A	*0-132	1.25	.165	$2\frac{13}{16}$x$2\frac{9}{32}$	3	9.00	9.00	7.65	7.20
5F301	171	175BU	A	*0-132	1.75	.23	$2\frac{13}{16}$x$2\frac{9}{32}$	3	9.25	9.25	7.85	7.40
5F302	251	250BU	A	*0-132	2.5	.33	$3\frac{1}{4}$x$3\frac{1}{4}$x$3\frac{15}{16}$	3.5	10.25	10.25	8.70	8.20
5F303	371	375BU	B	*0-120/140	3.75	.53	$3\frac{3}{4}$x$3\frac{3}{4}$x$3\frac{1}{4}$	5	14.75	12.55	12.55	11.80
5F304	501	451	B	0-120/140	5.0	.70	$3\frac{3}{4}$x$3\frac{3}{4}$x$3\frac{9}{16}$	5	15.00	12.75	12.75	12.00
5F305	751	500BU	C	0-120/140	7.5	1.05	$5\frac{11}{16}$x5	10	18.75	15.95	15.95	15.00
5F306	1010	1000	D	0-120/140	10.0	1.4	$5\frac{5}{16}$x5x$4\frac{3}{16}$	11	19.25	16.35	16.35	15.40
5F307	1210	1200	D	**0-120	12.5	1.4	$5\frac{5}{16}$x5x$4\frac{3}{16}$	11	21.50	18.30	18.30	17.20
5F308	1510	T1500U	E	0-120/140	15.0	2.1	$6\frac{1}{8}$x$6\frac{5}{8}$x$4\frac{1}{8}$	20	36.50	31.05	31.05	29.20

240 VOLT SINGLE PHASE PANEL MOUNTING

Stk. No.	Type	Old Type #	Fig.	Volts	Amps	KVA	Size	Lbs.	1-6	7-24	25-49
5F309	1020	.....	D	0-240/280	3.5	.98	$5\frac{5}{16}$x5x$4\frac{3}{16}$	11	22.00	18.70	17.60
5F310	1520	T1520U	E	0-240/280	9.5	2.7	$6\frac{1}{8}$x$6\frac{5}{8}$x$4\frac{13}{16}$	23	36.50	31.65	29.20

120 VOLT SINGLE PHASE MODELS WITH CORD & RECEPTACLE

All models housed in rugged cases include pilot light, switch, fuse, line cord, plug, and matching receptacle.

2 PF Models are equipped with 2-wire cords, plugs, and ceptacles.

3 PN Models are equipped with 3-wire grounded cords, plugs, and receptacles.

Stk. No.	Type	Old Type #	Fig.	Volts	Amps	KVA	Size	Lbs.	1-12	13-24	25-49
5F311	2PF121	PA-1	F	**0-132	1.25	.165	$3\frac{7}{8}$x$3\frac{7}{8}$x$3\frac{1}{2}$	3.5	17.00	14.45	13.60
5F312	2PF1010	2PF1000	G	0-120/140	10.0	1.4	$6\frac{7}{8}$x5x$4\frac{1}{16}$	12.5	27.75	23.60	22.20
5F313	3PN2210	3PN2500B	H	0-140	22.0	3.0	$10\frac{3}{4}$x$7\frac{5}{8}$x$4\frac{1}{8}$	23	75.00	63.75	60.00

240 VOLT SINGLE PHASE MODELS WITH CORD & RECEPTACLE

All models housed in rugged cases include pilot light, switch, fuse, line cord, plug, and matching receptacle.

2 PF Models are equipped with 2-wire cords, plugs, and receptacles.

Stk. No.	Type	Fig.	Volt	Amps	KVA	Size	Lbs.	1-12	13-24	25-49
5F314	2PF1020	G	0-280	3.5	.98	$6\frac{7}{8}$x5x$4\frac{7}{16}$	12.5	32.50	27.65	26.00

STACO DELUXE LINE

Exclusive line of variable transformers feature diode-protected meters (to guard against accidental burnout); insulated banana jacks on all metered units: easy to read, bold type facilitates accurate measurements. Positive stops are built into all control knobs to insure against internal damage and to assure no loss of index on the calibrated dials. Circuit breakers are employed to avoid the inconvenience and cost of fuse replacement, with the exception of the E171, which is fused. Enclosures are tamper-proof and movements are accurate within 2%. Pilot lights are provided with each unit at no extra cost. Efficiency is as high as 98%, and under maximum-output-voltage conditions at rated current, better than 5% regulation can be attained. Convenience outlets on most units add versatility to your work area. Conservative ratings allow continuous operation with a 10% to 17% output voltage above input. Available are variable autotransformers for every industrial, classroom, or laboratory application. Ammeter, voltmeter, or wattmeter, or a combination of all these are available. A selector switch is provided for use with dual scale meters to assure greater accuracy in meter readings. All units are supplied with a ventilated case, constructed of extruded aluminum and baked epoxy painted 18-gauge steel. The front panel is aluminum with permanently etched legends. The convenient carrying handle is anodized, rugged extruded aluminum. All units are designed to meet UL and CSA standards of safety.

Note: Types E501, E501VA, E501VAW, E1010V, E1010VA, E1010VAW have both a convenience AC and DC output of 10% of the output current rating of the unit. Outputs are available at banana receptacles. EJ401V, EJ901V also have a 0-120VDC output at full rated current available at banana receptacles. All convenience outlets provide 120VAC at 10 AMPS minimum.

Stk. No.	Mfr. Type	50/60 Hz Volts Current AC Input	AC Output Volts	Output Amps	Max. KVA	Size	Wt. Lbs.	NET
5F315	E171	120V, 10A	0-132	1.75	.23	$5\frac{7}{8}$x$9\frac{9}{16}$x$3\frac{5}{8}$	9	20.75
5F316	E501	120V, 10A	0-120/140	5.0	0.7	$7\frac{3}{8}$x$11\frac{3}{16}$x$4\frac{7}{8}$	13	30.00
5F317	E501V	120V, 10A	0-120/140	5.0	0.7	$7\frac{3}{8}$x$15\frac{1}{16}$x$5\frac{7}{8}$	15	57.00
5F318	E501VA	120V, 10A	0-120/140	5.0	0.7	$11\frac{1}{4}$x$12\frac{9}{16}$x$5\frac{7}{8}$	19	89.50
5F319	E501VAW	120V, 10A	0-120/140	5.0	0.7	$11\frac{1}{4}$x$14\frac{9}{16}$x$5\frac{7}{8}$	20	148.00
5F320	E1010	120V, 15A	0-120/140	10.0	1.4	$7\frac{3}{8}$x$11\frac{15}{16}$x$5\frac{7}{8}$	19	38.50
5F321	E1010V	120V, 15A	0-120/140	10.0	1.4	$7\frac{3}{8}$x$15\frac{1}{16}$x$5\frac{7}{8}$	21	69.50
5F322	E1010VA	120V, 15A	0-120/140	10.0	1.4	$11\frac{1}{4}$x$12\frac{9}{16}$x$5\frac{7}{8}$	24	108.00
5F323	E1010VAW	120V, 15A	0-120/140	10.0	1.4	$11\frac{1}{4}$x$14\frac{9}{16}$x$5\frac{7}{8}$	25	175.00
5F324	EJ401V	120V, 10A	0-140	4.0	.56	$9\frac{1}{2}$x$12\frac{15}{16}$x$6\frac{3}{8}$	30	85.00
5F325	EJ901V	120V, 10A	0-140	9.0	1.25	$11\frac{1}{4}$x$14\frac{9}{16}$x$6\frac{3}{8}$	36	100.00

Suffix V=Voltmeter; A=Ammeter; W=Wattmeter.

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

Chicago-Stancor Transistor Transformers

TRANSISTOR INPUT TYPES

Stock No.	Mfr's. Type	Imp. in Ohms Pri.	Imp. in Ohms Sec.	Max. Pri. Ma. DC	Power Watts	Mtg. Ctrs.	Fig.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F427	TA-1	600CT	10	20	.05	1 5/16	A	2.62	2.36	2.23	2.10	1.57	1.43
1F670	TA-18	30CT	50000	14.7	.15	25/32	A-1	4.57	4.12	3.89	3.66	2.48	2.26
1F671	TA-47	1000CT	200000CT	123	.30	1 3/8	A	4.39	3.95	3.73	3.51	2.37	2.16

TRANSISTOR INTERSTAGE TYPES

1F428	TA-2	100CT	10CT	100	.25	1 3/16	A	2.47	2.23	2.18	1.98	1.42	1.30
1F429	TA-3	100	1000CT	100	.25	2	A	2.45	2.21	2.09	1.96	1.47	1.35
1F430	TA-4	500CT	5000CT	12	.03	2	A	3.47	3.13	2.95	2.78	2.01	1.83
1F672	TA-19	100CT	10CT	—	.15	25/32	A-1	4.92	4.43	4.18	3.94	2.67	2.44
1F674	TA-24	500CT	50000	—	.15	25/32	A-1	4.39	3.95	3.73	3.51	2.37	2.16
1F675	TA-27	1200	20000CT	—	.15	25/32	A-1	4.39	3.95	3.73	3.51	2.37	2.16
1F676	TA-28	1500	500CT	—	.15	25/32	A-1	4.39	3.95	3.73	3.51	2.37	2.16
1F677	TA-30	5000CT	7500CT	—	.15	25/32	A-1	4.40	3.96	3.74	3.52	2.39	2.18
1F678	TA-31	5000CT	10000CT	—	.15	25/32	A-1	4.39	3.95	3.73	3.51	2.37	2.16
1F679	TA-32	5800CT	80000CT	—	.15	25/32	A-1	4.39	3.95	3.73	3.51	2.37	2.16
1F680	TA-34	10800	200CT	—	.15	25/32	A-1	4.65	4.18	3.95	3.72	2.52	2.30
1F681	TA-35	10000	2000CT	—	.15	25/32	A-1	4.39	3.95	3.73	3.51	2.37	2.16
1F682	TA-36	10000	3000CT	—	.15	25/32	A-1	4.39	3.95	3.73	3.51	2.37	2.16
1F683	TA-38	500CT	150CT	—	.15	25/32	A-1	4.46	4.02	3.79	3.57	2.42	2.22
1F684	TA-46	100000	1500CT	—	.30	1 3/8	A	4.39	3.95	3.73	3.51	2.37	2.16

TRANSISTOR DRIVER TYPES

*Tri-Filar Wound, 1:1:1 Impedance Ratio—50 ohms per winding.

1F431	TA-5	1000	200CT	10	.05	1 1/16	A	5.99	5.39	5.09	4.79	3.24	2.95
1F432	TA-6	2000	200CT	5	.05	1 1/16	A	6.41	5.77	5.45	5.13	3.47	3.16
1F433	TA-7	100	100CT	100	.5	2 3/8	A	2.52	2.27	2.15	2.02	1.43	1.31
1F443	TA-16	20	36CT	400	1.0	1 3/4	A	2.52	2.27	2.15	2.02	1.48	1.35
1F821	TA-59	500CT	200CT	50	.5	1 3/4	A	2.94	2.64	2.50	2.36	1.70	1.56
1F822	TA-61	———	———	—	—	2	S	3.46	3.12	2.94	2.77	1.93	1.76
1F823	TA-63*	20,000CT	2000CT	—	.300	1 3/8	A	5.77	5.20	4.90	4.61	3.13	2.85

TRANSISTOR OUTPUT TYPES

†2 secondaries: 16 ohm series, 4 ohms parallel.

1F437	TA-10	2000CT	16/8/4	—	.2	1 3/8	A	6.60	5.94	5.61	5.28	3.67	3.35
1F438	TA-11	48CT	16/8	275	5	2 7/8	A	4.98	4.48	4.23	3.99	2.78	2.53
1F440	TA-12	20CT	8	500	10	2	A	2.45	2.21	2.09	1.96	1.47	1.35
1F439	TA-14	24CT	16/4†	200	10	3 7/8x2 3/4	TD	16.04	14.44	13.64	12.84	8.99	8.19
1F685	TA-20	350CT	4/12	—	.15	25/32	A-1	5.03	4.53	4.27	4.03	2.73	2.49
1F686	TA-21	500CT	4/8/16	—	.15	25/32	A-1	4.61	4.15	3.92	3.69	2.50	2.28
1F687	TA-23	600CT	4/8/16	—	.15	25/32	A-1	5.03	4.53	4.27	4.03	2.73	2.49
1F689	TA-26	1250	4/12	—	.15	25/32	A-1	4.39	3.95	3.73	3.51	2.37	2.16
1F881	TA-33	10000CT	4/8/16	—	.15	25/32	A-1	4.65	4.18	3.95	3.72	2.52	2.30
1F893	TA-39	100CT	4/8/16	—	.30	1 3/8	A	4.59	4.13	3.90	3.68	2.56	2.34
1F694	TA-40	160	4/8/16	—	.30	1 3/8	A	4.83	4.35	4.11	3.87	2.62	2.39
1F695	TA-41	400CT	4/8/16	—	.30	1 3/8	A	4.39	3.95	3.73	3.51	2.37	2.16
1F696	TA-42	500CT	4/8/16	—	.30	1 3/8	A	4.39	3.95	3.73	3.51	2.37	2.16
1F697	TA-43	700CT	4/8/16	—	.30	1 3/8	A	4.59	4.13	3.90	3.68	2.56	2.34
1F698	TA-44	2500	4/8/16	—	.30	1 3/8	A	4.81	4.33	4.09	3.85	2.81	2.38
1F699	TA-45	3000	4/8/16	—	.30	1 3/8	A	4.45	4.01	3.78	3.56	2.47	2.25
1F824	TA-62	25	4	400	4	2 3/8	A	2.64	2.38	2.25	2.12	1.52	1.39

UNIVERSAL TYPE TRANSISTOR POWER TRANSFORMERS—PRIMARY 117 VOLT 60 HZ AC

*Tapped primary to obtain lower secondary voltages.

Stk. No.	Mfr. Type	OUTPUT 1 V AC	OUTPUT 1 DCMa	OUTPUT 2 V AC	OUTPUT 2 DCMa	Base Area	Fig.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F441	TP-1	13 or 18	900	13 or 18	900	3x2 1/2	C	6.16	5.55	5.24	4.93	3.55	3.24
1F825	TP-2*	10/20CT/40CT	100	.....	.....	2 13/16x1 5/8	A	4.98	4.48	4.23	3.99	2.70	2.46
1F828	TP-3*	10/20CT/40CT	300	.....	.....	3 3/4x2	A	6.68	6.01	5.68	5.35	3.62	3.30
1F827	TP-4*	10/20CT/40CT	1000	.....	.....	2 5/8x3	C	11.21	10.09	9.53	8.97	6.05	5.52
1F828	P-8196	80CT	1200	.....	.....	2 7/8x3 1/2	C	8.42	7.58	7.15	6.74	4.84	4.42

AUTO RADIO TRANSISTOR FILTER CHOKE

Similar to Fig. A-1, but with 4 vert. mtg. tabs.

Stock No.	Mfg. Type	Inductance @ DCMA	DC Res. In Ohms	RMS V Insulation	Mtg. Ctrs.	1-9	10-24	25-49	50-99	100-249	250-499
1F721	TC-2	11 mhy @ 1000 ma	.75	1000	1 1/4x1 1/16	1.59	1.43	1.35	1.27	.92	.84

● NEW LOW CURRENT CONTROL TRANSFORMERS

Versatile series of low current control transformers suited for flot lamps, miniature relays, low current-low voltage power supply application. Primaries 117 volt, 50-60 hz. Three isolated 12-volt secondaries (one with a center tap). Can be series or parallel connected.

Stock No.	Type	Amperes Ea. Sec.	Size H x W x D	Fig.	Wt.	1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F146	P-8361	.10	1 3/4x2 x1 1/2"	D	.36	3.73	3.36	3.17	2.99	2.14	1.95
1F147	P-8362	.15	2 x2 3/8x1 3/4"	D	.60	3.85	3.47	3.28	3.08	2.23	2.03
1F148	P-8363	.25	2 3/8x2 7/8x1 3/4"	D	.85	4.04	3.63	3.44	3.24	2.34	2.13
1F149	P-8364	.50	2 3/8x2 7/8x2 1/8"	D	1.25	4.68	4.22	3.98	3.74	2.69	2.45

● NEW MINIATURIZED CONTROL TRANSFORMERS

Primary: 117 volts, 60 hz. Wire lead term. Types P-8390 to 93 have 12 V secondaries. Types P-8394 to 97 have 24 V C.T.

1F950	P-8390	.150	1 1/4x2 1/8x1 1/4	E	.25	3.27	2.95	2.78	2.62	.....	.....
1F951	P-8391	.350	1 3/8x2 3/8x1 3/8	E	.35	3.39	3.06	2.89	2.72	.....	.....
1F952	P-8392	.700	1 5/8x2 7/8x1 1/2	E	.60	3.54	3.19	3.01	2.84	.....	.....
1F953	P-8393	1.200	2x3 1/4x1 5/8	E	.85	4.47	4.03	3.80	3.58	.....	.....
1F954	P-8394	.085	1 1/4x2 1/8x1 1/4	E	.25	3.57	3.22	3.04	2.86	.....	.....
1F955	P-8395	.200	1 3/8x2 3/8x1 3/8	E	.35	3.72	3.35	3.17	2.98	.....	.....
1F956	P-8396	.400	1 5/8x2 7/8x1 1/2	E	.60	3.87	3.49	3.29	3.10	.....	.....
1F957	P-8397	.700	1 5/8x3 1/4x2	E	.85	4.80	4.32	4.08	3.84	.....	.....

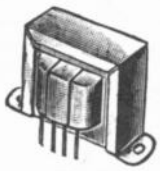


Fig. A

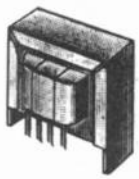


Fig. A-1

Fig. C

Complete on-the-shelf stock of Chicago-Stancor transformers at Newark, ready for immediate delivery!

Factory Competitive O.E.M. prices!

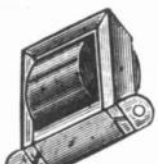


Fig. D.

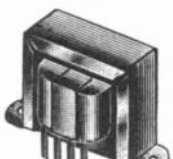


Fig. E

Chicago-Stancor Transformers

Fig. M
PM Types

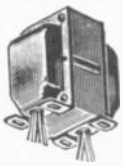


Fig. C
FC Types

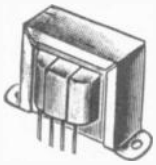


Fig. A
PA Types

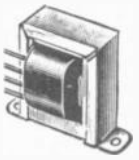


Fig. S
PS Types

Fig. BV

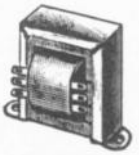


Fig. I

"8400" SERIES POWER TRANSFORMERS

All units have low temp. rise, well within limits set by EIA. PM types are Fig. M. PC types are Fig. C. PS types are Fig. S. PA types are Fig. A. Provide 260 VDC to condenser input filter.

Stock No.	Mfr's. Type	Plate V.	CT Ma.	Rect. V.	Rect. A.	Fil. V. CT	Fil. A.	Mtg. Ctrs.	Wt. Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F000	PC-8401	470	40	5.0	2.0	6.3CT	2.0	2 x1 9/16	2¼	6.15	6.10	5.76	5.42	3.90	3.56
1F001	PM-8401	470	40	5.0	2.0	6.3CT	2.0	2 x2½	2¼	7.45	6.70	6.33	5.97	4.28	3.90
1F002	FC-8402	480	55	5.0	2.0	6.3CT	2.0	2 x1 11/16	2½	6.46	5.81	5.49	5.17	3.72	3.39
1F003	PM-8402	480	55	5.0	2.0	6.3CT	2.0	2 x2½	2½	7.29	6.56	6.20	5.83	4.18	3.81
1F004	PC-8403	500	70	5.0	2.0	6.3CT	2.5	2 x2 1/16	3¼	7.73	6.96	6.57	6.19	4.45	4.05
1F005	PM-8403	500	70	5.0	2.0	6.3CT	2.5	2 x2½	3¼	8.02	7.22	6.82	6.42	4.61	4.21
1F006	PC-8404	520	90	5.0	2.0	6.3CT	3.0	2¼x2¼	4	8.69	7.83	7.40	6.96	5.00	4.56
1F007	PM-8404	520	90	5.0	2.0	6.3CT	3.0	2¼x2 13/16	4	9.07	8.17	7.71	7.26	4.98	4.54
1F008	PC-8405	540	120	5.0	3.0	6.3CT	3.5	2½x2 3/16	5	11.33	10.20	9.64	9.07	6.27	5.71
1F009	PM-8405	540	120	5.0	3.0	6.3CT	3.5	2½x3⅛	5	11.80	10.62	10.03	9.44	6.54	5.96
Designed for use with choke input filter. VR tube regulated supply, speaker field in filter, or higher voltage with condenser input filter. †has two 6.3 V @ 3.0 A Wdgs.															
1F010	PC-8406	650	40	5.0	2.0	6.3CT	2.0	2 x1 11/16	2½	7.32	6.59	6.22	5.86	4.22	3.84
1F011	PM-8406	650	40	5.0	2.0	6.3CT	2.0	2 x2½	2½	7.51	6.76	6.38	6.01	4.32	3.93
1F012	PC-8407	650	55	5.0	2.0	6.3CT	2.0	2 x2 1/16	3¼	7.59	6.84	6.46	6.08	4.38	4.00
1F013	PM-8407	650	55	5.0	2.0	6.3CT	2.0	2 x2½	3¼	7.79	7.02	6.63	6.24	4.59	4.18
1F014	PC-8408	680	70	5.0	2.0	6.3CT	2.5	2¼x2⅛	3¾	9.34	8.41	7.95	7.47	5.37	4.90
1F015	PM-8408	680	70	5.0	2.0	6.3CT	2.5	2¼x2 13/16	3¾	9.34	8.41	7.94	7.48	5.60	5.11
1F016	PC-8409	700	90	5.0	2.0	6.3CT	3.0	2¼x2⅜	4½	11.53	10.38	9.81	9.22	5.54	5.04
1F017	PM-8409	700	90	5.0	2.0	6.3CT	3.0	2¼x2 13/16	4½	9.98	8.98	8.48	7.98	5.81	5.30
1F018	PC-8410	720	120	5.0	3.0	6.3CT	3.5	2½x2 7/16	5½	11.05	9.95	9.39	8.84	6.35	5.79
1F019	PM-8410	720	120	5.0	3.0	6.3CT	3.5	2½x3⅛	5½	11.80	10.62	10.03	9.44	6.78	6.18
1F020	PC-8411	750	150	5.0	3.0	6.3CT	4.5	2¾x2 13/16	5¾	15.18	13.67	12.91	12.15	8.41	7.66
1F021	PM-8411	750	150	5.0	3.0	6.3CT	4.5	2¾x3 7/16	5¾	16.91	15.22	14.37	13.53	9.38	8.54
1F022	PC-8412	800	200	5.0	3.0	6.3CT	5.0	3 x2 13/16	8¼	15.81	14.23	13.44	12.65	9.08	8.27
1F023	PM-8412	800	200	5.0	3.0	6.3CT	5.0	3 x3¾	8¼	16.06	14.46	13.66	12.85	9.22	8.40
1F024	PC-8413	800	250	5.0	4.0	6.3CT	5.0	3 x3 5/16	10	17.08	15.37	14.51	13.67	9.82	8.94
1F025	PC-8414	1200	200	5.0	3.0	6.3CT	3.0	3 x3 1/16	8¼	18.87	16.99	16.04	15.10	10.84	9.87
1F764	PC 8422	650	150	5.0	3.0	6.3CT	5.0	2½x2 9/16	5.8	12.04	10.84	10.23	9.63	6.91	6.30
1F814	PM-8422	650	150	5.0	3.0	6.3CT	5.0	2½x3⅛	5.8	12.81	11.53	10.88	10.25	7.35	6.69
For use with 6AX5, 6X4 or selenium rectifiers. *Half wave															
1F026	PS-8415	125*	15	..	..	6.3	0.6	2	¾	2.97	2.68	2.53	2.38	1.76	1.61
1F027	PS-8416	250	25	..	..	6.3	1.0	2⅜	1	3.55	3.19	3.02	2.84	2.04	1.86
1F035	PA-8421	125*	50	..	..	6.3	2.0	3⅛	1½	4.65	4.18	3.95	3.72	2.58	2.35
1F028	PC-8417	440	50	..	.	25.2	0.5	2 x1 9/16	2¼	8.11	7.30	6.89	6.49	4.67	4.25
1F029	PC-8418	460	50	..	.	6.3	2.5	2 x1 9/16	2¼	5.88	5.30	5.00	4.70	3.38	3.08
1F030	PM-8418	460	50	..	.....	6.3	2.5	2 x2½	2¼	5.99	5.40	5.10	4.80	3.56	3.24
1F031	PC-8419	480	70	..	....	6.3	3.0	2 x1 13/16	2½	6.74	6.07	5.72	5.39	3.88	3.54
1F032	PM-8419	480	70	..	....	6.3	3.0	2 x2½	2½	6.92	6.23	5.89	5.54	3.99	3.63
1F033	PC-8420	520	90	..	..	6.3	4.0	2 x2¼	3½	7.86	7.08	6.68	6.29	4.35	3.96
1F765	PM8420	520	90	..	..	6.3	4.0	2¼x2 13/16	3½	8.24	7.42	7.01	6.59	4.73	4.32

POWER TRANSFORMERS WITH SPECIAL OR COMBINATION FILAMENT WINDINGS

Stock No.	Mfr's. Type	Plate Supply A.C. Volts	Plate Supply D.C.	Rect. Fil. Volts	Rect. Fil. Amps	Other Volts	Wdgs. Amps.	Mtg. Ctrs.	Wt. Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F766	P-6348	240-0-240	60	..	.....	6 3CT	2.75	1 15/16	2.3	7.32	6.59	6.22	5.86	3.96	3.61
1F767	P-8177	300-0-300	120	5.0	3.0	6.3CT	3.0	2¾x2¾	5¾	11.85	10.67	10.08	9.48	7.04	6.42
1F067	P-8174	250-0-250	20	..	.....	6.3/6.36/1.2		2 3/16	1½	6.46	5.81	5.49	5.17	3.58	3.26
1F068	P-8175	300-0-300	70	5.0	3.0	6.3CT	3.0	2¼x2¼	4	10.04	9.04	8.54	8.04	5.97	5.44
1F069	P-8176	350 0-350	110	5.0	2.0	6 3CT	3.0	2¾x3	5½	13.44	12.10	11.43	10.76	7.98	7.26
1F055	P-6011	350-0-350	70	5.0CT	3.0	6.3CT	.....	2⅞x3⅜	3.5	9.18	8.27	7.80	7.34	5.27	4.80
1F058	P-6014	375-0-375	150	5.0CT	3.0	6.3	5.0	3⅛x3¾	6	12.82	11.54	10.89	10.26	.....	
1F076	P-6315	370-0-370	275	5.0CT	3.0	6.3CT	7.0	3x3¾	9.5	18.54	16.69	15.76	14.83	10.65	9.70
1F082	P-6143	440-0-440	130	6.3	3.5	5	3.5	2¾x2 13/16	7	15.23	13.71	12.94	12.18	8.74	7.96
1F815	P-8359	190/160-0				6.3	0.6								
		160/190	70	..	.....	6 3CT	3.0	2x1⅞	2.8	9.96	8.97	8.46	7.87	5.39	4.91
1F816	P-8360	437-0-437				6.3									
			185	5.0	3.0	6.3	4.0	4x4½	9.5	19.63	17.67	16.68	15.70	10.67	9.90
1F817	P 5059	337-0-337													
			200	5.0CT	3.0	6.3CT	5.0	3¾x4⅛	9.6	16.55	14.90	14.06	13.24	9.51	8.66

SILICON OR SELENIUM RECTIFIER TRANSFORMERS (FIG. BV)

Stock No.	Mfr's. Type	Rect. Circ.	Out. Resis. Induc. Load Max. DC V	Out. Resis. Induc. Load Max. DC Amps	Out Capacitative Load Max. DC V	Out Capacitative Load Max. DC Amps	Shpg. Wt. Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F378	RT-201	CT	11 2	2.0	13.8	2.0	2.5						
		Bridge	23 0	1.25	30.0	1.25	2.5	6.74	6.07	5.73	5.40	3.63	3.32
1F379	RT-202	CT	11 1	4.0	14.7	4.0	3.8						
		Bridge	24 3	2.0	33.0	2.0	3.8	9.19	8.28	7.82	7.36	5.05	4.60
1F380	RT-204	CT	12 0	8.0	14.5	8.0	6.1						
		Bridge	24.0	4 0	32.4	4.0	6.1	11.94	10.75	10.15	9.56	6.52	5.93
1F381	RT-206	CT	11.5	12.0	14.4	12.0	9.1						
		Bridge	24 0	6.0	32.0	6.0	9.1	15.67	14.11	13.31	12.53	9.32	8.49
1F382	RT-208	CT	11.4	15.0	14.8	15.0	12.6						
		Bridge	23.7	8.0	32.5	8.0	12.6	21.27	19.15	18.08	17.02	11.74	10.69
1F383	RT-2012	CT	11 4	22.5	14.3	22.5	20.5						
		Bridge	23.5	12.0	33.0	12.0	20.5	36.12	32.51	30.71	28.90	20.50	18.66
1F384	RT-408	Bridge	44.0	8 0	63.0	8.0	26.5	55.64	50.08	47.30	44.52	31.33	28.52

CONTROL TRANSFORMERS

Typical applications: Automatic assembly equipment, relays, solenoids, small motors, speed changers, control valves for fluids and gases, fans and blowers, electronic tubes, lighting signal lamps, etc.

Stock No.	Mfr's. Type	Primary	Secondary Parallel	Secondary Series	VA Rat.	Mtg. Type	Shpg. Wt.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F818	P-6376	115V/230/	6V @ 4A	12V @ 2A	24	I	1.5	4.73	4.26	4.03	3.79	2.73	2.49
1F819	P-6377	50/60 CPS	12V @ 4A	24V @ 2A	48	J	2.5	5.89	5.31	5.01	4.71	3.39	3.10
1F820	P-6378	on all	12V @ 8A	24V @ 4A	96	BV	4.5	9.57	8.62	8.14	7.66	5.50	5.01

Chicago-Stancor Transformers

POWER TRANSFORMERS

Shielded against magnetic and electrostatic fields by one piece drawn steel cases. Vac. impreg. coils, compound filled under heat and pressure to resist moisture. Cores are high grade, non-aging silicon steel. All transformers are guaranteed to operate at rated values with EIA heat rise standards. For operation from 110-120 volts, 50-60 cps. AC. Type PCC-250 has 2nd fil. 5 Volts/2 amp.

Type PCC
Type PCR

Type PSR
Type PSC

CASE STYLES AND DIMENSIONS

Case	Width x Height x Depth
F8	2 11/16 x 3 1/2 x 2 7/8"
F8D	2 11/16 x 3 3/4 x 2 7/8"
F9	3x4x3 1/4"
F10	3 1/16 x 4 7/16 x 3 11/16"

Case	Width x Height x Depth
F10D	3 5/16 x 4 11/16 x 3 11/16"
F11	4 1/8 x 5 5/16 x 4 9/16"
F12	4 13/16 x 6 1/16 x 5 5/16"
S9	3x3 7/8 x 3 1/4"

CONDENSER INPUT POWER TYPES

Stock No.	Mfr. Type	Description	AC VCT	AC Ma.	Rect. V	Rect. A	Fil. VCT	Fil. A	Wt. Lbs.	Case	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
4F001	PCC-40	Wire Leads	450	40	5	2	6.3	2	3 1/4	F8	11.69	10.52	9.94	9.35	6.32	5.76
4F021	PSC-40	Solder Lugs	450	40	5	2	6.3	2	3 1/4	F8D	17.76	15.99	15.10	14.21	9.84	8.96
4F002	PCC-55	Wire Leads	540	55	5	2	6.3	2	3 1/2	F8	13.50	12.15	11.48	10.81	7.47	6.80
1F887	PSC-55	Solder Lugs	540	55	5	2	6.3	2	3 1/2	F8D	20.51	18.46	17.43	16.41	11.08	10.09
4F003	PCC-60	Wire Leads	600	60	5	2	6.3	3	4 1/2	F9	13.94	12.54	11.85	11.16	7.73	7.03
4F024	PSC-70	Solder Lugs	670	70	5	2	6.3	3	4 1/2	F9	20.60	18.54	17.51	16.48	11.42	10.40
4F006	PCC-105	Wire Leads	690	105	5	2	6.3	3.5	6 1/2	F10	16.23	14.61	13.80	12.98	8.99	8.19
1F800	PSC-150	Solder Lugs	740	150	5	3	6.3*	4/1	11 1/2	F11	36.51	32.86	31.04	29.21	20.96	19.08
1F801	PCC 200	Wire Leads	770	200	5	3	6.3	4.5/1	12	F11	28.05	25.25	23.85	22.44	16.11	14.67
4F029	PSC-200	Solder Lugs	770	200	5	3	6.3	4.5/1	12	F11	37.21	33.49	31.63	29.77	21.37	19.45
4F010	PCC-250	Wire Leads	800/160	250	5	6	6.3	2/7	15	F12	32.07	28.87	27.26	25.66	17.76	16.16

*Has extra 6.3V. CT @ 1A. WDG

CHOKE INPUT POWER TYPES

Stock No.	Mfr. Type	Description	AC VCT	AC Ma.	Rect. V	Rect. A	Fil. VCT	Fil. A	Wt. Lbs.	Case	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
4F061	PSR-55	Solder Lugs	700	55	5	2	6.3	2	3 1/4	F8D	19.30	17.37	16.41	15.44	10.43	9.50
4F041	PCR-55	Wire Leads	700	55	5	2	6.3	2	3 1/4	F8D	13.48	12.14	11.46	10.78	7.29	6.64
1F803	PCR-70	Wire Leads	850	70	5	2	6.3	3	4 1/2	F9	15.10	13.59	12.83	12.08	8.36	7.62
1F804	PSR-70	Solder Lugs	850	70	5	2	6.3	3	4 1/2	F9D	21.18	19.07	18.00	16.94	11.72	10.67
4F044	PCR-105	Wire Leads	900	105	5	2	6.3	3.5	6 1/2	F10	16.36	14.72	13.91	13.09	9.07	8.25
4F064	PSR-105	Solder Lugs	900	105	5	2	6.3	3.5	6 1/2	F101	23.13	20.82	19.66	18.51	13.28	12.09
1F802	PCR-300	Wire Leads	1100*	300	5	6	6.3	5	17 1/2	F12	38.76	34.89	32.95	31.00	21.48	19.55

PLATE TRANSFORMERS

DC output rated at load terminals of single section reactor-input filter with full-wave mercury vapor rectification. Primary is 117 AC volts. Sec. ACV: 2400 CT. Shipping wt., 13 lbs. 4x5 1/2 x4 3/4".

Stock No.	Type	DCV	DCMA CCS	DCMA ICAS	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
4F403	PT-8311	1000	225	280	23.24	20.92	19.75	18.59	13.81	12.58

DC output rated at load terminals of single section reactor input filter, ICAS with single section capacitor input filter. All primary are 117V AC. *Capacitor input rating is for intermittent duty. †Secondary CT must be grounded.

Stock No.	Type	Sec. ACV†	DC Output V	DC Output MA	Type Filter	Size	Shpg. Wt.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
4F404	PC-8301	830CT	300	200	Reactor Input	3 1/4 x 3 7/16 x 4	4.8	9.73	8.76	8.27	7.78	5.59	5.10
			425	160	*Capacitor Input								
1F805	PC-8303	1330CT	500	250	Reactor Input	4 3/4 x 4x 4 1/8	9.6	17.74	15.97	15.07	14.19	10.18	9.27
			750	200	*Capacitor Input								
4F405	PC-8304	1500CT	600	265	Reactor Input	4x4 7/8 x 4 3/4	11.5	18.62	16.76	15.83	14.90	11.06	10.07
			850	200	*Capacitor Input								
4F406	PC-8305	1840CT	750	250	Reactor Input	4 3/4 x 4x5	11.9	20.76	18.68	17.65	16.61	11.93	10.86
			1000	200	*Capacitor Input								

OUTPUT TRANSFORMERS

Single plate to line or voice coil. Dimensions 2 1/2 x 2 3/8 x 3 1/16". Max. D.C. in Pri: 55ma .Weight: 2 1/4 lbs.

Stock No.	Type	Imp. Ohms Pri.-Sec.	Power Level	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F806	COS-1	Pri: 5,000 Sec: 600/150/16/8/4	5-watts	16.16	14.55	13.74	12.93	8.74	7.98
4F418	COS-2	Pri: 8000 Sec: 600/150/16/8/4	5-watts	14.73	13.26	12.52	11.79	8.17	7.44
1F807	PCO-150A	Pri: 12,000 CT Sec: 600/150/16/8/4	15-watts	16.88	15.20	14.35	13.50	9.34	8.51

SILICON RECTIFIER POWER TRANSFORMERS — WT. 7 LBS.

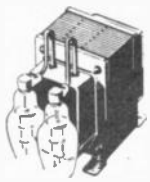
Stock No.	Type No.	Sec. No. 1 V	Sec. No. 1 DCMA	Sec. No. 2 V	Sec. No. 2 Amps	Sec. No. 3 V	Sec. No. 3 Amps	Mtg. Ctrs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F808	RP-400	400CT	400	6.3	3.0	6.3	3.0	2 3/4 x 3 1/16	16.31	14.68	13.86	13.05	9.02	8.21
1F809	RP-600	300CT	600	6.3	2.5	6.3	2.5	2 3/4 x 3 1/16	16.03	14.43	13.62	12.80	8.89	8.10
1F810	RP-800	200CT	800	6.3	2.0	6.3	2.0	2 3/4 x 2 13/16	15.95	14.36	13.57	12.76	8.85	8.06
1F811	RP-1600	100CT	1600	6.3	1.5	6.3	1.5	2 3/4 x 2 13/16	14.85	13.37	12.63	11.88	8.23	7.50
1F812	RP-2000	80CT	2000	6.3	1.5	6.3	1.5	2 3/4 x 2 13/16	15.45	13.91	13.13	12.36	8.56	7.79
1F813	RP-2500	60CT	2500	6.3	1.5	6.3	1.5	2 3/4 x 2 11/16	16.32	16.49	15.57	14.66	9.90	9.01

Fig. CD — BIAS SUPPLY TRANSFORMERS

High Voltage Type. Size 3 1/4 x 3 5/8 x 4". Shpg. wt., 4.9 lbs.

Stock No.	Type	AC volts @ 200 DC ma.	Rectifier Fil. Volts	Rectifier Fil. Amps	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F062	P-6317	400/340/260/180 CT	5.0	3.0	15.78	14.21	13.41	12.62	8.74	7.96

COS-2



Type PT

Type PC

Fig. CD

NEWARK CAN SUPPLY ALL CHICAGO-STANCOR TRANSFORMERS. CALL, WRITE OR WIRE FOR PRICES ON ITEMS NOT LISTED IN THIS CATALOG.

Chicago-Stancor Transformers

Type F

TYPE F — FILAMENT TRANSFORMERS

Primaries: 115/230 volts, 50-60 Hz.

Stk. No.	Type	Secondary Volts	Secondary Amps.	Insulation Volts RMS	WxDxH	Wt. Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
4F082	F-210	2.5CT	10	5000	2⅞x2 11/16x3¾"	3	16.22	14.60	13.79	12.98	8.47	7.72
4F085	F-54	5.0CT	4	2500	2½x2⅜x3 5/16"	2¼	11.70	10.53	9.95	9.36	6.25	5.69
4F089	F-520HB	5.0CT	20	10000	4 9/16x4½x5 5/16"	13	38.79	34.92	32.98	31.04	18.64	16.97
4F097	F-615	6.3CT	1.5	2500	2¼x2⅛x2 11/16"	1	16.06	14.46	13.66	12.85	8.68	7.90
1F879	F-63	6.3CT	3	2500	2½x2⅜x3 1/16"	2	11.94	10.75	10.15	9.56	6.33	5.77
1F880	F-65	6.3CT	5.5	2500	2⅞x2 11/16x3¾"	3	14.69	13.23	12.49	11.75	8.14	7.42
1F881	F-610	6.3CT	10	2500	3¼x3x4¼"	5	21.78	19.61	18.52	17.43	12.07	10.99
4F296	F-725	7.5CT	25	2500	4 9/16x4½x5 5/16"	12	36.66	32.99	31.16	29.33	21.05	19.16

FILAMENT TRANSFORMERS

All have 117V, or 117/107V primaries except + which has 6.3 volt primary; * electrostatic shield.

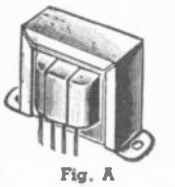


Fig. A

Stk. No.	Type	Sec. V	Amps	Size	Fig.	Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F093	P-4026	2.5	1.5	2⅞x1½x1⅝"	A	¾	3.66	3.29	3.11	2.93	1.98	1.81
1F100	P-6133*	2.5 CT	5	2 11/16x3 1/16x2¼"	S	1½	5.04	4.54	4.29	4.04	2.83	2.58
1F101	P-3024*	2.5 CT	10	3 3/16x2⅝x2⅝"	C	2½	6.16	5.55	5.24	4.93	3.55	3.24
1F102	P-3060	2.5 CT	10	3½x2⅞x2½"	NV	2½	8.47	7.63	7.21	6.78	4.88	4.45
1F333	P-6454	2.5 CT	10.0	3⅝x2½x3⅛"	S	2½	5.14	4.62	4.37	4.12	2.96	2.70
1F095	P-6467	5.0 CT	3.0	3 1/16x2x2"	A	1½	4.02	3.62	3.41	3.22	2.18	2.00
1F336	P-3026	5.0 CT	3.0	2⅝x2⅝x2⅝"	C	2 1/10	6.48	5.83	5.52	5.19	3.73	3.40
1F096	P-3062*	5.0 CT	6.0	2½x2½x3⅛"	NV	2⅓	6.11	5.50	5.20	4.89	3.51	3.21
1F334	P-6455	5.0 CT	6.0	3 1/16x2¼x2⅝"	S	2	5.72	5.15	4.87	4.58	3.11	2.83
1F335	P-5000*	5.0 CT	6.0	2½x3x3 1/16"	C	3 1/10	7.26	6.54	6.18	5.81	4.17	3.80
1F104	P-6135	5.0 CT	10	3⅛x2½x2⅞"	NV	3	6.62	5.96	5.63	5.30	3.94	3.59
1F097	P-6468*	5.0 CT	30.0	3 9/16x3⅞x4 1/16"	C	4⅓	17.66	15.90	15.01	14.13	10.15	9.24
1F376	P-6492	5.0 CT	30.0	4¾x3¾x3⅞"	C	7½	14.74	13.27	12.53	11.80	8.77	7.99
1F375	P-6465	6.3 CT	0.6	1⅜x2⅜x1⅜"	A	1 1/10	2.47	2.23	2.09	1.97	1.42	1.30
1F539	P-8190	6.3	1.2	2x3¼x1¾"	A	1	3.41	3.07	2.91	2.73	2.35	2.14
1F540	P-8191+	6.3	1.2	2x3¼x1¾"	A	1	4.01	3.61	3.40	3.21	1.85	1.69
1F105	P-6134	6.3 CT	1.2	1⅝x2¾x1¾"	A	1	2.63	2.37	2.24	2.11	1.52	1.39
1F138	P-6462	6.3	3.0	3⅝x2⅝x3"	S	2	7.28	6.54	6.18	5.81	3.93	3.58
1F106	P-5014*	6.3 CT	3	3⅛x2½x2½"	NV	2	5.50	4.95	4.68	4.40	3.17	2.90
1F123	P-6466	6.3 CT	3	2x3 1/16x2"	A	1½	3.99	3.59	3.39	3.19	2.20	2.01
1F098	P-4019*	6.3 CT	4.0	2⅝x3 3/16x2⅝"	C	2¾	6.44	5.80	5.47	5.15	3.71	3.38
1F107	P-3064*	6.3 CT	6	3⅛x2½x2⅞"	NV	2½	6.38	5.75	5.43	5.11	3.68	3.35
1F139	P-6456	6.3 CT	6 0	2¼x3⅝x2½"	A	2	4.72	4.25	4.02	3.79	2.72	2.48
1F108	P-6308*	6.3 CT	10	3½x2⅞x2⅞"	NV	3½	8.08	7.28	6.87	6.46	4.65	4.24
1F109	P-6309*	6.3 CT	20	4⅝x3¾x3"	NV	7	12.31	11.08	10.47	9.85	7.08	6.45
1F110	P-5015*	7.5 CT	4	3⅛x2½x2⅞"	NV	3	6.27	5.65	5.33	5.02	3.45	3.14
1F337	P-6138*	7.5 CT	8.0	3⅛x2⅞x3⅞"	NV	4 7/10	9.47	8.52	8.05	7.57	5.44	4.95
1F112	P-5016*	10 0 CT	4	3½x2⅞x2⅝"	NV	3½	7.42	6.68	6.31	5.94	4.27	3.90
1F141	P-6458*	10 0 CT	5.0	3 1/16x2½x2⅞"	NV	3	5.88	5.30	5.00	4.70	3.27	2.99
1F119	P-6139*	10 0 CT	8 0	3⅞x3¾x3⅛"	NV	5	9.49	8.54	8.07	7.59	5.45	4.97
1F142	P-6461	10 0 CT	10.0	3⅞x3¼x3⅝"	C	5	10.64	9.57	9.05	8.52	6.33	5.77
1F120	P-8130	12.6 CT	2 0	2x3¼x2"	A	1½	4.35	3.92	3.70	3.48	2.41	2.20
1F944	P-8180	25.2 CT	1.0	2⅛x3¼x2"	A	1.4	4.10	3.69	3.48	3.28	2.28	2.08
1F882	P-8358	12 6 CT	3.0	3⅝x2⅛x2¼"	A	2	5.31	4.78	4.51	4.25	2.86	2.61
1F116	P-6469	25 2	1 0	2x3¼x2"	A	1½	4.06	3.66	3.46	3.25	2.20	2.01
1F883	P-8357	25.2 CT	2 0	4x2¼x2⅝"	A	2¼	6.55	5.90	5.57	5.24	3.63	3.32
1F945	P-8388	25.2 CT	2.8	2¼x4x2⅝"	A	2.2	6.60	5.94	5.61	5.28	3.80	3.46
1F946	P-8389	6 3	1.0	1½x2 7/8x2⅜"	A	0.6	2.79	2.52	2.38	2.24	1.41	1.29

Fig. NV

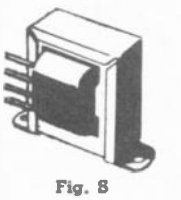


Fig. S

FILAMENT TRANSFORMERS WITH MULTIPLE SECONDARY

Stk. No.	Type	Secondary Volts	Secondary Amps.	RMSV Insul.	Pri. V.	Fig.	Ht.	Base Area	Wt. Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F884	P-6430	6.3 CT	3.0	2500											
		6.3 CT	3.0	2500	117	C	3⅛	2½x3⅞	3	7.14	6.43	6.08	5.71	4.11	3.74

TUBE CHECKER MULTI-TAPPED FILAMENT TRANSFORMER

Fig. C

Stock No.	Type No.	Secondary Volts	Primary Volts	Height	Base Area	Mtg. Ctrs.	Wt.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F885	P-1834-3	1/1.4/1.5/2.0/2.5/3.0/3.3/4.0/5.0/6.3/7.5/12/20/25/30/35/50/70/85/110/117	105/115/125	2⅝	4x2½	3 9/16	2.4	14.40	12.96	12.24	11.52	7.15	6.52

CATHODE RAY TUBE POWER TRANSFORMERS

Stock No.	Type No.	Plate Supply AC Volts	DCMA	Other Windings Volts	Amps	Mtg. Type	Size	Wt.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F310	P-8179	1600 half wave	3.0	6.3/5/2.5	1.0									
				6.3/5/2.5	3.0	M	3x2½x3⅜	3.5	13.96	12.57	11.87	11.17	7.54	6.87
1F080	P-8150	1550 half wave	1.5	.....	.....	TD	3x2½x3 1/16	2	10.99	9.89	9.34	8.79	5.94	5.42
1F091	P-8151	2400 half wave	5.0	2.5	2.0	C	3 9/16x3⅞x4 5/16"	7	16.27	14.65	13.83	13.02	9.34	8.51

TV BOOSTER TRANSFORMER

Stock No.	Type	Plate Supply AC Volts	DCMA	Filament Volts	Amps	Ht.	Base Area	Mtg. Ctrs.	Fig.	1-9	10-24	25-49	50-99	100-249	250-499
1F525	P-8181	150 half wave	25	6.3CT	0.5	2	2 1/16x1¾	2	VE	4.23	3.81	3.59	3.38	2.42	2.21

Fig. VE

PCF SERIES POWER CIRCUIT TRANSFORMERS

Stock No.	Type No.	Pri. Volts	Sec. Volts	Sec. Amps	V-A Cap	Wt.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F886	PCF-2025	230	115	.25	25	2	7.47	6.73	6.35	5.98	4.04	3.68

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

Chicago-Stancor Filters & Chokes

FILTER REACTORS

Stock No.	Mfr. Type	Description	Hy.	mA	Ohm	Type	Case	Each, Boxed 1-9	10-24	25-49	50-99	100-249	250-499
4F101	RC- 1540	Wire Leads	15	40	475	SC	F6	6.19	5.57	5.26	4.95	3.44	3.13
4F103	RC- 1555	Wire Leads	15	55	380	SC	F6	7.09	6.38	6.02	5.67	3.93	3.58
4F104	RC- 1085	Wire Leads	10	85	175	SC	F7	7.42	6.68	6.31	5.93	4.12	3.76
4F414	RS- 1085	Solder Lugs	10	85	175	SC	F7	9.96	8.97	8.46	7.97	5.53	5.03
1F889	RS- 1585	Solder Lugs	15	85	285	SC	F7D	8.14	7.33	6.92	6.52	3.61	3.29
4F108	RC- 8150	Wire Leads	8	150	100	SC	F9	12.60	11.35	10.71	10.08	6.98	6.35
4F111	RC-12200	Wire Leads	12	200	140	SC	F-10	13.64	12.28	11.60	10.92	7.85	7.14
1F888	RC- 1055	Wire Leads	10	55	230	SC	F6	6.52	5.87	5.54	5.22	3.61	3.29
4F123	RS- 1555	Solder Lugs	15	55	380	SC	F6	9.84	8.86	8.36	7.87	5.33	4.86
4F121	RS- 1540	Solder Lugs	15	40	475	SC	F6	8.66	7.79	7.36	6.93	4.81	4.38
4F127	RS-12105	Solder Lugs	12	105	170	SC	F8D	13.26	11.94	11.27	10.61	8.25	7.52
4F415	RC-12105	Wire Leads	12	105	170	SC	F8D	13.19	11.87	11.21	10.55	7.57	6.90
4F416	RC-12150	Wire Leads	12	150	150	SC	F9D	15.13	13.62	12.86	12.10	8.68	7.90
4F129	RS-12150	Solder Lugs	12	150	150	SC	F9D	14.36	12.93	12.20	11.49	8.25	7.52
4F131	RS-12200	Solder Lugs	12	200	140	SC	F10D	18.84	16.96	16.01	15.07	10.82	9.85
4F130	RS- 8200	Solder Lugs	8	200	85	SC	F10D	15.27	13.75	12.98	12.22	8.51	7.75
1F890	RC- 8200	Wire Leads	8	200	85	SC	F10D	14.27	12.84	12.13	11.42	8.19	7.46
1F891	RC- 8300	Wire Leads	8	300	60	SC	F11	21.94	19.75	18.65	17.56	12.62	11.49

HIGH CURRENT FILTER CHOKES

Inductance values rated at 1 volt RMS, 60 cycles. May be used with rectifier Power Transformers.

Stock No.	Type No.	mhys	DC Amps	DC Ohms	Insul Test V.RMS	Mtg. Ctrs.	Fig.	Wt.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F893	C-2685	35	2.0	.75	1500	2⅝x2"	NH	1.9	4.35	3.92	3.70	3.48	2.59	2.36
1F894	C-2686	25	4.0	.425	1500	2¹⁵⁄₁₆x2⅛"	NH	3.4	7.59	6.84	6.46	6.08	4.22	3.84
1F895	C-2688	10	12.5	.11	1500	3¹⁄₁₆x2⅜"	NH	5.9	11.55	10.40	9.83	9.24	6.41	5.83

SMOOTHING CHOKES

Stk. No.	Type	Hys.	mA	Ohms	Size	Fig.	Lbs.	1-9	10-24	25-49	50-99	*100-249	*250-499
1F896	C-2708	0.32	600	10	1¹⁵⁄₁₆x3⅝x2"	A	1.3	3.84	3.46	3.27	3.07	2.14	1.95
1F897	C-2343	0.75	300	32	1⅝x2⅞x1½"	A	0.7	2.14	1.93	1.82	1.72	1.15	1.05
1F176	C-2328	0.8	375	25	2¼x3¾x2"	A	1.5	4.54	4.09	3.85	3.63	2.46	2.24
1F510	C-2326	1.0	300	43	2¼x3¾x2¼"	A	1.7	3.60	3.24	3.06	2.89	2.07	1.90
1F533	C-2327	1.5	200	85	.⅝x2⅞x1½"	A	0.7	2.41	2.17	2.05	1.93	1.35	1.24
1F898	C-2707	2.0	15	70	1¼x2⅛x1⅛"	A	0.4	1.90	1.71	1.61	1.52	1.07	.98
1F509	C-2325	2.0	200	60	2¼x3¾x2¼"	A	1.8	3.60	3.24	3.06	2.89	2.07	1.90
1F165	C-2304	2.3	150	60	2x3¼x1¾"	A	1.0	2.83	2.55	2.40	2.27	1.58	1.45
1F164	C-2303	2.5	130	100	2x3¼x1¾"	A	1.0	2.79	2.52	2.38	2.24	1.57	1.43
1F899	C-2706	2.6	310	50	3⅛x2⅝x3¼"	C	4.0	7.92	7.13	6.74	6.34	4.56	4.15
1F177	C-2334	2.8	300	60	2⅝x2¼x4"	A	2.5	6.79	6.11	5.77	5.44	2.70	2.46
1F167	C-2309	3	150	90	2¼x3¾x2¼"	A	1.7	3.33	3.01	2.84	2.68	1.95	1.79
1F150	C-1410	4	175	100	3⅛x2⅝x2⅝"	C	2.4	5.93	5.34	5.04	4.75	3.41	3.12
1F153	C-1703	4	250	60	3½x2⅞x3⅛"	NV	4.2	7.94	7.15	6.75	6.36	4.60	4.20
1F173	C-1412	4.0	250	60	3x3½x3⅝"	C	4.3	8.77	7.89	7.55	7.02	5.04	4.59
1F156	C-1706	4.5	50	300	1⅜x2⅜x1⅜"	A	0.5	1.64	1.48	1.40	1.31	.94	.86
1F151	C-1411	4.5	200	80	3⅝x3x3⅛"	C	3.5	7.12	6.41	6.05	5.70	4.10	3.73
1F900	C-1723	4.5	50	325	1⅜x2⅜x1⅜"	A	0.5	2.04	1.84	1.73	1.63	1.18	1.08
1F166	C-2305	5	100	300	2¹¹⁄₁₆x2¾x2³⁄₁₆"	SC	1.5	4.55	4.10	3.87	3.64	2.56	2.46
1F152	C-1646	5	200	90	4x3¼x3⅜"	C	4.5	8.73	7.87	7.43	6.99	5.01	4.57
1F157	C-1707	7	50	550	1⅜x2⅜x1⅜"	A	0.5	1.92	1.73	1.63	1.53	1.10	1.01
1F171	C-1421	7.0	140	165	2⅝x2⅝x3¹³⁄₁₆"	C	2.5	5.67	5.11	4.82	4.54	3.36	3.06
1F160	C-1710	7	150	200	2⅝x4x2¼"	A	2.2	4.65	4.19	3.96	3.72	2.78	2.53
1F338	C-1414	7.5	400	60	4¾x4x5⅛"	C	11.8	20.12	18.11	17.11	16.10	11.96	10.89
1F169	C-1355	8.0	75	290	2¹⁄₁₆x1¾x2¹⁄₁₆"	L	1.0	3.30	2.97	2.81	2.64	1.86	1.70
1F159	C-1709	8	85	250	2x3¼x2"	A	1.4	2.97	2.68	2.53	2.38	1.73	1.58
1F154	C-2308	8	300	80	4¾x4x3⅞"	C	7.8	15.61	14.05	13.27	12.49	8.97	8.17
1F901	C-1722	8.0	300	80	4⅝x3¾x3½"	NV	7.3	13.19	11.87	11.21	10.55	7.57	6.90
1F172	C-1721	8.5	200	120	3⅛x3x3⅞"	NV	4.4	9.43	8.49	8.01	7.55	5.43	4.94
1F163	C-1001	10.5	110	225	2⅝x4x2¼"	A	2.3	4.52	4.07	3.85	3.62	2.64	2.41
1F175	C-2318	12.0	30	400	1⅜x2⅜x1⅜"	A	0.5	2.42	2.18	2.06	1.94	1.32	1.21
1F158	C-1708	13	65	500	2x3¼x1¾"	A	1.0	2.94	2.64	2.50	2.36	1.64	1.50
1F162	C-1002	15	75	400	2¼x3¾x2¼"	A	1.7	3.47	3.13	2.95	2.78	2.01	1.83
1F170	C-1420	16.0	80	360	2⅝x2⅝x3¹⁄₁₆"	C	2.5	6.21	5.59	5.27	4.97	3.57	3.25
1F902	C-1003	16.0	50	580	2x3¼x1¾"	A	1.0	2.62	2.36	2.23	2.10	1.57	1.43
1F178	C-1515	20.0	15	900	1⅝x2⅞x1½"	A	0.7	2.86	2.58	2.44	2.29	1.64	1.50
1F903	C-2345	350	5	5600	2x3¼x1¾"	A	1.0	4.34	3.91	3.69	3.47	2.40	2.19

SWINGING CHOKES

Stk. No.	Type	Hys.	DCMA	Ohms	Size	Fig.	Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F781	C-1402	12.2-2.0	25-250	60	3x3½x3⅝"	C	4.3	8.91	8.02	7.58	7.13	4.94	4.50
1F083	C-1718	13.5-3.5	15-150	130	2⅝x2½x3¹³⁄₁₆"	C	2.3	5.91	5.32	5.04	4.73	3.40	3.11
1F084	C-1400	12.0-2.0	17.5-175	100	2⅝x2⅝x3¹³⁄₁₆"	C	2.4	6.46	5.81	5.49	5.17	3.72	3.39
1F085	C-1645	12.0-2.0	20-200	90	3¼x3¾x4"	C	4.5	8.63	7.77	7.33	6.90	4.95	4.51
1F086	C-2307	20.0-4.0	30-300	80	4x3⅞x4¾"	C	7.9	15.24	13.72	12.95	12.19	8.75	7.97

AC-DC CHOKES

Stk. No.	Type	Hys.	mA	Ohms	Size	Fig.	Lbs.	1-9	10-24	25-49	50-99	*100-249	*250-499
1F191	C-1080	3.5	50	200	1⅝x2⅞x1½"	A	0.7	2.01	1.81	1.71	1.61	1.16	1.06
1F194	C-1279	8.5	50	400	1⅝x2⅞x1½"	A	0.7	2.04	1.84	1.73	1.63	1.18	1.08

COMMERCIAL GRADE AUDIO FILTERS

Stock No.	Type No.	Application	Inductance in henries	Max. DCV	Fig.	Mtg. Ctrs.	Wt.	1-9	10-24	25-49	50-99	*100-249	*250-499
1F486	C-2317	Splatter Sup. Filter	0.048-0.9	300ma	NH	2½x2	2.3	7.31	6.58	6.21	5.85	4.21	3.83

PLATE MODULATION TRANSFORMERS

Stk. No.	Type	Sec.	Pri.	mA-Pri.	mA-Sec.	Watts	Fig.	Lbs.	1-9	10-24	25-49	50-99
1F403	A-3812	4000	10,000CT	32	50	5	A	0.7	3.08	2.78	2.62	2.47

C-Type

S-Type

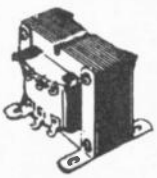


Fig. BH

Fig. D

Fig. TD

Fig. NV

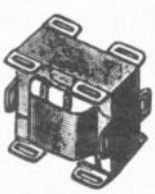


Fig. L

*Bulk Packed

Chicago - Stancor Transformers

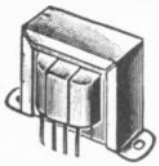


Fig. A

Fig. C

Fig. SC

Fig. J

Fig. Q

Order Chicago-Stancor Transformers from Newark's Complete On-The-Shelf Stock . . . at Factory Competitive O.E.M. Prices! Ready for Immediate Shipments

HIGH-FIDELITY OUTPUT TRANSFORMER

Frequency response: ±1db 20 to 20,000 cycles

Stock No.	Type No.	Pri. Imp. in Ohms	Sec. Imp. Ohms	Audio Watts	Mtg. Ctrs.	Flg.	Wt.	Each Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F904	A-8053	5000 CT	16/8	50	2¾x3 1/16	C	6.5	17.90	16.11	15.22	14.33	10.28	9.35
1F905	A-8056	6600 CT	16/8	50	2¾x3 1/16	C	6.5	17.93	16.14	15.25	14.35	10.29	9.37
1F906	A-8054	9000 CT	16/8	50	2¾x3 1/16	C	6.5	17.93	16.14	15.25	14.35	10.29	9.37
1F907	A-8072	7600 CT	16/8/4	25	2¾x3 1/16	C	6.5	21.42	19.28	18.21	17.14	11.55	10.52

SINGLE PLATE TO VOICE COIL TRANSFORMERS

Stock No.	Type No.	Imp. - Ohms Pri.	Sec.	DC Ma.	Audio Watts	Mtg. Type	Mtg. Ctrs.	Shpg. Wt.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F276	A-3332	2,000	3.2	50	3	A	1¾	0.4	1.73	1.56	1.47	1.39	1.02	.93
1F265	A-3876	2,000	4	60	5	A	2	0.4	1.84	1.65	1.57	1.48	1.07	.98
1F260	A-3328	4,000	3.5	10	3	A	1¾	0.4	1.79	1.61	1.52	1.43	1.03	.94
1F266	A-3877	5,000	4	40	5	A	2	0.4	1.84	1.66	1.57	1.48	1.10	1.01
1F340	A-8092	5,000	3-4	50	8	A	2⅜	0.5	2.74	2.47	2.34	2.19	1.49	1.36
1F908	A-3337	5,000	6-8	40	10	S	2⅜	1.0	2.89	2.61	2.46	2.32	1.70	1.56
1F339	A-3310	5,000	500/15/8/4	55	20	C	2	2.5	7.70	6.93	6.55	6.16	4.27	3.90
1F267	A-3878	7,000	4	30	5	A	2	0.4	1.92	1.73	1.63	1.53	1.10	1.01
1F909	A-2313	7,000	8	40	10	A	2 13/16	1.0	3.36	3.03	2.85	2.69	1.87	1.71
1F261	A-3329	8,000	3.5	10	3	A	1¾	0.4	1.86	1.67	1.58	1.48	1.07	.98
1F268	A-3879	10,000	4	30	5	A	2	0.4	1.87	1.69	1.60	1.50	1.09	1.01
1F341	A-3881	15,000	4	10	5	A	2	0.4	2.39	2.15	2.03	1.92	1.38	1.26
1F910	A-3327	25,000	4	5	5	A	2	0.4	2.36	2.13	2.01	1.89	1.36	1.24
1F940	A-8070	1,000	4.0	90	4	A	2	0.4	2.79	2.52	2.38	2.24	1.03	.94

PUSH-PULL PLATES TO VOICE COIL

Stk.No.	Type	Fig.	Impedance - Ohms Primary	Secondary	Watts	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F911	A-8098	C	2,000 CT	32/16/8	15	10.64	9.58	9.05	8.52	6.32	5.76
1F912	A-3800	C	5,000 CT	500/250/15/8/4	30	8.55	7.69	7.26	6.85	4.92	4.48
1F913	A-3304	C	10,000.7,000 CT	500/15/8/4	25	8.06	7.25	6.85	6.45	4.46	4.06
1F914	A-2312	A	14,000 CT	4	10	3.67	3.30	3.12	2.93	2.12	1.93
1F915	A-3496	A	14,000 CT	4	5	3.68	3.32	3.13	2.94	1.98	1.81
1F206	A-8094	A	4,000 CT	32/16/8	7.5	5.45	4.91	4.64	4.36	3.22	2.93
1F776	A-3872	SC	5,000 CT	15/8/4	18	5.75	5.17	4.89	4.60	3.30	3.01
1F777	A-3831	A	10,000 CT	8/4/2	5	3.47	3.13	2.95	2.78	2.01	1.83
1F778	A-3335	S	10,000 CT	6-8/3.2-4	10	3.93	3.54	3.34	3.15	2.19	2.01
1F780	A-3857	A	25,000 CT	4	5	3.05	2.74	2.59	2.45	1.70	1.56
1F222	A-3802	C	3,800/3,300 CT	500/250/8/4	75	19.75	17.78	16.79	15.80	11.33	10.32
1F275	A-3801	C	6,600 CT	500/250/15/8/4	35	10.88	9.79	9.26	8.71	6.25	5.69
1F409	A-3311	C	10,000 CT	500/15/8/4	25	8.13	7.32	6.91	6.51	4.40	4.01
1F225	A-3839	SC	10,000 CT	2,000 & 15/8/4	10	6.37	5.74	5.42	5.10	3.67	3.35
1F226	A-3885	C	9,000 CT	500/250/15/8/4	35	10.89	9.81	9.27	8.72	6.26	5.70
1F227	A-8093	A	10,000 CT	3-4	10	2.86	2.58	2.44	2.29	1.59	1.46

UNIVERSAL OUTPUT TRANSFORMERS

Match any voice coil to rated primary ohms.

Stk. No.	Type	Pri. Ohms	Watts	Fig.	Ctrs.	Lbs.	1-9	10-24	25-49	50-99	100-249	250-499
1F250	A-3856	4000 to 14,000	4	Q	2"	½	3.52	3.17	3.00	2.82	2.04	1.96
1F252	A-3850	4000 to 14,000	8	J	2"	¾	4.21	3.79	3.58	3.37	2.42	2.22

FIG. J. TUBE TO LINE

A-3841 Secondaries, 500 ohms; A-3250 500/333/200/125/50 ohms. A-3841 10W., 1.5 lbs., A-3250, 5W., 1 lb.

Stk. No.	Type	Use	Primary	Size	1-9	10-24	25-49	50-99
1F283	A-3841	Sgl Plate	7000/6000/5000/4000/2500	2 1/16x3 5/16x2¼"	6.55	5.90	5.57	5.24
1F296	A-3250	Sgl/PP Pl	20000/10000/5000	2x3¼x1¾"	5.09	4.58	4.33	4.07

LINE TO VOICE COIL

Stk. No.	Type	Fig.	Impedance - Ohms Primary	Sec.	Watts	Size	Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F366	A-8101	Q	500	6-8/3.2	5	2⅜x1⅜x1⅜"	½	2.22	2.00	1.89	1.78	1.31	1.20
1F369	A-3818	J	1,500/1,000/500	15/8/4	25	3⅝x2¼x3⅛"	2½	6.13	5.52	5.21	4.91	3.52	3.22
1F370	A-8104	J	3,000/2,000/1,500/ 1,000/500	16/8/4	10	2 15/16x1¾x2 5/16"	1½	5.25	4.72	4.46	4.21	2.91	2.66
1F280	A-7947	Q	2,000, 1,500, 1,000, 500	6-8/3.2	8	1 5/8x2 13/16x1 9/16"	¾	3.62	3.26	3.08	2.90	2.08	1.90

25 VOLT LINE TO VOICE COIL TRANSFORMERS

Stk. No.	Type	Pri. Imp.	Sec. Imp.	Watts	Mtg. Ctrs.	1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F389	A.8095	125/250/500/ 1000/2000	8/4	5/2.5/1.25/ .62/.31	2"	3.19	2.88	2.72	2.56	1.91	1.74
1F390	A-8096	78/156/312 625/1250	16/8/4	8/4/2/1/ 0.5	2"	4.67	4.21	3.96	3.73	2.59	2.36
1F345	A-6088	156/312/625/ 1250/2500/5000	8	4/2/1/ .5/.25/.12	2⅜"	3.40	3.06	2.89	2.72	1.86	1.61

OUTPUT TRANSFORMERS

Stock No.	Type No.	Typical Output Tubes	Impedance Ohms Primary	Secondary	DC Pri.	Pwr. Watts	Mtg. Type	Wt. Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F916	PCO-150A	P-P 6V6's, 6F6's	12,000CT	600/150/16/8/4	200	15	SC	5	16.88	15.20	14.35	13.50	9.34	8.51
1F917	COC-1	Sgl. 6L6, 6V6	5,000	600/150/16/8/4	55	5	SC	2¼	9.96	8.97	8.46	7.97	5.39	4.91

70.7 VOLT TO VOICE COIL TRANSFORMERS

Stock No.	Type No.	Power Steps In Watts	Impedance in Ohms Pri.	Sec.	Mtg. Type	Mtg. Ctrs.	Shpg. Wt.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F373	A-8102	8/4/2/1/0.5	625/1,250/2,500/ 5,000/10,000	16/8/ 4	J	2	0.7	4.37	3.93	3.71	3.50	2.42	2.22
1F126	A-8105	5/2.5/1.25/ .62/.31	1000/2000/4000/ 8000/16,000	8/4	Q	2	0.4	3.57	3.22	3.03	2.85	2.06	1.89
1F340	A-8084	4/2/1/.5/.25/ .12	1250/2500/5000/ 10000/20000/40000	8	A	2⅜	.07	3.64	3.28	3.10	2.92	1.86	1.61

Chicago-Stancor Transformers

CARBON MIKE or LINE to SINGLE GRID

†Has Dual primary—when properly connected, the 200 and 500 ohm sections are center tapped.

Stock No.	Type	Use	Pri.	Sec.	Size	Wt.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
IF285	A-4705	SB Mic	200/70	80,000	1⅜x2⅜x1⅜"	½	4.15	3.73	3.52	3.33	2.25	2.05
IF288	A-4351†	Mic or Line	500/333/200/125/50	89,000	2 11/16x2¼x1½"	1¼	6.01	5.41	5.11	4.81	.....	.....

MICROPHONE OR LINE TO LINE TRANSFORMERS

Sec. 500/333/200/125/50. Size: 3¼x1¾x2" high. Mtg. Ctrs. 2 13/16"

Stk.No.	Type	Primary	Watts	Mtg.	Wt.	1-9	10-24	25-49	50-99	100-249	250-499
IF763	A-4350	500/333/200/125/50	10	Q	1.0	5.28	4.76	4.49	4.23	2.86	2.61

INTERCOM TRANSFORMERS

St.No.	Type	Use	Pri. Imp.	Sec. Imp.	Fig.	Ht.	Wt. (lb.)	1-9	10-24	25-49	50-99	100-249	250-499
1F311	A-4744	Input	4Ω	25KΩ	VE	1⅜"	0.5	2.56	2.30	2.17	2.05	1.48	1.35
1F399	A-4748	Input	45 or 50Ω	50KΩ	A	1 5/16"	0.4	3.55	3.19	3.02	2.84	.....	.....

DRIVER TRANSFORMERS

St.No.	Type	Pri. Imp.	Pri. ½ Sec.	Pri. D.C.	Mtg.	Fig.	Lbs.	1-9	10-24	25-49	50-99	100-249	250-499
IF221	A4702	1500 to 5000Ω	5:1	80 ma	2x1 11/16	C	2.5	6.49	5.85	5.52	5.20	3.74	3.41
IF406	A4713	10,000Ω	2:1	30 ma	2⅜	A	.7	2.75	2.48	2.35	2.20	1.59	1.46
IF407	A4723	10,000Ω	3:1	30 ma	2⅜	A	.7	2.81	2.53	2.39	2.25	1.63	1.49
IF220	A4752	10,000Ω	2/1.5/1:1	40 ma	2 13/16	A	1.2	3.90	3.51	3.32	3.12	2.24	2.04

AUDIO TRANSFORMERS

1F302 (Type A-53) Interstage type; 7000-20,000 ohm plate impedance to 1G. Remainder Push Pull Inputs; One 7000-15,000 ohm plate impedance to 2 G maximum primary DC 10MA.

Stk. No.	Type No.	Ratio	Size	Fig.	Mtg. Ctrs.	Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
IF302	A-53	1:3	1⅜x2⅜x1½	A	2"	½	2.58	2.33	2.19	2.06	1.49	1.36
IF918	A-53C	1:3	1⅜x2⅜x1⅜	A	2	½	3.02	2.72	2.57	2.41	1.69	1.54
IF294	A-52C	1:2	1⅜x2⅜x1⅜	A	2	¼	2.83	2.55	2.40	2.27	1.64	1.50
IF291	A-63C	1:3	1⅜x2⅞x1½	A	2⅜	¾	3.55	3.19	3.02	2.84	1.97	1.80
IF300	A4711	1:1	1⅜x2⅞x1½	A	2⅜	¾	4.24	3.82	3.60	3.39	2.36	2.15

PHOTOFLASH TRANSFORMER

Stock No.	Type No.	Application	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-499
1F086	P-6425	Power transformer for AC powered Electronic flash circuits	1¼	4.59	4.13	3.90	3.68	2.54	2.32
1F087	P-6426	Trigger Coil for 450V flash	⅛	2.03	1.83	1.72	1.62	1.09	1.00

STEP-DOWN TRANSFORMERS

Type SD. For operating 115 volt equipment from 230 volts, 50-60 cycles AC for source, "Sealed in Steel" corrosion-proof. With 8 ft. cord, plug, standard receptacle on case.

Stk No.	Type	Watts	Lbs.	Size	1-9	10-24	25-49	50-99	100-249	250-499
4F141	SD-50	50	2¾	3½x3½x2⅞"	9.54	8.59	8.11	7.64	4.95	4.51
4F142	SD-100	100	4¼	4 5/16x4 1/16x3 11/16"	11.22	10.10	9.54	8.98	6.42	5.85
4F143	SD-150	150	7	5¼x5 5/16x4 9/16"	16.55	14.90	14.07	13.24	9.61	8.75
4F144	SD-250	250	8¾	5¼x5 5/16x4 9/16"	18.70	16.83	15.90	14.96	10.82	9.85
4F145	SD-500	500	14½	5⅞x6 1/16x5 5/16"	24.45	22.01	20.79	19.56	14.28	13.01
4F146	SD-1000	1000	22½	6½x7 1/16x6⅛"	40.45	36.41	34.39	32.36	23.35	21.26

ISOLATION TRANSFORMERS

Primary: 50/60 cycles.

Stock No.	Type No.	Input Voltage	Output Voltage	Watts	Lbs.	Size	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
IF919	IS-50	105/115/125	125/115/105	50	5	3 11/16x3 5/16x4 11/16	18.34	16.51	15.59	14.68	8.00	7.29
IF920	IS-100	105/115/125	125/115/105	100	8½	4 9/16x4 1/16x5 5/16	25.12	22.61	21.36	20.10	13.92	12.68
IF921	IS-250	105/115/125	125/115/105	250	18¼	5 5/16x4 13/16x6 1/16	35.30	31.77	30.01	28.24	20.96	19.08

STEPUP-STEPDOWN AUTOTRANSFORMERS

Type PSU. Designed specifically for use with air conditioners in converting a 208 volt unit to a 230 volt line. 60 cycle operation, 208 v/230 v, 230 v/208 v. Converting from 230 volt unit to a 208 volt line is done by a simple connection inside outlet box. Unit is for air conditioners using 1 to 2 hp motors.

Stock No.	Type No.	Size	Mtg. Ctrs.	Mtg. Type	Wt. Lbs.	Each, Boxed 1-9	10-24	25-49	50-99	Bulk Packed 100-249	250-499
1F922	PSU-3000	4x4½x6	2½x3¾	PSU	10	26.30	23.67	22.36	21.04	15.12	13.77

230 TO 115 VOLT STEP-DOWN AUTOFORMERS

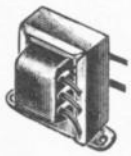
Fig. KA. Reduce 230 VAC to 115V 50/60 cyc. Std. Fem. receptacle on shell, UL-approved 6-ft. cord and plug included. RMS test insulation 1500V.

Stk. No.	Type	Watts	Size	Lbs.	1-9	10-24	25-49	50-99	100-249	250-499
IF320	P-6287	40	3½x2½x2⅝"	2¼	9.30	8.37	7.91	7.44	4.98	4.54
IF321	P-5062	80	3½x3⅜x2 13/16"	4	10.01	9.00	8.50	8.00	5.58	5.09
IF322	P-5063	100	3⅞x3⅝x3⅛"	4½	11.64	10.48	9.90	9.32	6.47	5.90
IF323	P-5064	150	4 11/16x4¼x3¾"	5¼	12.60	11.34	10.71	10.08	7.32	6.67
IF324	P-5065	300	4¾x4x4⅛"	9	16.25	14.62	13.81	13.01	9.33	8.50
IF325	P-6141	500	4 11/16x5¼x3¾"	14	21.53	19.37	18.30	17.22	12.80	11.65

STRAIGHT ISOLATION TRANSFORMERS

Heavy duty. Maintain rated wattage. Good pri-sec. isolation: Switched 105-115-125V., 50/60-cy., pri. taps; std. AC recptcl. 115-V sec. P-6415; test TV and radio recvrs.; 105, 115, 125V output recptcl., 117V, 60 cyc. pri.

Stk. No.	Type	Watts	Fig.	Size	Lbs.	1-9	10-24	25-49	50-99	100-249	250-499
IF923	P-6161	250	KA	4¾x4x5⅜"	14.2	26.27	23.65	22.33	21.02	15.08	13.73
IF924	P-6125	1000	.....	7¾x5⅝x7¾"	34.8	98.07	88.27	83.36	78.46	.....	.....
IF315	P-6160	100	KA	4¾x4x3⅞"	7	19.07	17.17	16.21	15.26	10.77	9.81
IF316	P-6415	350	KC	5⅜x4½x5¾"	17	30.42	27.38	25.85	24.34	18.08	16.46
IF317	P-6410	50	.....	3 13/16x2 15/16x3⅛"	4	9.34	8.41	7.95	7.47	5.37	4.90
IF319	P-6298	500	KA	7⅝x6½x7⅝"	28.0	67.41	60.66	57.29	53.92	39.03	35.52
IF404	P-6371	175	TE	5 9/16x4 9/16x5¼"	9	24.33	21.91	20.68	19.47	13.96	12.71



Type VE

Fig. C

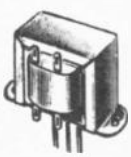


Fig. Q

Type SD

Fig. KA

Fig. TE

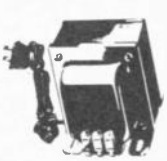
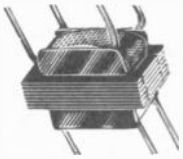


Fig. KC

TM Thordarson Transistor Transformers



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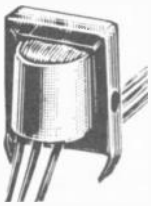

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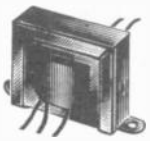

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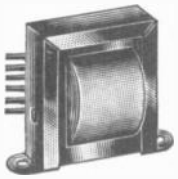

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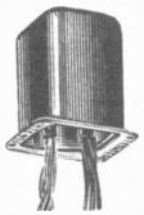


TAV

NOTE:
Key to opplicotion of Tronsformers ot right
A—Input
J—Interstoge
D—Driver
S—Output To Line

AUDIO TRANSISTOR TRANSFORMER — OPEN FRAME

(*) Split Center Tap Winding

Stock No.	Type	Mtg. Type	Impedance Pri.	Impedance Sec.	Use	Mtg. Cntrs.	Power MW	Each, Boxed 1-9	Each, Boxed 10-24	Each, Boxed 25-49	Each, Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F1500	TR-303	BAV	30	120*	D	2	4W	3.30	2.97	2.80	2.64	1.75	1.60
5F1501	TR-225	MAH	80CT	32*									
			100CT	40*	J	.....	250	3.90	3.51	3.31	3.12	.....	.....
5F1502	TR-12	BCH	100CT	10CT	J	13/16	150	3.90	3.51	3.31	3.12	2.42	2.21
5F1503	TR-64	BAH	100	100CT	D	1¾	500	3.30	2.97	2.80	2.64	.....	.....
5F1504	TR-65	BAH	100	200CT	D	1¾	500	3.30	2.97	2.80	2.64	1.49	1.36
5F1505	TR-257	BAH	100	1000CT	J	2	1W	4.50	4.05	3.82	3.60	1.33	1.22
5F1506	TR-246	BAH	200CT	2000CT	J	1⅜	200	4.50	4.05	3.82	3.60	.....	.....
5F1507	TR-224	MAH	400CT	40*									
			500CT	50*	J	.....	250	3.90	3.51	3.31	3.12	.....	.....
5F1508	TR-223	MAH	400CT	120*									
			500CT	150*	J	.....	250	3.90	3.51	3.31	3.12	.....	.....
5F1509	TR-222	MAH	400CT	400*									
			500CT	500*	J	.....	250	3.90	3.51	3.31	3.12	.....	.....
5F1510	TR-247	BAH	400CT	2000CT	J	1⅜	200	4.50	4.05	3.82	3.60	.....	.....
5F1511	TR-5	BCH	490CT	150CT	D	15/16	150	3.90	3.51	3.31	3.12	2.20	2.01
5F1512	TR-11	BCH	500CT	50	D, S	15/16	150	3.90	3.51	3.31	3.12	2.40	2.19
5F1514	TR-66	BAH	500CT	200CT	D	1¾	500	3.30	2.97	2.80	2.64	1.54	1.41
5F1515	TR-37	MAH	500CT	500CT	S	.....	50	3.90	3.51	3.31	3.12	.....	.....
5F1516	TR-1	BAH	500CT	500CT	D, S	1⅜	300	3.90	3.51	3.31	3.12	2.03	1.85
5F1517	TR-259	BAH	500CT	5000CT	J	2	1W	4.50	4.05	3.82	3.60	.....	.....
5F1518	TR-295	BAH	600CT	10	J	1⅜	50	3.30	2.97	2.80	2.64	1.42	1.30
5F1520	TR-423	BAH	600	600	D, J	15/32	200	4.15	3.74	3.53	3.32	.....	.....
5F1522	TR-459	BAH	600CT	600CT	J	1⅜	200	3.75	3.38	3.19	3.00	.....	.....
5F1523	TR-445	BAH	600CT	1200CT	J	1⅜	200	3.75	3.38	3.19	3.00	.....	.....
5F1524	TR-205	MAH	1000	50									
			1200	60	S	.....	100	3.00	2.70	2.55	2.40	.....	.....
5F1525	TR-238	BAH	1000	200CT	D	1 1/16	1	6.00	5.40	5.10	4.80	.....	.....
5F1526	TR-4	BCH	1500	500CT	D, S	15/16	150	3.90	3.51	3.31	3.12	.....	.....
5F1527	TR-213	MAH	1500CT	600CT	J, S	.....	100	3.00	2.70	2.55	2.40	.....	.....
5F1528	TR-260	BAH	2000CT	200CT	D	1 1/16	100	4.50	4.05	3.82	3.60	.....	.....
5F1529	TR-421	BAH	2000CT	500CT	J	1	600	4.15	3.74	3.53	3.32	.....	.....
5F1530	TR-413	BAH	2500	2500CT	J	1	200	4.15	3.74	3.53	3.32	.....	.....
5F1532	TR-407	BAH	4000CT	600CT	J	1	600	4.15	3.74	3.53	3.32	.....	.....
5F1534	TR-454	BAH	4000CT	600*	D, J	1⅜	1.5W	4.15	3.74	3.53	3.32	.....	.....
5F1535	TR-2	BCH	5000CT	7500CT	D, J	13/16	150	3.90	3.51	3.31	3.12	.....	.....
5F1536	TR-3	BCH	5000CT	10000CT	D, J	13/16	150	3.90	3.51	3.31	3.12	.....	.....
5F1537	TR-108	BCH	5000CT	80000CT	A, J	13/16	150	4.50	4.05	3.82	3.60	.....	.....
5F1538	TR-38	MAH	6000	5000CT	D, J	.....	50	3.90	3.51	3.31	3.12	.....	.....
5F1539	TR-415	BAH	7500CT	600CT	J	1	150	4.15	3.74	3.53	3.32	.....	.....
5F1540	TR-420	BAH	7500CT	1200CT	J	1	150	4.15	3.74	3.53	3.32	.....	.....
5F1541	TR-23	BCH	10000	200CT	D, S	13/16	150	3.90	3.51	3.31	3.12		
5F1542	TR-207	MAH	10000CT	200CT									
			25000CT	500CT	J	.....	100	3.90	3.51	3.31	3.12	.....	.....
5F1543	TR-210	MAH	10000	500CT									
			12500	600CT	D, S	.....	100	3.00	2.70	2.55	2.40	.....	.....
5F1545	TR-215	MAH	10000CT	1500CT									
			12000CT	1800CT	J	...	100	3.60	3.24	3.06	2.88	.....	.....
5F1546	TR-201	MAH	10000	2000CT	J	.....	100	3.90	3.51	3.31	3.12	.....	.....
5F1547	TR-7	BCH	10000	2000CT	J	13/16	150	3.90	3.51	3.31	3.12	2.15	1.96
5F1548	TR-219	MAH	10000	2000CT	J	.....	200	3.30	2.97	2.80	2.64	.....	.....
5F1550	TR-6	BCH	10000	3000CT	D, J	13/16	150	3.90	3.51	3.31	3.12	2.15	1.96
5F1551	TR-419	BAH	10000CT	10000CT	J	1	100	4.15	3.74	3.53	3.32	.....	.....
5F1552	TR-216	MAH	10000CT	10000CT									
			12000CT	12000CT	.....	...	100	4.50	4.05	3.82	3.60	.....	.....
5F1553	TR-25	BCH	15000	200CT	J, S	13/16	150	3.90	3.51	3.31	3.12	.....	.....
5F1554	TR-200	MAH	20000	800									
			30000	1200	J	...	100	3.00	2.70	2.55	2.40	.....	.....
5F1555	TR-218	MAH	20000	800									
			30000	1200	J	....	200	3.00	2.70	2.55	2.40	.....	.....
5F1556	TR-208	MAH	20000CT	800CT									
			30000CT	1200CT	J	.....	100	3.90	3.51	3.31	3.12	.....	.....
5F1557	TR-14	BCH	20000	1200	A, J	13/16	150	3.90	3.51	3.31	3.12	.....	.....
5F1558	TR-106	BCH	20000CT	1200	A, J	13/16	150	4.50	4.05	3.82	3.60	2.15	1.96
5F1559	TR-261	BAH	20000CT	2000CT	D	1⅜	200	4.50	4.05	3.82	3.60	2.84	2.55
5F1560	TR-406	BAH	25000	600	J	1	100	3.13	2.82	2.66	2.50	.....	.....
5F1561	TR-435	BAH	25000CT	1200CT	J	15/32	100	4.50	4.05	3.82	3.60	.....	.....
5F1563	TR-217	MAH	40000CT	400*									
			50000CT	500*	J	.....	100	4.50	4.05	3.82	3.60	.....	.....
5F1564	TR-34	BCH	50000	30CT	A	13/16	150	3.90	3.51	3.31	3.12	.....	.....
5F1565	TR-30	BCH	50000	200CT	A, S	13/16	150	3.90	3.51	3.31	3.12	.....	.....
5F1566	TR-26	BCH	50000	500CT	A, D	13/16	150	3.90	3.51	3.31	3.12	.....	.....
5F1567	TR-400	BAH	50000	600	A, J	1	100	3.75	3.38	3.19	3.00	.....	.....
5F1569	TR-24	BAH	100000	1500CT	A, J	1⅜	300	3.90	3.51	3.31	3.12	2.15	1.96
5F1570	TR-206	MAH	200000	1000	A	...	5	3.90	3.51	3.31	3.12	.....	.....
5F1571	TR-214	MAH	200000CT	1000CT	A	.....	5	4.50	4.05	3.82	3.60	.....	.....
5F1572	TR-28	BAH	200000	1000	A	1⅜	300	3.90	3.51	3.31	3.12	.....	.....
5F1573	TR-119	BAH	200000CT	1000CT	A	1⅜	300	4.50	4.05	3.82	3.60	2.15	1.96
5F1574	TR-36	BAH	500000	200CT	A	1⅜	300	3.90	3.51	3.31	3.12	2.15	1.96

INVERTERS DC TO AC

Converters of low voltage DC to high voltage AC or DC power. Ideally suited for powering all types of battery operated equipment. Complete instructions supplied with each transformer.

Stock No.	Type	Mtg. Type	DCV Supply	Output Voltage	Power Watts	Mtg. Cntrs.	Each Boxed 1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk-Packed 100-249	Bulk-Packed 250-499
5F1575	TR-70	GGV	12	117V@60CPS	50	1⅝x2	14.40	12.96	12.24	11.52		
5F1576	TR-71	GGV	12	117V@60CPS	110	2 3/16x2½	21.00	18.90	17.85	16.80	.....	.....
5F1577	TR-287	TYL	28	110/115/125V @400CPS	60	1 7/8x1⅜	14.40	12.96	12.24	11.52	.....	.....

CONVERTERS DC TO DC

5F1578	TR92	TAV	12	500/250	50	1½x2⅜	30.00	27.00	25.50	24.00	11.53	10.58
5F1579	TR-82	TAV	12	500/275	35	1¼x2⅛	30.00	27.00	25.50	24.00	.....	.....

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

OUTPUT-TRANSISTOR TO VOICE COIL

Stock No.	Type	Mfg. Type	Impedance Pri.	Impedance Sec.	Mtg. Cntrs.	Power Watts	Each, Boxed 1-9	Each, Boxed 10-24	Each, Boxed 25-49	Each, Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F1583	TR-199	GGV	6CT	4/8/16	2½x2¼	40	12.00	10.80	10.20	9.60	.....	.....
5F1584	TR-191	BAH	24CT	4/8	2 13/16	8	4.50	4.05	3.82	3.60	2.15	1.96
5F1585	25S81	TAV	24CT	16CT*	3⅞x2¾	10	16.20	14.58	13.77	12.96	.....	.....
5F1586	TR-304	BAH	25	4	2⅜	4	3.30	2.97	2.80	2.64	1.75	1.60
5F1587	TR-58	BAH	32CT	3.5/8/16	2 13/16	10	3.90	3.51	3.31	3.12	2.15	1.96
5F1588	TR-8	BAH	48CT	4/8	1⅜	3	3.90	3.51	3.31	3.12	.....	.....
5F1589	TR-61	BHV	48CT	3.2/8/16	1¾	5	3.90	3.32	3.12	2.87	.....	.....
5F1590	TR-196	BAH	48CT	8/16	2 13/16	8	4.50	4.05	3.82	3.60	2.52	2.30
5F1591	TR-59	BAV	48CT	1.6/4	2⅜	10	3.90	3.51	3.31	3.12	.....	.....
5F1592	TR-60	BHV	48CT	3.2/8/16	2⅜	10	3.90	3.51	3.31	3.12	1.99	1.82
5F1593	TR-111	BAH	100CT	4/8/16	1⅜	.3	4.50	4.05	3.82	3.60	2.32	2.12
5F1594	TR-193	BAH	100CT	4/8	1¾	2	4.50	4.05	3.82	3.60	.....	.....
5F1595	TR-62	BAV	100	3.2/8/16	1½	3	3.90	3.51	3.31	3.12	.....	.....
5F1596	TR-112	BAH	160	4/8/16	1⅜	.3	4.50	4.05	3.82	3.60	2.38	2.17
5F1597	TR-192	BAH	200CT	4/8	1¾	2	4.50	4.05	3.82	3.60	2.15	1.96
5F1598	TR-265	BAH	250CT	4/8/16	1⅜	.2	4.50	4.05	3.82	3.60	2.38	2.17
5F1599	TR-101	BCH	350CT	4/12	1 5/16	.15	4.50	4.05	3.82	3.60	2.48	2.26
5F1600	TR-22	BAH	400CT	4/8	⅜	.3	3.90	3.51	3.31	3.12	.....	.....
5F1601	TR-27	BCH	500CT	3.2	1 5/16	.15	3.90	3.51	3.31	3.12	.....	.....
5F1602	TR-102	BCH	500CT	4/8/16	1 5/16	.15	4.50	4.05	3.82	3.60	2.27	2.07
5F1603	TR-220	MAH	500CT	3.2	.....	25	3.30	2.97	2.80	2.64	.....	.....
5F1605	TR-103	BCH	600CT	4/8/16	1 5/16	15	4.50	4.05	3.82	3.60	2.48	2.26
5F1606	TR-115	BAH	700CT	4/8/16	1⅜	3	4.50	4.05	3.82	3.60	2.32	2.12
5F1607	TR-29	BCH	825CT	3.4	1 5/16	.15	3.90	3.51	3.31	3.12	.....	.....
5F1608	TR-116	BAH	1000	4/8/16	1⅜	.3	4.50	4.05	3.82	3.60	.....	.....
5F1609	TR-209	MAH	1200-1500	3.2-4	.....	.1	3.00	2.70	2.55	2.40	.....	.....
5F1610	TR-105	BCH	1250	4/12	1 5/16	15	4.50	4.05	3.82	3.60	2.15	1.96
5F1611	TR-258	BAH	2000CT	4/8/16	1⅜	.2	4.50	4.05	3.82	3.60	3.33	3.04
5F1612	TR-221	MAH	2000-4000CT	8/16 4/8/16	.....	.25	3.30	2.97	2.80	2.64	.....	.....
5F1613	TR-117	BAH	2500	4/8/16	1⅜	.3	4.50	4.05	3.82	3.60	2.37	2.16
5F1614	TR-118	BAH	3000		1⅜	.3	4.50	4.05	3.82	3.60	2.24	2.04
5F1615	TR-211	MAH	7500-9400CT	3.2-4 3.2	.....	.1	3.00	2.70	2.55	2.40	.....	.....
5F1616	TR-203	MAH	10000	16	.....	.1	3.00	2.70	2.55	2.40	.....	.....
5F1617	TR-202	MAH	10000	4/8/16	.....	.1	3.00	2.70	2.55	2.40	.....	.....
5F1618	TR-109	BCH	10000CT	6	1 5/16	.15	4.50	4.05	3.82	3.60	2.29	2.09
5F1619	TR-402	BAH	50000		1	.01	4.15	3.74	3.53	3.32	.....	.....

*Split CT Winding.

MINIATURE TRANSFORMERS

Top efficiency miniature transformers. Designed for a wide range of civilian and government applications. Used by many manufacturers of hearing aids and a variety of miniature electronic devices where maximum efficiency is necessary. Ideal for original equipment and for replacement.

Stock No.	Type		Impedance Primary	Impedance Secondary	Mtg. Cntrs.	Power MW	1-9	10-24	25-49	50-99
5F1620	MIT-184	BAH	30/7.5	50000	1⅜	3	6.00	5.40	5.10	4.80
5F1621	MIT-166	BAH	600/250/50	600/250/50	1 1/16	12	6.00	5.40	5.10	4.80
5F1622	MIT-182	BAH	600/250/50CT	50000	1¾	3	6.00	5.40	5.10	4.80
5F1623	MIT-183	BAH	600/250/50CT	50000CT	1¾	3	6.00	5.40	5.10	4.80
5F1624	MIT-167	BAH	5000CT	5000CT	1 1/16	12	6.00	5.40	5.10	4.80
5F1625	MIT-143	MAH	10000 to 25000	200 to 500	.....	200	3.30	2.97	2.80	2.64
5F1626	MIT-189	BAH	15000	600/250/50CT	1⅜	8	3.50	3.15	2.97	2.80
5F1627	MIT-186	BAH	15000	60000	1⅜	25	6.00	5.40	5.10	4.80
5F1628	MIT-187	BAH	15000	95000CT	1⅜	3	3.50	3.15	2.97	2.80
5F1629	MIT-73	MAH	25000	500	.....	9	4.50	4.05	3.82	3.60
5F1630	MIT-76	MAH	30000	50	.....	9	4.50	4.05	3.82	3.60
5F1631	MIT-144	MAH	30000	50	.....	200	3.30	2.97	2.80	2.64
5F1632	MIT-191	BAH	30000CT	600/250/50CT	1⅜	8	3.50	3.15	2.97	2.80
5F1633	MIT-79	MAH	100000	60	.....	9	4.50	4.05	3.82	3.60
5F1634	MIT-146	MAH	100000	60	.....	200	3.60	3.24	3.06	2.88

MINIATURE AUDIO INDUCTORS

Stock No.	Type	Series Connected Inductance-Henrys	Series Connected MADC	Series Connected Resistance-Ohms	Mtg. Type	1-9	10-24	25-49	50-99
5F1635	MIT-140	3.5	2	160	MAH	3.30	2.97	2.80	2.64
5F1636	MIT-139	8	2	650	MAH	3.30	2.97	2.80	2.64
5F1637	MIT-82	50	1	4500	MAH	6.90	6.21	5.86	5.52
5F1638	MIT-145	50	1	2675	MAH	2.70	2.43	2.29	2.16
5F1639	MIT-194	300/50	0/3	6000	BAH	3.50	3.15	2.97	2.80

TRANSISTOR BLOCKING OSCILLATOR-CONVERTERS

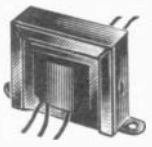
Designed specifically for use in single transistor blocking oscillator circuits. The DC output voltage of TR-464 is rated for a quadruple rectifier circuit and may vary some due to bias.

Stock No.	Type	DC Supply Voltage	DC Output Voltage	Output Current in Micro Amps	Mtg Type	1-9	10-24	25-49	50-99
5F1580	TR-464	4	425/500	50	MAH	4.86	4.37	4.13	3.89
5F1581	TR-462	3	1000 (½ Wave)	25	BAH	4.86	4.37	4.13	3.89

(TRANSISTOR CONVERTER (Mobile or Fixed Power Supply)

Secondaries: 280 V DC @ 150 MADC, 12.6V AC @ 3 Amps (117 Volt Pri. only)

Stock No.	Type	Primaries	Type Mtg.	Each, Boxed 1-9	Each, Boxed 10-24	Each, Boxed 25-49	Each, Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F1582	TR-294	12.6 Volts DC or 117V AC @ 60 Cycles	GGV	18.00	16.20	15.30	14.40	8.27	7.53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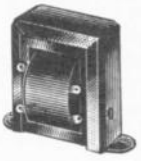
TAV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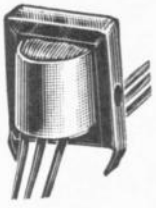
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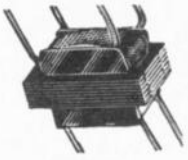
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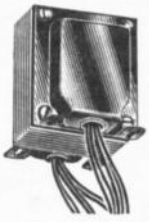

GGV

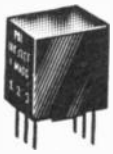
TM Thordarson MIL-T-27B Transformers

MINIATURE TRANSISTOR TRANSFORMER

Designed and built to meet MIL-T-27B Grade 4 specifications. Freq. range: 100-20000 Cycles.

RAV-4

RAV-6



M3

NSV-2

Stock No.	Type	MIL-T-27B Class.	Case Type	Impedance Primary	Impedance Secondary	Application	Pwr. MW	1-9	10-24	25-49	50-99
5F1640	MIT-241	TF4RX17YY	RAV-6	400/500CT	400/500*	J, S, P	500	7.50	6.75	6.37	6.00
5F1641	MIT-247	TF4RX13YY	RAV-6	9000/10000CT†	9000/10000CT	J	100	7.50	6.75	6.37	6.00
5F1642	MIT-236	TF4RX13YY	RAV-6	10000/12000CT	10000/12000CT	J, P	100	7.50	6.75	6.37	6.00
5F1643	MIT-220	TF4RX17YY	RAV-6	500CT	600	S, M	500	6.00	5.40	5.10	4.80
5F1644	MIT-221	TF4RX17YY	RAV-6	900CT	600	S	500	6.00	5.40	5.10	4.80
5F1645	MIT-219	TF4RX17YY	RAV-6	300CT	600	S, M	500	6.00	5.40	5.10	4.80
5F1646	MIT-244	TF4RX17YY	RAV-6	80/100CT	32/40*	J, M, S	500	7.50	6.75	6.37	6.00
5F1647	MIT-222	TF4RX13YY	RAV-6	1500CT	600	S, M	500	6.00	5.40	5.10	4.80
5F1648	MIT-242	TF4RX17YY	RAV-6	400/500CT	120/150*	D, J	500	7.50	6.75	6.37	6.00
5F1649	MIT-237	TF4RX13YY	RAV-6	2000/2500CT	8000/10000*	J, P	100	7.50	6.75	6.37	6.00
5F1650	MIT-211	TF4RX13YY	RAV-6	10000/12500	2000/2500CT	D, J	100	6.60	5.94	5.61	5.28
5F1651	MIT-238	TF4RX13YY	RAV-6	10000/12000CT	2000/2400*	D, J	100	7.50	6.75	6.37	6.00
5F1652	MIT-225	TF4RX13YY	RAV-6	10000/12000CT	1500/1800CT	D, J	100	7.05	6.35	5.99	5.64
5F1653	MIT-210	TF4RX13YY	RAV-6	10000/12500	1200/1500CT	D, J	100	6.60	5.94	5.61	5.28
5F1654	MIT-243	TF4RX17YY	RAV-6	400/500CT	40/50*	J, M, S	500	7.50	6.75	6.37	6.00
5F1655	MIT-202	TF4RX17YY	RAV-6	500/600	50/60	S, M	100	5.40	4.86	4.59	4.32
5F1656	MIT-212	TF4RX17YY	RAV-6	150/200CT	12/16	S	500	6.00	5.40	5.10	4.80
5F1657	MIT-245	TF4RX12YY	RAV-6	1000/1250CT	16000/20000*	J, P	100	7.50	6.75	6.37	6.00
5F1658	MIT-203	TF4RX13YY	RAV-6	1000/1200	50/60	S, M	100	5.40	4.86	4.59	4.32
5F1659	MIT-209	TF4RX13YY	RAV-6	10000/12000	500/600CT	D, S	100	6.60	5.94	5.61	5.28
5F1660	MIT-239	TF4RX13YY	RAV-6	20000/30000CT	1000/1500*	D, J	100	7.50	6.75	6.37	6.00
5F1661	MIT-213	TF4RX17YY	RAV-6	300/400CT	12/16	S	500	5.40	4.86	4.59	4.32
5F1662	MIT-201	TF4RX13YY	RAV-6	20000/30000	800/1200	D, J	50	6.00	5.40	5.10	4.80
5F1663	MIT-223	TF4RX13YY	RAV-6	20000/30000CT	800/1200CT	D, J	100	6.00	5.40	5.10	4.80
5F1664	MIT-229	TF4RX17YY	RAV-6	120/150CT	3.2/4	S	500	6.00	5.40	5.10	4.80
5F1665	MIT-214	TF4RX17YY	RAV-6	600/800CT	12/16	S	500	6.00	5.40	5.10	4.80
5F1666	MIT-215	TF4RX17YY	RAV-6	800/1070CT	12/16	S	500	6.00	5.40	5.10	4.80
5F1667	MIT-230	TF4RX17YY	RAV-6	320/400CT	3.2/4	S	500	6.00	5.40	5.10	4.80
5F1668	MIT-217	TF4RX13YY	RAV-6	1500/2000CT	12/16	S	500	6.00	5.40	5.10	4.80
5F1669	MIT-204	TF4RX17YY	RAV-6	600	3.2	S, M	100	5.40	4.86	4.59	4.32
5F1670	MIT-231	TF4RX17YY	RAV-6	640/800CT	3.2/4	S	500	6.00	5.40	5.10	4.80
5F1671	MIT-246	TF4RX16YY	RAV-6	100000CT†	500CT	A	25	7.50	6.75	6.37	6.00
5F1672	MIT-207	TF4RX16YY	RAV-6	200000	1000	A	25	9.00	8.10	7.65	7.20
5F1673	MIT-224	TF4RX16YY	RAV-6	200000CT	1000CT	A	25	9.00	8.10	7.65	7.20
5F1674	MIT-232	TF4RX17YY	RAV-6	800/1000CT	3.2/4	S	500	6.00	5.40	5.10	4.80
5F1675	MIT-233	TF4RX13YY	RAV-6	1060/1330CT	3.2/4	S	500	6.00	5.40	5.10	4.80
5F1676	MIT-205	TF4RX13YY	RAV-6	1200	3.2	S	100	5.40	4.86	4.59	4.32
5F1677	MIT-234	TF4RX13YY	RAV-6	1600/2000CT	3.2/4	S	500	6.00	5.40	5.10	4.80
5F1678	MIT-218	TF4RX13YY	RAV-6	7500/10,000CT	12/16	S	100	6.00	5.40	5.10	4.80
5F1679	MIT-240	TF4RX13YY	RAV-6	40000/50000CT	400/500*	J, S	50	7.50	6.75	6.37	6.00
5F1680	MIT-235	TF4RX13YY	RAV-6	8000/10000CT	3.2/4	S	500	6.00	5.40	5.10	4.80
5F1681	MIT-206	TF4RX13YY	RAV-6	10000	3.2	S	100	6.00	5.40	5.10	4.80
5F1682	MIT-249	TF4RX20YY	.....	Series: 8H @ 3MADC							
			RAV-6	Parallel: 2H @ 6MADC		Ind.	.....	7.50	6.75	8.37	6.00
5F1683	MIT-226	TF4RX20YY	RAV-6	1.5H @ 5MADC		Ind.	.....	6.00	5.40	5.10	4.80
5F1684	MIT-208	TF4RX20YY	RAV-6	1H @ 5MADC		Ind.	.....	5.40	4.86	4.59	4.32
5F1685	MIT-227	TF4RX20YY	RAV-6	.5H @ 11MADC		Ind.	.....	4.80	4.32	4.08	3.84
5F1686	MIT-228	TF4RX20YY	RAV-6	15H @ 20MADC		Ind.	.....	4.80	4.32	4.08	3.84
5F1687	MIT-250	TF4RX20YY	.....	Series: .06H @ 30MADC							
			RAV-6	Parallel: .015H @ 60MADC		Ind.	.....	5.40	4.86	4.59	4.32
5F1688	MIT-200	TF4RX03YY	.....	Primary: 28V @ 380-1000 Cycles							
			RAV-6	Secondary: 6.3V @ 60MADC		Fil.	.....	6.00	5.40	5.10	4.80
5F1689	MIT-300	.....	.....	High permeability cover, shield							
			RAV-6	20-30DB shielding		Shd.	.....	.90	.81	.76	.72
5F1690	MIT-271	TF4RX17YY	RAV-4	400/500CT	400/500*	J, S, P	500	7.05	6.35	5.99	5.64
5F1691	MIT-268	TF4RX13YY	RAV-4	10000/12000CT	10000/12000CT	J, P	100	7.05	6.35	5.99	5.64
5F1692	MIT-252	TF4RX13YY	RAV-4	1500CT	600	S	500	5.40	4.86	4.59	4.32
5F1693	MIT-270	TF4RX13YY	RAV-4	10000/12000CT	2000/2400*	J	100	7.05	6.35	5.99	5.64
5F1694	MIT-264	TF4RX13YY	RAV-4	10000/12000CT	1500/1800CT	J	100	7.05	6.35	5.99	5.64
5F1695	MIT-251	TF4RX13YY	RAV-4	10000/12000	500/600CT	D, S	100	6.00	5.40	5.10	4.80
5F1696	MIT-253	TF4RX13YY	RAV-4	20000/30000CT	800/1200CT	D, J	50	6.00	5.40	5.10	4.80
5F1697	MIT-258	TF4RX20YY	RAV-4	9H @ 4MADC		Ind.	.....	4.80	4.32	4.08	3.84
5F1698	MIT-266	TF4RX20YY	RAV-4	5H @ 6MADC		Ind.	.....	4.32	3.89	3.67	3.46
5F1699	MIT-295	.....	.....	High permeability cover, shield							
			RAV-4	25-30DB shielding		Shd.	.....	.90	.81	.76	.72

†Static Shielded; *Split Winding

INPUT-INTERSTAGE-DRIVER

Designed and built to meet all the requirements of MIL-T-27B specifications. Both Transistor and tube type transformers may be used at slightly different impedances. All encased except **molded.

Stock No.	Type	MIL-T-27B Class.	Case Type	Impedance Primary	Impedance Sec.	Application	Power MW	1-9	10-24	25-49	50-99
5F1700	27A46	TF4RX17YY	NSV-2	500CT	500CT*	Tr. to line	1	14.85	13.37	12.62	11.88
5F1701	27A20	TF4RX10YY	NSV-2	500CT/ 200CT/50	50000	Line to grid	3.2	9.00	8.10	7.65	7.20
5F1702	27A121†	TF4RX16YY	YY-18	600/150CT	600/150CT	Tr. Interstage	31	30.00	27.00	25.50	24.00
5F1703	27A186	TF4RX17YY	NSV-2B	600	600	Tr. Interstage	150	7.20	6.48	6.12	5.76
5F1704	27A37	TF4RX16YY	NSV-2	600CT*	600CT	Mix or Match	6.3	9.00	8.10	7.65	7.20
5F1705	27A120†	TF4RX10YY	YY-18	600CT*	50000CT*	Line to grid	31	30.00	27.00	25.50	24.00
5F1706	27A32	TF4RX10YY	NSV-2	600/150CT*	1 MEG	Line to grid	10	8.10	7.29	6.88	6.48
5F1707	27D39**	TF5RX13ZZ	M3	10000CT	500CT	Driver	50	6.60	5.94	5.61	5.28
5F1708	27D37**	TF5RX13ZZ	M3	10000CT	1200CT	Driver	50	6.60	5.94	5.61	5.28
5F1709	27A112**	TF5RX13ZZ	M3	10000CT	1500CT	Tr. Interstage	50	7.50	6.75	6.37	6.00
5F1710	27A47	TF4RX13YY	NSV-4	10000CT*	2000CT*	Tr. Interstage	1W	14.85	13.37	12.62	11.88
5F1711	27D38**	TF5RX13ZZ	M3	10000CT	2000CT	Driver	50	6.60	5.94	5.61	5.28
5F1712	27A33	TF4RX13YY	NSV-2	10000CT*	2000CT*	Tr. Interstage	100	9.90	8.91	8.41	7.92
5F1713	27A34	TF4RX13YY	NSV-2	10000CT*	4000CT*	Tr. Interstage	100	9.90	8.91	8.41	7.92

†Shielded for —70 DB hum reduction; *Split C.T. Winding

NOTE

Key to application of Tronsistor Tronsformers at right

A—Input
D—Driver
J—Interstage
M—Mixing or Matching
P—Pulse Applications
S—Output

INPUT-INTERSTAGE-DRIVER (Continued)

Stock No.	Type	MIL-T-27B Classification	Impedance Primary	Impedance Sec.	Case Type	Application	Power MW	1-9	10-24	25-49	50-99
5F1714	27A124	TF4RX10YY	10000	50000CT*	YY-18	Interstage	31	30.00	27.00	25.50	24.00
5F1715	27S18	TF4RX15YY	10000	90000	TSM	Plate to Grid	20	7.65	6.89	6.50	6.12
5F1716	27A30	TF4RX15YY	10000	1 MEG	NSV-2	Interstage	10	8.10	7.29	6.88	6.48
5F1717	27A24	TF4RX15YY	15000	60000CT	NSV-2	Plate to Grid	25	7.50	6.75	6.37	6.00
5F1718	27A44	TF4RX15YY	15000CT*	80000CT*	NSV-4	Plate to Grid	15	14.85	13.37	12.62	11.88
5F1719	27A45	TF4RX15YY	15000	80000CT*	NSV-4	Plate to Grid	200	16.20	14.58	13.77	12.96
5F1720	27A25	TF4RX10YY	15000	95000CT	NSV-2	Plate to Grid	3.2	9.00	8.10	7.65	7.20
5F1721	27A26	TF4RX15YY	15000	95000CT*	NSV-2	Plate to Grid	12	9.90	8.91	8.41	7.92
5F1722	27A125	TF4RX21FA	20000CT*	20000CT*	FA	Plate to Grid	3.1W	30.00	27.00	25.50	24.00
5F1723	27A110**	TF5RX12ZZ	25000	1000	M3	Tr. Interstage	40	7.20	6.48	6.12	5.76
5F1724	27A111**	TF5RX12ZZ	25000CT	1000CT	M3	Tr Interstage	40	7.20	6.48	6.12	5.76
5F1725	27A108**	TF5RX16ZZ	50000CT	1000CT	M3	Tr. Interstage	25	8.10	7.29	6.88	6.48
5F1726	27A109**	TF5RX16ZZ	200000	1000	M3	Input	10	7.20	6.48	6.12	5.76
5F1727	27A107**	TF5RX16ZZ	200000CT	1000CT	M3	Input or Chop.	10	8.10	7.29	6.88	6.48

*Split C.T. Winding.

STEEL JACKET OUTPUT TRANSFORMERS

Built to meet all the requirements of MIL-T-27B specifications. Listed in order of the primary impedance. Includes transistor and tube type. All encased except ** molded.

Stock No.	Type	MIL-T-27B Class.	Case Type	Impedance Primary	Impedance Secondary	Application	Pwr. MW	1-9	10-24	25-49	50-99
5F1728	27S103	TF5RX17ZZ	M3	120CT	3.2	Tr. to V.C.	50	6.60	5.94	5.61	5.28
5F1729	27S100**	TF5RX17ZZ	M3	500CT	600	Output or Mix.	50	6.60	5.94	5.61	5.28
5F1730	27S105**	TF5RX17ZZ	M3	600CT	3.2	Tr. to V.C.	50	6.60	5.94	5.61	5.28
5F1731	27S95**	TF5RX17ZZ	M3	600CT	12	Tr. to V.C.	50	7.50	6.75	6.37	6.00
5F1732	27S111**	TF5RX17ZZ	M3	600CT	600CT	Tr. to Line	50	8.23	7.41	6.99	6.58
5F1733	27S101*	TF5RX17ZZ	M3	900CT	600	Tr. to Line	50	6.60	5.94	5.61	5.28
5F1734	27S89**	TF5RX17ZZ	M3	1000	50	Tr. to Line	50	7.50	6.75	6.37	6.00
5F1735	27S35	TF4RX13YY	NSV-2	1500CT	500CT*	Tr. to Line	100	8.40	7.56	7.14	6.72
5F1736	27S102**	TF5RX13ZZ	M3	1500CT	600	Tr. to Line	50	6.60	5.94	5.61	5.28
5F1737	27S122	TF4RX13YY	YY-21	5000	4/8/16/150/600	Plate to Line	5W	22.50	20.25	19.12	18.00
5F1738	27S98**	TF5RX13ZZ	M3	7500CT	12	Plate to V.C.	50	7.50	6.75	6.37	6.00
5F1739	27S109**	TF5RX13ZZ	M3	8000CT	3.2	Tr. to V.C.	50	8.23	7.41	6.99	6.58
5F1740	27S19	TF4RX13YY	TSM	10000-25000	200-500	Plate to Line	20	7.65	6.89	6.50	6.12
5F1741	27S110**	TF5RX13ZZ	M3	10000CT	10000CT	Output or Isol.	50	8.23	7.41	6.99	6.58
5F1742	27S24	TF4RX13YY	NSV-4	15000	50/125/200/500	Plate to Line	200	15.00	13.50	12.75	12.00
5F1743	27S31	TF4RX13YY	NSV-2	20000CT	600CT*	Plate to Line	125	8.40	7.56	7.14	6.72
5F1744	27S118	TF4RX13YY	YY-27	20000CT*	600CT*	Plate to Line	1W	15.00	13.50	12.75	12.00
5F1745	27S25	TF4RX13YY	NSV-4	30000CT*	50/125/200/500	Plate to Low l.	80	15.00	13.50	12.75	12.00

*Split C.T. Winding.

MOLDED TOROID INDUCTORS

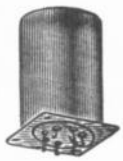
Toroid wound coils built to meet MIL-T-27B, TF5RX20ZZ specifications. High Q plus or minus 2% inductance tolerance. Easily stacked for multiple coil applications. Molded case. Case TM.

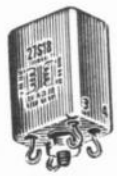
Stock No.	Type	Induct. MH	Resis. Ohms	Case — Mtg. Type TM Diameter	Height	Hole Dia.	1-9	10-24	25-49	50-99
5F1746	TOR-748	1	.40	1 1/16	1/2	.144	6.00	5.40	5.10	4.80
5F1747	TOR-775	1	.40	1 5/16	23/32	.173	6.00	5.40	5.10	4.80
5F1748	TOR749	2	.58	1 1/16	1/2	.144	6.00	5.40	5.10	4.80
5F1749	TOR-776	2	.56	1 5/16	23/32	.173	6.00	5.40	5.10	4.80
5F1750	TOR-777	3	.70	1 5/16	23/32	.173	6.00	5.40	5.10	4.80
5F1751	TOR-778	4	.82	1 5/16	23/32	.173	6.00	5.40	5.10	4.80
5F1752	TOR-779	5	.90	1 5/16	23/32	.173	6.00	5.40	5.10	4.80
5F1753	TOR-755	10	2.1	1 1/16	1/2	.144	6.00	5.40	5.10	4.80
5F1754	TOR-781	10	1.3	1 5/16	23/32	.173	6.00	5.40	5.10	4.80
5F1755	TOR-782	15	1.6	1 5/16	23/32	.173	6.00	5.40	5.10	4.80
5F1756	TOR-783	20	1.85	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1757	TOR-784	30	2.85	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1758	TOR-761	50	11	1 1/16	1/2	.144	6.00	5.40	5.10	4.80
5F1759	TOR-786	50	5.5	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1760	TOR-764	100	23	1 1/16	1/2	.144	6.00	5.40	5.10	4.80
5F1761	TOR-788	100	13	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1762	TOR-789	200	23	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1763	TOR-790	250	33	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1764	TOR-791	300	38	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1765	TOR-793	500	63.5	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1766	TOR-795	700	80	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1767	TOR-774	1000	260	1 1/16	1/2	.144	6.60	5.94	5.61	5.28
5F1768	TOR-796	1000	128	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1769	TOR-798	2000	220	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1770	TOR-799	3000	370	1 5/16	23/32	.173	6.60	5.94	5.61	5.28
5F1771	TOR-7101	5000	645	1 5/16	23/32	.173	10.00	9.00	8.50	8.00
5F1772	TOR-7103	10000	1100	1 5/16	23/32	.173	10.00	9.00	8.50	8.00

ENCASED SHIELDED TOROID INDUCTORS

High grade toroid wound coils built to meet MIL-T-27B, TF4RX20YY specifications.

Stock No.	Type	Induct. MH	Resis. Ohms	Case Type	Case Size Length	Height	Width	1-9	10-24	25-49	50-99
5F1773	TOR-7136	100	18	TH3	1 7/32	1/2	1 1/16	10.00	9.00	8.50	8.00
5F1774	TOR-7180	120	10	TH5	1 11/16	23/32	1 5/16	9.00	8.10	7.65	7.20
5F1775	TOR-7181	200	16	TH5	1 11/16	23/32	1 5/16	9.00	8.10	7.65	7.20
5F1776	TOR-7139	400	70	TH3	1 7/32	1/2	1 1/16	10.00	9.00	8.50	8.00
5F1777	TOR-7183	500	40	TH5	1 11/16	23/32	1 5/16	9.00	8.10	7.65	7.20
5F1778	TOR-7140	600	103	TH3	1 7/32	1/2	1 1/16	10.00	9.00	8.50	8.00
5F1779	TOR-7184	700	60	TH5	1 11/16	23/32	1 5/16	10.80	9.72	9.18	8.64
5F1780	TOR-7185	1000	85	TH5	1 11/16	23/32	1 5/16	10.80	9.72	9.18	8.64
5F1781	TOR-7186	1500	135	TH5	1 11/16	23/32	1 5/16	10.80	9.72	9.18	8.64
5F1782	TOR-7187	2500	220	TH5	1 11/16	23/32	1 5/16	10.80	9.72	9.18	8.64
5F1783	TOR-7188	4000	330	TH5	1 11/16	23/32	1 5/16	10.80	9.72	9.18	8.64
5F1784	TOR-7190	10000	850	TH5	1 11/16	23/32	1 5/16	13.75	12.38	11.69	11.00


NSV-4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TM

TH-3

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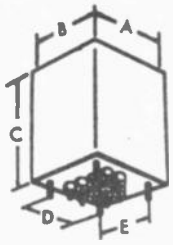
TM Thordarson MIL-T-27B Transformers



MIL-T-27B

TM-1

NSV-2

RAV-7

Depend on NEWARK For All Transformers at OEM Prices. To Serve You Better Ten Stocking Warehouses From Coast-to-Coast.

CONVERTER-EPOXY MOLDED TOROID-DC to DC

Ideally suited for powering all kinds of battery operated equipment, these transistor power supply transformers give a wide range of voltage and power from which to choose. Complete instructions included. All case Type TM1.

Stock No.	Type	DC Supply Voltage	DC Output Voltage	Power Output In Watts	Mtg. Hole Diameter	H.	Dia.	1-9	10-24	25-49	50-99
5F1785	TR-269	12.6	250/125	25	11/64	1 1/16	1 3/4	24.00	21.60	20.40	19.20
5F1786	TR-270	12.6	300/150	60	11/64	1	1 3/4	24.00	21.60	20.40	19.20
5F1787	TR-271	12.6	325/162.5	49	11/64	1	1 3/4	24.00	21.60	20.40	19.20
5F1788	TR-272	12.6	375/187.5	75	11/64	1	2	24.00	21.60	20.40	19.20
5F1789	TR-273	12.6	450/225	68	11/64	1	2	24.00	21.60	20.40	19.20
5F1790	TR-274	12.6	500/250	125	3/16	1 3/8	2 3/4	24.00	21.60	20.40	19.20
5F1791	TR-275	12.6	600/300	120	3/16	1 3/8	2 3/4	24.00	21.60	20.40	19.20
5F1792	TR-276	28	250/125	20	7/64	9/16	1 5/16	14.40	12.96	12.24	11.52
5F1793	TR-280	28	450/225	90	11/64	1	2	24.00	21.60	20.40	19.20
5F1794	TR-282	28	600/300	120	3/16	1 3/8	2 3/4	24.00	21.60	20.40	19.20

CONVERTER-ENCASED—DC to DC

Stock No.	Type	MIL-T-27B Classificaton	DC Supply Voltage	DC Output Voltage	Power Output In Watts	Case Type	1-9	10-24	25-49	50-99
5F1795	27R20	TF4RX09AH	12/14 or 24/28	250	15	AH	16.20	14.58	13.77	12.96
5F1796	27R21	TF4RX09AJ	12/14 or 24/28	375	37.5	AJ	16.20	14.58	13.77	12.96
5F1797	27R22	TF4RX09FA	12/14 or 24/28	425	53	FA	24.00	21.60	20.40	19.20
5F1798	27R23	TF4RX09GB	12/14 or 24/28	550	110	GB	24.00	21.60	20.40	19.20

LOW VOLTAGE RECTIFIER TRANSFORMERS

Dual Secondary—Tapped Primary. Primary 115 Volts 50/60 Cycles. For transistor supply, bias supply, battery chargers and similar applications. Built to MIL-T-27B specifications.

Stock No.	Type	MIL-T-27B Classification	Military DC Range	Industrial DC Range	MIL Case	Mtg. Centers	1-9	10-24	25-49	50-99
5F1799	27V61	TF4RX02AJ	6V-.22A to 53V-.07A	6V-.028A to 53V-.085A	AJ	1 3/16x1 3/16	12.90	11.61	10.96	10.32
5F1800	27V62	TF4RX02FA	6V-1.2A to 53V-.4A	6V-1.52A to 53V-.48A	FA	1 11/16x1 7/16	12.90	11.61	10.96	10.32
5F1801	27V63	TF4RX02HA	6V-3A to 53V-1A	6V-3.8A to 53V-1.2A	HA	2 19/64x1 55/64	18.00	16.20	15.30	14.40

60 Cycles Silicon rectifiers, bias, and filament supply, and all 60 cycle low voltage power supply applications. All units constructed to MIL-T-27B, Grade 4, Class R specifications.

Stock No.	Type	MIL-T-27B	Volts Primary	Secondary Volts	Secondary Amps	Approx. DC Volts Res. or Ind. Load Full Wave	Approx. DC Volts Res. or Ind. Load Bridge	MIL Case	1-9	10-24	25-49	50-99
5F1802	27V67	TF4RX02EB	117	20CT	.3	8	16.5	EB	10.00	9.00	8.50	8.00
5F1803	27V97	TF4RX02NA	105/115/125	30CT	2.5	12.5	25	JA	27.00	24.30	22.95	21.60
5F1804	27V98	TF4RX02HA	105/115/125	80CT	.6	35	70.5	HA	16.60	14.94	14.11	13.28

400 Cycles. These units meet MIL-T-27B. Grade 4, Class R specifications.

Stock No.	Type	MIL-T-27B	Volts Primary	Secondary Volts	Secondary Amps	Approx. DC Volts Res. or Ind. Load Full Wave	Approx. DC Volts Res. or Ind. Load Bridge	MIL Case	1-9	10-24	25-49	50-99
5F1805	27V86	TF4RX02FA	105/115/125	18.5CT	3	7	14	FA	15.00	13.50	12.75	12.00
5F1806	27V35	TF4RX02EA	105/115/125	26CT	1.5	10.7	21.5	EA	15.00	13.50	12.75	12.00
5F1807	27V34	TF4RX02FA	105/115/125	26CT	3	10.7	21.5	FA	15.00	13.50	12.75	12.00
5F1808	27V87	TF4RX02GA	105/115/125	35CT	3	14.5	29	GA	16.60	14.94	14.11	13.28
5F1809	27V88	TF4RX02FA	105/115/125	70CT	1	30	60	FA	15.00	13.50	12.75	12.00

MULTI SHIELDED-LINE ISOLATION

50/60 Cycles. Units have been specifically designed for critical circuitry where minimum coupling capacity is imperative and battery-isolation is desired.

Stock No.	Type	MIL-T-27B	Pri. Volt	Volt Sec.	VA Output Military	VA Output Industrial	MIL Case	1-9	10-24	25-49	50-99
5F1810	27V47	TF2RX011GA	115	115	25	30	GA	22.40	27.00	25.50	24.00
5F1811	27V50	TF4RX01YY	115	115	50	60	YY-73	33.00	29.70	28.05	26.40
5F1812	27V48	TF2RX01KA	115	115	115	140	KA	30.00	29.70	28.05	26.40
5F1813	27V51	TF4RX01YY	115	115	120	150	YY-74	33.00	29.70	28.05	26.40
5F1814	27V52	TF4RX01YY	115	115	160	200	YY-75	45.00	40.50	38.25	36.00
5F1815	27V49	TF2RX01NB	115	115	300	360	NB	33.00	29.70	28.05	26.40
5F1816	27V53	TF4RX01YY	115	115	400	480	YY-76	66.00	59.40	56.10	52.80

LINE ISOLATION TRANSFORMERS

380 to 1500 Cycles. Meet MIL-T-27B, Class R specifications. Applicable to communications, lighting and equipment systems requiring isolation. All units are static shielded.

Stock No.	Type	MIL-T-27B Classification	Pri. Volt	Sec. Volt	VA Output	MIL Case	1-9	10-24	25-49	50-99
5F1817	27V42	TF4RX01YY	115	115CT*	2	NSV-2	10.00	9.00	6.50	8.00
5F1818	27V41	TF4RX01EB	115	115CT*	40	EB	15.00	13.50	12.75	12.00
5F1819	27V40	TF4RX01GA	115	115CT*	150	GA	16.00	14.94	14.11	13.28

PULSE TRANSFORMERS — TRANSISTOR TYPE

Built to meet MIL-T-2103B specifications. All have 5/16 Diameter and 5/16 Height. RAV-7 Case.

Stock No.	Type	MIL-T-21038B Classification	Turns Ratio	Coupling Circuit Pulse Width Micro-Sec.	Coupling Circuit Rise Time (Micro-Sec.)	Coupling Circuit Impedance in/out	1-9	10-24	25-49	50-99
5F1820	PUL-39	TP6RX4410CZ	4:4:1	.05	.017	50/50	6.75	6.08	5.74	5.40
5F1821	PUL-40	TP6RX4410CZ	4:4:1	.10	.024	50/50	6.75	6.08	5.74	5.40
5F1822	PUL-41	TP6RX4410CZ	4:4:1	.20	.035	100/100	6.75	6.08	5.74	5.40
5F1823	PUL-42	TP6RX4410CZ	4:4:1	.50	.061	100/100	6.75	6.08	5.74	5.40
5F1824	PUL-43	TP6RX4410CZ	4:4:1	1.0	.150	100/100	6.75	6.08	5.74	5.40
5F1825	PUL-44	TP6RX4410CZ	4:4:1	2.0	.181	100/100	6.75	6.08	5.74	5.40
5F1826	PUL-45	TP6RX4410CZ	4:4:1	3.0	.210	100/100	6.75	6.08	5.74	5.40
5F1827	PUL-46	TP6RX4410CZ	4:4:1	5.0	.230	200/200	6.75	6.08	5.74	5.40
5F1828	PUL-47	TP6RX4410CZ	4:4:1	10.0	.41	200/200	6.75	6.08	5.74	5.40

MILITARY STANDARD TRANSFORMERS

These transformers bear government classification and part numbers as shown below. Dimensions, mounting centers, terminal arrangements, and markings are all in accordance with government specifications. All units will meet the requirements of Grade 4 MIL-T-27B specifications for Class R operation. Input, Output, and Interstage Transformers are 300 to 10000 CPS; Maximum Altitude 50000 ft. Case style AJ.

INPUT

Stock No.	Type	MIL-T-27B Classification	MIL-T-27B Part No.	Primary Impedance	Secondary Impedance	Max. Power Level	1-9	10-24	25-49	50-99
5F1829	27A02	TF4RX10AJ001	MS-90002-2	*600 ohms CT	135000 ohms CT	15 dbm	15.60	14.04	13.26	12.48

*Split center tap—balanced windings

INTERSTAGE

Stock No.	Type	MIL-T-27B Classification	MIL-T-27B Part No.	Primary Impedance	Secondary Impedance	Max. Power Level	1-9	10-24	25-49	50-99
5F1830	27A03	TF4RX16AJ001	MS-90003-2	*600 ohms CT	*600 ohms CT	15 dbm	15.60	14.04	13.26	12.48
5F1831	27A01	TF4RX15AJ001	MS-90000-2	10000 ohms CT	22500 ohms CT 22500 ohms CT	15 dbm	15.60	14.04	13.26	12.48

*Split center tap—balanced windings

OUTPUT

Stock No.	Type	MIL-T-27B Classification	MIL-T-27B Part No.	Primary Impedance	Secondary Impedance	Max. Power Level	1-9	10-24	25-49	50-99
5F1832	27S01	TF4RX16AJ002	MS-90001-2	*600 ohms CT	4/8/16 ohms	2 watts	18.00	16.20	15.30	14.40
5F1833	27S02	TF4RX13AJ001	MS-90004-2	4800/7600	*600 ohms CT	2 watts	15.00	13.50	12.75	12.00
5F1834	27S03	TF4RX13AJ002	MS-90005-2	4800/7600	4/8/16 ohms	2 watts	15.00	13.50	12.75	12.00
5F1835	27S04	TF4RX13AJ003	MS-90006-2	15000 ohms CT	*600 ohms CT	2 watts	15.00	13.50	12.75	12.00
5F1836	27S05	TF4RX13AJ004	MS-90007-2	24000 ohms CT	*600 ohms CT	1 watt	15.00	13.50	12.75	12.00
5F1837	27S06	TF4RX13AJ005	MS-90008-2	60000 ohms CT	*600 ohms CT	0.5 watt	18.00	16.20	15.30	14.40

*Split center tap—balanced windings

*Parallel rating is twice that of Series

CHOKES

Stock No.	Type	MIL-T-27B Classification	MIL-T-27B Part No.	Inductance (Henrys) Series	Inductance (Henrys) Parallel	MA DC* Series	MA DC* Case Size	1-9	10-24	25-49	50-99
5F1838	27C01	TF4RX04FA001	MS-90009-2	16	4	80	FA	15.00	13.50	12.75	12.00
5F1839	27C02	TF4RX04GA002	MS-90010-2	25	6.25	80	GA	15.00	13.50	12.75	12.00
5F1840	27C03	TF4RX04HA003	MS-90011-2	40	10	80	HA	30.00	27.00	25.50	24.00
5F1841	27C04	TF4RX04HA005	MS-90013-2	16	4	125	HA	21.00	18.90	17.85	16.80
5F1842	27C05	TF4RX04JB006	MS-90014-2	25	6.25	125	JB	30.00	27.00	25.50	24.00
5F1843	27C06	TF4RX04KA007	MS-90037-2	40	10	125	KA	39.00	35.10	33.15	31.20
5F1844	27C07	TF4RX04LA009	MS-75000-2	16	4	200	LA	39.00	35.10	33.15	31.20
5F1845	27C08	TF4RX04MA010	MS-75001-2	25	6.25	200	MA	39.00	35.10	33.15	31.20
5F1846	27C09	TF4RX04NA012	MS-75002-2	16	4	315	NA	39.00	35.10	33.15	31.20
5F1847	27C10	TF4RX04YY013	MS-75003-2	25	6.25	315	YY	75.00	67.50	63.75	60.00

FILAMENT TRANSFORMERS

Stock No.	Type	MIL-T-27B Classification	MIL-T-27B Part No.	Secondary Volts	Secondary Amps.	Insulation Volts RMS	Case Size	1-9	10-24	25-49	50-99
5F1848	27F36	TF4RX01EB002	MS-90016-2	2.5	3.0	2,500	EB	16.50	14.85	14.02	13.20
5F1849	27F37	TF4RX01GB003	MS-90017-2	2.5	10	2,500	GB	16.50	14.85	14.02	13.20
5F1850	27F38	TF4RX01FB004	MS-90018-2	5.0	3.0	2,500	FB	16.50	14.85	14.02	13.20
5F1851	27F39	TF4RX01HB005	MS-90019-2	5.0	10	2,500	HB	16.50	14.85	14.02	13.20
5F1852	27F40	TF4RX01FB006	MS-90020-2	6.3	2.0	2,500	FB	16.50	14.85	14.02	13.20
5F1853	27F41	TF4RX01GB007	MS-90021-2	6.3	5.0	2,500	GB	15.75	14.18	13.39	12.60
5F1854	27F42	TF4RX01JB008	MS-90022-2	6.3	10	2,500	JB	15.75	14.18	13.39	12.60
5F1855	27F43	TF4RX01KB009	MS-90023-2	6.3	20	2,500	KB	24.00	21.60	20.40	19.20
5F1856	27F44	TF4RX01JB012	MS-90024-2	2.5	10	10,000	JB	21.00	18.90	17.85	16.80
5F1857	27F45	TF4RX01KB013	MS-90025-2	5.0	10	10,000	KB	21.00	18.90	17.85	16.80

POWER TRANSFORMERS — REACTOR INPUT

Stock No.	Type	MIL-T-27B Classification	MIL-T-27B Part No.	Secondary A-C Volts	Secondary D-CMA	D-DV Output	Case Size	1-9	10-24	25-49	50-99
5F1858	27R86	TF4RX03HA001	MS-90026-2	200-100-0-100-200	70	385	HA	36.00	32.40	30.60	28.80
5F1859	27R87	TF4RX03JB002	MS-90027-2	325-0-325	70	260	JB	36.00	32.40	30.60	28.80
5F1860	27R88	TF4RX03KB006	MS-90028-2	325-0-325	150	245	KB	36.00	32.40	30.60	28.80
5F1861	27R89	TF4RX03LB003	MS-90029-2	400-0-400	175	318	LB	30.00	27.00	25.50	24.00
5F1862	27R90	TF4RX03MB004	MS-90030-2	450-0-450	250	345	MB	36.00	32.40	30.60	28.80
5F1863	27R91	TF4RX02KB001	MS-90031-2	350-0-350	250	255	KB	36.00	32.40	30.60	28.80
5F1864	27R92	TF4RX02LB002	MS-90032-2	550-0-550	250	419	LB	24.00	21.60	20.40	19.20
5F1865	27R93	TF4RX02NB003	MS-90036-2	800-0-800	250	640	NB	36.00	32.40	30.60	28.80

MIL-T-27B LOW FREQUENCY HIGH Q INDUCTORS

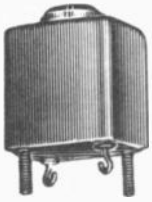
Units have magnetic shielding as well as humbucking construction. Designed to a Q of 40 or more on frequencies ranging from 60 to 300 cycles. Split winding termination.

Stock No.	Type	MIL-T-27B Classification	Series Ind. ±2%	Series Res. ±20%	Parallel Ind. ±2%	Parallel Res. ±20%	Case Size	1-9	10-49	25-49	50-99
5F1866	27C226	TF4RX20YY	50	10	2.5	12.5	NSV-5	27.00	24.30	23.00	21.60
5F1867	27C227	TF4RX20YY	82	20	5.	20.	NSV-5	27.00	24.30	23.00	21.60
5F1868	27C228	TF4RX20YY	820	200	50.	205.	NSV-5	27.00	24.30	23.00	21.60
5F1869	27C502	TF4RX20YY	3,750	300	75.	937.	NSV-3	12.15	10.94	10.33	9.72
5F1870	27C229	TF4RX20YY	2,100	400	100.	525.	NSV-5	30.00	27.00	25.50	24.00

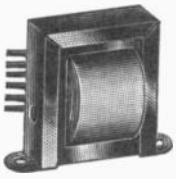
MIL-T-27B CASE DIMENSIONS

	AH	AJ	EA	EB	FA	FB	GA	GB	HA	HB	JB	KA	LB	MA	MB	NA	NB
A	1 5/16	1 5/8	1 15/16	1 15/16	2 5/16	2 5/16	2 3/4	2 3/4	3 1/16	3 1/16	3 9/16	3 15/16	4 5/16	4 11/16	4 11/16	5 1/16	5 1/16
B	1 5/16	1 5/8	1 13/16	1 13/16	2 1/16	2 1/16	2 5/8	2 5/8	2 5/8	2 5/8	3 1/16	3 3/8	3 15/16	4	4	4 5/16	4 5/16
C	1 3/4	2 3/8	2 3/4	2 7/16	3 1/16	2 1/2	3 1/16	2 13/16	4 1/4	3 3/16	5 1/4	4 5/16	5 9/16	6	4 15/16	6 13/16	5 1/2
D	1 1/4	1 3/4	2 1/4	1 3/8	1 11/16	1 11/16	2 1/8	2 1/8	2 19/16	2 19/16	2 7/8	3	3 1/16	3 1/16	3 1/16	4 1/16	4 1/16
E	1 1/4	1 9/16	1 1/4	1 1/4	1 7/16	1 7/16	1 3/4	1 3/4	1 55/64	1 55/64	2 1/8	2 7/16	2 1/16	2 1/16	3	3 5/16	3 5/16

TM Thordarson MIL-T-27B Transformers

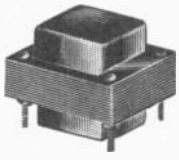


AL-1



BAV

GGV



AGF

TAV

FGV

ALIGNAIRE INDUCTORS—VARIABLE

Ideally suited for hard to align or frequently changed circuits. Applicable to mid-audio tuned freq. circuits. Case type AL-1—$1\frac{7}{32}$x$1\frac{1}{8}$x$2\frac{5}{32}$ except * case type AL-3—$1\frac{1}{16}$x$1\frac{7}{32}$x$1\frac{11}{32}$ (not illus.).

Stock No.	Type	MIL-T-27B	Induct. Hy. Max.	Induct. Hy. Min.	Max. MADC	Resis. Ohms	Mtg. Centers	1-9	10-24	25-49	50-99
5F1871	27C180	TF4RX20YY	.020	.002	100	.51	$2\frac{7}{32}$	8.10	7.29	6.88	6.48
5F1872	27C181	TF4RX20YY	.050	.005	60	1.42	$2\frac{7}{32}$	8.10	7.29	6.88	6.48
5F1873	27C207*	TF3RX20YY	.098	.029	36	6.0	$1\frac{3}{16}$x$2\frac{9}{32}$	6.00	5.40	5.10	4.80
5F1874	27C182	TF4RX20YY	.111	.011	40	3.5	$2\frac{7}{32}$	8.10	7.29	6.88	6.48
5F1875	27C208*	TF3RX20YY	.155	.046	30	9.3	$1\frac{3}{16}$x$2\frac{9}{32}$	6.00	5.40	5.10	4.80
5F1876	27C209*	TF3RX20YY	.240	.071	25	15.5	$1\frac{3}{16}$x$2\frac{9}{32}$	6.00	5.40	5.10	4.80
5F1877	27C183	TF4RX20YY	.300	.030	30	8.7	$2\frac{7}{32}$	8.10	7.29	6.88	6.48
5F1878	27C210*	TF3RX20YY	.390	.115	20	24	$1\frac{3}{16}$x$2\frac{9}{32}$	6.00	5.40	5.10	4.80
5F1879	27C211*	TF3RX20YY	.628	.187	20	36	$1\frac{3}{16}$x$2\frac{9}{32}$	6.00	5.40	5.10	4.80
5F1880	27C184	TF4RX20YY	.700	.070	20	22	$2\frac{7}{32}$	8.10	7.29	6.88	6.48
5F1881	27C212*	TF3RX20YY	1.00	.300	15	58	$1\frac{3}{16}$x$2\frac{9}{32}$	6.00	5.40	5.10	4.80
5F1882	27C213*	TF3RX20YY	1.57	.467	13	94	$1\frac{3}{16}$x$2\frac{9}{32}$	6.00	5.40	5.10	4.80
5F1883	27C185	TF4RX20YY	2.00	.200	16	55	$2\frac{7}{32}$	8.10	7.29	6.88	6.48
5F1884	27C214*	TF3RX20YY	2.40	.716	10	150	$1\frac{3}{16}$x$2\frac{9}{32}$	6.75	6.07	5.54	5.20
5F1885	27C215*	TF3RX20YY	4.07	1.2	8	235	$1\frac{3}{16}$x$2\frac{9}{32}$	6.75	6.07	5.54	5.20
5F1886	27C153	TF4RX20YY	5.00	.500	10	140	$2\frac{7}{32}$	12.00	10.80	10.20	9.60
5F1887	27C216*	TF3RX20YY	6.28	1.87	6.5	375	$1\frac{3}{16}$x$2\frac{9}{32}$	6.75	6.07	5.54	5.20
5F1888	27C217*	TF3RX20YY	10.0	3.00	6	585	$1\frac{3}{16}$x$2\frac{9}{32}$	6.75	6.07	5.54	5.20
5F1889	27C186	TF4RX20YY	11.0	1.10	7	365	$2\frac{7}{32}$	9.00	8.10	7.65	7.20
5F1890	27C218*	TF3RX20YY	15.7	4.65	5	955	$1\frac{3}{16}$x$2\frac{9}{32}$	6.75	6.07	5.54	5.20
5F1891	27C219*	TF3RX20YY	24.0	7.16	4	1500	$1\frac{3}{16}$x$2\frac{9}{32}$	6.75	6.07	5.54	5.20
5F1892	27C187	TF4RX20YY	30.0	3.00	5	945	$2\frac{7}{32}$	9.00	8.10	7.65	7.20
5F1893	27C188	TF4RX20YY	70.0	7.0	3.6	2200	$2\frac{7}{32}$	9.00	8.10	7.65	7.20
5F1894	27C189	TF4RX20YY	200	20	2.1	5500	$2\frac{7}{32}$	10.05	9.05	8.54	8.04
5F1895	27C190	TF4RX20YY	500	50	1.5	15500	$2\frac{7}{32}$	10.05	9.05	8.54	8.04

POWER TRANSFORMERS (*)400-80-0-80-400

Stock No.	Type	Plate Supply Volts	Plate Supply MADC	Rectifier Fil. Volts	Rectifier Fil. Amps	Other Fil. Volts	Other Fil. Amps	Mtg. Type	Each Box 1-9	Each Box 10-24	Each Box 25-49	Each Box 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F1896	22R39	125-0-125	25	.....	.....	6.3	1	BAV	3.00	2.70	2.55	2.40	1.85	1.69
5F1897	24R10	220-0-220	50	6.3	.6	25.2	.5	GGV	9.00	8.10	7.65	7.20	4.24	3.86
5F1898	25R23	225-0-225	40	5	2	6.3CT	2	TTV	15.00	13.50	12.75	12.00	.....	.....
5F1899	24R11	230-0-230	50	.....	.....	6.3	2.5	AGF	6.00	5.40	5.10	4.80	3.23	2.94
5F1900	24R11U	230-0-230	50	.....	.....	6.3	2.5	GGV	6.00	5.40	5.10	4.80	3.07	2.80
5F1901	24R00	240-0-240	40	5	2	6.3CT	2	AGF	7.50	6.75	6.37	6.00	3.89	3.54
5F1902	24R19	240-0-240	55	5	2	6.3CT	2	AGF	7.50	6.75	6.37	6.00	3.80	3.46
5F1903	24R19U	240-0-240	55	5	2	6.3CT	2	GGV	7.50	6.75	6.37	6.00	3.80	3.46
5F1904	24R12	240-0-240	70	.....	.....	6.3	3	AGF	7.50	6.75	6.37	6.00	3.62	3.30
5F1905	24R12U	240-0-240	70	.....	.....	6.3	3	GGV	7.50	6.75	6.37	6.00	3.62	3.30
5F1906	24R90	250-0-250	20	6.3	.6	6.3	1.2	FGV	6.00	5.40	5.10	4.80	3.25	2.96
5F1907	22R00	250-0-250	40	5	2	6.3CT	2	AGF	8.25	7.43	7.01	6.60	.....	.....
5F1908	24R09	250-0-250	70	5	2	6.3CT	2.5	AGF	9.00	8.10	7.65	7.20	4.19	3.82
5F1909	24R09U	250-0-250	70	5	2	6.3CT	2.5	GGV	9.00	8.10	7.65	7.20	4.04	3.68
5F1910	26R31U	260-0-260	90	.....	.....	6.3	4	GGV	9.00	8.10	7.65	7.20	3.95	3.60
5F1911	24R13	260-0-260	90	5	2	6.3CT	3	AGF	9.00	8.10	7.65	7.20	4.52	4.12
5F1912	24R13U	260-0-260	90	5	2	6.3CT	3	GGV	9.00	8.10	7.65	7.20	4.54	4.14
5F1913	26R53	268-0-268	260	5	3	6.3	8	GGV	18.00	16.20	15.30	14.40	7.48	6.81
5F1914	25R24	270-0-270	55	5	2	6.3CT	2	TTV	15.00	13.50	12.75	12.00	.....	.....
5F1915	24R20	270-0-270	120	5	3	6.3CT	3.5	AGF	12.00	10.80	10.20	9.60	5.94	5.41
5F1916	24R20U	270-0-270	120	5	3	6.3CT	3.5	GGV	12.00	10.80	10.20	9.60	5.70	5.19
5F1917	22R01	275-0-275	50	5	2	6.3CT	2.5	AGF	8.25	7.43	7.01	6.60	.....	.....
5F1918	25R03	300-0-300	60	5	2	6.3CT	3	TAV	20.25	18.23	17.21	16.20	.....	.....
5F1919	22R02	300-0-300	70	5	2	6.3CT	3	AGF	8.25	7.43	7.01	6.60	.....	.....
5F1920	22R04	300-0-300	90	5	2	6.3CT	3.5	AGF	8.25	7.43	7.01	6.60	.....	.....
5F1921	22R05	300-0-300	120	5	3	6.3CT	5	AGF	15.00	13.50	12.55	12.00	6.40	5.83
5F1922	22R05U	300-0-300	120	5	3	6.3CT	5	GGV	15.00	13.50	12.75	12.00	.....	.....
5F1923	24R01	325-0-325	40	5	2	6.3CT	2	AGF	7.50	6.75	6.37	6.00	3.92	3.57
5F1924	24R08	325-0-325	55	5	2	6.3CT	2	AGF	9.00	8.10	7.65	7.20	4.17	3.80
5F1925	24R08U	325-0-325	55	5	2	6.3CT	2	GGV	9.00	8.10	7.65	7.20	3.98	3.63
5F1926	25R27	335-0-335	70	5	2	6.3CT	3	TTV	15.00	13.50	12.75	12.00	.....	.....
5F1927	25R06	345-0-345	105	5	2	6.3CT	3.5	TAV	20.25	18.23	17.21	16.20	.....	.....
5F1928	25R30	350-0-350	30	5	2	6.3CT	2	TTV	30.00	27.00	25.50	24.00	.....	.....
5F1929	24R02	350-0-350	70	5	2	6.3CT	2.5	AGF	9.00	8.10	7.65	7.20	5.09	4.64
5F1930	24R02U	350-0-350	70	5	2	6.3CT	2.5	GGV	9.00	8.10	7.65	7.20	4.88	4.45
5F1931	24R04	350-0-350	90	5CT	3	2.5CT	3.5	AGF	9.00	8.10	7.65	7.20	5.28	4.81
5F1932	24R04U	350-0-350	90	5CT	3	2.5CT	3.5	GGV	9.00	8.10	7.65	7.20	.....	.....
5F1933	22R32	350-0-350	110	5CT	2	6.3CT	3	GGV	12.00	10.80	10.20	9.60	7.25	6.60
5F1934	24R05	350-0-350	120	5	3	6.3CT	4.7	AGF	9.00	8.10	7.65	7.20	.....	.....
5F1935	24R05U	350-0-350	120	5	3	6.3CT	4.7	GGV	9.00	8.10	7.65	7.00	.....	.....
5F1936	22R07	350-0-350	200	5	3	6.3CT	6	AGF	15.00	13.50	12.75	12.00	.....	.....
5F1937	22R87	350-0-350	200	5	3	6.3CT	8	GGV	12.00	10.80	10.20	9.60	.....	.....
5F1938	24R22	360-0-360	120	5	3	6.3CT	3.5	AGF	15.00	13.50	12.75	12.00	6.16	5.81
5F1939	24R22U	360-0-360	120	5	3	6.3CT	3.5	GGV	15.00	13.50	12.75	12.00	5.77	5.26
5F1940	25R32	370-0-370	150	5	3	6.3CT	4/1	TTV	30.00	27.00	25.50	24.00	.....	.....
5F1941	24R24	370-0-370	275	5CT	3	6.3CT	7	AGF	15.00	13.50	12.75	12.00	9.68	8.81
5F1942	24R06	375-0-375	150	5	3	6.3CT	4.7	AGF	15.00	13.50	12.75	12.00	8.52	7.76
5F1943	24R06U	375-0-375	150	5	3	6.3CT	4.7	GGV	15.00	13.50	12.75	12.00	7.64	6.96
5F1944	25R33	385-0-385	200	5	3	6.3CT	4.5/1	TTV	30.00	27.00	25.50	24.00	.....	.....
5F1945	24R66	400-0-400	30	5	2	6.3	1.2	GGV	12.00	10.80	10.20	9.60	.....	.....
5F1946	24R45	400-0-400	140	5	3	6.3CT	4	GGV	12.00	10.80	10.20	9.60	.....	.....
5F1947	24R07	400-0-400	200	5	3	6.3CT	5	AGF	15.00	13.50	12.75	12.00	8.38	7.63
5F1948	24R07U	400-0-400	200	5	3	6.3CT	5	GGV	15.00	13.50	12.75	12.00	8.25	7.51
5F1949	24R03	400-0-400	250	5	4	6.3CT	5	GGV	15.00	13.50	12.75	12.00	8.92	8.12
5F1950	25R11	•	250	5/5	6/2	6.3CT	7	TAV	36.00	32.10	30.60	28.80	3.23	2.94
5F1951	22R35	400-0-400	340	5	6	6.3CT	7	GGV	24.00	21.60	20.40	19.20	.....	.....
5F1952	25R35	425-0-425	70	5	2	6.3CT	3	TTV	30.00	27.00	25.50	24.00	.....	.....
5F1953	24R15	438-0-438	185	5	3	6.3	4/3	GGV	15.00	13.50	12.75	12.00	9.88	9.00
5F1954	24R25	440-0-440	130	5	3	6.3CT	3.5	GGV	9.00	8.10	7.65	7.20	5.77	5.26
5F1955	25R37	450-0-450	60	5	2	6.3CT	3.4	TTV	30.00	27.00	25.50	24.00	.....	.....
5F1956	22R36	600-0-600	200	5	3	6.3	5	GGV	24.00	21.60	20.40	19.20	.....	.....

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

INTERSTAGE TRANSFORMERS

Stock No.	Type	Impedance In Ohms Primary	Impedance In Ohms Secondary	Unb. Pri. MADC	Mtg. Type	Mtg. Centers	1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F1969	25A46	500*	500*	20	RTV	1 1/16	9.00	8.10	7.65	7.20	.....	.....
5F1970	25A69	500*	150*	20	UTV	1 5/32 x 1 5/32	10.80	9.72	9.18	8.64	.....	.....
5F1971	25A62	600*	2000*	0	UTV	1 5/32 x 1 5/32	12.00	10.80	10.20	9.60	.....	.....
5F1972	20A16	7000— 15000	28000— 60000CT	10	BAH	2	3.60	3.24	3.06	2.88	2.12	1.93
5F1973	25A35	15000	60000	0	RTV	1 1/16	8.10	7.29	6.88	6.48	.....	.....
5F1974	25A64	10000*	2000*	8	UTV	1 5/32 x 1 5/32	10.80	9.72	9.18	8.64	.....	.....
5F1975	25A66	15000	80000*	8	UTV	1 5/32 x 1 5/32	12.00	10.80	10.20	9.60	.....	.....
5F1976	25A38	15000	95000CT	4	RTV	1 1/16	8.10	7.29	6.88	6.48	.....	.....
5F1977	20A18	7000— 15000	63000— 135000CT	10	BAH	2	2.40	2.16	2.04	1.92	1.53	1.40
5F1978	20A45	10000	90000	10	BAH	2	2.40	2.16	2.04	1.92	1.35	1.23
5F1979	MIT142	10000	90000	.25	MAH	.....	3.30	2.97	2.80	2.64	.....	.....
5F1980	20A93	10000	90000CT	10	BAH	2 3/8	6.00	5.40	5.10	4.80	.....	.....
5F1981	25A48	500*	50*	20	RTV	1 1/16	9.00	8.10	7.65	7.20	.....	.....
5F1982	25A68	10000*	500*	8	UTV	1 5/32 x 1 5/32	10.80	9.72	9.18	8.64	.....	.....
5F1983	25A41	10000*	4000*	4	RTV	1 1/16	8.10	7.29	6.88	6.48	.....	.....
5F1984	25A67	25000*	500*	3	UTV	1 5/32 x 1 5/32	10.80	9.72	9.18	8.64	.....	.....
5F1985	25A39	10000	1 Meg.	.....	RTV	1 1/16	8.10	7.29	6.88	6.48	.....	.....

*Split C.T. Winding.

SINGLE PLATE TO PUSH PULL GRIDS

Stock No.	Type	Turns Ratio	Pri. MADC	Mtg. Type	Mtg. Centers	Dimension HxWxD			1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk-Packed 100-249	Bulk-Packed 250-499
5F1986	20D23	2:1	15	BAH	2 3/8	1 5/8	2 7/8	1 1/2	4.80	4.32	4.08	3.84	1.64	1.50
5F1987	20D75	2.4:1	10	BAH	2	1 3/8	2 3/8	1 1/4	9.00	8.10	7.65	7.20	.....	.....
5F1988	20D77	2.5:1	30	FGV	2 3/8	2 3/8	2 7/8	2 1/8	6.00	5.40	5.10	4.80	.....	.....
5F1989	20D76	5.2:1	15	BAH	2	1 3/8	2 3/8	1 1/4	7.20	6.48	6.12	5.76	.....	.....
5F1990	25D50	3:1	25	TAV	2 1 1/16 x 1 3/4	3 1/8	3	2 1/2	9.00	8.10	7.65	7.20	.....	.....
5F1991	20D89	3:1	40	BAH	2 3/8	1 5/8	2 13/16	1 1/2	6.00	5.40	5.10	4.80	1.48	1.35
5F1992	20D30	5:1	45	GGV	2x1 1 5/16	3 1/8	2 5/8	2 5/8	6.00	5.40	5.10	4.80	3.40	3.10

OUTPUT—SINGLE PLATE TO LINE OR VOICE COIL

Stock No.	Type	Impedance Pri.	Impedance Secondary	Pri. MADC	Watts	Mtg. Type	1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F1993	24S50	2000	3.5	55	5	BAH	1.50	1.35	1.27	1.20	.97	.89
5F1994	24S51	5000	3.5	40	5	BAH	1.50	1.35	1.27	1.20	1.00	.91
5F1995	25S43	5000	4/8/16/150/500	55	5	TTV	12.00	10.80	10.20	9.60	.....	.....
5F1996	22S35	5000	3.5	50	5	BAH	3.00	2.70	2.55	2.40	.....	.....
5F1997	24S91	5000	4/8/16/500	55	10	GGV	6.00	5.40	5.10	4.80	3.88	3.54
5F1998	24S52	7-10000	3.5	30	5	BAH	1.80	1.62	1.53	1.44	1.00	.91
5F1999	24S96	7000	4/8/16	40	10	BAH	2.25	2.02	1.91	1.80	1.63	1.47
5F2000	24S81	8000	3.5	30	3	BAV	1.80	1.62	1.53	1.44	1.27	1.16
5F2001	25S44	8000	4/8/16/150/600	55	5	TTV	12.00	10.80	10.20	9.60	.....	.....
5F2002	24S84	10000	3.5	30	3	BAV	2.25	2.02	1.91	1.80	.....	.....
5F2003	24S98	10000	3.5	30	5	BAH	2.25	2.02	1.91	1.80	1.27	1.16
5F2004	24S54	15-20000	3.5	10	5	BAH	1.80	1.62	1.53	1.44	1.19	1.09
5F2005	24S99	25000	3.5	5	5	BAH	2.25	2.02	1.91	1.80	1.23	1.12

OUTPUT—PUSH PULL PLATES TO LINE OR VOICE COIL

Primary Impedance (*) 5000/7000CT and (†) 7000/10000CT

5F2006	22S58		3.5/8	45	10	BAH	6.00	5.40	5.10	4.80	.....	.....
5F2007	24S119	6000CT	4/8/16/500	100	30	GGV	9.00	8.10	7.65	7.20	4.70	4.28
5F2008	24S57	6,600CT	4/8/16/250/500	150	35	GGU	9.00	8.10	7.65	7.20	5.68	5.17
5F2009	24S58†		3.5/8/16/500	60	25	GGV	9.00	8.10	7.65	7.20	4.05	3.69
5F2010	24S56	10000CT	2/4/8	75	8	BAH	4.50	4.05	3.82	3.60	1.82	1.61
5F2011	24S19	10000CT	4/8/16	60	12	BAV	9.00	8.10	7.65	7.20	.....	.....
5F2012	26S47	14000CT	3.5	35	12	BAH	3.96	3.56	3.37	3.17	.....	.....

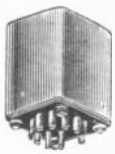
OUTPUT—TUBE TO LINE OR LINE MIXER

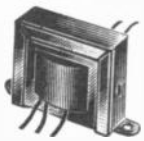
5F2013	25S01	15000	50/200-250/500-600	0	.006	RTV	8.10	7.29	6.88	6.48		
5F2014	25S02	15000	Same as 25S01	4	.006	RTV	8.10	7.29	6.88	6.48		
5F2015	25S03	30000CT	Same as 25S01	0*	.006	RTV	8.10	7.29	6.88	6.48		
5F2016	25S12	15000**	50/125-150/200-250/333/500-600	0*	.031	UTV	13.50	12.15	11.47	10.80		
5F2017	25S13	15000	Same as 25S12	8	.031	UTV	13.50	12.15	11.47	10.80		
5F2018	25S17	15000**	Same as 25S12	8	.160	UTV	18.90	17.01	16.06	15.12		
5F2019	25S16	30000CT	Same as 25S12	1	.2	UTV	18.90	17.01	16.06	15.12		
5F2020	25S33	30000CT	50/150/200/250/333/500	5	.5	UTV-1	39.00	35.10	33.15	31.20		

MICROPHONE, PICKUP OR LINE TO GRID

Stock No.	Type	Application	Impedance In Ohms Primary	Impedance In Ohms Secondary	Mtg. Type	1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F1957	25A210	Chopper Input	53000	13250CT	TAJ-1*	12.40	11.16	10.54	9.92	.....	.....
5F1958	20A00	Line to S. or PP Grids	600/500CT	60000CT	BAH	3.60	3.24	3.06	2.88	.....	.....
5F1959	25A28	Mike, Pickup or Line to S. or PP Grids	600/500/250, 200/50	50000CT	RTV	8.10	7.29	6.88	6.48	.....	.....
5F1960	25A58	Mike, Pickup or Line to S. or PP Grids	600/500/333/250, 200/150/125/50	50000CT**	UTV	12.00	10.80	10.20	9.60	.....	.....
5F1961	25A75	Mike, Pickup or Line to PP Grids Multiple Alloy Shield	600/500/333/250, 200/150/125/50	80000CT**	UTV	21.00	18.90	17.85	16.80	.....	.....
5F1962	25A121	Mike or Line to Grid	500/333/200, 125/50	89000	TAV	9.00	8.10	7.65	7.20	.....	.....
5F1963	20A32	Mike to S. Grid	200/70	80000	BAH	4.80	4.32	4.08	3.84	2.04	1.86
5F1964	MIT154	Mike or Line to Grid	600/250/50	250000	BAH	6.00	5.40	5.10	4.80	.....	.....
5F1965	20A35	Mike or Mixer to Grid	50	50000	BAH	3.60	3.24	3.06	2.88	.....	.....
5F1966	MIT141	Mike to Grid	200	250000	MAH	3.30	2.97	2.80	2.64	.....	.....
5F1967	20A04	Voice Coil to Grid	6/3	38400	BAH	3.00	2.70	2.55	2.40	1.74	1.63
5F1968	20A09	Mike, Line to Grids	100	700000CT	BAH	4.80	4.32	4.08	3.84	.....	.....

*Shielded for —90DB Hum Reduction; 1½ spade bolt mountings. **Split CT Winding.


UTV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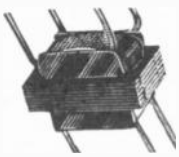
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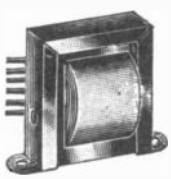
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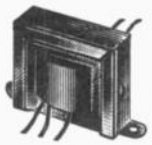
TM Thordarson Transformers



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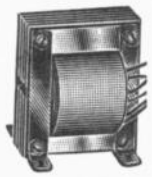
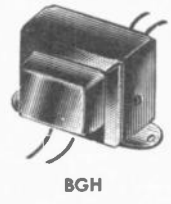


LAV

GGV

BHV

CHV



BGH

LOW VOLTAGE RECTIFIER TRANSFORMERS 50/60 CYCLES

Primary Voltage 115 except (†) 115/230 and (††) 110/120. *Top chassis mounting—lead holes on side of shield. **Primary tapped to produce lower secondary voltages.

Stock No.	Type	Secondary AC Voltage	Secondary AC Amps	Mtg. Type	Mtg. Centers	Each Boxed 1-9	Each Boxed 10-24	Each Boxed 25-99	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F2047	23V103	6.3/13/19.5/26	3	LAV	2¼x2⅜16	9.00	8.10	7.65	7.20	.....	.....
5F2048	23V107	7/8/9	7	LAV	2¼x2⅜16	9.00	8.10	7.65	7.20	.....	.....
5F2049	23V116	10/20CT/40CT	.1	BAH	2⅜	4.80	4.32	4.08	3.84	2.45	2.23
5F2050	23V117	10/20CT/40CT	.3	BAH	3⅛	4.80	4.32	4.08	3.84	3.29	3.00
5F2051	23V118	10/20CT/40CT	.75	BAH	3⅜16	9.00	8.10	7.65	7.20	5.50	5.01
5F2052	23V114†	12CT/12CT	10	GGV*	3x3⅝	24.00	21.60	20.40	19.20	.....	.....
5F2053	23V113	12/13.5/15/16.5/18	20								
		12/13.5/15/16.5/18	20	LAV	2¾x4½	48.00	43.20	40.80	38.40	.....	.....
5F2054	23V100	17/18	3	LAV	1⅝x2⅜	6.00	5.40	5.10	4.80	.....	.....
5F2055	23V101	17/18	6	LAV	2½x2¹¹⁄16	12.00	10.80	10.20	9.60	5.53	5.04
5F2056	23V104	24/27/30/33/36	3	LAV	2½x2¹¹⁄16	12.00	10.80	10.20	9.60	.....	.....
5F2057	23V105††	24/27/30/33/36	8	LAV	3x3⅝16	24.00	21.60	20.40	19.20	.....	.....
5F2058	23V112	24/26/28/30	15	LHV	3¾x4⅝16	36.00	32.40	30.60	28.80	.....	.....
5F2059	23V102	36/36	3/3	LAV	3x3¹¹⁄16	18.00	16.20	15.30	14.40	9.30	8.47
5F2060	23V119	10/20CT/40CT	1	GGV	2x2¼	9.00	8.10	7.65	7.20	.....	.....

MULTI-TAPPED-LOW VOLTAGE RECTIFIER

Rectifier circuit—full wave bridge except (*) bridge.

Stock No.	Type	Secondary AC..Volts	Recom. Capacitor	Mtg. Type	Mtg. Centers	Each Boxed 1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F2061	23V60	11.7 to 29.4	1000 MFD								
		11.1 to 28.5	500 MFD	AH	2x2⅛	9.00	8.10	7.65	7.20	4.59	4.18
5F2062	23V61	12.2 to 29.7	2000 MFD								
		12.2 to 29.7	1000 MFD	AJ	2¼x2⅜	9.00	8.10	7.65	7.20	4.59	4.18
5F2063	23V62	11.7 to 29.2	4000 MFD								
		11.8 to 29.2	2000 MFD	FA	2½x2⅞	15.00	13.50	12.75	12.00	5.92	5.39
5F2064	23V63	12.0 to 29.8	6000 MFD								
		12.0 to 29.6	3000 MFD	HA	2¾x3¼	18.00	16.20	15.30	14.40	8.47	7.71
5F2065	23V64	12.2 to 29.7	7500 MFD								
		12.1 to 29.2	4000 MFD	KA	2¹⁵⁄16x3¾	21.00	18.90	17.85	16.80	10.67	9.71
5F2066	23V66	12.2 to 29.1	11250 MFD								
		12.2 to 29.0	6000 MFD	HA	3½x4¼	30.00	27.00	25.50	24.00	18.63	16.96
5F2067	23V65*	25 to 53.5	4000 MFD	OA	3½x5¼	48.00	43.20	40.80	38.40	28.48	25.92

SILICON RECTIFIER POWER TRANSFORMERS

Stock No.	Type	Secondary Volts	Secondary MADC	Secondaries 6.3V @	Secondaries 6.3V @	Mtg. Type	Mtg. Centers	Each Boxed 1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F2068	24R105	30-0-30	2500	1.5A	1.5A	GGV	2¾x2¹¹⁄16	15.00	13.50	12.75	12.00	9.00	8.19
5F2069	27R105	30-0-30	2500	1.5A	1.5A	LA	3⅝16x2¹¹⁄16	60.00	52.00	51.00	48.00	.....	.....
5F2070	24R104	40-0-40	2000	1.5A	1.5A	GGV	2¾x2¹³⁄16	15.00	13.50	12.75	12.00	7.78	7.08
5F2071	27R104	40-0-40	2000	1.5A	1.5A	LA	3⅝16x2¹¹⁄16	60.00	52.00	51.00	48.00	.....	.....
5F2072	24R103	50-0-50	1600	1.5A	1.5A	GGV	2¾x2¹¹⁄16	15.00	13.50	12.75	12.00	7.48	6.81
5F2073	27R103	50-0-50	1600	1.5A	1.5A	LA	3⅝16x2¹¹⁄16	60.00	52.00	51.00	48.00	.....	.....
5F2074	24R102	100-0-100	800	2A	2A	GGV	2¾x2¹⁵⁄16	15.00	13.50	12.75	12.00	8.04	7.32
5F2075	27R102	100-0-100	800	2A	2A	LA	3⅝16x2¹¹⁄16	60.00	52.00	51.00	48.00	.....	.....
5F2076	24R101	150-0-150	600	2.5A	2.5A	GGV	2¾x3¹⁄16	15.00	13.50	12.75	12.00	8.08	7.36
5F2077	27R101	150-0-150	600	2.5A	2.5A	LA	3⅝16x2¹¹⁄16	60.00	52.00	51.00	48.00	8.20	7.46
5F2078	24R100	200-0-200	400	3A	3A	GGV	2¾x3¹⁄16	15.00	13.50	12.75	12.00	.....	.....
5F2079	27R100	200-0-200	400	3A	3A	LA	3⅞16x2¹¹⁄16	60.00	52.00	51.00	48.00	.....	.....

LOW VOLTAGE CONTROL

Stock No.	Type	VA Out	Primary Voltage	Secondary Voltage	Secondary Amps	Mtg. Type	Mtg. Centers	Each Boxed 1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F2021	23V50	12	115/230	6 or 12	2 or 4	BHV	2⅜	6.00	5.40	5.10	4.80	2.04	1.86
5F2022	23V51	24	115/230	6 or 12	4 or 2	BHV	2¹³⁄16	6.00	5.40	5.10	4.80	3.08	2.81
5F2023	23V160	24	115	24	1	BGH	2¹³⁄16	4.80	4.32	4.08	3.84	.....	.....
5F2024	23V52	48	115/230	12 or 24	4 or 2	BHV	3⅛	6.00	5.40	5.10	4.80	3.08	2.81
5F2025	23V53	96	115/230	12 or 24	8 or 4	CHV	2⅜x2¼	12.00	10.80	10.20	9.60	.....	.....

ISOLATION TRANSFORMERS 50/60 CYCLES

Stock No.	Type	VA Out	Primary Voltage	Sec. Volt	Mtg. Type	Mtg. Centers	Each Boxed 1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F2026	23V17	35	115	115	BAH	3⅛	4.80	4.32	4.08	3.84	2.80	2.55
5F2027	23V80	40	115/230	115	BAH	3⅛	6.00	5.40	5.10	4.80	.....	.....
5F2028	23V45	50	115	115	GMV	2½x1¹⁵⁄16	15.00	13.50	12.75	12.00	4.88	4.45
5F2029	23V18	80	115	115	GGV	2½x2⅝16	9.00	8.10	7.65	7.20	4.68	4.26
5F2030	23V25	100	105/115/125	115	GMV	2¾x3¹⁄16	24.00	21.60	20.40	19.20	9.79	8.91
5F2031	23V49	150	115	115	GMV	3x2⅝16	21.00	18.90	17.85	16.80	.....	.....
5F2032	23V74	150	115/230	115	GGV	2½x3	18.00	16.20	15.30	14.40	.....	.....
5F2033	25V19	250	105/115/125	115**	TMV*	3½x5⅜	33.00	29.20	28.05	26.40	16.45	14.96
5F2034	23V28	500	105/115/125	115	GMV	4⅝x4¼	48.00	43.20	40.80	38.40	35.48	32.29
5F2035	23V88	1200	110/120	110/120	GMV	3⅝x6⅝	72.00	64.80	61.20	57.60	.....	.....

*Complete with tap switch. **Or 125/115/105 with 115 V. Primary.

AUTOFORMERS 50/60 CYCLES

5F2036	25V10	50	220/250	110/125	TMV	2x3⅛	16.50	14.85	14.02	13.20	.....	.....
5F2037	23V70	65	230	115	GMV	2x1¹¹⁄16	30.00	27.00	25.50	24.00	.....	.....
5F2038	23V81	85	220/240	110/120	GMV	2x1⅞	9.00	8.10	7.65	7.20	5.07	4.62
5F2039	23V21	100	220/250	110/125	GMV	2½x1¾	12.00	10.80	10.20	9.60	5.88	5.36
5F2040	25V11	100	220/250	110/125	TMV	2¾x3⅞	16.50	14.58	14.02	13.20	.....	.....
5F2041	23V22	150	220/250	110/125	GMV	2x2½	12.00	10.80	10.20	9.60	6.65	6.60
5F2042	25V12	150	220/250	110/125	TMV	2½x4¾	16.50	14.85	14.02	13.20	.....	.....
5F2043	25V13	250	220/250	110/125	TMV	2½x4¾	21.00	18.90	17.85	16.80	.....	.....
5F2044	23V20	300	230	115	GMV	3x3¹⁄16	24.00	21.60	20.40	19.20	8.48	7.72
5F2045	23V24	500	220/250	110/125	GMV	3x3⅜	18.00	16.20	15.30	14.40	11.63	10.59
5F2046	23V46	3000	208 or 230	230 or 208	GMH	2½x3¾	24.00	21.60	20.40	19.20	13.74	12.51

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

Thordarson Inductors & Transformers TM

CHOKES

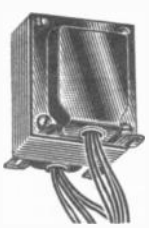
Stock No.	Type	Inductance Henrys	Inductance MADC	DC Ohms	Volts RMS	Mtg. Centers	Mtg. Type	Each Boxed 1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F2080	26C40	1.5	10	95	2500	1¾	BAH	1.80	1.62	1.53	1.44	.....	.....
5F2081	20C43	20	15	900	2500	2⅜	BAH	3.90	3.51	3.31	3.12	1.49	1.36
5F2082	20C51	35	15	1850	2500	2	BAH	1.80	1.62	1.53	1.44	1.17	1.07
5F2083	20C05	15	20	1000	1000	1¾	BAH	3.90	3.51	3.31	3.12	.....	.....
5F2084	20C52	8	40	450	2500	2	BAH	.180	1.62	1.53	1.44	1.17	1.07
5F2085	25C49	15	40	475	2500	1½x2⅜	TTV	.300	2.70		2.40	.....	.....
5F2086	26C42	4.5	50	200	2500	2⅜	BAH	1.98	1.78	1.68	1.58	1.22	1.12
5F2087	20C84	7	50	550	2500	2	BAH	2.70	2.43	2.30	2.16	1.00	.91
5F2088	20C66	9	50	500	2500	2⅜	BAH	2.70	2.43	2.30	2.16	.....	.....
5F2089	26C87	16	50	580	2500	2 13/16	BAH	2.40	2.16	2.04	1.92	1.42	1.30
5F2090	20C59	7	55	200	2500	2⅜	BAH	2.70	2.34	2.30	2.16	.....	.....
5F2091	25C51	15	55	420	2500	1½x2⅜	TTV	15.00	13.50	12.75	12.00	.....	.....
5F2092	20C85	13	65	500	2500	2 13/16	BAH	2.70	2.43	2.30	2.16	1.49	1.36
5F2093	20C48	8	80	250	2500	2 13/16	BAH	2.55	2.30	2.17	2.04	1.57	1.43
5F2094	20C53	12	80	375	2500	2 13/16	BAH	3.00	2.70	2.55	2.40	1.49	1.36
5F2095	25C52	10	85	175	2500	1¾x2 11/16	TTV	4.05	3.65	3.44	3.24	.....	.....
5F2096	20C06	10	90	270	1000	2 13/16	BAH	3.90	3.51	3.31	3.12	2.08	1.90
5F2097	20C67	5	100	300	2500	2⅜x1½	TAV	4.50	4.05	3.82	3.60	2.32	2.12
5F2098	25C55	12	105	170	2500	2x3⅛	TTV	12.00	10.80	10.20	9.60	.....	.....
5F2099	20C08	6	110	160	1500	3⅛	BAH	3.90	3.51	3.31	3.12	.....	.....
5F2100	20C09	9	125	250	1000	3⅛	BAH	3.90	3.51	3.31	3.12	2.08	1.90
5F2101	20C64	4	130	100	2500	3⅛	GGV	2.70	2.43	2.30	2.16	1.77	1.62
5F2102	20C68	7	150	200	2500	3 9/16	BAH	4.50	4.05	3.82	3.60	2.52	2.30
5F2103	20C54	8	150	145	2700	2x1¾	GGV	4.50	4.05	3.82	3.60	3.05	2.87
5F2104	20C93	4	175	100	3000	2x1 11/16	GGV	6.00	5.40	5.10	4.80	3.10	2.83
5F2105	26C41	1.5	200	90	2500	2⅜	BAH	1.98	1.78	1.86	1.58	1.22	1.12
5F2106	26C94	2	200	60	2500	3⅛	BAH	3.90	3.51	3.31	3.12	1.88	1.72
5F2107	20C49	4.5	200	58	2500	3⅜	BAH	3.90	3.51	3.31	3.12	.....	.....
5F2108	20C94	4.5	200	80	3000	2¼x2	GGV	6.60	5.94	5.61	5.28	3.72	3.39
5F2109	20C55	6	200	75	2500	2x2¼	GGV	9.90	8.91	8.41	7.92	.....	.....
5F2110	20C14	6	200	150	1500	3 9/16	BAH	4.50	4.05	3.82	3.60	.....	.....
5F2111	25C58	8	200	85	2500	3⅞x2¾	TTV	6.00	5.40	5.10	4.80	.....	.....
5F2112	20C96	8.5	200	120	3000	3½x2¼	LAV	7.80	7.02	6.63	6.24	4.93	4.49
5F2113	26C45	10	200	140	3000	2⅞x2¼	GGV	12.00	10.80	10.20	9.60	4.69	4.27
5F2114	25C59	12	200	140	2500	3⅞x2¾	TTV	6.00	5.40	5.10	4.80	.....	.....
5F2115	20C16	4	250	100	1500	3 9/16	BAH	4.50	4.50	3.82	3.60	.....	.....
5F2116	20C98	4	250	60	3000	2¼x2½	LAV	9.00	8.10	7.65	7.20	4.18	3.81
5F2117	26C77	.7	290	30	1500	2⅜	BAH	2.40	2.16	2.04	1.92	1.04	.95
5F2118	26C44	1	300	60	2500	2 13/16	BAH	3.60	3.24	3.06	2.88	.....	.....
5F2119	26C91	2.8	300	60	2500	3 9/16	BAH	3.90	3.51	3.31	3.12	2.45	2.23
5F2120	20C69	8	300	80	3000	3x2 13/16	GGV	13.20	11.88	11.22	10.56	8.15	7.42
5F2121	20C19	2.6	310	60	1500	2x2⅜	GGV	12.00	10.80	10.20	9.60	4.14	3.77
5F2122	20C22	6	400	60	300	3x3¾	GGV	13.20	11.88	11.22	10.56	.....	.....
5F2123	20C107	7.5	400	60	5000	3x3 13/16	GTV	18.00	16.20	15.30	14.40	8.99	8.91
5F2124	26C81	.32	600	10	1500	2 13/16	BAH	3.60	3.24	3.06	2.88	1.94	1.77
5F2125	20C00	.035	2A.	.75	1500	2 13/16x2	LHH	4.50	4.05	3.82	3.60	2.35	2.41
5F2126	20C01	.025	4A.	.425	1500	2 13/16x2⅛	LHH	9.00	8.10	7.65	7.20	3.83	3.49
5F2127	20C03	.01	12.5A	.11	1500	3 1/16x2⅜	LHH	9.00	8.10	7.65	7.20	5.82	5.30

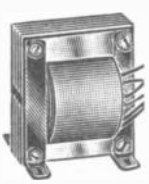
FILAMENT TRANSFORMERS WITH SINGLE SECONDARY

Stock No.	Type	Secondary Volts	Secondary Amps	Test Volts RMS	Mtg. Centers	Mtg. Type	Each Boxed 1-9	Each Boxed 10-24	Each Boxed 25-49	Each Boxed 50-99	Bulk Packed 100-249	Bulk Packed 250-499
5F2128	21F34	2.5	1.5	2500	2⅜	BAH	7.20	6.48	6.12	5.76	3.22	2.94
5F2129	21F00	2.5CT	5	2500	2⅜	BAV	.540	4.86	4.59	4.32	.....	.....
5F2130	21F01	2.5CT	10	2500	2 13/16	BAV	7.20	6.48	6.12	5.76	.....	.....
5F2131	21F32†	2.5CT	10	2500	2x1¾	GGV	7.20	6.48	6.12	5.76	3.22	2.94
5F2132	21F02	2.5CT	10	10000	2x1¾	CAV	7.20	6.48	6.12	5.76	.....	.....
5F2133	21F03	5.0CT	3	2500	2⅜	BAV	7.20	6.48	6.12	5.76	.....	.....
5F2134	25F60†	5.0CT	4	2500	1¾x2 11/16	TTV	13.50	12.15	11.47	10.80	.....	.....
5F2135	21F37	5.0CT	6	2500	2x2	LHV	6.60	5.94	5.61	5.28	3.37	3.07
5F2136	21F04	5.0CT	8	2500	2x1¾	CAV	7.20	6.48	6.12	5.76	.....	.....
5F2137	21F20	5.0CT	15	10000	2½x3	CAV	10.80	9.72	9.18	8.64	6.15	5.60
5F2138	21F67	5.2CT	24	1500	2½x3 16	LAV	12.00	10.80	10.20	9.60	.....	.....
5F2139	21F75	6.0CT/6.3CT	11	3000	2¼x2 1/16	LAV	7.20	6.48	6.12	5.76	.....	.....
5F2140	21F21	6.3	.6	2500	2	BAH	2.31	2.08	1.96	1.85	1.29	1.18
5F2141	21F08	6.3CT	1	2500	2	BAV	2.31	2.08	1.96	1.85	1.38	1.26
5F2142	21F09	6.3CT	1.2	2500	2⅜	BAH	2.31	2.08	1.96	1.85	1.38	1.26
5F2143	26F60	6 3	1.2	5000	2 1/16	BAH	3.90	3.51	3.31	3.12	2.13	1.94
5F2144	25F67†	6.3CT	1.5	2500	1½x2⅜	TTV	24.00	21.60	20.40	19.20	.....	.....
5F2145	21F10	6.3CT	3	2500	2 13/16	BAH	3.96	3.56	3.37	3.17	2.00	1.82
5F2146	21F107	6.3CT	3	2500	2x1¾	LHV	4.80	4.32	4.08	3.84	2.88	2.63
5F2147	25F78†	6.3CT	4	2000	1 13/16x1 13/16	NTV	9.00	8.10	7.65	7.20	.....	.....
5F2148	25F69°	6.3CT	5.5	2500	2x3⅛	TTV	24.00	21.60	20.40	19.20	.....	.....
5F2149	21F11	6.3CT	6	2500	2x1¾	CAV	5.94	5.35	5.05	4.75	4.18	3.81
5F2150	21F96	6.3CT	8	2500	3 9/16	BAH	5.40	4.86	4.59	4.32	.....	.....
5F2151	21F12	6.3CT	10	2500	2x2	CAV	7.20	6.48	6.12	5.76	5.02	4.57
5F2152	25F70†	6.3CT	10	2500	2¼x3½	TTV	24.00	21.60	20.40	19.20	.....	.....
5F2153	21F77	6.3CT	20	2500	2½x3	GGV	12.00	10.80	10.20	9.60	.....	.....
5F2154	21F45	7.5CT	4	2500	2x2⅛	LHV	6.60	5.94	5.61	5.28	3.13	2.85
5F2155	21F62	7.5CT	8	2500	2½x2⅜	LAV	9.00	8.10	7.65	7.20	4.94	4.50
5F2156	21F18	10.0CT	5	2500	2x1¾	CAV	6.60	5.94	5.61	5.28	2.97	2.71
5F2157	21F68	10CT/11CT/12CT	11	3000	2¾x2 16	LAV	12.00	10.80	10.20	9.60	.....	.....
5F2158	26F67	12.6CT	2	2500	2 13/16	BAH	3.90	3.51	3.31	3.12	2.19	2.00
5F2159	21F81	12.6CT	3	2500	3⅛	BAH	4.80	4.32	4.08	3.84	2.60	2.73
5F2160	21F52	12.6/25.2	7/3.5	2500	2¼x2⅝	GGV	13.20	11.88	11.22	10.56	.....	.....
5F2161	26F68	24.0	1	2500	2 13/16	BAH	6.00	5.40	5.10	4.80	.....	.....
5F2162	21F97	24CT/12	2/4	1500	3 9/16	BAH	5.40	4.86	4.59	4.32	.....	.....
5F2163	21F51	25.2	1	2500	2 15/16	BAH	4.80	4.32	4.08	3.84	2.00	1.82
5F2164	21F100	26.0CT	.04	2500	1¾	BAH	4.80	4.32	4.08	3.84	.....	.....
5F2165	21F101	26.0CT	.25	2500	2⅜	BAH	4.80	4.32	4.08	3.84	.....	.....
5F2166	21F27	26.5CT	.6	7500	2 13/16	BAH	5.40	4.56	4.59	4.32	.....	.....
5F2167	21F82	26.5CT	1	1500	2 13/16	BAH	4.80	4.32	4.08	3.84	.....	.....

TTV

TAV


GGV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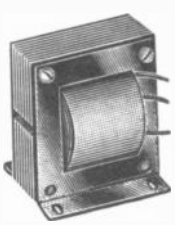
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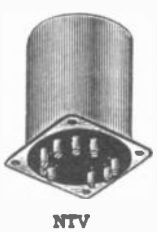

NTV

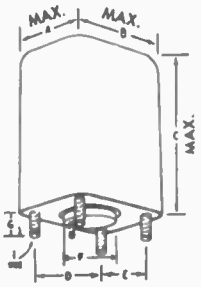
Triad Transformers

Case	Size A	B	C	D	E	G	I	Wt. lbs.
AH	1 5/16	1 5/16	1 3/4	1 1/4		3/8	6-32	4 oz.
AJ	1 5/8	1 5/8	2 3/8	1 9/16	1 5/16	3/8	6-32	9 oz.
EA	1 13/16	1 15/16	2 3/4	1 3/8	1 1/4	3/8	6-32	1
FA	2 1/16	2 5/16	3 1/8	1 11/16	1 1/16	3/8	6-32	1 1/2

TYPE HS-HSM HERMETICALLY SEALED TRANSFORMERS

HS-HSM series transformers are designed to meet MIL-T-27B requirements. Equip. using these transformers need not be redesigned to submit for MIL. approval.

These transformers are permanently marked with electrical and test data as specified in MIL-T-27B. All are "Climatite" treated. Avg. wt. 10 oz.



TYPE HS COMBINED PLATE AND FILAMENT TRANSFORMERS/PRIMARY 115 VOLTS/380-1500 CYCLE

Stk. No.	Type	MIL Type	Pri. Volts	Sec. Volts	Sec. Amp.	Case	1-9	10-24	25-49	50-99	100-249	250-up
3F836	HSM-225	TF4RX01EA	105-115-125	6.3CT	2	EA	22.47	20.22	18.20	16.93	15.91	15.11
3F737	HSM-230	TF4RX01FA	105-115-125	24CT	0.8	FA	17.35	15.62	14.06	13.08	12.30	11.69

TYPE HS TRANSFORMERS 380/1500 CYCLE (*Center Tapped)

Stk. No.	Type	MIL Type	Primary A.C. Volts	Fil. Volts	Fil. Amps	Case	1-9	10-24	25-49	50-99	100-249	250-up
4F442	HS-409	TF4RX03HA	.....	6.3*	4	HA	30.87	27.78	25.00	23.25	21.86	20.77
3F338	HS-417	TF1RX03LA	.....	6.3	6	LA	49.44	44.50	40.05	37.25	35.02	33.27
3F738	HS-436	TF4RX01AH	115	6.3CT	1	AH	11.75	10.58	9.52	8.85	8.32	7.90
3F739	HS-425	TF4RX01YY	105-115-125	6.3CT	2	AJ-2	16.34	14.71	13.24	12.31	11.57	10.99
3F740	HS-427	TF4RX01EA	105-115-125	6.3CT	5	EA	21.19	19.07	17.16	15.96	15.00	14.25
3F741	HS-438	TF4RX01EA	105-115-125	24CT	1.5	EA	20.59	18.53	16.68	15.51	14.58	13.85
3F742	HS-433	TF4RX01FA	105-115-125	6.3CT6.3	5	FA	23.34	21.01	18.91	17.59	16.53	15.70
3F745	HS-443	TF4RX01YY	105-115-125	12.6CT,12.6	0.8	AJ-2	18.69	16.82	15.14	14.08	13.24	12.58
3F719	HS-442	TF4RX01EA	57.5-99.7-115-120	12.6CT,12.6	2	EA	22.34	20.11	18.10	16.83	15.82	15.03

CASE X

TYPE HS AND JAF AUDIO TRANSFORMERS

Stk. No.	Type	Mil. Type	Application	Primary Imp.	Secondary Imp.	Freq. Resp.	1-9	10-24	25-49	50-99	100-249	250-up
3F339	HS-14	TF1QX10YY	input	600-250-150-62.5	117,600 CT	20-20,000	25.59	23.03	20.73	19.28	18.12	17.21
4F443	HS-27	TF1QX15YY	interstage	20K CT/5000	60K CT/15K	20-20,000	24.72	22.25	20.03	18.63	17.51	16.63
4F444	HS-52	TF1QX13YY	output	20K CT/5000	600-250-150-62.5	20-20,000	26.27	23.64	21.28	19.79	18.60	17.67
4F445	JAF-15	TF1QX10YY	plate to grid	15,000	1 meg	350-5000	14.57	13.11	11.80	10.97	10.31	9.79
4F446	JAF-33	TF1QX21YY	Hi Imp Isol	5000 CT	5000 CT	60-15,000	16.49	14.84	13.36	12.42	11.67	11.09

TYPE HS ISOLATION TRANSFORMERS—115 V., 380/1500 CYCLE

Stk. No.	Type No.	Mil. Type	Current	Volt-Amperes	Wt., lbs.	1-9	10-24	25-49	50-99	100-249	249-up
3F359	HS-470	TF4RX01EA	.35A	40	1.5	17.97	16.17	14.55	13.53	12.72	12.08
3F594	HS-472	TF4RX01GA	1.39A	160	3.1	22.09	19.88	17.89	16.54	15.64	14.86

CASE Z

TYPE R COMBINED PLATE AND FILAMENT TRANSFORMERS—Primary 115 Volts, 50-60 Cycles

All types are "Climatite" treated for protection against moisture and for elimination of lamination chatter. Hold temp. rise below 55°C. Only copper foil static shields, grounded to the case and core, are used. Leads are UL approved. All connection data permanently marked on case.

Stock No.	Type No.	Plate Supply AC V	DC Ma	Rect. Fil. Volts	Amp.	Other Fil. Volts	Amp.	Mtg. Dim.- MW	MD	1-9	10-24	25-49	50-99	100-249	250-up
3F942	R-4A	500CT	40	.....	....	6.3CT	2	1 3/4	1 7/8	6.65	.99	5.39	5.01	4.71	4.47
3F943	R-5A	600CT	65	.....	....	6.3CT	2.7	2	1 11/16	7.77	6.99	6.29	5.85	5.50	5.23
3F944	R-6A	480CT	50	5	2	6.3CT	2	2	1 11/16	8.03	7.23	6.51	6.05	5.69	5.41
3F945	R-7A	600CT	50	5	2	6.3CT	2	2	1 11/16	8.22	7.40	6.66	6.19	5.82	5.53
3F946	R-8A	500CT	75	5	2	6.3CT	2.5	2	2 3/16	8.65	7.79	7.01	6.52	6.13	5.82
3F948	R-10A	525CT	90	5	2	6.3CT	5	2 1/4	2 1/2	10.09	9.08	8.17	7.60	7.14	6.78
3F949	R-11A	700CT	90	5	3	6.3CT	3.5	2 1/4	2 3/8	10.77	9.69	8.72	8.11	7.62	7.24
3F950	R-20A	700CT	200	5	3	6.3	8	2 3/4	3 1/4	15.95	14.36	12.92	12.02	11.30	10.74
3F696	R-72A	800CT	140	5	3	6.3CT	4	2 3/4	2 1/2	12.20	10.98	9.88	9.19	8.64	8.21
4F441	R-22A	320/ 380CT	70	.....	.....	6.3CT	.6	2	1 7/8	7.90	7.11	6.40	5.95	5.59	5.31

CASE A

TYPE TY AUDIO TRANSISTOR TRANSFORMERS

Stk. No.	Type	Prim. Imped.	Size	Mtg. Ctrs.	Sec. Imped.	Output Watts	1-9	10-24	25-49	50-99	100-249	250-up
2F921	TY32X	200 CT	1 5/16x1 5/16x1"	1 3/8	2,000 CT	.2	3.77	3.39	3.05	2.84	2.67	2.54
2F923	TY34X	400 CT	1 3/16x1 5/16x1"	1 3/8	2,000 CT	.2	3.60	3.24	2.92	2.72	2.56	2.43
2F924	TY35X	500 CT	3/8x1 9/32x1 1/16	1 1/16	150 CT	.1	3.17	2.85	2.57	2.39	2.25	2.14
2F934	TY45X	500 CT	1 3/16x1 5/16x1"	1 3/8	16/8/4	.2	4.12	3.71	3.34	3.11	2.92	2.77
2F937	TY49X	500 CT	1 3/8x2 3/8x1 3/8"	2	5,000 CT	.3	3.98	3.58	3.22	2.99	2.81	2.67
2F939	TY51X	2,000 CT	5/8x1 9/32x1 1/16"	1 1/16	200 CT	.05	4.50	4.05	3.65	3.39	3.19	3.03
2F940	TY52X	20,000 CT	1 3/16x1 5/16x1"	1 3/8	2,000 CT	.1	5.63	5.07	4.58	4.24	3.99	3.79
2F943	TY56X	10,000	1 3/16x1 5/16x1"	1 3/8	2,000 CT	.05	3.77	3.39	3.05	2.84	2.67	2.54
2F944	TY57X	250 CT	1 3/16x1 5/16x1"	1 3/8	16/8/4	.2	4.07	3.66	3.29	3.06	2.88	2.74

TYPE TY OUTPUT AND DRIVER TRANSISTOR TRANSFORMERS—HIGH LEVEL

Stock No.	Type No.	Pri. Match. Imped.	Pri. Cur. MA	Sec. Match. Imped.	Max. Level	Size	1-9	10-24	25-49	50-99	100-249	250-up
2F959	TY-29X	24 CT	500	8/4	8 W	1 15/16x3 5/16x1 3/4"	4.95	4.46	4.01	3.73	3.51	3.33
2F949	TY-30X	100 CT	100	8/4	2 W	1 3/16x2 1/16x1 1/4"	3.32	2.99	2.69	2.50	2.35	2.23
2F950	TY-31X	200 CT	50	8/4	2 W	1 3/16x2 1/16x1 1/4"	3.25	2.93	2.64	2.46	2.31	2.19
2F952	TY-53X	200 CT	10	400 CT	.6 W	1 15/16x3 5/16x1 3/4	4.20	3.78	3.40	3.16	2.97	2.82
2F953	TY-61X	100	100	100 CT	.5 W	1 5/8x2 1/16x1 1/2"	3.49	3.14	2.83	2.63	2.47	2.35
2F954	TY-63X	48 CT	275	16/8	5 W	1 15/16x3 5/16x1 3/4"	4.83	4.35	3.92	3.65	2.43	3.26
2F955	TY-64X	32 CT	575	16/8/4	10 W	1 15/16x3 5/16x1 3/4"	4.95	4.46	4.01	3.73	3.51	3.33
2F956	TY-65Z	32 CT	575	6K/4K/3K	10 W	2 5/16x2 7/16x2"	4.52	4.07	3.66	3.40	3.20	3.04
2F957	TY-66A	6 CT	5A	6K/4K/3K	40 W	3 1/16x3 9/32x3 3/8"	10.22	9.20	8.28	7.70	7.24	6.88
2F958	TY-67A	6 CT	5A	16/8/4	40 W	3 1/16x3 9/32x3 3/8"	9.89	8.90	8.01	7.45	7.00	6.65

NOTE: LAST LETTER OF MFR. TYPE NUMBER FOR ITEMS IN THIS SECTION DENOTES CASE STYLE

TYPE TY TRANSISTOR DRIVER TRANSFORMERS — SPLIT SECONDARY

Stock No.	Type	Turns Ratio	DC Res. Pri.	DC Res. Ea. Sec.	Max. Pri. DC.Ma	Power level	Min. Pri. Induct	1-9	10-24	25-49	50-99	100-249	250-up
4F450	TY-160X	6:1.1	45	3.6	50	3-5W	3.5H	5.47	4.92	4.43	4.12	3.87	3.68

Newark-Denver Electranics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

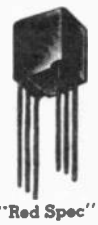
TYPE TY DC-TO-AC TRANSISTOR TRANSFORMERS

Stock No.	Mfr. Type	DCV Pri.	Secondary (115 VAC)	Dimensions (HWD, in.)	Mtg. Dim. MW	Mtg. Dim. MD	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-up
3F651	TY-46B	28	400cps 60W.	1⅞x2¼x2	1⅞"	1⅜"	½	13.35	12.02	10.82	10.06	9.46	8.99
3F652	TY-75A	12	60cps 115W.	3⅞x3 9/32x3½	2½"	2⅜"	5	16.54	14.89	13.40	12.46	11.71	11.12
3F653	TY-76A	12	60cps 60W.	3 1/16x2 21/32x2⅝	2"	1 11/16"	3	10.67	9.60	8.64	8.04	7.56	7.18

*1" mtg. ctrs., 1 3/32"x⅝"x¾"D.

MINIATURE AUDIO—"TRIJETS"

Stock No.	Type	Application*	Pri. Imp.	Sec. Imp.	Resp.	1-9	10-24	25-49	50-99	100-249	250-up
3F917	T-31X	Line to line	600/250/50	600/250/50	50-15000	4.20	3.78	3.40	3.16	2.97	2.82
3F918	T-33X	Hi-imp. line to line	5000 CT	5000 CT	60-15000	4.90	4.41	3.97	3.69	3.47	3.30



"Red Spec"

TYPE SP "RED SPEC" TRANSISTOR TRANSFORMERS

Type SP. Designed especially for use in transistorized and printed circuit applications, these units come in tough epoxy-molded cases, weigh 1/10 oz.! Incorporate .020" dia. strong nickel-alloy leads spaced on standard 1/10" grid ctrs. to fit printed circuit boards. Base dimensions: .310x.410". Lead length: ¾". Meet MIL-T-27B specs. *SP-66 is an output-isolation transformer. Shpg. wt., 1 oz.

Stock No.	Type	MIL-T-27B Designation	Pri. Imp.	Sec. Imp.	Pwr. M.W.	1-9	10-24	25-49	50-99	100-249	250-up
INPUT Response: ± 2 db, 230 cps-50 kc @ 25 mw., 100 cps-50 kc @ 1 mw.											
3F011	SP-4	TF5SX16ZZ	200K CT	1K CT	10	10.50	9.45	8.51	7.91	7.44	7.07
3F012	SP-5	TF5SX16ZZ	50K CT	1K CT	25	9.95	8.96	8.06	7.50	7.05	6.70
INTERSTAGE Response: ± 2 db, 200 cps-50 kc @ 40 mw., 100 cps-50 kc @ 1 mw.											
3F016	SP-15	TF5SX13ZZ	10K	1.5K	50	8.99	8.09	7.28	6.77	6.36	6.04
DRIVER Response: ± 2 db, 175 cps-50 kc.											
3F017	SP-20	TF5SX13ZZ	10K	1.2K	50	8.72	7.85	7.07	6.58	6.19	5.88
3F018	SP-21	TF5SX13ZZ	10K	2K	50	8.77	7.89	7.10	6.60	6.20	5.89
OUTPUT Response: ± 2 db. 250 cps-50 kc @ 50 mw., 150 cps-50 kc @ 1 mw.											
4F437	SP-32	TF5SX17ZZ	500	50	50	6.87	6.18	5.56	5.17	4.86	4.62
3F257	SP-33	TF5SX17ZZ	1K	50	50	7.10	6.39	5.75	5.35	5.03	4.78
3F279	SP-48	TF5SX13ZZ	7.5K CT	12	50	7.78	7.00	6.30	5.86	5.51	5.23
3F281	SP-50	TF5SX17ZZ	500 CT	600	50	7.62	6.86	6.17	5.74	5.40	5.13
3F283	SP-52	TF5SX13ZZ	1.5K CT	600	50	7.98	7.18	6.46	6.01	5.65	5.37
3F291	SP-65	TF5SX13ZZ	8K CT	3.2	50	7.50	6.75	6.08	5.65	5.31	5.04
3F292	SP-66	TF5SX13ZZ	10K CT*	10K CT	50	8.48	7.63	6.87	6.39	6.00	5.74
CHOKES											
3F204	SP-107	TF5SX20ZZ	1.25 hy. @ 2 ma.	.....	....	5.98	5.38	4.84	4.50	4.23	4.02
3F216	SP-108	TF5SX20ZZ	3.5 hy. @ 2 ma.	.....	....	6.22	5.60	5.04	4.69	4.41	4.19
3F318	SP-310	Magnetic Shielding Case		.....	....	.84	.80	.76	.70	.67	.63

SP-310 Magnetic Shielding Case

Type SP. All models have tough epoxy-molded case, weigh only 1/10 oz.! .02" dia. nickel-alloy leads are ¾" long, no stripping or tinning. Base size, .310 x .410"; height, .465". Operating voltage. 150 VDC. Meet MIL-T-27B spec. *Model SP-66 is an output-isolation transformer. Shpg. wt., 1 oz.

EX SERIES SUB-MINIATURE ENCAPSULATED TOROIDAL INDUCTORS

For quick circuit board mounting; from 50 millihenres to 400 milli-henres. 7/16D by ¼"H. Encapsulated in high temp. epoxy resin; leads of gold plt. nickel alloy. Manufactured to MIL-T-27B.

Stk. No.	Type	Inductance (O DC)	DCR (ohms) + 25%	Ma. DC Max.	1-9	10-24	25-49	50-99	100-249	250-over
2F960	EX-050A	62 mh	62	14	9.27	8.34	7.51	6.98	6.56	6.23
2F961	EX-100A	130 mh	30	10	9.89	8.90	8.01	7.45	7.00	6.65
2F962	EX:200A	200 mh	139	6	10.55	9.50	8.55	7.95	7.47	7.10
2F963	EX-300A	300 mh	206	5	10.77	9.69	8.72	8.11	7.62	7.24
2F964	EX-400A	400 mh	310	4.5	10.99	9.89	8.90	8.28	7.78	7.39

Toroidal Inductors

TYPE TY EPOXY MOLDED TOROIDAL TYPES

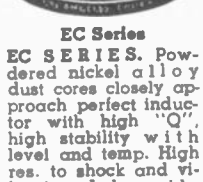
Type TY. Compact, hermetically sealed, very high efficiency. Single-hole mounting and peripheral terminals permit ready stacking for easy series—parallel connection if increased output is desired. Meet MIL-T-27B, Grade 5, Class R specs. DC Source Volts: *12.6, #28. Av. Shpg. wt., 1¼ lb.

Stock No.	Mfr. Type	DCV from Rectifier	Max. DC Ma.	D.xH. (in.)	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-up
3F438	*TY-68S	250/125	65	1 11/32x1¾	.2	7.52	6.77	6.09	5.66	5.32	5.05
3F633	*TY-78	250/125	100	1¾x 1 1/16	.35	14.72	13.25	11.93	11.09	10.42	9.90
3F634	*TY-79	300/150	200	1¾x1	.35	14.72	13.25	11.93	11.09	10.42	9.90
3F635	*TY-80	325/162.5	150	1¾x1	.35	15.94	14.35	12.92	12.02	11.30	10.74
3F636	*TY-81	375/187.5	200	2 x1	.50	15.19	13.67	12.30	11.44	10.75	10.21
3F637	*TY-82	450/225	150	2 x1	.50	14.72	13.25	11.93	11.09	10.42	9.90
3F638	*TY-83	500/250	250	2¾x1⅜	.85	21.17	19.05	17.15	15.95	14.99	14.24
3F639	*TY-84	600/300	200	2¾x1⅜	1.00	21.57	19.41	17.47	16.25	15.28	14.52
2F966	*TY-86	425/212.5	350	2¾x1⅜	1.00	21.80	19.62	17.66	16.42	15.43	14.66
3F640	TY-88	250/125	80	1 5/16x 9/16	.25	13.02	11.72	10.55	9.81	9.22	8.76
3F641	#TY-92	450/225	200	2x1	.50	15.50	13.95	12.56	11.68	10.98	10.43

Epoxy Molded Toroidal

EC AND EK SERIES TOROIDS

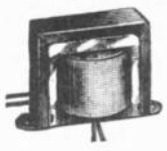
Stk. No.	Type No.	Ind.	Approx. Ohms	DC-ma for 5% ind. drop	1-9	10-24	25-49	50-99	100-249	250-up
4F015	EC-001A	1 mh	.40	520	5.72	5.15	4.64	4.32	4.06	3.86
4F016	EC-002A	2 mh	.56	368	5.68	5.11	4.60	4.28	4.02	3.82
4F017	EC-003A	3 mh	.70	300	5.93	5.34	4.81	4.47	4.20	3.99
4F036	EC-010A	10 mh	1.30	165	6.20	5.58	5.02	4.67	4.39	4.17
4F038	EC-020A	20 mh	1.85	116	6.27	5.64	5.08	4.72	4.44	4.22
4F039	EC-030A	30 mh	2.85	95	5.92	5.33	4.80	4.46	4.19	3.98
4F051	EC-050A	50 mh	5.50	74	6.38	5.74	5.17	4.81	4.52	4.29
4F053	EC-100A	100 mh	13.00	52	6.92	6.23	5.61	5.22	4.91	4.66
4F054	EC-200A	200 mh	23.00	37	6.72	6.05	5.45	5.07	4.77	4.53
4F055	EC-250A	250 mh	33.00	33	6.80	6.12	5.51	5.12	4.81	4.57
4F058	EC-500A	500 mh	72.00	23	6.93	6.24	5.62	5.23	4.92	4.67
4F060	EC-700A	700 mh	80.00	19.5	7.08	6.37	5.73	5.33	5.01	4.76
4F076	EC-1000A	1000 mh	134.00	16.5	7.25	6.53	5.88	5.47	5.14	4.88
4F078	EC-2000A	2000 mh	220.00	11.6	7.65	6.89	6.20	5.77	5.42	5.15
4F079	EC-3000A	3000 mh	370.00	9.5	7.97	7.17	6.45	6.00	5.64	5.36
4F236	EC-5000A	5000 mh	780.00	7.4	6.32	7.49	6.74	6.27	5.89	5.60
4F238	EC-10,000A	10000 mh	1100.00	5.2	9.60	8.64	7.78	7.24	6.81	6.47
4F439	EK-100	100 mh	4.4	82	5.92	5.33	4.80	4.46	4.19	3.98
4F440	EK-1000	1000 mh	45.0	26	7.15	6.44	5.80	5.39	5.07	4.82



EC Series

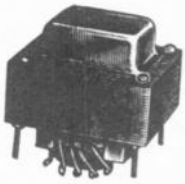
EC SERIES. Powdered nickel alloy dust cores closely approach perfect inductor with high "Q", high stability with level and temp. High res. to shock and vibration. Ind. coils held to 2% inductance tol. Supplied in molded epoxy to meet MIL-T-27B. Size: 1 5/16 dia. x 23/32" ht. Shpg. wt., 1½ lbs. EK series comes with plastic coated leads. Size: 1 11/16D. x ⅞H.

Transformers

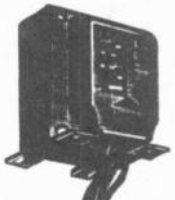


Case X

Case U



Case C



Case A

G-22

TYPE F FILAMENT TRANSFORMERS, SINGLE SECONDARY—Primary 115 volts, 60 cycles

Stk. No.	Type No.	Secondary Volts	Secondary Amperes	Test Volts	Mtg. MW	Dim., In. MD	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-over
3F720	F-1X	2.5CT	3	1500	2 3/8		.68	3.55	3.19	2.87	2.67	2.51	2.38
3F722	F-3X	2.5CT	10	3000	3 1/8		1 3/4	4.98	4.48	4.03	3.75	3.53	3.35
3F723	F-5U	2.5CT	10	7500	2	1 7/8	2.2	6.38	5.74	5.17	4.81	4.52	4.29
3F724	F-7X	5 CT	3	1500	2 13/16		1 1/4	4.00	3.60	3.24	3.01	2.83	2.69
3F958	F-13X	6.3	.6	1500	2		.37	2.67	2.40	2.16	2.01	1.89	1.80
3F959	F-14X	6.3CT	1.2	2500	2 3/8		3/4	3.17	2.85	2.57	2.39	2.25	2.14
3F960	F-16X	6.3CT	3	2500	2 13/16		1 1/4	3.98	3.58	3.22	2.99	2.81	2.67
3F961	F-18X	6.3CT	6	1500	3 9/16		2 1/4	5.88	5.29	4.76	4.43	4.16	3.95
3F775	F-18A	6.3CT	6	1500	2	1 11/16	2 1/2	7.05	8.35	5.72	5.32	5.00	4.75
3F776	F-21A	6.3CT	10	1500	2 1/4	2	3 1/2	9.00	8.10	7.29	6.78	6.37	6.05
2F532	F-45X	24CT	1	1500	2 13/16		1.3	3.77	3.39	3.05	2.84	2.67	2.54
3F777	F-22A	6.3CT	20	2000	2 1/2	3	7	12.50	11.25	10.13	9.42	8.85	8.41
3F778	F-25X	12.6CT	1.5	1500	2 13/16		1 1/4	3.75	3.38	3.04	2.83	2.66	2.53
3F996	F-26X	12.6CT	2.5	1500	3 1/8		1.55	4.15	3.74	3.37	3.13	2.94	2.79
3F779	F-40X	26.8CT	1	1500	2 13/16		1 1/4	3.38	3.04	2.74	2.55	2.40	2.28
3F726	F-41X	25.2CT	2	1500	3 9/16		2 1/4	4.82	4.34	3.91	3.64	3.42	3.25
3F626	F-12X	5 CT	8	2500	3 9/16		2 1/2	6.05	5.45	4.91	4.57	4.30	4.09
3F628	F-15U	5 CT	15	3000	2 1/4	2 3/16	3 1/4	9.32	8.39	7.55	7.02	6.60	6.27
3F629	F-20U	6.3/6CT	11	3000	2 1/4	2 1/16	4	9.82	8.84	7.96	7.40	6.96	6.61
3F631	F-28U	7.5/6.3CT	25	3000	3	3 1/16	7 1/2	18.07	16.26	14.63	13.61	12.79	12.15
3F632	F-29U	12/11/10CT	11	3000	2 3/4	2 9/16	6.5	12.51	11.26	10.13	9.42	8.76	8.32
4F435	F-42A	12.6	5	1500	2 1/4	2	3.7	7.40	6.66	5.99	5.57	5.24	4.98

POWER TRANSFORMERS FOR TRANSISTOR CIRCUITRY—For Delco 50 Watt and 100 Watt Amplifiers

Stk. No.	Type	Sec. V.	Sec. Amp.	Test V.	Mtg. MW	Dim. In. MD	Wt. lbs.	1-9	10-24	25-49	50-99	100-249	250-up
4F451	R-82B	70	3.5	1500	3 3/4	3	8 1/4	13.93	12.54	11.29	10.50	9.87	9.38
4F453	R-206B	68	1.25	1500	3 1/8	2 1/2	4 3/4	10.48	9.43	8.49	7.90	7.43	7.06

TYPE F SELENIUM RECTIFIER TRANSFORMERS—Primary 60 cycles

Stk. No.	Type No.	Pri. Volts	Secondary AC Volts	Secondary Amps RMS	Rectifier Circuit HW Volts DC	Rectifier Circuit FWB Volts DC	Mtg. Dim. MW	Mtg. Dim. MD	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-over
3F984	F-47U	115	17-18	3	6-7	13-14	1 5/8	2 3/8	3.2	8.07	7.26	6.53	6.07	5.71	5.42
3F862	F-48U	115	17-18	6	6-7	13-14	2 1/2	2 11/16	5.5	9.97	8.97	8.07	7.51	7.06	6.71
3F985	F-49U	115	36												
			36	3	13	26	3	3 1/16	9.75	16.39	14.75	13.28	12.35	11.61	11.03
3F963	F-60U	115	6.5-13-19.5-26	3	9	18	2 1/4	2 3/16	3.5	7.10	6.39	5.75	5.35	5.03	4.78
3F986	F-61U	115	24-27-30-33-36	3	13	26	2 1/2	2 11/16	5.65	10.17	9.15	8.23	7.65	7.19	6.83
3F965	F-64U	115	7-8-9	7		5-6-7	2 1/4	2 3/16	3.5	8.79	7.91	7.12	6.62	6.22	5.91
3F990	F65U	110-120	0-140 150-160	.75	60	115	2 1/2	2 13/16	5.8	10.17	9.15	8.24	7.66	7.20	6.84
3F987	F-67U	110-120	24-27-30-33-36	8	13	26	3	3 5/16	10 3/4	19.52	17.57	15.81	14.70	13.82	13.13
3F623	F-79U	115	24-26-28-30	15	11.4	22.8	3 3/4	4 9/16	18 1/2	28.19	25.37	22.83	21.23	19.96	18.96
3F624	F-80U	115 tap.	18-18	20-20	—	13	2 3/4	4 1/2	25	47.08	42.37	38.13	35.46	33.33	31.66
3F625	F-84AC	230-115	12-12	10-10	—	8.5	3	3 5/8	12.5	22.60	20.34	18.31	17.03	16.01	15.21

TYPE F LOW VOLTAGE RECTIFIER TRANSFORMERS—50-60 Cycles

Stk. No.	Type	Pri. Volts	Secondary AC Voltage	Amps	Case Dim. H	W	D	Wt.	1-9	10-24	25-49	50-99	100-249	250-up
3F620	F-90X	115 Tapped	10-20CT-40CT	.1	1 5/8	2 13/16	1 5/8	3/4	3.77	3.39	3.05	2.84	2.67	2.54
3F621	F-91X	115 Tapped	10-20CT-40CT	.3	2 9/32	3 1/16	2	1 1/2	4.45	4.01	3.61	3.36	3.16	3.00
3F622	F-92A	115 Tapped	10-20CT-40CT	1	3 5/16	2 21/32	3	3 1/4	7.73	6.96	6.26	5.82	5.47	5.20

TYPE R POWER TRANSFORMERS FOR PREAMPLIFIERS, VTVM, etc.—Primary 115 volts, 60 cycles

Stk. No.	Type No.	Plate Supply AC Volts	Plate Supply DC Ma.	Fil. Windings Volts-Amps.	Mtg. Dim.-In. MW	Mtg. Dim.-In. MD	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-over
3F930	R-68A	800 CT	30	5V.-2A, 6.3-1.2A, 5.3V.-1.2A.	2	2 3/16	3	9.77	8.79	7.91	7.36	6.92	6.57
2F534	R-2C	135	15	6.3V-.9A		1 1/4		6.35	5.72	5.15	4.79	4.50	4.28
3F932	R-3A	500 CT	20	6.3V.CT.-2A.	1 3/4	1 3/4	1 3/4	6.83	6.15	5.54	5.15	4.84	4.60
2F533	R-108A	500 CT	75	5V.-2A, 6.3-2.5	2	1 11/16	2.4	7.82	7.04	6.34	5.90	5.55	5.27
3F933	R-29A	230 CT	40	6.3V.-1.5A.	1 3/4	1 5/8	1 3/4	5.92	5.33	4.80	4.46	4.19	3.98
3F934	R-30X	135	50	6.3V.-1.5A.	3 1/8		1 1/2	5.45	4.91	4.42	4.11	3.86	3.67
3F935	R-54X	115	15	6.3V.-.6A.	2 3/8		1	2.72	2.45	2.21	2.06	1.94	1.84

TRANSFORMERS FOR CATHODE RAY TUBES—Primary 115 Volts—50-60 Cycles

Stk. No.	Type	Plate Supply AC Volts	Plate Supply DC Ma	Filament Windings Volts and Amperes	HxWxD	1-9	10-24	25-49	50-99	100-249	250-up
3F853	R-43C	1600	3	6.3/5/2.5V., 1A 6.3/5/2.5V, 3A	2 3/8x3 1/16x2 9/16	12.49	11.24	10.12	9.41	8.85	8.41
4F264	R-41C	440-0-440-1250	125/5	6.3V-.6A, 2.5V-1.75A 2.5V-1.75A, 5.0V-3.0A	3 1/4x4 3/16x3 1/2	15.97	14.37	12.93	12.02	11.30	10.74
4F265	R-83A	800 CT	70	6.3CTV.-3.5A.							
		650	3	6.3V.-.6A. 1.25V-.3A.	3 19/32x2 31/32x3 3/4	18.59	16.73	15.06	14.01	13.17	12.51

LOW FREQUENCY TRANSFORMERS—30 TO 500 CYCLES

One half of primary balanced to other half in both inductance and "Q". Cores specially treated to eliminate noise in microvolt range of input signals.

Stock No.	Type	Primary Imp. in Ohms	Secondary Imp. in Ohms	Size	Weight	1-9	10-24	25-49	50-99	100-249	250-up
2F535	G-19	1000 CT.	1000 CT.	2 3/4Hx1 5/8x2"	5 1/4 oz.	25.11	22.60	20.34	18.92	17.78	16.89
4F255	G-21	200000 CT.	12500 CT.	2 3/4Hx1 5/8x2"	5 1/4 oz.	31.69	28.52	25.67	23.87	22.44	21.32
4F256	G-22	50000 CT.	800000 CT.	2 3/4Hx1 5/8x2"	1 lb.	38.12	34.31	30.88	28.72	27.00	25.65
4F436	G-57	18000 CT.	500/333/233/200/125/67 1/2/50/17	1 3/4Hx 7/8x1 1/16"	2 3/4 oz.	19.62	17.66	15.89	14.78	13.89	13.20

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

TYPE "A" LOW LEVEL OUTPUT TRANSFORMERS

These audio components are designed to fill demands in public address, amateur, and replacement equipment, and offer absolute maximum of performance possible in the size allowed. Mtg. Centers: Type A-31X, 2"; Type A-51X, 1¾". Type A-53X, 2⅜". Type A-65J has split Secondary Winding.

Stock No.	Type No.	Application	Freq. Resp.	Pri. Imp.	Sec. Imp.	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-up
2F536	A-31X	Plate to Grid	100-10,000	10,000	90,000 CT	.45	3.90	3.51	3.16	2.94	2.76	2.62
3F782	A -51X	Plate to line	200-8000	7000	50	.21	3.33	3.00	2.70	2.51	2.36	2.24
3F783	A-53X	Single or p.p. Plate to line	70-7,000	18000 CT	600/250/50	.6	4.08	3.67	3.30	3.07	2.89	2.75
2F537	A-55J	Plate to line	30-15,000	15,000	600/250/50	.35	9.47	8.52	7.67	7.13	6.70	6.37
2F538	A-65J	Plate to line	30-15,000	15,000 CT	600CT/150	.35	9.69	8.72	7.85	7.30	6.86	6.52

TYPE "A" INPUT TRANSFORMERS, Line or Microphone to Grid

Stk. No.	Type No.	Application	Freq. Resp.	Pri. Imp.	Turn Ratio	Mtg. Dim. MW	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-Up
3F766	A-1X	Line or sgle btn mike to grid.	100-15,000	100	1:31.4	1¾	.21	2.97	2.67	2.40	2.23	2.10	2.00
3F619	A-3X	Line or db mike to grid	200-10,000	400CT	1:22.1	1¾	.21	3.32	2.99	2.69	2.50	2.35	2.23
3F689	A-4X	Line to grid.	100-20,000	500CT/333 200CT/125 67.5CT/50	1:12	1¾	.21	4.15	3.74	3.34	3.13	2.94	2.79
3F690	A-5X	Sgle btn mike to pp grids-Hi-gain.	100-15,000	100	1:833	2⅜	.6	4.28	3.85	3.47	3.23	3.04	2.89

TYPE "C" SMOOTHING FILTER REACTORS

Stk. No.	Type No.	Inductance Henries	Current Ma.	Resistance Ohms	Test Volts RMS	Mtg. Dim. MW	Mtg. Dim. MD	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-up
3F753	C-30X	50	15	3500	1500	2		.42	3.00	2.70	2.43	2.26	2.12	2.01
3F754	C-1X	15	20	1000	1000	1¾		.21	2.35	2.12	1.91	1.78	1.67	1.59
3F952	C-3X	10	50	500	1500	2⅜		.75	2.75	2.48	2.23	2.07	1.95	1.85
4F430	C-4X	4	50	360	1500	2		.35	2.30	2.07	1.86	1.73	1.63	1.55
3F755	C-5X	12	75	390	1000	2 13/16		1.00	3.28	2.95	2.66	2.47	2.32	2.20
3F757	C-7X	10	90	270	1000	2 13/16		1.3	3.48	3.13	2.82	2.62	2.46	2.34
2F539	C-9X	4	90	100	1500	2 13/16		1.0	2.90	2.61	2.35	2.19	2.06	1.96
3F954	C-11X	6	110	160	1500	3⅛		1.5	3.62	3.26	2.93	2.72	2.56	2.43
3F758	C-10X	9	125	250	1000	3⅛		1.6	4.13	3.72	3.35	3.12	2.93	2.78
3F956	C-14X	6	200	150	1500	3 9/16		2.3	4.75	4.28	3.85	3.58	3.37	3.20
3F760	C-14A	6	200	150	1500	2	1 11/16	2.5	6.48	5.83	5.25	4.88	4.59	4.36
3F761	C-16A	10	200	150	2500	2¼	2⅜	4.5	8.25	7.43	6.69	6.22	5.85	5.56
3F762	C-15X	4	250	100	1500	3 9/16		2.3	4.58	4.12	3.71	3.45	3.24	3.08
4F431	C-17X	1.5	300	40	1500	3⅛		1.6	3.77	3.39	3.05	2.84	2.67	2.54
3F764	C-20A	6	400	60	3000	3	3⅜	10.5	13.65	12.29	11.06	10.29	9.67	9.19
4F432	C-27X	0.7	290	30	1500	2⅜		.75	2.50	2.25	2.03	1.89	1.78	1.69
4F452	C36X	.5	300	30	1500	2	.....	.5	2.42	2.18	1.96	1.82	1.71	1.62
3F765	C-40X	.32	600	10	1500	2 13/16		1.3	3.15	2.84	2.56	2.38	2.24	2.13
3F734	C-47U	.3-.075	1A-2A	3-.75	1500	2¼	2 11/16	4.6	7.80	6.84	6.16	5.73	5.39	5.12
3F735	C-48U	.08-.02	2.5A-5A	.61-.155	1500	2½	3 1/16	6.75	9.55	8.60	7.74	7.20	6.77	6.43
2F540	C-49U	.032-.008	5A-10A	.19-.05	1500	2¾	3 1/16	8.0	14.69	13.22	11.90	11.07	10.41	9.89

TYPE "M" MODULATION TRANSFORMERS

Stock No.	Type No.	Primary	Freq. Resp.	Secondary Imped.	Secondary Ma.	Audio Watts	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-up
3F1045	M-4Z	5000 (Autoformer)	300-3000	6750 4(vc)	100 (tot.)	10	.67	4.17	3.75	3.38	3.14	2.95	2.80
3F1046	M-1X	10,000 CT.	300-3000	5000-8000-10,000	50	5	.45	3.48	3.13	2.82	2.62	2.46	2.34
3F1047	M-3X	10,000 CT.	300-3000	3000-5000-8000	100	20	1.6	5.77	5.19	4.67	4.34	4.08	3.88

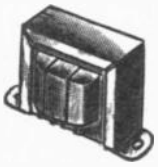
TYPE "N" ISOLATION TRANSFORMERS—50/60 cycles

Stock No.	Type No.	V. A. Output	Input Volts	Output Volts	Mtg. Dim. MW	Mtg. Dim. MD	Wt. Lbs.	1-4	5-24	25-49	50-99	100-249	250-over
4F433	N-5M*	250	230	115	2½	3	7.0	13.30	11.97	10.77	10.02	9.42	8.95
3F750	N-51X	35	115	115	3⅛	.....	1.7	4.73	4.28	3.83	3.56	3.35	3.18
3F603	N-68X	50	230/115	115	3⅛	.....	1.7	5.88	5.29	4.76	4.43	4.16	3.95
3F751	N-53M	85	115	115	2¼	2⅜	4.7	12.83	11.55	10.40	9.67	9.09	8.64
3F604	N-54M	150	115	115	2½	3	7.0	14.83	13.35	12.02	11.18	10.51	9.98
2F541	N-55M	250	115	115	3	3⅞	11.0	22.67	20.40	18.36	17.07	16.05	15.25
2F542	N-57M	500	115	115	3½	5⅛	23.75	52.33	47.10	42.39	39.42	37.05	35.20
3F605	N-67A	150	230/115	115	2½	3	7.0	11.55	10.40	9.36	8.70	8.18	7.77

* Autoformer

TYPE "S" STANDARD OUTPUT TRANSFORMERS

Stock No.	Type	Tubes Used	Primary Imped.	DC-Ma.	Audio Watts	Wt. Lbs.	1-9	10-24	25-49	50-99	100-249	250-up
3F1049	S-12X	25L6, 50L6, 35A5, 50B5, etc.,	2500	50	2-3	.21	2.37	2.13	1.92	1.79	1.68	1.60
3F1052	S-3X	6V6, 7C5, 6AQ5, 25A6, 71, etc.	5000	40	3-5	.45	2.60	2.34	2.11	1.96	1.84	1.75
3F1056	S-5X	6V6, 7C5, 6AQ5, 25A6, 71, etc.	5000	50	5-8	1.0	3.32	2.99	2.69	2.50	2.35	2.23
3F1058	S-7X	6K6, 7B5, 6F6, 1QS, 31, 33, 41, 42, etc.	7500	30	3-5	.45	2.60	2.34	2.11	1.96	1.84	1.75
3F1066	S-15X	P.p.-6V6, 7C5, 6K6, 6F6, etc.	10,000 CT.	35	7-10	.6	3.27	2.94	2.65	2.46	2.31	2.19
2F543	S-28X	Single plate to line or speaker.	7500	40	5	1.0	4.72	4.25	3.83	3.56	3.35	3.18
3F1067	S-19Z	P.p.-6V6, 7C5, 6K6, 6F6, etc.	10,000 CT.	50	10-14	1.25	4.22	3.80	3.42	3.18	2.99	2.84
2F544	S-20Z	Single tube to 3-4 ohm voice coil.	2000	50	2-3	.21	2.40	2.16	1.94	1.80	1.69	1.61
4F434	S-29X	Single plate to line or speaker.	5000	45	5	1.0	4.77	4.29	3.86	3.59	3.37	3.20



CASE X

CASE A

NOTE: Last Letter of Manufacturer Type Number for Items on This Page Denotes Case Style

CASE Z

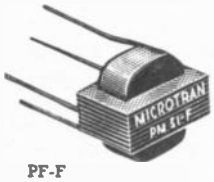
CASE M

CASE U

SAVE TIME! At Newark—fast, efficient service always!

SAVE MONEY! Quantity Prices Competitive with Manufacturer!

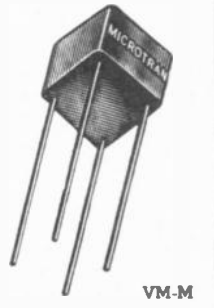
MICROTRAN Transformers



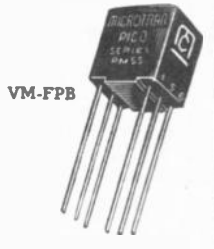
PF-F

PM-M

UM-M



VM-M



VM-FPB

MM-H

PM SERIES "PICO MINIATURE" TRANSFORMERS

For use in impedance matching applications. Frequency response ±2 db 300 hz to 100 khz. PM-F types are open-frame construction with wire leads, resin impregnated, MIL type TF6RX; size .406 x .250 x .375", wt., .05 oz. PM-M types are epoxy molded, with gold-plated leads on .1" centers for printed circuit applications, Mil type TF5RX; size .410 x .465 x .310", wt., .1 oz. PM90 is mu-metal shield can for PM-M types only; provides 20 db magnetic shielding.

Stock No.	Type	Impedance Primary	Impedance Secondary	Power Level M.W.	1-9	10-49	50-99	100-249
8F881	PM13-M	25,000	1000/250 Split	40	10.20	9.18	8.50	6.80
7F882	PM19-M	10,000 C.T.	2,000 C.T.	50	9.00	8.10	7.50	6.00
7F883	PM21-M	10,000	2000/500 Split	50	9.15	8.24	7.63	6.10
7F884	PM23-M	10,000 C.T.	1200 C.T.	50	9.00	8.10	7.50	6.00
7F885	PM31-M	2500	2500 C.T.	50	8.55	7.70	7.13	5.70
7F886	PM33-M	1500 C.T.	600	50	8.40	7.56	7.00	5.60
7F887	PM34-M	600 C.T.	600 C.T.	50	8.55	7.70	7.13	5.70
7F888	PM36-M	500	500/125 Split	50	9.00	8.10	7.50	6.00
7F889	PM38-M	300 C.T.	600	50	8.10	7.29	6.75	5.40
7F890	PM39-M	Audio Choke 6 Hy.			7.65	6.89	6.38	5.10
7F891	PM40-F	Audio Choke 3.5 Hy.			4.05	3.65	3.38	2.70
7F892	PM40-M	Audio Choke 3.5 Hy.			7.20	6.48	6.00	4.80
7F893	PM41-M	Audio Choke .3 Hy.			6.75	6.08	5.63	4.50
7F894	PM90	Mu-Metal Shield Can for PM-MS			1.05	.95	.88	.70

UM SERIES "ULTRA MINIATURE" TRANSISTOR TRANSFORMERS

Frequency response ±2 db 300 to 10,000 hz. UM-F types are open frame, with wire leads, MIL TF-6RX, 3/8 x 3/8 x 11/32", wt. .08 oz. UM-M types are molded, 1/2"H x 1/2"D, MIL TF5RX, wt., .14 oz. UM-90 slip-on mu-metal shield can provides 20 db shielding.

7F895	UM24-F	1000	50	500 mw	3.90	3.51	3.25	2.60
7F878	UM28-F	Choke 10 hy. (Odc)		650	3.75	3.38	3.13	2.50
7F896	UM28-M	Choke 10 hy. (Odc)		650	5.70	5.13	4.75	3.80
7F897	UM30-M	Choke 1.5 hy. (Odc)		100	4.80	4.32	4.00	3.20
7F898	UM31-M	10,000 C.T.	1200 C.T.	500 mw	7.20	6.48	6.00	4.80
7F899	UM32-M	1500 C.T.	600	500 mw	5.85	5.27	4.88	3.90
7F987	UM35-M	15,000 C.T.	15,000 C.T.	300 mw	7.05	6.35	5.88	4.70
7F988	UM36-F	20,000 C.T.	800 C.T.	500 mw	4.80	4.32	4.00	3.20
7F989	UM36-M	20,000 C.T.	800 C.T.	500 mw	6.75	6.08	5.63	4.50
7F990	UM37-F	10,000	2000 C.T.	500 mw	4.50	4.05	3.75	3.00
7F991	UM37-M	10,000	2000 C.T.	500 mw	6.00	5.40	5.00	4.00
7F992	UM39-F	2500 C.T.	600 C.T.	500 mw	4.50	4.05	3.75	3.00
7F993	UM39-M	2500 C.T.	600 C.T.	500 mw	6.00	5.40	5.00	4.00
7F994	UM90	Mu-Metal Shield Can for UM-M's			1.35	1.22	1.12	1.01

VM SERIES "VERI-MINIATURE" TRANSISTOR TRANSFORMERS

Frequency response ±2 db 200 hz to 10 khz. VM-M types are epoxy molded, with 1" leads, for printed circuit applications; Mil TF5RX; 9/16 x 9/16 x 1/2", wt. 1/4 oz. VM-FPB types are plug-in tab mounted channel construction, with wire leads; Mil TF6RX; 15/32 x 17/32 x 1/16", wt. .2 oz. VM90 shield can provides 20 db shielding for VM-M's.

7F995	VM10-M	2500 (1.5ma)	2300 C.T.	3	6.90	6.21	5.75	4.60
7F996	VM11-M	Choke 20 hy. (Oma) 12 hy. (5 ma)		1000	5.10	4.59	4.25	3.40
7F858	VM14-FPB	600 C.T. (7ma)	600 C.T.	15	4.50	4.05	3.75	3.00
7F347	VM14-M	600 C.T. (7ma)	600 C.T.	15	6.75	6.08	5.63	4.50
7F997	VM17-FPB	10,000 C.T.	5000 C.T.	5	5.85	5.27	4.88	3.90
7F998	VM17-M	10,000 C.T.	5000 C.T.	5	7.35	6.62	6.13	4.90

MM SERIES "MICRO MINIATURE" TRANSFORMERS

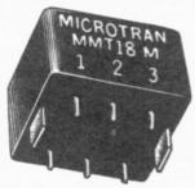
MM-M types are epoxy molded with PC pin leads, Mil TF5RX, 7/8 x 25/32 x 17/32", wt., 1/2 oz. MM-H types are hermetically sealed, with solder hooks; Mil TF4RX; 15/16"D x 11/16"H, wt. 3/4 oz. MM-FB types are open frame with channel, 63/64" mtg. ctrs. x 15/32"H, wire leads, Mil type TF6RX, wt. .38 oz. All types frequency response flat ±2 db 200 hz-15 khz except (*) 200 hz-10 khz, (†) 150 hz-10 khz.

Stock No.	Type	Impedance Primary	Impedance Secondary	Oper. Level DBM	1-9	10-49	50-99	100-249
79F999	MM1-FB	200/50	250,000/62,500	2.5	4.50	4.05	3.75	3.00
7F180	MM2-FB	10,000	90,000	MW	4.80	4.32	4.00	3.20
7F181	MM5-FB	50 HY-1 Mil. DC 4700 ohms-DC Res.			4.05	3.64	3.38	2.70
7F631	MMT1-FB	600	600	22	3.90	3.51	3.25	2.60
7F875	MMT1-M	600	600	22	8.55	7.69	7.13	5.70
7F182	MMT4-H	50,000 C.T.	600 C.T.	20	8.55	7.69	7.13	5.70
7F183	MMT4-M	50,000 C.T.	600 C.T.	20	9.75	8.77	8.13	6.50
7F184	MMT7-FB	25,000	1200 C.T.	20	4.50	4.05	3.75	3.00
7F185	MMT8-M	50,000 C.T.	1200 C.T.	20	9.75	8.77	8.13	6.50
7F637	MMT9-FB	600 C.T.	1200 C.T.	22	4.20	3.78	3.50	2.80
7F652	MMT9-H	600 C.T.	1200 C.T.	22	7.65	6.88	6.38	5.10
7F877	MMT9-M	600 C.T.	1200 C.T.	22	8.85	7.96	7.38	5.90
7F639	MMT11-FB	4000 C.T.	600 C.T.	28	4.35	3.92	3.63	2.90
7F796	MMT11-M	4000 C.T.	600 C.T.	28	9.00	8.10	7.50	6.00
7F186	MMT18-FB	25,000 C.T.	1200 C.T.	20	4.65	4.19	3.88	3.10
7F187	MMT18-M	25,000 C.T.	1200 C.T.	20	9.75	8.77	8.13	6.50
7F645	MMT19-FB	2500	2500 C.T.	23	4.05	3.65	3.38	2.70
7F656	MMT19-M	2500	2500 C.T.	23	8.70	7.83	7.25	5.80
7F855	MMT21-FB	4000 C.T.	600/150 Split	28	4.65	4.19	3.88	3.10
7F188	MMT21-M	4000 C.T.	600/150 Split	28	9.75	8.77	8.13	6.50
7F189	MMT25-FB	7500 C.T.	600 C.T.	22	4.35	3.92	3.63	2.90
7F190	MMT25-M	7500 C.T.	600 C.T.	22	9.00	8.10	7.50	6.00
7F335	MMT26-FB	600 C.T.	600 C.T.	22	4.20	3.78	3.50	2.80
7F191	MMT26-M	600 C.T.	600 C.T.	22	8.85	7.97	7.38	5.90
7F192	MMT28-M	10,000 C.T.	1500 C.T.	20	9.75	8.77	8.13	6.50
7F193	MMT29-FB	10,000 C.T.	10,000 C.T.	20	4.65	4.19	3.88	3.10
7F194	MMT29-M	10,000 C.T.	10,000 C.T.	20	9.75	8.77	8.13	6.50
7F195	MMT32-M	600 C.T.	1200/300 C.T.	22	9.75	8.77	8.13	6.50
7F196	MMT33-FB	600 C.T.	600/150 Split	22	4.50	2.70	2.43	2.25
7F197	MMT35-FB	10,000 C.T.	150/375 Split	20	4.80	4.32	4.00	3.20

SM SERIES SUB-MINIATURE AUDIO & TRANSISTOR TRANSFORMER

Open frame construction, with mounting channel (1⅜2" mtg. ctrs.). Height, 1⅝2", wt. ¾ oz. MIL TF6RX. Frequency response ±2 db from 200 hz to 15 khz, except (*) 80-10,000 hz, ( ) 100-10k hz.

Stk. No.	Type	Impedance Primary	Impedance Secondary	Pri. Unbal. DCMA	Oper. Level DBM	1-9	10-49	50-99	100-249
7F772	SM1-FB*	200/50	250,000/62,500	0	6	4.35	3.91	3.63	2.90
7F773	SM2-FB	10,000	90,000	0	8	3.90	3.51	3.25	2.60
7F771	SMT1-FB	600	600	9	23	3.90	3.51	3.25	2.60
7F903	SMT7-FB	25,000	1200 C.T.	1.5	20	4.65	4.18	3.88	3.10
7F904	SMT9-FB	600 C.T.	1200 C.T.	18	23	4.20	3.78	3.50	2.80
7F741	SMT16-FB	10,000	1500 C.T.	1	23	4.65	4.18	3.88	3.10
7F744	SMT19-FB	2500	2500 C.T.	5	26	4.65	4.18	3.88	3.10
7F907	SMT26-FB	600 C.T.	600 C.T.	18	23	4.50	4.05	3.75	3.00
7F908	SMT36-FB	2500 C.T.	2500/625 Split	10	26	5.10	4.59	4.25	3.40



MM-M

M & MT SERIES MINIATURE AUDIO AND TRANSISTOR TRANSFORMERS

M-A types are aluminum cased, MIL TF3RX, .875D x 1⅜16" H, wt. 1¼ oz. M-FB types are open frame with mtg. channel (1⅜" ctrs.), MIL TF6RX, wt. 1 oz. 1⅝32 x ⅞ x ⅞", MIL TF5RX, wt. 1¾ oz. M-AG types have compression sealed ceramic terminals in MIL-T-27B AG case, TF4RX. M90 shield can fits M-A types, provides 25 db shielding.

Stk. No.	Type	Impedance Primary	Impedance Secondary	Pri. Unbal. DCMA	Oper. Level DBM	1-9	10-49	50-99	100-249
7F909	M1-A	50/250/600 C.T.	50,000	0	5	8.10	7.29	6.75	5.40
7F910	M1-AG	50/250/600 C.T.	50,000	0	5	9.90	8.91	8.25	6.60
7F600	M1-FB	50/250/600 C.T.	50,000	0	5	5.10	4.59	4.25	3.40
7F912	M4-FB	15,000	60,000	0	6	3.75	3.38	3.13	2.50
7F913	M4-M	15,000	60,000	0	6	8.55	7.70	7.13	5.70
7F606	M7-FB	15,000	95,000 C.T.	4	11	3.90	3.51	3.25	2.60
7F915	M7-H	15,000	95,000 C.T.	4	11	8.85	7.97	7.38	5.90
7F607	M8-FB	15,000	50/250/600 C.T.	0	8	5.10	4.59	4.25	3.40
7F917	M9-FB	15,000	50/250/600 C.T.	4	21	4.20	3.78	3.50	2.80
7F609	M10-FB	30,000 P.P.	50/250/600 C.T.	0	8	5.25	4.73	4.38	3.50
7F919	M10-H	30,000 P.P.	50/250/600 C.T.	0	8	9.60	8.64	8.00	6.40
7F920	M12-FB	50/250 C.T.	50/250/600 C.T.	0	8	4.95	4.46	4.13	3.30
7F612	M13-FB	Reactor	300 hy. 0 d.c.			3.45	3.11	2.88	2.30
7F922	M13-M	Reactor	300 hy. 0 d.c.			8.25	7.43	6.88	5.50
7F168	M90	Magnetic Shield				1.35	1.22	1.13	.90
7F657	MT1-FB	600	600	10	23	3.60	3.24	3.00	2.40
7F924	MT7-AG	25,000	1200 C.T.	3	22	9.45	8.50	7.88	6.30
7F925	MT7-FB	25,000	1200 C.T.	3	22	4.20	3.78	3.50	2.80
7F800	MT9-AG	600 C.T.	1200 C.T.	4	23	9.60	8.64	8.00	6.40
7F664	MT9-FB	600 C.T.	1200 C.T.	4		4.35	3.92	3.63	2.90
7F928	MT9-M	600 C.T.	1200 C.T.	4	23	9.90	8.91	8.25	6.60
7F929	MT10-FB	25,000	600	3	22	3.90	3.51	3.25	2.60
7F930	MT11-FB	4000 C.T.	600 C.T.	3	32	4.35	3.92	3.63	2.90
7F670	MT18-FB	25,000 C.T.	1200 C.T.	6	22	4.35	3.92	3.63	2.90
7F932	MT18-M	25,000 C.T.	1200 C.T.	6	22	9.90	8.91	8.25	6.60
7F933	MT21-FB	4000 C.T.	600/150 Split	3	32	4.50	4.05	3.75	3.00
7F934	MT21-M	4000 C.T.	600/150 Split	3	32	10.05	9.04	8.38	6.70
7F839	MT26-FB	600 C.T.	600 C.T.	20	23	4.20	3.78	3.50	2.80
7F936	MT26-M	600 C.T.	600 C.T.	20	23	9.75	8.78	8.13	6.50
7F937	MT33-FB	600/150 Split	600/150 Split	20	23	4.65	4.19	3.88	3.10
7F938	MT34-FB	10,000/2500 Split	2000/500 Split	4	20	4.80	4.32	4.00	3.20

M-A

M-M

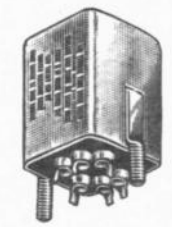
M90

LOW LEVEL CHOPPER INPUT TRANSFORMERS

Transfers 30 to 500 cps. Transducer or thermocouple signals to instrument amplifiers. Signal level range .5 μv to .5 volts. 3 mu-metal and 2 copper shields give 90 db magnetic shielding. 1⅜Dx1²⁵⁄₃₂Hx1½ M.C. Fig B. Wt., 5 oz.

Stk. No.	Type	Turns Ratio Full Pri. to Full Sec.	Turns Ratio ½ Pri. to Full Sec.	Ind. of Full Pri. @ 60 hz	Imp. of Full Pri. @ 60 hz	1-9	10-49	50-99	100-249
7F819	M8025	1:7.7	1:15.4	17.5 HY	6,600	13.80	12.42	11.50	9.20
7F820	M8026	1:3.2	1:6.4	60 HY	22,500	13.80	12.42	11.50	9.20
7F939	M8052	1:4.53	1:9.06	90 HY	34,000	14.25	12.83	11.88	9.50
7F322	M8053†	1:0.5	1:1	140 HY	53,000	13.65	12.28	11.38	9.10
7F940	M8112	1:0.5	1:1	.450 HY	80,000	14.40	12.96	12.00	9.60

†sec. is center tapped


M-AG

DC TO DC CONVERTER TRANSFORMERS

Switching Type. Open frame with channel and leads; MIL designation TF6RX09ZZ. 1 1¹¹⁄₁₆ x 1³⁄₁₆ x 1⅜".

Stk. No.	Type	Input DCV	Output mw	Bridge Output DCV	Bridge Output DCuA	1-9	10-49	50-99	100-249
7F320	M8072	2.7	190	480	400	7.20	6.48	6.00	4.80
7F942	M8120	28	190	480	400	7.20	6.48	6.00	4.80

DC TO DC CONVERTER TRANSFORMERS

Blocking Oscillator Type. MIL case M-AG construction. MIL designation TF4RX09YY. *Typical.

Stk. No.	Type	Input* DCV	Input* Ma. DC	Output* DCV	Output* μa DC	L	W	H	1-9	10-49	50-99	100-249
7F943	M8050	3	20	1000	25	1 1¹¹⁄₁₆"	1³⁄₁₆"	2⁷⁄₃₂"	6.30	5.67	5.25	4.20
7F944	M8074	3	45	535	90	1 1¹¹⁄₁₆"	1³⁄₁₆"	2⁷⁄₃₂"	5.10	4.59	4.25	3.40
7F318	M8073	4	2-15	425-500	50	⅜"	⅜"	⅜"	5.25	4.73	4.38	3.50

DC TO DC CONVERTER TRANSFORMERS

Switching type. Epoxy molded with terminals and clearance hole for mounting. MIL designation TF5RX09ZZ. Clearance hole .194 except * .140, Fig. C.

Stk. No.	Type	Input DCV	Output	Bridge Output DCV	Bridge Output DCMa.	D in.	H In.	1-9	10-49	50-99	100-249
7F946	M8113	13.8	50	28	1750	2⅛	1¼	16.05	14.45	13.38	10.70
7F947	M8114	28	50	28	1750	2⅛	1¼	16.05	14.45	13.38	10.70
7F948	M8115*	13.8	5	500	10	1¼	¾	12.30	11.07	10.25	8.20
7F949	M8116	13.8	50	70	700	2⅛	1¼	16.05	14.45	13.38	10.70
7F950	M8117*	28	5	500	10	1¼	¾	12.30	11.07	10.25	8.20
7F951	M8118	28	50	70	700	2⅛	1¼	16.05	14.45	13.38	10.70

M-H

MICROTRAN Transformers & Inductors

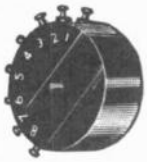


Fig. C

Fig. B

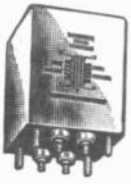


Fig. A

Fig. D

Fig. E

QG-F

POWER SUPPLY TRANSFORMERS

For silicon rectifier circuitry, and filament applications. MIL designation. TF4RX01. Hermetically sealed per MIL-T-27B. All Figure A except * Figure B. MM-H: MIL designation.

60 Hz.

Stk. No.	Type	Secondary A.C.V.	RMS Amp.	MIL Case	1-9	10-49	50-99	100-249
7F900	M8042	6.3 C.T.	.6	AJ	12.00	10.80	10.00	8.00
7F901	M8043	6.3 C.T.	2.0	FB	15.60	14.04	13.00	10.40
7F902	M8086	6.3 C.T.	6.0	GA	18.90	17.01	15.75	12.60
7F905	M8087	12.6 C.T.	3.0	GA	18.90	17.01	15.75	12.60
7F906	M8088	26 C.T.	2.5	HA	22.20	19.98	18.50	14.80
7F312	M8045	28 C.T.	.6	FA	18.00	16.20	15.00	12.00
7F874	M8023	35 C.T.	3.0	KA	26.10	23.49	21.75	17.40
7F911	M8089	40 C.T.	.1	AJ	12.00	10.80	10.00	8.00
7F914	M8090	40 C.T.	.3	EA	18.00	16.20	15.00	12.00
7F916	M8091	40 C.T.	.75	GB	18.45	16.61	15.38	12.30
7F714	M8024	70 C.T.	1.0	JA	25.65	23.09	21.38	17.10
7F314	M8056	80 C.T.	.6	HA	22.20	19.98	18.50	14.80
		400 Hz.						
7F921	M8075	6.3 C.T.	.3	YY*	9.75	8.75	8.13	6.50
7F923	M8076	12.6 C.T.	.3	AH	11.70	10.53	9.75	7.80
7F316	M8039	12.6/12.6 C.T.	.8/.8	AJ	18.00	16.20	15.00	12.00
7F926	M8077	12.6/12.6 C.T.	2/2	FA	19.05	17.15	15.88	12.70
7F927	M8038	12.6/12.6/12.6	.3/.3/.3	AJ	18.60	16.47	15.25	12.20
7F304	M8065	26 C.T.	1.5	EA	16.35	14.72	13.63	10.90
7F305	M8066	26 C.T.	3	FA	25.50	22.95	21.25	17.00
7F931	M8079	26 C.T.	4	HA	26.85	24.17	22.38	17.90
7F710	M8020	35 C.T.	3	GA	24.00	21.60	20.00	16.00
7F933	M8041	50 C.T.	.25	AH	11.10	9.99	9.25	7.40
7F935	M8080	50 C.T.	.20	AJ	13.80	12.42	11.50	9.20
7F308	M8070	65 C.T.	.170	AH	11.25	10.13	9.38	7.50
7F941	M8081	65 C.T.	.030	YY*	9.75	8.78	8.13	6.50
7F711	M8021	70 C.T.	1	FA	23.25	20.93	19.38	15.50
7F945	M8071	80 C.T.	.90	FA	22.20	19.98	18.50	14.80

ISOLATION/POWER TRANSFORMERS

Electrostatic shielding. MIL designation: TF4X01. All Figure A except * Figure B.

60 Hz.

Stk. No.	Type	Output Voltage	Current RMS Amps.	V.A. Rating	MIL Case	1-9	10-49	50-99	100-249
7F952	M8094	115 C.T.	.0085	1	AH	12.30	11.07	10.25	8.20
7F953	M8095	115/12.6/12.6 C.T.	.030/.25/.25	3.5/3.15/3.15	EA	18.90	17.01	15.75	12.60
7F954	M8096	115 C.T.	.35	40	GA	19.50	17.55	16.25	13.00
7F955	M8078	115 C.T..	.9	100	KA	29.10	26.19	24.25	19.40
*26U Primary			**400 Hz.**						
7F956	*M8082	12.6/12.6 C.T.	.15/.15	1.9/1.9	YY*	10.50	9.45	8.75	7.00
7F957	M8058	115 C.T.	.017	2	YY*	9.60	8.64	8.00	6.40
7F958	M8083	115/12.6/12.6 C.T.	.030/.25/.25	10 total	AJ	18.60	16.74	15.50	12.40
7F959	M8084	115 C.T.	.12	14	AJ	13.50	12.15	11.25	9.00
7F324	M8059	115 C.T.	.35	40	EB	14.70	13.23	12.25	9.80
7F960	M8085	115 C.T.	.7	80	FA	23.55	21.20	19.63	15.70
7F325	M8060	115 C.T.	1.3	150	GA	26.40	23.76	22.00	17.60

FILTER INDUCTORS

MIL designation TF4RX04. All Figure A. Test volt: 1500.

Stk. No.	Type	Series Conn. Henrys	Series Conn. Amps.	Parallel Conn. Henrys	Parallel Conn. Amps.	MIL Case	1-9	10-49	50-99	100-249
7F961	M8098	3.5	.050	.875	.10	AH	9.90	8.91	8.25	6.60
7F962	M8099	1.0	.15	.25	.30	AJ	12.90	11.61	10.75	8.60
7F963	M8100	.5	.3	.125	.6	EB	14.70	13.23	12.25	9.80
7F964	M8101	.32	.6	.08	1.2	FB	16.65	14.99	13.88	11.10
7F965	M8102	.2	1.0	.05	2.0	JA	21.60	19.44	18.00	14.40
7F966	M8103	.07	2.5	.0175	5.0	JA	24.00	21.60	20.00	16.00
7F967	M8104	.022	4.0	.0055	8.0	JA	22.80	20.52	19.00	15.20
7F968	M8105	.022	5.0	.0055	10	KA	25.65	23.09	21.38	17.10

400 HZ TOROIDAL POWER TRANSFORMERS

MIL designation TF5SX01ZZ. Figure C.

Stk. No.	Type	Secondary Volts	Secondary ma	V.A.	OD in.	H in.	Wt. oz.	1-9	10-49	50-99	100-249
7F969	M8106	28 C.T.	320	9	1 5/32	1 1/8	2	15.30	13.77	12.75	10.20
7F970	M8107	28 C.T.	710	20	1 1/2	1 1/4	4	15.90	14.31	13.25	10.60
7F971	M8108	56 C.T.	160	9	1 5/32	1 1/8	2	15.60	14.04	13.00	10.40
7F972	M8109	56 C.T.	356	20	1 1/2	1 1/4	4	16.20	14.58	13.50	10.80
7F973	M8110	115 C.T.	78	9	1 5/32	1 1/8	2	15.90	14.31	13.25	10.60
7F974	M8111	115 C.T.	170	20	1 1/2	1 1/4	4	16.50	14.85	13.75	11.00

ULTRA-MINIATURE TOROIDAL INDUCTOR — QEL&QEM SERIES

Epoxy molded. Leads .02" x 2" gold plated nickel alloy. QEL frequency range 1 KHZ to 300 KHZ—accuracy ±2%. QEM frequency range: 3KHZ to 500 KHZ—accuracy ±2%. Wt. .02 oz. Fig. E.

Stk. No.	Type	Mhys.	DCR	μμF	1-9	10-49	50-99	100-249
7F975	QEL5-M	5	6.7	13	8.40	7.56	7.00	5.60
7F976	QEL10-M	10	15.6	15	8.55	7.70	7.13	5.70
7F977	QEL25-M	25	38	22	9.00	8.10	7.50	6.00
7F978	QEL50-M	50	55	25	9.15	8.24	7.63	6.10
7F979	QEM2-M	2	6.1	12	8.40	7.56	7.00	5.60
7F980	QEM5-M	5	16	15	8.85	7.97	7.38	5.90
7F981	QEM10-M	10	29	19	9.00	8.10	7.50	6.00

TOROIDAL INDUCTORS — QGL & QGM SERIES

Two constructions: QG-F—open frame wax dipped; QG-M—epoxy molded.

7F982	QGL50-M	50	28	40	7.65	6.35	5.88	4.70
7F983	QGL100-F	100	50	42	4.95	4.46	4.13	3.30
7F984	QGL100-M	100	50	42	7.20	6.48	6.00	4.80
7F985	QGM1-M	1	1.4	22	7.05	6.35	5.88	4.70
7F986	QGM25-M	25	30	35	7.65	6.89	6.38	5.10

● NEW TOROIDAL INDUCTOR — QIL SERIES

Frequency range to 20 KHZ—Accuracy ±2%. Construction: open frame QI-F—wax dipped. Wt. ¾ oz.

Stk. No.	Type	Mhy.	DCRΩ	uuF	1-9	10-49	50-99	100-249
7F061	QIL100-F	100	22	49	4.20	3.78	3.50	2.80
7F062	QIL500-F	500	95	55	4.80	4.32	4.00	3.20

QG-M

● NEW DCM SERIES

Frequency response: 200-15,000 Hz +2db. Wt. .5 oz.

Stk. No.	Type	Pri. Imp.	Sec. Imp.	Pri. D.C. Ma.	1-9	10-49	50-99	100-249
7F063	DCM1-PC	25000 C.T.	1200 C.T.	2	4.95	4.46	4.13	3.30
7F064	DCM2-PC	15000 C.T.	15000 C.T.	3	5.10	4.59	4.25	3.40
7F065	DCM3-PC	15000 C.T.	600 C.T.	3	4.80	4.32	4.00	3.20
7F066	DCM4-PC	10000 C.T.	5000 C.T.	4	4.95	4.46	4.13	3.30
7F067	DCM5-PC	10000	2500/625 split	2	4.95	4.46	4.13	3.30
7F068	DCM6-PC	10000 C.T.	1500 C.T.	4	4.65	4.19	3.88	3.10
7F069	DCM7-PC	5000 C.T.	80000 C.T.	6	5.25	4.73	4.38	3.50
7F070	DCM8-PC	4000 C.T.	1200 C.T.	6	4.50	4.05	3.75	3.00
7F071	DCM9-PC	4000 C.T.	600 C.T.	6	4.35	3.92	3.63	2.90
7F072	DCM10-PC	4000	600/150 split	3	4.80	4.32	4.00	3.20
7F073	DCM11-PC	2500 C.T.	2500 C.T.	8	4.50	4.05	3.75	3.00
7F074	DCM12-PC	2500	2500/625 split	4	4.80	4.32	4.00	3.20
7F075	DCM13-PC	2500 C.T.	625 C.T.	8	4.35	3.92	3.63	2.90
7F076	DCM14-PC	2500 C.T.	200 C.T.	8	4.20	3.78	3.50	2.80
7F077	DCM18-PC	600 C.T.	50000 C.T.	16	4.65	4.19	3.88	3.10
7F078	DCM19-PC	600	8000/2000 split	8	4.80	4.32	4.00	3.20
7F079	DCM20-PC	600 C.T.	200 C.T.	16	4.05	3.65	3.38	2.70
7F080	DCM21-PC	600 C.T.	600 C.T.	16	4.05	3.65	3.38	2.70
7F081	DCM22-PC	250 C.T.	600 C.T.	25	4.05	3.65	3.38	2.70

Stk. No.	Type	Hy Oma dc	Hy rated current conditions	DCR	1-9	10-49	50-99	100-249
7F082	DCM51-PC	10	5 hy-3 ma	300	3.60	3.24	3.00	2.40
7F083	DCM52-PC	5	2 hy-5 ma	155	3.30	2.97	2.75	2.20
7F084	DCM53-PC	2.5	1 hy-7 ma	75	3.15	2.84	2.63	2.10

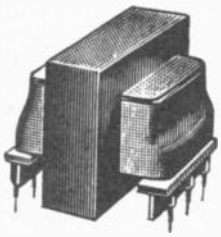


Fig. FB

● NEW LOW LEVEL/MICROPHONE INPUT TRANSFORMERS

Double mu-metal shielded except * single mu-metal shield and electrostatic shield.

Stk. No.	Type	Pri. Imp.	Sec. Imp.	Freq. Resp.	H(in)	Dia. (in.)	Wt. (oz.)	1-9	10-49	50-99	100-249
7F085	M8027*	200	40000	50-20000	2¾	1 5/16 x 7/8	2	9.00	8.10	7.50	6.00
7F086	M8030	200/50 C.T.	50000	20-20000	2⅛	1⅛ D.	6	13.50	12.15	11.25	9.00
7F087	M1-S	50/250 C.T./ 600 C.T.	50000	20-20000	1 17/32	1 1/16 D.	3	10.95	9.86	9.13	7.30

● NEW 60 HZ CONTROL AND POWER SUPPLY TRANSFORMERS

For relays, silicon rectifier circuitry, and filament applications. Figure FB except (*) Figure K.

Stk. No.	Type	Secondary ACV	Secondary RMS Amp	Dimensions L (in)	Dimensions W (in)	Dimensions H (in)	Mounting Centers	1-9	10-49	50-99	100-249
7F088	M8242	6.3 C.T.	.6	2⅜	1⅜	1½	2	3.75	3.38	3.13	2.50
7F089	M8243	6.3 C.T.	2.0	2 9/32	1⅝	1 11/16	2 13/16	4.50	4.05	3.75	3.00
7F090	M8286	6.3 C.T.	6.0	3 11/16	2⅛	2¼	3⅛	5.55	5.00	4.63	3.70
7F091	M8287	12.6 C.T.	3.0	3 11/16	2⅛	2¼	3⅛	5.55	5.00	4.63	3.70
7F092	M8247*	12/12	4.0/4.0	4⅛	3⅛	3¾	3 7/16 x 2½	12.15	10.94	10.13	8.10
7F093	M8244*	12.6 C.T./12.6	2.0/2.0	3⅜	2⅞	3 5/32	2 13/16 x 2½	7.95	7.16	6.63	5.30
7F094	M8222*	18.5 C.T.	3.0	3⅜	2½	3 5/32	2 13/16 x 2½	7.20	6.48	6.00	4.80
7F095	M8288*	26 C.T.	2.5	3	2¾	2⅜	2½ x 2½	7.05	6.35	5.88	4.70
7F096	M8245	28 C.T.	.6	2 9/32	2⅛	1 15/16	2 13/16	5.55	5.00	4.63	3.70
7F097	M8255*	30 C.T.	2.5	3¾	2¾	3 15/32	3⅛ x 2¼	8.25	7.43	6.88	5.50
7F098	M8223*	35 C.T.	3.0	4⅛	3	3¾	3 7/16 x 2⅜	12.45	11.21	10.38	8.30
7F099	M8289	40 C.T.	.1	2⅜	1⅜	1½	2	3.75	3.38	3.13	2.50
7F151	M8290	40 C.T.	.3	2 13/16	1⅝	1⅝	2⅜	4.50	4.05	3.75	3.00
7F152	M8291	40 C.T.	.75	3 11/16	2⅛	2¼	3⅛	5.55	5.00	4.63	3.70
7F153	M8246*	49 C.T.	2.5	4½	3¼	4 7/32	3¾ x 2½	8.70	7.83	7.25	5.80
7F154	M8224*	70 C.T.	1.0	3¾	2¾	3 15/32	3⅛ x 2¼	8.25	7.43	6.88	5.50
7F155	M8256*	80 C.T.	.6	3	2⅜	2¾	2½ x 2⅜	7.05	6.35	5.88	4.70

M8027

● NEW 60 HZ ISOLATION AND POWER TRANSFORMERS

Center tap permits use in either F.W. Bridge or F.W.C.T. circuitry. Electrostatic shielding.

Stk. No.	Type	In. V	Output V	Rms. Amp.	Mtg. Cntrs.	Fig.	1-9	10-49	50-99	100-249
7F156	M8294	115	115 C.T.	.0085	1¾	FB	3.90	3.15	3.25	2.60
7F157	M8295	115	115 C.T./12.6 C.T./12.6	.030/.25/.25	2⅜	FB	5.25	4.73	4.38	3.50
7F158	M8296	115	115 C.T.	.35	1 49/64 x 2⅛	H	7.20	6.48	6.00	4.80
7F159	M8278	115	115 C.T.	.9	3⅛ x 2¾	K	12.45	11.21	10.38	8.30

● NEW FILTER INDUCTORS

Stk. No.	Type	Series Conn. Hys.	Series Conn. Amps.	Parallel Conn. Hys.	Parallel Conn. Amps.	Mtg. Centers	Fig.	1-9	10-49	50-99	100-249
7F160	M8198	3.5	.050	.875	.10	1¾	FB	2.85	2.57	2.38	1.90
7F161	M8199	1.5	.15	.25	.30	2	FB	3.00	2.70	2.50	2.00
7F162	M8200	.5	.3	.125	.6	2⅜	FB	3.30	2.97	2.75	2.20
7F163	M8201	.32	.6	.08	1.2	2 13/16	FB	4.20	3.78	3.50	2.80
7F164	M8202	.2	1.0	.05	2.0	2 13/16 x 2⅛	K	9.60	8.64	8.00	6.40
7F165	M8203	.07	2.5	.0175	5.0	3⅛ x 2½	K	11.25	10.13	9.38	7.50
7F166	M8204	.022	4.0	.0055	8.0	2 13/16 x 2½	K	10.95	9.86	9.13	7.30
7F167	M8205	.022	5.0	.0055	10	3¾ x 2½	K	13.20	11.88	11.00	8.80

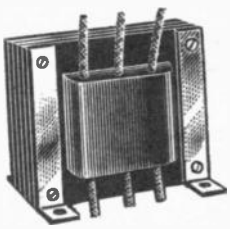


Fig. K

STANDARD MIL-T-27B CASES

Case Symbol	—Case Dimensions— L	W	H	—Mounting Dimensions— ML	MW	F
AF	¾	¾	1⅛	*1 3/16	—	4-40x3/8
AG	1	1	1⅜	*1⅛	—	6-32x3/8
AH	1 5/16	1 5/16	1¾	S:1¼	—	6-32x3/8
AJ	1⅝	1⅝	2⅜	1 3/16	1 3/16	6-32x3/8
EA	1 15/16	1 13/16	2¾	1⅜	1¼	6-32x3/8
EB	1 15/16	1 13/16	2 7/16	1⅜	1¼	6-32x3/8
FA	2 5/16	2 1/16	3⅛	1 11/16	1 7/16	6-32x3/8
FB	2 5/16	2 1/16	2½	1 11/16	1 7/16	6-32x3/8
GA	2¾	2⅜	3 13/16	2⅛	1¾	6-32x3/8
GB	2¾	2⅜	2 13/16	2⅛	1¾	6-32x3/8
HA	3 1/16	2⅝	4¼	2 19/64	1 55/64	8-32x3/8
HB	3 1/16	2⅝	3 9/16	2 19/64	1 55/64	8-32x3/8

Case Symbol	—Case Dimensions— L	W	H	—Mounting Dimensions— ML	MW	F
JA	3 9/16	3 1/16	4⅞	2⅝	2⅛	8-32x3/8
JB	3 9/16	3 1/16	3⅞	2⅝	2⅛	8-32x3/8
KA	3 15/16	3⅜	5¼	3	2 1/16	10-32x1/2
KB	3 15/16	3⅜	4 5/16	3	2 1/16	10-32x1/2
LA	4 5/16	3 11/16	5 9/16	3 5/16	2 11/16	10-32x1/2
LB	4 5/16	3 11/16	4½	3 5/16	2 11/16	10-32x1/2
MA	4 11/16	4	6	3 11/16	3	¼-20x5/8
MB	4 11/16	4	4 15/16	3 11/16	3	¼-20x5/8
NA	5 1/16	4 5/16	6 13/16	4 1/16	3 5/16	¼-20x5/8
NB	5 1/16	4 5/16	5½	4 1/16	3 5/16	¼-20x5/8
OA	5½	4½	6¾	3¾	3	¼-20x5/8

*Not in conformance with MIL-T-273. S:2 studs in diagonal.

Collins Toroidal Coils

MOLDED PLASTIC TYPE MPF

Molded in high temperature resin. All have tinned brass terminals. Excellent Q characteristics. Normally used in the range of 1 Khz to 15 Khz. Useful for filters, oscillators, and tuned transformers. Mounts with 3-48 screw. Tapped hole. Ambient temperature range: —55°C to +105°C. Size: 0.738"H. x 0.688"L. x 0.375"W. VALUES OF INDUCTANCE IN 20% INCREMENTS ARE AVAILABLE FROM 5mh TO 3H.

TYPE MPF-050 TOROIDS—FOR FREQUENCIES UP TO 30 KHZ (SUBMINIATURE)

Stk. No.	Coil Desig. Type	INDUCTANCE @ 1 VOLT RMS	Qmin	RdcΩ ±20%	Minimum Self Res. Freq.	Imax. MA	1-9	10-24	25-49	50-99	100-249
39F2500	MPF-050-1B	5 MH±1.5% @ 7khz	67 @ 10khz	2.3	360 khz	79.7	5.95	4.76	4.05	3.57	2.85
39F2504	MPF-050-5B	10 MH±1 % @ 5khz	67 @ 10khz	4.9	242 khz	50.1	5.95	4.76	4.05	3.57	2.85
39F2506	MPF-050-7B	15 MH±1 % @ 5khz	67 @ 10khz	7.3	196 khz	39.8	5.95	4.76	4.05	3.57	2.85
39F2507	MPF-050-8B	17.5 MH±1 % @ 4khz	67 @ 10khz	8.5	178 khz	39.8	5.95	4.76	4.05	3.57	2.85
39F2508	MPF-050-9B	20 MH±1 % @ 4khz	67 @ 10khz	11.2	165 khz	31.5	5.95	4.76	4.05	3.57	2.85
39F2510	MPF-050-11B	30 MH±1 % @ 3khz	67 @ 10khz	14.3	133 khz	31.5	5.95	4.76	4.05	3.57	2.85
39F2513	MPF-050-14B	50 MH±1 % @ 2khz	67 @ 10khz	25.0	100 khz	25.0	5.95	4.76	4.05	3.57	2.85
39F2517	MPF-050-18B	100 MH±1 % @ 2khz	67 @ 10khz	49.0	69 khz	15.7	7.20	5.76	4.90	4.32	3.46
39F2521	MPF-050-22B	200 MH±1 % @ 1khz	55 @ 7khz	115	47 khz	9.9	7.20	5.76	4.90	4.32	3.46
33F2523	MPF-050-24B	300 MH±1 % @ 1khz	55 @ 7khz	150	38 khz	9.9	7.20	5.76	4.90	4.32	3.46
39F2526	MPF-050-27B	500 MH±1 % @ 1khz	55 @ 7khz	290	29 khz	6.2	7.20	5.76	4.90	4.32	3.46
39F2530	MPF-050-31B	1.0 HY±1 % @ 400hz	44 @ 5khz	520	20 khz	4.9	8.83	7.06	6.00	5.30	4.24
39F2532	MPF-050-33B	1.5 HY±1 % @ 400hz	44 @ 5khz	780	16 khz	3.9	8.83	7.06	6.00	5.30	4.24
39F2534	MPF-050-35B	2.0 HY±1 % @ 400hz	30 @ 4khz	1050	14 khz	3.1	9.75	7.80	6.63	5.85	4.68
39F2536	MPF-050-37B	3.0 HY±1 % @ 400hz	30 @ 4khz	1700	11 khz	2.5	9.75	7.80	6.63	5.85	4.68

TYPE MPF-051 TOROIDS—FOR FREQUENCIES UP TO 100 MHZ (SUBMINIATURE)
VALUES OF INDUCTANCE IN 2% INCREMENTS ARE AVAILABLE FROM 1mh TO 3H.

Stk. No.	Coil Desig. Type	INDUCTANCE @ 1 VOLT RMS	Qmin	RdcΩ ±20%	Minimum Self Res. Freq.	Imax. MA	1-9	10-24	25-49	50-99	100-249
39F2584	MPF-051-1B	1 MH±2.5% @ 10khz	78 @ 30khz	1.2	942 khz	100	6.55	5.24	4.45	3.93	3.14
39F2583	MPF-051-5B	2.0 MH±1.5% @ 5khz	78 @ 30khz	2.1	625 khz	79.7	6.55	5.24	4.45	3.93	3.14
39F2590	MPF-051-7B	3.0 MH±1.5% @ 5khz	78 @ 30khz	3.2	500 khz	63.2	6.55	5.24	4.45	3.93	3.14
33F2593	MPF-051-10B	5.0 MH±1 % @ 5khz	78 @ 30khz	5.3	374 khz	50.1	6.55	5.24	4.45	3.93	3.14
39F2597	MPF-051-14B	10.0 MH±1 % @ 5khz	78 @ 30khz	12	251 khz	31.5	6.55	5.24	4.45	3.93	3.14
39F2599	MPF-051-16B	15 MH±1 % @ 2khz	64 @ 20khz	14	202 khz	31.5	6.55	5.24	4.45	3.93	3.14
39F2600	MPF-051-17B	17.5 MH±1 % @ 2khz	64 @ 20khz	19.5	185 khz	25	6.55	5.24	4.45	3.93	3.14
39F2601	MPF-051-18B	20 MH±1 % @ 2khz	64 @ 20khz	22	172 khz	25	6.55	5.24	4.45	3.93	3.14
39F2603	MPF-051-20B	30 MH±1 % @ 2khz	64 @ 20khz	32	137 khz	19.8	6.55	5.24	4.45	3.93	3.14
39F2606	MPF-051-23B	50 MH±1 % @ 2khz	64 @ 20khz	51	103 khz	15.7	7.25	5.80	4.93	4.35	3.48
39F2610	MPF-051-27B	100 MH±1 % @ 1khz	53 @ 15khz	115	71 khz	9.9	7.25	5.80	4.93	4.35	3.48
39F2614	MPF-051-31B	200 MH±1 % @ 1khz	38 @ 10khz	210	48 khz	7.8	8.45	6.76	5.75	5.07	4.06
39F2616	MPF-051-33B	300 MH±1 % @ 1khz	38 @ 10khz	330	41 khz	6.2	8.45	6.76	5.75	5.07	4.06
39F2619	MPF-051-36B	500 MH±1 % @ 400hz	31 @ 8khz	510	30 khz	4.9	8.45	6.76	5.75	5.07	4.06

TYPE MPF-054 TOROIDS—FOR FREQUENCIES UP TO 5 MHZ (SUBMINIATURE)
VALUES OF INDUCTANCE IN 2% INCREMENTS ARE AVAILABLE FROM .05mh TO 10 mh.

Stk. No.	Coil Desig. Type	INDUCTANCE @ 1 VOLT RMS	Qmin	RdcΩ ±20%	Minimum Self Res. Freq.	Imax. MA	1-9	10-24	25-49	50-99	100-249
39F2627	MPF-054-1B	0.05 MH±2.5% @ 50khz	120 @ 500khz	0.8	6.25mhz	78	5.13	4.10	3.49	3.08	2.46
39F2631	MPF-054-5B	0.1 MH±2.5% @ 50khz	120 @ 500khz	1.1	4.1 mhz	78	5.13	4.10	3.49	3.08	2.46
39F2635	MPF-054-9B	0.2 MH±1.5% @ 25khz	120 @ 500khz	2.2	2.6 mhz	55	5.13	4.10	3.49	3.08	2.46
39F2637	MPF-054-11B	0.3 MH±1.5% @ 25khz	120 @ 500khz	2.7	2.1 mhz	55	5.13	4.10	3.49	3.08	2.46
39F2640	MPF-054-14B	0.5 MH±1.5% @ 25khz	100 @ 200khz	4.4	1.6 mhz	47	5.13	4.10	3.49	3.08	2.46
39F2642	MPF-054-16B	0.72 MH±1.5% @ 25khz	100 @ 200khz	5.4	1.3 mhz	47	5.13	4.10	3.49	3.08	2.46
39F2644	MPF-054-18B	1.0 MH%1.0± @ 15khz	100 @ 200khz	7.8	987 khz	40	5.13	4.10	3.49	3.08	2.46
39F2648	MPF-054-22B	2.0 MH±1 % @ 10khz	70 @ 150khz	12.8	669 khz	31	5.75	4.60	3.91	3.45	2.76
39F2650	MPF-054-24B	3.0 MH±1 % @ 10khz	50 @ 80khz	18.7	532 khz	25	5.75	4.60	3.91	3.45	2.76
39F2653	MPF-054-27B	5.0 MH±1 % @ 5khz	50 @ 80khz	30.0	395 khz	20	5.75	4.60	3.91	3.45	2.76
39F2657	MPF-054-31B	10.0 MH±1 % @ 5khz	50 @ 80khz	54.5	260 khz	16	5.75	4.60	3.91	3.45	2.76

MOLDED PLASTIC MP-206 TOROIDS—FOR FREQUENCIES UP TO 20 KHZ

Commonly called the Wedding Ring. Excellent Q characteristics compatible with size and weight requirements of portable and airborne equipments. Molded in hi-temp resin. Terminals are tinned brass. Mounts with 6-32 screw. Tapped hole. Ambient temp. range. —55°C. to 105°C. Normally used in the range of 1 Khz to 20 Khz. Dia.: 1 1/16" ±1/64. Thickness: 1/2" ±1/64".

VALUES OF INDUCTANCE IN 20% INCREMENTS ARE AVAILABLE FROM 5mh TO 3h.

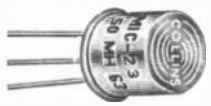
Stk. No.	Coil Desig. Type	INDUCTANCE @ 1 VOLT RMS	Qmin	RdcΩ ±20%	Minimum Self Res. Freq.	Imax. MA	1-9	10-24	25-49	50-99	100-249
39F2658	MP-206-1B	5 MH±1.5% @ 5khz	130 @ 10khz	0.92	320 khz	254	6.18	4.94	4.20	3.71	2.96
39F2662	MP-206-5B	10 MH±1.5% @ 5khz	130 @ 10khz	2.1	221 khz	160	6.18	4.94	4.20	3.71	2.96
39F2661	MP-206-7B	15.0 MH±1 % @ 3khz	130 @ 10khz	3.3	176 khz	127	6.18	4.94	4.20	3.71	2.96
39F2665	MP-206-8B	17.5 MH±1 % @ 3khz	130 @ 10khz	3.5	167 khz	127	6.18	4.94	4.20	3.71	2.96
39F2666	MP-206-9B	20 MH±1 % @ 3khz	130 @ 10khz	3.7	151 khz	127	6.18	4.94	4.20	3.71	2.96
39F2667	MP-206-10B	24 MH±1 % @ 3khz	130 @ 10khz	5.2	136 khz	100	6.18	4.94	4.20	3.71	2.96
39F2668	MP-206-11B	30 MH±1 % @ 3khz	130 @ 10khz	5.8	120 khz	100	6.18	4.94	4.20	3.71	2.96
39F2671	MP-206-14B	50 MH±1 % @ 2khz	130 @ 10khz	9.4	91 khz	80	6.18	4.94	4.20	3.71	2.96
39F2672	MP-206-15B	60 MH±1 % @ 2khz	110 @ 6khz	13.0	83 khz	63	6.18	4.94	4.20	3.71	2.96
39F2674	MP-206-17B	86 MH±1 % @ 2khz	110 @ 6khz	19.5	68 khz	50	6.18	4.94	4.20	3.71	2.96
39F2675	MP-206-18B	100 MH±1 % @ 2khz	110 @ 6khz	21	64 khz	50	6.18	4.94	4.20	3.71	2.96
39F2677	MP-206-20B	150 MH±1 % @ 1khz	110 @ 6khz	33	51 khz	40	6.18	4.94	4.20	3.71	2.96
39F2679	MP-206-22B	200 MH±1 % @ 1khz	110 @ 6khz	46	44 khz	40	6.85	5.48	4.66	4.11	3.29
39F2680	MP-206-23B	240 MH±1 % @ 1khz	110 @ 6khz	51	41 khz	32	6.85	5.48	4.66	4.11	3.29
39F2681	MP-206-24B	300 MH±1 % @ 1khz	110 @ 6khz	57	35 khz	32	6.85	5.48	4.66	4.11	3.29
39F2684	MP-206-27B	500 MH±1 % @ 1khz	85 @ 4khz	90	27 khz	25	6.85	5.48	4.66	4.11	3.29
39F2688	MP-206-31B	1 HY±1 % @ 400hz	75 @ 3khz	213	18 khz	16	8.50	6.80	5.78	5.10	4.08
39F2870	MP-206-33B	1.5 HY±1 % @ 400hz	75 @ 3khz	326	15 khz	12.5	8.50	6.80	5.78	5.10	4.08
39F2871	MP-206-35B	2.0 HY±1 % @ 400hz	30 @ 3khz	475	13 khz	10	8.50	6.80	5.78	5.10	4.08
39F2872	MP-206-37B	3.0 HY±1 % @ 400hz	30 @ 3khz	750	11 khz	8	8.50	6.80	5.78	5.10	4.08

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

Collins Toroidal Coils

TYPE MIC TOROIDS

Meets MIL-T-27B Grade 4, Class R. For almost any application requiring a high Q miniature inductor. Essentially no external magnetic field and no capacitive coupling to nearby circuitry. Automatic machine insertion. Insulation resistance is 10,000 megohms minimum at 100 v DC. 100 v RMS dielectric strength. Ambient temperature range is —55°C to +85°C. Inductance change with temperature is ±2% over range of —20°C to ±85°C. AC and DC saturation—Ultra linear to high excitation levels.



Stk. No.	Type	Induct.	1-9	10-24	25-49	50-99	100-249
39F2817	M1C-1	1 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2818	M1C-2	1.2 MH@10khz	4.93	3.94	3.35	2.95	2.36
28F2819	M1C-3	1.5 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2820	M1C-4	1.75MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2821	M1C-5	2.0 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2822	M1C-6	2.4 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2823	M1C-7	3.0 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2821	M1C-8	3.6 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2825	M1C-9	4.3 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2826	M1C-10	5.0 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2827	M1C-11	6.0 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2828	M1C-12	7.2 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2829	M1C-13	8.6 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2830	M1C-14	10 MH@10khz	4.93	3.94	3.35	2.95	2.36
33F2831	M1C-15	12 MH@10khz	4.93	3.94	3.35	2.95	2.36
33F2832	M1C-16	15 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2833	M1C-17	17.5 MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2834	M1C-18	20 MH@10khz	4.93	3.94	3.35	2.95	2.36

Stk. No.	Type	Induct.	1-9	10-24	25-49	50-99	100-249
39F2835	M1C-19	24MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2836	M1C-20	30MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2837	M1C-21	36MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2838	M1C-22	43MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2839	M1C-23	50MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2840	M1C-24	60MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2841	M1C-25	72MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2842	M1C-26	86MH@110khz	4.93	3.94	3.35	2.95	2.36
39F2843	M1C-27	100MH@10khz	4.93	3.94	3.35	2.95	2.36
39F2844	M1C-28	120MH@ 5khz	4.93	3.94	3.35	2.95	2.36
39F2845	M1C-29	150MH@ 5khz	4.93	3.94	3.35	2.95	2.36
39F2846	M1C-30	175MH@ 5khz	4.93	3.94	3.35	2.95	2.36
39F2847	M1C-31	200MH@ 5khz	4.93	3.94	3.35	2.95	2.36
39F2848	M1C-32	240MH@ 5khz	4.93	3.94	3.35	2.95	2.36
39F2849	M1C-33	300MH@ 5khz	4.93	3.94	3.35	2.95	2.36
39F2850	M1C-34	360MH@ 5khz	4.93	3.94	3.35	2.95	2.36
39F2851	M1C-35	430MH@ 5khz	4.93	3.94	3.35	2.95	2.36
39F2852	M1C-36	500MH@ 5khz	4.93	3.94	3.35	2.95	2.36

TYPE MIH MICRO INDUCTORS

These inductors may be used in most applications requiring a high Q and miniature size. Hermetically sealed tall TO-5 type transistor case. Standard inductance values are available in 20% increments from 1μH to 1 MH for frequencies to 10 MHz.

Stk. No.	Type	Induct. @ khs	1-9	10-24	25-49	50-99	100-249
39F2875	MIH-1	1.0 μH±20%@2500	4.93	3.94	3.35	2.95	2.36
39F2876	MIH-7	10.0 μH±10%@1000	4.93	3.94	3.35	2.95	2.36
39F2877	MIH-13	33 0 μH±10%@1000	4.93	3.94	3.35	2.95	2.36
39F2878	MIH-15	47.0 μH±5%@500	4.93	3.94	3.35	2.95	2.36
39F2879	MIH-19	.10μH±5%@500	4.93	3.94	3.35	2.95	2.36

Stk. No.	Type	Induct. @ khz	1-9	10-24	25-49	50-99	100-249
39F2880	MIH-26	.20MH±3%@500	4.93	3.94	3.35	2.95	2.36
39F2881	MIH-30	.30MH±3%@250	4.93	3.94	3.35	2.95	2.36
39F2882	MIH-36	.51MH±3%@250	4.93	3.94	3.35	2.95	2.36
39F2883	MIH-40	.75MH±3%@250	4.93	3.94	3.35	2.95	2.36
39F2884	MIH-43	1.00MH±3%@250	4.93	3.94	3.35	2.95	2.36

MOLDED PLASTIC TYPE MP-254 TOROIDS—FOR FREQUENCIES UP TO 8KC

Molded Plastic Type MP-254. Features exceptional Q below 5KC. Useful for critical filters, oscillators and tuned transformers in the above range. Provides filters of sharp characteristics and highest power capabilities. Molded in hi-temp resin. Tinned brass terminals. Mounts with 8-32 screw. Tapped hole. 2" dia., 1" thk. Values of inductance in 20% increments are available from 20Mh to 36th.

Stock No.	Coil Desig. Type	Inductance @ 1 Volt RMS	Q min	R dc Ω ±20%	Minim. Self. Res. Freq.	I max. MA	1-9	10-24	25-49	50-99	100-249
39F2695	MP-254-1B	20 MH±2.5%@2khz	155 @ 3.5khz	1.01	100khz	642	11.25	9.00	7.65	6.75	5.40
39F2697	MP-254-3B	30 MH±1.5%@2khz	155 @ 3.5khz	1.5	81khz	510	11.25	9.00	7.65	6.75	5.40
39F2700	MP-254-6B	50 MH±1.5%@2khz	155 @ 3.5khz	2.5	62khz	404	11.25	9.00	7.65	6.75	5.40
39F2701	MP-254-7B	60 MH±1.5%@2khz	155 @ 3.5khz	3.2	56khz	320	11.25	9.00	7.65	6.75	5.40
39F2704	MP-254-10B	100 MH±1.5%@1khz	147 @ 3khz	5.5	43khz	254	11.25	9.00	7.65	6.75	5.40
39F2708	MP-254-14B	200 MH±1 %@1khz	147 @ 3khz	9.9	30khz	201	12.08	9.66	8.21	7.25	5.80
39F2710	MP-254-16B	300 MH±1 %@1khz	125 @ 2khz	15.0	24khz	160	12.08	9.66	8.21	7.25	5.80
39F2713	MP-254-19B	500 MH±1 %@400hz	125 @ 2khz	25.0	18khz	127	12.08	9.66	8.21	7.25	5.80
39F2717	MP-254-23B	1.0HY±1 %@400hz	105 @ 1.5khz	56.0	13khz	80	12.08	9.66	8.21	7.25	5.80
39F2721	MP-254-27B	2.0HY±1 %@400hz	79 @ 1khz	100	9.0khz	63	13.28	10.62	9.03	7.97	6.37
39F2723	MP-254-29B	3.0HY±1 %@100hz	79 @ 1khz	155	7.0khz	50	13.28	10.62	9.03	7.97	6.37
39F2726	MP-254-32B	5.0HY±1 %@100hz	66 @ 800khz	250	5.5khz	40	13.28	10.62	9.03	7.97	6.37
39F2730	MP-254-36B	10 HY±1 %@100hz	51 @ 600hz	560	3.7khz	25	15.70	12.56	10.67	9.42	7.54
39F2734	MP-254-40B	20 HY±1 %@100hz	43 @ 500hz	1000	2.6khz	20	15.70	12.56	10.67	9.42	7.54
39F2736	MP-254-42B	30 HY±1 %@100hz	34 @ 400hz	1550	2.1khz	16	17.80	14.24	12.10	10.68	8.54

MOLDED PLASTIC CORE TYPE MP-848 TOROID—FOR FREQUENCIES UP TO 100 KHZ

Low permeability core material for use in the frequency range of 2hz to 100hz. Molded in hi-temp resin. Tinned brass terminals. Coefficient of Inductance: ±180 PPM/° C over AN. Mounts with 6-32 screw. Tapped hole. Ambient temp. range: —55°C. to 105°C. Values of industance in 20% increments are available from 2mh to 500mh.

39F2738	MP-848-1B	2.0MH±1.5%@10khz	140 @ 30khz	0.92	514khz	254	6.78	5.42	4.61	4.07	3.25
39F2740	MP-848-3B	3.0MH±1.5%@10khz	140 @ 30khz	1.39	390khz	202	6.78	5.42	4.61	4.07	3.25
39F2743	MP-848-6B	5.0MH±1 %@ 8khz	140 @ 30khz	2.29	308khz	160	6.78	5.42	4.61	4.07	3.25
39F2747	MP-848-10B	10 MH±1 %@ 5khz	140 @ 30khz	5.1	216khz	101	6.78	5.42	4.61	4.07	3.25
39F2749	MP-848-12B	15 MH±1 %@ 5khz	140 @ 30khz	6.2	174khz	101	6.78	5.42	4.61	4.07	3.25
39F2751	MP-848-14B	20 MH±1 %@ 4khz	140 @ 30khz	9.06	149khz	80	6.78	5.42	4.61	4.07	3.25
39F2753	MP-848-16B	30 MH±1 %@ 3khz	140 @ 30khz	14.0	120khz	63	6.78	5.42	4.61	4.07	3.25
39F2760	MP-848-23B	100 MH±1 %@ 1khz	95 @ 15khz	51.8	64khz	31.5	7.55	6.04	5.13	4.53	3.62
39F2764	MP-848-27B	200 MH±1 %@1khz	70 @ 10khz	92.0	44khz	25	8.35	6.68	5.68	5.01	4.01
39F2766	MP-848-29B	300 MH±1 %@ 1khz	70 @ 10khz	143	36khz	19.8	8.35	6.68	5.68	5.01	4.01
39F2769	MP-848-32B	500 MH±1 %@ 1khz	70 @ 10khz	234	27khz	15.7	8.35	6.68	5.68	5.01	4.01

MOLDED PLASTIC TYPE MP-930 TOROID—FOR FREQUENCIES UP TO 10 KHZ

Provides higher Q, power level and stability, with only slight increase in weight and volume. For use in frequency range of 500 hertz to 10kh3. Molded in hi-temp resin. Tinned brass terminals. Ambient temp. range: —55°C. to +105°C. Mounts with 6-32 screw. Tapped hole. 1 9/16"D.x 7/32" Thk. Values of inductance in 20% increments are available from 5mh to 17.5h.

39F2770	MP-930-1B	5 MH±2.5%@ 5khz	115 @ 7khz	0.6	255khz	402	5.90	4.72	4.01	3.54	2.83
39F2774	MP-930-5B	10 MH±1.5%@ 5khz	115 @ 5khz	1.07	172khz	320	5.90	4.72	4.01	3.54	2.83
39F2776	MP-930-7B	15 MH±1.5%@ 2khz	115 @ 5khz	1.65	139khz	254	5.90	4.72	4.01	3.54	2.83
39F2778	MP-930-9B	20 MH±1.5%@2khz	115 @ 5khz	1.89	127khz	254	5.90	4.72	4.01	3.54	2.83
39F2780	MP-930-11B	30 MH±1 %@2khz	115 @ 5khz	2.93	95khz	201	5.90	4.72	4.01	3.54	2.83
39F2783	MP-930-14B	50 MH±1 %@2khz	115 @ 5khz	6.0	72khz	127	5.90	4.72	4.01	3.54	2.83
39F2784	MP-930-15B	60 MH±1 %@2khz	115 @ 5khz	6.61	65khz	127	5.90	4.72	4.01	3.54	2.83
39F2787	MP-930-18B	100 MH±1 %@1khz	105 @ 4khz	10.6	50khz	100	5.90	4.72	4.01	3.54	2.83
39F2789	MP-930-20B	150 MH±1 %@1khz	105 @ 4khz	16.5	40khz	80	5.90	4.72	4.01	3.54	2.83
39F2791	MP-930-22B	200 MH±1 %@1khz	105 @ 4khz	23.9	34khz	63	5.90	4.72	4.01	3.54	2.83
39F2793	MP-930-24B	300 MH±1 %@1khz	93 @ 3khz	37	28khz	50	5.90	4.72	4.01	3.54	2.83
39F2795	MP-930-26B	430 MH±1 %@1khz	93 @ 3khz	44.2	23khz	50	5.90	4.72	4.01	3.54	2.83
39F2796	MP-930-27B	500 MH±1 %@400hz	93 @ 3khz	60.2	21khz	40	5.90	4.72	4.01	3.54	2.83
39F2800	MP-930-31B	1.0HY±1 %@400hz	73 @ 2khz	107	15khz	31.5	7.23	5.78	4.91	4.34	3.47
39F2804	MP-930-35B	2.0HY±1 %@400hz	58 @ 1.5khz	240	10khz	20	7.23	5.78	4.91	4.34	3.47
39F2806	MP-930-37B	3.0HY±1 %@100hz	58 @ 1.5khz	372	8khz	16	7.23	5.78	4.91	4.34	3.47
39F2809	MP-930-40B	5.0HY±1 %@100hz	42 @ 1khz	605	6.0khz	12.5	9.35	7.49	6.35	5.61	4.49
39F2813	MP-930-44B	10 HY±1 %@100hz	30 @ 800hz	1085	4.3khz	10.0	10.45	8.36	7.13	6.28	5.03

Miniature Transformers

"SUB-OUNCERS"

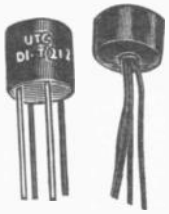
Tiny transformers for use in hearing aids, pocket radios, etc. Measure only 2 3/32 x 7/8 x 1 1/32"H. Weight .03 lb. each. Frequency response, ±3 db. 200-5,000 cps.
**Indicates split winding.

Stock No.	Type	Application	Pri. Imp.	Sec. Imp.	1-24	25-99	100-Up
3F390	SO-1	Input	200, 50	250,000, 62,500	3.60	3.06	2.88
3F391	SO-2	Inter.	10,000	90,000	3.30	2.81	2.64
3F392	SO-3	Plate to line	10,000, 25 000	200, 500	3.30	2.81	2.64
3F394	SO-5	Reactor 50 hy 1 ma DC	2,675 ohms DC res		3.00	2.55	2.40
3F396	SO-7	transis. Int.	20,000, 30,000	800,1200	3.00	2.55	2.40
3F397	SO-8	transis. to PP	10,000	2,000CT	3.60	3.06	2.88
3F398	SO-9	PP transis. to VC	500CT	3.2	3.60	3.06	2.88
3F399	SO-10	transis. to VC	2,000, 4,000CT	8/16	3.60	3.06	2.88
3F595	SO-11	transis. Inters	400 CT 500 CT	400** 500**	4.20	3.57	3.36
3F596	SO-12	transis. Inters	400 CT 500 CT	120** 150**	4.20	3.57	3.36
3F597	SO-13	transis. Inters	400 CT 500 CT	40** 50**	4.20	3.57	3.36
3F598	SO-14	transis. Inters	80 CT 100 CT	32** 40**	4.20	3.57	3.36
3F532	SO-CH	Mtg. Channel for any SO			.30	.26	.24

SUB-SUBOUNCER UNITS

Size: 1/16 x 3/4 x 43/64". Weight .02 lb. Impedance ratios are constant; these units can be used for other impedances if in same ratios. Units may be used reversed.

Stock No.	Type	Application	Pri. Imp.	Sec. Imp.	1-24	25-99	100-Up
3F375	SSO-1	Input	200 50	250,000 62,500	4.50	3.83	3.60
3F376	SSO-2	Inter. 3:1	10,000	90,000	4.80	4.08	3.84
3F377	SSO-3	Pl. to Line	10K/25K	200/500	4.20	3.57	3.36
3F378	SSO-4	Out	30K	50	3.90	3.32	3.12
3F379	SSO-5	React. 50 hy at 1 mil dc	4400 ohms dc Res.		3.90	3.32	3.12
3F381	SSO-7	Transis.	20,000	800			
3F382	SSO-8	Inter. Transis. to PP	30,000 10,000	1,200 2,000CT	3.30	2.81	2.64
3F383	SSO-9	Transis. to VC	10,000	16	3.90	3.32	3.12
3F384	SSO-10	Transis. to VC	10,000	3.2	3.00	2.55	2.40
3F385	SSO-11	Transis. Output	500-600	50-60	3.00	2.55	2.40
3F386	SSO-12	Transis. Output	1K-1200	50-60	3.00	2.55	2.40
3F387	SSO-13	Xtal to Transis.	200,000	1,000	4.50	3.83	3.60
3F388	SSO-14	Transis. Inter.	10,000 25,000	200CT 500CT	4.20	3.57	3.36
3F389	SSO-15	Transis. Inter.	20,000 30,000	800CT 1,200CT	4.20	3.57	3.36
3F599	SSO-16	Output	1.2K 1.5K	3.2/4	3.00	2.55	2.40
3F326	SSO-17	Out. or driver	10K 12K	500CT 600CT	3.30	2.81	2.64
3F328	SSO-19	Match	500CT	600CT	3.30	2.81	2.64
3F329	SSO-20	Output	1.5K CT	600CT	3.30	2.81	2.64
3F332	SSO-21	Xtal/ chopper	200K CT	1,000CT	4.80	4.08	3.84
3F333	SSO-22	Inter.	10K CT 12K CT	1,500CT 1,800CT	3.90	3.32	3.12
3F334	SSO-23	Reactor	8 Hys. @ 2 ma		3.00	2.55	2.40
3F335	SSO-24	Reactor	3.5 Hys. @ 2 ma		3.00	2.55	2.40
3F336	SSO-25	Transis. Inter.	10K CT 12K CT	10K CT 12K CT	5.10	4.34	4.08
3F337	SSO-26	Transis. Inter.	40K CT 50K CT	400 SPT 500 SPT	5.10	4.34	4.08
3F533	SSO-CH	Mtg. Channel for any SSO			.30	.26	.24



DI-T TRANSISTOR TRANSFORMERS
Meet MIL-T-27B-TF4RX

DI-T. Smaller than the DO-T Deci-Ouncers. Power ratings and other characteristics identical to DO-T's, except frequency response is approximately ±2 db, 260-20khz. Hermetically sealed; rated for Class R (105°C max. operating) temp. conditions. Size 5/16D x 1 1/4"H, wt. 1/15 oz.
DI-T200. As above, with uninsulated leads spaced on .1" radius for printed circuit boards. Size 5/16D x 3/8"H., wt. 1/15 oz.

Stock No.	Type No.	Application	Primary Impedance	Secondary Impedance	1-24	25-99	100-Up
3F422	DI-T1	Interstage	20K/30K	800/1200	6.00	5.10	4.80
3F125	DI-T2	Output	600/500	60/50	5.40	4.59	4.32
3F126	DI-T3	Output	1200/1000	60/50	5.40	4.59	4.32
2F642	DI-T5	Output	1200	3.2	5.40	4.59	4.32
3F127	DI-T8	Reactor	2.5Hy @ 2 ma		4.80	4.08	3.84
3F128	DI-T9	Output	10K/12K	500/600CT	6.60	5.61	5.28
3F129	DI-T10	Output	10K/12.5K	1.2K/1.5KCT	6.60	5.61	5.28
3F130	DI-T11	Output	10K/12.5K	2K/2500CT	6.60	5.61	5.28
3F131	DI-T19	Output	300CT	600	6.00	5.10	4.80
3F132	DI-T20	Output	500CT	600	6.00	5.10	4.80
3F474	DI-T21	Output	900CT	600	6.00	5.10	4.80
3F133	DI-T22	Driver	1500CT	600	6.00	5.10	4.80
3F134	DI-T23	Interstage	20K/30KCT	800/1200CT	6.90	5.87	5.52
3F495	DI-T25	Interstage	10K/12KCT	1.5K/1.8KCT	7.20	6.12	5.76
3F496	DI-T26	Reactor	4.5Hy @ 2 ma		5.70	4.85	4.56
3F497	DI-T27	Reactor	.9Hy @ 2ma		4.80	4.08	3.84
3F498	DI-T28	Reactor	.1Hy @ 4 ma		4.80	4.08	3.84
3F499	DI-T36	Isol or Int	10K/12KCT	10K/12KCT	7.50	6.38	6.00
2F643	DI-T37	Isol. or Int.	2K/2.5KCT	8K/10K split	7.80	6.63	6.24
2F644	DI-T38	Interstage	10K/12KCT	2K/2.4K split	7.80	6.63	6.24
2F645	DI-T41	Int. or Out.	400/500CT	400/500 split	7.50	6.38	6.00
2F646	DI-T43	Interstage	400/500CT	40/50 split	7.50	6.38	6.00
2F647	DI-T44	Interstage	80/100CT	32/40 split	7.50	6.38	6.00
2F990	DI-T51	Interstage	2K/2.5KCT	2K/2.5K split	7.80	6.63	6.24
2F991	DI-T52	Interstage	4K/5KCT	8K/10KCT	7.80	6.63	6.24
3F531	DI-TSH	Hypermalloy shield for DI-T's			.90	.77	.72
2F648	DI-T225	Interstage	80/100CT	32/40 split	8.40	7.14	6.72
2F649	DI-T230	Output	300CT	600CT	7.20	6.12	5.76
2F650	DI-T235	Interstage	400/500CT	40/50 Split	8.40	7.14	6.72
2F651	DI-T240	Interstage	400/500CT	400/500 split	8.40	7.14	6.72
2F652	DI-T245	Output	500/600CT	50/60CT	6.90	5.87	5.52
2F653	DI-T250	Output	500CT	600CT	7.20	6.12	5.76
2F654	DI-T255	Output	1K/1200CT	50/60CT	6.90	5.87	5.52
2F655	DI-T260	Output	1500CT	600CT	7.20	6.12	5.76
2F656	DI-T265	Isol. or Int.	2K/2500CT	8K/10K split	8.70	7.40	6.96
2F657	DI-T270	Output	10K/12KCT	500/600CT	7.80	6.63	6.24
2F658	DI-T273	Output	10K/12.5KCT	1200/1.5KCT	7.80	6.63	6.24
2F659	DI-T276	Interstage	10K/12KCT	2K/2400CT	7.80	6.63	6.24
2F660	DI-T278	Interstage	10K/12.5KCT	2K/2.5K split	8.70	7.40	6.96
2F661	DI-T283	Isol. or Int.	10K/12KCT	10K/12KCT	8.40	7.14	6.72
2F662	DI-T288	Interstage	20K/30KCT	800/1200CT	8.10	6.89	6.48
2F663	DI-T204	Split induct.	Ser. .1 hy	Par. .025 hy	6.00	5.10	4.80
2F664	DI-T208	Split induct.	Ser. .9 hy	Par. .2 hy	6.00	5.10	4.80
2F665	DI-T212	Split induct.	Ser. 2.5 hy	Par. .6 hy	6.00	5.10	4.80
2F666	DI-T216	Split induct.	Ser. 4.5 hy	Par. 1.1 hy	6.90	5.87	5.52
2F992	DI-T200SH	Hypermalloy shield for DI-T200's			.75	.64	.60

"OUNCER" AUDIOS

Famous one ounce audio transformers represent the acme in compact quality transformers. High fidelity from 30-20,000 cps. Maximum output level +8 db at 6.3 mw. Application: Input and Mixing, Interstage and Output Transformers. Fully impregnated and sealed in a drawn aluminum housing. Size: 7/8" dia. x 1 3/16". Wt. 1 oz.

Stock No.	Type	Primary	Secondary	1-24	25-99	100-Up
3F360	0-1	50, 200-250, 500-600	50,000	7.80	6.63	6.24
3F361	0-2	50, 200-250, 500-600	50,000 CT	7.80	6.63	6.24
3F362	0-3	7.5-30	50,000	7.50	6.38	6.00
3F363	0-4	15,000	60,000	6.60	5.61	5.28
3F365	0-6	15,000	95,000 CT	7.50	6.38	6.00
3F366	0-7	15,000-4MA	95,000 CT	7.50	6.38	6.00
3F367	0-8	15,000	50, 200-250, 500-600	7.80	6.63	6.24
3F368	0-9	15,000-4MA	50, 200-250, 500-600	7.80	6.63	6.24
3F369	0-10	30,000 CT PP to line	50, 200-250, 500-600	8.40	7.14	6.72
3F370	0-12	50, 200-250	50, 200-250, 500-600	7.80	6.63	6.24
3F372	0-14	200	½ megohm	7.50	6.38	6.00
3F373	0-15	10,000	1 megohm	7.50	6.38	6.00
3F374	0-16	250CT	50,000	10.20	8.67	8.16
3F322	0-19	10,000/2.500 (split) 4 Ma	4,000/1,000 (split)	7.80	6.63	6.24
3F157	0-18	10K/2.5K(split) 4 Ma	2000/500 (split)	7.80	6.63	6.24
2F678	0-20	1500CT 8 Ma	500/125 split	6.30	5.36	5.04
2F993	0-25	600/150 split	2000/500 split	8.10	6.89	6.48
3F136	0-30	500/125 split 20 Ma	500/125 split	8.10	6.89	6.48
3F138	0-32	500/125 split 20 Ma	50/12.5 split	8.10	6.89	6.48
3F325	0-17	Mumetal shield, slip fit over ouncer		1.50	1.28	1.20
2F754	0-BR	Mounting bracket for Ouncers		.21	.18	.17

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

DO-T TRANSISTOR TRANSFORMERS

Provides unprecedented power handling capacity, reliability, plus ultra small size. Hermetically sealed, metal cased to MIL-T-27B-TF4RX. Greater power rating, ±2 db, 200 cps —20KC. Low distortion. Anchored leads stand 10 lb. pull test; tinned and insulated copper conductors. For transistor use only. Size: 1 3/32" long; 5/16" diameter. Weight 1/10 oz.

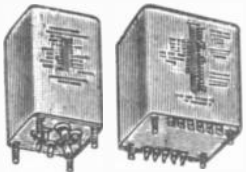
Stock No.	Mfr's. Type	Applications	Primary Impedance	Secondary Impedance	1-24	25-99	100-Up
3F550	DO-T1	Inter.	30,000/20,000	1200/800	6.00	5.10	4.80
3F551	DO-T2	Out.	600/500	60/50	5.40	4.59	4.32
3F552	DO-T3	Out.	1200/1000	60/50	5.40	4.59	4.32
3F553	DO-T4	Out.	600	3.2	5.40	4.59	4.32
3F554	DO-T5	Out.	1200	3.2	5.40	4.59	4.32
3F555	DO-T6	Out.	10,000	3.2	6.00	5.10	4.80
3F556	DO-T7	Input	200,000	1000	9.30	7.91	7.44
3F557	DO-T8	Inductor 3.5 hys at 2 ma, 560 ohms			4.80	4.08	3.84
3F660	DO-T9	Out.	10,000/12,000	500/600CT	6.60	5.61	5.28
3F661	DO-T10	Driver	10,000/12,500	1200/1.5KCT	6.60	5.61	5.28
3F662	DO-T11	Driver	10,000/12,500	2K/2500CT	6.60	5.61	5.28
3F663	DO-T12	Out.	150/200CT	12/16	5.70	4.85	4.56
3F664	DO-T13	Out.	300/400CT	12/16	5.70	4.85	4.56
3F665	DO-T14	Out.	600/800CT	12/16	6.00	5.10	4.80
3F666	DO-T15	Out.	800/1070CT	12/16	6.00	5.10	4.80
3F667	DO-T16	Out.	1000/1330CT	12/16	6.00	5.10	4.80
3F668	DO-T17	Out.	1500/2000CT	12/16	6.00	5.10	4.80
3F669	DO-T18	Out.	7500/10,000CT	12/16	6.30	5.36	5.04
3F670	DO-T19	Out.	300CT	600	6.00	5.10	4.80
3F671	DO-T20	Out.	500CT	600	6.00	5.10	4.80
3F672	DO-T21	Out.	900CT	600	6.00	5.10	4.80
3F673	DO-T22	Out.	1500CT	600	6.00	5.10	4.80
3F674	DO-T23	Inter.	20K/30KCT	800/1200CT	6.90	5.87	5.52
3F675	DO-T24	Input	200,000CT	1000CT	9.90	8.42	7.92
3F676	DO-T25	Inter.	10K/12KCT	1.5K/1800CT	7.20	6.12	5.76
2F669	DO-T26	Inductor	6 hys @ 2 ma	2100 ohms	5.70	4.85	4.56
3F658	DO-T27	Inductor	1.25 hy. at 2 ma DC 100 ohm		4.80	4.08	3.84
3F254	DO-T28	Inductor	3 Hy @ 4 Ma. DC 25 ohm.		4.80	4.08	3.84
3F218	DO-T29	Out.	120/150CT	3.2/4	5.70	4.85	4.56
3F219	DO-T30	Out.	320/400CT	3.2/4	5.70	4.85	4.56
3F225	DO-T31	Out.	640/800CT	3.2/4	6.00	5.10	4.80
3F226	DO-T32	Out.	800/1000CT	3.2/4	6.00	5.10	4.80
3F227	DO-T33	Out.	1060/1330CT	3.2/4	6.00	5.10	4.80
3F228	DO-T34	Out.	1600/2000CT	3.2/4	6.00	5.10	4.80
3F229	DO-T35	Out.	8000/10,000CT	3.2/4	6.30	5.36	5.04
3F255	DO-T36	Isol.	10K/12KCT	10K/12KCT	7.50	6.38	6.00
3F236	DO-T37	Isol.	2000/2500CT	8K/10K Split	7.80	6.63	6.24
3F237	DO-T38	Inter.	10K/12KCT	2K/2.4K Split	7.80	6.63	6.24
3F238	DO-T39	Inter.	20K/30KCT	1K1.5K Split	7.80	6.63	6.24
3F239	DO-T40	Inter.	40K/50KCT	400/500 Split	8.40	7.14	6.72
2F670	DO-T41	Inter.	400/500CT	400/500 Split	7.50	6.38	6.00
3F251	DO-T42	Inter.	400/500CT	120/150 Split	7.50	6.38	6.00
3F252	DO-T43	Inter.	400/500CT	40/50 Split	7.50	6.38	6.00
3F253	DO-T44	Inter.	80/100CT	32/40 Split	7.50	6.38	6.00
2F671	DO-T45	Inter.	1000/1250CT	16K/20K split	7.80	6.63	6.24
2F672	DO-T46	Input	100,000CT	500 CT	9.60	8.16	7.68
2F673	DO-T47	Isol.	9000/10,000CT	9K/10KCT	8.10	6.89	6.48
2F674	DO-T48	Inter.	8000/10,000CT	1200/1.5KCT	7.80	6.63	6.24
2F675	DO-T49	Spt. induct. Ser. 20 hy Par. 5 hy			7.80	6.63	6.24
2F676	DO-T50	Spt. induct. Ser. .075 hy Par .018 hy			5.70	4.85	4.56
2F994	DO-T51	Inter.	2K/2.5KCT	2K/2.5K split	7.80	6.63	6.24
2F995	DO-T52	Inter.	4K/5KCT	8K/10K CT	7.80	6.63	6.24
2F677	DO-T400	Pri. 28 v. 380-1 Kc.		6.3V/60 ma	6.60	5.61	5.28
2F996	DO-T410	Pri. 28 v. 380-1 Kc.		2-6 3V/30 ma	7.80	6.63	6.24
2F997	DO-T420	Pri. 28 v. 380-1 Kc.		28V/10 ma	7.80	6.63	6.24
3F659	DO-TSH	Hipermalloy shield for DO-T's			.90	.77	.72

HIGH LEVEL MATCHING TRANSFORMER

Type LS-33. Primary impedance; 50, 125-150, 200, 250, 333, 500/600. Max. level, 20 watts. In LS-2 case. LxWxH: 4 1/16 x 3 1/2 x 4 3/16".

Stk. No.	Wt. Lbs.	1-24	25-99	100-Up
3F285	7.5	24.00	20.40	19.20

MILITARY STANDARD TRANSFORMERS



TYPE W. Freq. response ± 2 db, 300 cps to 10KC. 600 ohms split winding provides for 600 ohms CT and 150 ohms. Size: 1 5/8 x 1 5/8 x 2 3/8". Wt. 2 3/4 lb. Type W-786 Electrostatic shielding.

TYPE N. Primaries are 105/115/125V. 54/66 cyc. Secondary ma ratings are DC. Choke input, derate ma 70% for condenser input.

TYPE W TYPE N

TYPE W-AUDIO-MEETS MIL SPEC. MIL-T-27B—TF1RX

Stk. No.	Type	Application	Pri. Ohms	Sec. Ohms	1-24	25-99	100-Up
2F562	W-786	Line to Line	600 split	600 split	15.30	13.01	12.24
2F563	W-787	Plate to Line	7600/4800	600 split	13.85	11.86	11.16
2F565	W-789	Plates to Line	15K CT	600 split	13.95	11.86	11.16

TYPE N-FILAMENT-MEETS MIL. SPEC. MIL-27B-TF4RX

Stk. No.	Type	Secondary Ratings		Size	1-24	25-99	100-Up
2F572	N-587A	6.3V- 2A	1000 WV	2 3/16 x 2 1/16 x 2 1/2"	13.50	11.48	10.80
2F573	N-588A	6.3V- 5A	1000 WV	2 3/4 x 2 3/8 x 2 13/16"	15.00	12.75	12.00
2F574	N-589A	6.3V-10A	1000 WV	3 9/16 x 3 1/16 x 3 7/8"	19.50	16.58	15.60

● NEW PIL ULTRAMINIATURE AUDIO TRANSFORMERS & INDUCTORS

These transformers and inductors incorporate the same construction as the DO-T units. PIL units are hermetically sealed to MIL-T-27B, are metal encased. Grade 4. All units terminated in insulated, tinned solid copper leads. Split winding inductors; inductance values shown are for 0 ma dc. 23/64 D. x 1/4" H. Actual wt. 1/20 oz.

Stock No.	Type	Pri Imp	Sec Imp	1-24	25-99	100-Up
2F825	PIL-50	500 CT	500 CT	7.20	6.12	5.76
2F826	PIL-70	10K CT	500 CT	7.50	6.38	6.00
2F827	PIL-75	10K CT	2K CT	7.50	6.38	6.00
2F828	PIL-5†	Ser. .09 hy; par. .022 hy		6.00	5.10	4.80
2F829	PIL-8†	Ser. .26 hy; par. .06 hy		6.00	5.10	4.80
2F830	PIL-12†	Ser. .66 hy; par. .16 hy		6.00	5.10	4.80

PIP TRANSISTOR PULSE TRANSFORMERS

Meets Mil. Spec. MIL-T-21038B-TP6RX. Subminiature, hermetically sealed metal case. Checked in transistor test circuit to give required pulse width. Size: 5/16" dia. x 3/16" height. Wt. 1/20 oz.

Stock No.	Type	Width μ sec.	Rise time	Imp. Out	1-24	25-99	100-Up
2F550	PIP-1	.05	.02	50	6.00	5.10	4.80
2F551	PIP-2	.1	.025	50	6.00	5.10	4.80
2F552	PIP-3	.2	.03	100	6.00	5.10	4.80
2F553	PIP-4	.5	.05	100	6.00	5.10	4.80
2F554	PIP-5	1.0	.08	100	6.00	5.10	4.80
2F555	PIP-6	2.0	.10	100	6.00	5.10	4.80
2F556	PIP-7	3.0	.20	100	6.00	5.10	4.80
2F557	PIP-8	5.0	.30	200	6.00	5.10	4.80
2F558	PIP-9	10.0	.35	200	6.00	5.10	4.80
2F704	PIP-10	.1	.01	140/50	6.00	5.10	4.80
2F705	PIP-11	1	.02	280/100	6.00	5.10	4.80
2F706	PIP-12	5	.05	560/100	6.00	5.10	4.80
2F998	PIP-SH	Hipermalloy shield for PIP's			.90	.77	.72

MINIATURE WIDE APPLICATION PULSE TRANSFORMERS

Hermetically sealed to MIL-T-21038B-TP7SX by vacuum molding and suited for service from —70° C to +130° C. Wound core structure. Where minimum rise time is important use next lower type.

3F081	H-45	.05	.022	250	7.35	6.25	5.88
3F082	H-46	.10	.024	250	7.35	6.25	5.88
3F083	H-47	.20	.026	500	6.60	5.61	5.28
3F084	H-48	.50	.03	500	6.60	5.61	5.28
3F085	H-49	1	.04	500	6.60	5.61	5.28
3F086	H-50	2	.05	500	6.60	5.61	5.28
3F087	H-51	3	.10	500	6.60	5.61	5.28
3F088	H-52	5	.13	1000	6.60	5.61	5.28
3F089	H-53	7	.28	1000	6.60	5.61	5.28
3F090	H-54	10	.30	1000	6.90	5.87	5.52
2F707	H-55	16	.75	1000	6.90	5.87	5.52
2F708	H-56	20	1.25	1000	6.90	5.87	5.52
2F709	H-57	25	2.	1000	6.90	5.87	5.52
2F633	H-60	.05	.016	50	6.60	5.61	5.28
2F634	H-61	.1	.016	50	6.60	5.61	5.28
2F635	H-62	.2	.022	100	6.60	5.61	5.28
2F636	H-63	.5	.027	100	6.60	5.61	5.28
2F637	H-64	1	.033	100	6.60	5.61	5.28
2F638	H-65	2	.066	100	7.50	6.38	6.00
2F639	H-66	3	.087	100	7.50	6.38	6.00
2F640	H-67	5	.097	200	7.50	6.38	6.00
2F641	H-68	10	.14	200	7.50	6.38	6.00

TYPE LS-HYBRID AND REPEAT COILS

High eff. low wave-form distortion, uniform freq. response. Electrostatic shielding 3 1/8 x 2 5/8 x 3 1/4". Wt. 3 lbs.

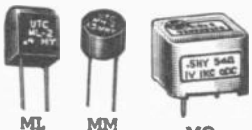
Stock No.	Type No.	Primary Impedance	Secondary Impedance	1-24	25-99	100-Up
2F831	LS-68	600/150 split	2 split 600/150	27.00	22.95	21.60
3F549	LS-140	500/600 split	500/600 split	27.00	22.95	21.60
3F290	LS-141	3 sets of bal. 500/600 CT		24.00	20.40	19.20

400-CYCLE FILAMENT TRANSFORMERS

These new transformers combine smallness of size and lightness of weight with the maximum possible reliability. These versatile midgets are suitable for either ground or airborne use applications. Molded specifically to meet MIL-T-27B-TF5SX specifications. Primary, 105/115 volts, 380-1000 cycles per second. Secondary, 6.3 volts, center tap.

Stock No.	Type	Sec. Amp.	LxWxH	Wt. Lbs.	1-24	25-99	100-Up
3F071	H-101	3.5	1 25/32 x 1 21/32 x 2"	.3	15.60	13.26	12.48
3F073	H-103	10	2 5/16 x 2 1/8 x 2 1/2"	.8	21.00	17.85	16.80

Inductors



MINIDUCTORS

MIL-T-27B-TF5RX

Hi Q in miniature form. Ideal for transistor use and printed circuits. High temp. stability (—55°C to 100°C). ML-0 to 4, MO-.1 to 1 are medium low frequencies—400 cyc., MM and MW for medium frequencits and MH for high frequencies. ML case 7/16 x 31/64 x 7/16". Wt. 1/5 oz. MM and MH cases 7/16"D x 1/4"H. Wt. .07 oz. MO case 3/4"" x 1 1/16" x 13/16"H. Wt. 1 oz. MW case 29/32"D x 13/32"H. Wt. 1/4 oz.

TYPE MH

Stk. No.	Type	Ind. @ 0 ma	DC MA	1-24	25-99	100-Up
3F029	MH-1	.6 Mhy	90	8.10	6.89	6.48
3F038	MH-2	1.5 Mhy	57	8.10	6.89	6.48
3F039	MH-3	2.5 Mhy	44	8.40	7.14	6.72
3F147	MH-4	6 Mhy	28	8.40	7.14	6.72
3F148	MH-5	10 Mhy	22	8.70	7.40	6.96
3F149	MH-6	15 Mhy	18	8.70	7.40	6.96
3F159	MH-7	25 Mhy	14	9.00	7.65	7.20
3F312	MH-8	40 Mhy	11	9.00	7.65	7.20

TYPE ML

2F800	ML-0	.15 Hy	12			
3F183	ML-1	.25 Hy	9			
3F184	ML-2	.4 Hy	7			
3F185	ML-3	.7 Hy	5			
3F186	ML-4	1.4 Hy	3	8.40	7.14	6.72
3F187	ML-5	2.5 Hy	1			
3F188	ML-6	4.0 Hy	.7			
3F189	ML-7	6.0 Hy	.6			
3F194	ML-8	10 Hy	.5			
3F195	ML-9	25 Hy	.3	8.70	7.40	6.96
3F196	ML-10	60 Hy	.2	9.90	8.42	7.92

TYPE MM

3F197	MM-1	3 Mhy	50	7.50	6.38	6.00
3F198	MM-2	5 Mhy	40	7.50	6.38	6.00
3F199	MM-3	8 Mhy	30	7.80	6.63	6.24
3F247	MM-4	12.5 Mhy	25	7.80	6.63	6.24
3F248	MM-5	20 Mhy	20	8.10	6.89	6.48
3F249	MM-6	30 Mhy	16	8.10	6.89	6.48
3F306	MM-7	60 Mhy	11	8.40	7.14	6.72
3F309	MM-8	120 Mhy	8	8.40	7.14	6.72

TYPE MO

2F801	MO-.1	.1 Hy	55	9.30	7.91	7.44
2F680	MO-.15	.15 Hy	45	9.30	7.91	7.44
2F681	MO-.3	.3 Hy	28	9.30	7.91	7.44
2F682	MO-.5	.5 Hy	23	9.30	7.91	7.44
2F683	MO-1	1 Hy	16	9.30	7.91	7.44
2F684	MO-2	2 Hy	8	9.60	8.16	7.68
2F685	MO-5	5 Hy	5	9.60	8.16	7.68
2F686	MO-7.5	7.5 Hy	4.5	9.60	8.16	7.68
2F687	MO-20	20 Hy	2.7	9.60	8.16	7.68
2F688	MO-50	50 Hy	1.4	9.90	8.42	7.92
2F689	MO-100	100 Hy	1.1	9.90	8.42	7.92

TYPE MW

2F802	MW-.05	.05 Hy	25	7.20	6.12	5.76
2F803	MW-.10	.10 Hy	18	7.50	6.38	6.00
2F804	MW-.25	.25 Hy	11	7.50	6.38	6.00
2F690	MW-.5	.5 Hy	8	7.80	6.63	6.24
2F691	MW-.75	.75 Hy	7	8.40	7.14	6.72
2F692	MW-1	1.0 Hy	6	8.70	7.40	6.96
2F693	MW-1.2	1.2 Hy	5	9.30	7.91	7.44
2F694	MW-2	2 Hy	4	10.80	9.18	8.64
2F695	MW-3	3 Hy	3.5	11.70	9.95	9.36
2F696	MW-5	5 Hy	3	13.50	11.48	10.80

VARIABLE INDUCTORS

Variable units for use in tuned audio circuits. Adjustment of set screw on side of case permits change in inductance of +85% to —45% of mean value shown. In die-cast case. Size: 1 11/32x1 1/4x1 7/16". Current rating shown is max. MADC. Weight, 5½ oz.

Stk. No.	Type	DC MA	Hys.	1-24	25-99	100-Up
3F404	VIC-5	35	.053	6.60	5.61	5.28
3F405	VIC-6	30	.084			
3F406	VIC-7	25	.13			
3F407	VIC-8	21	.21	6.90	5.87	5.52
3F408	VIC-9	18	.34			
3F409	VIC-10	15	.54			
3F410	VIC-11	12	.85			
3F411	VIC-12	10	1.3	7.20	6.12	5.76
3F412	VIC-13	8	2.2			
3F413	VIC-14	7	3.4			
3F414	VIC-15	6	5.4	7.50	6.38	6.00
3F416	VIC-17	4	13	7.50	6.38	6.00
3F418	VIC-19	3	33	7.80	6.63	6.24
3F419	VIC-20	2	52	8.40	7.14	6.72

TVC HERMETIC VARIDUCTORS

TVC Inductors are identical to the HVC units below but provide taps at 30% and 50% of total turns. Manufactured and guaranteed to MIL-T-27B by full environmental testing. Ideal for oscillator circuits impedance matching, and phase inversion where high Q and adjustable inductance are required. Dimensions: 1⅛ x 25/32 x 1 9/32". Approximate weight: 2 ounces.

Stock No.	Type	Min. Hys.	Mean Hys.	Max. Hys.	DC Ma	1-24	25-99	100-Up
3F163	TVC-1	.002	.006	.02	100			
3F164	TVC-2	.005	.015	.05	60			
3F165	TVC-3	.011	.040	.11	40	11.10	9.44	8.88
3F166	TVC-4	.03	.1	.3	30			
3F167	TVC-5	.07	.25	.7	20			
3F168	TVC-6	.2	.6	2	15			
3F169	TVC-7	.5	1.5	5	10			
3F175	TVC-8	1.1	4	11	7	11.70	9.95	9.36
3F176	TVC-9	3	10	30	5			
3F177	TVC-10	7	25	70	3.5	12.90	10.97	10.32
3F178	TVC-11	20	60	200	2	14.10	11.99	11.28
3F179	TVC-12	50	150	500	1.5	15.30	13.01	12.24

HERMETIC VARIDUCTORS

Variable inductors with higher "Q" and wider inductance ranges . . . plus hermetic sealing to MIL-T27B specs. Screw adjustment on top permits inductance changes from —70% to +200% of mean value DC current shown is maximum recommended. All 1⅛x25/32"x1 9/32". Weight, 2 ounces.

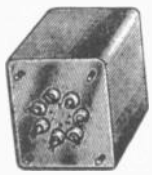
Stock No.	Mfr's. Type	Min. Hys.	Mean Hys.	Max. Hys.	DC Ma	1-24	25-99	100-Up
3F534	HVC-1	002	.006	.02	100			
3F535	HVC-2	.005	.015	.05	60			
3F536	HVC-3	.011	.040	.11	40	9.00	7.65	7.20
3F537	HVC-4	.03	.1	.3	30			
3F538	HVC-5	.07	.25	.7	20			
3F539	HVC-6	.2	.6	2	15			
3F540	HVC-7	.5	1.5	5	10			
3F541	HVC-8	1.1	4.0	11	7	9.60	8.16	7.68
3F542	HVC-9	3.0	10	30	5			
3F543	HVC-10	7.0	25	70	3.5	9.90	8.42	7.92
3F544	HVC-11	20	60	200	2	10.80	9.18	8.64
3F545	HVC-12	50	150	500	1.5	12.00	10.20	9.60

UTC HIGH Q TOROID INDUCTORS

The MQ series are ideal for audio, carrier and supersonic fields. Laboratory adjusted to 1% tolerance, inductance is virtually independent of frequency, temperature and vibration. Low hum pickup. Shielded case affords high permeability. Hermetically sealed to meet MIL-T-27B. Case similar to HVC above.

‡Indicates inductances expressed in mhy.

No.	Type	Hy	Ma.	Size	Oz.	1-24	25-99	100-Up
2F805	MQA-5	50‡	100	1 9/32x1 1/16x1 23/32"	4	8.70	7.40	6.96
3F502	MQA-6	70‡	80	1 9/32x1 1/16x1 23/32"	4	9.00	7.65	7.20
3F503	MQA-7	120‡	60	1 9/32x1 1/16x1 23/32"	4	9.30	7.91	7.44
3F504	MQA-8	.2	50	1 9/32x1 1/16x1 23/32"	4	9.60	8.16	7.68
3F505	MQA-10	.5	30	1 9/32x1 1/16x1 23/32"	4	10.20	8.67	8.16
3F506	MQA-11	.7	25	1 9/32x1 1/16x1 23/32"	4	10.50	8.93	8.40
3F507	MQA-12	1	20	1 9/32x1 1/16x1 23/32"	4	10.80	9.18	8.64
3F508	MQA-13	1.5	17	1 9/32x1 1/16x1 23/32"	4	11.10	9.44	8.88
3F509	MQA-14	2.5	13	1 9/32x1 1/16x1 23/32"	4	11.40	9.69	9.12
3F510	MQA-15	4	10	1 9/32x1 1/16x1 23/32"	4	12.00	10.20	9.60
3F511	MQA-17	10	7	1 9/32x1 1/16x1 23/32"	4	13.80	11.73	11.04
3F514	MQB-5	.5	60	2 9/16x1 3/16x2 13/16"	14	14.10	11.99	11.28
3F515	MQB-6	1	40	2 9/16x1 3/16x2 13/16"	14	14.40	12.24	11.52
3F516	MQB-7	2	30	2 9/16x1 3/16x2 13/16"	14	14.70	12.50	11.76
3F521	MQB-8	3.5	22	2 9/16x1 3/16x2 13/16"	14	15.00	12.75	12.00
3F527	MQE-7	100‡	35	1 1/16x1/2x1 7/32"	1.5	8.40	7.14	6.72
2F743	MQE-9	.25	22	1 1/16x1/2x1 7/32"	1.5	8.70	7.40	6.96
2F744	MQE-10	.4	17	1 1/16x1/2x1 7/32"	1.5	9.00	7.65	7.20
3F529	MQE-11	0.6	14	1 1/16x1/2x1 7/32"	1.5	9.00	7.65	7.20



OSCILLOSCOPE TRANSFORMER

Type H-198. Highly shielded scope transformer in hermetically sealed Mil-T-27BTF4RX specs. 800, 1600 & 2400 V. plate windings (no CT) supply approx. 1000, 2000 or 3000 V. DC at 5 ma. allowing great flexibility in application. Has 1.25 V. .2A rect. fil. winding connected to one end of HV winding. Separate 6.3 V. .6A fil. winding insulated to withstand anode voltages. Pri. 115V 50/60 cycle. Case similar to SM. Size 3 1/16x2 5/16x4 1/4".

Stk. No.	Wt.	Type	1-24	25-99	100-Up
3F078	4.5	H-198	27.00	22.95	21.60

Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

HERMETICALLY SEALED COMPONENTS

Hermetically sealed audio units that meet MIL-T-27B-TF4RX specifications. Units in RC-25 case are $1\frac{13}{32}$x$\frac{61}{64}$x$1\frac{7}{16}$" Mtg. (slot center) $1\frac{1}{8}$ to $1\frac{17}{32}$", and weigh 2 oz.; RC-50 case units are $1\frac{5}{8}$x$1\frac{5}{8}$x $2\frac{5}{16}$", weight $\frac{1}{2}$ lb. Response ±2 db. § center tapped (*split).

MINIATURE AUDIO UNITS IN RC-25 CASE

Stock No.	No.	Uses	Pri. Ohms	Sec. Ohms	Response in Cycles	1-24	25-99	100-up
3F450	H-1	Mike, pick-up, line to grid	50,200§ 500§	50,000	50-10,000	9.00	7.65	7.20
3F453	H-4	Sgl.-pl. Sgl.-g. DC in pri.	15,000	60,000	200-10,000	7.80	6.63	6.24
3F454	H-5	Sgl. pl.-PP g.	15,000	95,000§	50-10,000	8.40	7.14	6.72
3F455	H-6	As above, with DC in pri.	15,000	95,000 split	200-10,000	10.20	8.67	8.16
3F456	H-7	Single or PP plates to line	20,000§	150/600*	200-10,000	9.60	8.16	7.68
3F457	H-8	Mix/Match	150/600*	600§	50-10,000	9.00	7.65	7.20
3F460	H-11	Reactor 300 hy @ 0 DC, 50 hy @ 3 ma DC 6000 ohms				7.50	6.38	6.00
2F721	H-13	Tr. Interstage	10K/2.5K*	10K/2.5K	100-10,000	9.00	7.65	7.20
2F722	H-14	Tr. Interstage	10K/2.5K*	4K/1K*	100-10,000	9.00	7.65	7.20
2F723	H-15	Tr. to line	1,500 CT*	500/125*	100-10,000	9.00	7.65	7.20

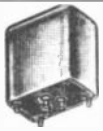
COMPACT AUDIO UNITS IN RC50 CASE

3F487	H-19A	Bal. line to grid 1:14	250§ 500§/ split	50,000§ 100,000§ split	30-20,000	16.50	14.03	13.20
2F724	H-20	Plate or PP to PP grids	15,000 split	80,000 split	30-20,000	15.90	13.52	12.72
2F725	H-25	Mixing or trans to line	500§	500/125 split	40-20,000	15.00	12.75	12.00
2F726	H-26	Transistor Interstage	10K/2.5K split	2K/500 split	40-20,000	15.00	12.75	12.00

RC25

RC50

SM


BMI

UTC INTERSTAGE AND LINE FILTERS

Mtet MIL-F-18327B specs. BMI and BML types are band-pass units. HMI and HML types are high-pass units. LMI types are low-pass units. Filters with I in type number are interstage, input imp., 10,000 ohms, L in type number are line units. All housed in hermetically sealed cases, shielded to reduce hum pick-up. Base area. $1\frac{3}{16}$x$1\frac{11}{16}$". Mtg. ctrs., $\frac{3}{4}$x$1\frac{1}{4}$". Ht.: BMI, LMI, BML, $1\frac{5}{8}$" HMI, HML, LML, $2\frac{1}{2}$". Average weight, 8 ounces.

Stock No.	Type	Freq.	1-24	25-99	100-Up
3F477	BMI-60	60			
3F558	BMI-100	100			
3F559	BMI-120	120	30.00	25.20	24.00
3F478	BMI-400	400			
3F479	BMI-1000	1000			
3F566	BMI-10000	10000			
2F806	HMI-100	100	31.50	26.78	25.20
3F567	HMI-200	200	31.50	26.78	25.20
3F573	BML-1000	1000	30.00	25.50	24.00
2F729	BML-400	400	30.00	25.50	24.00
3F481	LMI-200	200			
3F574	LMI-400	400			
3F575	LMI-500	500			
3F576	LMI-800	800			
3F577	LMI-1000	1000	31.50	26.78	25.20
2F807	LMI-2000	2000			
3F482	LMI-3000	3000			
3F580	LMI-4000	4000			
3F581	LMI-5000	5000			
3F484	HML-200	200			
3F583	HML-300	300	39.00	33.15	31.20
3F584	HML-500	500			
2F808	LML-8000	8000			
2F809	LML-2500	2500	31.50	26.78	25.50
2F810	LML-3000	3000			
3F590	LML-4000	4000			

BPM MINIFILTERS

Same characteristics as larger units, with slightly lower attenuation and operating levels. MIL-F-18327B. Input and output 10,000 ohms. Case similar to SM above Size: $\frac{3}{4}$x$\frac{3}{4}$x$1\frac{1}{8}$". Wt. 1 oz.

2F730	BPM-400	400			
3F037	BPM-1000	1000	27.00	22.95	21.60
2F811	BPM-10000	10000			

H-97

H-94

H-141

TRANSISTOR INVERTER TRANSFORMERS

Highly efficient, small size transistor inverter transformers, Hermetically sealed to MIL-T-27BTF4SX specs. Optimum results at approximately 1000 Hz. DC output shown is for 12/14 or 24/28 V battery. With 6/7 V battery, current ratings are same but output voltages are halved. Shpg. wts. H-97, $\frac{3}{8}$ lbs.; H-98, 2/3 lbs.; H-99, $1\frac{3}{4}$ lbs.; H-100 $2\frac{1}{2}$ lbs.

Stock No.	Type No.	DC V	Ma	Size (inches)	1-24	25-99	100-Up
2F731	H-97	250	60	$1\frac{5}{16}$x$1\frac{5}{16}$x$1\frac{3}{4}$	16.50	14.03	13.20
2F732	H-98	375	100	$1\frac{5}{8}$x$1\frac{5}{8}$x$2\frac{3}{8}$	17.40	14.79	13.92
2F733	H-99	425	175	$2\frac{5}{16}$x$2\frac{1}{16}$x$3\frac{1}{8}$	22.20	18.87	17.76
2F734	H-100	550	200	$2\frac{3}{4}$x$2\frac{3}{8}$x$2\frac{13}{16}$	22.20	18.87	17.76

● *NEW* TRANSISTOR SUPPLY TRANSFORMERS

Hermetically sealed, metal cased to MIL-T-27B. Primary 115 V 50/60 Hz, tapped on H-143 to give dual voltages shown. Shpg. wt. approx. 1 lb., except H-143; $4\frac{1}{2}$ lbs.

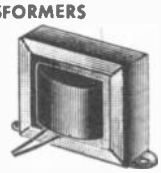
Stock No.	Type	Secondary Volts	Secondary Amps	Size (Inches)	1-24	25-99	100-Up
2F812	H-141	20CT	0.3	$1\frac{15}{16}$x$1\frac{13}{16}$x$2\frac{1}{16}$	10.80	9.18	8.64
2F813	H-142	20CT	0.6	$1\frac{15}{16}$x$1\frac{13}{16}$x$2\frac{3}{4}$	13.50	11.48	10.80
2F814	H-143	17/21½	1.5	$3\frac{1}{16}$x$2\frac{5}{8}$x$4\frac{1}{4}$	19.80	16.83	15.84
		17/21½	1.5				

● *NEW* UNIVERSAL SUPPLY TRANSFORMERS

High reliability units for many applications. Metal cases hermetically sealed to MIL-T-27B. Pri. 115V 50/60 hz with taps to modify sec. V ± 6%, and +12%. (†) Approx. DCV when used with typical silcon rectifier circuits.

Stock No.	Type	Sec. DC Range†	Wt. Lbs.	1-24	25-99	100-Up
2F815	H-915	6V/.085A-53V/.025A	⅜	13.50	11.48	10.80
2F816	H-925	6V/.28A-53V/.085A	⅔	14.10	11.99	11.28
2F817	H-935	6V/1.52A-53V/.48A	$1\frac{3}{4}$	15.60	13.26	12.48
2F818	H-94	6V/3.8-53V1.2A	$4\frac{1}{2}$	22.50	19.13	18.00
2F819	H-95	6V/9A-53V/3A	$8\frac{1}{2}$	30.00	25.50	24.00
2F820	H-96	6V/23A-53V/7.5A	21	54.00	45.90	43.20
2F821	H-965	12V/1.9A-106V/0.6A	$4\frac{1}{2}$	22.50	19.13	18.00

FILAMENT/TRANSISTOR TRANSFORMERS



Type FT Channel Frame. Primary: 115 volts 50/60 Hz. Test Volts RMS: 1500 All units are low temperature rise, vacuum-sealed against humidity with special impregnating materials to prevent corrosion and electrolysis. Approximate weight 2 lbs. FT13, FT14, FT15 & FT16 have taps on primary to modify nom. sec. V. ±6%, +12%.

Stock No.	Type No.	Secondary Volts	Secondary Amps	Mtg. Ctrs.	1-24	25-99	100-Up
3F295	FT2	6.3 CT	1.2	$2\frac{3}{8}$"	4.50	3.83	3.60
3F296	FT4	6.3 CT	3	$2\frac{13}{16}$"	5.10	4.34	4.08
3F297	FT6	5 CT	3	$3\frac{1}{8}$"	5.70	4.85	4.56
3F298	FT8	6.3 CT	8	$3\frac{9}{16}$"	6.30	5.36	5.04
3F299	FT10	24 CT or 12	2 4	$3\frac{9}{16}$"	6.90	5.87	5.52
2F702	FT13	26 VCT	.04	$1\frac{3}{4}$"	5.70	4.85	4.56
2F703	FT14	26 VCT	.25	$2\frac{3}{8}$"	5.70	4.85	4.56
2F822	FT15	48VCT	1	$3\frac{9}{16}$"	7.80	6.63	6.24
2F823	FT16	11VCT 5.5 VCT	2½ 5	$3\frac{1}{8}$"	7.80	6.63	6.24

POWER LINE ISOLATION TRANSFORMERS

Ultrashielded hermetically sealed units. Less than 1/10th mmfd. effective capacity between primary and secondary permits isolation formerly obtained only from battery power. Separate terminal for each shield. Input and output terminals on opposite sides of case. Primary & secondary—115 V 50/60 Hz.

Stock No.	Type No.	Watts Mil.	Watts Ind.	Wt. Lbs.	1-24	25-99	100-up
2F735	HIT-1	50	60	5½	33.00	28.05	26.40
2F736	HIT-15	120	150	13	39.00	33.20	31.20
2F737	HIT-2	160	200	15½	48.00	40.80	38.40
2F738	HIT-3	400	480	35	69.00	58.70	55.20
		Primary & Secondary — 115 V. 400 Cycles					
2F753	HIT-450	80	100	5½	33.00	28.05	26.40

Transformers

A

G-1 G-2
G-3 G-4

G-5
G-7 thru G-12

Fig. A—ULTRA COMPACT "A" SERIES

Excellent shielding Max. level 7 db. For top or bottom mtg. Size 1½x1½x2". ‡Indicates split winding. Wt. ½ lb.

Stock No.	Type	Pri. Imped.	Sec. Imped.	±2 db.	1-24	25-99	100-Up
3F340	A-10	50, 125-150, 200-250, 333, 500-600	50,000‡	20-20,000	15.00	12.75	12.00
3F341	A-11	50, 200, 500	50,000 CT	20-20,000	12.00	10.20	9.60
3F342	A-12	50, 125-150, 200-250, 333, 500-600	80,000‡	20-20,000	13.50	11.48	10.80
3F354	A-15	10,000/2,500‡	2000/500‡	40-20,000	10.80	9.18	8.64
3F344	A-16	15,000	60,000	20-20,000	11.40	9.69	9.12
3F345	A-18	15,000	80,000pp‡	20-20,000	13.20	11.22	10.56
3F346	A-19	15,000, 8 ma DC Pri.	80,000pp‡	40-20,000	12.00	10.20	9.60
3F347	A-20	50, 125-150, 200-250, 333, 500-600	Same as Pri.	10-50,000	14.40	12.24	11.52
3F348	A-21	50, 200-250, 500-600	Same as Pri.	30-30,000	12.00	10.20	9.60
3F355	A-22	500 CT	500/125‡	40-20,000	9.90	8.42	7.92
2F824	A-23	500 CT	16/4‡	40-20,000	9.90	8.42	7.92
3F349	A-24	15,000‡	50,125-150 200-250, 333, 500-600	20-40,000	14.70	12.50	11.76
3F350	A-25	15,000	Same as above	40-20,000	12.00	10.20	9.60
3F351	A-26	30,000‡ P to P	Same as above	20-40,000	15.30	13.01	12.24
3F352	A-27	100,000‡	Same as above	30-20,000	13.50	11.48	10.80
3F079	A-34	25,000/6250‡	500/125‡	30-20,000	10.20	8.67	8.16
3F080	A-35	10,000/2500‡	500/125‡	30-20,000	9.90	8.42	7.92
3F098	A-37	500/125‡	50/12.5‡	40-20,000	9.60	8.16	7.68
2F739	A-39	600/150‡	2000/500‡	20-20,000	11.70	9.95	9.36
2F740	A-42	600/150‡	600/150‡	20-30,000	14.70	12.50	11.76
2F741	A-30	Audio inductor 250 hys @ 5 ma 65 hys @ 10 ma.			10.20	8.67	8.16
3F357	A-32	Filter inductor 60 hys @ 15 ma, 15 hys. @ 30 ma.‡			7.50	6.38	6.00
2F742	A-42	Filter inductor ‡ Series 4 hys @ 50 ma Par. 1 hy @ 100 ma			6.60	5.61	5.28
3F050	A-40	Transformer, 115V 60 cycle to two 6.3V CT .2A secs.			9.90	8.42	7.92
3F358	A-33	Mumetal shield slip fit over A case			3.00	2.55	2.40

UNIVERSAL MODULATION TRANSFORMERS

Stock No.	Type	Watts	Fig.	1-24	25-99	100-Up
3F170	S-18	12	G-3	8.40	7.14	6.72
3F171	S-19	30	G-4	9.90	8.42	7.92

UNIVERSAL OUTPUTS—TO LINE AND VOICE COIL

All have secondary impedance: 500, 15, 8, 2 ohms

Stock No.	Type	Primary Impedan	W.	Fig.	1-24	25-99	100-Up
3F190	S-14	2500, 4000, 7,000, ,10,000	10	G-2	7.20	6.12	5.76
3F191	S-15	PP tubes: 4000, 5000, 10,000	12	G-2	7.80	6.63	6.24

"S" SERIES SIZE AND WEIGHT

Case	HxWxD	Lbs.	Case	HxWxD	Lbs.
G-1	1⅞x2 11/16x1¾"	1	G-8	4⅝x5⅜x5⅜"	12
G-2	2 15/16x3 9/16x1 15/16"	1½	G-9	5⅞x5⅜x6¾"	21
G-3	2½x3⅝x2 29/32"	2	G-10	5⅞x6⅛x6⅝"	24
G-4	2 15/16x4½x2 29/32"	3	G-11	5⅞x6 11/16x7⅜"	31
G-5	3¾x3⅛x4½"	4½	G-12	10¼x7⅜x9¼"	52
G-7	4⅝x4⅝x5½"	8			

PLATE AND FILAMENT TRANSFORMERS

Stock No.	Type	Ratings	Fig.	1-24	25-99	100-Up
3F081	S-40	H.V.; 1050-850 CT at 250 ma. Rect. fil. 5V-3A, fil. No. 1, 6.3 VCT-3A; fil. No. 2, 6.3 VCT-3A.	G-7	19.50	16.58	15.60
3F032	S-41	H.V.; 1200 CT at 200 ma. Rect. fil. 5V-3A; fil. No. 1, 7.5 V tapped 6.3 V-3A; fil. No. 2, 6.3 VCT-2A.	G-7	19.50	16.58	15.60
3F033	S-42	H.V.; 1200-1050 CT at 300 ma. Rect fil.; 5V-6A; fil. No. 1, 7.5 V tapped 6.3 V-3A; fil. 6.3 VCT-3A.	G-8	21.00	17.85	16.80

PLATE TRANSFORMERS

Stock No.	Type	High VAC	DCMA	Fig.	1-24	25-99	100-Up
3F040	S-44	1150-1050 CT	500	G-9	27.00	22.95	21.60
3F041	S-45	1800-1500 CT	200	G-8	22.50	19.13	18.00
3F043	S-47	3000-2500 2000 CT	300	G-10	36.00	30.60	28.80
3F044	S-48	Same as above	500	G-11	42.00	35.70	33.60
3F045	S-49	4200-3600-3000 CT	300	G-11	39.00	33.15	31.20
3F046	S-50	6000-5000 CT	300	G-12	66.00	56.10	52.80

FILTER, SWINGING AND AUDIO CHOKES

**Audio. M=Millihenries, A=Amperes. ‡Swinging. All oothers are filter types.

Stock No.	Type	Hnry.	Ma.	Ohms	Test V.	Fig.	1-24	25-99	100-Up
3F100	S-23**	300	5	5000	1500	G-2	4.80	4.08	3.84
3F104	S-27	25	75	350	1500	G-4	5.40	4.59	4.32
3F106	S-29	6	175	90	1500	G-4	5.40	4.59	4.32
3F107	S-30‡	20/4	175	90	1500	G-4	5.40	4.59	4.32
3F108	S-31	6	225	100	2700	G-5	7.50	6.38	6.00
3F109	S-32‡	20/4	225	100	2700	G-5	7.50	6.38	6.00
3F110	S-33	8	300	100	4000	G-7	9.90	8.42	7.92
3F111	S-34‡	20/4	300	100	4000	G-7	10.50	8.93	8.40
3F112	S-35	8	400	60	5000	G-8	12.90	10.97	10.32
3F114	S-37	8	550	60	6000	G-8	16.50	14.03	13.20
3F115	S-38‡	20/4	550	60	6000	G-8	16.50	14.03	13.20
3F095	S-80‡	45/-10M	1.75A	.5	500	G-1	4.50	3.83	3.60
3F096	S-81‡	100/-8M	2.5A	.6					
		25/2M	5A	.15	1500	G-3	6.60	5.61	5.28

FILAMENT TRANSFORMERS—105-115 V PRIMARIES

Stock No.	Type	Sec. (CT)	Sec. Amps	Insulation V.	Fig.	1-24	25-99	100-Up
3F000	S-53	2.5	10	1,500	G-3	6.90	5.87	5.52
3F002	S-55	6.3	3	1,500	G-3	6.00	5.10	4.80
3F004	S-57	2.5	10	10,000	G-5	9.90	8.42	7.92
3F005	S-58	2.5	20	10,000	G-5	10.50	8.93	8.40
3F007	S-60	6.3, 7.5	22	10,000	G-7	15.00	12.75	12.00
3F008	S-61	5-5.25	10	3,000	G-5	12.00	10.20	9.60
3F009	S-62	10	10	3,000	G-5	10.20	8.67	8.16
3F010	S-63	11, 12 14	10	5,000	G-7	15.00	12.75	12.00

TRANSISTOR FILAMENT SUPPLY TRANSFORMERS

Primary 115 V, 50/60 cycles, tapped on S-77 for dual secondary voltages.

Stock No.	Type No.	Sec. V RMS	Sec. A RMS	Fig.	1-24	25-99	100-Up
3F140	S-75	6.3 6.3	.6 .6	G-1	6.60	5.81	5.28
3F141	S-76	12.6 12.6	2 2	G-4	9.90	8.42	7.92
3F142	S-77	17/21.5 17/21.5	1.5 1.5	G-5	11.40	9.69	9.12

MULTIPLE FILAMENT TRANSFORMERS

Insulation, 3000 V. G-5 case.

Stock No.	Type	Fil. 1 V	Fil. 1 A	Fil. 2 V	Fil. 2 A	1-24	25-99	100-Up
3F026	S-70	6.3CT	5	6.3CT	5	11.40	9.69	9.12

Depend on NEWARK for the Latest Top-Quality Equipment. Complete On-the-Shelf Stocks — Lowest Prices — Fast Service.

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

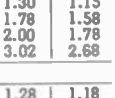
TYPE AFH TWIST PRONG ELECTROLYTICS

Designed for filter audio bypass applications in radio-TV and amplifier equipment. Also used in many industrial applications. Manufactured to exceed requirements of EIA Spec. RS-154. 85°C operation; high purity aluminum foil throughout; moisture-resistant seal. For use over a wide temperature range with minimum change capacitance. Positive lugs on bakelite base. Can serve as common negative terminal with twist lugs for upright mounting on metal chassis. Bakelite metal mounting washers furnished. Shpg. wt., 4 oz.

SINGLE SECTION — 15V

Stk. No.	Type	Mfd.	D x L	1-24	25-49	50-99	100-249
60F300	1-02	1000	1x1½"	1.68	1.10	.86	.68
60F301	1-03	2000	1⅜x2"	2.28	1.61	1.25	1.00
60F302	1-04	3000	1⅜x2"	2.81	2.00	1.56	1.24
			SINGLE SECTION — 25V				
16F822	1-08	500	1x2"	1.68	.96	.75	.59
16F823	1-10	1000	1⅜x2"	2.34	1.42	1.11	.89
			SINGLE SECTION — 50V				
60F303	1-11	100	¾x2"	1.09	.63	.50	.40
60F304	1-13-05	500	1x3"	1.75	1.05	.81	.65
60F305	1-14	1000	1⅜x3½"	2.48	1.64	1.28	1.01
60F306	1-14-50	1500	1⅜x3"	2.90	2.05	1.60	1.28
			SINGLE SECTION — 150V				
60F307	1-21	100	1x2"	1.32	.81	.63	.51
16F824	1-24-01	150	1⅜x2"	1.42	1.06	.83	.66
60F308	1-24-25	200	1⅜x2"	1.62	1.14	.89	.72
60F309	1-24-75	300	1⅜x2½"	1.85	1.34	1.05	.84
16F825	1-24-58	500	1⅜x4"	2.28	1.73	1.34	1.08
			SINGLE SECTION — 450V				
60F310	1-50	20	1x1½"	1.19	.79	.62	.50
60F311	1-51	30	1x1½"	1.29	.88	.68	.55
60F312	1-52	40	1x1¾"	1.35	.96	.75	.59
16F826	1-53	50	1x2½"	1.55	1.05	.81	.65
60F313	1-55	80	1x⅜x2½"	2.01	1.46	1.13	.90
60F314	1-55-20	100	1x⅜x2½"	2.28	1.62	1.25	1.00
16F827	1-55-25	125	1x⅜x3"	2.61	1.85	1.44	1.14
			DUAL SECTION — 150V				
60F317	2-08	20-20	1x1½"	1.12	.79	.62	.50
60F318	2-15	50-30	1x1½"	1.32	.87	.67	.54
60F319	2-20-50	125-100	1⅜x2"	2.31	1.30	1.01	.80
60F320	2-23	200-200	1⅜x3"	2.64	1.62	1.25	1.01
			DUAL SECTION — 450V				
60F321	2-47	10-10	1x1½"	1.25	.88	.68	.55
60F322	2-51	20-20	1x2"	1.68	1.06	.83	.66
60F324	2-54	30-30	1⅜x2"	2.01	1.36	1.06	.85
60F325	2-56	40-20	1⅜x2"	1.98	1.38	1.07	.86
60F326	2-57	40-40	1⅜x2½"	2.28	1.55	1.21	.97
			TRIPLE SECTION — 450V				
60F327	3-31	10-10-10	1x2"	1.71	1.07	.83	.66
60F328	3-36	20-20-20	1⅜x2"	2.38	1.47	1.14	.91
60F329	3-44	40-40-40	1⅜x3"	3.23	1.98	1.54	1.23
			QUADRUPLE SECTION — 450V				
60F330	4-10	10-10-10-10	1⅜x3"	2.21	1.38	1.07	.86
60F331	4-14	20-20-20-20	1⅜x2½"	3.10	1.73	1.34	1.08
60F332	4-18-45	40-40-40-40	1⅜x3½"	4.26	2.40	1.87	1.50

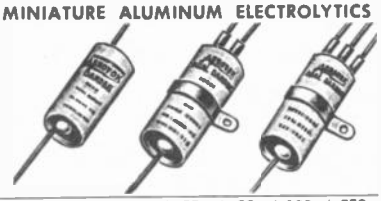
TYPE HCB HIGH CAPACITY LOW VOLTAGE ELECTROLYTICS



Polarized aluminum electrolytics in heavy duty bakelite cases for resistance to moisture, oil and dirt. Temperature range —40°C to 85°C. Wt., 4 oz.

Stock No.	Mfd.	Size	1-9	10-24	25-49	50-99	100-249
12 WVDC—18 VOLT SURGE							
60F491	2000	1⅞6x2¾"	3.36	2.88	1.68	1.30	1.15
60F492	4000	1⅞6x3⅜"	4.60	3.95	2.30	1.78	1.58
60F493	6000	1¹³⁄₁₆x3⅜"	5.20	4.46	2.60	2.00	1.78
60F484	10000	1¹³⁄₁₆x4⅜"	7.82	6.70	3.90	3.02	2.68
18 WVDC—25 VOLT SURGE							
60F495	1000	1⅞6x2¾"	3.31	2.83	1.65	1.28	1.18
60F496	2000	1⅞6x2¾"	3.47	2.97	1.74	1.34	1.19
60F497	4000	1¹³⁄₁₆x3⅜"	5.37	4.61	2.69	2.07	1.84
60F498	6000	1¹³⁄₁₆x3⅜"	5.62	4.82	2.81	2.17	1.93
25 WVDC—40 VOLT SURGE							
60F499	1000	1⅞6x2¾"	3.19	2.73	1.59	1.23	1.02
60F505	2000	1⅞6x3⅜"	4.15	3.56	2.07	1.60	1.42
60F506	4000	1¹³⁄₁₆x3⅜"	5.58	4.79	2.79	2.15	1.91
60F507	6000	1¹³⁄₁₆x4⅜"	7.12	6.10	3.56	2.72	2.44
50 WVDC—75 VOLT SURGE							
60F508	500	1⅞6x3⅜"	3.33	2.85	1.66	1.28	1.14
60F509	1000	1⅞6x3⅜"	4.25	3.65	2.13	1.64	1.46
60F510	2000	1¹³⁄₁₆x3⅜"	5.06	4.34	2.53	1.95	1.73
60F511	4000	2¼6x4⅜"	7.32	6.27	3.66	2.82	2.51
150 WVDC—185 VOLT SURGE							
60F512	1000	1¹³⁄₁₆x4⅜"	6.44	5.52	3.22	2.48	2.21

TYPE PRS DANDEE MINIATURE ALUMINUM ELECTROLYTICS



Compact, electrolytic tubular capacitors furnished in aluminum cans with cardboard insulating sleeves. Designed for compact assemblies in T.V.'s or radios. Shpg. wt: 4 oz.

Stk. No.	Mfd.	Volts	D x L	1-24	25-49	50-99	100-249	250-499
16F600	8	700	1⁵⁄₁₆x2¾"	1.91	1.46	1.14	.78	.91
16F602	16	700	1¼6x3⅜"	2.31	1.75	1.36	.94	1.09
16F604	10	600	1⁵⁄₁₆x2¾"	1.95	1.49	1.16	.79	.92
16F606	16	600	1⁵⁄₁₆x3¼"	2.28	1.73	1.34	.91	1.07
16F663	1	450	7⁄16xx1¼"	.73	.56	.43	.31	.35
16F656	2	450	9⁄16x1¼"	.76	.57	.44	.31	.35
16F611	4	450	9⁄16x1½"	.76	.57	.45	.31	.36
16F612	8	450	11⁄16x1⅝"	.83	.62	.51	.41	.35
16F613	10	450	11⁄16x1⅞"	.86	.65	.51	.41	.35
16F614	12	450	13⁄16x1½"	.89	.67	.55	.44	.38
16F615	16	450	13⁄16x1¾"	.92	.70	.58	.46	.40
16F616	20	450	13⁄16x2"	1.02	.79	.62	.50	.43
16F628	30	450	1⁵⁄₁₆x2⅛"	1.12	.84	.68	.55	.47
16F618	40	450	1⁵⁄₁₆x2½"	1.19	.91	.70	.57	.50
16F664	50	450	1⁵⁄₁₆x3¼"	1.39	1.07	.83	.66	.57
16F657	60	450	1¹⁄₁₆x3"	1.55	1.17	.91	.73	.63
16F659	100	450	1¹⁄₁₆x4"	2.11	1.29	1.00	.80	.69
16F623	4	250	7⁄16x1¼"	.66	.50	.41	.33	.29
16F624	8	250	9⁄16x1⅜"	.76	.56	.45	.36	.31
16F627	20	250	11⁄16x1⅝"	.89	.67	.55	.44	.37
16F665	30	250	11⁄16x2"	.95	.72	.58	.46	.40
16F628	40	250	13⁄16x1¾"	1.02	.76	.63	.51	.44
16F629	4	150	7⁄16x1¼"	.66	.46	.36	.29	.24
16F829	10	150	9⁄16x1⅜"	.69	.50	.39	.31	.26
16F632	16	150	9⁄16x1½"	.76	.54	.42	.33	.29
16F633	20	150	9⁄16x1⅝"	.79	.55	.43	.34	.30
16F635	30	150	11⁄16x1½"	.86	.61	.47	.37	.32
16F636	40	150	11⁄16x1¾"	.89	.64	.50	.40	.34
16F637	50	150	13⁄16x1¾"	.92	.65	.51	.41	.35
16F830	60	150	13⁄16x1¾"	.99	.69	.54	.43	.37
16F661	80	150	13⁄16x2"	1.06	.75	.58	.46	.40
16F667	100	150	13⁄16x2¼"	1.16	.81	.64	.51	.44
16F668	150	150	1⁵⁄₁₆x2⅜"	1.25	.89	.69	.56	.48
16F831	200	150	1⁵⁄₁₆x2⅞"	1.46	1.02	.80	.64	.55
16F832	300	150	1¹⁄₁₆x3"	1.68	1.10	.86	.68	.58
16F638	10	50	7⁄16x1¼"	.66	.46	.36	.29	.24
16F639	25	50	7⁄16x1⅜"	.69	.48	.37	.30	.25
16F640	50	50	11⁄16x1½"	.79	.56	.44	.35	.31
16F641	100	50	11⁄16x1¾"	.92	.65	.51	.41	.35
16F672	150	50	13⁄16x1¾"	1.02	.72	.56	.45	.39
16F673	250	50	1⁵⁄₁₆x1¾"	1.16	.88	.70	.56	.48
16F833	500	50	1⁵⁄₁₆x2¼"	1.58	1.21	.95	.76	.65
16F642	10	25	7⁄16x1¼"	.66	.46	.36	.29	.24
16F834	20	25	7⁄16x1¼"	.66	.47	.36	.30	.30
16F835	25	25	7⁄16x1¼"	.66	.48	.37	.30	.30
16F644	50	25	7⁄16x1⅜"	.73	.52	.40	.32	.28
16F645	100	25	9⁄16x1⅝"	.89	.63	.48	.40	.34
16F646	250	25	13⁄16x1¾"	1.12	.86	.67	.54	.46
16F647	500	25	13⁄16x2¼"	1.52	1.18	.91	.73	.63
16F836	1000	25	11⁄16x1⅞"	2.18	1.67	1.41	1.23	1.06
16F837	100	15	9⁄16x1⅜"	.83	.57	.44	.35	.31
16F838	250	15	11⁄16xx1⅝"	1.02	.76	.63	.51	.44
16F839	500	15	13⁄16x1¾"	1.16	.87	.70	.56	.48
16F840	1000	15	1⁵⁄₁₆x1⅞"	1.52	1.18	.91	.74	.64
16F841	2000	15	1⁵⁄₁₆x3"	2.11	1.39	1.07	.86	.74
16F842	100	6	7⁄16x1¼"	.79	.55	.43	.34	.30
16F843	250	6	9⁄16x1⅜"	.89	.69	.54	.43	.37
16F844	500	6	11⁄16x1½"	1.02	.79	.62	.50	.43
16F845	1000	6	11⁄16x2⅛"	1.25	.94	.76	.61	.52
16F846	1500	6	13⁄16x2"	1.39	1.07	.84	.67	.57
16F847	2000	6	13⁄16x2⅜"	1.52	1.19	.92	.74	.64
			TYPE PRS—DUAL SECTION					
16F700	8-8	450	13⁄16x1¾"	1.12	.87	.73	.58	.51
16F702	16-16	450	1⁵⁄₁₆x2¼"	1.49	1.17	.90	.73	.63
16F848	20-20	450	1⁵⁄₁₆x2¼"	1.65	1.26	.98	.78	.67
16F849	30-30	450	11⁄16x3"	1.98	1.55	1.21	.97	.84
16F706	40-40	450	11⁄16x3¾"	2.21	1.71	1.42	1.13	.98
16F708	30-30	250	13⁄16x2⅛"	1.49	1.05	.81	.65	.56
16F710	20-20	150	11⁄16x1¾"	1.09	.84	.65	.52	.44
16F713	30-30	150	13⁄16x1⅝"	1.19	.89	.69	.56	.48
16F716	40-40	150	13⁄16x2"	1.19	.92	.74	.58	.50
16F715	50-30	150	13⁄16x2"	1.29	.95	.74	.58	.51
16F717	80-40	150	13⁄16x2½"	1.45	1.03	.80	.64	.55
16F719	100-100	150	1⁵⁄₁₆x2⅞"	2.11	1.24	.97	.77	.66
			TYPE PRS—TRIPLE SECTION					
16F850	20-20-2	150	1⁵⁄₁₆x1¾"	1.66	1.25	.97	.78	.67
16F730	30-30-30	150	1⁵⁄₁₆x1¾"	1.74	1.31	1.02	.81	.70
16F731	40-20-20	150	1⁵⁄₁₆x1¾"	1.74	1.29	1.00	.80	.69
16F732	40-40-20	150	1⁵⁄₁₆x1⅞"	1.79	1.33	1.03	.83	.72
16F851	40-40-4'	150	1⁵⁄₁₆x2¼"	1.83	1.38	1.07	.97	.74
16F735	50-30-20	150	1⁵⁄₁₆x1⅞"	1.79	134	1.05	.84	.72
16F736	80-40-20	150	1⁵⁄₁₆x2¼"	1.91	1.43	1.11	.89	.77

AEROVOX Capacitors

Ultra miniature tubular aluminum cased electrolytics with tinned copper leads. Ideal for use in by-pass, filters and coupling applications. Temp. range: —30°C to +85°C. All welded construction and high purity ingredients insure low leakage, long shelf life. Furnished with heat shrinkable mylar tubing. SIZE: Diameter x length.

B—¼x½	D—5/16x11/16	F—⅜x1 3/16	H—⅜x1¼
C—¼x11/16	E—⅜x11/16	G—⅜x1 5/16	J—⅜x1½

TYPE CRE ULTRA MINIATURE ELECTROLYTICS

3 WVDC

Stk. No.	Type	Mfd.	Size	1-24	25-49	50-99	100-249	250-Up
60F334	CRE211A	20	B	.75	.37	.29	.23	.19
60F335	CRE212A	25	B	.75	.37	.29	.23	.19
60F336	CRE217A	50	C	.75	.53	.41	.33	.27
60F337	CRE220A	75	D	.84	.55	.43	.34	.28
60F338	CRE223A	100	D	.84	.61	.47	.38	.31
60F339	CRE228A	150	E	.87	.61	.47	.38	.31
60F340	CRE233A	250	G	.96	.61	.47	.38	.31
60F341	CRE235A	300	G	.99	.65	.51	.41	.33
60F342	CRE243A	500	J	1.05	.74	.58	.46	.38

6 WVDC

60F343	CRE300A	1	B					
60F344	CRE302A	3	B					
60F345	CRE303A	4	B					
60F346	CRE304A	5	B	.81	.38	.30	.24	.20
60F347	CRE306A	8	B					
60F348	CRE307A	10	B					
60F349	CRE309A	15	B					
60F350	CRE311A	20	C	.81	.38	.30	.24	.19
60F351	CRE312A	25	C	.81	.38	.30	.24	.19
60F352	CRE315A	40	D	.84	.42	.33	.26	.22
60F353	CRE317A	50	D	.84	.55	.43	.34	.28
60F354	CRE318A	60	D	.84	.55	.43	.34	.28
60F355	CRE320A	75	E	.87	.61	.47	.38	.31
60F356	CRE328A	150	G	.93	.61	.47	.38	.31
60F357	CRE331A	200	H	.96	.63	.49	.39	.32
60F358	CRE333A	250	H	1.02	.65	.51	.41	.33
60F359	CRE335A	300	J	1.08	.69	.54	.43	.35

12 WVDC

60F360	CRE400A	1	B					
60F361	CRE401A	2	B					
60F362	CRE405A	6	B	.84	.41	.32	.25	.21
60F363	CRE406A	8	B					
60F364	CRE409A	15	C					
60F365	CRE411A	20	C					
60F366	CRE412A	25	C	.84	.55	.43	.34	.28
60F367	CRE417A	50	E	.93	.61	.47	.38	.31
60F368	CRE420A	75	F	.99	.61	.47	.38	.31
60F369	CRE423A	100	F	1.05	.61	.47	.38	.31
60F370	CRE431A	200	H	1.23	.71	.55	.44	.36
60F371	CRE433A	250	J	1.32	.71	.55	.55	.36

15 WVDC

60F372	CRE450A	1	B	.84	.42	.32	.26	.21
60F373	CRE451A	2	B	.84	.42	.32	.26	.21

15 WVDC (Cont'd.)

Stk. No.	Type	Mfd.	Size	1-24	25-49	50-99	100-249	250-Up
60F374	CRE452A	3	B					
60F375	CRE453A	4	B					
60F376	CRE454A	5	B	.84	.42	.32	.26	.21
60F377	CRE455A	6	B					
60F378	CRE456A	8	B					
60F379	CRE457A	10	B					
60F380	CRE459A	15	C	.87	.42	.32	.26	.21
60F381	CRE461A	20	C	.87	.42	.32	.26	.21
60F382	CRE462A	25	D	.87	.55	.43	.34	.28
60F383	CRE463A	30	D	.90	.55	.43	.34	.28
60F384	CRE464A	35	E	.93	.55	.43	.34	.28
60F385	CRE467A	50	E	.96	.61	.47	.38	.31
60F386	CRE470A	75	F	1.02	.61	.47	.38	.31
60F387	CRE473A	100	G	1.08	.61	.47	.38	.31
60F388	CRE478A	150	H	1.17	.65	.51	.41	.33
60F389	CRE481A	200	J	1.26	.72	.56	.45	.37

25 WVDC

60F390	CRE600A	1	B	.84	.41	.32	.25	.21
60F391	CRE601A	2	B	.84	.41	.32	.25	.21
60F392	CRE602A	3	B	.84	.42	.33	.26	.22
60F393	CRE603A	4	B	.84	.43	.33	.27	.22
60F394	CRE604A	5	B	.84	.43	.33	.27	.22
60F395	CRE605A	6	C	.84	.43	.33	.27	.22
60F396	CRE606A	8	C	.87	.43	.34	.27	.22
60F397	CRE607A	10	C	.87	.44	.34	.27	.22
60F398	CRE609A	15	D	.87	.55	.43	.34	.28
60F399	CRE611A	20	E	.90	.61	.47	.38	.31
60F400	CRE612A	25	E	.93	.61	.47	.38	.31
60F402	CRE614A	35	F	.99	.61	.47	.38	.31
60F403	CRE617A	50	G	1.08	.61	.47	.38	.31
60F404	CRE620A	75	H	1.17	.64	.50	.40	.33
60F405	CRE623A	100	J	1.26	.66	.52	.41	.34

50 WVDC

60F406	CRE750A	1	B	.84	.41	.32	.25	.21
60F407	CRE751A	2	B	.84	.41	.32	.25	.21
60F408	CRE753A	4	C	.84	.43	.33	.27	.22
60F409	CRE754A	5	C	.87	.43	.33	.27	.22
60F410	CRE755A	6	D	.87	.59	.46	.37	.30
60F411	CRE756A	8	D	.90	.59	.46	.37	.30
60F412	CRE757A	10	D	.90	.59	.46	.37	.30
60F413	CRE759A	15	E	.90	.61	.47	.38	.31
60F414	CRE761A	20	F	.90	.61	.47	.38	.31
60F513	CRE764A	35	H	1.02	.61	.47	.38	.33
60F415	CRE767A	50	J	1.11	.85	.50	.40	.33

100 WVDC

60F416	CRE904A	5	E	.90	.60	.46	.37	.31
60F417	CRE905A	6	E	.90	.60	.47	.37	.31
60F418	CRE906A	8	F	.93	.60	.47	.37	.31
60F419	CRE907A	10	G	.93	.60	.47	.38	.31
60F420	CRE909A	15	H	.93	.61	.48	.38	.31
60F421	CRE911A	20	J	.96	.63	.49	.39	.32

150 WVDC

60F422	CRE950A	1	D	.84	.63	.49	.39	.32
60F423	CRE953A	4	E	.87	.63	.49	.39	.32
60F424	CRE954A	5	E	.93	.63	.49	.39	.32
60F425	CRE957A	10	H	.93	.61	.48	.38	.31

TYPE AEP PLUG-IN ELECTROLYTIC

Hermetically sealed, aluminum can with 4-pin octal base mounting. Commercial equivalent of Type CE51's, 2's, & 3's as listed in MIL C62A. Size: 1 9/32x2½" except (*) 1⅜x2½", (†) 1⅜x3½", (††) 1⅜x4¼", (**) 1⅜x3". Av. Shpg. wt., 5 oz.

Single Element Units

Stock No.	Type	Mfd.	WVDC	1-24	25-49	50-99	100-249
16F220	AEP400P*	2000	15	3.42	1.70	1.49	1.02
16F221	AEP5A	25	25	2.28	1.14	1.00	.68
16F200	AEP4D	20	150	2.28	1.20	1.05	.72
16F222	AEP8D	40	150	2.34	1.22	1.07	.73
16F201	AEP2J	10	450	2.34	1.24	1.09	.74
16F223	AEP3J	15	450	2.40	1.28	1.12	.77
16F202	AEP4J	20	450	2.43	1.32	1.16	.79
16F203	AEP6J	30	450	2.52	1.34	1.17	.80
16F204	AEP8J	40	450	2.76	1.36	1.19	.82
16F205	AEP16J†	80	450	3.24	1.50	1.31	.90
16F206	AEP2L††	10	600	2.85	1.42	1.24	.85

Dual Element Units

Stk. No.	Type	Mfd.	WVDC	1-24	25-49	50-99	100-249
16F207	AEP44D	20-20	150	2.46	1.12	.98	.67
16F208	AEP88D	40-40	150	2.55	1.17	1.02	.70
16F209	AEP22J	10-10	450	2.58	1.36	1.19	.82
16F210	AEP44J*	20-20	450	2.91	1.42	1.24	.85
16F219	AEP88J**	40-40	450	3.30	1.64	1.44	.99

Triple Element Units

16F211	AEP444D	20-20-20	150	2.61	1.30	1.14	.78
16F212	AEP88D4A	40-40/20	150/25	2.67	1.23	1.07	.74
16F213	AEP222J	10-10-10	450	2.79	1.38	1.21	.83
16F214	AEP22J4A	10-10/20	450/25	2.70	1.24	1.08	.74
16F215	AEP44J4A*	20-20/20	450/25	3.03	1.33	1.17	.80
16F216	AEP444J**	20-20-20	450	3.30	1.54	1.35	.92
16F224	AEP822J**	40-10-10	450	3.24	1.59	1.39	.96

Quadruple Element Units—with ground lug

16F217	AEPG444D4A*	20-20-20/20	150/25	2.88	1.42	1.24	.85
16F225	AEPG2222J*	10-10-10-10	450	3.12	1.54	1.35	.93
16F218	AEPG444J4A**	20-20-20/20	450/25	3.33	1.65	1.44	.99

NEWARK STOCKS THE WORLD'S MOST COMPLETE INVENTORY OF INDUSTRIAL ELECTRONIC EQUIPMENT

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

TYPE K323Z METALLIZED POLYCARBONATE CAPACITORS

Hermetically sealed Polycarbonate film provides high capacitance stability, low dissipation factor, low dielectric absorption and high insulation resistance. Self-heals in the rare case of dielectric breakdown. Operating temperature: —65°C to +125°% of full rating. Standard tolerance is 20%. Other tolerances available on special order.

100 VDCW

Stk. No.	Mfd.	Size	1-24	25-49	50-99	100-249
16F300	.015	.175x5/8"	1.59	1.06	.93	.74
16F301	.022	.175x5/8"	1.59	1.06	.93	.74
16F302	.033	.195x11/16"	1.62	1.08	.95	.76
16F303	.047	.235x5/8"	1.68	1.12	.98	.78
16F304	.068	.235x11/16"	1.77	1.18	1.03	.83
16F305	.1	.235x13/16"	1.95	1.30	1.14	.91
16F306	.15	.312x13/16"	2.04	1.36	1.19	.95
16F307	.22	.312x13/16"	2.07	1.38	1.21	.97
16F308	.33	.400x13/16"	2.25	1.50	1.31	1.05
16F309	.47	.400x15/16"	2.34	1.56	1.37	1.09
16F310	.68	.400x1 1/8"	2.49	1.66	1.45	1.16
16F311	1.0	.400x1 9/16"	2.73	1.82	1.59	1.27
16F312	1.5	.562x1 1/8"	4.35	2.90	2.54	2.03
16F313	2.0	.562x1 5/16"	5.40	3.60	3.15	2.52
16F314	3.0	.562x1 13/16"	5.94	3.96	3.47	2.77
16F315	4.0	.670x1 13/16"	7.05	4.70	4.11	3.29
16F316	5.0	.670x2 1/16"	7.95	5.30	4.64	3.71

For Plastic Sleeve add suffix "P" and add .02 to unit price.

200 VDCW

Stk. No.	Mfd.	Size	1-24	25-49	50-99	100-249
16F317	.015	.175x5/8"	1.83	1.22	1.07	.85
16F318	.022	.175x5/8"	1.83	1.22	1.07	.85
16F319	.033	.195x11/16"	1.86	1.24	1.09	.87
16F320	.047	.235x11/16"	1.89	1.26	1.10	.88
16F321	.068	.235x13/16"	1.95	1.30	1.14	.91
16F322	.1	.312x13/16"	2.22	1.48	1.30	1.04
16F323	.15	.312x13/16"	2.25	1.50	1.31	1.05
16F324	.22	.400x13/16"	2.25	1.50	1.31	1.05
16F325	.33	.400x1 1/8"	2.46	1.64	1.44	1.15
16F326	.47	.400x15/16"	2.61	1.74	1.52	1.22
16F327	.68	.562x13/16"	2.73	1.82	1.59	1.27
16F328	1.0	.562x1 1/16"	2.94	1.96	1.72	1.37
16F329	1.5	.562x1 9/16"	4.41	2.94	2.57	2.06
16F330	2.0	.562x1 13/16"	5.37	3.58	3.13	2.51
16F331	3.0	.750x13/16"	5.82	3.88	3.40	2.72
16F332	4.0	.750x2 1/16"	6.96	4.64	4.06	3.25
16F333	5.0	.750x2 5/16"	7.68	5.12	4.48	3.58

TYPE QE—COMPUTER GRADE ELECTROLYTICS

High reliability, long life, 65°C operating aluminum electrolyte capacitor for energy storage use. For computers, power supplies, industrial use in control and test equipment. Manufactured under controlled conditions with highest purity ingredients.
Hermetically sealed with pressure type safety vent. Low screw inserts and heat shrinkage mylar tubing keep overall size near to can size shown. Shipping weight 5-14 oz. depending on can size.

CASE SIZES

A1	1 3/8 x 1 3/8	B2	1 3/4 x 3 1/8	C3	2 x 4 5/8	D4	2 1/2 x 5 1/8
A2	1 3/8 x 2 1/8	B3	1 3/4 x 4 1/8	C4	2 x 5 1/8	D5	2 1/2 x 5 5/8
A3	1 3/8 x 3 1/8	B4	1 3/4 x 4 5/8	C5	2 x 5 5/8	E1	3 x 4 1/8
A4	1 3/8 x 4 1/8	B5	1 3/4 x 5 1/8	D1	2 1/2 x 3 1/8	E2	3 x 4 5/8
A5	1 3/8 x 4 5/8	C1	2 x 3 1/8	D2	2 1/2 x 4 1/8		3 x 5 1/8
B1	1 3/4 x 2 1/8	C2	2 x 4 1/8	D3	2 1/2 x 4 5/8	E4	3 x 5 5/8

Stk. No.	Type	Mfd.	Volt	Size	1-24	25-49	50-99
60F426	61QE2048M	1800	10	A1	2.97	1.73	1.34
60F427	61QE2049M	3600	10	A2	3.45	2.01	1.55
60F428	61QE2051M	7300	10	A3	4.71	2.75	2.12
60F429	61QE2052M	11000	10	A4	5.61	3.27	2.52
60F430	61QE2058M	25000	10	C2	8.79	5.13	3.96
60F431	61QE2072M	1500	15	A1	2.97	1.73	1.34
60F432	61QE2073M	3100	15	A2	3.54	2.07	1.59
60F433	61QE2075M	6100	15	A3	4.38	2.56	1.97
60F434	61QE2076M	9200	15	A4	5.61	3.27	2.52
60F435	61QE2079M	14000	15	C1	7.41	4.32	3.33
60F436	61QE2083M	21000	15	C2	8.94	5.22	4.02
60F437	61QE2086M	28000	15	C4	11.16	6.51	5.02
60F438	61QE2088M	35000	15	D2	12.00	7.00	5.40
60F439	61QE2120M	950	25	A1	2.97	1.73	1.34
60F440	61QE2121M	1900	25	A2	3.60	2.10	1.62
60F441	61QE2123M	3800	25	A3	4.62	2.70	2.08
60F442	61QE2124M	5800	25	A4	5.70	3.33	2.57
60F443	61QE2127M	8900	25	C1	6.72	3.92	3.02
60F444	61QE2131M	13000	25	C2	9.60	5.60	4.32
60F445	61QE2134M	17000	25	C4	10.20	5.95	4.59
60F446	61QE2136M	22000	25	D2	11.52	6.72	5.18
60F447	61QE2140M	33000	25	E1	13.56	7.91	6.10
60F448	61QE2164M	23000	35	E1	13.50	7.88	6.08
60F449	61QE2165M	27000	35	E2	14.10	8.23	6.35
60F450	61QE2171M	2400	40	A3	4.88	2.84	2.19
60F451	61QE2175M	5600	40	C1	7.05	4.11	3.17
60F452	61QE2178M	8300	40	C2	9.27	5.41	4.17
60F453	61QE2184M	14000	40	D2	13.50	7.88	6.08
60F454	61QE2185M	16300	40	D3	13.80	8.05	6.21
60F455	61QE2192M	470	50	A1	2.97	1.73	1.34
60F456	61QE2193M	940	50	A2	3.75	2.19	1.69
60F457	61QE2195M	1850	50	A3	4.23	2.47	1.90
60F458	61QE2196M	2830	50	A4	5.79	3.38	2.61

Stk. No.	Type	Mfd.	Volt	Size	1-24	25-49	50-99
60F459	61QE2199M	4300	50	C1	7.20	4.20	3.24
60F460	61QE2202M	6500	50	C2	8.19	4.78	3.69
60F461	61QE2206M	8700	50	C4	10.20	5.95	4.59
60F462	61QE2208M	10900	50	D2	12.90	7.53	5.81
60F463	61QE2243M	950	75	A3	4.05	2.36	1.82
60F464	61QE2247M	2300	75	C1	5.43	3.17	2.44
60F465	61QE2256M	5800	75	D2	10.41	6.07	4.68
60F466	61QE2268M	1000	100	A4	4.62	2.70	2.08
60F467	61QE2271M	1600	100	C1	5.22	3.05	2.35
60F468	61QE2274M	2400	100	C2	6.30	3.68	2.84
60F469	61QE2278M	3200	100	C4	8.64	5.04	3.89
60F470	61QE2280M	4000	100	D2	10.26	5.99	4.62
60F471	61QE2291M	520	150	A3	3.30	1.93	1.49
60F472	61QE2292M	785	150	A4	4.05	2.36	1.82
60F473	61QE2295M	1200	150	C1	5.55	3.24	2.50
60F474	61QE2298M	1800	150	C2	6.72	3.92	3.02
60F475	61QE2304M	3100	150	D2	9.06	5.29	4.08
60F476	61QE2308M	4700	150	E1	13.17	7.68	5.93
60F477	61QE2309M	5400	150	E2	14.10	8.23	6.35
60F478	61QE2315M	400	200	A3	3.27	1.91	1.47
60F479	61QE2319M	960	200	C1	6.90	4.03	3.11
60F480	61QE2323M	1450	200	C2	9.00	5.25	4.05
60F481	61QE2325M	1600	200	D1	9.75	5.69	4.39
60F482	61QE2340M	460	250	A4	3.90	2.28	1.76
60F483	61QE2343M	750	250	C1	5.40	3.15	2.43
60F484	61QE2346M	1100	250	C2	9.00	5.25	4.05
60F485	61QE2363M	250	300	A3	3.75	2.19	1.69
60F486	61QE2387M	185	350	A3	3.66	2.14	1.65
60F487	61QE2400M	1100	350	D2	11.25	6.56	5.06
60F488	61QE2430M	340	450	C2	5.82	3.40	2.62
60F489	61QE2436M	570	450	D2	7.26	4.24	3.27
60F490	61QE2437M	850	450	E1	10.80	6.30	4.86

METALLIZED MYLAR "WRAP & FILL" CAPACITORS

Type V146Z. Light weight, high insulation resistance, long stable life. For use in printed assemblies and light weight portable and airborne equipment of all types. Can be mounted in banks using a minimum amount of space. Self-healing and are of instrument quality. All leads are solder-coated copper-weld wire. Tolerance: ±10%.

100 VDCW @ 85°C 50 VDCW @ 125°C

Stk. No.	Cap.	H. x W. x L.	1-24	25-49	50-99	100-249
16F378	.1	.125x .234x9/16	.96	.60	.48	.38
16F379	.15	.156x .265x9/16	1.06	.66	.53	.42
16F380	.22	.156x .250x11/16	1.20	.75	.60	.48
16F381	.33	.203x .312x11/16	1.58	.99	.79	.63
16F382	.47	.250x .359x11/16	1.78	1.11	.89	.70
16F383	.68	.218x .328x15/16	2.21	1.38	1.10	.89
16F384	1.00	.265x .375x15/16	2.93	1.83	1.46	1.16
16F385	1.50	.250x .390x1 1/4	3.79	2.37	1.90	1.50
16F386	2.00	.312x .468x1 1/4	4.70	2.94	2.35	1.86
16F387	3.00	.406x .562x1 1/4	6.67	4.17	3.34	2.64
16F388	4.00	.406x .562x1 3/8	8.30	5.19	4.15	3.29
16F389	5.00	.375x .593x1 3/4	9.79	6.12	4.90	3.88

200 VDCW @ 85°C 150 VDCW @ 125°C

Stk. No.	Cap.	H. x W. x L.	1-24	25-49	50-99	100-249
16F390	.01	.156x .203x7/16	.86	.54	.43	.34
16F391	.015	.156x .234x7/16	.86	.54	.43	.35
16F392	.022	.203x .265x7/16	.88	.55	.44	.35
16F393	.033	.218x .281x7/16	.90	.56	.45	.36
16F394	.047	.171x .265x9/16	.91	.57	.46	.36
16F395	.068	.125x .250x11/16	.93	.58	.46	.37
16F396	.1	.187x .281x11/16	.94	.59	.47	.37
16F397	.15	.187x .312x11/16	1.02	.64	.51	.41
16F398	.22	.265x .375x11/16	1.11	.69	.55	.44
16F399	.33	.296x .484x11/16	1.26	.79	.63	.50
16F500	.47	.359x .546x11/16	1.47	.92	.74	.59
16F501	.68	.343x .515x11/16	1.77	1.11	.89	.71
16F502	1.0	.312x .468x13/16	2.19	1.37	1.10	.88
16F503	1.5	.406x .593x13/16	2.66	1.66	1.33	1.06
16F504	2.0	.343x .563x111/16	3.05	1.91	1.52	1.22
16F505	4.0	.562x .687x111/16	4.66	2.91	2.33	1.84
16F506	5.0	.484x .843x13/4	5.47	3.42	2.74	2.17

MAKE NEWARK YOUR ONE DEPENDABLE SOURCE
FOR EVERYTHING IN INDUSTRIAL ELECTRONICS

AEROVOX Capacitors

TYPE PTT PEE-WEE ELECTROLYTIC

Miniature polycap electrolytic encased in polycap tubes with special Aerovox plastic end-fill which binds to the ceramic case. Operating temp. range is minus 30°C plus 65° C. Cap. at 25° is minus 10% plus 250%. *Sizes A: 1/4x5/8", B: 1/4x3/4", C: 1/4x7/8", D: 5/16x5/8", E: 5/16x3/4", F: 5/16x7/8", G: 3/16x1", H: 3/8x3/4", I: 3/8x7/8", K: 3/8x1", M: 3/8x1 1/4", N: 3/8x1 3/8", O: 3/8x1 1/2", P: 7/16x7/8".

3 VDCW

Stk. No.	Type	Cap. Mfd.	Size*	1-24	25-49	50-99	100-249
16F1099	PTT1	1	A				
16F1142	PTT2	2	A				
16F1143	PTT3	3	A				
16F1144	PTT4	5	A				
16F1145	PTT5	8	A				
16F1146	PTT6	10	A				
16F1148	PTT8	20	B	.42	.32	.25	.20
16F1149	PTT9	25	B				
16F1188	PTT10	30	B				
16F1189	PTT11	40	B				
16F1190	PTT12	50	C				
16F1191	PTT13	100	H	.45	.36	.28	.23
16F1192	PTT14	200	K	.45	.36	.28	.23
16F1193	PTT15	250	K	.48	.36	.28	.23
16F1195	PTT17	500	O	.75	.39	.30	.23

6 VDCW

Stk. No.	Type	Cap. Mfd.	Size*	1-24	25-49	50-99	100-249
16F1196	PTT18	1	A				
16F1197	PTT19	2	A				
16F1198	PTT20	3	A				
16F1199	PTT21	5	A				
16F1251	PTT23	10	A	.42	.32	.25	.20
16F1252	PTT24	15	B				
16F1253	PTT25	20	B				
16F1254	PTT26	25	B				
16F1256	PTT28	40	C	.45	.32	.25	.20
16F1257	PTT29	50	E	.45	.32	.25	.20
16F1258	PTT30	100	G	.45	.36	.28	.23
16F1259	PTT31	200	K	.48	.36	.28	.23
16F1260	PTT32	250	M	.60	.36	.28	.23

10 VDCW

Stk. No.	Type	Cap. Mfd.	Size*	1-24	25-49	50-99	100-249
16F1261	PTT34	1	A				
16F1262	PTT35	2	A				
16F1263	PTT36	3	A	.42	.32	.25	.20
16F1264	PTT37	5	A				

10 VDCW (Cont.)

Stk. No.	Type	Cap. Mfd.	Size*	1-24	25-49	50-99	100-249
16F1265	PTT38	8	A				
16F1266	PTT39	10	A	.42	.32	.25	.20
16F1267	PTT40	15	B				
16F1268	PTT41	20	B				
16F1269	PTT42	25	E				
16F1270	PTT43	30	E	.32	.45	.25	.20
16F1271	PTT44	40	E				
16F1272	PTT45	50	F				
16F1273	PTT46	100	I	.45	.36	.28	.23
16F814	PTT102	150	K	.60	.36	.28	.23
16F815	PTT47	200	L	.75	.36	.28	.23
18F816	PTT103	250	N	.75	.36	.28	.23
18F817	PTT104	300	O	.75	.39	.30	.23

25 VDCW

Stk. No.	Type	Cap. Mfd.	Size*	1-24	25-49	50-99	100-249
16F1274	PTT74	1	A				
16F1275	PTT75	2	A				
16F1276	PTT76	3	A	.42	.32	.25	.20
16F1277	PTT77	5	B				
16F1278	PTT78	8	B				
16F1279	PTT79	10	E				
16F1280	PTT80	15	E				
16F1281	PTT81	20	H	.45	.32	.25	.20
16F1282	PTT82	25	H				
16F1283	PTT83	30	H				
16F1284	PTT84	40	J	.45	.32	.25	.20
16F1285	PTT85	50	K	.45	.32	.25	.20
16F1286	PTT86	100	N	.66	.36	.28	.23
16F818	PTT124	150	T	.75	.36	.28	.23

50 VDCW

Stk. No.	Type	Cap. Mfd.	Size*	1-24	25-49	50-99	100-249
16F1287	PTT87	1	A				
16F1288	PTT88	2	A	.42	.32	.25	.20
16F1289	PTT89	3	B				
16F1290	PTT90	5	C				
16F1291	PTT91	8	E				
16F1292	PTT92	10	H	.45	.32	.25	.20
16F1293	PTT93	15	H				
16F1294	PTT94	20	I				
16F1295	PTT95	25	K	.48	.32	.25	.20
16F819	PTT96	30	K	.60	.32	.25	.20
16F820	PTT97	40	M	.75	.32	.25	.20
16F821	PTT98	50	N	.75	.32	.25	.20

TYPE V146XR AEROFILM "WRAP & FILL" MYLAR CAPACITORS

Aerovox V146XR capacitors offer high resistance to humidity and excellent stability with temperature where a metal case is not needed. Extremely small size makes these ideal for use in miniaturized circuits. Mylar wrapped, epoxy end filled.

Standard tolerance is ±10%. Power factor will not exceed 1% at 25°C. Operating temperature range of —65°C to 85°C at full voltage rating and to 125°C with derating. Extended foil construction. Leads are solder-coated Copper-Weld wire.

150 VOLTS

Stk. No.	Type	Mfd.	1-49	50-99	100-499
60F514	V146XR- 1	.01			
60F515	V146XR- 2	.015			
60F516	V146XR- 3	.022	.30	.24	.21
60F517	V146XR- 4	.033			
60F518	V146XR- 5	.047			
60F519	V146XR- 6	.68	.32	.25	.22
60F520	V146XR- 7	.1	.35	.28	.24
60F521	V146XR- 8	.15	.38	.31	.27
60F522	V146XR- 9	.22	.43	.34	.30
60F523	V146XR-10	.33	.45	.36	.32
60F524	V146XR-11	.47	.54	.58	.38
60F525	V146XR-12	.68	.59	.47	.41
60F526	V146XR-13	1.0	.76	.61	.53
60F527	V146XR-14	1.5	.97	.78	.68
60F528	V146XR-15	2.0	1.68	1.18	1.03

200 VOLTS

Stk. No.	Type	Mfd.	1-49	50-99	100-499
60F529	V146XR-16	.001			
60F530	V146XR-17	.0015			
60F531	V146XR-18	.0022			
60F532	V146XR-19	.0033			
60F533	V146XR-20	.0047	.31	.25	.22
60F534	V146XR-21	.0068			
60F535	V146XR-22	.01			
60F536	V146XR-23	.015			
60F537	V146XR-24	.022			
60F538	V146XR-25	.033			
60F539	V146XR-26	.047	.31	.25	.22
60F540	V146XR-27	.068	.33	.26	.23
60F541	V146XR-28	.1	.35	.28	.25
60F542	V146XR-29	.15	.39	.31	.27
60F543	V146XR-30	.22	.44	.36	.31
60F544	V146XR-31	.33	.47	.37	.33
60F545	V146XR-32	.47	.55	.44	.38
60F546	V146XR-33	.68	.60	.48	.42
60F547	V146XR-34	1.0	.85	.68	.60
60F548	V146XR-35	1.5	1.31	.97	.85
60F549	V146XR-36	2.0	1.52	1.22	1.06

400 VOLTS

Stk. No.	Type	Mfd.	1-49	50-99	100-499
60F550	V146XR-37	.001			
60F551	V146XR-38	.0015			
60F552	V146XR-39	.0022			
60F553	V146XR-40	.0033	.31	.25	.22
60F554	V146XR-41	.0047			
60F555	V146XR-42	.0068			
60F556	V146XR-43	.01			
60F557	V146XR-44	.015			
60F558	V146XR-45	.022	.32	.25	.22
60F559	V146XR-46	.033	.33	.26	.23
60F560	V146XR-47	.047	.35	.28	.24
60F561	V146XR-48	.068	.39	.31	.27
60F562	V146XR-49	.1	.43	.33	.30
60F563	V146XR-50	.15	.47	.37	.33
60F564	V146XR-51	.22	.50	.40	.35
60F565	V146XR-52	.33	.81	.49	.43
60F566	V146XR-53	.47	.78	.62	.54
60F567	V146XR-54	.68	1.00	.80	.70
60F568	V146XR-55	1.0	1.12	.90	.79
60F569	V146XR-56	1.5	1.48	1.18	1.03
60F570	V146XR-57	2.0	1.92	1.54	1.35

600 VOLTS

Stk. No.	Type	Mfd.	1-49	50-99	100-499
60F571	V146XR-59	.0015			
60F573	V146XR-60	.0022	.31	.25	.22
60F575	V146XR-62	.0047			
60F577	V146XR-64	.01			
60F579	V146XR-66	.022	.38	.30	.26
60F581	V146XR-68	.047	.43	.34	.30
60F583	V146XR-70	.1	.52	.41	.36
60F585	V146XR-72	.22	.86	.69	.60
60F587	V146XR-74	.47	1.25	1.00	.88
60F589	V146XR-76	1.0	1.97	1.57	1.38

Rely on Newark for All Your Electronic Needs

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

V161 AEROFILM TUBULAR CAPS

High quality units in Polycap (Polyester Film) casing material which have high insulation resistance, low dielectric absorption and power factor. Relatively small capacitance change over 0° to 85°C. Epoxy end fill will not flow, soften, or melt at any operating temperature. Tolerance ±20%. Operating temp. —30° to +100°C. Aver. shpg. wt., 2 oz.

200 WVDC

Stock No.	Mfd.	D x L	1-24	25-49	50-99	100-249
1651579	.01	9/32x15/16"	.15	.13	.11	.10
16F1580	.05	5/16x1 1/16"	.15	.13	.11	.10
16F1581	.1	3/8x1 1/4"	.21	.15	.13	.12
16F1582	.22	1/2x1 1/4"	.24	.18	.15	.14
16F1583	.25	1/2x1 1/4"	.27	.18	.15	.14
16F1584	.33	1/2x1 1/2"	.33	.20	.16	.15
15F1585	1.0	13/16x1 7/8"	.57	.37	.31	.28

400 WVDC

Stock No.	Mfd.	D x L	1-24	25-49	50-99	100-249
16F1586	.00068	9/32x15/16"	.15	.14	.12	.11
16F1587	.01	5/16x1"	.15	.14	.12	.11
16F1588	.02	5/16x1 1/16"	.15	.14	.12	.11
16F1589	.05	3/8x1 1/4"	.18	.15	.13	.12
16F1590	.1	1/2x1 1/4"	.21	.18	.15	.13
16F1591	.25	9/16x1 3/4"	.39	.24	.20	.18
16F1592	.5	11/16x2"	.69	.32	.27	.24
16F1593	1.0	7/8x2 1/8"	1.05	.53	.44	.40

600 WVDC

Stock No.	Mfd.	D x L	1-24	25-49	50-99	100-249
16F1594	.001	9/32x15/16"	.15	.14	.12	.11
16F1595	.005	5/16x1"	.15	.14	.12	.11
16F1596	.01	11/32x1 1/16"	.18	.14	.12	.11
16F1597	.02	3/8x1 3/16"	.18	.15	.13	.12
16F1598	.03	7/16x1 5/16"	.21	.15	.13	.12

600 WVDC

Stock No.	Mfd.	D x L	1-24	25-49	50-99	100-249
16F1599	.05	1 1/2x1 1/4"	.24	.18	.15	.13
16F1600	.1	9/16x1 1/2"	.30	.21	.17	.16
16F1601	.2	23/32x1 5/8"	.48	.37	.31	.28
16F1602	.25	3/4x1 3/4"	.54	.40	.33	.30
16F1603	.5	7/8x2 1/8"	.87	.53	.44	.40

TYPE P123ZN METALLIZED PAPER CAPACITORS

Hermetically sealed metal cased metallized paper capacitors. 50 VDCW units specifically designed for transistor applications and low voltage operations. Oper. temp.: —55°C to +100°C with no derating, up to 125°C derated to 75%. Standard tolerance of 50 VDCW ±10%; 200, 400 & 600 VDCW, .01 and lower ±25%; .015 and up ± 20%. Other tol. and insulated sleeve available on special order.

50 WVDC

Stk. No.	Mfd.	Size	1-24	25-49	50-99	100-499
16F1534	.047	.195x1 3/16	1.65	1.14	1.01	.77
16F1535	.068	.195x1 3/16	1.65	1.14	1.01	.77
16F1536	.1	.195x1 3/16	1.68	1.16	1.03	.78
16F1537	.15	.235x1 5/16	1.71	1.18	1.05	.80
16F1538	.22	.312x1 3/16	1.74	1.20	1.07	.81
16F1539	.33	.312x1 1/8	1.80	1.24	1.10	.83
16F1540	.47	.312x1 3/16	1.86	1.28	1.14	.86
16F1541	.68	.400x1 1/8	2.07	1.42	1.26	.95
16F1542	1.0	.400x1 5/16	2.28	1.56	1.38	1.03
16F1543	1.5	.500x1 1/8	2.61	1.78	1.57	1.18
16F1544	2.0	.562x1 5/16	2.94	2.00	1.77	1.31
16F1545	3.0	.562x1 7/16	3.39	2.30	2.03	1.51
16F1546	4.0	.670x1 7/16	3.84	2.60	2.29	1.70

200 WVDC

Stk. No.	Mfd.	Size	1-24	25-49	50-99	100-499
16F1296	.0005	.175x1/2	1.11	.78	.70	.55
16F1297	.001	.175x1/2	1.11	.78	.70	.55
16F1298	.002	.175x1/2	1.11	.78	.70	.55
16F1299	003	.175x1/2	1.11	.78	.70	.55
16F1347	.005	.175x1/2	1.11	.78	.70	.55
16F1348	.01	.175x1/2	1.11	.78	.70	.55
16F1349	.015	.195x5/8	1.11	.78	.70	.55
16F1350	.02	.195x5/8	1.11	.78	.70	.55
16F1351	.022	.195x5/8	1.11	.78	.70	.55
16F1352	.033	.235x5/8	1.14	.80	.72	.56
16F1353	.04	.235x3/4	1.17	.82	.73	.57
16F1354	.047	.235x3/4	1.17	.82	.73	.57
16F1355	.05	.235x3/4	1.20	.84	.75	.58
16F1356	.068	.312x13/16	1.20	.84	.75	.58
16F1357	.1	.312x13/16	1.23	.86	.77	.59
16F1358	.15	.312x1 1/8	1.26	.88	.79	.61
16F1359	.2	.312x1 1/8	1.26	.88	.79	.61
16F1360	.22	.312x1 1/8	1.26	.88	.79	.61
16F1361	.25	.312x1 1/8	1.38	.96	.86	.65
16F1362	.33	.400x1 1/8	1.38	.96	.86	.65
16F1363	.47	.400x1 1/8	1.47	1.02	.91	.69
16F1364	.5	.400x1 1/8	1.50	1.04	.93	.70
16F1365	.68	.500x1 1/8	1.53	1.06	.94	.71
16F1366	1.0	.562x1 1/8	1.68	1.16	1.03	.78
16F1367	1.5	.562x1 5/8	2.49	1.70	1.50	1.13
16F1368	2.0	.562x1 7/8	2.49	1.70	1.50	1.13

400 WVDC

Stk. No.	Mfd.	Size	1-24	25-49	50-99	100-499
16F1369	.0005	.235x1/2	1.11	.78	.70	.55
16F1370	.001	235x1/2	1.11	.78	.70	.55

400 WVDC—(Cont.)

Stk. No.	Mfd.	Size	1-24	25-49	50-99	100-499
16F1371	.002	.235x1/2	1.11	.78	.70	.55
16F1372	.003	.235x5/8	1.14	.80	.72	.56
16F1373	.005	.235x13/16	1.17	.82	.73	.57
16F1374	.01	.235x13/16	1.17	.82	.73	.57
16F1376	.02	.235x13/16	1.17	.82	.73	.57
16F1377	.022	.235x13/16	1.20	.84	.75	.58
16F1378	.033	.312x13/16	1.20	.84	.75	.58
16F1380	.047	.312x1 1/8	1.20	.84	.75	.58
16F1381	.05	.312x1 1/8	1.20	.84	.75	.58
16F1382	.068	.312x1 1/8	1.29	.90	.80	.62
16F1383	.1	.400x1 1/8	1.32	.92	.82	.63
16F1384	.15	.500x1 1/8	1.38	.96	.86	.65
16F1385	.2	.500x1 1/8	1.41	.98	.87	.67
16F1386	.22	.500x1 1/8	1.41	.98	.87	.67
16F1387	.25	.500x1 1/8	1.56	1.08	.96	.74
16F1388	.33	.562x1 3/8	1.56	1.08	.96	.74
16F1389	.47	.562x1 5/8	1.83	1.28	1.12	.84
16F1390	.5	.562x1 5/8	1.95	1.34	1.19	.89
16F1391	.68	.670x1 5/8	2.10	1.44	1.28	.96
16F1392	1.0	.670x2 1/8	2.55	1.74	1.54	1.14
16F1394	2.0	1.000x1 7/8	3.87	2.62	2.31	1.70

600 WVDC

Stk. No.	Mfd.	Size	1-24	25-49	50-99	100-499
16F1396	.001	.235x1/2	1.14	.80	.72	.56
16F1397	.002	.235x5/8	1.14	.80	.72	.56
16F1398	.003	.235x5/8	1.20	.84	.75	.58
16F1399	.005	.235x5/8	1.20	.84	.75	.58
16F1435	.01	.312x13/16	1.20	.84	.75	.58
16F1436	.015	.312x13/16	1.23	.86	.77	.59
16F1437	.02	.312x13/16	1.23	.86	.77	.59
16F1438	.022	.312x13/16	1.23	.86	.77	.59
16F1440	.04	.400x13/16	1.26	.88	.79	.61
16F1441	.047	.400x13/16	1.26	.88	.79	.61
16F1442	.05	.400x13/16	1.32	.92	.82	.63
16F1443	.068	.400x1 1/8	1.32	.92	.82	.63
16F1444	.1	.400x1 1/8	1.38	.96	.86	.65
16F1445	.15	.500x1 1/8	1.50	1.04	.93	.70
16F1446	.2	.562x1 3/8	1.62	1.12	1.00	.76
16F1447	.22	.562x1 3/8	1.62	1.12	1.00	.76
16F1449	.33	.562x1 5/8	1.86	1.28	1.14	.86
16F1451	.5	.670x1 7/8	2.14	1.46	1.29	.97
16F1452	.68	.670x1 7/8	2.34	1.60	1.42	1.06
16F1453	1.0	.750x2 3/8	2.85	1.94	1.71	1.28
16F1455	2.0	1.000x2 3/8	4.44	3.00	2.64	1.94

P123ZNG METALLIZED PAPER CAPACITORS—GROUNDED CASE

Specifications as P123ZN but with grounded cases.

200 WVDC

Stk. No.	Mfd.	Size	1-24	25-49	50-99	100-499
16F1547	.0005	.175x1/16	.99	.66	.58	.42
16F1548	.001	.175x1/16	.99	.66	.58	.42
16F1549	.005	.175x1/16	.99	.66	.58	.42
16F1550	.01	.175x1/16	.99	.66	.58	.42
16F1551	.02	.195x9/16	.99	.66	.58	.42
16F1552	.05	.235x5/8	1.08	.72	.63	.45
16F1553	.1	.312x3/4	1.11	.74	.65	.46
16F1554	.25	.312x1 1/16	1.26	.84	.74	.53
16F1555	.5	.400x1 1/16	1.38	.92	.81	.58
16F1556	.68	.500x1 1/16	1.41	.94	.82	.59

600 WVDC

Stk. No.	Mfd.	Size	1-24	25-49	50-99	100-499
16F1557	2.0	.562x1 13/16	4.32	2.88	2.52	1.82
16F1558	.001	.235x9/16	1.02	.68	.60	.43
16F1559	.005	.235x9/16	1.08	.72	.63	.45
16F1560	.01	.235x3/4	1.08	.72	.63	.45
16F1561	.05	.400x3/4	1.20	.80	.70	.50
16F1562	.1	.400x1 1/16	1.26	.84	.74	.53
16F1563	.25	.562x1 5/16	1.56	1.04	.91	.65
16F1564	.5	.670x1 13/16	2.01	1.34	1.17	.84
16F1565	1.0	.750x2 5/16	2.73	1.82	1.59	1.14
16F1566	2.0	1.000x2 5/16	4.32	2.88	2.52	1.82

AEROVOX Capacitors

CERAFIL CERAMIC CAPACITORS

Ultraminiature ceramic capacitors. Meets MIL-C-11015C. Oper. temp. —55°C to +85°C or derate 50% to +125°C. Temp. Coeff. 100 volts applied +10 —35%. Power factor 2.5% max. Leads 1½ inch min. tinned copper. Below .01 mfd, 26 gauge. .01 and above 22 gauge. Tolerance: ±20%. 100 VDCW. 300 VDCT. Aver. Shpg. wt., 4 oz.

MOLDED AXIAL LEADS

Stk. No.	Type	Mfd.	Dia. x Lg.	1-24	25-49	50-99	100-499
16F1670	MC80V100AM	.00001	.087x.315				
16F548	MC80V150AM	.000015	.087x.315				
16F1671	MC80V220AM	.000022	.087x.315				
16F1672	MC80V330AM	.000033	.087x.315				
16F1673	MC80V470AM	.000047	.087x.315	.47	.40	.31	.23
60F630	MC80V680AM	.000068	.087x.315				
16F1674	MC80V101AM	.0001	.087x.315				
16F553	MC80V151AM	.00015	.087x.315				
16F1675	MC80V221AM	.00022	.087x.315				
16F1676	MC80V331AM	.00033	.087x.315				
16F1677	MC80V471AM	.00047	.087x.315				
60F633	MC80V681AM	.00068	.087x.315				
16F1678	MC80V102AM	.001	.087x.315	.41	.35	.28	.21
16F558	MC80V152AM	.0015	.117x.495	.68	.57	.46	.34

Stk. No.	Type	Mfd.	Dia. x Lt.	1-24	25-49	50-99	100-499
16F565	MC80V153AM	.015	.197x.495	1.65	1.38	1.10	.82
60F636	MC80V222AM	.0022	.117x.495	.68	.57	.46	.34
60F637	MC80V332AM	.0033	.117x.495	.68	.57	.46	.34
60F638	MC80V472AM	.0047	.117x.495	.68	.57	.46	.34
60F639	MC80V682AM	.0068	.157x.495	.90	.81	.64	.48
16F1680	MC80V103AM	.01	.157x.495	.90	.81	.64	.48
16F1681	MC80V203AM	.02	.197x.495	1.65	1.38	1.10	.82
60F640	MC80V223AM	.022	.237x 645	2.75	2.28	1.83	1.38
60F641	MC80V333AM	.033	.240x.650				
60F642	MC80V473AM	.047	.237x 645	2.75	2.28	1.83	1.38
16F1682	MC80V503AM	.05	.237x 645				
60F643	MC80V683AM	.068	.277x.745	4.93	4.10	3.29	2.47
16F1683	MC80V104AM	.1	.277x.745	4.93	4.10	3.29	2.47

CK MIL TYPE AXIAL LEADS

		± 10% K					
16F571	CK12AX100K	.00001					
16F572	CK12AX220K	.000022					
16F573	CK12AX330K	.000033					
16F574	CK12AX470K	.000047	.087x.315	.59	.50	.39	.29
16F575	CK12AX101K	.0001					
16F576	CK12AX221K	.00022					
16F577	CK12AX331K	.00033					
16F578	CK12AX471K	.00047					
16F579	CK12AX102K	.001	.087x.315	.59	.50	.39	.29
16F580	CK13AX222K	.0022	.117x.495	.85	.71	.58	.43
16F581	CK13AX322K	.0033	.117x.495	.85	.71	.58	.43
16F582	CK13AX472K	.0047	.117x.495	.85	.71	.58	.43
16F583	CK14AX103K	.01	.157x.495	1.13	1.01	.80	.60
16F584	CK15AX332K	.0033	.197x.495	2.06	1.73	1.38	1.03
16F585	CK16AX473K	.047	.237x.645	3.44	2.85	2.29	1.73
16F588	CK17AX104K	.1	.277x.745	6.16	5.13	4.11	3.09

		± 20% M					
16F587	CK12AX100M	.00001					
16F588	CK12AX220M	.000022					
16F589	CK12AX330M	.000033					
16F590	CK12AX470M	.000047					
16F591	CK12AX101M	.0001	.087x.315	.47	.40	.31	.23
16F592	CK12AX221M	.00022					
16F593	CK12AX331M	.00033					
16F594	CK12AX471M	.00047					
16F595	CK12AX102M	.001					
16F596	CK13AX222M	.0022	.117x.495	.68	.57	.46	.34
16F597	CK13AX332M	.0033	.117x.495	.68	.57	.46	.34
16F598	CK13AX472M	.0047	.117x.495	.68	.57	.46	.34
16F599	CK14AX103M	.01	.157x.495	.90	.81	.64	.48
16F686	CK15AX223M	.022	.197x 495	1.65	1.38	1.10	.82
16F687	CK16AX473M	.047	.237x.64[illegible]	2.75	2.28	1.83	1.38
16F688	CK17AX104M	.1	.277x.745	4.93	4.10	3.29	2.47

CERALAM CAPACITORS

Type MC91 and MC905.

These capacitors have greater volumetric efficiency and unique characteristics for inherent reliability. Units have a temperature range of —55° to +125°C. Capacitance change at 0 VDC is +10% and —15% at rated voltage +10%, and —30%. Maximum power factor is 2.5%. Gold dumet leads are standard 100WVDC except (*)50 WVDC.

Stk. No.	Type	Cap.	Tol.	1-24	25-49	50-99	100-499
16F362	MC91C153K	15,000	±10%	2.29	2.03	1.45	1.09
16F363	MC91C223K	22,000	±10%	2.44	2.18	1.55	1.16
16F364	MC91C333K	33,000	±10%	3.15	2.80	2.01	1.50
16F365	MC91C473K	47,000	±10%	3.26	2.90	2.08	1.56
16F366	MC91C683K	68,000	±10%	3.26	2.90	2.08	1.56
16F367	MC91C104K	100,000	±10%	6.50	5.78	4.13	3.10
16F368	MC905C154K*	150,000	±10%	6.50	5.78	4.13	3.10
16F369	MC905C224K*	220,000	±10%	7.29	6.48	4.63	3.48
16F370	MC91C153M	15,000	±20%	1.83	1.62	1.16	.87
16F371	MC91C223M	22,000	±20%	1.95	1.74	1.24	.93
16F372	MC91C333M	33,000	±20%	2.52	2.24	1.61	1.20
16F373	MC91C473M	47,000	±20%	2.61	2.32	1.66	1.25
16F374	MC91C683M	68,000	±20%	2.61	2.32	1.66	1.25
16F375	MC91C104M	100,000	±20%	5.20	4.62	3.30	2.48
16F376	MC905C154M*	150,000	±20%	5.20	4.62	3.30	2.48
16F377	MC905C224M*	220,000	±20%	5.88	5.18	3.70	2.78

MOLDED CERALAM TUBULAR CAPACITOR TYPE MC89

16F935	MC89C104AK	.1	±10%	3.88	3.61	3.36	3.10
16F936	MC89C254AK	.25	±10%	5.16	4.83	4.48	4.14
16F937	MC89C504AK	.5	±10%	8.40	7.83	7.26	6.71
16F938	MC89C105AK	1.0	±10%	12.91	12.05	11.19	10.33
16F939	MC89C205AK	2.0	±10%	19.38	18.03	16.79	15.49
16F940	MC89C104AM	.1	±20%	3.10	2.89	2.69	2.48
16F941	MC89C254AM	.25	±20%	4.13	3.86	3.58	3.31
16F942	MC89C504AM	.5	±20%	6.72	6.26	5.81	5.37
16F943	MC89C105AM	1.0	±20%	9.66	9.66	8.95	8.26
16F944	MC89C205AM	2.0	±20%	14.46	14.46	13.43	12.39

CHIP CAPACITOR ENGINEERING KIT

Model AKC800. Facilitates development of hybrid circuits. Contains 125 chip capacitors in capitance values from 1pf to 100,000 pf. Three basic temperature characteristics. The featured Ceralam cap. can be soldered or welded directly into the circuitry. Includes four types with capacitance of @ 25 VDC listed below.
Type ULA 102. 5 Each of 1.0±.5Mmf. & 10±20%. 10 Each, ±20% at values 50, 100, 500, 1000, 2200, 5000, 10,000 **Type ULA 302.** 5 Each, ±% at values 500, 2200, 22,000. **Type ULA 502.** 5 Each, ±20% at values 1000, 2200, 10,000, 100,000. **Type ULA 702.** 5 Each, ±20% at values 5000, 50,000.
16F959. NET Each per kit..... 59.95

CORDWOOD TYPE MC70 AND MC705 CERAMIC TUBULARS

Operating temp. —55°C to +85°C. Derate 50% at +125°C. Temp. Coeff. varies with capacity Leads ±26 Gauge Gold Plated Dumet 1½" min. for soldering or welding. Size: .250 x .100. Aver. Shpg. wt., 4 oz.

100 VDCW—Except (*) 50 VDCW

Stk. No.	Type	Cap.	1-24	25-49	50-99	100-499
60F644	MC70A100AK	10				
16F945	MC70A120AK	12				
60F645	MC70A150AK	15				
16F946	MC70A180AK	18				
60F646	MC70A220AK	22	.64	.55	.44	.34
60F647	MC70A330AK	33				
16F947	MC70B390AK	39				
60F648	MC70B470AK	47				
16F948	MC70B510AK	56				
60F649	MC70B560AK	56				
16F949	MC70B620AK	62				
60F650	MC70B680AK	68				
16F950	MC70B750AK	75				
60F651	MC70B820AK	82				
16F951	MC70B910AK	91	.64	.55	.44	.34
60F652	MC70B101AK	100				
16F952	MC70B121AK	120				
60F653	MC70B151AK	150				
16F953	MC70B181AK	180				
60F654	MC70B221AK	220				
60F955	MC70C331AK	330				
16F954	MC70C391AK	390				
60F656	MC70C471AK	470	.64	.55	.44	.34
60F657	MC70C561AK	560				
60F658	MC70C681AK	680				
60F659	MC70C821AK	820				
60F660	MC70C102AK	1000				
16F955	MC70C122AK	1200	1.46	1.25	.98	.74
60F661	MC70C561AK	1500	.64	.55	.44	.34
16F956	MC70C182AK	1800	1.46	1.25	.98	.74
60F662	MC70C222AK	2200	3.38	2.89	2.25	1.68
16F957	MC70C272AK	2700	3.38	2.89	2.25	1.68
60F663	MC70C332AK	3300	3.38	2.89	2.25	1.68
60F664	MC70C472AK	4700	3.38	2.89	2.25	1.68
60F665	MC70C562AM	5600	3.09	2.64	2.06	1.53
60F666	MC70C682AM	6800	3.09	2.64	2.06	1.53
60F667	MC70C822AM	8200	3.09	2.64	2.06	1.53
60F668	MC70C103AM*	10000	3.09	2.64	2.06	1.53
60F669	MC705C153AM*	15000	5.28	4.51	3.52	2.61
60F670	MC705C203AM	20000	5.28	4.51	3.52	2.61

NEWARK CAN SUPPLY ALL AEROVOX CAPACITORS

P8292ZN METALLIZED-PAPER CAPACITORS

Impregnated metallized paper. Modified plastic tubular type Duranite end-sealed capacitors in paper cases. Operating temp. —30° C to +100° C.

200 VOLTS

No.	Mfd.	D x L	1-24	25-49	50-99	100-499	500-999
16F473	.01	1/4x19/32"	.44	.26	.20	.18	.161
16F474	.02	1/4x21/32"	.44	.26	.20	.18	.162
16F475	.03	5/16x23/32"	.45	.26	.20	.18	.164
16F476	.05	5/16x23/32"	.45	.26	.20	.18	.165
16F477	.10	3/8x23/32"	.47	.28	.21	.19	.174
16F478	.25	1/2x23/32"	.68	.39	.30	.27	.248
16F479	.50	7/16x1 3/32"	.80	.47	.36	.32	.293
16F480	1.00	9/16x1 3/32"	1.07	.62	.48	.43	.392
16F481	2.00	5/8x1 21/32"	1.46	.85	.66	.58	.535
16F536	3.00	11/16x1 21/32"	1.80	1.20	1.05	.72	.660
16F537	4.00	13/16x1 15/16"	2.25	1.50	1.31	.90	.825
16F538	5.00	7/8x1 15/16"	2.70	1.80	1.58	1.08	.990
16F539	6.00	15/16x1 15/16"	3.45	2.30	2.01	1.38	1.265
16F540	8.00	15/16x2 3/8"	4.35	2.90	2.54	1.74	1.595
16F541	10.00	1x2 3/8"	4.80	3.20	2.80	1.92	1.760

400 VOLTS

No.	Mfd.	D x L	1-24	25-49	50-99	100-499	500-999
16F482	.01	5/16x23/32"	.44	.26	.20	.18	.162
16F483	.02	3/8x23/32"	.45	.26	.20	.18	.164
16F484	.03	3/8x23/32"	.45	.26	.20	.18	.165
16F485	.05	7/16x23/32"	.47	.28	.21	.19	.174
16F486	.10	7/16x1 3/32"	.51	.30	.23	.20	.186
16F487	.25	9/16x1 3/32"	.74	.43	.33	.30	.273
16F488	.50	5/8x1 15/32"	.95	.55	.43	.38	.347
16F489	1.00	11/16x1 31/32"	1.32	.77	.60	.53	.485
16F490	2.00	7/8x2 3/8"	1.86	1.09	.84	.75	.693
16F542	3.0	1x2 7/8"	4.35	2.90	2.54	1.74	1.595
16F543	4.0	1x3 3/8"	3.39	2.26	1.98	1.36	1.243

600 VOLTS

16F491	.01	3/8"x23/32"	.78	.46	.37	.31	.29
16F492	.02	3/8x23/32"	.81	.47	.38	.32	.30
16F493	.03	7/16x23/32"	.84	.49	.39	.34	.31
16F494	.05	1/2x23/32"	.85	.51	.41	.35	.32
16F495	.10	7/16x1 3/32"	.93	.54	.43	.37	.34
16F496	.25	5/8x1 5/32"	.96	.56	.45	.38	.35
16F497	.50	11/16x1 19/32"	1.32	.77	.62	.53	.48
16F498	1.00	1 1/16x2"	1.53	.89	.71	.61	.56
16F499	2.00	1x2 3/8"	2.31	1.35	1.08	.92	.85
16F544	3.00	1x3 3/8	3.39	1.98	1.59	1.39	1.24

TYPE P95ZN MICRO-MINIATURE METALLIZED PAPER CAPACITORS

Type P95ZN. Metallized paper miniature units offer small size, rugged construction and high reliability. Special construction offers strong lead connections and dipped resinous conformal coating provides good moisture barrier. Standard tolerance ±20% Operating temperature —55°C to +125°C.

SIZE CHART

A—.217 x .473 B—.217 x .610 C—.256 x .610

200 WVDC

Stk. No.	Type	Mfd.	Size	1-24	25-49	50-99	100-499
60F814	P95ZN1	.004	A	.40	.32	.24	.11
60F815	P95ZN2	.005	A				
60F816	P95ZN3	.01	A				
60F817	P95ZN4	.02	B	.50	.40	.30	.14
60F818	P95ZN5	.03	C				
60F819	P95ZN6	.04	C				
60F820	P95ZN7	.05	C				

400 WVDC

Stk. No.	Type	Mfd.	Size	1-24	25-49	50-99	100-499
60F821	P95ZN8	.002	A	.40	.32	.24	.11
60F822	P95ZN9	.003	A	.40	.32	.24	.11
60F823	P95ZN10	.005	B	.50	.40	.30	.14
60F824	P95ZN11	.01	C	.50	.40	.30	.14

600 WVDC

60F825	P95ZN12	.00005	A	.40	.32	.24	.11
60F826	P95ZN13	.0001	A				
60F827	P95ZN14	.0002	A				
60F828	P95ZN15	.00025	A				
60F829	P95ZN16	.0003	A				
60F830	P95ZN17	.0005	A				
60F831	P95ZN18	.001	A				
60F832	P95ZN19	.002	C	.50	.40	.30	.14
60F833	P95ZN20	.003	C	.50	.40	.30	.14

MIL-TYPE CK05-CK06 CAPACITORS

CK05 is .200 square by .100 thick. CK06 is .300 square by .100 thick. Molded for improved humidity protection and reliability. Tolerance is ±10% (K) or ±20% (M) as noted. 200VDCW. —55° to +150° to meet MIL-C-11015.

Stock No.	MMfd	Mil. No.	1-49	50-99	100-249	250-499	500-999
		±10%					
60F671	10	CK05CW100K	.70	.63	.49	.45	.42
60F673	12	CK05CW120K					
60F674	15	CK05CW150K					
60F676	18	CK05CW180K					
60F677	22	CK05CW220K					
60F679	27	CK05CW270K					
60F680	33	CK05CW330K					
60F682	39	CK05CW390K					
60F683	47	CK05CW470K					
60F685	56	CK05CW560K					
60F686	68	CK05CW680K					
60F688	82	CK05CW820K					
60F689	100	CK05CW101K					
60F691	120	CK05CW121K					
60F692	150	CK05CW151K					
60F694	180	CK05CW181K					
60F695	220	CK05CW221K					
60F697	270	CK05CW271K					
60F698	330	CK05CW331K					
60F700	390	CK05CW391K					
60F701	470	CK05CW471K					
60F703	560	CK05CW561K					
60F704	680	CK05CW681K					
60F706	820	CK05CW821K					
60F707	1000	CK05CW102K					
60F709	1200	CK06CW122K	.72	.65	.50	.47	.43
60F710	1500	CK06CW152K					
60F712	1800	CK06CW182K					
60F713	2200	CK06CW222K					
60F715	2700	CK06CW272K					
60F716	3300	CK06CW332K					
60F718	3900	CK06CW392K					
60F719	4700	CK06CW472K					
60F721	5600	CK06CW562K	.78	.70	.55	.51	.47
60F722	6800	CK06CW682K					
60F724	8200	CK06CW822K					
60F725	10000	CK06CW103K					
		±20%					
60F672	10	CK05CW100M	.58	.52	.41	.38	.35
60F675	15	CK05CW150M					
60F678	22	CK05CW220M					
60F681	33	CK05CW330M					
60F684	47	CK05CW470M					
60F687	68	CK05CW680M					
60F690	100	CK05CW101M					
60F693	150	CK05CW151M					
60F696	220	CK05CW221M					
60F699	330	CK05CW331M					
60F702	470	CK05CW471M					
60F705	680	CK05CW681M					
60F708	1000	CK05CW102M					
60F711	1500	CK06CW152M	.62	.56	.43	.40	.37
60F714	2200	CK06CW222M					
60F717	3300	CK06CW332M					
60F720	4700	CK06CW472M					
60F723	6800	CK06CW682M	.68	.61	.48	.44	.41
60F726	10000	CK06CW103M					

P30ZN METALLIZED BATHTUBS

Type P30ZN Aerolene impregnated metallized-paper capacitors housed in "bathtub" metal cased hermetically sealed. Operating temperature range —65°C. to +125°C. at full rating. Standard tolerance ±20%. Av. shpg. wt., 4 oz.

Stock No.	Cap. Mfd.	WVDC	1-49	50-99	100-499
16F1319	3.0	150	3.30	2.20	1.93
16F1320	4.0	150	3.96	2.64	2.31
16F1321	5.0	150	4.38	2.92	2.56
16F1322	6.0	150	4.56	3.04	2.66
16F1323	8.0	150	5.28	3.52	3.08
16F1324	10.0	150	6.09	4.06	3.55
16F1325	12.0	150	6.81	4.54	3.97
16F1326	15.0	150	8.25	5.50	4.81
16F920	.1	200	2.16	1.44	1.26
16F921	.25	200	2.40	1.60	1.40
16F922	.5	200	2.43	1.62	1.42
16F923	1.0	200	2.85	1.90	1.66
16F1336	2.0	400	5.04	3.36	2.94
16F1337	3.0	400	6.42	4.28	3.75
16F1338	4.0	400	7.80	5.20	4.55
16F1339	5.0	400	9.24	6.16	5.39
16F1342	.5	600	3.30	2.20	1.90
16F1343	1.0	600	4.35	2.90	2.55
16F1344	2.0	600	5.40	3.60	3.15
16F1345	3.0	600	7.05	4.70	4.10
16F1346	4.0	600	8.95	5.95	5.20

● NEW GENERAL PURPOSE DISC CAPACITORS

Type GPD General purpose disc ceramic capacitors ideal for by pass, filtering coupling applications

Stk. No.	Type	Pf	Tolerance	Volts	T.C.	Dia. In.	1-49	50-99	100-249	250-499	500-999
16F852	GPDCOJ2R2K	2.2	10%	1000	NPO	5/16"					
16F853	GPDCOJ3R3K	3.3	10%	1000	NPO	5/16"					
16F854	GPDCOH4R7K	4.7	10%	1000	NPO	5/16"					
16F855	GPDCOH6R8K	6.8	10%	1000	NPO	5/16"					
16F856	GPDCOH8R2K	8.2	10%	1000	NPO	5/16"					
16F857	GPDCOH100K	10	10%	1000	NPO	5/16"					
16F858	GPDU25150K	15	10%	1000	N750	5/16"					
16F859	GPDU2J200K	20	10%	1000	N750	5/16"					
16F860	GPDU2J220K	22	10%	1000	N750	5/16"					
16F861	GPDU2J250K	25	10%	1000	N750	5/16"					
16F862	GPDP3K330K	33	10%	1000	N1500	5/16"					
16F863	GPDX5F470K	47	10%	1000	X5F	5/16"	.15	.073	.061	.044	.041
16F864	GPDX5F500K	50	10%	1000	X5F	5/16"					
16F865	GPDX5F680K	68	10%	1000	X5F	5/16"					
16F866	GPDX5F820K	82	10%	1000	X5F	5/16"					
16F867	GPDX5F101K	100	10%	1000	X5F	5/16"					
16F868	GPDX5F151K	150	10%	1000	X5F	5/16"					
16F869	GPDX5F201K	200	10%	1000	X5F	5/16"					
16F870	GPDX5F221K	220	10%	1000	X5F	5/16"					
16F871	GPDX5F251K	250	10%	1000	X5F	5/16"					
16F872	GPDX5F331K	330	10%	1000	X5F	5/16"					
16F873	GPDX5F471K	470	10%	1000	X5F	5/16"					
16F874	GPDX5U471P5	470	+100-0	500	X5U	5/16"	.15	.07	.056	.04	.038
16F875	GPDX5F501K	500	±10%	1000	X5F	5/16"	.15	.073	.061	.044	.041
16F876	GPDX5F681K	680	±10%	1000	X5F	3/8"	.15	.073	.061	.044	.041
16F877	GPDX5F821K	820	±10%	1000	X5F	3/8"	.15	.073	.061	.044	.041
16F878	GPDX5F102K	1000	±10%	1000	X5F	3/8"	.15	.073	.061	.044	.041
16F879	GPDX5F152K	1500	±10%	1000	X5F	7/16"	.15	.073	.061	.044	.041
16F880	GPDX5F202K	2000	±10%	1000	X5F	11/16"	.15	.085	.071	.051	.048
16F881	GPDX5F222K	2200	±10%	1000	X5F	11/16"	.15	.085	.071	.051	.048
16F882	GPDX5F252K	2500	±10%	1000	X5F	11/16"	.15	.085	.071	.051	.048
16F883	GPDX5R332K	3300	±10%	1000	X5R	3/4"	.15	.102	.085	.061	.058
16F895	GPDX5R472K	4700	±10%	1000	X5R	3/4"	.15	.114	.095	.068	.064
16F884	GPDX5R502K	5000	±10%	1000	X5R	3/4"	.15	.114	.095	.068	.064
16F885	GPDX5R682K	6800	±10%	1000	X5R	29/32"	.18	.135	.113	.081	.077
16F886	GPDX5R822K	8200	±10%	1000	X5R	29/32"	.18	.135	.113	.081	.077
16F887	GPDX5S103K	10000	±10%	1000	X5S	29/32"	.18	.135	.113	.081	.077
16F888	GPDZ5U153P	15000	+100-0	1000	Z5U	29/32"	.24	.13	.11	.081	.076
16F889	GPDZ5U203P	20000	+100-0	1000	Z5U	29/32"	.36	.13	.11	.081	.076
16F890	GPDZ5V303P	30000	+100-0	1000	Z5V	29/32"	.39	.13	.11	.081	.076
16F891	GPDZ5V503P	50000	+100-0	1000	Z5V	29/32"	.42	.13	.11	.081	.076
16F892	GPDZ5V2X102P	2X.001	+100-0	1000	Z5V	7/16	.24	.06	.05	.036	.034
16F893	GPDZ5V2X103P	2X.01	+100-0	1000	Z5V	29/32"	.30	.09	.07	.051	.048
16F894	GPDZ5V2X203P	2X.02	+100-0	1000	Z5V	29/32"	.42	.13	.11	.081	.076

MILITARY CERAMIC DISCS PER MIL-C-11015-C

These general purpose military ceramic discs are made in accordance with MIL-C-11015-C. Rated at 530 VDCW. Units identified by letter A as fifth digit are made to operate from —55° to +85°C. Those with letter B as fifth digit operate from —55°C to +125°C. Tolerances as noted in the table below. Av. shpg wt., 2 oz.

Stock No.	MIL No.	Pf	Tol.	1-49	50-99	100-249	250-499	500-999
60F761	CK60BX2R2K	2.2	10%					
60F762	CK60BX3R3K	3.3	10%					
60F763	CK60BX4R7K	4.7	10%					
60F764	CK60BX6R8K	6.8	10%	.17	.13	.103	.074	.070
60F765	CK60BX100K	10	10%					
60F766	CK60BX150K	15	10%					
60F767	CK60BX220K	22	10%					
60F768	CK60BX330K	33	10%	.17	.13	.103	.074	.070
60F769	CK60BX330M	33	20%	.16	.12	.097	.070	.066
60F770	CK60BX470K	47	10%	.17	.13	.103	.074	.070
60F771	CK60BX470M	47	20%	.16	.12	.097	.070	.066
60F772	CK60BX680K	68	10%	.17	.13	.103	.074	.070
60F773	CK60BX680M	68	20%	.16	.12	.097	.070	.066
60F774	CK60BX101K	100	10%	.17	.13	.103	.074	.070
60F775	CK60BX101M	100	20%	.16	.12	.097	.070	.066
60F776	CK60BX151K	150	10%	.17	.13	.103	.074	.070
60F777	CK60BX151M	150	20%	.16	.12	.097	.070	.066
60F778	CK60AX221K	220	10%	.17	.13	.103	.074	.070
60F779	CK60AX221M	220	20%	.16	.12	.097	.070	.066
60F780	CK60AX331K	330	10%	.17	.13	.103	.074	.070
60F781	CK60AX331M	330	20%	.16	.12	.097	.070	.066
60F782	CK60AX471K	470	10%	.17	.13	.103	.074	.070
60F783	CK60AX471M	470	20%	.16	.12	.097	.070	.066
60F784	CK60AW681M	680	20%					
60F785	CK60AW821M	820	20%	.15	.12	.092	.067	.063
60F786	CK60AW102M	1000	20%					
60F787	CK60AW152M	1500	20%	.15	.12	.092	.067	.063
60F788	CK61BX221K	220	10%	.17	.13	.103	.074	.070
60F789	CK61BX221M	220	20%	.16	.12	.097	.070	.066
60F790	CK61BX331K	330	10%	.17	.13	.103	.074	.070
60F791	CK61BX331M	330	20%	.16	.12	.097	.070	.066
60F792	CK61BX471K	470	10%	.17	.13	.103	.074	.070
60F793	CK61BX471M	470	20%	.16	.12	.097	.070	.066
60F794	CK61BX681K	680	10%	.17	.13	.103	.074	.070
60F795	CK61BX681M	680	20%	.16	.12	.097	.070	.066
60F796	CK61AW222M	2200	20%	.15	.11	.092	.067	.063
60F797	CK62BX821K	820	10%	.19	.14	.113	.082	.077
60F798	CK62BX821M	820	20%	.17	.13	.105	.075	.071
60F799	CK62BX102K	1000	10%	.19	.14	.113	.082	.077
60F800	CK62BX102M	10000	20%	.17	.13	.105	.075	.071
60F801	CK62BX152K	1500	10%	.19	.14	.113	.082	.077
60F802	CK62BX152M	1500	20%	.17	.13	.105	.075	.071
60F803	CK62AX222K	2200	10%	.19	.14	.113	.082	.077
60F804	CK62AX222M	2200	20%	.17	.13	.105	.075	.071
60F805	CK62AW332M	3300	20%	.16	.12	.100	.072	.068
60F806	CK62AW472M	4700	20%	.16	.12	.100	.072	.068
60F807	CK62AW682M	6800	20%	.16	.12	.100	.072	.068
60F808	CK62AW822M	8200	20%	.16	.12	.100	.072	.068
60F809	CK63BX222K	2200	10%	.21	.16	.128	.092	.087
60F810	CK63BX222M	2200	20%	.18	.14	.110	.079	.075
60F811	CK63BX332K	3300	10%	.21	.16	.128	.092	.087
60F812	CK63BX332M	3300	20%	.18	.14	.110	.079	.075
60F813	CK63AW103M	10000	20%	.17	.13	.105	.075	.071

TYPE P 30M BATHTUBS

High-quality bypass capacitors recommended for applications where high reliability and superior performance is required. Drawn metal cases, hermetically-sealed with neoprene bakelite terminals. These units are Hyvol M impregnated for operation at temperatures from —55°C to +25°C. Standard tolerances +20% - —10%. Wt., 8 oz

Available on special order with terminals on top or bottom.

Single Section

Stk. No.	Mfd.	Volts	Size	1-9	10-24	25-49	50-99
16F053	.5	600	1¾x1x1"	1.92	1.60	1.28	.96
16F055	1	600	2x1¾x1"	2.10	1.75	1.40	1.05
16F056	2	600	2x2x1 3/16"	2.70	2.25	1.80	1.35
16F067	.25	1000	1¾x1x⅞"	1.77	1.48	1.18	.89

SINGLE SECTION (cont'd)

Stk. No.	Mfd.	Volts	Size	1-9	10-24	25-49	50-99
16F068	.5	1000	2x1¾x⅞"	2.04	1.70	1.36	1.02
16F069	.75	1000	2x1¾x⅞"	2.70	2.25	1.80	1.35
16F070	1	1000	2x2x1⅛"	2.70	2.25	1.80	1.35
16F896	.05	600	1¾x1x¾"	1.50	1.25	1.00	.75
16F897	.1	600	1¾x1x¾"	1.56	1.30	1.04	.78
16F898	.25	600	1¾x1x1 3/16"	1.71	1.43	1.14	.86
16F899	.75	600	2 1/16x1¼x⅞"	2.10	1.75	1.40	1.05

Dual Section

Stk. No.	Mfd.	Volts	Size	1-9	10-24	25-49	50-99
16F058	.1-.1	600	1¾x1x¾"	2.07	1.73	1.38	1.04
16F059	.25-.25	600	1¾x1x1"	2.25	1.88	1.50	1.13
16F900	.5-.5	400	2x1¾x⅞"	2.16	2.18	1.74	1.31

Newark-Denver Electronics Supply Corp., 2170 So. Grope St., Denver, Colo. 80222

MSRP & MSRT TUBULAR AC MOTOR START ELECTROLYTIC CAPACITORS

Types MSRP and MSRT. For use with any type of motor driven equipment; refrigerators, room air-conditioners, and oil burners. MSRP is bakelite cased, MSRT is cardboard insulated over round aluminum can. In various voltages.

110 VAC

Stk. No.	MSRT No.	Cap. Mfd.	Size	1-9	10-24	25-Up
16F1636	162	108-120	1⅜"x3⅛"	1.06	.96	.88
16F1637	160	124-138	1⅜"x3⅛"	1.08	.98	.89
16F1638	171	145-162	1⅜"x3⅛"	1.24	1.13	1.03
16F1639	198	161-180	1⅜"x3⅛"	1.25	1.14	1.06
16F1640	257	189-210	1⅜"x3⅛"	1.41	1.28	1.18
16F1641	192	216-240	1⅜"x3⅛"	1.58	1.44	1.32
16F1642	213	243-270	1¾"x3⅛"	1.74	1.58	1.45
16F1643	207	270-300	1¾"x3⅛"	1.87	1.70	1.56
16F1644	210	324-360	1¾"x3⅛"	1.97	1.79	1.64
16F1645	206	378-420	1¾"x3⅛"	2.24	2.04	1.87

110-125 VAC

Stock No.	MSRP No.	Cap. Mfd.	Size	1-9	10-24	25-Up
16F901	800	88-108	1⅞"x2¾	.74	.67	.65
16F1618	801	108-130	1⅞"x2¾	.74	.67	.65
16F1619	802	124-149	1⅞"x2¾	.79	.72	.70
16F1621	803	161-193	1⅞"x2¾	.88	.80	.78
16F902	804	200-220	1⅞"x3⅜	1.06	.96	.93
16F1623	805	216-259	1⅞"x3⅜	1.07	.97	.95
16F1624	806	243-270	1¹³⁄₁₆"x3⅜	1.24	1.13	1.10
16F1625	807	270-324	1¹³⁄₁₆"x3⅜	1.25	1.14	1.11
16F1626	808	320-360	1¹³⁄₁₆"x3⅜	1.40	1.27	1.24
16F903	809	400-450	1¹³⁄₁₆"x3⅜	1.72	1.56	1.51
16F904	810	485-540	1¹³⁄₁₆"x4⅜	2.04	1.85	1.80
16F905	811	20-24	1⅞"x2¾	.62	.56	.54
16F906	812	26-30	1⅞"x2¾	.63	.57	.55
16F907	813	32-36	1⅞"x2¾	.64	.58	.56
16F908	814	38-42	1⅞"x2¾	.64	.58	.57
16F909	815	43-53	1⅞"x2¾	.66	.60	.59
16F910	816	53-64	1⅞"x2¾	.69	.63	.61
18F911	817	64-77	1⅞"x2¾	.72	.65	.64
16F912	818	70-84	1⅞"x2¾	.73	.66	.65
16F913	819	75-90	1⅞"x2¾	.74	.67	.65
16F914	820	540-648	2⅛"x4⅜	2.24	2.04	1.98
16F915	821	590-708	2⅛"x4⅜	2.42	2.20	2.14
16F916	822	130-157	1⅞"x2¾	.81	.74	.72
16F1620	823	145-175	1⅞"x2¾	.84	.76	.74
16F1622	824	189-227	1⅞"x3⅜	1.04	.93	.91
16F917	825	340-412	1¹³⁄₁₆"x3⅜	1.51	1.37	1.33
16F918	826	378-454	1¹³⁄₁₆"x3⅜	1.61	1.46	1.42
16F919	827	430-485	1¹³⁄₁₆"x3⅜	1.93	1.66	1.62

HEAVY DUTY 125 VAC

Stock No.	MSRP No.	Cap. Mfd.	Size	1-9	10-24	25-Up
16F1627	882	145-175	1⅞"x3⅜"	1.16	1.05	1.02
16F1628	883	161-193	1⅞"x3⅜"	1.24	1.13	1.10
16F1629	884	189-227	1¹³⁄₁₆"x3⅜"	1.38	1.25	1.21
16F1630	886	243-292	1¹³⁄₁₆"x3⅜"	1.67	1.52	1.47
16F1631	887	270-324	1¹³⁄₁₆"x3⅜"	1.68	1.53	1.49

TYPE P09—AEROVOX HYVOLS

Immersion-proof units in sturdy rectangular metal can. High voltage screw type pillar terminals fitted with soldering lugs. Intended for heavy-duty continuous service in transmitters, amplifiers, etc. Type MB bracket is supplied unless otherwise specified except on units with base sizes 3¾x 3⅜" and 3¾x4⁹⁄₁₆" where type MS bracket is supplied. MSB bracket is available for all sizes on request. Standard tolerance +20 —10%. Average weight 5 pounds.

600 VOLT DC WORKING

Stk. No.	Mfd.	Size	1-9	10-24	25-49	50-99
16F230	.5	2¼x1¹³⁄₁₆x1¹⁄₁₆"	3.53	2.97	2.40	2.04
16F231	1.0	2¼x1¹³⁄₁₆x1¹⁄₁₆"	4.10	3.44	2.78	2.12
16F232	2.0	2⅞x1¹³⁄₁₆x1¹⁄₁₆"	5.03	4.22	3.40	2.59
16F234	4.0	3½x2½x1⁹⁄₁₆	6.59	5.52	4.44	3.37
16F235	8.0	3⅞x3¾x1¼"	7.64	6.39	5.14	3.89
16F236	10.0	4¾x3¾x1¼"	8.24	6.89	5.54	4.19
16F237	15.0	4¾x3¾x1¾"	12.33	10.32	8.30	6.29

1000 VOLT DC WORKING

Stk. No	Mfd.	Size	1-9	10-24	25-99	50-99
16F924	.1	1¹⁄₁₆x1³⁄₁₆x1⁵⁄₈"	3.93	3.28	2.62	1.97
16F825	.25	1¹⁄₁₆x1³⁄₁₆x2¼"	4.11	3.43	2.74	2.06
16F238	1.0	2¹⁄₁₆x1¹³⁄₁₆x1¹⁄₁₆"	4.88	4.09	3.30	2.51
16F239	2.0	3⅞x1¹³⁄₁₆x1¹⁄₁₆"	5.39	4.52	3.64	2.77
16F240	4.0	4¾x2½x1³⁄₁₆"	6.54	5.49	4.44	3.39
16F926	5.0	1¼x3¾x3⅞"	8.70	7.25	5.80	4.35
16F242	8.0	4¾x3¾x1¼"	10.44	8.74	7.04	5.34
16F243	10.0	4¾x3¾x1¾"	11.64	9.74	7.84	5.94
16F927	15.0	2½x3¾x4¾"	15.75	13.13	10.50	7.88

1500 VOLT DC WORKING

Stk. No.	Mfd.	Size	1-9	10-24	25-49	50-99
16F248	1.0	3⅞x1¹³⁄₁₆x1¹⁄₁₆	5.24	4.39	3.54	2.69

2000 VOLT DC WORKING

Stk. No.	Mfd.	Size	1-9	10-24	25-49	50-99
16F828	.1	1¹⁄₁₆x1¹³⁄₁₆x2½"	4.74	3.95	3.16	2.37
16F929	.25	1¹⁄₁₆x1¹³⁄₁₆x2½"	4.89	4.08	3.26	2.45
16F257	.5	2⅞x1¹³⁄₁₆x1⅛"	5.36	4.49	3.62	2.75
16F258	2.0	4¼x3¾x1½"	7.04	5.89	4.74	3.59
16F286	4.0	3⅞x3¾x2½"	9.84	8.24	8.64	5.04
16F930	5.0	2¼x3¾x4¾"	12.90	10.75	8.60	6.45
16F261	8.0	4¾x3¾x3⁹⁄₁₆"	16.34	13.64	10.94	8.24
16F931	10.0	3¾x4⁹⁄₁₆x5½"	19.50	16.25	13.00	9.75
16F932	15.0	3¾x4⁹⁄₁₆x6½"	28.50	23.75	19.00	14.25

3000 VOLT DC WORKING

Stk. No.	Mfd.	Size	1-9	10-24	25-49	50-99
16F269	.1	2x2½x1³⁄₁₆"	6.44	5.39	4.34	3.29

5000 VOLT DC WORKING

Stk. No.	Mfd.	Size	1-9	10-24	25-49	50-99
16F278	.1	2¾x3¾x2½"	13.73	11.48	9.23	6.98
16F279	.25	3⅞x3¾x2½"	15.83	13.23	10.63	8.03
16F933	.5	2¼x3¾x4½"	17.85	14.88	11.90	8.93
16F281	1.0	4¾x4⁹⁄₁₆x3¾"	25.69	21.49	17.29	13.09
16F934	2.0	3¾x4⁹⁄₁₆x6"	38.70	32.25	25.80	19.35

SPRAGUE

HIGH-K TYPES

Designed for By-Pass and Coupling applications where additional capacitance will not affect circuit operation. Combine small electrical value with high voltage rating in smallest physical size 5HK-S15 thru 5HK-P10, 5HK-2S20 500 WVDC. All other 5HK are 1000 WVDC. Capac. Tol.: GMV. Size: ½x½x⁹⁄₁₆".

SINGLE UNITS

Stock No.	Mfr's. No.	Capacitance μF	1-99	100-249	250-499	500-999
18F1575	5HK-D10	.001	.15	.119	.053	.047
18F1576	5HK-D15	.0015	.15	.119	.053	.047
18F1577	5HK-D20	.002	.15	.119	.053	.047
18F1578	5HK-D22	.0022	.15	.119	.053	.047
18F1579	5HK-D25	.0025	.15	.119	.064	.057
18F1580	5HK-D33	.0033	.15	.119	.053	.047
18F1581	5HK-D40	.004	.15	.119	.064	.057
18F1582	5HK-D47	.0047	.15	.119	.055	.049
18F1583	5HK-D50	.005	.15	.119	.055	.049
18F1584	5HK-D68	.0068	.15	.119	.061	.054
18F1585	5HK-S10	.01	.15	.119	.061	.054
18F1586	5HK-S15	.015	.15	.119	.079	.07
18F1587	5HK-S20	.02	.15	.119	.086	.076
18F1589	5HK-S25	.025	.15	.119	.086	.076
18F1591	5HK-S40	.04	.27	.214	.203	.18
18F1592	5HK-S50	.05	.27	.214	.203	.18
18F1593	5HK-P10	.1	.78	.618	.578	.514

DUAL UNITS

18F1594	5HK-2D10	2 x .001	.15	.119	.109	.097
18F1595	5HK-2D15	2 x .0015				
18F1596	5HK-2D20	2 x .002				
18F1597	5HK-2D22	2 x .0022				
18F1598	5HK-2D40	2 x .004	.15	.119	.111	.099
18F1599	5HK-2D47	2 x .0047	.15	.119	.111	.099
18F1600	5HK-2S10	2 x .01	.27	.214	.203	.18
18F1601	5HK-2S20	2 x .02	.78	.618	.578	.514

MINIATURIZED DISC TYPES FOR TRANSISTORIZED CIRCUITRY

Tiny ceramic capacitors for by-pass and coupling application. Low self inductance and flat plate construction permits higher self-resonant frequency and high by-pass efficiency in all TV and transistorized circuitry. Good performance under severe conditions of humidity and vibration. TH dia. .335 to .905, TG dia. .275 to .655.

Stock No.	Mfr's No.	Volts	Mfd.	1-99	100-249	250-499	500-999
18F932	TG-D50	50	.005	.15	.119	.09	.08
18F933	TG-S10	50	.01	.15	.119	.083	.074
18F934	TG-S20	50	.02	.15	.119	.107	.095
18F935	TG-S25	50	.025	.15	.119	.107	.095
18F936	TG-S30	50	.03	.15	.119	.111	.099
18F937	TG-S50	50	.05	.30	.238	.212	.188
18F938	TG-P10	50	.1	.39	.309	.281	.25
18F939	TH-D50	200	.005	.15	.119	.055	.049
18F940	TH-S10	200	.01	.30	.238	.214	.19
18F941	TH-S20	200	.02	.15	.119	.101	.09
18F942	TH-S25	200	.025	.15	.119	.113	.10
18F943	TH-S30	200	.03	.18	.143	.124	.11
18F944	TH-S50	200	.05	.27	.214	.203	.18
18F945	TH-P10	200	.1	.78	.618	.578	.514

AXIAL LEADS 25 WVDC ±20% TOLERANCE

SIZE-.390"x.202"

Stk. No.	Type	Mfd.	1-49	50-99	100-249	249-499
18F1976	3C023103X0250B1	.01	1.56	1.17	.878	.78
18F1978	3C023223X0250B1	.022	1.60	1.20	.90	.80
18F1980	3C023473X0250B1	.047	1.66	1.25	.934	.83
18F1982	3C023104X0250B1	.1	1.68	1.26	.945	.84

SPRAGUE
THE MARK OF RELIABILITY

Ceramic and Electrolytic Capacitors

POWERLYTIC ALUMINUM ELECTROLYTICS

Type 39D. End seals are made of molded phenolic, which is an important feature in establishing long life. Designed for operation at temperatures up to 85°C. Have very low effective series resistance and leakage current.

SIZE CHART FOR TYPE 39D

Key	DxL	Key	DxL	Key	DxL
EE	9/16x1 1/4	GJ	13/16x1 3/4	JE	1 1/16x1 1/4
EJ	9/16x1 3/4	GL	13/16x2 1/4	JL	1 1/16x2 1/4
EL	9/16x2 1/4	GP	13/16x2 3/4	JP	1 1/16x2 3/4
FJ	11/16x1 3/4	HE	15/16x1 1/4	JS	1 1/16x3 1/4
FL	11/16x2 1/4	HL	15/16x2 1/4	JT	1 1/16x3 3/4
FP	11/16x2 3/4	HP	15/16x2 3/4		
GE	13/16x1 1/4	HS	15/16x3 1/4		

3 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2613	39D138G003EL4	1,300	EL	1.67	.98	.75
18F2614	39D218G003HE4	2,100	HE	1.74	1.02	.79
18F2615	39D308G003JE4	3,000	JE	1.89	1.11	.85
18F2616	39D578G003GP4	5,700	GP	2.01	1.18	.91
18F2617	39D109G003HS4	10,000	HS	2.52	1.48	1.14
18F2618	39D189G003JT4	18,000	JT	3.15	1.84	1.42

6 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2619	39D607G006EJ4	600	EJ	1.62	.95	.73
18F2620	39D108G006GE4	1,000	GE	1.68	.99	.76
18F2621	39D208G006GJ4	2,000	GJ	1.79	1.05	.81
18F2622	39D408G006GP4	4,000	GP	2.01	1.18	.91
18F2623	39D608G006HP4	6,000	HP	2.07	1.21	.94
18F2624	39D109G006JS4	10,000	JS	2.91	1.70	1.31

10 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2625	39D507G01EJ4	500	EJ	1.62	.95	.73
18F2626	39D108G010FJ4	1,000	FJ	1.71	1.00	.77
18F2627	39D168G010FL4	1,600	FL	1.77	1.04	.80
18F2628	39D258G010GL4	2,500	GL	1.95	1.14	.88
18F2629	39D508G010HP4	5,000	HP	2.07	1.21	.94
18F2630	39D103G010JT4	10,000	JT	3.15	1.84	1.42

15 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2631	39D607G015EL4	600	EL	1.67	.98	.75
18F2632	39D128G015FL4	1,200	FL	1.77	1.04	.80
18F2633	39D258G015GP4	2,500	GP	2.01	1.18	.91
18F2634	39D408G015JL4	4,000	JL	2.43	1.42	1.10
18F2635	39D808G015JT4	8,000	JT	3.15	1.84	1.42

25 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2636	39D207G025EJ4	200	EJ	1.62	.95	.73
18F2637	39D507G025HE4	500	HE	1.74	1.02	.79
18F2638	39D108G025GL4	1,000	GL	1.95	1.14	.88
18F2639	39D228G025HP4	2,200	HP	2.07	1.21	.94
18F2640	39D408G025JT4	4,000	JT	3.15	1.84	1.42

30 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2641	39D756G030EE4	75	EE	1.59	.93	.72
18F2642	39D157G030EJ4	150	EJ	1.62	.95	.73
18F2643	39D257G030EL4	250	EL	1.67	.98	.75
18F2644	39D507G030FL4	500	FL	1.77	1.04	.80
18F2645	39D118G030GP4	1,100	GP	2.01	1.18	.91
18F2646	39D218G030HS4	2,100	HS	2.52	1.48	1.14
18F031	39D308G030JS4	3,000	JS	2.91	1.70	1.31

50 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2647	39D506G050EE4	50	EE	1.59	.93	.72
18F2648	39D107G050EJ4	100	EJ	1.62	.95	.73
18F2649	39D157G050EL4	150	EL	1.67	.95	.75
18F2650	39D257G050HE4	250	HE	1.74	1.02	.79
18F2651	39D507G050GL4	500	GL	1.95	1.14	.88
18F2652	39D118G050HP4	1,100	HP	2.07	1.21	.94
18F2653	39D238G050JT4	2,300	JT	3.15	1.84	1.42

150 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2654	39D256F150EJ4	25	EJ	1.62	.95	.73
18F2655	39D506F150FJ4	50	FJ	1.71	1.00	.77
18F2656	39D107F150FP4	100	FP	1.92	1.13	.87
18F2657	39D257F150HP4	250	HP	2.07	1.21	.94
18F2658	39D537F150JT4	530	JT	3.15	1.84	1.42

250 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2659	39D206F250EL4	20	EL	1.67	.98	.75
18F2660	39D506F250JE4	50	JE	1.89	1.11	.85
18F2661	39D107F250HL4	100	HL	2.06	1.20	.93
18F2662	39D207F250JP4	200	JP	2.58	1.51	1.16
18F2663	39D307F250JT4	300	JT	3.15	1.84	1.42

350 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2664	39D206F350FL4	20	FL	1.77	1.04	.80
18F2665	39D306F350FP4	30	FP	1.92	1.13	.87
18F2666	39D406F350GL4	40	GL	1.95	1.14	.88
18F2667	39D506F350GP4	50	GP	2.01	1.18	.91
18F2668	39D107F350HS4	100	HS	2.52	1.48	1.14
18F2669	39D167F350JT4	160	JT	3.15	1.84	1.42

450 WVDC

Stk. No.	Type	Mfd.	DxL	1-24	25-49	50-99
18F2670	39D505F450EL4	5	EL	1.67	.98	.75
18F2671	39D106F450FL4	10	FL	1.77	1.04	.80
18F2672	39D206F450GL4	20	GL	1.95	1.14	.88
18F2673	39D506F450JP4	50	JP	2.58	1.50	1.16
18F2674	39D756F450JT4	75	JT	3.15	1.84	1.42

CERAMIC CAPACITORS

Series 5 GA. Low self-inductance of silvered flat-plate design means very high by-pass efficiency in all TV circuits. Designed for 85° C (185°F) continuous operation. Higher self-resonant frequency than tubular ceramic or molded mica capacitors. Moisture proof coating. Tol. ±20%. 1000 WVDC

Stk. No.	Type	Mmfd.	1-99	100-249	250-499	500-Up
18F2675	5GA-V50	5	.15	.119	.066	.059
18F2676	5GA-V75	7.5	.15	.119	.066	.059
18F2677	5GA-Q10	10	.15	.119	.066	.059
18F2678	5GA-Q12	12	.15	.119	.066	.059
18F2679	5GA-Q15	15	.15	.119	.066	.059
18F2680	5GA-Q20	20	.15	.119	.066	.059
18F2681	5GA-Q22	22	.15	.119	.066	.059
18F2682	5GA-Q25	25	.15	.119	.066	.059
18F2683	5GA-Q27	27	.15	.119	.066	.059
18F2684	5GA-Q30	30	.15	.119	.066	.059
18F2685	5GA-Q33	33	.15	.119	.066	.059
18F2686	5GA-Q39	39	.15	.119	.066	.059
18F2687	5GA-Q47	47	.15	.119	.066	.059
18F2688	5GA-Q50	50	.15	.119	.066	.059
18F2689	5GA-Q56	56	.15	.119	.066	.059
18F2690	5GA-Q68	68	.15	.119	.066	.059
18F2691	5GA-Q75	75	.15	.119	.066	.059
18F2692	5GA-Q82	82	.15	.119	.066	.059
18F2693	5GA-T10	100	.15	.119	.066	.059
18F2694	5GA-T12	120	.15	.119	.066	.059
18F2695	5GA-T15	150	.15	.119	.055	.049
18F2696	5GA-T18	180	.15	.119	.066	.059
18F2697	5GA-T20	200	.15	.119	.066	.059
18F2698	5GA-T22	220	.15	.119	.055	.049
18F2699	5GA-T25	250	.15	.119	.066	.059
18F2700	5GA-T27	270	.15	.119	.066	.059
18F2701	5GA-T30	300	.15	.119	.066	.059
18F2702	5GA-T33	330	.15	.119	.066	.059
18F2703	5GA-T36	360	.15	.119	.066	.059
18F2704	5GA-T39	390	.15	.119	.066	.059
18F2705	5GA-T47	470	.15	.119	.055	.049
18F2706	5GA-T50	500	.15	.119	.055	.049
18F2707	5GA-T56	560	.15	.119	.055	.049
18F2708	5GA-T68	680	.15	.119	.055	.049
18F2709	5GA-T75	750	.15	.119	.055	.049
18F2710	5GA-T82	820	.15	.119	.055	.049
18F2711	5GA-D10	.001	.15	.119	.055	.049
18F2712	5GA-D12	.0012	.15	.119	.055	.049
18F2713	5GA-D13	.0013	.15	.119	.055	.049
18F2714	5GA-D15	.0015	.15	.119	.055	.049
18F2715	5GA-D18	.0018	.15	.119	.055	.049
18F2716	5GA-D20	.002	.15	.119	.055	.049
18F2717	5GA-D22	.0022	.15	.119	.055	.049
18F2718	5GA-D25	.0025	.15	.119	.066	.059
18F2719	5GA-D27	.0027	.15	.119	.066	.059
18F2720	5GA-D30	.003	.15	.119	.066	.059
18F2721	5GA-D33	.0033	.15	.119	.055	.049
18F2722	5GA-D39	.0039	.15	.119	.055	.049
18F2723	5GA-D40	.004	.15	.119	.066	.059
18F2724	5GA-D43	.0043	.15	.119	.066	.059
18F2725	5GA-D47	.0047	.15	.119	.057	.061
18F2726	5GA-D50	.005	.15	.119	.057	.051
18F2727	5GA-S10	.01	.15	.119	.072	.064
18F2728	5GA-S15	.015	.27	.214	.191	.170
18F2729	5GA-S20	.02	.39	.309	.281	.250
18F2730	5GA-S25	.025	.39	.309	.281	.250
18F2731	5GA-S40	.04	.39	.309	.281	.250
18F2732	5GA-S50	.05	.39	.309	.281	.250
18F2733	5GA-P10	.1	.84	.665	.619	.550

J-135 "CERAMICENTER" CERAMIC ASSORTMENT KIT

- **Handy metal drawers — Save Time and Effort**

710 capacitors of 57 different values in handy reusable "Kleer-Pak" plastic boxes. Kit includes: 290 Type 5 GA, 1000 WVDC ceramic disc capacitors in 31 different values from 5 mmf to 20,000 mmf; 145 Type 5HK "High K" bypass and coupling capacitors in 7 different values from .001 mfd. to .01 mfd. @ 1000 WVDC and .02 mfd. to .1 mfd. @ 500 WVDC; 100 Type 10 TS, 1000 WVDC temperature stable capacitors in 12 different values from 100 mmf to 20,000 mmf; and 175 Type TG, 50 WVDC disc capacitors in 7 different values from .005 to .1 mfd. Cabinet, 30¾ x5½x11¾". Ship. wt., 29 lbs.

18F2764. NET..... 172.50

HIGH-VOLTAGE DOORKNOB CERAMICS

Has female threads for interchangeable screw-in terminals. Molde plastic. Guard rings lengthen surface creepage path.
Type 20DK-T5. Complete with 7 terminals. 1" dia. x 31/32".
Type 30DK-T5. Complete with 2 terminals. 1⅛" dia. x 1¼".

Stk. No.	Type	Term	Size	μμf	KV	NET
18F2762	20DK-T5	1	1 x 31/32"	500	20	1.65
18F2763	30DK-T5	2	1 1/8 x 1 1/4"	500	30	2.40

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

HYPERCON CERAMIC DISCS

Ultra-miniature ceramic discs ideal for use in transistorized circuitry. Designed for bypass and coupling applications but particularly well-suited for any low voltage use where high capacitance and low power factor are important considerations. Superior to electrolytic capacitors of similar capacitance value because of the very low power factor of Hypercon Capacitors. Capacitance Tolerance: GMV.

3 VOLTS DC

Stock No.	Type	Mfd.	Dia.	1-99	100-249	250-499	500-999
18F946	HY-120	.1	.225"	.39	.309	.293	.26
18F947	HY-125	.22	.275"	.24	.19	.169	.15
18F948	HY-130	.47	.400"	.24	.19	.169	.15
18F949	HY-135	1.0	.595"	.30	.238	.225	.20
18F950	HY-150	2.2	.840"	.39	.309	.281	.25

10 VOLTS DC

18F951	HY-310	.047	.275"	.15	.119	.101	.09
18F952	HY-320	.1	.400"	.15	.119	.106	.094
18F953	HY-325	.22	.550"	.24	.19	.169	.15
18F1986	HY-327	.33	.66"	.30	.238	.225	.20
18F954	HY-330	.47	.840"	.36	.285	.27	.24

16 VOLTS DC

Stk. No.	Type	Mfd.	Dia.	1-99	100-249	250-499	500-999
18F032	HY-420	.01	.300"	.15	.119	.09	.08
18F033	HY-435	.047	.500"	.15	.119	.101	.09
18F034	HY-450	.1	.365"	.18	.143	.116	.103

25 VOLTS DC

Stock No.	Type	Mfd.	Dia.	1-99	100-249	250 499	500-999
18F1987	HY-520	.01	.275"	.21	.166	.158	.14
18F1988	HY-525	.022	.350"	.24	.19	.173	.154
18F1989	HY-530	.033	.400"	.27	.214	.198	.176
18F1990	HY-535	.047	.490"	.30	.238	.225	.20
18F1991	HY-550	.1	.660"	.45	.356	.338	.30

FORMULATION C-23 MONOLYTHIC CERAMIC CAPACITORS

Monolythic ceramic capacitors for transistorized circuitry. C-23 formulation insures high K—these units provide high capacitance in small physical size. Solid homogeneous blocks are protected against moisture and mechanical damage by a resin dip. Well suited for use in all frequency ranges through 1000 mc.

RADIAL LEADS 25 WVDC ±20% TOLERANCE

SIZE-.390"x.202"

Stk. No.	Type	Mfd.	1-49	50-99	100-249	250-499
18F1964	3C023103X0250A3	.01	1.32	.99	.743	.66
18F1965	3C023153X0250A3	.015	1.36	1.02	.765	.68
18F1966	3C023223X0250A3	.022	1.36	1.02	.765	.68
18F1967	3C023333X0250A3	.033	1.36	1.02	.765	.68
18F1968	3C023473X0250A3	.047	1.36	1.02	.765	.68
18F1969	3C023683X0250A3	.068	1.40	1.05	.788	.70
18F1970	3C023104X0250A3	.1	1.44	1.08	.810	.72

SIZE-.515"x.296"

18F1971	4C023154X0250A3	.15	1.94	1.46	1.091	.97
18F1972	4C023224X0250A3	.22	2.24	1.68	1.26	1.12
18F1973	4C023334X0250A3	.33	2.74	2.05	1.541	1.37

SIZE-.535"x.340"

18F1974	4C023474X0250A3	.47	3.42	2.57	1.924	1.71
18F1975	4C023684X0250A3	.68	4.44	3.33	2.498	2.22

RADIAL LEADS 25 WVDC ±20% TOLERANCE

MAX. THICKNESS .125; SIZE .500x500"

Stk. No.	Type	Mfd.	1-49	50-99	100-249	250-499
18F1955	5C023104X0250B3	.1	.96	.72	.54	.48
18F1956	5C023154X0250B3	.15	1.08	.81	.608	.54
18F1957	5C023224X0250B3	.22	1.14	.85	.65	.57
18F1958	5C023334X0250B3	.33	1.42	1.06	.799	.71
18F1959	5C023474X0250B3	.47	1.60	1.20	.90	.80
18F1960	5C023684X0250B3	.68	1.76	1.32	.99	.88
18F1961	5C023105X0250B3	1 0	2.00	1.50	1.12	1.00

MAX. THICKNESS .187; SIZE .500x500"

18F1962	5C023155X0250B3	1.5	2.80	2.10	1.57	1.40
18F1963	5C023225X0250B3	2.2	3.80	2.85	2.13	1.90

RADIAL LEADS 50 WVDC ±20% TOLERANCE

SIZE-.500"x.500"

18F885	5C023104X0500B3	.1	1.06	.80	.60	.53
18F886	5C023154X0500B3	15	1.20	.90	.68	.60
18F887	5C023224X0500B3	.22	1.38	1.03	.78	.69
18F888	5C023334X0500B3	.33	2.00	1.50	1.13	1.00
18F889	5C023474X0400B3	.47	2.52	1.89	1.42	1.26

MIL-C-25C CAPACITORS

Inserted tab construction. Positive hermetic seal assured by glass-to-metal solder-seal terminals. Vitaman Q impregnant. Will exceed latest Mil Specs. Temperature Range —55°C to +125°C. Tolerance ±10%. Bare metal case. Vibration grade 3 CP04. Mil C-25C capacitors.

SIZES FOR CP04, CP05, & CP09 CAPACITORS

AA.	¾x.235	GG.	1⅛x.400	NN.	1 7/16x.625
BB.	1 3/16x.298	HH.	1⅛x.562	PP.	1 11/16x.625
CC.	⅞x.312	JJ.	1 3/16x.463	RR.	1 15/16x.625
DD.	⅞x.400	KK.	1 3/16x.625	SS.	1 15/16x.733
EE.	1 5/16x.400	LL.	1⅜x.400	TT.	2 1/16x.813
FF.	1 5/16x.463	MM.	1 7/16x.463		

CP04 MIL-C-25C

600 WVDC

Stock No.	Type	Mfd.	Sz.	1-9	10-24	25-49	50-99	100-499	500-999
18F2734	CP04A1KF473K3	.047	GG	1.90	1.42	1.07	.71	.57	.52
18F1152	CP04A1KF104K3	.1	HH	2.12	1.59	1.19	.80	.64	.59

400 WVDC

18F2735	CP04A1KE103K3	.01	AA	1.72	1.29	.97	.65	.52	.48
18F2736	CP04A1KE473K3	.047	DD	1.85	1.39	1.04	.70	.56	.51
18F1155	CP04A1KE104K3	.1	LL	1.94	1.46	1.09	.73	.59	.54

200 WVDC

18F1158	CP04A1KC223K3	.022	AA	1.65	1.24	.93	.62	.50	.46
18F1159	CP04A1KC473K3	.047	CC	1.72	1.29	.97	.65	.52	.48
18F2737	CP04A1KB224K3	.22	GG	1.85	1.39	1.04	.70	.56	.51

CP05 MIL C-25C CAPACITORS

The same capacitor as CP04 except supplied with insulating sleeve.

600 WVDC

Stock No.	Type	Mfd.	Sz.	1-9	10-24	25-49	50-99	100-499	500-999
18F2738	CP05A1KF103K3	.01	EE	1.88	1.41	1.06	.71	.57	.52
18F2739	CP05A1KF223K3	.022	EE	1.92	1.44	1.08	.72	.58	.53

400 WVDC

18F2740	CP05A1KE103K3	.01	BB	1.83	1.38	1.03	.69	.55	.51
18F1168	CP05A1KE473K3	.047	FF	1.99	1.50	1.12	.75	.60	.55
18F2741	CP05A1KE104K3	.1	MM	2.08	1.56	1.17	.78	.63	.58
18F2742	CP05A1KE474K3	.47	SS	2.95	2.22	1.66	1.11	.89	.82

200 WVDC

18F2743	CP05A1KC153K3	.015	BB	1.77	1.33	1.00	.67	.53	.49
18F2744	CP05A1KC223K3	.022	BB	1.77	1.33	1.00	.67	.53	.49
18F2745	CP05A1KC104K3	.1	FF	1.95	1.46	1.10	.73	.59	.54
18F2746	CP05A1KC224K3	.22	MM	2.15	1.61	1.21	.81	.65	.59

100 WVDC

18F2747	CP05A1KB104K3	.1	EE	1.88	1.41	1.06	.71	.57	.52
18F2748	CP05A1KB474K3	.47	KK	2.44	1.83	1.37	.92	.74	.67
18F2749	CP05A1KB105K3	1.0	RR	3.01	2.26	1.70	1.13	.91	.83

CP09 MIL C-25C CAPACITORS

Vitamin Q impregnant. Will exceed latest Mil Specs. Temperature Range —55° to +125°C. Vibration: Grade 3. Tolerance ±10%.

600 WVDC

Stock No.	Type	Mfd.	Sz.	1-9	10-24	25-49	50-99	100-499	500-999
18F2750	CP09A1KF103K3	.01	EE	2.03	1.53	1.15	.77	.61	.56
18F2751	CP09A1KF104K3	.1	NN	2.40	1.80	1.35	.90	.72	.66

400 WVDC

18F2752	CP09A1KE473K3	.047	JJ	2.21	1.66	1.25	.83	.67	.61
18F2753	CP09A1KE104K3	.1	KK	2.31	1.73	1.30	.87	.70	.64

200 WVDC

18F2754	CP09A1KC104K3	.1	JJ	2.06	1.55	1.16	.78	.62	.57
18F2755	CP09A1KC474K3	.47	PP	2.53	1.90	1.42	.95	.76	.70
18F2756	CP09A1KC105K3	1.0	TT	3.26	2.44	1.83	1.22	.98	.90

100 WVDC

18F2757	CP09A1KB103K3	.01	BB	1.79	1.34	1.01	.67	.54	.50
18F2758	CP09A1KB473K3	.047	EE	1.92	1.44	1.08	.72	.58	.53
18F2759	CP09A1KB104K3	.1	FF	1.99	1.50	1.12	.75	.60	.55
18F2760	CP09A1KB154K3	.15	JJ	1.99	1.50	1.12	.75	.60	.55
18F2761	CP09A1KB224K3	.22	MM	2.12	1.59	1.20	.80	.64	.59

196D SOLID TANTALUM EPOXY DIPPED

Low-cost solid-electrolyte tantalum capacitors suitable for mounting printed wiring boards in transistorized commercial, and industrial electronic equipment. Furnished in sizes which permit coverage of a broad range of capitance ratings, from 0.1μF through 330μF. The standard capitance tolerance of these capacitors is ±20%. Operating temperature range —55° to +85°C low leakage current. The maximum dissipitation factor is 10%. Standard capacitors are furnished with long straight leads. Leads are electro-tinned nickel for ease in soldering. Solid-electrolyte tantalum pellet construction allows plug-in mounting on pirnted wiring boards Highly resistant, and insulated epoxy resin coating.

4 WVDC —20% TOLERANCE

Stk. No.	Mfd.	Size Code	1-24	25-49	50-99	100-499	500-999
18F049	33	196D336X0004EB	.80	.64	.44	.32	.29
18F050	150	196D157X0004FB	1.35	1.08	.74	.54	.49

6 WDC —20% TOLERANCE

18F051	22	196D226X0006EB	.80	.64	.44	.32	.29
18F052	100	196D107X0006FB	1.35	1.08	.74	.54	.49
18F053	330	196D337X0006GB	3.45	2.76	1.90	1.38	1.24

10 WVDC —20% TOLERANCE

18F054	15	196D156X0010EB	.80	.64	.44	.32	.29
18F055	68	196D686X0010FB	1.35	1.08	.74	.54	.49
18F056	220	196D227X0010GB	3.45	2.76	1.90	1.38	1.24

15 WVDC —20% TOLERANCE

18F057	10	196D106X0015EB	.80	.64	.44	.32	.29
18F058	33	196D336X0015FB	1.20	.96	.66	.48	.43
18F059	47	196D476X0015FB	1.35	1.08	.74	.54	.49
18F060	150	196D157X0015GB	3.45	2.76	1.90	1.38	1.24

20 WVDC —20% TOLERANCE

Stk. No.	Mfd.	Size Code	1-24-	25-49	50-99	100-499	500-999
18F061	2.2	196D225X0020EB	.80	.64	.44	.32	.29
18F062	4.7	196D475X0020EB	.80	.64	.44	.32	.29
18F063	6.8	196D685X0020EB	.80	.64	.44	.32	.29
18F064	10	196D106X0020FB	.85	.68	.47	.34	.31
18F065	22	196D226X0020FB	1.35	1.08	.74	.54	.49
18F066	100	196D107X0020GB	3.45	2.76	1.90	1.38	1.24

35 WVDC —20% TOLERANCE

18F067	.1	196D104X0035DB	.80	.64	.44	.32	.29
18F068	.22	196D224X0035DB	.80	.64	.44	.32	.29
18F069	.33	196D334X0035DB	.80	.64	.44	.32	.29
18F070	.47	196D474X0035DB	.80	.64	.44	.32	.29
18F071	.68	196D684X0035DB	.80	.64	.44	.32	.29
18F072	1.0	196D105X0035DB	.80	.64	.44	.32	.29
18F073	1.0	196D105X0035EB	.80	.64	.44	.32	.29
18F074	1.5	196D155X0035EB	.80	.64	.44	.32	.29
18F075	2.2	196D225X0035FB	1.00	.80	.55	.40	.36
18F076	3.3	196D335X0035FB	1.00	.80	.55	.40	.36
18F077	4.7	196D475X0035FB	1.10	.88	.61	.44	.40
18F078	6.8	196D685X0035FB	1.10	.88	.61	.44	.40
18F079	27	196D276X0035GB	3.45	2.76	1.90	1.38	1.24

HYPASS SUPPRESSION CAPACITORS

Exclusive 3-terminal Network-Feed-thru capacitors assure very effective VHF current by-passing. Bypass VHF oscillation up to 150 MC. Suppress TVI from Short-Wave Transmitters, Diathermy Machines, Electronic Heating Apparatus, etc. Eliminate interference caused by Line-conducted radiation between neighboring TV sets. Temperature operation: —40°C to +85°C. Currents up to 20 amps. (*) Have female screw terms. Bulkhead mounting. Shipping wt. 2 oz.

Stk. No.	Type	Amps.	Mfd.	WVDC	Dia. x Length	NET
18F189	48P18*	40	.5	50	1x1 3/16"	2.28
18F190	48P9*	20	.1	250VAC	1 1/16x1 13/16"	1.56
18F244	48P8*	20	.1	600	1 1/16x1 13/16"	1.56
18F192	47P6	20	.01	600	7/16x1 1/4"	1.41
18F199	80P3*	20	.1	600	1 1/16x1 13/16"	1.77

SUBMINIATURE—TYPE 96P—VITAMIN Q

Inserted tab construction. Glass-to-metal hermetically sealed. Operates from —55°C to +125°C. Terminals are insulated from metal case. Impregnated with vitamin Q. Tolerance of ±10%. Meets "latest" MIL-C-25 specs. Section insulated from can.

CASE SIZES FOR TYPE 96P

A:	.175x3/4"	E:	.400x 7/8"	H:	.562x1 1/8"	L:	.670x1 7/8"
B:	.195x3/4"	F:	.400x1 1/8"	J:	.562x1 3/8"	M:	.750x2 1/8"
C:	.235x3/4"	G:	.400x1 3/8"	K:	.562x1 7/8"	N:	1.000x1 7/8"
D:	.312x7/8"						

100 WVDC — ± 10% TOLERANCE

Stk. No.	Type	Mfd.	Sz.	1-9	10-24	25-49	50-99	100-499
18F1000	96P10291S2	.001	A					
18F1004	96P15291S2	.0015	A	1.65	1.24	.93	.619	.495
18F1009	96P22291S2	.0022	A					
18F1022	96P68291S2	.0068	A					
18F475	96P10391S2	.01	A	1.68	1.26	.95	.627	.502
18F1032	96P22391S2	.022	B					
18F1039	96P47391S2	.047	D	1.63	1.23	.92	.611	.488
18F300	96P10491S2	.1	D	1.76	1.32	.99	.66	.528
18F1044	96P15491S2	.15	E	1.85	1.39	1.04	.693	.554
18F301	96P47491S2	.47	H	2.25	1.69	1.27	.842	.673
18F471	96P10591S2	1.00	K	2.82	2.12	1.59	1.056	.845

200 WVDC — ± 10% TOLERANCE

Stk. No.	Type	Mfd.	Sz.	1-9	10-24	25-49	50-99	100-499
18F1019	96P47292S2	.0047	C	1.63	1.23	.92	.611	.488
18F476	96P10392S2	.01	C	1.63	1.23	.92	.611	.488
18F1028	96P15392S2	.015	C	1.65	1.24	.93	.619	.495
18F478	96P47392S2	.047	D	1.72	1.29	.97	.644	.515
18F302	96P10492S2	.1	E	1.81	1.36	1.02	.677	.541
18F1045	96P15492S2	.15	F	1.83	1.37	1.03	.685	.548
18F303	96P47492S2	.47	J	2.29	1.72	1.29	.858	.686
18F480	96P10592S2	1.00	L	2.91	2.18	1.64	1.089	.871

400 WVDC — ± 10% TOLERANCE

Stk. No.	Type	Mfd.	Sz.	1-9	10-24	25-49	50-99	100-499
18F1021	96P47294S2	.0047	C	1.70	1.28	.96	.635	.508
18F481	96P10394S2	.01	C	1.72	1.29	.97	.644	.515
18F1037	96P33394S2	.033	D	1.79	1.34	1.01	.668	.535
18F304	96P10494S2	.1	G	1.94	1.46	1.09	.726	.581
18F305	96P22494S2	.22	J	2.25	1.69	1.27	.842	.673
18F306	96P47494S2	.47	L	2.73	2.05	1.54	1.023	.818
18F486	96P10594S2	1.00	N	3.77	2.83	2.12	1.411	1.129

600 WVDC — ± 10% TOLERANCE

Stk. No.	Type	Mfd.	Sz.	1-9	10-24	25-49	50-99	100-499
18F307	96P10296S2	.001	C	1.68	1.26	.95	.627	.502
18F308	96P22296S2	.0022	C	1.68	1.26	.95	.627	.502
18F309	96P47296S2	.0047	C	1.72	1.29	.97	.644	.515
18F310	96P68296S2	.0068	C	1.72	1.29	.97	.644	.515
18F311	96P10396S2	.01	D	1.76	1.32	.99	.66	.528
18F1031	96P15396S2	.015	D	1.81	1.36	1.02	.677	.541
18F312	96P22396S2	.022	D	1.81	1.36	1.02	.677	.541
18F313	96P47396S2	.047	F	1.90	1.42	1.07	.710	.568
18F315	96P10496S2	.1	H	2.12	1.59	1.19	.792	.634
18F1048	96P15496S2	.15	J	2.20	1.65	1.24	.825	.660
18F316	96P22496S2	.22	K	2.38	1.79	1.34	.891	.713
18F1055	96P33496S2	.33	L	2.64	1.98	1.49	.990	.792
18F317	96P47496S2	.47	M	2.97	2.23	1.68	1.114	.891

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Miniature Capacitors

SPRAGUE TYPE TE LITTL-LYTICS (30D)

SPRAGUE THE MARK OF RELIABILITY

Ultra-small electrolytic capacitors made for transistor circuitry and other sub-min. applications. Temp. Range: —20°C to +85°C. Ultra-low leakage current. Clear Plastic Sleeves.

Key	Size	Key	Size	Key	Size
BA	17/64x35/64	CC	21/64x55/64	DD	25/64x63/64
BB	17/64x47/64	DB	25/64x47/64	DF	25/64x119/64
CB	21/64x47/64	DC	25/64x85/64	DG	25/64x135/64

Stock No.	Type	Mfd	WV DC	DxL	1-24	25-49	50-99	100-249	250-up
18F500	TE1010	5	1	BA					
18F532	TE1050	1	3	BA					
18F533	TE1052	3	3	BA					
18F534	TE1052.1	4	3	BA					
18F535	TE1052.2	5	3	BA					
18F536	TE1052.3	6	3	BA	.51	.38	.29	.231	.190
18F537	TE1052.5	8	3	BA					
18F538	TE1053.5	15	3	BA					
18F539	TE1054	20	3	BA					
18F501	TE1055	25	3	BA					
18F000	TE1055.5	30	3	BA					
18F540	TE1056	35	3	BB	.57	.42	.33	.257	.211
18F541	TE1057	40	3	BB	.72	.53	.42	.329	.271
18F542	TE1058	50	3	BB	.72	.53	.42	.329	.271
18F001	TE1058.5	65	3	BB	.75	.56	.43	.343	.282
18F543	TE1059	75	3	CB	.75	.56	.43	.343	.282
18F544	TE1059.5	100	3	CB	.81	.61	.48	.378	.311
18F502	TE1060	110	3	CB	.81	.61	.48	.378	.311
18F545	TE1061	150	3	CC	.81	.61	.48	.378	.311
18F546	TE1065	250	3	DC	.81	.61	.48	.378	.311
18F547	TE1066	300	3	DD	.87	.66	.51	.406	.334
18F548	TE1068	500	3	DF	.99	.75	.58	.462	.38
18F002	TE1069	590	3	DF	.99	.75	.58	.426	.38
18F003	TE1070	790	3	DG	1.02	.77	.60	.476	.391
18F503	TE1080	1	6	BA	.54	.39	.30	.238	.196
18F504	TE1081	2	6	BA	.54	.39	.30	.238	.196
18F505	TE1082	3	6	BA	.54	.39	.30	.238	.196
18F506	TE1083	4	6	BA	.54	.39	.30	.238	.196
18F507	TE1084	5	6	BA	.54	.39	.30	.238	.196
18F549	TE1085	6	6	BA	.54	.39	.30	.238	.196
18F508	TE1086	8	6	BA	.54	.39	.30	.238	.196
18F509	TE1087	10	6	BA	.54	.39	.30	.238	.196
18F510	TE1089	15	6	BA	.54	.39	.30	.238	.196
18F807	TE1090	20	6	BA	.54	.39	.30	.238	.196
18F511	TE1091	25	6	BB	.54	.39	.30	.238	.196
18F512	TE1092	30	6	BB	.57	.43	.33	.263	.216
18F808	TE1093	35	6	BB	.57	.43	.33	.263	.216
18F513	TE1095	40	6	BB	.57	.43	.33	.263	.216
18F514	TE1100	50	6	CB	.75	.56	.43	343	.282
18F515	TE1101	60	6	CB	.75	.56	.43	.343	.282
18F809	TE1101.5	75	6	CB	.81	.61	.48	.378	.311
18F004	TE1101.7	90	6	CB	.81	.61	.48	.378	.311
18F005	TE1102.5	140	6	CC	.81	.61	.48	.378	.311
18F810	TE1103	150	6	DC	.81	.61	.48	.378	.311
18F811	TE1104	200	6	DC	.84	.63	.49	.392	.322
18F812	TE1105	250	6	DD	.87	.66	.51	.406	.334
18F006	TE1105.5	280	6	DD	.90	.67	.52	.413	.339
18F813	TE1106	300	6	DF	.93	.69	.54	.428	.352
18F007	TE1107	400	6	DF	.93	.70	.55	.434	.357
18F008	TE1108	560	6	DG	1.02	.77	.60	.476	.391
18F516	TE1116	15	10	BA	.57	.41	.32	.254	.209
18F517	TE1118	25	10	BB	.75	.56	.43	.343	.282
18F814	TE1119	50	10	CB	.81	.61	.48	.378	.311
18F815	TE1119.3	100	10	CC	.81	.61	.48	.378	.311
18F816	TE1119.6	200	10	DF	.96	.72	.56	.442	.364
18F817	TE1120	1	12	BA	.57	.41	.32	.254	.209
18F818	TE1121	2	12	BA	.57	.41	.32	.254	.209
18F819	TE1122	3	12	BA	.57	.41	.32	.254	.209
18F820	TE1123	4	12	BA	.57	.41	.32	.254	.209
18F821	TE1127.1	6	12	BA	.57	.41	.32	.254	.209
18F822	TE1127.3	8	12	BA	.57	.41	.32	.254	.209
18F823	TE1129	15	12	BA	.57	.41	.32	.254	.209
18F824	TE1130	20	12	BB	.57	.41	.32	.254	.209
18F825	TE1131	25	12	BB	.75	.56	.43	.343	.282
18F826	TE1132	35	12	CB	.75	.56	.43	.343	.282
18F827	TE1133	50	12	CB	.81	.61	.48	.378	.311
18F009	TE1133.5	60	12	CB	.81	.61	.48	.378	.311
18F828	TE1134	75	12	CC	.81	.61	.48	.378	.311
18F010	TE1134.5	90	12	DB	.81	.61	.48	.378	.311
18F829	TE1135	100	12	CC	.81	.61	.48	.378	.311
18F011	TE1135.5	140	12	DC	.84	.63	.49	.392	.322
18F830	TE1136	150	12	DD	.87	.65	.50	.399	.328
18F012	TE1136.5	190	12	DD	.87	.65	.50	.399	.328
18F831	TE1137	200	12	DF	.93	.69	.53	.424	.349
18F832	TE1138	250	12	DH	.96	.72	.56	.442	.364
18F013	TE1139	290	12	DF	.96	.72	.56	.445	.366
18F014	TE1140	390	12	DG	.96	.72	.56	.448	.368
18F833	TE1148	1	15	BA	.57	.42	.33	.259	.214
18F834	TE1149	2	15	BA	.57	.42	.33	.259	.214
18F835	TE1150	3	15	BA	.57	.42	.33	.259	.214
18F836	TE1151	4	15	BA	.57	.42	.33	.259	.214
18F520	TE1152	5	15	BA	.57	.42	.33	.328	.214
18F837	TE1153	6	15	BA	.57	.42	.33	.259	.214
18F838	TE1154	8	15	BA	.57	.42	.33	.259	.214
18F521	TE1155	10	15	BA	.57	.42	.33	.259	.214
18F839	TE1156	15	15	BB	.57	.42	.33	.259	.214
18F522	TE1157	20	15	BB	.57	.42	.33	.259	.214
18F840	TE1157.1	25	15	BB	.75	.56	.43	.343	.282
18F523	TE1158	30	15	CB	.75	.56	.43	.343	.282
18F841	TE1159	35	15	CB	.75	.56	.43	.343	.282
18F842	TE1160	50	15	CB	.81	.61	.48	.378	.311
18F843	TE1161	75	15	CC	.81	.61	.48	.378	.311
18F015	TE1161.5	85	15	DB	.81	.61	.48	.378	.311
18F016	TE1161.7	90	15	CC	.81	.61	.48	.378	.311
18F844	TE1162	100	15	DC	.81	.61	.48	.378	.311
18F017	TE1162.5	130	15	DC	.84	.63	.49	.392	.322
18F845	TE1163	150	15	DD	.87	.66	.51	.406	.334
18F018	TE1163.5	170	15	DD	.87	.66	.51	.406	.334
18F846	TE1164	200	15	DF	.96	.72	.56	.448	.368
18F019	TE1165	260	15	DF	.96	.72	.56	.448	.368
18F020	TE1166	350	15	DG	.99	.75	.58	.462	.38
18F847	TE1200	1	25	BA	.54	.41	.32	.252	.207
18F848	TE1201	2	25	BA	.57	.41	.32	.252	.208
18F849	TE1201.1	3	25	BA	.57	.43	.33	.263	.217
18F850	TE1201.2	4	25	BA	.57	.43	.34	.266	.219
18F524	TE1202	5	25	BA	.57	.43	.34	.266	.219
18F525	TE1203	6	25	BA	.57	.43	.34	.266	.219
18F851	TE1203.5	8	25	BA	.60	.44	.34	.269	.222
18F526	TE1204	10	25	BB	.60	.44	.34	.271	.223
18F527	TE1205	15	25	BB	.75	.56	.43	.343	.282
18F528	TE1206	20	25	CB	.81	.61	.48	.378	.311
18F852	TE1207	25	25	CB	.81	.61	.48	.378	.311
18F021	TE1207.5	30	25	CB	.81	.61	.48	.378	.311
18F853	TE1208	35	25	CB	.81	.61	.48	.378	.311
18F854	TE1209	50	25	CC	.81	.61	.48	.378	.311
18F855	TE1210	75	25	DC	.87	.65	.50	.399	.328
18F856	TE1211	100	25	DD	.90	.67	.52	.413	.340
18F022	TE1212	150	25	DF	.90	.68	.53	.42	.345
18F023	TE1213	200	25	DG	.99	.75	.58	.462	.38
18F857	TE1300	1	50	BA	.54	.41	.32	.252	.207
18F858	TE1301	2	50	BA	.54	.41	.32	.252	.207
18F859	TE1302	3	50	BA	.57	.43	.33	.263	.217
18F860	TE1302.1	4	50	BA	.57	.43	.34	.266	.219
18F529	TE1303	5	50	BB	.57	.43	.34	.266	.219
18F861	TE1303.1	6	50	BB	.81	.59	.46	.367	.302
18F862	TE1303.3	8	50	BB	.81	.60	.46	.368	.303
18F530	TE1304	10	50	CB	.81	.60	.47	.370	.304
18F863	TE1304.2	15	50	CB	.81	.61	.48	.377	.310
18F531	TE1305	20	50	CC	.81	.61	.48	.378	.311
18F024	TE1305.5	25	50	CC	.81	.61	.48	.378	.311
18F864	TE1306	35	50	DC	.84	.63	.49	.392	.322
18F865	TE1307	50	50	DD	.87	.65	.51	.403	.332
18F025	TE1308	75	50	DF	.87	.66	.51	.406	.334
18F026	TE1309	100	50	DG	.90	.68	.53	.42	.345
18F866	TE1400	1	100	BA	.81	.60	.47	.370	.304
18F867	TE1401	2	100	BB	.81	.60	.47	.370	.304
18F868	TE1402	3	100	CB	.81	.60	.47	.370	.304
18F869	TE1403	4	100	CB	.81	.60	.47	.370	.304
18F870	TE1404	5	100	CC	.81	.60	.47	.371	.305
18F871	TE1405	6	100	CC	.81	.60	.47	.372	.306
18F872	TE1406	8	100	DC	.81	.61	.47	.374	.308
18F873	TE1407	10	100	DC	.81	.61	.47	.375	.309
18F874	TE1408	15	100	DD	.84	.62	.48	.382	.314
18F875	TE1409	20	100	DF	.84	.63	.49	.389	.320
18F027	TE1410	25	100	DG	.93	.70	.55	.434	.357
18F028	TE1411	30	100	DG	.93	.70	.55	.434	.357
18F876	TE1500	1	150	BA	.84	.63	.49	.389	.320
18F877	TE1501	2	150	BB	.84	.63	.49	.389	.320
18F878	TE1502	3	150	CB	.84	.63	.49	.389	.320
18F879	TE1503	4	150	CC	.84	.63	.49	.389	.320
18F880	TE1504	5	150	CC	.84	.63	.49	.389	.320
18F881	TE1505	6	150	DC	.84	.63	.49	.389	.320
18F029	TE1505.5	7	150	DC	.84	.63	.49	.391	.321
18F882	TE1506	8	150	DC	.84	.63	.49	.391	.321
18F883	TE1507	10	150	DD	.84	.63	.49	.392	.322
18F884	TE1508	12	150	DF	.87	.65	.51	.400	.329
18F030	TE1509	20	150	DG	.87	.66	.51	.406	.334

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TVA Atom Electrolytics

The only small size electrolytic especially designed for 85°C (185°F) operation on voltages to 450 working volts D.C. Unit is engineered to withstand extra high temperature, high ripple currents, plus high surge voltages. Metal case construction with outer insulating tube. Wt., 3 oz.

SINGLE UNITS 6 WVDC

Stock No.	TVA No.	Mfd.	D. x L.	1-24	25-49	50-99	100-249	250-Up
18F955	1100	50	3/8"x1 1/4"	.57	.41	.32	.26	.21
18F957	1102	250	9/16"x1 5/16"	.81	.64	.50	.40	.33
18F958	1103	500	5/8"x1 9/16"	.93	.73	.57	.46	.37
18F959	1104	1000	11/16"x2 5/16"	1.14	.89	.70	.56	.46
18F960	1105	1500	13/16"x2 11/16"	1.26	.98	.76	.61	.50
18F151	1106	2000	13/16"x2 15/16"	1.38	1.08	.84	.67	.55
12 WVDC								
18F961	1130	100	9/16"x1 5/16"	.72	.52	.40	.32	.26
18F962	1131	250	5/8"x1 5/16"	.87	.68	.53	.43	.35
18F153	1132	500	3/4"x1 11/16"	1.02	.79	.62	.49	.41
18F963	1133	1000	13/16"x1 13/16"	1.35	1.05	.82	.65	.54
15 WVDC								
18F964	1160	100	9/16"x1 5/16"	.75	.52	.41	.33	.27
18F965	1161	250	5/8"x1 5/16"	.93	.74	.60	.46	.38
18F966	1162	500	11/16"x1 13/16"	1.05	.83	.64	.52	.42
18F228	1163	1000	13/16"x1 13/16"	1.38	1.07	.84	.67	.55
18F2132	1170	2000	15/16"x2 13/16"	1.92	1.29	1.00	.81	.66
25 WVDC								
18F967	1201	2	7/16"x1 3/8"	.54	.39	.31	.25	.20
18F968	1203	5	7/16"x1 3/8"	.60	.42	.32	.26	.21
18F154	1204	10	7/16"x1 3/8"	.60	.42	.33	.27	.22
18F2133	1204.5	20	7/16"x1 1/4"	.60	.43	.34	.27	.23
18F155	1205	25	7/8"x1 3/8"	.60	.44	.35	.28	.23
18F156	1206	50	9/16"x1 5/16"	.66	.47	.37	.30	.24
18F157	1207	100	9/16"x1 11/16"	.81	.58	.45	.36	.30
18F969	1208	250	11/16"x1 9/16"	1.02	.79	.61	.49	.40
18F159	1209	500	3/4"x1 13/16"	1.38	1.07	.84	.67	.55
18F2134	1211	1000	15/16"x2 5/16"	1.98	1.79	1.39	1.11	.91
50 WVDC								
18F970	1300	1	7/16"x1 3/8"	.54	.39	.31	.25	.20
18F971	1301	2	7/16"x1 3/8"	.54	.39	.31	.25	.20
18F972	1303	5	7/16"x1 3/8"	.60	.42	.32	.26	.21
18F163	1304	10	7/16"x1 1/4"	.60	.42	.33	.27	.22
18F2136	1305	15	7/16"x1 1/4"	.60	.43	.34	.27	.23
18F973	1305.5	20	7/16"x1 1/4"	.60	.43	.34	.27	.22
18F164	1306	25	7/16"x1 1/4"	.63	.47	.35	.28	.23
18F165	1308	50	5/8"x1 5/16"	.72	.52	.40	.32	.27
18F166	1310	100	5/8"x1 5/16"	.84	.60	.47	.40	.31
18F974	1311	150	3/4"x1 9/16"	.93	.66	.51	.41	.34
18F229	1312	250	15/16"x1 11/16"	1.05	.83	.64	.52	.42
18F975	1315	500	1"x1 15/16"	1.44	1.11	.86	.69	.57
150 WVDC								
18F2137	1400	1	7/16"x1 3/8"	.57	.41	.32	.26	.22
18F976	1402	4	7/16"x1 1/4"	.60	.43	.33	.27	.22
18F977	1403	5	7/16"x1 1/4"	.60	.43	.34	.27	.22
18F978	1405	8	9/16"x1 5/16"	.63	.45	.35	.28	.23
18F222	1406	10	9/16"x1 5/16"	.63	.46	.36	.29	.24
18F979	1407	12	9/16"x1 5/16"	.66	.47	.37	.29	.24
18F980	1409	16	9/16"x1 5/16"	.69	.49	.38	.31	.25
18F175	1410	20	5/8"x1 9/16"	.72	.50	.39	.32	.26
18F981	1411	25	3/4"x1 9/16"	.75	.53	.41	.33	.27
18F167	1412	30	13/16"x1 5/16"	.78	.55	.43	.35	.28
18F176	1413	40	13/16"x1 9/16"	.81	.58	.45	.36	.30
18F230	1414	50	13/16"x1 13/16"	.84	.60	.47	.38	.31
18F223	1415	60	13/16"x1 9/16"	.90	.63	.49	.40	.33
18F168	1418	80	15/16"x1 9/16"	.96	.69	.54	.43	.35
18F231	1420	100	15/16"x2 1/16"	1.05	.75	.58	.47	.38
18F224	1422	150	1 1/16"x2 1/16"	1.14	.82	.64	.48	.42
18F982	1423	200	1 1/16"x2 9/16"	1.32	.93	.72	.58	.47
18F2138	1424	250	1 1/4"x4 3/8"	2.16	1.60	1.25	1.00	.82
18F983	1425	300	1 1/16"x3 5/16"	1.68	1.25	.97	.78	.64
200 WVDC								
18F985	1445	100	1 1/16"x2 5/16"	1.14	.90	.70	.56	.46
18F984	1447	150	1 3/8"x3 3/8"	1.68	1.26	.98	.79	.65
18F985	1480	200	1 3/8"x3 3/8"	1.89	1.42	1.10	.89	.73
250 WVDC								
18F986	1501	4	9/16"x1 5/16"	.66	.48	.30	.30	.25
18F987	1503	8	9/16"x1 9/16"	.69	.54	.42	.34	.28
18F232	1504	10	5/8"x1 9/16"	.72	.56	.43	.35	.29
18F988	1505	12	5/8"x1 9/16"	.75	.57	.45	.36	.29
18F989	1507	16	13/16"x1 5/16"	.78	.60	.47	.38	.31
18F233	1508	20	13/16"x1 5/16"	.81	.6	.50	.40	.33
18F990	1510	30	13/16"x1 13/16"	.87	.6	.53	.43	.35
18F234	1511	40	13/16"x2 1/16"	.93	.74	.57	.46	.38
18F991	1512	50	15/16x1 13/16"	1.02	.81	.63	.50	.41
18F992	1513	60	1"x1 13/16"	1.08	.8	.66	.53	.43
18F2139	1522	100	1 1/16"x2 5/16"	1.47	.96	.75	.60	.50
300 WVDC								
18F2140	1573	100	1 1/16"x3 1/16x3 1/	1.59	.98	.77	.61	.50
18F993	1575	140	1 3/8"x3 3/8"	2.19	1.64	1.28	1.02	.84
18F2142	1578	200	1 3/8"x4 5/8"	2.70	1.61	1.25	1.00	.72
350 WVDC								
18F994	1601	4	1 1/16"x1 9/16"	.63	.49	.38	.31	.25
18F995	1603	8	1 1/16"x1 5/16"	.72	.55	.43	.35	.28

350 WVDC

Stock No.	TVA No.	Mfd.	D. x L.	1-24	25-49	50-99	100-249	250-Up
18F996	1604	10	3/4"x1 9/16"	.75	.59	.46	.37	.30
18F997	1605	12	13/16"x1 9/16"	.78	.61	.47	.38	31
18F998	1607	16	13/16"x1 9/16"	.84	.66	.51	.41	.34
18F999	1608	20	13/16"x1 13/16"	.87	.68	.53	.42	.35
18F1529	1610	30	13/16"x2 1/16"	.99	.77	.60	.48	.40
18F1530	1611	40	15/16"x2 1/16"	1.05	.60	.6.	.50	.41
18F1531	1613	60	1 1/16"x2 1/16"	1.17	.91	.71	.57	.47
18F2144	1620	100	1 1/16"x2 13/16"	1.86	1.11	.86	.69	.57
400 WVDC (Nonpolarized)								
18F1532	1650	10	1 1/16"x2 1/16"	1.05	.78	.61	.49	.40
18F2143	1652	20	1 1/16"x2 9/16"	1.17	.88	.69	.55	.16
450 WVDC								
18F1533	1700	1	9/16"x1 5/16"	.66	.51	.40	.32	.26
18F1534	1701	2	9/16"x1 5/16"	.66	.52	.41	.33	.27
18F1535	1702	4	11/16"x1 5/16"	.69	.54	.42	.34	.28
18F2146	1703	5	11/16"x1 9/16"	.72	.56	.44	.35	.29
18F225	1704	8	3/4"x1 9/16"	.75	.60	.46	.37	.31
18F169	1705	10	13/16"x1 9/16"	.78	.60	.47	.37	.31
18F1536	1706	12	13/16"x1 9/16"	.81	.64	.50	.40	.33
18F187	1708	16	15/16"x1 13/16"	.84	.68	.53	.42	.35
18F170	1709	20	15/16"x1 13/16"	.93	.73	.57	.46	.37
18F171	1711	30	15/16"x2 1/16"	1.02	.80	.63	.50	11
18F172	1712	40	1 1/16"x2 1/16"	1.08	.83	.65	.52	.43
18F226	1713	50	1 1/16"x2 9/16"	1.26	.98	.76	.61	.50
18F227	1714	60	1 1/16"x2 13/16"	1.41	1.16	.90	.72	.59
18F235	1716	80	1 1/16"x3 1/16"	1.68	1.11	.87	.69	.57
18F1537	1718	100	1 1/16"x4 1/16"	1.92	1.69	1.31	1.05	.86
500 WVDC								
18F236	1902	8	15/16"x1 13/16"	.78	.61	.48	.38	.31
18F238	1906	20	1 1/16"x2 9/16"	.96	.75	.58	.47	.38
18F2144	1908	40	1 1/16"x3 1/16"	1.35	.79	.62	.50	.41
600 WVDC								
18F240	1962	8	1"x1 3/8"	1.83	1.5.	1.07	.8.	.70
18F241	1963	10	1"x1 3/8"	2.19	1.64	1.28	1.02	.84
18F242	1965	16	1"x1 7/8"	2.48	1.87	1.46	1.17	.96
18F243	1966	20	1"x1 7/8"	2.58	1.93	1.50	1.20	.99
DUAL UNITS (COMMON NEGATIVE) 150-150 WVDC								
18F173	2428	20-20	13/16"x1 9/16"	1.05	.80	.62	.50	.41
18F188	2434	30-30	15/16"x1 9/16"	1.08	.85	.66	.53	.43
18F1546	2438	40-20	15/16"x1 9/16"	1.14	.84	.65	.52	.43
18F1547	2442	40-30	15/16"x1 13/16"	1.08	.86	.67	.54	.44
18F178	2445	40-40	15/16"x2 1/16"	1.11	.88	.69	.55	.45
18F185	2450	50-30	15/16"x2 1/16"	1.17	.88	.69	.55	.45
18F1548	2453	50-50	1 3/8"x3 3/8	1.26	.93	.72	.58	.47
18F1549	2460	80-30	15/16"x2 9/16"	1.32	.94	.73	.59	.48
18F1550	2461	80-40	15/16"x2 9/16"	1.32	.96	.75	.60	.49
18F1551	2462	80-50	15/16"x2 9/16"	1.41	.99	.77	.62	.51
18F036	2463	100-50	1 1/16x2 13/16	1.59	1.04	.81	.65	.54
18F1552	2464	100-100	1 3/8"x3 3/8"	1.92	1.32	1.03	.82	.68
18F1553	2467	200-5	1 1/16"x3 9/16"	1.59	1.17	.91	.73	.67
250-250 WVDC								
18F1555	2515	20-20	15/16"x1 13/16"	1.11	.88	69	.55	.45
350-350 WVDC								
18F037	2640	140-5	1 1/4x3 7/8"	2.49	1.90	1.48	1.18	.97
450-450 WVDC								
18F179	2720	8-8	15/16"x1 13/16"	1.17	.88	.69	.55	.45
18F174	2722	10-10	15/16"x2 1/16"	1.23	.92	.72	.58	.47
18F180	2730	20-20	15vb"x2 13/16"	1.50	1.19	.92	.74	.61
18F038	2735	30-30	1 1/16x3 5/16"	1.95	1.46	1.13	.91	.75
18F181	2740	40-40	1 1/16"x4 1/16"	2.25	1.69	1.40	1.12	.92
TRIPLE UNITS 150-150-150 WVDC								
18F039	3440	20-20-20	15/16x1 13/16"	1.77	1.32	1.03	.82	.68
18F186	3444	30-30-30	15/16x2 5/16"	1.56	1.39	1.08	.86	.71
18F040	3446	40-20-20	15/16x2 1/16"	1.60	1.36	1.06	.84	.70
18F041	3448	40-30-20	15/16x2 3/16"	1.86	1.38	1.08	.86	.71
18F042	3450	40-40-20	15/16x2 9/16"	1.86	1.40	1.09	.88	.72
18F043	3451	40-40-40	1 1/16x2 9/16"	1.92	1.44	1.12	.90	.74
18F044	3453	50-30-20	1 1/16x2 9/16"	1.89	1.40	1.09	.88	.72
18F045	3455	80-40-20	1 1/16x3 1/16"	1.98	1.49	1.16	.93	.76
18F046	3456	80-40-40	1 1/16x3 1/16"	2.04	1.53	1.19	.95	.78
QUAD UNITS 450-450-450-450 WVDC								
18F047	4748	40-20-20-10	1 3/8x4 3/8"	3.18	2.37	1.84	1.47	1.21
18F048	4750	40-40-20-20	1 1/2x4 1/4"	3.27	2.34	1.82	1.46	1.20

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Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

Electrolytic Capacitors

SPRAGUE® THE MARK OF RELIABILITY

TVL TWIST-LOK ELECTROLYTICS

CASE SIZES

A—1⅜x2" E—1x2" H—1⅜x3" L—1x3½
B—¾x2" F—1x2½" J—1⅜x4" M—1⅜x4
C—¾x2½" G—1x3" K—1⅜x3½" N—1x4'
D—1⅜x2½" P—1x1½"

Withstands extremely high temperatures, ripple currents and surge voltages. Self-mounting, with twist-prong tabs that go through chassis or connect to washer for above-chassis mounting. For 85°C operation up to 450 Working Volts DC. Shpg. wt., 6 oz.

SINGLE UNITS

Stock No.	TVL No.	MF	WVDC	Size	1-24	25-49	50-99	100-249
18F550	1168	2000	15	A	2.07	1.44	1.12	.89
18F1603	1220	500	25	P	1.53	.87	.68	.54
18F552	1230	1000	25	A	2.13	1.30	1.01	.81
18F667	1317	100	50	B	.99	.58	.45	.36
18F554	1330	500	50	A	1.59	1.09	.85	.68
18F557	1415	50	150	P	.99	.66	.51	.41
18F559	1423	100	150	P	1.20	.75	.58	.47
18F1780	1426	120	150	D	1.29	.92	.71	.57
18F689	1429	150	150	E	1.29	.83	.65	.52
18F560	1430	150	150	A	1.29	.99	.77	.62
18F561	1431	200	150	A	1.47	1.10	.86	.69
18F562	1434	300	150	A	1.68	1.25	.97	.78
18F668	1509	20	250	E	.96	.64	.50	.40
18F684	1519	40	250	E	1.08	.70	.54	.44
18F1782	1535	100	250	G	1.62	.89	.69	.55
18F1783	1540	150	250	D	1.86	1.17	.91	.73
18F690	1547	200	250	D	2.19	1.36	1.06	.85
18F1784	1578	100	300	F	1.74	.98	.76	.61
18F566	1584	150	300	K	2.10	1.34	1.05	.84
18F692	1530	250	300	J	3.33	1.74	1.35	1.08
18F669	1617	30	350	E	1.14	.72	.56	.45
18F567	1621	40	350	E	1.20	.77	.60	.48
18F568	1638	125	350	D	2.37	1.37	1.06	.85
18F693	1642	150	350	D	2.37	1.50	1.17	.93
18F569	1705	10	450	P	.93	.65	.51	.41
18F570	1714	20	450	E	1.08	.72	.56	.45
18F571	1720	30	450	F	1.17	.80	.63	.50
18F572	1725	40	450	F	1.23	.88	.68	.55
18F573	1735	80	450	D	1.83	1.31	1.02	.81
18F574	1760	125	450	J	2.31	1.69	1.31	1.05
18F576	1820	40	475	A	1.51	1.06	.82	.66
18F578	1940	10	500	P	1.02	.68	.53	.42
18F670	1947	30	500	F	1.20	.89	.69	.55
18F1604	1950	40	500	F	1.50	.99	.77	.62
18F694	1958	80	500	D	2.16	1.54	1.20	.96
18F687	1960	90	500	H	2.10	1.66	1.29	1.03

DUAL UNITS

18F1605	2160	1000-1000	15-15	F	2.64	1.40	1.09	.87
18F583	2428	40-40	150-150	P	1.14	.80	.62	.50
18F584	2432	50-30	150-150	P	1.20	.80	.62	.50
18F585	2435	50-50	150-150	P	1.29	.83	.64	.52
18F587	2442	80-40	150-150	A	1.38	1.02	.79	.63
18F695	2442.1	80-50	150-150	F	1.44	.88	.68	.55
18F1785	2444	200-5	150-150	H	1.62	1.24	.96	.77
18F671	2515	20-20	250-250	P	1.14	.78	.61	.49

DUAL UNITS

Stock No.	TVL No.	MF	WVDC	Size	1-24	25-49	50-99	100-249
18F685	2628	30-30	350-350	F	1.74	.96	.75	.60
18F594	2635	80-80	350-350	D	2.82	1.63	1.27	1.01
18F1786	2641	100-100	350-350	H	3.69	1.80	1.40	1.12
18F598	2750	10-10	450-450	E	1.14	.81	.63	.50
18F600	2755	20-20	450-450	F	1.53	.96	.75	.60
18F601	2759	30-30	450-450	A	1.83	1.26	.98	.78
18F602	2764	40-40	450-450	D	2.07	1.42	1.10	.88
18F674	2940	40-40	500-500	D	2.58	1.63	1.27	1.02

TRIPLE UNITS

18F1787	3432	80-40-20	150-150-25	E	1.68	.95	.74	.59
18F1788	3437	40-20-20	150-150-150	P	1.44	.82	.64	.51
18F613	3440	40-40-40	150-150-150	E	1.56	.95	.74	.59
18F614	3442	50-50-50	150-150-150	G	1.80	.99	.77	.62
18F622	3583	80-40-40	300-300-300	D	2.85	1.52	1.18	.95
18F686	3639.8	30-20-10	350-350-350	F	1.95	1.04	.81	.65
18F625	3620	30-30-20	350-300-25	G	1.89	1.02	.80	.64
18F631	3642	80-60-60	350-350-350	K	3.33	1.91	1.49	1.19
18F1790	3689.3	100-10-80	400-400-350	K	3.66	2.04	1.59	1.27
18F634	3731	10-10-20	450-450-25	E	1.44	.90	.70	.56
18F635	3739	20-20-20	450-450-25	G	1.83	1.05	.82	.66
18F640	3757	80-20-100	450-450-50	K	2.88	1.75	1.36	1.09
18F641	3764	40-40-100	450-450-200	H	2.97	1.75	1.37	1.03
18F642	3775	10-10-10	450-450-450	E	1.56	.97	.76	.61
18F680	3778.2	15-15-15	450-450-450	F	1.86	1.08	.84	.67
18F644	3780	20-20-20	450-450-450	A	2.16	1.34	1.04	.84
18F1791	3784	40-30-20	450-450-450	D	2.58	1.57	1.23	.98
18F646	3785	40-40-10	450-450-450	D	2.49	1.56	1.21	.97
18F647	3786	40-40-20	450-450-450	D	2.67	1.65	1.28	1.03
18F648	3787	40-40-40	450-450-450	H	2.94	1.81	1.41	1.13
18F649	3789	60-20-20	450-450-450	H	2.76	1.65	1.28	1.03
18F681	3793	80-40-20	450-450-450	H	3.24	1.97	1.53	1.22
18F682	3952	10-10-10	500-500-500	F	1.62	1.05	.82	.66

QUADRUPLE UNITS

18F664	4760	10-10-10-10	450-450-450-450	A	2.01	1.25	.98	.78
18F665	4763	20-20-20-20	450-450-450-450	D	2.82	1.58	1.23	.98
18F1792	4773	40-40-20-20	450-450-450-450	D	3.33	1.90	1.48	1.18
18F699	4775	40-40-40-40	450-450-450-450	K	3.87	2.91	1.70	1.36

TYPE 600D HIGH GRADE ALUMINUM ELECTROLYTICS — PLASTIC INSULATING SLEEVE

Offer combination of extended temperature range and high voltage rating. Dual rated may be used for 85°C or 125°C operation. Withstands 2000-hour life test at either temperature, and corresponding working voltage. And vibration from 10 to 2000 cycles at 15 g. Features excellent capacitance stability, dissipation factor and DC leakage current after high temperature shelf testing. Closely approximate electrical requirements of MIL-C-3965 tantalum foil capacitors, at about half the cost. Compact size, weighs only about one-third as much as equivalent tantalum types. Tolerance is —10%, +75% up to 75 WVDC; —10%, +50% for 100 WVDC up. Sizes shown in chart are for bare can only: add 1/64" to dia. and 1/16" to length for insulating sleeve. Avg. shpg. wt., 3 oz.

Stock No.	Type 600D-	Mfd.	WVDC@ 85° C	WVDC@ 125° C	Size Pr. Key
18F2765	147G007DC4	140	7	5	AA
18F2766	217G007DD4	210	7	5	BB
18F2767	287G007DE4	280	7	5	CC
18F2768	427G007DG4	420	7	5	DD
18F2769	567G007DJ4	560	7		EE
18F2770	857G007DL4	850	7	5	FF
18F2771	956G015DC4	95	15	10	AA
18F2772	147G015DD4	140	15	10	BB
18F2773	197G015DE4	190	15	10	CC
18F2774	297G015DG4	290	15	10	DD
18F2775	397G015DJ4	390	15	10	EE
18F2776	587G015DL4	580	15	10	FF
18F2777	706G020DC4	70	20	15	AA
18F2778	107G020DD4	100	20	15	BB
18F2779	147G020DE4	140	20	15	CC
18F2780	227G020DG4	220	20	15	DD
18F2781	297G020DJ14	290	20	15	EE
18F2782	447G020DL4	440	20	15	FF
18F2783	506G025DC4	50	25	20	AA
18F2784	756G025DD4	75	25	20	BB
18F2785	107G025DE4	100	25	20	CC
18F2786	157G025DG4	150	25	20	DD

Stock No.	Type 600D-	Mfd.	WVDC@ 85° C	WVDC@ 125° C	Size Pr. Key
18F2787	217G025DJ4	210	25	20	EE
18F2788	317G025DL4	310	25	20	FF
18F2789	306G040DC4	30	40	30	AA
18F2790	506G040DD4	50	40	30	BB
18F2791	706G040DE4	70	40	30	CC
18F2792	107G040DG4	100	40	30	DD
18F2793	147G040DJ4	140	40	30	EE
18F2794	217G040DL4	210	40	30	FF
18F2795	206G050DC4	20	50	40	AA
18F2796	356G050DD4	35	50	40	BB
18F2797	506G050DE4	50	50	40	CC
18F2798	756G050DG4	75	50	40	DD
18F2799	107G050D14	100	50	40	EE
18F2800	157G050DL4	150	50	40	FF
18F2801	186G060DC4	18	60	50	AA
18F2802	256G060DD4	25	60	50	BB
18F2803	406G060DE4	40	60	50	CC
18F2804	606G060DG4	60	60	50	DD
18F2805	806G060DJ4	80	60	50	EE
18F2806	127G060DL4	120	60	50	FF
18F2807	156G070DC4	15	70	60	AA
18F2808	206G070DD4	20	70	60	BB

PRICE AND SIZE CHART

Case Size	Dia. x Len.	1-9	10-24	25-49	50-99	100-499
AA	3/8 x 1 3/16"	2.86	2.14	1.44	1.26	.899
BB	3/8 x 1 5/16"	3.06	2.29	1.54	1.34	.962
CC	3/8 x 1 1/8"	3.98	2.98	2.00	1.75	1.254
DD	3/8 x 1 3/8"	5.98	4.48	3.00	2.62	1.874
EE	3/8 x 1 5/8"	6.14	4.60	3.08	2.69	1.924
FF	3/8 x 1 3/16"	6.58	4.93	3.30	2.88	2.064

Stock No.	Type 600D-	Mfd.	WVDC@ 85° C	WVDC@ 125° C	Size Pr. Key
18F2809	306G070DE4	30	70	60	CC
18F2810	506G070DG4	50	70	60	DD
18F2811	656G070DJ4	65	70	60	EE
18F2812	107G070DL4	100	70	60	FF
18F2813	805G100DC4	8	100	75	AA
18F2814	136G100DD4	13	100	75	BB
18F2815	176G100DE4	17	100	75	CC
18F2816	256G100DG4	25	100	75	DD
18F2817	356G100DJ4	35	100	75	EE
18F2818	506G100DL4	50	100	75	FF
18F2819	605F150DC4	6	150	100	AA
18F2820	905F150DD4	9	150	100	BB
18F2821	126F150DE4	12	150	100	CC
18F2822	186F150DG4	18	150	100	DD
18F2823	256F150DJ4	25	150	100	EE
18F2824	376F150DL4	37	150	100	FF
18F2825	405F200DC4	4	200	150	AA
18F2826	605F200DD4	6	200	150	BB
18F2827	805F200DE4	8	200	150	CC
18F2828	136F200DG4	13	200	150	DD
18F2829	176F200DJ4	17	200	150	EE
18F2830	266F200DL4	26	200	150	FF

SPRAGUE
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Capacitors

36D "POWERLYTIC" ALUMINUM ELECTROLYTICS

For applications requiring maximum capacitance in a given case size. Low ESR and leakage current; extremely long shelf life. Withstands military environmental conditions including —55°C storage tests. Tol. 3-50v, +75% to —10%; 75-450v, +50% to —10%. Av. shpg. wt., 4 oz. With plastic outer tube.

SIZES FOR 36D CAPACITORS
D. x L. Including plastic outer case

AA, 1 13/32 x 2 3/16	BC, 2 1/32 x 4 3/16	DC, 3 1/32 x 4 3/16
AB, 1 13/32 x 3 3/16	CB, 2 1/32 x 3 3/16	DD, 3 1/32 x 4 11/16
AC, 1 13/32 x 4 3/16	CC, 2 1/32 x 4 3/16	DF, 3 1/32 x 5 11/16
BB, 2 1/32 x 3 3/16	CD, 2 1/32 x 4 11/16	

3 WORKING VOLTS DC

Stk. No.	Type	Mfd.	Size	1-24	25-49	50-99
18F2433	36D274G003DF2A	270,000	DF	10.97	9.60	7.41

6 WORKING VOLTS DC

18F2434	36D124G006DC2A	120,000	DC	8.20	7.17	5.54
18F2435	36D194G006DF2A	190,000	DF	11.04	9.66	7.46

10 WORKING VOLTS DC

18F2436	36D602G010AA2A	6,000	AA	1.85	1.62	1.25
18F2437	36D123G010AB2A	12,000	AB	2.23	1.95	1.51
18F2438	36D183G010AC2A	18,000	AC	2.57	2.25	1.74
18F2439	36D283G010BB2A	28,000	BB	3.43	3.00	2.32
18F2440	36D423G010BC2A	42,000	BC	4.15	3.64	2.81
18F2441	36D483G010CB2A	48,000	CB	4.66	4.08	3.15
18F2442	36D104G010DC2A	100,000	DC	8.27	7.24	5.58
18F2443	36D164G010DF2A	160,000	DF	11.10	9.71	7.49

15 WORKING VOLTS DC

18F2444	36D462G015AA2A	4,600	AA	1.85	1.62	1.25
18F2445	36D922G015AB2A	9,200	AB	2.24	1.96	1.51
18F2446	36D133G015AC2A	13,000	AC	2.58	2.26	1.74
18F2447	36D213G015BB2A	21,000	BB	3.45	3.02	2.33
18F2448	36D313G015BC2A	31,000	BC	4.16	3.64	2.81
18F2449	36D363G015CB2A	36,000	CB	4.68	4.10	3.16
18F2450	36D543G015CC2A	54,000	CC	6.14	5.37	4.14
18F2451	36D633G015CD2A	63,000	CD	6.87	6.01	4.64
18F2452	36D803G015DC2A	80,000	DC	7.97	6.98	5.38

25 WORKING VOLTS DC

18F2453	36D272G025AA2A	2,700	AA	1.85	1.62	1.25
18F2454	36D552G025AB2A	5,500	AB	2.24	1.96	1.51
18F2455	36D822G025AC2A	8,200	AC	2.59	2.26	1.75
18F2456	36D183G025BC2A	18,000	BC	4.18	3.66	2.82
18F2457	36D323G025CC2A	32,000	CC	6.18	5.41	4.17
18F2458	36D473G025DC2A	47,000	DC	7.99	7.00	5.40
18F2459	36D553G025DD2A	55,000	DD	9.51	8.33	6.42
18F2460	36D713G025DF2A	71,000	DF	10.99	9.62	7.42

30 WORKING VOLTS DC

18F2461	36D363G030DC2A	36,000	DC	8.05	7.05	5.44
18F2462	36D423G030DD2A	42,000	DD	9.56	8.36	6.45

40 WORKING VOLTS DC

18F2463	36D552G040AC2A	5,500	AC	2.60	2.28	1.76
18F2464	36D842G040BB2A	8,400	BB	3.50	3.06	2.36
18F2465	36D123G040BC2A	12,000	BC	4.26	3.73	2.88
18F2466	36D213G040CC2A	21,000	CC	6.22	5.45	4.20
18F2467	36D253G040CD2A	25,000	CD	7.02	6.14	4.74

50 WORKING VOLTS DC

18F2468	36D132G050AA2A	1,300	AA	1.86	1.63	1.26
18F2469	36D262G050AB2A	2,600	AB	2.26	1.98	1.53
18F2470	36D392G050AC2A	3,900	AC	2.61	2.29	1.76
18F2471	36D602G050BB2A	6,000	BB	3.52	3.08	2.38
18F2472	36D902G050BC2A	9,000	BC	4.27	3.74	2.88
18F2473	36D153G050CC2A	15,000	CC	6.24	5.46	4.22
18F2474	36D223G050DC2A	22,000	DC	8.09	7.08	5.47

75 WORKING VOLTS DC

Stk. No.	Type	Mfd.	Size	1-24	25-49	50-99
18F2475	36D252F075AC2A	2,500	AC	2.62	2.29	1.77
18F2476	36D392F075BB2A	3,900	BB	3.53	3.09	2.38
18F2477	36D592F075BC2A	5,900	BC	4.28	3.74	2.89
18F2478	36D113F075CD2A	11,000	CD	7.08	6.20	4.78
18F2479	36D143F075DC2A	14,000	DC	8.14	7.12	5.49
18F2480	36D223F075DF2A	22,000	DF	11.52	10.08	7.78

100 WORKING VOLTS DC

18F2481	36D451F100AA2A	450	AA	1.86	1.63	1.26
18F2482	36D132F100AC2A	1,300	AC	2.60	2.28	1.76
18F2483	36D302F100BC2A	3,000	BC	4.24	3.71	2.86
18F2484	36D532F100CC2A	5,300	CC	6.22	5.45	4.20
18F2485	36D782F100DC2A	7,800	DC	8.50	7.44	5.74

150 WORKING VOLTS DC

18F2486	36D301F150AA2A	300	AA	1.86	1.63	1.25
18F2487	36D901F150AC2A	900	AC	2.58	2.26	1.74
18F2488	36D142F150BB2A	1,400	BB	3.45	3.02	2.33
18F2489	36D212F150BC2A	2,100	BC	4.18	3.66	2.82
18F2490	36D362F150CC2A	3,600	CC	6.24	5.46	4.22
18F2491	36D532F150DC2A	5,300	DC	8.42	7.37	5.68
18F2492	36D782F150DF2A	7,800	DF	11.39	9.97	7.69

200 WORKING VOLTS DC

18F2493	36D251F200AA2A	250	AA	1.85	1.62	1.25
18F2494	36D431F200AB2A	430	AB	2.22	1.94	1.50
18F2495	36D641F200AC2A	640	AC	2.56	2.24	1.73
18F2496	36D142F200BC2A	1,400	BC	4.11	3.60	2.78
18F2497	36D162F200CB2A	1,600	CB	4.70	4.11	3.17
18F2498	36D372F200DC2A	3,700	DC	8.21	7.18	5.54
18F2499	36D552F200DF2A	5,500	DF	11.35	9.93	7.66

250 WORKING VOLTS DC

18F2500	36D531F250AC2A	530	AC	2.55	2.23	1.72
18F2501	36D122F250BC2A	1,200	BC	4.09	3.58	2.76
18F2502	36D302F250DC2A	3,000	DC	8.19	7.16	5.53
18F2503	36D452F250DF2A	4,500	DF	11.29	9.88	7.62

300 WORKING VOLTS DC

18F2504	36D241F300AB2A	240	AB	2.20	1.92	1.49
18F2505	36D821F300BC2A	820	BC	4.07	3.56	2.75
18F2506	36D212F300DC2A	2,100	DC	8.16	7.14	5.51

350 WORKING VOLTS DC

18F2507	36D950F350AA2A	95	AA	1.84	1.61	1.24
18F2508	36D191F350AB2A	190	AB	2.17	1.90	1.47
18F2509	36D421F350BB2A	420	BB	3.17	2.78	2.14
18F2510	36D651F350BC2A	650	BC	4.04	3.53	2.73
18F2511	36D112F350CC2A	1,100	CC	5.91	5.17	3.99
18F2512	36D162F350DC2A	1,600	DC	8.05	7.05	5.44
18F2513	36D252F350DF2A	2,500	DF	11.08	9.69	7.48

400 WORKING VOLTS DC

18F2514	36D421F400BC2A	420	BC	4.02	3.52	2.71

450 WORKING VOLTS DC

18F2515	36D500F450AA2A	50	AA	1.80	1.58	1.22
18F2516	36D141F450AC2A	140	AC	2.51	2.20	1.69
18F2517	36D221F450BB2A	220	BB	3.23	2.82	2.18
18F2518	36D331F450BC2A	330	BC	3.99	3.49	2.70
18F2519	36D861F450DC2A	860	DC	8.37	7.33	5.65

STANDARD SERIES 150D & MILITARY TYPE CS13

Type CS13. Hermetically sealed solid tantalum capacitors to Mil-C-26655 Revision 2D. Plastic insulating sleeves. Extremely low leakage current and stability with both temperature and time. Temperature range: —80°C to +85°C; +125°C with 1/3 voltage derating. Combines true miniaturization with characteristics previously unobtainable in electrolytic capacitors. Type 150D same as above except commercial series.

6 WVDC ±10% TOLERANCE

Commercial Stk. No.	Commercial 150D	MIL-C-26655B Stk. No.	MIL-C-26655B CS13	Mfd	Price & Size Key
18F1354	565X9006A2	18F2258	BB565K	5.6	C
18F1355	685X9006A2	18F2259	BB685K	6.8	C
18F1356	476X9006B2	18F2261	BB476K	47	H
18F1357	566X9006B2	18F2263	BB566K	56	H
18F1821	606X0006B2	.....	.....	60	H
18F1822	157X9006R2	18F2264	BB157K	150	M
18F1823	187X9006R2	18F2266	BB187K	180	M
18F1824	277X9006S2	18F2267	BB277K	270	S
18F1825	337X9006S2	18F2268	BB337K	330	S

6 WVDC ±20% TOLERANCE

18F770	685X0006AS	18F2260	BB685M	6.8	A
18F1210	106X0006B2	.....	.....	10	G
18F1211	336X0006B2	.....	BB476M	33	G
18F1212	476X0006B2	18F2262	.....	47	G
18F1236	606X0006B2	.....	BB157M	60	G
18F1213	157X0006R2	18F2265	.....	150	L
18F1214	187X0006R2	.....	BB337M	180	L
18F1839	277X0006S2	.....	BC395K	270	R
18F1237	337X0006S2	18F2269	BC475K	330	R

10 WVDC ±10% TOLERANCE

Commercial Stk. No.	Commercial 150D	MIL-C-26655B Stk. No.	MIL-C-26655B CS13	Mfd	Price & Size Key
18F1358	395X9010A2	18F2270	BC276K	3.9	C
18F1359	475X9010A2	18F2271	BC336K	4.7	C
18F1360	276X9010B2	18F2273	BC396K	27	H
18F1361	336X9010B2	18F2274	.....	33	H
18F1362	396X9010B2	18F2276	.....	39	H
18F1244	406X9010B2	.....	.....	40	H
18F1245	826X9010R2	18F2277	BC826K	82	M
18F1246	107X9010R2	18F2278	BC107K	100	M
18F1247	127X9010R2	18F2280	BC127K	120	M
18F1248	187X9010S2	18F2281	BC187K	180	S
18F1249	227X9010S2	18F2282	BC277K	220	S

10 WVDC ±20% TOLERANCE

18F772	475X0010A2	18F2272	BC475M	4.7	A
18F773	336X0010B2	18F2275	BC336M	33	G
18F774	406X0010B2	.....	.....	40	G
18F1215	107X0010R2	18F2279	BC107M	100	L
18F1216	127X0010R2	.....	.....	120	L
18F1238	227X0010S2	18F2283	BC227M	220	R

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

Type 150D and CS13 Solid Tantalums

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THE MARK OF RELIABILITY

15 WVDC ±10% TOLERANCE

Commercial Stk. No.	150D	MIL-C-39655B CS13	Stk. No.	Mfd	Price & Size Key
18F1363	275X9015A2	18F2284	BD275K	2.7	C
18F1826	335X9015A2	18F2285	BD335K	3.3	C
18F1364	186X9015B2	18F2287	BD186K	18	H
18F1365	226X9015B2	18F2288	BD226K	22	H
18F1827	566X9015R2	18F2290	BD566K	56	M
18F1828	686X9015R2	18F2291	BD686K	68	M
18F1829	127X9015S2	18F2292	BD127K	120	S
18F1830	157X9015S2	18F2293	BD157K	150	S

15 WVOC ±20% TOLERANCE

18F775	335X0015A2	18F2286	BD335M	3.3	A
18F776	226X0015B2	18F2289	BD226M	22	G
18F1217	686X0015R2	18F2295	BD686M	68	L
18F1239	157X0015S2	18F2294	BD157M	150	R

20 WVDC ±10% TOLERANCE

18F1366	125X9020A2	18F2296	BE125K	1.2	C
18F1367	155X9020A2	18F2297	BE155K	1.5	C
18F1368	185X9020A2	18F2299	BE185K	1.8	C
18F1369	225X9020A2	18F2300	BE225K	2.2	C
18F1370	825X9020B2	18F2302	BE825K	8.2	H
18F1371	106X9020B2	18F2303	BE106K	10	H
18F1372	126X9020B2	18F2305	BE126K	12	H
18F1373	156X9020B2	18F2306	BE156K	15	H
18F1831	276X9020R2	18F2308	BE276K	27	M
18F1832	336X9020R2	18F2309	BE336K	33	M
18F1833	396X9020R2	18F2311	BE396K	39	M
18F1834	476X9020R2	18F2312	BE476K	47	M
18F1835	566X9020S2	18F2314	BE566K	56	S
18F1836	686X9020S2	18F2315	BE686K	68	S
18F1837	826X9020S2	18F2317	BE826K	82	S
18F1838	107X9020S2	18F2318	BE107K	100	S

20 WVDC ±20% TOLERANCE

18F777	334X0020A2			.33	A
18F778	474X0020A2			.47	A
18F779	684X0020A2			.68	A
18F780	105X0020A2			1.0	A
18F781	155X0020A2	18F2298	BE155M	1.5	A
18F782	225X0020A2	18F2301	BE225M	2.2	A
18F783	335X0020B2			3.3	G
18F784	475X0020B2			4.7	G
18F785	685X0020B2			6.8	G
18F786	106X0020B2	18F2304	BE106M	10	G
18F1218	156X0020B2	18F2307	BE156M	15	G
18F1219	226X0020R2			22	L
18F1220	336X0020R2	18F2310	BE336M	33	L
18F1221	476X0020R2	18F2313	BE476M	47	L
18F1240	686X0020S2	18F2316	BE686M	68	R
18F1243	107X0020S2	18F2319	BE107M	100	R

35 WVDC ±10% TOLERANCE

18F1840	472X9035A2			.0047	D
18F1841	562X9035A2			.0056	D
18F1842	682X9035A2			.0068	D
18F1374	822X9035A2			.0082	D
18F1375	103X9035A2			.01	D
18F1376	123X9035A2			.012	D
18F1377	153X9035A2			.015	D
18F1378	183X9035A2			.018	D
18F1379	223X9035A2			.022	D
18F1380	273X9035A2			.027	D
18F1381	333X9035A2			.033	C
18F1382	393X9035A2			.039	C
18F1383	473X9035A2			.047	C
18F1384	563X9035A2			.056	C
18F1385	683X9035A2			.068	C
18F1386	823X9035A2			.082	C
18F1387	104X9035A2			.10	C
18F1388	124X9035A2			.12	C
18F1389	154X9035A2			.15	C
18F1390	184X9035A2			.18	C
18F1391	224X9035A2			.22	C
18F1392	274X9035A2			.27	C
18F1393	334X9035A2	18F2320	BF334K	.33	C
18F1843	394X9035A2	18F2322	BF394K	.39	C
18F1394	474X9035A2	18F2323	BF474K	.47	C
18F1395	564X9035A2	18F2325	BF564K	.56	C
18F1396	684X9035A2	18F2326	BF684K	.68	C
18F1397	824X9035A2	18F2328	BF824K	.82	C
18F1398	105X9035A2	18F2329	BF105K	1.0	C
18F1399	125X9035B2	18F2331	BF125K	1.2	H
18F1400	155X9035B2	18F2332	BF155K	1.5	H
18F1401	185X9035B2	18F2334	BF185K	1.8	H
18F1402	225X9035B2	18F2335	BF225K	2.2	H
18F1403	275X9035B2	18F2337	BF275K	2.7	H
18F1404	335X9035B2	18F2338	BF335K	3.3	H
18F1405	395X9035B2	18F2340	BF395K	3.9	H
18F1406	475X9035B2	18F2341	BF475K	4.7	H
18F1407	565X9035B2	18F2343	BF565K	5.6	H
18F1408	685X9035B2	18F2344	BF685K	6.8	H
18F1844	825X9035R2	18F2346	BF825K	8.2	M
18F1845	106X9035R2	18F2347	BF106K	10	M
18F1846	126X9035R2	18F2349	BF126K	12	M
18F1847	156X9035R2	18F2350	BF156K	15	M
18F1848	186X9035R2	18F2352	BF186K	18	M
18F1849	226X9035R2	18F2353	BF226K	22	M
18F1850	276X9035S2	18F2355	BF276K	27	S
18F1851	336X9035S2	18F2356	BF336K	33	S
18F1852	396X9035S2	18F2358	BF396K	39	S
18F1853	476X9035S2	18F2359	BF476K	47	S

35 WVDC ±20% TOLERANCE

COMMERCIAL Stk. No.	150D	Mil-C-2665B Stk. No.	CS13	Mfd.	Price & Size Key
18F787	472X0035A2			.0047	B
18F788	682X0035A2			.0068	B
18F789	103X0035A2			.01	B
18F790	153X0035A2			.015	B
18F791	223X0035A2			.022	B
18F792	333X0035A2			.033	A

35 WVDC ±20% TOLERANCE

18F793	473X0035A2			.047	A
18F794	683X0035A2			.068	A
18F795	104X0035A2			.10	A
18F1222	154X0035A2			.15	A
18F1223	224X0035A2			.22	A
18F1224	334X0035A2	18F2321	BF334M	.33	A
18F1225	474X0035A2	18F2324	BF474M	.47	A
18F1226	684X0035A2	18F2327	BF684M	.68	A
18F1227	105X0035A2	18F2330	BF105M	1.0	A
18F1228	155X0035B2	18F2333	BF155M	1.5	G
18F1229	225X0035B2	18F2336	BF225M	2.2	G
18F1230	335X0035B2	18F2339	BF335M	3.3	G
18F1231	475X0035B2	18F2342	BF475M	4.7	G
18F1232	685X0035B2	18F2345	BF685M	6.8	G
18F1233	106X0035R2	18F2348	BF106M	10	L
18F1234	156X0035R2	18F2351	BF156M	15	L
18F1235	226X0035R2	18F2354	BF226M	22	L
18F1241	336X0035S2	18F2357	BF336M	33	R
18F1242	476X0035S2	18F2360	BF476M	47	R

50 WVDC ±10% TOLERANCE

18F1854	123X9050A2			.012	F
18F1855	183X9050A2			.018	F
18F1856	273X9050A2			.027	F
18F1857	393X9050A2			.039	F
18F1858	563X9050A2			.056	F
18F1859	823X9050A2			.082	F
18F1860	124X9050A2			.12	F
18F1861	184X9050A2			.18	F
18F1862	274X9050A2			.27	F
18F1863	390X9050A2			.39	F
18F1864	564X9050A2			.56	F
18F1865	824X9050A2			.82	F
18F1866	125X9050B2	18F2363	BG125K	1.2	K
18F1867	185X9050B2	18F2366	BG185K	1.8	K
18F1868	275X9050B2	18F2369	BG275K	2.7	K
18F1869	395X9050B2	18F2370	BG395K	3.9	K
18F1870	565X9050R2	18F2375	BG565K	5.6	P
18F1871	825X9050R2	18F2378	BG825K	8.2	P
18F1872	126X9050R2	18F2381	BG126K	12	P
18F1873	186X9050R2	18F2384	BG186K	18	P
18F1800	103X0050A2			.01	E

50 WVDC ±20% TOLERANCE

18F1801	153X0050A2			.015	E
18F1802	223X0050A2			.022	E
18F1803	333X0050A2			.033	E
18F1804	473X0050A2			.047	E
18F1805	683X0050A2			.068	E
18F1806	104X0050A2			.1	E
18F1807	154X0050A2			.15	E
18F1809	224X0050A2			.22	E
18F1808	334X0050A2			.33	E
18F1810	474X0050A2			.47	E
18F1811	684X0050A2			.68	E
18F1812	105X0050A2	18F2362	BG105M	1.0	J
18F1813	155X0050B2	18F2365	BG155M	1.5	J
18F1814	225X0050B2	18F2368	BG225M	2.2	J
18F1815	335X0050B2	18F2371	BG335M	3.3	J
18F1816	475X0050B2	18F2374	BG475M	4.7	J
18F1817	685X0050R2	18F2377	BG685M	6.8	N
18F1818	106X0050R2	18F2380	BG106M	10	N
18F1819	156X0050R2	18F2383	BG156M	15	N
18F1820	226X0050S2	18F2386	BG226M	22	T

PRICE & SIZE LOCATOR CHART

Key	Sizes	1-24	25-49	50-99	100-499	500-999
A	.135 x .286	1.31	1.05	.72	.59	.50
B	.135 x .286	1.32	1.06	.93	.76	.61
C	.135 x .286	1.34	1.08	.75	.62	.53
D	.135 x .286	1.35	1.09	.96	.79	.64
E	.135 x .286	1.92	1.54	1.30	1.11	1.02
F	.135 x .286	1.54	1.99	1.68	1.45	1.31
G	.185 x .474	2.48	1.24	.74	.61	.51
H	.185 x .474	1.57	1.27	.77	.64	.54
J	.185 x .474	2.02	1.62	1.37	1.17	1.07
K	.185 x .474	2.62	2.10	1.77	1.52	1.39
L	.289 x .686	2.54	2.04	1.39	1.13	.95
M	.289 x .686	2.57	2.07	1.42	1.16	.98
N	.289 x .686	3.30	2.64	2.24	1.91	1.75
P	.289 x .686	4.28	3.43	2.90	3.47	2.26
R	.351 x .822	4.72	3.78	2.78	2.26	1.88
S	.351 x .822	4.75	3.81	2.81	2.29	1.91
T	.351 x .822	6.14	4.92	4.16	3.54	3.24

160P BLACK BEAUTY DIFILM MOLDED

For high humidity and high temperature operation up to 105° C. From 220v. through 1600v. the units will operate at 105°C. (221°F) with no voltage derating. From 6000v thru 12,500v. they will operate at 85°C. (185°F). Wt., 3 oz. Tolerance ±10%.

TYPE 2TM 200 VOLTS

Stock No.	Type	Mfd.	Size	1-24	25-49	50-99	100-249
18F088	2TMS10	.01	5/16x1"	.18	.12	.10	.08
18F130	2TMS20	.02	3/8x1 1/4"	.18	.13	.10	.08
18F131	2TMS47	.047	7/16x1 1/4"	.21	.14	.11	.09
18F132	2TMS50	.05	7/16x1 1/4"	.21	.15	.11	.09
18F133	2TMP10	.1	1/2x1 1/2"	.21	.16	.12	.10
18F134	2TMP15	.15	1/2x1 1/2"	.24	.18	.14	.11
18F135	2TMP22	.22	5/8x1 7/8"	.33	.24	.18	.15
18F136	2TMP25	.25	5/8x1 7/8"	.36	.25	.20	.16
18F137	2TMP47	.47	3/4x2 1/4"	.42	.31	.24	.19
18F138	2TMP50	.5	3/4x2 1/4"	.75	.54	.42	.34
18F139	2TMM1	1.0	3/4x2 1/4"	1.05	.79	.61	.49

TYPE 4TM 400 VOLTS

18F089	4TMS10	.01	3/8x1 1/4"	.18	.12	.10	.08
18F368	4TMS15	.015	3/8x1 1/4"	.18	.13	.10	.08
18F090	4TMS20	.02	3/8x1 1/4"	.18	.13	.10	.08
18F091	4TMS22	.022	3/8x1 1/4"	.18	.13	.10	.08
18F369	4TMS25	.025	7/16x1 1/4"	.21	.14	.11	.09
18F370	4TMS30	.03	7/16x1 1/4"	.21	.14	.11	.09
18F371	4TMS40	.040	7/16x1 1/4"	.21	.15	.12	.09
18F092	4TMS47	.047	7/16x1 1/4"	.21	.15	.12	.09
18F093	4TMS50	.05	7/16x1 1/4"	.24	.17	.13	.11
18F094	4TMS68	.068	1/2x1 1/2"	.24	.17	.13	.11
18F095	4TMP10	.1	1/2x1 1/2"	.24	.18	.14	.11
18F096	4TMP15	.15	5/8x1 7/8"	.33	.24	.19	.15
18F372	4TMP20	.2	5/8x1 7/8"	.36	.25	.20	.16
18F097	4TMP22	.22	5/8x1 7/8"	.36	.25	.20	.16
18F098	4TMP25	.25	3/4x2 1/4"	.54	.39	.30	.24
18F373	4TMP47	.47	3/4x2 1/4"	.63	.46	.36	.29
18F099	4TMP50	.5	3/4x2 1/4"	.75	.56	.44	.35
18F258	4TMM1	1.0	1x2 1/2"	1.26	.93	.72	.58

YPE 6TM 600 VOLTS

18F140	6TMT10	.0001	5/16x1"	.18	.12	.10	.08
18F141	6TMT25	.00025	5/16x1"	.18	.12	.10	.08
18F142	6TMT40	.0004	5/16x1"	.18	.12	.10	.08
18F143	6TMT50	.0005	5/16x1"	.18	.12	.10	.08
18F100	6TMD10	.001	5/16x1"	.18	.12	.10	.08
18F144	6TMD15	.0015	5/16x1"	.18	.12	.10	.08
18F101	6TMD20	.002	5/16x1"	.18	.13	.10	.08
18F145	6TMD22	.0022	5/16x1"	.18	.13	.10	.08
18F374	6TMD25	.0025	5/16x1"	.18	.13	.10	.08
18F102	6TMD30	.003	5/16x1"	.18	.13	.10	.08
18F375	6TMD33	.0033	5/16x1"	.18	.13	.10	.08
18F103	6TMD40	.004	3/8x1 1/4"	.18	.14	.11	.09
18F146	6TMD47	.0047	3/8x1 1/4"	.18	.14	.11	.09
18F104	6TMD50	.005	3/8x1 1/4"	.21	.14	.11	.09
18F105	6TMD60	.006	3/8x1 1/4"	.21	.14	.11	.09
18F147	6TMD68	.0068	3/8x1 1/4"	.21	.14	.11	.09
18F376	6TMD80	.008	3/8x1 1/4"	.21	.14	.11	.09
18F106	6TMS10	.01	3/8x1 1/4"	.18	.14	.11	.08
18F148	6TMS15	.015	3/8x1 1/4"	.21	.14	.11	.09
18F107	6TMS20	.02	7/16x1 1/4"	.21	.15	.12	.09
18F377	6TMS22	.022	7/16x1 1/4"	.21	.15	.12	.09
18F108	6TMS30	.03	7/16x1 1/4"	.21	.16	.12	.10
18F378	6TMS33	.033	7/16x1 1/4"	.21	.16	.12	.10
18F149	6TMS35	.035	7/16x1 1/4"	.24	.17	.13	.11
18F109	6TMS40	.04	1/2x1 1/2"	.24	.17	.13	.11
18F379	6TMS47	.047	1/2x1 1/2"	.24	.17	.13	.11
18F110	6TMS50	.05	1/2x1 1/2"	.27	.20	.15	.12
18F111	6TMS60	.06	1/2x1 1/2"	.27	.20	.15	.12
18F380	6TMS68	.068	1/2x1 1/2"	.27	.20	.15	.12
18F112	6TMP10	.1	5/8x1 7/8"	.33	.23	.18	.14
18F381	6TMP15	.15	5/8x1 7/8"	.45	.33	.25	.20
18F382	6TMP20	.2	3/4x2 1/4"	.60	.44	.34	.27
18F383	6TMP22	.22	3/4x2 1/4"	.60	.44	.34	.27
18F113	6TMP25	.25	3/4x2 1/4"	1.02	.75	.58	.46
18F384	6TMP50	.5	1x2 1/2"	1.05	.77	.60	.48
18F385	6TM-M1	1.0	1x2 1/2"	1.38	1.02	.79	.63

TYPE MB 1600 VOLTS
Designed for buffer operations

18F800	MB-D1	.001	3/8x1 1/4	.21	.14	.11	.09
18F801	MB-D2	.002	3/8x1 1/4	.24	.16	.13	.10
18F802	MB-D3	.003	7/16x1 1/4	.27	.18	.14	.11
18F803	MB-D4	.004	1/2x1 1/2	.27	.20	.16	.13
18F804	MB-D5	.005	1/2x1 1/2	.30	.22	.17	.14
18F406	MB-D7	.007	1/2x1 1/2	.39	.28	.22	.18
18F407	MB-D8	.008	5/8x1 7/8	.39	.28	.22	.18
18F408	MB-S1	.01	5/8x1 7/8	.39	.28	.22	.18
18F409	MB-S15	.015	5/8x1 7/8	.45	.33	.26	.20
18F805	MB-S2	.02	5/8x1 7/8	.45	.33	.26	.20
18F806	MB-S4	.04	3/4x2 1/4	.69	.51	.40	.32

TYPE TVM 6000 VOLTS *10,000 Volts

18F126	TVM356	.0005	9/16x1 7/8"	.81	.47	.37	.29
18F127	TVM216	.001	9/16x1 7/8"	.81	.40	.38	.30
18F128	TVM256	.005	11/16x2 1/4"	.81	.52	.40	.32
18F129	TVM351*	.0005	11/16x2 1/4"	.90	.52	.41	.33

ORANGE DROP, DIFILM DIPPED TUBULARS

Dual dielectric impregnated with exclusive HCX. Produces rock-hard capacitor section. Double dipped in Bright Orange Epoxy Resin — beats heat and humidity. Shpg. Wt. 4 oz.

SIZES FOR 75 AND 100 VOLT—ORANGE DROP

	H	T	L		H	T	L
A	5/8	25/64	3/4	H	63/64	47/64	1 3/16
B	43/64	27/64	3/4	J	5/16	13/64	45/64
C	27/32	31/64	3/4	K	21/64	15/64	45/64
D	27/32	19/32	3/4	L	11/32	1/4	45/64
E	57/64	9/16	1 3/16	M	3/8	9/32	45/64
F	29/32	19/32	1 3/16	N	17/32	21/64	45/64
G	61/64	21/32	1 3/16				

TYPE 225P—75 VOLTS DC

Stock No.	Mfd	Size	Type	1-24	25-49	50-99	100-249	250-up
18F2549	.12	A	225P1249R75	.21	.14	.11	.09	.071
18F2550	.15	A	225P1549R75	.21	.16	.12	.10	.077
18F2551	.18	B	225P1849R75	.24	.17	.13	.11	.085
18F2552	.22	B	225P2249R75	.27	.19	.15	.12	.094
18F2553	.27	C	225P2749R75	.30	.21	.17	.13	.106
18F2554	.33	C	225P3349R75	.33	.24	.19	.15	.120
18F2555	.39	D	225P3949R75	.36	.26	.20	.16	.131
18F2556	.47	D	225P4749R75	.39	.28	.22	.18	.142
18F2557	.56	E	225P5649R75	.54	.39	.30	.24	.196
18F2558	.68	F	225P6849R75	.54	.39	.30	.24	.196
18F2559	.82	G	225P8249R75	.60	.43	.34	.27	.219
18F2560	1.0	H	225P1059R75	.66	.49	.38	.31	.248

TYPE 225P—100 VOLTS DC

Stock No.	Mfd	Size	Type	1-24	25-49	50-99	100-249	250-up
18F2561	.001	J	225P10291	.15	.10	.08	.06	.049
18F2562	.0012	J	225P12291	.15	.10	.08	.06	.049
18F2563	.0015	J	225P15291	.15	.10	.08	.06	.049
18F2564	.0018	J	225P18291	.15	.10	.08	.06	.049
18F2565	.0022	J	225P22291	.15	.10	.08	.06	.049
18F2566	.0027	J	225P27291	.15	.10	.08	.06	.049
18F2567	.0033	J	225P33291	.15	.10	.08	.06	.049
18F2568	.0039	J	225P39291	.15	.10	.08	.06	.049
18F2569	.0047	J	225P47291	.15	.10	.08	.06	.049
18F2570	.0056	J	225P56291	.15	.10	.08	.06	.049
18F2571	.0068	J	225P68291	.15	.10	.08	.06	.049
18F2572	.0082	J	225P82291	.15	.10	.08	.06	.049
18F2573	.01	J	225P10391	.15	.10	.08	.06	.049
18F2574	.012	J	225P12391	.15	.10	.08	.07	.051
18F2575	.015	J	225P15391	.15	.10	.08	.07	.052
18F2576	.018	J	225P18391	.15	.10	.08	.07	.052
18F2577	.022	J	225P22391	.15	.11	.09	.07	.053
18F2578	.027	K	225P27391	.15	.11	.09	.07	.054
18F2579	.033	K	225P33391	.15	.11	.09	.07	.054
18F2580	.039	L	225P39391	.15	.11	.09	.07	.056
18F2581	.047	L	225P47391	.15	.12	.09	.07	.057
18F2582	.056	M	225P56391	.18	.12	.10	.08	.059
18F2583	.068	M	225P68391	.18	.12	.10	.08	.061
18F2584	.082	N	225P82391	.18	.13	.10	.08	.063
18F2585	.1	N	225P10491	.18	.13	.10	.08	.065

TYPE 220P—200 VOLTS DC

18F1612	.02	3/8x 7/8	2PS-S20	.15	.11	.09	.07	.056
18F1613	.022	25/64x 7/8	2PS-S22	.15	.11	.09	.07	.056
18F1614	.047	29/64x 7/8	2PS-S47	.15	.13	.10	.08	.061
18F1615	.05	15/32x 7/8	2PS-S50	.15	.13	.10	.08	.065
18F1616	.1	31/64x1 3/16	2PS-P10	.21	.15	.12	.09	.071
18F1617	.15	9/16x1 3/16	2PS-P15	.21	.17	.13	.11	.082
18F1618	.2	19/32x1 5/16	2PS-P20	.24	.20	.16	.13	.099
18F1619	.22	39/64x1 5/16	2PS-P22	.24	.20	.16	.13	.099
18F1620	.25	5/8x1 5/16	2PS-P25	.24	.20	.16	.13	.102
18F1621	.33	5/8x1 5/8	2PS-P33	.30	.23	.18	.15	.117
18F1622	.47	45/64x1 5/8	2PS-P47	.38	.26	.21	.17	.133
18F1623	.5	23/32x1 5/8	2PS-P50	.38	.27	.21	.17	.135

TYPE 220P—400 VOLTS DC

Stock No.	Mfd	Size	Type	1-24	25-49	50-99	100-249	250-up
18F1624	.01	13/32x 11/16	4PS-S10	.15	.10	.08	.07	.049
18F1625	.015	29/64x 11/16	4PS-S15	.15	.11	.08	.07	.052
18F1626	.02	13/32x 7/8	4PS-S20	.15	.12	.09	.07	.057
18F1627	.022	21/64x 7/8	4PS-S22	.18	.12	.09	.08	.057
18F1628	.025	7/16x 7/8	4PS-S25	.18	.12	.10	.08	.061
18F1630	.033	15/32x 7/8	4PS-S33	.18	.13	.10	.08	.063
18F1632	.047	29/64x1 3/16	4PS-S47	.18	.14	.11	.09	.071
18F1633	.05	29/64x1 3/16	4PS-S50	.18	.15	.11	.09	.072
18F1634	.056	31/64x1 3/16	4PS-S56	.21	.15	.12	.10	.074
18F1635	.068	33/64x1 3/16	4PS-S68	.21	.15	.12	.10	.075
18F1637	.1	37/64x1 3/16	4PS-P10	21	.17	.13	.11	.085
18F1638	.15	39/64x1 5/16	4PS-P15	.24	.21	.16	.13	.103
18F1639	.2	19/32x1 5/8	4PS-P20	.27	.25	.20	.16	.126
18F1640	.22	39/64x1 5/8	4PS-P22	.27	.25	.20	.16	.126
18F1641	.25	41/64x1 5/8	4PS-P25	.30	.26	.20	.16	.129

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

SPRAGUE
THE MARK OF RELIABILITY

ORANGE DROP (CONT'D.)

TYPE 220P—600 VOLTS DC

Stock No.	Mfd	Size	Type	1-24	25-49	50-99	100-249	250-Up
18F1642	.001	21/64 x 11/16	6PS-D10	.15	.10	.08	.07	.049
18F1644	.0015	21/64 x 11/16	6PS-D15	.15	.10	.08	.07	.049
18F1646	.002	21/64 x 11/16	6PS-D20	.15	.10	.08	.07	.050
18F1647	.0022	21/64 x 11/16	6PS-D22	.15	.10	.08	.07	.050
18F1648	.0025	21/64 x 11/16	6PS-D25	.15	.10	.08	.07	.050
18F1649	.0027	11/32 x 11/16	6PS-D27	.15	.10	.08	.07	.050
18F1651	.0033	23/64 x 11/16	6PS-D33	.15	.10	.08	.07	.050
18F1652	.0039	3/8 x 11/16	6PS-D39	.15	.10	.08	.07	.050
18F1654	.0047	23/64 x 11/16	6PS-D47	.15	.10	.08	.07	.050
18F1655	.005	25/64 x 11/16	6PS-D50	.15	.10	.08	.07	.051
18F1656	.0056	23/64 x 11/16	6PS-D56	.15	.10	.08	.07	.051
18F1658	.0068	13/32 x 11/16	6PS-D68	.18	.11	.08	.07	.052
18F1659	.0075	23/64 x 7/8	6PS-D75	.18	.11	.09	.07	.053
18F1661	.0082	3/8 x 7/8	6PS-D82	.18	.11	.09	.07	.053
18F1662	.01	25/64 x 7/8	6PS-S10	.18	.11	.09	.07	.054
18F1664	.015	27/64 x 7/8	6PS-S15	.18	.11	.09	.07	.056
18F1665	.02	31/64 x 7/8	6PS-S20	.18	.13	.10	.08	.062
18F1666	.022	31/64 x 7/8	6PS-S22	.18	.13	.10	.08	.062
18F1667	.025	17/32 x 7/8	6PS-S25	.21	.13	.11	.09	.065
18F1670	.033	15/32 x 1 3/16	6PS-S33	.21	.14	.11	.09	.065
18F1672	.039	31/64 x 1 3/16	6PS-S39	.21	.14	.11	.09	.069
18F1674	.047	17/32 x 1 3/16	6PS-S47	.24	.15	.12	.10	.072
18F1675	.05	17/32 x 1 3/16	6PS-S50	.24	.15	.12	.10	.076
18F1676	.056	33/64 x 1 3/16	6PS-S56	.24	.15	.12	.10	.076
18F1678	.068	37/64 x 1 3/16	6PS-S68	.27	.18	.14	.11	.088
18F1679	.075	9/16 x 1 5/16	6PS-S75	.27	.18	.14	.12	.092
18F1680	.082	37/64 x 1 5/16	6PS-S82	.27	.18	.14	.12	.092
18F1681	.1	5/8 x 1 5/16	6PS-P10	.27	.19	.15	.12	.095
18F1682	.15	43/64 x 1 5/8	6PS-P15	.30	.23	.18	.15	.116
18F1683	.2	3/4 x 1 5/8	6PS-P20	.39	.27	.21	.17	.133
18F1684	.22	23/32 x 1 5/8	6PS-P22	.42	.27	.21	.17	.133
18F1685	.25	13/16 x 1 5/8	6PS-P25	.45	.27	.21	.17	.135

TYPE 220P—1000 VOLTS DC

18F1686	.001	21/64 x 11/16	10PS-D10	.36	.09	.07	.06	.050
18F1689	.0022	3/8 x 11/16	10PS-D22	.36	.10	.08	.06	.053
18F1692	.0047	11/32 x 7/8	10PS-D47	.36	.11	.08	.07	.061
18F1693	.005	11/32 x 7/8	10PS-D50	.36	.11	.09	.07	.057

TYPE 118P DIFILM METALIZED CAPACITORS

Unique dual dielectric rated for operation at 125°C without voltage derating. High insulation resistance and capacitance is 10 megohm-microfarads for 200 V units or 40 megohm-microfarads for 400 and 600 V units. Hermetically sealed, with glass to metal solder seal terminals. Tolerance: ±10%.

SIZES — DIAMETER x LENGTH

J	.562" x 1 1/8"	W	1.000" x 1 7/8"	HH	.312" x 1 1/8"
K	.562" x 1 3/8"	X	1.000" x 2 1/8"	JJ	.400" x 7/8"
M	.562" x 1 5/8"	Y	1.000" x 2 3/8"	KK	.400" x 1 1/8"
P	.670" x 1 5/8"	Z	1.000" x 2 5/8"	LL	.500" x 1 1/8"
Q	.670" x 1 7/8"	FF	.235" x 3/4"	YY	.175" x 3/4"
T	.750" x 1 7/8"	GG	.312" x 7/8"	ZZ	.195" x 3/4"

Stock No.	Type	Mfd.	Size	1-24	25-49	50-99	100-499
18F1286	118P10392S2	.01	YY	1.95	1.14	.88	.780
18F1288	118P15392S2	.015	ZZ				
18F1290	118P22392S2	.022	FF				
18F1292	118P33392S2	.033	FF				
18F1294	118P47392S2	.047	GG	1.97	1.15	.89	.787
18F1296	118P68392S2	.068	GG	2.02	1.18	.91	.806
18F1298	118P10492S2	.1	GG	2.04	1.19	.92	.814
18F1300	118P15492S2	.15	HH	2.07	1.21	.94	.828
18F1301	118P22492S2	.22	JJ	2.07	1.21	.94	.828
18F1302	118P27492S2	.27	KK	2.15	1.26	.97	.858
18F1303	118P33492S2	.33	KK	2.22	1.30	1.00	.888
18F1305	118P47492S2	.47	LL	2.33	1.36	1.05	.930
18F1306	118P56492S2	.56	LL	2.37	1.38	1.07	.948
18F1307	118P68492S2	.68	LL	2.40	1.40	1.08	.960
18F1308	118P82492S2	.82	J	2.48	1.45	1.12	.990
18F1309	118P10592S2	1.0	J	2.55	1.49	1.15	1.020
18F1310	118P15592S2	1.5	M	3.62	2.11	1.63	1.446
18F1311	118P20592S2	2.0	P	4.29	2.51	1.94	1.716
18F1312	118P30592S2	3.0	Q	4.50	2.63	2.03	1.800
18F1313	118P40592S2	4.0	T	4.80	2.80	2.16	1.920
18F1314	118P50592S2	5.0	W	5.25	3.07	2.37	2.100
18F1315	118P60592S2	6.0	W	6.00	3.50	2.70	2.400
18F1316	118P80592S2	8.0	W	6.15	3.59	2.77	2.460
18F1317	118P10692S2	10.0	Y	6.57	3.84	2.96	2.628
18F1318	118P12692S2	12.0	Z	7.41	4.33	3.34	2.964
400 VOLTS							
18F1321	118P10594S2	1.0	T	3.40	1.98	1.53	1.357
18F1322	118P20594S2	2.0	W	4.95	2.89	2.23	1.980
18F1323	118P30594S2	3.0	Z	5.85	3.42	2.64	2.340
600 VOLTS							
18F1324	118P10396S2	.01	GG	2.01	1.18	.91	.804
18F1325	118P15396S2	.015	GG	2.03	1.19	.92	.810
18F1326	118P22396S2	.022	HH	2.04	1.19	.92	.816
18F1328	118P47396S2	.047	KK	2.07	1.21	.93	.826
18F1329	118P68396S2	.068	KK	2.16	1.26	.98	.864
18F1330	118P10496S2	.1	LL	2.34	1.37	1.06	.936
18F1331	118P15496S2	.15	J	2.43	1.42	1.10	.972
18F1332	118P22496S2	.22	K	2.57	1.50	1.16	1.026
18F1334	118P47496S2	.47	P	3.08	1.80	1.39	1.230
18F1335	118P68496S2	.68	Q	3.33	1.95	1.50	1.332
18F1336	118P10596S2	1.0	W	4.35	2.54	1.96	1.740
18F1337	118P15596S2	1.5	W	4.59	2.68	2.07	1.836
18F1338	118P20596S2	2.0	X	5.55	3.24	2.50	2.220
18F1339	118P25596S2	2.5	Z	6.30	3.68	2.84	2.520

192P "PACER"—MINIATURE "FILMITE E" CAPACITORS

Nearly three times smaller than conventional paper-film tubulars. Sizes are the same as composition resistors. Entire unit insulated by heat shrinkable mylar sleeve. High insulation resistance. Operating temp. range —55°C to +85°C. Derate 50% @ 105°C. Tolerance ±10%. Average shipping wt. 2 oz.

80 VOLTS DC

Stk. No.	Type	F	D. x L.	1-24	25-49	50-99	100-249
18F2520	192P2229R8	.0022	9/64 x 5/16	.36	.267	.208	.166
18F2521	192P2729R8	.0027	9/64 x 5/16	.36	.267	.208	.166
18F2522	192P3329R8	.0033	9/64 x 5/16	.36	.267	.208	.166
18F2523	192P3929R8	.0039	9/64 x 5/16	.36	.267	.208	.166
18F2524	192P4729R8	.0047	9/64 x 5/16	.36	.267	.208	.166
18F2525	192P5629R8	.0056	11/64 x 3/8	.36	.267	.208	.166
18F2526	192P6829R8	.0068	11/64 x 3/8	.36	.267	.208	.166
18F2527	192P8229R8	.0082	11/64 x 3/8	.36	.267	.208	.166
18F2528	192P1039R8	.01	11/64 x 3/8	.36	.252	.196	.157
18F2529	192P1239R8	.012	11/64 x 3/8	.36	.270	.210	.168
18F2530	192P1539R8	.015	11/64 x 3/8	.39	.290	.225	.180
18F2531	192P1839R8	.018	11/64 x 3/8	.39	.293	.228	.182
18F2532	192P2239R8	.022	11/64 x 3/8	.42	.297	.231	.185
18F2533	192P2739R8	.027	7/32 x 7/16	.42	.302	.235	.188
18F2534	192P3339R8	.033	7/32 x 7/16	.42	.307	.239	.191
18F2535	192P3939R8	.039	7/32 x 9/16	.42	.313	.243	.195
18F2536	192P4739R8	.047	7/32 x 9/16	.45	.322	.250	.200
18F2537	192P5639R8	.056	15/64 x 9/16	.45	.333	.259	.207
18F2538	192P6839R8	.068	15/64 x 9/16	.48	.347	.270	.216
18F2539	192P8239R8	.082	19/64 x 1/2"	.48	.360	.280	.224
18F2540	192P1049R8	.1	19/64 x 1/2"	.51	.371	.289	.231
18F2541	192P1249R8	.12	19/64 x 5/8"	.60	.439	.341	.273
18F2542	192P1549R8	.15	19/64 x 5/8"	.63	.470	.366	.293
18F2543	192P1849R8	.18	21/64 x 5/8	.69	.518	.403	.322
18F2544	192P2249R8	.22	21/64 x 5/8	.78	.569	.443	.354
18F2545	192P2749R8	.27	21/64 x 7/8	.81	.608	.473	.378
18F2546	192P3349R8	.33	21/64 x 7/8	.87	.644	.501	.400
18F2547	192P3949R8	.39	21/64 x 1 1/16	.93	.682	.530	.424
18F2548	192P4749R8	.47	21/64 x 1 3/16	.96	.718	.558	.447
200 VOLTS DC							
18F2242	192P47192	.00047	9/64 x 5/16	.33	.23	.18	.15
18F2243	192P56192	.00056	9/64 x 5/16	.30	.22	.17	.14
18F2244	192P68192	.00068	9/64 x 5/16	.30	.22	.17	.14
18F2245	192P82192	.00082	9/64 x 5/16	.30	.22	.17	.14
18F2246	192P10292	.001	9/64 x 5/16	.27	.19	.15	.12
18F2247	192P12292	.0012	9/64 x 5/16	.27	.19	.15	.12
18F2248	192P15292	.0015	9/64 x 5/16	.27	.19	.15	.12
18F2249	192P18292	.0018	11/64 x 5/16	.27	.19	.15	.12
18F2250	192P22292	.0022	11/64 x 5/16	.27	.19	.15	.12
18F2251	192P27292	.0027	11/64 x 5/16	.27	.19	.15	.12
18F2252	192P33292	.0033	11/64 x 5/16	.27	.19	.15	.12
18F2253	192P39292	.0039	11/64 x 5/16	.27	.19	.15	.12
18F2254	192P47292	.0047	11/64 x 5/16	.27	.20	.15	.12
18F2255	192P56292	.0056	11/64 x 5/16	.27	.20	.15	.12
18F2256	192P68292	.0068	11/64 x 5/16	.27	.20	.16	.13
18F2257	192P82292	.0082	11/64 x 1/2	.30	.21	.16	.13
18F2226	192P10392	.01	11/64 x 1/2	.30	.21	.17	.13
18F2227	192P12392	.012	7/32 x 5/16	.30	.22	.17	.14
18F2228	192P15392	.015	7/32 x 5/16	.30	.22	.17	.14
18F2229	192P18392	.018	7/32 x 9/16	.30	.22	.17	.14
18F2230	192P22392	.022	7/32 x 9/16	.30	.23	.18	.14
18F2231	192P27392	.027	15/64 x 9/16	.33	.24	.19	.15
18F2232	192P33392	.033	15/64 x 9/16	.33	.25	.20	.16
18F2233	192P39392	.039	19/64 x 1/2	.36	.26	.21	.17
18F2234	192P47392	.047	19/64 x 1/2	.39	.28	.22	.17
18F2235	192P56392	.056	19/64 x 5/8	.39	.29	.23	.18
18F2236	192P68392	.068	19/64 x 5/8	.42	.31	.24	.19
18F2237	192P82392	.082	21/64 x 5/8	.45	.32	.25	.20
18F2238	192P10492	.1	21/64 x 5/8	.45	.34	.26	.21
18F2239	192P12492	.12	21/64 x 7/8	.51	.35	.27	.22
18F2240	192P15492	.15	21/64 x 7/8	.48	.35	.27	.22
18F2241	192P22492	.22	21/64 x 1 3/16	.48	.37	.29	.23

121P METALIZED PAPER CAPACITORS

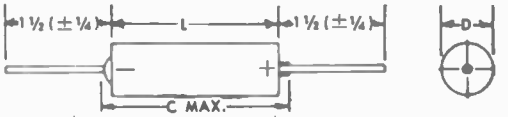
Designed to operate at 125°C without voltage derating. High insulation resistance—at 85°C minimum product of insulation resistance and capacitance is 20 megohm microfarads. Tol. ±10%. 150WVDC.

CASE SIZE

(J)	.562x1 1/8	(Q)	.670x1 7/8	(W)	1.000x1 7/8
(K)	.562x1 3/8	(T)	.750x1 7/8	(X)	1.000x2 1/8
(M)	.562x1 5/8	(U)	.750x2 3/8	(Y)	1.000x2 3/8
(N)	.670x1 3/8	(V)	.750x2 5/8	(Z)	1.000x2 5/8
(P)	.670x1 5/8				

Stk. No.	Type	Mfd.	*Size	1-24	25-49	50-99	100-499	500-999
18F1410	121P15591R5S2	1.5	J	2.73	1.60	1.23	1.092	1.001
18F1411	121P20591R5S2	2.0	K	3.00	1.75	1.35	1.20	1.10
18F1412	121P25591R5S2	2.5	M	3.09	1.80	1.39	1.236	1.133
18F1413	121P30591R5S2	3.0	N	3.45	2.02	1.56	1.38	1.265
18F1414	121P35591R5S2	3.5	P	3.66	2.14	1.65	1.464	1.342
18F1415	121P40591R5S2	4.0	P	3.72	2.17	1.68	1.488	1.364
18F1416	121P50591R5S2	5.0	Q	4.08	2.38	1.84	1.632	1.496
18F1417	121P60591R5S2	6.0	T	4.44	2.59	2.00	1.776	1.628
18F1418	121P80591R5S2	8.0	U	5.16	3.01	2.33	2.064	1.892
18F1419	121P10691R5S2	10	V	5.97	3.49	2.69	2.388	2.189
18F1420	121P12691R5S2	12	W	6.75	3.94	3.04	2.70	2.475
18F1421	121P14691R5S2	14	X	7.53	4.40	3.39	3.012	2.761
18F1422	121P16691R5S2	16	Y	8.01	4.68	3.61	3.204	2.937
18F1423	121P18691R5S2	18	Z	9.12	5.32	4.11	3.648	3.344

Texas Instruments Solid Tantalum Capacitors



No. 22 (0.025 +0.005 −0.001) No. 24 (0.020 +0.005 −0.001)
AWG SOLDERABLE LEADS

Parent Device System. Established to simplify your ordering and stocking procedures. Parent device types can be used for any working voltage equal to or less than those listed in tables below.

Type SCM. A capacitor of completely dry construction (no liquid or paste is used), offering the chemical stability of tantalum and its oxides. All available from Newark stock with Mylar insulating sleeves.

Case Size	D +0.010 -0.005	L 0.031	C Max.	Wire Size Avg.	D ±0.010	L ±0.031	C Max.	Avg. Wt. gms
F	0.125	0.250	0.422	24	0.135	0.286	0.422	0.4
B	0.173	0.438	0.610	24	0.185	0.474	0.610	1.2
G	0.279	0.650	0.822	22	0.289	0.686	0.822	2.0
H	0.341	0.750	0.922	22	0.351	0.786	0.922	3.4

6 WORKING VOLTS DC ± 20% TOLERANCE

Stock No.	Type-SCM	Cap.	Dia.	L.	1-24	25-49	50-99	100-499	500-999
17F025	476BP006D4	47	0.175	0.438	1.53	1.23	.73	.60	.45
17F026	157GP006D4	150	0.279	0.650	2.19	1.97	1.32	1.08	.81
17F027	337HP006D4	330	0.341	0.750	4.46	3.52	2.30	1.87	1.41

10 WORKING VOLTS DC ± 20% TOLERANCE

17F028	475FP010D4	4.7	0.125	0.250	1.30	1.04	.71	.58	.43
17F030	336BP010D4	33	0.175	0.438	1.53	1.23	.73	.60	.45
17F033	107GP010D4	100	0.279	0.650	2.19	1.97	1.32	1.08	.81
17F034	227HP010D4	220	0.341	0.750	4.46	3.52	2.30	1.87	1.41

15 WORKING VOLTS DC ± 20% TOLERANCE

17F007	226BP015D4	22	0.175	0.438	1.53	1.23	.73	.60	.45
17F079	686GP015D4	68	0.279	0.650	2.19	1.97	1.32	1.08	.81
17F039	157HP015D4	150	0.341	0.750	4.46	3.52	2.30	1.87	1.41

20 WORKING VOLTS DC ± 20% TOLERANCE

17F040	155FP020D4	1.5	0.125	0.250	1.30	1.04	.71	.58	.43
17F041	225FP020D4	2.2	0.125	0.250	1.30	1.04	.71	.58	.43
17F044	106BP020D4	10	0.175	0.438	1.53	1.23	.73	.60	.45
17F045	156BP020D4	15	0.175	0.438	1.53	1.23	.73	.60	.45
17F047	336GP020D4	33	0.279	0.650	2.19	1.97	1.32	1.08	.81
17F048	476GP020D4	47	0.175	0.650	2.19	1.97	1.32	1.08	.81
17F049	686HP020D4	68	0.341	0.750	4.46	3.52	2.30	1.87	1.41
17F050	107HP020D4	100	0.341	0.750	4.46	3.52	2.30	1.87	1.41

35 WORKING VOLTS DC ±20% TOLERANCE

Stock No.	Type-SCM	Cap.	Dia. x Lt.	1-24	25-49	50-99	100-499	500-999
17F1134	472FP035D4	.0047						
17F1135	682FP035D4	.0068						
17F1136	103FP035D4	.010	.125x.250	1.30	1.04	.71	.58	.48
17F1137	153FP035D4	.015						
17F1138	223FP035D4	.022						
17F1139	333FP035D4	.033						
17F1140	473FP035D4	.047						
17F1141	683FP035D4	.068						
17F1142	104FP035D4	.10						
17F1143	154FP035D4	.15						
17F1144	224FP035D4	.22	.125x.250	1.30	1.04	.71	.58	.43
17F1145	334FP035D4	.33						
17F1146	474FP035D4	.47						
17F1147	684FP035D4	.68						
17F051	105FP035D4	1.0						
17F052	155BP035D4	1.5						
17F053	225BP035D4	2.2						
17F054	335BP035D4	3.3	.175x.438	1.53	1.23	.73	.60	.45
17F055	475BP035D4	4.7						
17F056	685BP035D4	6.8						
17F057	106GP035D4	10						
17F058	156GP035D4	15	.279x.650	2.53	2.03	1.38	1.12	.85
17F059	226GP035D4	22						
17F060	336HP035D4	33	.341x.750	4.71	3.77	2.77	2.25	1.69
17F061	476HP035D4	47	.341x.750	4.71	3.77	2.77	2.25	1.69

6 WORKING VOLTS DC ± 10% TOLERANCE

17F1009	565FP006D2	5.6	.125x.250	1.33	1.07	.74	.61	.46
17F1010	685FP006D2	6.8	.125x.250	1.33	1.07	.74	.61	.46
17F1020	476BP006D2	47	.175x.438	1.56	1.26	.76	.63	.48
17F1021	566BP006D2	56	.175x.438	1.56	1.26	.76	.63	.48
17F1026	157GP006D2	150	.279x.650	2.22	2.00	1.35	1.11	.84
17F1027	187GP006D2	180	.279x.650	2.22	2.00	1.35	1.11	.84
17F1029	277HP006D2	270	.341x.750	4.49	3.55	2.33	1.90	1.44
17F1030	337HP006D2	330	.341x.750	4.49	3.55	2.33	1.90	1.44

10 WORKING VOLTS DC ± 10% TOLERANCE

17F1038	395FP010D2	3.9	.125x.250	1.33	1.07	.74	.61	.46
17F1039	475FP010D2	4.7	.125x.250	1.33	1.07	.74	.61	.46
17F1048	276BP010D2	27						
17F1049	336BP010D2	33	.175x.438	1.56	1.26	.76	.63	.48
17F1050	396BP010D2	39						
17F1054	826GP010D2	82						
17F1055	107GP010D2	100	.279x.650	2.22	2.00	1.35	1.11	.84
17F1056	127GP010D2	120						
17F1058	187HP010D2	180	.341x.750	4.49	3.55	2.33	1.90	1.44
17F1059	227HP010D2	220	.341x.750	4.49	3.55	2.33	1.90	1.44

15 WORKING VOLTS DC ± 10% TOLERANCE

Stock No.	Type-SCM	Cap.	Dia.xLt.	1-24	25-49	50-99	100-499	500-999
17F1065	275FP015D2	2.7	.125x.250	1.33	1.07	.74	.61	.46
17F1066	335FP015D2	3.3	.125x.250	1.33	1.07	.74	.61	.46
17F1075	186BP015D2	18	.175x.438	1.56	1.26	.76	.63	.48
17F1076	226BP015D2	22	.175x.438	1.56	1.26	.76	.63	.48
17F1081	566GP015D2	56	.279x.650	2.22	2.00	1.35	1.11	.84
17F1082	686GP015D2	68	.341x.650	2.22	2.00	1.35	1.11	.84
17F1086	157HP015D2	150	.279x.750	4.49	3.55	2.33	1.90	1.44

20 WORKING VOLTS DC ±10% TOLERANCE

17F1088	125FP020D2	1.2						
17F1089	155FP020D2	1.5	.125x.250	1.33	1.07	.74	.61	.46
17F1090	185FP020D2	1.8						
17F1091	225FP020D2	2.2						
17F1098	825BP020D2	8.2						
17F1099	106BP020D2	10	.173x.438	1.56	1.26	.76	.63	.48
17F1100	126BP020D2	12						
17F1101	156BP020D2	15						
17F1104	276GP020D2	27						
17F1105	336GP020D2	33	.279x.650	2.22	2.00	1.35	1.11	.84
17F1106	396GP020D2	39						
17F1107	476GP020D2	47						
17F1108	566HP020D2	56						
17F1109	686HP020D2	68						
17F1110	826HP020D2	82	.341x.750	4.49	3.55	2.33	1.90	1.44
17F1111	107HP020D2	100						
17F1112	127HP020D2	120						

35 WORKING VOLTS DC ±10% TOLERANCE

17F1150	472BP035D2	.0047						
17F1151	562BP035D2	.0056						
17F1152	682BP035D2	.0068						
17F1153	822GP035D2	.0082						
17F1154	103FP035D2	.010						
17F1155	123FP035D2	.012	.125x.250	1.33	1.07	.74	.61	.51
17F1156	153FP035D2	.015						
17F1157	183FP035D2	.018						
17F1158	223FP035D2	.022						
17F1159	273FP035D2	.027						
17F1160	333FP035D2	.033						
17F1161	393FP035D2	.039						
17F1162	473FP035D2	.047						
17F1163	563FP035D2	.056	.125x.250	1.33	1.07	.74	.61	.46
17F1164	683FP035D2	.068						
17F1165	823FP035D2	.082						
17F1166	104FP035D2	.10						
17F1167	124FP035D2	.12						
17F1168	154FP035D2	.15						
17F1169	184FP035D2	.18						
17F1170	224FP035D2	.22						
17F1171	274FP035D2	.27						
17F1172	334FP035D2	.33	.125x.250	1.33	1.07	.74	.61	.46
17F1173	394FP035D2	.39						
17F1174	474FP035D2	.47						
17F1175	564FP035D2	.56						
17F1176	684FP035D2	.68						
17F1177	824FP035D2	.82						
17F1113	105FP035D2	1.0						
17F1114	125BP035D2	1.2						
17F1115	155BP035D2	1.5						
17F1116	185BP035D2	1.8						
17F1117	225BP035D2	2.2						
17F1118	275BP035D2	2.7						
17F1119	335BP035D2	3.3	.173x.438	1.56	1.26	.76	.63	.48
17F1120	395BP035D2	3.9						
17F1121	475FP035D2	4.7						
17F1122	565FP035D2	5.6						
17F1123	685FP035D2	6.8						
17F1124	825FP035D2	8.2						
17F1125	106GP035D2	10						
17F1126	126GP035D2	12	.279x.650	2.56	2.06	1.41	1.15	.88
17F1127	156GP035D2	15						
17F1128	186GP035D2	18						
17F1129	226GP035D2	22						
17F1130	276HP035D2	27						
17F1131	336HP035D2	33	.341x.750	4.74	3.80	2.80	2.28	1.72
17F1132	396HP035D2	39						
17F1133	476HP035D2	47						

Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

TYPES TJU, TJL, TJH DYKANOL TRANSMITTING CAPACITORS
DC PAPER CAPACITORS TYPE T

● **Similar to CP70 specifications**

For power supply filter specifications. Solder seam styles, rectangular cased. Operating temp: —55°C to + 85°C. CDE reserves the right to supply type T with a 1/8" variation in case height from that shown in the listing. Ship. wt., 5 lbs. Order Brackets separately from table below, right column: *2 needed per condenser.

600 WORKING VOLTS DC

Stock No.	Type	Mfd.	H. x W. x D.	1-9	10-24	25-49	50-99	100-499	500-Up	Universal Mtg. Bracket Stk. No.	Type	Net Each	*Spade Bracket Stk No.	Type	Net Each
15F549	6005	.5	2¼x1 13/16x1 1/16"	4.47	2.24	2.01	1.86	1.71	1.64	15F2000	18402	.16	15F2020	SA2	.08
15F550	6010	1	2¼x1 13/16x1 1/16"	4.65	2.33	2.09	1.94	1.91	1.71	15F2000	18402	.16	15F2020	SA2	.08
15F551	6020	2	2⅞x1 13/16x1 1/16"	4.98	2.49	2.24	2.08	1.91	1.83	15F2000	18402	.16	15F2021	SA3	.08
15F552	6040	4	3½x2½x1 13/16"	5.70	2.85	2.57	2.38	2.19	2.09	15F2001	18403	.16	15F2024	SB3	.08
15F548	6060	6	4¾x2½x1 13/16"	6.36	3.18	2.86	2.65	2.44	2.33	15F2001	18403	.16	15F2027	SB6	.08
15F553	6080	8	3⅞x3¾x1¼"	7.38	3.69	3.32	3.08	2.83	2.71	15F2002	18404	.16	15F2028	SC2	.08
15F554	6100	10	4¾x3¾x1¼"	7.98	3.99	3.59	3.23	3.06	2.93	15F2002	18404	.16	15F2030	SC4	.08
1000 WORKING VOLTS DC															
15F541	10001	.1	2x1 13/16x1 1/16"	4.44	2.22	2.00	1.85	1.70	1.63	15F2000	18402	.16	15F2020	SA2	.08
15F542	100025	.25	2¼x1 13/16x1 1/16"	4.50	2.25	2.03	1.88	1.73	1.65	15F2000	18402	.16	15F2020	SA2	.08
15F586	10005	.5	2¼x1 13/16x1 1/16"	4.62	2.31	2.08	1.93	1.77	1.69	15F2000	18402	.16	15F2020	SA2	.08
15F555	10010	1	2¼x1 13/16x1 1/16"	4.89	2.45	2.20	2.04	1.88	1.79	15F2000	18402	.16	15F2020	SA2	.08
15F556	10020	2	3⅞x1 13/16x1 1/16"	5.26	2.64	2.38	2.20	2.02	1.94	15F2000	18402	.16	15F2022	SA5	.08
15F557	10040	4	4¾x2½x1 13/16"	6.12	3.06	2.75	2.55	2.33	2.24	15F2001	18403	.16	15F2027	SB6	.08
15F558	10080X	8	3⅞x3¾x1¾"	8.07	4.04	3.63	3.36	3.09	2.96	15F2003	18405	.27	15F2032	SD2	.14
15F559	10100	10	4¾x3¾x1¾"	9.15	4.58	4.12	3.81	3.51	3.36	15F2003	18405	.27	15F2033	SD5	.14
15F587	10150	15	4¾x3¾x2½"	12.90	6.45	5.81	5.38	4.95	4.73	15F2005	18407	.58	15F2038	SF1	.29
1500 WORKING VOLTS DC															
15F588	15005	.5	2⅞x1 13/16x1 1/16"	4.80	2.40	2.16	2.00	1.84	1.76	15F2000	18402	.16	15F2021	SA3	.08
15F560	15010	1	3⅞x2½x1 13/16"	5.01	2.51	2.26	2.09	1.92	1.89	15F2000	18402	.16	15F2022	SA5	.08
15F561	15020X	2	4½x2½x1 13/16"	5.79	2.90	2.61	2.41	2.22	2.12	15F2001	18403	.16	15F2026	SB5	.08
15F562	15040X	4	4¾x3¾x1¼"	7.26	3.63	3.27	3.03	2.78	2.66	15F2002	18404	.16	15F2030	SC4	.08
15F563	15080	8	4¾x3¾x2½"	11.82	5.91	5.32	4.93	4.53	4.33	15F2005	18407	.58	15F2038	SF1	.29
15F564	15100X	10	4¾x3¾x3 1/16"	13.95	6.98	6.28	5.81	5.35	5.12	15F2006	18408	.58	15F2040	SG2	.29
2000 WORKING VOLTS DC															
15F589	20001	.1	2½x1 13/16x1 1/16"	5.91	2.96	2.66	2.46	2.27	2.17	15F2000	18402	.16	15F2020	SA2	.08
15F590	20025	.25	2½x1 13/16x1 1/16"	6.06	3.03	2.73	2.53	2.32	2.22	15F2000	18402	.16	15F2020	SA2	.08
15F591	20005	.5	2⅞x1 13/16x1 1/16"	6.36	3.18	2.86	2.65	2.44	2.33	15F2000	18402	.16	15F2021	SA3	.08
15F565	20010	1	3½x2½x1 13/16"	6.39	3.20	2.88	2.66	2.45	2.34	15F2001	18403	.16	15F2024	SB3	.08
15F566	20020	2	3⅞x3¾x1¼"	7.80	3.90	3.51	3.25	2.99	2.86	15F2002	18404	.16	15F2029	SC3	.18
15F567	20040	4	3⅞x3¾x2¼"	10.50	5.25	4.73	4.38	4.03	3.85	15F2004	18406	.27	15F2035	SE3	.14
15F593	20080	8	4¾x3¾x3 9/16"	15.45	7.73	6.95	6.44	5.92	5.67	15F2006	18408	.58	15F2041	SG3	.29
2500 WORKING VOLTS DC															
15F543	25005	.5	3½x3¾x1¼"	6.99	3.50	3.15	2.91	2.68	2.56	15F2001	18403	.16	15F2024	SB3	.08
15F569	25010	1	3¼x3¾x1¾"	8.34	4.17	3.75	3.48	3.20	3.06	15F2003	18405	.27	15F2031	SD1	.14
15F571	25040	4	3⅞x3¾x4 9/16"	15.21	7.61	6.84	6.34	5.83	5.58	15F2007	18409	.58	15F2042	SJ1	.29
15F572	25100X	10	6½x3¾x4 9/16"	29.07	14.54	13.08	12.11	11.14	10.66	15F2007	18409	.58	15F2047	SJ7	.29
3000 WORKING VOLTS DC															
15F574	300025	.25	2½x2½x1 13/16"	8.91	4.46	4.01	3.71	3.42	3.27	15F2001	18403	.16	15F2023	SB2	.08
15F575	30005	.5	3⅞x2½x1 13/16"	9.57	4.79	4.31	3.99	3.67	3.51	15F2001	18403	.16	15F2025	SB4	.08
15F576	30010	1	3⅞x3¾x2¼"	11.97	5.99	5.39	4.99	4.59	4.39	15F2004	18406	.27	15F2035	SE3	.14
15F577	30020	2	4½x3¾x3 9/16"	14.73	7.37	6.63	6.14	5.65	5.40	15F2006	18408	.58	15F2039	SG1	.29
15F578	30040	4	4¾x3¾x4 9/16"	21.57	10.79	9.71	8.98	8.27	7.91	15F2007	18409	.58	15F2044	SJ3	.29
4000 WORKING VOLTS DC															
15F545	40025	.25	2¾x3¾x2¼"	13.11	6.56	5.90	5.46	5.03	4.81	15F2004	18406	.27	15F2034	SE1	.14
15F546	40005	.5	3⅞x3¾x2¼"	13.92	6.96	6.26	5.80	5.34	5.10	15F2004	18406	.27	15F2035	SE3	.14
15F579	40010	1	5½x3¾x2¼"	15.06	7.53	6.78	6.28	5.77	5.52	15F2004	18406	.27	15F2037	SE6	.14
15F580	40020	2	5½x3¾x4 9/16"	20.04	10.02	9.02	8.35	7.68	7.35	15F2007	18409	.58	15F2048	SJ10	.29
15F581	40040A	4	8x3¾x4 9/16"	28.38	14.19	12.77	11.83	10.88	10.40						
5000 WORKING VOLTS DC															
15F582	50005	.5	4⅜x3¾x2¼"	14.40	7.20	6.48	6.00	5.52	5.28	15F2004	18406	.27	15F2034	SE1	.14
15F583	50010	1	4⅜x3¾x4 9/16"	20.22	10.11	9.10	8.43	7.75	7.41	15F2007	18409	.58	15F2045	SJ4	.29
15F584	50020	2	6x3¾x2¼"	25.62	12.81	11.53	10.67	9.82	9.39	15F2004	18406	.27	15F2036	SE4	.14
6000 WORKING VOLTS DC															
15F547	60001X	.1	2¾x3¾x2¼"	13.44	6.72	6.05	5.60	5.15	4.43	15F2007	18409	.58	15F2043	SJ2	.29
15F585	60010X	1	5½x3¾x4 9/16"	24.60	12.30	10.76	10.25	9.43	9.02	15F2007	18409	.58	15F2046	SJ6	.29

TYPE DYR OIL FILLED BATHTUBS

Widely used in military, communications, and industrial electronic equipment. All types are drawn case "bathtub" configurations provided with integral drilled mounting flange. Available in F (—55°C to +85°C). All styles supplied with terminal style B, non-removable soldered lug. Single, dual and triple capacitance units available.

600 WVDC

Stk. No.	Type	Mfd.	L.xW.xT.	1-9	10-24	25-49	50-99	100-499	500-999
15F500	6005	.05	1 13/16x1x¾"	1.77	1.18	1.03	.94	.68	.65
15F501	6010	.1	1 13/16x1x¾"	1.89	1.26	1.10	.79	.72	.69
15F502	6025	.25	1 13/16x1x¾"	1.92	1.28	1.12	.80	.74	.70
15F503	6050	.5	1 13/16x1x⅞"	2.13	1.42	1.24	.89	.82	.78
15F504	6100	1	2x1¾x⅞"	2.55	1.70	1.49	1.06	.98	.94
15F505	6200	2	2x2x1⅛"	3.33	2.22	1.94	1.39	1.28	1.22

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600 WVDC (Cont'd.)

Stk. No.	Type	Mfd.	L. x W. x T.	1-9	10-24	25-49	50-99	100-499	500-999
15F506	60055	.05-.05	1 13/16x1x¾"	2.52	1.68	1.47	1.05	.97	.92
15F507	6011J	.1-.1	1 13/16x1x¾"	2.61	1.74	1.52	1.09	1.00	.96
15F508	6022J	.25-.25	1 13/16x1x⅞"	2.85	1.90	1.66	1.19	1.09	1.05
15F509	6055	.5-.5	2x1¾x⅞"	3.30	2.20	1.93	1.38	1.27	1.21
15F510	6110	.1-1.	2x2x1⅛"	4.08	2.72	2.38	1.70	1.56	1.50
15F511	6111	3x.1	1 13/16x1x¾"	2.97	1.98	1.73	1.24	1.14	1.09
15F513	6555	3x.5	2x2x1⅛"	4.47	2.98	2.61	1.86	1.71	1.64

1000 VDC WORKING

15F515	10010	.1	1 13/16x1x¾"	1.92	1.28	1.12	.88	.74	.70
15F516	10025	.25	1 13/16x1x¾"	2.07	1.38	1.21	.86	.79	.76
15F517	10050	.5	2x1¾x1 3/16"	2.25	1.50	1.31	.94	.86	.83
15F518	10100	1	2x2x1⅛"	3.00	2.00	1.75	1.25	1.15	1.10
15F520	10011	.1-.1	1 13/16x1x¾"	2.73	1.82	1.59	1.14	1.05	1.00

CDE Cornell-Dubilier Capacitors

TYPE BBR AND BR "BLUE BEAVER" ELECTROLYTIC CAPACITORS

Type BR

Type BBR

Compact aluminum cased, cardboard insulated DC electrolytics. Type BR section tabs and leads are riveted. Type BBR negative lead is riveted and positive lead is solidly crimped to an aluminum stud. Voltage ratings up to and including 150 volts feature etched cathodes. Operating temperature range is —20C to +85C up to 450 volts and to +65C for higher voltage.

6 DC W. VOLTS

Stock No.	Type	Mfd.	D x L	1-24	25-49	50-99	100-499	500-999
15F310	BBR5-6	5	⅜x1 1/16"	.48	.35	.27	.22	.19
15F311	BBR25-6	25	⅜x1 1/16"	.51	.37	.29	.23	.20
15F312	BBR50-6	50	⅜x1 1/16"	.57	.41	.32	.26	.22
15F314	BR100-6	100	½x1 1/16"	.72	.50	.39	.31	.27
15F315	BR250-6	250	½x1 1/16"	.81	.64	.50	.40	.34
15F193	BR500-6	500	½x1 7/16"	.93	.73	.57	.45	.39
15F153	BR1000-6	1000	⅝x1 11/16"	1.14	.89	.69	.55	.48
15F154	BR2000-6	2000	¾x2"	1.38	1.04	.84	.67	.58
15F181	BR3000-6	3000	⅞x2"	1.71	1.35	1.04	.84	.72
15F182	BR4000-6	4000	1x2 3/16"	1.95	1.54	1.20	.95	.82

15 DC W. Volts

15F316	BR100-15	100	½x1 1/16"	.75	.52	.41	.33	.28
15F159	BR250-15	250	½x1 1/16"	.93	.73	.57	.46	.40
15F160	BR500-15	500	½x1 7/16"	1.05	.82	.64	.51	.44
15F165	BR1000-15	1000	⅝x1 11/16"	1.38	1.07	.83	.67	.58
15F166	BR2000-15	2000	¾x2"	1.92	1.26	.97	.78	.68
15F194	BR3000-15	3000	⅞x2 3/16"	2.37	1.82	1.42	1.14	.98
15F195	BR4000-15	4000	⅞x2¾	2.91	2.25	1.75	1.40	1.20
15F196	BR5000-15	5000	1x3"	3.15	2.45	1.91	1.53	1.31

25 DC W. Volts

15F317	BBR10-25	10	⅜x1 1/16"	.60	.42	.33	.26	.23
15F318	BBR20-25	20	⅜x1 1/16"	.60	.43	.34	.27	.23
15F319	BBR25-25	25	⅜x1 1/16"	.60	.44	.35	.28	.24
15F320	BR50-25	50	½x1 1/16"	.66	.47	.37	.30	.25
15F321	BR100-25	100	½x1 1/16"	.81	.57	.45	.36	.31
15F162	BR250-25	250	½x1 7/16"	1.02	.79	.62	.49	.42
15F163	BR500-25	500	⅝x1 11/16"	1.38	1.07	.83	.67	.57
15F112	BR1000-25	1000	¾x2"	2.37	1.82	1.42	1.14	.97
15F113	BR2000-25	2000	⅞x2½"	2.91	2.25	1.76	1.41	1.21

50 DC W. Volts

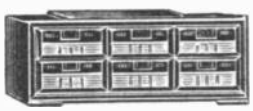
Stock No.	Type	Mfd.	D x L	1-24	25-49	50-99	100-499	500-999
15F322	BBR1-50	1	⅜x1 1/16"	.54	.39	.31	.24	.21
15F323	BBR2-50	2	⅜x1 1/16"	.54	.39	.31	.24	.21
15F324	BBR4-50	4	⅜x1 1/16"	.60	.42	.32	.26	.22
15F325	BBR5-50	5	⅜x1 1/16"	.60	.42	.32	.26	.22
15F326	BBR10-50	10	⅜x1 1/16"	.60	.42	.33	.27	.23
15F327	BR25-50	25	½x1 1/16"	.63	.44	.35	.28	.24
15F131	BR50-50	50	½x1 1/16"	.72	.51	.40	.32	.28
15F164	BR100-50	100	½x1 7/16"	.84	.59	.46	.37	.32
15F199	BR150-50	150	⅝x1 1/16"	.93	.66	.51	.41	.36
15F198	BR250-50	250	¾x1 7/16"	1.05	.87	.64	.51	.44
15F197	BR500-50	500	⅞x1 11/16"	1.44	1.11	.86	.69	.59
15F114	BR1000-50	1000	1x2 1/16"	2.52	1.93	1.49	1.20	1.03
15F536	BR1500-50	1500	1 1/16x2¾"	3.00	2.26	1.76	1.41	1.26
15F537	BR2000-50	2000	1⅜x2¾"	3.48	2.60	2.02	1.61	1.38

150 DC W. VOLTS

15F330	BBR4-150	4	⅜x1 1/16"	.60	.43	.33	.27	.23
15F331	BR8-150	8	½x1 1/16"	.63	.45	.34	.28	.24
15F332	BR10-150	10	½x1 1/16"	.63	.46	.35	.29	.25
15F333	BR12-150	12	½x1 1/16"	.66	.42	.36	.29	.25
15F334	BR16-150	16	½x1 7/16"	.69	.49	.38	.31	.26
15F313	BR20-150	20	½x1 7/16"	.72	.50	.39	.31	.27
15F302	BR25-150	25	¾x1 7/16"	.75	.53	.41	.33	.29
15F862	BR30-150	30	¾x1 7/16"	.78	.55	.43	.34	.30

(Con't. on next col.)

TUBULAR ELECTROLYTIC ASSORTMENT KIT



Assortment of tubular electrolytics widely used in entertainment repair. Single and dual sections—plus one wide-range printed circuit unit for 8 standard 150V capacitors and covers a multitude of service replacements. Types are: BBR, BR, BBRD.

Type	Mfd.	Qty.	Type	Mfd.	Qty.	Type	Mfd.	Qty.
BBR	10-50	1	BR	10-450	2	BR	80-450	1
BR	25-50	1	BR	20-450	1	BBRD	50+30/150	1
BR	50-50	1	BR	40-450	2	BBRD	80+50/150	1
BR	100-50	1						

15F1950. NET..... **12.87**

150 DCV (Con't.)

Stock No.	Type	Mfd.	D x L	1-24	25-49	50-99	100-499	500-999
15F124	BR40-150	40	¾x1 11/16"	.81	.58	.45	.36	.31
15F125	BR50-150	50	¾x1 11/16"	.84	.59	.46	.37	.32
15F303	BR60-150	60	⅞x1 11/16"	.90	.63	.49	.39	.34
15F126	BR80-150	80	⅞x1 11/16"	.96	.68	.54	.43	.37
15F167	BR100-150	100	⅞x2"	1.05	.74	.58	.46	.40
15F168	BR150-150	150	1x2 3/16"	1.14	.82	.63	.51	.44
15F098	BR200-150	200	1x3"	1.32	.98	.77	.62	.53
15F118	BR250-150	150	1x3 3/16"	1.53	1.17	.90	.73	.63
15F099	BR300-150	300	1x3 1 3/16"	1.77	1.35	1.04	.84	.72

250 DC W. Volts

15F300	BR4-250	4	½x1 1/16"	.60	.47	.37	.30	.26
15F994	BR8-250	8	½x1 7/16"	.69	.54	.41	.33	.29
15F995	BR12-250	12	½x1 7/16"	.75	.57	.44	.36	.31
15F115	BR16-250	16	¾x1 7/16"	.78	.60	.47	.38	.32
15F116	BR20-250	20	¾x1 7/16"	.81	.64	.49	.40	.34
15F304	BR30-250	30	¾x1 11/16"	.87	.68	.53	.42	.37
15F117	BR40-250	40	¾x2"	.93	.73	.57	.46	.39
15F305	BR50-250	50	⅞x1 11/16"	1.02	.80	.62	.50	.43
15F306	BR60-250	60	1x1 11/16"	1.08	.84	.65	.52	.44
15F119	BR100-250	100	1x2 3/16"	1.47	.96	.75	.60	.52
15F120	BR150-250	150	1 1/16x3"	1.89	1.12	.87	.70	.60
15F309	BR200-250	200	1⅜x3 1/8"	2.10	1.28	1.00	.80	.69

350 DC W. Volts

15F886	BR4-350	4	⅝x1 1/16"	.63	.47	.38	.30	.26
15F887	BR8-350	8	⅝x1 7/16"	.72	.55	.43	.34	.30
15F888	BR12-350	12	¾x1 7/16"	.78	.60	.47	.38	.32
15F890	BR20-350	20	¾x1 7/16"	.87	.68	.52	.42	.36
15F123	BR30-350	30	¾x2"	.99	.77	.60	.48	.41
15F892	BR40-350	40	⅞x2"	1.05	.81	.62	.51	.43
15F893	BR50-350	50	1x2"	1.11	.87	.68	.54	.47
15F894	BR60-350	60	1x2"	1.17	.91	.71	.57	.49
15F895	BR80-350	80	1x3"	1.26	.98	.78	.63	.54
15F896	BR100-350	100	1x3"	1.53	1.11	.86	.69	.60
15F121	BR150-350	150	1⅜x3"	2.37	1.36	1.05	.85	.73
15F122	BR200-350	200	1⅜x4⅛"	2.70	1.72	1.34	1.11	.92

450 DC W. Volts

15F102	BR1-450	1	⅝x1 1/16"	.66	.51	.39	.32	.27
15F103	BR2-450	2	⅝x1 1/16"	.66	.52	.40	.32	.28
15F104	BR4-450	4	⅝x1 7/16"	.69	.53	.42	.34	.29
15F105	BR8-450	8	¾x1 7/16"	.75	.59	.46	.37	.32
15F106	BR10-450	10	¾x1 7/16"	.78	.62	.47	.38	.32
15F107	BR12-450	12	¾x1 7/16"	.81	.64	.50	.40	.34
15F108	BR16-450	16	¾x1 11/16"	.84	.65	.53	.42	.36
15F109	BR20-450	20	⅞x1 11/16"	.93	.73	.56	.45	.39
15F110	BR30-450	30	1x2"	1.02	.80	.62	.50	.43
15F111	BR40-450	40	1x2 3/16"	1.08	.83	.64	.52	.45
15F147	BR60-450	60	1x3"	1.41	1.08	.83	.67	.58
15F148	BR80-450	80	1x3 1/16"	1.68	1.28	.99	.79	.68
15F169	BR100-450	100	1x3 1/16"	1.92	1.48	1.15	.92	.80
15F127	BR150-450	150	1⅜x3 5/16"	2.85	2.00	1.55	1.27	1.07
15F128	BR200-450	200	1⅜x4 1/8"	3.00	2.50	1.95	1.56	1.34

500 DC W. Volts

No. Stock	Type	Mfd.	D x L	1-24	25-49	50-99	100-499	500-999
15F307	BR4-500	4	⅝x1 7/16"	.72	.56	.43	.35	.30
15F100	BR8-500	8	¾x1 7/16"	.78	.61	.47	.38	.33
15F308	BR12-500	12	¾x1 11/16"	.84	.66	.51	.41	.35
15F101	BR16-500	16	⅞x1 11/16"	.90	.70	.54	.43	.38
15F145	BR20-500	20	⅞x2"	.96	.74	.60	.47	.40
15F146	BR30-500	30	1x2"	1.05	.82	.66	.52	.45

600 DC W. VOLTS

15F183	BR4-600	4	1 3/16x2 1/16"	1.35	1.03	.80	.64	.55
15F185	BR8-600	8	1 3/16x3 3/16"	1.38	1.08	.84	.67	.58
15F186	BR10-600	10	1 5/16x3 3/16"	1.47	1.12	.87	.69	.60
15F187	BR12-600	12	1 1/16x3 3/16"	1.65	1.24	.96	.78	.67
15F188	BR16-600	16	1 1/16x3 3/16"	1.89	1.52	1.18	.94	.81
15F184	BR20-600	20	1 1/16x3 11/16"	2.10	1.72	1.34	1.08	.93

700 DC W. VOLTS

15F189	BR8-700	8	1 5/16x3 3/16"	1.47	1.12	.87	.69	.60
15F190	BR10-700	10	1 1/16x3 3/16"	1.53	1.17	.91	.73	.63
15F191	BR12-700	12	1 1/16x3 11/16"	1.71	1.30	1.01	.80	.70
15F192	BR16-700	16	1 1/16x4 5/16"	2.10	1.68	1.30	1.05	.90

NON-POLARIZED ELECTROLYTICS

Suitable for use when no DC polarized voltage is present. Units are physically similar to the type BR-axial lead, hermetically sealed in aluminum cases with cardboard insulating sleeves. For use in crossover networks and in boot-strap filtering applications.

Stk. No.	CDE Part No.	Mfd.	Volts	Size	1-24	25-49	50-99	100-499	500-999
15F1674	BRNP1000-3	1000	3	1 5/16x2 3/16	1.29	.92	.77	.62	.53
15F1675	BRNP500-10	500	10	1 3/16x1 5/8	1.20	.91	.75	.56	.44
15F1676	BRNP20-30	20	30	1 1/16x1 1/4	.75	.54	.42	.33	.28
15F1677	BRNP4-50	4	50	1 1/16x1 1/4	.75	.51	.40	.30	.26
15F1678	BRNP5-400	5	400	1 3/16x1 5/8	.81	.56	.42	.33	.28
15F1679	BRNP20-400	20	400	1 1/16x2 3/8	1.20	.91	.75	.60	.46
15F1680	BRNP10-400	10	400	1 5/16x1 7/8	.93	.71	.57	.43	.38

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

Cornell-Dubilier Capacitors

CDE

COMPUTER GRADE HIGH CAPACITANCE TYPE FAH

Designed for use in computer power supplies and other applications where banks of high capacitance filters are required. Low leakage current, minimum ESR, high 120cps ripple currents, molded terminal block with safety vent seal, provided with screw terminals, plastic insulating sleeve. Dual rated as shown, minimum operating temperature 20°C.

65C: 10V DCW, 15VS; 85C: 8V DCW, 10VS

Stock No.	Type FAH—	Cap. Mfd.	Size	ESR Ohms	1-49	50-99	100-249	250-up
15F1807	353-10	35,000	2x5 5/8	.043	4.50	4.05	3.60	3.30
15F1808	503-10	50,000	2 1/2x4 5/8	.036	6.15	5.52	4.92	4.61

65C: 15V DCW, 20VS; 85C: 10V DCW, 15VS

15F1809	143-15	14,000	1 3/4x4 1/8	.067	3.30	2.90	2.58	2.37
15F1810	253-15	25,000	2x5 5/8	.051	4.55	4.11	3.66	3.36
15F1811	403-15	40,000	3x4 1/8	.040	5.90	5.29	4.68	4.29

65C: 25V DCW, 35VS; 85C: 20V DCW, 30VS

15F1812	152-25	1,500	1 3/8x2 1/8	.17	1.50	1.35	1.20	1.10
15F1813	103-25	10,000	2x4 1/8	.066	3.40	3.04	2.70	2.48
15F1814	203-25	20,000	2 1/2x4 1/8	.047	4.95	4.46	3.96	3.63
15F1815	323-25	32,000	3x4 5/8	.037	6.18	5.55	4.92	4.51

65C: 50V DCW, 65VS; 85C: 40V DCW, 55VS

15F1816	801-50	800	1 3/8x2 1/8	.35	1.55	1.42	1.26	1.16
15F1817	252-50	2,500	1 3/8x4 1/8	.15	1.90	1.69	1.50	1.38
15F1818	402-50	4,000	1 3/4x4 1/8	.115	2.55	2.30	2.04	1.87
15F1819	502-50	5,000	2x4 1/8	.099	3.30	3.00	2.64	2.42
15F1820	103-50	10,000	2 1/2x4 1/8	.07	5.30	4.80	4.26	3.91
15F1821	203-50	20,000	3x5 5/8	.047	7.35	6.64	5.88	5.41

65C: 100V DCW, 135VS; 85C: 75V DCW, 100VS

Stock No.	Type FAH—	Cap. Mfd.	Size	ESR Ohms	1-49	50-99	100-249	250-up
15F1822	102-100	1,000	1 3/8x4 1/8	.225	2.05	1.83	1.62	1.49
15F1823	402-100	4,000	2 1/2x4 1/8	.112	4.65	4.19	3.72	3.41
15F1824	532-100	5,300	3x4 1/8	.093	5.20	4.65	4.14	3.80

65C: 150V DCW, 185VS; 85C: 125V DCW, 150VS

15F1825	751-150	750	1 3/8x4 1/8	.375	2.05	1.82	1.62	1.49
15F1826	202-150	2,000	2x4 5/8	.128	3.90	3.52	3.12	2.86
15F1827	602-150	6,000	3x5 5/8	.072	7.15	6.40	5.70	5.23

65C: 200V DCW, 250VS; 85C: 150V DCW, 200VS

15F1828	501-200	500	1 3/8x4 1/8	.56	1.95	1.74	1.56	1.43
15F1829	202-200	2,000	2 1/2x4 1/8	.127	4.30	3.85	3.42	3.14

65C: 250V DCW, 300VS; 85C: 200V DCW, 250VS

15F1830	102-250	1,000	2x4 5/8	.28	4.50	4.05	3.60	3.30
15F1831	152-250	1,500	2 1/2x4 1/8	.15	5.05	4.60	4.08	3.74

65C: 350V DCW, 400VS; 85C:300V DCW, 350VS

15F1832	351-350	350	1 3/4x4 1/8	.56	2.55	2.30	2.04	1.87
15F1833	102-350	1,000	3x4 1/8	.198	5.40	4.85	4.32	3.96

65C: 450V DCW, 525VS; 85C: 400V DCW, 475VS

15F1834	251-450	250	1 3/4x4 1/8	.782	2.80	2.50	2.22	2.04
15F1835	501-450	500	2x5 5/8	.392	3.75	3.40	3.00	2.75
15F1836	861-450	860	3x4 1/8	.215	6.45	5.80	5.16	4.73

"KR" ALUMINUM CAN CAPACITOR

Single hole inverted mounting aluminum can electrolytics. Ideal for replacement of 1" diameter wet type electrolytics in older equipment. Shipping wt., 6 oz.

Stk. No.	Type	VDC	Mfd.	DxL	1-24	25-49	50-99	100-499	500-999
15F450	604C	600	4	1 3/8x3 1/2"	1.77	1.32	1.02	.90	.86
15F451	608C	600	8	1 3/8x4 3/8"	1.89	1.50	1.15	1.08	.98
15F452	616C	600	16	1 3/8x4 3/8"	2.25	1.68	1.28	1.14	1.10
15F459	540	450	40	1 3/8x4 3/8"	1.89	1.08	.83	.74	.71

DUAL SEPARATE SECTION UNITS

Stock No.	Type	Mfd.	DxL	1-24	25-49	50-99	100-499	500-999
15F460	KR588A	8-8	1 3/8x3"	2.25	1.16	.90	.80	.77

NLW ELECTROLYTIC CAPACITORS

Type NLW. Rugged physical construction. Hermetically sealed aluminum foil electrolytic capacitors. Low leakage currents; freedom from shorts. Long shelf and operating life. Suitable for printed circuits. Tinned copper leads with plastic sleeves. Temperature range, —40°C to +85°. Tol. —10% to +150%.

Stock No.	Type No.	Cap. Mfd.	WV DC	DxL	1-24	25-49	50-99	100-499	500-999
15F1003	NLW25-3	25	3	1/4x1 1/2	.75	.53	.30	.24	.21
15F1005	NLW50-3	50	3	1/4x1 3/4	.75	.53	.41	.33	.28
15F1042	NLW100-3	100	3	3/8x5/8	.84	.61	.47	.38	.32
15F1007	NLW200-3	200	3	3/8x7/8	.90	.61	.47	.38	.32
15F1014	NLW10-6	10	6	3/16x1/2	.84	.56	.40	.28	.24
15F1018	NLW30-6	30	6	1/4x5/8	.84	.51	.30	.24	.21
15F1025	NLW25-10	25	10	1/4x5/8	.87	.55	.43	.34	.29
15F1026	NLW50-10	50	10	3/16x3/4	.93	.61	.47	.38	.32
15F1059	NLW100-12	100	12	3/8x3/4	1.05	.61	.47	.38	.32
15F1060	NLW200-12	200	12	3/8x1 1/4	1.23	.68	.53	.42	.36
15F1085	NLW4-15	4	15	3/16x1/2	.78	.51	.32	.26	.22
15F1028	NLW5-15	5	15	3/16x1/2	.90	.51	.37	.30	.26
15F1029	NLW10-15	10	15	1/4x1/2	.84	.53	.34	.27	.23
15F1062	NLW15-15	15	15	1/4x5/8	.87	.53	.34	.27	.23
15F1086	NLW20-15	20	15	1/4x5/8	.87	.53	.34	.27	.23
15F1087	NLW25-15	25	15	5/16x5/8	.87	.55	.43	.34	.29
15F1762	NLW20-25	20	25	3/8x5/8	.90	.56	.44	.35	.30
15F1763	NLW25-25	25	25	3/8x5/8	.93	.61	.47	.38	.32
15F1764	NLW40-25	40	25	3/8x3/4	1.02	.61	.47	.38	.32
15F1765	NLW50-25	50	25	3/8x7/8	1.08	.61	.47	.38	.32
15F1863	NLW50-15	50	15	3/8x 5/8	.96	.61	.47	.38	.32
15F1089	NLW75-15	75	15	3/8x 3/4	1.02	.61	.47	.38	.32
15F1064	NLW100-15	100	15	3/8x 7/8	1.08	.61	.50	.38	.32
15F1033	NLW6-25	6	25	1/4x 1/2	.84	.53	.51	.27	.23
15F1092	NLW8-25	8	25	1/4x 1/2	.87	.56	.46	.28	.24
15F1034	NLW10-25	10	25	1/4x 5/8	.87	.56	.47	.28	.24
15F1035	NLW15-25	15	25	5/16x 5/8	.87	.55	.49	.34	.29
15F1094	NLW35-25	35	25	3/8x 3/4	.96	.61	.49	.38	.32
15F1096	NLW1-50	1	50	3/16x 1/2	.87	.59	.49	.28	.24
15F1097	NLW2-50	2	50	3/16x 1/2	.81	.53	.49	.26	.22
15F1037	NLW5-50	5	50	1/4x 1/2	.87	.53	.49	.27	.23
15F1038	NLW10-50	10	50	3/16x 5/8	.90	.59	.51	.37	.32
15F1144	NLW15-50	15	50	3/8x 5/8	.90	.61	.52	.38	.32
15F1039	NLW20-50	20	50	3/8x 5/8	.90	.61	.34	.38	.32
15F1145	NLW25-50	25	50	3/8x 3/4	.93	.61	.50	.38	.32
15F1066	NLW30-50	30	50	3/8x 3/4	.96	.61	.51	.38	.32
15F1147	NLW40-50	40	50	3/8x1	1.05	.64	.47	.40	.34
15F1067	NLW75-50	75	50	3/8x1 1/2	1.20	.65	.47	.41	.35
15F1040	NLW2-100	2	100	1/4x 5/8	.84	.59	.47	.37	.32
15F1045	NLW10-100	10	100	3/8x 7/8	.93	.60	.34	.38	.32
15F1047	NLW20-100	20	100	3/8x1 1/2	.96	.63	.40	.39	.33
15F1148	NLW2-150	2	150	3/16x 5/8	.87	.63	.40	.39	.33
15F1049	NLW5-150	5	150	3/8x 5/8	.93	.63	.43	.39	.33
15F1051	NLW8-150	8	150	3/8x 7/8	.96	.63	.47	.39	.33
15F1052	NLW10-150	10	150	3/8x1	.96	.63	.40	.39	.34
15F1149	NLW15-150	15	150	3/8x1 1/4	.96	.65	.32	.41	.35
15F1766	NLW100-25	100	25	3/8x1 1/2	1.26	.66	.34	.41	.35
15F1767	NLW4-50	4	50	1/4x1/2	.81	.53	.46	.27	.23
15F1768	NLW50-50	50	50	3/8x1 1/4	1.11	.64	.47	.40	.35
15F1769	NLW18-150	18	150	3/8x1 1/2	.96	.66	.47	.41	.35

WIDE-RANGE ELECTROLYTIC TYPE ESS7515

Type ESS wide range printed circuit electrolytic is an exact replacement for eight original standard electrolytics used in home receivers. A replacement for units of 150 V: 50-30 mfd.; 70-30 mfd.; 75-30 mfd.; 60-40 mfd.; 80-40 mfd.; 50-50 mfd.; 70-50 mfd.; 80-50 mfd. A good replacement for many single and dual units within the ratings indicated. Size: 1"D.x2 1/2L.

Stock No.	Type	1-24	25-49	50-99	100-499	500-999
15F538	ESS	1.20	.80	.73	.58	.52

DEPEND ON NEWARK FOR EVERYTHING IN INDUSTRIAL ELECTRONICS

- OEM Factory Prices
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Electrolytic Capacitors

WIDE APPLICATION RANGE TWIST-PRONG ELECTROLYTIC CAPACITORS

Wide application range Twist-Prongs provide proper replacement for any electrolytic marked with a capacitance within range on wide application label. Proper replacement instantly available. Highest purity materials.

Tolerance from nominal rated capacitance:

Rated DC Voltage	Capacitance Tolerance
3-50 volts, inclusive	—10% to +150%
51-350 volts, inclusive	—10% to +100%
351-500 volts, inclusive	—10% to +50%

Convert code-letter to size using this table.

Code Letter	Size	Code Letter	Size	Code Letter	Size
A	1x1½	E	1 x3	J	1⅜x3½
B	1x1¾	F	1⅜x2	K	1⅜x3⅝
C	1x2	G	1⅜x2½	L	1⅜x4
D	1x2½	H	1⅜x3		

SINGLE-SECTION TWIST-PRONG ELECTROLYTICS (AA)

10-16 WVDC

Stock No.	Type AA—	CAP. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F215	0060	500-1000	A	1.26	.93	.73	.540	.477
15F216	0070	1000-2000	F	1.92	1.43	1.11	.824	.729
15F277	0080	1500-3000	F	2.40	1.78	1.39	1.031	.912

10-25 WVDC

Stock No.	Type AA—	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F1681	0120	250-500	A	1.17	.87	.68	.502	.444
15F213	0130	500-1000	F	1.74	1.29	1.01	.748	.661

10-50 WVDC

Stock No.	Type AA—	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F279	0160	250-500	F	1.44	1.07	.83	.620	.549
15F262	0174	750-1500	H	2.46	1.83	1.42	1.056	.934

10-150 WVDC

Stock No.	Type AA	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F1682	0200	30-50	A	.90	.66	.51	.380	.336
15F261	0241	60-100	A	.99	.74	.57	.425	.376
15F260	0261	100-150	C	1.11	.82	.64	.473	.419
15F288	0263	200-300	F	1.59	1.19	.93	.688	.608
15F475	0264	120-200	E	1.23	.90	.70	.523	.462

10-250 WVDC

Stock No.	Type AA—	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F1683	0267	80-125	E	1.29	.96	.74	.553	.489
15F210	0316	100-160	G	1.65	1.17	.91	.680	.600

10-300 WVDC

Stock No.	Type AA—	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F1684	0350	60-100	D	1.29	.96	.75	.556	.492
15F211	0357	120-200	G	2.01	1.49	1.16	.861	.761

10-350 WVDC

Stock No.	Type AA	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F1685	0390	30-50	C	1.11	.82	.64	.473	.419
15F1686	0401	60-80	F	1.47	1.10	.85	.633	.560
15F207	0415	100-150	G	1.95	1.44	1.12	.833	.737
15F1687	0417	250-300	L	2.97	2.21	1.72	1.279	1.132

10-450 WVDC

Stock No.	Type AA—	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F1688	0490	35-50	D	1.26	.94	.73	.543	.481
15F206	0510	60-80	G	1.74	1.30	1.01	.753	.666
15F465	0512	70-100	H	1.98	1.46	1.14	.846	.749
15F1689	0514	100-125	J	2.22	1.67	1.30	.962	.851

10-500 WVDC

Stock No.	Type AA—	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F200	0520	7-10	A	.90	.68	.53	.390	.345
15F204	0530	15-20	C	1.05	.78	.60	.449	.391
15F205	0550	30-40	D	1.32	.97	.76	.563	.498
15F202	0560	60-80	H	2.07	1.53	1.19	.885	.783

DUAL-SECTION TWIST-PRONG ELECTROLYTICS (BB)

10-150 VDCW

STOCK NO.	TYPE BB	CAP. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F293	0141	20-40						
		20-40	A	1.11	.79	.61	.454	.401
15F231	0150	30-50						
		15-30	A	1.11	.79	.61	.454	.401
15F232	0171	50-80						
		50-80	C	1.29	.92	.71	.530	.469
15F273	0181	50-80						
		20-40	B	1.20	.85	.66	.490	.434

DUAL-SECTION TWIST-PRONG ELECTROLYTICS (CON'T.)

10-350 VDCW

Stock No.	Type BB	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F225	0300	15-20						
		15-20	C	1.20	.86	.67	.494	.437
15F226	0310	20-30						
		20-30	D	1.38	.95	.74	.550	.486

10-450 WVDC

Stock No.	Type BB	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F220	0400	15-20						
		15-20	D	1.38	.95	.74	.551	.488
15F447	0410	20-30						
		7-10	E	1.38	.96	.75	.554	.490
15F221	0430	20-30						
		20-30	F	1.77	1.24	.96	.716	.634
15F222	0440	30-40						
		15-20	F	1.77	1.24	.96	.716	.634
15F224	0480	60-80						
		30-40	K	2.43	1.72	1.34	.992	.877

10-500 WVDC

Stock No.	Type BB	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F219	0490	7-10						
		7-10	C	1.17	.86	.67	.498	.440
15F217	0500	15-20						
		15-20	F	1.71	1.20	.93	.694	.614
15F223	0530	30-40						
		30-40	G	2.28	1.61	1.25	.930	.822

TRIPLE-SECTION TWIST-PRONG ELECTROLYTICS (CC)

10-150 WVDC

Stock No.	Type	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F249	CC0090	20-40						
		20-40						
		20-40	B	1.47	.93	.72	.536	.474
15F229	CC0105	30-50						
		30-50						
		30-50	C	1.53	.98	.76	.567	.501

10-450 WVDC

Stock No.	Type	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F269	CC0350	30-40						
		30-40						
		30-40	H	2.76	1.79	1.39	1.032	.913
15F228	CC0370	50-80						
		30-40						
		15-20	H	2.97	1.93	1.50	1.115	.987

10-500 VDCW

Stock No.	Type	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F234	CC0380	7-10						
		7-10						
		7-10	E	1.62	1.05	.81	.605	.535
15F268	CC0390	20-30						
		15-20						
		15-20	H	2.43	1.61	1.25	.930	.822

QUADRUPLE-SECTION TWIST-PRONG ELECTROLYTICS (DD)

10-475 WVDC

Stock No.	Type	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F253	DD0179.5	15-20						
		15-20						
		15-20						
		15-20	G	2.67	1.66	1.29	.957	.846

10-500 WVDC

Stock No.	Type	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F252	DD0180	7-10						
		7-10						
		7-10						
		7-10	F	2.10	1.36	1.05	.784	.693

10-450 WVDC

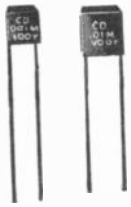
Stock No.	Type	Cap. MFD.	Size	1-24	25-49	50-99	100-499	500-999
15F254	DD0480	7-10						
		7-10						
		7-10						
		15-20*	F	1.89	1.19	.93	.688	.608

*This section 10-25 WVDC.

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

CERAMIC CAPACITORS

Models CK05 & CK06. Ultra-miniature rectangular cased. Meets requirements of MIL-C-11015. Rated at 200V DCW over operating temp. range: —55C To +150C. High reliability packaged in small sizes. The temperature characteristic is MIL CW specified as maximum capacitance change of —22%, or +56% when the temperature cycled is per MIL-C-11015. Units are stocked and are available in the latest revision of MIL-C-11015 with a tolerance of ±10%. These tiny capacitors come in a premolded case. Size: CK05, .2x.2x.1. CK06, .3x.3x.1.



STYLE CK05

Stock. No.	Type	Cap. Pf.	1-49	50-99	100-249	250-499	500-999
15F1770	CK05BX100K	10					
15F1771	CK05BX120K	12					
15F1772	CK05BX150K	15					
15F1773	CK05BX180K	18					
15F1774	CK05BX220K	22					
15F1775	CK05BX270K	27					
15F1776	CK05BX330K	33	.70	.63	.49	.45	.42
15F1777	CK05BX390K	39					
15F1778	CK05BX470K	47					
15F1779	CK05BX560K	56					
15F1780	CK05BX680K	68					
15F1781	CK05BX820K	82					
15F1782	CK05BX101K	100					
15F1783	CK05BX121K	120					
15F1784	CK05BX151K	150					
15F1785	CK05BX181K	180					
15F1786	CK05BX221K	220					
15F1787	CK05BX271K	270					
15F1788	CK05BX331K	330	.70	.63	.49	.45	.42
15F1789	CK05BX391K	390					
15F1790	CK05BX471K	470					
15F1791	CK05BX561K	560					
15F1792	CK05BX681K	680					
15F1793	CK05BX821K	820					
15F1794	CK05BX102K	1000					

STYLE CK06

15F1801	CK06BX122K	1200					
15F1802	CK06BX152K	1500					
15F1803	CK06BX182K	1800					
15F1804	CK06BX222K	2200	.72	.65	.50	.47	.43
15F1805	CK06BX272K	2700					
15F1806	CK06BX332K	3300					
15F1795	CK06BX392K	3900					
15F1796	CK06BX472K	4700					
15F1797	CK06BX562K	5600					
15F1798	CK06BX682K	6800	.78	.70	.55	.51	.47
15F1799	CK06BX822K	8200					
15F1800	CK06BX103K	10000					

MYLAR DIELECTRIC FILM ENCASED

Type WMF. Encased in a Mylar film wrapping and end sealed with a high density thermosetting plastic. A desirable unit where a metal case unit is not indicated miniscule in size, has high resistance to humidity and excellent capacitance stability with temp. and life. Temp. range: —55°C to +125°C. Tolerance: 10%.

100 WVDC

Stk. No.	Type	Mfd.	DxL (in.)	1-24	25-49	50-99	100-499	500-999
15F1450	WMF1D1	.001	.156x ½					
15F1451	WMF1D15	.0015	.156x ½					
15F1452	WMF1D22	.0022	.255x ½					
15F1453	WMF1D33	.0033	.255x ½	.21	.17	.14	.12	.10
15F1454	WMF1D47	.0047	.255x ½					
15F1455	WMF1D68	.0068	.175x ½					
15F1456	WMF1S1	.01	.200x ½					
15F1457	WMF1S15	.015	.235x ½					
15F1458	WMF1S22	.022	.275x ⅝					
15F1459	WMF1S33	.033	.300x ⅝	.24	.18	.15	.13	.12
15F1460	WMF1S47	.047	.265x ¾	.27	.21	.16	.14	.12
15F1461	WMF1S68	.068	.280x ¾	.27	.21	.16	.14	.12
15F1462	WMF1P1	.1	.290x ⅞	.36	.25	.20	.14	.12
15F1463	WMF1P15	.15	.335x ⅞	.36	.25	.20	.14	.12
15F1464	WMF1P22	.22	.385x1	.39	.29	.22	.15	.13
15F1465	WMF1P33	.33	.415x1⅛	.45	.32	.24	.19	.15
15F1466	WMF1P47	.47	.475x1¼	.47	.33	.26	.22	.19
15F1467	WMF1P68	.68	.570x1¼	.57	.42	.33	.29	.24
15F1468	WMF1W1	1 0	.625x1½	.87	.59	.46	.40	.34
15F1469	WMF1W1P25	1.25	.690x1½	1.05	.68	.53	.46	.38
15F1470	WMF1W1P5	1.5	.770x1¾	1.23	.81	.63	.54	.45
15F1471	WMF1W2	2.0	.995x1¾	1.50	.98	.76	.66	.55
15F1837	WMF1D12	.0012	.156x ½	.21	.17	.14	.12	.10
15F1838	WMF1D18	.0018	.156x ½					
15F1839	WMF1D27	.0027	.156x ½					
15F1840	WMF1D39	.0039	.156x ½	.21	.17	.14	.12	.10
15F1841	WMF1D5	.005	.156x ½					
15F1842	WMF1D56	.0056	.156x ½					
15F1843	WMF1D82	.0082	.175x ½	.21	.17	.14	.12	.10
15F1844	WMF1S12	.012	.215x ½					
15F1845	WMF1S18	.018	.255x ½					
15F1846	WMF1S27	.027	.300x ⅝	.21	.17	.14	.12	.10
15F1847	WMF1S39	.039	.245x ¾	.24	.18	.15	.13	.12
15F1848	WMF1S5	.05	.265x ¾	.27	.21	.16	.14	.12
15F1849	WMF1S56	.056	.265x ¾	.27	.21	.16	.14	.12
15F1850	WMF1S82	.082	.270x ¾	.36	.25	.20	.14	.12

200 WVDC

15F1472	WMF2D1	.001	.156x ½					
15F1473	WMF2D15	.0015	.156x ½					
15F1474	WMF2D22	.0022	.540x ⅞					
15F1475	WMF2D33	.0033	.160x ½	.21	.17	.14	.12	.10
15F1476	WMF2D47	.0047	.170x ½					
15F1477	WMF2D68	.0068	.200x ½					
15F1478	WMF2S1	.01	.230x ½					
15F1479	WMF2S15	.015	.290x ½					
15F1480	WMF2S22	.022	.275x ⅝	.24	.18	.15	.13	.12
15F1481	WMF2S33	.033	.270x ¾	.24	.18	.15	.13	.12
15F1482	WMF2S47	.047	.320x ¾	.27	.20	.16	.14	.12
15F1483	WMF2S68	.068	.350x ¾	.27	.21	.16	.14	.12
15F1484	WMF2P1	.1	.410x ⅞	.36	.25	.20	.14	.12
15F1485	WMF2P15	.15	.500x ⅞	.36	.26	.24	.15	.12
15F1486	WMF2P22	.22	.500x1⅛	.39	.29	.22	.15	.13

Stk. No.	Type	Mfd.	DxL (in.)	1-24	25-49	50-99	100-499	500-999
15F1487	WMF2P33	.33	.550x1⅛	.45	.32	.24	.19	.15
15F1488	WMF2P47	.47	.600x1¼	.51	.36	.29	.23	.19
15F1489	WMF2P68	.68	.650x1⅝	.57	.42	.33	.29	.24
15F1490	WMF2W1	1.0	.750x1¾	.87	.59	.46	.40	.34
15F1491	WMF2W1P25	1.25	.825x1¾	1.05	.68	.53	.46	.38
15F1492	WMF2W1P5	1.5	.900x1¾	1.23	.81	.63	.54	.45
15F1493	WMF2W2	2.0	.980x1⅞	1.50	.98	.76	.66	.55

400 WVDC

15F1494	WMF4D1	.001	.156x ⅝	.27				
15F1495	WMF4D15	.0015	.156x ⅝	.27				
15F1496	WMF4D22	.0022	.175x ⅝	.27	.21	.16	.15	.12
15F1497	WMF4D33	.0033	.190x ⅝	.27				
15F1498	WMF4D47	.0047	.200x ⅝	.27				
15F1499	WMF4D68	.0068	.250x ⅝	.27				
15F1500	WMF4S1	.01	.300x ⅝	.27	.21	.16	.13	.12
15F1501	WMF4S15	.015	.360x ⅝	.27	.21	.16	.15	.13
15F1502	WMF4S22	.022	.320x ¾	.27	.21	.16	.15	.13
15F1503	WMF4S33	.033	.350x ⅞	.27	.21	.16	.15	.13
15F1504	WMF4S47	.047	.400x ⅞	.30	.22	.17	.15	.13
15F1505	WMF4S68	.068	.390x1	.3[illegible]	.24	.18	.16	.14
15F1506	WMF4P1	.1	.465x1	.3[illegible]	.24	.18	.16	.14
15F1507	WMF4P15	.15	.515x1¼	.36	.25	.20	.18	.14
15F1508	WMF4P22	.22	.565x1⅜	.4[illegible]	.29	.23	.20	.17
15F1509	WMF4P33	.33	.600x1⅝	.66	.47	.36	.32	.25
15F1510	WMF4P47	.47	.700x1⅝	.78	.56	.43	.37	.32
15F1511	WMF4P68	.68	.790x1¾	.96	.68	.54	.46	.39
15F1512	WMF4W1	1.0	.875x2	1.20	.78	.60	.52	.44
15F1513	WMF4W1P25	1.25	.950x2	1.38	.90	.70	.60	.50
15F1514	WMF4W1P5	1.5	.975x2¼	1.56	1.01	.80	.68	.57
15F1515	WMF4W2	2.0	1.250x2¼	2.04	1.33	1.04	.89	.75

600 WVDC

15F1516	WMF6D1	.001	.170x ¾	.30				
15F1517	WMF6D15	.0015	.170x ¾	.30				
15F1518	WMF6D22	.0022	.187x ¾	.30				
15F1519	WMF6D33	.0033	.203x ¾	.30				
15F1520	WMF6D47	.0047	.234x ¾	.30	.23	.18	.16	.14
15F1521	WMF6D68	.0068	.265x ¾	.30				
15F1522	WMF6S1	.01	.290x ¾	.30				
15F1523	WMF6S15	.015	.312x ⅞	.30				
15F1524	WMF6S22	.022	.325x ⅞	.30				
15F1525	WMF6S33	.033	.350x1	.30				
15F1526	WMF6S47	.047	.415x1	.33	.24	.18	.16	.14
15F1527	WMF6S68	.068	.500x1	.36	.25	.20	.17	.15
15F1528	WMF6P1	.1	.520x1⅜	.42	.31	.24	.21	.18
15F1529	WMF6P15	.15	.625x1⅜	.45	.33	.25	.23	.19
15F1530	WMF6P22	.22	.660x1⅝	.51	.37	.30	.25	.21
15F1531	WMF6P33	.33	.685x2	.90	.64	.50	.43	.36
15F1532	WMF6P47	.47	.855x2	1.14	.83	.65	.56	.46
15F1533	WMF6P68	.68	.970x2	1.53	1.10	.86	.74	.62
15F1534	WMF6W1	1.0	1.165x2½	2.55	1.74	1.35	1.17	.97
15F1535	WMF6W1P25	1.25	1.340x2½	2.88	1.88	1.46	1.26	1.07
15F1536	WMF6W1P5	1.5	1.275x3	3.48	2.26	1.76	1.52	1.26
15F1537	WMF6W2	2.0	1.460x3	4.38	2.85	2.22	1.91	1.59

WMF 100 VOLT KIT

For maintenance of industrial equipment and engineering lab stock.

Type	Mfd.	Qty.	Type	Mfd.	Qty.	Type	Mfd.	Qty.
1D1	.001	5	1S15	.015	5	1P1	.1	5
1D22	.0022	5	1S22	.022	5	1P22	.22	5
1D47	.0047	5	1S33	.033	5	1P47	.47	5
1S1	.01	5	1S47	.047	5			

15F1951. NET 15.30

CDE Cornell-Dubilier Capacitors

TYPE MFP SPACE-SAVER FLAT-OVAL POLYESTER FILM CAPACITORS

Type MFP is similar to WMF. It is designed however, with an oval figure useful in many applications requiring its space saving characteristics. In ratings of 0.01 mfd. and above, the MFP is often used as an alternative to type WMF of the mil. type CTM. The unit is highly moisture and humidity resistant. Max. operating temp. range: —55° to 125°C—85°C at full rated voltage with deratings of 10% and 50% at 100°C and 125°C respectively. Standard tolerance is ±20%, 1½" min. copperweld leads. Thickness and width tolerances are: up to and incl. .484", ±.032"; .500" to and incl. 1.000", ±.062"; larger than 1.000", ±.093".

100 VOLTS DCW

Stk. No.	Type	Cap. Mfd.	Size L.xW.	1-24	25-49	50-99	100-499	500-999
15F1851	MFP-1S22	.022	.625x .343"	.27	.23	.18	.16	.13
15F1852	MFP-1S33	.033	.625x .312"	.30	.26	.21	.17	.15
15F1853	MFP-1S47	.047	.750x .312"	.30	.26	.21	.17	.15
15F1854	MFP-1S68	.068	.750x .343"	.30	.26	.21	.17	.15
15F1855	MFP-1P1	.10	.875x .343"	.36	.30	.23	.20	.17
15F1856	MFP-1P15	.15	.875x .406"	.39	.32	.25	.22	.18
15F1857	MFP-1P22	.22	1.000x .468"	.42	.35	.28	.23	.20
15F1858	MFP-1P33	.33	1.125x .500"	.45	.37	.29	.25	.21
15F1859	MFP-1P47	.47	1.250x .531"	.51	.42	.33	.29	.23
15F1860	MFP-1P68	.68	1.250x .687"	.57	.47	.36	.32	.26
15F1861	MFP-1W1	1.00	1.500x .718"	.81	.64	.49	.43	.33
15F1862	MFP-1W1P25	1.25	1.500x .718"	.99	.74	.58	.50	.41
15F1863	MFP-1W1P5	1.50	1.750x .843"	1.14	.86	.67	.57	.48
15F1864	MFP-1W2	2.00	1.750x1.062"	1.38	1.04	.81	.69	.58
	200 VOLTS DCW							
15F1865	MFP-2S15	.015	.500x .312"	.27	.23	.18	.16	.13
15F1866	MFP-2S22	.022	.625x .343"	.27	.23	.18	.16	.13
15F1867	MFP-2S33	.033	.750x .343"	.30	.26	.21	.17	.15
15F1868	MFP-2S47	.047	.750x .375"	.30	.26	.21	.17	.15
15F1869	MFP-2S68	.068	.750x .437"	.30	.26	.21	.17	.15
15F1870	MFP-2P1	.10	.875x .500"	.36	.30	.23	.20	.17
15F1871	MFP-2P15	.15	.875x .562"	.39	.32	.25	.22	.18
15F1872	MFP-2P22	.22	1.125x .562"	.42	.35	.28	.23	.20
15F1873	MFP-2P33	.33	1.125x .625"	.45	.37	.29	.25	.21
15F1874	MFP-2P47	.47	1.250x .656"	.51	.42	.33	.29	.23
15F1875	MFP-2P68	.68	1.625x .718"	.57	.47	.36	.32	.26
15F1876	MFP-2W1	1.00	1.750x .812"	.81	.64	.49	.43	.36
15F1877	MFP-2W1P25	1.25	1.750x .906"	.99	.74	.58	.50	.41
15F1878	MFP-2W1P5	1.50	1.750x1.000"	1.14	.86	.67	.57	.48
15F1879	MFP-2W2	2.00	1.875x1.062"	1.38	1.03	.81	.69	.58
	400 VOLTS DCW							
15F1880	MFP-4S15	.015	.625x .437"	.30	.26	.21	.17	.15
15F1881	MFP-4S22	.022	.750x .375"	.30	.26	.21	.17	.15
15F1882	MFP-4S33	.033	.875x .406"	.30	.26	.21	.17	.15
15F1883	MFP-4S47	.047	.875x .500"	.33	.29	.22	.20	.16
15F1884	MFP-4S68	.068	1.000x .437"	.33	.29	.22	.20	.16
15F1885	MFP-4P1	.10	1.000x .531"	.36	.30	.23	.20	.17
15F1886	MFP-4P15	.15	1.250x .562"	.36	.30	.23	.20	.17
15F1887	MFP-4P22	.22	1.375x .625"	.42	.35	.28	.23	.20
15F1888	MFP-4P33	.33	1.625x .656"	.63	.47	.41	.35	.29
15F1889	MFP-4P47	.47	1.625x .781"	.75	.62	.48	.42	.34
15F1890	MFP-4P68	.68	1.750x .875"	.90	.75	.58	.50	.42
15F1891	MFP-4W1	1.00	2.000x .937"	1.11	.87	.68	.59	.48
15F1892	MFP-4W1P25	1.25	2.000x1.062"	1.26	.95	.74	.63	.53
15F1893	MFP-4W1P5	1.50	2.259x1.062"	1.41	1.06	.82	.71	.59
15F1894	MFP-4W2	2.00	2.250x1.312"	1.83	1.37	1.07	.92	.76

DPM KIT — 600 VOLTS

Dipped paper Mylar by-pass types. Tolerance ±10%. High temp. operation. High insulation resistance. Compact.

Type	Mfd.	Qty.	Type	Mfd.	Qty.	Type	Mfd.	Qty.
6D1	.001	5	6D68	.0068	5	6S33	.033	5
6D22	.0022	10	6S1	.01	10	6S47	.047	10
6D33	.0033	5	6S22	.022	10	6P1	.1	10
6D47	.0047	10	6S27	.027	5	6P22	.22	5

15F1952. NET 18.75

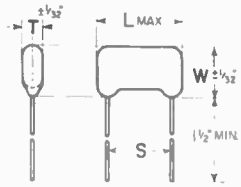
DPMS DIELECTRIC SIDE-LEAD TUBULARS CAPACITORS

Type DPMS has two dielectrics—Mylar Polyester Film and a film of high grade paper. Features a "dipped" rock-hard casing which holds wire leads rigidly at fixed spacings. High humidity resistance. Crimped side leads for uniform mounting. —55°C. to +125°C. Derate working voltage 25% for +125°C operation.

200 VDCW ± 10% Tol.

Stk. No.	Type	Cap. Mfd.	Size	1-24	25-49	50-99	100-499	500-999
15F1600	DPMS2S22	.022	.350x .855	.15	.12	.09	.07	.063
15F1601	DPMS 2S47	.047	.450x .855	.18	.13	.10	.08	.072
15F1603	DPMS 2P1	.1	.470x1.180	.21	.15	.11	.09	.081
15F1604	DPMS 2P15	.15	.540x1.180	.24	.17	.13	.11	.099
15F1605	DPMS 2P22	.22	.590x1.300	.27	.20	.16	.13	.117
15F1607	DPMS 2P47	.47	.730x1.600	.36	.26	.21	.17	.153

MINIATURE RADIAL-LEAD POLYESTER FILM CAPACITORS



A flat space saving configuration, excellent for ultracompact assemblies. MYLAR dielectric. Dipping process assures high moisture and humidity resistance. Epoxy impregnated casting. Fix-fil-impregnated capacitor section—no impregnation leakage even at maximum operating temperatures. Uniform dip coating control assures protection of capacitor section—no possibility of shorts caused by contact of an uncoated case to chassis. Max. operating temperature is 125°C-85°C at full rated voltage. 10% derated at 100°C and 50% derated at 125°C. Leads are #22 AWG including 0.068/100V; 0.047/200V; 022/400V, and 0.068 at 600V. Above these ratings, leads are #20 AWG. Tol. ±20% or ±10%. Wire lead spacing: 9/16" for ¾" dim. L and 5/16" for 1⅛" dim. L.

100 VOLTS DCW

Stk. No.	Type	Cap. Mfd.	Size T.xW.xL.	1-24	25-49	50-99	100-449	500-999
15F1895	DMF-1S15	.015	5/16x5/16x¾"	.18	.12	.10	.08	.069
15F1896	DMF-1S22	.022	5/16x5/16x¾"	.18	.12	.10	.08	.069
15F1897	DMF-1S33	.033	7/32x11/32x¾"	.18	.13	.10	.09	.074
15F1898	DMF-1S47	.047	7/32x11/32x¾"	.18	.14	.11	.10	.080
15F1899	DMF-1S68	.068	¼x3/8x¾"	.21	.16	.13	.11	.090
15F1900	DMF-1P1	.10	5/16x7/16x¾"	.24	.17	.13	.12	.096
15F1901	DMF-1P15	.15	9/32x11/16x¾"	.27	.21	.16	.14	.118
15F1902	DMF-1P22	.22	3/8x3/4x¾"	.33	.25	.19	.17	.138
15F1903	DMF-1P33	.33	7/16x27/32x¾"	.36	.28	.22	.19	.156
15F1904	DMF-1P47	.47	3/8x¾x1⅛"	.42	.33	.25	.22	.181
15F1905	DMF-1P-68	.68	15/32x21/32x1⅛"	.51	.38	.30	.26	.213
15F1906	DMF-1W1	1.00	9/16x15/16x1⅛"	.69	.51	.40	.34	.285

200 VOLTS DCW

Stk. No.	Type	Cap. Mfd.	Size T.xW.xL.	1 24	25-49	50-99	100-499	500-999
15F1907	DMF-2S1	.01	5/16x5/16x¾"	.18	.12	.10	.08	.069
15F1908	DMF-2S15	.015	7/32x11/32x¾"	.18	.12	.10	.08	.069
15F1909	DMF-2S22	.022	¼x3/8x¾"	.18	.12	.10	.08	.069
15F1910	DMF-2S33	.033	¼x3/8x¾"	.18	.13	.10	.09	.074
15F1911	DMF-2S47	.047	¼x3/8x¾"	.18	.14	.11	.10	.080
15F1912	DMF-2S68	.068	9/32x13/32x¾"	.21	.16	.13	.11	.090
15F1913	DMF-2P1	.10	5/16x23/32x¾"	.24	.17	.13	.12	.096
15F1914	DMF2P15	.15	5/8x23/32x¾"	.27	.21	.16	.14	.118
15F1915	DMF-2P22	.22	15/32x21/32x¾"	.33	.25	.19	.17	.138
15F1916	DMF-2P33	.33	9/16x31/32x¾"	.36	.28	.22	.19	.156
15F1917	DMF-2P47	.47	½x7/8x1⅛"	.42	.33	.25	.22	.181
15F1918	DMF-2P68	.68	9/16x31/32x1⅛"	.51	.38	.30	.26	.213

400 VOLTS DCW

Stk. No.	Type	Cap. Mfd.	Size T.xW.xL.	1-24	25-49	50-99	100-499	500-999
15F1919	DMF-4D47	.0047	5/16x5/16x¾"	.18	.12	.10	.08	.069
15F1920	DMF-4D68	.0068	5/16x5/16x¾"	.18	.12	.10	.08	.069
15F1921	DMF-4S1	.01	7/32x11/32x¾"	.18	.12	.10	.08	.069
15F1922	DMF-4S15	.015	¼x3/8x¾"	.18	.12	.10	.08	.069
15F1923	DMF-4S22	.022	9/32x11/32x¾"	.18	.12	.10	.08	.069
15F1924	DMF-4S33	.033	9/32x11/16x¾"	.18	.14	.10	.09	.076
15F1925	DMF-4S47	.047	11/32x23/32x¾"	.21	.15	.12	.10	.083
15F1926	DMF-4S68	.068	13/32x23/32x¾"	.21	.16	.13	.11	.091
15F1927	DMF-4P1	.10	1/2x29/32x¾"	.27	.19	.15	.13	.105
15F1928	DMF-4P15	.15	11/32x23/32x1⅛"	.30	.22	.17	.15	.124
15F1929	DMF-4P22	.22	15/32x7/8x1⅛"	.36	.27	.21	.18	.149

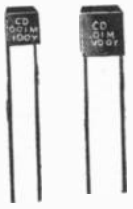
600 VDCW ± 10% Tol.

Stk. No.	Type	Cap. Mfd.	Size	1-24	25-49	50-99	100-499	500-999
15F1609	DPMS 6D1	.001	.340x .690	.15	.10	.08	.07	.063
15F1610	DPMS 6D2	.002	.340x .690	.15	.10	.08	.07	.063
15F1611	DPMS 6D25	.0025	.350x .690	.15	.10	.08	.07	.063
15F1612	DPMS 6D33	.033	.370x .690	.15	.10	.08	.07	.063
15F1613	DPMS 6D5	.005	.400x .690	.15	.10	.08	.07	.063
15F1614	DPMS 6S1	.01	.340x .870	.18	.11	.09	.07	.063
15F1615	DPMS 6S2	.02	.445x .870	.18	.13	.10	.08	.072
15F1616	DPMS 6S3	.03	.415x1.150	.21	.13	.11	.09	.081
15F1617	DPMS 6S47	.047	.490x1.150	.21	.15	.12	.10	.09
15F1618	DPMS 6S5	.05	.490x1.150	.24	.15	.12	.10	.09
15F1619	DPMS 6S68	.068	.540x1.300	.27	.18	.14	.11	.099
15F1620	DPMS 6P1	.1	.640x1.300	.27	.21	.16	.13	.117
15F1622	DPMS 6P22	.22	.750x1.560	.42	.28	.22	.19	.171
15F1623	DPMS 6P25	.25	.830x1.560	.42	.28	.22	.20	.183

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

CERAMIC CAPACITORS

Models CK05 & CK06. Ultra-miniature rectangular cased. Meets requirements of MIL-C-11015. Rated at 200V DCW over operating temp. range: —55C To +150C. High reliability packaged in small sizes. The temperature characteristic is MIL CW specified as maximum capacitance change of —22%, or +56% when the temperature cycled is per MIL-C-11015. Units are stocked and are available in the latest revision of MIL-C-11015 with a tolerance of ±10%. These tiny capacitors come in a premolded case. Size: CK05, .2x.2x.1. CK06, .3x.3x.1.



STYLE CK05

Stock. No.	Type	Cap. Pf.	1-49	50-99	100-249	250-499	500-999
15F1770	CK05BX100K	10					
15F1771	CK05BX120K	12					
15F1772	CK05BX150K	15					
15F1773	CK05BX180K	18					
15F1774	CK05BX220K	22					
15F1775	CK05BX270K	27					
15F1776	CK05BX330K	33	.70	.63	.49	.45	.42
15F1777	CK05BX390K	39					
15F1778	CK05BX470K	47					
15F1779	CK05BX560K	56					
15F1780	CK05BX680K	68					
15F1781	CK05BX820K	82					
15F1782	CK05BX101K	100					
15F1783	CK05BX121K	120					
15F1784	CK05BX151K	150					
15F1785	CK05BX181K	180					
15F1786	CK05BX221K	220					
15F1787	CK05BX271K	270					
15F1788	CK05BX331K	330	.70	.63	.49	.45	.42
15F1789	CK05BX391K	390					
15F1790	CK05BX471K	470					
15F1791	CK05BX561K	560					
15F1792	CK05BX681K	680					
15F1793	CK05BX821K	820					
15F1794	CK05BX102K	1000					

STYLE CK06

15F1801	CK06BX122K	1200					
15F1802	CK06BX152K	1500					
15F1803	CK06BX182K	1800					
15F1804	CK06BX222K	2200	.72	.65	.50	.47	.43
15F1805	CK06BX272K	2700					
15F1806	CK06BX332K	3300					
15F1795	CK06BX392K	3900					
15F1796	CK06BX472K	4700					
15F1797	CK06BX562K	5600					
15F1798	CK06BX682K	6800	.78	.70	.55	.51	.47
15F1799	CK06BX822K	8200					
15F1800	CK06BX103K	10000					

MYLAR DIELECTRIC FILM ENCASED

Type WMF. Encased in a Mylar film wrapping and end sealed with a high density thermosetting plastic. A desirable unit where a metal case unit is not indicated miniscule in size, has high resistance to humidity and excellent capacitance stability with temp. and life. Temp. range: —55°C to +125°C. Tolerance: 10%.

100 WVDC

Stk. No.	Type	Mfd.	DxL (in.)	1-24	25-49	50-99	100-499	500-999
15F1450	WMF1D1	.001	.156x 1/2					
15F1451	WMF1D15	.0015	.156x 1/2					
15F1452	WMF1D22	.0022	.255x 1/2					
15F1453	WMF1D33	.0033	.255x 1/2	.21	.17	.14	.12	.10
15F1454	WMF1D47	.0047	.255x 1/2					
15F1455	WMF1D68	.0068	.175x 1/2					
15F1456	WMF1S1	.01	.200x 1/2					
15F1457	WMF1S15	.015	.235x 1/2					
15F1458	WMF1S22	.022	.275x 5/8					
15F1459	WMF1S33	.033	.300x 5/8	.24	.18	.15	.13	.12
15F1460	WMF1S47	.047	.265x 3/4	.27	.21	.16	.14	.12
15F1461	WMF1S68	.068	.280x 3/4	.27	.21	.16	.14	.12
15F1462	WMF1P1	.1	.290x 7/8	.36	.25	.20	.14	.12
15F1463	WMF1P15	.15	.335x 7/8	.36	.25	.20	.14	.12
15F1464	WMF1P22	.22	.385x1	.39	.29	.22	.15	.13
15F1465	WMF1P33	.33	.415x1 1/8	.45	.32	.24	.19	.15
15F1466	WMF1P47	.47	.475x1 1/4	.47	.33	.26	.22	.19
15F1467	WMF1P68	.68	.570x1 1/4	.57	.42	.33	.29	.24
15F1468	WMF1W1	1.0	.625x1 1/2	.87	.59	.46	.40	.34
15F1469	WMF1W1P25	1.25	.690x1 1/2	1.05	.68	.53	.46	.38
15F1470	WMF1W1P5	1.5	.770x1 3/4	1.23	.81	.63	.54	.45
15F1471	WMF1W2	2.0	.995x1 3/4	1.50	.98	.76	.66	.55
15F1837	WMF1D12	.0012	.156x 1/2	.21	.17	.14	.12	.10
15F1838	WMF1D18	.0018	.156x 1/2					
15F1839	WMF1D27	.0027	.156x 1/2					
15F1840	WMF1D39	.0039	.156x 1/2	.21	.17	.14	.12	.10
15F1841	WMF1D5	.005	.156x 1/2					
15F1842	WMF1D56	.0056	.156x 1/2					
15F1843	WMF1D82	.0082	.175x 1/2	.21	.17	.14	.12	.10
15F1844	WMF1S12	.012	.215x 1/2					
15F1845	WMF1S18	.018	.255x 1/2					
15F1846	WMF1S27	.027	.300x 5/8	.21	.17	.14	.12	.10
15F1847	WMF1S39	.039	.245x 3/4	.24	.18	.15	.13	.12
15F1848	WMF1S5	.05	.265x 3/4	.27	.21	.16	.14	.12
15F1849	WMF1S56	.056	.265x 3/4	.27	.21	.16	.14	.12
15F1850	WMF1S82	.082	.270x 3/4	.36	.25	.20	.14	.12

200 WVDC

15F1472	WMF2D1	.001	.156x 1/2					
15F1473	WMF2D15	.0015	.156x 1/2					
15F1474	WMF2D22	.0022	.540x 7/8					
15F1475	WMF2D33	.0033	.160x 1/2	.21	.17	.14	.12	.10
15F1476	WMF2D47	.0047	.170x 1/2					
15F1477	WMF2D68	.0068	.200x 1/2					
15F1478	WMF2S1	.01	.230x 1/2					
15F1479	WMF2S15	.015	.290x 1/2					
15F1480	WMF2S22	.022	.275x 5/8	.24	.18	.15	.13	.12
15F1481	WMF2S33	.033	.270x 3/4	.24	.18	.15	.13	.12
15F1482	WMF2S47	.047	.320x 3/4	.27	.20	.16	.14	.12
15F1483	WMF2S68	.068	.350x 3/4	.27	.21	.16	.14	.12
15F1484	WMF2P1	.1	.410x 7/8	.36	.25	.20	.14	.12
15F1485	WMF2P15	.15	.500x 7/8	.36	.26	.24	.15	.12
15F1486	WMF2P22	.22	.500x1 1/8	.39	.29	.22	.15	.13
15F1487	WMF2P33	.33	.550x1 1/8	.45	.32	.24	.19	.15
15F1488	WMF2P47	.47	.600x1 1/4	.51	.36	.29	.23	.19
15F1489	WMF2P68	.68	.650x1 5/8	.57	.42	.33	.29	.24
15F1490	WMF2W1	1.0	.750x1 3/4	.87	.59	.46	.40	.34
15F1491	WMF2W1P25	1.25	.825x1 3/4	1.05	.68	.53	.46	.38
15F1492	WMF2W1P5	1.5	.900x1 3/4	1.23	.81	.63	.54	.45
15F1493	WMF2W2	2.0	.980x1 7/8	1.50	.98	.76	.66	.55

400 WVDC

15F1494	WMF4D1	.001	.156x 5/8	.27				
15F1495	WMF4D15	.0015	.156x 5/8	.27				
15F1496	WMF4D22	.0022	.175x 5/8	.27	.21	.16	.15	.12
15F1497	WMF4D33	.0033	.190x 5/8	.27				
15F1498	WMF4D47	.0047	.200x 5/8	.27				
15F1499	WMF4D68	.0068	.250x 5/8	.27				
15F1500	WMF4S1	.01	.300x 5/8	.27	.21	.16	.13	.12
15F1501	WMF4S15	.015	.360x 5/8	.27	.21	.16	.15	.13
15F1502	WMF4S22	.022	.320x 3/4	.27	.21	.16	.15	.13
15F1503	WMF4S33	.033	.350x 7/8	.27	.21	.16	.15	.13
15F1504	WMF4S47	.047	.400x 7/8	.30	.22	.17	.15	.13
15F1505	WMF4S68	.068	.390x1	.33	.24	.18	.16	.14
15F1506	WMF4P1	.1	.465x1	.33	.24	.18	.16	.14
15F1507	WMF4P15	.15	.515x1 1/4	.36	.25	.20	.18	.14
15F1508	WMF4P22	.22	.565x1 3/8	.42	.29	.23	.20	.17
15F1509	WMF4P33	.33	.600x1 5/8	.66	.47	.36	.32	.25
15F1510	WMF4P47	.47	.700x1 5/8	.78	.56	.43	.37	.32
15F1511	WMF4P68	.68	.790x1 3/4	.96	.68	.54	.46	.39
15F1512	WMF4W1	1.0	.875x2	1.20	.78	.60	.52	.44
15F1513	WMF4W1P25	1.25	.950x2	1.38	.90	.70	.60	.50
15F1514	WMF4W1P5	1.5	.975x2 1/4	1.56	1.01	.80	.68	.57
15F1515	WMF4W2	2.0	1.250x2 1/4	2.04	1.33	1.04	.89	.75

600 WVDC

15F1516	WMF6D1	.001	.170x 3/4	.30				
15F1517	WMF6D15	.0015	.170x 3/4	.30				
15F1518	WMF6D22	.0022	.187x 3/4	.30				
15F1519	WMF6D33	.0033	.203x 3/4	.30				
15F1520	WMF6D47	.0047	.234x 3/4	.30	.23	.18	.16	.14
15F1521	WMF6D68	.0068	.265x 3/4	.30				
15F1522	WMF6S1	.01	.290x 3/4	.30				
15F1523	WMF6S15	.015	.312x 7/8	.30				
15F1524	WMF6S22	.022	.325x 7/8	.30				
15F1525	WMF6S33	.033	.350x1	.30				
15F1526	WMF6S47	.047	.415x1	.33	.24	.18	.16	.14
15F1527	WMF6S68	.068	.500x1	.36	.25	.20	.17	.15
15F1528	WMF6P1	.1	.520x1 3/8	.42	.31	.24	.21	.18
15F1529	WMF6P15	.15	.625x1 3/8	.45	.33	.25	.23	.19
15F1530	WMF6P22	.22	.660x1 5/8	.51	.37	.30	.25	.21
15F1531	WMF6P33	.33	.685x2	.90	.64	.50	.43	.36
15F1532	WMF6P47	.47	.855x2	1.14	.83	.65	.56	.46
15F1533	WMF6P68	.68	.970x2	1.53	1.10	.86	.74	.62
15F1534	WMF6W1	1.0	1.165x2 1/2	2.55	1.74	1.35	1.17	.97
15F1535	WMF6W1P25	1.25	1.340x2 1/2	2.88	1.88	1.46	1.26	1.07
15F1536	WMF6W1P5	1.5	1.275x3	3.48	2.26	1.76	1.52	1.26
15F1537	WMF6W2	2.0	1.460x3	4.38	2.85	2.22	1.91	1.59

WMF 100 VOLT KIT

For maintenance of industrial equipment and engineering lab stock.

Type	Mfd.	Qty.	Type	Mfd.	Qty.	Type	Mfd.	Qty.
1D1	.001	5	1S15	.015	5	1P1	.1	5
1D22	.0022	5	1S22	.022	5	1P22	.22	5
1D47	.0047	5	1S33	.033	5	1P47	.47	5
1S1	.01	5	1S47	.047	5			

15F1951. NET 15.30

Cornell-Dubilier Capacitors

DIPPED MICA DIELECTRIC CAPACITORS

Type CD10. Silvered mica capacitor with a plastic coating. Combines excellent stability, dielectric strength, "Q", dielectric constant, chemical inertness, moisture resistance and puncture resistance. Oper. temp. —50°C to 125°C. Tolerance ±5% except (*) 20% and (**) 10%. Aver. shpg. wt., 1 oz.

Stk. No.	Type	Mmf.	1-24	25-99	100-499	500-999
15F1338	CD10G050K	5	.18	.14	.10	.091
15F1339	CD10C100[	10	.21	.17	.12	.110
15F1340	CD10C120[	12				
15F1341	CD10C150[	15				
15F1342	CD10C180[	18				
15F1344	CD10E220[	22				
15F1345	CD10E240[	24	.24	.14	.13	.099
15F1346	CD10E270[	27				
15F1347	CD10E300[	30				
15F1348	CD10E330[	33				
15F1350	CD10E390[	39				
15F1352	CD10E470[	47				
15F1353	CD10E510[	51				
15F1354	CD10E560[	56				
15F1355	CD10E620[	62	.27	.14	.13	.099
15F1356	CD10E680[	68				
15F1358	CD10E820[	82				
15F1360	CD10E101[	100				
15F1362	CD10E121[	120	.30	.17	.13	.116
15F1364	CD10E151[	150	.33	.21	.16	.139
15F1366	CD10E181[	180	.39	.25	.19	.170
15F1367	CD10E201[	200	.45	.27	.20	.178
15F1368	CD10E221[	220	.45	.27	.20	.178
15F1369	CD10E241[	240	.45	.27	.20	.178

TYPE WCR—POLYCARBONATE/FILM WRAP

Characteristics similar to polystyrene, but often preferred. With a high operating temperature range from —55°C to +85°C without derating, and to +125°C with 50% voltage derating, overcomes polystyrene limitation. Excellent capacitance stability. Tt 1000 Hz average capacitance change is within +1%; —3% of the +25°C value.

Stk. No.	Type WCR-	Mfd.	WV DC	Size DxL (in.)	1-24	25-49	50-99	100-499	500-999
15F740	1D1	.001	100	.200x15/16	.47	.31	.23	.20	.17
15F741	1D22	.0022	100	.220x15/16	.47	.31	.23	.20	.17
15F742	1D33	.0033	100	.260x15/16	.47	.31	.23	.20	.17
15F743	1D47	.0047	100	.290x15/16	.47	.31	.23	.20	.17
15F744	1D68	.0068	100	.340x15/16	.47	.31	.23	.20	.17
15F745	1S1	.01	100	.235x3/4	.47	.31	.23	.20	.17
15F746	1S22	.022	100	.295x3/4	.47	.32	.24	.20	.18
15F747	1S33	.033	100	.345x3/4	.51	.34	.26	.21	.19
15F748	1S47	.047	100	.395x3/4	.54	.36	.27	.23	.20
15F749	1S68	.068	100	.415x7/8	.58	.38	.29	.24	.21
15F750	1P1	.10	100	.450x1	.63	.42	.32	.26	.23
15F751	1P22	.22	100	.590x1 1/8	.78	.52	.39	.33	.29
15F752	1P33	.33	100	.645x1 3/8	.93	.62	.47	.39	.34
15F753	1P47	.47	100	.735x1 5/8	1.08	.72	.54	.45	.40
15F754	1P68	.68	100	.765x1 7/8	1.25	.83	.62	.52	.46
15F755	1W1	1.0	100	.925x1 7/8	1.70	1.13	.85	.71	.62
15F756	2D1	.001	200	.200x15/16	.47	.31	.23	.20	.17
15F757	2D22	.0022	200	.220x15/16	.47	.31	.23	.20	.17
15F758	2D33	.0033	200	.260x15/16	.47	.31	.23	.20	.17
15F759	2D47	.0047	200	.290x15/16	.47	.31	.23	.20	.17
15F760	2D68	.0068	200	.290x15/16	.47	.31	.23	.20	.17
15F761	2S1	.01	200	.290x15/16	.47	.31	.23	.20	.17
15F762	2S22	.022	200	.385x15/16	.56	.37	.28	.23	.20
15F763	2S33	.033	200	.465x15/16	.62	.41	.31	.26	.23
15F764	2S47	.047	200	.405x15/16	.68	.45	.34	.28	.25
15F765	2S68	.068	200	.485x15/16	.77	.51	.38	.32	.28
15F766	2P1	.10	200	.585x15/16	.84	.56	.42	.35	.31
15F767	2P22	.22	200	.675x1 7/8	1.10	.73	.55	.46	.40
15F768	2P33	.33	200	.815x1 7/8	1.28	.85	.64	.53	.47
15F769	2S47	.47	200	.950x1 7/8	1.47	.98	.74	.61	.54
15F770	2P68	.68	200	1.000x2 3/8	1.71	1.14	.86	.71	.63

CD SERIES DIPPED MICA CAPACITORS TO MIL. SPEC

Multi-coated to meet rigid humidity requirements. Oper. temp.: —55°C to 125°C. Tolerance: ±5% except (**) ±10%. All units are dual marked with commercial and Mil. nos. listed below are old CD numbers as follows:

CD15.....CM05. CD19.....CM06.
CD30.....CM07. CD42.....CM08.

Stk. No.	CD No.	Mmf.	1-24	25-99	100-499	500-999
15F1203	CD15C050K**	5	.15	.15	.11	.095
15F1204	CD15C100K**	10	.15	.11	.09	.076
15F1205	CD15C120K**	12	.15	.11	.09	.076
15F1207	CD15C180K**	18	.15	.11	.09	.076
15F1209	CD15E220[	22				
15F1210	CD15E240[	24				
15F1211	CD15E270[	27				
15F1212	CD15E300[	30				
15F1213	CD15E330[	33				
15F1214	CD15E360[	36				
15F1215	CD15E390[	39	.18	.13	.10	.086
15F1217	CD15E470[	47				
15F1219	CD15E510[	51				
15F1220	CD15E560[	56				
15F1221	CD15E620[	62				
15F1222	CD15F680[	68				
15F1223	CD15E750[	75				
15F1224	CD15F820[	82	.18	.13	.10	.086
15F1226	CD15F101[	100	.18	.13	.10	.086
15F1228	CD15F121[	120	.21	.14	.11	.101
15F1230	CD15F151[	150	.21	.14	.11	.101
15F1232	CD15F181[	180	.27	.16	.11	.101
15F1233	CD15F201[	200	.27	.16	.11	.101
15F1234	CD15F221[	220	.27	.16	.12	.102
15F1235	CD15F241[	240	.27	.16	.12	.102
15F1237	CD15F271[	270	.30	.18	.14	.120
15F1238	CD15F301[	300	.30	.18	.14	.120
15F1239	CD15F331[	330	.33	.18	.14	.124
15F1240	CD15F361[	360	.33	.20	.14	.125
15F1241	CD15F391[	390	.36	.20	.14	.128
15F1242	CD19F431[	430	.30	.18	.127	.115
15F1243	CD19F471[	470	.33	.20	.14	.132
15F1245	CD19F511[	510	.33	.20	.14	.132
15F1246	CD19F561[	560	.36	.20	.14	.132
15F1247	CD19F621[	620	.36	.23	.16	.142
15F1248	CD19F681[	680	.36	.23	.16	.142
15F1249	CD19F751[	750	.39	.23	.16	.142
15F1250	CD19F821[	820	.42	.23	.16	.142
15F1251	CD19F911[	910	.42	.26	.18	.164
15F1252	CD19F102[	1000	.45	.27	.20	.175
15F1253	CD19F112[	1100	.45	.28	.21	.188
15F1254	CD19F122[	1200	.46	.30	.22	.195
15F1256	CD19F152[	1500	.54	.36	.26	.232
15F1258	CD19F182[	1800	.66	.38	.28	.249
15F1259	CD19F202[	2000	.72	.41	.30	.265
15F1260	CD19F222[	2200	.78	.43	.31	.278
15F1261	CD19F242[	2400	.84	.47	.35	.309
15F1263	CD19F272[	2700	.90	.54	.40	.354
15F1264	CD19F302[	3000	.99	.58	.43	.378
15F1265	CD19F332[	3300	1.05	.63	.46	.404
15F1267	CD19F392[	3900	1.17	.67	.49	.438
15F1268	CD19F432[	4300	1.23	.73	.53	.472
15F1269	CD19F472[	4700	1.32	.77	.56	.500
15F1271	CD30F512[	5100	1.14	.61	.44	.392
15F1272	CD30F562[	5600	1.17	.66	.48	.425
15F1273	CD30F622[	6200	1.23	.71	.52	.461
15F1274	CD30F682[	6800	1.38	.80	.58	.515
15F1275	CD30F752[	7500	1.50	.84	.62	.549
15F1276	CD30F822[	8200	1.65	.93	.68	.600
15F1277	CD30F912[	9100	1.77	1.00	.74	.654
15F1278	CD30F103[	10000	1.98	1.11	.81	.719
15F1375	CD30F113[	11000	2.16	1.18	.87	.772
15F1376	CD30F123[	12000	2.31	1.30	.94	.840
15F1377	CD30F133[	13000	2.46	1.41	1.02	.912
15F1378	CD30F153[	15000	2.79	1.57	1.16	1.030
15F1379	CD30F163[	16000	2.97	1.68	1.24	1.101
15F1380	CD30F183[	18000	3.30	1.91	1.39	1.22
15F1381	CD30F203[	20000	3.63	2.11	1.53	1.361
15F1382	CD42F223[	22000	4.14	2.28	1.68	1.494
15F1383	CD42F243[	24000	4.50	2.51	1.84	1.638
15F1384	CD42F273[	27000	5.58	3.03	2.21	1.964
15F1385	CD42F303[	30000	5.04	2.036	3.716	1.804
15F1386	CD42F333[	33000	6.12	3.31	2.41	2.144
15F1387	CD42F363[	36000	6.66	3.64	2.74	2.356
15F1388	CD42F393[	39000	7.20	3.88	2.83	2.501
15F1389	CD42F433[	43000	7.80	4.28	3.12	2.763
15F1390	CD42F473[	47000	8.40	4.28	3.12	2.763

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CORNELL-DUBILIER

MINIATURE DIPPED MICA-DIELECTRIC CAPACITORS

CD6

CD7

Types CD6 and CD7 are microminiature, radial lead, dipped silvered mica capacitors. Operate within temperature range —55°C to +125°C. Excellent for applications not critical with regard to extreme conditions of humidity. Have phenolic coating with epoxy impregnation; affords protection for one cycle of the moisture resistance test of EIA Specification RS153. Meets MIL-C-5B. Capacitance tolerance: ±20% (M), ±10% (K), ±5% (J), ±2% (G).

DIMENSIONS

CD6 — .265" x .135" x .095" CD7 — .320" x .270" x .160"

500 WVDC

Stk. No.	Type	Pf.	1-24	25-99	100-499	500-999
15F1700	CD6CD030C03	3	.36	.17	.11	.101
15F1701	CD6CD050C03	5	.36	.17	.11	.101
15F1702	CD6CD100K03	10	.36	.17	.11	.101
15F1703	CD6CD120C03	12	.39	.17	.13	.116
15F1704	CD6CD180C03	18	.39	.17	.13	.116
15F1705	CD6CD200J03	20	.39	.17	.13	.116
15F1706	CD6CD220J03	22	.39	.17	.13	.116
15F1707	CD6CD240J03	24	.39	.17	.13	.116
15F1708	CD6CD270C03	27	.48	.27	.20	.116
15F1709	CD6CD300C03	30	.48	.30	.21	.188
15F1710	CD6CD330C03	33	.51	.30	.21	.188
15F1711	CD6CD360C03	36	.51	.30	.21	.188
15F1712	CD6CD390C03	39	.51	.30	.21	.188
15F1713	CD6CD430C03	43	.51	.30	.21	.188
15F1714	CD6CD470C03	47	.51	.30	.21	.188
15F1716	CD6CD560603	56	.57	.33	.24	.211

CONTINUED IN NEXT COLUMN

500 WVDC

Stk. No.	Type	Pf	1-24	25-99	100-499	500-999
15F1717	CD6CD620G03	62	.57	.33	.24	.211
15F1718	CD6CD680G03	68	.60	.33	.24	.211
15F1719	CD6CD750G03	75	.60	.36	.26	.232
15F1720	CD6CC820G03	82	.66	.36	.26	.232
15F1721	CD6CC910G03	91	.66	.38	.28	.241
15F1722	CD6FC101G03	100	.66	.38	.28	.241
15F1723	CD6FC111G03	110	.72	.41	.30	.270
15F1724	CD6FC121G03	120	.72	.41	.30	.270
15F1725	CD7FD131G03	130	.63	.37	.27	.236
15F1726	CD7FD151G03	150	.63	.37	.27	.236
15F1727	CD7FD161G03	160	.63	.37	.27	.236
15F1728	CD7FD181G03	180	.63	.37	.27	.236

300 WVDC

Stk. No.	Type	Pf.	1-24	25-99	100-499	500-999
15F1729	CD7FC201G03	200	.69	.37	.28	.251
15F1730	CD7FC221G03	220	.69	.37	.28	.251
15F1731	CD7FC241G03	240	.69	.37	.28	.251
15F1732	CD7FC271G03	270	.69	.40	.30	.262
15F1733	CD7FC301G03	300	.69	.40	.30	.262

100 WVDC

Stk. No.	Type	Pf.	1-24	25-99	100-499	500-999
15F1734	CD7FA331G03	330	1.05	.60	.44	.388
15F1735	CD7FA361G03	360	1.08	.61	.45	.401
15F1736	CD7FA391G03	390	1.29	.74	.54	.481
15F1738	CD7FA471G03	470	1.17	.67	.49	.438
15F1739	CD7FA511G03	510	1.20	.70	.51	.452
15F1740	CD7FA561G03	560	1.23	.71	.52	.461
15F1741	CD7FA621G03	620	1.29	.74	.54	.480
15F1742	CD7FA681G03	680	1.65	.93	.67	.598
15F1743	CD7FA751G03	750	1.74	1.00	.73	.645
15F1746	CD7FA102G03	1000	2.13	1.21	.89	.790
15F1747	CD7FA112G03	1100	2.31	1.31	.96	.854
15F1748	CD7FA122G03	1200	2.37	1.36	.99	.880
15F1749	CD7FA132G03	1300	2.70	1.54	1.13	.999
15F1750	CD7FA152G03	1500	2.82	1.64	1.18	1.042

PLASTIC CAPACITORS, INC.

TYPE AM METAL CLAD MINIATURE CAPACITORS

Type AM metal clad miniature capacitors utilize metallized mylar film as the solid dielectric and are hermetically sealed. High performance exceeding the most rigid tests for humidity and temperature. Windings are extended foil (non-inductive) construction. The capacitors are self healing and non-sparking. Tolerance is 20%. Sizes shown are for diameter and length. Power factor is less than 1% at 25°C.

200 WORKING VOLTS DC

Stk. No.	Type	Mfd.	Size	1-24	25-49	50-99	100-249
19F1558	AM2-223	.022	.187x⅜	1.08	.83	.77	.68
19F1559	AM2-333	.033	.235x⅜	1.15	.88	.82	.72
19F1560	AM2-473	.047	.235x⅜	1.16	.89	.83	.73
19F1561	AM2-683	.068	.235x1 3/16	1.16	.90	.83	.73
19F1562	AM2-104	.1	.235x1 3/16	1.17	.90	.84	.74
19F1563	AM2-154	.15	.312x1 3/16	1.18	.91	.84	.74
19F1564	AM2-224	.22	.312x1 3/16	1.21	.93	.86	.76
19F1565	AM2-334	.33	.400x1 3/16	1.36	1.05	.97	.86
19F1566	AM2-474	.47	.400x1⅛	1.40	1.08	1.00	.88
19F1567	AM2-684	.68	.400x1⅛	1.46	1.13	1.04	.92
19F1568	AM2-105	1.0	.562x1⅛	1.70	1.31	1.21	1.07
19F1569	AM2-205	2.0	.670x1 5/16	2.31	1.79	1.65	1.46
19F1570	AM2-405	4.0	.670x1 13/16	2.93	2.26	2.09	1.84
19F1571	AM2-505	5.0	.750x1 13/16	3.08	2.38	2.20	1.94
19F1572	AM2-805	8.0	1.000x1 13/16	4.52	3.49	3.23	2.85
19F1573	AM2-106	10.0	1.000x2 5/16	5.81	4.49	4.15	3.66

300 WORKING VOLTS DC

Stk. No.	Type	Mfd.	Size	1-24	25-49	50-99	100-249
19F1580	AM3-104	.10	.312x1 3/16	1.19	.92	.85	.75
19F1581	AM3-154	.15	.400x1 3/16	1.29	1.00	.92	.81
19F1582	AM3-224	.22	.400x1⅛	1.32	1.02	.95	.83
19F1583	AM3-334	.33	.400x1⅛	1.38	1.07	.99	.87
19F1584	AM3-474	.47	.562x1⅛	1.65	1.27	1.18	1.04
19F1585	AM3-684	.68	.562x1⅛	1.75	1.35	1.25	1.10
19F1586	AM3-105	1.0	.562x1 5/16	1.90	1.47	1.36	1.20
19F1587	AM3-205	2.0	.750x1 5/16	2.93	2.26	2.09	1.84
19F1588	AM3-405	4.0	1.000x1 7/16	4.06	3.13	2.90	2.55
19F1589	AM3-505	5.0	1.000x1 13/16	4.56	3.52	3.26	2.87

TYPE "OF" HIGH V. GLASS CAPACITORS

Plastic film dielectric. Useful for high voltage power filter. Mount in any position. Temperature range —55°C. to +85°C. Tolerance ±10%. 3/8x8-32 screw terminals except * marked have tinned copper pigtails. Heavy wall, hard glass case.

Stk. No.	Type	Cap. Mfd.	Volts	Size	1-9	10-24	25-49	50-99	100-249
*19F700	20-10.	.01	2000	1 3/16x1 9/32"	2.30	2.30	2.12	1.90	1.66
19F701	20-50.	.05	2000	1¾x¾"	2.50	2.50	2.30	2.06	1.80
19F702	20-104	.10	2000	2¼x¾"	2.84	2.84	2.60	2.34	2.04
19F703	20-254	.25	2000	2¾x2 9/32"	3.24	3.24	2.96	2.66	2.32
*19F704	30-103	.01	3000	1 9/16x1 9/32"	2.70	2.70	2.52	2.32	1.78
19F705	30-203	.02	3000	1¾x¾"	2.90	2.90	2.70	2.50	1.90
19F706	30-503	.05	3000	2¼x¾"	2.94	2.94	2.76	2.56	1.96
19F707	30-104	.10	3000	1¾x1⅛"	3.46	3.46	3.22	2.98	2.26
19F1290	30-254	.25	3000	2x1⅜"	3.90	3.90	3.62	3.35	2.55
19F1291	30-504	.50	3000	2¾x1⅝"	4.85	4.85	4.52	4.20	3.18
19F708	50-10	.01	5000	1¾x¾"	3.60	360	3.22	3.02	2.62
19F709	50-20.	.02	5000	2¼x¾"	4.00	4.00	3.54	3.34	2.86
19F710	50-503	.05	5000	2¼x2 9/32"	4.35	4.35	3.82	3.60	3.08
19F711	50-104	.10	5000	2¼x1⅜"	5.85	5.85	5.15	4.85	4.15
19F1292	50-102	.001	5000	1 3/16x1 9/32"	3.54	3.54	3.14	2.94	2.54
19F1293	50-502	.005	5000	1⅝x1 9/32"	3.58	3.58	3.18	2.98	2.58
19F1294	50-254	.25	5000	3x1⅝"	7.35	7.35	6.50	6.13	5.25
19F1295	50-504	.50	5000	6x1⅝"	8.45	8.45	7.45	7.05	6.05
19F1296	80-502	.005	8000	1¾x¾"	3.84	3.52	3.24	2.94	2.76
19F1297	80-103	.01	8000	2¼x¾"	4.20	3.68	3.26	3.05	2.64
19F1298	80-104	.10	8000	3⅝x1⅝"	7.76	6.63	6.22	5.58	4.77
*19F712	100-102	.001	10KV	1⅝x1 9/32"	3.78	3.45	3.12	2.94	2.54
19F713	100-502	.005	10KV	1¾x1 3/16"	4.60	4.20	3.80	3.57	3.10
19F714	100-103	.01	10KV	2¼x2 9/32"	5.07	4.65	4.20	3.94	3.42
19F715	100-230	.02	10KV	2¾x1⅛"	6.70	6.10	5.52	5.18	4.50
19F1299	150-10.	.01	15KV	3¾x1⅛"	8.20	7.50	6.80	6.35	5.55
19F716	200-102	.001	20KV	3½x¾"	7.85	7.15	6.45	5.90	5.05
19F717	200-202	.002	20KV	3½x1 3/16"	8.15	7.40	6.70	6.10	5.25
19F718	200-502	.005	20KV	3½x1⅛"	8.75	7.95	7.20	6.55	6.65
19F719	200-103	.01	20KV	4½x1⅛"	10.40	9.45	8.50	7.80	6.70
*19F720	300-501	.0005	30KV	4 9/16x1 9/32"	8.15	7.40	6.70	6.15	5.30
19F722	300-202	.002	30KV	5x2 9/32"	13.00	11.90	10.70	9.75	8.35
19F723	300-502	.005	30KV	5x1⅜"	16.00	14.50	12.80	12.00	10.50
19F724	600-501	.0005	60KV	10x¾"	14.45	13.25	12.03	11.13	9.33
19F725	600-102	.001	60KV	10x2 9/32"	17.48	16.00	14.25	13.47	11.28
19F726	600-202	.002	60KV	10x1⅜"	18.77	17.20	15.65	14.47	12.12

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Capacitors

SUBMINIATURE MONOBLOC CERAMIC CAPACITORS

Monobloc construction allows volumetric efficiency up to 20mf/cu. in. Tolerance within ±10% for capacitance from 10 pf to 100 pf when measured at 1mc with 5 to 1 VRMS across the capacitor including COG dielectric. For values greater than 100pf tolerance is within ±10% —when measured at 1kc with 5 to 1 VRMS across the capacitor. Maximum capacitance change ±15% of the 25°C value over temp. range —55°C to 125°C. Size: .260 max. lead length 1.5 min. Leads 22AWG sodder coated copper.

Type 8003

W5RO GENERAL PURPOSE TYPE 8003 — 100 VDCW @ 125°C

Stock No.	Type	Cap. (pf.)	1-49	50-99	100-249	250-499	500-999
19F2534	8003-000 W5RO 181K	180					
19F2535	8003-000 W5RO 221K	220					
19F2536	8003-000 W5RO 271K	270					
19F2537	8003-000 W5RO 331K	330					
19F2538	8003-000 W5RO 391K	390	.80	.70	.59	.51	.47
19F2539	8003-000 W5RO 471K	470					
19F2540	8003-000 W5RO 561K	560					
19F2541	8003-000 W5RO 681K	680					
19F2542	8003-000 W5RO 821K	820					
19F2543	8003-000 W5RO 102K	1000					
19F2544	8003-000 W5RO 122K	1200	.80	.72	.60	.52	.48
19F2545	8003-000 W5RO 152K	1500					
19F2546	8003-000 W5RO 182K	1800					
19F2547	8003-000 W5RO 222K	2200	.82	.74	.62	.53	.49
19F2548	8003-000 W5RO 272K	2700	.82	.74	.62	.53	.49
19F2549	8003-000 W5RO 332K	3300	.84	.76	.63	.55	.50
19F2550	8003-000 W5RO 392K	3900	.84	.76	.63	.55	.50
19F2551	8003-000 W5RO 472K	4700	.88	.79	.66	.57	.53
19F2552	8003-000 W5RO 562K	5600	.88	.79	.66	.57	.53
19F2553	8003-000 W5RO 682K	6800	1.00	.90	.75	.65	.60
19F2554	8003-000 W5RO 822K	8200	1.00	.90	.75	.65	.60
19F2555	8003-000 W5RO 103K	10000	1.00	.90	.75	.65	.60
19F2556	8003-000 W5RO 123K	12000	1.36	1.22	1.02	.88	.82
19F2557	8003-000 W5RO 153K	15000	1.36	1.22	1.02	.88	.82
19F2558	8003-000 W5RO 183K	18000	1.36	1.22	1.02	.88	.82
19F2559	8003-000 W5RO 223K	22000	1.66	1.49	1.25	1.08	1.00

NPO HIGH STABILITY TYPE 8003-100 VDCW @ 125°C

19F2560	8003-000 COGO 100K	10					
19F2561	8003-000 COGO 120K	12					
19F2562	8003-000 COGO 150K	15					
19F2563	8003-000 COGO 180K	18	.88	.79	.66	.57	.53
19F2564	8003-000 COGO 220K	22					
19F256	8003-000 COGO 270K	27					
19F2566	8003-000 COGO 330K	33					
19F3350	8003-000 COGO 689K	6.8	.88	.79	.66	.57	.53
19F3351	8003-000 COGO 829K	8.2					
19F2567	8003-000 COGO 390K	39	.88	.79	.66	.57	.53
19F2568	8003-000 COGO 470K	47	.88	.79	.66	.57	.53
19F2569	8003-000 COGO 560K	56	.88	.79	.66	.57	.53
19F2570	8003-000 COGO 680K	68	1.00	.90	.75	.65	.60
19F2571	8003-000 COGO 820K	82	1.00	.90	.75	.65	.60
19F2572	8003-000 COGO 101K	100	1.00	.90	.75	.65	.60
19F2573	8003-000 COGO 121K	120	1.00	.90	.75	.65	.60
19F2574	8003-000 COGO 151K	150	1.00	.90	.75	.65	.60

W5R GENERAL PURPOSE TYPE 8123 & 8133 — 100 VDCW @ 125°C

19F3352	8013-000 COGO 100K	10	.84	.76	.63	.58	.50
19F3353	8013-000 COGO 101K	100	.90	.81	.68	.59	.54
19F3354	8013-000 COGO 470K	47	.86	.77	.65	.56	.52
19F3355	8013-000 W5RO 102K	1000	.84	.76	.63	.55	.50
19F3356	8003-000 W5RO 471K	470	.84	.76	.63	.55	.50
19F3357	8013-000 W5RO 472K	4700	.90	.81	.68	.59	.54
19F2575	8123-000 W5RO 271K	270					
19F2576	8123-000 W5RO 331K	330					
19F2577	8123-000 W5RO 391K	390					
19F2578	8123-000 W5RO 471K	470	.58	.52	.44	.38	.35
19F2579	8123-000 W5RO 561K	560					
19F2580	8123-000 W5RO 681K	680					
19F2581	8123-000 W5RO 821K	820					
19F2582	8123-000 W5RO 102K	1000					
19F2583	8133-000 W5RO 122K	1200					
19F2584	8133-000 W5RO 152K	1500	.54	.49	.41	.35	.32
19F2585	8133-000 W5RO 182K	1800					
19F2586	8133-000 W5RO 222K	2200					
19F2587	8133-000 W5RO 272K	2700					
19F2588	8133-000 W5RO 332K	3300	.54	.49	.41	.35	.32
19F2589	8133-000 W5RO 392K	3900	.56	.50	.42	.36	.34
19F2590	8133-000 W5RO 472K	4700	.56	.50	.42	.36	.34
19F2591	8133-000 W5RO 562K	5600	.72	.65	.54	.47	.43
19F2592	8133-000 W5RO 682K	6800	.72	.65	.54	.47	.43
19F2593	8133-000 W5RO 822K	8200	.72	.65	.54	.47	.43
19F2594	8133-000 W5RO 103K	10000	.72	.65	.54	.47	.43
19F2595	8133-000 W5RO 123K	12000	1.10	.99	.83	.72	.66
19F2596	8133-000 W5RO 153K	15000	1.10	.99	.83	.72	.66
19F259[illegible]	8133-000 W5RO 183K	18000	1.22	1.10	.92	.79	.73
19F2598	8133-000 W5RO 223K	2[illegible]000	1.22	1.10	.92	.79	.73
19F2599	8133-000 W5RO 273K	27000	1.54	1.39	1.16	1.00	.92
19F2600	8133-000 W5RO 333K	33000	1.66	1.49	1.25	1.08	1.00
19F2601	8133-000 W5RO 393K	39000	1.76	1.58	1.32	1.14	1.06
19F2602	8133-000 W5RO 473K	47000	1.76	1.58	1.32	1.14	1.06
19F2603	8133-000 W5RO 563K	56000	1.88	1.69	1.41	1.22	1.13
19F2604	8133-000 W5RO 683K	68000	1.98	1.78	1.49	1.29	1.19
19F2605	8133-000 W5RO 823K	8[illegible]000	2.10	1.89	1.58	1.37	1.26
19F2606	8133-000 W5RO 104K	100000	2.20	1.98	1.65	1.43	1.32

NPO HIGH STABILITY TYPE 8123 & 8133 — 100 VDCW @ 125°C EXCEPT (*) 25 VDCW

Type 8123 & 8133

Type	Width	Height	Thickness	Spacing
8123	.200	.200	.100	.200
8133	.300	.300	.100	.200

19F2607	8123-000 COGO 100K	10	.42	.38	.32	.28	.25
19F2608	8123-000 COGO 120K	12	.42	.38	.32	.28	.25
19F2609	8123-000 COGO 150K	15	.66	.59	.50	.43	.40
19F2610	8123-000 COGO 180K	18	.66	.59	.50	.43	.40
19F2611	8123-000 COGO 220K	22	.66	.59	.50	.43	.40
19F2612	8123-000 COGO 270K	27	.66	.59	.50	.43	.40
19F2613	8123-000 COGO 330K	33	.66	.59	.50	.43	.40
19F2614	8123-000 COGO 390K	39	.66	.59	.50	.43	.40
19F2615	8123-000 COGO 470K	47	.66	.59	.50	.43	.40
19F2616	8123-000 COGO 560K	56	.66	.59	.50	.43	.40
19F2617	8123-000 COGO 680K	68	.66	.59	.50	.43	.40
19F2618	8123-000 COGO 820K	82	.66	.59	.50	.43	.40
19F2619	8123-000 COGO 101K	100	.88	.79	.66	.57	.53
19F2620	8123-000 COGO 121K	120	.88	.79	.66	.57	.53
19F2621	8123-000 COGO 151K	150	.88	.79	.66	.57	.53
19F2622	8123-000 COGO 181K	180	.88	.79	.66	.57	.53
19F2623	8123-000 COGO 221K	220	.88	.79	.66	.57	.53
19F2624	8133-000 COGO 271K	270	1.00	.90	.75	.65	.60
19F2625	8133-000 COGO 331K	330	1.22	1.10	.92	.79	.73
19F2626	8133-000 COGO 391K	390	1.22	1.10	.92	.79	.73
19F2627	8133-000 COGO 471K	470	1.22	1.10	.92	.79	.73
19F2628	8133-000 COGO 561K	560	1.32	1.19	.99	.86	.79
19F2629	8133-000 COGO 681K	680	1.32	1.19	.99	.86	.79
19F2630	8133-000 COGO 821K	820	1.32	1.19	.99	.86	.79
19F2631	8133-000 COGO 102K	1000	1.44	1.30	1.08	.94	.86
19F3358	8133-000 Z5UO 154M*	150000	1.76	1.58	1.32	1.14	1.00
19F3359	8133-000 Z5UO 224M*	220000	1.98	1.78	1.49	1.29	1.19
19F3360	8133-000 Z5UO 334M*	330000	1.88	1.69	1.41	1.22	1.13
19F3361	8133-000 Z5UO 474M*	470000	2.10	1.89	1.58	1.37	1.26
19F3362	8133-000 Z5UO 684M*	680000	2.64	2.38	1.98	1.72	1.58
19F3363	8133-000 Z5UO 105M*	1000000	3.42	3.08	2.57	2.22	2.05

MIL-C-11015-C TYPES 8133 & 8123-200 VDCW @ 150°C

19F2632	CKO5CW 100K	10					
19F2633	CKO5CW 120K	12					
19F2634	CKO5CW 150K	15					
19F2635	CKO5CW 180K	18					
19F2636	CKO5CW 220K	22					
19F2637	CKO5CW 270K	27					
19F2638	CKO5CW 330K	33					
19F2639	CKO5CW 390K	39					
19F2640	CKO5CW 470K	47					
19F2641	CKO5CW 560K	56	.42	.38	.32	.28	.25
19F2642	CKO5CW 680K	68					
19F2643	CKO5CW 820K	82					
19F2644	CKO5CW 101K	100					
19F2645	CKO5CW 121K	120					
19F2646	CKO5CW 151K	150					
19F2647	CKO5CW 181K	180					
19F2648	CKO5CW 221K	220					
19F2649	CKO5CW 271K	270					
19F2650	CKO5CW 331K	330					
19F2651	CKO5CW 391K	390					
19F2652	CKO5CW 471K	470					
19F2653	CKO5CW 561K	560	.42	.38	.32	.28	.25
19F2654	CKO5CW 681K	680					
19F2655	CKO5CW 821K	820					
19F2656	CKO5CW 102K	1000					
19F2657	CKO6CW 122K	1200					
19F2658	CKO6CW 152K	1500	.50	.45	.38	.33	.30
19F2659	CKO6CW 182K	1800					
19F2660	CKO6CW 222K	2200					
19F2661	CKO6CW 272K	2700	.54	.49	.41	.35	.32
19F2662	CKO6CW 332K	3300	.54	.49	.41	.35	.32
19F2663	CKO6CW 392K	3900	.56	.50	.42	.36	.34
19F2664	CKO6CW 472K	4700	.56	.50	.42	.36	.34
19F2665	CKO6CW 562K	5600	.72	.65	.54	.47	.43
19F2666	CKO6CW 682K	6800	.72	.65	.54	.47	.43
19F2667	CKO6CW 822K	8200	.72	.65	.54	.47	.43
19F2668	CKO6CW 103K	10000	.72	.65	.54	.47	.43

KEY FOR CERAMICONS

Type	Diameter	Lead Spacing	Thickness
831	.290	.250	.156
801	.360	.250	.156
811	.539	.357	.156
841	.675	.375	.156
851	.437	.250/.375	.156

MIL-C-11015B DISC CERAMICS

MIL-C-1105C capacitors meet requirements for TV, industrial electronics and military equipment at 85°C. All .156" thick. Style 831: .290 disc. dia., .250 lead spacing. Style 801: 360 disc. dia., .250 lead spacing. Style 811: .539 disc. dia., .357 lead spacing. Style 841: .675 disc. dia., .375 lead spacing. 600 VDC. 1500 VDC Flash Test. Shpg. Wt., 1 oz.

Stk. No.	Mil. No.	Cap. (pf)	1-49	50-99	100-249	250-499	500-999	1000-4999
19F2745	CK60BX100K	10.0	.23	.18	.146	.105	.099	.059
19F2746	CK60BX150K	15.0	.23	.18	.146	.105	.099	.059
19F2747	CK60BX220K	22.0	.23	.18	.146	.105	.099	.059
19F2750	CK60BX470K	47.0	.23	.18	.146	.105	.099	.059
19F2754	CK60BX101K	100.0	.23	.18	.146	.105	.099	.059
19F2755	CK60BX101M	100.0	.23	.17	.141	.102	.096	.057
19F2756	CK60BX151K	150.0	.23	.18	.146	.102	.096	.059
19F2762	CK60AX471K	470.0	.19	.15	.121	.087	.082	.049
19F2763	CK60AX471M	470.0	.19	.14	.116	.084	.079	.047
19F2764	CK60AW471M	470.0	.182	.137	.114	.082	.077	.046
19F2765	CK60AW681M	680.0	.18	.14	.114	.082	.077	.046
19F2766	CK60AW821M	820.0	.18	.14	.114	.082	.077	.046
19F2767	CK60AW102M	1,000.0	.18	.14	.114	.082	.077	.046
19F2768	CK60AW152M	1,500.0	.18	.14	.114	.082	.077	.046
19F2769	CK61BX221K	220.0	.23	.18	.146	.105	.099	.059
19F2773	CK61BX471K	470.0	.23	.18	.146	.105	.099	.059
19F2774	CK61BX471M	680.0	.23	.17	.141	.102	.096	.057
19F2775	CK61BX681K	470.0	.23	.18	.146	1.05	.099	.059
19F2776	CK61BX681M	680.0	.23	.17	.141	.102	.096	.057
19F2777	CK61AW222M	2,200.0	.18	.14	.114	.082	.077	.046
19F2778	CK62AY220M	22.0	.208	.156	.130	.094	.088	.052
19F2779	CK62AY470M	47.0	.208	.156	.130	.094	.088	.052
19F2780	CK62AY101M	100.0	.208	.156	.130	.094	.088	.052
19F2781	CK62AY221M	220.0	.208	.156	.130	.094	.088	.052
19F2782	CK62AY471M	470.0	.208	.156	.130	.094	.088	.052
19F2783	CK62BX821K	820.0	.24	.18	.149	.107	.101	.060
19F2785	CK62BX102K	1,000.0	.24	.18	.149	.107	.101	.060
19F2787	CK62BX152K	1,500.0	.24	.18	.149	.107	.101	.060
19F2788	CK62AX222K	2,200.0	.20	.15	.124	.089	.084	.050
19F2791	C62AW332M	3,300.0	.21	.16	.13	.094	.088	.052
19F2792	CK62AW472M	4,700.0	.21	.16	.13	.094	.088	.052
19F2794	CK62AW822M	8,200.0	.21	.16	.13	.094	.088	.052
19F2795	CK63BX222K	2,200.0	.256	.192	.16	.115	.109	.064
19F2797	CK63BX332K	3,300.0	.256	.192	.16	.115	.109	.064
19F2800	CK63AY103X	10,000.0	.22	.165	.138	.099	.094	.055
19F2801	CK63AW103M	10,000.0	.238	.179	.149	.107	.101	.060

12-VOLT TRANSCAPS

Use in transistorized, filtering and by-pass applications. .156" thick. All char. Y5F. PF max. is 8%. IR(min)ohms, is 1,000,000 for 5655 and 5615. Life, at 85°C. and rated voltage, is 500 hours. All are rated at ±20% tol. Shpg. wt., 1 oz.
Lead spac. * .250 † .325

Stk. No.	Type	Dia.	Mf.	1-49	50-99	100-249	250-499	500-999	1000-4999
19F2802*	5635-000 Y5F0 503M	.275	.05	.22	.16	.135	.097	.092	.054
19F2803*	5655-000 Y5F0 104M	.420	.1	.22	.17	.140	.101	.095	.056
19F2804†	5615-000 Y5F0 224M	.550	.22	.34	.25	.21	.151	.143	.084
19F2805†	5645-000 Y5F0 334M	.660	.33	.44	.33	.275	.198	.187	.110
19F2806†	5685-000 Y5F0 474M	.800	.47	.55	.414	.345	.248	.235	.138

25-VOLT TRANSCAPS

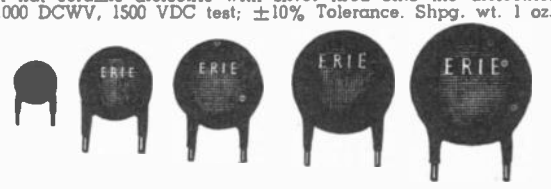
Thin film ceramic capacitor combines high capacitance with small size. +80%, —20% capacitance tolerance.
All .156 thickness except 19F2089 and 19F1708-.200. Lead spacing: * .250 † .375.

Stk. No.	Type	Mf.	Dia.	1-49	50-99	100-249	250-499	500-999	1000-4999
19F2085	5835-000-Y5U0-103Z	.01	.290	.20	.15	.125	.09	.085	.050
19F2086	5835-000-Y5U0-203Z	.02	.290	.24	.18	.15	.108	.102	.080
19F2087	5855-000-Y5U0-503Z	.05	.437	.30	.227	.189	.136	.128	.08
19F2088	5815-000-Y5U0-104Z	.1	.593	.32	.240	.200	.144	.136	.08
19F2089	5815-000-Y5U0-204Z	.2	.593	.62	.465	.388	.279	.264	.155
19F1707	5865-000-Y5U0-224Z	.22	.895	.48	.36	.30	.216	.204	.120
19F1708	5865-000-Y5U0-474Z	.47	.895	.94	.705	.588	.423	.400	.235

You Can Depend on NEWARK For Complete Stocks — Lowest Prices — Fastest Service and the Latest in Industrial Electronics

GENERAL PURPOSE CERAMICONS

A flat ceramic dielectric with silver fired onto the dielectric. 1000 DCWV, 1500 VDC test; ±10% Tolerance. Shpg. wt. 1 oz.



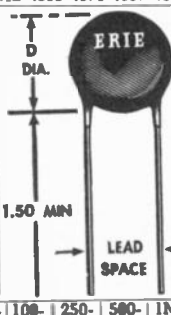
CK60 831 | CK61 801 | 851 | CK62 811 | CK63 841

Stk. No.	Type	Cap. (pf.)	1-49	50-99	100-249	250-499	500-999	1000-4999
19F2683	831-000 COGO 509C	5.0**	.10	.08	.063	.045	.043	.025
19F2684	831-000 COGO 829D	8.2*	.10	.08	.063	.045	.043	.025
19F2685	831-000 COGO 100J	10.2*	.10	.08	.063	.045	.043	.025
19F2686	831-000 COGO 120J	12.0†	.10	.08	.063	.045	.043	.025
19F2687	801-000 COGO 150J	15.0†	.10	.08	.063	.045	.043	.025
19F2688	801-000 COGO 180J	18.0†	.10	.08	.063	.045	.043	.025
19F2689	801-000 COGO 200J	20.0†	.10	.08	.063	.045	.043	.025
19F2690	801-000 COGO 220J	22.0†	.10	.08	.063	.045	.043	.025
19F2691	851-000 COGO 270J	27.0†	.10	.08	.063	.045	.043	.025
19F2692	851-000 COGO 330J	33.0†	.10	.08	.063	.045	.043	.025
19F2693	851-000 COGO 470J	47.0†	.10	.08	.063	.045	.043	.025
19F2710	811-000 COGO 680J	69.0†	.42	.38	.32	.28	.25	.031
19F2711	811-000 COGO 750J	75.0†	.42	.38	.32	.28	.25	.031
19F2712	841-000 COGO 820J	82.0†	.42	.38	.32	.28	.25	.031
19F2713	841-000 COGO 101J	100.0†	.42	.38	.32	.28	.25	.031
19F2694	831-000 U2JO 100D	10.0†	.10	.08	.063	.045	.043	.025
19F2695	831-000 U2JO 120J	12.0†	.10	.08	.063	.045	.043	.025
19F2696	831-000 U2JO 150J	15.0†	.10	.08	.063	.045	.043	.025
19F2697	831-000 U2JO 180J	18.0†	.10	.08	.063	.045	.043	.025
19F2698	831-000 U2JO 200J	20.0†	.10	.08	.063	.045	.043	.025
19F2699	831-000 U2JO 220J	22.0†	.10	.08	.063	.045	.043	.025
19F2700	831-000 U2JO 270J	27.0†	.10	.08	.063	.045	.043	.025
19F2701	831-000 U2JO 330J	33.0†	.10	.08	.063	.045	.043	.025
19F2702	801-000 U2JO 390J	39.0†	.10	.08	.063	.045	.043	.025
19F2703	801-000 U2JO 470J	47.0†	.10	.08	.063	.045	.043	.025
19F2704	801-000 U2JO 500J	50.0†	.10	.08	.063	.045	.043	.025
19F2705	801-000 U2JO 560J	56.0†	.10	.08	.063	.045	.043	.025
19F2706	851-000 U2JO 680J	68.0†	.10	.08	.063	.045	.043	.025
19F2707	851-000 U2JO 750J	75.0†	.42	.38	.32	.045	.043	.025
19F2708	851-000 U2JO 820J	82.0†	.42	.38	.32	.045	.043	.025
19F2709	851-000 U2JO 101J	100.0†	.42	.38	.32	.045	.043	.025
19F2718	831-000 X5FO 470K	47.0	.15	.11	.095	.068	.065	.038
19F2719	831-000 X5FO 560K	56.0	.15	.11	.095	.068	.065	.038
19F2720	831-000 X5FO 680K	68.0	.15	.11	.095	.068	.065	.038
19F2721	831-000 X5FO 101K	100.0	.15	.11	.095	.068	.065	.038
19F2722	831-000 X5FO 151K	150.0	.15	.11	.095	.068	.065	.038
19F2723	831-000 X5FO 201K	200.0	.15	.11	.095	.068	.065	.038
19F2724	831-000 X5FO 221K	220.0	.15	.11	.095	.068	.065	.038
19F2725	831-000 X5FO 271K	270.0	.15	.11	.095	.068	.065	.038
19F2726	831-000 X5FO 331K	330.0	.15	.11	.095	.068	.065	.038
19F2727	831-000 X5FO 391K	390.0	.15	.11	.095	.068	.065	.038
19F2728	831-000 X5FO 471K	470.0	.15	.11	.095	.068	.065	.038
19F2729	831-000 X5FO 501K	500.0	.15	.11	.095	.068	.065	.038
19F2730	801-000 X5FO 681K	680.0	.15	.11	.095	.068	.065	.038
19F2731	801-000 X5FO 102K	1,000.0	.15	.11	.095	.068	.065	.038
19F2732	851-000 X5FO 152K	1,500.0	.15	.11	.095	.068	.065	.038
19F2733	871-000 X5FO 202K	2,000.0	.16	.12	.099	.071	.067	.04
19F2734	811-000 X5FO 222K	2,200.0	.16	.12	.10	.072	.068	.04
19F2735	811-000 X5FO 332K	3,300.0	.16	.12	.10	.072	.068	.04
19F2736	811-000 X5RO 472K	4,700.0	.12	.09	.075	.054	.051	.03
19F2737	811-000 X5RO 502K	5,000.0	.12	.09	.075	.054	.051	.03
19F2738	811-000 Z5UO 103M	10,000.0††	.13	.10	.080	.058	.054	.03
19F2739	841-000 Z5UO 153M	15,000.0††	.16	.12	.099	.071	.067	.04
19F2740	841-000 X5UO 203M	20,000.0††	.16	.12	.099	.071	.067	.04

100V TRANSISTOR CAPACITORS

Ultra miniature. Capacitance Tol. 80% to 20%. Style 835, 805, & 855 have a thickness of .125 and lead spacing of .250. Style 845 has a thickness of .125 and lead spacing of .375. Style *845 have a thickness of .172 and lead spacing of .375 with a duel Ceramicon. Shpg. wt., 1 oz.

Type	D-Dia.	T.-Thick.	Lead Spacing
835	.275	.125	.250
805	.344	.125	.250
855	.420	.125	.250
845	.655	.125	.375
845*	.675	.172	.375



Stk. No.	Type	Mf.	Dia.	1-49	50-99	100-249	250-499	500-999	1M-5M
19F1700	835-000-X5V0-502Z	.005	.275	.12	.09	.078	.058	.053	.031
19F1701	845-000-X5V0-103Z	.01	.344	.20	.15	.128	.092	.087	.051
19F1702	855-000-X5V0-203Z	.02	.420	.20	.15	.128	.092	.087	.051
19F1704	845-000-X5V0-473Z	.047	.655	.27	.20	.166	.12	.113	.....
19F1705	845-000-X5V0-503Z	.05	.655	.27	.20	.166	.12	.113	.067
19F1706	845-000-X5V0-104Z	.1	.675	.67	.50	.412	.299	.283	.166

ERIE Capacitors

TYPE NPO CERAMICONS

316

301

Tubular capacitors for frequency determining applications. Also used as temp. compensating elements in circuits which must be temp. stabilized. Shpg. wt. 1 oz. Size: 301; D-.200, L-.400 Lead sp.-.250; 316 same as 315.

± .25 PF TOL.

Stk. No.	Type	T. Co NPO	Cap. pf	1-49	50-99	100-249	250-499	500-999
19F1092	301-000 COKO 508C	±250	0.5					
19F1093	301-000 COKO 688C	±250	0.68	.11	.08	.068	.049	.046
19F1094	301-000 COKO 109C	±250	1.0					
19F500	301-000 COKO 159C	±250	1.5					
19F2823	301-000 COKO 209C	±250	2.0					
19F1096	301-000 COJO 229C	±120	2.2	.10	.08	.064	.046	.043
19F501	301-000 COJO 309C	±120	3.0					
19F502	301-000 COJO 339C	±120	3.3	.11	.08	.068	.049	.046
19F503	301-000 COHO 479C	±60	4.7					
19F504	301-000 COHO 509C	±60	5.0					
19F505	301-000 COHO 689C	±60	6.8					
19F506	301-000 COHO 829C	±60	8.2	.22	.16	.135	.097	.092
19F507	301-000 COHO 100C	±60	10.0					

± 5% TOL.

Stk.No.	Type	T. Co NPO	Cap. pf	1-49	50-99	100-249	250-499	500-999
19F2824	301-000 COGO 120J	±30	12.0					
19F2825	301-000 COGO 150J	±30	15.0					
19F2826	301-000 COGO 180J	±30	18.0	.11	.08	.068	.049	.046
19F2827	301-000-COGO 200J	±30	20.0					
19F2828	301-000 COGO 220J	±30	22.0					
19F2829	301-000 COGO 240J	±30	24.0					
19F2830	315-000 COHO 100D	±60	10.0					
19F2832	315-000 COGO 150J	±30	15.0					
19F508	315-000 COGO 200J	±30	20.0	.21	.16	.132	.095	.090
19F2833	315-000 COGO 220J	±30	22.0					
19F2834	315-000 COGO 240J	±30	24.0					

TYPE N750 TUBULAR CERAMICONS

Have neg. temp. coefficient of 750 x 10^6 mmf/°C. Tolerance at working volt. 600 VDC is ±5%. Sizes: 301, ½"x¼"; 316, 3/16"x¼".

Stk. No.	Type	Cap. pf	1-49	50-99	100-249	250-499	500-999
19F540	301-000 U2JO 509C	5.0	.11	.08	.068	.049	.046
19F541	301-000 U2JO 100C	10.0	.22	.16	.135	.097	.092
19F544	316-000 U2JO 101J	100.0	.22	.17	.138	.099	.094

MIL C-20-D TUBULARS

Ideally suited for applications where temperature coefficient is not important. Ceramicons meet performance specifications of EIA Standard RS109 for class 1; temp. comp. class 2 HI-K.

Stk. No.	Mil. Type	Mmf.	Body Style	1-49	50-99	100-249	499 250-	500-999
19F2200	CC20 CH 040C	4	301					
19F2201	CC20 CH 050C	5	301	.27	.20	.168	.121	.114
19F2202	CC20 CH 060C	6	301					
19F2203	CC20 CH 070C	7	301					
19F2204	CC20 CH 080C	8	301	.38	.28	.235	.169	.160
19F2205	CC20 CH 090C	9	301					
19F2206	CC20 CH 100C	10	301					
19F2835	CC20 CH 120G	12	301					
19F2836	CC20 CH 150G	15	301					
19F2837	CC20 CH 180G	18	301	.42	.31	.26	.187	.177
19F2838	CC20 CH 200G	20	301					
19F2839	CC20 CH 220G	22	301					
19F2840	CC20 CJ 030C	3	301					
19F2841	CC20 CK 010C	1	301	.27	.20	.168	.121	.114
19F2197	CC20 CK 1R5C	1.5	301					
19F2198	CC20 CK 020C	2	301	.26	.20	.164	.118	.111
19F2195	CC20 CK 0R5C	0.5	301	.27	.20	.168	.121	.114
19F2196	CC20 CK R75C	0.75	301					
19F2161	CC20 UJ 100C	10	301	.38	.28	.235	.169	.160
19F2842	CC20 UJ 120J	12	301					
19F2843	CC20 UJ 150J	15	301					
19F2154	CC20 UJ 030C	3	301	.27	.20	.168	.121	.114
19F2155	CC20 UJ 040C	4	301					
19F2156	CC20 UJ 050C	5	301					
19F2157	CC20 UJ 060C	6	301					
19F2158	CC20 UJ 070C	7	301					
19F2159	CC20 UJ 080C	8	301	.38	.28	.235	.169	.160
19F2160	CC20 UJ 090C	9	301					
19F2153	CC20 UK 020C	2	301	.26	.20	.164	.118	.111
19F2448	CC21 CH 100C	10	315	.49	.37	.308	.221	.209
19F2207	CC21 CH 120J	12	315					
19F2208	CC21 CH 150J	15	315					
19F2209	CC21 CH 180J	18	315	.37	.28	.233	.168	.158
19F2210	CC21 CH 220J	22	315					
19F2211	CC21 CH 240J	24	315					
19F2844	CC21 CH 040C	4	315	.39	.29	.243	.175	.165
19F2845	CC21 CH 050C	5	315	.39	.29	.243	.175	.165
19F2846	CC21 UJ 100C	10	315	.49	.37	.308	.221	.209

GENERAL PURPOSE CERAMICONS—500 VDC

315

Reliability at low cost. Tolerance, ±10%; characteristic X5R. Capacitance within tolerance @ 1 kc, 25°C., with 0.5 to 5 V RMS across piece. Size: O-.250, L-.562.

Stk. No.	Type	Cap. (pf)	1-49	50-99	100-249	250-499	500-999
19F2807	315-005 X5R 820K	82	.19	.14	.120	.086	.082
19F2808	315-005 X5R 101K	100	.19	.14	.120	.086	.082
19F2809	315-005 X5R 151K	150	.21	.16	.129	.093	.088
19F2810	315-005 X5R 201K	200	.21	.16	.129	.093	.088
19F2811	315-005 X5R 221K	220	.21	.16	.129	.093	.088
19F2812	315-005 X5R 251K	250	.23	.17	.141	.102	.096
19F2813	315-005 X5R 271K	270	.21	.16	.129	.093	.088
19F2814	315-005 X5R 301K	300	.23	.17	.141	.102	.096
19F2815	315-005 X5R 331K	330					
19F2816	315-005 X5R 391K	390					
19F2817	315-005 X5R 471K	470					
19F2818	315-005 X5R 501K	500	.21	.16	.129	.093	.088
19F2819	315-005 X5R 561K	560					
19F2820	315-005 X5R 681K	680					
19F2821	315-005 X5R 821K	820					
19F2822	315-005 X5R 102K	1000					

SUB-MINIATURE MOLDED CAPACITORS

Meets military specifications MIL-C-11015 with a cap. range up to 330 pf ±10%, 20%; 390-680 pf ±20%+100-0% (GMV); 820 and above +100-0% (GMV). Working voltage of 100 volts DC at 85°C, or 50 volts at 125°C. Constructed of high quality molded plastic to assure resistance against moisture and humidity. Dia., —.100; L—.260 Lead L—1.50 min. #22 AWG (.025) tinned copper leads.

Stk. No.	Type	Mmf.	Tol.	1-49	50-99	100-249	250-499	500-999
19F1709	390-000 X5PO 569K	5.6	±10%	.58	.44	.363	.261	.247
19F1710	390-000 X5PO 689K	6.8	±10%	.58	.44	.363	.261	.247
19F1711	390-000 X5PO 829K	8.2	±10%	.58	.44	.363	.261	.247
19F1712	390-000 X5PO 100K	10	±10%	.58	.44	.363	.261	.247
19F1713	390-000 X5PO 120K	12	±10%	.58	.44	.363	.261	.247
19F1714	390-000 X5PO 150K	15	±10%	.58	.44	.363	.261	.247
19F1715	390-000 X5PO 180K	18	±10%	.58	.44	.363	.261	.247
19F1716	390-000 X5PO 220K	22	±10%	.58	.44	.363	.261	.247
19F1717	390-000 X5PO 270K	27	±10%	.58	.44	.363	.261	.247
19F1718	390-000 X5PO 330K	33	±10%	.58	.44	.363	.261	.247
19F1719	390-000 X5PO 390K	39	±10%	.58	.44	.363	.261	.247
19F1720	390-000 X5PO 470K	47	±10%	.58	.44	.363	.261	.247
19F1721	390-000 X5PO 560K	56	±10%	.58	.44	.363	.261	.247
19F1722	390-000 X5PO 680K	68	±10%	.58	.44	.363	.261	.247
19F1723	390-000 X5PO 820K	82	±10%	.58	.44	.363	.261	.247
19F1724	390-000 X5PO 101K	100	±10%	.58	.44	.363	.261	.247
19F1725	390-000 X5PO 121K	120	±10%	.58	.44	.363	.261	.247
19F1726	390-000 X5PO 151K	150	±10%	.58	.44	.363	.261	.247
19F1727	390-000 X5PO 181K	180	±10%	.58	.44	.363	.261	.247
19F1728	390-000 X5TO 221K	220	±10%	.58	.44	.363	.261	.247
19F1729	390-000 X5TO 271K	270	±10%	.58	.44	.363	.261	.247
19F1730	390-000 X5TO 331K	330	±10%	.58	.44	.363	.261	.247
19F1731	390-000 X5UO 391M	390	±20%	.54	.41	.338	.243	.230
19F1732	390-000 X5UO 471M	470	±20%	.54	.41	.338	.243	.230
19F1733	390-000 X5UO 561M	560	±20%	.54	.41	.338	.243	.230
19F1734	390-000 X5UO 681M	680	±20%	.54	.41	.338	.243	.230
19F1735	390-000 X5VO 821P	820	GMV	.50	.38	.313	.225	.213
19F1736	390-000 X5VO 102P	1000	GMV	.50	.38	.313	.225	.213
19F1737	390-000 X5VO 122P	1200	GMV	.50	.38	.313	.225	.213

WEECON CERAMIC CAPACITORS

Type	W.	H.	Lead Spacing
8101	.100	.100	.100
8111	.150	.150	.100
8121	.200	.200	.100
8131	.300	.300	.200

The square shape saves space. Made from the same material with same manufacturing techniques as tubular and disc capacitors. Flash test: 100% tested @ 3 DCWV. Capacitors listed are 10% tol. except (*) ±5 pf, (**) ±.25 pf, (‡) ±5%, (‡‡) ±20%.

Stk. No.	Type	Cap. (pf.)	1-49	50-99	100-249	250-499	500-999
19F2891	8101-026 COGO 479D	*4.7	.44	.33	.275	.198	.187
19F2892	8111-026 COGO 689D	*6.8	.44	.33	.275	.198	.187
19F2669	8111-026 COGO 100K	10	.44	.33	.275	.198	.187
19F2670	8111-026 U2JO 150K	15	.44	.33	.275	.198	.187
19F2671	8111-026 U2JO 220K	22	.44	.33	.275	.198	.187
19F2672	8111-026 U2JO 330K	33	.44	.33	.275	.198	.187
19F2673	8111-026 X5RO 331K	330	.44	.33	.275	.198	.187
19F2674	8111-026 X5RO 471K	470	.44	.33	.275	.198	.187
19F2675	8111-026 X5RO 681K	680	.44	.33	.275	.198	.187
19F2676	8121-026 X5RO 102K	1000	.40	.30	.25	.18	.17
19F2677	8131-026 X5RO 152K	1500	.44	.33	.275	.198	.187
19F2678	8131-026 X5RO 222K	2200	.44	.33	.275	.198	.187
19F2679	8131-026 X5UO 332M	3300‡‡	.44	.33	.275	.198	.187
19F2680	8131-026 X5UO 472M	4700‡‡	.44	.33	.275	.198	.187
19F2681	8131-026 Z5UO 682M	6800‡‡	.44	.33	.275	.198	.187
19F2682	8131-026 Z5UO 103M	10,000‡‡	.44	.33	.275	.198	.187
19F3474	8111-026 X5FO 470K	47	.46	.345	.288	.207	.196
19F3475	8111-026 X5FO 101K	100	.46	.345	.288	.207	.196
19F3476	8111-026 X5FO 151K	150	.46	.345	.288	.207	.196
19F3477	8111-026 X5FO 221K	220	.46	.345	.288	.207	.196

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

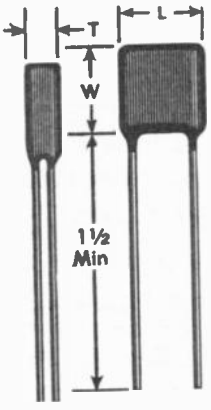
● NEW 6100 SERIES PHENOLIC COATED SUBMINIATURE MOMOBLOC CAPACITORS

Temp. characteristics: ±15% at —55°C to 125°C. Rated at 200 WVDC at 85°C and 100 WVDC at 125°C.

NPO

Stk. No.	Type	L Max.	W Max.	T Max.	1-49	50-99	100-249	250-499	500-999
19F3373	6121-200 COGO 221K	.100	.200	.125	.72	.65	.54	.47	.43
19F3374	6121-200 COGO 471K	.100	.200	.125	1.04	.94	.78	.68	.62
19F3375	6131-200 COGO 102K	.200	.290	.150	1.32	1.19	.99	.86	.79
19F3376	6131-200 COGO 222K	.200	.290	.150	2.18	1.96	1.64	1.42	1.31
19F3377	6151-200 COGO 332K	.400	.500	.125	2.96	2.66	2.22	1.92	1.78
19F3378	6151-200 COGO 472K	.400	.500	.125	3.88	3.49	2.91	2.52	2.33
19F3379	6151-200 COGO 682K	.400	.500	.125	6.16	5.54	4.62	4.00	3.69
19F3380	6151-200 COGO 103K	.400	.500	.125	7.90	7.11	5.92	5.14	4.74
				K1100					
19F3381	6121-100 WSRO 332K	.200	.200	.125	.60	.54	.45	.39	.36
19F3382	6121-100 WSRO 472K	.200	.200	.125	.66	.59	.50	.43	.40
19F3383	6121-100 WSRO 103K	.200	.200	.125	.70	.63	.53	.46	.42
19F3384	6131-100 WSRO 223K	.290	.290	.150	1.08	.97	.81	.70	.65
19F3385	6131-100 WSRO 333K	.290	.290	.150	1.32	1.19	.99	.86	.79
19F3386	6131-100 WSRO 473K	.290	.290	.150	1.64	1.48	1.23	1.07	.98
19F3387	6131-100 WSRO 104K	.290	.290	.150	1.98	1.79	1.49	1.29	1.19
19F3388	6151-100 WSRO 224K	.500	.500	.125	3.26	2.90	2.45	2.12	1.96
19F3389	6151-100 WSRO 334K	.500	.500	.125	5.04	4.54	3.78	3.28	3.02

SERIES 6100

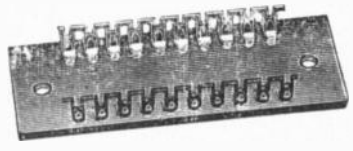


REDCAPS

Compact Jetseal protected general purpose capacitors. Rated at .01μF to 2.2μF; 100Vdc. Tol. +22%, —82% from —55°C to 85°C. Exceeds MIL-C-20 and MIL-C-11015.

Stk. No.	Type	CAP μF	ead Spacin	ead Dia	Thick (Max.)	1-49	50-99	100-249	250-499	500-999
19F3478	6121-100-103M	.01	.100	.020	.125	.42	.38	.32	.27	.25
19F3479	6121-100-153M	.015	.100	.020	.125	.58	.52	.44	.38	.35
19F3480	6121-100-223M	.022	.100	.020	.125	.60	.54	.45	.39	.36
19F3481	6121-100-333M	.033	.100	.020	.125	.62	.56	.47	.40	.37
19F3482	6121-100-473M	.047	.100	.020	.125	.64	.58	.48	.42	.38
19F3483	6121-100-683M	.068	.100	.020	.125	.66	.59	.50	.43	.40
19F3484	6131-100-104M	.1	.200	.020	.150	.76	.68	.57	.49	.46
19F3485	6131-100-154M	.15	.200	.020	.150	.80	.72	.60	.52	.48
19F3486	6131-100-224M	.22	.200	.020	.150	.86	.77	.65	.56	.52
19F3487	6131-100-334M	.33	.200	.020	.150	.90	.81	.68	.59	.54
19F3488	6131-100-474M	.47	.200	.020	.150	.96	.86	.72	.62	.58
19F3489	6131-100-684M	.68	.200	.020	.150	1.00	.90	.75	.65	.60
19F3490	6131-100-105M	1.0	.200	.020	.150	1.32	1.19	.99	.86	.79
19F3491	6141-100-155M	1.5	.200	.020	.150	1.96	1.76	1.47	1.27	1.18
19F3492	6141-100-225M	2.2	.200	.020	.150	2.66	2.39	2.00	1.73	1.60

TRIP PACKAGE SYSTEM

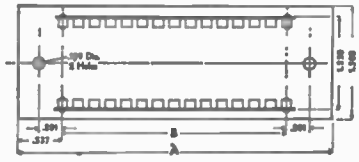


TRIP PACKAGE SYSTEM

Provides quick, more efficient assembly than with piece-by-piece construction. Features automatic clip assembly, connector cutting, component insertion, and component soldering. Tolerance: ±.005.

Stk. No.	Type	Stat.	Overall Length	Dist. Bwtn. Mtg. Ctrs.	1-49	50-99	100-249	250-499	500-999
19F3069	3976-205-1	5	1.875	1.362	.30	.25	.22	.19	.16
19F545	3976-205-2	10	2.875	2.362	.35	.30	.24	.21	.18
19F546	3976-205-3	15	3.875	3.362	.38	.33	.28	.24	.21
19F547	3976-205-4	20	4.875	4.362	.42	.37	.33	.28	.24
19F548	3976-205-5	25	5.875	5.362	.50	.45	.40	.37	.32
19F549	3976-205-6	30	6.875	6.362	.55	.50	.45	.40	.35
19F3070	3976-228-1	5	1.875	.800	.45	.40	.37	.34	.31
19F1770	3976-228-2	10	2.875	1.800	.50	.45	.39	.36	.33
19F1771	3976-228-3	15	3.875	2.800	.55	.50	.45	.41	.37
19F1772	3976-228-4	20	4.875	3.800	.59	.54	.50	.45	.42
19F1773	3976-228-5	25	5.875	4.800	.67	.60	.55	.52	.47
19F1774	3976-228-6	30	6.875	5.800	.72	.67	.62	.57	.52

3776-2S Series



3976-228 Series

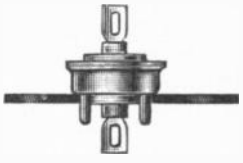
Mounts in .219" Hole

BUTTON MICA CAPACITORS

Midget, silvered-mica capacitors. Designed for use where compact size, minimum series inductance, and high leakage resistance are essential. Offer stability of capacitors over the full temp. range —55°C to 125°C. Unmatched for VHF and UHF work.

Stk. No.	Type	Mil No.	Cap. (pf)	Cap. Tol.	1-49	50-99	100-250	250-499	500-999
19F3071	662-003 150K	CB21PD150K	15	±10%	.84	.70	.56	.42	.308
19F3390	662-003 240K	CB21PD240K	24	±10%	.84	.70	.56	.42	.308
19F3391	662-003 470K	CB21PD470K	47	±10%	.84	.70	.56	.42	.308
19F3392	662-003 101K	CB21PD101K	100	±10%	.84	.70	.56	.42	.308
19F3075	662-003 151K	CB21PD151K	150	±10%	.84	.70	.56	.42	.308
19F3076	662-003 201K	CB21PD201K	200	±10%	.84	.70	.56	.42	.308
19F3393	662-003 241K	CB21PD241K	240	±10%	.84	.70	.56	.42	.308
19F3394	662-003 471K	CB21PD471K	470	±10%	1.01	.84	.67	.502	.369
19F3395	662-003 471J	CB21PD471J	470	±5%	1.26	1.05	.84	.63	.462
19F3800	662-003 102K	CB21PD102K	1K	±10%	1.70	1.41	1.13	.848	.622
19F3801	662-003 102J	CB21PD102J	1K	±5%	2.12	1.76	1.41	1.06	.776
19F3082	654-017 150K	CB11RD150K	15	±10%	.855	.713	.57	.428	.314
19F3396	654-017 240K	CB11RD240K	24	±10%	.855	.713	.57	.428	.314
19F3397	654-017 470K	CB11RD470K	47	±10%	.855	.713	.57	.428	.314
19F3085	654-017 101K	CB11RD101K	100	±10%	.855	.713	.57	.428	.314
19F3086	654-017 151K	CB11RD151K	150	±10%	.855	.713	.57	.428	.314
19F3087	654-017 201K	CB11RD201K	200	±10%	.855	.713	.57	.428	.314
19F3398	654-017 241K	CB11RD241K	240	±10%	.855	.713	.57	.428	.314
19F3399	654-017 471K	CB11RD471K	470	±10%	1.01	.84	.67	.503	.369
19F3400	654-017 471J	CB11RD471J	470	±5%	1.28	1.06	.85	.638	.468
19F3091	654-017 102K	CB11RD102K	1K	±10%	1.71	1.43	1.14	.855	.627
19F3092	654-017 102J	CB11RD102J	1K	±5%	2.13	1.78	1.42	1.065	.781

BUTTON MICA CAPACITORS COMPACT SIZE



CB-11

CB-21

Type	O.D.	Height Above Surface
CB11	.447±.010	5-500RF .070 201-100PF .100 1001-2400PF .100
CB21	.447±.010	5-500PF .070 201-100PF .100 1001-2400PF .100

ERIE Ceramic Trimmers

● NEW SUBMINIATURE CERAMIC TRIMMERS

The sub-miniature 518 occupies less than .007 cu. inches of space. Unique base design permits rigid mounting in both printed circuit and point to point wiring applications. Capacity range, 5-25pF. Operating temp. range, —55°C to 125°C. WVDC, 100 to 85°C and 50 to 125°C. Torque, .5-3 oz. in.

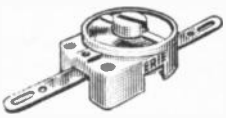
Stk. No.	Type	1-49	50-99	100-249	250-499	500-999
19F3440	518-000-39A	7.00	6.30	5.25	4.55	4.20

MINIATURE CERAMIC DISC TRIMMERS

(Following trimmers mfg'd. to app. req. of MIL-C-81)

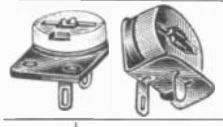
Stk. No.	Type	Fig.	Mmf. Range	1-49	50-99	100-249	250-499	500-999
19F2090	538-000-C0P0-89R	A	2-8	1.69	1.35	1.125	.675	.563
19F2091	538-000-C0P0-92R	A	5.5-18	1.69	1.35	1.125	.675	.563
19F2092	538-000-B2P0-90R	A	2.5-11	1.69	1.35	1.125	.675	.563
19F2093	538-000-B2P0-93R	A	7-25	1.69	1.35	1.125	.675	.563
19F2094	538-000-D2P0-91R	A	3-10	1.69	1.35	1.125	.675	.563
19F2095	538-000-D2P0-99R	A	8-25	1.69	1.35	1.125	.675	.563
19F2096	538-000-E2P0-110R	A	3-15	1.69	1.35	1.125	.675	.563
19F2097	538-000-E2P0-94R	A	9-35	1.69	1.35	1.125	.675	.563
19F2893	538-000-P3P0-112R	A	15-60	1.98	1.59	1.317	.787	.653
19F2098	538-002-C0P0-89R	B	2-8	1.69	1.35	1.125	.675	.563
19F2099	538-002-C0P0-92R	B	5.5-18	1.69	1.35	1.125	.675	.563
19F2100	538-002-B2P0-90R	B	2.5-11	1.69	1.35	1.125	.675	.563
19F2101	538-002-B2P0-93R	B	7-25	1.69	1.35	1.125	.675	.563
19F2102	538-002-D2P0-91R	B	3-10	1.69	1.35	1.125	.675	.563
19F2103	538-002-D2P0-99R	B	8-25	1.69	1.35	1.125	.675	.563
19F2104	538-002-E2P0-110R	B	3-15	1.69	1.35	1.125	.675	.563
19F2105	538-002-E2P0-94R	B	9-35	1.69	1.35	1.125	.675	.563
19F2894	538-002-P3P0-112R	B	15-60	1.98	1.59	1.317	.787	.653
19F2219	538-006-C0P0-89R	D	2-8	1.86	1.49	1.240	.743	.619
19F2220	538-006-C0P0-92R	D	5.5-18	1.86	1.49	1.240	.743	.619
19F2221	538-006-B2P0-90R	D	2.5-11	1.86	1.49	1.240	.743	.619
19F2222	538-006-B2P0-93R	D	7-25	1.86	1.49	1.240	.743	.619
19F2223	538-006-D2P0-91R	D	3-10	1.86	1.49	1.240	.743	.619
19F2224	538-006-D2P0-99R	D	8-25	1.86	1.49	1.240	.743	.619
19F2225	538-006-E2P0-110R	D	3-15	1.86	1.49	1.240	.743	.619
19F2226	538-006-E2P0-94R	D	9-35	1.86	1.49	1.240	.743	.619
19F2444	538-006-P3P0-112R	D	15-60	2.15	1.73	1.432	.85[illegible]	.709
19F1738	538-011-C0P0-89R	C	2-8	2.05	1.64	1.365	.819	.683
19F1739	538-011-C0P0-92R	C	5.5-18	2.05	1.64	1.365	.819	.683
19F1740	538-011-B2P0-90R	C	2.5-11	2.05	1.64	1.365	.819	.683
19F1741	538-011-B2P0-93R	C	7-25	2.05	1.64	1.365	.819	.683
19F1742	538-011-D2P0-91R	C	3-10	2.05	1.64	1.365	.819	.683
19F1743	538-011-D2P0-99R	C	8-25	2.05	1.64	1.365	.819	.683
19F1744	538-011-E2P0-110R	C	3-15	2.05	1.64	1.365	.819	.683
19F1745	538-011-E2P0-94R	C	9-35	2.05	1.64	1.365	.819	.683
19F2895	538-011-P3P0-112R	C	15-60	2.34	1.88	1.557	.931	.773
19F2227	538-001-C0P0-89R	A	2-8	1.97	1.58	1.315	.788	.656
19F2228	538-001-C0P0-92R	A	5.5-18	1.97	1.58	1.315	.788	.656
19F2229	538-001-B2P0-90R	A	2.5-11	1.97	1.58	1.315	.788	.656
19F2230	538-001-B2P0-93R	A	7-25	1.97	1.58	1.315	.788	.656
19F2231	538-001-D2P0-91R	A	3-10	1.97	1.58	1.315	.788	.656
19F2232	538-001-D2P0-99R	A	8-25	1.97	1.58	1.315	.788	.656
19F2233	538-001-E2P0-110R	A	3-15	1.97	1.58	1.315	.788	.656
19F2234	538-001-E2P0-94R	A	9-35	1.97	1.58	1.315	.788	.656
19F2442	538-001-P3P0-112R	A	15-60	2.26	1.82	1.507	.90	.746
19F2235	538-003-C0P0-89R	B	2-8	1.97	1.58	1.315	.788	.656
19F2236	538-003-C0P0-92R	B	5.5-18	1.97	1.58	1.315	.788	.656
19F2237	538-003-B2P0-90R	B	2.5-11	1.97	1.58	1.315	.788	.656
19F2238	538-003-B2P0-93R	B	7-25	1.97	1.58	1.315	.788	.656
19F2239	538-003-D2P0-91R	B	3-10	1.97	1.58	1.315	.788	.656
19F2240	538-003-D2P0-99R	B	8-25	1.97	1.58	1.315	.788	.656
19F2241	538-003-E2P0-110R	B	3-15	1.97	1.58	1.315	.788	.656
19F2242	538-003-E2P0-94R	B	9-35	1.97	1.58	1.315	.788	.656
19F2443	538-003-P3P0-112R	B	15-60	2.26	1.82	1.507	.90	.746
19F2243	538-007-C0P0-89R	D	2-8	2.16	1.73	1.440	.863	.719
19F2244	538-007-C0P0-92R	D	5.5-18	2.16	1.73	1.440	.863	.719
19F2245	538-007-B2P0-90R	D	2.5-11	2.16	1.73	1.440	.863	.719
19F2246	538-007-B2P0-93R	D	7-25	2.16	1.73	1.440	.863	.719
19F2247	538-007-D2P0-91R	D	3-10	2.16	1.73	1.440	.863	.719
19F2248	538-007-D2P0-99R	D	8-25	2.16	1.73	1.440	.863	.719
19F2249	538-007-E2P0-110R	D	3-15	2.16	1.73	1.440	.863	.719
19F2258	538-007-E2P0-94R	D	9-35	2.16	1.73	1.440	.863	.719
19F2445	538-007-P3P0-112R	D	15-60	2.44	1.97	1.632	.975	.809
19F2259	538-016-C0P0-89R	C	2-8	2.33	1.86	1.553	.932	.776
19F2260	538-016-C0P0-92R	C	5.5-18	2.33	1.86	1.553	.932	.776
19F2261	538-016-B2P0-90R	C	2.5-11	2.33	1.86	1.553	.932	.776
19F2262	538-016-B2P0-93R	C	7-25	2.33	1.86	1.553	.932	.776
19F2263	538-016-D2P0-91R	C	3-10	2.33	1.86	1.553	.932	.776
19F2264	538-016-D2P0-99R	C	8-25	2.33	1.86	1.553	.932	.776
19F2265	538-016-E2P0-110R	C	3-15	2.33	1.86	1.553	.932	.776
19F2266	538-016-E2P0-94R	C	9-35	2.33	1.86	1.553	.932	.776
19F2446	538-016-P3P0-112R	C	15-60	2.62	2.10	1.745	1.044	.866

MINIATURE CERAMIC TRIMMER



TYPE 539. Miniaturized for maximum density. Designed for point-to-point wiring and printed circuit. Secure mount assured by 0.068" diameter mounting holes that accept #0 screws. A conservative rating from —55°C to +125°C insures inherent reliability. Intimately bonded silver electrode.

Stk. No.	Type	Cap. Rnge.	Temp. Coef.	1-49	50-99	100-249	250-499	500-999
19F2281	539-000 C0P0 98R	1.5-8	NPO	1.78	1.43	1.19	.713	.594
19F2282	539-000 C0P0 144R	4-15	NPO	1.78	1.43	1.19	.713	.594
19F2283	539-000 E2P0 137R	4-20	N650	1.78	1.43	1.19	.713	.594
19F2284	539-000 E2P0 142R	8-35	N650	1.78	1.43	1.19	.713	.594
19F2285	539-000 P3P0 112R	15-60	N1500	2.07	1.67	1.38	.825	.684
19F2286	539-002 C0P0 98R	1.5-8	NPO	1.78	1.43	1.19	.713	.594
19F2287	539-002 C0P0 144R	4-15	NPO	1.78	1.43	1.19	.713	.594
19F2288	539-002 E2P0 137R	4-20	N650	1.78	1.43	1.19	.713	.594
19F2289	539-002 E2P0 142R	8-35	N650	1.78	1.43	1.19	.713	.594
19F2290	539-002 P3P0 112R	15-60	N1500	2.07	1.67	1.38	.825	.684
19F2291	539-001 C0P0 98R	1.5-8	NPO	2.06	1.65	1.375	.825	.688
19F2292	539-001 C0P0 144R	4-15	NPO	2.06	1.65	1.375	.825	.688
19F2293	539-001 E2P0 137R	4-20	N650	2.06	1.65	1.375	.825	.688
19F2294	539-001 E2P0 142R	8-35	N650	2.06	1.65	1.375	.825	.688
19F2295	539-001 P3P0 112R	15-60	N1500	2.35	1.89	1.567	.937	.778
19F2296	539-003 C0P0 98R	1.5-8	NP0	2.06	1.65	1.375	.825	.688
19F2297	539-003 C0P0 144R	4-15	NP0	2.06	1.65	1.375	.825	.688
19F2298	539-003 E2P0 137R	4-20	N650	2.06	1.65	1.375	.825	.688
19F2299	539-003 E2P0 142R	8-35	N650	2.06	1.65	1.375	.825	.688
19F2450	539-003 P3P0 112R	15-60	N150C	2.35	1.89	1.567	.937	.778



PHENOLIC BASE — TYPE SS7

Features .500" dia. ceramic rotor, lapped and silvered on the underside, and a silvered ceramic dielectric stator disc wits lapped bearing surface.

Stk. No.	Type	Mmf. Range	Temp. Coef.	1-49	50-99	100-249	250-499	500-999
19F2971	557-000-C0P0-10R	1.5- 7	NP0	.90	.75	.60	.353	.315
19F2972	557-000-C0P0-17R	3 -12	NP0	.90	.75	.60	.353	.315
19F2973	557-000-C0P0-39R	5 -25	NP0	.90	.75	.60	.353	.315
19F2974	557-000-P3P0-109R	10 -75	N1500	1.06	.89	.71	.416	.371
19F2975	557-000-S2P0-28R	5 -20	N330	.90	.75	.60	.353	.315
19F2976	557-000-U2P0-29R	5 -30	N750	.90	.75	.60	.353	.315
19F2977	557-000-U2P0-34R	8 -50	N750	.90	.75	.60	.353	.315
19F2978	557-006-C0P0-10R	1.5- 7	NP0	.90	.75	.60	.377	.336
19F2979	557-006-C0P0-17R	3 -12	NP0	.90	.75	.60	.377	.336
19F2980	557-006-C0P0-39R	5 -25	NP0	.90	.75	.60	.377	.336
19F2981	557-006-P3P0-109R	10 -75	N1500	1.06	.89	.71	.44	.392
19F2982	557-006-S2P0-28R	5 -20	N330	.90	.75	.60	.377	.336
19F2983	557-006-U2P0-29R	5 -30	N750	.90	.75	.60	.377	.336
19F2984	557-006-U2P0-34R	8 -50	N750	.90	.75	.60	.377	.336
19F2985	557-013-C0P0-10R	1.5- 7	NP0	.90	.75	.60	.332	.296
19F2986	557-013-C0P0-17R	3 -12	NP0	.90	.75	.60	.332	.296
19F2987	557-013-C0P0-39R	5 -25	NP0	.90	.75	.60	.332	.296
19F2988	557-013-P3P0-109R	10 -75	N1500	1.06	.89	.71	.395	.352
19F2989	557-013-S2P0-28R	5 -20	N330	.90	.88	.60	.332	.296
19F2990	557-013-U2P0-29R	5 -30	N750	.90	.75	.60	.332	.296
19F2991	557-013-U2P0-34R	8 -50	N750	.90	.75	.60	.332	.296
19F2992	557-051-C0P0-10R	1.5- 7	NP0	1.05	.75	.70	.496	.443
19F2993	557-051-C0P0-17R	3 -12	NP0	1.05	.88	.70	.496	.443
19F2994	557-051-C0P0-39R	5 -25	NP0	1.05	.88	.70	.496	.443
19F2995	557-051-P3P0-109R	10 -75	N1500	1.21	1.01	.81	.559	.499
19F2996	557-051-S2P0-28R	5 -20	N330	1.05	.88	.70	.496	.443
19F2997	557-051-U2P0-29R	5 -30	N750	1.05	.88	.70	.496	.443
19F2998	557-051-U2P0-34R	8 -50	N750	1.05	.88	.70	.496	.443
19F2999	557-091-C0P0-10R	1.5- 7	NP0	1.02	.85	.68	.391	.349
19F3000	557-091-C0P0-17R	3 -12	NP0	1.02	.85	.68	.391	.349
19F3001	557-091-C0P0-39R	5 -25	NP0	1.02	.85	.68	.391	.349
19F3002	557-091-P3P0-109R	10 -75	N1500	1.18	.99	.788	.454	.405
19F3003	557-091-S2P0-28R	5 -20	N330	1.02	.85	.68	.391	.349
19F3004	557-091-U2P0-29R	5 -30	N750	1.02	.85	.68	.391	.349
19F3005	557-091-U2P0-34R	8 -50	N750	1.02	.85	.68	.391	.349

CERAMIC TRIMMERS — PHENOLIC BASE — TYPE 3192

19F3006	3192-000-C0P0-15R	2.5- 7	NP0	1.20	1.00	.80	.478	.427
19F3007	3192-000-C0P0-20R	4 -12	NP0	1.20	1.00	.80	.478	.427
19F3008	3192-000-C0P0-32R	6 -25	NP0	1.20	1.00	.80	.478	.427
19F3009	3192-000-P3P0-120R	11 -75	N1500	1.20	1.00	.80	.478	.427
19F3010	3192-000-U2P0-47R	9 -50	N750	1.20	1.00	.80	.478	.427
19F3011	3192-000-U2P0-77R	6 -30	N750	1.20	1.00	.80	.478	.427
19F3012	3192-000-S2P0-81R	6 -20	N330	1.20	1.00	.80	.478	.427

STYLE 503—CERAMIC DISC TRIMMERS—MI-C-81A

Stk. No.	Mil. Type	Cap. Rnge.	Temp. Coef.	1-49	50-99	100-249	250-499	500-999
19F1072	CV11A070	1.5-7	NP0	1.18	.94	.810	.627	.527
19F1073	CV11A120	3-12	NP0	1.18	.94	.810	.627	.527
19F1074	CV11A250	4.5-25	NP0	1.18	.94	.810	.627	.527
19F1075	CV11B130	3-13	N300	1.18	.94	.810	.627	.527
19F1076	CV11B200	5-20	N300	1.18	.94	.810	.627	.527
19F1077	CV11C300	4-30	N500	1.18	.94	.810	.627	.527
19F1078	CV11C450	7-45	N500	1.18	.94	.810	.627	.527
19F1079	CV11D300	4-30	N650	1.18	.94	.810	.627	.527
19F1080	CV11D450	7-45	N650	1.18	.94	.810	.627	.527

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

MINIATURE BUSHING CERAMIC CAPACITORS

A	L.898 x H.267
B	L.533 x H.267

Feed-Thru

Stand-Off

Type 2425. Capacitance of +80°% —20%=100, 500, 1000 pf. Power factor 3.5%. Hex nut mounting. Types 2425-001 and 2425-061 operating temperature: —55° to 85°C. Types 2425-003 and 2425-063 op. temp. —55° to 125°C. Thread: 8-32 UNC-2A.

FEED-THRU TYPES

Stock No.	Type No.	WVDC	1-49	50-99	100-249	250-499	500-999
19F2418	2425 001 X5U 0101AA	200	2.03	1.52	1.270	.914	.864
19F2419	2425 001 X5U 0102AA	200	2.03	1.52	1.270	.914	.864
19F2420	2425 001 X5U 0152AA	200	2.03	1.52	1.270	.914	.864
19F2421	2425 001 X5U 0202AA	200	2.03	1.52	1.270	.914	.864
19F2422	2425 001 X5U 0501AA	200	2.03	1.52	1.270	.914	.864
19F2423	2425 001 X5V 0502AA	200	2.03	1.52	1.270	.914	.864
19F2424	2425 003 W5U 0101AA	100	2.17	1.63	1.358	.977	.923
19F2425	2425 003 W5U 0102AA	100	2.17	1.63	1.358	.977	.923
19F2426	2425 003 W5U 0152AA	100	2.17	1.63	1.358	.977	.923
19F2427	2425 003 W5U 0202AA	100	2.17	1.63	1.358	.977	.923
19F2428	2425 003 W5U 501AA	100	2.17	1.63	1.358	.977	.923
19F2429	2425 003 W5W 0502AA	100	2.17	1.63	1.358	.977	.923

STAND-OFF TYPES

19F2430	2425 061 X5U 0101AA	200	2.03	1.52	1.270	.914	.864
19F2431	2425 061 X5U 0102AA	200	2.03	1.52	1.270	.914	.864
19F2432	2425 061 X5U 0152AA	200	2.03	1.52	1.270	.914	.864
19F2433	2425 061 X5U 0202AA	200	2.03	1.52	1.270	.914	.864
19F2434	2425 061 X5U 0501AA	200	2.03	1.52	1.270	.914	.864
19F2435	2425 061 X5V 0502AA	200	2.03	1.52	1.270	.914	.864
19F2436	2425 063 W5U 0101AA	100	2.17	1.63	1.358	.977	.923
19F2437	2425 063 W5U 0102AA	100	2.17	1.63	1.358	.977	.923
19F2438	2425 063 W5U 0152AA	100	2.17	1.63	1.358	.977	.923
19F2439	2425 063 W5U 0202AA	100	2.17	1.63	1.358	.977	.923
19F2440	2425 063 W5U 0501AA	100	2.17	1.63	1.358	.977	.923
19F2441	2425 063 W5W 0502AA	100	2.17	1.63	1.358	.977	.923

FEED-THRU CERAMICONS

A

C

B

D

Types 363 and 327 have tie-point terminals; provide point to point wiring. 20% Tol. 500 WVDC. Size: 321 (.625x5/16) 327 (1¼x5/16) 357 & 363 (.625x5/16), 2404 (.375x.150). Lock washers available on request. Shpg. wt., 1 oz.

Stk. No.	Type	Fig.	Mmf.	1-49	50-99	100-249	250-499	500-999
19F1780	327-005-X5U0-102M	D	1000	1.34	1.00	.836	.602	.569
19F1781	327-005-X5U0-152M	D	1500	1.34	1.00	.836	.602	.569
19F1783	357-000-X5U0-102M	C	1000	.93	.70	.579	.417	.394
19F1784	357-000-X5U0-152M	C	1500	.93	.70	.579	.417	.394
19F1785	362-000-X5U0-102M	A	1000	.93	.70	.579	.417	.394
19F1786	362-000-X5U0-152M	A	1500	.93	.70	.579	.417	.394
19F1787	2404-000-U2M0-500M	B	50	.19	.14	.116	.084	.079
19F1788	2404-000-X5U0-101M	B	100	.19	.14	.116	.084	.079
19F1789	2404-000-X5U0-102P	B	1000	.19	.14	.116	.084	.079
19F1790	2404-014-X5U0-501M	.....	500	.15	.11	.093	.067	.063
19F1791	2404-014-X5U0-102P	.....	1000	.15	.11	.093	.067	.063
19F2857	2443-000-X5S0-102M	.....	1000	1.12	.84	.703	.506	.478
19F2858	2443-000-X5S0-152M	.....	1500	1.12	.84	.703	.506	.478
19F2859	2443-001-X5S0-102M	.....	1000	1.18	.88	.735	.529	.50
19F2860	2443-001-X5S0-152M	.....	1500	1.18	.88	.735	.529	.50
19F2861	2499-003-X5S0-102M	.....	1000	1.26	.95	.788	.567	.536
19F2862	2499-003-X5S0-152M	.....	1500	1.26	.95	.788	.567	.536

Fig. D—CK-70 Series Mil-C-11015C Feed-Thru Ceramicons. Body style 327. Size 1.25Hx5/16".

Stk. No.	Mil. Type	Mmf.	Tol.	1-49	50-99	100-249	250-499	500-999
19F2149	CK70 AW 102M	1000	±20	1.56	1.17	.974	.701	.662
19F2150	CK70 AW 152M	1500	±20	1.56	1.17	.974	.701	.662

GLASS TRIMMER CAPACITOR — EXTERNAL SPLIT BUSHING

For applications allowing extension of the adjustment screw. Suited for high volume, economic usage in electronic equipment. Linear, non-reversing capacitance change with rotation. Maintains proper screw torque under varying conditions of vibration and shock. Insl. Res: 10^{12} ohms mm. at 25°C. Op. Temp.: —55°C to 125°C.

Stock No.	Type	WVDC	Cap. Rng.(pf)	1-24	25-49	50-99	100-299	300-499	500-999
19F3099	582-000	1250	.7-9	2.62	2.25	1.88	1.54	1.49	1.38
19F3032	582-003	1250	.7-9	2.70	2.33	1.95	1.62	1.52	1.45
19F3033	586-000	750	.7-17	2.70	2.33	1.95	1.62	1.52	1.45
19F3034	586-003	750	.8-17	2.77	2.40	2.03	1.69	1.61	1.53
19F3035	588-003	750	2.0-30	3.00	2.63	2.25	1.95	1.84	1.75

AIR DIELECTRIC PRECISION TRIMMERS

Series 540. New trimmer assures excellent stability. Rotor and stator plates are machined from solid brass extrusions. 375 WVDC Op. temp., —55°C to 125°C. Insulation resistance 50K Megohms Min. Torque, 4-10 oz. in. Initial Q, 1500 Min. Trimmers utilize low loss steatite base.

Stk. No.	Type	1-49	50-99	100-249	250-499	500-999
19F3450	540-000	.63	.51	.46	.41	.36
19F3451	541-000	.64	.52	.47	.42	.37
19F3452	542-000	.66	.53	.48	.43	.38
19F3453	543-000	.67	.54	.49	.44	.39
19F3454	544-000	.69	.55	.50	.45	.40
19F3455	545-000	.72	.58	.52	.47	.41
19F3456	546-000	.74	.59	.53	.48	.42
19F3457	547-000	.76	.61	.55	.50	.44
19F3458	540-010	.63	.51	.46	.41	.36
19F3459	541-010	.64	.52	.47	.42	.37
19F3460	542-010	.66	.53	.48	.43	.38
19F3461	543-010	.67	.54	.49	.44	.39
19F3462	544-010	.69	.55	.50	.45	.40
19F3463	545-010	.72	.58	.52	.47	.41
19F3464	546-010	.74	.59	.53	.48	.42
19F3465	547-010	.76	.61	.55	.50	.44
19F3466	540-020	.63	.51	.46	.41	.36
19F3467	541-020	.64	.52	.47	.42	.37
19F3468	542-020	.66	.53	.48	.43	.38
19F3469	543-020	.67	.54	.49	.44	.39
19F3470	544-020	.69	.55	.50	.45	.40
19F3471	545-020	.72	.58	.52	.47	.41
19F3472	546-020	.74	.59	.53	.48	.42
19F3473	547-020	.76	.61	.55	.50	.44

GLASS & QUARTZ TRIMMER CAPACITORS

A B C

Meet or exceed applicable requirements of MIL-C-14409. 1000 VDCW from —55°C to 125°C. Life test: 1500VDC for 250 hours @ 125°C. "Q" minimum at 1MC: 500.

GLASS PANEL MOUNT

Stk. No.	Type	Fig.	Mmf.	1-24	25-49	50-99	100-299	300-499	500-999
19F1755	560-013	A	.8-4.5	3.20	2.95	2.50	2.10	2.00	1.70
19F1756	562-013	A	.8-8.5	3.40	3.05	2.70	2.25	2.15	1.80
19F1757	564-013	A	.7-12	3.75	3.40	2.95	2.45	2.35	2.00
19F1758	566-013	A	.8-18	4.35	3.95	3.40	2.85	2.70	2.35
19F1759	568-013	A	1.0-30.0	4.55	4.15	3.60	3.05	2.90	2.40

GLASS PRINTED CIRCUIT MOUNT

19F3364	521-000	B	.8-5.5	3.40	3.05	2.75	2.40	2.15	2.00
19F3365	523-000	B	.8-11.0	3.80	3.40	3.05	2.65	2.40	2.20
19F3366	525-000	B	.8-16.0	4.40	3.95	3.35	3.10	2.80	2.50
19F3367	527-000	B	.8-23.0	6.00	5.40	4.85	4.25	3.80	3.30
19F1760	561-013	B	.8-4.5	2.80	2.60	2.20	1.85	1.75	1.50
19F1761	563-013	B	.8-8.5	3.00	2.75	2.40	2.00	1.90	1.65
19F1762	565-013	B	.8-12	3.35	3.05	2.65	2.20	2.10	1.80
19F1763	567-013	B	.8-18	3.95	3.60	3.10	2.60	2.45	2.10
19F1764	569-013	B	.8-30	4.15	3.80	3.30	2.80	2.65	2.25
19F1765	561-023	C	.8-4.5	2.80	2.60	2.20	1.85	1.75	1.50
19F1766	563-023	C	.8-8.5	3.00	2.75	2.40	2.00	1.90	1.65
19F1767	565-023	C	.8-12	3.35	3.05	2.65	2.20	2.10	1.80
19F1768	567-023	C	.8-18	3.95	3.60	3.10	2.60	2.45	2.10
19F1769	569-023	C	.8-30	4.15	3.80	3.30	2.80	2.65	2.25

QUARTZ PANEL MOUNT

19F3368	520-000	A	.8-5.5	3.80	3.40	3.05	2.65	2.40	2.20
19F3369	522-000	A	.8-11.0	4.20	3.80	3.40	3.00	2.70	2.40
19F3370	524-000	A	.8-16.0	4.80	4.30	3.05	3.35	3.05	2.70
19F3371	526-000	A	.8-23.0	5.40	4.85	4.35	3.80	3.45	3.00
19F3372	528-000	A	1.0-38.0	5.60	5.05	4.55	4.00	3.65	3.10
19F3019	560-053	A	.6-1.8	4.35	4.05	3.60	3.15	3.00	2.90
19F3020	562-053	A	.6-5.5	4.75	4.45	4.00	3.55	3.40	3.25
19F3021	566-053	A	.6-9.5	6.15	5.75	5.15	4.55	4.40	4.20
19F3022	568-053	A	.8-16.0	7.35	6.95	6.35	5.75	5.60	5.40

QUARTZ PRINTED CIRCUIT MOUNT

Stk. No.	Type	Fig.	Mmf.	1-24	25-49	50-99	100-299	300-499	500-999
19F3023	561-053	B	.6-1.8	4.05	3.80	3.40	3.00	2.90	2.75
19F3024	563-053	B	.6-5.5	4.55	4.25	3.80	3.35	3.20	3.05
19F3025	567-053	B	.6-9.5	5.70	5.35	4.90	4.35	4.20	4.00
19F3026	569-053	B	.8-16.0	7.00	6.65	6.10	5.50	5.40	5.20
19F3027	561-054	B	.6-1.8	4.05	3.80	3.40	3.00	2.90	2.75
19F3028	563-054	B	.6-5.5	4.55	4.25	3.80	3.35	3.20	3.05
19F3029	567-054	B	.6-9.5	5.70	5.35	4.90	4.35	4.20	4.00
19F3030	569-054	B	.8-16.0	7.00	6.65	6.10	5.50	5.40	5.20

MILITARY APPROVED TYPES

19F3013	PC40H120	A	.8-12	3.75	3.40	2.95	2.45	2.35	2.00
19F3014	PC40H180	A	.8-18	4.35	3.95	3.40	2.85	2.70	2.35
19F3015	PC40H300	A	1-30	4.55	4.15	3.60	3.05	2.90	2.40
19F3016	PC41H120	B	.8-12	3.35	3.05	2.65	2.20	2.10	1.80
19F3017	PC41H180	B	.8-18	3.95	3.60	3.10	2.60	2.45	2.10
19F3018	PC41H300	B	1-30	4.15	3.80	3.30	2.80	2.65	2.27
19F1794	PC40J4R5	A	.8-4.5	3.20	2.95	2.50	2.10	2.00	1.70
19F1795	PC40J8R5	A	.8-8.5	3.40	3.05	2.70	2.25	2.15	1.80
19F1796	PC41J4R5	B	.8-4.5	2.80	2.60	2.20	1.85	1.75	1.50
19F1797	PC41J8R5	B	.8-8.5	3.00	2.75	2.40	2.00	1.90	1.65

ERIE Filters

BROAD BAND EMI FILTERS

Miniature filter for low voltage circuits. High capacitor with a ferrite enclosed lead provides an L section filter. Non-polar for use in either low voltage DC or AC lines. Four mtg. arrangements. Temp. mg.: —55°C. Working volt. 50VDC at 105°C, 28 VDC at 125°C. Dielectric strength: 110VDC at 25°C. (50 ma. max. charging current.) Meets applicable requirements of MIL-F-15733.

Stock No.	Type	Max. DC Resist. at 25°C	Max. DC Curr.	1-49	50-99	100-249	250-499	500-999
19F3036	1200-003	70 ohms	60 ma	16.24	14.21	13.20	12.18	11.17
19F3037	1200-002	12 ohms	150 ma	13.73	12.01	11.15	10.30	9.44
19F3038	1200-004	4 ohms	250 ma	13.73	12.01	11.15	10.30	9.44
19F3039	1200-001	2.3 ohms	300 ma	13.73	12.01	11.15	10.30	9.44
19F3040	1200-000	1.2 ohms	450 ma	14.64	12.81	11.99	10.98	10.07
19F3041	1200-005	.01 ohms	10 amps	13.73	12.01	11.15	10.30	9.44
19F3042	1200-013	70 ohms	60 ma	16.24	14.21	13.20	12.18	11.17
19F3043	1200-012	12 ohms	150 ma	13.73	12.01	11.15	10.30	9.44
19F3044	1200-014	4 ohms	250 ma	13.73	12.01	11.15	10.30	9.44
19F3045	1200-011	2.3 ohms	300 ma	13.73	12.01	11.15	10.30	9.44
19F3046	1200-010	1.2 ohms	450 ma	14.64	12.81	11.99	10.98	10.07
19F3047	1200-015	.01 ohms	10 amps	13.73	12.01	11.15	10.30	9.44
19F3048	1200-028	70 ohms	60 ma	16.24	14.21	13.20	12.18	11.17
19F3049	1200-023	12 ohms	150 ma	13.73	12.01	11.15	10.30	9.44
19F3050	1200-024	4 ohms	250 ma	13.73	12.01	11.15	10.30	9.44
19F3051	1200-021	2.3 ohms	300 ma	13.73	12.01	11.15	10.30	9.44
19F3052	1200-022	1.2 ohms	450 ma	14.64	12.81	11.99	10.98	10.07
19F3053	1200-025	.01 ohms	10 amps	13.73	12.01	11.15	10.30	9.44
19F3054	1200-016	70 ohms	60 ma	17.04	14.91	13.58	12.79	11.72
19F3055	1200-017	12 ohms	150 ma	14.48	12.67	11.77	10.87	9.96
19F3056	1200-018	4 ohms	250 ma	14.48	12.67	11.77	10.87	9.96
19F3057	1200-019	2.3 ohms	300 ma	14.48	12.67	11.77	10.87	9.96
19F3058	1200-020	1.2 ohms	450 ma	15.36	13.44	12.48	11.52	10.56
19F3059	1200-027	.01 ohms	10 amps	14.48	12.67	11.77	10.87	9.96

1203 1204 1201 1202

Specifications for 1201 & 1202: Cap. 1000 mmf. at 1KC; .5 to 5 VRMS; 25°C; working voltage, 200 VDC; operating temp. range, —55°C to 125°C. DC resistance 0.01 ohms max. DC and low frequency current 5 amps. max.

Type 1201 bushing type. Lockwashers and hex nuts supplied. .812 L x .250 Dia.

Type 1212. Same as 1201 but size is: .999 L x .375 Dia. Hex nuts and lockwashers are supplied.

Stk. No.	Type	1-49	50-99	100-249	250-499	500-999
19F2451	120-050	3.40	2.92	2.38	2.21	2.04
19F2452	1201-051	3.44	2.92	2.41	2.24	2.06
19F2110	1201-052	3.44	2.92	2.41	2.24	2.06
19F2459	1202-050	1.80	1.53	1.26	1.17	1.08

Specifications for 1203 & 1204: Minimum attenuation 50 db from 100 MC to 2000MC over a temp. range of —55°C to 125°C. Cap.: 2000 mmf. min. at 1 KC, .5 to 5 VRMS, 25°C. working voltage: 500 VDC. DC resistance: 0.10 ohms max. DC and low frequency current: 5 amps. max. RF current: 0.25 amps. max.

Type 1023 miniaturized eyelet type. Overall size is: .718 L x .218 Dia.

Type 1024 eyelet type similar to 1023, but size is: 1.187 L. x .328 Dia.

Stk. No.	Type	1-49	50-99	100-249	250-499	500-999
19F2460	1202-051	1.84	1.56	1.29	1.20	1.10
19F2112	1202-052	1.84	1.56	1.29	1.20	1.10
19F2111	1203-050	1.60	1.36	1.12	1.04	.96
19F2113	1204-050	1.20	1.02	.84	.78	.72

LOW PASS, HIGH FREQUENCY FILTERS

Type 1280-001 and 1270-001. Minimum attenuation: 50 db from 10 Mc to 2000 Mc over temp. range of —55° to +85°C. Capacitance: 2000 pf min. Working voltage 15000 VDC for 1 sec.

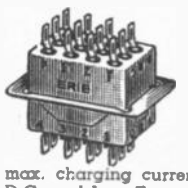
Stock No.	Type	atten.	1-49	50-99	100-249	250-499	500-999
19F2454	1280-001	.....	3.50	2.98	2.45	2.28	2.10
19F2455	1270-009	40 db.	2.20	1.87	1.54	1.43	1.32
19F2456	1270-016	40 db.	2.40	2.04	1.68	1.56	1.44
19F2457	1270-024	50 db.	1.62	1.51	1.40	1.30	1.40
19F2458	1270-025	50 db.	2.07	1.77	1.52	1.42	1.53

SUBMINIATURE EMI FILTER

Featured improved volumetric efficiency. Long-lasting and easy to mount. Supplied with lock washer and hex nut as standard. Min. Attenuation per Mil.-Std. 220A; 50 db from 200 MC to 2000 MC over range from —55°C to 125°C. Working Voltage; 100VDC.

Stock No.	Type	1-49	50-99	100-249	250-499	500-999
19F3061	1250-003	4.20	3.57	2.94	2.73	2.52

MINIATURE R.F.I. FILTERS—MINIATURE 6 & 12 CHANNEL R.F.I. FILTERS



Minimum attenuation: 45 db from 100-200 Mc, 50 db from 200 Mc to 2000 Mc, over the temp. range of —55°C to +125°C measured in accordance with Mil-Std.-220A. Capacitance: 2500 pf min. at 1 Kc, 0.5 to 5 Vrms, 25°C. Working voltage: 350 VDC. Insulation resistance: 20K megohms min. at 100 VDC, 25°C (50 ma max. charging current). D.C. resistance: .01 ohms per section. D.C. and Low Frequency current: 5 amps max. per section.

Type 1212 is 12 channel—**Type 1206** is 6 channel. **Size:** 502 and 501—1.125 x .594". 552 and 554—.75 x .437".

Stk. No.	Type	1-49	50-99	100-249	250-499	500-999
19F3066	1212-501	20.69	19.21	17.00	16.26	15.52
19F3067	1212-502*	20.69	19.21	17.00	16.26	15.52
19F2462	1212-552*	18.06	16.77	14.84	14.19	13.55
19F3063	1212-554*	18.06	16.77	14.84	14.19	13.55
19F3064	1206-501	16.11	14.96	13.24	12.66	12.09
19F3065	1206-502	16.11	14.96	13.24	12.66	12.09
19F2463	1206-552	14.14	13.13	11.62	11.11	10.61
19F3068	1206-554*	14.14	13.13	11.62	11.11	10.61

Solder Mount except (*) Bolt Mount.

● NEW LOW PASS EMI SUPRESSION FILTERS

Temp. range: —55°C to 85°C. Miniaturized line of filters rated at 100 WVDC to cover the freq. range from 10khz to 10 ghz. Filters hermetically sealed.

100 WVDC — L Section Filters — .728 x .406"

Stk. No.	Type	Rdc Ohms	1-9	10-49	50-99	100-249	250-499
19F3404	9000-000-0000	1.5	27.55	25.38	23.20	21.03	19.29
19F3405	9000-000-0003	.35	26.60	24.50	22.40	20.30	18.62
19F3406	9000-000-0007	.04	24.89	22.93	20.96	19.00	17.42

100 WVDC — Pi Section Filters — .728 x .406"

19F3407	9000-000-1000	1.5	35.15	32.38	29.60	26.38	24.61
19F3408	9000-000-1003	.35	34.20	31.50	28.80	26.10	23.94
19F3409	9000-000-1005	.06	33.44	30.80	28.16	25.52	23.41
19F3410	9000-000-1008	.04	32.49	29.93	27.36	24.80	22.74

100 WVDC — T Section Filters — 1.164 x 1.33"

19F3411	9004-000-2000	.2	42.75	39.38	36.00	32.63	29.93
19F3412	9005-000-2000	.05	41.99	38.68	35.36	32.05	29.39

115 VAC — L Section Filter — .930 x 1.164"

19F3413	9400-000-0003	.35	13.11	12.08	11.04	10.01	9.18
19F3414	9400-000-0005	.06	13.05	12.02	10.99	9.96	9.14
19F3415	9400-000-0007	.04	13.01	11.99	10.96	9.93	9.11
19F3416	9401-000-0003	.35	13.40	12.34	11.28	10.22	9.38
19F3417	9401-000-0005	.6	13.77	12.69	11.60	10.51	9.64
19F3418	9401-000-0007	.4	14.06	12.95	11.84	10.73	9.84

115 VAC — Pi Section Filter — .930 x 1.164"

19F3419	9000-000-1018	1.2	35.15	32.38	29.60	26.83	24.61
19F3420	9000-000-1021	.25	34.20	31.50	28.80	26.10	23.94
19F3421	9000-000-1023	.05	33.25	30.63	28.00	24.38	23.28
19F3422	9000-000-1025	.015	32.49	29.93	27.36	24.80	22.74

150 WVDC @ 85°C — T Section Filter — 1.164 x 1.33"

Stk. No.	Type	Rdc Ohms	1-9	10-49	50-99	100-249	250-499
19F3423	9004-000-2001	.01	42.75	39.38	36.00	32.63	29.93
19F3424	9005-000-2001	.05	41.99	38.68	35.36	32.05	29.39

150 WVDC @ 85°C — L Section Filter — 1.164 x 1.33"

19F3425	9000-000-0012	1.2	35.15	32.38	29.60	26.83	24.61
19F3426	9000-000-0015	.25	34.20	31.50	28.80	26.10	23.94
19F3427	9000-000-0019	.015	32.49	29.93	27.36	24.80	22.74

150 WVDC @ 85°C — Pi Section Filter — .728 x 1.164"

19F3428	9000-000-1010	1.2	35.15	32.38	29.60	26.83	24.61
19F3429	9000-000-1013	.25	34.20	31.50	28.80	26.10	23.94
19F3430	9000-000-1015	.05	33.44	30.80	28.16	25.52	23.41
19F3431	9000-000-1017	.015	32.49	29.93	27.36	24.80	22.74
19F3432	9000-000-1006	.22	34.20	31.50	28.80	26.10	23.94
19F3433	9000-000-1009	1.2	35.15	32.38	29.60	26.83	24.61
19F3434	9004-000-1002	12	35.72	32.90	30.08	27.26	25.00

150 WVDC @ 85°C — T Section Filter — 1.164 x 1.33"

19F3435	9004-000-2002	.10	42.75	39.38	36.00	32.63	29.93

150 WVDC @ 85° — L Section Filter 1.164 x 1.33"

19F3436	9000-000-0026	.25	26.60	24.50	22.40	20.30	18.62
19F3437	9000-000-0028	.05	25.84	23.80	21.76	19.72	18.09
19F3438	9000-000-0030	.015	24.89	22.93	20.96	19.00	17.42

150 WVDC @ 125°C — T Section Filter — 1.164 x 1.33"

19F3439	9005-000-2002	.05	41.99	38.68	35.36	32.05	29.39

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

Ceramic Capacitors NYTRONICS

● NEW "DECI-CAP"

Epoxy-molded subminiature ceramic capacitor. Operating range: —55°C to +125°C. High density cordwood packaging. Capacitance range: 4.7-27,000 pf. Size: all 0.100" dia. x 0.250" l.(¼ watt resistor). Tolerance: ±10%. Working voltage 4.7-470 pf: 200 volts DC. 560 pf to 27,000 pf: 100 volts DC. Meets MIL-C-11015C.

Stk. No.	Type	pf	1-24	25-49	50-99	100-249	250-499	500-999
35F1700	DC-047	4.7						
35F1701	DC-056	5.6						
35F1702	DC-068	6.8						
35F1703	DC-082	8.2						
35F1704	DC-100	10						
35F1705	DC-120	12						
35F1706	DC-150	15						
35F1707	DC-180	18						
35F1708	DC-220	22						
35F1709	DC-270	27						
35F1710	DC-330	33						
35F1711	DC-390	39	.51	.41	.35	.32	.30	.28
35F1712	DC-470	47						
35F1713	DC-560	56						
35F1714	DC-680	68						
35F1715	DC-820	82						
35F1716	DC-101	100						
35F1717	DC-121	120						
35F1718	DC-151	150						
35F1719	DC-181	180						
35F1720	DC-221	220						
35F1721	DC-271	270						
35F1722	DC-331	330						

Stk. No.	Type	pf	1-24	25-49	50-99	100-249	250-499	500-999
35F1723	DC-391	390	.51	.41	.35	.32	.30	.28
35F1724	DC-471	470	.53	.43	.37	.34	.31	.29
35F1725	DC-561	560	.53	.43	.37	.34	.31	.29
35F1726	DC-681	680	.53	.43	.37	.34	.31	.29
35F1727	DC-821	820	.53	.43	.37	.34	.31	.29
35F1728	DC-102	1000	1.18	.94	.82	.74	.69	.64
35F1729	DC-122	1200	1.30	1.04	.90	.82	.76	.71
35F1730	DC-152	1500	1.33	1.06	.92	.84	.78	.72
35F1731	DC-182	1800	1.47	1.18	1.02	.93	.86	.80
35F1732	DC-222	2200	1.49	1.19	1.04	.94	.87	.81
35F1733	DC-272	2700	1.65	1.32	1.15	1.05	.97	.90
35F1734	DC-332	3300	1.74	1.39	1.21	1.10	1.01	.94
35F1735	DC-392	3900	1.82	1.46	1.26	1.15	1.06	.99
35F1736	DC-472	4700	1.87	1.50	1.30	1.18	1.09	1.02
35F1737	DC-562	5600	2.12	1.69	1.47	1.34	1.24	1.15
35F1738	DC-682	6800	2.33	1.87	1.62	1.48	1.36	1.27
35F1739	DC-822	8200	2.55	2.04	1.77	1.61	1.49	1.39
35F1740	DC-103	10000	2.81	2.25	1.95	1.78	1.64	1.53
35F1741	DC-123	12000	2.93	2.35	2.03	1.85	1.71	1.59
35F1742	DC-153	15000	3.20	2.56	2.22	2.02	1.87	1.74
35F1743	DC-183	18000	3.20	2.56	2.22	2.02	1.87	1.74
35F1744	DC-223	22000	3.25	2.61	2.26	2.06	1.90	1.77
35F1745	DC-273	27000	3.66	2.93	2.54	2.32	2.14	1.99

● NEW HY-CAP

The HY-CAP is a high capacity ceramic capacitor. For design application in coupling, by-pass, and filter circuits where temperature stability and high capacitance are mandatory. Capacitance range is .01 mfd. to 2.5 mfd. Less than ±15% capacitance change from —55°C to +125°C. Working voltage is 100 Volts D.C. with no derating to 125°C. Life test is 1000 hours at 125° under twice rated voltage. Tol: ±20%. This ceramic capacitor meets the requirements of MIL-C-11015.

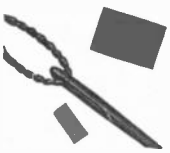
Stk. No.	Type HC-	Mfd.	H max.	W max.	T max.	1-24	25-49	50-99	100-249	250-499
35F1746	A-103-M	.01	0.175	0.225	0.110	1.39	1.11	.97	.88	.82
35F1747	A-123-M	.012	0.175	0.225	0.110	1.57	1.26	1.09	.99	.92
35F1748	A-153-M	.015	0.175	0.225	0.110	1.73	1.38	1.20	1.09	1.01
35F1749	A-183-M	.018	0.175	0.225	0.110	1.86	1.49	1.30	1.18	1.09
35F1750	A-223-M	.022	0.175	0.225	0.110	2.10	1.68	1.46	1.33	1.23
35F1751	A-273-M	.027	0.175	0.225	0.110	2.51	2.01	1.75	1.59	1.47
35F1752	A-333-M	.033	0.175	0.225	0.110	2.83	2.26	1.97	1.79	1.66
35F1753	B-393-M	.039	0.310	0.325	0.150	3.21	2.57	2.23	2.03	1.88
35F1754	B-473-M	.047	0.310	0.325	0.150	3.39	2.71	2.36	2.14	1.98
35F1755	B-563-M	.056	0.310	0.325	0.150	3.55	2.84	2.47	2.24	2.08
35F1756	B-683-M	.068	0.310	0.325	0.150	3.91	3.12	2.72	2.47	2.29
35F1757	B-823-M	.082	0.310	0.325	0.150	4.15	3.32	2.89	2.63	2.43
35F1758	B-104-M	.100	0.310	0.325	0.150	4.38	3.50	3.04	2.77	2.56

Stk. No.	Type HC-	Mfd.	H max.	W max.	T max.	1-24	25-49	50-99	100-249	250-499
35F1759	C-124-M	.12	0.310	0.325	0.150	4.40	3.52	3.06	2.78	2.58
35F1760	C-154-M	.15	0.355	0.670	0.150	4.49	3.59	3.12	2.84	2.63
35F1761	C-184-M	.18	0.355	0.670	0.150	4.71	3.77	3.28	2.98	2.76
35F1762	C-224-M	.22	0.355	0.670	0.150	4.94	3.95	3.44	3.12	2.89
35F1763	C-274-M	.27	0.355	0.670	0.150	5.21	4.17	3.62	3.29	3.05
35F1764	C-334-M	.33	0.355	0.670	0.150	5.91	4.41	3.83	3.49	3.23
35F1765	C-394-M	.39	0.355	0.670	0.150	5.93	4.74	4.12	3.75	3.47
35F1766	C-474-M	.47	0.355	0.670	0.150	6.40	5.12	4.45	4.05	3.75
35F1767	D-105-M	1.0	0.550	0.800	0.225	10.10	8.08	7.03	6.39	5.91
35F1768	E-155-M	1.5	0.550	0.800	0.250	12.90	10.32	8.98	8.16	7.56
35F1769	F-205-M	2.0	0.550	0.800	0.300	16.83	13.47	11.71	10.64	9.86
35F1770	G-255-M	2.5	0.550	0.800	0.375	20.76	16.61	14.44	13.13	12.16

● NEW HIGH STABILITY CERAMIC MOLDED & CHIP CAPACITORS

NYT-CAP. This ceramic capacitor has ultra-high stability. Capacitance range is 4.7pf. to 4700pf. Working voltage is 200 Volts D.C. Miniature molded epoxy case suitable for high component density applications. For use in oscillators, filters, and other critical circuitry. Tolerance ±10%.

NYT-CHIP. Provides in slug form all of the high stability and low loss features of the epoxy molded NYT-CAP. Compatible with integrated circuitry, thick and thin film circuitry, and printed circuitry. Capacitance range: 4.7pf to 4700pf. Tolerance: ±10% standard. 200 VDC rating. With wrap-around terminals.



NYT-CAP

Cap. Range	Size	1-24	25-49	50-99	100-249	250-499	500-999
4.7-82pf	.1" dia.x.25 l.	1.41	1.14	.98	.90	.83	.77
100-220pf	.1" dia.x.25 l.	1.49	1.20	1.04	.94	.87	.81
270-470pf	.35"x.25"x.1"	2.44	1.96	1.70	1.54	1.43	1.33
560-1000pf	.35"x.25"x.1"	3.35	2.68	2.32	2.12	1.95	1.82
1200-4700pf	.35"x.25"x.1"	4.20	3.37	2.92	2.66	2.46	2.29

NYT-CHIP

Cap. Range	Size	1-24	25-49	50-99	100-249	250-499	500-999
4.7-82pf	.17"x.065"x.07"	1.36	1.09	.93	.85	.78	.72
100-220pf	.17"x.065"x.07"	1.44	1.15	.99	.89	.82	.76
270-470pf	.28"x.195"x.07"	2.39	1.91	1.65	1.49	1.38	1.28
560-1000pf	.28"x.195"x.07"	3.30	2.63	2.27	2.07	1.90	1.77
1200-4700pf	.28"x.195"x.07"	4.15	3.32	2.87	2.61	2.41	2.24

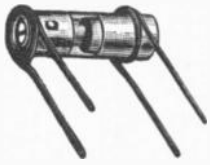
Stk. No.	Type	pf	Stk. No.	Type	pf
35F1771	NC-047	4.7	35F1790	NC-181	180
35F1772	NC-056	5.6	35F1791	NC-221	220
35F1773	NC-068	6.8	35F1792	NC-271	270
35F1774	NC-082	8.2	35F1793	NC-331	330
35F1775	NC-100	10	35F1794	NC-391	390
35F1776	NC-120	12	35F1795	NC-471	470
35F1777	NC-150	15	35F1796	NC-561	560
35F1778	NC-180	18	35F1797	NC-681	680
35F1779	NC-220	22	35F1798	NC-821	820
35F1780	NC-270	27	35F1799	NC-102	1000
35F1781	NC-330	33	35F1800	NC-122	1200
35F1782	NC-390	39	35F1801	NC-152	1500
35F1783	NC-470	47	35F1802	NC-182	1800
35F1784	NC-560	56	35F1803	NC-222	2200
35F1785	NC-680	68	35F1804	NC-272	2700
35F1786	NC-820	82	35F1805	NC-332	3300
35F1787	NC-101	100	35F1806	NC-392	3900
35F1788	NC-121	120	35F1807	NC-472	4700
35F1789	NC-151	150			

Stk. No.	Type	pf	Stk. No.	Type	pf
35F1808	NCU-047	4.7	35F1827	NCU-181	180
35F1809	NCU-056	5.6	35F1828	NCU-221	220
35F1810	NCU-068	6.8	35F1829	NCU-271	270
35F1811	NCU-082	8.2	35F1830	NCU-331	330
35F1812	NCU-100	10	35F1831	NCU-391	390
35F1813	NCU-120	12	35F1832	NCU-471	470
35F1814	NCU-150	15	35F1833	NCU-561	560
35F1815	NCU-180	18	35F1834	NCU-681	680
35F1816	NCU-220	22	35F1835	NCU-821	820
35F1817	NCU-270	27	35F1836	NCU-102	1000
35F1818	NCU-330	33	35F1837	NCU-122	1200
35F1819	NCU-390	39	35F1838	NCU-152	1500
35F1820	NCU-470	47	35F1839	NCU-182	1800
35F1821	NCU-560	56	35F1840	NCU-222	2200
35F1822	NCU-680	68	35F1841	NCU-272	2700
35F1823	NCU-820	82	35F1842	NCU-332	3300
35F1824	NCU-101	100	35F1843	NCU-392	3900
35F1825	NCU-121	120	35F1844	NCU-472	4700
35F1826	NCU-151	150			

JFD Trimmers

JFD precision bore solid dielectric Piston Trimmer. Capacitors with special anti-corrosion metalizing. Meets or exceeds MIL-C-14409B. Glass operate from —55°C to 125°C; quartz from —55°C to 150°C. Features: 6 patented precision anti-backlash drive mechanisms; Hi-Life standard panel mount; MCD; Miniature Telescoping sliding piston and direct transverse. Five dielectric materials and matched metalized for homogenous bond of metalizing to dielectric. Low T.C., low loss of inductance. All have highest level shock and vibration resistance. Green Glass "N" prefix units with higher Q increase delta C's 50% over other comparably sized units, and have Hi-Life "Y" mechanism. Low cost "Y" suffix units combine Hi-Life adjustment mechanism with standard glass dielectric are physically interchangeable with corresponding standard units. JFD trimmers have been exclusively selected for the Apollo, Gemini, and Minuteman programs.

MINIATURE SERIES



JFD Miniature Trimmer Series features exclusive telescoping tuning assembly for miniaturization. Up to 50% savings in length for a given capacitance range. Mechanical stops at both ends of adjustment. NVC and VC glass dielectric, ¼ dia. NMQ quartz dielectric, 5/16" dia. "Y" series directly interchangeable with standard VC units, and NMQ units with standard MQ units with added feature of longer life and lower cost. Uses 7104-5 tool.

PANEL MOUNT TYPES

Stock No.	Type	Cap AMF Range	1-24	25-49	50-99	100-299	300-499
19F3161	NVC20G	.8-11.0	4.20	3.80	3.40	3.00	2.70
19F3162	NVC21G	.8- 5.5	3.88	3.40	3.05	2.65	2.40
19F3163	NVC22G	.8-16.0	4.80	4.30	3.85	3.35	3.05
19F3164	NVC23G	.8-23.0	5.40	4.85	4.35	3.80	3.45
19F3165	NVC24G	1.0-38.0	6.00	5.40	4.85	4.25	3.80
19F1461	VC20GY	.8- 8.5	3.40	3.05	2.70	2.25	2.15
19F1462	VC21GY	.8- 4.5	3.20	2.95	2.50	2.10	2.00
19F1463	VC22GY	.8-12.0	3.75	3.40	2.95	2.45	2.35
19F1464	VC23GY	.8-18.0	4.35	3.95	3.40	2.85	2.70
19F1465	VC24GY	1.0-30.0	4.55	4.15	3.60	3.05	2.90
19F3166	NMQ101	.6- 1.8	5.00	4.50	4.05	3.55	3.25
19F3167	NMQ103	.6- 5.5	5.60	5.05	4.55	4.00	3.65
19F3168	NMQ106	.6- 9.5	7.40	6.65	6.00	5.25	4.75
19F3169	NMQ109	.8-16.0	9.20	8.30	7.45	6.55	5.85

PRINTED CIRCUIT TYPES • LUG MTG. + WIRE MTG.

19F3170	NVC9G*	.8-11.0	3.80	3.40	3.05	2.65	2.40
19F3171	NVC10G*	.8- 5.5	3.40	3.05	2.75	2.40	2.15
19F3172	NVC31G*	.8-16.0	4.40	3.95	3.55	3.10	2.80
19F3173	NVC32G*	.8-23.0	5.00	4.50	4.05	3.55	3.25
19F3174	NVC43G*	1.0-38.0	5.60	5.05	4.55	4.00	3.65
19F1459	VC9GY*	.8- 8.5	3.00	2.75	2.40	2.00	1.90
19F1460	VC10GY*	.8- 4.5	2.80	2.60	2.20	1.85	1.75
19F1466	VC31GY*	.8-12.0	3.35	3.05	2.65	2.20	2.10
19F3291	VC23GY*	.8-18.0	4.35	3.95	3.40	2.85	2.70
19F1468	VC43GY*	1.0-30.0	4.15	3.80	3.30	2.80	2.65
19F3175	NVC9GW†	.8-11.0	3.80	3.40	3.05	2.65	2.40
19F3176	NVC10GW†	.8- 5.5	3.40	3.05	2.75	2.40	2.15
19F3177	NVC31GW†	.8-16.0	4.40	3.95	3.55	3.10	2.80
19F3178	NVC32GW†	.8-23.0	5.00	4.50	4.05	3.55	3.25
19F3179	NVC43GW†	1.0-38.0	5.60	5.05	4.55	4.00	3.65
19F1469	VC9GWY†	.8- 8.5	3.00	2.75	2.40	2.00	1.90
19F1470	VC10GWY†	.8- 4.5	2.80	2.60	2.20	1.85	1.75
19F1471	VC31GWY†	.8-12.0	3.35	3.05	2.65	2.20	2.10
19F3292	VC32GWY†	.8-18.0	3.95	3.60	3.10	2.60	2.45
19F1473	VC43GWY†	1.0-30.0	4.15	3.80	3.30	2.80	2.65
19F3180	NMQ111*	.6- 1.8	4.60	4.15	3.75	3.30	2.95
19F3181	NMQ113*	.6- 5.5	5.20	4.70	4.20	3.70	3.35
19F3182	NMQ116*	.6- 9.5	7.00	6.30	5.65	4.95	4.45
19F3183	NMQ119*	.8-16.0	8.80	7.90	7.10	6.20	5.60
19F3184	NMQ121*	.6- 1.8	4.60	4.15	3.75	3.30	2.95
19F3185	NMQ123*	.6- 5.5	5.20	4.70	4.20	3.70	3.35
19F3186	NMQ126*	.6- 9.5	7.00	6.30	5.65	4.95	4.45
19F3187	NMQ129*	.8-16.0	8.80	7.90	7.10	6.20	5.60

STANDARD PANEL MOUNT SERIES

JFD Precision capacitor for all panel mtg. purposes. Available in glass, quartz, and new green glass "N" prefix with long life adjustment. VC99 is designed for hi voltage and power applications. Has closed end to prevent arcing. Rated at 5000 WV, DC. Test 5 KDVC. All units ¼"—Quartz 5/16" dia. * glass. ** green glass. + quartz.

Stock No.	Mfg's Type	Mmf Min.	Max. Mmf	1-24	25-49	50-99	100-299	300-499
19F1959	VC25G*	.5	3.	1.74	1.55	1.35	1.14	1.09
19F1953	VC1GC*	.7	9.	1.66	1.50	1.34	1.12	1.07
19F1954	VC26G*	.7	9.	1.74	1.55	1.35	1.14	1.09
19F1956	VC27G*	.8	18.	1.80	1.60	1.42	1.20	1.12
19F1955	VC4G*	.8	18.	1.70	1.53	1.35	1.13	1.08
19F1957	VC28G*	.8	30.	2.00	1.80	1.55	1.30	1.22
19F3150	NVC25G**	0.5	4.5	2.50	2.25	2.00	1.75	1.60
19F3151	NVC26G**	0.8	13.0	2.60	2.35	2.10	1.85	1.65
19F3152	NVC27G**	1.0	24.0	3.00	2.70	2.40	2.10	1.85
19F3153	NVC28G**	1.0	40.0	3.40	3.05	2.75	2.40	2.15

MAX-C SEALED CAP CAPACITORS

Max-C embedded electrode technique gives 3 times more capacity than standard metalizing in standard glass. Sealed cap. construction. "Y" series reduces Max-C, has added advantage of Hi-Life mechanism and is directly interchangeable with std. MC units. "N" series has 30% greater delta C and Hi-life mechanism.

PANEL MOUNT TYPES

Stock No.	Type	Cap. Mmf	1-24	25-49	50-99	100-299	300-499
19F3120	NMC601	1.0- 16.0	10.20	9.20	8.30	7.30	6.60
19F3121	NMC603	1.0- 36.0	10.50	9.45	8.50	7.45	6.75
19F3122	NMC604	1.0- 52.0	10.80	9.70	8.70	7.60	6.90
19F3123	NMC606	1.0- 75.0	11.40	10.25	9.25	8.10	7.40
19F3124	NMC609	1.0-120.0	12.60	11.35	10.20	8.95	8.10
19F3125	MC601Y	1.0- 14.0	6.20	5.60	5.05	4.45	4.05
19F3126	MC603Y	1.0- 28.0	6.50	5.85	5.25	4.60	4.20
19F3127	MC604Y	1.0- 42.0	6.80	6.10	5.50	4.80	4.35
19F3128	MC606Y	1.0- 60.0	7.40	6.65	6.00	5.25	4.75
19F3129	MC609Y	1.0- 90.0	8.60	7.75	7.00	6.15	5.50

PRINTED CIRCUIT TYPES

19F3135	NMC621†	1.0- 16.0	10.20	9.20	8.30	7.30	6.60
19F3136	NMC623†	1.0- 36.0	10.50	9.45	8.50	7.45	6.75
19F3137	NMC624†	1.0- 52.0	10.80	9.70	8.70	7.60	6.90
19F3138	NMC626†	1.0- 75.0	11.40	10.25	9.25	8.10	7.40
19F3139	NMC629†	1.0-120.0	12.60	11.35	10.20	8.95	8.10
19F3140	MC621Y†	1.0- 14.0	6.20	5.60	5.05	4.45	4.05
19F3141	MC623Y†	1.0- 28.0	6.50	5.85	5.25	4.60	4.20
19F3142	MC624Y†	1.0- 42.0	6.80	6.10	5.50	4.80	4.35
19F3143	MC626Y†	1.0- 60.0	7.40	6.65	6.00	5.25	4.75
19F3144	MC629Y†	1.0- 90.0	8.60	7.75	7.00	6.15	5.50
19F3145	NMC611†	1.0- 16.0	10.20	9.20	8.30	7.30	6.60
19F3146	NMC613†	1.0- 36.0	10.50	9.45	8.50	7.45	6.75
19F3147	NMC614†	1.0- 52.0	10.80	9.70	8.70	7.60	6.90
19F3148	NMC616†	1.0- 75.0	11.40	10.25	9.25	8.10	7.40

TYPE SC SEALCAPS

Ideal for space applications SC-SCY (glass) QS-NQS (quartz) NSC (Green Glass) miniature or new Hi-Life design. Available in panel mounted or printed circuit mounting. Hi-Life adjustment mechanism has exclusive anti-backlash features and a 500 cycle adjustment life, exceeding Mil-C-14409B by 600%.
"Y" series SC dielectric interchangeable with standard with the added feature (Hi-Life mechanism).
NSC has approximately 50% greater delta C than standard, superior Q and long life adjustment mechanism.

Stock No.	Type	Cap. Mmf	1-24	25-49	50-99	100-299	300-499
19F3240	NSC131†	.8- 5.5	4.60	4.15	3.75	3.30	2.95
19F3241	NSC133†	.8-11.0	5.00	4.50	4.05	3.55	3.25
19F3242	NSC134†	.8-16.0	5.60	5.05	4.55	4.00	3.65
19F3243	NSC136†	.8-23.0	6.20	5.60	5.05	4.45	4.05
19F3244	NSC139†	1.0-38.0	6.80	6.10	5.50	4.80	4.35
19F3245	SC131Y†	.8- 4.5	3.80	3.40	3.05	2.65	2.40
19F3246	SC133Y†	.8- 8.5	4.00	3.60	3.25	2.85	2.55
19F3247	SC134Y†	.8-12.0	4.40	3.95	3.55	3.10	2.80
19F3248	SC136Y†	.8-18.0	5.00	4.50	4.05	3.55	3.25
19F3249	SC139Y†	1.0-30.0	5.20	4.70	4.20	3.70	3.35
19F3250	NQS171†	.6- 1.8	7.00	6.30	5.65	4.95	4.45
19F3251	NQS173†	.6- 5.5	7.60	6.80	6.10	5.30	4.80
19F3252	NQS176†	.6- 9.5	9.40	8.45	7.65	6.70	6.10
19F3253	NQS179†	.8-16.0	11.20	10.10	9.10	8.00	7.30

LOW COST DIRECT TRAVERSE TRIMMERS

Direct Traverse Trimmers by JFD are designed for use in high quality commercial or instrument applications and communications equipment. Uses direct traverse mechanism with expanding self-aligning spring-clip piston. Also features standard panel mount drive mechanism. With glass or ceramic dielectric.

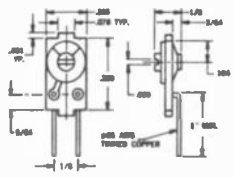
Stk. No.	Type	Cap Mmf Range	1-24	25-99	100-199	200-299
19F1948	VC54G	0.8-13.0	1.65	1.48	1.37	1.24
19F1949	VC55C†	5.0-50.0	1.95	1.75	1.62	1.46
19F1950	*VC56C†	5.0-50.0	1.95	1.75	1.62	1.46
19F1951	VC57G	1.0-12.0	1.65	1.48	1.37	1.24
19F1952	*VC58G	1 0-12.0	1.65	1.48	1.37	1.24

TUNING TOOLS

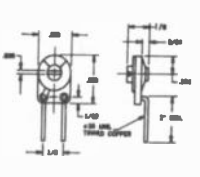
Stk. No.	Type	Application	NET
19F1448	5284	All hex and screw adjustments.	.85
19F1456	7104-1	Screw adjustments. With ferrule.	2.50

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

● NEW MODUTRIM CERAMIC VARIABLE CAPACITORS



MT300



MT400

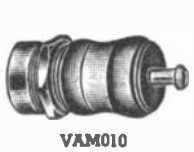
Microminiature. Offer a choice of wide ΔCs in exeremely small and stable units. Unique rotor design utilizes proprietary ceramic material in a monolithic structure. MT400 (with 4 feed-through leads, 2 dummy leads) for cordwood and channel-mount applications. MT300, with 4 "legged" configuration, 2 dummy terminals, is for printed, microminiature, module circuits. Operating range: —55°C to +85°C. Weight: .026 oz.

MT SERIES ELECTRICAL DATA SHEET

Types		Capacitance Range (pf)	Nom. Temp. Coeff." PPM/°C	WVDC
MT300	MT400	4.0 to 15.0	N250	500
MT306	MT406	1.1 to 5.0	NPO	50
MT309	MT409	1.6 to 9.0	NPO	50
MT312	MT412	3.0 to 12.0	N250	50
MT320	MT420	3.5 to 20.00	N250	50
MT330	MT430	5.00 to 30.0	N450	50
MT340	MT440	6.5 to 40.0	N550	50
MT350	MT450	8.5 to 50.0	N650	50
MT360	MT460	12.0 to 60.0	N650	50

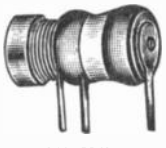
Stk. No.	Type	Stk. No.	Type	1-24	25-99	100-199	200-299	300-499
19F3282	MT300	19F3293	MT400	6.00	5.40	5.00	4.50	4.00
19F3283	MT306	19F3294	MT406	6.00	5.40	5.00	4.50	4.00
19F3284	MT309	19F3295	MT409	6.00	5.40	5.00	4.50	4.00
19F3285	MT312	19F3296	MT412	6.00	5.40	5.00	4.50	4.00
19F3286	MT320	19F3297	MT420	6.00	5.40	5.00	4.50	4.00
19F3287	MT330	19F3298	MT430	6.00	5.40	5.00	4.50	4.00
19F3288	MT340	19F3299	MT440	6.00	5.40	5.00	4.50	4.00
19F3289	MT350	19F3300	MT450	6.00	5.40	5.00	4.50	4.00
19F3290	MT360	19F3301	MT460	6.00	5.40	5.00	4.50	4.00

● NEW VAM AIR VARIABLE MINIATURE CAPACITORS



VAM010

VAM010M



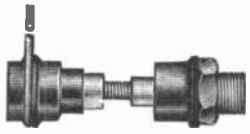
VAM010W

For high frequency applications demanding stability, small size and high Q (more than 2000 at 10 pf, 100 MHz). VAM010 is a panel mount w/turret term. VAM010M, a panel mount w/lug term. VAB010W, printed circuit. Plates are silver and gold plated. Terminals, leads are brass w/gold plating. Has ceramic insulator and positive stop 250WVDC.

Stk. No.	Type	pf—Range	1-24	25-49	50-99	100-199	200-390	400-499
19F3302	VAM010	.8—10.0	3.95	3.60	3.10	2.60	2.60	2.45
19F3303	VAM010M	.8—10.0						
19F3304	VAM010W	.8—10.0						

SUBMINIATURE VC900 SERIES

Larger range of capacity adjustment in a smaller size than previously available with ±50 parts/million Temp. Coefficient. VC960-961 green glass dielectric higher "Q"—expanded range 17/64" Dia. all units.



VC950

Stock No.	Type	Cap. MMf. Max.	Min.	L	1-24	25-49	50-99	100-299	300-499
19F3157	VC950	1-10.0 PF		27/64	4.20	3.80	3.40	3.00	2.70
19F3158	VC951	1-16.0 PF		15/32	6.20	5.60	5.05	4.45	4.05
19F3159	VC960	1-10 PF		17/64	3.80	3.40	3.05	2.65	2.40
19F3160	VC961	1-16 PF		5/16	5.80	5.22	4.70	4.15	3.70

JFD LC TUNERS

Combine precision variable piston capacitor with metallized inductor, to provide compact, tunable LC circuit. Offer more circuit in less space, economy, and faster assembly.

PANEL MOUNT

Stk. No.	Type	Min. MC	Max. MC	Size	1-24	25-99	100-199	200-299
19F1427	LC-303	400	725	.640x¼"	4.65	4.19	3.88	3.49
19F1428	LC-304	275	550	.850x¼"	4.80	4.32	4.00	3.60
19F1429	LC-306	200	500	1.109x¼"	4.95	4.46	4.13	3.71
19F1430	LC-309	125	375	1.696x¼"	5.40	4.86	4.50	4.05
19F1869	LC-333	400	725	41/64x¼"	3.60	3.24	3.00	2.70
19F1870	LC-334	275	550	27/32x¼"	3.75	3.38	3.13	2.81
19F1871	LC-336	200	500	1 7/64x¼"	4.05	3.65	3.38	3.04
19F1872	LC-339	125	375	1 13/16x¼"	4.20	3.78	3.50	3.15

PRINTED CIRCUIT

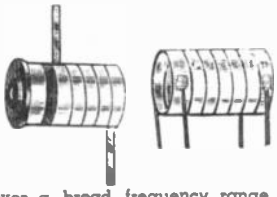
19F1433	LC-316	200	500	1½x¼"	4.80	4.32	4.00	3.60
19F1434	LC-319	125	375	1 45/64x¼"	5.25	4.73	4.38	3.94

PANEL MOUNT MINIATURE TANK CIRCUITS

Precision miniature piston capacitor across an air core coil. Patented telescopic tuning for more space economy and faster assembly. Low temperature coefficient, low loss and inductance due to superior construction. High levels of shock and vibration resistance. Size 9/10x½x¼" with 10-32 x ¼ bushing.

Stk. No.	Type	Cap. mmF min.	Cap. mmF max.	1-24	25-99	100-199	200-299
19F1452	LC372	290	850	4.05	3.64	3.37	3.04
19F1453	LC373	230	650				
19F1455	LC375	165	425				

FIXED METALLIZED INDUCTORS



Precision metallized miniature inductors feature large space economy, fast assembly and reduced weight. The inductor employs a silver film bonded to the glass dielectric. This construction results in a low temperature coefficient of inductance and low distributed capacitance. All leads are made of silver plated copper. High Q over a broad frequency range. All inductors are available in panel or printed circuit types. Temperature: —55°C to +125°C (*)—Q measured at 75.0 MC. (**)—Q measured at 25 MC.

LF-1P AND LF-3P SERIES — PANEL MOUNT

Stk. No.	Type	μh ±5%	Q Min.	1-24	25-99	100-199	200-299
19F1800	LF-1P005	.05	125*	1.95	1.76	1.63	1.46
19F1894	LF-1P100	1.00	135**	1.95	1.76	1.63	1.46
19F1896	LF-1P200	2.00	180**	2.25	2.02	1.87	1.69
19F1474	LF-3P005	.05	170	1.95	1.75	1.62	1.46

LF-2W AND LF-4W SERIES — PRINTED CIRCUIT MOUNT

19F1824	LF-2W010	.10	165	1.89	1.70	1.58	1.42
19F1829	LF-2W020	.20	170				
19F1480	LF-4W005	.05	170	1.89	1.70	1.57	1.42
19F1481	LF-4W016	.16	160				
19F1482	LF-4W025	.25	160				
19F1483	LF-4W050	.50	140				
19F1484	LF-4W080	.80	125				

CORNING Capacitors

MIL-C-11272B CYFM GLASS CAPACITORS

Completely frozen in glass with a true glass to metal seal at the 106A) conditions for over 1200 hrs. Immersed in boiling salt water for 450 hrs. and saturated in steam at 15 lbs. gage press, for 150 hrs. without altering their performance. Highly resistant to nuclear radiation. Exposures to radiation levels of 10^{18} NVT result in no significant changes in properties. VDCW is 300v & 500v from —55° to +125°C. Std. Tol. is ±5% or +0.25uuf whichever is greater.

CYFM10C

Stk. No.	Type	Cap.	1-49	50-99	100-249	250-499	500-999
58F050	0R5C	5					
58F051	1R0C	1.0	3.78	3.47	2.67	2.52	1.89
58F052	1R5C	1.5					
58F053	2R2C	2.2					
58F054	2R7C	2.7					
58F055	3R0C	3.0					
58F056	3R3C	3.3					
58F057	3R6C	3.6	3.63	3.33	2.57	2.42	1.82
58F058	3R9C	3.9					
58F059	4R3C	4.3					
58F060	4R7C	4.7					
58F061	5R1C	5.1					
58F062	5R6J	5.6					
58F063	6R2J	6.2					
58F064	6R8J	6.8					
58F065	7R5J	7.5	2.25	2.06	1.59	1.50	1.13
58F066	8R2J	8.2					
58F067	9R1J	9.1					
58F068	100J	10					
58F069	110J	11					
58F070	120J	12					
58F071	130J	13					
58F072	150J	15					
58F073	160J	16	1.20	1.10	.85	.80	.60
58F074	180J	18					
58F075	200J	20					
58F076	220J	22					

Stk. No.	Type	Cap.	1-49	50-99	100-249	250-499	500-999
58F077	240J	24					
58F078	270J	27					
58F079	300J	30	1.20	1.10	.85	.80	.60
58F080	330J	33					
58F081	360J	36					
58F082	390J	39					
58F083	430J	43					
58F084	470J	47					
58F085	510J	51	1.35	1.24	.95	.90	.68
58F086	560J	56					
58F087	620J	62					
58F088	680J	68					
58F089	750J	75					
58F090	820J	82					
58F091	910J	91					
58F092	101J	100					
58F093	111J	110	2.16	1.98	1.53	1.44	1.08
58F094	121J	120					
58F095	131J	130					
58F096	151J	150					
58F097	161J	160					
58F098	181J	180	2.40	2.20	1.70	1.60	1.20
58F099	201J	200					
58F100	221J	220					
58F101	241J	240	2.82	2.59	2.00	1.88	1.41
58F102	271J	270					
58F103	301J	300					

CYFM15C

Stk. No.	Type	Cap.	1-49	50-99	100-249	250-499	500-999
58F104	221J	220					
58F105	241J	240	1.50	1.38	1.06	1.00	.75
58F106	271J	270					
58F107	301J	300					
58F108	331J	330					
58F109	361J	360	1.74	1.60	1.23	1.16	.87
58F110	391J	390					
58F111	431J	430					
58F112	471J	470	2.10	1.93	1.49	1.40	1.05

Stk. No.	Type	Cap.	1-49	50-99	100-249	250-499	500-999
58F113	511J	510					
58F114	561J	560	2.10	1.93	1.49	1.40	1.05
58F115	621J	620					
58F116	681J	680					
58F117	751J	750					
58F118	821J	820	2.40	2.20	1.70	1.60	1.20
58F119	911J	910					
58F120	102J	1000					
58F121	122J	1200	3.00	2.75	2.13	2.00	1.50

CYFM20C

Stk. No.	Type	Cap.	1-49	50-99	100-249	250-499	500-999
58F122	561J	560					
58F123	621J	620	2.25	2.06	1.59	1.50	1.13
58F124	681J	680					
58F125	751J	750					
58F126	821J	820					
58F127	911J	910	2.40	2.20	1.70	1.60	1.20
58F128	102J	1000					
58F129	112J	1100					
58F130	122J	1200					
58F131	132J	1300	2.70	2.48	1.91	1.80	1.35
58F132	152J	1500					
58F133	162J	1600					

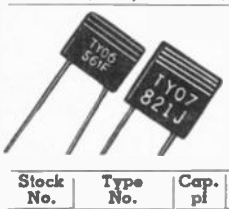
Stk. No.	Type	Cap.	1-49	50-99	100-249	250-499	500-999
58F134	182J	1800	3.00	2.75	2.13	2.00	1.50
58F135	202J	2000	3.00	2.75	2.13	2.00	1.50
58F136	222J	2200					
58F137	242J	2400	3.30	3.03	2.34	2.20	1.65
58F138	272J	2700					
58F139	302J	3000					
58F140	332J	3300	3.75	3.44	2.66	2.50	1.88
58F141	362J	3600					
58F142	432J	4300					
58F143	472J	4700	4.20	3.85	2.98	2.80	2.10
58F144	512J	5100					

CYFM30C

Stk. No.	Type	Cap.	1-49	50-99	100-249	250-499	500-999
58F145	362J	3600					
58F146	392J	3900	3.90	3.58	2.76	2.60	1.95
58F147	432J	4300					
58F148	472J	4700					
58F149	512J	5100	4.50	4.13	3.19	3.00	2.25
58F150	562J	5600	4.50	4.13	3.19	3.00	2.25

Stk. No.	Type	Cap.	1-49	50-99	100-249	250-499	500-999
58F151	622J	6200	4.50	4.13	3.19	3.00	2.25
58F152	682J	6800	4.95	4.54	3.50	3.30	2.48
58F153	752J	7500	4.85	4.54	3.50	3.30	2.48
58F154	822J	8200	5.40	4.95	3.82	3.60	2.70
58F155	912J	9100	5.40	4.95	3.82	3.60	2.70
58F156	103J	10,000	6.00	5.50	4.24	4.00	3.00

TYO CAPACITORS



For printed circuit or point to point wiring. Permits upright or flush mounting on circuit boards. Has 1¼" gold-plated Dumet leads. Proven glass dielectric and foil are fused together to form single monolithic capacitive element to achieve unexcelled electrical and dimensional stability. These capacitors meet the environmental and electrical requirement of MIL-C-11272B. Range: at 25°C IR is greater than 100,000 megohms. Voltage rating is 300 WVDC from —55°C to +125°C.

TYPE TY06

Stock No.	Type No.	Cap. pf	Tolerance ±	1-49	50-99	100-249	250-499	500-999
58F202	TY06-5R1C	5.1	.25 pf	3.45	3.16	2.44	2.30	1.73
58F203	TY06-100C	10	.25 pf	2.52	2.31	1.78	1.68	1.26
58F205	TY06-150J	15	5 %					
58F206	TY06-200J	20	5 %					
58F207	TY06-300J	30	5 %					
58F209	TY06-390J	39	5 %					
58F210	TY06-470J	47	5 %	1.29	1.18	.92	.86	.65
58F211	TY06-510J	51	5 %					
58F212	TY06-560J	56	5 %					
58F214	TY06-680J	68	5 %					
58F215	TY06-820J	82	5 %					
58F216	TY06-910J	91	5 %					

Stock No.	Type No.	Cap. pf	Tolerance ±	1-49	50-99	100-249	250-499	500-999
58F217	TY06-101J	100	5 %	1.29	1.18	.92	.86	.65
58F219	TY06-121J	120	5 %					
58F221	TY06-151J	150	5 %					
58F222	TY06-201J	200	5 %	1.44	1.32	1.02	.96	.72
58F223	TY06-221J	220	5 %					
58F225	TY06-271J	270	5 %					
58F226	TY06-301J	300	5 %					
58F237	TY06-361J	360	5 %					
58F228	TY06-391J	390	5 %					
58F229	TY06-471J	470	5 %	1.62	1.48	1.14	1.08	.81
58F230	TY06-511J	510	5 %					
58F231	TY06-561J	560	5 %					

TYPE TY07

58F232	TY07-621J	620	5 %	1.68	1.54	1.19	1.12	.84
58F233	TY07-681J	680	5 %	1.68	1.54	1.19	1.12	.84

58F234	TY07-751J	750	5 %	1.68	1.54	1.19	1.12	.84
58F236	TY07-102J	1000	5 %	1.80	1.65	1.27	1.20	.90

CORNING

CYK01

Glass-K miniature capacitor of a new dielectric material with metalized ends. Range of 1000 to 100,000 pf. Meets requirements of MIL-C-11015. Volt rating: 50VDC (—55°C to +125°C).

Stk. No.	Type	1-24	25-99	100-499	500-999
58F250	CYK01BT102K	1.84	1.70	1.36	1.02
58F251	CYK01BT103K	2.30	2.13	1.70	1.28
58F252	CYK02BT203K	3.92	3.63	2.90	2.18
58F253	CYK01BV393K	4.05	3.75	3.00	2.25
58F254	CYK01BV513K	4.05	3.75	3.00	2.25
58F255	CYK01BT152K	1.84	1.70	1.36	1.02
58F256	CYK01BT332K	2.03	1.88	1.50	1.13
58F257	CYK01BT472	2.03	1.88	1.50	1.13
58F258	CYK01BT122K	1.84	1.70	1.36	1.02
58F259	CYK01BT182K	1.84	1.70	1.36	1.02
58F260	CYK02BT123K	3.92	3.63	2.90	2.18
58F281	CYK01BT222K	2.03	1.88	1.50	1.13
58F282	CYK01BT272K	2.03	1.88	1.50	1.13
58F263	CYK0BT292K	2.03	1.88	1.50	1.13
58F264	CYK01BT562K	2.03	1.88	1.50	1.13
58F265	CYK01BT682K	2.03	1.88	1.50	1.13
58F266	CYK01BT822K	2.03	1.88	1.50	1.13

CYK02

Dim., CYK01—.250 x .100 and CYK02—.250 x 140. △c w/life as low as 2%.

Stk. No.	Type	1-24	25-99	100-499	500-999
58F267	CYK01BU123K	3.65	3.38	2.70	2.03
58F268	CYK01BU153K	3.65	3.38	2.70	2.03
58F269	CYK01BU183K	3.65	3.38	2.70	2.03
58F270	CYK01BU203K	3.65	3.38	2.70	2.03
58F271	CYK01BV223K	4.05	3.75	3.00	2.25
58F272	CYK01BV273K	4.05	3.75	3.00	2.25
58F273	CYK01BV333K	4.05	3.75	3.00	2.25
58F274	CYK01BV473K	4.05	3.75	3.00	2.25
58F275	CYK02BU223K	3.92	3.63	2.90	2.18
58F276	CYK02BU273K	3.92	3.63	2.90	2.18
58F277	CYK02BU333K	3.92	3.63	2.90	2.18
58F278	CYK02BU393K	3.92	3.63	2.90	2.18
58F279	CYK02BV563K	3.90	3.58	2.60	1.95
58F280	CYK02BV683K	3.90	3.58	2.60	1.95
58F281	CYK02BV823K	3.90	3.58	2.60	1.95
58F282	CYK02BV104K	5.40	4.95	3.60	2.70

NEWARK GROWS WITH YOUR

GROWING NEEDS

NOW TEN STOCKING WAREHOUSES

TO SERVE YOU BETTER

CORNING M.F.D. CAPACITOR KITS

The M.F.D. (Mighty Fast Delivery) Kit provides a broad selection of CYFM capacitors. These are electrically and environmentally interchangeable with the CYFR type. The Kit features 109 pieces in 32 values which conform to MIL-C-11272-B. Kit contains gray enameled steel construction with sturdy plastic drawers and sub-dividers. Included are 4 different case sizes: Type CYFM-10 with 2 each of 75 and 240pf; 3 each of 33, 51, 68, 120 and 200 pf; 4 each of 10, 47, 100, 140 and 200pf. Type CYFM-15 with 2 each of 220, 270 and 360 pf; 3 each of 820; 4 each of 330, 470, 510, 560, 680, 1000 and 1200pf. Type CYFM-20 with 2 each of 820; 3 each of 680; 4 each of 1000, 1500, 2000, 2200, 3300 and 5100pf. Type CYFM-30 with 4 pieces each of 10,000pf. Greatly reduces design to breadboard time.

58F299 NET **89.50**

MALLORY

SERIES MTP

Available in 43 sizes with a capacitance greater than other conventional wet or solid foil capacitor. Oper. temp. —55 to 85°C Tol., ±20%. Size: A, .115D x .400L; B, .145D x .590L; C, .225D x .775L; D, .115D x .312L.

Stock No.	Catalog Number	Mfd.	WDVC	Size	1-9	10-24	25-49	50-99	100-499	500-999
13F314	MTP187M 006P1B	180	6	B	3.11	2.74	2.39	2.06	1.64	1.51
13F315	MTP457M 006P1C	450	6	C	3.62	3.18	2.78	2.39	1.91	1.75
13F316	MTP127M 010P1B	120	10	B	3.11	2.74	2.39	2.06	1.64	1.51
13F317	MTP307M 010P1C	300	10	C	3.62	3.18	2.78	2.39	1.91	1.75
13F318	MTP806M 015P1B	80	15	B	3.11	2.74	2.39	2.06	1.64	1.51
13F319	MTP207M 015P1C	200	15	C	3.62	3.18	2.78	2.39	1.91	1.75
13F320	MTP606M 020P1B	60	20	B	3.11	2.74	2.39	2.06	1.64	1.51
13F321	MTP605M 030P1D	6	30	D	2.57	2.26	1.97	1.69	1.35	1.23
13F322	MTP106M 030P1A	10	30	A	2.59	2.28	1.99	1.71	1.37	1.25
13F323	MTP456M 030P1B	45	30	B	3.11	2.74	2.39	2.06	1.64	1.51
13F324	MTP127M 030P1C	120	30	C	3.62	3.18	2.78	2.39	1.91	1.75
13F325	MTP405M 050P1D	4	50	D	2.57	2.26	1.97	1.69	1.35	1.23
13F326	MTP685M 050P1A	6.8	50	A	2.59	2.28	1.99	1.71	1.37	1.25
13F327	MTP306M 050P1B	30	50	B	3.11	2.74	2.39	2.06	1.64	1.51
13F328	MTP786M 050P1C	78	50	C	3.62	3.18	2.78	2.39	1.91	1.75
60F2136	MTP476M 006P1A	47	6	A	2.59	2.28	1.99	1.71	1.37	1.25
60F2137	MTP477M 006P1C	470	6	C	3.62	3.18	2.78	2.39	1.91	1.75
60F2138	MTP227M 015P1C	220	15	C	3.62	3.18	2.78	2.39	1.91	1.75
60F2139	MTP106M 035P1A	10	35	A	2.59	2.28	1.99	1.71	1.37	1.25
60F2140	MTP107M 035P1C	100	35	C	3.62	3.18	2.78	2.39	1.91	1.75
60F2141	MTP336M 050P1B	33	50	B	3.11	2.74	2.39	2.06	1.64	1.51
60F2142	MTP226M 060P1B	22	60	B	3.11	2.74	2.39	2.06	1.64	1.51
60F2143	MTP336M 060P1C	33	60	C	3.62	3.18	2.78	2.39	1.91	1.75
60F2144	MTP476M 060P1C	47	60	C	3.62	3.18	2.78	2.39	1.91	1.75
60F2260	MTC156M 006P1D	15	6	D	2.57	2.26	1.97	1.69	1.35	1.23
60F2261	MTP157M 006P1B	150	6	B	3.11	2.74	2.39	2.06	1.64	1.51
60F2262	MTP106M 010P1D	10	10	D	2.57	2.26	1.97	1.69	1.35	1.23
60F2263	MTP336M 010P1A	33	10	A	2.59	2.28	1.99	1.71	1.37	1.25
60F2264	MTP107M 010P1B	100	10	B	3.11	2.74	2.39	2.06	1.64	1.51
60F2265	MTP337M 010P1C	330	10	C	3.92	3.18	2.78	2.39	1.91	1.75
60F2266	MTP226M 015P1A	22	15	A	2.59	2.28	1.99	1.71	1.37	1.25
60F2267	MTP686M 015P1B	68	15	B	3.11	2.74	2.39	2.06	1.64	1.51
60F2268	MTP685M 020P1D	6.8	20	D	2.57	2.26	1.97	1.69	1.35	1.23
60F2269	MTP156M 020P1A	15	20	A	2.59	2.28	1.99	1.71	1.37	1.25
60F2270	MTP476M 020P1B	47	20	B	3.11	2.74	2.39	2.06	2.64	1.51
60F2271	MTP157M 020P1C	150	20	C	3.62	3.18	2.78	2.39	1.91	1.75
60F2272	MTP475M 035P1D	4.7	35	D	2.57	2.26	1.97	1.69	1.35	1.23
60F2273	MTP686M 050P1C	68	50	C	3.62	3.18	2.78	2.39	1.91	1.75
60F2274	MTP335M 060P1D	3.3	60	A	2.57	2.26	1.97	1.69	1.35	1.23
60F2275	MTP475M 060P1A	4.7	60	A	2.59	2.28	1.99	1.71	1.37	1.25
60F2276	MTP685M 060P1A	6.8	60	A	2.59	2.28	1.99	1.71	1.37	1.25
60F2277	MTP106M 060P1B	10	60	B	3.11	2.74	2.39	2.06	1.64	1.51
60F2278	MTP156M 060P1B	15	60	A	3.11	2.74	2.39	2.06	1.64	1.51

MALLORY Tantalum Capacitors

TYPE CSR SOLID ELECTROLYTE TANTALUM CAPACITORS

New solid electrolyte tantalum capacitors meet or exceed established reliability requirements of MIL-C-39003A for 2% (L) and 1% (M) failure rate levels. Rigid MIL specifications. Have hermetically sealed metal cases with insulating sleeves. WVDC is at +85°C. ±10% Tolerance. Av. shpg. wt. 2 oz.

Case Code	Dia. x Len.
A	.135 x .286"
B	.185 x .474"
C	.289 x .686"
D	.351 x .786"

NOTE: CS13B SPEC. REVISION
Specification MIL-26655B, dated 29 April 1964, is hereby canceled. For replacement purposes, use the applicable requirements in Military Specifications MIL-C-39003, Capacitors, Fixed, Electrolytic, Tantalum, Solid Electrolyte, Established Reliability, General Specifications for, covering style CSR13.

2% FAILURE RATE

Stk. No.	Type CSR13-	Mfd.	WV DC	Case Size	1-24	25-49	50-99	100-499	500-999
17F1505	B565KL	5.6	6	A	1.46	1.17	.80	.65	.56
17F1506	B685KL	6.8	6	A	1.46	1.17	.80	.65	.56
17F1507	B476KL	47	6	B	1.71	1.37	.83	.69	.57
17F1508	B566KL	56	6	B	1.71	1.37	.83	.69	.57
17F1509	B157KL	150	6	C	2.82	2.25	1.55	1.25	1.06
17F1510	B187KL	180	6	C	2.82	2.25	1.55	1.25	1.06
17F1511	B277KL	270	6	D	5.21	4.15	3.08	2.49	2.09
17F1512	B337KL	330	6	D	5.21	4.15	3.08	2.49	2.09
17F1513	C395KL	3.9	10	A	1.46	1.17	.80	.65	.56
17F1514	C475KL	4.7	10	A	1.46	1.17	.80	.65	.56
17F1515	C276KL	27	10	B	1.71	1.37	.83	.69	.57
17F1516	C336KL	33	10	B	1.71	1.37	.83	.69	.57
17F1517	C396KL	39	10	B	1.71	1.37	.83	.69	.57
17F1518	C826KL	82	10	B	2.82	2.25	1.55	1.25	1.06
17F1519	C107KL	100	10	C	2.82	2.25	1.55	1.25	1.06
17F1520	C127KL	120	10	C	2.82	2.25	1.55	1.25	1.06
17F1521	C187KL	180	10	D	5.21	4.15	3.08	2.49	2.09
17F1522	C227KL	220	10	D	5.21	4.15	3.08	2.49	2.09
17F1523	D275KL	2.7	15	A	1.46	1.17	.80	.65	.56
17F1524	D335KL	3.3	15	A	1.46	1.17	.80	.65	.56
17F1525	D186KL	18	15	B	1.71	1.37	.83	.69	.57
17F1526	D226KL	22	15	B	1.71	1.37	.83	.69	.57
17F1527	D566KL	56	15	C	2.82	2.25	1.55	1.25	1.06
17F1528	D686KL	68	15	C	2.82	2.25	1.55	1.25	1.06
17F1529	D127KL	120	15	D	5.21	4.15	3.08	2.49	2.09
17F1530	D157KL	150	15	D	5.21	4.15	3.08	2.49	2.09
17F1531	E125KL	1.2	20	A	1.46	1.17	.80	.65	.56
17F1532	E155KL	1.5	20	A	1.46	1.17	.80	.65	.56
17F1533	E185KL	1.8	20	A	1.46	1.17	.80	.65	.56
17F1534	E225KL	2.2	20	A	1.46	1.17	.80	.65	.56
17F1535	E825KL	8.2	20	B	1.71	1.37	.83	.69	.57
17F1536	E106KL	10	20	B	1.71	1.37	.83	.69	.57
17F1537	E126KL	12	20	B	1.71	1.37	.83	.69	.57
17F1538	E156KL	15	20	B	1.71	1.37	.83	.69	.57
17F1539	E276KL	27	20	C	2.82	2.25	1.55	1.25	1.06
17F1540	E336KL	33	20	C	2.82	2.25	1.55	1.25	1.06
17F1541	E396KL	39	20	C	2.82	2.25	1.55	1.25	1.06
17F1542	E476KL	47	20	C	2.82	2.25	1.55	1.25	1.06
17F1543	E566KL	56	20	D	5.21	4.15	3.08	2.49	2.09
17F1544	E686KL	68	20	D	5.21	4.15	3.08	2.49	2.09
17F1545	E826KL	82	20	D	5.21	4.15	3.08	2.49	2.09
17F1546	E107KL	100	20	D	5.21	4.15	3.08	2.49	2.09
17F1547	F565KL	5.6	35	B	1.71	1.37	.83	.69	.57
17F1548	F685KL	6.8	35	B	1.71	1.37	.83	.69	.57
17F1549	F226KL	22	35	C	2.82	2.25	1.55	1.25	1.06
17F1550	F276KL	27	35	D	5.21	4.15	3.08	2.49	2.09
17F1551	F336KL	33	35	D	5.21	4.15	3.08	2.49	2.09
17F1552	F396KL	39	35	D	5.21	4.15	3.08	2.49	2.09
17F1553	F476KL	47	35	D	5.21	4.15	3.08	2.49	2.09
17F1554	G472KL	.0047	50	A	2.71	2.17	1.83	1.58	1.42
17F1555	G562KL	.0056	50	A	2.71	2.17	1.83	1.58	1.42
17F1556	G682KL	.0068	50	A	2.71	2.17	1.83	1.58	1.42
17F1557	G822KL	.0082	50	A	2.71	2.17	1.83	1.58	1.42
17F1558	G103KL	.01	50	A	2.71	2.17	1.83	1.58	1.42
17F1559	G123KL	.012	50	A	2.71	2.17	1.83	1.58	1.42
17F1560	G153KL	.015	50	A	2.71	2.17	1.83	1.58	1.42
17F1561	G183KL	.018	50	A	2.71	2.17	1.83	1.58	1.42
17F1562	G223KL	.022	50	A	2.71	2.17	1.83	1.58	1.42
17F1563	G273KL	.027	50	A	2.71	2.17	1.83	1.58	1.42
17F1564	G333KL	.033	50	A	2.71	2.17	1.83	1.58	1.42
17F1565	G393KL	.039	50	A	2.71	2.17	1.83	1.58	1.42
17F1566	G473KL	.047	50	A	2.71	2.17	1.83	1.58	1.42
17F1567	G563KL	.056	50	A	2.71	2.17	1.83	1.58	1.42
17F1568	G683KL	.068	50	A	2.71	2.17	1.83	1.58	1.42
17F1569	G823KL	.082	50	A	2.71	2.17	1.83	1.58	1.42
17F1570	G104KL	.1	50	A	2.71	2.17	1.83	1.58	1.42
17F1571	G124KL	.12	50	A	2.71	2.17	1.83	1.58	1.42
17F1572	G154KL	.15	50	A	2.71	2.17	1.83	1.58	1.42
17F1573	G184KL	.18	50	A	2.71	2.17	1.83	1.58	1.42
17F1574	G224KL	.22	50	A	2.71	2.17	1.83	1.58	1.42
17F1575	G274KL	.27	50	A	2.71	2.17	1.83	1.58	1.42
15F1576	G334KL	.33	50	A	2.71	2.17	1.83	1.58	1.42
17F1577	G394KL	.39	50	A	2.71	2.17	1.83	1.58	1.42
17F1578	G474KL	.47	50	A	2.71	2.17	1.83	1.58	1.42
15F1779	G564KL	.56	50	A	2.71	2.17	1.83	1.58	1.42
17F1580	G684KL	.68	50	A	2.71	2.17	1.83	1.58	1.42
17F1581	G824KL	.82	50	A	2.71	2.17	1.83	1.58	1.42
17F1582	G105KL	1.0	50	A	2.71	2.17	1.83	1.58	1.42
17F1583	G125KL	1.2	50	A	2.86	2.29	1.94	1.65	1.52
17F1584	G155KL	1.5	50	A	2.86	2.29	1.94	1.65	1.52
17F1585	G185KL	1.8	50	A	2.86	2.29	1.94	1.65	1.52
17F1586	G225KL	2.2	50	A	2.86	2.29	1.94	1.65	1.52
17F1587	G275KL	2.7	50	A	2.86	2.29	1.94	1.65	1.52
17F1588	G335KL	3.3	50	A	2.86	2.29	1.94	1.65	1.52
17F1589	G395KL	3.9	50	B	2.86	2.29	1.94	1.65	1.52
17F1590	G475KL	4.7	50	B	2.86	2.29	1.94	1.65	1.52
17F1591	G565KL	5.6	50	B	4.70	3.75	3.19	2.70	2.47
17F1592	G685KL	6.8	50	B	4.70	3.75	3.19	2.70	2.47
17F1593	G825KL	8.2	50	B	4.70	3.75	3.19	2.70	2.47
17F1594	G106KL	10	50	B	4.70	3.75	3.19	2.70	2.47
17F1595	G126KL	12	50	B	4.70	3.75	3.19	2.70	2.47
17F1596	G156KL	15	50	B	4.70	3.75	3.19	2.70	2.47
17F1597	G186KL	18	50	C	4.70	3.75	3.19	2.70	2.47
17F1598	G226KL	22	50	C	8.76	7.00	5.92	5.03	4.61

1% FAILURE RATE

Stock No.	Type CSR13-	Mfd.	WV DC	Case Size	1-24	25-49	50-99	100-499	500-999
17F1678	B685KM	6.8	6	A	1.99	1.60	1.10	.90	.77
17F1680	B476KM	47	6	B	2.34	1.88	1.13	.93	.78
17F1681	B157KM	150	6	C	3.83	3.08	2.11	1.72	1.45
17F1682	B337KM	330	6	D	7.10	5.66	4.20	3.40	2.85
17F1683	C475KM	4.7	10	A	1.99	1.60	1.10	.90	.77
17F1684	C336KM	33	10	B	2.34	1.88	1.13	.93	.78
17F1685	C107KM	100	10	C	3.83	3.08	2.11	1.72	1.45
17F1686	C227KM	220	10	D	7.10	5.66	4.20	3.40	2.85
17F1687	D335KM	3.3	15	A	1.99	1.60	1.10	.90	.77
17F1688	D686KM	68	15	C	3.83	3.08	2.11	1.72	1.45
17F1689	D157KM	150	15	D	7.10	5.66	4.20	3.40	2.85
17F1690	E155KM	1.5	20	A	1.99	1.60	1.10	.90	.77
17F1691	E225KM	2.2	20	A	2.34	1.88	1.13	.93	.78
17F1692	E106KM	10	20	B	2.34	1.88	1.13	.93	.78
17F1693	E156KM	15	20	B	2.34	1.88	1.13	.93	.78
17F1694	E336KM	33	20	C	3.83	3.08	2.11	1.72	1.45
17F1695	E476KM	47	20	C	3.83	3.08	2.11	1.72	1.45
17F1696	E686KM	68	20	D	7.10	5.66	4.20	3.40	2.85
17F1697	E107KM	100	20	D	7.10	5.66	4.20	3.40	2.85
17F1698	F685KM	6.8	35	B	3.83	1.88	1.13	.93	.78
17F1699	F226KM	22	35	C	2.34	3.08	2.11	1.72	1.45
17F1655	F336KM	33	35	D	7.10	5.66	4.20	3.40	2.85
17F1656	F476KM	47	35	D	7.10	5.66	4.20	3.40	2.85
17F1657	G103KM	.01	50	A	3.69	2.95	2.49	2.15	1.93
17F1658	G153KM	.015	50	A	3.69	2.95	2.49	2.15	1.93
17F1659	G223KM	.022	50	A	3.69	2.95	2.49	2.15	1.93
17F1660	G333KM	.033	50	A	3.69	2.95	2.49	2.15	1.93
17F1661	G473KM	.047	50	A	3.69	2.95	2.49	2.15	1.93
17F1662	G683KM	.068	50	A	3.69	2.95	2.49	2.15	1.93
17F1663	G104KM	.1	50	A	3.69	2.95	2.49	2.15	1.93
17F1664	G224KM	.22	50	A	3.69	2.95	2.49	2.15	1.93
17F1666	G334KM	.33	50	A	3.69	2.95	2.49	2.15	1.93
17F1667	G474KM	.47	50	A	3.69	2.95	2.49	2.15	1.93
17F1668	G684KM	.68	50	A	3.69	2.95	2.49	2.15	1.93
17F1669	G105KM	1.0	50	A	3.69	2.95	2.49	2.15	1.93
17F1670	G155KM	1.5	50	B	3.91	3.11	2.63	2.25	2.05
17F1671	G225KM	2.2	50	B	3.91	3.11	2.63	2.25	2.05
17F1672	G335KM	3.3	50	B	3.91	3.11	2.63	2.25	2.05
17F1673	G475KM	4.7	50	B	3.91	3.11	2.63	2.25	2.05
17F1674	G685KM	6.8	50	C	6.40	5.10	4.34	3.69	3.35
17F1675	G106KM	10	50	C	6.40	5.10	4.34	3.69	3.35
17F1676	G156KM	15	50	C	6.40	5.10	4.34	3.69	3.35
17F1677	G226KM	22	50	D	11.95	9.54	8.07	6.86	6.28

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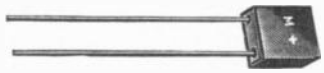
Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

Tantalum Capacitors

MALLORY

TANTALUM CAPACITORS TYPE TAM



Plastic encapsulated, solid electrolyte, sintered tantalum pellet anode. Temperature range: —80° to +85°C or 125° if derated. 33⅓%. Ht. .3125", Dia. .175". Aver. Shpg. Wt. 2 oz.

Stock No.	Type	Mfd.	WV	1-24	25-49	50-99	100-499	500-999
14F126	TAM685M025P5C	6.8	25	1.20	.96	.82	.69	.63
14F127	TAM106M025P5C	10	25					
14F128	TAM156M025P5C	15	25					
14F129	TAM226M015P5C	22	15	1.20	.96	.82	.69	.63
14F145	TAM336M010P5C	33	10					
14F146	TAM396M010P5C	39	10					
14F147	TAM566M006P5C	56	6					

● NEW TAC TYPE

Mallory TAC solid electrolytic tantlum capacitors are miniature types designed for high density applications. Precision molded in cases .105" x .290" long with #24 (.020") wire leads 1½" ±¼" long.

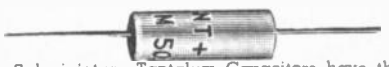
Stock No.	Type Tac—	Mfd.	WV DC	1-99	100-249	500-up
17F1600	823K050P02	.082	50	1.06	.80	.53
17F1601	104K050P02	.1	50			
17F1602	124K050P02	.12	50			
17F1603	154K050P02	.15	50			
17F1604	184K050P02	.18	50			
17F1605	224K050P02	.22	50			
17F1606	274K050P02	.27	50			
17F1607	334K050P02	.33	50			
17F1608	394K050P02	.39	50			
17F1609	474K050P02	.47	50			
17F1610	564K035P02	.56	35	.66	.50	.33
17F1611	684K035P02	.68	35			
17F1612	824K035P02	.82	35			
17F1613	105K020P02	1.0	20			
17F1614	125K020P02	1.2	20			
17F1615	155K020P02	1.5	20			
17F1616	185K020P02	1.8	20			
17F1617	225K020P02	2.2	20			
17F1618	275K015P02	2.7	15			
17F1619	335K010P02	3.3	10			
17F1620	395K010P02	3.9	10			
17F1621	475K010P02	4.7	10			
17F1622	565K010P02	5.6	10			
17F1623	685K010P02	6.8	10			
17F1624	825K006P02	8.2	6			
17F1625	106K006P02	10	6			
17F1626	126K006P02	12	6			
17F1627	156K003P02	15	3			
17F1628	186K003P02	18	3			

● NEW TIM TYPE

Mallory TIM capacitors are solid electrolytic tantalum types in rectangular cases. .228" w.x. 345" h.x. .105" th. Tinned #24 AWG wire leads. Total lead length is 1½" ±¼".

Stock No.	Type Tim—	Mfd.	WV DC	1-99	100-249	500-up
17F1629	823K050POW	.082	50	1.18	.89	.59
17F1630	124K050POW	.12	50			
17F1631	154K050POW	.15	50			
17F1632	184K050POW	.18	50			
17F1633	224K050POW	.22	50			
17F1634	274K050POW	.27	50			
17F1635	334K050POW	.33	50			
17F1636	394K050POW	.39	50			
17F1637	474K050POW	.47	50			
17F1638	564K050POW	.56	50			
17F1639	684K050POW	.68	50			
17F1640	824K035POW	.82	35	.72	.55	.36
17F1641	105K035POW	1.0	35			
17F1642	125K035POW	1.2	35			
17F1643	155K020POW	1.5	20			
17F1644	185K020POW	1.8	20			
17F1645	225K020POW	2.2	20			
17F1646	275K015POW	2.7	15			
17F1647	335K015POW	3.3	15			
17F1648	395K015POW	3.9	15			
17F1649	475K010POW	4.7	10			
17F1650	565K010POW	5.6	10			
17F1651	685K010POW	6.8	10			
17F1652	825K006POW	8.2	6			
17F1653	106K006POW	10	6			
17F1654	126K003POW	12	3			

WET-SLUG TANTALUM CAPACITORS



Type TAP. Tantalum Capacitors possess extremely long operational life. Operating temp. —55° to +85°C. DC leakage is less than 1 microamp after 10 min. of rated voltage. Employ sintered anode wet-slug construction and are furnished in metal cases with precision formed epoxy end seals. Tol., —15% to +75% Axial leads 1½" tinned for easy soldering.

Stk. No.	TAP Type	Cap. Mfd.	WVDC +85°C	Case Size	Price Code
14F442	TAP306U006POA	30	6	.228 x .500	A
14F091	TAP147U006POB	140	6	.228 x .660	B
14F441	TAP206U010POA	20	10	.228 x .500	A
14F090	TAP107U010POB	100	10	.228 x .660	B
14F089	TAP706U015POB	70	15	.228 x .660	B
14F438	TAP106U025POA	10	25	.228 x .500	A
14F437	TAP905U030POA	8	30	.228 x .500	A
14F088	TAP406U030POB	40	30	.228 x .660	B
14F871	TAP705U035POA	7	35	.228 x .500	A
14F436	TAP605U040POA	6	40	.228 x .500	A
14F435	TAP505U050POA	5	50	.228 x .500	B
14F086	TAP256U050POB	25	50	.228 x .660	A
14F434	TAP405U060POA	4	60	.228 x .500	B
14F432	TAP205U090POA	2	90	.228 x .500	A
14F083	TAP116U090POB	11	90	.228 x .660	B

TAP Prices

Case Size	1-24	25-49	50-99	100-499	500-999
A	1.46	1.17	0.99	0.84	0.766
B	2.46	1.97	1.66	1.415	1.29

Type TNT. Subminiature Tantalum Capacitors have the largest capacity per unit volume available. Operating temp. —55° to +85°C. DC leakage is less than 1 microamp after 10 min. of rated voltage. Tol., —15% to +75%. Leads withstand 5 sec., 3 lb. axial pull. Axial leads 1½" tinned for easy soldering.

Stk. No.	TNT Type	Cap. Mfd.	WVDC +85°C	Case Size	Price Code
14F494	TNT406U003POA	40	3	.152 x .325	A
14F449	TNT806U003POB	80	3	.152 x .475	B
14F495	TNT256U006POA	25	6	.152 x .325	A
14F448	TNT506U006POB	50	6	.152 x .475	B
14F869	TNT356U012POB	35	12	.152 x .475	B
14F496	TNT126U015POA	12	15	.152 x .325	A
14F447	TNT256015POB	25	15	.152 x .475	B
14F446	TNT156P030POB	15	30	.152 x .475	B
14F497	TNT605U035POA	6	35	.152 x .325	A
14F870	TNT126U035POB	12	35	.152 x .475	B
14F499	TNT205U050POA	2	50	.152 x .325	A
14F498	TNT405050POA	4	50	.152 x .325	A
14F445	TNT805U050POB	8	50	.152 x .475	B

TNT Prices

Case Size	1-24	25-49	50-99	100-499	500-499
A	1.24	0.99	0.84	0.714	0.651
B	1.46	1.17	0.99	0.84	0.766

TYPE MTPH HIGH RELIABILITY

Sintered anodes housed in special silver cases with elastomer end seal: completely insulated. Operating temp.: —50°C to +85°C. Tolerance ±20%. DCL is extrem. low. Manufactured to rigid standards, of failurse in 3.7 million unit—hours. Case Size: A, .115D x .400L# B, 145D x .590L; C, .225D x .775L.

Stock No.	Catalog No.	Mfd.	WVDC	Size	1-9	10-24	25-49	50-99	100-499	500-999
60F2279	MTPH12	180	6	B	8.04	6.70	5.36	4.02	3.49	2.94
60F2280	MTPH13	150	6	C	8.34	6.95	5.56	4.17	3.62	3.06
60F2281	MTPH10	120	10	B	8.04	6.70	5.36	4.02	3.49	2.94
60F2282	MTPH11	300	10	C	8.34	6.95	5.56	4.17	3.62	3.06
60F2283	MTPH8	80	15	B	8.04	6.70	5.36	4.02	3.49	2.94
60F2284	MTPH9	200	15	C	8.34	6.95	5.56	4.17	3.62	3.06
60F2285	MTPH7	60	20	B	8.04	6.70	5.36	4.02	3.49	2.94
60F2286	MTPH4	10	30	A	7.68	6.40	5.12	3.84	3.33	2.81
60F2287	MTPH5	45	30	B	8.04	6.70	5.36	4.02	3.49	2.94
60F2288	MTPH6	120	30	C	8.34	6.95	5.56	4.17	3.62	3.06
60F2289	MTPH1	6 8	50	A	7.68	6.40	5.12	3.84	3.33	2.81
60F2290	MTPH2	30	50	B	8.04	6.70	5.36	4.02	3.49	2.94
60F2291	MTPH3	78	50	C	8.34	6.95	5.56	4.17	3.62	3.06

MALLORY Electrolytic Capacitors

FP AND WP CAPACITORS

Vertical mounting dry electrolytics for all filter and audio by-pass circuits, and TV applications. All types include deep etched anodes and etched cathodes. All hermetically sealed in aluminum cases. Can is negative; separate positive terminals provided for each section. With mounting washers. Shipping weight, 6 oz.

SIZE CHART

Key Size	Key Size	Key Size	Key Size
A ¾ x 2	E 1 x 2	I 1⅜ x 2½	N 1⅜ x 4
B 1 x 2½	F 1 x 1¾	J 1⅜ x 3½	
C 1 x 3	G 1⅜ x 3	K 1⅜ x 1¾	
D 1 x 1½	H 1⅜ x 2		

SINGLE SECTION

Stock No.	Type	Mfd.	WV	Size	1-9	10-24	25-49	99 50-
14F216	WP039A	1000	15	D	1.56	1.20	0.90	0.70
14F217	WP041A	2000	15	H	2.36	1.82	1.36	1.06
14F243	WP042A	3000	15	H	2.92	2.25	1.69	1.31
60F2105	FP04206	10000	15	J	6.66	5.13	3.85	2.99
14F213	WP055A	100	25	D	1.14	.88	.66	.51
14F214	WP057A	500	25	D	1.35	1.04	0.78	0.61
14F215	WP059	1000	25	H	1.89	1.46	1.10	.85
60F2106	FP060.2	2000	25	K	2.56	1.96	1.48	1.15
60F2107	FP060.4	4000	25	G	3.93	3.02	2.27	1.76
60F2108	FP060.6	5000	25	J	4.63	3.56	2.67	2.08
14F212	WP065	500	50	H	1.74	1.34	1.00	0.78
14F245	WP068	1500	50	G	2.70	2.08	1.56	1.21
60F2110	FP070	2000	50	J	3.22	2.48	1.86	1.44
14F211	FP116A	100	150	D	1.34	1.03	0.77	0.60
14F247	FP117A	150	150	E	1.49	1.14	0.86	0.67
14F971	FP118A	200	150	H	1.88	1.45	1.09	0.85
14F248	FP119A	300	150	H	2.17	1.67	1.25	0.97
14F972	FP140.6A	150	350	I	2.64	2.03	1.52	1.18
14F251	FP137A	50	350	E	1.49	1.15	0.86	0.67
14F252	FP138A	80	350	H	2.00	1.54	1.16	0.90
14F209	FP140A	125	350	I	2.41	1.86	1.39	1.08
14F203	FP142	10	450	A	1.05	0.81	0.61	0.47
14F205	FP144	20	450	F	1.31	1.01	0.76	0.59
14F207	FP146	40	450	B	1.58	1.22	0.91	0.71
14F208	FP149	80	450	I	2.37	1.82	1.37	1.06
14F973	FP150	100	450	I	2.68	2.06	1.54	1.20
14F291	FP187	90	500	I	2.95	2.29	1.72	1.34

DUAL SECTION

Stock No.	Type	Mfd.	Wkg. Volts	Size	1-9	10-24	25-49	50-99
14F229	WP200	1000-1000	15-15	H	2.48	1.91	1.43	1.11
14F241	FP208A	20-20	150-150	D	1.32	1.01	.76	.59
14F977	FP216.2A	80-40	150-150	F	1.55	1.19	.90	.70
14F292	FP216.4A	200-200	150-150	I	2.66	2.05	1.54	1.20
14F227	FP221A	40-40	250-250	F	1.64	1.26	.95	.74
14F256	FP227A	20-20	350-350	E	1.55	1.19	.90	.70
14F219	FP231A	10-10	450-450	F	1.47	1.13	.85	.66
14F220	FP234A	20-20	450-450	B	1.74	1.34	1.00	.78
14F222	FP238A	40-40	450-450	I	2.55	1.96	1.47	1.14
14F223	FP240	50-50	450-450	G	2.99	2.31	1.73	1.35
14F980	FP258	15-15	475-475	B	1.68	1.29	.97	.75
14F262	FP288A	40-40	500-500	I	2.97	2.28	1.71	1.33

TRIPLE SECTION

14F267	FP311.2A	20-20-20	150-150-150	D	1.51	1.17	.88	.68
14F263	FP311.5A	40-40-40	150-150-150	F	1.69	1.30	.98	.76
14F986	FP311.7	80-40-20	150-150-150	H	2.03	1.56	1.17	.91
14F270	FP345.8	20-20-20	450-450-25	B	1.91	1.47	1.10	.86
14F271	FP346A	40-40-20	450-450-25	G	2.75	2.12	1.59	1.24
14F275	FP375.8	10-10-10	450-450-450	B	1.75	1.35	1.01	.79
14F278	FP376.5A	20-20-20	450-450-450	H	2.44	1.88	1.41	1.10
14F279	FP376.8A	40-40-10	450-450-450	I	2.86	2.20	1.65	1.28
14F234	FP377.1A	40-40-40	450-450-450	G	3.28	2.53	1.89	1.47
14F235	FP378	80-40-20	450-450-450	N	3.58	2.75	2.07	1.61
14F231	FP394A	10-10-10	475-475-475	B	1.83	1.41	1.06	.82
14F280	FP398A	10-40-40	500-450-450	I	2.91	2.24	1.68	1.31

QUADRUPLE SECTION

14F996	FP428.4A	40-40-30-30	450-450-350-350	J	3.42	2.63	1.98	1.54
14F239	FP434	10-10-10-10	450-450-450-450	H	2.27	1.75	1.31	1.02
14F289	FP434.5	20-10-10-10	450-450-450-450	H	2.41	1.85	1.39	1.08
14F240	FP444A	20-20-20-20	450-450-450-450	I	2.86	2.21	1.65	1.29
14F283	FP447A	40-40-20-20	450-450-450-450	J	3.43	2.64	1.98	1.54
14F990	FP447.5A	40-40-30-30	450-450-450-450	J	3.72	2.86	2.14	1.67

HC CAPACITORS

Plastic case electrolytics for high-capacity, low-voltage applications such as dry disc rectifier filters, movie equipment, etc. All are polarized. Two screw terminals. 10 oz.

Stk. No.	Type	Mfd.	WV	Size	1-9	10-24	25-49	50-99
14F100	HC1020A	2000	10	1 7/16x2 3/4	3.36	2.88	1.68	1.30
14F101	HC1040A	4000	10	1 7/16x3 3/8	4.60	3.95	2.30	1.78
14F102	HC1060A	6000	10	1 1/2x4 1/8	5.20	4.46	2.60	2.00
14F197	HC10100	10000	10	2 1/16x4 3/8	7.82	6.70	3.90	3.02
14F103	HC1520A	2000	15	1 7/16x2 3/4	3.47	2.97	1.74	1.34
14F104	HC1540A	4000	15	1 7/16x4 3/8	5.37	4.61	2.69	2.07
14F105	HC1560A	6000	15	1 13/16x3 3/8	5.62	4.82	2.81	2.17
17F1700	HC2050-50	25,000	20	2 1/16x4 3/8	8.00	6.86	4.00	3.09
14F294	HC2060	6000	20	2 1/16x4 3/8	6.60	5.66	3.30	2.55
14F295	HC2060A	6000	20	1 13/16x4 3/8	6.11	5.24	3.05	2.36
17F1701	HC20250	25,000	20	3x4 1/8	12.88	11.04	6.44	4.96
14F106	HC2510A	1000	25	1 7/16x2 3/4	3.19	2.73	1.59	1.23
14F107	HC2520A	2000	25	1 7/16x3 3/8	4.15	3.56	2.07	1.60
14F108	HC2540A	4000	25	1 13/16x3 3/8	5.58	4.79	2.79	2.15
14296	HC4040	4000	40	2 1/16x4 3/8	7.54	6.48	3.77	2.91
14F297	HC4040A	4000	40	1 13/16x4 3/8	6.98	6.00	3.49	2.69
14F298	HC5040	4000	50	2 1/16x4 3/8	7.32	6.27	3.66	2.82
14F109	HC5005A	500	50	1 7/16x2 3/4	3.33	2.85	1.66	1.28
14F110	HC5010A	1000	50	1 7/16x3 3/8	4.25	3.65	2.13	1.64
14F111	HC5020A	2000	50	1 13/16x3 3/8	5.06	4.34	2.53	1.95
14F997	HC15010	1000	150	2 1/16x4 3/8	6.89	5.96	3.45	2.68
14F112	HC15010A	1000	150	1 13/16x4 3/8	6.44	5.52	3.22	2.48
17F1702	HC15010A	1000	150	1 13/16x3 3/8	6.44	5.52	3.22	2.48
17F1703	HC20005	500	200	2 1/16x4 3/8	5.97	5.12	2.99	2.30
14F113	HC20005A	500	200	1 13/16x3 3/8	5.53	4.74	2.77	2.13
14F114	HC45003	300	450	2 1/16x4 3/8	8.47	7.26	4.24	3.27
17F1704	HC45003	300	450	2 1/16x4 3/8	8.47	7.26	4.24	3.27

TYPE NP NON-POLARIZED HIGH CAP ELECTROLYTICS

Stk. No.	Type	Mfd.	WV	Size	1-9	10-24	25-49	50-99
14F135	NP1225A	200	125	1 7/16x3 3/8	4.04	3.47	2.02	1.56
14F137	NP1235A	300	125	1 13/16x3 3/8	4.87	4.17	2.43	1.88
14F136	NP1255A	500	125	1 13/16x4 3/8	6.30	5.40	3.15	2.42
14F138	NP3003A	15	300	1 7/16x2 3/4	2.87	2.46	1.44	1.11
26F989	NP3008	50	300	1 7/16x2 3/4	5.25	4.50	2.63	2.03
14F134	NP3025	200	300	2 1/16x4 3/8	7.00	6.00	3.50	2.70
14F131	NP4505	50	450	1 13/16x3 3/8	6.30	5.40	3.15	2.42
14F132	NP4510	100	450	2 1/16x4 3/8	7.70	6.60	3.85	2.97

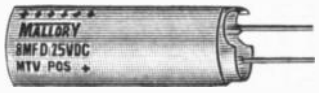
METAL TUBULAR DRY ELECTROLYTIC CAPACITORS

Type TC is single-section capacitor with insul. sleeve. Up to 450 WV, DC, cap. tolerance is —10% +100%. 450 and above WV, DC, cap. tolerance is —10% +50%. Rated 85°C. Av. Shipping Wt., 4 oz.

Stk. No.	Type	Mfd.	W.V.	Size	1-24	25-49	50-99	100-249	250-499
14F151	TC605A	500	6	.421x1 9/16	.92	.67	.56	.44	.39
14F152	TC610A	1000	6	.640x1 3/8	1.08	.81	.63	.51	.46
14F153	TC1505A	500	15	.640x1 3/8	1.05	.80	.63	.52	.42
14F443	TC1501A	1000	15	.77 x1 5/8	1.38	1.07	.83	.67	.54
17F1708	TC1520	2000	15	.89 x1 7/8	1.65	1.25	.95	.78	.67
14F154	TC22A	10	25	.275x 1 1/16	.60	.43	.33	.26	.22
14F155	TC26A	25	25	.322x 1 1/16	.60	.43	.35	.28	.23
14F156	TC29A	50	25	.385x 1 5/16	.67	.47	.36	.30	.24
14F157	TC2501A	100	25	.385x1 7/16	.80	.57	.45	.35	.30
17F1707	TC25015	150	25	.420x1 1/16	.87	.63	.49	.38	.32
14F158	TC2505	500	25	.765x1 5/8	1.35	1.05	.83	.66	.55
14F162	TC32	10	50	.322x 1 3/16	.60	.43	.33	.27	.22
14F163	TC36A	25	50	.385x 1 5/16	.64	.44	.35	.28	.23
14F164	TC39A	50	50	.385x1 7/16	.72	.52	.40	.33	.28
14F165	TC3501A	100	50	.640x1 5/8	.83	.61	.47	.40	.31
14F166	TC40A	5	150	.32 x 1 3/16	.60	.43	.34	.27	.22
14F185	TC50025A	250	50	.765x1 5/8	1.00	.78	.62	.48	.43
17F1709	TC50100	1000	50	1.02 x2 3/4	1.90	1.30	1.04	.82	.64
14F168	TC42A	10	150	.385x1.02	.64	.47	.37	.29	.24
14F170	TC45A	20	150	.385x1 7/16	.72	.51	.39	.32	.27
14F171	TC47A	30	150	.640x1 1/8	.79	.55	.43	.35	.30
14F172	TC48A	40	150	.77 x1 1/8	.82	.59	.45	.36	.31
14F173	TC49A	50	150	.640x1 5/8	.84	.60	.47	.38	.32
14F174	TC497A	80	150	.765x1 5/8	.95	.67	.54	.43	.37
17F1710	TC493	100	150	.77 x1 7/8	1.05	.75	.58	.47	.40
14F175	TC495A	150	150	1.015x1 3/8	1.13	.81	.64	.48	.43
17F1711	TC496	200	150	1.02 x1 5/8	1.32	.93	.74	.69	.47
17F1712	TC499	300	150	1.02 x2 1/8	1.63	1.21	.96	.84	.64
26F990	TC50XA	5	250	.51 x1 1/8	.69	.49	.37	.31	.26
14F024	TC65A	20	350	.765x1 5/8	.87	.65	.53	.42	.36
26F991	TC68A	60	350	.890x2 3/4	1.17	.87	.66	.57	.48
14F176	TC70A	5	450	.640x1 3/8	.72	.52	.40	.34	.29
14F177	TC71A	8	450	.765x1 5/8	.75	.56	.45	.37	.32
14F178	TC72A	10	450	.765x1 5/8	.77	.59	.47	.37	.33
14F179	TC74A	16	450	.890x1 5/8	.84	.64	.52	.41	.36
14F180	TC75A	20	450	.890x1 5/8	.93	.70	.56	.45	.39
14F182	TC78A	40	450	1.015x2 1/8	1.08	.83	.65	.51	.44
14F184	TC80A	80	450	1.062x3 3/8	1.63	1.11	.83	.76	.71
17F1713	TC805	100	450	1.39 x2 7/8	1.82	1.33	1.10	.90	.85
14F190	TC92A	10	600	.81 x2 1/8	1.77	1.35	1.12	.98	.83
17F1714	TC90	4	600	.69 x2 1/2	1.17	.85	.71	.69	.68

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

MTA



MTV

MOLDED ALUMINUM ELECTROLYTICS

Molded polypropelene cases provides excellent humidity protection as well as positive electrotyte seal. MTA has axial leads, MTV has two #20 AWG leads ½" long spaced 0.200" apart. Both types rated for operation from —30° to +65°C. Tolerance: —10%+100%. DCL: less than .03 ua/ mf—volt (4 ua, max.)

MTA PRICES

Price Code	Size	1-24	25-49	50-99	100-249	250-499	500-999	1000
A	5/16 x 3/4"	.36	.27	.24	.202	.179	.150	.130
B	3/8 x 1"	.40	.30	.26	.220	.195	.164	.142
C	1/2 x 1 3/8"	.45	.34	.30	.252	.222	.188	.162
D	1/2 x 1 3/8"	.51	.38	.33	.270	.248	.209	.181
E	1/2 x 1 3/8"	.54	.40	.35	.296	.262	.222	.191
F	1/2 x 1 3/8"	.57	.43	.37	.315	.279	.235	.203

TYPE MTA — AXIAL LEADS

Stk. No.	Type MTA-	Mfd.	WV DC	Price Code
17F1753	50E15	50	15	B
26F956	100E15	100	15	B
17F1754	250F15	250	15	D
26F958	350F15	350	15	F
26F959	25D20	25	20	A
26F962	250F20	250	20	F
26F963	50E25	50	25	B
26F965	200F25	200	25	F
17F1755	10D35	10	35	A
26F968	25E35	25	35	B
26F972	100F35	100	35	D
26F974	150F35	150	35	F
26F975	1D50	1	50	A
26F976	2D50	2	50	A
26F977	5D50	5	50	A
26F978	10E50	10	50	B
26F981	25F50	25	50	C
26F982	30F50	30	50	C
26F985	50F50	50	50	C
26F988	80F50	80	50	E
17F1746	175E3	175	3	C
17F1747	600F3	600	3	C
17F1748	50D6	50	6	A
17F1749	150E6	150	6	B
17F1750	500F6	500	6	D
26F950	40D10	40	10	A
17F1751	100E10	100	10	B
17F1752	200F10	200	10	C
26F951	400F10	400	10	E
26F952	30D15	30	15	A

MTV PRICES

Price Code	1-24	25-49	50-99	100-249	250-499	500-999	1000
A	.40	.30	.26	.220	.195	.164	.143
B	.42	.32	.27	.230	.206	.173	.150
C	.48	.36	.31	.267	.237	.199	.172
D	.54	.40	.36	.283	.262	.222	.191
E	.56	.42	.37	.313	.277	.233	.201
F	.60	.45	.40	.331	.292	.247	.213

TYPE MTV — PRINTED CIRCUIT

Stk. No.	Type MTV-	Mfd.	WV DC	Price Code	Size
17F1756	150CD3	150	3	B	3/8 x 15/16
17F1757	200CF3	200	3	C	3/8 x 1 1/16
17F1758	300CK3	300	3	C	3/8 x 1 5/16
17F1759	700DJ3	700	3	E	1/2 x 1 1/4
17F1760	1000DN3	1000	3	F	1/2 x 1 1/2
17F1761	100CB6	100	6	B	3/8 x 15/16
17F1762	150CF6	150	6	B	3/8 x 1 1/16
17F1763	250CK6	250	6	C	3/8 x 1 5/16
17F1764	400DE6	400	6	C	1/2 x 1
17F1765	500DJ6	500	6	D	1/2 x 1 1/4
17F1766	800DN6	800	6	F	1/2 x 1 1/2
17F1767	100CD10	100	10	B	3/8 x 15/16
17F1768	250CP1C	250	10	C	3/8 x 1 9/16
17F1769	400DJ10	400	10	E	1/2 x 1 1/4
17F1770	600DN10	600	10	F	1/2 x 1 1/2
17F1771	50CB15	50	15	B	3/8 x 15/16
17F1772	100CF15	100	15	B	3/8 x 1 1/16
17F1773	150CK15	150	15	C	3/8 x 1 5/16
17F1774	250DE15	250	15	D	1/2 x 1
17F1775	500DN15	500	15	F	1/2 x 1 1/2
17F1776	50CD25	50	25	B	3/8 x 15/16
17F1777	100CP25	100	25	C	3/8 x 1 9/16
17F1778	250DN25	250	25	F	1/2 x 1 1/2
17F1779	25CB35	25	35	B	3/8 x 15/16
17F1790	50CF35	50	35	C	3/8 x 1 1/16
17F1780	100DE35	100	35	D	1/2 x 1
17F1781	150DJ35	150	35	F	1/2 x 1 1/4
17F1782	200DN35	200	35	F	1/2 x 1 1/2
17F1783	1CB50	1	50	A	3/8 x 15/16
17F1784	2CB50	2	50	A	3/8 x 15/16
17F1785	5CB50	5	50	A	3/8 x 15/16
17F1786	10CB50	10	50	B	3/8 x 15/16
17F1787	25CF50	25	50	C	3/8 x 1 1/16
17F1788	50DE50	50	50	C	1/2 x 1
17F1789	100DN50	1000	50	F	1/2 x 1 1/2

HARDWARE FOR CAPACITORS

MOUNTING PLATES

For mounting "Twist-Prong" capacitors.

FIG. A METAL Stk. No.	Size	FIG. B PHENOLIC Stk. No.	Size
14F400	3/4"	14F403	3/4"
14F401	1"	14F404	1"
14F402	1 1/8"†	14F405	1"•
		14F406	1 3/8"†

•For mounting 1" FP's in chassis punches for 1 3/8" wafer.

†Mount 1" dia. can over a 1 3/8" dia. hole.

1-99	100-999	1000-up
.09	.07	.05

MOUNTING SOCKETS—Fig. C

Stk. No.	Size, In.	1-24	25-49	50-99	100-249
29F549	1	.49	.39	.33	.26
29F550	1 3/8	.71	.57	.48	.38

CLAMPS—Fig. E

Clamps fit all can types.

Stk. No.	Sizes, in.	1-99	100-999	1000-up
14F409	1 x 1 1/16	.15	.12	.10
14F410	1 3/8 x 1 7/16	.18	.15	.13
14F411	1 1/2 x 1 9/16	.18	.15	.13
14F412	1 3/4 x 1 13/16	.24	.20	.16
14F413	2 x 2 1/16	.11	.14	.12
60F2292	2 1/2 x 2 9/16	.21	.18	.15
60F2113	3	.39	.35	.32

CLIPS—Fig. D

Clips for tubular and can types.

Stk. No.	Size, in.	1-99	100-999	1000-up
14F414	3/8 x 3/16	.12	.10	.08
14F415	1/2 x 9/16	.12	.10	.08
14F416	5/8 x 11/16	.12	.10	.08
14F417	3/4 x 13/16	.15	.11	.09
14F418	7/8 x 15/16	.15	.11	.09
14F419	1 x 1 1/16	.15	.11	.09
14F420	1 3/8 x 1 7/16	.15	.11	.09

MOUNTING WRENCH—Fig. G

For locking "Twist-Prong" electrolytic capacitors securely into position. Shpg. wt., 1 lb.

14F421 ..... 1.49

INSULATING SLEEVES—Fig. F

Fiber insulating sleeves for Twist-Prong capacitors. Closed end. Weight 2 oz.

Stk. No.	Size	1-99	100-999	1000-up
14F422	3/4x2"	.09	.07	.05
14F423	1 x2"			
14F424	1 x3"			
14F425	1 3/8x2"			
14F426	1 3/8x3"			
14F427	1 x2 1/2"			
14F428	1 x4"			
14F429	1 3/8x2 1/2"			
14F430	1 3/8x4"			
60F2114	1 x3 1/2"			
60F2115	1 3/8x3 1/2"			
60F2116	1 x1 3/4"			
60F2117	3/4x1 1/2"			

MALLORY Capacitors

COMPUTER GRADE ELECTROLYTIC CAPACITORS

- Pressure sensitive safety vent construction.
- May be operated —20° to +85°C.

Computer grade capacitors; may be operated —40°C to +85°C. Max. DC leakage current is .0- square root of CV, where C=measured capacity, V=rated DC voltage. Dissipation factor =ESR/Xc. Tolerance: —10, +75% for 0-150 volt units; —10, +50% for 151-450 volt units. Supplied with Mylar insulating sleeve and 7/32" long post terminals with #10-32 screws. Sizes do not include terminals or sleeve; Lug terminals, special capacitances, working voltages, and sizes available on special order.

Stk. No.	Type	Mfd.	WV DC	DxL In.	1-49	50-99	100-up
26F434	CG363U3D1	36,000	3	3 x5⅝	4.41	3.47	2.84
17F1727	CG54U3E1	50,000	3	2 33/64x4 9/64	5.65	4.44	3.63
60F2129	CG753U3F1	75,000	3	3 x4⅛	7.06	5.55	4.53
17F1729	CG115U3G1	115,000	3	3 1/64 x5 41/64	8.63	6.78	5.55
26F646	CG2752U5D1	27,500	5	2 x4⅛	4.60	3.61	2.96
60F2135	CG653U5F1	65,000	5	3 x4⅛	7.14	5.61	4.59
60F2134	CG15U5G1	100,000	5	3 x5⅝	9.39	7.38	6.03
17F1730	CG63U10B1	6,000	10	1 25/64x3 9/64	2.37	1.87	1.53
26F425	CG822U10C1	8,200	10	1⅜ x4⅛	2.84	2.23	1.82
17F1731	CG14U10H1	10,000	10	1 49/64x3 9/64	3.15	2.48	2.03
26F428	CG135U10K1	13,500	10	2 x3⅛	3.72	2.92	2.39
26F430	CG183U10D1	18,000	10	3 x4⅛	4.59	3.61	2.96
17F1732	CG34U10E1	30,000	10	2 33/64x4 9/64	6.61	5.20	4.25
26F647	CG452U10F1	43,500	10	3 x4⅛	8.25	6.48	5.31
26F436	CG683U10G1	68,000	10	3 x5⅝	9.66	7.59	6.21
26F635	CG252U15A1	2,500	15	1⅜ x2¼	1.97	1.55	1.27
26F642	CG642U15G1	6,400	15	1⅜ x4⅛	2.69	2.11	1.73
17F1733	CG83U15H1	8,000	15	1 49/64x3 9/64	3.07	2.41	1.97
26F644	CG1052U15K1	10,500	15	2 x3⅛	3.38	2.66	2.17
26F615	CG143U15D1	14,000	15	2 x4⅛	4.47	3.51	2.88
17F1734	CG223U15	23,000	15	2 33/64x4 9/64	6.32	4.97	4.06
26F433	CG343U15F1	34,000	15	2 x4⅛	7.11	5.59	4.57
26F435	CG533U15G1	53,000	15	2 x4⅛	9.30	7.30	5.98
26F631	CG152U25A1	1,500	25	1⅜ x2½	1.72	1.35	1.11
17F1735	CG282U25B1	2,800	25	1 25/64x3 9/64	2.12	1.67	1.36
26F639	CG382U25C1	3,800	25	1⅜ x4⅛	2.60	2.05	1.67
17F1736	CG452U25H1	4,500	25	1 49/64x3 9/64	2.77	2.18	1.78
26F641	CG63U25K1	6,000	25	2 x3⅛	3.23	2.54	2.08
26F427	CG852U25D1	8,500	25	2 x4⅛	3.90	3.07	2.51
17F1737	CG1352U25E1	13,000	25	2 33/64x4 9/64	3.72	2.92	2.39
26F431	CG24U25F1	20,000	25	3 x5⅝	6.55	5.15	4.21
26F432	CG3152U25G1	31,500	25	3 x4⅛	8.78	6.90	5.64
17F1738	CG212U35B1	2,100	35	1 25/64x3 9/64	2.16	1.70	1.39
17F1739	CG312U35C1	3,100	35	1 25/64x4 9/64	3.04	2.40	1.96
17F1740	CG362U35H1	3,600	35	1 49/64x3 9/64	3.21	2.52	2.07
17F1741	CG472U35K1	4,700	35	2 1/64 x3 9/64	3.46	2.73	2.23
17F1742	CG113U35E1	11,000	35	2 33/64x4 9/64	6.42	5.05	4.14
26F630	CG82U50A1	800	50	1⅜ x2¼	1.74	1.37	1.12
17F1743	CG152U50B1	1,500	50	1 25/64x4 9/64	2.05	1.62	1.32
26F633	CG23U50C1	2,000	50	1⅜ x4⅛	2.29	1.80	1.47
17F1744	CG252U50H1	2,500	50	1 49/64x3 9/64	2.52	1.98	1.62
60F2130	CG332U50K1	3,300	50	2 x3⅛	3.25	2.56	2.09
26F424	CG452U50D1	4,500	50	2 x4⅛	3.42	2.72	2.23
17F1745	CG732U50E1	7,300	50	2 33/64x4 9/64	5.33	4.19	3.42
60F2133	CG14U50F1	10,000	50	3 x4⅛	6.70	5.27	4.30
26F429	CG1652U50G1	16,500	50	3 x5⅝	9.20	7.23	5.91
26F628	CG62U75A1	600	75	1⅜ x2¼	2.01	1.58	1.30
17F1715	CG13U75B1	1,000	75	1 25/64x3 9/64	2.35	1.85	1.51
26F632	CG152U75C1	1,500	75	1⅜ x4⅛	2.84	2.23	1.82
17F1716	CG23U75H1	2,000	75	1 49/64x3 9/64	3.09	2.43	1.98
26F636	CG252U75K1	2,500	75	2 x3⅛	3.70	2.90	2.38
26F421	CG345U75D1	3,450	75	1⅜ x4⅛	4.03	3.17	2.59
17F1717	CG552U75E1	5,500	75	2 33/64x4 9/64	6.40	5.04	4.12
26F643	CG822U75F1	8,200	75	3 x4⅛	7.25	5.70	4.66
60F2132	CG1252U75G1	12,500	75	3 x5⅝	9.45	7.42	6.08
60F2123	CG42U100A1	100	100	1⅜ x2¼	2.01	1.58	1.30
17F1718	CG75U100B1	750	100	1 25/64x3 9/64	2.38	1.86	1.53
60F2126	CG13U100C1	1,000	100	1⅜ x4⅛	2.73	2.15	1.76
17F1719	CG132U100H1	1,300	100	1 49/64x3 9/64	2.99	2.35	1.92
60F2128	CG165U100K1	1,650	100	2 x3⅛	3.17	2.49	2.04
26F419	CG2251U100D1	2,250	100	2 x4⅛	4.12	3.23	2.64
17F1720	CG362U100E1	3,600	100	2 33/64x4 9/64	6.03	4.74	3.88
26F640	CG532U100F1	5,300	100	2 x4⅛	6.74	5.30	4.33
26F426	CG832U100G1	8,300	100	3 x5⅝	9.68	7.61	6.23
26F627	CG2750U100A1	275	150	1⅜ x2¼	1.63	1.29	1.05
17F1721	CG52U150B1	500	150	1 25/64x3 9/64	2.05	1.62	1.32
26F629	CG72U150C1	700	150	1⅜ x4⅛	2.40	1.89	1.54
60F2127	CG112U150K1	1,100	150	2 x3⅛	3.13	2.46	2.01
26F416	CG1551U150D1	1,550	150	2 x4⅛	4.01	3.15	2.58
17F1722	CG252U150E1	2,500	150	2 33/64x4 9/64	5.92	4.65	3.81
26F422	CG362U150F1	3,600	150	2 x4⅛	7.08	5.56	5.44
60F2131	CG562U150G1	5,600	150	3 x5⅝	9.87	7.76	6.35
60F2119	CG181U200A1	180	200	⅜ x2¼	2.02	1.59	1.30
60F2125	CG451U200C1	450	200	1⅜ x4⅛	2.58	2.08	1.63
17F1723	CG551T200H1	550	200	1 49/64x3 9/64	2.86	2.24	1.84
26F414	CG13T200D1	1,000	200	2 x4⅛	4.51	3.54	2.90
26F420	CG2451T200F1	2,450	200	3 x4⅛	6.83	5.35	4.39
26F423	CG382T200G1	3,800	200	3 x5⅝	12.26	9.64	7.88
60F2120	CG141T250A1	140	250	1⅜ x2¼	2.41	1.90	1.55
17F1724	CG2750Y250B1	275	250	1 25/64x3 9/64	2.75	2.16	1.76
60F2122	CG375T250G1	375	250	1⅜ x4⅛	2.99	2.35	1.92
26F413	CG82T250D1	800	250	2 x4⅛	4.72	3.71	3.04
26F418	CG192T250F1	1,900	250	3 x4⅛	7.60	5.97	4.89
26F638	CG33T250G1	3,000	250	3 x5⅝	10.16	8.00	6.53
17F1725	CG325T300C1	325	300	1 25/64x4 9/64	2.85	2.24	1.84
26F412	CG72T300D1	700	300	2 x4⅛	4.74	3.72	3.05
26F417	CG1651T300F1	1,650	300	3 x4⅛	8.46	6.65	5.44
26F637	CG262T300G1	2,600	300	3 x5⅝	10.63	8.35	6.84
60F2121	CG12T350A1	100	350	⅜ x2¼	2.43	1.91	1.57
60F2118	CG25T350C1	250	350	1⅜ x4⅛	2.96	2.33	1.90
60F2124	CG42T350K1	400	350	2 x3⅛	3.57	2.80	2.30
26F411	CG551T350D1	550	350	2 x4⅛	5.10	4.01	3.28
17F1726	CG92T350E1	900	350	2 33/64x4 9/64	6.46	5.09	4.16
26F415	CG132T350F1	1,300	350	3 x4⅛	8.59	6.75	5.52
26F634	CG23T350G1	2,000	350	3 x5⅝	10.63	8.35	6.84
26F626	CG141T400C1	150	400	1⅜ x4⅛	2.96	1.90	1.90
26F410	CG3250T400D1	325	400	2 x4⅛	3.80	2.44	2.44
26F624	CG41T450A1	40	450	1¾ x2¼	1.80	1.60	1.60
26F625	CG111T450C1	110	450	1⅜ x4⅛	2.73	1.75	1.75
26F409	CG241T450D1	240	450	2 x4⅛	3.42	2.20	2.20

MALLORY PVC MYLAR CAPACITORS

Constructed of aluminum foil and 100% DuPont Mylar. Has radial leads for adaptability to printed circuit applications. Leads can be bent in any manner to accommodate mounting without danger of cracking. Unaffected by soldering iron heat. Can be operated at 105°C and at two times rated voltage with no performance derating. Exceptionally low capacitance drift characteristics. Temp. range: —40°C to +105°C. Tolerance ±10%. Shpg. wt., 2 oz.

Stk. No.	Type	Mfd.	WV DC	L. x H. x T.	1-24	25-49	50-99
60F2146	PVC1122	.022	100	.75 x .34x.22	.17	.13	.10
60F2147	PVC1133	.033	100	.75 x .34x.22	.17	.13	.10
60F2149	PVC1147	.047	100	.75 x .34x.22	.18	.14	.11
60F2150	PVC1156	.056	100	.75 x .38x.25	.20	.16	.12
60F2152	PVC101	.10	100	.75 x .44x.31	.22	.17	.13
60F2153	PVC1015	.15	100	.75 x .69x.34	.27	.20	.16
60F2154	PVC1022	.22	100	.75 x .74x.38	.28	.22	.17
60F2156	PVC1033	.33	100	.75 x .84x.44	.33	.25	.19
60F2157	PVC1047	.47	100	1.125x .75x.38	.38	.29	.23
60F2158	PVC105	.5	100	1.125x .78x.41	.38	.29	.23
60F2159	PVC1056	.56	100	1.46 x .63x.46	.20	.16	.12
60F2161	PVC11	1.0	100	1.125x .94x.56	.60	.45	.36
60F2162	PVC11P5	1.5	100	.78 Dia. x 1.75	.82	.62	.47
60F2163	PVC12	2.0	100	1.78 x1.00x.79	.72	.61	.47
60F2253	PVC4247	.0047	400	.63 x .38x.22	.15	.11	.08
13F799	PVC4222	.0022	400	.63 x 31x.22	.15	.11	.08
13F888	PVC411	.01	400	.63 x .38x.22	.15	.11	.08
13F890	PVC412	.02	400	.75 x .41x.25	.15	.12	.09
13F893	PVC415	.05	400	.94 x .46x.31	.18	.15	.11
13F705	PVC404	.40	400	1.75 x .75x.56	.41	.32	.25
13F706	PVC405	.5	400	1.75 x .81x.63	.46	.37	.28
13F790	PVC-211	.01	200	.63x.38x.22	.17	.13	.10
13F791	PVC-2115	.015	200	.63x.38x.22	.17	.13	.10
13F792	PVC-212	.02	200	.63x.38x.22	.17	.13	.10
13F793	PVC-2133	.033	200	.81x.41x.25	.17	.13	.10
13F794	PVC214	.04	200	.81x.41x.25	.18	.14	.11
13F795	PVC-215	.05	200	.81x.44x.28	.18	.14	.12
13F796	PVC-2168	.068	200	.94x.46x.28	.20	.16	.12
13F797	PVC-201	.10	200	1.10x.50x.31	.22	.17	.13
60F2243	PVC2122	.022	200	.63x.38x.22	.17	.13	.10
60F2244	PVC2147	.047	200	.81x.44x.28	.38	.29	.23
60F2245	PVC2015	.15	200	1.22x.53x.34	.27	.20	.16
60F2246	PVC2022	.22	200	1.22x.56x.41	.30	.23	.17
06F2247	PVC2025	.25	200	1.34x.56x.41	.30	.23	.17
60F2248	PVC2033	.33	200	1.46x.63x.44	.33	.25	.19
60F2249	PVC2047	.47	200	1.63x.66x.46	.38	.29	.23
60F2250	PVC205	.5	200	1.63x.69x.50	.38	.29	.23
60F2251	PVC21	1.0	200	1.75x.88x.63	.66	.49	.39
60F2252	PVC22	2.0	200	1.78x1.15x.94	1.12	.82	.68
60F2254	PVC4147	.047	400	.94x.46x.28	.18	.15	.11
60F2255	PVC401	.1	400	1.22x.53x.38	.21	.17	.13
60F2256	PVC4022	.22	400	1.46x.66x.46	.27	.23	.18
60F2258	PVC4047	.47	400	1.75x.78x.59	.45	.35	.27
60F2259	PVC4056	.56	400	1.78x.84x.66	.49	.39	.30

DEPEND ON NEWARK FOR EVERYTHING IN INDUSTRIAL ELECTRONICS

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

DUR-MICA CAPACITORS

The Dur-Mica is a silvered mica capacitor with a plastic coating. It combines excellence in stability, dielectric strength, "Q", dielectric constant, chemical inertness, moisture resistance and puncture resistance. Operating temperature range —55°C to 150°C. Standard tolerance ±5% except (*) Min. tolerance ±1.0 Pf. DM5 capacitors are stamped with capacitance values in pf. followed by a letter signifying capacitance tolerance. (J) means ±5%, while (A) signifies ±1% pf. All ELMENCO dipped mica capacitors meet or exceed requirements set forth in MIL-C-5C specificaeoins. Portions of the ELMENCO DM series are the specific values and case sizes tabulated in the MIL-C-5/18 detail specifications.

MIL Type	Cap. Pf.	Elmenco
CM04	1-390	DM10
CM05	1-390	DM15
CM06	430-4700	DM19
CM07	5,100-20,000	DM30
CM08	22,000-62,000	DM42

● NEW TYPE DM5 DCWV 300

Stk. No.	Type	Pf.	1-24	25-99	100-499	500-999	1000-Up
14F1262	DM5-010A	1*	.21	.19	.13	.105	.095
14F1263	DM5-020A	2*	.21	.19	.13	.105	.095
14F1264	DM5-030A	3*	.21	.19	.13	.105	.095
14F1265	DM5-040A	4*	.21	.19	.13	.105	.095
14F1266	DM5-050A	5*	.21	.19	.13	.105	.095
14F1267	DM5-060A	6*	.23	.21	.14	.115	.104
14F1268	DM5-070A	7*	.23	.21	.14	.115	.104
14F1269	DM5-080A	8*	.23	.21	.14	.115	.104
14F1270	DM5-100J	10	.38	.35	.23	.19	.18
14F1271	DM5-120J	12	.39	.36	.24	.195	.176
14F1272	DM5-150J	15	.39	.36	.24	.195	.176
14F1273	DM5-180J	18	.41	.37	.25	.205	.185
14F1274	DM5-200J	20	.27	.25	.17	.135	.122
14F1275	DM5-220J	22	.28	.26	.17	.140	.126
14F1276	DM5-240J	24	.28	.26	.17	.140	.126
14F1277	DM5-270J	27	.29	.17	.18	.15	.13
14F1278	DM5-300J	30	.29	.17	.18	.15	.13
14F1279	DM5-330J	33	.30	.27	.18	.15	.14
14F1280	DM5-360J	36	.31	.28	.19	.16	.14
14F1281	DM5-390J	39	.31	.28	.19	.16	.14
14F1282	DM5-430J	43	.31	.28	.19	.16	.14
14F1283	DM5-470J	47	.32	.29	.28	.16	.15
14F1284	DM5-500J	50	.32	.29	.20	.16	.15
14F1285	DM5-510J	51	.34	.31	.21	.17	.16
14F1286	DM5-560J	56	.36	.33	.22	.18	.17
14F1287	DM5-620J	62	.38	.35	.23	.19	.18
14F1288	DM5-680J	68	.39	.36	.24	.20	.18
14F1289	DM5-750J	75	.41	.37	.25	.21	.19
14F1290	DM5-820J	82	.45	.41	.27	.23	.21
14F1291	DM5-910J	91	.49	.45	.30	.25	.22
14F1292	DM5-101J	100	.51	.46	.31	.26	.23
14F1293	DM5-111J	110	.54	.49	.33	.27	.25
14F1294	DM5-121J	120	.47	.43	.29	.24	.22
14F1295	DM5-131J	130	.49	.45	.30	.25	.22
14F1296	DM5-151J	150	.54	.49	.33	.27	.25
14F1297	DM5-161J	160	.47	.43	.29	.24	.22
14F1298	DM5-181J	180	.51	.46	.31	.26	.23

TYPE DM-10 DCWV 500

Stk. No.	Type	Pf.	1-24	25-99	100-499	500-999	1000-Up
14F1150	DM10-010A	1*	.19	.17	.11	.095	.085
14F1151	DM10-020A	2*					
14F1152	DM10-030A	3*					
14F1153	DM10-050A	5*					
14F1154	DM10-100J	10	.31	.28	.186	.155	.139
14F1155	DM10-120J	12					
14F1156	DM10-150J	15					
14F1157	DM10-180J	18					
14F1158	DM10-200J	20	.24	.22	.14	.120	.108
14F1159	DM10-220J	22					
14F1160	DM10-240J	24					
14F1161	DM10-270J	27					
14F1162	DM10-300J	30					
14F1163	DM10-330J	33					
14F1164	DM10-360J	36					
14F1165	DM10-390J	39					
14F1166	DM10-430J	43					
14F1167	DM10-470J	47	.27	.24	.16	.135	.121
14F1168	DM10-500J	50					
14F1169	DM10-510J	51					
14F1170	DM10-560J	56					
14F1171	DM10-620J	62					
14F1172	DM10-680J	68					
14F1173	DM10-750J	75					
14F1174	DM10-820J	82					
14F1175	DM10-910J	91					
14F1176	DM10-101J	100					
14F1177	DM10-111J	110					
14F1178	DM10-121J	120	.31	.28	.19	.155	.139
14F1179	DM10-131J	130	.31	.28	.19	.155	.139
14F1180	DM10-151J	150	.34	.31	.20	.170	.153
14F1182	DM10-181J	180	.42	.38	.25	.210	.189
14F1183	DM10-201J	200	.42	.38	.25	.210	.189
14F1184	DM10-221J	220	.46	.41	.28	.230	.207
14F1185	DM10-241J	240	.48	.43	.29	.240	.216
14F1186	DM10-251J	250	.48	.43	.29	.240	.216

TYPE DM-10 DCWV 300

Stk. No.	Type	Pf	1-24	25-99	100-499	500-999	1000-Up
14F1187	DM10-271J	270	.46	.42	.28	.230	.207
14F1188	DM10-301J	300	.50	.45	.30	.249	.225

TYPE DM-10 DCWV 100

Stk. No.	Type	Pf	1-24	25-99	100-499	500-999	1000-up
14F1189	DM10-331J	330	.50	.45	.30	.249	.225
14F1190	DM10-361J	360	.53	.48	.32	.264	.238
14F1200	DM10-391J	390	.56	.51	.34	.282	.254

TYPE DM-15 DCWV 500 except (††) 100 (†) 300

Stk. No.	MIL No.	Pf.	1-24	25-99	100-499	500-999	1000-up
14F549	DM15-010A	1*	.21	.19	.13	.105	.094
14F550	DM15-020A	2*					
14F551	DM15-030A	3*					
14F552	DM15-050A	5*					
14F553	DM15-100J	10					
14F554	DM15-120J	12					
14F555	DM15-150J	15					
14F556	DM15-180J	18					
14F557	DM15-200J	20					
14F558	DM15-220J	22	.18	.16	.11	.090	.081
14F559	DM15-240J	24					
14F560	DM15-270J	27					
14F561	DM15-300J	30					
14F562	DM15-330J	33					
14F563	DM15-360J	36					
14F564	DM15-390J	39					
14F565	DM15-430J	43					
14F566	DM15-470J	47					
14F567	DM15-500J	50					
14F568	DM15-510J	51					
14F569	DM15-560J	56					
14F570	DM15-620J	62					
14F571	DM15-680J	68					
14F572	DM15-750J	75					
14F573	DM15-820J	82					
14F574	DM15-910J	91					
14F575	DM15-101J	100					
14F576	DM15-111J	110	.21	.19	.13	.105	.094
14F577	DM15-121J	120					
14F578	DM15-131J	130					
14F579	DM15-151J	150					
14F580	DM15-161J	160	.24	.21	.14	.120	.108
14F581	DM15-181J	180	.25	.22	.15	.125	.112
14F582	DM15-201J	200	.25	.23	.15	.125	.112
14F583	DM15-221J	220	.27	.24	.16	.153	.121
14F584	DM15-241J	240	.28	.25	.16	.140	.126
14F585	DM15-251J	250	.28	.25	.16	.140	.126
14F586	DM15-271J	270	.31	.28	.18	.155	.139
14F587	DM15-301J	300	.31	.28	.18	.155	.139
14F588	DM15-331J	330	.34	.31	.20	.170	.153
14F589	DM15-361J	360	.36	.32	.21	.180	.162
14F590	DM15-391J	390	.38	.34	.22	.190	.171
14F591	DM15-431J	430	.40	.36	.24	.200	.180
14F592	DM15-471J	470	.42	.38	.25	.210	.189
14F593	DM15-501J	500	.42	.38	.25	.210	.189
14F594	DM15-511J	510	.44	.40	.26	.220	.198
14F595	DM15-561J	560†	.44	.40	.26	.220	.198
14F596	DM15-621J	620†	.48	.43	.28	.240	.216
14F597	DM15-681J	680†	.52	.47	.31	.260	.234
14F598	DM15-751J	750†	.55	.50	.33	.275	.247
14F599	DM15-821J	820†	.60	.54	.36	.300	.270
14F1116	DM15-911J	910††	.63	.57	.38	.315	.284
14F1117	DM15-102J	1000††	.66	.59	.40	.33	.297
14F450	DM19-101J	100	.20	.18	.12	.10	.09
14F452	DM19-121J	120	.20	.18	.12	.10	.09
14F457	DM19-201J	200	.22	.20	.132	.110	.99
14F458	DM19-221J	220	.22	.20	.132	.110	.99
14F459	DM19-241J	240	.24	.22	.144	.120	.108
14F460	DM19-251J	250	.24	.22	.144	.120	.108
14F461	DM19-271J	270	.27	.24	.162	.135	.121
14F462	DM19-301J	300	.26	.24	.158	.132	.119
14F463	DM19-331J	330	.27	.24	.162	.135	.121
14F464	DM19-361J	360	.31	.28	.186	.155	.139
14F465	DM19-391J	390	.31	.28	.186	.155	.139

ARCO – ELMENCO Capacitors

(DM series continued from preceding page)

TYPE DM-19 DCWV 500

Stk. No.	Type No.	Mmf.	1-24	25-99	100-499	500-999	1000-up
14F466	DM19-431J	430	.31	.28	.186	.155	.139
14F467	DM19-471J	470	.34	.31	.204	.170	.153
14F468	DM19-501J	500	.34	.31	.204	.170	.153
14F469	DM19-511J	510	.34	.31	.204	.170	.153
14F470	DM19-561J	560	.34	.31	.204	.170	.153
14F471	DM19-621J	620	.37	.33	.222	.185	.166
14F472	DM19-681J	680	.37	.33	.222	.185	.166
14F473	DM19-751J	750	.41	.37	.246	.205	.184
14F474	DM19-821J	820	.44	.40	.264	.220	.198
14F477	DM19-112J	1100	.50	.45	.300	.250	.225
14F478	DM19-122J	1200	.53	.48	.318	.265	.238
14F479	DM19-132J	1300	.56	.50	.336	.280	.252
14F480	DM19-152J	1500	.59	.53	.354	.295	.265
14F481	DM19-162J	1600	.63	.57	.378	.315	.283
14F482	DM19-182J	1800	.69	.62	.414	.345	.310
14F483	DM19-202J	2000	.76	.68	.450	.380	.342
14F484	DM19-222J	2200	.82	.74	.492	.410	.369
14F1201	DM19-242J	2400	.89	.80	.534	.445	.400
14F1202	DM19-252J	2500	.92	.83	.552	.460	.414
14F1203	DM19-272J	2700	.96	.86	.576	.480	.432
14F1204	DM19-302J	3000	.99	.89	.594	.495	.446
14F1205	DM19-332J	3300	1.10	.99	.660	.550	.495
14F1206	DM19-362J	3600	1.17	1.05	.702	.585	.526
14F1207	DM19-392J	3900	1.23	1.11	.738	.615	.553
14F1208	DM19-432J	4300	1.33	1.20	.798	.665	.598
14F1209	DM19-472J	4700	1.44	1.30	.864	.720	.648
14F1210	DM19-502J	5000	1.54	1.39	.924	.770	.693
14F1211	DM19-512J	5100	1.57	1.41	.942	.785	.706

TYPE DM-20 DCWV 500

14F601	DM20-751J	750	.34	.31	.204	.170	.153
14F603	DM20-911J	910	.37	.33	.222	.185	.166
14F604	DM20-102J	1000	.41	.37	.246	.205	.184
14F607	DM20-132J	1300	.48	.43	.288	.240	.216
14F608	DM20-152J	1500	.53	.48	.318	.265	.238
14F610	DM20-182J	1800	.62	.56	.372	.310	.279
14F611	DM20-202J	2000	.63	.57	.378	.315	.284
14F612	DM20-222J	2200	.73	.66	.438	.365	.328

TYPE DM 42—DCWV 500

14F1252	DM42-253J	25000	5.04	4.54	3.02	2.52	2.27
14F1254	DM42-303J	30000	5.95	5.35	3.57	2.97	2.67
14F1257	DM42-393J	39000	7.56	6.80	4.53	3.78	3.40
14F1258	DM42-433J	43000	6.56	5.81	3.88	3.23	2.91

TYPE CM-15 MINIATURE SILVER MICAS

Smallest molded silver micas made. In low-loss phenolic cases, 9/32 by 1/2 by 3/16 in. Standard tolerance ±5%; tolerances of ±2% and ±1% available on special order. All are 500 volts DC working. *Closest tolerance ±.5 mmf. Wt., 1 oz.

Stk. No.	Mil. No.	Mmf.	1-24	25-99	100-499	500-999	1000-up
14F650*	C010M	1					
14F651*	C020M	2					
14F652*	C030M	3					
14F653*	C050K	5	.21	.19	.126	.105	.094
14F654	C100J	10					
14F655	C120J	12					
14F656	C150J	15					
14F657	C180J	18					
14F658	C200J	20					
14F659	C220J	22					
14F660	E240J	24					
14F661	E270J	27					
14F662	E300J	30					
14F663	E330J	33					
14F664	E360J	36					
14F665	E390J	39	.19	.17	.114	.095	.085
14F666	E430J	43					
14F667	E470J	47					
14F668	E500J	50					
14F669	E510J	51					
14F670	E560J	56					
14F671	E620J	62					
14F672	E680J	68					
14F673	E750J	75	.19	.17	.114	.095	.085
14F674	E820J	82	.19	.17	.114	.095	.085
14F675	E910J	91	.19	.17	.114	.095	.085
14F676	E101J	100	.19	.17	.114	.095	.085
14F677	E111J	110	.22	.20	.132	.110	.099
14F678	E121J	120	.22	.20	.132	.110	.099
14F679	E131J	130	.22	.20	.132	.110	.099
14F680	E151J	150	.22	.20	.132	.110	.099
14F681	E161J	160	.25	.23	.150	.125	.112
14F682	E181J	180	.25	.23	.150	.125	.112
14F683	E201J	200	.25	.23	.150	.125	.112

Con't on Next Col..

CM-15 Cont'd.

Stk. No.	Mil.No.	Mmf.	1-24	25-99	100-499	500-999	1000-up
14F684	E221J	220	.28	.25	.168	.140	.126
14F685	E241J	240	.28	.25	.168	.140	.126
14F686	E251J	250	.28	.25	.168	.160	.126
14F687	E271J	270	.32	.29	.192	.160	.144
14F688	E301J	300	.32	.29	.192	.175	.144
14F689	E331J	330	.35	.32	.210	.190	.157
14F690	E361J	360	.38	.34	.228	.205	.171
14F691	E391J	390	.41	.37	.246	.205	.184
14F692	E431J	430	.41	.37	.246	.220	.184
14F693	E471J	470	.44	.40	.264	.220	.198
14F694	E501J	500	.44	.40	.264	.220	.198
14F695	E511J	510	.44	.40	.264	.220	.198

MOLDED SILVERED MICA CAPACITORS

Manufactured in accordance with MIL-C-5 specifications and EIA Specification RS-153. Color coded in accordance with MIL-C-5. Temp. range: —55 to +85°C. Vibration frequency: 10-2000 hz. ±5% tolerance. CM-19, CM20: 25/32 x 1/16 x 1/32". CM30: 13/16 x 3/16 x 9/32".

SILVERED TYPE CM19 & CM20 500 VDCW

Stk. No.	MIL No.	Mmf.	1-24	25-99	100-499	500-999	1000-up
14F865	C101J	100	.20	.18	.120	.100	.090
14F866	C111J	110	.22	.20	.132	.110	.099
14F867	C121J	120	.22	.20	.132	.110	.099
14F868	C131J	130	.22	.20	.132	.110	.099
14F869	C151J	150	.22	.20	.132	.110	.099
14F870	C161J	160	.22	.20	.132	.110	.099
14F871	C181J	180	.22	.20	.132	.110	.099
14F872	D201J	200	.22	.20	.132	.110	.099
14F873	D221J	220	.22	.20	.132	.110	.099
14F874	D241J	240	.25	.22	.150	.125	.112
14F875	D251J	250	.25	.22	.150	.125	.112
14F876	D271J	270	.25	.22	.150	.125	.112
14F877	D301J	300	.25	.22	.150	.125	.112
14F878	D331J	330	.25	.22	.150	.125	.112
14F879	D361J	360	.25	.22	.150	.125	.112
14F880	D391J	390	.28	.25	.168	.140	.126
14F881	D431J	430	.28	.25	.168	.140	.126
14F882	D471J	470	.28	.25	.168	.140	.126
14F883	D501J	500	.31	.28	.186	.155	.139
14F884	D511J	510	.31	.28	.186	.155	.139
14F885	D561J	560	.31	.28	.186	.155	.139
14F886	D621J	620	.34	.31	.204	.170	.153
14F887	D681J	680	.38	.34	.228	.190	.171
14F888	D751J	750	.38	.36	.240	.200	.171
14F889	D821J	820	.40	.34	.228	.190	.180
14F890	D911J	910	.44	.40	.264	.220	.198
14F891	E102J	1000	.44	.40	.264	.220	.198
14F892	E112J	1100	.48	.43	.288	.240	.216
14F893	E122J	1200	.50	.45	.300	.250	.225
14F894	E132J	1300	.50	.45	.300	.250	.225
14F895	E152J	1500	.53	.48	.318	.265	.238
14F896	E162J	1600	.56	.50	.336	.280	.252
14F897	E182J	1800	.62	.56	.372	.310	.279
14F898	E202J	2000	.69	.62	.414	.345	.310

SILVERED TYPE CM30

Stk. No.	Mil.No.	Mmf.	1-24	25-99	100-499	500-999	1000-up
14F903	E511J	510	.35	.32	.210	.175	.158
14F904	E561J	560	.38	.34	.228	.190	.171
14F905	E621J	620	.38	.34	.228	.190	.171
14F906	E681J	680	.41	.37	.246	.205	.185
14F907	E751J	750	.41	.37	.246	.205	.185
14F908	E821J	820	.44	.40	.264	.220	.198
14F910	E911J	910	.44	.40	.264	.220	.198
14F911	E102J	1000	.47	.42	.282	.235	.211
14F912	E112J	1100	.47	.42	.282	.235	.211
14F914	E132J	1300	.50	.45	.300	.250	.225
14F915	E152J	1500	.54	.49	.324	.270	.243
14F916	E162J	1600	.54	.49	.324	.270	.243
14F918	E202J	2000	.63	.57	.378	.315	.283
14F919	E222J	2200	.69	.62	.414	.345	.310
14F920	E242J	2400	.76	.68	.456	.380	.342
14F921	E252J	2500	.76	.68	.456	.380	.342
14F922	E272J	2700	.82	.74	.492	.410	.369
14F923	E302J	3000	.82	.74	.492	.410	.369
14F924	E332J	3300	.95	.86	.570	.475	.427
14F925	E362J	3600	1.01	.91	.606	.505	.454
14F926	E392J	3900	1.07	.96	.642	.535	.481
14F927	E432J	4300	1.13	1.08	.678	.565	.508
14F929	E502J	5000	1.26	1.13	.756	.630	.567
14F930	E512J	5100	1.26	1.13	.756	.630	.567
14F931	E562J	5600	1.32	1.19	.792	.660	.594

ARCO DUB-MICA KITS

Individual clear plastic boxes, labeled for easy handling.

Type CM-15. Kit # 1. Contains one each of 46 capacitors. Values: 1 mmf.—510 mmf. Shpg. wt. 1¼ lbs.
14F830. NET **48.00**

Type DM-15. Kit # 10. Five each of 51 capacitors. Values: 1 mmf.—820 mmf. Tol. ±5%. Shpg. wt., 1½ lbs.
14F840. NET **61.20**

ARCO-ELMENCO

DP TUBULARS

Mylar paper dielectric non-inductively wound and vacuum dipped to obtain solid impregnation and rugged moisture-resistant coat. Leads are radial and crimped to facilitate use in printed circuits. Full rated voltage: 125°C. Leads are tinned copper #20 gauge and are 1⅝" min. below the crimp. Tol. is ±10%.

100 DCWV

Stk. No.	Type	Mfd.	1-24	25-99	100-499	500-999	1000-up
14F1000	1DP-1-502	.005					
14F1002	1DP-1-682	.0068					
14F1003	1DP-1-752	.0075					
14F1004	1DP-1-103	.01					
14F1005	1DP-1-153	.015	.18	.16	.108	.09	.081
14F1006	1DP-1-203	.02					
14F1007	1DP-1-223	.022					
14F1008	1DP-1-253	.025					
14F1009	1DP-1-303	.03					
14F1010	1DP-1-333	.033					
14F1012	1DP-2-473	.047					
14F1013	1DP-2-503	.05					
14F1014	1DP-2-563	.056	.21	.19	.126	.105	.095
14F1015	1DP-2-683	.068					
14F1017	1DP-2-104	.1					
14F1018	1DP-3-154	.15	.24	.22	.144	.12	.108
14F1019	1DP-3-204	.2	.27	.24	.162	.135	.122
14F1020	1DP-3-224	.22	.27	.24	.162	.135	.122
14F1021	1DP-3-254	.25	.30	.27	.18	.15	.135

200 DCWV

14F1022	2DP-3-104	.1	.21	.19	.126	.105	.095
14F1025	2DP-4-224	.22	.27	.24	.162	.135	.122
14F1029	2DP-5-504	.5	.45	.41	.27	.225	.203

400 DCWV

14F1030	4DP-1-103	.01	.15	.14	.09	.075	.068
14F1033	4DP-2-223	.022	.18	.16	.108	.09	.081
14F1038	4DP-3-473	.047	.21	.19	.126	.105	.095
14F1043	4DP-3-104	.1	.24	.22	.144	.12	.108
14F1046	4DP-5-224	.22	.33	.30	.198	.165	.149

600 DCWV

Stk. No.	Type	Mfd.	1-24	25-99	100-499	500-999	1000-up
14F1049	6DP-1-102	.001	.15	.14	.09	.075	.068
14F1053	6DP-1-222	.0022	.15	.14	.09	.075	.068
14F1061	6DP-1-502	.005	.15	.14	.09	.075	.068
14F1064	6DP-1-682	.0068	.18	.16	.108	.09	.081
14F1068	6DP-2-103	.01	.18	.16	.108	.09	.081
14F1070	6DP-2-153	.015	.18	.16	.108	.09	.081
14F1071	6DP-2-203	.02	.18	.16	.108	.09	.081
14F1072	6DP-2-223	.022	.18	.16	.108	.09	.081
14F1073	6DP-2-253	.025	.21	.19	.126	.105	.095
14F1076	6DP-3-333	.033	.21	.19	.126	.105	.095
14F1078	6DP-3-473	.047	.24	.22	.144	.12	.108
14F1080	6DP-3-503	.05	.24	.22	.144	.12	.108
14F1081	6DP-3-563	.056	.24	.22	.144	.12	.108
14F1083	6DP-4-683	.068	.27	.24	.162	.135	.122
14F1086	6DP-4-104	.1	.27	.24	.162	.135	.122
14F1087	6DP-5-154	.15	.36	.32	.216	.18	.162
14F1088	6DP-5-204	.2	.42	.38	.252	.21	.189
14F1089	6DP-5-224	.22	.42	.38	.252	.21	.189

1600 DCWV

14F1091	16DP-2-102	.001	.24	.22	.144	.12	.108
14F1095	16DP-2-222	.0022	.24	.22	.144	.14	.108
14F1100	16DP-2-472	.0047	.27	.24	.162	.135	.122
14F1106	16DP-3-103	.01	.30	.27	.18	.15	.135
14F1109	16DP-5-223	.022	.42	.38	.252	.21	.189
14F1115	16DP-5-503	.05	.48	.43	.288	.24	.216

TYPE 42 MOUNTING BRACKETS

Stk. No.	For	1-24	25-99	100-up
14F831	2	.11	.10	.066
14F832	3	.13	.11	.078
14F833	4	.14	.13	.084
14F834	5	.16	.15	.096
14F835	6	.18	.16	.108

TYPE 40 MINIATURE TRIMMERS

Stk. No.	Type	Plts.	Range Mmf.	1-24	25-99	100-499
14F836	400	1⅛	7-0.9	.33	.30	.20
14F837	402	2	20-1.5	.33	.30	.20
14F838	403	3	35-3	.39	.35	.23
14F839	404	4	60-8	.45	.40	.27

QUALITY TRIMMERS

Treated for resistance to humidity and for permanence of cap. setting. Low dielectric loss bases, micas are clear India ruby. Voltage 350 VDCT—175 VDCW. Shipping weight 3 ounces.

TYPE 42 MIDGET TRIMMERS

Stk. No.	Type	Plts.	Range Mmf.	1-24	25-99	100-up
14F960	420	1⅛	12-1	.33	.30	.20
14F961	421	1¾	25-2	.33	.30	.20
14F962	422	2	40-4	.33	.30	.20
14F963	423	3	100-7	.36	.32	.22
14F964	424	4	150-14	.45	.40	.27
14F965	425	5	200-24	.51	.46	.31
14F966	426	6	250-37	.57	.51	.34
14F967	427	7	300-55	.63	.57	.39
14F968	428	8	350-70	.69	.62	.41
14F969	429	9	400-90	.75	.67	.45

TYPE 46 MICA TRIMMERS

Stk. No.	Type	Plts.	Range Mmf.	1-24	25-99	100-up
14F818	460	1¼	15-1.5	.33	.30	.20
14F819	461	1¾	30-2.7	.33	.30	.20
14F820	462	2	80-5	.33	.30	.20
14F821	463	3	180-9	.36	.32	.22
14F822	464	4	280-25	.45	.40	.27
14F823	465	5	380-50	.51	.46	.31
14F824	466	6	480-80	.57	.51	.34
14F825	467	7	580-110	.63	.57	.39
14F826	468	8	680-140	.69	.62	.41
14F827	469	9	780-170	.75	.67	.45

CENTRALAB LOW VOLTAGE CAPACITORS

UK10

UK3

DA

DDA

DM

DF

TYPE UK ULTRA-KAPS

For transistor circuit applications, low voltage use requiring high capacities and low power factors. TOL: (GMV) Rated: 3 VDCW.

Stk. No.	Type	Mfd.	Diam.	1-4 Each	Pkg. of 5 5-99	Pkg. of 100 100	200-400	500-1000
19F395	UK-104	.1	.220	.49	.42	.333	.21	.158
19F396	UK-224	.22	.290	.35	.30	.238	.15	.113
19F397	UK-474	.47	.408	.35	.30	.238	.15	.113
19F398	UK-105	1.0	.590	.42	.36	.285	.18	.135
19F399	UK-225	2.2	.840	.49	.42	.333	.21	.158
	TYPE UK10—10 VDCW (Tol. +80 —20%)							
19F276	UK10-503	.05	.290	.21	.18	.143	.09	.068
19F277	UK10-104	.10	.408	.21	.18	.143	.09	.068
19F278	UK10-204	.20	.590	.35	.30	.238	.15	.113
19F279	UK10-474	.47	.840	.49	.42	.333	.21	.158
	TYPE UK20—20 VDCW (Tol. +80 —20%)							
19F1278	UK20-503	.05	.408	.21	.18	.143	.09	.068
19F1279	UK20-104	.1	.590	.24	.21	.166	.105	.079
19F1280	UK20-204	.2	.840	.45	.39	.31	.195	.146

High capacity, low voltage ceramic capacitors designed for such sub-miniature applications as transistor circuits. **Type DA.** ½x½x$\frac{9}{64}$". Cap. Tolerance: —20%, +100%. Rated 30 VDCW.

19F1100	DA-203	.02	.42	.36	.285	.18	.135
19F1101	DA-503	.05	.95	.81	.641	.405	.304
19F1102	DA-104	.1	1.58	1.35	1.07	.675	.506

Type DDA. Disc type ⅜" diam. x $\frac{5}{32}$" thk. Cap. tolerance —30%, +80%. Rated 75 VDCW.

Stk. No.	Type	Mfd.	1-4 Each	Pkg. of 5 5-95	Pkgs. of 100 100	200-400	500-1000
19F1103	DDA-503	.05	.35	.30	.238	.15	.113
19F1104	DDA-104	.1	.70	.60	.475	.30	.225

Type DM. Plate type 1$\frac{17}{32}$x$\frac{17}{32}$x$\frac{7}{64}$" thk. Cap. Tolerance: —20%, +50% up to .002 higher cap. —20%, +80%. Rated 150 VDCW.

19F1105	DM-101	.0001					
19F1106	DM-201	.0002					
19F1107	DM-301	.0003					
19F1108	DM-501	.0005					
19F1109	DM-102	.001	1.05	.83	.70	.525	.394
19F1110	DM-202	.002					
19F1111	DM-302	.003					
19F1112	DM-502	.005					
19F1113	DM-103	.01					
19F1114	DM2-502	2x.005					

Type DF Flat Plate Hi-Xaps. 600 VDCW. 1200 VDC. 1$\frac{17}{32}$x1$\frac{17}{32}$x$\frac{7}{32}$"

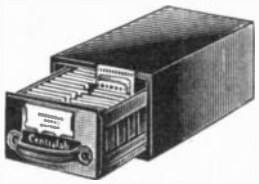
Stk. No.	Type	Mfd.	Tol.	Each	Pkg. of 2 2-49	Pkg. of 50 50-100	150-450	500-1000
19F362	DF-503	.05	GMV	.88	.75	.59	.375	.28
19F364	DF-104*	.1	+80-20%	1.23	1.05	.83	.525	.394

Centralab Capacitors

CERAMIC CAPACITOR KIT

MODEL DDK-200 KIT. Contains a carefully balanced inventory of 200 disc capacitors required most in replacement applications. All are 1000 WVDC except (*) 600 WVDC. Value desired can easily be located and removed from labeled, reusable clear plastic packages. Housed in one drawer, heavy gauge steel 6x4x11" cabinet finished with durable blue enamel.

19F2406. NET **34.10**



Cap. Mmf.	Qty.	Type	Cap. Mmf.	Qty.	Type	Cap. Mfd.	Qty.	Type
5	5	DD-050	200	10	DD-201	.001	15	DD-102
10	5	DD-100	220	5	DD-221	.0015	5	DD-152
25	5	DD-250	250	5	DD-251	.003	5	DD-302
33	5	DD-330	270	5	DD-271	.0047	5	DD-472
47	5	DD-470	300	5	DD-301	.005	5	DD-5022
50	5	DD-500	330	5	DD-331	.005	10	DD-502
68	5	DD-680	390	5	DD-391	.01	5	*DD6-103
100	10	DD-101	470	5	DD-471	.01	15	DD-103
120	5	DD-121	500	5	DD-501	.01	5	DD-1032
150	5	DD-151	680	5	DD-681	.02	15	*DD-203
180	5	DD-181						

3000-6000 V HI-VO DISC CAPACITORS

Highly efficient for by-pass-coupling in high frequency circuits under conditions of extreme humidity or temperature. Maintain performance at temperatures up to 85° C. Tested at twice rated working voltage before shipment. Leads #22 tinned copper wire 1½" min. length. Insul.: Double coating phenolic resin "DUREZ" and high temp. vacuum wax impregnation. Tol. ±20%. Volt. DD30 series, 3000 VDCW, 6000 VDC test; DD60 series, 6000 VDCW, 12,000 test. Sizes: (A) .290" dia.; (B) .385" dia.; (C) .590" dia.; (E) .840" dia.; (F) .969" dia.; (G) 1.0" dia.

TYPE DD30—3000 VDCW—6000 VDC TEST

Stk. No.	Type	Mmf	Size	1-49	50-149	150-499	500-1000
19F200	4R7	4.7	A	.24	.19	.12	.09
19F203	100	10	A				
19F212	500	50	A				
19F217	101	100	A				
19F219	151	150	A				
19F222	221	220	A				
19F225	301	300	A				
19F228	401	400	A				
19F229	471	470	B				
19F230	501	500	B				
19F232	681	680	A				
19F233	751	750	A				
19F234	102	1,000	B	.30	.238	.15	.113
19F236	152	1,500	C				
19F237	202	2,000	C				
19F238	222	2,200	C				
19F241	302	3,000	C				
19F242	502	5,000	F				

TYPE DD60—6000 VDCW—12,000 VDC TEST

Stk. No.	Type	Mmf	Size	1-49	50-149	150-499	500-1000
19F473	500	50	C	.36	.285	.18	.135
19F481	181	180	C				
19F482	201	200	C				
19F483	221	220	C				
19F485	271	270	C				
19F490	471	470	C	.36	.285	.18	.135
19F491	501	500	C				
19F493	681	680	C				
19F495	102	1,000	E	.60	.475	.30	.225
19F498	202	2,000	G	.60	.475	.30	.225

CENTRALAB TYPE DD DISC CERAMIC CAPACITORS

Primarily intended for by-pass coupling or filter service where high capacity is necessary and controlled stability is secondary. Disc ceramic capacitors have a higher dielectric constant, greater voltages, and higher capacities in less space than paper or mica types. Construction enables these units to operate for long periods of time under extreme moisture, temperature, and vibration 1000 volts DC working except #, which are 600 volts DC working. Tol. ±10% except * ±20%, † ±.5 mmf, ‡ GMV; ** +80—20% (A) ¼x⅜2"; (B) ⅜x⅜2"; (C) 9/16x⅜2"; (D) 11/16x⅜2"; (F) ⅞x⅜2"; (G) 2⅜2x1 3/64";

Stk. No.	Type	Mmf	Size	1-99	100-199	200-499	500-999	1M-3M	4M-5M
19F300	DD-3R3	3.3†	A	.15	.119	.075	.056	.048	.042
19F301	DD-050	5	A					.048	.042
19F341	DD-060	6	A					.048	.042
19F302	DD-6R8	6.8	A					.048	.042
19F342	DD-7R5	7.5	A					.048	.042
19F343	DD-080	8	A					.048	.042
19F303	DD-100	10	A					.038	.033
19F344	DD-120	12	A					.038	.033
19F304	DD-150	15	A					.038	.033
19F345	DD-180	18	A					.038	.033
19F305	DD-200	20	A					.038	.033
19F346	DD-220	22	A					.038	.033
19F347	DD-240	24	A					.038	.033
19F306	DD-250	25	A					.038	.033
19F348	DD-270	27	A					.038	.033
19F349	DD 300	30	A					.038	.033
19F307	DD-330	33	A					.038	.033
19F308	DD-390	39	A					.038	.033
19F309	DD-470	47	A					.038	.033
19F310	DD-500	50	A					.038	.033
19F516	DD-510	51	A					.038	.033
19F311	DD-560	56	A					.038	.033
19F312	DD 680	68	A					.038	.033
19F313	DD-750	75	A					.038	.033
19F358	DD-820	82	A					.038	.033
19F359	DD-910	91	A					.038	.033
19F314	DD-101	100	A					.038	.033
19F315	DD-121	120	A					.038	.033
19F365	DD-131	130	A					.038	.033
19F316	DD-151	150	A					.038	.033
19F317	DD-181	180	A					.038	.033
19F318	DD-201	200	A					.038	.033
19F319	DD-221	220	A					.038	.033
19F366	DD-241	240	A					.038	.033
19F320	DD-251	250	A					.041	.035
19F321	DD-271	270	A					.041	.035
19F322	DD-301	300	A					.041	.035
19F323	DD-331	330	A					.041	.035
19F368	DD-351	350	A					.041	.035
19F369	DD-361	360	A					.041	.035
19F324	DD-391	390	A					.041	.035
19F379	DD-401	400	A					.041	.035
19F325	DD-471	470	A					.041	.035

Stk. No	Type	Mmf	Size	1-99	100-199	200-499	500-999	1M-3M	4M-5M
19F517	DD 471G	470‡	A	.15	.119	.075	.056	.036	.031
19F326	DD-501	500	A					.041	.035
19F518	DD-511	510	A					.041	.035
19F327	DD-561	560	A					.041	.035
19F519	DD 601	600	A					.041	.035
19F328	DD-681	680	A					.041	.035
19F329	DD-751	750	A					.041	.035
19F330	DD-801	800‡	A					.036	.031
19F380	DD-821	820	A					.041	.035
19F531	DD-911	910	A					.041	.035
19F331	DD-102	1000	B					.043	.038
19F532	DD-102G	1000‡	A					.036	.031
19F381	DD-122	1200	B					.044	.038
19F533	DD-122G	1200‡	A					.036	.031
19F382	DD-132	1300	B					.044	.038
19F332	DD-152	1500	B					.044	.038
19F534	DD-152G	1500‡	A					.036	.031
19F383	DD-162	1600	B					.044	.038
19F384	DD-182	1800	B					.044	.038
19F333	DD-202	2000‡	B					.038	.033
19F385	DD-222	2200‡	B					.038	.033
19F386	DD-252	2500‡	B					.038	.033
19F387	DD-272	2700‡	B					.038	.033
19F334	DD-302	3000‡	B					.038	.033
19F388	DD-332	3300‡	C					.044	.038
19F389	DD-392	3900‡	C					.044	.038
19F390	DD-402	4000‡	C					.044	.038
19F391	DD-432	4300‡	C					.044	.038
19F335	DD-472	4700‡	C					.046	.040
19F535	DD-472G	4700‡	C					.044	.038
19F336	DD-5022	5000*	C					.046	.040
19F337	DD-502	5000‡	C					.044	.038
19F392	DD-562	5600‡	C					.044	.038
19F393	DD-682	6800‡	C					.044	.038
19F394	DD-752	7500‡	C					.044	.038
19F536	DD-822	8200‡	D					.054	.047
19F339	DD-103	10000‡	D	.24	.19	.12	.09	.054	.047
19F338	DD-1032	10000*	D	.24	.19	.12	.09	.062	.054
19F340	DD-203#	20000**	D	.45	.356	.225	.169	.054	.047
19F537	DD-303#	30000**	F	.45	.356	.225	.169	.099	.085
19F538	DD-403#	40000**	G	.45	.356	.225	.169	.155	.145
19F539	DD-503#	50000**	F	.45	.356	.225	.169	.155	.145

Centralab Capacitors

CENTRALAB

POLYSTYRENE CAPACITORS

Sealed polystyrene foil-capacitors, ideal for applications in TV and radio where they can be used as direct replacements for micas and mylars. Voltage rating 500 VDCW; 1500 VDC test. Tolerance ±5%. 20-250mmf: 394" L, .157" to .276" Dia.; 251-3000mmf: .591" L, .197" to .413" Dia.; 3001-10000mmf: .787" L, .335" to .531" Dia.

Stk. No.	Type	Mmf.	1-49	50-149	150-499	500-999	1M-3M	4M-5M
19F2337	CPR-20J	20	.15	.119	.075	.056	.052	.047
19F2338	CPR-22J	22						
19F2339	CPR-24J	24						
19F2340	CPR-27J	27						
19F2341	CPR-30J	30						
19F2342	CPR-33J	33						
19F2343	CPR-36J	36						
19F2344	CPR-39J	39						
19F2345	CPR-43J	43						
19F2346	CPR-47J	47						
19F2347	CPR-56J	56						
19F2348	CPR-62J	62						
19F2349	CPR-68J	68						
19F2350	CPR-75J	75						
19F2351	CPR-82J	82						
19F2352	CPR-91J	91						
19F2353	CPR-100J	100						
19F2354	CPR-110J	110						
19F2355	CPR-120J	120						
19F2356	CPR-130J	130						
19F2357	CPR-150J	150						
19F2358	CPR-160J	160						
19F2359	CPR-180J	180						
19F2360	CPR-200J	200						
19F2361	CPR-220J	220						
19F2362	CPR-240J	240						
19F2363	CPR-270J	270						
19F2364	CPR-300J	300						
19F2365	CPR-330J	330						
19F2366	CPR-360J	360						
19F2367	CPR-390J	390						
19F2368	CPR-430J	430						
19F2369	CPR-470J	470						
19F2370	CPR-510J	510						

Stk. No.	Type	Mmf.	1-49	50-149	150-499	500-999	1M-3M	4M-5M
19F2371	CPR-560J	560	.15	.119	.075	.056	.052	.047
19F2372	CPR-620J	620						
19F2373	CPR-680J	680						
19F2374	CPR-750J	750						
19F2375	CPR-820J	820						
19F2376	CPR-910J	910						
19F2377	CPR-1000J	1000						
19F2378	CPR-1100J	1100	.18	.143	.09	.068	.064	.059
19F2379	CPR-1200J	1200						
19F2380	CPR-1300J	1300						
19F2381	CPR-1500J	1500						
19F2382	CPR-1600J	1600						
19F2383	CPR-1800J	1800						
19F2384	CPR-2000J	2000						
19F2385	CPR-2200J	2200						
19F2386	CPR-2400J	2400						
19F2387	CPR-2500J	2500						
19F2388	CPR-2700J	2700						
19F2389	CPR-3000J	3000						
19F2390	CPR-3300J	3300	.21	.166	.105	.079	.075	.070
19F2391	CPR-3600J	3600						
19F2392	CPR-3900J	3900						
19F2393	CPR-4300J	4300						
19F2394	CPR-4700J	4700						
19F2395	CPR-5000J	5000						
19F2396	CPR-5100J	5100						
19F2397	CPR-5600J	5600						
19F2398	CPR-6200J	6200						
19F2399	CPR-6800J	6800						
19F2400	CPR-7500J	7500						
19F2401	CPR-8200J	8200						
19F2402	CPR-9100J	9100						
19F2403	CPR-10000J	10000						

POLYSTYRENE CAPACITOR KIT

Model CPK-150 Kit. Contains 150 sealed polystyrene foil capacitors, rated at 500VDCW and with a ±5% tolerance. Included are 17 selected values in a range from 22 pF to 10,000 pF. There are 5 to 20 pieces per value, based on estimated frequency of use. The polystyrene film dielectric of these units permits use in place of mica, Mylar, paper, and ceramic capacitors. They not only substitute for the above types of capacitors but generally outperform them. Capacitance drift: .05% max. @ +25°C. Insulation resistance is 100,000 megohms. "Q" factor is over 2,000 at 1 mc, +25°C. operating temp. range is from —40° to +85°C.

The assortment in this kit is packaged in a 1-drawer Equipto cabinet finished in blue baked enamel. Contents are fully labeled.
19F2404. NET **25.55**

TYPE CK—50 VDCW

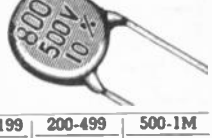
Type CK capacitors are designed for high capacity low voltage demands of transistor circuitry. Proven for use in transistor radios. Working voltage: 50 VDC. Leakage resistance initial: over 7500 megohms. Leakage resistance after humidity: over 1000 megohms. Leads: #22 tinned copper, 1½" minimum length. Max. thickness .235". Power factor: 2% max. at 1 KC. Insulation: Phenolic vacuum wax impregnated. Tolerance: all +80 —20%. Max. pregnated. Tolerance: all +80 —20%. Operating range: —55° to +85°C.

Stk. No.	Cap. Mfd.	CRL. No.	Diam.	1-99	100-199	200-499	500-999	1M-3M	4M-5M
19F1223	.005	CK-502	3/8"	.21	.166	.105	.079	.076	.067
19F1224	.01	CK-103	3/8"						
19F1225	.02	CK-203	19/32"						

Stk. No.	Cap. Mfd.	CRL. No.	Diam.	1-99	100-199	200-499	500-999	1M-3M	4M-5M
19F1226	.025	CK-253	19/32"	.21	.166	.105	.079	.076	.067
19F1228	.05	CK-503	11/16"	.30	.238	.15	.113	.088	.077
19F1229	.1	CK-104	23/32"	.60	.475	.30	.225	.216	.192

TEMPERATURE STABLE "K" AND SEMI-STABLE "K" DISC HI-KAPS

Types CE & CF Hi-Kaps used for applications requiring a min. capacity change as temperature varies between —55 C and +85°C. Working voltage: 500 VDC. Phenolic insulation impregnated with high temp. wax. ±10% Tolerance. Leads: 1½" min. lengths. * .290" dia., ** .390" dia., † .590" dia., ‡ .690" dia., # .920" dia. Average shipping weight, 1 oz



STABLE

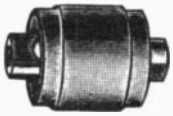
Stk. No.	Mmf.	CRL. No.	1-99	100-199	200-499	500-1M
19F1235	150	CE-151*	.18	.143	.09	.068
19F1236	220	CE-221*				
19F1237	330	CE-331*				
19F1238	470	CE-471*				
19F1239	500	CE-501**				
19F1240	560	CE-561**				
19F1241	680	CE-681**				
19F1242	750	CE-751**				
19F1243	800	CE-801**				
19F1244	1000	CE-102†				

SEMI-STABLE

Stk. No.	Mmf.	CRL. No.	1-99	100-199	200-499	500-1M
19F1245	1200	CF-122**	.18	.143	.09	.068
19F1246	1500	CF-152**				
19F1247	1800	CF-182**				
19F1248	2000	CF-202†	.21	.166	.105	.079
19F1249	2200	CF-222†				
19F1250	3300	CF-332†				
19F1251	3900	CF-392†				
19F1252	4700	CF-472‡				
19F1253	5000	CF-502‡				
19F1256	10000	CF-103#	.24	.19	.12	.09

Central Capacitors

TRANSMITTING CAPACITORS TYPE 857



7.5 KV and 15KV axial screw terminals that are fully threaded to ¼" with 10-32 thread. All 15,000 volts DC, except *, which work at 7,500 volts DC. Negative 750 temperature coefficients, except †, which are NPO zero temperature coefficients. The tolerance is ±10%. Size: 1 9/32" diameter by 1 57/64" long.

Stk. No.	Type	Mmf.	RF Load at 30MC	1-9	10-24	25-99	100-249
19F454	857-25Z†	25	12 amps	8.40	7.56	6.65	5.99
19F455	857-50Z†	50	12 amps	8.40	7.56	6.65	5.99
19F456	857-100N	100	14.4 amps	7.20	6.48	5.70	5.13
19F457	857-200N*	200	18.2 amps	7.20	6.48	5.70	5.13

CENTRALAB CERAMIC TRANSMITTING CAPACITORS

High voltage applications. 5000 Volts D.C.W., tested to 7500 volts DC. ±10% tolerance. Available in either wire lead or axial screw terminal types. NPO temperature coefficients except * which are N750. Dimensions: Type 853—½" dia. x 7/16" L; Type 854—3/8" dia. x 3/8" L; Type 855—¼" dia. x 11/32" L; Type 853A—9/16" dia. x 31/64" L; Type 854A—7/16" dia. x 7/16" L; Type 855A—5/16" dia. x 25/64" L.

WIRE LEAD

Stk. No.	Type	Mmf.	RF Load at 30MC	1-4	5-29	30-104	105-250
19F268	855-3Z	3	1.8 amps				
19F270	854-10Z	10	1.8 amps				
19F271	855-10N*	10	3.2 amps	1.80	1.62	1.43	1.28
19F272	853-20Z	20	2.8 amps				
19F274	853-40N*	40	5.6 amps				

CENTRALAB CERAMIC TRIMMERS

Centralab ceramic trimmers are highly stable, small in size, and light weight. Light-weight rotor under constant spring pressure provides excellent vibration stability. All units 500 VDC working. Power factor less than 0.2%.

CRL TYPE 822 TRIMMERS

Type 822. Steatite body trimmers. Silver rotor and stator plates. 500 VDC working 1500 VDC test, 21/32x21/32". Mtg. holes take No. 4 screws. All are zero temp. coeff. except * neg. T.C. Shpg. wt., 2 oz.

Stk. No.	Type	Mmf	1-4	5-29	30-104	105-250
19F163	AN*	8.0-50				
19F164	BN*	7-45				
19F165	CN*	4.5-25				
19F166	DN*	2-6				
19F167	AZ	4.5-25				
19F168	BZ	2.5-13	1.14	.95	.90	.76
19F169	CZ	2-7.5				
19F185	DZ	1.5-3				
19F186	EZ	1.5-7				
19F188	EN*	4-30				
19F189	FZ	3-12				

CRL TYPE 825 MIL-C-81A TRIMMER CAPACITORS

Ceramic trimmer caps. 21/32x21/32". Mtg. hole takes No. 4 screws. 500 VDC working. Shpg. wt., 2 oz. CVII Series meet MIL-C-81A specifications. Low loss steatite base and silver fired base for stator plate. Temp. Coeffs: DN, BN—N650; AN, FN—N300; CN, GN—N500; EZ, FZ, AZ—0.

Stk. No.	Type	Mmf.	MIL No.	1-4	5-29	30-104	105-250
19F1217	825-EZ	1.5-7	CV11A070				
19F1218	825-FZ	3-12	CV11A120				
19F1219	825-AZ	4.5-25	CV11A250				
19F1220	825-DN	2-6	CV11D060				
19F1222	825-BN	7-45	CV11D450	1.17	.98	.93	.78
19F1230	825-AN	3-13.0	CV11B130				
19F1231	825-GN	7-45.0	CV11C450				
19F1232	825-FN	5-20.0	CV11B200				
19F1233	825-CN	4-30.0	CV11C300				

CENTRALAB CERAMIC TRANSMITTING CAPACITORS

Type 858—7.5 KV and 5 KV transmitting capacitors. All 7500 VDC working except (*) 5000 VDC working. 850S tol.: ± 10%, 858S tol.: ± 20% ‡ Hi-K material, variable T.C. Body 13/16" diameter x 5/8" long. Screw Terminals.

Stk. No.	Type	Mmf.	RF Load at 30MC	1-4	5-29	30-104	105-250
19F248	850S-25Z	25	7 amps				
19F254	850S-50Z	50	10 amps				
19F250	850S-50N	50	8.8 amps	2.70	2.43	2.14	1.92
19F251	850S-75N	75	10 amps				
19F252	850S-100N*	100	9.8 amps				
19F253	858S-500‡	500					
19F249	858S-1000‡	1000					

CRL TYPE FT FEED-THRU CAPACITORS

Bushing type ceramic feed-thru capacitors rated 500 VDC working. 1000 VDC test. Bushing 12-28 thread hex nut .281" lg. Overall size 5/16" hex x 15/32" lg. Tolerance ±20% except when marked by an asterisk, indicates a tolerance of +50%, —20%. Shpg. wt., 2 oz.

Stk. No.	Type	Mmf	1-99	100-199	200-499	500-1M
19F1115	FT-500	500				
19F1116	FT-1000	1000*				
19F1117	FT-1500	1500*	.75	.594	.375	.28
19F1118	FT-1800	1800*				
19F1119	FT-2300	2300*				

CRL TYPE MFT FEED-THRU CAPACITORS

Miniature eyelet type, rated 500 VDC working, 1000 VDC test. Mounts on ¼" flange on eyelet inserted in .160" hole in chassis Body diam. .135x1 3/8" L. overall. Shipping wt., 1 oz.

Stk. No.	Type	Mmf.	1-99	100-199	200-499	500-1M
19F1120	MFT-50	50±10%				
19F1121	MFT-100	100±10%	.30	.238	.15	.113
19F1122	MFT-500	500±20%				
19F1123	MFT-1000	1000 GMV				

CRL TYPE 827 TRIMMER

Sturdy, moisture-resistant ceramic trimmers Ceramic molded phenolic body. Maintain stability under vibration, due to light weight rotor construction that is always in balance under heavy spring pressure. 500 volts DC working, 1000 volts DC test. Initial insulation resistance, 10,000 megs minimum. Power factor is less than 0.2% at one MHz. Size: 17/32x3/4". Wt., 2 oz.

Stk. No.	Type	Mmf	1-4	5-29	30-104	105-250
19F094	827A	2.5-7				
19F095	827B	3.5-12	.90	.75	.71	.60
19F096	827C	6.0-30				
19F097	827D	7.0-35				

CRL TYPE 829 TUBULAR TRIMMER

Tiny tubular high-voltage trimmers for TV and FM applications. Have ceramic bodies, .225" in diameter. Length as shown. Mount by means of lock-nut. Full capacity range obtained in 180° rotation.. Power factor: .25% at 1 MHz 500 volts DC working. 1000 VDC test. Shpg. wt. 1 oz.

Stk. No.	Type	Mmf	Length	1-24	25-124	125-499	500-1M
19F170	829-3	.5-3	½"				
19F171	829-4	1-4	½"	.30	.238	.15	.113
19F172	829-6	1-6	5/8"				
19F173	829-7	1-7.5	¾"				
19F174	829-10	1.5-10	¾"				

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TEXAS INSTRUMENTS SENSISTOR® SILICON RESISTORS

All are solid state temperature sensing resistors. Temperature compensating, temperature sensing. Positive temperature coefficient thermistors. TM¼, TM-⅛, and TC-⅛ feature large positive temperature coefficient of resistance (approx. 0.7%/C). **TM-¼ & TM-⅛.** Molded case. Tolerance of ±10%. Axial leads, Full lead at 100°C. Derated linearly to 150°C. Size: ¼" dia. x ½" length. **TG⅛.** Features round welded case. Has glass-to-metal hermetic seal between case and leads. ±10% tolerance. Full load at 125°C. Derated Linearly to 200°C. Size: ⅜" dia. x ¼" height. **TG-⅛.** Hermetically sealed, designed to meet or exceed all electrical requirements of MIL-T-23648A for positive-TC thermistors ±10% tolerance. Ambient and Storage Temp. Range: —65°C to 150°C. Power dis. (at 25°C)—250 mW; at 100°C—125mW. Wt. 1 oz.

Stk. No.	Type	Watts	Resistance Range	1-49	50-249	250-499	500-999
12F055	TM-⅛	⅛	10 ohms to 10 K	4.00	3.50	3.00	2.50
12F052	TM-⅛	⅛	10 ohms to 5.6 K	5.00	4.50	4.00	3.20
12F050	TC-⅛	⅛	10 ohms to 5.6 K	5.00	4.50	4.00	3.20
12F075	TG-⅛	⅛	10 ohms to 2.7 K	5.00	4.50	4.00	3.20

RESISTANCE TABLE FOR SENSISTORS

10	18	33	56	100	180	330	500	820	1500	2700	4700	6800
12	22	39	68	120	220	390	560	1000	1800	3300	5000	8200
15	27	47	82	150	270	470	680	1200	2200	3900	5600	10000

TYPE CR "EPOXY-PLUS" CARBON FILM RESISTORS

High moisture resistance. Insulation res. over 100,000 meg. Operate at full rated power at 70°C. amb., derated linearly to zero at 165°C. for characteristic D, 150°C. for characteristic B, to MIL-R-10509D. Size: CR-⅛, .25"Lx..095"dia.; CR-¼, .375"Lx.105" dia.; CR-½, .6"Lx.175"dia. 1% tolerance.

Stock No.	Type No.	Mil Type	Resistance Range	Watts	1-24	25-99	100-249	500-999	500-999	1000-4999
60F500	CR-⅛	RN55D,B	10 ohms-301K	⅛	1.22	.66	.40	.26	.26	.22
60F501	CR-¼	RN60D,B	10 ohms-1 meg	¼	.95	.42	.26	.17	.17	.13
60F502	CR-½	RN65D,B	10 ohms-100 ohms	½	1.10	.50	.30	.188	.18	.143
60F502	CR-½	.....	102 ohms-2.49 meg	½	.95	.42	.26	.18	.17	.13

GLASS HERMETIC RESISTORS

Hermetically sealed in hard glass for stability and reliability. Impervious to moisture. 1% ohmic tolerance. Meets or exceeds all requirements of Specification MIL-R-10509C for Characteristic B. Alloy end caps high-temperature sealed to glass shell. Size: CG ⅛-0.240 Length x 0.125 dia. CG ¼-0.360 Length x 0.140 diameter.

Stk. No.	Type	Watts Ti	Watts Mil	Mil Type	Resis. Range	Volts	1-24	25-99	100-249	250-499	500-999	1000-4999
12F110	CG ⅛	⅛	1/10	RN55G,D	10 ohms-100 ohms	250	1.22	.66	.48	.38	.31	.27
12F110	CG ⅛	⅛	1/10	RN55G,D	102 ohms-100K ohms	250	1.22	.66	.40	.30	.26	.22
12F115	CG ¼	¼	⅛	RN60D	10 ohms-100 ohms	250	1.22	.66	.48	.38	.31	.27
12F115	CG ¼	¼	⅛	RN60G	102 ohms-1 meg	250	1.22	.66	.40	.30	.27	.22

TYPE MM MOLDED METAL-FILM RESISTORS

Meet or exceed all requirements of Specification MIL-R-10509D for characteristic C. Full rated load at 125°C. amb., derated linearly to zero at 175°C. Fully insulated molded coating. Temp. coeff. T-2, ±50 ppm/°C. Size: MM60, .40"L. x .135"dia.; 1% tolerance. Axial leads.

Meet or exceed all requirements of MIL-R-10509 specifications for characteristic X. High degree of stability ±1% resistance tolerance. Will withstand moisture, shock environment and abrasion. Full rated load at 70° C. Insulation resistance greater than 50,000 megohms. Negligibl¹ noise level.

Stock No.	Type	Mil Type	Resistance Range	Watts	1-24	25-99	100-249	250-499	500-999	1000-4999
60F503	MM60	RN60C	49.9 ohms-499K	⅛	1.14	.58	.33	.32	.30	.26

MIL LINE CARBON FILM RESISTORS

Stock No.	Type	Mil Type	Resistance Range	Watts	1-24	25-99	100-249	250-499	500-999	1000-4999
12F080	CD½MR	RN20X	10 ohms-100 ohms	½	2.20	1.30	.98	.84	.75	.68
			102 ohms-4.99 meg	½	.95	.40	.24	.15	.125	.095
			5.11 meg-10 meg	½	2.20	1.30	.98	.84	.75	.68

Resistance values for units above shown below.

DECADE TABLE FOR DETERMINING MIL-BELL STANDARD RESISTANCE VALUES

Standard Resistance Values are obtained from the Decade Table by multiplying by multiples of 10. As an example, 1.33 can represent 13.3 ohms; 133 ohms, 1.33 K, 13.3 K, 133 K. 1.33 megohms.

1.00	1.21	1.47	1.78	2.15	2.61	3.16	3.83	4.64	5.62	6.81	8.25
1.02	1.24	1.50	1.82	2.21	2.67	3.24	3.92	4.75	5.76	6.98	8.45
1.05	1.27	1.54	1.87	2.26	2.74	3.32	4.02	4.87	5.90	7.15	8.66
1.07	1.30	1.58	1.91	2.32	2.80	3.40	4.12	4.99	6.04	7.32	8.87
1.10	1.33	1.62	1.96	2.37	2.87	3.48	4.22	5.11	6.19	7.50	9.09
1.13	1.37	1.65	2.00	2.43	2.94	3.57	4.32	5.23	6.34	7.68	9.31
1.15	1.40	1.69	2.05	2.49	3.01	3.65	4.42	5.36	6.49	7.87	9.53
1.18	1.43	1.74	2.10	2.55	3.09	3.74	4.53	5.49	6.65	8.06	9.76

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OHMITE Adjustable Dividohms

"Dividohm" Vitreous Enameled Resistors make ideal voltage dividers for original equipment and replacement in transmitters, rectifiers and other apparatus. Handy for obtaining odd resistance values, for adjusting circuits and for use on equipment which must be set to meet various line voltages, Tolerance: 10%. Avg. Shipping wt. 12-50 Watts, 4.0 oz.; 100-225 Watts, 1 lb.

STYLE 210-12—12 WATT—1¾"x5/16"

Stock No.	Type	Resis. Ohms	Max Amps.	1-9	10-24	25-99	100-249
13F500	1001	1	3.46				
13F501	1002	2	2.45				
13F502	1003	3	2.00	1.20	1.02	.84	.72
13F503	1004	5	1.54				
13F504	1005	7.5	1.26				
13F505	1006	10	1.09				
13F506	1007	15	.89				
13F507	1008	20	.77	1.20	1.02	.84	.72
13F508	1009	25	.69				
13F509	1010	50	.49				
13F510	1011	75	.40				
13F511	1012	100	.34				
13F512	1013	150	.28	1.20	1.02	.84	.72
13F513	1014	200	.24				
13F514	1015	250	.22				
13F515	1016	300	.20				
13F516	1017	350	.18				
13F517	1018	400	.17				
13F518	1019	500	.15	1.20	1.02	.84	.72
13F519	1020	600	.14				
13F520	1021	750	.13				
13F521	1022	800	.12				
13F522	1023	1,000	.11				
13F523	1024	1,250	.098				
13F524	1025	1,500	.089				
13F525	1026	2,000	.077				
13F526	1027	2,250	.073				
13F527	1028	2,500	.069	1.24	1.05	.87	.74
13F528	1029	3,000	.063				
13F529	1030	3,500	.058				
13F530	1031	4,000	.055				
13F531	1032	4,500	.052				
13F532	1033	5,000	.049				
13F533	1034	6,000	.045				
13F534	1035	7,000	.042				
13F535	1036	7,500	.040				
13F536	1037	8,000	.039	1.33	1.13	.93	.80
13F537	1038	8,500	.037				
13F538	1039	9,000	.036				
13F539	1040	10,000	.035				

STYLE 210-25—25 WATT—2"x9/16"

Stock No.	Type	Resis. Ohms	Max Amps.	1-9	10-24	25-99	100-249
13F550	0360	1	5.00				
13F551	0360B	2	3.54				
13F552	0361	3	2.88	1.35	1.15	.95	.81
13F553	0362	5	2.24				
13F554	0362B	7.5	1.82				
13F555	0363	10	1.58				
13F556	0364	15	1.29				
13F557	0364B	20	1.12	1.35	1.15	.95	.81
13F558	0365	25	1.00				
13F559	0366	50	.71				
13F560	0367	75	.58				
13F561	0368	100	.50				
13F562	0369	150	.41	1.35	1.15	.95	.81
13F563	0370	200	.35				
13F564	0371	250	.32				
13F565	0371B	300	.29				
13F566	0371C	400	.25				
13F567	0372	500	.22	1.35	1.15	.95	.81
13F568	0373	750	.18				
13F569	0374	800	.17				
13F570	0375	1,000	.16				
13F571	0375B	1,250	.14				
13F572	0376	1,500	.13				
13F573	0377	2,000	.12				
13F574	0377B	2,250	.11				
13F575	0378	2,500	.10	1.39	1.18	.97	.83
13F576	0379	3,000	.091				
13F577	0380	3,500	.084				
13F578	0381	4,000	.079				
13F579	0381B	4,500	.074				
13F580	0382	5,000	.070				
13F581	0383	6,000	.064				
13F582	0383B	7,000	.060				
13F584	0384	7,500	.057	1.49	1.27	1.04	.89
13F585	0384B	8,000	.055				
13F586	0384C	9,000	.052				
13F587	0385	10,000	.050				
13F588	0386	12,000	.042	1.54	1.31	1.08	.92
13F589	0387	15,000	.036	1.54	1.31	1.08	.92
13F590	0388	20,000	.031	1.54	1.31	1.08	.92
13F591	0389	25,000	.028	1.69	1.44	1.18	1.01

STYLE 210-50—50 WATT—4"x9/16"

Stock No.	Type	Resis. Ohms	Max Amps.	1-9	10-24	25-99	100-249
13F600	0560	5	3.16				
13F601	0561	10	2.23				
13F602	0562	25	1.41	1.76	1.50	1.23	1.06
13F603	0563	50	1.00				
13F604	0564	75	.82				
13F605	0565	100	.71				
13F606	0566	150	.58				
13F607	0567	200	.50	1.76	1.50	1.23	1.06
13F608	0568	250	.45				
13F609	0568B	300	.41				
13F610	0568C	400	.35				
13F611	0569	500	.32				
13F612	0570	750	.26	1.76	1.50	1.23	1.06
13F639	0571	800	.25				
13F613	0572	1,000	.22				
13F614	0572B	1,250	.20				
13F615	0573	1,500	.18				
13F616	0574	2,000	.16				
13F617	0575	2,500	.14				
13F618	0576	3,000	.13	1.80	1.53	1.26	1.08
13F619	0576B	3,500	.12				
13F620	0577	4,000	.11				
13F621	0577B	4,500	.10				
13F622	0578	5,000	.10				
13F623	0578B	6,000	.091				
13F624	0578C	7,000	.084				
13F625	0579	7,500	.081				
13F626	0580	8,000	.079	1.89	1.61	1.32	1.13
13F627	0580B	9,000	.074				
13F628	0581	10,000	.071				
13F629	0582	12,000	.064	2.02	1.72	1.41	1.21
13F630	0583	15,000	.057	2.02	1.72	1.41	1.21
13F631	0584	20,000	.050	2.02	1.72	1.41	1.21
13F632	0585	25,000	.045	2.22	1.89	1.55	1.33
13F633	0586	30,000	.036	2.22	1.89	1.55	1.33
13F634	0587	40,000	.029	2.22	1.89	1.55	1.33
13F635	0588	50,000	.026	2.40	2.04	1.68	1.44
13F636	0589	60,000	.024	2.40	2.04	1.68	1.44
13F637	0590	80,000	.021	2.67	2.27	1.87	1.60
13F638	0591	100,000	.018	2.84	2.41	1.99	1.70

STYLE 210-100—100 WATT—6½"x¾"

Stock No.	Type	Resis. Ohms	Max Amps.	1-9	10-24	25-99	100-249
13F670	0956A	1	10.0	2.87	2.44	2.01	1.72
13F671	0956B	2	7.07	2.87	2.44	2.01	1.72
13F672	0956C	3	5.77	2.87	2.44	2.01	1.72
13F673	0956D	4	5.00				
13F650	0956	5	4.47				
13F651	0957	10	3.16				
13F652	0958	25	2.00				
13F653	0959	50	1.41	2.22	1.89	1.55	1.33
13F654	0960	100	1.00				
13F655	0960B	250	.63				
13F656	0961	500	.45				
13F657	0962	1,000	.32				
13F658	0962B	1,500	.26	2.28	1.94	1.60	1.37
13F659	0963	2,500	.20	2.28	1.94	1.60	1.37
13F660	0964	5,000	.14	2.28	1.94	1.60	1.37
13F661	0965	10,000	.10	2.42	2.06	1.69	1.45
13F662	0966	15,000	.081	2.56	2.18	1.79	1.54
13F663	0967	20,000	.071	2.56	2.18	1.79	1.54
13F664	0968	25,000	.063	2.84	2.41	1.99	1.70
13F665	0969	30,000	.058	2.84	2.41	1.99	1.70
13F666	0970	40,000	.050	2.84	2.41	1.99	1.70
13F667	0971	50,000	.045	2.92	2.48	2.04	1.75
13F668	0972	75,000	.032	3.17	2.69	2.22	1.90
13F669	0973	100,000	.028	3.49	2.97	2.44	2.09

ADJUSTABLE LUGS

For Dividohms—Bakelite knob type

Stock No.	Type	Description	1-9	10-24	25-99
13F710	0359	For 25, 50 Watt	.33	.28	.23
13F711	1959	For 100 Watt	.33	.28	.23
13F712	2159	For 200 Watt	.42	.36	.29
		For Dividohms—Screw driver type			
13F713	1058	For 10 Watt	.15	.13	.11
13F714	0358	For 25, 50 Watt	.15	.13	.11
13F715	1958	For 100 Watt	.15	.13	.11
13F716	2158	For 200 Watt	.24	.20	.17

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

OHMITE ADJUSTABLE DIVIDOHMS (Continued)

STYLE 210-225 225 WATT—10½"x1⅛"

Stock No.	Type	Resis. Ohms	Max. Amps.	1-9	10-24	25-99	100-249
13F676	1356A	1	15.00	4.54	3.86	3.18	2.72
13F677	1356B	2	10.60				
13F678	1356C	3	8.67				
13F679	1356D	4	7.50				
13F680	1356	5	6.72				
13F681	1357	10	4.74	3.51	2.98	2.46	2.11
13F682	1358	25	3.00				
13F683	1359	50	2.12				
13F684	1360	100	1.50				
13F685	1360B	250	.95				
13F686	1361	500	.67				
13F687	1362	1,000	.47				
13F688	1362B	1,500	.39	3.58	3.04	2.51	2.15
13F689	1363	2,500	.30	3.58	3.04	2.51	2.15
13F690	1364	5,000	.21	3.58	3.04	2.51	2.15
13F691	1365	10,000	.15	3.77	3.20	2.64	2.26
13F692	1366	15,000	.13	3.96	3.37	2.77	2.38
13F693	1367	20,000	.11	3.96	3.37	2.77	2.38
13F694	1368	25,000	.095	4.05	3.44	2.84	2.43
13F695	1369	30,000	.087	4.05	3.44	2.84	2.43
13F696	1370	40,000	.075	4.05	3.44	2.84	2.43
13F697	1371	50,000	.067	4.16	3.54	2.91	2.50
13F698	1372	75,000	.055	4.35	3.70	3.05	2.61
13F699	1373	100,000	.047	4.56	3.88	3.19	2.74

TYPE 200 "BROWN DEVIL" RESISTORS

High quality, compact wire-wound resistors for voltage-dropping, bias units, bleeders, etc. Extra-sturdy all-ceramic vitreous enameled. Protected against shock, vibration, heat and humidity. Have standard resistance tolerance of ±5%. 8-watt units have 1x⅝" cores: 12-watt units, 1¾x⅝" cores; 20-watt units, 2x⅞" cores. All have 1½" leads. Average shipping weight, 3 ounces.

13F150—8 WATT "BROWN DEVIL" RESISTORS—STYLE 200-8

Type	Ohms	1-9	10-24	25-99	100-249
1500	1	.55	.47	.39	.33
1500B	1.5				
1501	2				
1502	3				
1503	4				
1504	5				
1505	7.5				
1506	10				
1507	12				
1508	15				
1509	20				
1510	25				
1511	30				
1512	35				
1513	40				
1514	50				
1515	75				
1516	100				
1517	125				
1518	150				
1519	200	.55	.47	.39	.33
1520	225				
1521	250				
1522	300				
1523	350				
1524	400				
1525	450				
1526	500				
1527	600				
1528	700				
1529	750				
1530	800				
1531	900				
1532	1,000				
1533	1,100	.58	.49	.41	.35
1534	1,200				
1535	1,250				
1536	1,500				
1537	1,750				
1538	2,000				
1539	2,250	.58	.49	.41	.35
1540	2,500				
1541	3,000				
1542	3,500				
1543	4,000				
1544	4,500				
1545	5,000				
1546	6,000	.61	.52	.43	.37
1547	7,000				
1548	7,500				
1549	8,000				
1550	9,000				
1551	10,000				
1552	12,500	.68	.58	.48	.41
1553	15,000				
1554	17,500				
1555	20,000				
1556	22,500	.71	.60	.50	.43
1557	25,000				

13F155—12 WATT "BROWN DEVIL" RESISTORS—STYLE 200-12

Type	Ohms	1-9	10-24	25-99	100-249
1701	1	.60	.51	.42	.36
1704	1.5				
1705	2				
1706	3				
1707	4				
1708	5				
1709	7.5				
1710	10				
1711	12				
1712	15				
1713	20				
1714	25				
1715	30				
1716	35				
1717	40				
1718	50				
1719	75				
1720	100				
1721	125				
1722	150				
1723	200				
1724	225				
1725	250				
1726	300	.60	.51	.42	.36
1727	350				
1728	400				
1729	450				
1730	500				
1731	600				
1732	700				
1733	750				
1734	800				
1735	900				
1736	1,000				
1737	1,100	.64	.54	.45	.38
1738	1,200				
1739	1,250				
1740	1,500				
1741	1,750				
1742	2,000				
1743	2,250				
1744	2,500				
1745	3,000				
1746	3,500				
1747	4,000				
1748	4,500				
1749	5,000	.74	.63	.52	.44
1750	6,000				
1751	7,000				
1752	7,500				
1753	8,000				
1754	8,500				
1754A	9,000				
1755	10,000				
1756	11,000	.83	.71	.58	.50
1757	12,000				
1758	12,500				
1759	13,500				
1761	15,000				
1762	16,000				
1763	17,500				
1764	18,000				
1765	20,000				
1766	22,500	.87	.74	.61	.52
1767	25,000				
1768	30,000				
1769	35,000				
1770	40,000				
1771	45,000	.98	.83	.69	.59
1772	50,000				

13F160—20 WATT "BROWN DEVIL" RESISTORS—STYLE 200-20

Type	Ohms	1-9	10-24	25-99	100-249
1802A	1	.71	.60	.50	.43
1802B	2				
1802C	3				
1802D	4				
1803	5				
1804	10				
1805	25				
1806	50				
1807	75				
1808	100				
1809	150				
1810	200				
1811	250				
1812	300				
1813	350				
1814	400				
1815	500				
1816	650				
1817	700				
1818	750				
1819	800	.71	.60	.50	.43
1820A	900				
1821	1,000				
1822	1,200	.74	.63	.52	.44
1823	1,250				
1824	1,500				
1825	1,750				
1827	2,000				
1828	2,250				
1830	2,500				
1831	2,750				
1832	3,000				
1833	3,500				
1834	4,000				
1835	4,500				
1836	5,000				
1837	6,000	.87	.74	.61	.52
1838	7,000				
1839	7,500				
1840	8,000				
1840A	9,000	.87	.74	.61	.52
1841	10,000				
1842	12,500	.89	.76	.62	.53
1843	15,000				
1844	20,000				
1845	25,000	1.04	.88	.73	.62
1846	30,000				
1847	35,000				
1848	40,000				
1849	45,000	1.21	1.03	.85	.73
1850	50,000				
1851	55,000				
1852	60,000				
1853	65,000	1.44	1.22	1.01	.86
1854	70,000				
1855	75,000				
1856	80,000				
1857	85,000	1.65	1.40	1.16	.99
1858	90,000				
1859	95,000				
1860	100,000				

OHMITE Fixed Resistors

Lug type, wire-wound with vitreous enamel. Wire of the finest alloy and largest possible size is used for each resistance. The original uniform close spacing of the turns is maintained by the anchoring effect of the vitreous enamel. The wire is securely welded to the terminal lugs. Tolerance: 5%. Shpg. wt.: 10-50 watts, 4.0 oz.; 100-225 watts, 1 lb.

STYLE 270-12 — 12 WATT—1¾"x5/16"

Stock No.	Type	Resis. Ohms	Max. Amps.	1-9	10-24	25-99	100-249
13F1200	3723	.51	4.86				
13F1201	3730	1.0	3.46				
13F1202	3734	1.5	2.83				
13F1203	3738	2.2	2.34				
13F1204	3742	3.3	1.91				
13F1205	3746	4.7	1.60				
13F1206	3750	6.8	1.33				
13F1207	3754	10	1.10				
13F1208	3756	12	1.00				
13F1209	3758	15	.89				
13F1210	3760	18	.82				
13F1211	3762	22	.74				
13F1212	3764	27	.67				
13F1213	3766	33	.60				
13F1214	3768	39	.55				
13F1215	3770	47	.53				
13F1216	3772	56	.46	.60	.51	.42	.36
13F1217	3774	68	.42				
13F1218	3776	82	.38				
13F1219	3778	100	.35				
13F1220	3780	120	.32				
13F1221	3782	150	.28				
13F1222	3784	180	.26				
13F1223	3786	220	.23				
13F1224	3788	270	.21				
13F1225	3790	330	.19				
13F1226	3792	390	.18				
13F1227	3794	470	.16				
13F1228	3796	560	.15				
13F1229	3798	680	.13				
13F1230	3800	820	.12				
13F1231	3802	1,000	.11				
13F1232	3804	1,200	.10				
13F1233	3806	1,500	.089				
13F1234	3808	1,800	.082				
13F1235	3810	2,200	.074	.64	.54	.45	.38
13F1236	3812	2,700	.067				
13F1237	3814	3,300	.060				
13F1238	3816	3,900	.055				
13F1239	3818	4,700	.053				
13F1240	3820	5,600	.046				
13F1241	3822	6,800	.042	.74	.63	.52	.44
13F1242	3824	8,200	.038				
13F1243	3826	10,000	.035				
13F1244	3828	12,000	.032				
13F1245	3830	15,000	.028	.83	.71	.58	.50
13F1246	3832	18,000	.026				
13F1247	3834	22,000	.023				
13F1248	3836	27,000	.021	.87	.74	.61	.52
13F1249	3838	33,000	.019				
13F1250	3840	39,000	.018				
13F1251	3842	47,000	.016	.98	.83	.69	.59
13F1252	3843	51,000	.015	.98	.83	.69	.59

STYLE 270-25—25 WATT—2"x9/16"

13F720	0200J	1	5.00				
13F721	0200K	2	3.54				
13F722	0200L	3	2.88				
13F723	0200A	5	2.24				
13F724	0200B	10	1.58				
13F725	0200R	15	1.29				
13F726	0200C	25	1.00				
13F727	0200D	50	.71	.76	.65	.53	.46
13F728	0200E	75	.58				
13F729	0200F	100	.50				
13F730	0200G	150	.41				
13F731	0200H	200	.35				
13F732	0201	250	.32				
13F733	0202	500	.22				
13F734	0203	750	.18				
13F735	0204	800	.17				
13F736	0205	1,000	.16				
13F737	0206	1,500	.13				
13F738	0207	2,000	.12				
13F739	0208	2,500	.10	.79	.67	.55	.47
13F740	0209	3,000	.091				
13F741	0210	3,500	.084				
13F742	0211	4,000	.079				
13F743	0212	5,000	.070				
13F744	0213	6,000	.064				
13F745	0214	7,500	.057	.89	.76	.62	.53
13F746	0215	10,000	.050				
13F747	0216	12,000	.042				
13F748	0217	15,000	.036	.95	.81	.67	.57
13F749	0218	20,000	.031				
13F750	0219	25,000	.028				
13F754	0220	30,000	.026	1.09	.93	.76	.65
13F755	0221	35,000	.024				
13F751	0222	40,000	.022				
13F752	0224	50,000	.020	1.27	1.08	.89	.76
13F756	0226	70,000	.014	1.49	1.27	1.04	.89
13F753	0229	100,000	.010	1.72	1.46	1.20	1.03

STYLE 270-50—50 WATT—4"x9/16"

Stock No.	Type	Resis. Ohms	Max. Amps.	1-9	10-24	25-99	100-249
13F760	0400A	5	3.16				
13F761	0400B	10	2.23				
13F762	0400C	25	1.41				
13F763	0400D	50	1.00				
13F764	0400E	75	.82				
13F765	0400F	100	.71				
13F766	0400G	150	.58	1.17	.99	.82	.70
13F767	0400H	200	.50				
13F768	0401	250	.45				
13F769	0402	500	.32				
13F770	0403	750	.26				
13F789	0404	800	.25				
13F771	0405	1,000	.22				
13F772	0406	1,500	.18				
13F773	0407	2,000	.16				
13F774	0408	2,500	.14	1.20	1.02	.84	.72
13F775	0409	3,000	.13				
13F776	0410	4,000	.11				
13F777	0411	5,000	.10				
13F778	0412	7,500	.081	1.29	1.10	.90	.77
13F779	0413	8,000	.079	1.29	1.10	.90	.77
13F780	0414	10,000	.071	1.29	1.10	.90	.77
13F781	0415	12,000	.064	1.42	1.21	.99	.85
13F782	0416	15,000	.057	1.42	1.21	.99	.85
13F783	0417	20,000	.050	1.42	1.21	.99	.85
13F784	0418	25,000	.045	1.62	1.38	1.13	.97
13F785	0419	35,000	.032	1.62	1.38	1.13	.97
13F786	0420	50,000	.026	1.81	1.54	1.27	1.09
13F787	0421	75,000	.021	2.07	1.76	1.45	1.24
13F788	0422	100,000	018	2.24	1.90	1.57	1.34

STYLE 270-100—100 WATT—6½"x¾"

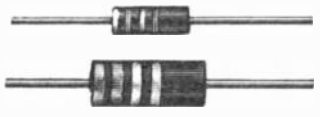
13F800	0600A	5	4.47				
13F801	0600B	10	3.16				
13F802	0601	25	2.00				
13F803	0602	50	1.41				
13F804	0603	75	1.15				
13F805	0604	100	1.00	1.62	1.38	1.13	.97
13F806	0605	150	.82				
13F807	0606	250	.63				
13F808	0607	500	.45				
13F809	0608	750	.37				
13F810	0609	1,000	.32				
13F811	0610	1,500	.26				
13F812	0611	2,000	.22	1.68	1.43	1.18	1.01
13F813	0612	2,500	.20				
13F814	0613	3,000	.18				
13F815	0614	5,000	.14				
13F816	0615	7,500	.12	1.82	1.55	1.27	1.09
13F817	0616	10,000	.10	1.82	1.55	1.27	1.09
13F818	0617	15,000	.081	1.96	1.67	1.37	1.18
13F819	0618	20,000	.071	1.96	1.67	1.37	1.18
13F820	0619	25,000	.063	2.24	1.90	1.57	1.34
13F821	0620	30,000	.058	2.24	1.90	1.57	1.34
13F822	0621	40,000	.050	2.24	1.90	1.57	1.34
13F823	0622	50,000	.045	2.32	1.97	1.62	1.39
13F825	0624	75,000	.032	2.57	2.18	1.80	1.54
13F826	0625	100,000	.028	2.89	2.46	2.02	1.73

STYLE 270-225—225 WATT—10½" x 1⅛"

13F830	0900A	5	6.72	3.61	3.07	2.53	2.17
13F831	0900B	10	4.74				
13F832	0901	25	3.00				
13F833	0902	50	2.12				
13F834	0903	75	1.73				
13F835	0904	100	1.50	2.58	2.19	1.81	1.55
13F836	0905	150	1.25				
13F837	0906	250	.95				
13F838	0907	500	.67				
13F839	0908	750	.55				
13F840	0909	1,000	.47				
13F841	0910	1,500	.39				
13F842	0911	2,000	.34	2.66	2.26	1.86	1.60
13F843	0912	2,500	.30				
13F844	0913	3,000	.27				
13F845	0914	5,000	.21				
13F846	0915	7,500	.17	2.85	2.42	2.00	1.71
13F847	0916	10,000	.15	2.85	2.42	2.00	1.71
13F848	0917	15,000	.13	3.03	2.58	2.12	1.82
13F849	0918	20,000	.11	3.03	2.58	2.12	1.82
13F850	0919	25,000	.095	3.13	2.66	2.18	1.88
13F851	0920	30,000	.087	3.13	2.66	2.18	1.88
13F852	0921	40,000	.075	3.13	2.66	2.19	1.88
13F853	0922	50,000	.067	3.23	2.75	2.26	1.94
13F854	0923	60,000	.061	3.23	2.75	2.26	1.94
13F855	0924	75,000	.055	3.42	2.91	2.39	2.05
13F856	0925	100,000	.047	3.63	3.09	2.54	2.18

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

OHMITE "LITTLE DEVIL" RESISTORS



Molded composition resistors meet all requirements for MIL-R-11E, except *. Minimum resistance under MIL spec is 2.7 ohms for ½ watt and 10 ohms for 1/8 watt. Meets salt water and high humidity requirements. Unexcelled for low noise level. Dissipate heat rapidly—can be used at their full wattage ratings at 158°F. ambient temp. 1½" leads. WT., 2 oz. **Figures in large, bold type are 10% EIA values. All values available in ±5% tolerance.**

Ohms							Megohms		
1.0	6.2	39	240	1500	9100	56000	0.24	1.1	5.1
1.1	6.8	43	270	1600	10000	62000	0.27	1.2	5.6
1.2	7.5	47	300	1800	11000	68000	0.30	1.3	6.2
1.3	8.2	51	330	2000	12000	75000	0.33	1.5	6.8
1.5	9.1	56	360	2200	13000	82000	0.36	1.6	7.5
1.6	10	62	390	2400	15000	91000	0.39	1.8	8.2
1.8	11	68	430	2700	16000	100000	0.43	2.0	9.1
2.0	12	75	470	3000	18000	110000	0.47	2.2	10.0
2.2	13	82	510	3300	20000	120000	0.51	2.4	11.0
2.4	15	91	560	3600	22000	130000	0.56	2.7	12.0
2.7	16	100	620	3900	24000	150000	0.62	3.0	13.0
3.0	18	110	680	4300	27000	160000	0.68	3.3	15.0
3.3	20	120	750	4700	30000	180000	0.75	3.6	16.0
3.6	22	130	820	5100	33000	200000	0.82	3.9	18.0
3.9	24	150	910	5600	36000	220000	0.91	4.3	20.0
4.3	27	160	1000	6200	39000		1.0	4.7	22.0
4.7	30	180	1100	6800	43000				
5.1	33	200	1200	7500	47000				
5.6	36	220	1300	8200	51000				

⅛ WATT UNITS

Voltage Rating: 150 volts r.m.s. Size: .145" x .062". Mil. RC-05.

Stock No.	Tol.	Resist. Range	May be Assorted 100 per value 1-4	5-49	50-99	100-249	250-499	500-999	1000-up
13F048	5%	2.7 ohms to 9.1 ohms*	.37	.31	.25	.218	.190	.175	.164
		10 ohms to 22 Meg.	.34	.28	.23	.198	.173	.159	.149
13F046	10%	2.7 ohms to 8.2 ohms*	.27	.22	.18	.156	.134	.123	.116
		10 ohms to 22 Meg.	.24	.20	.16	.140	.122	.112	.105

¼ WATT UNITS

Voltage Rating: 250 volts r.m.s. Size: .25x.090". Mil. RC-07.

12F205	± 5%	2.7 ohms to 9.1 ohms	.29	.24	.15	.105	.10	.08	.068
		10 ohms to 22 Meg.	.26	.22	.14	.095	.091	.073	.062
12F200	±10%	2.7 ohms to 8.2 ohms	.14	.12	.08	.055	.055	.044	.037
		10 ohms to 22 Meg.	.13	.11	.07	.05	.05	.04	.034

½ WATT UNITS

Voltage rating: 350 volts r.m.s. Size: .375 x .1404". Mil. RC-20.

Stock No.	Tol.	Resis. Range	May be Assorted 100 per value 1-4	5-49	50-99	100-249	250-499	500-999	1000-up
13F065	± 5%	1 ohm to 2.4 ohms*	.26	.22	.14	.095	.091	.073	.062
		2.7 ohms to 22 Meg.	.24	.20	.12	.075	.073	.065	.056
13F050	±10%	1 ohm to 2.2 ohms*	.13	.11	.07	.05	.05	.04	.034
		2.7 ohms to 22 Meg.	.12	.10	.06	.04	.04	.032	.03

1 WATT UNITS

Voltage Rating: 500 volts r.m.s. Size: .5625x.218". Mil. RC-32.

13F070	± 5%	2.7 ohms to 22 Meg.	.36	.30	.18	.125	.123	.11	.09
13F055	±10%	2.7 ohms to 22 Meg.	.18	.15	.09	.06	.055	.050	.045

2 WATT UNITS

Voltage Rating: 750 volts r.m.s. Size: .6875x.3125". Mil. RC-42.

13F075	± 5%	10 ohms to 22 Meg.	.48	.40	.24	.19	.185	.175	.16
13F060	±10%	10 ohms to 22 Meg.	.24	.20	.15	.11	.096	.088	.082

OHMITE "LITTLE DEVIL" KITS

Most commonly used resistors with a plastic cabinet included at no extra cost. Cabinet has 5 drawers and 40 compartments. 9x4¾x5¼". Wt., 7 lbs.

Model CAB-4. ¼ watt ± 10% assortment with 150 resistors in values below.
13F164. NET **19.50**

Model CAB-10. ½-watt ± 10% assortment with 150 resistors in values listed below.
13F165. NET **18.00**

Model CAB-2. 1-watt ±10% assortment with 125 resistors in values below.
13F166. NET **22.50**

Model CAB-3. 2-watt ±10% assortment with 125 resistors in values below.
13F167. NET **30.00**

Quantities CAB-4	CAB-10	CAB-2 CAB-3	Ohms	Quantities CAB-4	CAB-10	CAB-2 CAB-3	Ohms
....	1	1	10	3	3	1	33,000
....	1	1	15	3	5	5	39,000
....	1	1	27	5	10	10	47,000
5	1	1	47	3	3	1	68,000
5	5	1	100	2	1	1	82,000
1	1	1	150	10	10	10	.1 meg
3	3	1	270	3	5	5	.15 meg
1	1	1	330	3	3	1	.22 meg
3	3	1	470	3	10	10	.27 meg
1	1	1	680	3	3	1	.33 meg
10	5	3	1,000	5	10	10	.47 meg
5	1	1	1,500	1	1	1	.68 meg
10	1	1	2,200	10	10	10	1.0 meg
5	3	3	2,700	1	1	1	1.5 meg
10	10	5	4,700	1	1	1	2.2 meg
5	1	1	6,800	1	3	1	2.7 meg
10	10	10	10,000	1	1	1	3.9 meg
5	3	3	15,000	1	1	1	4.7 meg
5	5	5	22,000	1	1	1	6.8 meg
5	10	10	27,000	1	1	1	10.0 meg

"LITTLE DEVIL" COLOR CODER

Type #5190. Set dial to resistor's EIA color code . . . read resistance directly. Gives MIL equivalents and chart showing availability of various resistances. Shpg. wt., 2 oz.
51F989. NET **10c**

OHM'S LAW CALCULATOR

Type #5182. Easy-to-use rapid calculator. Solve electrical problems involving various applications of Ohm's Law—has a parallel-resistance calculator. Made of vinyl. Slide-rule scales. Size: 9x3". Shpg. wt., 3 oz.
51F992. NET **1.50**

Type #5180. As above, but on cardboard. Shpg. wt., 2 oz.
51F993. NET **25c**

CAPACITOR CALCULATOR

Type #5184. Provides quick answers on capacitance problems. With one setting of slide, capacitor calculator gives the solution to problems involving frequency, reactance, power factor, dissipation factor, equivalent series resistance, impedance and phase angle. Incorporates A, B, C, D, slide rule scales. Includes important capacitance formulae and comparison chart. 7"x2⅝". Durable, heavy, varnished cardboard. Shpg. wt., 2 oz.
51F995. NET **25c**

Depend on NEWARK for the Latest Top-Quality Equipment. Complete On-the-Shelf Stocks • Lowest Prices • Fast Service

OHMITE MOLDED VITREOUS ENAMELED RESISTORS—SERIES 99

TYPE 991 MILITARY AXIAL LEAD POWER RESISTORS

Meets the requirements of MIL-R-26C insulated styles RW67V, RW68V, RW69V. Tolerance ±5% 1000 VAC insl. brkdwn. Vitrified, permanent markings. Leads 1½ in. long. Resistors utilize a single layer winding of high grade resistance alloy on a ceramic core. Axial type terminal leads and the resistance wire are both welded to metal end-caps which fit snugly over the core ends. Tough, moisture-resistant, vitreous enamel material is molded around the resistor. Provides a uniformly thick, dense, smooth covering. Av. Shpg. wt., 4 oz.

Stock Resistances—Ohms

1.0	18	36	68	180	360	680	1300	2700	5100
2.0	20	39	75	200	390	750	1500	3000	5600
3.0	22	43	82	220	430	820	1600	3300	6200
5.1	24	47	91	240	470	910	1800	3600	6800
10	27	51	100	270	510	1000	2000	3900	7500
12	30	56	120	300	560	1100	2200	4300	8200
15	33	62	150	330	620	1200	2400	4700	

TYPE RW69V—3 WATTS

To replace RW59V and RW59G. OHMITE STYLE 991-3. Size: 0.203 in. Dia. by 0.547 in. L.

Stk. No.	Stock res. in ohms	NET EACH 1-9	10-24	25-99	100-249
13F310	1.0 to 910	.71	.60	.50	.43

TYPE RW67V—6.5 WATTS

To substitute RW57V and RW57G. OHMITE STYLE 991-6.5. Size: 0.313 in. dia. x 0.922 in. L.

13F311	1.0 to 1000	.74	.63	.52	.44
	1100 to 3600	.79	.67	.55	.47

TYPE RW68V—11 WATTS

To replace RW58V, RW58G, RW55V, RW55G and RW56G. OHMITE STYLE 991-11. Size: 0.313 in. dia. by 1.781 in. L.

13F312	1.0 to 1000	.82	.70	.57	.49
	1100 to 4700	.88	.75	.62	.53
	5100 to 8200	1.01	.86	.71	.61

TYPE 995 "MOLDED VITREOUS" AXIAL-LEAD RESISTORS

All welded vitreous enamel resistor with 1000VAC insulation. Resists chipping, breaking, and protects against moisture, salt spray, and salt immersion. Vitrified markings resist high temperatures, solvents, and abrasions. Standard resistance tolerance: ±5%. Leads tinned, 1½"L. All sizes 20 gauge except 1½ w.: 24 gauge. Leads can be bent sharply at the body. Uniform dimensions permit use in automated assembly insertion equipment.

RESISTOR SIZE

1½ Watt: 0.422" L. x 0.125" D. **3¼ Watt:** 0.547" L. x 0.203 D. **2¼ Watt:** 0.375" L. x 0.188 D. **5 Watt:** 0.938" L. x 0.203" D. **11 Watt:** 1.781" L. x 0.313" D.

Stock Resistance—Ohms

1.0	22	82	400	1200	5000	18000
1.5	25	100	470	1500	5600	20000
2.0	27	120	500	1800	6000	22000
3.0	30	150	560	2000	6800	25000
4.0	33	180	600	2200	7000	27000
5.0	39	200	680	2500	7500	30000
7.5	40	220	700	2700	8000	33000
10	47	250	750	3000	8200	39000
12	50	270	800	3300	9000	40000
15	56	300	820	3900	10000	47000
18	68	330	900	4000	12000	50000
20	75	390	1000	4700	15000	

Specify Stock No. and Resistance when ordering.

1½ WATT UNITS—STYLE 995-1A

Stk. No.	Value in Ohms	1-9	10-24	25-99	100-249
13F168	1 to 1,000	.62	.53	.43	.37
	1,100 to 3,000	.66	.56	.46	.40

2¼ WATT UNITS—STYLE 995-2A

13F169	1 to 1,000	.60	.51	.42	.36
	1,100 to 3,000	.64	.54	.45	.38

3¼ WATT UNITS—STYLE 995-3A

13F145	1 to 1,000	.59	.50	.41	.35
	1,200 to 5,000	.62	.53	.43	.37
	5,600 to 10,000	.66	.56	.46	.40

5 WATT UNITS—STYLE 995-5B

13F146	1 to 1,000	.62	.53	.43	.37
	1,200 to 5,000	.66	.56	.46	.40
	5,600 to 10,000	.70	.60	.49	.42
	12,000 to 20,000	.78	.66	.55	.47
	22,000 and 25,000	.82	.70	.57	.49

11 WATT UNITS—STYLE 995-10A

13F147	1 to 1,000	.68	.58	.48	.41
	1,200 to 5,000	.73	.62	.51	.44
	5,600 to 10,000	.84	.71	.59	.50
	12,000 to 20,000	.95	.81	.67	.57
	22,000 to 40,000	1.00	.85	.70	.60
	47,000 and 50,000	1.12	.95	.78	.67

Newark Can Supply All Industrial Needs Whether Listed or Not . .

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Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

Precision Metal Film & Wirewound Resistors

ELECTRA

For all industrial or military requirements. The application of metal film "across the board" for all film resistor types means it is possible to reduce the numerous classes of film resistors to just four. The four classes cover all requirements from the most precise (1%, 100 PPM/°C) down through the types formerly covered by carbon film and tin oxide.

Mil Standard Resistance Values — **Specify Stock Number and Resistance.**

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Meg
30.1	59.0	115	226	442	866	1690	3320	6490	12.7K	24.9K	48.7K	95.3K	187K	365K	715K	1.00
30.9	60.4	118	232	453	887	1740	3400	6650	13.0K	25.5K	49.9K	97.6K	191K	374K	732K	1.02
31.6	61.9	121	237	464	909	1780	3480	6810	13.3K	26.1K	51.1K	100K	196K	383K	750K	1.05
32.4	63.4	124	243	475	931	1820	3570	6980	13.7K	26.7K	52.3K	102K	200K	392K	768K	1.07
33.2	64.9	127	249	487	953	1870	3650	7150	14.0K	27.4K	53.6K	105K	205K	402K	787K	1.10
34.0	66.5	130	255	499	976	1910	3740	7320	14.3K	28.0K	54.9K	107K	210K	412K	806K	1.13
34.8	68.1	133	261	511	1000	1960	3830	7500	14.7K	28.7K	56.2K	110K	215K	422K	825K	1.15
35.7	69.8	137	267	523	1020	2000	3920	7680	15.0K	29.4K	57.6K	113K	221K	432K	845K	1.18
36.5	71.5	140	274	536	1050	2050	4020	7870	15.4K	30.1K	59.0K	115K	226K	442K	866K	1.21
37.4	73.2	143	280	549	1070	2100	4120	8060	15.8K	30.9K	60.4K	118K	232K	453K	887K	1.24
38.3	75.0	147	287	562	1100	2150	4220	8250	16.2K	31.6K	61.9K	121K	237K	464K	909K	1.27
39.2	76.8	150	294	576	1130	2210	4320	8450	16.5K	32.4K	63.4K	124K	243K	475K	931K	1.30
40.2	78.7	154	301	590	1150	2260	4420	8660	16.9K	33.2K	64.9K	127K	249K	487K	953K	1.33
41.2	80.6	158	309	604	1180	2320	4530	8870	17.4K	34.0K	66.5K	130K	255K	499K	976K	1.37
42.2	82.5	162	316	619	1210	2370	4640	9090	17.8K	34.8K	68.1K	133K	261K	511K		1.40
43.2	84.5	165	324	634	1240	2430	4750	9310	18.2K	35.7K	69.8K	137K	267K	523K		1.43
44.2	86.6	169	332	649	1270	2490	4870	9530	18.7K	36.5K	71.5K	140K	274K	536K		1.47
45.3	88.7	174	340	665	1300	2550	4990	9760	19.1K	37.4K	73.2K	143K	280K	549K		1.50
46.4	90.9	178	348	681	1330	2610	5110	10.0K	19.6K	38.3K	75.0K	147K	287K	562K		
47.5	93.1	182	357	698	1370	2670	5230	10.2K	20.0K	39.2K	76.8K	150K	294K	576K		
48.7	95.3	187	365	715	1400	2740	5360	10.5K	20.5K	40.2K	78.7K	154K	301K	590K		
49.9	97.6	191	374	732	1430	2800	5490	10.7K	21.0K	41.2K	80.6K	158K	309K	604K		
51.1	100	196	383	750	1470	2870	5620	11.0K	21.5K	42.2K	82.5K	162K	316K	619K		
52.3	102	200	392	768	1500	2940	5760	11.3K	22.1K	43.2K	84.5K	165K	324K	634K		
53.6	105	205	402	787	1540	3010	5900	11.5K	22.6K	44.2K	86.6K	169K	332K	649K		
54.9	107	210	412	806	1580	3090	6040	11.8K	23.2K	45.3K	88.7K	174K	340K	665K		
56.2	110	215	422	825	1620	3160	6190	12.1K	23.7K	46.4K	90.9K	178K	348K	681K		
57.6	113	221	432	845	1650	3240	6340	12.4K	24.3K	47.5K	93.1K	182K	357K	698K		

MFC CONFORMALLY COATED

High temperature high impact epoxy compound impervium "X" gives a MIL level moisture barrier. 1% tolerance. New cap type termination. Temp. coefficients: ± 100 PPM/°C. Average wt. 1 oz. Precision made.

T-O 1/20 WATT MF3C. 152" L. X .065" D.

Stock No.	Resistance Range	1-24	25-99	100-249	250-499	500-999	1000-9999
58F012	30.1 ohms-100K	2.29	1.89	1.00	.94	.90	.67

T-O 1/10 WATT MF4C .250" X .093" D.
Mil Approved RN55D — Mil-R-10509E

58F013	30.1 to 301K	1.34	.50	.30	.22	.188	.143

T-O ⅛ WATT MF5C .312" L. X .093" D.

58F016	49.9 ohms-499K	1.06	.40	.24	.15	.125	.095

T-O ¼ WATT MF6C .495" L. X .146" D.

Stock No.	Resistance Range	1-24	25-99	100-249	250-499	500-999	1000-9999
58F017	49.9 ohms-1 meg	1.06	.40	.24	.15	.125	.095

T-O ½ WATT MF7C .611" L. X .165" D.

58F018	49.9 ohms-1.5 meg	1.06	.40	.24	.15	.125	.095

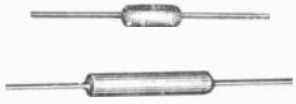
T-2 ¼ WATT MF62C .611" L. X .165" D.
RN60C Mil Approved

Stk. No.	Resistance Range	1-24	25-99	100-249	250-499	500-999
58F020	30.1 ohms to 499K	1.31	.70	.39	.39	.39

T-2 ⅛ WATT MF52C .385" L. X .146" D.
RN65C Mil Approved

58F021	49.9 ohms to 2 meg.	1.31	.70	.39	.39	.39

SPRAGUE RESISTORS



AXIAL-LEAD "BLUE JACKET" POWER WIREWOUND RESISTORS

Designed for industrial applications demanding utmost stability under extreme operating conditions. Well suited for printed circuits, terminals boards, and point-to-point wiring applications. Unique all-welded end-cap construction eliminated moisture paths along the leads and anchors the leads securely to the resistor. Power rating is based on a max. temperature rise of 300°C above a 40° ambient at full rated wattage. Will meet performance characteristics of MIL-R-26C. Available only in values shown.

TYPE 242E—3 WATT ± 5% TOLERANCE
Size: 13/64" dia. x 17/32" L.

Stk. No.	Range (ohms)	1-9	10-24	25-99	100-249	250-499
60F290	1 thru 10	.53	.46	.38	.32	.28
	12 thru 1000 except 35, 350, 450, 750	.52	.44	.36	.31	.27
	1200 thru 5000 except 3.5K, 4.5K.	.55	.47	.38	.33	.27
	5600 thru 10K except 7K	.58	.49	.41	.35	.29

TYPE 243E—5 WATT ±5% TOLERANCE
Size: 13/64" dia. x 15/16" L.

60F291	1 thru 10	.56	.49	.40	.35	.29
	12 thru 1000 except 18, 22, 27, 33, 39, 47, 56, 68, 82, 180, 270, 330, 390, 450, 560, 680, 820	.55	.47	.38	.33	.27
	1100 thru 5000 except 2700, 3300, 3900, 4700	.58	.49	.41	.35	.29
	6000 thru 10K except 6800, 8200	.62	.53	.43	.37	.31
	12K thru 20K except 16K, 17K	.69	.58	.49	.41	.34
	22K thru 30K	.75	.65	.53	.46	.39

TYPE 247E—10 WATT ±5% TOLERANCE
Size: 5/16" dia. x 1¾" L.

Stk. No.	Range (ohms)	1-9	10-24	25-99	100-249	250-499
60F292	1 thru 10	.62	.53	.44	.38	.32
	12 thru 1000 except 18, 22, 27, 33, 39, 47, 56, 68, 82, 180, 270, 330, 390, 450, 470, 560, 680, 820	.60	.51	.42	.36	.30
	1100 thru 5000 except 2.7K, 4.7K	.65	.54	.45	.39	.32
	6000 thru 10K except 6.8K, 8.2K	.74	.63	.52	.44	.37
	11K thru 20K except 17K	.84	.71	.59	.50	.42
	22K thru 40K	.93	.80	.66	.57	.48
	45K thru 50K	.99	.84	.69	.59	.50

TABLE OF RESISTANCE VALUES

1	12	33	75	250	470	820	2000	4000	7500	15K	35K
1.5	15	35	82	270	500	900	2200	4500	8000	16K	40K
2	18	39	100	300	560	1000	2500	4700	8200	17K	45K
3	20	40	120	330	600	1100	2700	5000	9000	18K	50K
4	22	47	150	350	680	1200	3000	5600	10K	20K	
5	25	50	180	390	700	1400	3300	6000	11K	22K	
7.5	27	56	200	400	750	1500	3500	6800	12K	25K	
10	30	68	220	450	800	1800	3900	7000	14K	30K	

Fixed Resistors

POWER RESISTORS "GREENOHM V"

Vitreous enamel, wire-wound power resistors engineered to meet or exceed MIL-R-26 specifications. Features wire of finest grade resistance alloy. Teal green enamel finish withstands overheating without peeling or cracking. Tolerance ±5%, resistance 1 ohm and over. Designed for the utmost in reliability and stability under the most adverse conditions.

TERMINALS, WIRE LEAD AND LUG

VPRSF FIXED 5 WATT

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F260	1	.46	.40	.32	.262	.232
	1.5					
	2					
	3					
	4					
	5					
	7.5					
	10					
	15					
	20					
	25					
	30					
	40					
	50					
	75					
	100					
	125					
	150					
	200					
	225					
	250					
	300					
	400					
	500					
	600					
	800					
	900					
	1000					
	1500	.49	.43	.34	.277	.25
	2000					
	2250					
	2500					
	3000					
	3500					
	5000					
	6000	.52	.45	.36	.292	.258
	7000					
	8000					
	9000					
	10K					
	12.5K	.58	.51	.41	.329	.291
	15K					
	17.5K					
	20K					
	22.5K	.66	.58	.46	.375	.331

VPR10F FIXED 10-WATT

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F261	1	.51	.44	.35	.287	.254
	1.5					
	2					
	3					
	4					
	5					
	10					
	12					
	15					
	20					
	25					
	30					
	35					
	40					
	50					
	75					
	100					
	125					
	150					
	200					
	225					

VPR10F (cont'd)

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F261	250	.51	.44	.35	.287	.254
	300					
	350					
	400					
	450					
	500					
	600					
	750					
	1000					
	1100	.54	.47	.38	.306	.271
	1200					
	1250					
	1500					
	1750					
	2000					
	2250					
	2500					
	3000					
	3500					
	4000					
	4500					
	5000					
	6000	.62	.54	.43	.352	.311
	7000					
	7500					
	8000					
	10K					
	11K	.70	.61	.49	.398	.352
	12K					
	15K					
	20K					
	25K	.74	.64	.51	.418	.369
	30K	.74	.64	.51	.418	.369
	40K	.83	.72	.58	.468	.414
	50K	.83	.72	.58	.468	.414

FIXED 20-WATT VPR-20H

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F262	5	.61	.53	.42	.342	.302
	10					
	25					
	50					
	75					
	100					
	150					
	200					
	250					
	300					
	400					
	500					
	650					
	700					
	800					
	850					
	1250	.62	.54	.43	.352	.311
	1500					
	1850					
	2000					
	2400					
	2500					
	3000					
	3500					
	4000					
	5000					
	6000	.74	.64	.51	.418	.370
	7000					
	7500					
	8000					
	10K					
	12.5K	.77	.66	.53	.428	.378
	20K					
	25K	.88	.77	.61	.50	.442
	30K					
	40K					
	50K	1.02	.89	.71	.579	.512
	60K	1.02	.89	.71	.579	.512
	65K	1.08	.94	.75	.611	.54
	75K	1.08	.94	.75	.611	.54
	100K	1.16	1.01	.81	.655	.579

LUG TERMINALS AND MTG. BKT.

FIXED 25-WATT VP25K

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F317	1	.64	.57	.45	.363	.321
12F318	2	.64	.57	.45	.363	.321

FIXED 25-WATT VP25K (cont'd)

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F319	3	.64	.57	.45	.363	.321
12F320	4					
12F321	5					
12F322	10					
12F323	15					
12F324	25					
12F325	50					
12F326	75					
12F327	100					
12F328	150					
12F329	200					
12F330	250					
12F263	500					
12F331	750					
12F332	1000					
12F333	1500	.66	.58	.47	.378	.334
12F334	2000					
12F335	2500					
12F336	3000					
12F337	5000					
12F338	10K	.76	.66	.53	.428	.378
12F339	15K	.80	.70	.58	.45	.401
12F340	20K	.80	.70	.58	.45	.401
12F341	25K	.93	.81	.64	.523	.463
12F342	40K	.93	.81	.64	.523	.463
12F343						
12F344	50K	1.08	.94	.75	.609	.539
12F345	100K	1.47	1.28	1.02	.832	.736

FIXED 50-WATT VP50K

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F264	1	.99	.86	.69	.558	.493
12F265	2					
12F266	3					
12F267	4					
12F268	5					
12F269	10					
12F270	25					
12F271	50					
12F272	100					
12F273	150					
12F274	200					
12F275	250					
12F276	300					
12F277	400					
12F278	500					
12F279	750					
12F280	800					
12F281	1000	1.01	.....	.71	.573	.507
12F282	1250					
12F283	1500					
12F284	2000					
12F285	3000					
12F286	4000					
12F287	5000					
12F288	6000	1.09	.95	.76	.618	.547
12F289	10K	1.09	.95	.76	.618	.547
12F290	15K	1.20	1.05	.84	.68	.601
12F291	50K	1.54	1.34	1.07	.872	.772
12F292	100K	1.90	1.65	1.32	1.08	.951
12F293	150K	2.44	2.12	1.70	1.38	1.22
12F294	200K	2.85	2.48	1.98	1.61	1.43
12F295	250K	3.04	2.64	2.11	1.72	1.52

FIXED 100-WATT VP100N

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F296	1	1.37	1.19	.95	.775	.686
12F297	2					
12F298	3					
12F299	4					
12F300	5					
12F301	10					
12F302	25					
12F303	50					
12F304	75					
12F305	100					
12F306	150					
12F307	200					
12F308	250					
12F309	300					
12F310	1000					
12F311	2500	1.42	1.24	.99	.805	.712
12F312	5000	1.42	1.24	.99	.805	.712
12F313	10K	1.54	1.34	1.07	.870	.769
12F314	50K	1.47	1.71	1.37	1.11	.983
12F315	100K	2.44	2.12	1.70	1.38	1.22
12F316	200K	3.80	3.30	2.64	2.15	1.90

LUG TERM. AND MTG. BKT. CONT. 200 WATT VK-200W

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F346	1					
12F347	2					
12F348	3					
12F349	4					
12F350	5					
12F351	10					
12F352	25					
12F353	50	2.19	1.90	1.52	1.24	1.09
12F354	75					
12F355	100					
12F356	150					
12F357	200					
12F358	250					
12F359	500					
12F360	1000					
12F361	2500					
12F362	5000	2.55	1.95	1.56	1.27	1.12
12F363	10K	2.42	2.10	1.68	1.37	1.21
12F364	50K	2.76	2.40	1.92	1.56	1.38
12F365	100K	3.08	2.68	2.14	1.74	1.54

ADJUSTABLE SERIES

ADJ. 50 WATT VP50KA

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F422	1					
12F423	2					
12F424	3					
12F425	4					
12F426	5					
12F427	10					
12F428	20					
12F429	25					
12F430	50					
12F431	75	1.11	.98	.81	.679	.614
12F432	100					
12F433	150					
12F434	200					
12F435	250					
12F436	300					
12F437	400					
12F438	500					
12F439	750					
12F440	800					

VP50KA (cont'd)

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F441	1000	1.11	.98	.81	.679	.614
12F442	1250					
12F443	1500					
12F444	2000					
12F445	3000	1.13	1.00	.83	.694	.628
12F446	3500					
12F447	5000					
12F448	7500	1.21	1.07	.88	.739	.688
12F449	10K	1.21	1.07	.88	.739	.688
12F450	15K	1.32	1.17	.96	.80	.722
12F451	20K	1.32	1.17	.96	.80	.722
12F452	25K	1.51	1.33	1.00	.905	.814
12F453	30K	1.51	1.33	1.00	.905	.814
12F454	50K	1.66	1.46	1.19	.993	.893
12F455	100K	2.02	1.77	1.44	1.20	1.07

ADJ. 25-WATT VP25KA

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F394	1					
12F395	2					
12F396	5					
12F397	10					
12F398	15					
12F399	20					
12F400	25					
12F401	50					
12F402	75	.76	.68	.57	.484	.442
12F403	100					
12F404	150					
12F405	200					
12F406	250					
12F407	400					
12F408	500					
12F409	750					
12F410	1000					
12F411	1500					
12F412	2000					
12F413	2500	.79	.60	.59	.499	.555
12F414	3000					
12F415	5000					
12F416	6000					
12F417	9000	.88	.78	.65	.549	.499
12F418	10K					
12F419	15K	.92	.82	.68	.574	.522
12F420	20K	.92	.82	.68	.574	.522
12F421	25K	1.05	.93	.77	.644	.584

ADJ. 100 WATT VK100NA

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F456	1					
12F457	2					
12F458	3					
12F459	4					
12F460	5					
12F461	10					
12F462	15					
12F463	25					
12F464	50	1.49	1.31	1.08	.896	.707
12F465	100					
12F466	150					
12F467	200					
12F468	250					
12F469	300					
12F470	400					
12F471	500					
12F472	750					
12F473	1000					
12F474	1500					
12F475	2000	1.54	1.36	1.11	.926	.833
12F476	2500					
12F477	5000					
12F478	10K	1.66	1.46	1.19	.99	.89
12F479	100K	2.56	2.24	1.82	1.50	1.34

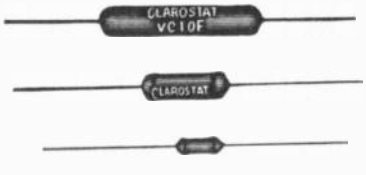
ADJ. 10 WATT VP10FA

Stk. No.	Ohms	1-9	10-24	25-99	100-249	250-499
12F366	1					
12F367	2					
12F368	3					
12F369	5					
12F370	10					
12F371	15					
12F372	20					
12F373	25					
12F374	50					
12F375	75					
12F376	100	.63	.56	.47	.408	.375
12F377	150					
12F378	200					
12F379	250					
12F380	300					
12F381	400					
12F382	500					
12F383	600					
12F384	750					
12F385	1000					
12F386	1250					
12F387	1500					
12F388	2000					
12F389	2250	.66	.59	.50	.427	.392
12F390	2500					
12F391	3000					
12F392	5000					
12F393	10K	.74	.66	.55	.473	.432

Note: Fixed series VK200 has core size of 10½" x 1⅛". Adjustable series core sizes are as follows: VP50KA, 4" x 9/16"; VP25KA, 2" x 9/16"; VK100NA, 6½" x ¾"; VP10FA, 1¾" x 5/16". **(All series above are furnished with lug terminals and mounting brackets.)**

AXIAL LEAD VITREOUS RESISTORS

Axial lead resistors are available in three sizes; 3, 5, and 10 watts, Series VC3D, VC5E, and VC10F. Axial lead resistors are particularly adapted to printed circuit, terminal board, and point to point wiring applications. These resistors save considerable space because of the elimination of mounting brackets and terminal lugs. Standard resistance tolerance is ±5% for 1 Ohm and higher. Attractively packaged in a newly designed carton particularly adapted to this new type resistor. Finished in vitreous shade of teal green. Designed for critical applications, these resistors will operate with stability and reliability under the most variable environmental conditions. Economically priced for quantity selector.



OHM CHART

1	50	390	1.2K	4.5K	22K
1.5	56	400	1.25K	4.7K	25K
2	68	450	1.5K	5K	27K
3	82	470	1.75K	5.6K	30K
4	100	500	1.8K	6K	33K
5	120	560	2K		40K
7.5	150	600	2.2K	7K	45K
10	180	680	2.25K	7.5K	50K
15	200	700	2.5K	8K	
18	220	750	2.7K	8.2K	
20	225	800	3K	9K	
25	250	820	3.3K	10K	
30	270	900	3.5K	12.5K	
33	300	1K	3.9K	15K	
35	330	1.1K	4K	20K	

VC3D 1Ω TO 10K

Stk. No.	Range Ohms	1-9	10-24	25-99	100-249	250-499	500-999
12F480	1.0-100	.51	.44	.35	.286	.253	.235
	101-2.5K	.47	.41	.32	.263	.233	.217
	2501-5.5K	.53	.46	.37	.297	.263	.245
	5501-7.5K	.57	.49	.39	.32	.283	.264
	7501-10K	.67	.58	.47	.378	.334	.31

VC5E 1Ω TO 25K

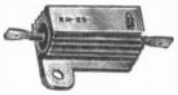
Stk. No.	Range Ohms	1-9	10-24	25-99	100-249	250-499	500-999
12F481	1.0-1K	.51	.44	.35	.286	.253	.235
	1001-5K	.53	.46	.37	.297	.263	.245
	5001-10K	.57	.49	.39	.32	.283	.264
	10001-15K	.61	.53	.42	.343	.304	.283
	15001-20K	.69	.60	.48	.389	.344	.32
	20001-25K	.91	.79	.63	.515	.455	.424

VC10F 1Ω TO 50K

Stk. No.	Range Ohms	1-9	10-24	25-99	100-249	250-499	500-999
12F482	1.0-1K	.55	.48	.38	.309	.273	.254
	1001-5K	.61	.53	.42	.343	.304	.283
	5001-10K	.67	.58	.47	.378	.334	.311
	10001-20K	.76	.66	.53	.432	.382	.356
	20001-40K	.86	.75	.60	.486	.43	.40
	40001-50K	1.01	.88	.70	.57	.51	.47

DALE Precision Resistors

TYPE RH-MIL-R-18546



Resistors are wire wound type with special resistance-temperature characteristics and housing configurations designed to meet MIL-R-18546 specifications. Constructed to provide a flat surface and recommended for chassis mounting to assure proper heat dissipation. Molded construction in a die-cast, gold anodized-radiator finned aluminum housing. 100% impervious to moisture and salt spray. Heavy duty leads.

RH-10 ±1% — 12.5 WATT MIL. NO. RE65

Stock No.	Resistance in Ohms	1-24	25-49	50-99	100-249	250-499
13F139	1.0-1K	1.82	1.45	1.36	1.27	1.18
	1-1K-5K	1.91	1.53	1.44	1.34	1.24
	5.1K-10K	2.08	1.66	1.56	1.45	1.35
	10.1K-12K	2.24	1.79	1.68	1.56	1.45
	12.1K-15K	2.44	1.95	1.83	1.71	1.58
	15.1K-25K	2.62	2.39	2.18	1.95	1.74
	25.1K-40K	2.90	2.65	2.41	2.17	1.93
	40.1K-50K	3.19	2.91	2.64	2.42	2.11

RH-25 ±1%—25 WATT MIL. NO. RE70

Stock No.	Resistance in Ohms	1-24	25-49	50-99	100-249	250-499
13F140	1.0-1K	1.82	1.45	1.36	1.27	1.18
	1.1K-5K	1.91	1.53	1.44	1.34	1.24
	5.1K-10K	2.08	1.66	1.56	1.45	1.35
	10.1K-12K	2.24	1.79	1.68	1.56	1.45
	12.1K-15K	2.44	1.95	1.83	1.71	1.58
	15 1K-25K	2.62	2.39	2.18	1.95	1.74
	25.1K-40K	2.90	2.65	2.41	2.17	1.93
	40.1K-50K	3.19	2.91	2.64	2.42	2.11
	50.1K-60K	3.48	3.17	2.87	2.54	2.26
	60.1K-75K	3.79	3.45	3.10	2.76	2.48
	75.1K-95.2K	4.17	3.79	3.41	3.07	2.73

RH-50 ±1%—50 WATT MIL. NO. RE75

Stock No.	Resis., Ohms	1-24	25-49	50-99	100-249	250-499
13F141	1.0-5.9	3.23	2.59	2.42	2.26	2.10
	6.0-1K	2.23	1.78	1.67	1.56	1.45
	1.1K-5K	2.34	1.87	1.76	1.64	1.52
	5.1K-10K	2.53	2.02	1.89	1.77	1.64
	10.1K-20K	2.75	2.20	2.06	1.93	1.78
	20.1K-55K	3.00	2.40	2.24	2.10	1.95
	55.1K-75K	3.26	2.61	2.44	2.28	2.11
	75.1K-100K	3.50	2.79	2.63	2.45	2.28
	100.1K-125K	3.80	3.04	2.85	2.66	2.46
	125.1K-150K	4.09	3.28	3.07	2.86	2.66
	150.1K-175K	4.38	3.50	3.29	3.07	2.85
	175.1K-225K	4.65	3.67	3.52	3.24	3.05
	225.1K-273K	5.02	3.95	3.80	3.45	3.28

STANDARD RESISTANCE VALUES —RH & RS ONLY

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms
1	15	65	330	900	4.2K	14K	70K
1.5	16	70	350	950	4.3K	15K	75K
2	17.5	75	375	1K	4.5K	15.5K	80K
2.5	20	80	390	1.1K	4.7K	17.5K	90K
3	21	85	400	1.2K	5K	20K	100K
4	22.5	90	425	1.25K	5.3K	22.5K	110K
4.5	25	100	450	1.3K	6K	25K	120K
5	27.5	110	470	1.4K	6.2K	27.5K	130K
5.5	30	125	500	1.5K	6.3K	30K	140K
6	31	130	510	1.6K	6.8K	35K	150K
7	33	150	560	1.75K	7K	40K	160K
7.5	35	160	600	1.8K	7.5K	42K	170K
8	37	175	620	2K	8K	45K	175K
9	40	180	650	2.2K	8.2K	46K	182K
10	42	200	700	2.5K	9K	47K	191K
11	45	220	725	3K	10K	50K	200K
12	47	225	750	3.1K	11K	55K	221K
12.5	50	250	760	3.5K	12K	60K	232K
13	55	270	800	3.75K	12.5K	65K	243K
14	60	300	850	4K	13K	68K	267K

CARBON-FILM PRECISION RESISTORS

Type DC and DCS. Low cost miniature resistors designed for excellent protection from moisture, salt spray and other environmental conditions. Ideal for applications requiring high stability and accuracy combined with long reliable load life. Pure crystalline carbon film (no binder or filler). Excellent high frequency characteristics. Tolerance 1%. Full power to 70°C, derating at 0 at 165° C. Sizes: DC-¼—Dia. .109 x Lt. .468 DCS½ Dia. .171 x Lt. .562.

Stock No.	Range Resist.	Type	Watt	1-24	25-99	100-499	500-999
13F148	10 ohm—2 meg.	DC-¼ (RN-10X)	¼	.48	.19	.11	.10
	2.01 meg.-5 meg.			.58	.23	.13	.12
13F152	10-2.5 meg.	DCS-½ (RN-20X)	½	.48	.19	.11	.10
	2.51-5 meg.			.58	.23	.13	.12

STANDARD RESISTANCE VALUES FOR DC-¼ AND DCS-½ RESISTORS

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Meg	Meg
10.0	22.1	48.7	107	237	523	1150	2550	5620	12.4K	27.4K	60.4K	133K	294K	649K	1.37	3.01
10.2	22.6	49.9	110	243	536	1180	2610	5760	12.7K	28.0K	61.9K	137K	301K	665K	1.40	3.09
10.5	23.2	51.1	113	249	549	1210	2670	5900	13.0K	28.7K	63.4K	140K	309K	681K	1.43	3.16
10.7	23.7	52.3	115	255	562	1240	2740	6040	13.3K	29.4K	64.9K	143K	316K	698K	1.47	3.24
11.0	24.3	53.6	118	261	576	1270	2800	6190	13.7K	30.1K	66.5K	147K	324K	715K	1.50	3.32
11.3	24.9	54.9	121	267	590	1300	2870	6340	14.0K	30.9K	68.1K	150K	332K	732K	1.54	3.40
11.5	25.5	56.2	124	274	604	1330	2940	6490	14.3K	31.6K	69.8K	154K	340K	750K	1.58	3.48
11.8	26.1	57.6	127	280	619	1370	3010	6650	14.7K	32.4K	71.5K	158K	348K	768K	1.62	3.57
12.1	26.7	59.0	130	287	634	1400	3090	6810	15.0K	33.2K	73.2K	162K	357K	787K	1.65	3.65
12.4	27.4	60.4	133	294	649	1430	3160	6980	15.4K	34.0K	75.0K	165K	365K	806K	1.69	3.74
12.7	28.0	61.9	137	301	665	1470	3240	7150	15.8K	34.8K	76.8K	169K	374K	825K	1.74	3.83
13.0	28.7	63.4	140	309	681	1500	3320	7320	16.2K	35.7K	78.7K	174K	383K	845K	1.78	3.92
13.3	29.4	64.9	143	316	698	1540	3400	7500	16.5K	36.5K	80.6K	178K	392K	866K	1.82	4.02
13.7	30.1	66.5	147	324	715	1580	3480	7680	16.9K	37.4K	82.5K	182K	402K	887K	1.87	4.12
14.0	30.9	68.1	150	332	732	1620	3570	7870	17.4K	38.3K	84.5K	187K	412K	909K	1.91	4.22
14.3	31.6	69.8	154	340	750	1650	3650	8060	17.8K	39.2K	86.6K	191K	422K	931K	1.96	4.32
14.7	32.4	71.5	158	348	768	1690	3740	8250	18.2K	40.2K	88.7K	196K	432K	953K	2.00	4.42
15.0	33.2	73.2	162	357	787	1740	3830	8450	18.7K	41.2K	90.9K	200K	442K	976K	2.05	4.53
15.4	34.0	75.0	165	365	806	1780	3920	8660	19.1K	42.2K	93.1K	205K	453K		2.10	4.64
15.8	34.8	76.8	169	374	825	1820	4020	8870	19.6K	43.2K	95.3K	210K	464K	Meg	2.15	4.75
16.2	35.7	78.7	174	383	845	1870	4120	9090	20.0K	44.2K	97.6K	215K	475K	1.00	2.21	4.87
16.5	36.5	80.6	178	392	866	1910	4220	9310	20.5K	45.3K	100K	221K	487K	1.02	2.26	4.99
16.9	37.4	82.5	182	402	887	1960	4320	9530	21.0K	46.4K	102K	226K	499K	1.05	2.32	
17.4	38.3	84.5	187	412	909	2000	4420	9760	21.5K	47.5K	105K	232K	511K	1.07	2.37	
17.8	39.2	86.6	191	422	931	2050	4530	10.0K	22.1K	48.7K	107K	237K	523K	1.10	2.43	
18.2	40.2	88.7	196	432	953	2100	4640	10.2K	22.6K	49.9K	110K	243K	536K	1.13	2.49	
18.7	41.2	90.9	200	442	976	2150	4750	10.5K	23.2K	51.1K	113K	249K	549K	1.15	2.55	
19.1	42.2	93.1	205	453	1000	2210	4870	10.7K	23.7K	52.3K	115K	255K	562K	1.18	2.61	
19.6	43.2	95.3	210	464	1020	2260	4990	11.0K	24.3K	53.6K	118K	261K	576K	1.21	2.67	
20.0	44.2	97.6	215	475	1050	2320	5110	11.3K	24.9K	54.9K	121K	267K	590K	1.24	2.74	
20.5	45.3	100	221	487	1070	2370	5230	11.5K	25.5K	56.2K	124K	274K	604K	1.27	2.80	
21.0	46.4	102	226	499	1100	2430	5360	11.8K	26.1K	57.6K	127K	280K	619K	1.30	2.87	
21.5	47.5	105	232	511	1130	2490	5490	12.1K	26.7K	59.0K	130K	287K	634K	1.33	2.94	

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Use the Services of the NEWARK Facility Nearest You — See Front Cover

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

DALE

Stk. No.	Type	Mil Type	TC Code	1-24	25-99	100-499	500-999
12F149	MF-1/10	RN-55D	T-1 0±100 ppm/°C 49.9 Ω —200K	.93	.41	.27	.21
12F151	MF-1/8	RN-60D	T-1 0±100 ppm/°C 30 Ω —550K	.70	.35	.18	.15
12F156	MF-1/10	RN-55C	T-2 0±50 ppm/°C 100 Ω —200K	1.80	1.08	.64	.58
12F161	MF-1/8	RN-60C	T-2 0±50 ppm/°C 49.9 Ω —550K	1.26	.71	.39	.36

TYPE RS—MIL——R-26C MIL-R-23379

Type RS. These should be specified when space is at a premium and when precision and power are needed. They are of the conventional type with pigtail mounting leads. They are completely protected and silicone sealed. Surpasses MIL-R-26C.

RS-1B ±1%—1 WATT

Stock No.	Resistance in Ohms	1-24	25-49	50-99	100-249	250-499
13F137	1 - 1K	.98	.77	.73	.68	.63
	1.1K- 4K	1.08	.86	.81	.75	.69
	4.1K-15K	1.21	.95	.90	.83	.77

RS-2B ±1%—3 WATT

Stock No.	Resistance in Ohms	1-24	25-49	50-99	100-249	250-499
13F142	1 - 1K	.75	.59	.56	.52	.48
	1.1K- 5K	.83	.66	.62	.57	.53
	5.1K-10K	.86	.68	.64	.59	.56
	10.1K-15K	.88	.70	.66	.62	.57
	15.1K-20K	.92	.74	.69	.65	.59
	20.1K-24.5K	.98	.78	.74	.68	.64

Resistance values not listed are available. $7.50 minimum order. Prices as listed below:

For ±0.5% tolerance add 100% to listed prices.
For 0.25% tolerance add 150% to listed prices.
For ±0.10% tolerance add 200% to listed prices.
For 0.05% tolerance add 300% to listed prices.

● NEW MOLDED METAL FILM RESISTORS

Meet a variety of industrial and military applications. Vacuum deposited metal film resistors have inherently good RF characteristics and low noise level. Protected against moisture and other severe environmental factors. Wide choice of tolerance and temperature coefficients.

Type MF. Epoxy molded. Meets MIL-R-10509. Includes subminiature MF50 (1/20 watt).

Type MFF. Epoxy conformal coated. Meets characteristics of MIL-R-10509F, but dimensionally smaller.

RS-5 ±1%—5 WATT—MIL. NO. RW-67 & RWP-21

Stock No.	Resistance in Ohms	1-24	25-49	50-99	100-249	250-499
13F143	1 - 1K	.75	.59	.56	.52	.48
	1.1K- 5K	.83	.66	.62	.57	.53
	5.1K-10K	.86	.68	.64	.59	.56
	10.1K-15K	.88	.70	.66	.62	.57
	15-1K-20K	.92	.74	.69	.65	.59
	20.1K-40K	.98	.78	.74	.68	.64
	40.1K-55K	1.05	.85	.79	.74	.68
	55.1K-75K	1.16	.92	.87	.81	.75
	75.1K-95.2K	1.28	1.02	.96	.89	.83

RS-10 ±1%—10 WATT—MIL. NO. RW-68 & RWP-23

Meets precision power req. in advanced electronic circuits where space is at a premium. Silicon coating maintains stable performance under adverse environmental conditions.

Stock No.	Resistance in Ohms	1-24	25-49	50-99	100-249	250-499
13F136	1 - 1K	.75	.59	.56	.52	.48
	1.1K- 5K	.83	.66	.62	.57	.53
	5.1K- 10K	.86	.68	.64	.59	.56
	10.1K- 15K	.88	.70	.66	.62	.57
	15.1K- 20K	.92	.74	.69	.65	.59
	20.1K- 40K	.98	.78	.74	.68	.64
	40.1K- 55K	1.05	.85	.79	.74	.68
	55.1K- 75K	1.16	.92	.87	.81	.75
	75.1K-100K	1.28	1.02	.96	.89	.83
	100.1K-125K	1.40	1.11	1.05	.98	.91
	125.1K-150K	1.53	1.21	1.14	1.07	.99
	150.1K-175K	1.67	1.33	1.25	1.17	1.09
	175.1K-225K	1.82	1.46	1.37	1.29	1.20
	225.1K-273K	2.00	1.61	1.51	1.42	1.33

See Next Poge for Stondord Resistonce Volues.

DAVEN

MODEL 1250 ENCAPSULATED RESISTORS

Encapsulated axial lead non-inductive resistors. Meet MIL-R-93C requirements. Meet AFRT-10 requirements for values of 100 ohms to 100K. Tolerance: 1%. Designed to dissipate .33 watts at 800°C., amb. with 25°C rise. Size: ¼" dia. x ½" L. Avg. wt. 1 oz.

Stock No. 10F000 . . . . See table below for values and prices.

Ohms	1-4	5-9	10-24	25-99
1	1.90	1.29	.92	.75
10	1.90	1.29	.92	.75
20	1.90	1.29	.92	.75
40	1.90	1.29	.92	.75
50	1.90	1.29	.92	.75
100	1.90	1.29	.92	.75
150	1.90	1.29	.92	.75
200	1.90	1.29	.92	.75
300	1.90	1.29	.92	.75
400	1.90	1.29	.92	.75
500	1.90	1.29	.92	.75
600	1.90	1.29	.92	.75
1000	1.90	1.29	.92	.75
1500	1.90	1.29	.92	.75
2000	1.90	1.29	.92	.75
3000	1.90	1.29	.92	.75
4000	1.90	1.29	.92	.75
5000	1.90	1.29	.92	.75
6000	1.93	1.31	.93	.77
8000	1.93	1.31	.93	.77
10000	1.93	1.31	.93	.77
15K	2.02	1.37	1.00	.80
18K	2.02	1.37	1.00	.80
20K	2.02	1.37	1.00	.80
22K	2.02	1.37	1.00	.80
25K	2.02	1.37	1.00	.80
30K	2.13	1.44	1.06	.84
40K	2.13	1.44	1.06	.84
43K	2.13	1.44	1.06	.84
47K	2.13	1.44	1.06	.84
50K	2.13	1.44	1.06	.84
56K	2.35	1.59	1.18	.93
60K	2.35	1.59	1.18	.93
70K	2.35	1.59	1.18	.93
75K	2.35	1.59	1.18	.93
80K	2.51	1.76	1.30	1.03
82K	2.51	1.76	1.30	1.03
100K	2.51	1.76	1.30	1.03
120K	2.60	1.80	1.40	1.11
150K	2.70	1.94	1.46	1.20
160K	2.83	2.12	1.59	1.31
180K	2.92	2.20	1.65	1.35
200K	2.92	2.20	1.65	1.35
220K	3.12	2.34	1.76	1.44
250K	3.12	2.34	1.76	1.44
300K	3.48	2.61	1.96	1.62
400K	3.97	2.85	2.13	1.75
500K	4.37	3.28	2.46	2.02

MODEL 1195 ENCAPSULATED RESISTORS

Model 1195. Axial lead resistor. Same as Model 1250 above except: Power rating is 5 watts and size is ¼" diameter x ¾" length. Avg. wt. 2 oz. Stock No. 10F005.

Ohms	1-4	5-9	10-24	25-99
750K	5.78	4.34	3.25	2.67
1 Meg.	6.67	5.22	3.92	3.22

CORNING

Model O.H.M.S. Resistor Kit. Broad selection of popular value C resistors. Kit features gray enameled steel case construction with sturdy plastic drawers and sub-dividers. Contains 840 pieces in 138 resistance values of types C-07, C-20, and C-32 which conform to MIL-R-22684 specifications. Values included are: 5 each of 100, 1000, 2700, 5600, and 10K; 10 each of 1500, 4700 & 100K types RL07-2%. 5 each of 51, 39K, 56K and 10 each of 100, 1000, 1500, 2000, 5100, 7500, 10K, 12K, 15K, 18K, 22K, 24K and 27K of types RL07-5%. 5 each of 150, 470, 680, 6800, 22K, 68K, and 15 each of 100, 220, 1000, 1500, 2200, 2700, 4700, 10K, 27K and 100K of types RL-20-2%. 10 each of 51, 100, 150, 470, 680, 1500, 2200, 2700, 4700, 6800, 10K, 15K, 22K, 27K, 33K, 47K, 68K, 82K, 100K, and 150K of RL20-5%. Others included are assorted values in the RL32 series.

58F298. NET **89.50**

CORNING Resistors

SERIES-C FILM RESISTORS

MIL-R-22684B

RL42S C-42 2 Watt

RL32S C-32 1 Watt

RL20S C-5 ½ Watt

Large variety of small size metallic oxide film resistors. Combine small size with excellent thermal, frequency, and stability characteristics. These low-power resistors are expressly designed for TV, Radio, and allied products, where high-quality, low cost applications are required. PYREX brand glass core insulator with a very thin film of metallic oxide. Load Life Resistance change of 1.5-3% after 1,000 hours of operation at 70°C. Operating Temperature from —55°C to 175°C. Moisture Resistance: Change in ohmic value 0.3-2%. Lead wire 1½"L. Tol: C-5, C-32 ±5%; C-42 ± 5 and 10%. Copper leads are standard. Mil-R-22684B.

C-4 2%—¼ Watt Mil Type RL07S

Stock No.	Type	Resis. Ohms	1-24	25-99	100-159	200-999	1000-9999
58F034	C-4	51-300K	.35	.27	.205	.128	.102

C-4 5%—¼ Watt Mil Type RL07S

58F035	C-4	50-300K	.30	.23	.180	.118	.09

RL20S C-5 5%—½ WATT (Dia. .138", Length .375±.041")

Stock No.	Type	Resis. Ohms	1-99	100-249	250-499	500-999	1000-4999
58F025	C-5	10-51 ohms	.32	.25	.195	.12	.112
		52-150K	.25	.22	.15	.09	.067
		151K-1 Meg	.28	.22	.17	.12	.095

C42S 5%—2 WATT (Dia. .318", Length .688 ± .031") RL42

Stock No.	Type	Resis. Ohms	1-99	100-249	250-499	500-999	1000-4999
12F005	C-42	10 ohms to 1.5 meg.	.30	.275	.225	.16	.118

C-42 ±10%—2 WATT (Dia. .318", Length .688 ± .031"

58F027	C-42	10 ohms to 1.5 meg.	.20	.14	.12	.09	.057

C-32 ±5%—1 WATT (Dia. .190", Length .562 ± .031") RL32

58F026	C-32	10 ohms to 51 ohms	.32	.25	.195	.12	.112
		52-470K	.25	.20	.15	.10	.067
		471K-1Meg	.28	.22	.17	.12	.095

STANDARD RESISTANCE VALUES FOR C-FILM RESISTORS

10% tolerance values in bold face. All values available in 5% and 2% tolerance.

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megohms	
10	27	68	180	470	1200	3300	8200	22000	56000	150000	0.24	0.62
11	30	75	200	510	1300	3600	9100	24000	62000	160000	0.27	0.68
12	33	82	220	560	1500	3900	10000	27000	68000	180000	0.30	0.75
13	36	91	240	620	1600	4300	11000	30000	75000	200000	0.33	0.82
15	39	100	270	680	1800	4700	12000	33000	82000	220000	0.36	0.91
16	43	110	300	750	2000	5100	13000	36000	91000		0.39	1.0
18	47	120	330	820	2200	5600	15000	39000	100000		0.43	1.1
20	51	130	360	910	2400	6200	16000	43000	110000		0.47	1.2
22	56	150	390	1000	2700	6800	18000	47000	120000		0.51	1.3
24	62	160	430	1100	3000	7500	20000	51000	130000		0.56	1.5

NA SERIES RESISTOR

Types NA55, NA60, NA65, NA70. Has glass body with tin oxide coating temp. coef., ±0.01%/°C on NA55, NA60. NA65 and NA70 over —55° to +165°C. Overload change less than 0.5% and noise level less than 0-1 uv/v. Non-insulation, wattage: ⅛, ¼, ½, ¾ @ 70°C., tolerance: 1%. Meets MIL-R-10509E, characteristic D. Copper leads are standard.

Stk. No.	Mfr. Type	Mil Type	Range Ohms	1-24	25-99	100-199	200-999	1000-9999
58F033	NA55	RN55D	51-301K	.95	.41	.19	.17	.12
58F030	NA60	RN60D	10-49.9	.99	.46	.32	.24	.19
			50-499K	.73	.27	.13	.10	.08
58F031	NA65	RN65D	10-49.9	.99	.46	.32	.24	.19
			50-1 Meg	.73	.27	.13	.10	.08
58F032	NA70	RN70D	51-1 Meg	.75	.30	.16	.12	.10

"S" TYPE RESISTORS

Type S. These resistors are made to meet the problems of small space and high ambient temperatures. Ideal for miniature power units, high-gain, low-signal amplifiers, computers, missiles, aircraft instruments. Meets MIL-R-11804D, char. P specs. Full rating at 130°C ambient. Extremely low noise level. Less than 0.1% resistance change under one year of aging. ½ watt rating. Voltage rating, 350 volts. Dimensions: 1$^{9}/_{32}$" long x 1$^{1}/_{64}$" dia. Terminal length, 1½". A temperature coefficient of ±0.03% per degree C. These high quality, accurate resistors provide excellent performance at temperatures up to 200°C. 1% Tol.

Stock No.	Mfr. Type	MIL Type	Resis. Ohms	1-49	50-99	100-249	250-499	500-999
12F000	S-20	RD60P	10-49	1.05	.96	.74	.70	.52
			50-500K	.75	.69	.53	.50	.37

DECADE TABLE DETERMINING MIL-BELL STANDARD RESISTANCE VALUES FOR NA, NC & S

Standard Resistance Values are obtained from the Decade Table by multiplying by multiples of 10. As an example, 1.33 can represent 13.3 ohms; 133 ohms, 1.33 K, 13.3 K, 133 K. 1.33 megohms.

1.00	1.21	1.47	1.78	2.15	2.61	3.16	3.83	4.64	5.62	6.81	8.25
1.02	1.24	1.50	1.82	2.21	2.67	3.24	3.92	4.75	5.76	6.98	8.45
1.05	1.27	1.54	1.87	2.26	2.74	3.32	4.02	4.87	5.90	7.15	8.66
1.07	1.30	1.58	1.91	2.32	2.80	3.40	4.12	4.99	6.04	7.32	8.87
1.10	1.33	1.62	1.96	2.37	2.87	3.48	4.22	5.11	6.19	7.50	9.09
1.13	1.37	1.65	2.00	2.43	2.94	3.57	4.32	5.23	6.34	7.68	9.31
1.15	1.40	1.69	2.05	2.49	3.01	3.65	4.42	5.36	6.49	7.87	9.53
1.18	1.43	1.74	2.10	2.55	3.09	3.74	4.53	5.49	6.65	8.06	9.76

● *NEW* — NC RESISTORS

Provide circuit designer ± 50 ppm temp. coefficient stability with ½ and 1% tol. in glass tin oxide film construction. Meets and conforms to Mil-R-10509E, Characteristic C, and other circuitry requiring reliable load life performance. Design tolerances, high frequency characteristics, and low current noise permit greater design freedom with other, more costly components.

NC4 (RN55C) 1/10 Watt ± 1% 200 Volts

Stk. No.	Res. (Ohms)	1-24	25-99	100-199	200-999	1000-9999
58F036	49.9-301K	1.72	.86	.45	.37	.25

NC5 (RN60C) ⅛ Watt ± 1% 250 Volts

58F037	49.9-1 meg	1.14	.58	.30	.28	.19

NC66 (RN65C ¼ Watt ± 1% 300 Volts

58F038	49.9-2 meg	1.14	.58	.30	.28	.19

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

AEROVOX RESISTORS

Mil Values Available on Special Order

Carbon deposit type. For test equipment and lab. instruments. Sizes and resistance values listed below. **All ±1% tol. except (•) 2% tol.** Aeroglaze coating will meet all moisture in requirements of MIL-R-10509B. Shipping weight, 2 oz. **Specify stock number and resistance values.**

CPSX½—½ WATT
(Equiv. Mil. Type RN20X .203"D x 19/32"L.)

Stk. No.	Ohms	1-24	25-49	50-99	May be asst'd 100 per value 100-249	250-499	500-666
13F120	10 ohms-49.9 ohms	.64	.34	.27	.26	.20	.16
13F120	50 ohms-2.2 meg.	.54	.28	.21	.17	.13	.11

CPx½—½ WATT (.260"D x 23/32" L)

13F120	2.21 meg-5 meg	.83	.44	.32	.26	.20	.17

CPLX½—½ WATT (.260"D x 1"L)

Stk. No.	Ohms	1-24	25-49	50-99	May be asst'd 100 per value 100-249	250-499	500-999
13F125	5.01 meg-7.5 meg	.90	.50	.40	.35	.29	.24

CPX-1—1 WATT (Equiv. Mil. Type RN25 .328"x15/16")

13F130	10 ohms-99.9 ohms	.94	.47	.36	.31	.25	.21
13F130	100 ohms-5 meg	.81	.43	.31	.25	.19	.18
13F130	5.01 meg-10 meg	.89	.47	.36	.30	.24	.22
13F130	10.1 meg-15 meg	1.03	.54	.41	.34	.27	.25

CPX-2—2 WATT (Mil. Type RN30 .328"x2-1/16")

13F135	50 ohms-199 ohms	1.20	.64	.48	.40	.31	.28
13F135	200 ohms-10 meg	.97	.51	.38	.32	.25	.23
13F135	10.1 meg-30 meg	1.13	.59	.46	.40	.33	.28
13F135	30.1 meg-50 meg	1.25	.68	.55	.48	.41	.34
13F135	•100 meg	1.62	.88	.66	.57	.48	.41

Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Ohms	Megs.	Megs.	Megs.
10.0	33	70	200	560	1500	4450	8950	25000	68000	220000	600000	1.6	5.1	15.0
11.0	35	74.5	220	600	1600	4500	9000	27000	70000	225000	620000	1.8	5.5	16.0
12.0	36	75	225	620	1750	4700	9100	30000	75000	240000	650000	2.0	5.6	18.0
12.5	39	80	240	650	1800	5000	9950	33000	80000	250000	680000	2.2	6.0	20.0
13.0	40	82	250	680	2000	5100	10000	35000	82000	270000	700000	2.225	6.2	22.0
14.5	43	85	270	700	2200	5500	11000	36000	85000	300000	750000	2.4	6.5	25.0
15.0	44.5	89.5	300	750	2250	5600	12000	39000	90000	330000	800000	2.5	6.8	27.0
16.0	45	90	330	800	2400	5950	12500	40000	91000	350000	820000	2.7	7.0	30.0
17.5	47	91	350	820	2500	6000	13000	43000	100000	360000	850000	3.0	7.5	33.0
18.0	50	99.5	360	850	2700	6200	13500	45000	110000	390000	900000	3.3	8.0	36.0
20	51	100	390	900	2950	6500	15000	47000	120000	400000	910000	3.5	8.2	39.0
22.0	55	110	400	910	3000	6800	16000	50000	125000	430000	**Megs.**	3.6	8.5	43.0
22.5	56	120	430	1000	3300	7000	17500	51000	130000	450000	1.0	3.9	9.0	47.0
24.0	59.5	130	450	1100	3500	7450	18000	55000	150000	470000	1.1	4.0	9.1	50.0
25.0	60	150	470	1200	3600	7500	20000	56000	160000	500000	1.2	4.3	10.0	100.0•
27.0	62	160	500	1250	3900	8000	22000	60000	175000	510000	1.25	4.5	12.0	
29.5	65	175	510	1300	4000	8200	22500	62000	180000	550000	1.3	4.7	12.5	
30	68	180	550	1450	4300	8500	24000	65000	200000	560000	1.5	5.0	13.0	

VECO THERMISTORS

GENERAL PURPOSE ROD THERMISTORS
ROD WITH RADIAL LEADS (Fig. A)

B, 5/8"; D, 1/8"

Stock No.	Type	Ro @ 25°C	Dissip. Const.	Time Constant	1-9	10-24	25-99	100-249	250-499
29F143	41S2	10000	3	16	1.35	1.08	.95	.745	.675

ROD WITH AXIAL LEADS (Fig. B)

All-Dia. 7/32"

29F144	33S1	3150	6	50	1.10	.88	.77	.605	.55
29F145	41R1	10000	5	35	1.10	.88	.77	.605	.55
29F148	43R1	31500	5.5	50	1.10	.88	.77	.605	.55
29F173	45R1	50000	6	65	1.10	.88	.77	.605	.55

GENERAL PURPOSE WASHER THERMISTORS

Size .77Dx.281Hx.13T.

Stock No.	Type	Ro @ 25°C	Dissip. Const.	1-9	10-24	25-99	100-249	250-499
29F142	14X2	38±10%	420	1.20	.96	.78	.60	.48

SPECIAL PURPOSE VARISTOR

Power rating of 3 watts; .78Dx.3Hx.145D

Stk. No.	Type	1-9	10-24	25-99	100-249	250-499
29F172	023W1	1.80	1.44	1.26	1.08	.90

GENERAL PURPOSE VARISTOR

Exp. 1 KV of 3; 6 volt at 5MaDc

Stk. No.	Type	1-9	10-24	25-99	100-249	250-499
29F174	023L9	1.00	.80	.70	.60	.55

PACKING GLAND

Type A819. Made for use with Veco bead thermistors in glass probe units. Made of stainless steel. All steel parts are zinc plated and chromate dipped. Has neoprene sealant. Has effective temperature range of —40°F to +200°F.

Stock No.	Type	1-9	10-24	25-49	50-99	100-249
29F116	A819	4.00	3.20	3.00	2.80	2.60

MOUNTING KITS

Stock No.	Type	Description	1-9	10-24	25-49	50-99	100-249
29F176	A-815	Mtg 1 washer	1.00	.80	.75	.70	.65
29F175	A-828	Mtg 3 washers	1.75	1.40	1.315	1.225	1.1375

VECO EXPERIMENTER KIT

Veco Experimenter Kits are designed to acquaint personnel with the various types of thermistors and varistor applications and preparations of prototype models.

M-168. Contains: 2 each type thermistor, bead, disc and washer. 1 varistor washer.
29F114. NET **5.00**

M168A. 2 each type thermistor, probe and rod. 2 each washer (varistor) 1 set mounting hardware.
29F115. NET **10.00**

THERMISTOR & VARISTER DESIGNER KITS

Each of the kits listed below provides a wide range of resistances and physical sizes of thermistors and varistors. Technical characteristics and schematics to assist in the solution of circuitry design problems are also included.

Thermistor Kits: Model KW125 Washer Kit w/mtg. kit A828, 2 each of 11X1, 12X15, 14X4, 21W1, 22W6, & 24W6. **Model KP50** Probe Kit w/ 1 ea. of 21A3, 31A11, 41A11, 51A11, 61A11, and 71A11 thermistors. **Model KR75** Rod Kit w/ea. of 33S1, 36S1, 41R1, 41S2, 43R1, 45R1, 51R1, and 51R2. **Model KD25** Disc Kit w/ 1 ea. of 11E-2, 12E2, 15D1, 18E2, 21E21, 22E6, 23D34, 25D4, 31E2, 32D12, 33D10, 35D6 and 41D2. **Model KTB1** Bead Kit w/ tweezers, and 1 ea. of, 32A48, 51A30, 21A2, 31A2, 41A2, 51A2, and 61A2. **Varistor Kits: Model KV100** w/ A818 mtg. kit with the following varistors; 023L4, 023W1, 063L4, 114L1, 124W1, 143W1, 155L2, and 165W2. **Model KV1001** Disc Kit w/ 1 ea. of 023L9, 063L9, 114L2, 124L1, 124L2, 134L1, 155L3, 175L1, and 195L1.

Stk. No.	Type	Weight	1-4	5-up
29F111	KW125	1 lb.	13.50	12.25
29F112	KP50	1 lb.	14.50	13.00
29F113	KR75	1 lb.	8.75	8.00
29F134	KD25	1 lb.	10.50	9.50
29F135	KTB1	1 lb.	19.50	17.75
29F136	KV100	1 lb.	14.50	13.00
29F137	KV1001	1 lb.	7.50	6.75

VECO V42 DATA BOOK

An explanation of the function of various types of thermistors and varistors with voltage current characteristics and resistance temperature tables.
29F149. Postpaid in USA **1.00**

Thermistors

Fig. 1

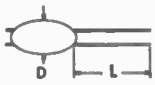


Fig. 2

Fig. 5

Fig. 6

Fig. 6X

GENERAL PURPOSE BEAD THERMISTORS

Max. oper. temp. 300°C for exceptional stability. Satisfactory operation at 500°C. Dissipation constant @ 25°C .7mw/°C. Time constant: 2 secs. Ro Tol. ±20% (Fig 1), except (*) ±15% (Fig. 2). (†) ±25%. Bead dia. .043 in. Leads are .004" dia. platinum-iridium. Values are approximate unless specified.

Stk. No.	Type	Cold Res. Ro @ 25°C ohms	Temp Coeff. @ 25°C %/°C	Ld. L.	1-9	10-24	25-99	100-249	250-499
29F150	21A2	100	—3.2	5/16	3.00	2.40	1.95	1.57	1.50
29F100	31A2	1000	—3.9	1/4	2.00	1.60	1.30	1.07	1.82
29F151	32A7†	2000	—3.4	5/16	2.80	2.24	1.82	1.47	1.40
29F152	32A13	2000	—3.9	1/4	2.10	1.68	1.37	1.12	1.07
29F101	32A12	2000	—3.9	1/4	1.95	1.56	1.27	1.04	1.00
29F102	35A1	5000	—4.0	1/4	2.30	1.84	1.50	1.22	1.16
29F103	41A2	10000	—4.4	5/16	2.30	1.84	1.50	1.22	1.16
29F104	45A2	50000	—4.4	5/16	2.30	1.84	1.50	1.22	1.16
29F153	45A23†	5000	—4.0	1/4	3.40	2.72	2.21	1.77	1.69
29F105	51A2*	100000	—4.6	1/4	1.95	1.56	1.27	1.04	1.00

BEAD THERMISTORS FOR HIGH FREQUENCY POWER MEASUREMENT

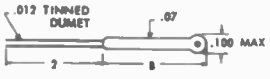
Fig. 3—32A5

Fig. 4—32A3

Subject to additional D.C. voltage and current tests. Ro Tol. 2000+20%@ 25°C. Disp. const. 0.1 MW/°C @ 25°C.

Stk. No.	Type	Body Lth.	Dia.	Lead Lth.	1-9	10-24	25-99	100-249	250-499
29F109	32A5	..	.013	3/8	3.00	2.40	2.10	1.72	1.57
29F110	32A3	0.4	5/32	1 7/8	4.60	3.68	3.22	2.60	2.37

GENERAL PURPOSE BEAD THERMISTOR IN GLASS PROBES AND RODS



Dissipation Constant @ 25°C (MW/°C)			Time Constant		
Still Air	Still Oil	Still Water	Still Air	Still Oil	Still Water
1	3.5	5	25	2	1

Stk. No.	Type	Cold Res. Ro @ 25°C ohms	Temp Coeff. @ 25°C %/°C	1-9	10-24	25-99	100-249	250-499
29F123	31A11	1000	—3.9	1.95	1.56	1.27	1.04	1.00
29F124	32A1	2000	—3.9	2.25	1.80	1.46	1.12	1.07
29F154	32A129	2000	—3.9	2.30	1.84	1.50	1.17	1.12
29F125	34A3†	3500	—3.9	2.40	1.92	1.56	1.22	1.16
29F126	41A11	10000	—4.4	2.25	1.80	1.46	1.12	1.07
29F129	51A1*	100000	—4.6	2.30	1.84	1.50	1.17	1.12
29F130	51A11	100000	—4.6	1.95	1.56	1.27	.97	.92
29F155	61A11	1 Meg.	—5.0	2.70	2.16	1.76	1.42	1.35

Ro ± 20% except (*) ± 15% and (†) ± 30%.

BEAD THERMISTORS IN SPECIAL ENCLOSURES

Fig. 8—46A2

Fig. 9—65A1

Type 46A2. Ro @ 25°C: 60500 ohms ± 29%. Dissipation constant 0.3 MW/°C. Type 65A1. Ro @ 25°C: 5.4 Meg ± 32%. Dissipation constant .01 MW/°C. Type 46A2; 1¼" body length x ¼" dia. x 1⅜" min. lead length. Type 65A1; 1½" body length x .3" max. dia. x 1¼" min. lead length.

Stk. No.	Type	Fig.	Lead Dia. and Material	1-9	10-24	25-99	100-249	250-499
29F132	46A2	8	.016 Dumet (T)	2.60	2.08	1.82	1.50	1.37
29F133	65A1	9	.016 Dumet (T)	6.00	4.80	4.20	3.37	3.07

GENERAL PURPOSE DISC THERMISTOR

Temperature limits: 100°C painted or coated units, 150°C discs with leads. 200°C plain discs, washers, and rods. Lead material: tinned copper:—Discs 0.1 dia.=.013 (28AWG)x1"Lg. Discs 0.2 dia.=.020 (24AWG)x1¼"Lg. Discs 0.3 dia.=.020 (24AWG)x1½"Lg. Discs 0.4 dia.=.025 (22AWG)x3¾"Lg. The dissipation constants are for discs with leads. Nominal temperature coefficient @ 25°C: "E" type= —3.8%/°C, "D" type= —4.4%/°C. Resistance tolerance @ 25°C ± 10%.

DISCS WITH RADIAL LEADS (Fig. 5)

Stk. No.	Type	Cold Res. Ro @ 25°C	Disp Const. @ 25°C	T Dim.	1-9	10-24	25-99	100-249	250-499
0.1 Disc Diameter									
29F117	25E2	500	3.5	.035	.80	.64	.52	.47	.39
29F156	31E2	1000	3.5	.029	.80	.64	.52	.47	.39
29F118	35D2	5000	3.5	.048	.80	.64	.52	.47	.39
29F119	41D2	10000	3.5	.095	.80	.64	.52	.47	.39
0.2 Disc Diameter									
29F120	33D10	1000	7.0	.038	.80	.64	.52	.47	.39
0.3 Disc Diameter									
29F121	21E21	100	8.0	.063	.85	.68	.55	.49	.41
0.4 Disc Diameter									
29F122	21E2	100	10	.110	.85	.68	.55	.49	.41
0.770 Disc Diameter									
29F157	21D2	100	16	.056	.85	.68	.55	.49	.41

DISCS WITH AXIAL LEADS (Fig. 6)

Stk. No.	Type	Cold Res. Ro @ 25°C	Disp. Const. @ 25°C	T Dim.	1-9	10-24	25-49	100-249	250-499
0.2 Disc Diameter									
29F158	21E25	100	7.0	.028	.80	.64	.52	.47	.39
29F159	22E8	200	7.0	.056	.80	.64	.52	.47	.39
29F160	23E14	250	7.0	.070	.80	.64	.52	.47	.39
29F161	23E18	300	7.0	.083	.80	.64	.52	.47	.39
29F138	31D4	1000	7.0	.038	.80	.64	.52	.47	.39
29F162	33D2	3000	7.0	.103	.80	.64	.52	.47	.39
0.3 Disc Diameter									
29F163	21E28	100	8.0	.063	.80	.64	.52	.47	.39
29F164	23E7	300	9.0	.189	.80	.64	.52	.47	.39
0.4 Disc Diameter									
29F165	21E30	100	10.0	.110	.85	.68	.55	.49	.41
29F166	22E12	200	11.0	.220	.85	.68	.55	.49	.41
29F167	23E24	250	11.0	.275	.85	.68	.55	.49	.41
29F168	23D16	250	9.0	.038	.85	.68	.55	.49	.41
29F169	23D20	300	10.0	.046	.85	.68	.55	.49	.41
29F170	32D14	2000	11.0	.300	.85	.68	.55	.49	.41
Discs with Axial Leads (Fig. 6X)									
29F171	21D1	100	16	.056	.60	.48	.39	.37	.31

Fig. 10

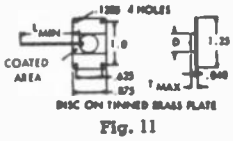


Fig. 11

TYPICAL MOUNTED, COATED AND CLOSE TOLERANCE DISCS

*Cycleweld Coated (Fig. 10). †Disc on Plate (Fig. 11).

Stock No.	Ro @ 25°C	Dissip. Const.	Time Const.	T	1-9	10-24	25-99	100-249	250-499
Type 31DT*									
29F139	1200±10%	7	19	5/16"	1.08	.80	.65	.57	.47
Type 27D1±									
29F140	725±5%	150	80	.040"	2.60	2.08	1.69	1.37	1.11
Type 28D±									
29F141	760±5%	150	80	.040"	2.60	2.08	1.69	1.37	1.11

Newark-Denver Electronics Supply Corp., 2170 So. Grope St., Denver, Colo. 80222

YSI Thermistors

YELLOW SPRINGS INSTRUMENT CO.
YELLOW SPRINGS, OHIO

PRECISION THERMISTORS

Thermistors which match a published resistance-temperature curve and thus each other to ± 1% not only at 25° C but over most of their useable range of —80° C to +150° C. Each thermistor is provided with resistance-temperature data for each degree C and with tolerance curves both in resistance variation and temperature sensing interchangeability. Base resistance from 100 ohms to 1 Megohm at 25° C available to ease circuit design impedance matching problems. Useful as transducers for measurement and control circuits where precision of YSI thermistors allow interchanging of transducers and multiple monitoring from single circuits. In control circuitry direct dialing of set points is possible as is trigger action at a specific temperature since resistance at any usable temperature is known to close tolerances. Also useful as temperature compensating devices for transistors, meters, circuits, etc. Physical size: .095" maximum dimension #32 solid tinned copper leads, 3" long. Thermistors are epoxy encapsulated for ruggedness and long life. Each thermistor supplied with data and with dissipation information, time constant and instructions. Rated at 25° C.

- Low Cost Precision Thermistors
- Matches Standard Curves—80°C to 150°C

Stock No.	Type	Ohms	Res. Tol.	Temp. Tol.	1-9	10-29	30-99
29F200	44001	100	1.0%	.3°C	4.90	4.15	3.50
29F201	44002	300	1.0%	.3°C			
29F202	44003	1K	1.0%	.3°C			
29F203	44005	3K	.8%	.2°C			
29F204	44006	10K	.8%	.2°C			
29F205	44008	30K	.8%	.2°C			
29F206	44011	100K	.8%	.2°C			
29F214	44014	300K	1.0%	.3°C			
29F215	44015	1 Meg	1.0%	.3°C			

½ % PRECISION THEMISTORS

Specifically designed to match published and provided curves to within ±½% over exceptionally wide range! Units can be interchanged in measuring circuitry with a maximum 0.1°C error. Resistance tolerance data provided with each thermistor for each degree centigrade and its corresponding resistance shown from —40° to +100°C. Physical size: .095" diameter. #32 solid tinned copper leads, 3" long. Thermistors are epoxy encapsulated for ruggedness and extremely long life. Individually packaged with dissipation information, time constant data, and instructions. Rated at 25°C.

- Twice the Precision over Previous YSI Devices
- Interchangeability—0.1 °C
- ± ½ °C to 100°C.

Stock No.	Type	Ohms	Res. Tol.	1-9	10-29	30-99
29F223	44030	3K	.4%	9.90	8.90	7.75
29F224	44031	10K	.4%			
29F225	44032	30K	.4%			

TEFLON® PRECISION THERMISTOR PROBES

YSI interchangeable thermistors in chemically imprevious form for sensing or control use. The interchangeable precision thermistors listed above, but additionally encased in a 2" length of chemically impervious Teflon. 3" leads extend 1" beyond the probe for convenience in attaching leads. Leads are insulated from each other by a smaller Teflon tube around one lead. Probes can be used straight or can be bent by finger pressure to exact configuration required for placing the thermistor where you want it. 11" max. in diameter.

- Precision — ± 1% at 25°C.
- Easily bent to required shape
- Chemically impervious Teflon casing

Can be assorted for quantity prices.

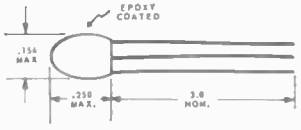
Stock No.	Type	Ohms	Res. Tol.	Temp. Tol.	1-9	10-29	30-99
29F207	44101	100	1.0%	.3°C	9.90	8.90	7.75
29F208	44102	300	1.0%	.3°C			
29F209	44103	1K	1.0%	.3°C			
29F210	44105	3K	.8%	.2°C			
29F211	44106	10K	.8%	.2°C			

Stock No.	Type	Ohms	Res. Tol.	Temp. Tol.	1-9	10-29	30-99
29F212	44108	30K	.8%	.2°C	9.90	8.90	7.75
29F213	44111	100K	.8%	.2°C			
29F216	44114	300K	1.0%	.3°C			
29F217	44115	1 Meg	1.0%	.3°C			

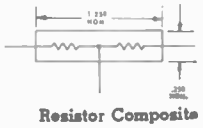
THERMILINEAR® THERMISTOR DEVICES

Linear Output Thermistor Networks

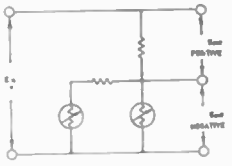
A composite precision thermistor device which, in conjunction with the precision resistors supplied, provides linear voltage output or linear resistance change with change of temperature. Sensitivities of 20 mv/°C. and more are common, 400 times the sensitivity of an IC thermocouple. Linearity deviation is as little as 2 parts in 1000 from 0 to 100°C. Combined absolute accuracy, linearity and interchangeability specifications of as little as 3 parts in 1000 from 0 to 100°C. Greater accuracies, interchangeabilities, and linearities available for shorter standard ranges. Parts guaranteed to stay within tolerances for three years. Useful for direct digital temperature indication with DVM or linear recorder. Provides linear temperature compensation with thermistor sensitivity. Time constant: 1 second, in well-stirred oil bath. Parts consist of composite thermistor and resistor assembly. Thermistor composites are manufactured to absolute accuracy tolerances of ±0.15°C from —30 to +100°C. For complete information and technical data, write Newark. Type 44018: additional thermistor composites for replacement or multiple input work.



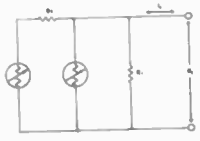
Thermistor Composite



Resistor Composite



Linear Voltage vs. Temperature



Linear Resistance vs. Temperature

Stk. No.	Type	Range	Linearity	1-9	10-29	30-99
29F218	44201	0° to 100°C	±0.2°C	19.70	18.25	16.80
29F219	44202	— 5 to — 45°C	±0.1°C			
29F220	44203	—30 to — 50°C	±0.2°C			
29F221	44204	+30 to 100°F	±0.075°F			
29F222	44018	see text	.....	14.90	13.70	12.60

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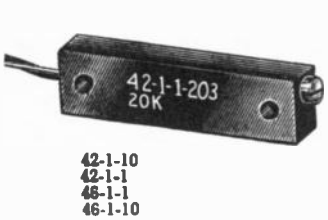
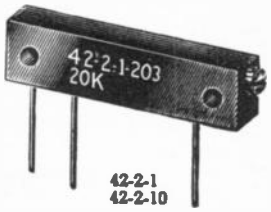
Spectrol Trimming Potentiometers

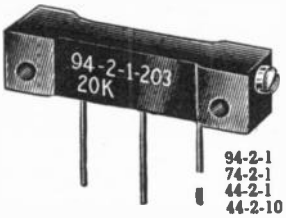


42-1-10
42-1-1
48-1-1
46-1-10



42-2-1
42-2-10

74-1-1
94-1-1
44-1-1
44-1-10



94-2-1
74-2-1
44-2-1
44-2-10

MODEL 42

Rectangular wirewound type. Resistance tolerance ±5%. Tempco 50 ppm. Power rating 1.0 watt at 70°C. Operating temperature —65°C to 175°C. Meets MIL specs. Number of turns 22±5. 42-1-1 has 12" teflon leads. 42-2-1 has PC pins. Size .190 x .315 x 1.250. Mtg. hole centers 1 inch. Wt. 4.3 grams max.

Type 42-1-1 Stk. No.	Type 42-2-1 Stk. No	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2500	12F2511	50							
12F2501	12F2512	100							
12F2502	12F2513	200							
12F2503	12F2514	500	5.75	5.25	4.90	4.56	4.39	4.06	3.89
12F2504	12F2515	1K							
12F2505	12F2516	2K							
12F2506	12F2517	5K							
12F2507	12F2518	10K							
12F2508	12F2519	20K	6.44	5.88	5.50	5.12	4.93	4.55	4.36
12F2509	12F2520	50K	6.95	6.34	5.93	5.52	5.32	4.91	4.70
12F2510	12F2521	100K	8.62	7.68	7.35	6.85	6.49	6.08	5.83

MODEL 44

Rectangular wirewound type. Resistance tolerance ±5%. Tempco 50 ppm. Power rating 1.0 watt at 70°C. Operating temperature —65°C to 175°C. Meets MIL specs. Number of turns 22±5. 44-1-1 has 12" teflon leads. 44-2-1 has PC pins. Size .280 x .315 x 1.250. Mtg. hole centers 1 inch. Wt. 4.5 grams max.

Type 44-1-1 Stk. No	Type 44-2-1 Stk. No	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2522	12F2533	50							
12F2523	12F2534	100							
12F2524	12F2535	200							
12F2525	12F2536	500	5.56	5.07	4.74	4.42	4.25	3.92	3.76
12F2526	12F2537	1K							
12F2527	12F2538	2K							
12F2528	12F2539	5K							
12F2529	12F2540	10K							
12F2530	12F2541	20K	6.22	5.67	5.31	4.94	4.76	4.39	4.21
12F2531	12F2542	50K	6.73	6.14	5.74	5.35	5.15	4.75	4.55
12F2532	12F2543	100K	8.35	7.61	7.12	6.63	6.38	5.89	5.65

MODEL 46

Rectangular wirewound type. Resistance tolerance ±5%. Tempco 50 ppm. Power rating 1.0 watt at 70°C. Operating temperature —65°C to 175°C. Meets MIL specs. Number of turns 15±3. 46-1-1 has 6" teflon leads. 46-2-1 and 46-4-1 have PC pins. Size .180 x .315 x 1 in. Mtg. hole centers .750. Wt. 3.6 grams max.

Type 46-1-1 Stk. No	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2544	50							
12F2545	100							
12F2546	200							
12F2547	500	6.63	6.05	5.66	5.27	5.07	4.68	4.49
12F2548	1K							
12F2549	2K							
12F2550	5K							
12F2551	10K							
12F2552	20K	7.43	6.77	6.34	5.90	5.68	5.24	5.03
12F2553	50K	8.02	7.32	6.84	6.37	6.14	5.66	5.43

MODEL 74

Rectangular wirewound type. Resistance tolerance ±10%. Tempco 50 ppm. Power rating 1 watt at 70°C. Operating temperature —65°C to 125°C. Meets MIL specs. Number of turns 22±5. 74-1-1 has 12" teflon leads. 74-2-1 has PC pins. Size .280 x .315 x 1.250. Mtg. hole centers 1 inch. Wt. 4.5 grams max.

Type 74-1-1 Stk. No	Type 74-2-1 Stk. No	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2554	12F2565	50							
12F2555	12F2566	100							
12F2556	12F2567	200							
12F2557	12F2568	500	4.93	4.50	4.21	3.92	3.77	3.48	3.34
12F2558	12F2569	1K							
12F2559	12F2570	2K							
12F2560	12F2571	5K							
12F2561	12F2572	10K							
12F2562	12F2573	20K	5.53	5.04	4.71	4.39	4.23	3.90	3.74
12F2563	12F2574	50K	5.97	5.44	5.09	4.74	4.56	4.21	4.04

MIL STYLE RT 12

Meets MIL-R-27208A. Resistance tolerance ±5%. Tempco 50 ppm. Power rating 1.0 watt at 70°C. Operating temperature —65°C to 175°C. Number of turns 22±5. Size .190 x .315 x 1.250. Mtg. hole centers 1 inch. Wt. 4.3 grams max.

42-1-10 RT12C2L Stk. No	42-2-10 RT12C2P Stk. No	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2822	12F2831	50							
12F2823	12F2832	100							
12F2824	12F2833	200							
12F2825	12F2834	500	5.92	5.39	5.05	4.70	4.52	4.18	4.00
12F2826	12F2835	1K							
12F2827	12F2836	2K							
12F2828	12F2837	5K							
12F2829	12F2838	10K							
12F2830	12F2839	20K	6.63	6.05	5.66	5.27	5.07	4.68	4.49

MIL STYLE RT 11

Meets MIL-R-27208A. Resistance tolerance ±5%. Tempco 50 ppm. Power rating 1.0 watt at 70°C. Operating temperature —65°C to 175°C. Number of turns 22±5. Size .280 x .315 x 1.250. Mtg. hole centers 1 inch. Wt. 4.5 grams max.

44-1-10 RT11C2L Stk. No	44-2-10 RT11C2P Stk. No	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2840	12F2849	50							
12F2841	12F2850	100							
12F2842	12F2851	200							
12F2843	12F2852	500	5.73	5.22	4.89	4.55	4.38	4.04	3.88
12F2844	12F2853	1K							
12F2845	12F2854	2K							
12F2846	12F2855	5K							
12F2847	12F2856	10K							
12F2848	12F2857	20K	6.41	5.84	5.47	5.09	4.90	4.52	4.34

MIL STYLE RT 10

Meets MIL-R-27208A. Resistance tolerance ±5%. Tempco 50 ppm. Power rating 1.0 watt at 70°C. Operating temperature —65°C to 175°C. Number of turns 15±3. Size .180 x .315 x 1 in. Mtg. hole centers .750. 46-4-10 has PC pins out side of case. Wt. 3.6 grams max.

46-1-10 RT10C2L Stk. No	46-4-10 RT10C2P Stk. No	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2858	12F2865	100							
12F2859	12F2866	200							
12F2860	12F2867	500							
12F2861	12F2868	1K	6.80	6.20	5.80	5.40	5.00	4.80	4.60
12F2862	12F2869	2K							
12F2863	12F2870	5K							
12F2864	12F2871	10K							

MODEL 94

Rectangular wirewound type. Resistance tolerance ±10%. Tempco 100 ppm. Power rating 0.5 watt at 70°C. Operating temperature —65°C to 105°C. Number of turns 22±5. 94-1-1 has 12" teflon leads. 94-2-1 has PC pins. Size .280 x .315 x 1.250. Mtg. hole centers 1 inch. Wt. 4.5 grams.

Type 94-1-1 Stk. No	Type 94-2-1 Stk. No	Ohms	1-9	10-24	25-49	50-99	100-499	250-499	500-999
12F2576	12F2584	50							
12F2577	12F2585	100							
12F2578	12F2586	200							
12F2579	12F2587	500	3.15	2.87	2.68	2.50	2.41	2.22	2.13
12F2580	12F2588	1K							
12F2581	12F2589	2K							
12F2582	12F2590	5K							
12F2583	12F2591	10K							
12F3002	12F3003	20K	3.52	3.21	3.00	2.80	2.69	2.48	2.38

PANEL MOUNTING

All Spectrol trimmers can be furnished with panel mounts on special order. Add the following charge to the regular trimmer price.

1-9	10-24	25-99	100-249	250-499
.80	.72	.65	.60	.56

Trimming Pots & Miniature Switches

Spectrol

● NEW SERIES 949 "CERMET" TRIMMING POTS

1¼" rectangular types for industrial and commercial application. Multi-finger wiper design provides redundant positive contact under the most severe environments. Fired-on precious metal terminals assure minimum end resistance. Rated ¾ watt at 70°C; temperature range —25 to +125°C. Excellent stability due to physical characteristics of uniform cermet element. Equivalent to Bournes Types 272 and 276. ±20% tol.

Wire Leads		Printed Circuit									
Stock No.	Type	Stock No.	Type	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2978	949-1-1-101	12F2990	949-2-1-101	100							
12F2979	949-1-1-201	12F2991	949-2-1-201	200							
12F2980	949-1-1-501	12F2992	949-2-1-501	500							
12F2981	949-1-1-102	12F2993	949-2-1-102	1K							
12F2982	949-1-1-202	12F2994	949-2-1-202	2K							
12F2983	949-1-1-502	12F2995	949-2-1-502	5K	3.03	2.76	2.58	2.40	2.31	2.14	2.05
12F2984	949-1-1-103	12F2996	949-2-1-103	10K							
12F2985	949-1-1-203	12F2997	949-2-1-203	20K							
12F2986	949-1-1-503	12F2998	949-2-1-503	50K							
12F2987	949-1-1-104	12F2999	949-2-1-104	100K							
12F2988	949-1-1-504	12F3000	949-2-1-504	500K							
12F2989	949-1-1-105	12F3001	949-2-1-105	1 Meg							

- Excellent Stability
- Minimal End Resistance

GENERAL SPECIFICATIONS SERIES 949

Actual Effective Electrical Travel: 22 ±5 turns.

End Resistance: 1.0% RT or 5 ohms, which ever is greater.

Dielectric Withstanding Voltage: 500 VAC at sea level, 250 VAC at 80,000 feet.

Stops: Wiper assembly idles against stops.

Operation Torque: 5.0 oz. in. max.

Rotational Life: 200 cycles min. without discontinuity.

Temperature Coefficient of Resistance: ±300 PPM/°C maximum.

Weight: 4.5 grams.

MIL STYLE RT 22 TRIMMING POTS

Meets MIL-R-27208A. Power rating 1.5 watts at 70°C. Tempco 50 ppm. Resistance tolerance ±5%. Operating temperature —65°C to 150°C. Case size: ½x½x3/16". Weight: 2.5 grams. **Type 55-1-10 has leads. Type 55-4-10 has PC pins.**

Type 55-1-10 RT22C2L Stock No.	Type 55-4-10 RT22C2P Stock No.	Ohms	1-9	10-24	25-49	50-99	100-249	250 499	500-999
12F2960	12F2969	50							
12F2961	12F2970	100							
12F2962	12F2971	200							
12F2963	12F2972	500	5.95	5.43	5.08	4.73	4.55	4.20	4.03
12F2964	12F2973	1K							
12F2965	12F2974	2K							
12F2966	12F2975	5K							
12F2967	12F2976	10K							
12F2968	12F2977	20K	6.66	6.08	5.68	5.29	5.10	4.70	4.51

MODEL 55 TRIMMING POTS

Meets or exceeds all applicable military and commercial specifications. Power rating 1.5 watts at 70°C. Tempco 50 ppm. Resistance tolerance ±5%. Operating temperature —65°C to 150°C. Models 55-(x)-8 with stops/clutch, 25 turns. Models 55-(x)-12 continuous rotation. 42 turns. Case size ½x½x3/16. Wt. 2.5 grams.

TEFLON INSULATED LEADS

Type 55-1-8 Stock No.	Type 55-1-12 Stock No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F3006	12F3008	10							
12F3007	12F3009	20							
12F2622	12F2781	50							
12F2623	12F2782	100							
12F2624	12F2783	200	5.78	5.27	4.93	4.59	4.42	4.08	3.91
12F2625	12F2784	500							
12F2626	12F2785	1K							
12F2627	12F2786	2K							
12F2628	12F2787	5K							
12F2629	12F2788	10K							
12F2630	12F2789	20K	6.48	5.91	5.53	5.14	4.95	4.57	4.38
12F2631	12F2790	50K	6.99	6.37	5.96	5.55	5.34	4.93	4.73

55-3-8
55-3-12

55-1-12
55-1-8
55-1-10

PRINTED CIRCUIT PINS

Type 55-4-8 Stk. No.	Type 55-4-12 Stk. No.	Type 55-3-8 Stk. No.	Type 55-3-12 Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F3010	12F3012	12F3014	12F3016	10							
12F3011	12F3013	12F3015	12F3017	20							
12F2632	12F2801	12F2791	12F2642	50							
12F2633	12F2802	12F2792	12F2643	100							
12F2634	12F2803	12F2793	12F2644	200	5.78	5.27	4.93	4.59	4.42	4.08	3.91
12F2635	12F2804	12F2794	12F2645	500							
12F2636	12F2805	12F2795	12F2646	1K							
12F2637	12F2806	12F2796	12F2647	2K							
12F2638	12F2807	12F2797	12F2648	5K							
12F2639	12F2808	12F2798	12F2649	10K							
12F2640	12F2809	12F2799	12F2650	20K	6.48	5.91	5.53	5.14	4.95	4.57	4.38
12F2641	12F2810	12F2800	12F2651	50K	6.99	6.37	5.96	5.55	5.34	4.93	4.73

55-4-8
55-4-12
55-4-10

88-3-8

MINIATURE ROTARY SWITCHES

Makes practical many printed circuit board switching applications. Unique "lift off/drop on" cam-actuated wiper action reduces switch arcing and noise. Militarized design withstands severe environments per MIL-STD-202B. Single pole with 10 active non-shorting positions. Contact current rating 250 ma at 28 VDC. Continuous rotation. Temperature range: —65°C to 150°C.

Type 88-3-8. Screwdriver adjust, PC pin. Size: .17 x .50" dia.
Type 88-3-10. Knob adjust., PC pins. Size: .27 x .55" diameter.
Type 88-5-6. Screwdriver adjust, solder hooks, panel bushing mount. Size: .455 x .50" diameter.

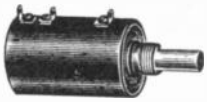
Stk. No.	Type No.	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2925	88-3-8	3.32	3.02	2.83	2.63	2.54	2.34	2.24
12F2930	88-3-10	3.83	3.49	3.26	3.04	2.93	2.70	2.59
12F2931	88-5-6	5.10	4.65	4.35	4.05	3.90	3.60	3.45

88-5-6

88-3-10

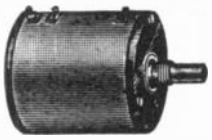
Spectrol Precision Potentiometers

Model 162


Model 510

Model 500

Model 530


Model 810

50-1-1

50-4-1

50-3-1

MODEL 162 10 TURN—½" DIAMETER

Small size with rear terminals allows use where space is at a premium. Power rating 2 watts at 40°C. Tempco 20 ppm. Operating temperature —55°C to 125°C. Resistance tolerance ±5%. Linearity tolerance 0.3%. Max. start torque 0.8 oz. in. One inch long. .0935 Dia. slotted shaft, ¼-32 bushing. Shipping wt. 1.0 oz.

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F2899	100						
12F2900	200						
12F2901	500						
12F2902	1K						
12F2903	2K	10.00	9.50	9.00	8.50	8.00	7.50
12F2904	5K						
12F2905	10K						
12F2906	20K						
12F2907	30K						
12F2908	50K						

MODEL 500 10 TURN—⅞" DIAMETER

Power rating 3.0 watts at 40°C. Tempco 20 ppm except 100 ohms at 180 ppm. Operating temperature —55°C to 125°C. Resistance tolerance ±3%. Linearity ±.25%. Max. start torque .5 oz. in. 1.5" long. ⅛" shaft. ¼-32 bushing. Shipping wt. 1.1 oz.

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F2709	100						
12F2710	500						
12F2711	1K						
12F2712	2K						
12F2713	5K	15.00	14.25	13.50	12.75	12.00	11.25
12F2714	10K						
12F2715	20K						
12F2716	30K						
12F2717	50K						
12F2718	100K						

MODEL 510 10 TURN—⅞" DIAMETER

Power rating 3.0 watts at 40°C. Tempco 20 ppm. Except 100 ohms at 180 ppm. Operating temperature —55°C to 105°C. Resistance tolerance ±3%. Linearity ±.25%. Max. start torque .5 oz. in. 1.5" long. ¼" shaft. ⅜-32 bushing. Shipping weight 1.5 oz.

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F2719	100						
12F2720	200						
12F2721	500						
12F2722	1K						
12F2723	2K	10.00	9.50	9.00	8.50	8.00	7.50
12F2724	5K						
12F2725	10K						
12F2726	20K						
12F2727	30K						
12F2728	50K						
12F2729	100K						

MODEL 530 10 TURN—⅞" DIAMETER

Power rating 3.0 watts at 40°C. Tempco 20 ppm. except 100 ohms at 180 ppm. Operating temperature —55°C to 105°C. Resistance tolerance ±5%. Linearity ±.25%. Max. start torque .5 oz. in 1.4" long. ¼" slotted shaft. ⅜-32 bushing. Shipping wt. 1.5 oz.

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F3004	100						
12F3005	200						
12F2890	500						
12F2891	1K						
12F2892	2K	7.00	6.65	6.30	5.95	5.60	5.25
12F2893	5K						
12F2894	10K						
12F2895	20K						
12F2896	30K						
12F2897	50K						
12F2898	100K						

MODEL 810 10-TURN—1-13/16" DIAMETER

Power rating 8 watts at 40°C. Operating temperature —55°C to 105°C. Meets or exceeds military and industrial specifications. Resistance tolerance ±3%. Linearity tolerance ±.25%. Max. start torque 1.75 oz. in. 2" long. ¼" shaft. ⅜-32 bushing. Shipping weight 4.5 oz.

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F2730	25						
12F2731	50						
12F2732	100						
12F2733	200						
12F2734	500						
12F2735	1K						
12F2736	2K						
12F2737	5K	12.00	11.40	10.80	10.20	9.60	9.00
12F2738	10K						
12F2739	20K						
12F2740	30K						
12F2741	50K						
12F2742	100K						
12F2743	200K						
12F2744	250K						
12F2745	300K						

MODEL 50

Meets or exceeds all applicable military and commercial specifications. Power rating 1.0 watt at 50°C. Tempco 50 ppm. Resistance tolerance ±5%. Operating temperature —65° to 150°C. Number of turns 23±2. Case size ⅜x⅜x⅜6. Wt. 1.5 grams.

TEFLON INSULATED LEADS

Type 50-1-1 Stock No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2592	50	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2593	100	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2594	200	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2595	500	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2596	1K	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2597	2K	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2598	5K	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2599	10K	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2600	20K	7.62	6.94	6.50	6.05	5.82	5.38	5.15
12F2601	50K	8.23	7.50	7.02	6.53	5.29	5.81	5.57

PRINTED CIRCUIT PINS

Type 50-3-1 Stk. No.	Type 50-4-1 Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2602	12F2612	50	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2603	12F2613	100	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2604	12F2614	200	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2605	12F2615	500	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2606	12F2616	1K	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2607	12F2617	2K	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2608	12F2618	5K	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2609	12F2619	10K	6.80	6.20	5.80	5.40	5.20	4.80	4.60
12F2610	12F2620	20K	7.62	6.94	6.50	6.05	5.82	5.38	5.15
12F2611	12F2621	50K	8.23	7.50	7.02	6.53	6.29	5.81	5.57

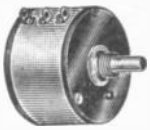
Newark can supply most Spectrol Potentiometers. Write phone or wire Newark Chicago for prices on Potentiometers not listed in this Catalog.

TRIMMING POTENTIOMETERS

84-3-8

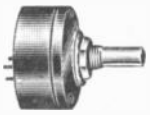
84-3-10

84-5-6

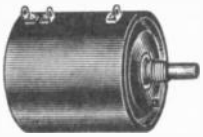


Model 830

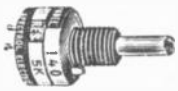
80-3-1
80-3-4



130



Model 860



140

MODEL 84 SINGLE TURN

Meets or exceeds MIL specs. Power rating 1.5 watts at 70°C. Tempco 50 ppm. Temperature range —65°C to 175°C. Case diameter ½". Model 84-3-8, screwdriver adjust, PC pins. Model 84-3-10, knob adjust, PC pins. Model 84-5-6, panel bushing mount, solder hooks.

TYPE 84-3-8—SCREWDRIVER ADJUST-PC PINS

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2958	10							
12F2959	20							
12F2680	50							
12F2681	100							
12F2682	200	3.32	3.02	2.83	2.63	2.54	2.34	2.24
12F2683	500							
12F2684	1K							
12F2685	2K							
12F2686	5K							
12F2687	10K							
12F2688	20K	3.71	3.38	3.16	2.94	2.83	2.62	2.51
12F2689	50K	4.01	3.66	3.42	3.19	3.07	2.83	2.71
12F2690	100K	4.98	4.54	4.25	3.96	3.81	3.52	3.37

TYPE 84-3-10—KNOB ADJUST-PC PINS

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2932	10							
12F2933	20							
12F2934	50							
12F2935	100							
12F2936	200	4.00	3.64	3.41	3.17	3.06	2.82	2.70
12F2937	500							
12F2938	1K							
12F2939	2K							
12F2940	5K							
12F2941	10K							
12F2942	20K	4.47	4.08	3.81	3.55	3.42	3.16	3.03
12F2943	50K	4.83	4.40	4.12	3.83	3.69	3.41	3.27
12F2944	100K	6.00	5.47	5.12	4.77	4.59	4.24	4.06

TYPE 94-5-6—PANEL BUSHING MOUNT-SOLDER HOOKS

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F2945	10							
12F2946	20							
12F2947	50							
12F2948	100							
12F2949	200	5.10	4.65	4.35	4.05	3.90	3.60	3.45
12F2950	500							
12F2951	1K							
12F2952	2K							
12F2953	5K							
12F2954	10K							
12F2955	20K	5.71	5.21	4.87	4.54	4.37	4.03	3.86
12F2956	50K	6.17	5.63	5.26	4.90	4.72	4.36	4.18
12F2957	100K	7.65	6.98	6.53	6.08	5.85	5.40	5.18

MODEL 830 3-TURN—1-13/16" DIAMETER

Power rating 3 watts at 40°C. Operating temperature —55°C to 105°C. Meets or exceeds military and industrial specifications. Resistance tolerance ±3%. Linearity tolerance ±.25%. Max. start torque 1.75 oz. in. 1.220" long. ¼" shaft. ⅜-32 bushing. Shipping weight 3.0 oz.

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F2746	100						
12F2747	500						
12F2748	1K						
12F2749	2K	10.00	9.50	9.00	8.75	8.50	8.00
12F2750	5K						
12F2751	10K						
12F2752	20K						
12F2753	30K						
12F2754	50K						

MODEL 80 SINGLE TURN

Ultraminiature TO-9 size. Terminal spacing per standard MIL grid. High power rating 1 watt at 50°C. Resistance tolerance ±5%. Tempco 50 ppm. 80-3-4: 310° elec. travel with end stops. 80-3-1: cont. rotation with 335° elec. travel. Temperature range —65°C to 150°C. Size .241 x .325 dia.

Type 80-3-4 Stk. No.	Type 80-3-1 Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499	500-999
12F3025	12F3027	10							
12F3026	12F3028	20							
12F2653	12F2662	50							
12F2652	12F2663	100							
12F2654	12F2664	200							
12F2655	12F2665	500	3.74	3.41	3.19	2.97	2.86	2.64	2.53
12F2656	12F2666	1K							
12F2657	12F2667	2K							
12F2658	12F2668	5K							
12F2659	12F2669	10K							
12F2660	12F2670	20K	4.18	3.81	3.57	3.32	3.20	2.95	2.83
12F2661	12F2671	50K	4.52	4.12	3.86	3.59	3.46	3.19	3.06

MODEL 130 SINGLE-TURN 1-5/16" DIAMETER

High reliability at low cost. Terminals at rear. Bushing mount. Power rating 2.75 watts at 40°C. Temperature range (operating) —55°C to 105°C. Resistance tolerance ±3%. 360° mech. rotation, 352° ±2° elec. rot. Body length ⅝". Shaft diameter ¼". Shpg. wt. 1.5 oz.

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F2691	100						
12F2692	1K						
12F2693	2K	9.00	8.55	8.10	7.65	7.20	6.75
12F2694	5K						
12F2695	10K						
12F2696	20K						
12F2897	30K						

MODEL 140 SINGLE TURN ½" DIAMETER

Small diameter, rear terminals for maximum package density. Linearity tolerance 1%. Power rating 2 watts at 40°C. Operating temperature range —55°C to 125°C. 330° ±5° mech. rotation, 320° ±5° elec. rot. Body length .305". Shaft diameter ⅛". Shipping weight 0.1 oz.

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F2698	50						
12F2699	100						
12F2700	200						
12F2701	500						
12F2702	1K	8.65	8.22	7.80	7.37	6.93	6.50
12F2703	2K						
12F2704	5K						
12F2705	10K						
12F2706	20K						
12F2707	50K						

MODEL 860 10-TURN—1-13/16" DIAMETER

Power rating 8 watts at 40°C. Operating temperature —55°C to 105°C. Resistance tolerance ±3%. Linearity tolerance ±.25%. Max. start torque 1.75 oz. in. 2" long. ¼" shaft. ⅜-32 bushing. Shipping weight 4.5 oz.

Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F2755	25						
12F2756	50						
12F2757	100						
12F2758	200						
12F2759	500						
12F2760	1K						
12F2761	2K	10.00	9.50	9.00	8.50	8.00	7.50
12F2762	5K						
12F2763	10K						
12F2764	20K						
12F2765	30K						
12F2766	50K						
12F2767	100K						
12F2768	200K						
12F2769	300K						
12F2770	400K						

Turns Counting Dials and Trimmers

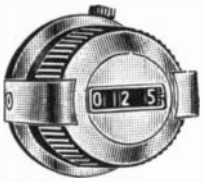
SPECTROL

Model 10

Model 11

12

14



Model 25

Model 30

PRECISION TURNS COUNTING DIALS

Accuracy of better than 0.1% when used with 10-turn pot. Fast numeral transfer takes place in less than one division. Unique one-finger brake lever prevents dial creepage or loss of setting no matter how severe vibration or shock encountered.

PRECISION TURNS-COUNTING DIALS

Model 10. Ten turns. Registers 999 total count. Black anodized, white numerals. One inch diameter.

Stock No.	Type	Shaft Diameter	1-9	10-24	25-49	50-99	100-249	250-499
12F2771	10-1-11	¼"	8.75	8.31	7.88	7.44	7.00	6.56
12F2772	10-3-11	⅜"	9.75	9.26	8.78	8.29	7.80	7.31

Model 11. Eleven turns. Registers 1099 total count. Satin chrome, black markings. 1" diameter.

12F2773	11-1-11	¼"	7.75	7.36	6.98	6.59	6.20	5.81
12F2774	11-3-11	⅜"	8.35	7.93	7.52	7.10	6.68	6.26

Model 12. Ten turns. Registers 999 total count. Brake lever close to body for use in restricted panel space. Black anodized, white markings. 1" diameter.

Stk. No.	Type	Shaft Dia.	1-9	10-24	25-49	50-99	100-249	250-499
12F2926	12-1-11	¼"	8.75	8.31	7.88	7.44	7.00	6.56
12F2927	12-3-11	⅜"	9.75	9.26	8.78	8.29	7.80	7.31

Model 14. Ten turns. Registers 999 total count. Housing squared off sides and bottom for use where space is severely restricted. Black anodized, white markings. 15/16" wide x 29/32" high.

12F2928	14-1-11	¼"	8.75	8.31	7.88	7.44	7.00	6.56
12F2929	14-3-11	⅜"	9.75	9.26	8.78	8.29	7.80	7.31

DIGITAL DIAL

Model 25-1-13. Three digit dial reads to 1099 in 11 turns. Fine calibrations allow settings to 1/10 of a digit accuracy. 2 to 1 gear ratio between setting knob and device shaft for extremely fine settings. Mounts directly to panel. Satin chrome finish with black plastic turn-knob. 1 13/16" dia. 1 5/8" protrusion from panel.

Stock No.	Type	Shaft Diameter	1-9	10-24	25-49	50-99	100-249	250-499
12F2777	25-1-13	¼"	14.25	13.54	12.83	12.11	11.40	10.69

Model 25-4-13. 4-digit dial unit similar to above reads to 9999 in 100 turns.

12F2778	25-4-13	¼"	19.75	18.76	17.78	16.79	15.80	14.81

PRECISION TURNS-COUNTING DIAL

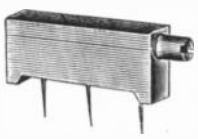
Model 20. Ten turns. Registers 999 total count. Black anodized, white markings. 1 13/16" diameter.

Stock No.	Type	Shaft Diameter	1-9	10-24	25-49	50-99	100-249	250-499
12F2775	20-1-11	¼"	7.50	7.13	6.75	6.38	6.00	5.63
12F2776	20-3-11	⅜"	8.10	7.70	7.29	6.89	6.48	6.08

Model 30. Ten turns. Registers 999 total count. Satin chrome, black markings. 1 13/16" diameter.

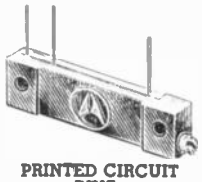
12F2779	30-1-11	¼"	5.75	5.46	5.18	4.89	4.60	4.31
12F2780	30-3-11	⅜"	6.35	6.03	5.72	5.40	5.08	4.76

AMPHENOL TRIMMERS



2600P-2610P

LEADS



PRINTED CIRCUIT PINS

SOLDER LUGS

2900 L

2901 P

AMPHENOL WIREWOUND TRIMMERS

Micro-Miniature Trimmers. —65° to +125°C. 1 watt at 40°C. .75 x .16 x .31". Up to 52% higher resolution than many trimmers selling up to six times the price. Silver brazed terminations virtually eliminate end resistance. Self-locking leadscrew, and low mass contact design permits the 2600 to withstand acceleration and shock up to 50 g's. T.C., 30 ppm nominal. Damage proof clutch. Rated one full watt at 40°C, derated to zero at 125°C. Factory tested. 2610P is humidity-proof version.

2600P SERIES WIREWOUND

Stock No.	Ohms	% Resolution	Res. No. of Turns	1-9	10-24	25-49	50-99	100-249	250-499
12F1627	100	.95	104						
12F1628	200	.72	135						
12F1629	500	.64	156						
12F1630	1000	.53	190	1.75	1.62	1.46	1.39	1.30	1.23
12F1631	2000	.47	211						
12F1632	5000	.32	314						
12F1633	10000	.24	403						
12F1634	20000	.22	454						

2610P HUMIDITY PROOF WIREWOUND

Stock No.	Ohms	% Resolution	Res. No. of Turns	1-9	10-24	25-49	50-99	100-249	250-499
12F1636	100	.95	104						
12F1637	200	.72	135						
12F1638	500	.64	156						
12F1639	1000	.53	190	2.45	2.27	2.04	1.95	1.82	1.72
12F1640	2000	.47	211						
12F1641	5000	.32	314						
12F1642	10000	.24	403						
12F1643	20000	.22	454						

2750 SERIES (RT 12)

Designed to meet all the specifications detailed in MIL-R-27208A, style RT12. Leadscrew actuated, wirewound, and humidity proof of the high temperature type. Operating temperature ranges from —65° to +175°C. Stranded copper wire leads are color coded and teflon insulated for extra insulation in corrosive atmospheres. 1 1/2" minimum lengths. Total resistance tolerance is ±5% with a power rating of 1 watt at 70°C, which is derated to 0 at 175°C. Range of adjustment from leadscrew in 22 turns. Size: 1.25"x0.19"x0.32".

Type 2750 L Stock No.	Type 2750P Stock No.	Type 2750SL Stock No.	Ohms	Resolution No. of Trns.	1-9	10-24	25-49	50-99	100-249	250-499
12F1657	12F1757	12F1857	10	77						
12F1658	12F1758	12F1858	20	97						
12F1659	12F1759	12F1859	50	126						
12F1660	12F1760	12F1860	100	154						
12F1661	12F1761	12F1861	200	192	5.60	5.20	4.87	4.58	4.36	4.05
12F1662	12F1762	12F1862	500	256						
12F1663	12F1763	12F1863	1000	237						
12F1664	12F1764	12F1864	2000	288						
12F1665	12F1765	12F1865	5000	398						
12F1666	12F1766	12F1866	10000	475						
12F1667	12F1767	12F1867	20000	605	6.10	5.66	5.30	4.97	4.75	4.40
12F1668	12F1768	12F1868	50000	715	6.50	6.05	5.66	5.31	5.07	4.70
12F1669	12F1769	12F1869	100000	1180	7.75	7.21	6.75	6.35	6.35	5.60

WIRE WOUND TRIMMERS

2850 SERIES (RT 11)

Designed to meet government specifications as stated in MIL-R-27208A, style RT 11. Rated one full watt at 110°C, the 2850 is a high temperature, humidity proof, wirewound precision trimmer, with a temperature range of —65°C to +175°C. Special silver brazed terminations minimize end resistance to a minute ohm, or 0.25% of the total resistance. Total resistance tolerance is ±5%. Extra long ceramic mandrel provides more turns of resistance element, superior resolution. 12" tinned teflon insulated leads.

Type 2850L Stock No.	Type 2850P Stock No.	Type 2850SL Stock No.	Ohms	Resolution No. of Turns	1-9	10-24	25-49	50-99	100-249	250-499
12F1644	12F1744	12F1844	10	61						
12F1645	12F1745	12F1845	20	77						
12F1646	12F1746	12F1846	50	102						
12F1647	12F1747	12F1847	100	154						
12F1648	12F1748	12F1848	200	192	5.43	5.05	4.72	4.43	4.23	3.92
12F1649	12F1749	12F1849	500	176						
12F1650	12F1750	12F1850	1K	238						
12F1651	12F1751	12F1851	2K	287						
12F1652	12F1752	12F1852	5K	343						
12F1653	12F1753	12F1853	10K	570						
12F1654	12F1754	12F1854	20K	675	6.03	5.60	5.25	4.92	5.70	4.35
12F1655	12F1755	12F1855	50K	915	6.55	6.07	5.67	5.33	5.08	4.71
12F1656	12F1756	12F1856	100K	1100	7.55	7.20	6.74	6.31	6.04	5.60

2900 SERIES (RT 22)

Trimmers are ½" square, humidity-proof, and wirewound. Conform to government standards specified in MIL-R-27208A. An ambient temperature range of —65°C to +175°C. Power dissipation is one watt at 70°C derated to at 175°C. Complete adjustment of this instrument is achieved in 25 turns of the lead-screw. Six inch long wire leads are color coded for your convenience, and teflon insulated for extra protection against corrosive forces. Total resistance tolerance ±5%.

Type 2900L Stock No.	Type 2900P Stock No.	Ohms	Resolution No. of Trns.	1-9	10-24	25-49	50-99	100-249	250-499
12F1670	12F1770	10	100						
12F1671	12F1771	20	130						
12F1672	12F1772	50	185						
12F1673	12F1773	100	233						
12F1674	12F1774	200	286	5.43	5.05	4.72	4.43	4.22	3.92
12F1675	12F1775	500	286						
12F1676	12F1776	1000	322						
12F1677	12F1777	2000	477						
12F1678	12F1778	5000	625						
12F1679	12F1779	10000	714						
12F1680	12F1780	20000	910	6.01	5.60	5.23	4.90	4.68	4.35
12F1681	12F1781	50000	1190	7.10	6.60	6.16	5.80	5.53	5.13

2901 METAL FILM TRIMMERS

Offers a temperature coefficient as low as 50 ppm/°C and zero noise level at the trimmed position. ½" square trimmer is humidity-proof, vibration proof and shock-proof. Entire case is insulator. 2901L—color coded wire lead is 0.5x0.187x0.5". 2901P—gold plated printed circuit pin is 0.5x0.220x0.5". Wt., 3 gms.

Type 2901L Stk. No.	Type 2901P Stk. No.	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
12F1682	12F1690	500						
12F1683	12F1691	1K						
12F1684	12F1692	2K						
12F1685	12F1693	5K						
12F1686	12F1694	10K	7.35	6.95	6.60	6.25	5.85	5.50
12F1687	12F1695	20K						
12F1688	12F1696	50						
12F1689	12F1697	100						
12F1699	12F1698	200						

3600 SERIES (RT 24)

Unique wiper design does not shift under shock. Constant contact even at 50 g's. Gives 85% better resolution than specified by MIL-R-27208B, RT 24. Gives a low .200" trimmer height for low card space applications. Circuit pins are silver brazed directly to the resistance element for long life. Exclusive ratcheting clutch mechanism eliminates open circuit, contact damage and wiper slippage. Meets steady-state humidity spec of MIL-STD-202. .375" square with ¼" corrosion-proof gold-plated pins .010" thick x .030" wide. Resistance tolerance: ±10%.

Type 3600P Stk. No.	Ohms	Resolution No. of Turns	1-9	10-24	25-49	50-99	100-249	250-499
12F1785	100	218						
12F1786	200	282						
12F1787	500	362						
12F1788	1K	337	2.95	2.73	2.46	2.33	2.18	2.07
12F1789	2K	448						
12F1790	5K	560						
12F1791	10K	709						
12F1792	20K	881						

SERIES 992

General purpose wirewound. Resistance range: 50 ohms to 10K. Resistance tolerance: ±10% to 100 ohms; ±5% 100 ohms and over. Power rating: 1 watt @ 40°C, 0 watt @ 105°C. Dust proof; 0-ring seal. Usable potentiometer range: 93% to 100%. Insulation: 0.2" double amplitude 2-30 hz., 20 g's, 30-2000 hz. Acceleration 100 g's. Shock: 50 g's Load life: 500 hrs. operation. 1100VAC breakdown voltage. Gang mountable.

Type 992L Stock No.	Type 992P Stock No.	Type 992SL Stock No.	Ohms	Resolution No. of Turns	1-9	10-24	25-49	50-99	100-249	250-499
12F941	12F856	12F1512	50	108						
12F942	12F857	12F1513	100	108						
12F943	12F858	12F1514	200	107						
12F944	12F859	12F1515	500	167	2.95	2.73	2.46	2.33	2.18	2.07
12F945	12F960	12F1516	1K	225						
12F946	12F961	12F1517	2K	273						
12F948	12F963	12F1518	5K	378						
12F949	12F964	12F1519	10K	448						

994 SERIES

General purpose, wire-wound model with resistance range of 50 to 10,000 ohms, ±5% from 100 to 10,000 ohms. Temperature range, —55°C to +105°C. Acceleration is up to 100 G's. Humidity-proof: meets military salt spray test as well as sand and dust specifications. Power rating is 1 watt @ 40°C. Size: .36"H x .28"W x 1.25"L.

994L Stk. No.	994P Stk. No.	994SL Stk. No.	Ohms	Resolution No. of Turns	1-9	10-24	25-49	50-99	100-249	250-499
12F1531	12F1710	12F1718	50	108						
12F1532	12F1711	12F1719	100	108						
12F1533	12F1712	12F1720	200	107						
12F1534	12F1713	12F1721	500	167	3.10	2.87	2.59	2.45	2.29	2.18
12F1535	12F1714	12F1722	1000	225						
12F1536	12F1715	12F1723	2000	273						
12F1537	12F1716	12F1724	5000	378						
12F1538	12F1717	12F1725	10000	448						

999 TRIMMER MOUNTING BRACKET

For any .28" W. x 1.25" L. Trimmer: Models 992, 994, and 2850 series. Easily adjusted—no special tools needed. Self-locking. Aluminum with gold anodized finish.

Stk. No.	Type	Size	1-9	10-24	25-49
12F1635	999	1 19/32"Lx15/32"Wx5/16"H	.81	.75	.68

Amphenol Microdials and Potentiometers

CONCENTRIC SCALE MICRODIALS®

Composed of 2 concentrically mounted dials: Smaller counts up to 10 turns; larger counts increments of turn. (100 equal divisians). Attachment to actuation shaft eliminates backlash. Accelerating turn-counting dial removes confusion. Cont. operation in either direction. No stops in dial itself. Finger tip brake. #6 Allen wrench packed with each unit. Dia: 1¾". Depth: 1 3/16". Shaft Dia.: 0.252". Shpg. wt: 8 oz.

Stk. No.	Type	Description	1-9	10-24	25-99	100-199
12F833	1320	Bright chrome cover-satin chrome dials	5.82	5.46	5.09	4.85
12F834	1321	Bright chrome cover-gloss black dials				
12F835	1322	Satin chrome cover-satin chrome dials				
12F836	1323	Satin chrome cover-gloss black dials				
12F837	1324	Gloss black cover-satin chrome dials				
12F838	1325	Gloss black cover-gloss black dials				
12F839	1326	Dull black cover-satin chrome dials				
12F840	1327	Dull black cover-dull black dials				

DIRECT-READING MICRODIALS®

Inline digital presentation. Rugged, sealed construction. Control knob mounted on the shaft. Packed with #6 Allen Set Screw Wrench, 1 adapter ring for use when panel thickness exceeds ⅛". Depth 1⅝". Panel face dia. 2 1/16". †Panel face dia. 1 13/16", depth 1 21/32". Finger tip braking on some models. *Has anodized aluminum control knob (meets 50 hour salt spray test). Shpg. wt., 8 oz.

Stk. No.	Type	Description	1-9	10-24	25-49	50-99	100-up
12F828	1304	0-9999 Scale, w/o brake	18.00	17.10	16.20	14.85	13.95
12F829	1305	0-99999 Scale, w/o brake	23.00	21.90	20.70	19.60	18.40
12F831	1309*†	0-999 Scale with brake	14.00	13.30	12.60	11.55	10.80
12F832	1310*†	0-999 Scale, w/o brake	13.00	12.35	11.70	10.75	10.10

2201B PRECISION 10-TURN LINEAR MICROPOTS

Model 2201B. A high resolution ten-turn precision potentiometer for use in commercial instrument applications. Specifications include Mechanical Rotation: 3600° +4° —0°. Temperature Range: —55°C to +105°C. Torque: 2 oz/in running 3 oz/in starting. Stop Strength: 160 oz/in. Shaft Dia: .250". Front Shaft ext. ⅞". Power Dissipation: 5 watts at 40°C. Wt. 4.2 oz.

Stock No.	Ohms	Std. Linearity	1-9	10-24	25-49	50-99	100-199
12F885	25	±.5%	10.00	9.50	9.00	8.50	8.00
12F886	50	±.5%					
12F887	100	±.25%					
12F888	200	±.25%					
12F889	500	±.25%					
12F890	1K	±.25%					
12F891	2K	±.25%					
12F892	5K	±.25%					
12F893	10K	±.25%					
12F894	20K	±.25%					
12F895	30K	±.25%					
12F896	50K	±.25%					
12F897	100K	±.25%					
12F898	200K	±.25%					

1" MICRODIAL® WITH BRAKE

Series 3000. Ten-turn, precision counting dial provide maximum accuracy and convenience with Amphenol Micropot potentiometers. Concentricscale Microdial with finger tip brake ideal for the series 205 and 1111B Micropots and for all potentiometers having ten turn adjustment and ¼" diameter shaft. White numerals on black scale. Smooth, silent gear action. Size 1¼" with finger grip. Shpg. wt. 10 oz.

Stock No.	Type	Description	1-9	10-24	25-99	100-199
12F875	3041-2	Black Brake Knob	7.75	7.30	6.95	6.55
12F876	3041-4	Dark-Gray Br. Knob				
12F877	3041-5	Light-Gray Br. Knob				

SERIES 1350 MICRODIAL COUNTING DIAL

Counting dial features 2 concentrically mounted dials: larger counts shaft rev. in 100 equal increments: inner — full rev. Smooth equicyclic motion. Eliminates reading inaccuracies. Indexing accuracy: 1000:1. 1 13/16" diameter. Ten turns. Shaft dia: ¼". Housing: clear anodized alum. Wt: 4.4 oz.

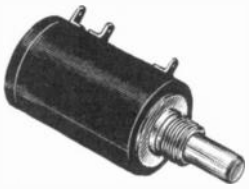
Stk. No.	Type	1-9	10-24	25-99	100-199
12F878	1350	5.75	5.46	5.18	4.89

3141 DIGITAL MICRODIAL

Remarkably accurate (1000:1 indexing accuracy). Measures only 1⅛x1 21/32" and protrudes only 2 5/32" from a panel. Digits are magnified by convex lens in recessed window. Three-digit, ten-turn dial rotates continuously forward or backward with push-pull fingertip brake to lock settings. Will mount on panels 3/16-3/16" thick. Natural brushed aluminum finish. Shaft dia. ¼". Shpg. wt. 2.75 oz.

Stk. No.	1-9	10-24	25-99	100-199
12F879	10.00	9.50	9.00	8.50

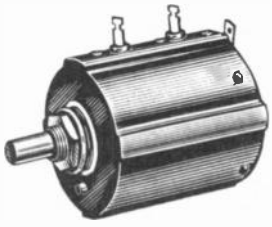
2151B WIREWOUND POTENTIOMETERS



Type 2151B. For industrial-commercial use. ⅞" diameter. Wirewound Dual slip-ring commutator. Metal wiper contact "hugs." Rotational life: over 2,000,000 revolutions. High temperature thermosetting. Molded phenolic case meets MIL-R-12934D. Temp. range: —65°C to +85°C. Wt. 1 oz.

Stock No.	Ohms	Res. No. of turns	1-9	10-24	25-49	50-99	100-249
12F1800	25	1,820	10.00	9.50	9.00	8.50	8.00
12F1801	50	2,080					
12F1802	100	1,850					
12F1803	200	2,143					
12F1804	500	2,745					
12F1805	1,000	3,180					
12F1806	2,000	4,040					
12F1807	5,000	5,200					
12F1808	10,000	4,800					
12F1809	20,000	5,900					
12F1810	30,000	6,500					
12F1811	50,000	9,150					
12F1812	100,000	11,300					

MODEL 205 MICROPOT 10-TURN POTS



- **Dual Bearings**
- **Zero-based Resolution**
- **64% better Resolution**
- **Anti-backlash Drive**
- **Rugged Molded Element**

Designed for both military and commercial application. Single shaft, non-gangable. Mechanical Rotation: 3600° +15° —0° Electrical Rotation: 3600° +14.4° —0. Resistance Tolerance: ±3% except items marked (*) which are ±10%. Linearity Accuracy: ±1% except (*) which are ±1% independent linearity. Running torque not over 1.5 inch ounces, starting torque not to exceed 3.0 inch ounces. Power dissipation 5 watts at 40°C. Shaft: ½" long, .25" dia. Size 2⅛" long; 1¾" dia. Fits panel hole .405" dia. Shpg. wt. 8 oz.

Stock No.	Ohms	Resolution: Turns of Wire	Resolution: %	Res. Element (40°C): Maximum Voltage	Res. Element (40°C): Max. Current in Amps
12F800*	1.15	.....	. .	2.4	2.08
12F801*	2.9	. . . .	. . . .	3.8	1.32
12F802*	25	2520	.040	11.2	.450
12F803*	50	3230	.031	15.9	.316
12F804	100	3820	.026	22.3	.223
12F805	200	6100	.0164	31.6	.158
12F806	500	5150	.0195	50.0	.100
12F807	1K	6200	.0162	72.0	.070
12F808	2K	7800	.0141	100 0	.050
12F809	5K	9170	.0109	160.0	.0315
12F810	10K	8300	.0120	222 0	.0225
12F811	20K	10900	.0092	318.0	.0159
12F812	30K	13000	.0077	390.0	.0128
12F813	50K	17000	.0059	500 0	.0100
12F814	100K	18750	.0053	710 0	.0070

PRICES	1-9	10-24	25-99	100-999
	16.86	15.81	14.75	14.05

STYLE AS ½ WATT MINIATURE POTENTIOMETERS

The smallest, high-quality, molded, composition potentiometer available. Only ½" in diameter. Locking type shaft is standard. Max. continuous voltage across entire element—350v. ½-watt at 70°C. Derate linearly to zero at 120°C ambient. Can be used throughout range from —55°C to +120°C. Type AS potentiometers meet the 200 hour salt spray test of QQ-M-151 and exceed the performance requirements of MIL-R-94A as well as E.I.A. requirements. Shipping weight, 4 ounces. Tol. ±10%. * ±20%.

Stk. No.	Type	MIL-R-94	Ohms	1-9	10-49	50-99	100-up
9F950	AS3601	RV6LAYSA101A	100	5.10	4.59	4.23	3.58
9F951	AS3602	RV6LAYSA251A	250	5.10	4.59	4.23	3.58
9F952	AS3603	RV6LAYSA501A	500	5.10	4.59	4.23	3.58
9F953	AS3604	RV6LAYSA102A	1,000	5.10	4.59	4.23	3.58
9F954	AS3605	RV6LAYSA252A	2,500	5.10	4.59	4.23	3.58
9F963	AS3606	RV6LAYSA502A	5,000	5.10	4.59	4.23	3.58
9F964	AS3607	RV6LAYSA103A	10,000	5.10	4.59	4.23	3.58
9F955	AS3608	RV6LAYSA253A	25,000	5.10	4.59	4.23	3.58
9F956	AS3609	RV6LAYSA503A	50,000	5.10	4.59	4.23	3.58
9F957	AS3610	RV6LAYSA104A	.1 meg	5.10	4.59	4.23	3.58
9F958	AS3611	RV6LAYSA254A	.25 meg	5.10	4.59	4.23	3.58
9F959	AS3612	RV6LAYSA504A	.50 meg	5.10	4.59	4.23	3.58
9F960	AS3613	RV6LAYSA105B	1 meg.*	5.10	4.59	4.23	3.58
9F949	AS3684	RV6LAYSA205B	2.0 meg*	5.10	4.59	4.23	3.58
9F961	AS3614	RV6LAYSA255B	2.5 meg*	5.10	4.59	4.23	3.58
9F962	AS3615	RV6LAYSA505B	5.0 meg*	5.10	4.59	4.23	3.58

STYLE ASM POTENTIOMETERS

½ watt potentiometers. Same as Type AS above, except that Type ASM has straight bushing and shafts that extend ⅞" L. from the mounting surface. Shafts are slotted. Tolerance: ±10%. except * ±20%.

Stk. No.	Type	MIL-R-94	Ohms	1-9	10-49	50-99	100-up
9F1800	ASM6661	RV6NAYSD101A	100	5.10	4.59	4.23	3.58
9F1801	ASM6662	RV6NAYSD251A	250	5.10	4.59	4.23	3.58
9F1802	ASM6663	RV6NAYSD501A	500	5.10	4.59	4.23	3.58
9F1803	ASM6664	RV6NAYSD102A	1,000	5.10	4.59	4.23	3.58
9F1804	ASM6665	RV6NAYSD252A	2,500	5.10	4.59	4.23	3.58
9F1805	ASM6666	RV6NAYSD502A	5,000	5.10	4.59	4.23	3.58
9F1806	ASM6667	RV6NAYSD103A	10,000	5.10	4.59	4.23	3.58
9F1807	ASM6668	RV6NAYSD253A	25,000	5.10	4.59	4.23	3.58
9F1808	ASM6669	RV6NAYSD503A	50,000	5.10	4.59	4.23	3.58
9F1809	ASM6670	RV6NAYSD104A	.1 meg.	5.10	4.59	4.23	3.58
9F1810	ASM6671	RV6NAYSD254A	.25 meg.	5.10	4.59	4.23	3.58
9F1811	ASM6672	RV6NAYSD504A	.5 meg.	5.10	4.59	4.23	3.58
9F1812	ASM6673	RV6NAYSD105B	1.0 meg.*	5.10	4.59	4.23	3.58
9F1813	ASM6674	RV6NAYSD205B	2.0 meg.*	5.10	4.59	4.23	3.58
9F1814	ASM6675	RV6NAYSD255B	2.5 meg.*	5.10	4.59	4.23	3.58
9F1815	ASM6676	RV6NAYSD505B	5.0 meg.*	5.10	4.59	4.23	3.58

TYPE AB 2-WATT POTENTIOMETERS

A

B

C

Molded composition 2-watt variable resistance control units. Type CMU (Fig. C has ⅞"Lx¼" slotted shaft. Type CLU (Fig. A.) has locking nut, ⅝" L. x ¼" slotted shaft mounts in ⅜" hole on panels up to ⅛". Types CU (Fig. B), has a 2" long, Mount in ⅜" hole on panels up to ¼". All are ±10% tolerance, except * ±20%. Types CU, CCU, CMU, and CLU are linear taper; Type CA clockwise log; Type CB counter-clockwise log; size ⅝x1 5/32" diameter. Type CCU size, 1 17/64 x 1 5/32" dia. With lock washer and mtg. nut. Shpg. wt., 4 oz.

Stock Potentiometers-Mil Units Are Stamped With Mil And Commercial Designations.

STYLE CLU (⅜" SHAFT) FIG. A

Stk. No.	Type	MIL-R-94	Ohms	1-9	10-49	50-99	100-up
9F916	CLU5001	RV4LAYSA500A	50	2.55	2.29	2.12	1.90
9F917	CLU1011	RV4LAYSA101A	100	2.55	2.29	2.12	1.90
9F558	CLU1511	RV4LAYSA151A	150	2.55	2.29	2.12	1.90
9F918	CLU2511	RV4LAYSA251A	250	2.55	2.29	2.12	1.90
9F559	CLU3511	RV4LAYSA351A	350	2.55	2.29	2.12	1.90
9F919	CLU5011	RV4LAYSA501A	500	2.55	2.29	2.12	1.90
9F560	CLU7511	RV4LAYSA751A	750	2.55	2.29	2.12	1.90
9F920	CLU1021	RV4LAYSA102A	1,000	2.55	2.29	2.12	1.90
9F561	CLU1521	RV4LAYSA152A	1,500	2.55	2.29	2.12	1.90
9F921	CLU2521	RV4LAYSA252A	2,500	2.55	2.29	2.12	1.90
9F562	CLU3521	RV4LAYSA352A	3,500	2.55	2.29	2.12	1.90
9F922	CLU5021	RV4LAYSA502A	5,000	2.55	2.29	2.12	1.90
9F563	CLU7521	RV4LAYSA752A	7,500	2.55	2.29	2.12	1.90
9F923	CLU1031	RV4LAYSA103A	10,000	2.55	2.29	2.12	1.90
9F564	CLU1531	RV4LAYSA153A	15,000	2.55	2.29	2.12	1.90
9F924	CLU2531	RV4LAYSA253A	25,000	2.55	2.29	2.12	1.90
9F565	CLU3531	RV4LAYSA353A	35,000	2.55	2.29	2.12	1.90
9F925	CLU5031	RV4LAYSA503A	50,000	2.55	2.29	2.12	1.90
9F566	CLU7531	RV4LAYSA753A	75,000	2.55	2.29	2.12	1.90
9F926	CLU1041	RV4LAYSA104A	100,000	2.55	2.29	2.12	1.90
9F567	CLU1541	RV4LAYSA154A	150,000	2.55	2.29	2.12	1.90
9F927	CLU2541	RV4LAYSA254A	250,000	2.55	2.29	2.12	1.90
9F568	CLU3541	RV4LAYSA354A	350,000	2.55	2.29	2.12	1.90
9F928	CLU5041	RV4LAYSA504A	500,000	2.55	2.29	2.12	1.90
9F569	CLU7542	RV4LAYSA754B	750,000*	2.55	2.29	2.12	1.90
9F929	CLU1052	RV4LAYSA105B	1 meg*	2.55	2.29	2.12	1.90
9F570	CLU1552	RV4LAYSA155B	1.5 meg*	2.55	2.29	2.12	1.90
9F948	CLU2052	RV4LAYSA205B	2.0 meg*	2.55	2.29	2.12	1.90
9F930	CLU2552	RV4LAYSA255B	2.5 meg*	2.55	2.29	2.12	1.90
9F571	CLU3552	RV4LAYSA355B	3.5 meg*	2.55	2.29	2.12	1.90
9F931	CLU5052	RV4LAYSA505B	5 meg*	2.55	2.29	2.12	1.90

STYLE CMU (⅞" SHAFT) FIG. C

9F1350	CMU5001	RV4NAYSD500A	50	1.95	1.75	1.62	1.46
9F1351	CMU1011	RV4NAYSD101A	100	1.95	1.75	1.62	1.46
9F1352	CMU1511	RV4NAYSD151A	150	1.95	1.75	1.62	1.46
9F1353	CMU2511	RV4NAYSD251A	250	1.95	1.75	1.62	1.46
9F1354	CMU3511	RV4NAYSD351A	350	1.95	1.75	1.62	1.46
9F1355	CMU5011	RV4NAYSD501A	500	1.95	1.75	1.62	1.46
9F1356	CMU7511	RV4NAYSD751A	750	1.95	1.75	1.62	1.46
9F1357	CMU1021	RV4NAYSD102A	1,000	1.95	1.75	1.62	1.46
9F1358	CMU1521	RV4NAYSD152A	1,500	1.95	1.75	1.62	1.46
9F1359	CMU2521	RV4NAYSD252A	2,500	1.95	1.75	1.62	1.46
9F1360	CMU3521	RV4NAYSD352A	3,500	1.95	1.75	1.62	1.46
9F1361	CMU5021	RV4NAYSD502A	5,000	1.95	1.75	1.62	1.46
9F1362	CMU7521	RV4NAYSD752A	7,500	1.95	1.75	1.62	1.46
9F1363	CMU1031	RV4NAYSD103A	10,000	1.95	1.75	1.62	1.46
9F1364	CMU1531	RV4NAYSD153A	15,000	1.95	1.75	1.62	1.46
9F1365	CMU2531	RV4NAYSD253A	25,000	1.95	1.75	1.62	1.46
9F1366	CMU3531	RV4NAYSD353A	35,000	1.95	1.75	1.62	1.46
9F1367	CMU5031	RV4NAYSD503A	50,000	1.95	1.75	1.62	1.46
9F1368	CMU7531	RV4NAYSD753A	75,000	1.95	1.75	1.62	1.46
9F1369	CMU1041	RV4NAYSD104A	.1 meg.	1.95	1.75	1.62	1.46
9F1370	CMU1541	RV4NAYSD154A	.15 meg.	1.95	1.75	1.62	1.46
9F1371	CMU2541	RV4NAYSD254A	.25 meg.	1.95	1.75	1.62	1.46
9F1372	CMU3541	RV4NAYSD354A	.35 meg.	1.95	1.75	1.62	1.46
9F1373	CMU5041	RV4NAYSD504A	.5 meg.	1.95	1.75	1.62	1.46
9F1374	CMU7542	RV4NAYSD754B	.75 meg.*	1.95	1.75	1.62	1.46
9F1375	CMU1052	RV4NAYSD105B	1.0 meg.*	1.95	1.75	1.62	1.46
9F1376	CMU1552	RV4NAYSD155B	1.5 meg.*	1.95	1.75	1.62	1.46
9F1377	CMU2052	RV4NAYSD205B	2.0 meg.*	1.95	1.75	1.62	1.46
9F1378	CMU2552	RV4NAYSD255B	2.5 meg.*	1.95	1.75	1.62	1.46
9F1379	CMU3552	RV4NAYSD355B	3.5 meg.*	1.95	1.75	1.62	1.46
9F1380	CMU5052	RV4NAYSD505B	5.0 meg.*	1.95	1.75	1.62	1.46

STYLE CU (⅝" SHAFT) FIG. B

Stk. No.	Type	Ohms	1-9	10-49	50-99	100-up
9F900	CU5001	50	1.95	1.75	1.62	1.46
9F901	CU1011	100	1.95	1.75	1.62	1.46
9F572	CU1511	150	1.95	1.75	1.62	1.46
9F902	CU2511	250	1.95	1.75	1.62	1.46
9F573	CU3511	350	1.95	1.75	1.62	1.46
9F903	CU5011	500	1.95	1.75	1.62	1.46
9F574	CU7511	750	1.95	1.75	1.62	1.46
9F904	CU1021	1,000	1.95	1.75	1.62	1.46
9F575	CU1521	1,500	1.95	1.75	1.62	1.46
9F905	CU2521	2,500	1.95	1.75	1.62	1.46
9F576	CU3521	3,500	1.95	1.75	1.62	1.46
9F906	CU5021	5,000	1.95	1.75	1.62	1.46
9F577	CU7521	7,500	1.95	1.75	1.62	1.46
9F907	CU1031	10,000	1.95	1.75	1.62	1.46
9F578	CU1531	15,000	1.95	1.75	1.62	1.46
9F908	CU2531	25,000	1.95	1.75	1.62	1.46
9F579	CU3531	35,000	1.95	1.75	1.62	1.46
9F909	CU5031	50,000	1.95	1.75	1.62	1.46
9F580	CU7531	75,000	1.95	1.75	1.62	1.46
9F910	CU1041	100,000	1.95	1.75	1.62	1.46
9F581	CU1541	150,000	1.95	1.75	1.62	1.46
9F911	CU2541	250,000	1.95	1.75	1.62	1.46
9F582	CU3541	350,000	1.95	1.75	1.62	1.46
9F912	CU5041	500,000	1.95	1.75	1.62	1.46

OHMITE Potentiometers

TYPE AB 2-WATT POTENTIOMETERS (Cont.)

All types ±10% tolerance, except (*) 20%.

STYLE CU — FIG. B (Continued)

Stk. No.	Type	Ohms	1-9	10-49	50-99	100-up
9F583	CU7542	750,000*				
9F913	CU1052	1 meg*				
9F584	CU1552	1.5 meg*	1.95	1.75	1.62	1.46
9F586	CU2052	2.0 meg*				
9F914	CU2552	2.5 meg*				
9F585	CU3552	3.5 meg*				
9F915	CU5052	5 meg*				

STYLE CA and CB—Fig. B.

Stk. No.	Type	Ohms	1-9	10-49	50-99	100-up
9F932	CB1031	10,000				
9F933	CB2531	25,000				
9F934	CB5031	50,000				
9F935	CA1041	100,000	2.25	2.02	1.87	1.69
9F936	CA2541	250,000				
9F937	CA5041	500,000				
9F938	CA1052	1 meg*				
9F939	CA2552	2.5 meg*				

STYLE CCU Dual—Fig. C

Stk. No.	Type	Ohms	1-9	10-49	50-99	100-up
9F941	CCU1031	10,000				
9F945	CCU2531	25,000				
9F942	CCU5031	50,000	5.85	5.26	5.06	4.40
9F946	CCU1041	100,000				
9F943	CCU2541	250,000				
9F947	CCU5041	500,000				
9F944	CCU1052	1.0 meg*				

TYPE CS-1 SWITCH

SPST Switch for Ohmite Potentiometers listed above and on preceding page — except Dual Style CCU.

Stock No.	Type	1-9	10-49	50-99	100-up
9F940	CS-1	.66	.62	.59	.55

12½ WATT MINIATURE RHEOSTATS

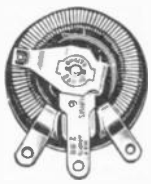
Model E. 12½-Watt Miniature Rheostat. (Rating on metal panel.) Smaller than many 1- or 2-watt potentiometers. Rugged, all-ceramic and metal construction. Use where 12½ watts dissipation is needed but space is limited. Operates at a maximum hot spot temperature rise of 300°C at an ambient of 40°C, but also useful for operating at high military ambients, derated linearly to zero at 340°C. Specifications: Overall diam.: ⅞". Shaft diam.: ⅛". Resistance range: Up to 5000 ohms with vitreous enamel; higher values available with Ohmicone inorganic coating. Resistance tol.: ±10%. Standard Mounting: for panels up to ⅛", ¼"-32 threaded Bushing. With non-turn washer. Rotation: 300° ±5°. Shpg. wt.,1½ oz. † Silicone-ceramic coating.

Stock No.	Type	Ohms	Max. Amps.	1-4	5-9	10-24	25-49
9F965	0101	1	3.53				
9F966	0102	2	2.50				
9F967	0103	3	2.04	5.05	4.29	3.38	2.78
9F968	0104	6	1.44				
9F969	0105	8	1.25				
9F970	0106	10	1.12				
9F971	0107	15	.91				
9F972	0108	25	.71				
9F973	0109	35	.60				
9F974	0110	50	.50	4.55	3.87	3.05	2.50
9F975	0111	75	.41				
9F976	0112	100	.35				
9F977	0113	125	.32				
9F978	0114	175	.27				

Stock No.	Type	Ohms	Max. Amps.	1-4	5-9	10-24	25-49
9F979	0115	250	.22				
9F980	0116	350	.19	4.55	3.87	3.05	2.50
9F981	0117	500	.16				
9F982	0118	750	.11				
9F983	0119	1,000	.13				
9F984	0120	1,500	.091	5.05	4.29	3.38	2.78
9F985	0121	2,500	.060				
9F986	0122	3,500	.071	5.35	4.55	3.58	2.94
9F987	0123	5,000	.050	5.35	4.55	3.58	2.94
9F988	4190†	7,500	.041	5.55	4.72	3.72	3.05
9F989	4191†	10,000	.035	5.55	4.72	3.72	3.05
9F990	4192†	12,500	.031	6.05	5.14	4.05	3.33
9F991	4193†	15,000	.029	6.05	5.14	4.05	3.33

WIRE WOUND POWER RHEOSTATS

ALL RHEOSTATS SUPPLIED LESS KNOBS. SEE NEXT PAGE FOR KNOB LISTING



All ceramic vitreous enameled construction. Wire wound over ceramic core. Shunt pigtail carries current to slip-ring. High strength ceramic hub insulates the shaft and bushing. Tempered steel contact arm. Models H, J, K, L, N, when made without additional features are listed by UL and are marked Series A except (*) Silicone Ceramic Coating are not UL listed. Aver. shpg. wt.: Models H, J, K: 8 oz.—Models L, N: 3 lbs.—Model R: 4 lbs.

MODEL H—25 WATT

Mounts on panels up to ¼" by ⅜"—32 Bushing with No 5050 Non-turn washer. Shaft Dia. ¼". 300° rotation. Dia. 1⁹⁄₁₆".

Stk. No.	Type	Ohms	1-4	5-9	10-24	25-49
11F000	0140	1				
11F001	0141	2				
11F002	0142	3	5.05	4.29	3.38	2.78
11F003	0143	6				
11F004	0144	8				
11F005	0145	10				
11F006	0146	15				
11F007	0147	25				
11F008	0148	35				
11F009	0149	50				
11F010	0150	75				
11F011	0151	100	4.55	3.87	3.05	2.50
11F012	0152	125				
11F013	0153	175				
11F014	0154	250				
11F015	0155	350				
11F016	0156	500				
11F017	0157	750				
11F018	0158	1,000				
11F019	0159	1,500	5.05	4.29	3.38	2.78
11F020	0160	2,500				
11F021	0161	3,500	5.35	4.55	3.58	2.94
11F022	0162	5,000	5.35	4.55	3.58	2.94
11F026	*4200	7,500	5.55	4.72	3.72	3.05
11F027	*4201	10,000	5.55	4.72	3.72	3.05
11F028	*4202	15,000	6.05	5.14	4.05	3.33
11F029	*4203	20,000	6.80	5.78	4.56	3.74
11F030	*4204	25,000	7.50	6.38	5.03	4.13

MODEL J—50 WATT

Mounts on panels up to ¼" by ⅜"—32 Bushing with No. 5050 Non-turn washer. Shaft Dia. ¼". 300° rotation. Dia. 2⁵⁄₁₆".

Stk. No.	Type	Ohms	1-4	5-9	10-24	25-49
11F040	0308	0.5				
11F041	0309	1				
11F042	0310	2	5.65	4.80	3.79	3.11
11F043	0311	4				
11F044	0312	6				
11F045	0313	8				
11F046	0314	12				
11F047	0315	16	5.05	4.29	3.38	2.78
11F048	0316	22				
11F049	0317	35				
11F050	0318	50				
11F051	0319	80				
11F052	0320	125				
11F053	0321	150	5.05	4.29	3.38	2.78
11F054	0322	225				
11F055	0323	300				
11F056	0324	500				
11F057	0325	800				
11F058	0326	1,000	5.35	4.55	3.58	2.94
11F059	0327	1,600				
11F060	0328	2,500				
11F061	0329	3,500				
11F062	0330	5,000	5.65	4.80	3.79	3.11
11F063	0331	8,000				
11F064	0332	10,000				
11F066	*4210	15,000	6.40	5.44	4.29	3.52
11F067	*4211	20,000	7.25	6.16	4.86	3.99
11F068	*4212	25,000	8.00	6.80	5.36	4.40
11F069	*4213	30,000	8.85	7.52	5.93	4.87
11F070	*4214	40,000	10.30	8.76	6.90	5.67
11F071	*4215	50,000	11.25	9.56	7.54	6.19

SEE NEXT PAGE FOR ADDITIONAL RHEOSTATS AND ACCESSORIES

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

OHMITE

WIRE WOUND POWER RHEOSTATS—ALL RHEOSTATS SUPPLIED LESS KNOB

MODEL K—100 WATT

Mounts on panels up to ¼" by ⅜"—32 Bushing with No. 5050 Non-turn washer. Shaft Diameter ¼". 300° rotation. Rheostat diameter 3⅛".

Stk. No.	Type	Ohms	1-4	5-9	10-24	25-49
11F076	0440	0.5				
11F077	0441	1				
11F078	0442	2				
11F079	0443	3	8.45	7.18	5.66	4.65
11F080	0444	5				
11F081	0445	7.5				
11F082	0446	10				
11F083	0447	16				
11F084	0448	25	7.95	6.76	5.33	4.37
11F085	0449	50				
11F086	0450	75				
11F087	0451	100				
11F088	0452	200				
11F089	0453	300	7.95	6.76	5.33	4.37
11F090	0454	400				
11F091	0455	500				
11F092	0456	750				
11F093	0457	1,000				
11F094	0458	1,500	8.45	7.18	5.66	4.65
11F095	0459	2,000				
11F096	0460	2,500				
11F097	0461	5,000	9.05	7.69	6.06	6.98
11F098	0462	7,500	9.65	8.25	6.41	5.31
11F099	0463	10,000	10.20	8.67	6.83	5.61

MODEL L—150 WATT

Mounts on panels up to ¼" by ⅜"—32 Bushing or by two No. 10-32x¾" long flat head screws which are supplied. Shaft diameter ¼" 300° Rotation Rheostat diameter 4".

Stk. No.	Type	Ohms	1-4	5-9	10-24	25-49
11F100	0524	0.5				
11F101	0525	1	10.75	9.14	7.20	5.91
11F102	0528	5				
11F103	0530	10				
11F104	0532	25				
11F105	0534	50				
11F106	0536	100				
11F107	0537	150	10.15	8.63	6.80	5.58
11F108	0538	200				
11F109	0539	250				
11F110	0541	500				
11F111	0543	1,250	10.75	9.14	7.20	5.91
11F112	0545	2,250	11.35	9.65	7.60	6.24
11F113	0547	4,500	11.90	10.12	7.97	6.55
11F114	0549	10,000	13.60	11.56	9.11	7.48

MAKE NEWARK YOUR ONE-STOP HEADQUARTERS FOR OHMITE RHEOSTATS.

DIAL PLATES

Use 5000 with H,K,J,L,AB except CLU. Use 5001 with N and R. Use 5007 with E.

Stock No.	Type	1-4	5-9	10-24	25-49
11F199	5000	.30	.26	.20	.18
11F198	5001	.74	.63	.50	.50
11F194	5007	.30	.26	.20	.18

TANDEM COUPLING KITS

Type 6532 for models H and J; couple models K,H,J, or L in rear position. 6533 for models K and L; couple models H,J,K, or L in rear position. Shpg. wt., 5 oz.

*For model E rheostats.

11F196	6532	2.20	1.87	1.48	1.21
11F197	6533	2.75	2.34	1.84	1.51
11F195	6591*	2.20	1.87	1.48	1.21

KNOBS FOR OHMITE RHEOSTATS

5105 — Handwheel without pointer. For models N & R. 5104-Same but with pointer. 5150 for models H,J,K,L, "AR" pots, except CLU. Model 5151 for model E.

Stock No.	Type	1-4	5-9	10-24	25-49
11F023	5105	1.22	1.04	.97	.....
11F200	5104	1.45	1.23	.97	.....
11F024	5150	.30	.26	.20	.18
11F025	5151	.30	.26	.20	.18

MODEL N—300 WATT

Mounts on panels up to 1¼", by two ¼"—20 by 1½" flat head screws supplied. Shaft dia. ⅜". 320° Rotation. Dia. 6".

Stk. No.	Type	Ohms	No.	Type	Ohms	1-2	3-4
11F130	0650	1	11F141	0661	100		
11F131	0651	2	11F142	0662	150		
11F132	0652	3	11F143	0663	200		
11F133	0653	4	11F144	0664	300		
11F134	0654	5	11F145	0665	400		
11F135	0655	7.5	11F146	0666	700	16.80	14.28
11F136	0656	10	11F147	0667	900		
11F137	0657	15	11F148	0668	1,200		
11F138	0658	25	11F149	0669	1,500		
11F139	0659	50	11F150	0670	1,750		
11F140	0660	75	11F151	0671	2,500		

MODEL R—500 WATT

Mounts on panels up to 1¼" by two ¼"-20 by 1½" flat head screws supplied. Shaft diameter ⅜". 325° Rotation. Dia. 8".

Stk. No.	Type	Ohms	No.	Type	Ohms	1-2	3-4
11F170	0849	1.0	11F182	08/2	50		
11F171	0850	1.5	11F183	0861	80		
11F172	0851	2	11F184	0862	125		
11F173	0852	2.5	11F185	0863	175		
11F174	0853	3	11F186	0864	250		
11F175	0854	4	11F187	0865	325	24.30	20.66
11F176	0855	5	11F188	0866	500		
11F177	0856	8	11F189	0867	750		
11F178	0857	12.5	11F190	0868	1,000		
11F179	0858	16	11F191	0869	1,500		
11F180	0859	25	11F192	087[illegible]	2,000		
11F181	0860	40	11F193	0871	2,500		

DALE

MILITARY GRADE TRIMMER POTENTIOMETERS—HIGH TEMP., HUMIDITY-PROOF, PRECISION

1 watt @ 70°C Temp. range: —65°C to 175°C.
1287, 1680, 5080, 2187: Printed Circuit Pins 21 AWG.

1288, 1697, 2188: Stranded Teflon Leads 28AWG (5050—30 AWG)
2387: Printed Circuit Terminals Gold Plated. **2389:** Solder Lugs.

SERIES 1200

Ohms	1287 Stk. No.	1288 Stk. No.	1-24	25-99	100-499	500-999
10	13F1550	13F1565	5.56	4.71	4.03	3.54
20	13F1551	13F1566	5.56	4.71	4.03	3.54
50	13F1552	13F1567	5.56	4.71	4.03	3.54
100	13F1553	13F1568	5.56	4.71	4.03	3.54
200	13F1554	13F1569	5.56	4.71	4.03	3.54
500	13F1555	13F1570	5.56	4.71	4.03	3.54
1K	13F1556	13F1571	5.56	4.71	4.03	3.54
2K	13F1557	13F1572	5.56	4.71	4.03	3.54
5K	13F1558	13F1573	5.56	4.71	4.03	3.54
10K	13F1559	13F1574	5.56	4.71	4.03	3.54
15K	13F1560	13F1575	6.11	5.17	4.42	3.89
20K	13F1561	13F1576	6.11	5.17	4.42	3.89
25K	13F1562	13F1577	6.11	5.17	4.42	3.89
50K	13F1563	13F1578	6.43	5.47	4.72	4.19
100K	13F1564	13F1579	7.83	6.63	5.68	4.99

SERIES 1600

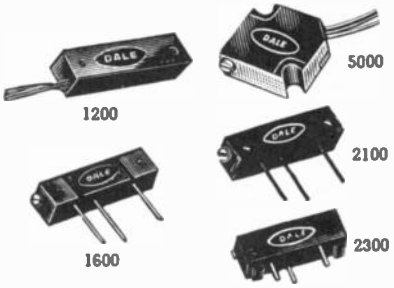
Ohms	1680 Stk. No.	1697 Stk. No.	1-24	25-99	100-499	500-999
10	13F1580	13F1592	5.56	4.71	4.03	3.54
20	13F1581	13F1593	5.56	4.71	4.03	3.54
50	13F1582	13F1594	5.56	4.71	4.03	3.54
100	13F1583	13F1595	5.56	4.71	4.03	3.54
200	13F1584	13F1596	5.56	4.71	4.03	3.54
500	13F1585	13F1597	5.56	4.71	4.03	3.54
1K	13F1586	13F1598	5.56	4.71	4.03	3.54
2K	13F1587	13F1599	5.56	4.71	4.03	3.54
5K	13F1588	13F1600	5.56	4.71	4.03	3.54
10K	13F1589	13F1601	5.56	4.71	4.03	3.54
20K	13F1590	13F1602	6.67	5.73	4.98	4.45
50K	13F1591	13F1603	6.43	5.47	4.72	4.19

SERIES 5000

Ohms	5050 Stk. No.	5080 Stk. No.	1-24	25-99	100-499	500-999
10	13F1604	13F1616	5.47	4.84	4.24	3.74
20	13F1605	13F1617	5.47	4.84	4.24	3.74
50	13F1606	13F1618	5.47	4.84	4.24	3.74
100	13F1607	13F1619	5.47	4.84	4.24	3.74
200	13F1608	13F1620	5.47	4.84	4.24	3.74
500	13F1609	13F1621	5.47	4.84	4.24	3.74
1K	13F1610	13F1622	5.47	4.84	4.24	3.74
2K	13F1611	13F1623	5.47	4.84	4.24	3.74
5K	13F1612	13F1624	5.47	4.84	4.24	3.74
10K	13F1613	13F1625	5.47	4.84	4.24	3.74
20K	13F1614	13F1626	6.02	5.36	4.70	4.17
50K	13F1615	13F1627	7.07	6.29	5.41	4.89

SERIES 2100

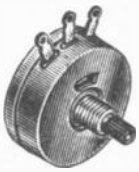
Ohms	2187 Stk. No.	2188 Stk. No.	1-24	25-99	100-499	500-999
10	13F1628	13F1643	3.10	2.62	2.30	2.03
20	13F1629	13F1644	3.10	2.62	2.30	2.03
50	13F1630	13F1645	3.10	2.62	2.30	2.03
100	13F1631	13F1646	3.10	2.62	2.30	2.03
200	13F1632	13F1647	3.10	2.62	2.30	2.03
500	13F1633	13F1648	3.10	2.62	2.30	2.03
1K	13F1634	13F1649	3.10	2.62	2.30	2.03
2K	13F1635	13F1650	3.10	2.62	2.30	2.03
5K	13F1636	13F1651	3.10	2.62	2.30	2.03
10K	13F1637	13F1652	3.10	2.62	2.30	2.03
15K	13F1638	13F1653	3.61	3.05	2.66	2.36
20K	13F1639	13F1654	3.61	3.05	2.66	2.36
25K	13F1640	13F1655	3.61	3.05	2.66	2.36
50K	13F1641	13F1656	4.11	3.47	3.03	2.69
100K	13F1642	13F1657	5.20	4.40	3.84	3.41



SERIES 2300

Ohms	2387 Stk. No.	2389 Stk. No.	1-24	25-99	100-499	500-999
10	13F1658	13F1670	1.82	1.50	1.27	1.06
20	13F1659	13F1671	1.82	1.50	1.27	1.06
50	13F1660	13F1672	1.82	1.50	1.27	1.06
100	13F1661	13F1673	1.82	1.50	1.27	1.06
200	13F1662	13F1674	1.82	1.50	1.27	1.06
500	13F1663	13F1675	1.82	1.50	1.27	1.06
1K	13F1664	13F1676	1.82	1.50	1.27	1.06
2K	13F1665	13F1677	1.82	1.50	1.27	1.06
5K	13F1666	13F1678	1.82	1.50	1.27	1.06
10K	13F1667	13F1679	1.82	1.50	1.27	1.06
20K	13F1668	13F1680	2.22	1.90	1.67	1.46
50K	13F1669	13F1681	2.22	1.90	1.67	1.46

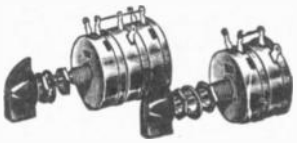
MALLORY Potentiometers And Controls



12½ WATT MG WIRE-WOUND CONTROLS

MG controls have a continuous DC rating of 12.5 watts at 35°C (ambient). Volume is 1.1 cu. in. and outside control diameter is only slightly larger than standard knob rotation arc at 1⅝". Mechanical rotation: 294°; electrical rotation: 275°; peak audio rating at 50 watts. Voltage breakdown of 900V RMS. Contact arm insulated.

Stock No.	Type	Ohms Resist.	Net Ea.	Stock No.	Type	Ohms Resis.	Net Ea.
9F1700	MG1	1	2.18	9F1714	MG600	600	2.18
9F1701	MG3	3	2.18	9F1715	MG1000	1000	2.22
9F1702	MG6	6	2.18	9F1716	MG1500	1500	2.22
9F1703	MG10	10	2.18	9F1717	MG2000	2000	2.22
9F1704	MG15	15	2.18	9F1718	MG2500	2500	2.22
9F1705	MG20	20	2.18	9F1719	MG3000	3000	2.22
9F1706	MG25	25	2.18	9F1720	MG4000	4000	2.22
9F1707	MG30	30	2.18	9F1721	MG5000	5000	2.22
9F1708	MG50	50	2.18	9F1722	MG10K	10K	2.32
9F1709	MG100	100	2.18	9F1723	MG15K	15K	2.32
9F1710	MG200	200	2.18	9F1724	MG20K	20K	2.32
9F1711	MG300	300	2.18	9F1725	MG25K	25K	2.32
9F1712	MG400	400	2.18	9F1726	MG50K	50K	2.50
9F1713	MG500	500	2.18	9F1727	MG100K	100K	2.72



MALLORY T AND L PADS

Control level of low impedance audio circuits DC rating, 4 w.; 15 watts audio. With bar knob, dial-plate, washer and nuts. "L" pad 1⅝" dia. x 1⅛" deep. "T" pad. 1 11/16" deep. Wt., 7 oz.

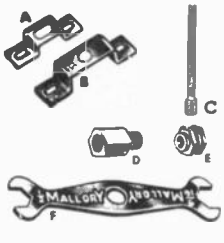
"T" PADS

Stk. No.	Type	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
9F251	T4	4						
9F252	T6	6						
9F253	T8	8						
9F254	T15	15						
9F255	T50	50						
9F256	T100	100	3.54	3.36	3.19	2.95	2.655	2.36
9F258	T250	250						
9F259	T500	500						
9F260	T600	600						
9F261	T1000	1000						
9F262	T2000	2000						
9F263	T3000	3000						

"L" PADS

Stk. No.	Type	Ohms	1-9	10-24	25-49	50-99	100-249	250-499
9F281	L4	4						
9F282	L6	6						
9F283	L8	8						
9F284	L15	15						
9F285	L50	50						
9F286	L100	100	2.73	2.59	2.46	2.28	2.047	1.82
9F287	L200	200						
9F288	L250	250						
9F289	L500	500						
9F290	L600	600						
9F291	L1000	1000						
9F292	L2000	2000						
9F293	L3000	3000						

VOLUME CONTROL ACCESSORIES



RB MOUNTING BRACKETS

Average shpg. wt., 3 oz.

No.	Type	Fig.	Mtg.	EACH
9F201	RB248	A	1¾"	.05
9F202	RB249	B	2½"	
9F218	RB254	....	Univ.	

TYPE 178 WRENCH

Fig. F. Wrench for ½" and 9/16" volume control hex nuts. Cadmium plated steel.

9F216. NET 51

RS EXTENSION SHAFTS

Type RS242. Fig. C. 4x¼x13/32" flat. Wt., 1½ oz.
9F212. NET $7

Type RS243. Fig. C. 4x¼x3/32" flat. Wt., 1 oz.
9F213. NET $7

COUPLERS AND BUSHINGS

Stk. No.	Type	Fig.	EACH
9F206	EB247	D	.13
9F207	UB241	E	.12

HEX SHOULDER NUTS

No.	Type	Size	EACH
9F208	255	¼"	.08
9F209	A11260-12	½"	.08

TYPE M AND MT WIRE WOUND POTENTIOMETERS

Used on bias control and voltage dividers; also for replacement of positioning, hold, focus and other controls of TV sets. MT are center tapped. Compact high wattage controls rated 4 watts. Arm insulated from shaft. 275° rotation. 1⅝" dia. x 9/16"W. ¼" shaft, slotted 3/64x1/16" deep, extended 3/8" from bush. Mount in ⅜" hole. 4 oz.

Stk. No.	Type	Ohms	1-9	10-49	50-99	100-249	250-499
9F300	M1PK	1					
9F337	M3PK	3	1.35	1.22	1.13	1.013	.90
9F302	M6PK	6					
9F328	MT10PK	10	1.32	1.19	1.10	.99	.88
9F303	M10PK	10					
9F304	M15PK	15	1.35	1.22	1.13	1.013	.90
9F329	MT20PK	20	1.32	1.19	1.10	.99	.88
9F306	M25PK	25					
9F307	M30PK	30	1.35	1.22	1.13	1.013	.90
9F336	MT30PK	30	1.32	1.19	1.10	.99	.88
9F308	M40PK	40					
9F309	M50PK	50					
9F310	M60PK	60	1.35	1.22	1.13	1.013	.90
9F311	M75PK	75					
9F312	M100PK	100					
9F313	M200PK	200					
9F331	M300PK	300					
9F314	M400PK	400	1.35	1.22	1.13	1.013	.90
9F315	M500PK	500					
9F316	M600PK	600					
9F317	M1MPK	1K					
9F332	M1.5MPK	1.5K					
9F318	M2MPK	2K					
9F333	M2.5MPK	2.5K					
9F319	M3MPK	3K	1.35	1.22	1.13	1.013	.90
9F338	M4MPK	4K					
9F321	M5MPK	5K					
9F322	M10MPK	10K					
9F323	M15MPK	15K					
9F324	M20MPK	20K	1.47	1.32	1.23	1.103	.98
9F325	M25MPK	25K					
9F326	M50MPK	50K	1.74	1.57	1.45	1.305	1.16
9F327	M70MPK	70K	1.74	1.57	1.45	1.305	1.16
9F335	M100MPK	100K	2.46	2.21	2.05	1.845	1.64

TYPE VW WIREWOUND 5 WATT CONTROLS

Subminiature Industrial 5 Watt potentiometer. Ideal for limited space applications. Case size only ¾ of an inch in diameter by ⅞" in depth. Bushing ⅜"x⅜" in diameter and length. Has ¼" plain round shaft 2½" from mounting surface.

Stk. No.	Type	Ohms	1-9	10-24	25-49	50-99	100-up
9F033	VW-1	1					
9F034	VW-2	2					
9F035	VW-3	3					
9F036	VW-5	5					
9F037	VW-6	6					
9F038	VW-8	8	1.38	1.24	1.15	1.035	.92
9F039	VW-10	10					
9F040	VW-15	15					
9F041	VW-20	20					
9F042	VW-25	25					
9F043	VW-30	30					
9F044	VW-40	40					
9F045	VW-50	50					
9F046	VW-60	60					
9F047	VW-75	75					
9F048	VW-100	100					
9F049	VW-200	200					
9F055	VW-250	250					
9F056	VW-300	300	1.38	1.24	1.15	1.035	.92
9F057	VW-400	400					
9F058	VW-500	500					
9F059	VW-600	600					
9F060	VW-750	750					
9F061	VW-1K	1000					
9F062	VW-1.5K	1500					
9F063	VW-2K	2000					
9F064	VW-2.5K	2500	1.44	1.30	1.20	1.08	.96
9F065	VW-3K	3000					
9F066	VW-4K	4000					
9F067	VW-5K	5000					
9F068	VW-7.5K	7500	1.50	1.35	1.25	1.125	1.00
9F069	VW-10K	10000	1.50	1.35	1.25	1.125	1.00
9F070	VW-15K	15000	1.56	1.40	1.30	1.17	1.04
9F071	VW-20K	20000	1.56	1.40	1.30	1.17	1.04
9F072	VW-25K	25000	1.65	1.49	1.38	1.237	1.10

TYPE U METAL SHAFT MIDGETROLS

Standard universal replacement 15/16" dia. carbon control. 1/4" dia. round brass shaft with adapters for knurled, slotted or flatted knobs. Hex nut incl.

No. Taper as for minitrols below

Stk. No.	Type No.	Resist. Ohms	Taper	1-24	25-49	50-99	100-174	175-299	300-499
9F073	U1	100	4	1.02	.92	.85	.77	.73	.68
9F074	U2	500	4	1.02	.92	.85	.77	.73	.68
9F075	U52R	500	2	1.02	.92	.85	.77	.73	.68
9F076	U751R	750	2	1.02	.92	.85	.77	.73	.68
9F077	U3	1K	2	1.02	.92	.85	.77	.73	.68
9F078	U4	1K	4	1.02	.92	.85	.77	.73	.68
9F079	U5	1500	2	1.02	.92	.85	.77	.73	.68
9F080	U5L	1500	4	1.02	.92	.85	.77	.73	.68
9F081	U6	2K	4	1.02	.92	.85	.77	.73	.68
9F082	U7	2500	2	1.02	.92	.85	.77	.73	.68
9F083	U8	3K	4	1.02	.92	.85	.77	.73	.68
9F084	U9	3K	2	1.02	.92	.85	.77	.73	.68
9F085	U12	5K	1	1.02	.92	.85	.77	.73	.68
9F086	U14	5K	4	1.02	.92	.85	.77	.73	.68
9F087	U18	10K	1	1.02	.92	.85	.77	.73	.68
9F088	U19	10K	2	1.02	.92	.85	.77	.73	.68
9F089	U20	10K	4	1.02	.92	.85	.77	.73	.68
9F090	U21	15K	1	1.02	.92	.85	.77	.73	.68
9F091	U22	15K	2	1.02	.92	.85	.77	.73	.68
9F092	U24	20K	1	1.02	.92	.85	.77	.73	.68
9F093	U26	20K	4	1.02	.92	.85	.77	.73	.68
9F094	U28	25K	2	1.02	.92	.85	.77	.73	.68
9F095	U28A	25K	1	1.02	.92	.85	.77	.73	.68
9F096	U29	25K	4	1.02	.92	.85	.77	.73	.68
9F097	U30	30K	4	1.02	.92	.85	.77	.73	.68
9F098	U33	50K	1	1.02	.92	.85	.77	.73	.68
9F099	U34	50K	2	1.02	.92	.85	.77	.73	.68
9F219	U35	50K	4	1.02	.92	.85	.77	.73	.68

Stk. No.	Type No.	Resist. Ohms	Taper	1-24	25-49	50-99	100-174	175-299	300-499
9F220	U36	75K	1	1.02	.92	.85	.77	.73	.68
9F221	U39	100K	1	1.02	.92	.85	.77	.73	.68
9F222	U40	100K	2	1.02	.92	.85	.77	.73	.68
9F223	U41	100K	4	1.02	.92	.85	.77	.73	.68
9F224	U415	125K	4	1.02	.92	.85	.77	.73	.68
9F225	U42	150K	1	1.02	.92	.85	.77	.73	.68
9F226	U43	200K	4	1.02	.92	.85	.77	.73	.68
9F227	U44	250K	1	1.02	.92	.85	.77	.73	.68
9F228	U45	250K	2	1.02	.92	.85	.77	.73	.68
9F229	U46	250K	4	1.02	.92	.85	.77	.73	.68
9F230	U48	500K	1	1.02	.92	.85	.77	.73	.68
9F231	U50	500K	4	1.02	.92	.85	.77	.73	.68
9F232	U51	750K	1	1.02	.92	.85	.77	.73	.68
9F233	U52	1 meg.	2	1.02	.92	.85	.77	.73	.68
9F234	U53	1 meg.	1	1.02	.92	.85	.77	.73	.68
9F235	U54	1 meg.	4	1.02	.92	.85	.77	.73	.68
9F236	U155	1.5 meg.	4	1.02	.92	.85	.77	.73	.68
9F237	U55	2 meg	1	1.02	.92	.85	.77	.73	.68
9F238	U56	2 meg	4	1.02	.92	.85	.77	.73	.68
9F239	U255	2.5 meg	4	1.02	.92	.85	.77	.73	.68
9F240	U57	3 meg.	1	1.02	.92	.85	.77	.73	.68
9F241	U59	3 meg	4	1.02	.92	.85	.77	.73	.68
9F242	U63	5 meg	2	1.02	.92	.85	.77	.73	.68
9F243	U65	5 meg	1	1.02	.92	.85	.77	.73	.68
9F244	U67	5 meg	4	1.02	.92	.85	.77	.73	.68
9F245	U82	10 meg	4	1.02	.92	.85	.77	.73	.68

SWITCHES FOR TYPE U CONTROLS

Stk. No.	Type No.	Description	1-24	25-49	50-99	100-174	175-299	300-499
9F246	US26	SPST 6 amp @ 125V.	.42	.38	.35	.315	.30	.28
9F247	US26T	SPST w/dummy Terminal	.51	.46	.43	.383	.36	.34
9F248	US27	DPST 6 amp @ 125V.	.51	.46	.43	.383	.36	.34
9F249	US28	SPDT 3 amp @ 125V.	.51	.46	.43	.383	.36	.34

SUBMINIATURE MINITROLS

Only 1/2" diameter. Rated 1/4 watt linear, watt audio. 1/2"-32 x 1/4" bushing with nut. Shaft: 1/4" diameter x 1" FMS, MLC (steel); MLCN (nylon). (*) Indicates an SPST switch rated 2 amperes at 125VAC, UL approved. Printed ckt, MTC has open screwdriver slot. Supplied in resistance values from 100 ohms to 3 1/2 megohms, in standard linear taper.

Taper No. 1: Logarithmic used in audio circuits where percent of change is small at start of rotation.
Taper No. 2: Reverse logarithmic used where percent of change must be large at start of rotation.
Taper No. 4: Linear taper where percent of resistance change is directly proportional to rotational change on a straight line.

MLC

MTC

BUSHING MOUNT

Stk. No.	Type MLC	Resis., Ohms	Taper	1-24	25-49	50-99	100-174	175-299	300-499
60F2164	13L	1000	4	1.14	1.03	.95	.86	.81	.76
60F2165	222LS*	2200	4	1.86	1.67	1.55	1.40	1.33	1.24
60F2166	252A	2500	1	1.14	1.03	.95	.86	.81	.76
60F2167	252AS*	2500	1	1.86	1.67	1.55	1.40	1.33	1.24
60F2168	53A	5000	1	1.14	1.03	.95	.86	.81	.76
60F2169	53AS*	5000	1	1.86	1.67	1.55	1.40	1.33	1.24
60F2170	53L	5000	4	1.14	1.03	.95	.86	.81	.76
60F2171	53LS*	5000	4	1.86	1.67	1.55	1.40	1.33	1.24
60F2172	14AS*	10K	1	1.86	1.67	1.55	1.40	1.33	1.24
60F2173	14L	10K	4	1.14	1.03	.95	.86	.81	.76
60F2174	54L	50K	4	1.14	1.03	.95	.86	.81	.76
60F2175	15A	100K	1	1.14	1.03	.95	.86	.81	.76

Stk. No.	Type MLC	Resis., Ohms	Taper	1-24	25-49	50-99	100-174	175-299	300-499
60F2176	15L	100K	4	1.14	1.03	.95	.86	.81	.76
60F2177	25L	200K	4	1.14	1.03	.95	.86	.81	.76
60F2178	254L	250K	4	1.14	1.03	.95	.86	.81	.76
60F2179	N55A	500K	1	1.14	1.03	.95	.86	.81	.76
60F2180	55AS*	500K	1	1.86	1.67	1.55	1.40	1.33	1.24
60F2181	55LS*	500K	4	1.86	1.67	1.55	1.40	1.33	1.24
60F2182	N55L	500K	4	1.14	1.03	.95	.86	.81	.76
60F2183	16AS*	1 meg	1	1.86	1.67	1.55	1.40	1.33	1.24
60F2184	16LS*	1 meg	4	1.86	1.67	1.55	1.40	1.33	1.24
60F2185	N16A	1 meg	1	1.14	1.03	.95	.86	.81	.76
60F2186	N16L	1 meg	4	1.14	1.03	.95	.86	.81	.76

PRINTED CIRCUIT VERTICAL MOUNT

Stk. No.	Type MTC	Resis., Ohms	1-24	25-49	50-99	100-174	175-299	300-499
60F2187	12L1	100	.39	.35	.33	.29	.29	.26
60F2188	22L1	200	.39	.35	.33	.29	.29	.26
60F2189	251L1	250	.39	.35	.33	.29	.29	.26
60F2190	32L1	300	.39	.35	.33	.29	.29	.26
60F2191	52L1	500	.39	.35	.33	.29	.29	.26
60F2192	751L1	750	.39	.35	.33	.29	.29	.26
60F2193	13L1	1000	.39	.35	.33	.29	.29	.26
60F2194	152L1	1500	.39	.35	.33	.29	.29	.26
60F2195	23L1	2000	.39	.35	.33	.29	.29	.26
60F2196	33L1	3000	.39	.35	.33	.29	.29	.26
60F2197	53L1	5000	.39	.35	.33	.29	.29	.26
60F2198	63L1	6000	.39	.35	.33	.29	.29	.26
60F2199	682L1	6800	.39	.35	.33	.29	.29	.26
60F2200	14L1	10K	.39	.35	.33	.29	.29	.26

Stk. No.	Type MTC	Resis., Ohms	1-24	25-49	50-99	100-174	175-299	300-499
60F2201	153L1	15K	.39	.35	.33	.29	.29	.26
60F2202	24L1	20K	.39	.35	.33	.29	.29	.26
60F2203	253L1	25K	.39	.35	.33	.29	.29	.26
60F2204	54L1	50K	.39	.35	.33	.29	.29	.26
60F2205	15L1	100K	.39	.35	.33	.29	.29	.26
60F2206	124L1	120K	.39	.35	.33	.29	.29	.26
60F2207	184L1	180K	.39	.35	.33	.29	.29	.26
60F2208	254L1	250K	.39	.35	.33	.29	.29	.26
60F2209	3253L1	325K	.39	.35	.33	.29	.29	.26
60F2210	454L1	450K	.39	.35	.33	.29	.29	.26
60F2211	55L1	500K	.39	.35	.33	.29	.29	.26
60F2212	16L1	1 meg	.39	.35	.33	.29	.29	.26
60F2213	26L1	2 megs	.39	.35	.33	.29	.29	.26
60F2214	355L1	3.5 megs	.39	.35	.33	.29	.29	.26

MTC-4 PRINTED CIRCUIT HORIZONTAL MOUNTS

Stk. No.	Type MTC	Resis. Ohms	1-24	25-49	50-99	100-174	175-299	300-499
60F2215	MTC153L4	15K	.39	.35	.33	.29	.29	.26
60F2216	MTC24L4	20K	.39	.35	.33	.29	.29	.26
60F2217	MTC253L4	25K	.39	.35	.33	.29	.29	.26
60F2218	MTC54L4	50K	.39	.35	.33	.29	.29	.26
60F2219	MTC15LA	100K	.39	.35	.33	.29	.29	.26
60F2220	MTC124L4	120K	.39	.35	.33	.29	.29	.26
60F2221	MTC184L4	180K	.39	.35	.33	.29	.29	.26
60F2222	MTC254L4	250K	.39	.35	.33	.29	.29	.26
60F2223	MTC3253L4	325K	.39	.35	.33	.29	.29	.26
60F2224	MTC454L4	450K	.39	.35	.33	.29	.29	.26
60F2225	MTC55L4	500K	.39	.35	.33	.29	.29	.26
60F2226	MTC16L4	1 meg	.39	.35	.33	.29	.29	.26
60F2227	MTC26L4	2 megs	.39	.35	.33	.29	.29	.26
60F2228	MTC355L4	3.5 megs	.39	.35	.33	.29	.29	.26

Stk. No.	Type MTC	Resis. Ohms	1-24	25-49	50-99	100-174	175-299	300-499
60F2229	MTC12L4	100	.39	.35	.33	.29	.29	.26
60F2230	MTC22L4	200	.39	.35	.33	.29	.29	.26
60F2231	MTC251L4	250	.39	.35	.33	.29	.29	.26
60F2232	MTC32L4	300	.39	.35	.33	.29	.29	.26
60F2233	MTC52L4	500	.39	.35	.33	.29	.29	.26
60F2234	MTC751L4	750	.39	.35	.33	.29	.29	.26
60F2235	MTC13L4	1000	.39	.35	.33	.29	.29	.26
60F2236	MTC152L4	1500	.39	.35	.33	.29	.29	.26
60F2237	MTC23L4	2000	.39	.35	.33	.29	.29	.26
60F2238	MTC33L4	3000	.39	.35	.33	.29	.29	.26
60F2239	MTC53L4	5000	.39	.35	.33	.29	.29	.26
60F2240	MTC63L4	6000	.39	.35	.33	.29	.29	.26
60F2241	MTC682L4	6800	.39	.35	.33	.29	.29	.26
60F2242	MTC14L4	10K	.39	.35	.33	.29	.29	.26

Potentiometers

SERIES RA10—1 WATT WIRE WOUND
Meets Mil. Spec.—MIL-R-19A

Linear resistance taper. ±10% tolerance. 25/32" dia. Shpg. Wt., 7 oz.
TYPE RA10NASD. ¼" dia., bushing ¼" long. Slotted shaft ⅛" diameter, ⅞" long FMS.
TYPE RA10LASD. Locking bushing ¼" dia., ⅜" long. Slotted shaft ⅛" dia. ⅞" long FMS.

Stk. No.	Type	Ohms	1-9	10-24	25-49	50-99	100-249
8F832	RA10NASD150A	15					
8F833	RA10NASD250A	25					
8F834	RA10NASD500A	50					
8F835	RA10NASD750A	75					
8F836	RA10NASD101A	100					
8F837	RA10NASD151A	150					
8F838	RA10NASD201A	200	4.99	3.79	3.28	2.77	2.42
8F839	RA10NASD251A	250					
8F840	RA10NASD351A	350					
8F841	RA10NASD501A	500					
8F842	RA10NASD751A	750					
8F843	RA10NASD102A	1K					
8F844	RA10NASD152A	1.5K					
8F845	RA10NASD202A	2K					
8F846	RA10NASD252A	2.5K					
8F847	RA10LASD150A	15					
8F848	RA10LASD250A	25					
8F849	RA10LASD500A	50					
8F850	RA10LASD750A	75					
8F851	RA10LASD101A	100					
8F852	RA10LASD151A	150					
8F853	RA10LASD201A	200					
8F854	RA10LASD251A	250	5.16	3.92	3.39	2.86	2.50
8F855	RA10LASD351A	350					
8F856	RA10LASD501A	500					
8F857	RA10LASD751A	750					
8F858	RA10LASD102A	1K					
8F859	RA10LASD152A	1.5K					
8F860	RA10LASD202A	2K					
8F861	RA10LASD252A	2.5K					

HOT MOLDED CARBON POTENTIOMETERS
MIL-R-94 STYLE RV6

RV6L

RV6N

Rated 0.5 watt @ 70°C, derated to zero power @120°C. Working voltage 350 VDC across end of terminals. Mechanical and electrical rotation 295°±3°. Voltage breakdown 750 VAC between terminals and ground for 1 minute. Available with standard or locking type bushing. RV6L Locking Bushing. RV6N Standard Bushing. Diameter: ½", Shpg. wt., 5 oz.

SERIES RV6L

Stk. No.	RV6L/ AYSA Type	Ohms	1-24	25-34	35-49	50-64	65-99	100-249
9F2000	101A	100						
9F2001	251A	250						
9F2002	501A	500						
9F2003	102A	1000						
9F2004	252A	2500						
9F2005	502A	5000						
9F2006	103A	10,000						
9F2007	153A	15,000	5.35	5.08	3.88	3.10	2.33	2.02
9F2008	253A	25,000						
9F2009	503A	50,000						
9F2010	104A	100K						
9F2011	154A	150K						
9F2012	254A	250K						
9F2013	504A	500K						
9F2014	105A	1 Meg						

SERIES RV6N

Stk. No.	RV6N/ AYSD Type	Ohms	1-24	25-34	35-49	50-64	65-99	100-249
9F2015	101A	100						
9F2016	251A	250						
9F2017	501A	500						
9F2018	102A	1000						
9F2019	252A	2500						
9F2020	502A	5000						
9F2021	103A	10,000						
9F2022	153A	15,000	5.00	4.76	3.65	2.92	2.19	1.90
9F2023	253A	25,000						
9F2024	503A	50,000						
9F2025	104A	100K						
9F2026	154A	150K						
9F2027	254A	250K						
9F2028	504A	500K						
9F2029	105A	1 Meg						

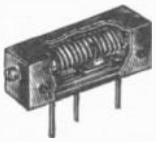
NEWARK Maintains Ten Giant Warehouses to Insure Fastest Delivery From Stock

SERIES RA20—2 WATT WIRE WOUND
Meets Mil. Spec.—MIL-R-19A

Linear resistance taper ± 10% tolerance. 1 11/64" dia. Shpg. wt. 7 oz.
RA20NASD: Standard bushing ⅜" long. Slotted shaft ¼" diameter ⅞" long FMS.
RA20LASB: Locking bushing ½" long. Slotted shaft ¼" diameter ⅝" long FMS.

Stk. No.	Type	Ohms	1-24	25-34	35-49	50-64	65-99	100-249
8F735	RA20NASD6R0A	6						
8F736	RA20NASD8R0A	8						
8F737	RA20NASD100A	10						
8F738	RA20NASD150A	15						
8F739	RA20NASD200A	20						
8F740	RA20NASD250A	25						
8F741	RA20NASD350A	35						
8F742	RA20NASD500A	50						
8F743	RA20NASD101A	100						
8F744	RA20NASD151A	150						
8F745	RA20NASD201A	200						
8F746	RA20NASD251A	250	3.00	2.54	2.01	1.62	1.41	1.16
8F747	RA20NASD351A	350						
8F748	RA20NASD501A	500						
8F749	RA20NASD751A	750						
8F750	RA20NASD102A	1K						
8F751	RA20NASD152A	1.5K						
8F752	RA20NASD202A	2K						
8F753	RA20NASD252A	2.5K						
8F754	RA20NASD352A	3.5K						
8F755	RA20NASD502A	5K						
8F756	RA20NASD103A	10K						
8F757	RA20NASD153A	15K						
8F758	RA20LASB3R0A	3						
8F759	RA20LASB6R0A	6						
8F760	RA20LASB8R0A	8						
8F761	RA20LASB100A	10						
8F762	RA20LASB150A	15						
8F763	RA20LASB200A	20						
8F764	RA20LASB250A	25						
8F765	RA20LASB350A	35						
8F766	RA20LASB500A	50						
8F767	RA20LASB101A	100						
8F768	RA20LASB151A	150						
8F769	RA20LASB201A	200	3.00	2.62	2.09	1.70	1.49	1.24
8F770	RA20LASB251A	250						
8F771	RA20LASB351A	350						
8F772	RA20LASB501A	500						
8F773	RA20LASB751A	750						
8F774	RA20LASB102A	1K						
8F775	RA20LASB152A	1.5K						
8F776	RA20LASB202A	2K						
8F777	RA20LASB252A	2.5K						
8F778	RA20LASB352A	3.5K						
8F779	RA20LASB502A	5K						
8F780	RA20LASB103A	10K						
8F781	RA20LASB153A	15K						

SERIES 76 SUPER SET TRIMMING POTENTIOMETERS



SUPER SETABILITY made possible through 10 times the resolution — 15 times greater winding length ever offered in this configuration. Trimming costs in critical circuits drop, performance of circuit improves. Because of small size, packaging size decreases. Mechanical travel: 14 turns approx. Effective travel: 11 turns ±¼ turn. Resistance Range: 100 ohms to 20,000 ohms. Resistance tolerance ±5%. Power Rating: .75 watts @ 85°C—derated linearly to 0 power @150°C.

SERIES 76JA-2 (solder lug)

Stk. No.	Resis. Ohms	Nom. Resolution %	1-24	25-49	50-99	100-249	250-499
9F1381	100	0.1					
9F1382	200	0.09					
9F1383	500	0.08					
9F1384	1K	0.075	8.10	7.20	6.75	6.30	5.63
9F1385	2K	0.06					
9F1386	5K	0.05					
9F1387	10K	0.04					
9F1388	20K	0.03					

SERIES 76JA-3 (printed circuit)

Stk. No.	Resis. Ohms	Nom. Resolution %	1-24	25-49	50-99	100-249	250-499
9F1389	100	0.1					
9F1390	200	0.09					
9F1391	500	0.08					
9F1392	1K	0.075	8.10	7.20	6.75	6.30	5.63
9F1393	2K	0.06					
9F1394	5K	0.05					
9F1395	10K	0.04					
9F1396	20K	0.03					

SERIES RV4—2 WATT CARBON Meets Mil. Spec.—MIL-R-94B

For tolerance see last letter in type number (A) ± 10% (B) ± 20%. Linear resistance taper. 1⅛" dia. Shpg. wt. 7 oz.
TYPE RV4NAYSD ⅜" long standard bushing. Slotted shaft ¼" dia., ⅞" long FMS.
TYPE RV4LAYSA: ½" long locking bushing. Slotted shaft ¼" dia., ⅝" long FMS.

Stock No.	Type	Ohms	1-24	25-34	35-49	50-64	65-99	100-249
9F1400	RV4NAYSD500A	50						
8F700	RV4NAYSD101A	100						
9F1402	RV4NAYSD151A	150						
8F701	RV4NAYSD251A	250						
9F1404	RV4NAYSD351A	350						
8F702	RV4NAYSD501A	500						
9F1406	RV4NAYSD751A	750						
8F703	RV4NAYSD102A	1000						
9F1408	RV4NAYSD152A	1500						
8F704	RV4NAYSD252A	2500						
9F1410	RV4NAYSD352A	3500						
8F705	RV4NAYSD502A	5000						
9F1412	RV4NAYSD752A	7500						
8F706	RV4NAYSD103A	10K						
9F1414	RV4NAYSD153A	15K						
8F707	RV4NAYSD253A	25K	1.95	1.75	1.60	1.55	1.50	1.25
9F1416	RV4NAYSD353A	35K						
8F708	RV4NAYSD503A	50K						
9F1418	RV4NAYSD753A	75K						
8F709	RV4NAYSD104A	100K						
9F1420	RV4NAYSD154A	150K						
8F710	RV4NAYSD254A	250K						
9F1422	RV4NAYSD354A	350K						
8F711	RV4NAYSD504A	500K						
9F1424	RV4NAYSD754A	750K						
8F712	RV4NAYSD105A	1 Meg						
9F1426	RV4NAYSD155B	1.5 Meg						
9F1427	RV4NAYSD205B	2 Meg						
8F713	RV4NAYSD255B	2.5 Meg						
9F1429	RV4NAYSD355B	3.5 Meg						
8F714	RV4NAYSD505B	5 Meg						
9F1431	RV4LAYSA500A	50						
8F715	RV4LAYSA101A	100						
9F1433	RV4LAYSA151A	150						
8F716	RV4LAYSA251A	250						
9F1435	RV4LAYSA351A	350						
8F717	RV4LAYSA501A	500						
9F1437	RV4LAYSA751A	750						
8F718	RV4LAYSA102A	1000						
9F1439	RV4LAYSA152A	1500						
8F719	RV4LAYSA252A	2500						
9F1441	RV4LAYSA352A	3500						
8F720	RV4LAYSA502A	5000						
9F1443	RV4LAYSA752A	7500						
8F721	RV4LAYSA103A	10K						
9F1445	RV4LAYSA153A	15K						
8F722	RV4LAYSA253A	25K	2.25	2.05	1.90	1.79	1.58	1.33
9F1447	RV4LAYSA353A	35K						
8F723	RV4LAYSA503A	50K						
9F1449	RV4LAYSA753A	75K						
8F724	RV4LAYSA104A	100K						
9F1451	RV4LAYSA154A	150K						
8F725	RV4LAYSA254A	250K						
9F1453	RV4LAYSA354A	350K						
8F726	RV4LAYSA504A	500K						
9F1455	RV4LAYSA754A	750K						
8F727	RV4LAYSA105A	1 Meg						
9F1457	RV4LAYSA155B	1.5 Meg						
9F1458	RV4LAYSA205B	2 Meg						
8F728	RV4LAYSA255B	2.5 Meg						
9F1460	RV4LAYSA355B	3.5 Meg						
8F729	RV4LAYSA505B	5 Meg						

Type RV4LAYSD. Carbon type "pots" with ½ in. locking type bushing. Maximum temperature: 120°C Maximum resistance change due to humidity test: ±10%. Minimum insulation resistance during humidity test: 100 megs. Screw drive slotted operating shaft: ⅞ in. long (from mtg. surface). Wt., 7 oz.

8F685	RV4LAYSD101A	100 ohms						
8F686	RV4LAYSD251A	250 ohms						
8F687	RV4LAYSD501A	500 ohms						
8F688	RV4LAYSD102A	1000 ohms						
8F689	RV4LAYSD252A	2500 ohms						
8F690	RV4LAYSD502A	5000 ohms						
8F691	RV4LAYSD103A	10 K						
8F692	RV4LAYSD253A	25 K	2.25	2.05	1.90	1.79	1.58	1.33
8F693	RV4LAYSD503A	50 K						
8F694	RV4LAYSD104A	100 K						
8F695	RV4LAYSD254A	250 K						
8F696	RV4LAYSD504A	500 K						
8F697	RV4LAYSD105A	1 Meg.						
8F698	RV4LAYSD255B	2.5 Meg						
8F699	RV4LAYSD505B	5 Meg.						

Type RV4NAYSK

Maximum operating temperature: 120°C. Maximum resistance change due to humidity test: 100 megs. Slotted operating shaft ¼" dia., 2½" long.

Stock No.	Type	Ohms	1-24	25-34	35-49	50-64	65-99	100-249
9F1462	RV4NAYSK101A	100						
9F1463	RV4NAYSK251A	250						
9F1464	RV4NAYSK501A	500						
9F1465	RV4NAYSK102A	1000						
9F1466	RV4NAYSK252A	2500						
9F1467	RV4NAYSK502A	5000						
9F1468	RV4NAYSK103A	10K						
9F1469	RV4NAYSK253A	25K	1.95	1.75	1.60	1.55	1.50	1.25
9F1470	RV4NAYSK503A	50K						
9F1471	RV4NAYSK104A	100K						
9F1472	RV4NAYSK254A	250K						
9F1473	RV4NAYSK504A	500K						
9F1474	RV4NAYSK105A	1 Meg						
9F1475	RV4NAYSK255B	2.5 Meg						
9F1476	RV4NAYSK505B	5 Meg						

Type RV4NAYSB

Same as above except with ⅛" diameter, ⅞" long, slotted shaft.

9F1477	RV4NAYSB101A	100						
9F1478	RV4NAYSB251A	250						
9F1479	RV4NAYSB501A	500						
9F1480	RV4NAYSB102A	1000						
9F1481	RV4NAYSB252A	2500						
9F1482	RV4NAYSB502A	5000						
9F1483	RV4NAYSB103A	10K						
9F1484	RV4NAYSB253A	25K	1.95	1.75	1.60	1.55	1.50	1.25
9F1485	RV4NAYSB503A	50K						
9F1486	RV4NAYSB104A	100K						
9F1487	RV4NAYSB254A	250K						
9F1488	RV4NAYSB504A	500K						
9F1489	RV4NAYSB105A	1 Meg						
9F1490	RV4NAYSB255B	2.5 Meg						
9F1491	RV4NAYSB505B	5 Meg						

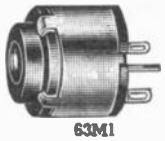
SERIES RA30—4 WATT WIRE WOUND
Meets Mil. Spec.—MIL-R-19A

Linear resistance taper ± 10% tolerance. 1 17/32" dia. Shpg. wt. 7 oz.
TYPE RA30NASD: ⅜" long standard bushing. Slotted shaft ¼" diameter, ⅞" long FMS.
TYPE RA30LASB: ½" long locking bushing. Slotted shaft ¼" diameter, ⅝" long FMS.

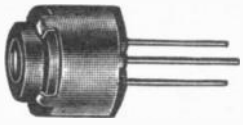
Stk. No.	Type	Ohms	1-24	25-34	35-49	50-64	65-99	100-249
9F1492	RA30NASD2R0A	3						
8F786	RA30NASD6R0A	6						
8F787	RA30NASD8R0A	8						
8F788	RA30NASD100A	10						
8F789	RA30NASD150A	15						
8F790	RA30NASD200A	20						
8F791	RA30NASD250A	25						
8F792	RA30NASD350A	35						
8F793	RA30NASD500A	50						
8F794	RA30NASD750A	75						
8F795	RA30NASD101A	100						
8F796	RA30NASD151A	150						
8F797	RA30NASD251A	250	3.00	2.72	2.19	1.80	1.59	1.34
8F798	RA30NASD351A	350						
8F799	RA30NASD501A	500						
8F800	RA30NASD102A	1K						
8F801	RA30NASD152A	1.5K						
8F802	RA30NASD202A	2K						
8F803	RA30NASD252A	2.5K						
8F804	RA30NASD352A	3.5K						
8F805	RA30NASD502A	5K						
8F806	RA30NASD752A	7.5K						
8F807	RA30NASD103A	10K						
8F808	RA30NASD203A	20K						
8F809	RA30NASD253A	25K						
9F1493	RA30LASB3R0A	3						
8F810	RA30LASB6R0A	6						
8F811	RA30LASB8R0A	8						
8F812	RA30LASB150A	15						
8F813	RA30LASB200A	20						
8F814	RA30LASB350A	35						
8F815	RA30LASB750A	75						
8F816	RA30LASB101A	100						
8F817	RA30LASB151A	150	3.00	2.80	2.27	1.88	1.67	1.42
8F818	RA30LASB351A	350						
8F819	RA30LASB102A	1K						
8F820	RA30LASB152A	1.5K						
8F821	RA30LASB202A	2K						
8F822	RA30LASB352A	3.5K						
8F823	RA30LASB502A	5K						
8F824	RA30LASB103A	10K						
8F825	RA30LASB203A	20K						
8F826	RA30LASB253A	25K						

Potentiometers

● *NEW* SERIES 63 HOT-MOLDED CARBON TRIMMING POTENTIOMETERS



63M1



63M5

Type 63M1. Plastic Shaft and Faceplate. Solder Lug
Type 63M2. Metal Shaft and Faceplate. Solder Lug
Type 63M4. Plastic Shaft and Faceplate. Wire Leads
Type 63M5. Metal Shaft and Faceplate. Wire Leads

Designed specifically for application on printed circuit boards, this new configuration permits extremely close board-to-board spacing. Power Rating: .25 watt @ 70°C. Working Voltage: 350 VDC across end terminals, but power not to exceed rating. Resistance Range is 100 Ω to 1 megohm, linear. Resistance Tolerance: ±20%. Mechanical & Electrical Rotation 295° ±3°. Voltage Breakdown is 750 VAC between terminals and gnd. for 1 min. Torque 0.5 to 3 oz. in. Diam. ½"; body length 15/32". Wt., 1 oz. appr.

Res.	Stock No. Type 63M1	Type 63M2	Type 63M4	Type 63M5
100	9F2030	9F2039	9F2048	9F2057
250	9F2031	9F2040	9F2049	9F2058
500	9F2032	9F2041	9F2050	9F2059
1K	9F2033	9F2042	9F2051	9F2060
2.5K	9F2034	9F2043	9F2052	9F2061
5K	9F2035	9F2044	9F2053	9F2062
10K	9F2036	9F2045	9F2054	9F2063
15K	9F2037	9F2046	9F2055	9F2064
25K	9F2038	9F2047	9F2056	9F2065
50K	9F2066	9F2073	9F2080	9F2087
100K	9F2067	9F2074	9F2081	9F2088
150K	9F2068	9F2075	9F2082	9F2089
200K	9F2069	9F2076	9F2083	9F2090
250K	9F2070	9F2077	9F2084	9F2091
300K	9F2071	9F2078	9F2085	9F2092
1 Meg.	9F2072	9F2079	9F2086	9F2093

1-24	25-34	34-49	50-64	65-99	100-249	250-499	500-999
3.45	3.27	2.50	2.00	1.50	1.30	1.20	1.10

SERIES 42JA SINGLE TURN POTENTIOMETER

All types of applications ranging from ultra critical military systems to ultra dependable industrial equipment. Power Rating: 3 watts at 40°C. Resis. Tolerance: ±5%. Electrical rotation 330°±5°. Mechanical rotation: 360° continuous. Resolution from .35% at 500 ohms to .051% at 100K ohms. Linear output. Max. speed of rotation: 90 RPM. Body dia.: 1¾". Shaft length: ¼"; Shaft dia,, .249". Approximate weight, 3.2 ounces.

Stk. No.	Res.	1-9	10-24	25-99	100-199	200-499
8F523	50					
8F524	100					
8F525	500					
8F526	1K	8.00	7.60	7.20	6.80	6.40
8F527	2.5K					
8F528	5K					
8F529	10K					
8F530	20K					
8F531	50K	9.00	8.55	8.10	7.65	7.20
8F532	100K	9.00	8.55	8.10	7.65	7.20

SERIES 42-900 SINGLE TURN POTENTIOMETER

Extra tap for greater electrical versatility. Shaft extends thru rear of unit to permit addition of switching and other functions actuated by a single shaft. Tol.: ±5%. Linear output. Rated at 3 watts at 40° C. Tap 50% of applied voltage. ±1 in. tol. Max. speed of rotation: 90 RPM. 121/32" dia. Shaft length: 1½". Shaft dia.: .25". Approximate weight, 3.2 oz.

Stk. No.	Res.	1-9	10-24	25-99	100-199	200-499
8F548	50					
8F549	100					
8F550	500					
8F551	1K	14.00	13.30	12.60	11.90	11.20
8F552	2.5K					
8F553	5K					
8F554	10K	16.00	15.20	14.40	13.60	12.80
8F555	20K	16.00	15.20	14.40	13.60	12.80
8F556	50K	19.00	18.05	17.10	16.15	15.20
8F557	100K	19.00	18.05	17.10	16.15	15.20

SERIES 57M, 57M9, 57EJA, 57EJB SINGLE TURN POTENTIOMETERS

½" dia. housing. Series 57M is rated at 1.5 watts at 40°C. Series 57EJ 2 watts at 70°C and features glass sealed terminals. Shaft length: 57M and 57EJA ½" bevond bushing. Series 57M9 has locking bushing mtg. and a 3/16" shaft. Series 57EJB is similar to Series 57EJA except it has locking bushing mtg. and 3/16" shaft. Common Specifications: Res. Tol.: ±5% independent. Linearity: ±2%. Mechanical and electrical rotation: 320° ±5%. Dielectric Strength: 1000 VAC. Corrosion resistant housing per QQ-M-151. Centerless grnd, stainless steel shaft. Approx. wt., ½ oz.

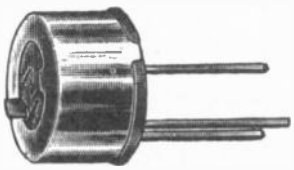
SERIES 57M AND 57M9

57M Stk. No.	57M9 Stk. No.	Res.	1-9	10-24	25-99	100-199	200-499
8F470	8F480	50					
8F471	8F481	100					
8F472	8F482	200					
8F473	8F483	500					
8F474	8F484	1K	9.65	9.17	8.69	8.20	7.72
8F475	8F485	5K					
8F476	8F486	10K					
8F477	8F487	20K					
8F478	8F488	50K					

SERIES 57EJA AND 57EJB

57EJA Stk. No.	57EJB Stk. No.	Res.	1-9	10-24	25-99	100-199	200-499
8F500	8F510	50					
8F501	8F511	100					
8F502	8F512	200					
8F503	8F513	500					
8F504	8F514	1K	10.00	9.50	9.00	8.50	8.00
8F505	8F515	5K					
8F506	8F516	10K					
8F507	8F517	20K					
8F508	8F518	50K					

● *NEW* STRIES 371-5 HOT MOLDED, LOW COST, TRIMMING POTENTIOMETERS



Construction consists of a hot molded carbon element, carbon contact brush, pressure spring and cover. Have stand-offs to insulate metal cover from printed circuit board and a screwdriver adjustment slot. Power rating: ⅜ watt @ 70°C derated linearly to zero watts @ 120°C. Working voltage: 350 VAC. Resistance range: 100 ohms to 1 megohm. Resistance tolerance: ±20%. Tapers: linear and audio. Mechancial and electrical rotation: 290° ±5°. Dielectric strength: variable arm hot to case. Case to mounting plane — 750 volts R.M.S. @ atmospheric pressure. Torque: operating: 7.0 ounce inches maximum. Stop: 20 ounce-inches. Approximate weight: .2 ounces.

Stock No.	Resist.	1-24	25-34	35-49	50-64	65-99	100-249	250-499	500-999
9F1750	100								
9F1751	250								
9F1752	500								
9F1753	1K								
9F1754	2.5K								
9F1755	5K								
9F1756	10K								
9F1757	15K	2.28	1.95	1.63	1.30	.98	.85	.78	.72
9F1758	25K								
9F1759	50K								
9F1760	100K								
9F1761	150K								
9F1762	200K								
9F1763	250K								
9F1764	500K								
9F1765	1 Meg.								

Potentiometers and Dials

"CLARODIAL" 10 TURN SCALE DIALS

Calibrated dials designed for multi-turn potentiometers up to 10 turns. Requires 1 inch of panel space. The knob attaches directly to the shaft and the body of the dial is mounted rigidly to the panel. Ratio of 1000 to 1 for 10 turns provided with zero backlash and reading error. ¼" shaft.

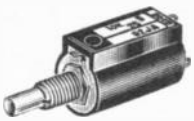
Stock No.	Type No.	Description	1-9	10-24	25-99	100-249
8F585	411	Black; no lock	7.75	7.30	6.95	6.55
8F586	412	Black; with lock	8.75	8.50	8.05	7.60
8F587	461	Clear; no lock	8.25	7.80	7.40	7.00
8F588	462	Clear; with lock	9.45	8.95	8.50	8.00

SERIES SC42-970 SIN/COS SINGLE TURN POTENTIOMETER

Used in any application requiring two output voltage accurately proportioned to the sine and cosine rotation angle. Total Resistance: 16K, ±10%. Power rating: 2.46 watts at 40°C. 360° cont. rotation. Resolution: 0.14% of max. peak to peak voltage. Max. shaft speed: 30 RPM. Shaft length: 1 9/16", dia.: .2498". Body dia.: 2 1/16".

Stk. No.	1-9	10-24	25-99	100-199	200-499
8F568	45.00	42.75	40.50	38.25	36.00

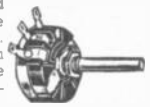
SERIES 62JA—10-TURN COMMERCIAL POTENTIOMETERS



Designed for industrial instrumentation applications. Resistance tolerance ±5%. Linear functional output; absolute linearity ±25%. 500-100K ohms. Power dissipation 2 watts @ 25°C. Dielectric strength 1000 volts AC. Effective rotation 360° nominal. Insulation resistance 100 meg-ohms. Max. speed of rotation is 60 RPM. Weight: 1.34 oz.

Stk. No.	Res.	1-9	10-24	25-99	100-499
8F570	100				
8F569	200				
8F571	250				
8F572	500				
8F573	1K				
8F574	2K	7.50	6.50	6.00	5.50
8F575	5K				
8F576	10K				
8F577	20K				
8F578	30K				
8F579	50K				
8F580	100K				

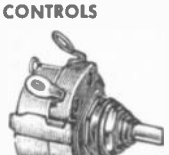
TYPE 58 WW CONTROLS



Linear type wirewound 4 watt controls. All are 1 23/32" dia. x 1 1/16" deep. Mount in ⅜" hole with nut and washer. Average weight, 4 oz. ±10% tolerance.

Stk. No.	Type	Ohms	NET
9F700	58-1	1	
9F701	58-2	2	
9F702	58-4	4	
9F703	58-6	6	
9F704	58-10	10	
9F705	58-15	15	
9F706	58-20	20	
9F707	58-25	25	
9F708	58-30	30	
9F709	58-40	40	
9F710	58-50	50	
9F711	58-60	60	
9F712	58-75	75	1.25
9F713	58-100	100	
9F714	58-200	200	
9F715	58-300	300	
9F716	58-400	400	
9F717	58-500	500	
9F718	58-750	750	
9F719	58-1,000	1,000	
9F720	58-2,000	2,000	
9F721	58-3000	3,000	
9F722	58-5,000	5,000	
9F723	58-7,500	7,500	
9F724	58-10K	10,000	
9F725	58-15K	15,000	
9F726	58-20K	20,000	1.52
9F727	58-25K	25,000	
9F728	58-30K	30,000	
9F729	58-40K	40,000	1.95
9F730	58-50K	50,000	

MINIATURIZED CONTROLS



Series 48M-9. Single pot. with shaft locking bushing. Rated at 0.2 w. Dia. ⅜". Screwdriver slot shaft ⅛" diameter x 1/16" long. Split-locking bushing. ¼"x2NEF2A, ⅜" long. Tolerance, 1K-100K is 10%, balance 20%.

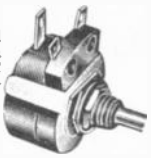
No.	Ohms	1-9	10-24	25-49	50-99
9F513	1000				
9F514	1500				
9F515	2500				
9F516	5000				
9F517	7500				
9F518	10K				
9F519	25K	4.90	3.68	3.15	2.63
9F520	50K				
9F521	100K				
9F522	250K				
9F523	500K				
9F524	1 meg.				
9F525	2.5 meg.				

58C1 WIRE-WOUND POTENTIOMETERS

Standard bushings; wirewound; with all controls rated at 4 watts. Electrical tolerance is ±5% with all changes. Available up to 50K Ohms. Diam. 1 23/32x1" depth. Shpg. wt.: 4 oz.

Stk. No.	Type	Ohms	NET
8F430	58C1-1	1	
8F431	58C1-2	2	
8F432	58C1-4	4	
8F433	58C1-6	6	
8F434	58C1-10	10	
8F435	58C1-15	15	
8F436	58C1-20	20	
8F437	58C1-30	30	
8F438	58C1-40	40	
8F439	58C1-50	50	
8F440	58C1-60	60	
8F441	58C1-75	75	
8F442	58C1-100	100	
8F443	58C1-200	200	2.25
8F444	58C1-300	300	
8F445	58C1-400	400	
8F446	58C1-500	500	
8F447	58C1-750	750	
8F448	58C1-1000	1000	
8F449	58C1-1500	1500	
8F450	58C1-2000	2000	
8F451	58C1-2500	2500	
8F452	58C1-3000	3000	
8F453	58C1-5000	5000	
8F454	58C1-7500	7500	
8F455	58C1-10K	10 K	
8F456	58C1-15K	15 K	
8F457	58C1-20K	20 K	2.55
8F458	58C1-25K	25 K	
8F459	58C1-30K	30 K	
8F460	58C1-40K	40 K	3.00
8F461	58C1-50K	50 K	

WW MIN. CONTROLS



Series 49M-9. Wirewound pot rated 1.5W Low-loss ¾" housing; 1000VAC bkdn. volt. Linear taper thru 300° rot. ⅛"D shaft. W/shaft locking bushing. Shpg. wt. 4 oz.

No.	Ohms	1-9	10-24	25-49	50-99
9F542	5	5.83	4.37	3.75	3.12
9F543	10				
9F544	20				
9F545	25				
9F546	50				
9F547	100				
9F548	200				
9F549	250				
9F550	500	4.96	3.72	3.19	2.66
9F551	1000				
9F552	1500				
9F553	2000				
9F554	2500				
9F555	5000				
9F556	7500				
9F557	10K				

43C2 2 WATT WW POTENTIOMETERS

2 watt, wire-wound control. Tolerance ±5%. ⅛ screwdriver slotted bushing. Diam. 15/32x5/8" deep. Fabricated in accordance with MIL-R-19 Style RA20. Shpg. wt., 4 oz.

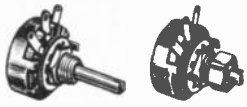
Stk. No.	Type	Ohms	NET
8F400	43C2-5	5	
8F401	43C2-10	10	
8F402	43C2-20	20	
8F403	43C2-25	25	
8F404	43C2-30	30	
8F405	43C2-40	40	
8F406	43C2-50	50	
8F407	43C2-75	75	
8F408	43C2-100	100	
8F409	43C2-150	150	
8F410	43C2-200	200	
8F411	43C2-300	300	2.50
8F412	43C2-400	400	
8F413	43C2-500	500	
8F414	43C2-750	750	
8F415	43C2-1000	1000	
8F416	43C2-1500	1500	
8F417	43C2-2000	2000	
8F418	43C2-2500	2500	
8F419	43C2-3000	3000	
8F420	43C2-4000	4000	
8F421	43C2-5000	5000	
8F422	43C2-7500	7500	
8F423	43C2-10K	10 K	
8F424	43C2-15K	15 K	2.81
8F425	43C2-20K	20 K	
8F426	43C2-25K	25 K	
8F427	43C2-30K	30 K	3.30
8F428	43C2-40K	40 K	
8F429	43C2-50K	50 K	

TYPE 43 2-4 WATT WW CONTROLS

Rated at 2-4 watts. Overall tol. +10% for all values. Linear taper molded phenolic body, 1⅛" dia. 9/16" deep. ⅜"-32 bushing. 2" long round shaft. Less switch.

Stk. No.	Type	Ohms	NET
9F760	43-5	5	
9F761	43-10	10	
9F762	43-20	20	
9F763	43-25	25	
9F764	43-30	30	
9F765	43-40	40	
9F766	43-50	50	
9F767	43-75	75	
9F768	43-100	100	
9F769	43-150	150	
9F770	43-200	200	
9F771	43-300	300	1.25
9F772	43-400	400	
9F773	43-500	500	
9F774	43-750	750	
9F775	43-1,000	1,000	
9F776	43-1,500	1,500	
9F777	43-2,000	2,000	
9F778	43-2,500	2,500	
9F779	43-3,000	3,000	
9F780	43-4,000	4,000	
9F781	43-5,000	5,000	
9F782	43-7,500	7,500	
9F783	43-10K	10,000	

1/5 WATT MINIATURE COMPOSITION CONTROLS



Style RV1. Meets MIL-R-94B. Ideally suited for guided missiles, geophysical equipment and miniature amplifiers. Linear taper. Tol: ±10% Dielectric strength: 900 VAC-RMS Resistance elements completely enclosed permitting sealing and potting without damage. Brass terminals. Tin plated leads. Locating lug—left only. Stainless steel screwdriver slotted shaft, 1/8" dia. Mech. rotation 260° ±3°. Bushing mtg. nut and lockwasher supplied.

JMP. Shaft 7/8" long from mtg. surface. 1/4" —32 NEF-2A thd.

JML. Shaft 1/2" long from mtg. surface. Locking type bushing 1/4" —32 NEF-2A thd. 3/8" long from mtg. surface. Shaft locking nut furnished.

MODEL JMP

Stock No.	Type	Mil. Type	Ohms	1-9	10-24	25-49	50-99	100-249
9F1500	JMP-501	RV1NAXSD501A	500					
9F1501	JMP-102	RV1NAXSD102A	1000					
9F1502	JMP-252	RV1NAXSD252A	2500					
9F1503	JMP-502	RV1NAXSD502A	5000					
9F1504	JMP-103	RV1NAXSD103A	10K					
9F1505	JMP-253	RV1NAXSD253A	25K	3.60	3.24	3.00	2.85	2.70
9F1506	JMP-503	RV1NAXSD503A	50K					
9F1507	JMP-104	RV1NAXSD104A	100K					
9F1508	JMP-254	RV1NAXSD254A	250K					
9F1509	JMP-504	RV1NAXSD504A	500K					
9F1510	JMP-105	RV1NAXSD105A	1 MEG.					

TYPE JML

Stock No.	Type	Mil. Type	Ohms	1-9	10-24	25-49	50-99	100-249
9F1511	JML-501	RV1LAXSB501A	500					
9F1512	JML-102	RV1LAXSB102A	1000					
9F1513	JML-252	RV1LAXSB252A	2500					
9F1514	JML-502	RV1LAXSB502A	5000					
9F1515	JML-103	RV1LAXSB103A	10K					
9F1516	JML-253	RV1LAXSB253A	25K	3.90	3.51	3.25	3.09	2.93
9F1517	JML-503	RV1LAXSB503A	50K					
9F1518	JML-104	RV1LAXSB104A	100K					
9F1519	JML-254	RV1LAXSB254A	250K					
9F1520	JML-504	RV1LAXSB504A	500K					
9F1521	JML-105	RV1LAXSB105A	1 MEG.					

WW AND WN WIREWOUND CONTROLS

Rated full 5 watts — small as other 2 watt controls. 1 5/32" dia., 9/16" depth, WW shaft 1/4" dia. full round, 2 3/8" lg., WN shaft fingertip knurl, screwdriver slotted, 3/8" lg. from end at bushing. Linear taper. Shpg. wt., 4 oz.

Stk. No.	Type WW	Stk. No.	Type WN	Ohms	1-9	10-24	25-49	50-99	100-249
9F400	010	9F433	010	1					
9F401	020	9F434	020	2					
9F402	030	9F435	030	3					
9F403	040	9F436	040	4					
9F404	050	9F437	050	5					
9F405	060	9F438	060	6					
9F406	080	9F439	080	8					
9F407	100	9F440	100	10					
9F408	150	9F441	150	15					
9F409	200	9F442	200	20					
9F410	250	9F443	250	25					
9F411	300	9F444	300	30					
9F412	400	9F445	400	40					
9F413	500	9F446	500	50					
9F414	600	9F447	600	60					
9F415	750	9F448	750	75					
9F416	101	9F449	101	100	1.32	1.19	1.10	1.05	.99
9F417	201	9F450	201	200					
9F418	251	9F451	251	250					
9F419	301	9F452	301	300					
9F420	401	9F453	401	400					
9F421	501	9F454	501	500					
9F422	751	9F455	751	750					
9F423	102	9F456	102	1000					
9F424	152	9F457	152	1500					
9F425	202	9F458	202	2000					
9F426	252	9F459	252	2500					
9F427	302	9F460	302	3000					
9F428	402	9F461	402	4000					
9F429	502	9F462	502	5000					
9F430	752	9F463	752	7500					
9F431	103	9F464	103	10000					
9F432	153	9F465	153	15000					
9F683	203	9F690	203	20000	1.59	1.43	1.33	1.26	1.19
9F684	253	9F691	253	25000					
9F685	303	9F692	303	30000					
9F686	403	9F693	403	40000	2.01	1.81	1.68	1.59	1.51
9F687	503	9F694	503	50000	2.01	1.81	1.68	1.59	1.51
9F688	753	9F685	753	75000	2.46	2.22	2.05	1.95	1.85
9F689	104	9F696	104	100000	2.46	2.22	2.05	1.95	1.85

MODEL B CONTROLS

1/2 watt, 15/16" diam., universal fluted shaft 3" lg. Use KR switches. Less switch.

Stk. No.	Type	Ohms	Taper	1-9	10-24	25-49	50-99	100-249	250-499
9F600	B-2	200	C1						
9F824	B-4	500	C1						
9F800	B-5	1,000	C1						
9F825	B-6	2,000	C1						
9F826	B-7	2,500	C1						
9F801	B-10	5,000	C1						
9F828	B-11	5,000	C2						
9F802	B-14	10,000	C1						
9F835	B-15	10,000	C2						
9F840	B-22	20,000	C1						
9F804	B-26	25,000	C1						
9F805	B-31	50,000	C1						
9F806	B-32	50,000	C2						
9F844	B-35	75,000	C1						
9F807	B-40	100,000	C1						
9F808	B-41	100,000	C2	1.02	.92	.85	.81	.76	.68
9F846	B-46	200,000	C1						
9F847	B-50	250,000	C1						
9F848	B-51	250,000	C2						
9F810	B-59	.5 meg.	C1						
9F811	B-60	.5 meg.	C2						
9F853	B-69	1 meg.	C1						
9F812	B-70	1 meg.	C2						
9F613	B-742	1.5 megs	C1						
9F857	B-75	2 megs	C1						
9F813	B-76	2 megs	C2						
9F859	B-83	2.5 megs	C1						
9F860	B-84	3 megs	C1						
9F814	B-87	5 megs	C1						
9F476	B-90	7.5 megs	C1						
9F815	B-98	10 megs	C1						

TAPERS FOR CENTRALAB CONTROLS

C1. Linear, has uniform resistance change from either end.
C2. Semi-log (audio) 10% center.

TYPE KR FASTATCH SWITCHES FOR MODEL B CONTROLS

3 Amps—125 Volts

Stk. No.	Type	Circuit	1-9	10-24	25-49	50-99	100-249
9F466	KR-1†	SPST	.60	.54	.50	.48	.45
9F467	KR-2	DPST					
9F468	KR-3*	DP (1 on 1 off)					

15 Amps—10 Volts

9F469	KR-4	SPST	.60	.54	.50	.48	.45
9F470	KR-6**	SPST					
9F471	KR-7	DPST					

*Can be used as SPDT. **With dummy lug. †5 amps.

1/10 WATT-MINIATURE CONTROLS

Type B16. Dielectric strength 900 VAC-RMS. Tol. ±20% except (†) ±30%. SPST switch rated at 6.5 amps at 1.5 VDC. Mounting nuts and screws supplied. Audiotaper except * which is linear. Shpg. wt., 3 oz.

Plain Type Stud Mounted — 260° Rotation

Stock No.	Type	Ohms	1-9	10-24	25-49	50-99	100-249
9F621	B16-107*	500					
9F622	B16-109*	1000					
9F623	B16-111*	2500					
9F624	B16-112	2500					
9F625	B16-113*	5000					
9F626	B16-114	5000					
9F627	B16-115*	10K					
9F628	B16-116	10K					
9F629	B16-117	25K	1.50	1.35	1.25	1.19	1.13
9F630	B16-119*	50K					
9F631	B16-121*	100K					
9F632	B16-123*	250K					
9F633	B16-118	500K					
9F634	B16-120	1 Meg.					
9F635	B16-122	2 Meg.					
9F636	B16-124†	3 Meg.					
9F637	B16-128†	5 Meg.					

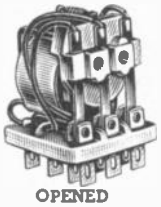
Switch Type — Bracket Mounted — 225° Rotation

9F638	B16-212	2500					
9F639	B16-214	5000					
9F640	B16-216	10K					
9F641	B16-217	25K					
9F642	B16-218	500K	2.40	2.16	2.00	1.90	1.80
9F643	B16-220	1 Meg.					
9F644	B16-222	2 Meg.					
9F645	B16-224†	3 Meg.					
9F646	B16-228†	5 Meg.					

Reed and General Purpose Relays

CR120 TYPE H GENERAL PURPOSE RELAY

Compact, high quality relay line for multipole switching applications. Available in AC or DC coils. Rated 10 amps and 1/6 hp at 120 volts AC, 1/3 hp at 240V AC. Well suited for use in small, built in chassistype control units or as an output device for electronic equipment. May also be in control panels to obtain plug-in construction. Typical applications include, air-conditioning and refrigerator equipment, office machines, packaging equipment and many other types of machinery. Relays are offered open stud mount, or enclosed with plastic dust covers. The enclosed DPDT uses standard octal socket, 3PDT, 11 pin socket. Built to withstand extreme shock and vibration while delivering high-fidelity performance. Constant, outstanding coil performance at temperature ranges of —45 to +80°C. Low noise level and high load life are characteristic of this relay. High insulation resistance, 1000 megs at 500 volts DC between all terminals and ground coil to contacts and between contacts. Dielectric strength: 1000 volts RMS.



OPENED

ENCLOSED

OPEN TYPE

Stock No.	Type CR120	Volts	Cont. Action	1-24	25-49	50-74	75-99	100-999
24F3050	HC12J02	115AC	DPDT	4.18	3.97	3.76	3.35	2.93
24F3051	HF12J09	12DC	DPDT	3.73	3.54	3.36	2.98	2.61
24F3052	HF12J10	24DC	DPDT	3.73	3.54	3.36	2.98	2.61
24F3053	HC12W02	115AC	3PDT	4.71	4.47	4.24	3.77	3.30
24F3054	HF12W09	12DC	3PDT	4.31	4.09	3.88	3.44	3.01
24F3055	HF12W10	24DC	3PDT	4.31	4.09	3.88	3.44	3.01

ENCLOSED TYPE

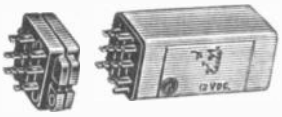
Stock No.	Type CR120	Volts	Cont. Action	1-24	25-49	50-74	75-99	100-999
24F3056	HC85J02	115AC	DPDT	6.34	6.03	5.71	5.07	4.44
24F3057	HF85J09	12DC	DPDT	6.30	5.99	5.67	5.04	4.41
24F3058	HF85J10	24DC	DPDT	6.30	5.99	5.67	5.04	4.41
24F3059	HC95W02	115AC	3PDT	7.93	7.54	7.14	6.35	5.55
24F3060	HF95W09	12DC	3PDT	7.88	7.49	7.10	6.31	5.52
24F3061	HF95W10	24DC	3PDT	7.88	7.49	7.10	6.31	5.52

DRY REED RELAYS

TUBE TYPE PLUG IN

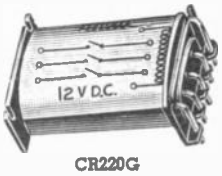
ENCLOSED PRINTED CIRCUIT

PLUG-IN REED SWITCH



WITH SOCKET

WIRE WRAP FORMS



CR220G

- No Contact Contamination
- Easy to Install
- Long Electrical, Mechanical Life
- Gold Plated Hi-Fi Contacts
- Fast Cycling

Types CR120 G and CR220 G reed switch relays may be applied where a fast operating time is required (1.0 to 1.5 milliseconds). Relays are housed in compact packages suitable for multi-relay applications. Used for computer, scanning, counting, sequencing, or data processing circuits.

TYPE CR120 G REED RELAY COIL POWER AND SIZE

Contacts	Milliwatts	Sizes CR120G1	Sizes CR120G2
1-Pole	450	$3\frac{1}{16} \times 1\frac{1}{4}''$	$2\frac{3}{32} \times 2\frac{3}{4} \times 2\frac{3}{32}''$
2-Pole	680	$3\frac{1}{16} \times 1\frac{1}{4}''$	$2\frac{3}{32} \times 2\frac{3}{4} \times 1\frac{3}{64}''$
3-Pole	1000	$3\frac{1}{16} \times 1\frac{1}{4}''$	$2\frac{3}{32} \times 2\frac{3}{4} \times 1\frac{27}{64}''$

12VDC CR120G1 OCTAL PLUG-IN

Stock No.	Type CR120	Cont. Action	1-24	25-49	50-74	75-99	100-249	250-499	500-up
24F3062	G10A03	SPST	4.90	4.65	4.41	3.92	3.43	3.18	2.94
24F3063	G10B02	DPST	7.02	6.67	6.32	5.62	4.91	4.56	4.21
24F3064	G10C02	3PST	9.25	8.79	8.33	7.40	6.48	6.01	5.55
24F3065	G10D02	SPDT	6.77	6.43	6.09	5.41	4.74	4.40	4.06
24F3066	G10202	DPDT	10.69	10.16	9.62	8.55	7.48	6.95	6.42
24F3067	G10302	3PDT	15.41	14.64	13.87	12.33	10.79	10.02	9.24

24 VDC CR120G1 OCTAL PLUG-IN

Stock No.	Type CR120	Cont. Action	1-24	25-49	50-74	75-99	100-249	250-499	500-up
24F3068	G10A03	SPST	4.90	4.65	4.41	3.92	3.43	3.18	2.94
24F3069	G10B03	DPST	7.02	6.67	6.32	5.62	4.91	4.56	4.21
24F3070	G10C03	3PST	9.25	8.79	8.33	7.40	6.48	6.01	5.55
24F3071	G10103	SPDT	6.77	6.43	6.09	5.41	4.74	4.40	4.06
24F3072	G10203	DPDT	10.69	10.16	9.62	8.55	7.48	6.95	6.42
24F3073	G10303	3PDT	15.41	14.64	13.87	12.33	10.79	10.02	9.24

12 VDC CR120G2 PRINTED CIRCUIT

Stock No.	Type CR120	Cont. Action	1-24	25-49	50-74	75-99	100-249	250-499	500-up
24F3074	G20A02	SPST	3.82	3.63	3.43	3.05	2.67	2.40	2.29
24F3075	G20B02	DPST	5.69	5.40	5.12	4.55	3.98	3.70	3.41
24F3076	G20C02	3PST	7.81	7.42	7.03	6.25	5.47	5.08	4.69
24F3077	G20102	SPDT	6.77	6.43	6.09	5.41	4.74	4.40	4.06
24F3078	G20202	DPDT	9.68	9.20	8.72	7.75	6.78	6.29	5.81
24F3079	G20302	3PDT	13.54	12.86	12.18	10.83	9.48	8.80	8.12

24 VDC CR120G2 PRINTED CIRCUIT

Stock No.	Type CR120	Cont. Action	1-24	25-49	50-74	75-99	100-249	250-499	500-up
24F3080	G20A03	SPST	3.82	3.63	3.43	3.05	2.67	2.48	2.29
24F3081	G20B03	DPST	5.89	5.40	5.12	4.55	3.98	3.70	3.41
24F3082	G20C03	3PST	7.81	7.42	7.03	6.25	5.47	5.08	4.69
24F3083	G20103	SPDT	6.08	5.98	5.48	4.87	4.26	3.95	3.65
24F3084	G20203	DPDT	13.54	12.86	12.18	10.83	9.48	8.80	8.12
24F3085	G20303	3PDT	13.54	12.86	12.18	10.83	9.48	8.80	8.12

TYPE CR220G REED RELAYS COIL POWER AND SIZE

Contacts	Milliwatts	Size CR220G600	Size CR220G700
1-Pole	350	$9\frac{1}{16} \times 2 \times \frac{3}{4}''$	$2\frac{21}{64} \times 1\frac{1}{32} \times \frac{61}{64}''$
2-Pole	600	$9\frac{1}{16} \times 2 \times 1''$	$2\frac{21}{64} \times 1\frac{1}{32} \times \frac{61}{64}''$
4-Pole	1000	$9\frac{1}{16} \times 2 \times 1\frac{1}{2}''$	$2\frac{21}{64} \times 1\frac{1}{32} \times \frac{61}{64}''$
6-Pole	1600	$9\frac{1}{16} \times 2 \times 2''$	$2\frac{21}{64} \times 1\frac{1}{32} \times 1\frac{29}{64}''$

12 VAC CR200G OPEN TYPE—PRINTED CIRCUIT

Stock No.	Type CR200G	Cont. Action	1-24	25-49	50-74	75-99	100-249	250-499	500-up
24F3086	G600Au2	SPST	2.95	2.80	2.66	2.36	2.07	1.92	1.77
24F3087	G600B02	DPST	4.36	4.14	3.92	3.48	3.05	2.83	2.61
24F3088	G600D02	4PST	7.31	6.94	6.58	5.85	5.12	4.75	4.38
24F3089	G600F02	6PST	10.19	9.68	9.17	8.15	7.13	6.62	6.11

24 VDC CR200G600 OPEN TYPE—PRINTED CIRCUIT

24F3090	G600A03	SPST	2.95	2.80	2.66	2.36	2.07	1.92	1.77
24F3091	G600B03	DPST	4.36	4.14	3.92	3.48	3.05	2.83	2.61
24F3092	G600D03	4PST	7.31	6.94	6.58	5.85	5.12	4.75	4.38
24F3093	G600F03	6PST	10.19	9.68	9.17	8.15	7.13	6.62	6.11

12 VDC CR220700 PLUG-IN

24F3094	G700A02	SPST	4.14	3.93	3.73	3.31	2.90	2.69	2.48
24F3095	G700B02	DPST	5.76	5.47	5.18	4.61	4.03	3.74	3.46
24F3096	G700D02	4PST	9.54	9.06	8.59	7.63	6.68	6.20	5.72
24F3097	G700F02	6PST	13.61	12.93	12.25	10.89	9.53	8.85	8.16

24 VDC CR220G700 PLUG-IN

24F3098	G700A03	SPST	4.14	3.93	3.73	3.31	2.09	2.69	2.48
24F3097	G700B03	DPST	5.76	5.47	5.18	4.61	4.03	3.74	3.46
24F3100	G700D03	4PST	9.54	9.06	8.59	7.63	6.68	6.20	5.72
24F3101	G700F03	6PST	13.61	12.93	12.25	10.89	9.53	8.85	8.16

SOCKETS

24F3102	GX1 Skt. for 1, 2, & 4 Pole	1.15	1.10	1.04	.92	.81	.75	.691
24F3103	GX2 Skt. for 6- Pole	1.44	1.37	1.30	1.15	1.01	.94	.864

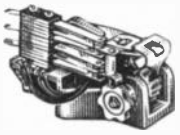
NOTE: Complete set of G.E. catalogs covering terminal boards, relays, and switches listing applications dimensions and engineering data.
39F2061 ..... **FREE**

ATTENTION INDUSTRIAL BUYERS

NEWARK carries complete lines of the top quality electronic equipment. Newark can supply all your needs, whether or not they are listed in this catalog.

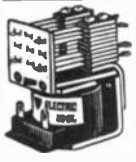
Guardian Relays

IMPULSE RATCHET RELAY—AC



Type 660. For on/off control of lighting, motors, appliances and speaker applications, among others. Each impulse (up to 10 steps per second) reverses contacts. Contact amperes 12.5 Intermittent duty coil with voltage of 115 VAC, 60 cycles. Size: 3x1¾x2 1/16". Shpg. wt., 7.5 oz.

Stock No.	Type	Cont. Comb.	Coil VAC	1-24	25-49	50-99	100-249	250-up
24F193	660-C-115A	SPDT	115	6.85	6.17	5.82	5.48	4.80
24F194	660-2C-115A	DPDT	115	7.40	6.66	6.29	5.92	5.18
24F2437	660-C-24A	SPDT	24	6.85	6.17	5.82	5.48	4.80
24F2438	660-2C-24A	DPDT	24	7.40	6.66	6.29	5.92	5.18
24F2439	660-4C-24A	4PDT	24	10.75	9.68	9.14	8.60	7.53
24F2440	660-4C-115A	4PDT	115	10.75	9.68	9.14	8.60	7.53
			Coil VDC					
24F2441	665-C-24D	SPDT	24	6.85	6.17	5.82	5.48	4.80
24F2442	665-2C-24D	DPDT	24	7.40	6.66	6.29	5.92	5.18
24F2443	665-4C-24D	4PDT	24	10.75	9.68	9.14	8.60	7.53



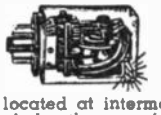
ALL-PURPOSE ECONOMY AC-DC RELAY

Types IR-640 & 645. Compact, lightweight relay capable of unusually heavy power control for its size. Contact rating at 60 cycles, 115 V non-inductive load. All contact ratings are 10 amps, except 4PDT which are 8 amps. *Normally open. Size 1 11/16x1½x1". Shpg. wt., 4 oz.

6 VOLTS AC—(Coil resistance 1.7 ohms)

Stock No.	Mfr. No.	Cont. Comb.	1-24	25-49	50-99	100-249	250-up
24F000	IR-640U-A-6A	SPST*	2.90	2.61	2.47	2.32	2.03
24F001	IR-640U-C-6A	SPDT	3.15	2.84	2.68	2.52	2.21
24F002	IR-640U-2C-6A	DPDT	3.40	3.06	2.89	2.72	2.38
24F003	IR-640U-4C-6A	4PDT	5.00	4.50	4.25	4.00	3.50
	24 VOLTS AC—(Coil resistance 24 ohms)						
24F004	IR-640U-A-24A	SPST*	2.90	2.61	2.47	2.32	2.03
24F005	IR-640U-C-24A	SPDT	3.15	2.84	2.68	2.52	2.21
24F006	IR-640U-2C-24A	DPDT	3.40	3.06	2.89	2.72	2.38
24F007	IR-640U-4C-24A	4PDT	5.00	4.50	4.25	4.00	3.50
	115 VOLTS AC—(Coil resistance 550 ohms)						
24F008	IR-640U-A-115A	SPST*	2.90	2.61	2.47	2.32	2.03
24F009	IR-640U-C-115A	SPDT	3.15	2.84	2.68	2.52	2.21
24F010	IR-640U-2C-115A	DPDT	3.40	3.06	2.89	2.72	2.38
24F011	IR-640U-4C-115A	4PDT	5.00	4.50	4.25	4.00	3.50
	230 VOLTS AC—(Coil resistance 2950 ohms)						
24F012	IR-640U-2C-230A	DPDT	4.20	3.78	3.57	3.36	2.94
	6 VOLTS DC—(Coil Resistance 12 ohms)						
24F013	IR-645-A-6D	SPST*	2.90	2.61	2.47	2.32	2.03
24F014	IR-645-C-6D	SPDT	3.15	2.84	2.68	2.52	2.21
24F015	IR-645-2C-6D	DPDT	3.40	3.06	2.89	2.72	2.38
24F016	IR-645-4C-6D	4PDT	5.00	4.50	4.25	4.00	3.50
	12 VOLTS DC—(Coil resistance 50 ohms)						
24F106	IR-645-A-12D	SPST*	2.90	2.61	2.47	2.32	2.03
24F107	IR-645-C-12D	SPDT	3.15	2.84	2.68	2.52	2.21
24F108	IR-645-2C-12D	DPDT	3.40	3.06	2.89	2.72	2.38
24F109	IR-645-4C-12D	4PDT	5.00	4.50	4.25	4.00	3.50
	24 VOLTS DC—(Coil resistance 200 ohms)						
24F017	IR-645-A-24D	SPST*	2.90	2.61	2.47	2.32	2.03
24F018	IR-645-C-24D	SPDT	3.15	2.84	2.68	2.52	2.21
24F019	IR-645-2C-24D	DPDT	3.40	3.06	2.89	2.72	2.38
24F020	IR-645-4C-24D	4PDT	5.00	4.50	4.25	4.00	3.50
	110 VOLTS DC—(Coil resistance 4,000 ohms)						
24F021	IR-645-A-110D	SPST*	3.40	3.06	2.89	2.72	2.38
24F022	IR-645-C-110D	SPDT	3.70	3.33	3.15	2.96	2.59
24F023	IR-645-2C-110D	DPDT	3.95	3.56	3.36	3.16	2.77
24F024	IR-645-4C-110D	4PDT	5.25	4.73	4.46	4.20	3.68

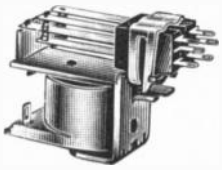
ENCLOSED PLUG-IN AC RELAY WITH NEON LAMP



Type 1210-N. A miniature neon lamp lights each time the coil is energized, or indicates a circuit fault when lamp is dark. Ideal for detecting circuit faults in relay banks, mass relay arrangements, or where relays are visibly located at intermediate switching points of the circuitry. Precludes the use of circuit testers. Coil Res. 1110 ohms. Contacts rated 10 amps at 115 VAC, 60 cycles, non-inductive load. Size, 2 25/32x1¾x1⅜. Shipping weight, 3.5 ounces. *8 pin octal plug. †11 pin plug.

Stock No.	Mfg. No.	Coil Res.	Cont. Comb.	1-24	25-49	50-99	100-249	250-up
24F191	1210N-2C115A*	1110	DPDT	6.75	6.08	5.74	5.40	4.73
24F192	1210N-3C-115A†	1110	3PDT	8.00	7.20	6.80	6.40	5.60

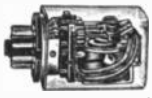
GUARDIAN 900 SERIES RELAYS



Number of parts and assembly time reduced by 50%. Eliminates cold flow. Higher voltage breakdown. Contacts D.P.D.T. can control up to 10 amps. resistive load at 115 V.A.C. Coil Values 24, 115 or 230 V.A.C. and 6, 12 or 24 V.D.C. 2 point. Single screw mounting. Unitary field and core, no gap between core and field piece. For 115v., 60 cycles. *UL Approved. Size 2 11/16 x 1 11/16 wide.

Stock No.	Type	1-9	10-24	25-49	50-99	100-up
62F1875	900-2C-24VAC					
62F1876	900-2C-115VAC*					
62F1877	900-2C-230AC	1.75	1.66	1.49	1.40	1.23
62F1878	905-2C-6VDC					
62F1879	905-2C-12VDC					
62F1880	905-2C-24VDC					
As above, but with 5/16" quick-disconnect terminals.						
24F2444	910-2C-24AC					
24F2445	910-2C-115AC					
24F2446	910-2C-230AC	1.75	1.66	1.49	1.40	1.23
24F2447	915-2C-6DC					
24F2448	915-2C-12DC					
24F2449	915-2C-24DC					

ENCLOSED PLUG-IN AC-DC RELAY



Type 1210. Type 1215. Enclosed in a transparent, lightweight Lexan case, resistant to temperatures of 200° F. 8 pin octal plug for DPDT and 11 pin for 3PDT. Contacts rated for 10 amperes at 60 cycles, 115 V. AC non-inductive load. Size 2 25/32"x1 3/8"x1 3/8". Shpg. wt., 3.5 oz.

Stock No.	Mfr. No.	AC Volts	Cont. Comb.	1-24	25-49	50-99	100-249	250-up
24F115	1210-2C-6A	6	DPDT	6.00	5.40	5.10	4.80	4.20
24F116	1210-3C-6A	6	3 PDT	7.50	6.75	6.38	6.00	5.25
24F117	1210-2C-24A	24	DPDT	6.00	5.40	5.10	4.80	4.20
24F118	1210-3C-24A	24	3PDT	7.50	6.75	6.38	6.00	5.25
24F119	1210-2C-115A	115	DPDT	6.00	5.40	5.10	4.80	4.20
24F120	1210-3C-115A	115	3PDT	7.50	6.75	6.38	6.00	5.25
24F2457	1210-2C-230A	230	DPDT	6.25	5.63	5.31	5.00	4.38
24F2458	1210-3C-230A	230	3PDT	7.75	6.98	6.59	6.20	5.43
			DC					
24F121	1215-2C-6D	6	DPDT	6.00	5.40	5.10	4.80	4.20
24F122	1215-3C-6D	6	3 PDT	7.50	6.75	6.38	6.00	5.25
24F2459	1215-2C-12D	12	DPDT	6.00	5.40	5.10	4.80	4.20
24F2460	1215-3C-12D	12	3PDT	7.50	6.75	6.38	6.00	5.25
24F123	1215-2C-24D	24	DPDT	6.00	5.40	5.10	4.80	4.20
24F124	1215-3C-24D	24	3PDT	7.50	6.75	6.38	6.00	5.25
24F2461	1215-2C-110D	110	DPDT	6.50	5.85	5.53	5.20	4.55
24F2462	1215-3C-110D	110	3PDT	8.00	7.20	6.80	6.40	5.60

MEDIUM POWER AC-DC RELAY

Type 1200. Type 1205. Suited to communications, remote control. Heavy solder lug type terminals molded in phenolic black, with barriers for over-surface insulation, built to meet U/L specifications. Contacts rated 10 amperes at 60 cycles, 115 V. AC non-inductive load. Size: 1⅝"x1"x1½". Mounting single mtg.hole 6-32 TAP. 2.5 oz.

Stock No.	Mfr. No.	AC Volts	Cont. Comb.	1-24	25-49	50-99	100-249	250-up
24F833	1200-2C-6A	6	DPDT	3.75	3.38	3.19	3.00	2.63
24F834	1200-3C-6A	6	3PDT	4.25	3.83	3.61	3.40	2.98
24F835	1200-2C-24A	24	DPDT	3.75	3.38	3.19	3.00	2.63
24F836	1200-3C-24A	24	3PDT	4.25	3.83	3.61	3.40	2.98
24F837	1200-2C-115A	115	DPDT	3.75	3.38	3.19	3.00	2.63
24F838	1200-3C-115A	115	3PDT	4.25	3.83	3.61	3.40	2.98
24F2450	1200-2C-230A	230	DPDT	4.00	3.60	3.40	3.20	2.80
24F2451	1200-3C-230A	230	3DPT	4.50	4.05	3.83	3.60	3.15
			DC					
24F839	1205-2C-6D	6	DPDT	3.40	3.06	2.89	2.72	2.38
24F840	1205-3C-6D	6	3DPT	3.85	3.47	3.27	3.08	2.70
24F2452	1205-2C-12D	12	DPDT	3.40	3.06	2.89	2.72	2.38
24F2453	1205-3C-12D	12	3PDT	3.85	3.47	3.27	3.08	2.70
24F841	1205-2C-24D	24	DPDT	3.40	3.06	2.89	2.72	2.38
24F842	1205-3C-24D	24	3PDT	3.85	3.47	3.27	3.08	2.70
24F2455	1205-2C-110D	110	DPDT	3.75	3.38	3.19	3.00	2.63
24F2456	1205-3C-110D	110	3PDT	4.25	3.83	3.61	3.40	2.98

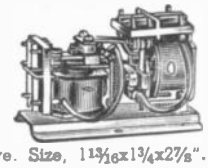
RESET OVERLOAD DC RELAY

Type X300-ER. Protects from current surges and continuous overloads. Remote panel installation of control potentiometer simplifies adjustment of relay to operate on any current value from 250 to 750 ma. Auxiliary for pilot light indication of "overload" or "clear" position. Insulation, coil to ground rated 3,000 V. Size: 4¾x2x1 15/16". Shpg. wt. 13 oz.

Stock No.	1-24	25-49	50-99	100-249	250-up
24F852	10.00	8.55	8.50	8.00	7.00

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

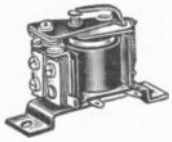
INTERLOCKING RELAY 115V. AC



Two interlocking AC relays in sturdy metal frame bracket. Used to maintain circuits continuously without coil power consumption. Unit is electrically pulse operated with mechanical hold and electrical release. Contacts rated at 10 amps., 60 cps. non-inductive. Size, 1 13/16 x 1 3/4 x 2 7/8". 4PDT contacts. Shipping wt., 5.5 oz.

Stock No.	Mfg. No.	1-24	25-49	50-99	100-249	250-up
24F868	IR-1200/1200-4C-115A	10.40	9.36	8.84	8.32	7.28

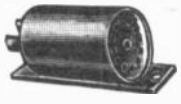
HEAVY DUTY INDUSTRIAL RELAY—AC



Type IR-220. Rugged unit breaks up to 20 amperes, at 230 volts. Armature is equipped with Phenolic contact mounting block carrying 5/16" dual contacts. Phenolic is tested at 1500 volts breakdown to ground. Contacts are silver alloy. Relay is available in SPST-NO contact combination only. Contact rating at 60 cycles, 20 amps, 230 V non-inductive load. Size: 3x1 7/8x1 3/4". Shipping wt., 5.5 oz.

Stock No.	Mfr. No.	Volts	1-24	25-49	50-99	100-249	250-up
24F052	IR-220A-24A	24	4.50	4.05	3.83	3.60	3.15
24F053	IR-220A-115A	115	5.05	4.55	4.29	4.04	3.54
24F054	IR-220A-230A	230	5.55	5.00	4.72	4.44	3.89

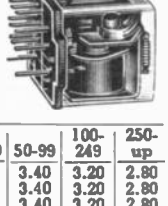
ROTOMITE STEPPER-DC



Continuous rotation on 12 positions up to 20 step per sec. Stepping mechanism, coils and contacts completely (metal) enclosed. 3 amps resistive, 1 amp inductive (50% P.F.). Tests well over 1,000,000 operations. App: bus. machines, lighting, sorting, computer circuits, and counting. Size: 2"L.x1 3/16"D. Shpg. wt., 5 oz.

Stk. No.	Mfg. No.	VDC	1-24	25-49	50-99	100-249	250-up
24F125	IR-705-12P-6D	6	6.60	5.94	5.61	5.28	4.62
24F126	IR-705-12P-12D	12					
24F127	IR-705-12P-24D	24					

10 AMPERE VERSATILE ENCLOSED RELAY



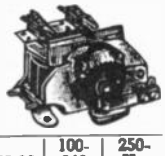
Reduced height and cost by elimination of radio-type plug. Features "Uni-Guard," loop moving blades; snap lock cover; terminals can be used as solder lug, AMP Faston 110 Series quick connect or socket plug in; built to U/L requirements; with mounting bracket. *3 pole.

Stk. No.	Type	Coil Volt.	1-24	25-49	50-99	100-249	250-up
62F1881	IR-1220-2C-6A	6AC	4.00	3.60	3.40	3.20	2.80
62F1882	IR-1220-2C-24A	24AC	4.00	3.60	3.40	3.20	2.80
62F1883	IR-1220-2C-115A	115AC	4.00	3.60	3.40	3.20	2.80
62F1884	IR-1220-2C-230A	230AC	4.25	3.83	3.61	3.40	2.98
62F1885	IR-1220-3C-6A*	6AC	4.50	4.05	3.83	3.60	3.15
62F1886	IR-1220-3C-24A*	24AC	4.50	4.05	3.83	3.60	3.15
62F1887	IR-1220-3C-115A*	115AC	4.50	4.05	3.83	3.60	3.15
62F1888	IR-1220-3C-230A*	230AC	4.75	4.28	4.04	3.80	3.33
62F1889	IR-1225-2C-6D	6DC	4.00	3.60	3.40	3.20	2.80
62F1890	IR-1225-2C-12D	12DC	4.00	3.60	3.40	3.20	2.80
62F1891	IR-1225-2C-24D	24DC	4.00	3.60	3.40	3.20	2.80
62F1892	IR-1225-2C-110D	110DC	4.25	3.83	3.61	3.40	2.98
62F1893	IR-1225-3C-6D*	6DC	4.50	4.05	3.83	3.60	3.15
62F1894	IR-1225-3C-12D*	12DC	4.50	4.05	3.83	3.60	3.15
62F1895	IR-1225-3C-24D*	24DC	4.50	4.05	3.83	3.60	3.15
62F1896	IR-1225-3C-110D	110DC	4.75	4.28	4.04	3.80	3.33

IR-1220 SOCKET. Socket terminal lugs can be soldered to or will accept Series 110 quick connects.

62F1911 ..... 1-9 ..... .60 10 up ..... .55

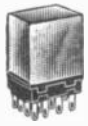
ADD AND SUBTRACT STEP RELAY



Type IR-M.A.S. Add and Subtract Stepper. Guardian Steppers intermittent duty units at 10% duty cycle, max. energization single period, 5 min. Coil 115 VAC, 10 W. No. of pts: 30. Zero position switch only. 1 15/16 x 3 1/8 x 3". Shpg. wt., 11 oz.

Stock No.	Mfr. Type	VA.	1-24	25-49	50-99	100-249	250-Up
24F772	IR-M.A.S. 115A	15	17.35	15.62	14.75	13.88	12.15

● *NEW* SERIES 1300 AND 1305 PLUG IN RELAYS



Especially suitable for computers, data processing equipment, logic systems, and business machines. 4PDT with contacts rated at 3 amps at 115 VAC or 30 VDC resistive. Power requirements: 1.2 Volt-Amps at nominal voltage for AC and 0.9 watts for DC. Temperature range: —45 to +70°C. Lexan Cover. Silver, gold flashed. 1 17/64 x 53/64 x 1 7/64". Shpg. wt., 1½ ounces.

Type 1300. A.C.
Type 1305. D.C.

Stock No.	Type	Nom. Volt.	Coil Res.*	1-24	25-49	50-99	100-249	250-Up
24F025	1300-4C-6A	6AC	10.5	5.50	4.95	4.67	4.40	3.85
24F026	1300-4C-12A	12AC	45	5.50	4.95	4.67	4.40	3.85
24F027	1300-4C-24A	24AC	160	5.50	4.95	4.67	4.40	3.85
24F028	1300-4C-115A	115AC	3770	5.85	5.26	4.97	4.68	4.09
24F029	1305-4C-6D	6DC	40	4.50	4.05	3.88	3.60	3.15
24F030	1305-4C-12D	12DC	160	4.50	4.05	3.88	3.60	3.15
24F031	1305-4C-24D	24DC	650	4.50	4.05	3.88	3.60	3.15
24F032	1305-4C-110D	110DC	11000	5.25	4.72	4.46	4.20	3.67

*Ohms (DC)

SOLID STATE TIME DELAY RELAYS

Series TDO

Series TD

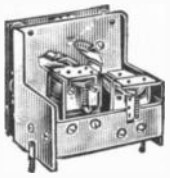
Series TDO-62C30-115A. 2PDT 5 amp. commercial time delay relay. 10 turn pot .5 to 30 seconds. Recycling time: 100 milliseconds. Accuracy to 10% of a nominal setting over the temperature range. Plug-in mtg. Termination: octal socekt. Temperature —10° F to +100o F. 115 VAC ±10% 50/60 cycles.

Stock No.	1-49	50-99	100-Up
62F1912	16.32	15.69	14.12

Series TD. High reliability; all silicon semiconductors, precision tantalum capacitors. High resolution 15 turn pot. Recycle-time: 50 milliseconds. Accuracy: ±5% of nominal setting over complete voltage and temperature range. Repeatability: ±1% of nominal setting. 3PDT—10 amps. Temperature: —40°F to +150°F.

Stock No.	Type No.	Coil Volts	Adj. Range (Sec)	1-49	50-99	100-Up
62F1913	TD-33C15-24D	24VDC	1-15	24.20	21.88	19.69
62F1914	TD-33C60-24D	24VDC	10-60	25.19	22.67	20.40
62F1915	TD-33C180-24D	24VDC	50-180	32.09	29.88	26.90
62F1916	TD-63C15-115A	115VAC	1-15	29.70	26.73	24.06
62F1917	TD-63C60-115A	115VAC	10-60	30.06	27.54	24.79
62F1918	TD-63C180-115A	115VAC	50-180	36.85	33.16	29.84

ELECTRICAL RESET STEP RELAY



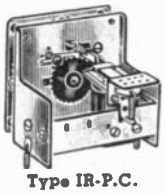
Type IR-P.E.R.

Type M.E.R.

Type IR-P.E.R. Positive mechanical stops available to limit "steps." Resets when coil energized. Coil V 115 VAC; 45W (stepping coil), 15W (reset coil). No. of pts: 40. 36 active contacts. Size 3x3 3/8x3 9/16. Wt. 22 oz. **Type M.E.R.** Reset stepper with positive acting interlock, actuated by magnet. Positive reset on one-hundredth of second. Coil V 115 VAC. 18W stepping coil, 7W reset coil. No. of pts: 24. 22 active contacts. Size 3 1/4x2 9/16x3 1/9. Wt. 11.5 oz.

Stk. No.	Type	VA.	1-24	25-49	50-99	100-249	250-Up
24F766	IR-PER-115A	70-25	26.25	23.63	22.31	21.00	18.37
24F865	MER-115A	30-9	15.75	14.18	13.39	12.60	11.03
62F1919	MER-24DC	30-9	15.75	14.18	13.39	12.60	11.03

CONTINUOUS ROTATION STEP RELAY



Type IR-P.C.

Type IR-M.C.

Type IR-P.C. Oilite shaft bearing. Beryllium copper pawl control shutter. Solder beaded for easy soldering. Life expectancy at 4,000,000 steps; operate at 15% below, or 10% above voltage. Coil. 115 VAC. 45W; r.o. of pts: 40. 40 active contacts. Size 3 3/8x3x3 9/16. Wt. 17 oz. **Type IR-M.C.** Smaller rotation stepper similar to P.C.; life expectancy 2,000,000 steps. Coil V 115 VAC, 18W. No. pts: 24. 24 active contacts. Size: 2 9/16x3x3 1/4.

Stk. No.	Mfr. Type	VA.	1-24	25-49	50-99	100-249	250-up
24F762	IR-PC-115A	70	19.95	17.96	16.96	15.96	13.97
24F764	IR-MC-115A	30	14.75	13.28	12.54	11.80	10.32

Guardian Relays

UNIVERSAL "200" SERIES RELAYS

With coil assembly (coil and field piece) and contact assembly (switch blades, armature, return spring, and mntg. bracket). Contacts: 60 cy. AC non-induct. Stnd. size: 2⅞ x 1¾ x 1". Midget: 1⅝" long. Mntg. (all 200 relays): (2) 6-32 mtg. holes. .687" ctr. 4 oz.

Stk. No.	Type No.	Volts	1-24	25-49	50-99	100-249	250-up
24F810	200- 6A	6AC	1.85	1.67	1.57	1.48	1.30
24F811	200- 12A	12AC					
24F812	200- 24A	24AC					
24F813	200-115A	115AC	2.15	1.94	1.83	1.72	1.51
24F814	200-230A	230AC	2.85	2.57	2.42	2.28	2.00
24F820	200- 6D	6DC	2.00	1.80	1.70	1.60	1.40
24F821	200- 12D	12DC					
24F822	200- 24D	24DC					
24F823	200- 32D	32DC					
24F824	200-110D	110DC	2.65	2.39	2.25	2.12	1.86
24F815	200-5000D	5000Ω	2.30	2.07	1.96	1.84	1.61
24F829	200 10000D	10000Ω	2.65	2.39	2.25	2.12	1.86

CONTACT SWITCH ASSEMBLIES

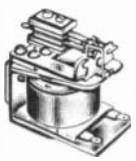
*Rating 8 amps. **Rating 10 amps. †Rating 12.5 amps.

Stk. No.	Type	Contacts	1-24	25-49	50-99	100-249	250-up
24F800	200-1	SPDT*	1.60	1.44	1.36	1.28	1.12
24F801	200-2	DPDT*	2.10	1.89	1.79	1.68	1.47
24F830	200-3	DPDT	2.15	1.94	1.88	1.72	1.50
24F802	200-4	DPDT†	2.35	2.12	2.00	1.88	1.65
24F805	200-5	4PDT*	3.70	3.33	3.15	2.96	2.59
24F803	200-M1	Midget SPDT	1.50	1.35	1.28	1.20	1.05
24F804	200-M2	Midget DPDT**	1.85	1.67	1.57	1.48	1.30
24F831	200-M3	DPDT	1.95	1.76	1.66	1.56	1.37
24F806	200-M5	Midget 4PDT*	3.00	2.70	2.55	2.40	2.10

PLATE CIRCUIT RELAY

Unit is constructed with extra long coil for greater sensitivity. Adaptable to voltage operating as well as sensitive plate circuit control installations. Rated at 10 amps. Coil impregnated for reliability and longer life. Average power requirement, 0.2 watts. DPDT Silver contacts. Size, 2½"x2"x1½". Wt. 5.5 oz.

Stk. No.	Mfg. No.	Coil Res. Ohms	Oper. Mils	1-24	25-49	50-99	100-249	250-up
24F055	IR-625-2.5	2,500	9Ma.	4.45	4.01	3.78	3.56	3.12
24F056	IR-625-5	5,000	5 3Ma.	4.75	4.28	4.04	3.80	3.33
24F057	IR-625-10	10,000	1.5Ma.	5.80	5.22	4.93	4.64	4.06



AC-60 CYCLE LATCHING ON/OFF RELAY

Type IR-610L. Recommended for positive ON/OFF control of positioning devices, remote controls, lighting circuits and many additional applications. Impulse as short as 20 M.S. energizes coil to reverse position of snap-action switches. Holds last position of switch with coil de-energized. Contacts rated for 5 amperes, at 60 cycles, 115 V. AC non-inductive load. Size, 2⅛" x 1⅛" x 1⅝". 4 oz.

St. No.	Type	Comb.	1-24	25-49	50-99	100-249	250-up
24F097	IR-640L-A-115A	SPST	4.45	4.01	3.78	3.56	3.12
24F098	IR-640L-C115A	SPDT	4.75	4.28	4.04	3.80	3.33

ENGINEER'S CONTACT SWITCH KIT

Indispensable to those who design, build, repair or test electrical controls. Contains large assortment of switch blades, contacts, separators, adapters, fish papers, bushings, etc. All standard high-quality Guardian parts. Shpg. wt., 1¾ lbs.

24F094. NET **11.50**

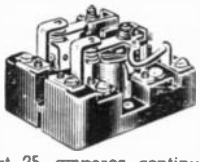
32-POLE DC RELAY

Type IR-805-S. Group selector relay can simultaneously make common up to 32 circuits. All circuits insulated from ground. Contact blades molded in thermosetting phenolic. Phenolic plunger housing, 32 poles made common upon energization. Coil Res. Ohms 72. Size, 2 1/32"x1 17/32"x2⅛". Shpg. wt., 6 oz.

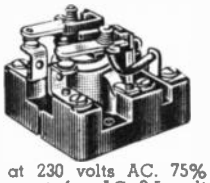
Stock No.	Type	Volts	1-24	25-49	50-99	100-249	250-up
24F058	IR-805-S	24 DC	5.00	4.50	4.25	4.00	3.50

SERIES 2200 & 2210 POWER RELAYS

2200

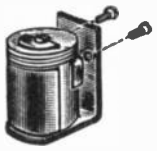


2210



Rated at 25 amperes continuous duty at 230 volts AC. 75% power factor. Operating power requirement for AC 9.5 volt amperes, 60 cycles. Coil drain approximately .080 amperes at 115 volts, 60 cycles. U/L approved.

Stk. No.	Mfg. No.	1-24	25-49	50-99	100-249	250-up
24F816	2200U-DPDT-6	6.75	6.08	5.74	5.40	4.73
24F817	2200U-DPDT-24					
24F818	2200U-DPDT-115					
24F819	2200U-DPDT-230	7.25	6.53	6.16	5.80	5.08
24F110	2210U-DPST-N.O.-6	5.75	5.18	4.89	4.60	4.03
24F111	2210U-DPST-N.O.-24	5.75	5.18	4.89	4.60	4.03
24F112	2210U-DPST-N.O.-115	5.75	5.18	4.89	4.60	4.03
24F113	2210U-DPST-N.O.-230	6.10	5.49	5.19	4.88	4.27



INTERCHANGEABLE COIL ASSEMBLIES

By removing two easily accessible screws, coil assembly can be replaced by coil of another value. Complete instructions for this operation are included with each unit. Solder connections are not required when changing coils. MTG. 2 holes for 8/32 screws on 1⅞" cirs. Shpg. wt., 6 oz.

AC REPLACEMENT COILS—FOR EITHER RELAY

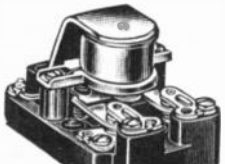
Stk. No.	Type No.	1-24	25-49	50-99	100-249	250-up
24F825	2200-6A	2.35	2.12	2.00	1.88	1.65
24F827	2200-115A					
24F828	2200-230A	2.65	2.39	2.25	2.12	1.86

POWER RELAY REPLACEMENT CONTACT SWITCH PARTS

Available for series 2200 only—Replacement Contact Switch Parts for easy right or left S.P.D.T. assembly. Package contains one normally open and one normally closed contact bracket, complete moving blade and terminal. Left or Right Switch Assemblies determined by viewing relay from armature hinge end with contacts up. Cur. Cap. 25 amps. Shpg. wt. 4 oz.

24F847	CS-2200-Left	1.95	1.76	1.66	1.56	1.37
24F848	CS-2200-Right	1.95	1.76	1.66	1.56	1.37

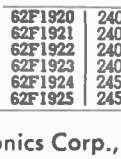
SERIES 2400 AC AND 2405 DC POWER RELAYS



For power applications requiring up to 15 ampere conntacts. Inverted coil construction protects armature and contacts. Standard DPDT contacts rated for 15 amperes non-inductive, or 1 H.P. at 115/120 volts, 60 Hertz. Armature extension permits manual circuit testing. Screw type terminals. Recessed auxiliary switch, up to S.P.D.T. for 10 ampere operation; available for both A.C. and D.C. versions. Size: 3 5/16" x 2½" x 2 1/16". Mounting: Two 196" Dia. holes on 1⅞" centers. Shpg. wt., 8 oz. *10 amps AC. U/L approved.

Stk. No.	Mfg. No.	1-24	25-49	50-99	100-249	250-up
24F213	2400U-DPDT-6VAC	6.25	5.63	5.31	5.00	4.38
24F214	2400U-DPDT-24VAC					
24F215	2400U-DPDT-115VAC					
24F216	2400U-DPDT-230VAC	6.50	5.85	5.53	5.20	4.55
24F2463	2405-DPDT-6VDC	6.25	5.63	5.31	5.00	4.38
24F2464	2405-DPDT-12VDC					
24F2465	2405-DPDT-24VDC					
24F2466	2405-DPDT-110VDC	6.75	6.08	5.74	5.40	4.73
24F217	2400-SPDT-AUX* Auxiliary Switch	1.35	1.22	1.15	1.08	.95

SERIES 240 AC & 245 DC RELAYS

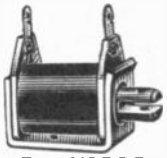


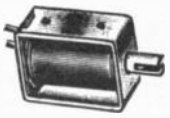
Contact rating up to 4PDT, is 15 amps, 115 V, 60 cyc. Pwr. Req.: AC—6 volt amps, 60 cyc. DC—1.5 watts min.; 3 watts max. AC coils operates at —15% of rated volt.; will not overheat on contin. duty at ±10% of rated volt. DC coils operate on values up to 10% above; 20% below rated voltage.

62F1920	240U-A-24A	3.15	2.84	2.68	2.52	2.21
62F1921	240U-2C-24A	3.95	3.56	3.36	3.16	2.77
62F1922	240U-A-115A	3.15	2.84	2.68	2.52	2.21
62F1923	240U-2C-115A	3.95	3.56	3.36	3.16	2.77
62F1924	245U-A-24D	3.15	2.84	2.68	2.52	2.21
62F1925	245U-2C-24D	3.95	3.56	3.36	3.16	2.77

AC AND DC SOLENOIDS

Type 1A1


Type 34AC-DC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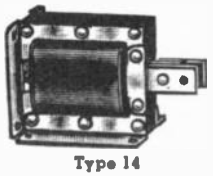
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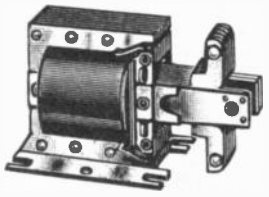
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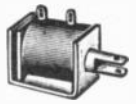
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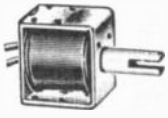
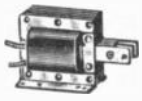
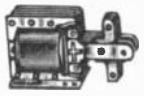
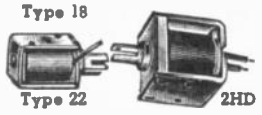

Type 2 and 4

4HD-DC


Type 12


Type 16


Type 22 2HD AC-DC

Type 28

Available in both intermittent and continuous duty types. Intermittent types should not be energized for more than 5 consecutive minutes, or be permitted to rise more than 85° C. above 24° C. ambient, without giving sufficient time to cool between operation cycles. Continuous duty types are designed so they will not rise more than 85° C. above the 24° C. ambient temperature when operated at rated load. Plunger has slotted end with ⅛" diameter hole for coupling.

***Pull Data Obtained During "Cold" Operation, when plunger is down.**

Stock No.	Type	Volts	Current	Duty	Ohms	Amps	Adj. Stroke (in.)	Max. *Lift (oz.)	SIZE Height (in.)	SIZE Length (in.)	SIZE Width (in.)	Shpg. Wt. (oz.)	1-24	25-94	50-99	100-249	250-up
24F870	1A1	115	AC	Inter.	300	.17	⅛-½	8	1 1/16	1¾	15/16	4.5	3.15	2.84	2.68	2.52	2.21
24F871	1A1	115	AC	Cont.	675	.076	⅛-⅜	3	1 1/16	1¾	15/16	4.5	3.15	2.84	2.68	2.52	2.21
24F078	2	115	AC	Inter.	60	.50	⅛-⅞	33	1⅝	1 9/16	1 7/16	10	3.68	3.31	3.13	2.94	2.58
24F079	2	115	AC	Cont.	166	.155	⅛-⅞	10.5	1⅝	1 9/16	1 7/16	10	3.68	3.31	3.13	2.94	2.58
62F1897	2HD	115	AC	Inter.	39	.6	⅛-¾	38	1 1/16	1 23/32	1 7/16	13	8.66	7.79	7.36	6.93	6.06
62F1898	2HD	115	AC	Cont.	113	.13	⅛-¾	17	1 1/16	1 23/32	1 7/16	13	8.66	7.79	7.36	6.93	6.06
24F872	4	115	AC	Inter.	37	.64	⅛-1	24	1⅝	2	1 7/16	14.5	4.20	3.78	3.57	3.36	2.94
24F873	4	115	AC	Cont.	133	.14	⅛-½	8	1⅝	2	1 7/16	14.5	4.20	3.78	3.57	3.36	2.94
24F890	11	24	AC	Inter.	5.1	1.10	⅛-1	26	1 3/16	1 5/16	1 27/32	7.5	3.15	2.84	2.68	2.52	2.21
24F080	11	24	AC	Cont.	12	.33	⅛-1	10	1 3/16	1 5/16	1 27/32	7.5	3.15	2.84	2.68	2.52	2.21
24F081	11	115	AC	Inter.	125	.225	⅛-1	26	1 3/16	1 5/16	1 27/32	7.5	3.15	2.84	2.68	2.52	2.21
24F082	11	115	AC	Cont.	300	.072	⅛-1	10	1 3/16	1 5/16	1 27/32	7.5	3.15	2.84	2.68	2.52	2.21
24F086	12	115	AC	Inter.	100	.27	⅛-1	32	1 7/16	1⅝	1 3/16	6	4.46	4.01	3.79	3.57	3.12
24F087	12	115	AC	Cont.	150	.155	⅛-⅞	22	1 7/16	1⅝	1 3/16	6	4.46	4.01	3.79	3.57	3.12
24F874	14	115	AC	Inter.	11	1.4	⅛-1½	110	2 1/16	2 7/16	1 7/16	19	6.04	5.44	5.13	4.83	4.23
24F875	14	115	AC	Cont.	18	.52	⅛-1½	65	2 1/16	2 7/16	1 7/16	19	6.04	5.44	5.13	4.83	4.23
24F090	16	115	AC	Inter.	41	54	⅛-¾	96	1 7/16	1⅝	1⅛	7.5	3.68	3.31	3.13	2.94	2.58
24F876	16	115	AC	Cont.	85	.19	⅛-⅝	50	1 3/16	1⅝	1⅛	7.5	3.68	3.31	3.13	2.94	2.58
24F892	16	230	AC	Inter.	224	.230	⅛-¾	96	1 7/16	1⅝	1⅛	7.5	3.94	3.55	3.35	3.15	2.76
24F893	16	230	AC	Cont.	350	.110	⅛-⅝	50	1 7/16	1⅝	1⅛	7.5	3.94	3.55	3.35	3.15	2.76
24F092	18	115	AC	Inter.	8.8	1.45	⅛-1	280	2 1/16	2½	1 13/16	16.5	4.99	4.49	4.24	3.99	3.49
24F093	18	115	AC	Cont.	19.7	.39	⅛-1	145	2 1/16	2½	1 13/16	16.5	4.99	4.49	4.24	3.99	3.49
24F894	18	230	AC	Inter.	45	.590	⅛-1	280	2 1/16	2½	1 13/16	16.5	5.25	4.73	4.46	4.20	3.68
24F895	18	230	AC	Cont.	78	.20	⅛-1	145	2 1/16	2½	1 13/16	16.5	5.25	4.73	4.46	4.20	3.68
24F754	24	115	AC	Inter.	310	.130	1/16-⅝	16	59/64	1¼	1	3.0	3.41	3.07	2.90	2.73	2.39
24F755	24	115	AC	Cont.	500	.07	1/16-⅝	10.5	59/64	1¼	1	3.0	3.41	3.07	2.90	2.73	2.39
24F878	1A1	24	DC	Inter.	42.6	.56	⅛-⅜	5	1 1/16	1¾	15/16	4.5	2.89	2.60	2.46	2.31	2.02
62F1905	34	115	AC	Inter	400	.11	1/16-½	15	1 7/64	1⅛	¾	2.5	2.31	2.08	1.96	1.85	1.62
62F1906	34	115	AC	Cont	865	.055	1/16-½	7	1 7/64	1⅛	¾	2.5	2.31	2.08	1.96	1.85	1.62
24F879	1A1	24	DC	Cont.	74.4	.32	⅛-¼	2	1 1/16	1¾	15/16	4.5	2.89	2.60	2.46	2.31	2.02
24F880	1A1	115	DC	Inter.	803	.14	⅛-⅜	5	1 1/16	1¾	15/16	4.5	3.41	3.07	2.90	2.73	2.39
24F881	1A1	115	DC	Cont.	2070	.05	⅛-¼	2	1 1/16	1¾	15/16	4.5	3.41	3.07	2.90	2.73	2.39
24F885	4	24	DC	Inter.	15	1.6	⅛-1	90	1⅝	2	1 7/16	14.5	4.20	3.78	3.57	3.36	2.94
24F886	4	24	DC	Cont	50	.48	⅛-⅞	55	1⅝	2	1 7/16	14.5	4.20	3.78	3.57	3.36	2.94
24F887	4	115	DC	Inter.	346	.33	⅛-1	90	1⅝	2	1 7/16	14.5	4.46	4.01	3.79	3.57	3.12
24F888	4	115	DC	Cont.	1210	.09	⅛-⅞	55	1⅝	2	1 7/16	14.5	4.46	4.01	3.79	3.57	3.12
24F889	11	6	DC	Inter.	2	3.00	⅛-⅞	34	1 3/16	1 5/16	1 27/32	7.5	3.15	2.84	2.68	2.52	2.21
24F083	11	6	DC	Cont.	5	1.2	⅛-⅝	25	1 3/16	1 5/16	1 27/32	7.5	3.15	2.84	2.68	2.52	2.21
24F891	11	24	DC	Inter.	32	.750	⅛-⅞	34	1 3/16	1 5/16	1 27/32	7.5	3.15	2.84	2.68	2.52	2.21
24F084	11	24	DC	Cont.	72	.333	⅛-⅝	25	1 3/16	1 5/16	1 27/32	7.5	3.15	2.84	2.68	2.52	2.21
24F756	22	6	DC	Inter.	4.7	1.27	1/16-⅜	24	¾	1⅛	¾	2.5	2.94	2.65	2.50	2.35	2.06
24F757	22	6	DC	Cont.	9	.667	1/16-¼	13	¾	1⅛	¾	2.5	2.94	2.65	2.50	2.35	2.06
24F758	22	24	DC	Inter.	60	.4	1/16-⅜	24	¾	1⅛	¾	2.5	2.94	2.65	2.50	2.35	2.06
24F759	22	24	DC	Cont.	144	.167	1/16-¼	13	¾	1⅛	¾	2.5	2.94	2.65	2.50	2.35	2.06
24F176	28	24	AC	Inter.	7.5	.900	1/16-½	35	1 5/16	1⅛	15/16	3.5	3.15	2.84	2.68	2.52	2.21
24F177	28	24	AC	Cont.	17.4	.340	1/16-½	20	1 3/16	1⅛	15/16	3.5	3.15	2.84	2.68	2.52	2.21
24F178	28	115	AC	Inter.	220	.160	1/16-½	35	1 3/16	1⅛	15/16	3.5	3.41	3.07	2.90	2.73	2.39
24F179	28	115	AC	Cont.	400	.077	1/16-½	20	1 3/16	1⅛	15/16	3.5	3.41	3.07	2.90	2.73	2.39
24F218	28	6	DC	Inter.	3.3	1.80	1/16-½	41	1 3/16	1⅛	15/16	3.5	2.94	2.65	2.50	2.35	2.06
24F219	28	6	DC	Cont.	7.7	.78	1/16-⅜	24	1 3/16	1⅛	15/16	3.5	2.94	2.65	2.50	2.35	2.06
24F220	28	12	DC	Inter.	13.	.92	1/16-½	41	1 3/16	1⅛	15/16	3.5	2.94	2.65	2.50	2.35	2.06
24F221	28	12	DC	Cont.	27	.45	1/16-⅜	24	1 3/16	1⅛	15/16	3.5	2.94	2.65	2.50	2.35	2.06
24F222	28	24	DC	Inter.	50	.48	1/16-½	41	1 3/16	1⅛	15/16	3.5	2.94	2.65	2.50	2.35	2.06
24F223	28	24	DC	Cont.	104	.23	1/16-⅜	24	1 3/16	1⅛	15/16	3.5	2.94	2.65	2.50	2.35	2.06
62F1899	2HD	24	DC	Inter.	20	1.2	⅛-¾	120	1 1/16	1 23/32	1 7/16	13	8.93	8.04	7.59	7.14	6.25
62F1900	2HD	24	DC	Cont.	60	.4	⅛-¾	60	1 1/16	1 23/32	1 7/16	13	8.93	8.04	7.59	7.14	6.25
62F1901	4HD	24	DC	Inter.	14	1 7	⅛-¾	156	1⅝	2 1/64	1 7/16	15	6.41	5.77	5.45	5.13	4.49
62F1902	4HD	24	DC	Cont.	50	.092	⅛-¾	86	1⅝	2 1/64	1 7/16	15	6.41	5.77	5.45	5.13	4.49
62F1903	4HD	110	DC	Inter.	330	.48	⅛-¾	156	1⅝	2 1/64	1 7/16	15	6.41	5.77	5.45	5.13	4.49
62F1904	4HD	110	DC	Cont.	1200	.33	⅛-¾	86	1⅝	2 1/64	1 7/16	15	6.41	5.77	5.45	5.13	4.49
62F1907	34	6	DC	Inter.	4.3	1.4	1/16-½	17	1 7/64	1⅛	¾	2.5	2.31	2.08	1.96	1.85	1.62
62F1908	34	6	DC	Cont.	9.1	.66	1/16-½	8.5	1 7/64	1⅛	¾	2.5	2.31	2.08	1.96	1.85	1.62
62F1909	34	24	DC	Inter.	66	.36	1/16-½	17	1 7/64	1⅛	¾	2.5	2.31	2.08	1.96	1.85	1.62
62F1910	34	24	DC	Cont.	145	.16	1/16-½	8.5	1 7/64	1⅛	¾	2.5	2.31	2.08	1.96	1.85	1.62

POTTER & BRUMFIELD General Purpose Relays

KA GENERAL PURPOSE RELAY

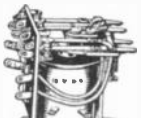
For small power loads; silver contacts rated at 5 amps. "G" suffix indicates silver cadmium contacts on movables rated 10 amps. Mounting #6-32 stud with locating tab. Size: 1 15/32"x 1 21/32"x1 11/16". KAP-enclosed model protected by clear plastic dust cover. Terminals: 8 or 11 pin plug. U. L. listed.

Stock No.	Type	Action	Volt	1-24	25-50	51-99	100-249
24F545	KA5AY	SPDT	6v. AC				
24F1308	KA5AY	SPDT	12v. AC	3.35	3.18	3.02	2.35
24F593	KA5AY	SPDT	24v. AC				
24F515	KA5AY	SPDT	120v. AC				
24F547	KA11AY	DPDT	6v. AC				
24F1309	KA11AY	DPDT	12v. AC	4.05	3.85	3.65	2.84
24F594	KA11AY	DPDT	24v. AC				
24F517	KA11AY	DPDT	120v. AC				
24F1310	KA11AY	DPDT	240v. AC				
24F549	KA14AY	3PDT	6v. AC				
24F1213	KA14AY	3PDT	12v. AC	4.45	4.23	4.01	3.12
24F595	KA14AY	3PDT	24v. AC				
24F519	KA14AY	3PDT	120v. AC				
24F552	KA5DY	SPDT	6v. DC				
24F1214	KA5DY	SPDT	12v. DC	3.20	3.04	2.88	2.24
24F596	KA5DY	SPDT	24v. DC				
24F1311	KA5DY	SPDT	110v. DC	3.85	3.66	3.47	2.70
24F553	KA11DY	DPDT	6v. DC				
24F1215	KA11DY	DPDT	12v. DC	3.55	3.37	3.20	2.49
24F597	KA11DY	DPDT	24v. DC				
24F554	KA11DY	DPDT	110v. DC	4.20	3.99	3.78	2.94
24F523	KA14DY	3PDT	6v. DC				
24F1216	KA14DY	3PDT	12v. DC	4.05	3.85	3.65	2.84
24F598	KA14DY	3PDT	24v. DC				
24F1217	KA14DY	3PDT	110v. DC	4.65	4.42	4.19	3.26
24F1665	KA5AG	SPDT	6v. AC				
24F1666	KA5AG	SPDT	12v. AC	3.40	3.23	3.06	2.38
24F1667	KA5AG	SPDT	24v. AC				
24F1668	KA5AG	SPDT	120v. AC				
24F1669	KA5AG	SPDT	240v. AC	3.85	3.66	3.47	2.70
24F1670	KA11AG	DPDT	6v. AC				
24F1671	KA11AG	DPDT	12v. AC	4.15	3.94	3.74	2.91
24F1672	KA11AG	DPDT	24v. AC				
24F1673	KA11AG	DPDT	120v. AC				
24F1674	KA11AG	DPDT	240v. AC	4.55	4.32	4.10	3.19
24F1675	KA14AG	3PDT	6v. AC				
24F1676	KA14AG	3PDT	12v. AC	4.60	4.37	4.14	3.22
24F1677	KA14AG	3PDT	24v. AC				
24F1678	KA14AG	3PDT	120v. AC				
24F1679	KA14AG	3PDT	240v. AC	5.05	4.80	4.55	3.54

SERIES KAP GENERAL PURPOSE RELAYS

24F2565	KAP11AY	DPDT	24VAC	6.35	6.03	5.72	4.45
24F2566	KAP11AY	DPDT	120VAC	6.35	6.03	5.72	4.45
24F2567	KAP11AY	DPDT	240VAC	6.75	6.41	6.08	4.73
24F2568	KAP11AG	DPDT	6VAC	6.45	6.13	5.81	4.52
24F2569	KAP11AG	DPDT	24VAC	6.45	6.13	5.81	4.52
24F2570	KAP11AG	DPDT	120VAC	6.45	6.13	5.81	4.52
24F2571	KAP11DG	DPDT	24VDC	6.40	6.08	5.76	4.48
24F2572	KAP11DG	DPDT	110VDC	7.05	6.70	6.35	4.94
24F2573	KAP11DY	DPDT	12VDC	6.30	5.99	5.67	4.41
24F2574	KAP11DY	DPDT	24VDC	6.30	5.99	5.67	4.41
24F2575	KAP11DY	DPDT	110VDC	6.95	6.60	6.26	4.81
24F2576	KAP14AY	3PDT	24VAC	7.90	7.51	7.11	5.53
24F2577	KAP14AY	3PDT	120VAC	7.90	7.51	7.11	5.53
24F2578	KAP14AY	3PDT	240VAC	8.30	7.89	7.47	5.81
24F2579	KAP14AG	3PDT	24VAC	8.05	7.65	7.25	5.64
24F2580	KAP14AG	3PDT	120VAC	8.05	7.65	7.25	5.64
24F2581	KAP14DG	3PDT	24VDC	8.00	7.60	7.20	5.60
24F2582	KAP14DG	3PDT	110VDC	8.60	8.17	7.74	6.02
24F2583	KAP14DY	3PDT	12VDC	7.80	7.41	7.02	5.46
24F2584	KAP14DY	3PDT	24VDC	7.80	7.41	7.02	5.46
24F2585	KAP14DY	3PDT	110VDC	8.45	8.03	7.61	5.92

24F2586 KAP holdown springs 9KA1 (.15 ea. Box of 50 5.50)



KL MULTIPLE CONTACT RELAY

Highly versatile relay with extra-long coil permits double the ampere-turns; provides more power to actuate the relay and maintain good hold-down pressure. Silver contacts rated at 5 amps. Mounting: Two #6-32 holes on 1 7/16" centers. Weight: 5 ozs. Size: 2 1/16"x1 23/32"x1 15/16".

Stock No.	Type	Action	Volts	1-24	25-50	51-99	100-249
24F1312	KL5A	SPDT	120v. AC	4.05	3.85	3.65	2.84
24F684	KL11A	DPDT	120v. AC	5.05	4.80	4.55	3.54
24F691	KL14A	3PDT	120v. AC	5.60	5.32	5.04	3.92
24F694	KL17A	4PDT	24v. AC	6.60	6.27	5.94	4.62
24F687	KL17A	4PDT	120v. AC	6.60	6.27	5.94	4.62
24F696	KL14D	3PDT	24v. DC	5.40	5.13	4.86	3.78
24F686	KL17D	4PDT	24v. DC	6.30	5.99	5.67	4.41
24F697	KL17D	4PDT	110v. DC	6.95	6.60	6.26	4.87

COMPUTER and DATA PROCESSING APPLICATION

4-pole relay with long life operating 4PDT contacts switch loads from dry circuit to 3 amps at 30VDC or 115VAC. Power: 0.5 W min. and 0.9 W max. at 3 amps. Temp.: —45°C to +70°C. Pull-in time less than 15ms.
KHP: Size 1 17/64x 55/64x1 7/64". Wt., 1⅛ oz. Nylon dust cover.
KHS: Size 1 5/32x 29/32x 19/32. Wt., 1⅝oz. Hermetically sealed. (*) Silver Cadmium-oxide contacts.

Stock No.	Type	DC Voltage	Ohms	1-24	25-50	51-99	100-249
24F1390	KHP17D11	6	40	5.05	4.80	4.55	3.54
24F1391	KHP17D11	12	160	5.05	4.80	4.55	3.54
24F1392	KHP17D11	24	650	5.05	4.80	4.55	3.54
24F1393	KHP17D11	48	2600	5.25	4.99	4.73	3.68
24F1394	KHP17D11	90	9000	5.90	5.61	5.31	4.13
24F1395	KHP17D11	110	11000	5.90	5.61	5.31	4.13
24F2561	KHS17D11	6	40	8.55	8.12	7.70	5.99
24F2562	KHS17D11	12	160	8.55	8.12	7.70	5.99
24F2563	KHS17D11	24	650	8.55	8.12	7.70	5.99
24F2564	KHS17D11	110	11000	9.40	8.93	8.46	6.58
24F1697	KHP17D12*	24	650	5.20	4.95	4.68	3.64
24F1698	KHP17D12*	110	11000	6.05	5.75	5.45	4.24
		AC VOLTS					
24F1661	KHP17A11	6	10.5	5.55	5.27	5.00	3.89
24F1662	KHP17A11	12	43	5.55	5.27	5.00	3.89
24F1663	KHP17A11	24	160	5.55	5.27	5.00	3.89
24F1664	KHP17A11	120	3900	6.05	5.75	5.45	4.24
24F2557	KHS17A11	6	10.5	9.55	9.07	8.60	6.69
24F2558	KHS17A11	12	43	9.55	9.07	8.60	6.69
24F2559	KHS17A11	24	160	9.55	9.07	8.60	6.69
24F2560	KHS17A11	120	3900	9.90	9.41	8.91	6.93

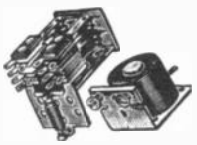
P&B SOCKETS FOR COMPUTER AND DATA PROCESSING RELAYS

Stock No.	Type	Description	1-24	25-50	51-99	100-249
24F1396	9KH-1	Sold. Term Skt.	.66	.63	.59	.46
24F1397	9KH-2	P.C. Socket	.66	.63	.59	.46

GA GENERAL ALL PURPOSE RELAY

Multiple leaf relay with a wide range of contact combinations. Used for remote power switching and mobile communications equipment. (See GB for current actuated models.) Mounting: No. 8-32 tapped core with locating boss. Silver contacts rated at 5 amps. Size: 1 1/16"W x 1 23/32"L x 1 25/32"H. Weight: 3.5 ozs.

Stk. No.	Type	Action	Volts	1-24	25-50	51-99	100-249
24F1183	GA11A	DPDT	6v.AC				
24F1184	GA11A	DPDT	24v.AC	3.50	3.33	3.15	2.45
24F1185	GA11A	DPDT	120v.AC				
24F1307	GA14A	3PDT	120v.AC	4.25	4.04	3.83	2.98
24F1186	GA17A	4PDT	6v.AC	5.10	4.85	4.59	3.57
24F1187	GA17A	4PDT	12v.AC				
24F1188	GA17A	4PDT	24v.AC	5.10	4.85	4.59	3.57
24F1189	GA17A	4PDT	120v.AC				
24F1190	GA11D	DPDT	6v.DC				
24F1191	GA11D	DPDT	12v.DC	3.50	3.33	3.15	2.45
24F1192	GA11D	DPDT	24v.DC				
24F1193	GA11D	DPDT	110v.DC	4.00	3.80	3.60	2.80
24F1194	GA17D	4PDT	6v.DC				
24F1195	GA17D	4PDT	12v.DC	5.10	4.85	4.59	3.57
24F1196	GA17D	4PDT	24v.DC				
24F1197	GA17D	4PDT	110v DC	5.60	5.32	5.04	3.92



GP "PIC & BUILD" KIT

Units can be combined to produce twenty different relays and design different sensitivities or switches for different contact arrangements. Mtg: permits rapid changing of coils for #8-32 tapped core and locating half punch. Silver contacts rated at 5 amps. Wt. Av. 4 oz.

Stock No.	Mfr's Type	Item	1-24	25-50	51-99	100-249
24F1200	GPA	6v. AC Coil	1.75	1.66	1.58	1.23
24F1201	GPA	12v. AC Coil	1.75	1.66	1.58	1.23
24F1203	GPA	120v AC Coil	1.75	1.66	1.58	1.23
24F1211	GP11	DPDT Switch	1.80	1.71	1.62	1.26
24F1212	GP17	4PDT Switch	3.10	2.95	2.79	2.17
24F2644	GPD	6VDC	2.20	2.09	1.98	1.54
24F2645	GPD	12VDC	2.20	2.09	1.98	1.54
24F2646	GPD	24VDC	2.20	2.09	1.98	1.54
24F2647	GPD	110VDC	3.30	3.14	2.97	2.31
24F2648	GPD	2.5K Ohms	1.60	1.52	1.44	1.12
24F2649	GPD	5K Ohms	1.85	1.80	1.67	1.30
24F2650	GPD	10K Ohms	2.20	2.09	1.98	1.54

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

General Purpose Relays — POTTER & BRUMFIELD

KRP ENCLOSED-VOLTAGE ACTUATED RELAY

Versatile, multi-contact relay enclosed in **clear plastic dust cover.** (See KCP for current actuated models.) Mounting: Standard 8 pin octal for KRP-5 & 11; 11 pin for KRP14. Contacts: 5 amp — gold flashed silver. 10 amp — silver cadmium-oxide. Size: 1 13/32 x 1 13/32 x 2". Wt., 3 oz.

5 AMP

Stock No.	Mfr's Type	Coil Volts	Action	1-24	25-50	51-99	100-249
24F522	KRP5A	6v. AC	SPDT	5.70	5.42	5.13	3.99
24F524	KRP5A	24v. AC	SPDT				
24F520	KRP5A	120v. AC	SPDT				
24F548	KRP11A	6v. AC	DPDT	6.35	6.03	5.72	4.45
24F1223	KRP11A	12v. AC	DPDT				
24F525	KRP11A	24v. AC	DPDT				
24F518	KRP11A	120v. AC	DPDT				
24F1324	KRP11A	240v. AC	DPDT	6.75	6.41	6.08	4.73
24F1224	KRP14A	6v. AC	3PDT	7.90	7.51	7.11	5.53
24F1225	KRP14A	12v. AC	3PDT				
24F526	KRP14A	24v. AC	3PDT				
24F527	KRP14A	120v. AC	3PDT				
24F1226	KRP5D	6v. DC	SPDT	5.65	5.37	5.09	3.96
24F1325	KRP5D	12v. DC	SPDT				
24F1227	KRP5D	24v. DC	SPDT				
24F1326	KRP5D	110v. DC	SPDT	6.30	5.99	5.67	4.41
24F680	KRP11D	6v. DC	DPDT				
24F683	KRP11D	12v. DC	DPDT				
24F528	KRP11D	24v. DC	DPDT				
24F682	KRP11D	110v. DC	DPDT	6.95	6.60	6.26	4.87
24F1228	KRP14D	6v. DC	3PDT	7.80	7.41	7.02	5.46
24F1229	KRP14D	12v. DC	3PDT				
24F679	KRP14D	24v. DC	3PDT				
24F1327	KRP14D	110v. DC	3PDT	8.45	8.03	7.61	5.92

10 AMP

24F1330	KRP5AG	6v. AC	SPDT	5.85	5.56	5.27	4.10
24F1331	KRP5AG	24v. AC	SPDT				
24F1332	KRP5AG	120v. AC	SPDT				
24F1333	KRP11AG	6v. AC	DPDT	6.55	6.22	5.90	4.59
24F1334	KRP11AG	12v. AC	DPDT				
24F1335	KRP11AG	24v. AC	DPDT				
24F1336	KRP11AG	120v. AC	DPDT				
24F1696	KRP11AG	240v. AC	DPDT	7.00	6.65	6.30	4.90
24F1337	KRP14AG	6v. AC	3PDT	8.20	7.79	7.38	5.74
24F1338	KRP14AG	12v. AC	3PDT				
24F1339	KRP14AG	24v. AC	3PDT				
24F1340	KRP14AG	120v. AC	3PDT				
24F1343	KRP5DG	24v. DC	SPDT	5.80	5.51	5.22	4.06
24F1344	KRP5DG	110v. DC	SPDT	6.40	6.08	5.76	4.48
24F1345	KRP11DG	6v. DC	DPDT	6.50	6.18	5.85	4.55
24F1346	KRP11DG	12v. DC	DPDT				
24F1347	KRP11DG	24v. DC	DPDT				
24F1348	KRP11DG	110v. DC	DPDT	7.15	6.79	6.44	5.01
24F1349	KRP14DG	6v. DC	3PDT	8.10	7.70	7.29	5.67
24F1350	KRP14DG	12v. DC	3PDT				
24F1359	KRP14DG	24v. DC	3PDT				
24F1351	KRP14DG	110v. DC	3PDT	8.75	8.31	7.88	6.13

KRP-N INDICATOR LAMP RELAY

Plug-in relay has built-in lamp, which lights when relay coil is energized. Operates on 1.2 watts DC or 2 volt-amps AC. DPDT silver cadmium contacts rated at 10 amps. Octal plug 3PDT. Lamp: AC 6 to 230 volts, DC 6 to 110 volts. Enclosure: clear cellulose acetate. Dim: 2"H x 1 13/32" square. 3 oz.

Stk. No.	Type	Volts	1-24	25-50	51-99	100-249
24F1435	KRP11AN	6v. AC	7.50	7.13	6.75	5.25
24F1436	KRP11AN	12v. AC				
24F1437	KRP11AN	24v. AC				
24F1438	KRP11AN	120v. AC				
24F1439	KRP11AN	240v. AC	7.90	7.51	7.11	5.53
24F1329	KRP14AN	120v. AC	9.15	8.69	8.24	6.41
24F1440	KRP11DN	6v. DC	7.45	7.08	6.71	5.22
24F1441	KRP11DN	12v. DC				
24F1442	KRP11DN	24v. DC				
24F1443	KRP11DN	110v. DC	8.10	7.70	7.29	5.67

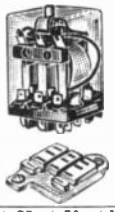
KCP-KRP HOLD DOWN SPRING

Type 9-KR-15. Insures mounting of relay in any position. Fits all KCP and KRP plug-in relays. Stainless steel spring can be moved aside for relay removal and installation. Mounting: Two 3/32" dia. holes on 15/16" centers. Wt. 3 oz. for 50

Stk. No.	Type	Each	Box of 50
24F1358	9-KR-15	.15	5.50

For sockets for above listings see Amphenol pages listed in the Index.

GENERAL PURPOSE KUP SERIES



This reliable 10-ampere relay is for industrial control. The .187" terminals of the relay are of the quick-connect solder type. The KUP is enclosed in a clear, high impact plastic dust cover. Silver-cadmium-oxide contacts assure long contact life. Operation: continuous. Shpg. wt., 3 ozs.

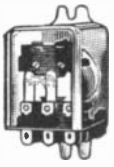
Stock No.	Type	Action	Coil	Ma.	1-24	25-50	51-99	100-249
24F2600	KUP5A15	SPDT	6VAC	10	3.70	3.52	3.33	2.59
24F2601	KUP5A15	SPDT	12VAC	10	3.70	3.52	3.33	2.59
24F2602	KUP5A15	SPDT	24VAC	10	3.70	3.52	3.33	2.59
24F2603	KUP5A15	SPDT	120VAC	10	3.70	3.52	3.33	2.59
24F2604	KUP5A15	SPDT	240VAC	10	4.10	3.90	3.69	2.87
24F2605	KUP5D15	SPDT	6VDC	10	3.55	3.37	3.20	2.49
24F2606	KUP5D15	SPDT	12VDC	10	3.55	3.37	3.20	2.49
24F2607	KUP5D15	SPDT	24VDC	10	3.55	3.37	3.20	2.49
24F2608	KUP5D15	SPDT	110VDC	10	4.15	3.94	3.74	2.91
24F2609	KUP11A15	DPDT	6VAC	10	4.50	4.28	4.05	3.15
24F2610	KUP11A15	DPDT	12VAC	10	4.50	4.28	4.05	3.15
24F2611	KUP11A15	DPDT	24VAC	10	4.50	4.28	4.05	3.15
24F2612	KUP11A15	DPDT	120VAC	10	4.50	4.28	4.05	3.15
24F2613	KUP11A15	DPDT	240VAC	10	4.90	4.66	4.41	3.43
24F2614	KUP11D15	DPDT	6VDC	10	4.05	3.85	3.65	2.84
24F2615	KUP11D15	DPDT	12VDC	10	4.05	3.85	3.65	2.84
24F2616	KUP11D15	DPDT	24VDC	10	4.05	3.85	3.65	2.84
24F2617	KUP11D15	DPDT	110VDC	10	4.65	4.42	4.19	3.26
24F2618	KUP14A15	3PDT	6VAC	10	5.05	4.80	4.55	3.54
24F2619	KUP14A15	3PDT	12VAC	10	5.05	4.80	4.55	3.54
24F2620	KUP14A15	3PDT	24VAC	10	5.05	4.80	4.55	3.54
24F2621	KUP14A15	3PDT	120VAC	10	5.05	4.80	4.55	3.54
24F2622	KUP14A15	3PDT	240VAC	10	5.45	5.18	4.91	3.82
24F2623	KUP14D15	3PDT	6VDC	10	4.65	4.42	4.19	3.26
24F2624	KUP14D15	3PDT	12VDC	10	4.65	4.42	4.19	3.26
24F2625	KUP14D15	3PDT	24VDC	10	4.65	4.42	4.19	3.26
24F2626	KUP14D15	3PDT	110VDC	10	5.05	4.80	4.55	3.54

9KUI SOCKETS

For KUP relays. 10 amps. molded nylon.

Stk No.	Type	1-24	25-50	51-99	100-249
24F2627	9KUI	.75	.71	.68	.53

KUP SERIES WITH SLOTTED FLANGES



This 10-ampere relay is identical to the KUP above, except for slotted flange case for direct-to-chassis mounting. The .187" terminals of relay are of the quick-connect solder type. Enclosed in clear, high impact plastic dust cover. Silver-cadmium-oxide contacts assure long contact life. Operation: continuous. Slot width: .156". Weight: 3 oz.

Stock No.	Type	Action	Coil Volts	1-24	25-50	51-99	100-249
24F2891	KUP14A5S	3PDT	12 VAC	5.05	4.80	4.55	3.54
24F2892	KUP14A5S	3PDT	24 VAC	5.05	4.80	4.55	3.54
24F2893	KUP14A5S	3PDT	120 VAC	5.05	4.80	4.55	3.54
24F2894	KUP14D5S	3PDT	12 VAC	4.65	4.42	4.19	3.26
24F2895	KUP14D5S	3PDT	24 VAC	4.65	4.42	4.19	3.26
24F2896	KUP14D5S	3PDT	110 VAC	5.05	4.80	4.55	3.54

KR3-H AND KRP-3 SERIES

KR3-H Series

KRP3-H Series

KR3-H. Compact heavy-duty relays. Silver-CdO contacts rated 20A @ 115 VAC resistive, or 28 VDC; 1 HP @ 115/230 VAC. Form X arrangement (SPST-NO-DB). Solder terminals on coil, 1/4" quick-connect on contacts. 1.6 x 1 1/4 67 x 1.52"; mtg: one 6-32 stud on .437" center. 2 oz.

KRP3-H. As above, with plastic dust cover & octal base.

Stock No.	Mfr. Type	Contacts	Coil Volts	1-24	25-50	51-99	100-249
24F2628	KR3AH	SPST-NO-DB	6VAC	4.10	3.90	3.69	2.87
24F2629	KR3AH	SPST-NO-DB	12VAC	4.10	3.90	3.69	2.87
24F2630	KR3AH	SPST-NO-DB	24VAC	4.10	3.90	3.69	2.87
24F2631	KR3AH	SPST-NO-DB	120VAC	4.10	3.90	3.69	2.87
24F2632	KR3DH	SPST-NO-DB	6VDC	3.90	3.71	3.51	2.73
24F2633	KR3DH	SPST-NO-DB	12VDC	3.90	3.71	3.51	2.73
24F2634	KR3DH	SPST-NO-DB	24VDC	3.90	3.71	3.51	2.73
24F2635	KR3DH	SPST-NO-DB	110VDC	4.50	4.28	4.05	3.15
24F2636	KRP3AH	SPST-NO-DB	6VAC	6.65	6.32	5.99	4.66
24F2637	KRP3AH	SPST-NO-DB	12VAC	6.65	6.32	5.99	4.66
24F2638	KRP3AH	SPST-NO-DB	24VAC	6.65	6.32	5.99	4.66
24F2639	KRP3AH	SPST-NO-DB	120VAC	6.65	6.32	5.99	4.66
24F2640	KRP3DH	SPST-NO-DB	6VDC	6.45	6.13	5.81	4.52
24F2641	KRP3DH	SPST-NO-DB	12VDC	6.45	6.13	5.81	4.52
24F2642	KRP3DH	SPST-NO-DB	24VDC	6.45	6.13	5.81	4.52
24F2643	KRP3DH	SPST-NO-DB	110VDC	7.10	6.75	6.39	4.97

POTTER & BRUMFIELD Relays

PLATE CIRCUIT AND SENSITIVE RELAYS

GB LOW COST PLATE CIRCUIT RELAY

115 milliwatts for single pole, 275 milliwatts for 4 pole. (See GA Relay for similar voltage actuated models.) Silver contacts rated at 5 amps. Mounting: No. 8-32 tapped core and locating half-punch. $2\frac{15}{32}$x$1\frac{23}{32}$x$1\frac{1}{16}$". Weight: 5 ozs.

Stk. No.	Type	Action	Ohms	Ma.	1-24	25-50	51-99	100-249
24F1319	GB5D	SPDT	2500	6.8	3.60	3.42	3.24	2.52
24F1320	GB5D	SPDT	5000	4.8	3.80	3.61	3.42	2.66
24F1321	GB5D	SPDT	10 000	3.4	4.30	4.09	3.87	3.01
24F1177	GB11D	DPDT	2500	7.0	5.10	4.85	4.59	3.57
24F1178	GB11D	DPDT	5000	5.0	5.20	4.94	4.68	3.64
24F1179	GB11D	DPDT	10,000	3.53	5.80	5.51	5.22	4.06
24F1181	GB17D	4PDT	5000	7.4	6.25	5.94	5.63	4.38
24F1182	GB17D	4PDT	10,000	5.25	6.70	6.37	6.03	4.69

KCP ENCLOSED PLATE CIRCUIT RELAY

Silver contacts rated at 2 amps. Current actuated. Sensitivity: 125 milliwatts per pole. Mounting: Standard octal plug; eight pins for KCP5 and 11, 11 pins for KCP14. Clear plastic case. $1\frac{13}{32}$x$1\frac{13}{32}$x2" high. Wt., 3 ozs.

Stk. No.	Type	Action	Ohms	Ma.	1-24	25-50	51-99	100-249
24F489	KCP5	SPDT	2500	7.2	6.20	5.89	5.58	4.34
24F490	KCP5	SPDT	5000	5.0	6.30	5.99	5.67	4.41
24F491	KCP5	SPDT	10,000	3.6	6.70	6.37	6.03	4.69
24F492	KCP11	DPDT	2500	10.0	6.60	6.27	5.94	4.62
24F496	KCP11	DPDT	5000	7.2	6.70	6.37	6.03	4.69
24F497	KCP11	DPDT	10,000	5.0	7.15	6.79	6.44	5.01
24F493	KCP14	3PDT	2500	12.3	8.15	7.74	7.34	5.71
24F494	KCP14	3PDT	5000	8.7	8.25	7.84	7.43	5.78
24F495	KCP14	3PDT	10,000	6.1	8.65	8.22	7.79	6.06

SM SUPER MIDGET RELAY

Both current and voltage actuated models available. 75 mw. sensitivity for current actuated models. Hermetically sealed. SPDT silver-rhodium contacts rated at 250 ma. Mounting: Sealed-Standard 7-pin miniature tube socket. Size: $1\frac{11}{16}$" above chassis, .765" dia. Wt.: 1 oz.

Stk. No.	Type	VDC	Ohms	Ma.	1-24	25-50	51-99	100-249
24F602	SM5DS	6	80		6.90	6.56	6.21	4.83
24F607	SM5DS	12	360					
24F603	SM5DS	24	900					
24F604	SM5LS	...	5000	3.9	7.20	6.84	6.48	5.04
24F606	SM5LS	...	10,000	2.7	7.70	7.32	6.93	5.39

PW HERMETICALLY SEALED RELAY

A miniature tube sensitive relay available in voltage or current actuated models. Sensitivity: Voltage: 180 mw.; current: 40 mw. Precision, light weight relay with 10g vibration to 500 cps. Silver SPDT contacts rated at 2 amps. Mounting: Standard 7-pin miniature tube base. Weight: 1 oz. Size: $1\frac{11}{16}$" high above socket, .765" dia.

Stk. No.	Type	Volts	Ohms	Ma.	1-24	25-50	51-99	100-249
24F556	PW5DS	6VDC	202	....	11.30	10.74	10.17	7.91
24F555	PW5DS	12VDC	810	.	11.30	10.74	10.17	7.91
24F557	PW5DS	24VDC	3240		11.30	10.74	10.17	7.91
24F558	PW5LS	....	5000	2.8	11.65	11.07	10.49	8.16
24F559	PW5LS	.....	10,000	2.0	12.10	11.50	10.89	8.47

LM PLATE CIRCUIT RELAY

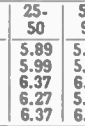
Operates on only 100 mw. per pole. Medium cost high quality relay with silver contacts rated at 5 amps. Pull-in adjustable by tail spring adjusting screw. Mounting: Two No. 6-32 holes on $1\frac{13}{16}$" centers. DC only. (See KL for voltage actuated models.) $2\frac{3}{16}$x$2\frac{1}{4}$x$2\frac{1}{2}$". Weight: 5 ozs.

Stk. No.	Type	Action	Ohms	Ma.	1-24	25-50	51-99	100-249
24F562	LM5	SPDT	2500	6.3	4.15	3.94	3.74	2.91
24F563	LM5	SPDT	5000	4.5	4.35	4.13	3.92	3.05
24F564	LM5	SPDT	10,000	3.2	4.65	4.42	4.19	3.26
24F567	LM11	DPDT	2500	9.0	5.90	5.61	5.31	4.13
24F568	LM11	DPDT	5000	6.3	6.10	5.80	5.49	4.27
24F569	LM11	DPDT	10,000	4.5	6.70	6.37	6.03	4.69

LB LOW COST PLATE CIRCUIT RELAY

Current sensitive relays designed to operate on a few milliwatts DC. Sensitivity 200 milliwatts. Silver contacts rated at 5 amps. Two $\frac{3}{16}$" holes on $2\frac{1}{32}$" centers. $2\frac{21}{32}$x$1\frac{1}{4}$x$1\frac{3}{8}$". Weight. 2 ozs.

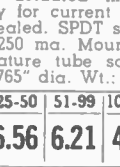
24F570	LB5	SPDT	2500	9.0	2.70	2.57	2.43	1.89
24F571	LB5	SPDT	5000	6.3	2.90	2.76	2.61	2.03
24F572	LB5	SPDT	10,000	4.5	3.15	2.99	2.84	2.21



RS5D LIGHT WEIGHT, SENSITIVE RELAY

Low cost, sensitive relay for current or voltage applications. Mounting: Hwo No. 4-40 holes on $\frac{3}{4}$x$\frac{5}{8}$" diagonal centers. SPDT bar palladium contacts rated at 2 amps. Size: 1x$1\frac{11}{16}$x$1\frac{5}{16}$" high. Av. Shpg. wt. 3 oz.

Stk. No.	V.DC	Ohms	Ma.	1-24	25-50	51-99	100-249
24F1173	6	335	....	2.75	2.61	2.48	1.93
24F1198	12	1350	...	2.90	2.76	2.61	2.03
24F1174	....	2500	5.0	3.00	2.85	2.70	2.10
24F1175	....	5000	3.5	3.30	3.14	2.97	2.31
24F1176	...	10,000	2.5	3.80	3.61	3.42	2.66

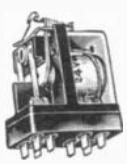


SS SUPER SENSITIVE RELAY

Model SS5D. 10 mw. sensitivity. Dual coils with balanced armature on needle-point bearings for precision instruments and bridge circuits. May be used as a differential relay. SPDT silver contacts rated at 2 amps. Coil 10,000 ohms 1 ma. Mounting: Two No. 6-32 holes on $2\frac{3}{32}$" centers. Size: $1\frac{3}{4}$x$1\frac{5}{16}$x$1\frac{1}{16}$". Wt. $3\frac{1}{2}$ oz.

Stk. No.	1-24	25-50	51-99	100-249
24F609	14.50	13.78	13.05	10.15

POWER RELAYS



AB APPLIANCE RELAY

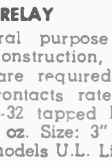
For appliance and general purpose applications where rugged construction, long life and quiet operation are required. All units have DPDT silver contacts rated at 10 amps. Mounting: 2 #8-32 tapped holes on $1\frac{1}{4}$" centers. Weight: 5 oz. Size: 3" L. x $1\frac{13}{32}$" W. x $1\frac{15}{16}$" H. A.C. models U.L. Listed.

Stock No.	Type	Coil Volts	Ohms	1-24	25-50	51-99	100-249
24F1121	AB11AY	120 VAC	510	5.55	5.27	5.00	3.89

ABC MEDIUM POWER RELAYS

Dust cover enclosed AB relay. Used with small motors, industrial controls and similar applications. All relays have DPDT silver contacts rated at 10 amps. Snap-on terminals packed with each relay. Mounting: One #8-32 stud $\frac{3}{8}$" long. Weight: 7 oz. Size: $2\frac{25}{32}$" L. x $1\frac{31}{64}$" W. x $2\frac{3}{32}$" H. All A.C. Models U.L. Listed.

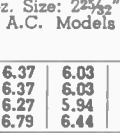
24F1128	ABC11AY	24 VAC	23	6.70	6.37	6.03	4.69
24F1129	ABC11AY	120 VAC	510	6.70	6.37	6.03	4.69
24F1301	ABC11D	24 VDC	288	6.60	6.27	5.94	4.62
24F1131	ABC11D	110 VDC	6050	7.15	6.79	6.44	5.01



MEDIUM DUTY POWER RELAY

GF SERIES Medium duty power relay for industrial control applications. ¼" dia. silver contacts rated at 10 amps at 115V AC or 28V DC resistive. Tinned, pierced solder terminals. Mounting: 8-32 tapped cord with locating boss. Weight: 4.75 ozs.

Stk. No.	Type	Coil Volts	Action	1-24	25-50	51-99	100-249
24F2587	GF17A	4PDT	6VAC	7.00	6.65	6.30	4.90
24F2588	GF17A	4PDT	12VAC	7.00	6.65	6.30	4.90
24F2589	GF17A	4PDT	24VAC	7.00	6.65	6.30	4.90
24F2590	GF17A	4PDT	120VAC	7.00	6.65	6.30	4.90
24F2591	GF17A	4PDT	240VAC	7.40	7.03	6.66	5.18
24F2592	GF17D	4PDT	6VDC	7.00	6.65	6.30	4.90
24F2593	GF17D	4PDT	12VDC	7.00	6.65	6.30	4.90
24F2594	GF17D	4PDT	24VDC	7.00	6.65	6.30	4.90
24F2595	GF17D	4PDT	110VDC	7.45	7.08	6.71	5.22



"P" CASE — CLEAR RESISTANT PLASTIC

For mounting rectifiers, capacitors, or combinations. Av. Shpg. wt. 3 oz.

Stock No.	Type	Plugs	1-24	25-50	51-99	100-249
24F1322	35D070	8 pin	.60	.57	.54	.42
24F1323	35D072	11 pin	.75	.71	.68	.53

PM SERIES POWER RELAYS

PM series relays are rated at 25 amperes (or 1 H.P.) at 115 volts, 50/60 cycles resistive. Insulated with molded phenolic. These are 4PDT relays with silver-cadmium-oxide contacts. UL listed. Terminals are screw type with No. 8-32 BH screw. Wt., 14 oz. Size: 2 31/32"W, 3 23/64"L, 2 17/32"H.

Stock No.	Mfr. No.	Coil Volts	1-24	25-50	51-99	100-249
24F1430	PM17AY	6VAC	12.95	12.30	11.66	9.07
24F1431	PM17AY	12VAC	12.95	12.30	11.66	9.07
24F1432	PM17AY	24VAC	12.95	12.30	11.66	9.07
24F1433	PM17AY	120VAC	12.95	12.30	11.66	9.07
24F1434	PM17AY	240VAC	13.40	12.73	12.06	9.38
24F1449	PM17A	480VAC	14.30	13.59	12.87	10.01
24F1426	PM17DY	6VDC	12.40	11.78	11.16	8.68
24F1427	PM17DY	12VDC	12.40	11.78	11.16	8.68
24F1428	PM17DY	24VDC	12.40	11.78	11.16	8.68
24F1429	PM17DY	110VDC	13.00	12.35	11.70	9.10

PM COVER—35D227

Metal cover for PM only. 5 1/8x3 13/16x3 13/16".

Stock No.	1-24	25-50	51-99	100-249
24F1289	3.30	3.14	2.97	2.31

MR MEDIUM DUTY POWER RELAY

Designed for small motors and appliances. Contacts rated at 8 amps except † rated at 10 amps. Mounting: Two 5/32" dia. holes on 2 5/8" centers for 1 and 3 poles and 2 1/4" centers for 2 pole relay. Size: 2 31/32x2 1/8x1 3/4". Weight: 4 ozs.

6 Volts AC

Stock No.	Mfrs. Type	Action	Normal Pos.	1-24	25-50	51-99	100-249
24F1157	MR3A	SPST*	Open	4.10	3.90	3.69	2.87
24F541	MR5A	SPDT	.....	3.65	3.47	3.29	2.56
24F543	MR11A	DPDT	.....	5.15	4.89	4.64	3.61

24 Volts AC

24F1158	MR3A	SPST*	Open	4.10	3.90	3.69	2.87
24F1159	MR5A	SPDT	.....	3.65	3.47	3.29	2.56
24F1160	MR11A	DPDT	.....	5.15	4.89	4.64	3.61

120 Volts AC

24F506	MR3A	SPST*	Open	4.10	3.90	3.69	2.87
24F509	MR5A	SPDT	.....	3.65	3.47	3.29	2.56
24F511	MR11A	DPDT	.....	5.15	4.89	4.64	3.61
24F536	MR14A	3PDT	.....	6.15	5.84	5.54	4.31

240 Volts AC

Stock No.	Mfrs. Type	Action	Normal Pos.	1-24	25-50	51-99	100-249
24F534	MR5A	SPDT	.....	4.10	3.90	3.69	2.87
24F535	MR11A	DPDT	.....	5.55	5.27	5.00	3.89

6 Volts DC

24F1164	MR3D	SPST*	Open	3.70	3.52	3.33	2.59
24F550	MR5D	SPDT	.....	3.40	3.23	3.06	2.38
24F551	MR11D	DPDT	.....	4.90	4.66	4.41	3.43

12 Volts DC

24F1167	MR5D	SPDT	.....	3.40	3.23	3.06	2.38
24F1169	MR11D	DPDT	.....	4.90	4.66	4.41	3.43
24F1171	MR14D	3PDT	.....	5.80	5.51	5.22	4.06

24 Volts DC

24F1166	MR3D	SPST*	Open	3.70	3.52	3.33	2.59
24F1168	MR5D	SPDT	.....	3.40	3.23	3.06	2.38
24F1170	MR11D	DPDT	Open	4.90	4.66	4.41	3.43

110 Volts DC

24F1315	MR11D	DPDT	.....	5.40	5.13	4.86	3.78
24F1316	MR14D	3PDT	.....	6.30	5.99	5.67	4.41

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PR HEAVY-DUTY POWER RELAY

Extra rugged fast-acting power relay with full-floating movable contact carrier to provide ample contact wipe and pressure. For industrial control applications, motor loads up to 1 HP or heater loads up to 25 amps. Terminals are heavy duty screw type. Mounting: Two 5/16" dia. holes on 1 7/8" centers. Silver contacts rated at 25 amps. Size: max. w/out aux. contacts. 3 3/8" L. x 2 1/16" W. x 2 1/2" H. All except PR11AL5 are U/L listed. Weight, 11 ozs.

Stk. No.	Type	Action	Coil V.	1-24	25-50	51-99	100-249
24F1132	PR3AY	SPST	6 VAC	4.35	4.13	3.92	3.05
24F1133	PR3AY	Nor. Open	24 VAC	4.35	4.13	3.92	3.05
24F500	PR3AY	Double	120 VAC	4.35	4.13	3.92	3.05
24F530	PR3AY	Break	240 VAC	4.75	4.51	4.26	3.33
24F1135	PR5AY	SPDT	12 VAC	4.55	4.32	4.10	3.19
24F1136	PR5AY	SPDT	24 VAC	4.55	4.32	4.10	3.19
24F503	PR5AY	SPDT	120 VAC	4.55	4.32	4.10	3.19
24F531	PR5AY	SPDT	240 VAC	5.00	4.75	4.50	3.50
24F1137	PR7AY	DPST	6 VAC	5.15	4.89	4.64	3.61
24F539	PR7AY	DPST	24 VAC	5.15	4.89	4.64	3.61
24F504	PR7AY	DPST	120 VAC	5.15	4.89	4.64	3.61
24F1139	PR7AY	DPST	240 VAC	5.60	5.32	5.04	3.92
24F1140	PR11AY	DPDT	6 VAC	6.75	6.41	6.07	4.73
24F538	PR11AY	DPDT	24 VAC	6.75	6.41	6.07	4.73
24F505	PR11AY	DPDT	120 VAC	6.75	6.41	6.07	4.73
24F532	PR11AY	DPDT	240 VAC	7.30	6.94	6.57	5.11
24F1199	PR11AY	DPDT	480 VAC	8.20	7.79	7.38	5.74
24F1141	†PR11AL5	DPDT	6 VAC	8.55	8.12	7.70	5.99
24F1144	†PR11AL5	DPDT	120 VAC	8.55	8.12	7.70	5.99
24F1147	PR3DY	SPST-NO	110 VDC	5.00	4.75	4.50	3.50
24F579	PR5DY	SPDT	12 VDC	4.55	4.32	4.10	3.19
24F1148	PR5DY	SPDT	110 VDC	5.20	4.94	4.68	3.64
24F1150	PR7DY	DPST	24 VDC	5.15	4.89	4.64	3.61
24F1151	PR7DY	DPST	110 VDC	5.80	5.51	5.22	4.06
24F586	PR11DY	DPDT	6 VDC	6.75	6.41	6.07	4.73
24F1152	PR11DY	DPDT	12 VDC	6.75	6.41	6.07	4.73
24F578	PR11DY	DPDT	24 VDC	6.75	6.41	6.07	4.73
24F577	PR11DY	DPDT	110 VDC	7.40	7.03	6.66	5.18

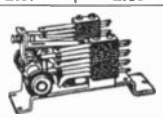
†DPDT main contacts rated at 20 amps.

PR COVER-35DO13

A sheet steel base with aluminum cover all finished in zinc gray baked enamel with 4 knockouts for 1/2" conduit. Mounting: 3 No. 10 holes on 1 7/8x4 1/8" centers. Shpg. wt., 1 lb.

Stock No.	1-24	25-50	51-99	100-249
24F1318	3.30	3.14	2.97	2.31

AP RATCHET IMPULSE RELAY



Compact unit for applications requiring on-off or reversing action on alternate impulses. Operates on 60 ms. pulses. Intermittent duty. Silver contacts rated at 5 amps. Mtg.: Three 5/32" dia. holes on 3 3/8"x7/8" triangular centers. Wt. 7 ozs. Size 2 5/16"x2 1/4"x3 3/4".

Stock No.	Mfr's Type	Action	Coil Volts	1-24	25-50	51-99	100-249
24F1231	AP11A	DPDT	6v AC	9.20	8.74	8.28	6.44
24F1232	AP11A	DPDT	12v AC	9.20	8.74	8.28	6.44
24F1233	AP11A	DPDT	24v AC	9.20	8.74	8.28	6.44
24F1234	AP11A	DPDT	120v AC	9.20	8.74	8.28	6.44
24F1235	AP11A	4PDT	240v AC	9.70	9.22	8.73	6.79
24F1238	AP17A	4PDT	24v AC	11.15	10.59	10.04	7.81
24F1239	AP17A	4PDT	120v AC	11.15	10.59	10.04	7.81
24F1241	AP11D	DPDT	6v DC	9.20	8.74	8.28	6.44
24F1243	AP11D	DPDT	24v DC	9.20	8.74	8.28	6.44
24F1247	AP17D	4PDT	24v DC	11.15	10.59	10.04	7.81
24F1248	AP17D	4PDT	110v DC	11.85	11.26	10.66	8.30

GM SERIES IMPULSE SEQUENCING RELAYS

Especially suitable for applications where single coil latching is desirable. The 2 Form C contact arrangement is switched alternately by cams. Positive switching is by indirect action during drop-out of the armature. All contacts are rated at 3 amps, 120V AC (non-inductive). Available with AC or DC coils. Mounting: 8-32 tapped core with a locating boss. *All Double Action DPDT. Weight: with aux. contacts 4 3/4 oz.; without aux. contacts 4 oz.

Stk. No.	Type	Action	Coil Volts	1-24	25-50	51-99	100-249
24F2470	GM11A	DPDT	24 AC	7.60	7.22	6.84	5.32
24F2471	GM11A	DPDT	120 AC	7.60	7.22	6.84	5.32
24F2472	GM11AL11	DPDT*	24 AC	10.80	10.26	9.72	7.56
24F2473	GM11AL11	DPDT*	120 AC	10.80	10.26	9.72	7.56
24F2474	GM11D	DPDT	12 DC	7.30	6.94	6.57	5.11
24F2475	GM11D	DPDT	24 DC	7.30	6.94	6.57	5.11
24F2476	GM11D	DPDT	110 DC	7.80	7.41	7.02	5.46
24F2477	GM11DL11	DPDT*	12 DC	10.60	10.07	9.54	7.42
24F2478	GM11DL11	DPDT*	24 DC	10.60	10.07	9.54	7.42
24F2479	GM11DL11	DPDT*	110 DC	11.10	10.55	9.99	7.77

POTTER & BRUMFIELD Relays

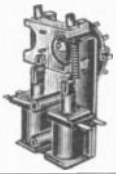
SPECIAL PURPOSE RELAYS

BU AC-OPERATED BUZZERS

Steel armature buzzes when coil is energized. Mntg.: #6-32. Tapped core. 15/8 oz.

Stk. No.	Volts	Ohms	1-24	25-50	51-99	100-249
24F2483	6	2.75	1.85	1.80	1.67	1.30
24F2484	12	13.25				
24F2485	24	50.00				
24F2486	120	1250.00				

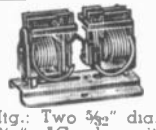
● NEW GR SERIES



Bi-directional stepping relay employs 2 solenoids for contact operation. Audio control speed, temp., etc., adjusted remotely. Adding and subtracting are typical applications. Solenoid coils epoxy potted. Mntg: 2 6-32 bosses on .875" centers. Pierced solder lug terminals. Cycle: intermittent, 5 min. max. on, 5 min. off. 420 ohms. Pwr: 15VA. Size: 2.06 x 3.31". 7 oz.

Stk. No.	Type	Action	Coil V.	1-24	25-50	51-99	100-249
24F2897	GR1N10A	SP-10 Pos.	120 AC	14.50	13.78	13.05	10.15

KB SERIES LATCHING RELAY



Dual coil relay for latching, memory work or overlord application. Operates on momentary impulse to either coil. Silver contacts rated at 5 amps except * 10 amps. Mtg.: Two 5/32" dia. holes on 1 3/8" centers. Size: 2 15/16"x1 25/32"x 2 1/32". AC relay with 5 amp contacts. U.L. listed. Wt. 6 oz.

Stock No.	Mfr's Type	Action	Coil Volts	1-24	25-50	51-99	100-249
24F629	KB17AY	4PDT	6 AC	11.05	10.50	9.95	7.74
24F617	KB17AY	4PDT	12 AC	11.05	10.50	9.95	7.74
24F631	KB17AY	4PDT	120 AC	11.05	10.50	9.95	7.74
24F1249	KB17AG	4PDT	24 AC*	11.15	10.59	10.04	7.81
24F1250	KB17AG	4PDT	120 AC*	11.15	10.59	10.04	7.81
24F632	KB17D	4PDT	6 DC	9.90	9.41	8.91	6.93
26F618	KB17D	4PDT	12 DC	9.90	9.41	8.91	6.93
24F633	KB17D	4PDT	24 DC	9.90	9.41	8.91	6.93
24F619	KB17D	4PDT	110 DC	11.20	10.64	10.08	7.84
24F1355	KB17DG	4PDT	24DC*	10.15	9.64	9.14	7.11

● NEW KBP SERIES LATCHING RELAY

Enclosed in a translucent polypropylene dust cover, the KBP is furnished with 20-pin octal type plugs for socket mounting. Specifications same as the KB series above. Weight: 8 ounces. Size: 1.781 x 2.406 x 3.56".

Stk. No.	Type	Action	Coil V.	1-24	25-50	51-99	100-249
24F2900	KBP17A	4PDT	120 AC	15.50	14.73	13.95	10.85
24F2901	KBP17AG	4PDT	120 AC	15.70	14.92	14.13	10.99
24F2902	KBP17D	4PDT	24 DC	14.75	13.73	13.01	10.12
24F2903	KBP17DG	4PDT	12 DC	14.65	13.92	13.19	10.26
24F2904	KBP17DG	4PDT	24 DC	14.65	13.92	13.19	10.26
24F2905	KBP20A	5PDT	120 AC	16.00	15.20	14.40	11.20
24F2906	KBP20AG	5PDT	120 AC	16.25	15.44	14.63	11.38
24F2907	KBP20DG	5PDT	12 DC	15.45	14.68	13.91	10.82
24F2908	KBP20DG	5PDT	24 DC	15.45	14.68	13.91	10.82

PC ALTERNATE PULSE RELAY

Conventional armature relay operated by 60-ms pulses. Armature actuates phenolic rocker to transfer contacts between alternate positions. For on-off or alternate mode switching. Gold-flashed silver cadmium oxide 7 1/2-amp. contacts. Mtg.: Two 5/32" diam. holes on 2 5/8" centers. Wt., 5 oz. 2 31/32Lx 2 1/16Wx2 5/64"H.

Stk. No.	Type	Action	Coil V.	1-24	25-50	51-99	100-249
24F636	PC11A	DPDT	120 AC	5.90	5.61	5.31	4.13
24F638	PC17A	4PDT	24 AC	8.15	7.74	7.34	5.71
24F639	PC17A	4PDT	120 AC	8.15	7.74	7.34	5.71
24F641	PC11D	DPDT	24 DC	5.70	5.42	5.13	3.99
24F643	PC17D	4PDT	24 DC	7.95	7.55	7.16	5.57

KM SUBMINIATURE RELAYS

Subminiature relay for use where size and weight are critical factors. Simple to install and wire into circuit. Silver contacts rated at 2 amps. Terminals are solder lug type Mounting: No. 2-56 tapped core with locating boss. Size: 1 1/8"Lx35/64"Wx53/64"H. Wt., 1 oz.

Stk. No.	Type	VDC	Action	1-24	25-50	51-99	100-249
24F1268	KM11D	6	DPDT	3.95	3.75	3.56	2.77
24F1269	KM11D	12	DPDT				
24F1270	KM11D	24	DPDT				
24F1271	KM14D	6	3PDT	4.55	4.32	4.10	3.19
24F1272	KM14D	12	3PDT				
24F1273	KM14D	24	3PDT				

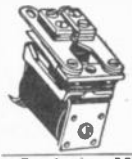
KT ANTENNA SWITCHING RELAY

Glass base insulation to minimize RF losses. Used to switch common transmitter-receiver antenna using 300-ohm line. Silver contacts rated at 5 amps. Mounting: 6-32 stud. Weight: 1.5 oz. Size: 1 5/8"Lx1 1/4"Wx1 11/16"H.

Stk. No.	Type	Coil V.	Action	1-24	25-50	51-99	100-249
24F1275	KT11A	120 AC	DPDT	3.90	3.71	3.51	2.73
24F1277	KT11D	12 DC	DPDT	3.90	3.71	3.51	2.73

TELEPHONE TYPE RELAYS

MB MINIATURE DC POWER CONTACTOR



Designed for very high current applications Switches 60 amps with SPST, normally open, double break silver contacts. Mounting: Four #3-48 holes on 3/8x3/8" centers. Weight: 2 oz. Solder terminals. Size: 1 5/8" L. x 27/32" W. x 1 3/8" H.

Stock No.	Mfr. Type	Coil VDC	1-24	25-50	51-99	100-249
24F612	MB3D	12	5.80	5.51	5.22	4.06
24F613	MB3D	24	5.80	5.51	5.22	4.06
24F614	MB3D	110	6.20	5.89	5.58	4.34

MH MINIATURE TELEPHONE RELAY

DC Models withstand 0.065" double amplitude vibrations from 10-55 cps. Sealed AC's operate with built-in rectifier. 4.5-ma current actuated, 10,000 ohm coil. Mtg. MHIIL has #6-32 stud, 11/32" long locating boss. Other open relays have 4, #3-48 holes on 3/8" ctrs. Sealed units have 3, #6-32 studs, 7/16" long on 1 1/4x1 1/2" ctrs. Weight Sealed: 5 oz.; open: 2 1/2 oz. Silver contacts rated at 5 amp except † 3 amps. **Herm. sealed. Size Open: 1 17/32"L. x 3/4"W. x 1 3/8"H.

Stk. No.	Mfr. Type	Contacts	Coil V	1-24	25-50	51-99	100-249
24F1115	MH11L†	DPDT	10,000 Ohms	6.25	5.94	5.63	4.38
24F1118	MH11LM**†	DPDT	10,000 Ohms	10.60	10.07	9.54	7.42
24F1113	MH17D	4PDT	6 VDC	6.25	5.94	5.63	4.38
24F1296	MH17D	4PDT	12 VDC	6.25	5.94	5.63	4.38
24F620	MH17D	4PDT	24 VDC	6.25	5.94	5.63	4.38
24F1297	MH17DM**	4PDT	12 VDC	12.65	12.02	11.39	8.86
24F622	MH17DM**	4PDT	24 VDC	12.65	12.02	11.39	8.86
24F1117	MH17AMR**	4PDT	120 VAC	20.65	19.62	18.59	14.46
24F1298	MH23D	6PDT	24 VDC	7.90	7.51	7.11	5.53
24F1299	MH23D	6PDT	110 VDC	8.40	7.98	7.56	5.88

HIGH PERFORMANCE RELAYS

TYPE FL MICRO-MINIATURE LATCHING RELAY

Hermetically sealed relay. Particularly designed for use in printed circuit applications. The terminals are plug-in pins to afford fast interchangeability. Coil resistance is 10,000 ohms per coil. The transfer time is .5 millisecond maximum. The terminals are arranged in a grid layout of multiples of 0.1". Weight: .75 ounces. DPDT silver contacts rated at 3 amps. @ V.D.C. 1.1x.925x.485".

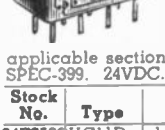
Stk. No.	Type	Volts	1-24	25-50	51-99	100-249
24F1286	FL11D	6 VDC	20.15	19.14	18.14	14.11
24F1287	FL11D	12 VDC				
24F1288	FL11D	24 VDC				

FC SERIES RELAYS

Conventional micro-miniature relay lies flat on printed circuit board. Contact arrangement: DPDT. Rated 3 amps. .65W. 3/4 oz.

Stock No.	Type	Coils Volt.	Coils Ohms	1-24	25-50	51-99	100-249
21F2487	FC11D	6VDC	60	17.90	17.01	16.11	12.53
24F2488	FC11D	12VDC	210				
24F2489	FC11D	24VDC	900				
24F2490	FC4037	26.5VDC	.....				

HC SERIES RELAYS



A micro-miniature, non-polarized, non-latching half-size crystal case relay. High torque motor structure and bifurcated gold-plated silver DPDT contacts rated dry circuit to 2 amps @ 28 VDC (or 814 ohms) resistive. Nominal power: .72W. Temperature range: —65C to +125C. Hermetically welded. Meets or exceeds all applicable sections of MIL-R-5757D/9, and complies with MSFC-SPEC-399. 24VDC. 8x.4x.4". Shpg. wt., 1/4 oz.

Stock No.	Type	Description	1-24	25-51-	50 99	100-249
24F2596	HC11D	plug-in case hook-end sold. term. flat mtg. plate	17.50	16.63	15.75	12.25
24F2597	HC11DA					
24F2598	HC11DB					

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

Relays POTTER & BRUMFIELD

HIGH PERFORMANCE RELAYS

● NEW HP SERIES

Microminiature, half crystal case size relay for applications in minimum area—as in TV cameras, dictating and copying machines. For circuit board or socket mntg. Terminals on .200" grid. 2 amps @ 30 VDC, resistive; 0.5 amps max. @ 120 VAC. Wt.: 0.26 oz. Range: —45 to +75°C. Continuous duty. Pwr: .662W nom; 1.0W max. @ 25°C. .88 x .49 x .48".

Stk. No.	Type	Action	VDC	1-24	25-50	51-99	100-249
24F2898	HP11D	DPDT	12	9.95	9.45	8.96	6.97
24F2899	HP11D	DPDT	24	9.95	9.45	8.96	6.97

SC MICRO-MINIATURE PERMANENT MAGNET D.C. RELAY

High shock-vibration relay conforms with standard crystal-case relay dimensions and circuitry. Coil circuit polarized; positive terminal marked with red dot. Mounting: Plug-in for printed circuit or receptacle A, shoulder bracket B with two 0.014" x 0.136" holes on 1.062" centers; mounting plates C. DD-plain case w/hook end solder terminals. D 2 #4-40 Studs. 0.54" cttrs. Wt. ¾ oz. Gold-0.795" x 0.359" x 0.890" above the chassis. All DPDT.

Stk. No.	Type	Mtg.	VDC	1-24	25-50	51-99	100-249
24F1360	SC11D	A	6				
24F1361	SC11D	A	12				
24F1280	SC11D	A	24				
24F1363	SC11DA	B	6				
24F1364	SC11DA	B	12	18.10	17.20	16.29	12.67
24F1281	SC11DA	B	24				
24F1282	SC11DB	C	24				
24F1386	SC11DC	D	24				
24F1387	SC11DD	D	24				

SOCKET FOR PLUG-IN SC RELAYS

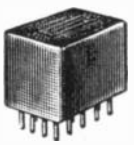
Stk. No.	Type	Description	1-99	100-up per 100
29FX729	54A20730	Socket	.45	22.50

SL MAGNETIC LATCHING D.C. RELAY

Dual coil latching relay for low power, high shock/vibration uses. Requires connections to both coils or a reversing power source applied to the two coils in series. Operates on 1 watt, 3-ms pulses to either coil. Remaining specifications identical to SC description at left. All DPDT.

Stk. No.	Type	Mtg.	VDC	1-24	25-50	51-99	100-249
24F1373	SL11D	A	6				
24F1283	SL11D	A	24				
24F1377	SL11DA	B	12				
24F1284	SL11DA	B	24				
24F1399	SL11DB	C	6	19.85	18.86	17.87	13.90
24F1380	SL11DB	C	12				
24F1285	SL11DB	C	24				
24F1388	SL11DC	D	24				
24F1389	SL11DD	C	24				

TL SERIES MAGNETIC LATCHING RELAYS



High performance 4PDT micro-miniature magnetic latching relay for severe environments. Encapsulated and hermetically sealed coils within hermetically sealed relay case can't contaminate contacts by outgassing. Approx. 0.5 ms transfer time. Temperature range: —65°C to 125°C. Mountings: D-plain case, plug-in header; DC-shoulder brackets .300" from base, hook-end solder; DB-flatplate, .593" x 1.60". 4-.125 dia. holes on .281" x 1.30" centers, hook-end solder. Shpg. wt. 2 oz.

Stk. No.	Type	Action	Coil Volts	1-24	25-50	51-99	100-249
24F2480	TL17D	4PDT	24 DC	28.75	28.21	26.88	20.13
24F2481	TL17DA	4PDT	24 DC				
24F2482	TL17DB	4PDT	24 DC				

DRY REED RELAYS

JR DRY REED RELAYS

Relays for computer circuits and other data processing equipment. Glass supported nylon insulated. Voltage: 500 volts rms 60 Hz, between insulated points. 250 volts rms 60 Hz between open contacts. Operate time: 3 ms. @ nom. coil voltage @ 25C. Coil power: 1 capsule-240 mw; 2 capsules-360 mw; 3 capsules-720 mw; 4 capsules-960 mw.

Stock No.	Type	No. Cav	Coil Nom. Volt	Coil Ohms	Con. Arr.	Reed Rating Watts	1-9	10-24	25-99
24F2860	JR1000	1	6	150	1A	15	2.65	2.07	1.93
24F2861	JR1001	2	6	100	2A	15	3.55	2.77	2.59
24F2862	JR1003	4	6	37.5	4A	15	4.95	3.86	3.61
24F2863	JR1084	3	6	50	1A&1B	15	4.40	3.43	3.21
24F2864	JR1040	1	6	150	1C	10	6.65	5.19	4.85
24F2865	JR1020	1	6	150	1A	50	3.75	2.93	2.74
24F2866	JR1021	2	6	100	2A	50	5.75	4.49	4.20
24F2867	JR1005	1	12	600	1A	15	2.65	2.07	1.93
24F2868	JR1006	2	12	400	2A	15	3.55	2.77	2.59
24F2869	JR1008	4	12	150	4A	15	4.95	3.86	3.61
24F2870	JR1086	3	12	200	1A&1B	15	4.40	3.43	3.21
24F2871	JR1045	1	12	600	1C	10	6.65	5.19	4.85
24F2872	JR1025	1	12	600	1A	50	3.75	2.93	2.74
24F2873	JR1026	2	12	400	2A	50	5.75	4.49	4.20
24F2874	JR1010	1	24	2400	1A	15	3.10	2.42	2.26
24F2875	JR1011	2	24	1600	2A	15	3.80	2.96	2.77
24F2876	JR1013	4	24	600	4A	15	5.20	4.06	3.80
24F2877	JR1088	3	24	800	1A&1B	15	4.65	3.63	3.39
24F2878	JR1050	1	24	2400	1C	10	6.95	5.42	5.07
24F2879	JR1030	1	24	2400	1A	50	4.00	3.12	2.92
24F2880	JR1031	2	24	1600	2A	50	6.00	4.68	4.38

● NEW JRM MINIATURE DRY REED RELAYS

JRM relay employs dry reed glass capsules with 2 types of contact arrangement: Form A (SPST-NO) or Form C (SPDT). Biasing with a permanent magnet changes Form A to a B (SPST-NC), using a 2-cavity bobbin and requiring the observation of coil polarity. Combining Form A with B results in a single Form C (SPDT) break-before-make; using a 3-cavity bobbin. A "True" Form C (SPDT)† uses a reed switch with 2 stationary and 1 movable contact, using a single-cavity bobbin. 1.125" long; .468" high; width varies with contact arrangement. Oper. time: 1ms. Release time: .05ms. Pickup: 75% nom. @ 25°C. Rating: 10 watts (or 4 watts*).

Stock No.	Type JRM	No. Cav	VDC	Con. Arr.	W. In.	Wt. Oz.	1-9	10-24	25-99
24F2909	1006	1	12	1A	.432	.366	2.90	2.26	2.12
24F2910	1007	2	12	2A	.557	.395	4.20	3.28	3.07
24F2911	1009	4	12	4A	.808	.620	6.65	5.19	4.85
24F2912	1012	1	24	1A	.432	.366	3.15	2.46	2.30
24F2913	1013	2	24	2A	.557	.395	4.30	3.35	3.14
24F2914	1015	4	24	4A	.808	.620	6.75	5.27	4.93
24F2915	1024*	1	12	1C	.432	.366	6.15	4.80	4.49
24F2916	1025*	2	12	2C	.557	.395	10.55	8.23	7.70
24F2917	1030*	1	24	1C	.432	.366	6.25	4.88	4.56
24F2918	1031*	2	24	2C	.557	.395	10.65	8.31	7.77
24F2919	1040	2	12	1B	.557	.395	3.65	2.85	2.66
24F2920	1041	3	12	2B	.698	.530	4.90	3.82	3.58
24F2921	1044	2	24	1B	.557	.395	3.75	2.93	2.74
24F2922	1045	3	24	2B	.698	.530	5.00	3.90	3.65
24F2923	1050	3	12	1A&1B	.698	.530	4.90	3.82	3.58
24F2924	1051	5	12	2A&2B	.963	.781	7.50	5.85	5.48
24F2925	1052	3	24	1A&1B	.698	.530	5.00	3.90	3.65
24F2926	1053	5	24	2A&2B	.963	.781	7.60	5.93	5.55

POLARIZED RELAYS

MDP SMALL POLARIZED RELAYS

Small size, ultra-sensitivity and high speed switching together with efficient, bounce free contact action. For Bi-stable or Center-stable operation. Temperatures: —60°C to +85°C. Size: 1 1/16" sq.x 13/16"H (seated). Equipped with a plastic dust cover and 8 or 12 pin slugs. Ship. wt. 4¼ oz. MDP-900-1 and MDP-930-1 directly replace Western Electric Type 255 relays. 2 1/16" sq. x 3¾" H. 10 oz.

BI-STABLE

Stock No.	Type	MA	Ohms	1-9	10-49	50-249
24F2855	MDP-300-1	1.5	150	22.35	20.12	19.00
24F2856	MDP-900-1	2.0	150	29.00	26.10	24.65
24F2857	MDP-930-1	2.4	150	29.55	26.60	25.12
24F2858	MDP-1300-1	1.4	150	22.35	20.12	19.00
24F2859	MDP-1300-8	0.28	4000	22.35	20.12	19.00

CENTER STABLE

Stock No.	Type	MA	Ohms	1-9	10-49	50-249
24F2839	MDP-306-5	1.5	250	33.40	30.06	28.39
24F2840	MDP-1001	1.75	12			
24F2841	MDP-1004	0.49	130			
24F2842	MDP-1006	0.32	330			
24F2843	MDP-1007	0.27	480			
24F2844	MDP-1008	0.23	900			
24F2845	MDP-1009	0.18	1460			
24F2846	MDP-1011	0.10	3500			
24F2847	MDP-1013	0.067	7200	25.55	23.00	21.72
24F2848	MDP-2001	3.50	6			
24F2849	MDP-2008	0.46	360			
24F2850	MDP-2009	0.32	1000			
24F2851	MDP-2011	0.17	2300			
24F2852	MDP-2101	5.30	6			
24F2853	MDP-2107	0.80	240			
24F2854	MDP-2112	0.22	3300			

POTTER & BRUMFIELD Special Purpose Relays

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Last Two Digits in Type Number Indicates Contact Form

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JM MERCURY-WETTED CONTACT RELAYS

Designed for long high speed versatility of operation; computing systems, data processing, missile control, etc. Glass capsule contains 2 sets of contacts with mercury reservoir. Hermetically sealed in hydrogen. Rating—500V-54; 250 VA contact protection. Timing—Contact speed up to 100 operations/second; 60 operations—2 and 4 capsule—3 Mi/sec.; 4 Mi/sec.—2 capsule; 5 Mi/sec. —4 capsule. Resistance 25-50 milliohms. Dielectric—Double buffer coils. 1000V-60cy. Will withstand 10G's 10-500 cps. Wt. 4 oz.

SINGLE CAPSULE—Single Coils

Stk. No.	Type	Ohms	1-9	10-24	25-99
24F1680	JM1-109-12	130	14.75	11.50	10.77
24F1681	JM1-112-11	500	14.75	11.50	10.77
24F1682	JM1-114-11	700	14.75	11.50	10.77
24F1683	JM1-114-12	700	14.75	11.50	10.77
24F1684	JM1-118-11	2500	15.00	11.70	10.95
24F1685	JM1-119-11	4000	8.55	8.55	8.55
24F2156	JM1-119-12	4000	15.55	12.13	11.35
24F1686	JM1-120-11	7000	15.55	12.13	11.35
24F1687	JM1-121-11	11000	15.55	12.13	11.35
24F1688	JM1-123-11	25000	15.55	12.13	11.35

SINGLE CAPSULE—Dual Coil

24F1689	JM1-405-51	(1) 700 (2) 3300	17.00	13.26	12.41

DOUBLE CAPSULE—Single Coil

24F2157	JM2-104-22	50			
24F2158	JM2-109-22	315			
24F2159	JM2-110-22	500			
24F1690	JM2-111-22	700	23.95	18.68	17.48
24F2160	JM2-112-22	1250			
24F2162	JM2-115-21	5000			
24F1691	JM2-115-22	5000			

THREE CAPSULE—Single Coil

24F2166	JM3-111-31	700			
24F2167	JM3-112-31	1250	31.00	24.18	22.63
24F2168	JM3-115-31	5000			

FOUR CAPSULE—Single Coil

Fig. 41 14-Pin. Fig. 42 Hook Solder Terminals.

24F2170	JM4-106-41	65			
24F2171	JM4-110-41	390			
24F2172	JM4-110-42	390			
24F2173	JM4-112-41	700			
24F1692	JM4-114-41	1400	39.90	31.12	29.13
24F1693	JM4-114-42	1400			
24F2175	JM4-117-42	4000			
24F1694	JM4-118-41	6500			
24F1695	JM4-119-42	10000			

JML NON-BRIDGING MERCURY-WETTED CONTACT RELAYS

JML relays employ a Form C non-bridging (break-before-make) contact arrangement. They provide greater sensitivity, faster operation, and somewhat lower contact ratings than the JMP relays. JML relays have a sensitivity approximately six times that of the JM1. Speeds from 3 ms to 1.1 ms are possible, depending upon coil power. Contacts are rated 2 amps max., 500V max. with contact protection. All JML relays mount in Amphenol 77-MIP-8 sockets. Size: Diameter 1.312" max.; Seated height 2.640" max.; Overall height 3.303" max. Weight: 4 ozs.

SINGLE-SIDE-STABLE

Stk. No.	Type	Ohms	1-9	10-24	25-99
24F2189	JML-1061-81	40	12.20	9.52	8.91
24F2190	JML-1110-81	350	12.20	9.52	8.91
24F2191	JML-1160-81	1000	12.20	9.52	8.91
24F2192	JML-1190-81	2500	13.00	10.14	9.49
24F2193	JML-1200-81	4000	13.00	10.14	9.49
24F2194	JML-1260-81	25000	13.00	10.14	9.49

BI-STABLE

24F2197	JML-5200-81	4000	13.00	10.14	9.49
24F2198	JML-5430-82	1100;1100	14.30	11.15	10.44

CHOPPER

24F2199	JML-8130-81	600	12.70	9.91	9.27

JMF PRINTED CIRCUIT MODULE RELAYS

JMF relays utilize the same capsule as the JML series, but are designed for mounting on printed circuit boards. They employ a Form C SPDT break-before-make non-bridging contact arrangement. Contacts are rated 2 amps max.; 500 volts max. with contact protection. Details of a simple protection circuit are packed with every relay. Size: Width .612"; Mounted height .625" max.; Length 2.062". Weight 1.25 ozs.

SINGLE-SIDE-STABLE

Stk. No.	Type	Ohms	1-9	10-24	25-99
24F2550	JMF-1020-61	65			
24F2551	JMF-1070-61	450			
24F2552	JMF-1080-61	675	9.40	7.33	6.86
24F2553	JMF-1120-61	1425			
24F2554	JMF-1150-61	2400			
24F2555	JMF-1160-61	4000	9.90	7.72	7.23

BI-STABLE

Stk. No.	Type	Ohms	1-9	10-24	25-99
24F2556	JMF-5080-61	675	9.40	7.33	6.86

JMP POLARIZED MERCURY-WETTED CONTACT RELAYS

JMP relays utilize the same capsule with the same general ratings as the JM series. However, greater sensitivity is achieved by permanent magnet biasing. These magnets are factory adjustable over a wide range of operating characteristics. All JMP relays mount in Amphenol 77-MIP-8 sockets. Size: Diameter 1.31⅜" max.; Seated height 3.105" max.; Overall height 3.665" max. Weight: 4 ozs.

CHOPPER

Stk No.	Type	Ohms	1-9	10-24	25-99
24F2186	JMP-8120-12	500	16.50	12.87	12.05
24F2187	JMP-8200-12	4000	17.65	13.77	12.88

CU SERIES TIME DELAY RELAYS

Ideal for vending equipment, machine tool control, process controls and many others. Designed for delay on operate applications with fixed timing tolerance of ±5%, resistor adjustable tolerance of ±10%, and an internal DPDT relay rated at 10 amperes. Available with fixed timing ranges of 10 and 120 seconds.

Plain Case

Flange Case

Versatility is increased by the availability of resistor adjustable relays in the 1 to 10 seconds and 1 to 120 seconds range. Resistor adjustable units require the addition of an external resistor before relay is operational. **TYPE 41** enclosures are plain cases, while **TYPE 42** are flanged cases for direct-to-chassis mounting. External Resistor for Maximum Time: CUF 41-70010, -30010, CUF 42-70010, -30010: 250 K . . CUF 41-70120, 42-70120: 3 meg . . . CUH 41-30010, 42-30010: 200 K . . . CUH 41-30120, 42-30120: 2.5 meg. Shipping weight: 4¼ oz.

FIXED UNITS

Stk. No.	Type	Input Voltage	Time (sec)	1-9	10-24	25-49	50-99
24F2927	CUA 41-70010	120 VAC	10	12.50	11.88	11.25	10.00
24F2928	CUA 41-70120	120 VAC	120	14.00	13.30	12.60	11.20
24F2929	CUC 41-30010	24 VDC	10	12.50	11.88	11.25	10.00
24F2930	CUC 41-30120	24 VDC	120	14.00	13.30	12.60	11.20
24F2931	CUA 41-30010	24 VAC	10	12.50	11.88	11.25	10.00
24F2932	CUA 42-70010	120 VAC	10	12.50	11.88	11.25	10.00
24F2933	CUA 42-70120	120 VAC	120	14.00	13.30	12.60	11.20
24F2934	CUC 42-30010	24 VDC	10	12.50	11.88	11.25	10.00
24F2935	CUC 42-30120	24 VDC	120	14.00	13.30	12.60	11.20
24F2936	CUA 42-30010	24 VAC	10	12.50	11.88	11.25	10.00

RESISTOR ADJUSTABLE UNITS

Stk. No.	Type	Input Voltage	Time (sec)	1-9	10-24	25-49	50-99
24F2937	CUF 41-70010	120 VAC	1- 10	13.25	12.59	11.93	10.60
24F2938	CUF 41-70120	120 VAC	1-120	14.50	13.78	13.05	11.60
24F2939	CUH 41-30010	24 VDC	1- 10	13.25	12.59	11.93	10.60
24F2940	CUH 41-30120	24 VDC	1-120	14.50	13.78	13.05	11.60
24F2941	CUF 41-30010	24 VAC	1- 10	13.25	12.59	11.93	10.60
24F2942	CUF 42-70010	120 VAC	1- 10	13.25	12.59	11.93	10.60
24F2943	CUF 42-70120	120 VAC	1-120	14.50	13.78	13.05	11.60
24F2944	CUH 42-30010	24 VDC	1- 10	13.25	12.59	11.93	10.60
24F2945	CUH 42-30120	24 VDC	1-120	14.50	13.78	13.05	11.60
24F2946	CUF 42-30010	24 VAC	1- 10	13.25	12.59	11.93	10.60

Relays, Thermostatic Relays, Tubes, and Flashers

POTTER AND BRUMFIELD

DC SOLID STATE TIME DELAY RELAYS

Knob adjustment for entire time range. Timing accuracy ±10%. Repeatability, ±2%. Plastic enclosures. All delay on operate except **CDB-38-70012 and CDD-38-10012 are delay on release. CDB-38 and CDD-38 have internal DPDT 10-amp relay. Timers only for use with P&B relays: *KRP5AG, KRP11AG, KRP14AG; †KRP5DG, KRP11DG, KRP14DG, ††PR11AY-115VAC, #KHP17D11 (adjustable delay, 1.88-180 sec. by connecting ½ watt resistors).

Specifications	CH SERIES	CD SERIES
Dial Setting	Reference scale	Time-calibrated ±5% of full scale
Temperature	—10°C to +55°C	—40°C to +55°C
Accuracy Over Temp. and Voltage Range	±10% of nominal	±5% of nominal
Transient Protection	Twice rated impulse voltage 8 milliseconds	Tested to 1000V-½ hz surges (on all 115V AC models)
Inherent False Oper.	Contacts transfer mom. if timing interval is interrupted	None
Reset Time	100 milliseconds	60 milliseconds
Repeatability	±2%	±1%
Polarity Reversal Protection on DC	Yes	Yes

Stock No.	Type	Input Volts	Delay Sec.	1-9	10-24	25-49	50-99
24F2881	CHB38-30001	24VAC	1.0—10	18.50	17.58	16.65	14.80
24F2882	CHB38-30003	24VAC	1.0—180	18.50	17.58	16.65	14.80
24F2883	CHB38-70001	115VAC	1.0—10	18.50	17.58	16.65	14.80
24F2884	CHB38-70003	115VAC	1.0—180	18.50	17.58	16.65	14.80
24F2885	CHD38-30001	24VDC	1.0—10	17.50	16.63	15.75	14.00
24F2886	CHD38-30003	24VDC	1.0—180	17.50	16.63	15.75	14.00
24F2887	CHB38-70011	115VAC	1.0—10	22.50	21.38	20.25	18.00
24F2888	CHB38-70013	115VAC	1.0—180	22.50	21.38	20.25	18.00
24F2889	CHD38-30011	24VDC	1.0—10	20.50	19.47	18.45	16.40
24F2890	CHD38-30013	24VDC	1.0—180	20.50	19.47	18.45	16.40
24F1875	CDB-38-70003	115VAC	0.1-10	43.80	41.61	39.42	35.04
24F1876	CDB-38-70004	115VAC	0.6-60	43.80	41.61	39.42	35.04
24F1877	CDB-38-70005	24VDC	1.8-180	43.80	41.61	39.42	35.04
24F1878	CDD-38-30003	24VDC	0.1-10	41.55	39.48	37.40	33.24
24F1879	CDD-38-30004	24VDC	0.6-60	41.55	39.48	37.40	33.24
24F1880	CDD-38-30005	115VAC	1.8-180	41.55	39.48	37.40	33.24
24F1881	CDB-21-70003*	115VAC	0.1-10	38.70	36.76	34.83	30.96
24F1882	CDB-21-70001*	24VDC	1.8-100	38.70	36.76	34.83	30.96
24F1883	CDD-21-30003†	24VDC	0.1-10	38.35	36.44	34.52	30.68
24F1884	CDD-21-30001†	24VDC	1.8-180	38.35	36.44	34.52	30.68
24F1885	CDH-31-30005#	24VDC	180 Max.	38.90	36.99	35.09	31.12
24F1886	CDB-45-70002††	115VAC	0.6-60	37.05	35.20	33.35	29.64
24F1887	CDB-38-70012**	115VAC	0.6-60	52.45	49.83	47.21	41.96
24F1888	CDD-38-30012**	25VDC	0.6-60	49.50	47.02	44.55	39.60

BARBER-COLMAN RELAYS

Ultra-sensitive, versatile, polarized DC industrial relay. With 0.0005 watt input. Can control 100 watts on contacts with proper arc suppression giving 200,000 to 1 amplification factor. Reliable selenium photo cell can drive directly, one millisecond operation. SPDT center off works in relation to the current direction. Resists 10g vibration. With twice pull-in current. Comes with octal base — dimensions: 2 3/16 x 1 7/8". Shipping weight. 6¼ oz.

SINGLE COIL (1.3 Ampere-Turns)

Stock No.	Mfr. Type AYLZ	Coil Ohms	Pull-In Amps.	Pull-In Volts	uW Input	NET
24F387	7300-100	13	.00173	.023	39.1	
24F388	7301-100	54	.00087	.047	40.6	
24F390	7303-100	140	.00054	.076	41.1	
24F391	7304-100	215	.00046	.100	46.3	
24F392	7305-100	350	.00035	.123	43.2	
24F393	7306-100	560	.00028	.155	42.8	29.00
24F394	7307-100	900	.00022	.198	43.7	
24F395	7308-100	1400	.00017	.243	42.1	
24F396	7309-100	2300	.00014	.325	45.9	
24F397	7310-100	3550	.00011	.401	45.3	
24F398	7311-100	5650	.000093	.524	48.7	
24F426	7312-100	7950	.000076	.604	45.9	

SINGLE COIL (2 Ampere-Turns)

Stk. No.	Mfr. Type AYLZ-	Coil Ohms	Pull-in Amps.	Pull-in Volts	uW Input	NET
24F401	7325-100	13	.00267	.035	92.4	
24F405	7329-100	215	.00071	.154	109.6	
24F407	7331-100	560	.00043	.238	101.2	25.00
24F409	7334-100	2300	.00022	.499	108.3	
24F412	7337-100	7950	.00012	.930	108.8	

DOUBLE COIL (1.3 Ampere-Turns)

24F471	7358-100	940	.00034	.322	110.0	
24F473	7360-100	2300	.00022	.507	111.6	30.00
24F474	7361-100	3800	.00017	.650	111.1	

DOUBLE COIL (2 Ampere-Turns)

24F400	7383-100	940	.00053	.494	260 0	
24F424	7386-100	3800	.00026	1.000	263.0	26.00

AMPERITE THERMOSTATIC DELAY RELAYS, TUBES & FLASHERS

THERMOSTATIC DELAY RELAYS

OCTAL BASE TUBE SHELL

Delay Seconds	Stock No.	6.3 NO	Stock No.	26V NO	Stock No.	115V NO	Stock No.	115V NC	NET
2	24F2300	6 NO2	24F2314	26 NO2	24F2328	115 NO2	24F2342	115 C2	
3	24F2301	6 NO3	24F2315	26 NO3	24F2329	115 NO3	24F2343	115 C3	
5	24F2302	6 NO5	24F2316	26 NO5	24F2330	115 NO5	24F2344	115 C5	
10	24F2303	6 NO10	24F2317	26 NO10	24F2331	115 NO10	24F2345	115 C10	
15	24F2304	6 NO15	24F2318	26 NO15	24F2332	115 NO15	24F2346	115 C15	
20	24F2305	6 NO20	24F2319	26 NO20	24F2333	115 NO20	24F2347	115 C20	2.35
30	24F2306	6 NO30	24F2320	26 NO30	24F2334	115 NO30	24F2348	115 C30	
45	24F2307	6 NO45	24F2321	26 NO45	24F2335	115 NO45	24F2349	115 C45	
60	24F2308	6 NO60	24F2322	26 NO60	24F2336	115 NO60	24F2350	115 C60	
75	24F2309	6 NO75	24F2323	26 NO75	24F2337	115 NO75	24F2351	115 C75	
90	24F2310	6 NO90	24F2324	26 NO90	24F2338	115 NO90	.....	.....	
120	24F2311	6 NO120	24F2325	26 NO120	24F2339	115 NO120	24F2353	115 C120	
150	.....	.....	24F2326	26 NO150	24F2340	115 NO150	24F2354	115 C150	
180	24F2313	6 NO180	24F2327	26 NO180	24F2341	115 NO180	24F2355	115 C180	

MINIATURE 9 PIN TUBE SHELL

2	24F2370	6 NO2T	24F2381	26 NO2T	24F2392	115 NO2T	24F2403	115 C2T	
3	24F2371	6 NO3T	24F2382	26 NO3T	24F2393	115 NO3T	24F2404	115 C3T	
5	24F2372	6 NO5T	24F2383	26 NO5T	24F2394	115 NO5T	24F2405	115 C5T	
10	24F2373	6 NO10T	24F2384	26 NO10T	24F2395	115 NO10T	24F2406	115 C10T	
15	24F2374	6 NO15T	24F2385	26 NO15T	24F2396	115 NO15T	24F2407	115 C15T	
20	24F2375	6 NO20T	24F2386	26 NO20T	24F2397	115 NO20T	24F2408	115 C20T	2.35
30	24F2376	6 NO30T	24F2387	26 NO30T	24F2398	115 NO30T	24F2409	115 C30T	
45	24F2377	6 NO45T	24F2388	26 NO45T	24F2399	115 NO45T	24F2410	115 C45T	
60	24F2378	6 NO60T	24F2389	26 NO60T	24F2400	115 NO60T	24F2411	115 C60T	
90	24F2379	6 NO90T	24F2390	26 NO90T	24F2401	115 NO90T	24F2412	115 C90T	
120	24F2380	6 NO120T	24F2391	26 NO120T	24F2402	115 NO120T	24F2413	115 C120T	

24F2414. Type 26C5T. Normally closed. Delay 5 sec. 26 V. NET..... 2.35

OCTAL BASE TUBE SHELL

Same as above, but lower voltage and normally closed; except 2N030 normally open.

Delay Sec.	Stock No.	2.5 V.	Stock No.	6.3 V.	Stock No.	26.0 V.	NET
30	24F2356	2NO30	.....	.....	.....	.....	
20	.....	.....	24F2357	6C20	.....	.....	2.35
30	.....	.....	.....	.....	24F2358	26C30	

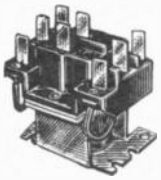
Hermetically sealed-heater actuated relays for AC or DC operation. SPST—Normally open (NO); Normally closed (C). Draw 2 w. Contact rating—115v at 3A AC and 220v at 1A AC. Breakdown voltage: delays 2-5 sec. between contacts 250 V, heater to contacts 500 V. Compensated for 55°-70°C ambient. Dia. 1¼". Hgt. less prongs 2¾". Min. 9 pin. ¾ x 2½". Shpg. wt. 4 oz.

AMPERITE BALLAST TUBES

Rugged units provide low-cost automatic voltage and current regulation. As supply voltage increases, ballast tube resistance increases. Regulating action is based on high temperature coefficient of resistance element and heat dissipation qualities of gas-filled tube. Av. shpg. wt., 8 oz.

No.	Type	No.	Type	NET
24F735	1HT4	24F724	4A1	
24F717	3-4	24F718	4H4C	
24F716	3-14	24F719	6-4	
24F739	3-16	24F720	6-8B	
24F737	3-50A	24F721	6-12	
24F727	3HTF4	24F722	6H6	1.76
24F725	3TF4A	24F742	6TF4	
24F738	3TF4	24F733	8-4	
24F726	3TFV4	24F734	9-7	
24F729	3TK2	24F723	10-4C	
24F732	3V4	24F743	3A10	

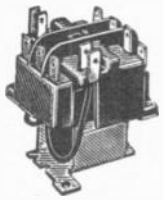
TYPE 91 A.C. GENERAL PURPOSE



Solenoid action. Quick connect terminals Enclosed fine silver contacts. Contacts rated at 15 amps, 277 volts AC max., resistive; 12 amps, (60 amps inrush), 125 volts AC—6 amps (35 amps inrush) 250 volts AC inductive. Selective mounting. Electrical life, 100,000 operations at rated load. Coil, 22 volt-amperes inrush; 10 volt-amperes sealed. Overall dimensions, 2⅛"x1⅞"x2⅜". Approx. wt., 5 oz.

Stock No.	Type	A.C. Coil V.	Action	1-24	25-49	50-99	100-249
60F2716	91-901	24	DPDT	5.14	4.63	4.11	3.60
60F2717	91-902	115/120	DPDT	5.37	4.84	4.30	3.76
60F2718	91-903	208/240	DPDT	5.57	5.02	4.46	3.90

TYPE 92 A.C. GENERAL PURPOSE



Solenoid action. Quick connect terminals. Enclosed fine silver contacts rated at 15 amps, 277 volts AC max., resistive: 12 amps (60 amps inrush), 125 volts AC — 6 amps (35 amps inrush), 250 volts AC inductive. Selective mounting. Electrical life, 100,000 operations at rated load. Coil characteristics, 24 volt-amperes inrush; 12 volt-amperes sealed. Overall dimensions, 2⅜x2⅜x2¾". Approx. wt., 6 oz.

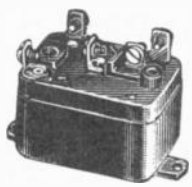
Stock No.	Type	Coil V.	Action	1-24	25-49	50-99	100-249
60F2719	92-901	24	3PDT	5.87	5.29	4.70	4.11
60F2720	92-902	115/120	3PDT	6.07	5.47	4.86	4.25
60F2721	92-903	208/240	3PDT	6.24	5.62	5.00	4.37

TYPE S30 SOLENOID CONTACTORS

3PNO double break-rated. 30 amps continuous, 180 amps inrush at 250 volts. 15 amps continuous and 90 amps inrush at 600 VAC. Laminated magnet and armature. Resilient mounting. Screw terminals. Enclosed contacts. 50/60 cy. coil. 14.5 Volt Amps. continuous with 50 Volt Amps. inrush. Overall size: 3⅞"x2⅜"x2½".

Stock No.	Mfr's. No.	A.C. Voltage	1-24	25-49	50-99	100-249
60F2863	S30-901	24V.	11.55	10.40	9.24	8.09
60F2864	S30-902	115V.				
60F2865	S30-903	230V.				

TYPE 84 SCREW TERMINALS



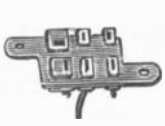
Totally enclosed. Silver alloy contacts rated at 125/250 volts AC; SPNO, 16 amps resistive (continuous); 8 amps (25 amps inrush) inductive. SPDT, 12 amps resistive (18 amps inrush) inductive. 6-32 mounting holes/2.156" centers. Electrical life, 100,000 operations at rated load. Coil, 4 VA inrush; 3 VA sealed. Overall size, 2⅜x1⅝x1½". Approx. wt., 5 oz.

Stock No.	Type	A.C. Coil V.	Action	1-24	25-49	50-99	100-249
60F2700	84-901	6	SPNO	2.85	2.57	2.28	2.00
60F2701	84-902	24	SPNO	2.90	2.61	2.32	2.03
60F2702	84-903	115/120	SPNO	3.05	2.75	2.44	2.14
60F2703	84-904	230/240	SPNO	3.35	3.02	2.68	2.35
60F2704	84-905	6	SPDT	3.00	2.70	2.40	2.10
60F2705	84-906	24	SPDT	3.20	2.88	2.56	2.24
60F2706	84-907	115/120	SPDT	3.35	3.02	2.68	2.35
60F2707	84-908	230/240	SPDT	3.59	3.24	2.87	2.52

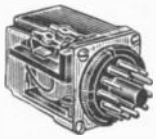
TYPE 84 QUICK CONNECT TERMINALS

With female quick connect wiring terminals, the type 84 is totally enclosed. Operates in any position. Isolated coil. Silver alloy contacts rated at 125/250 VAC SPNO, 16 amps resistive (continuous); 8 amps (25 amps inrush) inductive. SPDT, 8 amps resistive; 8 amps (18 amps inrush) inductive. 6-32 mounting holes—2.156" centers. Electrical life: 100,000 operations at rated load. Coil 4 VA inrush; 3 VA sealed. Size: 2⅜x1⅝x1½". Weight: 5 oz.

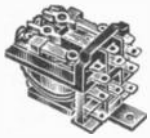
Stock No.	Type	AC Volts 50/60 Hertz	Action	1-24	25-49	50-99	100-249
60F2985	84-912	24	SPNO	2.90	2.61	2.32	2.03
60F2986	84-913	115	SPNO	3.05	2.75	2.44	2.14
60F2987	84-914	230	SPNO	3.35	3.02	2.68	2.35
60F2988	84-916	24	SPDT	3.20	2.88	2.56	2.24
60F2989	84-917	115	SPDT	3.35	3.02	2.68	2.35
60F2990	84-918	230	SPDT	3.59	3.24	2.87	2.52



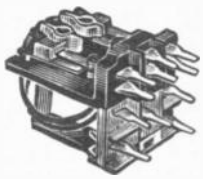
93-153-1



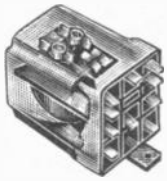
Type 93P



Type 93



Printed Circuit



Type 93Q

TYPE 93 AC AND DC GENERAL PURPOSE RELAYS

Combination molded coil bobbin and stationary contact terminal block. Extremely high arc-resistant and minimal moisture absorption characteristics. Terminal block, coil bobbin and carrier-molded glass filled alkyd material (GLASKED): — Stable over a normal commercial temperature range. All flexible lead wires are welded (no solder) joints. Coil terminals are on contact terminal block. Gold alloy cross-bar contacts (welded to contact springs) are superior for low level or audio circuits, coil power. DC.-1.5 watts. AC.-3.0 VA. 4.5 VA. inrush. CONTACT RATING: Silver Button — 120 Volts, 10 amps.; 240 Volts, 5 amps. Gold alloy cross-bar 120 Volts 5 amps.; 240 Volts, 3 amps.
CONTACT SPRINGS:
10 AMPS: Plated Beryllium Copper. **5 AMPS:** Nickel Silver.

OPEN TYPE 93 (Front Mtg.)

Hardware included to permit replacement of rear mounted relays either, screw or stud mounted. Solder terminals. Overall size—1 13/16"x1 5/16"x1 5/16". Approximate wt. 5 oz.

Stock No.	Mfr. No.	Coil Voltage	Contact Form	Contact Amps	1-24	25-49	50-99	100-249
60F2882	93-908	120VAC	2PDT	10	3.95	3.56	3.16	2.74
60F2883	93-909	50/60 Hz	3PDT	10	4.40	3.96	3.52	3.08
60F2915	93-917	12 VDC	2PDT	10	3.50	3.15	2.80	2.45
60F2916	93-918		3PDT	10	4.00	3.60	3.20	2.80
60F2918	93-920	24 VDC	2PDT	10	3.50	3.15	2.80	2.45
60F2919	93-921		3PDT	10	4.00	3.60	3.20	2.80

TYPE 93P 8 AND 11 PIN

Plug in. 8 pin octal base for single and two-pole—11 pin base for 3 pole. Overall size—2⅛"x1 7/16"x1 3/16". Approximate weight 5 oz.

Stock No.	Mfr. No.	Coil Voltage	Contact Form	Contact Amps	1.24	25-49	50-99	100-249
60F2930	93P-908	120 VAC	2PDT	10	6.15	5.54	4.92	4.31
60F2931	93P-909	50/60 Hz	3PDT	10	7.65	6.89	6.12	5.36
60F2939	93P-917	12 VDC	2PDT	10	6.10	5.49	4.88	4.27
60F2940	93P-918		3PDT	10	7.60	6.84	6.08	5.32
60F2942	93P-920	24 VDC	2PDT	10	6.10	5.49	4.88	4.27
60F2943	93P-921		3PDT	10	7.60	6.84	6.08	5.32

TYPE 93 PRINTED CIRCUIT TERMINAL RELAYS

Overall size: 1 5/16"x1 5/16"x1 5/16"

Stock No.	Mfr's No.	Coil Voltage	Contact Form	Contact Amps	1-24	25-49	50-99	100-249
60F2745	93-968	120V	2PDT	5	3.85	3.47	3.08	2.70
60F2746	93-969	50/60 Hz	3PDT	5	4.25	3.83	3.40	2.98
60F2748	93-977	12 VDC	2PDT	5	3.40	3.06	2.72	2.38
60F2749	93-978		3PDT	5	3.65	3.47	3.08	2.70
60F2751	93-980	24 VDC	2PDT	5	3.40	3.06	2.72	2.38
60F2752	93-981		3PDT	5	3.85	3.47	3.08	2.78

TYPE 93Q SERIES QUICK-CONNECT TERMINAL RELAYS

Front mounting. Size: 2⅛"x1 7/16"x1 9/16". Approximate wt. 5 oz.

Stock No.	Mfr's. No.	Coil Voltage	Contact Form	Contact Amps	1-24	25-49	50-99	100-249
60F2762	93Q-908	120V	2PDT	10	4.50	4.05	3.60	3.15
60F2763	93Q-909	50/60 Hz	3PDT	10	5.00	4.50	4.00	3.50
60F2771	93Q-917	12 VDC	2PDT	10	4.05	3.65	3.24	2.84
60F2772	93Q-918		3PDT	10	4.60	4.14	3.68	3.22
60F2773	93Q-919	24 VDC	2PDT	10	3.60	3.24	2.88	2.52
60F2774	93Q-920		2PDT	10	4.05	3.65	3.24	2.84
60F2775	93Q-921		3PDT	10	4.60	4.14	3.68	3.22

POLARIZED SOCKET FOR TYPE 93Q

Include Quick Connect Terminals

Stk. No.	Mfr's No.	Description	1-24	25-49	50-99	100-249
60F2753	93-153-1	Panel Mount	.60	.54	.48	.42

● NEW INDUSTRIAL AC CONTACTORS

Double break contact action. Replaceable contacts and coil. Silver alloy contacts. Design permits common base, coil, and magnet for contactor ratings from 10-50 amperes. Epoxy sealed molded magnet coil housing. 50/60 Hz magnet coil. Hi-dielectric arc resistant moldled block and carrier. Resilient mounting.

C10/41N0

Pressure type power terminals: #10 wire max; 10 amps @ 600 max. resistive load (per pole); Contacts convert to N.c.

Stk. No.	Type	Coil V.	1-24	25-49	50-99	100-299
60F2833	C10-901	24	14.00	12.60	11.20	9.80
60F2834	C10-902	110				
60F2835	C10-903	220				

C15/4PNO

Same feature as above but rated for 15 amps. @ 600 Volts Contacts convert to N.C.

60F2853	C15-901	24	19.80	17.82	15.84	13.86
60F2854	C15-902	110				
60F2855	C15-903	220				

C30/3PNO

30 amps. @ 600V; Terminals take #6 solid wire max.; SPNO auxiliary converts to N.C.

60F2833	C30-901	24	24.30	21.87	19.44	17.01
60F2834	C30-902	110				
60F2835	C30-903	220				

● NEW AC REVERSING CONTACTORS

Two type C contactors mounted side by side on steel base. Hardened steel interlock prevents simultaneous closing of both contactors. Resilient mounting. No cross-phase wiring. 15 amps @ 600V. 4PNO. All contacts convert to N.C.

60F2836	CR15-901	110	43.20	38.88	34.56	30.24
60F2837	CR15-902	220	43.20	38.88	34.56	30.24

TYPE C REPLACEMENT PARTS

Magnetic Coils

Stk. No.	Type	Replaces	Voltage 50/60Hz	1-24	25-Up
60F2991	MC-901	45225-5	24	4.68	3.51
60F2992	MC-902	45225-1	110		
60F2993	MC-903	45225-2	220		

Contact Assemblies

Stk. No.	Type	Replaces	Type	1-24	25-Up
60F2994	CA-901	45997-3 45997-4	C-10, C-15 CR-15*	5.76	4.33
60F2995	CA-902	45997-24	C-30, CR-30*	7.80	5.85

*Reversing type—2 sets required

Armature and Magnet

Stk. No.	Type No.	1-24	25-Up
60F2996	RP-901	4.28	3.22

● NEW MS40 DC SENSITIVE RELAYS

Solder terminals; 4-40 mounting; Gold Alloy cross-bar; Contacts rated 2 amps (resistive) @ 28 VDC or 115 VAC. SPDT.

Stk. No.	Type	Coil Ω*	1-25	25-49	50-99	100-249
60F2838	MS40-901	250	2.00	1.80	1.60	1.40
60F2839	MS40-902	500	2.00	1.80	1.60	1.40
60F2840	MS40-903	750	2.00	1.80	1.60	1.40
60F2841	MS40-904	1K	2.00	1.80	1.60	1.40
60F2842	MS40-905	1.5K	2.00	1.80	1.60	1.40
60F2843	MS40-906	2.5K	2.00	1.80	1.60	1.40
60F2844	MS40-907	5K	2.25	2.03	1.80	1.58
60F2845	MS40-908	7.5K	2.25	2.03	1.80	1.58
60F2846	MS40-909	10K	2.50	2.25	2.00	1.75

TYPE MS64 MINIATURE SENSITIVE RELAY

For application where minimum mounting space and maximum protection to moving parts are important. For printed circuit board mounting, or in mounting bracket version for "solder on" lead wire termination. Snap-on cover.

PRINTED CIRCUIT

Printed Circuit Stock No.	Type	DC Voltage Nom.	Pick-up*	Coil Ohms @25°C	1-24	25-49	50-99	100-249
60F2971	MS64-901	6	4.5	400	2.37	2.13	1.90	1.66
60F2972	MS64-902	12	9.0	1600	2.44	2.20	1.96	1.71
60F2973	MS64-903	24	18.0	6500	2.82	2.54	2.27	1.97
60F2974	MS64-904	3MA.	2.3MA.	10000	2.96	2.66	2.37	2.07

BRACKET SOLDER TERMINALS

60F2975	MS64-911	6	4.5	400	2.37	2.13	1.90	1.66
60F2976	MS64-912	12	9.0	1600	2.44	2.20	1.96	1.71
60F2977	MS64-913	24	18.0	6500	2.82	2.54	2.27	1.97
60F2978	MS64-914	3MA.	2.3MA.	10000	2.96	2.66	2.37	2.07

TYPE 70

Solenoid action. Totally enclosed. Double break copper to copper rotating disc moveable contact. Copper stud power and isolated coil terminals. Wiring hardware included. Continuous rating, 80 amps (inrush 300 amps at 6 volts—150 amps at 12 volts DC). 50 amps maximum at 24 and 32 volts DC. Bracket mounting —2.109" centers. Coil, 9 watts. Copper contacts except * which are silver. Overall dimensions, 2½x3½x2½". Approx. wt., 1 lb.

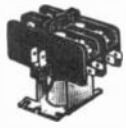
Stock No.	Type	Coil V.	Action	1-24	25-49	50-99	100-249
60F2725	70-901	6V. D.C.	SPNO	3.74	3.37	3.00	2.62
60F2726	70-902	12V. D.C.	SPNO	3.74	3.37	3.00	2.62
60F2727	70-903	24V. D.C.	SPNO	3.74	3.37	3.00	2.62
60F2728	70-904	32V. D.C.	SPNO	3.74	3.37	3.00	2.62
60F2675	70-905*	6V. D.C.	SPNO	5.97	5.37	4.77	4.18
60F2676	70-906*	12V. D.C.	SPNO	5.97	5.37	4.77	4.18
60F2677	70-907*	24V. D.C.	SPNO	5.97	5.37	4.77	4.18
60F2678	70-908*	36V. D.C.	SPNO	5.97	5.37	4.77	4.18
60F2679	70-909*	4V. D.C.	SPDT	9.54	8.59	7.64	6.68
60F2680	70-910*	12V. D.C.	SPDT	9.54	8.59	7.64	6.68
60F2681	70-911*	24V. D.C.	SPDT	9.54	8.59	7.64	6.68
60F2682	70-912*	36V. D.C.	SPDT	9.54	8.59	7.64	6.68

TYPE 75 AC POWER CONTACTORS

Protected contacts Coil lead wires. Silver alloy contacts rated at 20 amps, 240 volts AC (per hole) resistive; 15 amps, 230 volts AC inductive. 1 Horse power per pole, 115/230 volts AC. 2 pole rating—2 horse power, 230 volts AC. Selective mounting. Electrical life, 100,000 operations at rated load. Coil characteristics, 16 volt-amperes inrush; 12 volt-amperes sealed. Screw power terminals except * which are quick-connect. Overall dimensions, 2½x2⅛x2¼". Approx. wt., 7 oz.

Stock No.	Type	AC Volts 60 Cycle	Action	1-24	25-49	50-99	100-249
60F2722	75-901	24	2PNO	4.59	4.13	3.67	3.21
60F2723	75-902	115/120	2PNO				
60F2724	75-903	230/240	2PNO				
60F2982	75-904*	24	2PNO	4.59	4.13	3.67	3.21
60F2983	75-905*	115/120	2PNO				
60F2984	75-906*	230/240	2PNO				

TYPE 143 AC POWER CONTACTOR



New, compact power contactor. 2-pole normally open double break contacts. Rated for 18 amp., 250 volts continuous or 90 amp. inrush. Straight-through wiring. No. 10 presure screw power terminals with dual quick connect auxiliary terminals. Female quick-connect wiring, terminals included. High dielectric molded vertical mounting. Class "B" coils. Size: 3¼ x 2⅜ x 2½". Wt. 8 oz. U.L. and CSA listed.

Stock No.	Type	AC Volts 50/60 Cycle	1-24	25-49	50-99	100-249
60F2979	143-901	24	4.78	4.30	3.83	3.35
60F2980	143-902	120				
60F2981	143-903	208/240				

TYPE 129 AC POWER RELAY

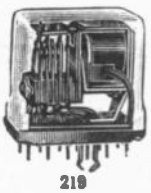
Totally enclosed. Screw terminals. Silver alloy contacts rated at 18 amperes continuously at 250 volts AC, resistive or inductive. Horse power rating, 1 H.P. at 125 volts, 2 H.P. at 250 volts. Single screw mounting. Electrical life, 100,000 operations at rated load. Coil: 10 volt-amperes inrush—5 volt-amperes sealed. Size, 2⅜x1⅞x1⅞". Approx. wt. 7 oz.

Stock No.	Type	Coil V.	Action	1-24	25-49	50-99	100-249
60F2708	129-901	6	SPNO	3.89	3.50	3.11	2.72
60F2709	129-902	24	SPNO	3.94	3.55	3.16	2.76
60F2710	129-903	115/120	SPNO	4.05	3.65	3.24	2.84
60F2711	129-904	208/230	SPNO	4.14	3.73	3.31	2.90
60F2712	129-905	6	SPDT*	4.32	3.89	3.46	3.03
60F2713	129-906	24	SPDT*	4.37	3.94	3.50	3.06
60F2714	129-907	115/120	SPDT*	4.50	4.05	3.60	3.15
60F2715	129-908	208/240	SPDT*	4.59	4.14	3.68	3.22

*Isolated Terminals; all contact terminals must be wired same polarity.

NEWARK — Fast Service — Top Quality

Dunco Industrial Relays



219

211

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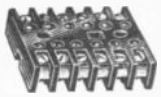


Socket 27390

219 FRAME GENERAL PURPOSE RELAYS

For lab type "tail chasing" circuits, machine control installations handling light relay loads, solenoids, and heaters. Clear thermoplastic enclosure, mounted on 12-pin plugs. 10 amp. contact current carrying capacity. Insulation: ¼" over the surface, ⅛" through air. 1500 dielectric test Max amb. 53°C. 20,000,000 cycle no-load life. Withstand 110% nominal V without damage. Oper: AC 85% nominal V; DC 80% nominal V. Base 1 15/32 x 2⅜" Height, 2 19/32" (less pins). UL. listed. Wt. 7 oz.

Manual Actuator. Sliding plastic actuator on cover for manual operation of relay contacts w/o removing cover from relay or relay from socket. Spring return.

Indicating Lamp. Neon lamp across relay coil indicates when pwr is available.

Actuator Lamp. Both of above features.

Stk. No.	Type 219—	Coil Volts	DPDT Cont.	1-24	25-49	50-74	75-99	100-249
60F3101	XBXP	24DC	DPDT	12.10	11.50	10.89	9.68	8.47
60F3102	XBXP	115DC	DPDT					
60F3100	XBXP	115AC	DPDT					
60F3104	BBXP	24DC	+2NO	14.50	13.78	13.05	11.60	10.15
60F3105	BBXP	115DC	+2NO					
60F3103	BBXP	115AC	+2NO					
60F3107	ABAP	24DC	+1NO+1NC					
60F3108	ABAP	115DC	+1NO+1NC					
60F3106	ABAP	115AC	+1NO+1NC					

With Manual Contact Actuators

Stock No.	Type	DPDT Contacts	1-24	25-49	50-74	75-99	100-249
60F3198	219XBXPM	DPDT	13.20	12.54	11.88	10.56	9.24
60F3197	219BBXPM	+2NO	15.60	14.82	14.04	12.48	10.92
60F3196	219ABAPM	+1NO +1NC	15.60	14.82	14.04	12.48	10.92

With Neon Indicating Light

Stock No.	Type	DPDT Contacts	1-24	25-49	50-74	75-99	100-249
60F3195	219XBXPL	DPDT	13.20	12.54	11.88	10.56	9.24
60F3194	219BBXPL	+2NO	15.60	14.82	14.04	12.48	10.92
60F3193	219ABAPL	+1NO +1NC	15.60	14.82	14.04	12.48	10.92

With Manual Actuator and Indicating Light

60F3199	219XBXPLM	DPDT	14.30	13.60	12.87	11.44	10.01
60F3200	219BBXPLM	+2NO	16.70	15.87	15.03	13.36	11.69
60F3201	219ABAPLM	+1NO +1NC	16.70	15.87	15.03	13.36	11.69

211 FRAME SEQUENCE 115VAC RELAYS

For applications requiring max. dependability in min. space. Double cam movement on each step. Molded spacers lock contacts into position and provide 150V insulation to meet U.L. Requirements. Ratchets and cams are of nylon. Eight tooth hatchets are standard. Rated at 5 amps. @ 115V AC. Coils are enameled copper wire on acetate lined bobbin, impregnated and baked. Operated 15% below rated AC voltage & 20% on DC. Position: vertical with ratchets up. Min. life: 1,000,000 oper. Size: 3¾ (less pins) x 2⅝ x 1 15/32". Wt.: 6 oz.

*Contacts open and close alternately **Transfer on each impulse.

Stock No.	Type	Contacts	1-24	25-49	50-74	75-99	100-249
60F3109	211AXAP	DPST*	22.80	21.66	20.52	18.24	15.96
60F3111	211XBXP	DPDT**	25-10	23.85	22.59	20.08	17.57

255 FRAME LATCH 115 VAC RELAYS

For dependable, long-life service on industrial panels. Combines standard 219 frame relay with latching frame. Min. life 10 million mech. oper. Cois rated for continuous duty. Cont. rated 10 amps. @ 115VAC. 115V electrical spacings of ¼" surface & ⅛" air. Size: 3 (less pins) x 2⅝ x 1 15/32". Wt. 9 oz.

Stock No.	Type	Contacts	1-24	25-49	50-74	75-99	100-249
60F3112	255XBXP	DPDT	24.20	22.99	21.78	19.36	16.94
60F3113	255XCXP	3PDT	26.60	25.27	23.94	21.28	18.62
60F3114	255BXBP	2NO; 2NC	26.60	25.27	23.94	21.28	18.62

235AAXP FRAME TIME-DELAY 115VAC RELAYS

Combines 219 Frame relays with epoxy-encapsulated, solid state delay networks. Timing is screwdriver adjustable over 90:1 range. Cont: 10 amps. 115VAC resist. Repeat accuracy ±5% @ fixed V. Will operate at voltages from 95 to 125V, but timing var. inversely with voltages. 20 million mech. oper. life. Size: 3¾ x 2⅝ x 1 15/32". Shpg. wt.: 11 oz.

Stock No.	Time Range	1-24	25-49	50-74	75-99	100-249
60F3115	0.2 to 18 sec.	57.80	54.91	52.02	46.24	40.46
60F3116	2.0 to 180 sec.	57.80	54.91	52.02	46.24	40.46

TYPE 27390 12-PIN PLUG-IN SOCKET

Heavy-duty socket for all relays listed above. Front-connected screws have clamp plates for up to two No. 14 wires. Base: 2 5/16 x 2⅝; ht. 2 1/32". Wt. 3 oz.

60F3117. EACH 2.20

B11

C85

B11 MIDGET FRAME SEQUENCE 115VAC DPST RELAYS

DPST cam-operated contacts repeat predetermined sequence continuously. Type B11BXX contacts open and close together. Type B11AXA contacts open and close alternately. Coils are for intermittent duty only. Contact ratings: 6 amps @ 24, or 115 VAC., 3 amps @ 230 VAC. or 6 amps @ 27 VDC, ½ amp. @ 115 VDC. Eight tooth ratchets. Six terminals: #6-32 studs complete with wiring hardware for front connection. Size: 2 x 3 13/16". Av. wt., 1 lb.

Stk. No.	Type	1-24	25-49	50-74	75-99	100-249
60F3124	B11BXX	24.20	22.99	21.78	19.36	16.94
60F3125	B11AXA	24.20	22.99	21.78	19.36	16.94

C85 FRAME POWER SEQUENCE 115VAC DPST RELAYS

DPST cam operated contacts repeat predetermined sequence continuously. Type C85BXX relay contacts open and close together. Type C85AXA contacts open and close alternately. Contact ratings: 20 amps @ 24 and 115VAC or 24 VDC; 10 amps @ 230VAC; 1 amp @ 115VDC: ¼ amp @ 230VDC. Eight toothed ratchets. Same terminals as Type B11. Size: 3 x 5". Shpg. wt., 1 lb.

Stk. No.	Type	1-24	25-49	50-74	75-99	100-249
60F3126	C85BXX	38.40	36.48	34.56	30.72	26.88
60F3127	C85AXA	38.40	36.48	34.56	30.72	26.88

TYPE 415XBX COMPACT POWER RELAY

For instrument control, small motors, solenoid valves & heating elements. Contact arrangement DPDT, single-break. Mech. life, 20 million oper. Rating: 15 amps, 115 VAC resistive load, 10 amps, 230VAC, resistive load. Size base, 1⅞ x 2¾"; ht., 1¾". Shpg. wt. 8 oz.

Stk. No.	Coil Volts	1-24	25-49	50-74	75-99	100-249
60F3129	24VDC	7.20	6.84	6.48	5.76	5.04
60F3130	115VDC					
60F3128	115VAC					

PLASTIC RELAY ENCLOSURES

Make your own plug-in type enclosure for experimental circuits, timing devices, etc. It features the same construction as enclosures on this page. Fits Type 27390 socket on this page. Case is sturdy, thermoplastic with molded phenolic base. Size: 2 5/16 x 1 5/32". Twelve usable pins with 10-amp current rating. Polarized by means of a mounting clip. All necessary hardware is included. Ship. weight, 4 oz.

Stk. No.	Type	Size	Net
60F3131	CX3671	2 19/32" high less pins	2.45
60F3132	CX3672	3¾" high less pins	2.55

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

SERIES 6000 AC MOTOR RELAYS AND CONTROLS

SERIES 6000 CONTACTORS AND MOTOR STARTERS

Just one screw and a nylon lock block tightly interlocks twelve basic parts into a compact, integral assembly. Housing is insulated with pressure-type terminals and stationary contacts. Free-floating magnet frame, molded operating coil, movable contacts, stainless steel contact and return springs, nylon yoke and free-floating armature.

20 AND 30 AMPERE AC MAGNETIC CONTACTORS

Compact, long-life—requires less than 11 square inches of panel space. Mount either vertically or horizontally. High reliability—ideal for power, lighting, machine tool control and other industrial applications. For enclosed mounting, unit installs in Type 1 General Purpose Enclosure. Available with either 3 or 4 isolated double break contacts in 20 Ampere (Size 0) or 30 Ampere (Size 1) ratings. Silver cadmium oxide main contacts. Molded, continuous duty AC coils require 94 VA with armature open; 16 VA armature sealed. 10,000,000 cycle mechanical life. Class A insulation with 2500 volt dielectric test. Undervoltage: 85% of rated voltage. Overvoltage: 110%. *8 hour ampere rating. Size: 4 13/32 x 3 3/4 x 2 15/16".

3-POLE TYPES—RATINGS ARE FOR 2-3 PHASE

OPEN TYPE

Stk. No.	Type	Rating Amps*	Volts 60 hz	Max. HP Normal Service	NET
60F3208	6000-30101	20	110/115	2	29.00
60F3209	6001-30101	30	110/115	3	34.00
60F3210	6000-30201	20	208/220	3	29.00
60F3211	6001-30201	30	208/220	7.5	34.00

ENCLOSED TYPE

60F3212	6000-31101	18	110/115	2	31.00
60F3213	6001-31101	27	110/115	3	36.00
60F3214	6000-31201	18	208/220	3	31.00
60F3215	6001-31201	27	208/220	7.5	36.00

4-POLE TYPES—RATINGS ARE FOR 2-PHASE/4-WIRE

OPEN TYPE

60F3216	6000-40101	20	110	2	37.00
60F3217	6001-40101	30	110	3	42.00
60F3218	6000-40201	20	208/220	3	37.00
60F3219	6001-40201	30	208/220	7.5	42.00

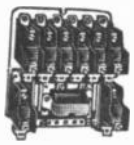
ENCLOSED TYPE

60F3220	6000-41101	18	110	2	39.00
60F3221	6001-41101	27	110	3	44.00
60F3222	6000-41201	18	208/220	3	39.00
60F3223	6001-41201	27	208/220	7.5	44.00

TYPE MC SINGLE CONTACT RELAYS

Similar to Type MCL w/o latching. High speed enables control of any type load with high mechanical and electrical reliability. Interchangeable magnetic assemblies and coils. Self-aligning armatures. Low friction nylon armature guides. Shpg. wt. 2 lbs.

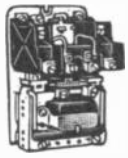
601-4



601-8

Stock No.	Type	Contacts NO	Contacts NC	No. of Cont. Mod.	AC Volts	NET
60F3265	601-4-4S0	4	0	4	115	20.00
60F3266	601-4-4S0	4	0	4	230	20.00
60F3267	601-8-4S4	4	4	8	115	33.00
60F3268	601-8-4S4	4	4	8	230	33.00
60F3269	601-8-6S2	6	2	8	115	33.00
60F3270	601-8-6S2	6	2	8	230	33.00
60F3271	001 Replacement Contact Kit—N.O.					3.00
60F3272	002 Replacement Contact Kit—N.C.					3.00

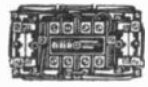
TYPE MCL AC LATCH RELAYS



Modular construction feature with mechanical latch and electrical reset. Typical application; logic functions involving "memory"; control circuits which must function regardless of power failure; hold contacts open or closed for long periods without using coil power; and when AC hum is objectionable. When operating coil is energized, roller engages metal latch on relay yoke. Armature remains closed even with power failure or vibration. Energizing latch coil releases roller—armature drops out. Wt. 3 lbs.

Stock No.	Type	Contacts NO	Contacts NC	No. of Cont. Mod.	AC Volts	NET
60F3263	601L-H-2S0	2	0	2	110	29.00
60F3264	601L-H-2S0	2	0	2	220	29.00

20 AND 30 AMP AC-MAGNETIC NON-REVERSING STARTERS



Starters can be connected for 2 or 3 wire control. Positive low voltage protection provided by maintaining contact for 3-wire control.

HORIZONTAL TYPES: For 2 overload relays. Third overload can be used if mounted on control panel. Size: 6 5/8 x 3 3/4 x 4 9/16".

VERTICAL TYPES: Allows addition of third overload relay to base plate. Size: 3 3/4 x 7 7/8 x 4 9/16".

GENERAL PURPOSE ENCLOSURE: For vertical configuration only. With master reset button — See below for all accessories. Size: 10 9/64 x 6 31/32 x 5 1/2".

Heaters (listed below) not included. Order separately.

3-POLE 2 OR 3-PHASE WITH OVERLOAD RELAYS

HORIZONTAL OPEN TYPES

Stock	Type	60 hz Volts	Amps	NET
60F3224	6010-3H101	110	20	35.50
60F3225	6011-3H101	110	30	40.50
60F3226	6010-3H201	208	20	35.50
60F3227	6011-3H201	220	30	40.50

VERTICAL OPEN TYPES

Stock No.	Type	60 hz Volts	Amps	NET
60F3228	6010-3V101	110	20	35.50
60F3229	6011-3V101	110	30	40.50
60F3230	6010-3V201	208	20	35.50
60F3231	6011-3V201	220	30	40.50

VERTICAL MOUNTING IN TYPE 1 ENCLOSURE

Stock No.	Type	60 hz Volts	Amps	NET
60F3232	6010-31101	110	20	37.50
60F3233	6011-31101	110	30	42.50
60F3234	6010-31201	208	20	37.50
60F3235	6011-31201	220	30	42.50

HEATERS FOR OVERLOAD RELAYS

Heater sizes shown below are for 40°C rise motors. Will allow a max. of approximately 125% of rated motor current. For 140% protection use 1 size larger heater. For 50°C rise motors, or if the ambient temperature at the motor exceeds that at the controller by 10°C select heater one size smaller.

Stock No.	Type	Full Ld. Motor Curr.—Amps. Min.	Full Ld. Motor Curr.—Amps. Max.	Trip Amps.	Max. Fuse Size—Amps. 250V.	Max. Fuse Size—Amps. 600V.	NET
60F3236	W-7	1.0	1.14	1.25	4	4	
60F3237	W-8	1.2	1.31	1.5	5	5	
60F3238	W-10	1.32	1.5	1.65	6	6	
60F3239	W-12	1.52	1.73	1.9	6	6	
60F3240	W-14	1.84	2.0	2.3	6	6	
60F3241	W-16	2.24	2.39	2.8	8	8	
60F3242	W-18	2.4	2.73	3.0	10	10	
60F3243	W-20	3.2	3.62	4.0	11	11	
60F3244	W-22	4.0	4.39	5.0	14	14	
60F3245	W-23	4.4	5.0	5.5	15	15	
60F3246	W-25	5.6	6.35	7.0	20	20	1.50
60F3247	W-27	6.7	7.14	8.4	25	25	
60F3248	W-50	7.15	7.99	8.8	30	30	
60F3249	W-51	8.0	9.1	10.0	30	30	
60F3250	W-52	9.4	10.24	11.75	35	35	
60F3251	W-53	10.25	11.7	12.8	45	45	
60F3252	W-55	11.85	13.5	14.8	45	45	
60F3253	W-57	13.6	15.1	17.0	50	50	
60F3254	W-58	15.2	17.3	19.0	60	60	
60F3255	W-100	17.6	19.99	22.0	60	—	
60F3256	W-101	20.0	22.7	25.0	70	—	
60F3257	W-103	25.6	28.0	32.0	90	—	

ACCESSORIES FOR SERIES 6000

Type 6M71

Type 6M81

Type 6M82

Type 6M71 Overload Relay. Thermal inverse time delay type with manual reset button. Molded case with removable heater. Less heater (see left). Shpg. wt. 8 oz.
60F3258. NET 4.50

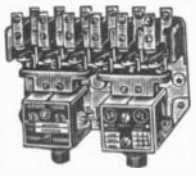
Type 6M81 "Start-Stop" Pushbutton. Fits standard Type I Enclosure. With hardware for installation case.
60F3259. NET 6.00

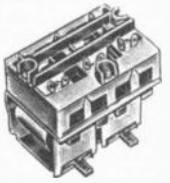
Type 6M82 "Hand-Off-Auto" Selector Switch. Fits standard Type I Enclosure. With necessary hardware. Shpg. wt. 8 oz.
60F3260. NET 6.00

Type 6M60 Normally Open Auxiliary Contacts. Rated @: Normal —3 amps; Inrush—30 amps at 110-125 volts. Shpg. wt. 4 oz.
60F3261. NET 4.00

Type I General Purpose Enclosure. Size: 10 9/64"H x 6 31/32"W x 5 1/2"D. Shpg. wt. 3 lbs.
60F3262. NET 7.00

Dunco Industrial Relays





SERIES B175KKK REVERSING CONTACTOR

Control the reversal of single phase AC, polyphase AC, and DC motors. Withstands frequent reversing or jogging service, and severe shock and vibrations encountered in the hoist service. Two 3-pole solenoid operated contactors mounted on a common frame and mechanically interlocked to prevent simultaneous closure. Double-break silver contacts rated 2hp at 110-220v., 2-3 phase; 3 hp at 440-450v., 2-3 phase; 1½hp at 230v., 1 hp at 115v. single phase. 5¼x4 1/16x2½". U.L., C.S.A. listed. Shpg. wt. 2½ lbs.

Stk. No.	Type	Coil Vac	1-24	25-49	50-74	75-99	100-249
60F3174	B175KXX	24	27.50	26.13	24.75	22.00	19.25
60F3175	B175KXX	115					
60F3176	B175KXX	230					

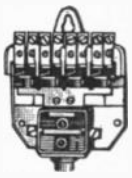
SERIES 275KXX REVERSING CONTACTOR

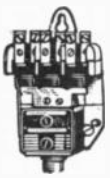
Compact, low cost contactor designed for continuous operation in heavy duty service. Numerous applications in overhead doors, elevators, hoists, pump sequencing and other jogging services. 3 point suspension 3 pole contactor mounted on a common frame and mechanically interlocked to prevent simultaneous closure. Contacts rated ¾ hp at 120v; 1 hp at 120v; 2-3 phase, 240 and 480v; 1-2-3-phase.

SERIES 275KXX74. As above but with auxiliary electrical interlock that consists of a pair of SPDT double break contacts mounted on hte front of the contactor. Size: 3⅛x2 3/16x2 7/8". Wt. 1 lb.

Stock No.	Type	Coil Vac	1-24	25-49	50-74	75-99	100-249
60F3177	275KXX	24	16.50	15.68	14.85	13.20	11.55
60F3178	275KXX	120					
60F3179	275KXX	230					
60F3180	275KXX74	24	19.80	18.81	17.82	15.84	13.86
60F3181	275KXX74	120					
60F3182	275KXX74	230					

FRAME 48 NON-REVERSING POWER CONTACTORS


48LXX


48KXX

Ideally suited for use in severe motor-starting applications hoists, window and door openers, motorized valves, built-in motor control uses. Silver, double break contacts in melamine arc chutes provide extra degree of safety under high overload conditions. Coils and contact terminals readily accessible from front for easy installation. Heavy gauge mounting plates resist twisting and torsional strain. Single throw contacts normally open—each individually sprung for precise contact alignment. Coils with molded melamine insulation with 600 volt spacing. Contact rating: 1½ hp (15 amps) at 230 volts, single phase 1 hp (15 amps) at 115 volts, single phase. Sizes: 3-Pole Types: 5⅛ x 2 13/16 x 2½". 4-Pole Types: 5⅛ x 3⅝ x 2½". UL and CSA Listed. Shpg. wt. 1½ lbs.

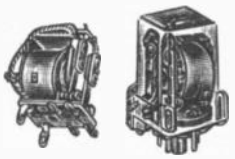
Stock No.	Type	Coil VAC	Poles	1-24	25-49	50-74	75-99	100-249
60F3273	48KXX	24	3	15.70	14.92	14.13	12.56	10.99
60F3274	48KXX	115	3	15.70	14.92	14.13	12.56	10.99
60F3275	48LXX	24	4	18.20	17.29	16.38	14.56	12.74
60F3276	48LXX	115	4	18.20	17.29	16.38	14.56	12.74

STANDARD INDUSTRIAL OPEN-TYPE POWER 115VAC RELAYS

For supervisory, interlocking and power transferring. Cont. ratings: single-break type. 30 amps. @ 24, 115 or 230VAC or 24VDC; 3 amps @ 115VDC; ¾ amp @ 230-VDC; Heavy duty contacts that transfer when energized. Cont. spaced, relays insulated according to U.L. requir. *U.L. Listed. Stud terminals. Size: 3 x 4¼". Av. ft., 1 lb.

Stk. No.	Type	Contacts	1-24	25-49	50-74	75-99	100-249
60F3121	8BXX	DP-NO	20.60	19.57	18.54	16.48	14.42
60F3122	8AXA	INO-INC	20.60	19.57	18.54	16.48	14.42
60F3123	A8CXX	3P-NO	23.30	22.14	20.97	18.64	16.31

214 FRAME GENERAL PURPOSE RELAYS



Space saving, low cost relays for general purpose applications. Features contact reliability. Insulation (G5) is Melamine bonded fibre glass which assures firm contact support. Longer operating life by use of wide hinge. AC relays operate over a range of 85% to 110% of nom.v. DC relays operate over a range of 80% to 110% of nom. v. Standard contacts are fine silver rated 5 amps, 115 VAC. Shpg. Wt. 5 oz.

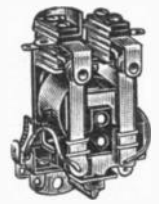
OPEN

Stock No.	Type	Coil volts	Action	1-24	25-49	50-74	75-99	100-249	250-499
60F3183	214XBX	115AC	DPDT	3.10	2.95	2.79	2.48	2.17	2.02
60F3184	214XBX	24DC	DPDT	3.10	2.95	2.79	2.48	2.17	2.02
60F3185	214XCX	115AC	3PDT	3.50	3.33	3.15	2.80	2.45	2.28
60F3186	214XCX	24DC	3PDT	3.50	3.33	3.15	2.80	2.45	2.28

ENCLOSED

60F3187	214XBX48P	115AC	DPDT	5.00	4.75	4.50	4.00	3.50	3.25
60F3188	214XBX48P	24DC	DPDT	5.00	4.75	4.50	4.00	3.50	3.25
60F3189	214XCX48P	115AC	3PDT	6.00	5.70	5.40	4.80	4.20	3.90
60F3190	214XCX48P	24DC	3PDT	6.00	5.70	5.40	4.80	4.20	3.90

MEDIUM POWER OPEN-FRAME 115 VAC RELAYS



Low cost relay designed for long life. Can be used over a broad range of applications. Impregnated operating coils for max. moisture and corrosion resistance. Insulated carrying parts for min. of 1250 volts AC breakdown. Contacts are 7/32" fine silver buttons mounted on heavy flexing phosphor bronze fingers with a current carrying cap. of 15 amps. DC circuits when adjusted may be used in plate circuits. Shpg. wt. 5 oz.

Stk. No.	Type	Action	1-24	25-49	50-74	75-99	100-249
60F3191	215XAX	SPDT	5.10	4.85	4.59	4.08	3.57
60F3192	215XBX	DPDT	7.20	6.84	6.40	5.76	5.04

FRAME 51 MIDGET MECHANICAL LATCH RELAYS

Designed for logic functions concerned with independent control of circuits which must operate through power failure; logic involving "memory", normal AC hum elimination, retention of open or closed contact position over long periods without using coil power. Mechanical latching with electrical reset. Contact ratings: 6 amps at 24 or 115 VAC or 24 VDC; 3 amps at 230 VAC; 0.5 amps at 115 VAC. Coils approximate 5 volt amperes AC; 3 watts DC; continuous duty. Size: 2⅜ x 5 1/16". Wt. 1½ lbs.

Stock No.	Type	Action	AC Volts	1-24	25-49	50-74	75-99	100-249
60F3277	51XBX46	DPDT	24	30.30	28.79	27.27	24.24	21.21
60F3278	51XBX46	DPDT	115					
60F3279	51BXB46	2NO-2NC	24					
60F3280	51BXB46	2NO-2NC	115					

STANDARD MIDGET OPEN-TYPE 115VAC RELAYS

Use for control circuits and for operating small motors, heaters, lights. Contact resistive rating: 6 amps @ 24 or 115VAC or 24VDC; 3 amps @ 230 VAC; 0.5 amps @ 115VDC. Inrush on motor or lamp loads should not exceed 20 amps. Insulation spacing in accordance with U.L. requirements for 300 V. *U.L. listed. 1⅞ x 2¾". Shpg. wt., 1 lb.

Stk. No.	Type	Contacts	1-24	25-49	50-74	75-99	100-249
60F3118	B1HXX	DB-NO	8.90	8.48	8.01	7.12	6.23
60F3119	B1XAX	SPDT	9.80	9.31	8.82	7.86	6.86
60F3120	B1XBX	DPDT*	12.60	11.97	11.34	10.08	8.82

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

STANDARD REED CHARACTERISTICS

Temp. range; 0°C to 50°C. Vib.; 10G to 450 cycles; Shock; 50G; Contact rating; 15 watts; 250 volts or 1 amp. Contact resistance; 50 milliohms maximum. Life epectancy; 200,000,000 operations at dry circuit level. 100,000,000 operations at one-half max; 20-000,000 operations at maximum rating. Form A (SPST-NO), Form B (SPST-NC), Form C (SPDT).

MINIATURE REED CHARACTERISTICS

Contact rating; low level to 4 watts; 250 volts max. 125 MA max. Temp. range; 0°C to 50°C. Vib.; 10 G to 1000 cycles. Shock; 50G. Contact Res., 200 milliohms max. Life expectancy; 100,000,000. oper. at dry circuit level. 20,000,000 oper. at ½ max. rating. 10,000.000 oper. at max. rating.

MINIATURE MOLDED SHIELD REEDS

Operating time is 1-2.5 msec. Release time less than 0.3 msec. Insulation resistance: 50,000 megs. MRR1A, 1 form A, N.O.; 425" dia x 1.062". MRR2A. 2 form A, N.O.; 425x 515x1.062". MRR4A 4 form A, N.O.; 53x 810x1.062". Shpg. wt. 2 oz.

Stock No.	Type	Coil VDC	Ohms	1-24	25-49	50-74	75-99	100-249
60F3154	MRR1A	6	288	4.20	3.99	3.78	3.36	2.94
60F3155	MRR1A	12	1152	4.20	3.99	3.78	3.36	2.94
60F3156	MRR1A	24	4600	6.20	5.89	5.57	4.95	4.33
60F3157	MRR2A	6	144					
60F3158	MRR2A	12	576					
60F3159	MRR2A	24	2300	7.70	7.32	6.93	6.16	5.39
60F3160	MRR4A	12	288	10.60	10.07	9.54	8.48	7.42
60F3161	MRR4A	24	1152	10.60	10.07	9.54	8.48	7.42

STANDARD MOLDED SHIELDED REEDS

Axial leads, encapsulated with wrap around sheilding. Operating time; 1.5 to 2.5 milliseconds, 500,000 megohms insulating res. Contact arrangements indicated by type numbers as follows: RR1A (1 Form A) and RR1B (1 Form B), .655" dia. x 1.875"; RR2A (2 Form A), .67 x .84 x 1.875" and RR4AF (4 Form A), .81 x 1.385 x 1.875". Shpg. wt. 4 oz.

Stock No.	Type	Coil VDC	Ohms	1-24	25-49	50-74	75-99	100-249
60F3133	RR1A	6	90	3.20	3.04	2.88	2.56	2.24
60F3134	RR1A	12	360					
60F3135	RR1A	24	1440					
60F3137	RR1B	12	360	4.10	3.90	3.69	3.28	2.87
60F3136	RR1B	24	1440					
60F3138	RR2A	6	36	5.00	4.75	4.50	4.00	3.50
60F3139	RR2A	12	145					
60F3140	RR2A	24	580					
60F3141	RR4AF	12	95	8.60	8.17	7.74	6.88	6.02
60F3142	RR4AF	24	380					

MINIATURE PRINTED CIRCUIT SHIELDED REEDS

Can be wired on 0.1 grid centers. MRR1AM, 1 form A; MRR1BM, 1 form B; MRR1A1BM, 1 form A, 1 form B; MRR2AM, 2 form A; MRR2BM 2 form B; Size; All aver. .50x.50x1.125". Shpg. wt. 5 oz.

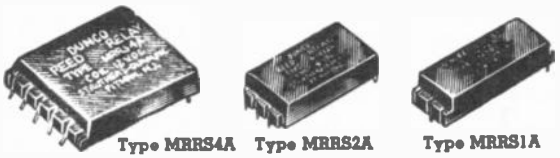
Stock No.	Type	Coil VDC	Ohms	1-24	25-49	50-74	75-99	100-249
60F3162	MRR1AM	6	144	5.70	5.42	5.13	4.56	3.99
60F3163	MRR1AM	12	576					
60F3164	MRR1AM	24	2304					
60F3165	MRR1BM	12	576	5.90	5.61	5.31	4.72	4.13
60F3166	MRR1BM	24	2304					
60F3167	MRR1A1BM	6	72	7.70	7.32	6.93	6.16	5.39
60F3168	MRR1A1BM	12	288					
60F3169	MRR1A1BM	24	1152					
60F3170	MRR2AM	12	288	6.80	6.46	6.12	5.44	4.76
60F3171	MRR2AM	24	1152					
60F3172	MRR2BM	12	288	7.00	6.65	6.30	5.60	4.90
60F3173	MRR2BM	24	1152					

STANDARD PRINTED CIRCUIT SHIELED REEDS

Entirely enclosed in a steel housing. Insulation resistance; 10000 megohms. RR1-A1BM, 1 Form A, 1 Form B; .800x.500x2.313" RR2A2BM 2 Form A, 2 Form B; 1.200x5.50x 2.313". RR1CM, 1 Form C; RRLM1CM, 1 Form C (latching-single coil, bistable) and RRLM1CM102, is same but double coil; .60x.55x2.313".

Stock No.	Type	Coil VDC	Ohms	1-24	25-49	50-74	75-99	100-249
60F3143	RR1A1BM	6	36	7.00	6.65	6.30	5.60	4.90
60F3144	RR1A1BM	12	144					
60F3145	RR1A1BM	24	576					
60F3146	RR2A2BM	12	72	12.30	11.69	11.07	9.84	8.61
60F3147	RR2A2BM	24	288					
60F3148	RR1CM	12	1152	12.70	12.07	11.43	10.16	8.89
60F3149	RR1CM	24	4600					
60F3150	RRLM1CM	12	1152	11.80	11.21	10.62	9.44	8.26
60F3151	RRLM1CM	24	4600					
60F3152	RRLM1CM102	12	480	12.70	12.07	11.43	10.16	8.89
60F3153	RRLM1CM102	24	1920					

LOW PROFILE SUBMINIATURE DRY REED RELAYS FOR PRINTED CIRCUITS



Type MRRS4A **Type MRRS2A** **Type MRRS1A**

Extra-thin . . . .350" high! Electromagnetically shielded internally. Designed to assure maximum environmental protection. Contact rating: 10 watts. Operate time: 2.5 ms Temperature range: 0°C to +50°C. Shock resistance up to 50g. Mechanical lift 100,000,000 operations at dry circuit level; 10,000,000 operations at minimum rating. Std. 0.172" grid space, right angle leads arranged to prevent incorrect insertion into circuit board. Insulation resistance: 1000 megohms. Wt. 4 oz.

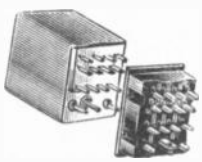
Type MRRS1A. SPST N.O Size: 1.3 x .500 x .350".

Type MRRS2A. DPST N.O. Size: 1.3 x .625 x .350".

Type MRRS4A. 4PST N.O. Size: 1.3 x 1.0 x .350".

Stock No.	Type	Coil DC Volts Nom.	Coil DC Volts Oper.	Ohms	1-24	25-49	50-74	75-99	100-249
60F3206	MRRS1A	12	9.6	576	4.40	4.18	3.96	3.52	3.08
60F3207	MRRS1A	24	19.2	2300	4.40	4.18	3.96	3.52	3.08
60F3202	MRRS2A	12	9.6	380	6.10	5.80	5.49	4.88	4.27
60F3203	MRRS2A	24	19.2	1440	6.10	5.80	5.49	4.88	4.27
60F3204	MRRS4A	12	9.6	125	7.70	7.32	6.93	6.16	5.39
60F3205	MRRS4A	24	19.2	500	7.70	7.32	6.93	6.16	5.39

MINIATURE WIRED OR PLUG-IN RELAY



Contacts: Configuaration: 4PDT single break. Ratings: 3 amps at 30V DC or 120V AC, resistivt loads. Coil Data Power: AC coils: 2.4 Va. max., 1.2 Va. nominal DC coils: 2.0 watts max. 0.9 watts nominal. Duty Cycle: Continuous Ambient Operating Temp. Range: —45°C to +70°C. Operating time: 15 millisec. max. Life Expectancy: 50 million mech. oper. min. 750,000 elec. oper.. min. Mounting: (Solder Terminals) single #3-48 stud. (Sockets) single #3-48 screw. Ground clip maintains contact between relay mounting stud and socket mounting screw. Materials: Gold-flashed fine silver 3/32" diameter. Temperaturt Rise: Approximately 35°C at nominal voltage. **Model 281XDX.** Light duty 4PDT relay contains in-line contacts and is enclosed by a removeable nylon cover. The basic relay has solder brass terminals and a single mounting stud for directly-wired applications; converts easily to plug-in by adding sockets. Both sockets (Printed circuit and solder term.) have hold down retainers and ground clips. High contact packaging density makes it ideal for applications requiring large banks of relays. Contacts are fine silver buttons, gold flashed. Contact overtravel makes contacts self-cleaning. Magnetic structure provides high-speed operation at a low power dissapation.

Stk. No.	Coil Volts	Coil Cur.	Coil Ohms	1-24	25-49	50-74	75-99	100-249
60F3281	24AC	40MA	160	5.20	4.94	4.68	4.16	3.64
60F3282	115AC	10MA	3900	5.60	5.32	5.04	4.48	3.92
60F3283	12DC	76MA	160	4.50	4.28	4.05	3.60	3.15
60F3284	24DC	37MA	650	4.50	4.28	4.05	3.60	3.15
60F3285	110DC	10MA	11000	4.80	4.56	4.32	3.84	3.36
60F3286	32884—Solder Terminal Socket			.60	.54	.54	.48	.42
60F3287	32885—PC Terminal Socket			.60	.54	.54	.48	.42

To Serve You Better — Ten Stocking Warehouses From Coast-to-Coast

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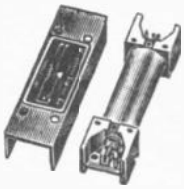
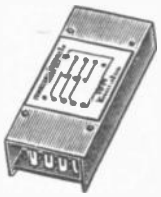
MAGNECRAFT Relays

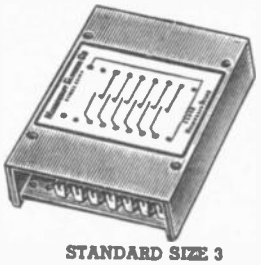
Modular Packaged "MPC" Dry and Mercury-Wetted Contact Reed Relays



STANDARD SIZE 1



STANDARD SIZE 2



STANDARD SIZE 3

MINIATURE SIZE 1

MINIATURE SIZE 2

MICRO-MINIATURE

STANDARD SERIES MPC RELAYS

MPC Packaged Relays provide quick plug-in assembly to circuit boards. Nylon bobbin intergrally molded with terminal board support and mounting base. Epoxy resin terminal board with tinned terminal supports and terminal pins (one piece) riveted into mortised position. Snap-on steel cover—combines mechanical protection and magnetic shielding, also prevents interaction. The switch mechanism, hermetically sealed with an atmosphere of inert gas in a glass capsule.

CLASS 102MPC FORM A DRY REED RELAYS

DC Power Required: ½ watt nom.; Operating Time: 3 msec. average; Release Time:½ msec. average; Contact Bounce: less than 1 msec. average; Contact Load Ratings 15 VA at 1 amp, max. or 250 VAC max.; non-inductive load; Contact Resistance: 0.1 ohm. Life Expectancy: 20 million cycles; Dielectric str., cont. to coil: 500 VAC RMS; Operating Position: Any; Ambient Temp. Range: —50°F. to +185°F.; Maintenance: None. Size 1 Single-Pole—2⅝x¾x4¹⁄₆₄"; Size 2 Triple-Pole—2⅝x1⁹⁄₁₆x4¹⁄₆₄"; Size 3 Six-Pole— 2⅝"x1³¹⁄₃₂"x4¹⁄₆₄"; All are normally open. Wt. 2 oz.

Stk. No.	Type W102-	Act.	COIL DATA VDC	OHMS	1-24	25-49	50-74	75-99	100-499
56F415	MPCX-5	SPST	....	30	3.20	2.96	2.79	2.63	2.30
56F416	MPCX-6	SPST	6	70	3.20	2.96	2.79	2.63	2.30
56F417	MPCX-7	SPST	12	250	3.20	2.96	2.79	2.63	2.30
56F418	MPCX-8	SPST	24	1000	3.29	2.96	2.79	2.63	2.30
56F419	MPCX-9	SPST	48	4000	3.46	3.11	2.94	2.77	2.42
56F420	MPCX-10	SPST	....	7000	4.14	3.73	3.52	3.31	2.90
56F300	MPCX-48	3PST	6	50	5.62	5.06	4.78	4.50	3.94
56F301	MPCX-49	3PST	12	175	5.63	5.07	4.79	4.51	3.95
56F302	MPCX-50	3PST	24	750	5.77	5.20	4.91	4.62	4.04
56F303	MPCX-51	3PST	48	3000	5.97	5.38	5.08	4.78	4.18
56F304	MPCX-52	6PST	6	25	9.18	8.27	7.81	7.35	6.43
56F305	MPCX-53	6PST	12	100	9.30	8.37	7.91	7.44	6.51
56F306	MPCX-54	6PST	24	375	9.35	8.42	7.95	7.48	6.55
56F307	MPCX-55	6PST	48	1500	9.43	8.49	8.02	7.55	6.61

CLASS 103MPC FORM C DRY REED RELAYS

Contact load rating: 10 VA at ½ amp max., or 250 VAC max., non-inductive load; contact resistance 0.1 ohm; dielectric str., cont. to coil: 500 VAC RMS; DC power required: ½ watt nom. Life expectancy 25 million hz. Ambient temp. range: —50 to +185°F. Operating time: 2 msec, release time: ½ msec. Size 1 SPDT—2⅝x¾x4¹⁄₆₄"; Size 2 3PDT—2⅝x1⁹⁄₁₆x4¹⁄₆₄"; Size 3 3PDT—2 ⅝x1³¹⁄₃₂x4¹⁄₆₄". Wt. 2 oz.

Stk. No.	Type W103	Act.	COIL DATA VDC	OHMS	1-24	25-49	50-74	75-99	100-499
56F421	MPCX-1	SPDT	....	30	5.83	5.25	4.96	4.66	4.08
56F422	MPCX-2	SPDT	6	70	5.83	5.25	4.96	4.66	4.08
56F423	MPCX-3	SPDT	12	250	5.83	5.25	4.96	4.66	4.08
56F424	MPCX-4	SPDT	24	1000	5.83	5.25	4.96	4.66	4.08
56F425	MPCX-5	SPDT	48	4000	6.00	5.40	5.10	4.80	4.20
56F426	MPCX-6	SPDT	....	7000	6.68	6.01	5.68	5.34	4.68
56F308	MPCX-30	DPDT	6	50	8.30	7.50	7.09	6.67	5.84
56F309	MPCX-31	DPDT	12	175	8.30	7.50	7.09	6.67	5.84
56F310	MPCX-32	DPDT	24	750	8.47	7.63	7.20	6.78	5.93
56F311	MPCX-33	DPDT	48	3000	8.67	7.81	7.37	6.94	6.07
56F312	MPCX-34	4PDT	6	25	14.60	13.14	12.41	11.68	10.22
56F313	MPCX-35	4PDT	12	100	14.70	13.23	12.50	11.76	10.29
56F314	MPCX-36	4PDT	24	375	14.77	13.29	12.55	11.82	10.34
56F315	MPCX-37	4PDT	48	1500	14.89	13.40	12.65	11.91	10.42

CLASS 132MPC FORM A MERCURY-WETTED RELAYS

Power Required: ½ watt nom.; Operating Time: 2 msec. average; Release Time: 2msec. average; Contact Bounce: None; Contact Load Rating: 50 VA at 3.0 amps. max. or 400 VAC max.; non-inductive; Contact Resistance: 50 milliohm av.; Life Expectancy 25 million hz; Diel. str., cont. to coil: 500 VAC RMS; Operating Position: Upright, not more than 30 from vertical; Ambient Temp. Range: —37°F. to+185°F.; Maintenance: No change in adjustment after the realy is made. Size 1 Single-Pole—2⅝x¾x4¹⁄₆₄". All are normally open. Wt. 2 oz.

Stk. No.	Type W132-	Act.	COIL DATA VDC	OHMS	1-24	25-49	50-74	75-99	100-499
56F483	MPCX-1	SPST	....	30	5.83	5.25	4.96	4.66	4.08
56F484	MPCX-2	SPST	6	70	5.83	5.25	4.96	4.66	4.08
56F485	MPCX-3	SPST	12	250	5.83	5.25	4.96	4.66	4.08
56F486	MPCX-4	SPST	24	1000	5.83	5.25	4.96	4.66	4.08
56F487	MPCX-5	SPST	48	4000	6.00	5.40	5.10	4.80	4.20
56F488	MPCX-6	SPST	....	7000	6.68	6.01	5.68	5.34	4.68

CLASS 133MPC FORM C MERCURY-WETTED CONTACT RELAYS

Same as Class 132MPC listed on this page, except for—Contact Load Rating: 50 VA at 2.0 amps. max. or 400 VAC max., non-inductive load. Size 1 Single-Pole—2⅝x¾x4¹⁄₆₄". Wt. 2 oz.

Stk. No.	Type W133-	Act.	COIL DATA VDC	OHMS	1-24	25-49	50-74	75-99	100-499
56F489	MPCX-1	SPDT	....	30	8.42	7.58	7.16	6.74	5.89
56F490	MPCX-2	SPDT	6	70	8.42	7.58	7.16	6.74	5.89
56F491	MPCX-3	SPDT	12	250	8.42	7.58	7.16	6.74	5.89
56F492	MPCX-4	SPDT	24	1000	8.42	7.58	7.16	6.74	5.89
56F493	MPCX-5	SPDT	48	4000	8.89	7.74	7.31	6.88	6.02
56F494	MPCX-6	SPDT	....	7000	9.35	8.42	7.95	7.48	6.55

MINIATURE SERIES MPC RELAYS

Miniature MPC Reed Relays offer more than versatility alone . . . they're fast and reliable! Form A Dry Reed MPC Relays provide operating times of one msec. average and life expectancies of 5 million cycles at rated loads! Contact ratings and mechanical construction is fully consistent with circuit requirements. Ideal units for compact printed circuit design.

CLASS 101MPC FORM A MINIATURE DRY REED RELAYS

DC Power Required: 500 Milliwatts; Operating Time: 1 Millisecond, average; Release Time: 0.5 Millisecond, average; Contact Bounce: less than 0.5 msec. average; Contact Load Rating: 12 Volt-Amperes maximum at 250 Milliamperes maximum or 100 Volts maximum, non-inductive; Contact Resistance: 150 Milliohms, average; Capacitance Across Contacts: 0.8 Picofarad, average; Life Expectancy, Rated Load: 5 million hz Diel. sta. cont. to coil: 500 Volts AC, RMS; Operating Position: Any; Ambient Temperature Range: —50°F. to +185°F. Size 1 Single-Pole—1⅛x1³⁄₃₂x⅜"; Size 2 Triple-Pole—1⅛x⁵⁹⁄₆₄x⅜". Wt. 1 oz.

Stk. No.	Type W101-	Act.	COIL DATA VDC	OHMS	1-24	25-49	50-74	75-99	100-499
56F316	MPCX-1	SPST	6	70	3.60	3.24	3.06	2.88	2.52
56F317	MPCX-2	SPST	12	300	3.60	3.24	3.06	2.88	2.52
56F318	MPCX-3	SPST	24	1100	3.63	3.27	3.09	2.90	2.54
56F319	MPCX-4	SPST	48	4300	3.77	3.39	3.20	3.02	2.64
56F320	MPCX-5	3PST-	6	50	6.75	6.08	5.74	5.40	4.73
56F321	MPCX-6	3PST-	12	220	6.75	6.08	5.74	5.40	4.73
56F322	MPCX-7	3PST-	24	850	6.77	6.09	5.75	5.42	4.74
56F323	MPCX-8	3PST-	48	3300	6.85	6.17	5.82	5.48	4.80

CLASS 104MPC FOR MC MINIATURE DRY REED RELAYS

DC Power Required: 500 Milliwatts; Operating Time: 1 Millisecond, average; Release Time: 1 Millisecond, average; Contact Resistance: 150 Milliohms, average; Diel. str., cont. to coil: 500 Volts AC, RMS; Operating Position: Any; Contact Load Rating: 3 Volt-Amperes maximum at 250 Milliamperes maximum or 28 Volts maximum. non-inductive; Size 1 Single-Pole—1⅛x1³⁄₃₂x⅜"; Size 2 Double-Pole—1⅛x³⁹⁄₆₄x⅜". Wt. 1 oz.

Stk. No.	Type W104-	Act.	COIL DATA VDC†	OHMS	1-24	25-49	50-74	75-99	100-499
56F324	MPCX-1	SPDT	6	70	6.82	6.14	5.80	5.46	4.77
56F325	MPCX-2	SPDT	12	300	6.83	6.15	5.81	5.46	4.78
56F326	MPCX-3	SPDT	24	1100	6.85	6.17	5.82	5.48	4.80
56F327	MPCX-4	SPDT	48	4300	6.98	6.28	5.93	5.58	4.89
56F328	MPCX-5	DPDT	6	50	11.62	10.46	9.88	9.30	8.13
56F329	MPCX-6	DPDT	12	220	11.63	10.47	9.89	9.30	8.14
56F330	MPCX-7	DPDT	24	850	11.65	10.49	9.90	9.32	8.16
56F331	MPCX-8	DPDT	48	3300	11.73	10.56	9.97	9.38	8.21

MICRO-MINIATURE SERIES MPC RELAYS

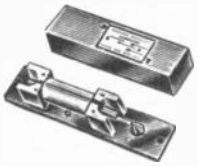
Provide all of the outstanding advantages of reed relays in low profile compact designs. Available in either encapsulated axial lead units or "plug-in" units specifically designed for high density printed circuit applications.. Swtich capsule and design features provide fast switching plus low internal noise. Contacts: SPST-NO; Contact Load Rating: 100 Millivolt-Amperes maximum at 10 Milliamperes maximum or 12 Volts maximum, non-inductive; Contact Resistance: 200 Milliohms, average; Diel. str., cont. to coil: 500 VAC RMS. Operating Position: Any; DC Coil Poower Required: 300 Milliwatts: Size 1: Single-Pole —⅝x⁵⁹⁄₆₄x1¹¹⁄₃₂". Wt. 1 oz.

Stk. No.	Type No.	Coil VDC	1-24	25-49	50-74	75-99	100-499
56F332	W105MPCX-1	6	5.45	4.91	4.63	4.36	3.82
56F333	W105MPCX-2	12	5.47	4.92	4.65	4.38	3.83
56F334	W105MPCX-3	24	5.58	5.02	4.74	4.46	3.91

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

SPECIAL PURPOSE REED RELAYS

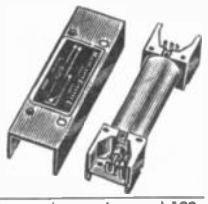
CLASS 102V 5000 VOLT REED RELAY



For high voltage switching with the inherent reliability of reed relay operation. Contacts rated at 50 Volt Amp @ 3 amps max. or 5000 VDC max. resistive load. Life expectancy 20,000,000 operations. Op time, 3 millisec. average, release time 0.5 millisec. average. Internally insulated metal cover protects coil assembly and shields relays from stray magnetic fields. Contacts: SPST-NO. 4½"x1⅝"x⅞". Wt. 3 oz.

Stk. No.	Type	Volt. or. Curr.	Res. (Ohms)	1-24	25-49	50-74	75-99	100-499
56F368	W102VX-9	140.0 MA	30	13.69	12.32	11.64	10.95	9.58
56F369	W102VX-10	6 V	70	13.69	12.32	11.64	10.95	9.58
56F370	W102VX-11	12 V	250	13.73	12.36	11.67	10.98	9.61
56F371	W102VX-12	24 V	1000	13.78	12.40	11.71	11.02	9.65
56F372	W102VX-13	48 V	4000	14.15	12.7(	12.03	11.32	9.91
56F373	W102VX-14	9.0 MA	7000	14.58	13.12	12.39	11.66	10.21

102RMPC POWER REED RELAY



Type 102 RMPC. Provides the printed circuit design engineer with the first reed relay capable of switching up to 100 watts at 3 amps and within 1 msec. average. SPST-NO. Requiring ½ watt nominal operating power and rated 100VA @ 3 amps or 250 volts maximum. Dimensions: 2⅝L, ¾W, 41/64H.

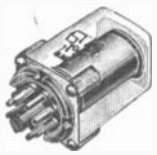
Stock No.	Type	VDC	Ohms	1-24	25-49	50-74	75-99	100-499
56F356	W102RMPCX-1	6	70	7.87	7.08	6.69	6.30	5.51
56F357	W102RMPCX-2	12	250	7.88	7.09	6.70	6.31	5.52
56F358	W102RMPCX-3	24	1000	7.93	7.14	6.74	6.34	5.55
56F359	W102RMPCX-4	48	4000	8.18	7.36	6.95	6.54	5.73

103 LMPC LATCHING REED RELAYS

Magnetic latching; requires no coil current to hold SPDT contacts. Contacts rated at 10 Volt Amp @ .2 amps max. or 200 VDC max. Life expectancy, 25 million operations. Size: 2⅝" x 41/64" x ¾". Wt. 3 oz.

Stock No.	Type	Ma	Volt	Ohm	1-24	25-49	50-74	75-99	100-499
56F390	W103LMPCX-3	40		70	7.07	6.36	6.01	5.66	4.95
56F391	W103LMPCX-4		6	250	7.07	6.36	6.01	5.66	4.95
56F392	W103LMPCX-5		12	1000	7.07	6.36	6.01	5.66	4.95
56F393	W103LMPCX-6		24	4000	7.26	6.53	6.17	5.81	5.08
56F394	W103LMPCX-7	4		7000	8.01	7.21	6.81	6.41	5.61
56F395	W103LMPCX-8	80		30/30	8.22	7.40	6.99	6.58	5.75
56F396	W103LMPCX-9		6	120/120	8.33	7.50	7.08	6.66	5.83
56F397	W103LMPCX-10		12	460/460	8.33	7.50	7.08	6.66	5.83
56F398	W103LMPCX-11		24	1800/1800	9.60	8.10	7.65	7.20	6.30
56F399	W103LMPCX-12	8		3000/3000	10.04	9.04	8.53	8.03	7.03

DRY REED RELAY PLUG-IN ASSEMBLIES WITH PLASTIC DUST COVER



Type 103CP. Each assembly contains two or three SPDT dry reeds with plugin mounting in plastic dust cover. All are DPDT except (*) are 3PDT. Rated: 10 watts resistive load. .5 amp or 250 VAC max. Life expectancy: 25 million cycles at rated. 50 million cycles at ½ rated. 100 million cycles at low load. Dimensions: 1⅜" x 1⅜" x 2⅛". Wt. 5 oz.

Stk. No.	Type	Volt or Cur.	Coil Res. (Ohms)	1-24	25-49	50-74	75-9'	100-499
56F360	W103CPX-7	6VDC	75	12.92	11.63	10.98	10.34	9.04
56F361	W103CPX-8	12VDC	300	12.95	11.66	11.01	10.36	9.07
56F362	W103CPX-9	24VDC	1K	13.01	11.71	11.06	10.41	9.11
56F363	W103CPX-10	8MADC	5K	13.57	12.21	11.53	10.86	9.50
56F364	W103CPX-11*	6VDC	40	16.77	15.09	14.25	13.42	11.74
56F365	W103CPX-12*	12VDC	150	16.83	15.15	14.31	13.46	11.78
56F366	W103CPX-13*	24VDC	650	16.95	15.26	14.41	13.56	11.87
56F367	W103CPX-14*	10MADC	5K	17.50	15.75	14.86	14.00	12.25

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ENCAPSULATED PRINTED CIRCUIT REED RELAYS

CLASS 101 ENCAPSULATED MINIATURE REED RELAYS

SPST-1½"L, ½"W, 9/16"H. DPST-1½"L, 11/16"W, 9/16"H. Gold contacts rated at 12 VA @ .25 amps max. or 100 VAC max. resistance. Operating time 1 millisecond average. Release time ½ millisecond average. Wt. 1 oz.

Stk. No.	Type	Volt	Ohm	Cont.	1-24	25-49	50-74	75-99	100-499
56F459	W101PCX-5	6VDC	65	SPST	5.11	4.60	4.34	4.09	3.58
56F460	W101PCX-6	12VDC	250	SPST	5.16	4.64	4.39	4.13	3.61
56F461	W101PCX-7	24VDC	1000	SPST	5.26	4.73	4.47	4.21	3.68
56F462	W101PCX-8	8.0MADC	5000	SPST	5.68	5.11	4.83	4.54	3.98
56F463	W101PCX-9	6VDC	40	DPST	7.15	6.43	6.08	5.72	5.00
56F464	W101PCX-10	12VDC	150	DPST	7.18	6.46	6.10	5.74	5.03
56F465	W101PCX-11	24VDC	650	DPST	7.24	6.52	6.15	5.78	5.07
56F466	W101PCX-12	8.0MADC	5000	DPST	7.69	6.92	6.54	6.15	5.38

CLASS 102 ENCAPSULATED STANDARD REED RELAYS

SPST 2¼"L, 21/32"W, 5/8"H. DPST 2¼"L. 1¼"W, 5/8"H. Operate, 3 ms. average. Release, ½ ms. average. Contact Load Rating, 15VA at 1 amp. max. or 250 VAC max., non-inductive. Life Expectancy, 20 million cycles at full load; 100 million at ½ load Wt. 3 oz.

Stk. No.	Type	Volt	Ohm	Cont.	1-24	25-49	50-74	75-99	100-499
56F467	W102PCX-1	6VDC	100	SPST	4.77	4.29	4.05	3.82	3.34
56F468	W102PCX-2	12VDC	400	SPST	4.83	4.35	4.10	3.86	3.38
56F469	W102PCX-3	24VDC	1500	SPST	4.87	4.38	4.14	3.90	3.41
56F470	W102PCX-4	6.5MADC	5000	SPST	5.32	4.79	4.52	4.26	3.72
56F471	W102PCX-5	6VDC	50	DPST	6.22	5.60	5.29	4.98	4.35
56F472	W102PCX-6	12VDC	200	DPST	6.28	5.65	5.34	5.02	4.40
56F473	W102PCX-7	24VDC	800	DPST	6.33	5.70	5.38	5.06	4.43
56F474	W102PCX-8	9.0MADC	5000	DPST	6.78	6.10	5.76	5.42	4.75

CLASS 103 ENCAPSULATED STANDARD REED RELAYS

SINGLE POLE DOUBLE THROW 2¼"L, 21/32"W, 5/8"H. Double pole-double throw 2½"L, 1¼"W, ¾"H. SPDT or DPDT. Good contacts rated 10 watts resistive load, .5 amp or 250 VAC max. Operating and release time less than 2 millisecond average. Wt., 3 oz.

Stk. No.	Type	Volt	Ohm	Cont.	1-24	25-49	50-74	75-99	100-499
56F475	W103PCX-1	6VDC	100	SPDT	7.22	6.50	6.14	5.78	5.05
56F476	W103PCX-2	12VDC	400	SPDT	7.27	6.54	6.18	5.82	5.09
56F477	W103PCX-3	24VDC	1500	SPDT	7.32	6.59	6.22	5.86	5.12
56F478	W103PCX-4	6.5MADC	5000	SPDT	7.76	6.98	6.60	6.21	5.43
56F479	W103PCX-5	6VDC	50	DPDT	10.77	9.69	9.15	8.62	7.54
56F480	W103PCX-6	12VDC	200	DPDT	10.79	9.71	9.17	8.63	7.55
56F481	W103PCX-7	24VDC	800	DPDT	10.84	9.76	9.21	8.67	7.59
56F482	W103PCX-8	9.0MADC	5000	DPDT	11.31	10.18	9.61	9.05	7.92

CLASS 104 ENCAPSULATED MINIATURE SPDT OR DPDT REED RELAY

Miniaturized Magnereed relay. Contacts: gold rated 3 VA @ ¼ amp. max. or 28 V max. Life expectancy: 10 million cycles at rated load. Oper. time lms. average.

Stk. No.	Type	Volt	Ohm	Cont.	1-24	25-49	50-74	75-99	100-499
56F427	W104PCX-7	6VDC	65	SPDT	10.07	9.06	8.56	8.06	7.05
56F428	W104PCX-8	12VDC	225	SPDT	10.12	9.11	8.60	8.10	7.08
56F429	W104PCX-9	24VDC	10000	SPDT	10.22	9.20	8.69	8.18	7.15
56F430	W104PCX-10	.....	5000	SPDT	10.64	9.58	9.0'	8.51	7.45
56F431	W104PCX-3	6VDC	40	DPDT	14.59	13.13	12.4(	11.67	10.21
56F432	W104PCX-4	12VDC	150	DPDT	14.62	13.16	12.43	11.70	10.23
56F433	W104PCX-5	24VDC	650	DPDT	14.68	13.21	12.48	11.74	10.28
56F434	W104PCX-6	..	1000	DPDT	15.13	13.62	12.86	12.10	10.59

SERIES "131PC" MINIATURE MERCURY WETTED RELAY

Miniature mercury wetted contact printed circuit relay. Contacts rated at 28VA @ 1 amp, or 100v max., resistive. Operate and release time 1MS average 100 million cycle life. 2 oz.

Stk. No.	Type	Volt. or Curr.	Res. (Ohms)	1-24	25-49	50-74	75-99	100-499
56F374	W131PCX-8	6 VDC	65	8.38	7.54	7.12	6.70	5.87
56F375	W131PCX-9	12 VDC	250	8.44	7.60	7.17	6.75	5.91
56F376	W131PCX-10	24 VDC	1000	8.55	7.70	7.27	6.84	5.99
56F377	W131PCX-11	8.0 MA	5000	9.01	8.11	7.66	7.21	6.31
56F378	W131PCX-12	6 VDC	40	10.62	9.56	9.03	8.50	7.43
56F379	W131PCX-13	12 VDC	150	10.66	9.59	9.06	8.53	7.46
56F380	W131PCX-14	24 VDC	650	10.71	9.64	9.10	8.57	7.50
56F381	W131PCX-15	8.0 MA	5000	11.21	10.09	9.53	8.97	7.85

MAGNECRAFT Relays

ENCAPSULATED AXIAL LEAD REED RELAYS

CLASS "101EP" SPST REED RELAYS

SPST-NO gold contacts rated at 12 VA at .250 amperes maximum or 100 VAC maximum. Life expectancy 5 million hz at rated load. Operate time 1 millisecond average release time ½ millisecond average. Axial lead wires for coil and contacts. Encapsulated molded case. Overall length 3', body length 1", 7/16" diameter. Weight, 1 oz.

Stock No.	Type	Coil MA	Coil Volt	Coil Ohms	Nom. Pwr.	1-24	25-49	50-74	75-99	100-499
56F382	W101EPX-5	.....	6VDC	65		3.62	3.26	3.08	2.90	2.53
56F383	W101EPX-6	.....	12VDC	225	600	3.62	3.26	3.08	2.90	2.53
56F384	W101EPX-7	.....	24VDC	1000	MW	4.24	3.82	3.60	3.39	2.97
56F385	W101EPX-8	8	.....	5000		4.68	4.21	3.98	3.74	3.28

CLASS "104EP" SPDT REED RELAYS

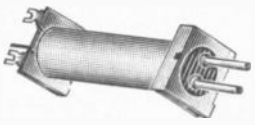
SPDT gold contacts rated at 3 VA at .250 amps. or 28 VAC maximum. Life expectancy 10 million hz at rated load. Operate time and release time 1 millisecond average. Axial lead wires for coil and contacts. Encapsulated molded case. Overall length 3", body length 1", 7/16" diameter. Weight, 1 ounce.

Stock No.	Type	Coil Voltage or Current	Coil Res. in Ohms	1-24	25-49	50-74	75-99	100-499
56F386	W104EPX-2	6VDC	65	7.37	6.63	6.26	5.90	5.16
56F387	W104EPX-3	12VDC	225	7.37	6.63	6.26	5.90	5.16
56F388	W104EPX-4	24VDC	1000	8.05	7.25	6.84	6.44	5.64
56F389	W104EPX-5	8.OMA	5000	8.55	7.70	7.27	6.84	5.99

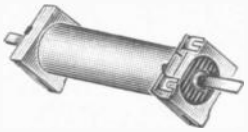
MICRO-MINIATURE CLASS "105EP" SPST REED RELAYS

Highly resistant to mechanical shock, excessive humidity and corrosive atmospheres. They are equipped with ¾" long axial leads, for both coil and contacts, and may be used in either printed circuit applications or circuits designed for point-to-point wiring. DC Coil Power Required: 300 mw avg; Operate Time: 250 Microseconds, average; Release Time: 500 Microseconds, average. Contact Load Rating: 100 Millivolt-Amperes maximum at 10 Milliamperes max. or 12 Volts maximum, non-inductive; Contact Resistance: 200 Milliohms, average; Capacitance Across Contacts: .5. Picofarad, average: Life Expectancy, Rated Load: 10 Million hz. ¼" in diameter by 7/16" long. Wt. 1 oz.

Stk. No.	Type	Coil VDC	Coil Ohms	1-24	25-49	50-74	75-99	100-499
56F351	W105EPX-1	6	90	6.18	5.56	5.25	4.94	4.33
56F352	W105EPX-2	12	350	6.18	5.56	5.25	4.94	4.33
56F353	W105EPX-3	24	1300	6.30	5.67	5.36	5.04	4.41



W103M



W102M

TYPES W101M & W104M MINIATURE REED RELAYS

Specifications: nominal coil power 300 mw, operate time less than 3 ms, release time 0.5 ms av., contact bounce less than 1 ms av. Dielectric contact 500 VAC RMS. Dielectric contact & coil 750 VAC RMS. Contact resistance: 100 milliohm av. Size: ½x1 9/32x2⅛". Shpg. wt. 2 oz.

TYPE W102M—SPST—NO

Contacts rated 15 volt-amps maximum at 1 amp maximum, or 250 VAC maximum resistive. Capacitance across contacts is 0.9 pf average, and 20,000,000 operations at rated load. (*) Milliamps.

Stock No.	Type	Coil VDC	Coil Ohms	1-24	25-49	50-74	75-99	100-499
56F900	W102MX-1	40*	100	2.18	1.96	1.85	1.74	1.53
56F901	W102MX-2	6	200	2.25	2.03	1.91	1.80	1.58
56F902	W102MX-3	12	500	2.25	2.03	1.91	1.80	1.58
56F903	W102MX-4	24	2000	2.47	2.22	2.10	1.98	1.73
56F904	W102MX-5	5.5*	5000	2.63	2.37	2.24	2.10	1.84

TYPE W103M—SPDT

Contacts rated 10 volt-amps maximum at .5 amp maximum or 250 VAC maximum resistive. Capacitance across contacts is 3.0 pf average, and 25,000,000 operations at rated load. (*) Milliamps.

Stock No.	Type	Coil VDC	Coil Ohms	1-24	25-49	50-74	75-99	100-499
56F905	W103MX-1	6	200	4.23	3.81	3.60	3.38	2.96
56F906	W103MX-2	12	500	4.23	3.81	3.60	3.38	2.96
56F907	W103MX-3	24	2000	4.45	4.01	3.78	3.56	3.12
56F908	W103MX-4	5.5*	5000	4.62	4.16	3.93	3.70	3.23

OPEN TYPE AXIAL LEAD REED RELAYS

Pre-adjusted gold contacts hermetically sealed inside a glass capsule in an atmosphere of inert gas. Contacts are actuated magnetically by a coil around the sealed capsule. They are easily adaptable to mtg. configurations as well as group to meet multipole switching requirements. Contact combination: SPST, normally open. Operating time: 1 millisec average. Release time: ½ millisec average.

CLASS 101 MINIATURE

101

Contacts: Gold; rated 12VA at .250 amps max. Nom. Power: 600 mw. Life Expectancy: Max rating: 5 million hz. Size: 7/16" dia. x 2¼" L. Wt. 1 oz.

Stock No.	Type	Operate I	Operate Volts	Ohms	1-24	25-49	50-74	75-99	100-499
56F625	W101X-1	46MA	6V	100	3.29	2.96	2.80	2.63	2.30
56F626	W101X-2	30MA	12V	250	3.29	2.96	2.80	2.63	2.30
56F627	W101X-3	2MA	24V	500	3.85	3.46	3.27	3.08	2.69
56F628	W101X-4	9MA	.....	2500	4.25	3.82	3.61	3.40	2.97

CLASS 102 STANDARD TYPES

102

Contacts: Gold; Rated 15VA at 1 amp. max. Life Expectancy: Max. rating—20 million cyc., ½ max. rating—100 million cyc., low load (1/10 amp. a t12V)—200 million hz. Size: ½" dia. x 3¼". Wt., 1 oz.

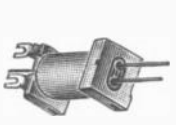
DC Voltage Actuated

Stock No.	Type	Operate I	Operate Volts	Ohms	1-24	25-49	50-74	75-99	100-499
56F629	W102X-1	32 MA	.....	100	2.57	2.31	2.18	2.06	1.80
56F630	W102X-2	23 MA	6V	200	2.57	2.31	2.18	2.06	1.80
56F631	W102X-3	14.5MA	12V	500	2.57	2.31	2.18	2.06	1.80
56F632	W102X-4	10 MA	24V	2000	2.70	2.43	2.29	2.16	1.89
56F633	W102X-5	4.6MA	.....	5000	3.25	2.92	2.76	2.60	2.27

CLASS 103 STANDARD TYPES

Overall length: 3½"; glass length: 2⅛. Outside diameter: ½". Contact combinations; single pole, double throw. Contacts: gold-rated 10 watts resistive load .5 amp or 250 VAC maximum. Operating time 2 millisecond, release time .5 millisecond average. *I in MA. Weight 1 oz.

Stock No.	Type	Operate I*	Operate V	Ohms	1-24	25-49	50-74	75-99	100-499
56F450	W103X-8	32		100	4.54	4.09	3.86	3.63	3.18
56F451	W103X-9	23	6	200	4.75	4.28	4.04	3.80	3.33
56F452	W103X-10	14.5	12	500	5.22	4.70	4.44	4.18	3.65
56F453	W103X-11	7.5	24	2000	5.66	5.09	4.81	4.53	3.96
56F454	W103X-12	4.6		5000	5.79	5.21	4.92	4.63	4.05



W104M

W101M

TYPES W102M & W103M STANDARD REED RELAYS

Specifications: nominal coil power 300mw, operate time 1 ms av., release time less than 1 ms, contact bounce less than 0.5 ms av. Dielectric contact 250 VAC RMS. Dielectric contact & coil 750 VAC RMS. Contact resistance: 150 mΩ av. Size: ½x7/16x1". Shpg. wt. 1 oz.

TYPE 101M—SPST-NO

Contacts rated 12 volt-amps maximum at 0.25 amp .maximum, or 100 VAC maximum resistive. Capacitance across contacts: 0.7 pf average, and 5,000,000 operations at rated load. (*) Milliamps.

Stock No.	Type	Coil VDC	Coil Ohms	1-24	25-49	50-74	75-99	100-499
56F909	W101MX-1	6	100	2.20	1.98	1.87	1.76	1.54
56F910	W101MX-2	12	250	2.25	2.03	1.91	1.80	1.58
56F911	W101MX-3	24	500	2.25	2.03	1.91	1.80	1.58
56F912	W101MX-4	9*	2500	2.43	2.19	2.07	1.94	1.70

TYPE 104M—SPDT

Contacts rated 3 volt-amps maximum at 0.25 amp maximum, or 28 VAC maximum, resistive. Capacitance across contacts is 1.3 pf average, and 10,000,000 operations at rated load. (*) Milliamps.

Stock No.	Type	Coil VDC	Coil Ohms	1-24	25-49	50-74	75-99	100-499
56F913	W104MX-1	6	100	5.63	5.07	4.78	4.50	3.94
56F914	W104MX-2	12	250	5.68	5.11	4.83	4.54	3.98
56F915	W104MX-3	24	500	5.68	5.11	4.83	4.54	3.98
56F916	W104MX-4	9*	2500	5.87	5.28	4.99	4.70	4.11

Newark-Denver Electronics Supply Corp., 2170 So. Grope St., Denver, Colo. 80222

● NEW SERIES 77CS TELEPHONE RELAY WITH DUST COVER

Class 77 telephone type relay features miniature size 4PDT contact combination, switches to 5 amps, has greater contact pressure without increasing coil operating power. The special design eliminates internal wiring and solder connections. Precision built hinge pin armature bearings with oversize bearings guarantee longer life. Insulation protects terminals from humidity and temperature changes. Comes in molded insulated snap on dust cover. 1 7/64 x 1 9/32 x 55/64".

Stk. No.	Type	Cont.	Coils Volts	Coils Ohms	1-9	10-24	25-49	50-99	100-249
24F335	W77CSX-1	¼PDT 5 Amp	6VDC	40	5.30	5.04	4.77	4.51	3.58
24F336	W77CSX-2		12VDC	160	5.30	5.04	4.77	4.51	3.58
24F337	W77CSX-3		24VDC	600	5.48	5.13	4.86	4.59	3.65
24F338	W77CSX-4		48VDC	2500	5.55	5.27	5.00	4.72	3.75
24F339	W77CSX-5		110VDC	10000	5.97	5.67	5.37	5.07	4.03
24F340	W77ACSX-1		115VAC	.....	5.58	5.30	5.02	4.74	3.77
24F341	70-161-1	Socket with Solder terminals			.60	.54	.51	.48	.42
24F342	70-161-3	Socket with printed circuit terminals			.60	.54	.51	.48	.42

● NEW—CLASS 88 PLUG-IN AND OPEN RELAYS

Closed

Open

Closed. Relay is enclosed in CRACKPROOF plastic cover, which is tough as steel and clear as glass. Insulation provides dielectric strength unaffected by humidity and temperature changes. All models have rugged, precision built hinge-pin armature bearings with oversize bearing surfaces—the same construction used in the finest telephone relays for lowest friction and maximum contact effectiveness. Molded nylon bobins with ruggedized coil terminals and inserts eliminate possibility of shorts. Built in contact wipe with riveted contacts further advance reliability through long life. Silver alloy contacts. W88ANCPX2 is equipped with neon lite. 10 amp rating. Size: 1⅜ x 1⅛ x 2⅛". Wt. 3 oz.

Open. Same as above except, open with tinned soldering terminals and tapped mounting hole. Size: 1¾ x 1 3/16 x 1¼". Wt: 2 oz.

Note: All use octal plug in except, 3PDT—11 pin plug in.

CLOSED TYPE RELAYS

Stk. No.	Type No.	Coil Volts	Coil Ohms	Con. Form	1-9	10-24	25-49	50-99	100-499
56F507	W88ACPX4	115VAC	.....	SPDT	5.79	5.21	4.92	4.63	4.05
56F515	W88ACPX8	115VAC	.....	SPDT	6.44	5.80	5.47	5.15	4.51
56F344	W88ANCPX2	115VAC	•	DPDT	7.29	6.56	6.20	5.83	5.11
56F523	W88ACPX12	115VAC	.....	SPDT	5.56	5.00	4.73	4.45	3.89
56F530	W88CPX3	24VDC	400	SPDT	5.40	4.86	4.59	4.32	3.78
56F536	W88CPX5	6VDC	25	DPDT	5.85	5.27	4.97	4.68	4.10
56F537	W88CPX6	12VDC	100	DPDT	5.85	5.27	4.97	4.68	4.10
56F538	W88CPX7	24VDC	400	DPDT	5.95	5.36	5.06	4.76	4.17
56F545	W88CPX10	12VDC	100	3PDT	7.28	6.55	6.19	5.82	5.10
56F546	W88CPX11	24VDC	400	3PDT	7.38	6.64	6.27	5.90	5.17
56F557	W88CPX16	10MA	2500	DPDT	6.30	5.67	5.36	5.04	4.41
56F558	W88CPX17	7.2MA	5000	DPDT	6.40	5.76	5.44	5.12	4.48
56F559	W88CPX18	5MA	10000	DPDT	6.80	6.12	5.78	5.44	4.76

OPEN RELAYS

56F503	W88AX4	115VAC	.....	SPDT	3.66	3.29	3.11	2.93	2.56
56F511	W88AX8	115VAC	.....	DPDT	4.27	3.84	3.63	3.42	2.99
56F519	W88AX12	115VAC	.....	3PDT	4.77	4.29	4.05	3.82	3.34
56F525	W88X3	12VDC	100	SPDT	3.20	2.88	2.72	2.56	2.24
56F526	W88X4	24VDC	400	SPDT	3.28	2.95	2.79	2.62	2.30
56F533	W88X7	12VDC	100	DPDT	3.73	3.36	3.17	2.98	2.61
56F534	W88X8	24VDC	400	DPDT	3.79	3.41	3.22	3.03	2.65
56F541	W88X11	12VDC	100	3PDT	4.17	3.75	3.54	3.34	2.92
56F542	W88X12	24VDC	400	3PDT	4.21	3.79	3.58	3.37	2.95
56F554	W88X17	10MA	2500	DPDT	4.01	3.61	3.41	3.21	2.81
56F555	W88X18	7.2MA	5000	DPDT	4.11	3.70	3.49	3.29	2.88
56F556	W88X19	5MA	10000	DPDT	4.51	4.06	3.83	3.61	3.16

SERIES 88D AC-DC POWER RELAY

Specially designed with 50 ampere SPST, Double break, normally open contacts, for high reliability. Developed for switching heavy loads in minimum space economically. Unique contact structure provides positive wiping action. One 6-32 tapped mounting hole and locating tab. 1 13/16 x 1¼ x 1 1/16". Weight: 3 oz.

Stk. No.	Type No.	Cont.	Coil Volts	Coil Ohms	1-9	10-24	25-49	50-99	100-249
56F412	W88ADX-1		24VAC	.....	5.15	4.64	4.38	4.12	3.86
56F413	W88ADX-2	50	115VAC	.....	5.25	4.72	4.46	4.20	3.94
56F409	W88DX-2	Amp	12VDC	100	4.65	4.19	3.95	3.72	3.49
56F410	W88DX-3	SPST	24VDC	400	4.70	4.23	4.00	3.76	3.53

HERMETICALLY SEALED RELAYS 4PDT SMALL AC-DC TYPES

Hermetically sealed enclosure housing Class 22 telephone type relay with 14 pin glass insulated solder terminal header. Silver alloy contacts, 5 amp rating. Three 6-32 threaded mounting studs on 15/16 x 1 3/16" centers. Size: 1 7/16 x 1 5/8 x 2 11/16". Wt.: 7 oz.

AC Voltage Actuated

Stock No.	Type	Coil Volts	1-9	10-24	25-49	50-99	100-249
56F607	W22AHSX32	115	17.30	15.57	14.71	13.84	12.98

DC Voltage Actuated

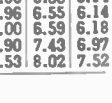
Stock No.	Type	Coil Volts	Coil Ohms	1-9	10-24	25-49	50-99	100-249
56F608	W22HSX144	6V	20	17.00	15.30	14.45	13.60	12.75
56F609	W22HSX145	12V	80	17.00	15.30	14.45	13.60	12.75
56F610	W22HSX146	24V	375	17.05	15.35	14.49	13.64	12.79
56F611	W22HSX147	110V	8000	18.03	16.23	15.33	14.42	13.52

CLASS 88 HERMETICALLY SEALED PLUG-IN RELAY

High reliability relay with type 40-180 enclosure. Has hermetically sealed housing. Class 88 with a standard 8-pin octal plug. Has silver alloy contacts. Rated at 10 amps. All are DPDT except (•) are 3PDT and use 11-pin octal plug. Type 88AHP is alternating current voltage actuated. Type 88HP is direct current voltage actuated. Nominal power: Type 88AHP, 3VA; Type 88HP, 1.5 W. Plug-in mounted. Size: 1 1/16" x 2 1/32". Wt. 5 oz.

Stk. No.	Type	Voltage	Res. Ohms	1-9	10-24	25-49	50-99	100-249
56F400	W88AHPX-21	6 VAC	.....	8.59	7.73	7.39	6.87	6.44
56F401	W88AHPX-22	12 VAC	.....	8.59	7.73	7.39	6.87	6.44
56F402	W88AHPX-23	24 VAC	.....	8.64	7.78	7.34	6.91	6.48
56F403	W88AHPX-24	115 VAC	.....	8.79	7.91	7.47	7.03	6.59
56F354	W88AHPX-36•	115 VAC	.....	10.60	9.54	9.01	8.48	7.95
56F404	W88HPX-32	6 VDC	25	8.19	7.37	6.96	6.55	6.14
56F405	W88HPX-33	12 VDC	100	8.19	7.37	6.96	6.55	6.14
56F406	W88HPX-34	24 VDC	400	8.24	7.42	7.00	6.59	6.18
56F407	W88HPX-35	110 VDC	8000	9.29	8.36	7.90	7.43	6.97
56F355	W88HPX-51•	24 VDC	400	10.03	9.03	8.53	8.02	7.52

SUB-MINIATURE DC TYPES



Hermetically sealed enclosure housing Class 33 telephone type relay with high compression, glass insulated solder terminal header. 5 amp silver alloy contacts. Three 4-40 threader mtg. studs on ½x1" centers. Size: 3 1/32 x 1 11/32 x 1 41/64". Wt., 3 oz.

DPDT 8 Pin Solder Terminal

Stock No.	Type	Coil Volts	Coil Ohms	1-9	10-24	25-49	50-99	100-249
56F612	W33HSX177	6V	17	13.21	11.89	11.23	10.57	9.91
56F613	W33HSX178	12V	75	13.21	11.89	11.23	10.57	9.91
56F614	W33HSX179	24V	280	13.26	11.93	11.27	10.61	9.95

4PDT 14 Pin Solder Terminal

Stock No.	Type	Coil Volts	Coil Ohms	1-9	10-24	25-49	50-99	100-249
56F617	W33HSX182	12V	75	16.65	14.99	14.15	13.32	12.49
56F618	W33HSX183	24V	280	16.70	15.03	14.20	13.36	12.53
56F619	W33HSX184	110V	6500	17.36	15.62	14.76	13.89	13.02

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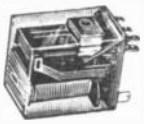
Allied Control Relays

ENCLOSED PLUG-IN RELAYS



Compact long life telephone relays. No external wiring, contact arms extend to form combination solder and plug-in terminals. **A listing of the sockets required by all of the relays on this page is included on the bottom of this column.**

T-154 DC RELAYS

2 amp contacts, 700 MW except 6-C with 1.5W coil power.

Stock No.	Type	Volt	Cont.	Ohms	1-9	10-49	50-99	100-499
59F459	T154-2C	6	DPDT	52	3.25	2.92	2.44	2.27
59F460	T154-2C	12	DPDT	185	3.25	2.92	2.44	2.27
59F461	T154-2C	24	DPDT	700	3.25	2.92	2.44	2.27
59F462	T154-2C	48	DPDT	2500	3.25	2.92	2.44	2.27
59F463	T154-2C	115	DPDT	15000	4.95	4.45	3.71	3.46
59F464	T154-4C	6	4PDT	52	3.63	3.27	2.72	2.54
59F465	T154-4C	12	4PDT	185	3.63	3.27	2.72	2.54
59F466	T154-4C	24	4PDT	700	3.63	3.27	2.72	2.54
59F467	T154-4C	48	4PDT	2500	3.63	3.27	2.72	2.54
59F468	T154-4C	115	4PDT	15000	5.33	4.80	3.99	3.73
59F469	T154-6C	6	6PDT	25	4.66	4.19	3.49	3.26
59F470	T154-6C	12	6PDT	90	4.66	4.19	3.49	3.26
59F471	T154-6C	24	6PDT	430	4.66	4.19	3.49	3.26
59F472	T154-6C	48	6PDT	1550	4.66	4.19	3.49	3.26
59F473	T154-6C	115	6PDT	9000	5.56	5.00	4.17	3.89

TS-154 PLATE CIRCUIT RELAYS

1 amp contacts, DPDT — 85 mW, 4PDT — 125 mW.

59F509	TS154-2C	5.8 ma	DPDT	2500	3.55	3.19	2.66	2.48
59F510	TS154-2C	4.1 ma	DPDT	5000	4.05	3.64	3.04	2.83
59F511	TS154-2C	3.1 ma	DPDT	10000	4.45	4.00	3.34	3.11
59F512	TS154-4C	8.4 ma	4PDT	2500	3.96	3.57	2.97	2.77
59F513	TS154-4C	6.2 ma	4PDT	5000	4.46	4.02	3.35	3.12
59F514	TS154-4C	4.5 ma	4PDT	10000	4.86	4.38	3.65	3.40

T-163 BIFURCATED DC RELAYS

Interchangeable physically with T-154. 2 amp. Gold plated contacts, rated 1 ampere.

59F526	T-163-2C	6	DPDT	52	3.65	3.28	2.74	2.55
59F527	T-163-2C	12	DPDT	185	3.65	3.28	2.74	2.55
59F528	T-163-2C	24	DPDT	700	3.65	3.28	2.74	2.55
59F529	T-163-2C	48	DPDT	2500	3.65	3.28	2.74	2.55
59F530	T-163-2C	115	DPDT	15000	5.35	4.81	4.01	3.74
59F531	T-163-4C	6	4PDT	52	4.16	3.74	3.12	2.91
59F532	T-163-4C	12	4PDT	185	4.16	3.74	3.12	2.91
59F533	T-163-4C	24	4PDT	700	4.16	3.74	3.12	2.91
59F534	T-163-4C	48	4PDT	2500	4.16	3.74	3.12	2.91
59F535	T-163-4C	115	4PDT	15000	5.86	5.27	4.39	4.10
59F536	T-163-6C	6	6PDT	52	5.34	4.81	4.01	3.74
59F537	T-163-6C	12	6PDT	185	5.34	4.81	4.01	3.74
59F538	T-163-6C	24	6PDT	700	5.34	4.81	4.01	3.74
59F539	T-163-6C	48	6PDT	2500	5.34	4.81	4.01	3.74
59F540	T-163-6C	115	6PDT	15000	6.24	5.62	4.69	4.37

TF154 DC RELAYS

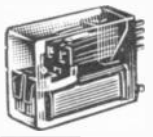
5 amp contacts; 700 mW, except the 6PDT which is 1.5 W. Combination solder terminals, plug in style

Stock No.	Type	Volt	Cont.	Ohms	1-9	10-49	50-99	100-499
59F484	TF154-2C	6	DPDT	52	3.37	3.03	2.53	2.36
59F485	TF154-2C	12	DPDT	185	3.37	3.03	2.53	2.36
59F486	TF154-2C	24	DPDT	700	3.37	3.03	2.53	2.36
59F487	TF154-2C	48	DPDT	2500	3.37	3.03	2.53	2.36
59F488	TF154-2C	115	DPDT	15000	5.35	4.81	4.01	3.74
59F489	TF154-4C	6	4PDT	52	3.87	3.48	2.90	2.71
59F490	TF154-4C	12	4PDT	185	3.87	3.48	2.90	2.71
59F491	TF154-4C	24	4PDT	700	3.87	3.48	2.90	2.71
59F492	TF154-4C	48	4PDT	2500	3.87	3.48	2.90	2.71
59F493	TF154-4C	115	4PDT	15000	5.49	4.94	4.12	3.84
59F494	TF154-6C	6	6PDT	25	5.02	4.52	3.76	3.51
59F495	TF154-6C	12	6PDT	90	5.02	4.52	3.76	3.51
59F496	TF154-6C	24	6PDT	430	5.02	4.52	3.76	3.51
59F497	TF154-6C	48	6PDT	1550	5.02	4.52	3.76	3.51
59F498	TF154-6C	115	6PDT	9000	5.92	5.33	4.44	4.14

SOCKETS FOR RELAYS ON THIS PAGE

Above chassis mounting sockets. Beryllium copper, silver plated contacts. Socket: mica filled phenolic. Hardware: retainer ring and ground wire.

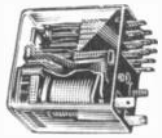
Stock No.	Type	For Relays	1-9	10-49	50-99	100-499
59F517	30055-1	2PDT—Solder	.55	.50	.43	.38
59F541	30055-5	2PDT—Pr. Cir.	.55	.50	.43	.38
59F518	30055-2	4PDT—Solder	.60	.55	.46	.42
59F542	30055-6	4PDT—Pr. Cir.	.70	.64	.54	.49
59F519	30055-20	6PDT—Solder	.95	.86	.73	.66
59F543	30055-24	6PDT—Pr. Cir.	.95	.86	.73	.66



TF-2S5 AC RELAYS

Contact rating: 2 amps at 29 VDC. 1 amp. resis. at 115 VAC. Terminals: conbination plug-in or solder. Terminals, standard tolerance, ±10%.

Stock No.	Type TF2S5-	Volt	Cont.	Resis. Ohms	1-9	10-49	50-99	100-499
59F1200	2C	6	DPDT	6.4	4.40	3.96	3.30	3.08
59F1201	2C	12	DPDT	31.8	4.40	3.96	3.30	3.08
59F1202	2C	24	DPDT	112.5	4.40	3.96	3.30	3.08
59F1203	2C	115	DPDT	2580	4.40	3.96	3.30	3.08
59F1204	2C	220	DPDT	6000	4.90	4.41	3.67	3.43
59F1205	4C	6	4PDT	6.4	5.12	4.61	3.84	3.58
59F1206	4C	12	4PDT	20	5.12	4.61	3.84	3.58
59F1207	4C	24	4PDT	112.5	5.12	4.61	3.84	3.58
59F1208	4C	115	4PDT	1575	5.12	4.61	3.84	3.58
59F1209	4C	220	4PDT	6000	5.62	5.06	4.21	3.93



T-3S1 MAGNETIC LATCHING DC RELAYS

Actuated by a pulse of 10 milli-seconds duration, it is able to withstand a continuous coil input. Coil available with one or two windings. Coil dissipation: 1.2 W. Operate time: 10 ms max. (set or reset) Contact ratings: T-351, 1A at 29 VDC, non-ind. and 0.5A at 115 VAC, non-ind.; TF-351, 5A (2C max.) at 24 VDC, non-ind. and 3A (2C max.) at 115 VAC, non-ind. With up to 4 contact (2x) circuits, 6 normally opened or closed. Size: $4\frac{7}{64}$x$1\frac{1}{64}$x$1\frac{3}{16}$.

Single Coil

Stock No.	Type	VDC	Ohms	Contact	1-9	10-49	50-99	100-499
59F1210	T351-2C	6	40	DPDT	5.00	4.50	3.75	3.50
59F1211	T351-2C	12	166	DPDT	5.00	4.50	3.75	3.50
59F1212	T351-2C	24	630	DPDT	5.00	4.50	3.75	3.50
59F1213	T351-2C	48	2020	DPDT	5.20	4.68	3.90	3.64
59F1214	T351-2C	115	13800	DPDT	6.40	5.76	4.80	4.84
59F1215	T351-4C	6	40	4PDT	5.50	4.95	4.12	3.85
59F1216	T351-4C	12	166	4PDT	5.50	4.95	4.12	3.85
59F1217	T351-4C	24	630	4PDT	5.50	4.95	4.12	3.85
59F1218	T351-4C	48	2020	4PDT	5.70	5.13	4.27	3.99
59F1219	T351-4C	115	13800	4PDT	6.90	6.21	5.17	4.83
59F1220	TF351-2C	6	40	DPDT	5.12	4.61	3.84	3.58
59F1221	TF351-2C	12	166	DPDT	5.12	4.61	3.84	3.58
59F1222	TF351-2C	24	630	DPDT	5.12	4.61	3.84	3.58
59F1223	TF351-2C	48	2020	DPDT	5.32	4.79	3.99	3.72
59F1224	TF351-2C	115	13800	DPDT	6.52	5.87	4.89	4.56

Double Coil*

59F1225	T351-2C	2/6	31.5	DPDT	7.10	6.39	5.33	4.97
59F1226	T351-2C	2/12	134	DPDT	7.10	6.39	5.33	4.97
59F1227	T351-2C	2/24	485	DPDT	7.10	6.39	5.33	4.97
59F1228	T351-2C	2/48	1760	DPDT	7.30	6.57	5.48	5.11
59F1229	T351-2C	2/110	9600	DPDT	9.05	8.15	6.79	6.34
59F1230	T351-4C	2/6	31.5	4PDT	7.50	6.75	5.63	5.25
59F1231	T351-4C	2/12	134	4PDT	7.50	6.75	5.63	5.25
95F1232	T351-4C	2/24	485	4PDT	7.50	6.75	5.63	5.25
59F1233	T351-4C	2/48	1760	4PDT	7.70	6.93	5.78	5.39
95F1234	T351-4C	2/110	9600	4PDT	9.40	8.46	7.05	6.58
59F1235	TF351-2C	2/6	31.5	DPDT	7.50	6.75	5.63	5.25
59F1236	TF351-2C	2/12	134	DPDT	7.50	6.75	5.63	5.25
59F1237	TF351-2C	2/24	485	DPDT	7.50	6.75	5.63	5.25
59F1238	TF351-2C	2/48	1760	DPDT	7.70	6.93	5.78	5.39
59F1239	TF351-2C	2/110	9600	DPDT	9.45	8.51	7.09	6.62

***Dual winding relay is described by a "2" before the coil voltage. Example: T351-2C2/6VD.**

TAT DC RELAYS

Subminiature, 4-4-48. NF-2B tapped holes. NF tapped holes. Wt. .7 oz., 2 AMP contacts; 700 MW, DPDT Relay.

Stk. No.	Type	Voltage	Ohms	1-9	10-49	50-99	100-499
59F474	TAT-2C	6DC	52				
59F475	TAT-2C	12DC	185	2.96	2.66	2.22	2.07
59F476	TAT-2C	24DC	700				
59F477	TAT-2C	48DC	2500				
59F478	TAT-2C	115DC	15000	4.66	4.19	3.49	3.26

TAT-4C DC RELAYS

59F479	TAT-4C	6DC	52				
59F480	TAT-4C	12DC	185	3.34	3.01	2.51	2.34
59F481	TAT-4C	24DC	700				
59F482	TAT-4C	48DC	2500				
59F483	TAT-4C	115DC	15000	5.04	4.54	3.78	3.53

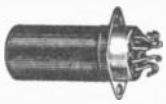
ALLIED

GENERAL PURPOSE RELAYS

DPDT enclosed in a transparent polycarbonate cover and rigidly secured to base. Enclosure: dust cover. Socket: Any standard RETMA or EIA octal. Shpg. weight: 2.5 ounces. Contacts rated 5 amps.

Stock No.	Type	Volt.	Ohms	1-9	10-49	50-99	100-499
59F1240	TEFDO-2C	6AC	6.4	4.92	4.43	3.69	3.44
59F1241	TEFDO-2C	12AC	31.8	4.92	4.43	3.69	3.44
59F1242	TEFDO-2C	24AC	112.5	4.92	4.43	3.69	3.44
59F1243	TEFDO-2C	115AC	2580.0	4.92	4.43	3.69	3.44
59F1244	TEFDO-2C	220AC	6000.0	5.42	4.88	4.06	3.79
59F502	TFMDO-2C	6DC	52	6.02	5.42	4.51	4.21
59F503	TFMDO-2C	12DC	185	6.02	5.42	4.51	4.21
59F504	TFMDO-2C	24DC	700	6.02	5.42	4.51	4.21
59F505	TFMDO-2C	115DC	15000	7.72	6.95	5.78	5.40

MH SEALED RELAYS



26.5 VDC, 5 Amp, DPDT contacts. Solder hook terminals. Vibration 34-1000 Hz at 15G Temp. for MH, —55° to +85°C for MHB, —65°C to +125°C. DPDT. Wt.: 2 oz.

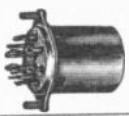
Stk. No.	Type	Ohm	Coil Pwr.	Cont.	1-9	10-49	50-99	100-499
59F439	MH-6D	400	1.75W	DPDT	14.25	11.40	10.69	9.98
59F442	MHB-6D	325	1.25W	DPDT	14.25	11.40	10.69	9.98
59F441	MH-18D	240	3W	4PDT	23.75	19.00	17.81	16.63
59F444	MHB-18D	200	3.5W	4PDT	23.75	19.00	17.81	16.63
59F440	MH-12D	300	2.5W	6PDT	20.90	16.72	15.68	14.63
59F443	MHB-12D	250	3.0W	6PDT	20.90	16.72	15.68	14.63

MHUO SEALED PLUG-IN RELAYS

Same as MH above. Temp. —55°C. to +85°C. Vibration 34-1000 Hz at 15G. Wt.: 3 oz.

Stk. No.	Type	Ohm	Coil Pwr.	Cont.	1-9	10-49	50-99	100-499
59F445	MHUO-120	300	2.5W	4PDT	20.90	16.72	15.68	14.63
59F446	MHUO-180	240	3W	6PDT	23.75	19.00	17.81	16.63
59F515	16188-1	4PDT socket			1.42	1.28	1.07	.99
59F516	16189-1	6PDT socket			1.64	1.48	1.23	1.15

MHY SEALED 4PDT RELAYS



Same as MH except 10 amps and vibration 28-500 Hz at 20G. Mounting (2)—6-32 thd. studs. Wt.: 4.2 oz. Solder hook.

Stk. No.	Type	Ohm	Coil Pwr.	1-9	10-49	50-99	100-499
59F447	MHY12D	200	3.5W	25.41	20.33	19.06	17.79

MHYO RELAYS

Same as Relay MHY except plug in style. Mtg. 2-.125 dia. holes.

Stk. No.	Type	Ohm	Coil Pwr.	1-9	10-49	50-99	100-499
59F448	MHYO-12D	200	3.5W	25.41	20.33	19.06	17.79

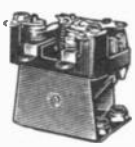
CH DC RELAYS

CH relay, miniature, 10 AMP; 4 PDT vibration 28-2000 Hz at 20G. Temp. —65°C to +125°C. Operating time 15 milliseconds. Voltage—26.5 DC. Wt.—5 oz. Mounting, (3)—6-32 thd. studs. Solder hook terminals.

Stk. No.	Type	Coil Pwr.	1-9	10-49	50-99	100-499
59F416	CH-12D	4W	30.00	24.00	22.50	21.00

POWER TYPE RELAYS

BOT AC/DC RELAYS



AC-DC relay for 15 amp at 29 VDC and 115 VAC. .05 ohms max, resistance. Temp: —55 C to +71 C. The BOT is an unenclosed DPDT relay with standard mounting. Terminals solder lug. Wt. 5 oz.

Stock No.	Type	Voltage	Ohm	Coil Power	1-9	10-49	50-99	100-499
59F404	BOT6A	6AC	1.07	5VA	5.50	4.95	4.12	3.85
59F1245	BOT6A	12AC	4.10	5VA	5.50	4.95	4.12	3.85
59F405	BOT6A	24AC	17.	5VA	5.50	4.95	4.12	3.85
59F406	BOT6A	115AC	445	5VA	5.50	4.95	4.12	3.85
59F407	BOT6A	230AC	2675	5VA	5.82	5.06	4.21	3.93
59F408	BOT6D	6DC	14.2	2.5W	4.82	4.34	3.61	3.37
59F409	BOT6D	12DC	70	2.5W	4.82	4.34	3.61	3.37
59F410	BOT6D	26.5DC	230	2.5W	4.82	4.34	3.61	3.37
59F411	BOT6D	110DC	5000	2.5W	5.40	4.86	4.05	3.78

BOHR AC/DC RELAYS

Same as BOT except 10 amps, hermetically sealed mounting (3)—8-32 thd. studs. Wt. 9.5 oz. Solder hook term.

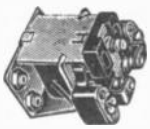
Stk. No.	Type	Voltage	Ohm	Coil Power	1-9	10-49	50-99	100-499
59F412	BOHR-6A	115AC	445	5VA	11.33	10.20	8.50	7.93
59F413	BOHR 6D	26.5DC	230	2.5W	10.88	9.79	8.16	7.62

BOHRO AC/DC RELAYS

Same as above except plug-in style, socket RETMA or EIA. 9.5 oz.

59F414	BOHRO-6A	115AC	445	5VA	11.33	10.20	8.50	7.93
59F415	BOHRO-6D	26.5DC	230	2.5W	10.88	9.79	8.16	7.62

CNA 115 VAC AC RELAYS



SPST-NO; 145 ohm coil, 10.5 VA relays are heavy duty with compact double break contacts. Mounting (4)—6-32 elastic stop nuts. Wt.; 9.5 oz.

Stk. No.	Type	Cont.	1-9	10-49	50-99	100-499
59F417	CNA-13A	25A	8.60	7.74	6.45	6.02
59F418	CNAS-13A	50A	10.60	9.54	7.95	7.42

PO-9 AND PO-12 AC/DC RELAY SERIES

Low cost compact. PO-9 3PDT, PO-12 4PDT, 15 ampere relays. Mounting (4)—6-32 tapped holes. Wt., 8.0 oz.

Stk. No.	Type	Volt.	Wattage	Ohm	1-9	10-49	50-99	100-499
59F449	PO-9A	24AC	10.5VA	8	7.03	6.33	5.27	4.92
59F450	PO-9A	115AC	10.5VA	145	7.03	6.33	5.27	4.92
59F451	PO-9D	13.2DC	2.5W	70	6.71	6.04	5.03	4.70
59F452	PO-9D	24DC	2.5W	230	6.71	6.04	5.03	4.70
59F453	PO-9D	110DC	2.5W	5000	7.38	6.64	5.53	5.17
59F454	PO-12A	115AC	10.5VA	145	7.90	7.11	5.92	5.53
59F455	PO-12D	13.2DC	2.5W	70	7.44	6.70	5.58	5.21
59F456	PO-12D	24DC	2.5W	230	7.44	6.70	5.58	5.21

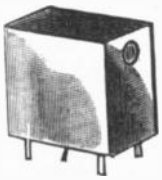
WJS-3D AND WJS-6D DC RELAYS

Welded construction, bifurcated contacts. Meets MIL-R-5757/13. Ambient temp.: —65°C to +125°C. Non-inductive—low level up to 3 amps @ 29VDC or - amp @ 115 VAC case underground. Terminals: 0.2 in. grid spaced Shock: 50g operational. Insl. rest.: 1000 megohms min. Min. pull-in power; WJS-3D, 24 mw; WJS-6D, 40 mw. Hook solder term. except *Plug-in style.

Stk. No.	Type	Curr. Ma	Ohms	Ohms	1-9	10-49	50-99	100-499
59F664	WJS-3D	3.2	2500	2500 SPDT	11.57	10.41	8.68	8.10
59F665	WJS-3D	2.2	5000	5000 SPDT	11.57	10.41	8.68	8.10
59F666	WJS-3D	1.6	10000	10000 SPDT	13.50	12.15	10.13	9.45
59F667	WJS6D	4.0	2500	2500 DPDT	11.83	10.65	8.87	8.28
59F668	WJS6D	2.8	5000	5000 DPDT	11.83	10.65	8.87	8.28
59F669	WJS6D	2.00	10000	10000 DPDT	13.83	12.45	10.37	9.68
59F670	WJS0-6D*	2.8	5000	5000 DPDT	11.83	10.65	8.87	8.28
59F671	WJS0-6D*	2.0	10000	10000 DPDT	13.83	12.45	10.37	9.68

CORNELL DUBILIER

FULLY ENCLOSED MINIATURE RELAYS



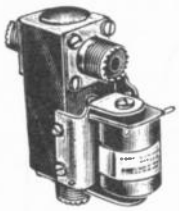
Well suited for modern designs. High volumetric efficiency. Nylon snap-on cover protects the relay from dust and foreign particles. Meets UL requirements. Mechanical life is up to 100,000,000 cycles. Breakdown strength is 900 VAC. Coil voltage ranges from 3 volts to 28 volts, and pull-in voltage from 2.2 volts to 22 volts. With one form C contact, PC terminals, and contacts rated at 3 amps, 115 VAC resistive. Shpg. wt., 3 oz.

Stock No.	Type	Ohms	Coil Volts DC	1-24	25-49	50-99	100-499
15F2050	603-3V	80	3	2.80	2.66	2.52	1.89
15F2051	603-6V	340	6	2.85	2.71	2.57	1.92
15F2052	603-9V	750	9	2.90	2.76	2.61	1.76
15F2053	603-12V	1350	12	2.95	2.80	2.66	1.99
15F2054	603-18V	3000	18	3.00	2.85	2.70	2.03
15F2055	603-24V	5400	24	3.05	2.90	2.75	2.06
15F2056	603-28V	8000	28	3.10	2.95	2.79	2.09

Hart-Advance Relays

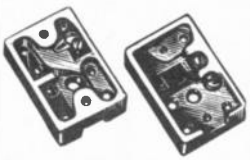
W Series

AT Series

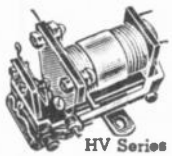


CB Series

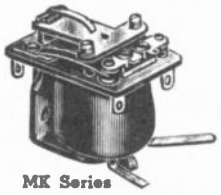
DM Series



DT Series



HV Series



MK Series

● NEW SERIES W RELAYS

DPDT Series. For plug-in application, also has quick connect terminals for use without socket. Mechanical life expectancy under low contact load conditions is in excess of 10,000,000 cycles. Contact ratings: 25 A resistive: 120 VAC or 240 VAC. 1 HP: 120 VAC. 2 HP: 240 VAC. 25 A resistive: 24 VDC. Small size, 1½ x 1½ x 1⅞". U.L. approved.

Stk. No.	Type	Coil Volts	Coil Ohms	1-9	10-49	50-99	100-249	250-499
24F1959	WU012D3-159	12 VDC	50	8.00	7.25	6.00	5.00	4.05
24F1960	WU024D3-129	24 VDC	250					
24F1961	WU012A3-293	12 VAC	4					
24F1962	WU024A3-295	24 VAC	14					
24F1963	WU115A3-099	115 VAC	250					
24F1964	WU220A3-108	220 VAC	1,000	8.30	7.55	6.30	5.25	4.30
24F1972	WPS-C socket for above relays			1.06	.96	.86	.81	.76

HEAVY DUTY ANTENNA RELAY

AT Series. For heavy-duty RF transmitter antenna changeover applications. Primarily designed for fixed-station usage, with a conservative 1 Kilowatt RF rating. Insulated with ceramic Steatite. Excellent wiping action of contacts assures flow of most minute currents for receiving positions. High efficiency. Available with auxiliary single-pole, normally open contacts. Four mounting holes, .157 dia., clearance for 6-32 screws. Size 1 11/16"H.x2 13/16"W.x3 9/16"L. Weight 12.6 oz.

Stock No.	Type	Coil Res.	Coil Voltage	Contacts	1-9	10-49	50-99	100-249	250-499
24F1971	AT/2C/115VA	450 ohms	115VAC	DPDT	13.20	12.54	11.88	11.22	10.56

COAXIAL SWITCHING RELAYS

CB Series. Unsurpassed for meeting problems of coaxial cable switching. Designed for performance on 52-ohm coaxial lines. Low standing-wave ratios permit usage on frequencies up to 300 megacycles. Units operate equally well in any position. All types supplied with SO-239 connectors. Inspection port at contact end for access to internal parts. Two tapped holes 6-32 NC-2; 1 1/16" cntrs., for mounting. 1½"H.x3 5/16"W.x3 5/8"L. Shpg. wt., 11.1 oz.

Stock No.	Type	Coil Resis.	Coil Voltage	Contacts	1-9	10-49	50-99	100-249	250-499
24F1006	CB/1C/115VA	280 ohms	115VAC	SPDT 5 amps	21.00	19.95	18.90	17.85	16.80
24F1007	CB/1C2C/115VA	280 ohms	115VAC	SPDT(int.) DPDT(aux.) 5 amps	24.55	23.32	22.10	20.87	19.64
24F1061	CB/1C2C/12VD	70 ohms	12VDC	SPDT(int) DPDT(aux) 5 amps	23.60	22.42	21.24	20.06	18.88
24F1062	CB/1C2C/24VD	280 ohms	24VDC	SPDT(int) DPDT(aux) 5 amps	23.60	22.42	21.24	20.06	18.88

TIME-DELAY RELAY

DM Series. Has adjustable time-delay range, excellent for use in pre-heating tube-filaments, for specialized lighting circuits, photographic controls, protection applications, etc. Provides time-delay before make. Uses bi-metal thermal unit which can be adjusted for delays of from 5 to 60 seconds Cool quickly for recycling. Require only 8 to 10 times the delay period to be properly cooled. Two .152 dia., 3 5/16" centers, mounting holes. 1 5/8"x2 5/8"x3 3/4". Wt. 7.8 oz.

Stk. No.	Type	Coil Resist.	Coil Voltage	Contacts	1-9	10-49	50-99	100-249	250-499
24F748	DM/2C/115VA	450 ohms	115VAC	DPDT 15 amps	14.35	13.63	12.92	12.20	11.48

THERMAL DELAY RELAYS

DT Series. Efficient, low-cost units used in conjunction with various relays for delayed making or breaking of controlled circuits. Applicable wherever a time delay of 5 to 60 seconds is needed. Adjustable range from 8 to 20 hz per minute. Operates on the bi-metal thermal principle, housed in unglazed porcelain, and obtainable with either normally-open or normally-closed contacts. 2 holes, .154 dia. for 6-32 NC-2 screws; 1 3/8" cntrs. 15/16" x 1 17/64" x 1 51/64". Wt. 1.4 oz.

Stock No.	Type	Coil Voltage	Contacts	1-9	10-49	50-99	100-249	250-499
24F1057	DT/1A/115VA	115VAC	SPST-NO 2 amps	2.75	2.61	2.48	2.36	2.20
24F1058	DT/1B/115VA	115VAC	SPST-NC 2 amps	2.75	2.61	2.48	2.36	2.20

HIGH VOLTAGE RELAYS

HV SERIES. Replaces space taking std. high volt units. Will break up to 5000V RMS @ 200ma. Contact assembly mounted on Steatite to insure high insulation and low energy loss. Available in SPDT contact arrangement. Dimensions: 1 29/32 x 2 1/32 x 3 1/16". Shpg. wt., 7.5 oz.

Stock No.	Type	Coil Resis.	Coil Voltage	Contacts	1-9	10-49	50-99	100-249	250-499
24F1081	HV/1Z/24VD	120 ohms	24VDC	SPDT DB-DM	17.65	16.77	15.89	15.00	14.12
24F1082	HV/1Z/110VD	3000 ohms	110VDC	SPDT DB-DM	18.25	17.34	16.43	15.51	14.60

ATTENTION INDUSTRIAL BUYERS

NEWARK carries complete lines of the top quality electronic equipment. Newark can supply all your needs, whether or not they are listed in this catalog.

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

GENERAL PURPOSE RELAYS

Type 1S. A small economical unit designed for printed circuit or screw mounting. 200 milliwatts nominal operating power. Available in form 1C only. Three coil voltage ratings, all with contacts rated at 1 ampere. Single $^{6}/_{32}$" tapped mounting hole. 0.781" x $1\frac{1}{16}$" x 1".

Stk. No.	Type	Coil Voltage	Coil Res. (Ω)	Contact Rating (Amps.)	1-9	10-49	50-99	100-249	250-499
60F1747	1S-6-1C	6	85	1	1.50	1.42	1.27	1.12	1.05
60F1748	1S-12-1C	12	300	1	1.50	1.42	1.27	1.12	1.05
60F1749	1S-24-1C	24	1100	1	1.50	1.42	1.27	1.12	1.05

GENERAL PURPOSE RELAYS

GHA and GHP Series. General purpose, continuous-duty relays, engineered for high efficiency at low cost. Contacts rated at 5 amps with resistive load. GHA series is open-frame relay with axial-type solder lug terminals, size $1\frac{47}{64}$x$1\frac{7}{64}$x$1\frac{3}{16}$". GHP relays have dustite plastic enclosure with octal base in SP and DPDT models, 11-pin base in 3PDT types; size $1\frac{13}{32}$x$1\frac{13}{32}$x$2\frac{1}{8}$". power of 130 milliwatts per 1C (single pole) is required. Contact rating: 5 amps. Size: $1\frac{13}{32}$x$1\frac{13}{32}$x$2\frac{1}{8}$". Wt. 2 oz.

Stock No.	Type	Coil Res. (ohms)	Coil Voltage	Contacts Form	Contacts Rating	1-9	10-49	50-99	100-249	250-499
24F1020	GHA/1C/115VAC	1600	115VAC	SPDT	5 amps	3.05	2.90	2.75	2.14	1.98
24F1022	GHA/2C/ 6VAC	400	6VAC	DPDT	5 amps	3.55	3.37	3.20	2.49	2.31
24F1023	GHA/2C/ 24VAC	4	24VAC	DPDT	5 amps	3.55	3.37	3.20	2.49	2.31
24F1024	GHA/2C/115VAC	25	115VAC	DPDT	5 amps	3.55	3.37	3.20	2.49	2.31
24F1026	GHA/3C/ 6VAC	100	6VAC	3PDT	5 amps	4.05	3.85	3.65	2.84	2.63
24F1028	GHA/3C/115VAC	400	115VAC	3PDT	5 amps	4.05	3.85	3.65	2.84	2.63
24F1034	GHA/2C/ 24VDC	1600	24VDC	DPDT	5 amps	3.35	3.18	3.02	2.35	2.18
24F1037	GHA/3C/ 24VDC	1600	24VDC	3PDT	5 amps	3.75	3.56	3.38	2.63	2.44
24F989	GHP/2C/115VAC	1600	115VAC	DPDT	5 amps	5.75	5.46	5.18	4.03	3.74
24F993	GHP/3C/115VAC	1600	115VAC	3PDT	5 amps	7.05	6.70	6.35	4.94	4.58

GENERAL PURPOSE RELAYS

GHE SERIES. A plate circuit current operated unit having extremely good sensitivity. Standard GHE enclosed in dustite plastic enclosure and mounts with either an 8 pin or 11 pin plug-in base. Nominal power of 130 milliwatts per 1C (single pole) is required. Contact rating: 5 amps. Size $1\frac{13}{32}$x$1\frac{13}{32}$x $2\frac{1}{8}$". Wt. 2 oz.

Stk. No.	Type	Coil Resis.	Coil Cur ma	Contacts	1-9	10.49	50-99	100-249	250-499
24F994	GHE/2C/2500D	2500	10.	DPDT	5.15	4.89	4.64	3.61	3.35
24F995	GHE/2C/5000D	5000	7.2	DPDT	5.25	4.99	4.74	3.68	3.41
24F996	GHE/2C/10,000D	10000	5.	DPDT	5.65	5.37	5.09	3.96	3.67

MICRO-MINIATURE CRYSTAL CAN RELAYS

MV Series. Hermetically sealed rotary action DPDT DC relay for severe military and industrial applications. Designed to meet MIL-R-5757D requirements. Occupies ¼ inch. Spring leaf contact blades insure longer life, greater heat dissipation. All except MV7033 available in a wide variety of terminal and mounting arrangements. Type number designates coil resist.; 120, 600, 1000, or 2500Ω except MV7033 which has 6000. *44 ma. max. pull-in current, nom. coil voltage 12VDC. **21 ma., 26VDC. ***16 ma., 35VDC. †10 ma., 55 VDC. ††21 ma.. 26.5 VDC.

Stock No.	Type	Terminal Arrangement	Mounting Arrangement	1-9	10-49	50-99	100-249	250-499
24F1910	MV2C120D-13*	Solder-hook	2-hole bracket	13.50	11.50	8.50	8.00	7.50
24F1915	MV2C120D-24*	Plug-in pin	Plain can					
24F1916	MV2C600D-11**	Solder-hook	Side studs					
24F1917	MV2C600D-12**	Solder-hook	Top studs					
24F1918	MV2C600D-13**	Solder-hook	2-hole bracket					
24F1923	MV2C600D-24**	Plug-in pin	Plain can					
24F1926	MV2C1000D-13***	Solder-hook	2-hole bracket					
24F1931	MV2C1000D-24***	Plug-in pin	Plain can					
24F1956	MV7033††	Solder-hook	Angle bracket					

POWER TRANSFER RELAYS

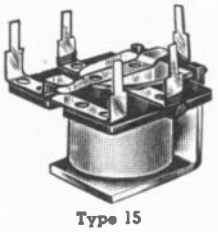
PG Series. Continuous duty general purpose relay. Excellent for general industrial power control circuits and withstanding vibration and shock because of special armature and frame design. 4 tapped holes 6-32 NC-2; ½" x $1\frac{5}{16}$" cntrs. $1\frac{7}{8}$" x $1\frac{5}{8}$" x $1\frac{1}{2}$". Wt. 4.4 oz.

Stk. No.	Type	Coil Resistance	Coil Voltage	Coil Cont.	1-9	10-49	50-99	100-249	250-499
24F917	PG/2C/115VA	400 ohms	115VAC	DPDT 15 amps	7.50	7.13	6.75	6.37	6.00
24F919	PG/2C/24VD	250 ohms	24-28VDC	DPDT 15 amps	6.90	6.56	6.21	5.87	5.52

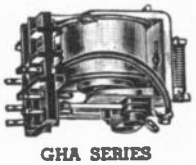
POWER RELAYS

PC Series. Compact, positive-acting relays for either AC or DC use. Used in air conditioning and lighting systems, small motor starting, transformers, garage door openers—wherever dependable circuit switching is necessary. Rugged construction for long life at peak efficiency. Contacts rated at 15 amperes resistive, 5 amperes inductive at 115 VAC or 26.5 VDC. 2 tapped mounting holes 6-32 NC-2; 2" centers. $^{19}/_{16}$" x $1\frac{5}{8}$" $2\frac{5}{8}$". Weight 8 oz.

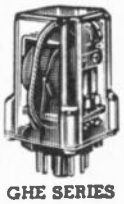
Stk. No.	Type	Coil Resistance	Coil Voltage	Cont.	1-9	10-49	50-99	100-249	250-499
24F783	PC/1C/115VA	450 ohms	115VAC	SPDT	3.95	3.75	3.56	3.35	3.16
24F939	PC/2C/6VA	1.6 ohms	6VAC	DPDT	5.95	5.65	5.36	5.06	4.77
24F913	PC/2C/115VA	450 ohms	115VAC	DPDT					
24F942	PC/2C/12VD	63 ohms	12VDC	DPDT					
24F943	PC/2C/24VD	250 ohms	24-28VDC	DPDT					
24F945	PC/3C/115VA	450 ohms	115VAC	3PDT	8.45	8.03	7.61	7.19	6.76
24F947	PC/3C/24VD	250 ohms	24-28VDC	3PDT	8.45	8.03	7.61	7.19	6.76
24F948	PC/4C/115VA	450 ohms	115VAC	4PDT	10.95	10.40	9.86	9.41	8.76
24F949	PC/4C/24VD	250 ohms	24-28VDC	4PDT	10.95	10.40	9.86	9.41	8.76



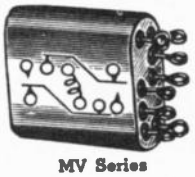
Type 1S



GHA SERIES



GHE SERIES

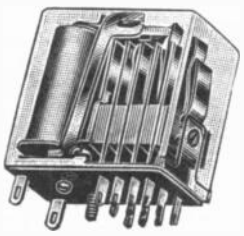


MV Series

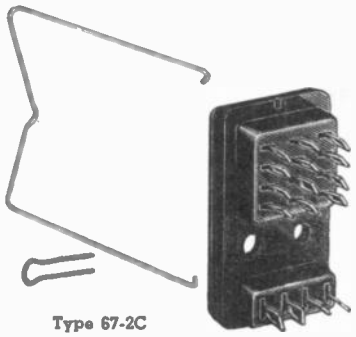
PG Series

PC Series

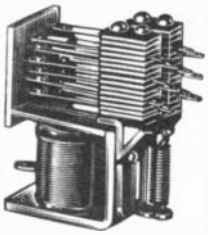
Hart-Advance Relays



Type 67



Type 67-2C



Type 12

SV Series

MINIATURE INDUSTRIAL RELAY

Type 67. Uses armco magnetic ingot iron and a one piece frame and core to provide unusually precise adjustment. Has plastic protective cover. Sockets available. Listed below.

STANDARD ADJUSTMENT

Stk. No.	Type	Coil VDC	Ohms	Contacts Form	Amp	1-9	10-49	50-99	100-249	250-499
57F1600	67DP--A-2C3	6	52	2C	3	3.40	3.05	2.55	2.38	2.31
57F1601	67DP-D-2C3	12	185	2C	3	3.40	3.05	2.55	2.38	2.31
57F1602	67DP-G-2C3	24	700	2C	3	3.40	3.05	2.55	2.38	2.31
57F1603	67DP-N-2C3	115	15000	2C	3	4.80	4.32	3.60	3.36	3.26
57F1604	67DP-A-4C3	6	52	4C	3	3.80	3.42	2.85	2.66	2.58
57F1605	67DP-D-4C3	12	185	4C	3	3.80	3.42	2.85	2.66	2.58
57F1606	67DP-G-4C3	24	700	4C	3	3.80	3.42	2.85	2.66	2.58
57F1607	67DP-N-4C3	115	15000	4C	3	5.20	4.68	3.90	3.64	3.54
57F1608	67DP-E-6C3	12	90	6C	3	4.90	4.41	3.68	3.43	3.33
57F1610	67DP-H-6C3	24	430	6C	3	4.90	4.41	3.68	3.43	3.33
57F1613	67DP-F-8C3	12	72	8C	3	7.00	6.30	5.25	4.90	4.76
57F1614	67DP-J-8C3	24	350	8C	3	7.00	6.30	5.25	4.90	4.76
57F1616	67DP-A-2C5	6	52	2C	5	3.50	3.15	2.63	2.45	2.38
57F1617	67DP-D-2C5	12	185	2C	5	3.50	3.15	2.63	2.45	2.38
57F1618	67DP-G-2C5	24	700	2C	5	3.50	3.15	2.63	2.45	2.38
57F1621	67DP-D-4C5	12	185	4C	5	4.00	3.60	3.00	2.80	2.72
57F1622	67DP-G-4C5	24	700	4C	5	4.00	3.60	3.00	2.80	2.72
57F1623	67DP-N-4C5	115	15000	4C	5	5.40	4.86	4.05	3.78	3.67
57F1625	67DP-E-6C5	12	90	6C	5	5.20	4.68	3.90	3.64	3.54
57F1626	67DP-H-6C5	24	430	6C	5	5.20	4.68	3.90	3.64	3.54
57F1629	67DP-F-8C5	12	72	8C	5	7.40	6.66	5.55	5.18	5.03
57F1630	67DP-J-8C5	24	350	8C	5	7.40	6.66	5.55	5.18	5.03
57F1638	67DP-G-4C3B	24	700	Bifurcated		4.30	3.87	3.23	3.01	2.94
57F1641	67DP-E-6C3B	12	90	Bifurcated		5.40	4.86	4.05	3.78	3.67
57F1642	67DP-H-6C3B	24	430	Bifurcated		5.40	4.86	4.05	3.78	3.67
57F1645	67DP-F-8C3B	12	72	Bifurcated		7.70	6.93	5.78	5.39	5.24
57F1646	67DP-J-8C38	24	350	Bifurcated		7.70	6.93	5.78	5.39	5.24

SENSITIVE ADJUSTMENT

Stk. No.	Type	Ohms	Contacts Form	Amp	Curr.	1-9	10-49	50-99	100-249	250-499
57F1648	67S-S-2C3	1,000	2C	3	8.5	3.70	3.33	2.78	2.59	2.52
57F1649	67S-K-2C3	2,500	2C	3	5.8	3.70	3.33	2.78	2.59	2.52
57F1650	67S-T-2C3	5,000	2C	3	4.1	4.20	3.78	3.15	2.94	2.87
57F1653	67S-S-4C3	1,000	4C	3	13.0	4.15	3.74	3.11	2.91	2.82
57F1654	67S-K-4C3	2,500	4C	3	8.4	4.15	3.74	3.11	2.91	2.82
57F1655	67S-T-4C3	5,000	4C	3	6.2	4.65	4.19	3.49	3.26	3.16
57F1656	67S-V-4C3	10,000	4C	3	4.5	5.05	4.55	3.79	3.54	3.44

CHASSIS SOCKETS

For 67 relay. Retaining ring & ground clip included.

Stk. No.	Type	Socket No.	1-9	10-49	50-99	100-249
57F1658	67-2C	16-1313-9	.55	.50	.43	.38
57F1659	67-4C	16-1313-11	.60	.55	.46	.42
57F1660	67-6C	16-1313-13	.95	.86	.73	.66
57F1661	67-8C	16-1313-15	1.30	1.13	1.08	.97

GENERAL PURPOSE RELAYS

Type 12. Low cost general purpose relay with multiple contacts. Used widely in commercial applications such as industrial controls, communications equipment, and automatic vending machines. AC or DC, 230 volts maximum. Coil dissapation, 3 watts maximum. Provided with four mounting holes, single stud for easy installation. 2 3/16 x 1 23/32 x 1".

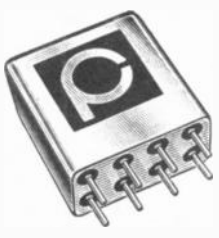
Stk. No.	Type	Coil Volt.	Cont. Arr.	Rating (Amps)	1-9	10-49	50-99	100-249	250-499
60F1715	12DC-6-2C-10	6	DPDT	10	2.30	1.95	1.72	1.54	1.45
60F1716	12DC--12-2C-10	12	DPDT	10	2.40	2.04	1.80	1.60	1.51
60F1717	12DC-24-2C-10	24	DPDT	10	2.50	2.13	1.88	1.67	1.58
60F1720	12DC-12-3C-10	12	3PDT	10	2.75	2.34	2.06	1.84	1.73
60F1721	12DC-24-3C-10	24	3PDT	10	2.80	2.38	2.10	1.88	1.76
60F1722	12DC-115-3C-10	115	3PDT	10	3.15	2.68	2.36	2.11	1.98
60F1723	12DC-6-4C-10	6	4PDT	10	3.00	2.55	2.25	2.00	1.89
60F1724	12DC-12-4C-10	12	4PDT	10	3.10	2.63	2.32	2.07	1.95
60F1725	12DC-24-4C-10	24	4PDT	10	3.15	2.68	2.37	2.11	1.98
60F1726	12DC-115-4C-10	115	4PDT	10	3.50	2.98	2.63	2.33	2.21
60F1728	12DC-12-6C-10	12	6PDT	10	3.60	3.06	2.70	2.40	2.27
60F1729	12DC-24-6C-10	24	6PDT	10	3.65	3.10	2.74	2.45	2.30
60F1731	12AC-6-2C-10	6	DPDT	10	2.40	2.04	1.80	1.60	1.51
60F1732	12AC-12-2C-10	12	DPDT	10	2.50	2.13	1.88	1.67	1.58
60F1733	12AC-24-2C-10	24	DPDT	10	2.55	2.17	1.92	1.71	1.61
60F1734	12AC-115-2C-10	115	DPDT	10	2.70	2.30	2.03	1.80	1.70
60F1742	12AC-115-4C-10	115	4PDT	10	3.40	2.89	2.55	2.27	2.14
60F1745	12AC-24-6C-10	24	6PDT	10	3.70	3.15	2.78	2.47	2.33
60F1746	12AC-115-6C-10	115	6PDT	10	3.90	3.32	2.93	2.60	2.46

SENSITIVE RELAYS

SV Series. For DC circuits restricted to a few thousandths of a watt power consumption. Venier screws vary sensitivity from the 5 milliwatt factory setting. Contacts and spring tension can be accurately set—easily changed. Mtg. holes 9/64" dia. 1 1/2x2x2 9/16". Shpg. wt. 6.5 oz.

Stock No.	Type	Ohms	Coil Cur.	1-9	10-49	50-99	100-249	250-499
24F920	1SV/1C/1000D	1000	2.25 MA	8.25	7.84	7.43	7.01	6.60
24F922	1SV/1C/2200D	2200	1.5 MA	8.25	7.84	7.43	7.01	6.60
24F776	1SV/1C/3500D	3500	1.2 MA	8.40	7.98	7.56	7.14	6.72
24F924	1SV/1C/5500D	5500	.95 MA	8.75	8.31	7.88	7.44	7.00
24F923	1SV/1C/10000D	10000	.7 MA	9.40	8.93	8.46	7.99	7.52
24F926	1SV/1C/14000D	14000	.6 MA	10.10	9.60	9.09	8.59	8.08
24F927	1SV/1C/20000D	20000	.5 MA	11.10	10.55	9.99	9.44	8.88
24F928	1SV/1C/30000D	30000	.4 MA	11.85	11.26	10.67	10.07	9.48
24F929	1SV/1C/40000D	40000	.35 MA	13.30	12.64	11.97	11.33	10.64

MICRO-MINIATURE RELAYS



Type 30. Micro-miniature relay provides rugged, dependable performance from a compact, hermetically sealed unit. It is ideal for applications involving computer systems, missile or aircraft control circuits, communications equipment and general electronic circuitry. Quality controlled production and precision components assembled and tested under dust-free super clean manufacturing conditions assures you that the Hart micro-miniature Type 30 will uphold the high quality standards of your products. Conforms to MIL-5757D. Meets the following low level requirements: 30 microvolts open circuit voltage; 10 microamperes contact current. Available with five different mountings, all with 675 ohms resistance and 26.5 volts nominal.

Stk. No.	Type	Mounting	Res.	Volt Nom.	1-9	10-49	50-99	100-249	250-499
60F1750	30-01G	Solder Header with 2 mtg. brackets	675	26.5	7.25	7.00	6.25	6.00	5.75
60F1751	30-02G	Solder Header with side bracket	675	26.5	7.25	7.00	6.25	6.00	5.75

SAVE WORK! Make Newark your Complete 1-Point Stock Source!

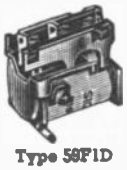
SAVE TIME! At Newark—fast, efficient service always!

Relays — General Purpose SIGMA

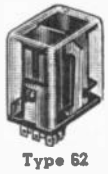
Type 11FZ

Type 50F

Type 50RO


Type 59F1D

Type 59A01D


Type 62

SERIES 11 AC & DC SPDT RELAYS

Small, low cost relays for 1 ampere switching at 28 VDC/115 VAC resistive. DC types are designed for sliding current or on-off 50 mw signals. AC is used for .3va on-off signals. Good environmental capability. UL and CSA listed. **11F and 11 FZ** screw mounting with solder lug terminals. 1 7/32 x 1 3/16 x 1 1/16". 11 FP shoulder lug mounting with printed circuit terminals, 1 7/32" sq. x 1 5/12". Temperature range: —40 to +122°F. Shpg. wt. 3 oz.

DC RELAYS

Stock No.	Type and Coil ohms	Ma DC	Nominal Voltage	1-99	100-499
24F1987	11F-250-G-SIL	14.0	6VDC	1.95	1.76
24F1988	11F-550-G-SIL	9.5	....	1.95	1.76
24F360	11F-1000-G-SIL	7.0	12VDC	1.95	1.76
24F1989	11F-1500-G-SIL	5.8	....	1.95	1.76
24F361	11F-2300-G-SIL	4.6	.....	1.95	1.76
24F362	11F-6000-G-SIL	2.9	24VDC	2.15	1.94
24F363	11F-9000-G-SIL	2.4	.... .	2.35	2.12
24F381	11F2-2300-G-SIL	4.6	.....	2.15	1.94
24F1990	11FP-1000-G-SIL	7.0	12VDC	2.05	1.85
24F1991	11FP-2300-G-SIL	4.6	.....	2.05	1.85

AC RELAYS

Stock No.	Type and Coil ohms	V AC	1-24	25-49	50-74	75-99	100-249
24F1992	11FZ-25-ACS-SIL	6	3.05	2.90	2.75	2.44	2.14
24F380	11FZ-9000-ACS-SIL	115	3.60	3.42	3.24	2.88	2.52

SERIES 62DC DPDT, 4PDT, 6PDT RELAYS

Excellent stability, exceptional life at moderate loads. Interchangeable with similar commercial relays. Rated 2 amps. Nom. power for 2 pole and 4 pole; 70mw; For 6 pole 1.4w. Plastic dust cover, stud mounting, and solder or printed-circuit terminal sockets. 1 3/16"x3/4"x1 9/32" h. Temp: +14° to +158°F. UL/CSA listed. Shpg. wt., 1 oz.

Stock No.	Type and coil volts	Coil ohms	Action	1-24	25-49	50-74	75-99	100-499
24F2675	62R2-6DC	52	DPDT	3.40	3.23	3.06	2.72	2.38
24F2676	62R2-12DC	185	DPDT	3.40	3.23	3.06	2.72	2.38
24F2677	62R2-24DC	700	DPDT	3.40	3.23	3.06	2.72	2.38
24F2678	62R2-48DC	2.5K	DPDT	3.50	3.33	3.15	2.80	2.45
24F2679	62R2-110DC	15K	DPDT	4.80	4.56	4.32	3.84	3.36
24F2680	62R4-6DC	52	4PDT	3.80	3.61	3.42	3.04	2.66
24F2681	62R4-12DC	185	4PDT	3.80	3.61	3.42	3.04	2.66
24F2682	62R4-24DC	700	4PDT	3.80	3.61	3.42	3.04	2.66
24F2683	62R4-48DC	2500	4PDT	4.00	3.80	3.60	3.20	2.80
24F2684	62R4-110DC	15000	4PDT	5.20	4.94	4.68	4.16	3.64
24F2685	62R6-6DC	25	6PDT	4.85	4.61	4.37	3.88	3.40
24F2686	62R6-12DC	90	6PDT	4.85	4.61	4.37	3.88	3.40
24F2687	62R6-24DC	430	6PDT	4.85	4.61	4.37	3.88	3.40
24F2688	62R6-48DC	1550	6PDT	5.20	4.94	4.68	4.16	3.64
24F2689	62R6-110DC	9000	6PDT	5.80	5.51	5.22	4.64	4.06
24F2690	AD22-Solder term. socket DPDT			.55	.52	.50	.44	.39
24F2691	AD23-P.C. term. socket DPDT			.55	.52	.50	.44	.39
24F2692	AD24-Solder term. socket 4PDT			.65	.62	.58	.52	.46
24F2693	AD25-P.C. term. socket 4PDT			.65	.62	.58	.52	.46
24F2694	AD26-Solder term. socket 6PDT			.95	.90	.86	.76	.66
24F2695	AD27-Solder term. socket 6PDT			.95	.90	.86	.76	.66

SERIES 59DC SPDT RELAYS

While priced almost unbelievably low, this snap switch relay features an excellent contact rating of 2 amperes. The precise contact assembly provides positive operations from on-off or slowly changing signals. Mechanical life: 1,000,000 operations. Temperature range: +14 to +158°F. **59F1D:** Screw mounting with solder terminals 1 1/8" x 2 29/32 x 1 3/64". Shipping weight: 1 oz. **59A01D:** Metal dust cover, 8-pin plug, dia. 1 5/16 x 1 19/32" height. Nominal power: 300 mw. Shipping weight: 2 oz.

Stock No.	Type and coil V.	Coil ohms	1-99	100-499
24F1978	59A01D-6DC	120	3.55	3.20
24F1979	59A01D-12DC	465	3.55	3.20
24F1980	5901D-24DC	1800	3.55	3.20
24F1975	59F1D-6DC	120	2.05	1.85
24F1976	59F1D-12DC	465	2.05	1.85
24F1977	59F1D-24DC	1800	2.05	1.85

SERIES 50 AC & DC SPDT, DPDT, 3PDT RELAYS

Compact relay for switching small motors, solenoids, and other relays in all types of automated equipment. Contact rating 10 amps at 28 VDC/115 VAC. Polycarbonate cover. Mech. life, $5x10^6$ operations. Temp: +14° to ±158°F; 50R0: TO +131° F.

50F1, 50F2, 50F3: Screw mounting with solder terminals. H: 1 3/16"x1 11/64"x1 15/16". Shpg. tw., 2 oz. 50R01, 50R02, 50R03: H; 1 3/8" eq. x 2 3/32". 50R01, 50R02; 8-pin plug; 50R03; 11-pin plug. UL/CSA listed. Shpg. wt., 4 oz.

OPEN TYPE WITH SOLDER TERMINALS

Stock No.	Type SCO and Coil Volts	Coil ohms	Action	1-24	25-49	50-74	75-99	100-249
24F2651	50F1-6AC	5.8	SPDT	3.20	3.04	2.88	2.56	2.24
24F2652	50F1-12AC	23.5	SPDT	3.20	3.04	2.88	2.56	2.24
24F2653	50F1-24AC	95	SPDT	3.20	3.04	2.88	2.56	2.24
24F2654	50F1-115AC	2300	SPDT	3.20	3.04	2.88	2.56	2.24
24F2655	50F1-6DC	23.5	SPDT	3.15	2.99	2.84	2.52	2.21
24F2656	50F1-12DC	95	SPDT	3.15	2.99	2.84	2.52	2.21
24F2657	50F1-24DC	430	SPDT	3.15	2.99	2.84	2.52	2.21
24F2558	50F1-110DC	10000	SPDT	3.65	3.47	3.29	2.92	2.56
24F2659	50F2-6AC	5.8	DPDT	3.95	3.75	3.56	3.16	2.77
24F2660	50F2-12AC	23.5	DPDT	3.95	3.75	3.56	3.16	2.77
24F2661	50F2-24AC	430	DPDT	3.95	3.75	3.56	3.16	2.77
24F2662	50F2-115AC	2300	DPDT	3.95	3.75	3.56	3.16	2.77
21F2663	50F2-6DC	23.5	DPDT	3.60	3.42	3.24	2.88	2.52
24F2664	50F2-12DC	95	DPDT	3.60	3.42	3.24	2.88	2.52
24F2665	50F2-24DC	430	DPDT	3.60	3.42	3.24	2.88	2.52
24F2666	50F2-110DC	10000	DPDT	4.05	3.85	3.65	3.24	2.84
24F2667	50F3-6AC	5.8	3PDT	4.40	4.18	3.96	3.52	3.08
24F2668	50F3-12AC	23.5	3PDT	4.40	4.18	3.96	3.52	3.08
24F2669	50F3-24AC	95	3PDT	4.40	4.18	3.96	3.52	3.08
24F2670	50F3-115AC	2300	3PDT	4.40	4.18	3.96	3.52	3.08
24F2671	50F3-6DC	23.5	3PDT	4.05	3.85	3.65	3.24	2.84
24F2672	50F3-12DC	95	3PDT	4.05	3.85	3.65	3.24	2.84
24F2673	50F3-24DC	430	3PDT	4.05	3.85	3.65	3.24	2.84
24F2674	50F3-110DC	10000	3PDT	4.55	4.32	4.10	3.64	3.19

ENCLOSED PLUG-IN TYPE

Stock No.	Type SCO & Coil V.	Coil Ohms	Action	1-24	25-49	50-74	75-99	100-249
24F2696	50R01-6AC	5.8	SPDT	5.40	5.13	4.86	4.32	3.78
24F2697	50R01-12AC	23.5	SPDT	5.40	5.13	4.86	4.32	3.78
24F2698	50R01-24AC	95	SPDT	5.40	5.13	4.86	4.32	3.78
24F2699	50R01-115AC	2300	SPDT	5.40	5.13	4.86	4.32	3.78
24F2700	50R01-6DC	23.5	SPDT	5.30	5.04	4.77	4.24	3.71
24F2701	50R01-12DC	95	SPDT	5.30	5.04	4.77	4.24	3.71
24F2702	50R01-24DC	430	SPDT	5.30	5.04	4.77	4.24	3.71
24F2703	50R01-110DC	10000	SPDT	5.75	5.46	5.18	4.60	4.03
24F2704	50R02-6AC	5.8	DPDT	6.05	5.75	5.45	4.84	4.24
24F2705	50R02-12AC	23.5	DPDT	6.05	5.75	5.45	4.84	4.24
24F2706	50R02-24AC	95	DPDT	6.05	5.75	5.45	4.84	4.24
24F2707	50R02-115AC	2300	DPDT	6.05	5.75	5.45	4.84	4.24
24F2708	50R02-6DC	23.5	DPDT	6.00	5.70	5.40	4.80	4.20
24F2709	50R02-12DC	95	DPDT	6.00	5.70	5.40	4.80	4.20
24F2710	50R02-24DC	430	DPDT	6.00	5.70	5.40	4.80	4.20
24F2711	50R02-110DC	10000	DPDT	6.40	6.08	5.76	5.12	4.48
24F2712	50R03-6AC	5.8	3PDT	7.00	6.65	6.30	5.60	4.90
24F2713	50R03-12AC	23.5	3PDT	7.00	6.65	6.30	5.60	4.90
24F2714	50R03-24AC	95	3PDT	7.00	6.65	6.30	5.60	4.90
24F2715	50R03-115AC	2300	3PDT	7.00	6.65	6.30	5.60	4.90
24F2716	50R03-6DC	23.5	3PDT	6.95	6.60	6.26	5.56	4.87
24F2717	50R03-12DC	95	3PDT	6.95	6.60	6.26	5.56	4.87
24F2718	50R03-24DC	430	3PDT	6.95	6.60	6.26	5.56	4.87
24F2719	50R03-110DC	10000	3PDT	7.40	7.03	6.66	5.92	5.18

To Serve You Better — Ten Stocking Warehouses From Coast-to-Coast

Use the Services of the NEWARK Facility Nearest You — See Front Cover

SIGMA Relays

8RCO1A

8P3

8L7

8P4

● NEW SERIES 8 LIGHT-ACTUATED

Two-part systems employ integral receiver units (containing photo-cell and relay) and prefocussed light sources. Three-part systems have miniaturized light sources and receivers, for use where space is limited; receivers connect to remote amplifier-relay units.

TWO-PART (INTEGRAL RECEIVER) SYSTEMS

All units operate from 115 VAC, 50/60 hz, and are housed in NEMA type 1 & 12 enclosures. Complete system consists of 8L3 light source plus receiver unit appropriate to application. Operate over a 12 foot range; no inter-wiring necessary.

8P3, 8P5 & 8P6 General-Purpose Receiver. For switching rates up to 600 operations/minute contacts rated 10A or 28VDC/115VAC. Wt., 13 oz.

8P8, 8P9 and 8P10 High-Speed Receivers. Operate 1200 times per minute. Relay contacts rated 5A at 28VDC/115VAC, 2.5A at 230-VAC. 8P8 comes with wire leads, ½" conduit bushing and mtg. bracket; 8P10 has bracket and octal plug. Wt., 13 oz.

8RCO1A & 8RCO2A Miniature Low-Cost Receivers. 120 cycles/minute switching. Plug-in units fit standard 5-pin socket; SPDT relay contacts rated 3A at 28VDC/115VAC. May be used for beam-breaking or fluctuating-intensity applications: 8RCO1A relay picks up at 5 foot-candles, drops out at .1 fc.; 8RCO2A for high-ambient-light conditions, picks up at 5 fc; opens at .5 fc. Supply voltage 115V 60 Hz, UL approved. Wt., 3 oz.

8L3 Light Source. Provides actuating beam for all 8P and 8R receivers. Set to span up to 12 feet. With mounting bracket, ½" conduit bushing, and 16" leads (18 AWG). Wt., 13 oz.

Stk. No.	Type	Action	Mounting	1-24	25-49
24F427	8P3-115	SPDT	Bracket	19.80	17.60
24F437	8P5-115	DPDT	Octal plug	19.80	17.60
24F438	8P6-115	SPDT	5-pin plug	18.90	16.80
24F428	8P8-115	SPDT	Bracket	39.60	35.20
24F439	8P9-115	DPDT	Octal plug	39.60	35.20
24F429	8P10-115	SPDT	5-pin plug	37.80	33.60
24F1719	8RC01A	SPDT	5-pin plug	16.33	14.52
24F1720	8RC02A	SPDT	5-pin plug	16.88	15.00
24F430	8L3-115	Light Source	Bracket	14.40	12.80

THREE PART (REMOTE AMPLIFIER-RELAY) SYSTEMS

8P7 Subminiature Receiver. Beam range 12". 600 cycle/minute switching rate. Black plastic enclosure measures 1½x⅝". **8L7 Light Source.** Matches 8P7. Lamp life 4000 hours. Wt., 2 oz. **8P4 Miniature Receiver.** Max. range 25 ft. 600 operations/min. 1 x 2 1/16" Black anodized aluminum housing. Wt., 3 oz. **8L4 Light Source.** For 8P4. Adjustable focus. Wt., 2.7 oz. **8A Amplifier-Relay Unit.** DPDT rated 5A at 28 VDC or 115/230-VAC. Operates from 115/230 VAC; provides power for 8L7, 8L4 light sources and 8P7, 8L7 receivers 8½x5x2 9/16", unenclosed, wt. 2 lbs. **8A3 Amplifier-Relay Unit.** Identical to 8A, but with time delay relay; delay variable from .05 to 20 sec.

NOTE: For a complete photocontrol system, order the 8A or 8A3 control unit plus a suitable source-receiver combination.

Stk. No.	Type	Description	1-24	25-Up
24F431	8P7	Wire leads, mtg. bracket	13.05	11.60
24F432	8L7	Wire leads, mtg. bracket	9.45	8.40
24F433	8P4	⅜" conduit fitting & bracket	14.40	12.80
24F434	8L4	⅜" conduit fitting & bracket	12.60	11.20
24F435	8A	(Amp.-Relay Control)	54.00	48.00
24F436	8A3	(Amp.-Relay Control)	72.00	64.00

SERIES 67 AC AND DC — 4PDT

This miniature AC or DC relay switches 3 ampere loads from 1.2 volt-ampere or 900 milliwatt signals. Features inline contacts, and the choice of solder terminals. Also features temperature range of —4°F. to +140° F. Plastic dust cover is included. With 14-prong plug, is adequately designed for stud mounting. 1-5/16 x 1-7/64 x 55/64". Shipping weight, 1.5 oz.

Stock No.	Mfr's. Type Coil Volts	Ohms Coil	1-24	25-49	50-74	75-99	100-249
24F2829	67R4-12AC	43	5.00	4.75	4.50	4.00	3.50
24F2830	67R4-24AC	160	5.00	4.75	4.50	4.00	3.50
24F2821	67R4-115AC	3900	5.40	5.13	4.62	4.32	3.78
24F2832	67R4-6DC	40	4.40	4.18	3.96	3.52	3.08
24F2833	67R4-12DC	160	4.40	4.18	3.96	3.52	3.08
24F2834	67R4-24DC	650	4.40	4.18	3.96	3.52	3.08
24F2835	67R4-48DC	2600	4.60	4.37	4.14	3.68	3.22
24F2836	67F4 110DC	11000	5.10	4.85	4.19	4.08	3.57
24F2837	AD28 Solder Term. Skt.		.60	.57	.54	.48	.42
24F2838	AD29 Printed Circ. Skt.		.60	.57	.54	.48	.42

A

B

C

D

E

SPECIFICATIONS

Series	Coil Ohms	Adj. Ohms	Pickup Pwr (mw)	Pickup Volts (DC)	Vibration	Shock
32	3100	G	50	4.0	30 g's to 5000 cps.	—100 g s
32	1200	GD	100	9.2	30 g's to 5000 cps.	—100 g's
33	1200	VG	100	9.2	30 g's to 5000 cps.	—70 g's
34	6300	G	20	1.8	30 g's to 2000 cps.	—50 g's
34	4000	GD	40	3.2	30 g's to 2000 cps.	—50 g's
35	1000	VG	40	6.5	30 g's to 2000 cps.	—50 g's
35	4000	VG	40	13.5	30 g s to 2000 cps.	—50 g's
36	700	G	200	13.5	30 g's to 2000 cps.	—50 g's

Subminiature relays, exceeds MIL-R-5757D. Rated 26.5 VDC nom. except *12 DC. Contact rating 2 amp. All types hermetically sealed. **Dual coil types. Size: 0.8x0.9x0 4" except Type 36, 0.8x0.41x0.41". Ship. wt., 10 oz. Temp: —60 to +125°C.

TYPE 32 — DPDT (Solder terms., except † 10 pin) LATCHING

Stock No.	Mfr's Type & Coil Ohms	Fig.	1-24	25-49	50-74	75-99	100-249
24F2754	32]D-1200 GD-SIL†	A	26.50	25.18	23.85	21.20	18.55
24F2755	32R]KD-1200 GD-SIL	B	26.50	25.18	23.85	21.20	18.55
24F2756	32R]PD-1200 GD-SIL	C	26.50	25.18	23.85	21.20	18.55
24F2757	32R]P-3100 G-SIL	C	23.50	22.33	21.15	18.80	16.45

TYPE 33 — DPDT (Solder term., except † 9-pin.

24F2758	33]-1200 VG-SIL†	A	22.00	20.90	19.80	17.60	15.40
24F2759	33R]K-1200 VG-SIL	B	22.00	20.90	19.80	17.60	15.40
24F2760	33R]L-1200 VG-SIL	D	22.00	20.90	19.80	17.60	15.40
24F2761	33R]P-1200 VG-SIL	C	22.00	20.90	19.80	17.60	15.40

TYPE 34 — DPDT (Solder term.) LATCHING

24F2762	34R]P2-6300 G-SCN	C	21.10	20.05	18.99	16.88	14.77
24F2763	34R]P2D-4000 GD-SCN	C	22.00	20.90	19.80	17.60	15.40

TYPE 35 — DPDT (Solder term., except † 8 pin.)

24F2764	35]P2-1000 VG-SCN†	C	18.00	17.10	16.20	14.40	12.60
24F2765	35R]L-4000 VG-SCN	D	18.00	17.10	16.20	14.40	12.60
24F2766	35R]P2-4000 VG-SCN	C	18.00	17.10	16.20	14.40	12.60

TYPE 36 — DPDT (8 Pin term., except † solder.)

24F2767	36]-700 G-SMN	C/A	15.20	14.44	13.68	12.16	10.64
24F2768	36]P2-700 G-SMN	E/C	15.20	14.44	13.68	12.16	10.64
24F2769	36R]P2-700 G-SMN†	E/C	15.20	14.44	13.68	12.16	10.64

SERIES 22—MINIATURE DL RELAYS

For airborne and ground-based military equipment. A sensitive, high-reliability miniature, non-polarized relay featuring excellent stability and dropout 33% of pickup current. Single-coil 22RJC pickup power: 20 mw; dual-coil 22RJCC, 22JNCC: 40 mw. 2 amp contact-rated at 28 VDC/115 VAC. Resists 10 g to 300 cps vibration, 100 g shock. Temp: —65 to +125°C. All hermetically sealed. 1" sq. x 1 25/32". 22RJC, 22RJCC: stud mounting; 22JNCC: 9-pin plug. Ship. wt., 3 oz.

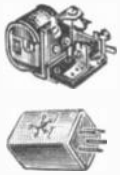
SPDT

Stock No.	Mfr's Type & Coil Ohms	1-24	25-49	50-74	75-99	100 249
24F2750	22R]C-500 G-SIL	13.00	12.35	11.70	10.40	9.10
24F371	22R]C-1000 G-SIL	13.00	12.35	11.70	10.40	9.10
24F372	22R]C-2500 G-SIL	13.50	12.83	12.15	10.80	9.45
24F373	22R]C-5000 G-SIL	14.00	13.30	12.60	11.20	9.80

DPDT

24F1750	22R]CC-500 G-SIL	14.50	13.78	13.05	11.60	10.15
24F375	22R]CC-1000 G-SIL	14.50	13.78	13.05	11.60	10.15
24F376	22R]CC-2500 G-SIL	15.00	14.25	13.50	12.00	10.50
24F377	22R]CC-5000 G-SIL	15.50	14.73	13.95	12.40	10.85
24F378	22R]CC-8000 G-SIL	16.00	15.20	14.40	12.80	11.20
24F2751	22R]CC-12000 G-SIL	17.50	16.63	15.75	14.00	12.25
24F382	22]NCC-500G-SIL	16.35	15.53	14.72	13.08	11.45
24F2752	22]NCC-2500 G-SIL	15.35	14.58	13.82	12.28	10.75
24F2753	22]NCC-5000 G-SIL	15.85	15.06	14.27	12.68	11.10
24F383	22KNCC-1000G-SIL	16 50	15.68	15.84	13.20	11.55
24F384	22KNCC-5000G-SIL	17.60	16.72	14.85	14.08	12.32
24F385	22KNCC-8000-SIL	18.15	17.24	16.34	14.52	12.71
24F386	AT155 socket	.45	.43	.41	.36	.32

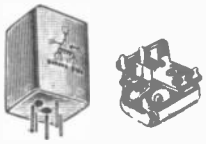
SERIES 4 DC — SPDT



For vacuum tube and transistor drives and applications requiring high dropout or narrow differential. Ideal for circuits where energizing current does not drop to zero. Pickup power: 20 mw. Contact rating: 2 amp at 28VDC/115VAC. Temperature range: +32 to +112 F. Unenclosed 4F has screw mounting, with solder terminals. 4R has aluminum dust cover and 5 pin plug. **4F:** 1¾x1½x1 15/32". Shp. wt. 2¼ oz. **4R:** 1 9/16 sq. x 2 19/32". Sh. wt. 3¾ oz.

Stock No.	Mfr's Type	Coil Ohms	Ma DC	1-24	25-49	50-74	75-99	100-249
24F352	4F-1000 S-SIL	1 K	4.5	6.50	6.18	5.85	5.20	4.55
24F353	4F-2500 S-SIL	2.5K	3.0	6.50	6.18	5.85	5.20	4.55
21F354	4F-5000 S-SIL	5 K	2.0	6.85	6.51	6.17	5.48	4.80
24F350	4F-8000 S-SIL	8 K	1.6	7.10	6.75	6.39	5.68	4.97
24F1700	4F-10,000 S-SIL	10 K	1.4	7.10	6.75	6.39	5.68	4.97
24F2770	4R-1000 S-SIL	1 K	4.5	8.90	8.46	8.01	7.12	6.23
24F2771	4R-5000 S-SIL	5 K	2.0	9.20	8.74	8.28	7.36	6.44
24F2772	4R-8000 S-SIL	8 K	1.6	9.45	8.98	8.51	7.56	6.62
24F2773	4R-10,000 S-SIL	10 K	1.4	9.45	8.98	8.51	7.56	6.62

SERIES S DC — SPDT



Sensitive type for overload underload detection. Withstands overloads of 30:1. Contact ratings: S: 1 amp; SS, .25 amp. All types UL listed. Temp.: S: —4 to +158°F.; SS: +50 to 140°F. **5F.** Unenclosed, screw mounting, solder terminals. 1⅜x1¾x1½". Ship. wt. 4¼ oz. **5R.** Aluminum cover. 5 pin plug. 1 9/16 sq. x 2 9/32". Ship. wt. 5¾ oz.

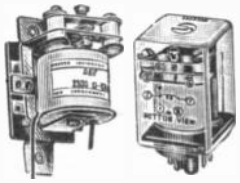
Stock No.	Mfr's Type	Coil Ohms	Ma DC	1-24	25-49	50-74	75-99	100-249
24F355	5F-1000 S-SIL	1 K	2.3	9.25	8.79	8.33	7.40	6.48
24F356	5F-2500-S-SIL	2.5K	1.4	9.25	8.79	8.33	7.40	6.48
24F357	5F-5000 S-SIL	5 K	1.0	9.90	9.41	8.91	7.92	6.93
24F358	5F-10,000 S-SIL	10 K	.70	10.85	10.31	9.77	8.68	7.60
24F2774	5F-1000 SS-PAL	1 K	1.0	10.50	9.98	9.45	8.40	7.35
24F2775	5F-10,000 SS-PAL	10 K	.30	12.10	11.50	10.89	9.68	8.47
24F2776	5R-1000 S-SIL	1 K	2.3	11.70	11.12	10.53	9.36	8.19
24F2777	5R-2500 S-SIL	2.5K	1.4	11.70	11.12	10.53	9.36	8.19
24F2778	5R-5000 S-SIL	5 K	1.0	12.35	11.73	11.12	9.88	8.65
24F1742	5R-10,000 S-SIL	10 K	.70	13.25	12.59	11.93	10.60	9.28
24F1743	5R-16,000 S-SIL	16 K	.55	14.25	13.54	12.83	11.40	9.98

SERIES 26 — SPDT

Adjustment S features 5 mw pickup power, switches 1 amp at 28 VDC/115 VAC. CDS: 4 mw pickup power, .5 ampere contact rating, drop-out 50% of pickup current. Temp: —85 to +212°F. **26F:** unenclosed, screw mounting, solder terminals. 1 7/8x3 1/32x1 1/16". Ship. wt. 2 oz.

Stock No.	Mfr's Type	Coil Ohms	Ma DC	1-24	25-49	50-74	75-99
24F2088	26F-1000 S-SIL	1 K	2.3	9.45	8.98	8.51	8.03
24F351	26F-8000 CDS-PAL	8 K	.7	11.55	10.97	10.40	9.32

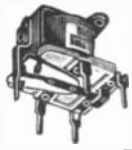
SERIES 48 DC — SPDT



Low cost sensitive relay for use in alarm systems requiring operation from 10 mw. Bridge type contact structure. Compliant armature for good contact wipe. Contact rating: 2 amp; Temp.: —4 to +158°F. **48F.** Unenclosed, screw mounting, solder terminals. 1 17/64x2 9/32x 1 1/16". Ship. wt. 3 oz. **48RO:** Plastic dust cover, 8 pin octal plug. 1 23/64 sq. x 2 1/64". Ship. wt. 4 oz.

Stock No.	Mfr's Type	Coil Ohms	Ma DC	1-24	25-49	50-74	75-99	100-249
24F2779	48F-1000 G-SIL	1 K	3.2	5.90	5.61	5.31	4.72	4.13
24F2780	48F-2500 G-SIL	2.5K	2.0	5.90	5.61	5.31	4.72	4.13
24F2783	48RO-1000 G-SIL	1 K	3.2	6.90	6.56	6.21	5.52	4.83
24F2784	48RO-2500 G-SIL	2.5K	2.0	6.90	6.56	6.21	5.52	4.83

TYPE 65 COMMERCIAL SPDT RELAYS



Small, low cost relay which can respond positively to low-power signals. Good adjustments stability. 5 million operation mechanical life. Contact load rating: 1 A. Nom power: 90 mw. 65F1 (screw mount. with solder term). 65FP1 (terminals with printed circuit). Shpg. wt: 1 oz.

Stock No.	Mfr.'s Type Coil Volts	Coil Ohms	1-99	100-499
24F1981	65F1A-6DC	410	1.50	1.35
24F1982	65F1A-12DC	1640	1.50	1.35
24F1983	65F1A-24DC	6560	1.50	1.35
24F1984	65FP1A-6DC	1640	1.60	1.44
24F1985	65FP1A-12DC	1640	1.60	1.44
24F1986	65FP1A-24DC	6560	1.60	1.44

SERIES 41 AC & DC — SPDT

Industrial relay with one-billion-operation mechanical life. Balanced design for coil overload capacity 4-5 times rated input, long contact life. Operates from on-off AC/DC signals. Adjustment S: 40 mw; ACS: .2 va; ACG: .4 va. ACG rated 5 amp, S, ACS: 2 amp. Temp.: —67 to +185°F. **41F, 41FZ:** unenclosed, screw mounting, solder terminals. 1 17/64x2 9/32x1 1/16". **41ROZ, 41RO:** aluminum dust cover, 8-pin. 1 21/64 x sq. 2 1/16". **41RO6:** plastic dust cover, 8-pin. 1 23/64 sq. x 2 1/64". **41JOZ:** hermetically sealed, 8-pin. 1⅜ sq. x ⅝". Ship. wt. Enclosed: 4 oz.; unenclosed 2½ oz.

AC TYPES

Stock No.	Mfr's Type & Coil Ohms	VDC/AC Ma	1-24	25-49	50-74	75-99	100-249
24F365	41FZ-10 ACG-BSL	6	3.90	3.71	3.51	3.12	2.73
24F369	41FZ-5000 ACG-BSL	115	4.10	3.90	3.69	3.28	2.87
24F364	41FZ-35 ACS-SIL	6	4.50	4.28	4.05	3.60	3.15
24F368	41FZ-10,000 ACS-SIL	115	5.00	4.75	4.50	4.00	3.50
24F2787	41JOZ-12,000 ACS-SIL	150	12.15	11.54	10.94	9.72	8.51
24F2788	41ROZ-5000 ACG-BSL	115	5.75	5.46	5.18	4.60	4.03
24F2789	41RZ-5000 ACG-BSL	115	5.75	5.46	5.18	4.60	4.03

DC TYPES

24F2790	41F-200 S-SIL	6	4.30	4.09	3.87	3.44	3.01
24F2791	41F-500 S-SIL	.	4.30	4.09	3.87	3.44	3.01
24F1714	41F-1000 S-SIL	12	4.30	4.09	3.87	3.44	3.01
24F2792	41F-5000 S-SIL	24	4.50	4.28	4.05	3.60	3.15
24F1747	41F-10,000 S-SIL	.	4.75	4.51	4.28	3.80	3.33
24F1716	41RO-1000 S-SIL	12	6.15	5.84	5.54	4.92	4.31
24F2793	41RO-5000 S-SIL	24	6.30	5.99	5.67	5.04	4.41
24F2794	41RO-10,000 S-SIL	.....	6.60	6.27	5.94	5.28	4.62
24F2795	41RO6-1000 S-SIL	12	6.15	5.84	5.54	4.92	4.31
24F2796	41RO6-2500 S-SIL	..	6.15	5.84	5.54	4.92	4.31
24F2797	41RO6-5000 S-SIL	24	6.30	5.99	5.67	5.04	4.41

SERIES 42 AC & DC — DPDT

100 mw for 1-billion-operation mechanical life. Adjustment S: 100 mw; G: 200 mw; ACS; .3 va; ACG: .5 va. Contact ratings: ACG, G: 5 amp ACS, S: 2 amp. Temp.: —67 to +185°F, plastic covers to 158°F. **42RO, 42ROZ:** Plastic dust cover with 8-pin. 1 23/64 sq. x 2 1/64". **42RO6Z:** Differ in wiring only. **42JOZ:** Hermetically sealed, 8-pin. 1⅝ sq. x 2⅝". Ship. wt. 5¼ oz.

AC TYPES

Stock No.	Mfr's Type & Coil Ohms	Nom. Volts	1-24	25-49	50-74	75-99	100-249
24F2798	42JOZ-4000 ACG-SIL	115	11.25	10.69	10.13	9.00	7.88
24F2799	42ROZ-8 ACG-SIL	6	6.55	6.22	5.90	5.24	4.59
24F2800	42ROZ-50 ACG-SIL	12	6.55	6.22	5.90	5.24	4.59
24F2801	42ROZ-200 ACG-SIL	24	6.55	6.22	5.90	5.24	4.59
24F2802	42ROZ-4000 ACG-SIL	115	6.55	6.22	5.90	5.24	4.59
24F2049	42RO6Z-4000 ACG-SIL	115	6.55	6.22	5.90	5.24	4.59
24F2803	42ROZ-7000 ACS-SIL	115	7.80	7.41	7.02	6.24	5.46

DC TYPES

24F2804	42RO-200 G-SIL	12	6.55	6.22	5.90	5.24	4.59
24F2805	42RO-500 G-SIL	.....	6.55	6.22	5.90	5.24	4.59
24F2806	42RO-1000 G-SIL	24	6.55	6.22	5.90	5.24	4.59
24F2807	42RO-2500 G-SIL	48	6.55	6.22	5.90	5.24	4.59
24F2808	42RO-5000 G-SIL	.	6.80	6.46	6.12	5.44	4.76
24F2809	42RO-10,000 G-SIL	.	7.00	6.65	6.30	5.60	4.90
24F2810	42RO-12,000 G-SIL	.	7.30	6.94	6.57	5.84	5.11
24F2041	42RO6-500 G-SIL	.	6.55	6.22	5.90	5.24	4.59
24F2010	42RO6-1000 G-SIL	24	6.55	6.22	5.90	5.24	4.59
24F2043	42RO6-2500 G-SIL	48	6.55	6.22	5.90	5.24	4.59
24F2011	42RO6-5000 G-SIL	.	6.80	6.46	6.12	5.44	4.76
24F2045	42RO6-10,000 G-SIL	.....	7.00	6.65	6.30	5.60	4.90
24F2811	42RO-150 S-SIL	6	7.20	6.84	6.48	5.76	5.04
24F2812	42RO-500 S-SIL	12	7.20	6.84	6.48	5.76	5.04
24F2813	42RO-1000 S-SIL	.	7.20	6.84	6.48	5.76	5.04
24F2814	42RO-2500 S-SIL	24	7.20	6.84	6.48	5.76	5.04
24F2815	42RO-5000 S-SIL	....	7.45	7.08	6.71	5.96	5.22
24F2817	42RO6-1000 S-SIL	...	7.20	6.84	6.48	5.76	5.04

SERIES 72 — SPDT

Latching, 2 position polar relay. For high-speed switching, telegraphy at 100 words/minute, pulse repetition. Contacts replaceable for extended life. Temp.: —85 to +185°F **72A0Z** plastic dust cover, 8-pin. 1 13/32 dia. x 2⅝". Ship. wt. 4 oz.

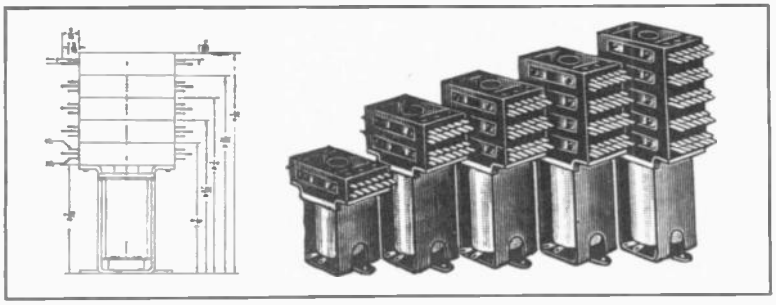
Stock No.	Mfr's Type & Coil Ohms	Ma DC	1-24	25-49	50-74	75-99	100-249
24F2818	72AOZ-160 TG-TCP	3.6	33.00	31.35	29.70	26.40	23.10
24F1752	72AOZ-160 TS-TCP	1.4	33.00	31.35	29.70	26.40	23.10
24F2819	72AOZ-4000 TS-TCP	.28	34.10	32.40	30.69	27.28	23.87

Stock No.	Description	Net Each
24F2820	AT36-1 Contact Repair Kit	3.50

ELECTRONIC CONTROLS INC.

T-BAR RELAYS

- Stock-up Contact Wafers Switch up to 60 Poles at Once
- Easily Mounted — With Only 2 Screws — In Any Orientation
- Easily Wired — Snap-on Crimp Terminals Fit into Block Connectors



SERIES 801 T-BAR RELAYS

Reliable, ultra-compact, solenoid actuated relays with a unique design employing stacked-up enclosed contact wafers for up to 60-pole switching. Ideal for aircraft, telemetry, communications, computers. Gold bonded silver contacts are rated to carry 500 watts resistive (5 amps), make or break 3 amps. Less than 30 milliseconds operate and release time. Min. life: 20 million mechanical operations. 1000 VAC dielectric strength, terminal-to-case; temperature range —55 to +85°C. Terminals will mate with T-Bar Connectors (below), which simply push onto contact wafers for quick, easy wiring, or solder connections may be made. Contact assemblies are in dust-tight plastic enclosures which measure 1 1/32" wide by 2 3/8" long; height is 1 3/32" per wafer.

T-BAR RELAY COIL CHARACTERISTICS

All characteristics are nominal and subject to normal manufacturing tolerances. All are for continuous duty. 115 VAC units have a full-wave bridge rectifier and use the same coils listed under 110 VDC. Operate at 80%, release at 20% of nominal voltage. Actuator assembly size: 1.375" mtg. centers x 2 1/32" high, except one-wafer relay use a shorter actuator (1 15/32" high).

Coil Voltage	12 POLES 1 WAFER RELAY Wt: 4.5 oz.			24 POLES 2 WAFER RELAYS Wt: 6.75 oz.			36 POLES 3 WAFER RELAYS Wt: 7.25 oz.			48 POLES 4 WAFER RELAYS Wt: 8.5 oz.			60 POLES 5 WAFER RELAYS Wt: 9 oz.		
	Ohms	Amps	Watts	Ohms	Amps	Watts	Ohms	Amps	Watts	Ohms	Amps	Watts	Ohms	Amps	Watts
6 VDC	11.9	0.504	3.01	11.09	0.541	3.24	7	0.857	5.06	5.5	1.09	6.54	5.5	1.09	6.54
12 VDC	49.1	0.244	2.96	45	0.267	3.19	28	0.429	5.16	22	.545	6.54	22	.545	6.54
24 VDC	193	0.124	2.98	174	0.138	3.32	111	0.216	5.15	94	.255	6.12	94	.255	6.12
28 VDC	258	0.109	3.03	227	0.123	3.44	150	0.187	5.23	120	.233	6.52	120	.233	6.52
48 VDC	778	0.062	2.98	674	0.071	3.41	438	0.110	5.26	350	.137	6.58	350	.137	6.58
110 VDC	3963	0.028	3.05	3450	0.032	3.54	2355	0.047	5.18	1930	.057	6.27	1930	.057	6.27
115 VAC	3963	0.024	2.80	3450	0.027	3.10	2355	0.041	4.72	1930	.049	5.62	1930	.049	6.62

T-BAR DC RELAYS

Stk. No.	Type 801-	Action	DC Coil Volt.	1-24	25-49	50-74	75-99
59F700	4C24	4PDT	24	8.58	8.14	7.73	7.35
59F701	8C24	8PDT	24	11.33	10.78	10.42	9.90
59F764	12A12	12PST	12	14.43	12.77	12.11	11.50
59F765	12A24	12PST	24	12.21	11.61	11.00	10.45
59F766	12A28	12PST	28	12.21	11.61	11.00	10.45
59F767	12A48	12PST	48	14.43	12.77	12.11	11.50
59F768	12A110	12PST	110	12.21	11.61	11.00	10.45
59F702	12C12	12PDT	12	14.39	13.67	13.02	12.34
59F703	12C24	12PDT	24	13.09	12.43	11.83	11.22
59F750	12C28	12PDT	28	13.09	12.43	11.83	11.22
59F704	12C48	12PDT	48	14.39	13.67	13.02	12.34
59F705	12C110	12PDT	110	13.09	12.43	11.83	11.22
59F769	24A12	24PST	12	22.57	21.42	20.33	19.36
59F770	24A24	24PST	24	20.52	19.47	18.48	17.60
59F771	24A28	24PST	28	20.52	19.47	18.48	17.60
59F772	24A48	24PST	48	22.57	21.42	20.33	19.36
59F773	24A110	24PST	110	20.52	19.47	18.48	17.60
59F751	24C12	24PDT	12	25.89	24.62	23.42	22.26
59F712	24C24	24PDT	24	23.54	22.38	21.29	20.24
59F752	24C28	24PDT	28	23.54	22.38	21.29	20.24
59F713	24C48	24PDT	48	25.89	24.62	23.42	22.26
59F714	24C110	24PDT	110	23.54	22.38	21.29	20.24
59F774	36A12	36PST	12	29.95	28.44	27.05	25.65
59F775	36A24	36PST	24	27.23	25.85	24.59	23.32
59F776	36A28	36PST	28	27.23	25.85	24.59	23.32
59F777	36A48	36PST	48	29.95	28.44	27.05	25.65
59F778	36A110	36PST	110	27.23	25.85	24.59	23.32
59F753	36C12	36PDT	12	34.89	33.15	31.46	29.88
59F721	36C24	36PDT	24	31.72	30.14	28.60	27.17
59F754	36C28	36PDT	28	31.27	30.14	28.60	27.17
59F722	36C48	36PDT	48	34.89	33.15	31.46	29.88
59F723	36C110	36PDT	110	31.72	30.14	28.60	27.17
59F779	48A12	48PST	12	37.33	35.46	33.69	32.01
59F780	48A24	48PST	24	33.94	32.24	30.63	29.10
59F781	48A28	48PST	28	33.94	32.24	30.63	29.10
59F782	48A48	48PST	48	37.33	35.46	33.69	32.01
59F783	48A110	48PST	110	33.94	32.24	30.63	29.10
59F775	48C12	48PDT	12	48.39	45.97	43.68	41.48
59F756	48C24	48PDT	24	43.99	41.79	39.71	37.71
59F757	48C28	48PDT	28	43.99	41.79	39.71	37.71
59F758	48C48	48PDT	48	48.39	45.97	43.68	41.48
59F759	48C110	48PDT	110	43.99	41.79	39.71	37.71
59F784	60A12	60PST	12	52.10	49.49	47.01	44.66
95F785	60A24	60PST	24	47.36	44.99	42.74	40.60
59F786	60A28	60PST	28	47.36	44.99	42.74	40.60
59F787	60A48	60PST	48	52.10	49.49	47.01	44.66
59F788	60A110	60PST	110	47.36	44.99	42.74	40.60

T-BAR 115 VAC RELAYS

Stk. No.	Type 801-	Action	1-24	25-49	50-74	75-99
59F789	4C115	4PDT	13.53	12.84	12.19	11.60
59F790	8C115	8PDT	16.28	15.48	14.88	14.15
59F791	12A115	12PST(NO)	17.16	16.31	15.46	14.70
59F792	12C115	12PDT	18.04	17.13	16.29	15.47
59F793	24A115	24PST(NO)	25.47	24.37	22.94	21.85
59F794	24C115	24PDT	28.49	27.08	25.75	24.49
59F795	36A115	36PST(NO)	32.18	30.55	29.05	27.57
59F796	36C115	36PDT	36.67	34.84	33.06	31.42
59F797	48A115	48PST(NO)	38.89	37.19	35.58	34.05
59F798	48C115	48PDT	48.94	46.74	44.66	42.66
59F799	60A115	60PST(NO)	52.31	49.94	47.69	45.55

CONNECTOR, TOOLS

88601

8601-51

8601-61

8601-71

Model 88601. T-Bar Connector. For connecting wires to T-Bar switches or terminals. Nylon terminal block pushes onto wafer terminals. Snap-in terminals for wire. Wires are first crimped to snap-in terminal using the crimping tool below. Accommodates #20, 22 or 24 stranded wire with max. insulation diameter of .074". Can be used with all T-Bar Relays (above) and Switches (see index).
59F741 1-23 Each 1.25
24-499 **(Free connector tong with each pkg. of 24) Ea.** 1.15

Model 8601-51. Crimping Tool. For use with the connectors above. Crimps wire and insulation to snap-in terminals.
59F742. NET 35.00

Model 8601-61. Extraction Tool. Removes snap-in contact from crimped wire.
59F743. NET 7.50

Model 8601-71. Connector Tong. For pushing on or withdrawing terminals from T-Bar connectors.
59F739. NET. 1.00

ALCO

ISOLATION RELAYS

Millions of applications because of compact size. Typical uses are in automatic apparatus demanding isolated control circuits. Relay combines isolated step down transformer & sensitive low volt. relay in a single laminated core construction. Operates from 95-125 VAC.

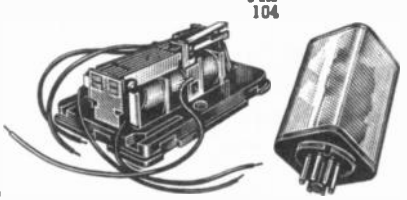
61F968. Model FRP-101. SPST — Basic. **NET.** **3.85**

61F969. Model FRP-102. SPDT — Basic. **NET.** **4.45**

Model FRP-104. A standard octal base plug feature is added to the basic isolation relay for the industrial user. The relay is protected by a plastic dust cover. SPDT @ 5 amps. Same specs as above.

61F970. NET. **5.45**

FRP 104



JAMES ELECTRONICS

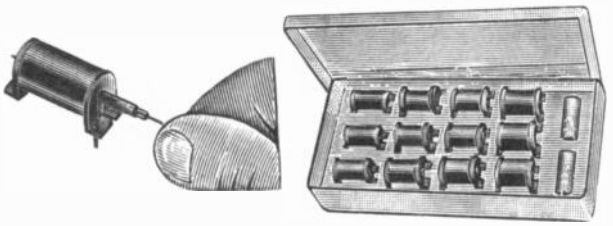
A New Design and Production Concept for Applying Dry Reed Capsule Switching

● *NEW* **REED-COIL**

Better performance, simplicity of circuitry, and cost savings now possible. REED-COIL and capsule design is readily adaptable to volume production techniques. Control relays can be assembled with the desired combination of switching and installed in the most efficient manner. Features: Full range of operating volts with simplicity of control; Flexibility of reed mounting, termination, and combinations; Models for 1-4 reeds for combination logic systems; Space saving dry miniature reeds; Ease of replacement; Positive cost savings over pre-assembled relays & logic boards.

REED-COIL DESIGN KIT

Model C-7800. Combination of 12 coil assemblies (one each of those listed) plus 50 each of numbers 7822, 7823, 7824 terminal pins and reed retainers, listed below.
63F129. NET **14.95**



TEST KIT

6 VOLT

Stk. No.	Type	Description	1-24	25-49	50-99	100-up
63F130	7801	Single Reed	1.35	1.22	1.01	.89
63F131	7802	Double Reed	1.42	1.28	1.07	.95
63F132	7803	Triple Reed	1.42	1.28	1.07	.95
63F133	7804	Quad. Reed	1.42	1.28	1.07	.95

12 VOLT

Stk. No.	Type	Description	1-24	25-49	50-99	100-up
63F134	7805	Single Reed	1.70	1.53	1.27	1.13
63F135	7806	Double Reed	1.80	1.62	1.35	1.20
63F136	7807	Triple Reed	1.80	1.62	1.35	1.20
63F137	7808	Quad. Reed	1.80	1.62	1.35	1.20

24 VOLT

Stk. No.	Type	Description	1-24	25-49	50-99	100-up
63F138	7809	Single Reed	2.01	1.81	1.51	1.34
63F139	7810	Double Reed	2.07	1.86	1.55	1.38
63F140	7811	Triple Reed	2.07	1.86	1.55	1.38
63F141	7812	Quad. Reed	2.07	1.86	1.55	1.38

ACCESSORIES

63F142. TYPE 7822. Term pin for PC board. Pkg. of 100 ..... **.50**

63F143. TYPE 7823. Terminal with lead. Pkg. of 100..... **.50**

63F144. TYPE 7824. Nylon reed retainers. (5 Strips of 24) ..... **.50**

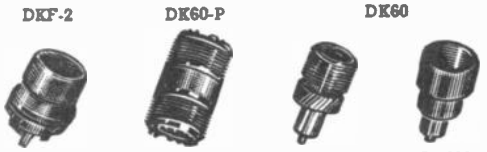
DOW KEY

COAXIAL RELAYS

SPDT R.F. switch with DPDT auxiliary contacts and special "isolated connector" in de-energize position. Low VSWR: less than 1.5:1 from 0-500 mc. Long life expectancy greater than 1,000,000 operations. Power rating: 1 kilowatt through straight connectors: to 10 watts through "isolated connector." Maximum operating temperature: 100°C. Pure silver contacts with UHF connectors. Size: 3¾" x 2¾" x 1⅛". Shpg. wt., 1 lb.

Stk. No.	Type	Coil Voltage	1-4	5-9	10-24	25-up
24F2000	DK60-G2C	6 VDC	20.80	17.15	15.60	14.05
24F2001	DK60-G2C	6 VAC	21.80	18.00	16.35	14.70
24F2002	DK60-G2C	12 VDC	20.80	17.15	15.60	14.05
24F2003	DK60-G2C	115 VAC	21.80	18.00	16.35	14.70

DKF-2 DK60-P DK60



DK201 DK202 DK210 DK211

UHF CONNECTORS

A complete line of connector styles suitable for every UHF application. Panel-mounting connectors require a ⅝" hole, no screws necessary. Connectors are made of precision machined brass which is then silver-plated. They lock firmly and provide a tight, firm connection. Females designed for low-loss operation with moisture and humidity-proof construction. Approximate shipping weight for each connector, 1 oz.

Stk. No.	Type	Description	1-4	5-9	10-24	25-49	50-99	100-up
24F959	DKF-2	Double Male	.92	.76	.69	.62	.54	.46
24F999	DK60-P	Panel Mount Female	.84	.69	.63	.57	.50	.42
24F1700	DK201	Panel Mount Male	1.30	1.07	.97	.87	.78	.65
24F1701	DK202	Double Female	1.00	.82	.75	.65	.60	.50
24F1702	DK210	Female-Male Phono	1.50	1.24	1.12	1.01	.90	.75
24F1703	DK211	Male-Male Phono	1.60	1.32	1.20	1.08	.96	.80

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Whether ordering in quantity for production or in small lots for specialized use, make Newark your headquarters for every electronic component. — Get the exact part you need from an inventory of over 70,000 units! Top Quality, Lowest Prices, Fastest Service.

Time Delay and Mercury Plunger Relays

AGASTAT PNEUMATIC TIME DELAY RELAYS

Fig. A

Fig. C

Fig. B

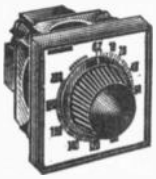


Fig. E

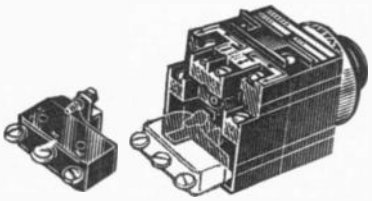


Fig. D

Type 2412, 2452. Time delay on pull-in. Timing cycle begins when coil is energized. Coil kept energized throughout time setting preceding DPDT contacts transfer from de-energized to energized position. Coil de-energized: contacts retransfer immediately (25 m-sec). Coil de-energized during timing cycle, contacts remain de-energized & timing mech, resets to start position for full time cycle on next energization of coil.

Moodel 2422. Time delay on drop-out. Coil energized: DPDT contacts transfer & stay in transfer position. De-energization coil: Time delay begins. Timing cycle: contacts stay energized. End time delay setting: contacts transfer back to de-energized position. Coil re-energized during timing cycle; contacts energized produce full time delay upon next de-energization if coil remains de-energized through time setting.

Type 2422, 2462. Double head unit provides independent delay of contact transfer on both energized & de-energized cycles of coil, 6⅝"x3⅜"x3⅛". Shpg. wt. 2½ lbs. **Auxiliary Switch Kits:** Type "T" SPDT contacts rated 10A/120V, 60 cy. attached to Model 2412 or 2422. 2412 units: "T" switch provides 2-step timing. Switch transfers time delay up to 30 sec. Type "L" switch gives immediate transfer of contacts both on energization and de-energization cy. of coil. *Needle valve.

Stk. No.	Model	Fig.	Time Delay Range	Volts AC	NET
57F1550	2412AB	A	0.2 to 5 sec.	120	38.00
57F1551	2412AD	A	2.5 to 50 sec.	120	38.00
57F1552	2412AH	A	1 to 30 min.	120	46.00
57F1567	2412AN*	.....	0.2 to 180 sec.	120	34.00
57F1553	2412BB	A	0.2 to 5 sec.	240	38.00
57F1554	2412BD	A	2.5 to 50 sec.	240	38.00
57F1555	2412BH	A	1 to 30 min.	240	46.00
57F1556	2422AB	A	0.2 to 5 sec.	120	38.00
57F1557	2422AD	A	2 to 50 sec.	120	38.00
57F1558	2422AH	A	1 to 30 min.	120	46.00
57F1568	2422AN*	.....	0.2 to 180 sec.	120	34.00
57F1559	2422BB	A	0.2 to 5 sec.	240	38.00
57F1560	2422BD	A	2.5 to 50 sec.	240	38.00
57F1561	2422BH	A	1 to 30 min.	240	46.00
57F1562	2432ADD	B	2.5 to 50 sec.	120	74.00
57F1563	2432AHH	B	1 to 30 min.	120	82.00
57F1569	2452AB	E	.2 to 5 sec.	120	45.00
57F1570	2452AD	E	2.5 to 50 sec.	120	45.00
57F1571	2452AH	E	1 to 30 min.	120	53.00
57F1572	2462BB	E	.2 to 5 sec.	240	45.00
57F1573	2462BD	E	2.5 to 50 sec.	240	45.00
57F1574	2462BH	E	1 to 30 min.	240	53.00
57F1564	T	D	Aux. switch kit (see text) 30 sec.		8.00
57F1565	L	D	Aux. switch kit (see text) 30 sec.		7.00
57F1566	GZ	C	Relay enclosure w/bottom knockouts		6.50
57F1575	2462AB	E	.2 to 5 sec.	120	45.00
57F1576	2462AD	E	2.5 to 50 sec.	120	45.00
57F1577	2462AH	E	1 to 30 min.	120	53.00
57F1578	2462BB	E	.2 to 5 sec.	240	45.00
57F1579	2463BD	E	2.5 to 50 sec.	240	45.00
57F1580	2462BH	E	1 to 30 min.	240	53.00

EBERT MERCURY PLUNGER RELAYS

A-111

A-11, B-11, H-11

A-1, A-2, B-1, H-1

S&T

EM-1, HD-1

MR-14, EM-4, HD-4

"100" Relay

Sturdy construction and compact part design combined with simple, silent, service-free mercury to mercury action make these relays ideal for most power control applications. All terminals are up front and easily accessible. All relays listed below are for 115 volts 50/60 Hz AC. Contacts rated to 550 Volts AC.

EPOXY ENCASED METAL TUBE TYPES

Epoxy encased metal tube withstands physical shock.

MINIATURE SERIES A 25 AMPS (115VAC)

Stk. No.	Type	Description	Size	1-9	10-99
59F1600	A-1	Single pole NO	4¼x3x2¼"	13.80	12.50
59F1601	A-2	Single pole NC	4¼x3x2¼"	15.80	14.50
59F1602	A-11	2-pole both NO	4¼x4¼x2½"	24.65	22.20
59F1603	A-111	3-pole ALL NO	4¼x4¼x2½"	35.85	32.30

STANDARD SERIES B 50 AMPS (115VAC)

59F1604	B-1	Single pole NO	4¾x3x2¼"	17.50	15.95
59F1605	B-11	2-pole both NO	4¾x4¼x2½"	29.75	26.90

HEAVY DUTY SERIES H 100 AMPS (115VAC)

59F1606	H-1	Single pole NO	7½x4x3½"	47.70	42.95
59F1607	H-11	2-pole both NO	7½x6½x4"	78.90	71.00

COMPLETELY ENCAPSULATED RELAYS

Use for extreme environmental conditions. Molded-in terminal connectors eliminates need for enclosures.

MINIATURE SERIES S 25 AMPS (115VAC)

59F1608	S-1	Single pole NO	3½x1¾x1⅝"	16.30	14.70
59F1609	S-2	Single pole NC	3½x1¾x1⅝"	18.30	16.70

STANDARD SERIES T 50 AMPS

59F1610	T-1	Single pole NO	3⅞x2x1⅞"	19.90	17.95
59F1611	T-2	Single pole NC	3⅞x2x1⅞"	21.90	19.95

OPEN CONSTRUCTION TYPES

MINIRELAY 20 AMPS (115VAC) CSA LISTED

Stk. No.	Type	Description	Size	Each	2-up
59F1612	MR-10	Single pole NO	3x1⅞x1½"	10.89	8.36
59F1613	MR-12	Single pole NC	4x1⅞x1½"	11.99	9.19
59F1614	MR-14	2 pole both NO	4½x3x1⅞"	20.63	16.34

STANDARD DUTY 35 AMPS (115VAC) UL&CSA LISTED

59F1615	EM-1	Single pole NO	4¾x2⅝x2½"	15.35	11.28
59F1616	EM-4	2pole both NO	5⅜x3⅜x2½"	25.30	19.80

HEAVY DUTY 60 AMPS (115VAC) UL&CSA LISTED

59F1617	HD-1	Single pole NO	5¼x3¾x2⅜"	17.32	13.64
59F1618	HD-4	2 pole both NO	5¼x3¾x2⅜"	31.95	24.31

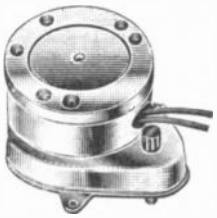
"100" RELAY—100 AMPS (115VAC) CSA LISTED

Encapsulated relay tube to withstand physical shock and rough handling.

59F1619	100	Single pole NO	7x3½x3⅜"	35.75	27.22
59F1620	100	Single pole NC	7x3½x3⅜"	37.95	29.42

ALL TYPES LISTED OPERATE FROM 115 VAC. OTHER AC AND DC VOLTAGES AVAILABLE FROM NEWARK ON SPECIAL ORDER

CRAMER MOTORS



Type 117P. Permanent magnet type synchronous motors suited for use both in the lab and industry where precise timing functions are a prerequisite. Instant start and stop . . . No Coast! Rotation is clockwise facing shaft. Shaft is .125" dia., .375" long with flat. For 115 volt, 60 hz operation. 117 P series 30 in. oz. @ 1RPM. 117 H series 60 in. oz. @ 1 RPM.

Stock No.	Type	Speed	1-4	5-9	10-24	25-49	50-99
55F390	117P	1 rev./day	9.00	8.50	8.00	7.00	5.65
55F391	117P	1 rev /12 hrs	9.00	8.50	8.00	7.00	5.65
55F392	117P	1 rev./hour	8.50	8.25	7.75	6.75	5.40
55F393	117P	1 rev./30 min	8.50	8.25	7.75	6.75	5.40
55F394	117P	1 rev /5 min	8.50	8.00	7.50	6.50	5.10
55F395	117P	1 rev./min					
55F4400	117P	2 rev /min					
55F4401	117P	4 rev./min	8.00	7.50	7.00	6.00	4.85
55F397	117P	10 rev /min					
55F398	117P	30 rev /min					
55F399	117P	60 rev./min					
55F4402	117H	2 rev./min					
55F4403	117H	4 rev./min					
55F4404	117H	10 rev./min	10.00	9.00	8.50	7.50	6.50
55F4405	117H	30 rev./min					
55F4406	117H	60 rev./min					

REVERSIBLE SYNCHRONOUS MOTORS

Type 0410. Provides equivalent of 35 in. oz. at 1 RPM and electrically reversible. Direction of the rotation can be controlled by an SPDT switch. Operates on 2 phase or single phase. Single phase operation is accomplished by a shift network which is furnished with motor. Shaft is .125 dia. x .375 long flatted. 115 volt 60 hz operation. Shpg. wt., 7 oz.

Stock No.	Speed	1-4	5-9	10-24	25-49	50-99
55F4407	1 rev./day	17.50	15.50	14.25	13.25	12.00
55F4408	1 rev /12 hr	17.50	15.50	14.25	13.25	12.00
55F4409	1 rev./hour					
55F4410	1 rev./30 min					
55F4411	1 rev./5 min					
55F4412	1 rev /min					
55F4413	2 rev./min	16.50	15.00	13.75	12.75	11.85
55F4414	4 rev./min					
55F4415	10 rev./min					
55F4416	30 rev./min					
55F4417	60 rev./min					

AMPHENOL MOTORS

4 POLE SYNCHRONOUS MOTORS

1005-4SY

1003-4SY

Synchronous permanent split capacitor type. No cut out switch is used. Can be reversed with a DPDT switch. Torque same in both directions. Starting torque min. of double the rated syn. torque with average of 3 to 4 times this fig. Rated 8.7 Watts on 110V. 50 or 60 hz, 110-220V. * is 11 watts. On 50 cycles the output speed will be 5/6 of the listed speed. Size: 1003—2⅞x2⅜", shaft dia., .25". 1005—2¼x2⅜", shaft dia., 1.876", mounting size for both 2.696". Geared motor can be mounted with shaft in 9, 12, 3, or 6 o'clock positions. Wt., 3 lbs. *Without gear train.

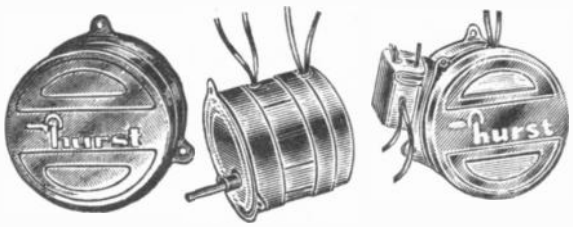
Stk. No.	Type	Output	Rated Sync. Torque-oz. in.	1-9	10-49	50-199
12F860	1003-4SY	300 RPM	1.3	31.96	28.78	26.95
12F861	1003-4SY	180 RPM	2.1	31.96	28.78	26.95
12F862	1003-4SY	120 RPM	3.2	33.26	29.94	28.04
12F863	1003-4SY	60 RPM	7.0	33.26	29.94	28.04
12F864	1003-4SY	30 RPM	14 0	33.26	29.94	28.04
12F865	1003-4SY	10 RPM	41.0	35.87	32.29	30.25
12F866	1003-4SY	3 RPM	138.0	37.11	33.41	31.29
12F867	1003-4SY	1 RPM	150.0	37.11	33.41	31.29
12F868	1005-4SY*	1800 RPM	.56	25.17	22.66	21.22

MOTOR CAPACITOR

A 0.8 mfd capacitor that is required for the above listed motors. Size: 3"x1" dia. Shipping wt., ½ lb.

12F869. 1-9 1.17 10-49 .99 50-199 .97

HURST MOTORS



SM-DA CA PC-DA

40 INCH-OUNCE SYNCHRONOUS MOTOR FOR HEAVY DUTY CONTINUOUS TIMING

This compact motor is engineered for tough jobs demanding accurate timing. It has excellent shock and vibration resistance and will start instantly at full torque (40 in. ounces @ 1 RPM). It will not overheat during continuous duty nor in a stall position. Dim. 2½"x1¾". Weight 12 oz. Shaft size: 3/16" dia flatted. Shaft length: 1". Mounting: 3 no. 6 holes spaced 120°. Power: 60 CPS. AC: 95/130V., 5 watts. Rotation: Clockwise facing shaft. Max. temp. rise 40°C above ambient. Shock resistance: 100g without motor damage. Shpg. wt., 1 lb.

Stock No.	Mfg. Type	RPM	1-9	10-24	25-49	50-99	100-249
24F1450	SM-1	1					
24F1451	SM-4	4					
24F1452	SM-6	6	12.28	11.05	10.50	9.98	9.48
24F1453	SM-10	10					
24F1454	SM-30	30					
24F1455	SM-60	60					

120 INCH-OUNCE REVERSIBLE SYNCHRONOUS MOTORS

Complete timing accuracy in both clockwise and counter-clockwise directions. SPDT switching. Dimensions: 2½" dia. Shaft size: 3/16" dia. Shaft length 1" standard flatted. Power: 60 hz. AC 95/130V., 5 watts. Other specifications same as above. Shpg. wt., 1 pound 4 ounces.

Stk. No.	Mfg. Type	RPM	1-9	10-24	25-49	50-99	100-249
24F1456	DA-1	1					
24F1580	DA-2	2					
24F1457	DA-4	4					
24F1458	DA-6	6	14.60	13.14	12.48	11.86	11.27
24F1459	DA-10	10					
24F1581	DA-12	12					
24F1460	DA-30	30					
24F1461	DA-60	60					

120 INCH-OUNCE REVERSIBLE SYNCHRONOUS MOTORS

Same as Series DA (above) but with clutch and brake. Shpg. wt., 1 lb. 8 oz.

Stk. No.	Mfg. Type	RPM	1-9	10-24	25-49	50-99	100-249
24F1471	PC-DA-1	1					
24F1582	PC-DA-2	2					
24F1472	PC-DA-4	4					
24F1473	PC-DA-6	6	20.18	18.16	17.25	16.39	15.75
24F1474	PC-DA-10	10					
24F1583	PC-DA-12	12					
24F1475	PC-DA-30	30					
24F1476	PC-DA-60	60					

100 INCH-OUNCE REVERSIBLE SYNCHRONOUS MOTORS

Instantly reversible (with SPDT switching). Completely accurate both clockwise and counter-clockwise. 1200 rpm rotor speed for quiet performance. Torque, 100 inch-ounce at 1 rpm. Case dimensions, 2½" dia. x 2⅛". Output shaft 3/16" dia. x 1" long flatted. Shpg. wt., 1 lb. 2 oz.

Stk. No.	Mfg. Type	RPM	1-9	10-24	25-49	50-99	100-249
24F1584	CA-½	½					
24F1494	CA-1	1					
24F1585	CA-2	2					
24F1495	CA-4	4					
24F1496	CA-6	6	12.51	11.26	10.70	10.17	9.67
24F1497	CA-10	10					
24F1586	CA-15	15					
24F1498	CA-30	30					
24F1499	CA-60	60					

Depend on NEWARK for the Latest Top-Quality Equipment. Complete On-the-Shelf Stocks — Lowest Prices — Fast Service.

Intermatic Timers

PORTABLE TIME-ALL

Type A911-6

Type A911-6 Deluxe. Time control switch for plant, office, store. Controls lights, appliances, P.A. systems, dehumidifiers, etc. Operation repeated every 24 hours. Plug equipment controlled into built-in AC outlet. Contacts handle 15 amp, 1875 watt load. 5 ft. line cord, plug included. 5x4x2½". Plastic case. U.L. listed. For 110-120 V. 60 Hz AC. 2 lbs. Formerly A211-6.

Stk. No.	Type	1-5	6-Up
24F979	A911-6	9.70	8.64

Type A921-6

Type A921-6. Standard. Similar to above, but handles 7 amps or 875 watts.
24F966. 1 to 5 ..... **8.95**
6 or more, each **7.97**

TIME MINDER

Type A301-4

Type A301-4. Plug it in and set for 1 to 60 minutes At end of interval, buzzer sounds. Desert sand case, 4¾x4½x2¼". 125v, 60 hz AC. 2 lbs.

Stk. No.	Type	1-5	6-Up
24F967	A301-4	7.47	6.64

CLOCK TIMER

Type A401-4

Type A401-4. Super deluxe timepiece that turns lights and appliances on for periods of 15 minutes to 5½ hours . . . then turns them off again automatically. Handles up to 1875 watts (15 amps). Desert sand case, 4¾x4½x2¼". Operates on 125v, 60 hz AC. Shipping wt. 2 lbs.

Stk. No.	Type	1-5	6-Up
24F968	A401-4	9.70	8.64

7-DAY OPERATION "SKIPPER" TIME SWITCH

Model T171, T173 & T175. The Intermatic Skipper provides a program of operations for most commercial or industrial needs. For use where it is desired to skip operations on weekends or other selected days. Has 24-hour time dial and 7-day skipper dial. Small skipping screws are merely inserted into the respective day-holes for skipping operation. Contacts are rated up to 40 amps. per pole. 3 skipping screws, one cutout, one off tripper. Power requirements: 125 volt AC 60 Hz. Drawn steel case, gray finished. 7¾"x5"x3". 3 lbs.

Model T173. DPST.
24F1890. EACH **13.62**

Model T175. SPDT.
24F1891. EACH **13.62**

Model T171. SPST.
24F1892. EACH **12.32**

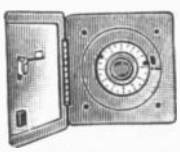
Set of extra trippers.
24F982. Each ..... **.26**

SUPERVISOR DELUXE

Ideal for control of background music, industrial process operations, heating systems. Periods of operation can be varied in multiples of 5 minutes. Repeats program every 24 hours and skips any days desired. Includes toggle switches for testing signal and cutting off automatic operations. Gray steel case 12⅛"x9⅛" x4⅝". 125 V, 60 Hz AC. Weight: 9½ lbs.

24F1893. Model V27171 One circuit **71.96**
24F1894. Model V27177 Two Circuit **95.96**

LAMP LYTER



Lamp Lyter is an automatic light switch that opens a new era of modern living. Combines a timer and manual switch in one compact unit. Turns lights on or off automatically—in any room, on the porch, in the yard, or in the garage at any pre-set time. Lamp Lyter can be used to control any appliance such as, lights, coffee maker, fans, radios, TV's, etc. Unit mounts flush into wall or instrument panel. Hinged door, painted desert sand 6½ x 6½" held shut by magnet. Manual slide switch on outside of door. Junction box 5x5x2 13/16" deep. Timing range: "on" time 30 minutes to 23 hours. 1650 watts, 15 amps, 125 volts, 60 hz AC. Shpg. Wt. 4 lbs.
24F975. Type T-1101. **NET** **14.27**

GENERAL PURPOSE TIMERS

Type T101. Rugged time switch for stores, offices, homes, and industry. Perfect for neon signs, air conditioners, fans, etc. Turns device on and off for any period over 1 hour . . . once every 24 hours. May be set up for more operations with additional trippers sets below. Can be manually operated without upsetting automatic sequence. SPST switch has new alloy-T contacts, U-beam blades, high-power switching mechanism, and tungsten rated at 40 amps. to carry incandescent lighting loads. 7¾x5x3". For 125 v. 60-hz AC. 3 lbs.
24F978. EACH **9.07**

Type T103. Same as above, but it has DPST contacts.
24F977. EACH **10.37**

24F982. Set of extra trippers each ..... **.26**

PROGRAM TIME SWITCH

Type T1905. Provides up to 96 on and off operations in 15-minute steps every 24 hours! Ideal for music systems, chicken feeders, fans, and other devices requiring frequent control. Permanently attached trippers are spotted every 15 minutes around the dial . . . slide easily, and can't get lost. Timer is driven by slow-speed industrial-type motor coupled to dial through only four gears. 20-amp. contacts can be set up for: SPST normally open or closed, or SPDT. Knockout box, 7¾x5x3". For 125v, 60 hz AC. Shpg. wt., 4 lbs.
24F973. EACH **20.12**

SUPERVISOR PROGRAM TIMER

Type T1975. Has 96 trippers for 48 "on" and 48 "off" operations every 24 hours. Minimum interval is 15 minutes. Controls heating, air conditioning, music systems, etc. "Skipper" dial omits operation on selected days. Synchronous, slow-speed, heavy duty industrial type, self-starting motor. Snap-out mechanism. SPDT switch, rated 20 amps at 125 volts, 60 hz AC. Gray steel case, 7¾" x 5" x 3". 3¾ lbs.
24F980. NET **23.37**

SEVEN DAY PROGRAMMER

Type V26001. Provides different program for every day of week. Up to 4 operations per day with minimum of 3 hours between operations. For heating, lights, motors, and other loads which require daily scheduling. 40 Amp tungsten rated contacts. 120 VAC 60 hz. Gray steel case, 10⅞" x 7⅜" x 3⅝". Shpg. wt.: 6¼ lbs.
24F1897. 4 PST switch **21.09**
24F1898. Type V26003 Same as above except 4P: 2 NO-2 NC switch **21.09**

SCHEDULER

Provides 1 to 288 short interval operations per day. For bells, buzzers. Operates for periods of from 2-30 sec.—intervals of 2½ min. on 12 hour models. 2-60 at 5 min. intervals on 24 hours models. 125 V, 60 hz AC. 12⅛x 9x4⅝". 9½ lbs.

24F970. Model V28177 (with advance warning signal before maj. sig.) 2 cir., 24 hr. **63.96**
24F971. Model V29171 1 cir., 24 hr **59.96**
24F972. Model V29177 2 cir., 24 hr. **79.96**

PORTABLE TIME SWITCH

Type P101. Will handle any appliance that plugs into regular outlets. Has many uses in the shop, store, or factory. Controls lamps, signs, radios, TV sets, etc. Easily set for as many as 12 "on-off" operations per day with extra trippers. Minimum "on" or "off" time, 1 hour; maximum, 23 hours. May also be manually operated, 10 amps at 125 volts. Tungsten rated contacts. Gray steel case, 7¾"H x 5"W x 3"D. 125 V. 60 hz AC. 3 lbs.
24F1899. NET **10.37**

RANGER TIME SWITCH

Type T185. Up to 12 "on-off" cycles of from 5-60 minutes. Minimum interval between cycles, 2 hours. Used as SPST, N.O.; SPST, N.C.; or SPDT, alternate open & closed 40 Amps (1 combination tripper for each "on-off" cycle). Gray steel case. 7¾" x 5" x 3". 60 hz AC. Shpg. wt.: 3 lbs.
24F1895. NET **12.97**

Extra Set of Trippers. Adjustable cam type tripper can be set for duration of "on" period. 4 oz.
24F1896. EACH **1.27**

Timers, Time Switches, Alarm & Lamp Dimmers

INTERMATIC

● NEW SERIES PT-301 INTERVAL TIMER

Operates appliances with automatic shut-off at end of desired time period. Practical for the control of sun lamps, sterilizers, televisions, and electrical cooking appliances. Interval: 0 to 60 minutes. 15 amps—1875 watts. 125 volts, 60 hz. Shipping wt.: 2 lbs.

Stk. No.	Type	1-5	6-Up
24F951	PT-301	8.21	7.29

● NEW SERIES PT-304 INTERVAL TIMER

Similar to above except 0-24 hrs. Controls battery chargers. hair dryers, air conditioners, and all other electrical appliances. 15 amps—1875 watts. 125 volts, 60 hz. Shpg. wt.: 2 lbs.

Stk. No.	Type	1-5	6-Up
24F952	PT-304	8.21	7.29

● NEW SERIES AB-1000 BURGLAR ALARM

Use for windows, patios, drawers, doors, storage areas, fire exits, camp sites. Special sensitizor triggers horn, emitting a loud, continuous sound, 5" high, 2½" dia. Dawn white and charcoal brown. Uses one standard "D" cell (not included). Shpg. wt.; 2 lbs.

Stk. No.	Type	1-5	6-Up
24F953	AB-1000	9.71	8.64

● NEW SERIES PD-140 PORTABLE LAMP DIMMER

Controls light volume from dim to full bright. No special installation required. Lamp plugs into dimmer—dimmer plugs into wall outlet. Not for use on motors or fluorescent lights. 400 watts. 125V, 60 hz. Shpg. wt.: 2 lbs.

Stk. No.	Type	1-5	6-Up
24F954	PD-140	11.21	9.97

MARK TIME BELL TIMERS & TIME SWITCHES

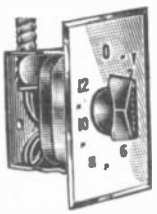
WALL BOX TIME SWITCH

Type 29001

Automatically turns "off" appliances, fans, heaters, lights. Perfect for home use or industrial application. Simple installation . . . easy as a toggle switch in a standard gem box. Rated 20 amps. ⅓ H.P. 125 VAC. UL and CSA listed. Shpg. wt. 9 oz.

Stk. No.	Type	Time Interval	1-11	12-Up
60F3356	90004	5 minutes	5.63	5.00
60F3357	90005	15 minutes		
60F3358	90006	30 minutes		

WALL BOX TIME SWITCH WITH "HOLD" FEATURE



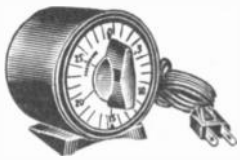
Same as above, but has "hold" feature and used as toggle switch. When knob is turned to "hold", current is held on and timing mechanism remains inoperative until knob is turned manually to a time position.

Stk. No.	Type	Time Interval	1-11	12-Up
60F3359	90021	3 minutes	5.63	5.00
60F3360	90024	60 minutes		
60F3361	90015	12 hours		

HANDY ALL-IN-ONE TIMED EXTENSION CORD

Type TEC-4. Time switch, extension cord, 3-way outlet! Automatically turns appliances, hi-fi, recorder "off" after a pre-set time up to 4 hours. 10 amps., 125 VAC. Cream base, brass finished dial.

Stk. No.	Type	1-11	12-Up
60F3362	TEC-4	5.21	4.63



Type 78174

Type 74703

PROFESSIONAL TIME SWITCHES

Portable units with AC receptacle. Turns off equipment automatically after a pre-set time period. 10 amps—125VAC. Black heavy duty case. UL and CSA listed. For 110-120V 60 hz. Shipping weight: 1 lb.

Stock No.	Type	Time Interval	1-11	12-Up
60F3353	78104	30 min.	6.71	5.97
60F3354	78105	60 min.	6.71	5.97
60F3355	78126	12 hours	6.71	5.97

PHOTOGRAPHIC TIME SWITCH

Type 78174. Dark room time switch with push button lock and release, adj. stop for repeat settings; has "hold" feature. Black case. 10 amps—125 VAC. Shpg. wt. 1 lb. UL and CSA listed.

60F3352	78174	60 sec.	7.13	6.33

INDUSTRIAL TIME SWITCH—SPDT

For panel mount or 4" octagon switch box. 20 amps—120/240V AC. U.L. and CSA Listed. Brush-Chrome dial, bakelite housing. "ON" or "OFF" type application. Shpg. wt. 1 lb.

Stk. No.	Type	Time Interval	1-11	12-Up
60F3363	74701	15 min.	6.38	5.67
60F3364	74702	30 min.	6.38	5.67
60F3365	74703	60 min.	6.38	5.67

CLOCK WATCHER

Spring driven timers accurately time intervals up to one hour. Excellent for outdoor use or where power is not readily available. Housed in attractive white plastic case with clear, easy to read dial. Shipping weight 1 lb.

Stock No.	Type	Description	1-11	12-Up
60F3351	29001	Bell Tone	2.96	2.63
60F3350	22501	Long Ring	4.45	3.95

GENERAL ELECTRIC

THUMBWHEEL SWITCHES

CR103 Type F Thumbwheel Switch. Save panel space by replacing old "wafer type" switches. It can be used wherever data are manually inserted into a machine or process, such as welding control, computer systems, and numerical control. Purchase modules as individual units to be mounted and replaced separately. Make up your own standard duty switches by ordering blocks spacers, shafts and witch modules. Rated 3 amperes carry, 150V ac-dc and is available standard duty form. Black body, white wheel, and black numerals. Size: ½" x 1¾" x 2".

Stk. No.	CR103	Description	1-9	10-49	50-149	150-up
39F2000	FX10AC	Module	3.94	3.74	3.54	3.35
39F2001	FX110	Ends (2)	1.13	1.07	1.01	.96

CR103 SHAFT ASSEMBLY

Stk. No.	SR103	Description	NET EACH
39F2002	FX302	For 2 Modules	.38
39F2003	FX303	For 3 Modules	
39F2004	FX304	For 4 Modules	
39F2005	FX305	For 5 Modules	
39F2006	FX306	For 6 Modules	

Industrial Timer Controls

Series TDAB

Series TDAF

AUTOMATIC RESET TIME DELAY SERIES TDAB & TDAF

Both have SPST switches rated 10 amps, 115 V, 60 cycle. TDAF designed for panel mount; TDAB designed for behind panel mount. Shpg. wt. 4 lbs. TDAB is U.L. approved.

Back Mount		Panel Mount		Time	Calibration	NET EACH					
Stk. No.	TDAB	Stk. No.	TDAF	Cy.		1-3	4-5	6-11	12-24	25-49	50-99
24F1848	-3S	24F1850	-3S	3 sec	1/20 sec						
24F1810	-6S	24F305	-6S	6 sec	1/10 sec						
24F302	-15S	24F1806	-15S	15 sec	¼ sec						
24F1849	-30S	24F1807	-30S	30 sec	½ sec	43.00	40.85	38.70	36.55	34.40	32.25
24F1811	-60S	24F1838	-60S	60 sec	1 sec						
24F1812	-15M	24F1808	-15M	15 min	15 sec						
24F303	-30M	24F1809	-30M	30 min	30 sec						
24F304	-60M	24F1839	-60M	60 min	60 sec						
24F1871	Type K Steel Housing Encl. for TDAB					6.50	6.18	5.85	5.53	5.20	4.88

Series SF

Series TD

AUTOMATIC RESET SERIES TD AND CTD

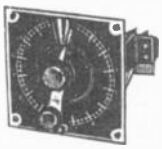
Expertly designed for "through the panel" mounting. 3" diameter extra strong bakelite case with terminals at rear. 115V. 60 cy. Weight, 1½ lbs. *2 23/32 dep., †4 5/32 depth. U.L. and C.S.A. approved.

Stock No	Type No.	Time Cycle	Calibration	NET EACH					
				1-3	1-5	6-11	12-24	25-49	50-99
24F1851	TD-6S	6 seconds	1/10 seconds						
24F275	TD15S*	15 seconds	¼ second						
24F1852	TD-30S	30 seconds	½ second	30.50	28.98	27.45	25.93	24.40	22.88
24F276	CTD1M†	60 seconds	1 seconds						
24F277	CTD3M†	3 minutes	3 seconds						
24F278	CTD5M†	5 minutes	5 seconds						

AUTOMATIC RESET SERIES SF AND CSF

For back of panel or chassis installation. 115v 60-cycle. 2¾x3 1/16x7 5/8". Shpg. wt., 1½ lbs. U.L. and C.S.A. approved.

24F1853	SF-6S	6 seconds	1/10 second						
24F279	SF15S	15 seconds	¼ second						
24F1854	SF-30S	30 seconds	½ second	23.00	21.85	20.70	19.55	18.40	17.25
24F280	CSF1M	60 seconds	2 seconds						
24F281	CSF3M	3 minutes	6 seconds						
24F282	CSF5M	5 minutes	10 seconds						



Series H

AUTOMATIC RESET SERIES H AND CH

For panel mounting. Four screws hold timer in place. Terminals at rear. 115 volt, 60 cycle operation. 3 9/16x3 7/16x3½". Shipping weight 1½ lbs. U.L. and C.S.A. approved.

24F1855	H-6S	6 seconds	1/10 second						
24F296	H-15S	15 seconds	¼ second						
24F1856	H-30S	30 seconds	½ second	26.50	25.18	23.85	22.53	21.20	19.88
24F297	CH1M	60 seconds	1 second						
24F298	CH3M	3 minutes	3 seconds						
24F299	CH5M	5 minutes	5 seconds						

Series MTD

AUTOMATIC RESET TIME DELAY RELAY

Series MTD. Timing cycle begins when power is applied to timer, motor; contacts transfer when progress indicator reaches zero point on timer dial Units operate from 115 VAC, 60 cycles; SPDT contacts are rated 10A/115 VAC. Rugged plastic matches modern panels.

Stock No.	Model No.	Max. Setting	Min. Setting	1-3	4-5	6-11	12-24	25-49	50-99
62F2036	MTD-15S	15 sec.	¼ sec.						
62F2037	MTD-60S	60 sec.	1 sec.	30.50	28.98	27.45	25.93	24.40	22.88
62F2038	MTD-5M	5 min.	5 sec.						
62F2039	MTD-60M	60 min.	1 min.						

Series 90

SERIES 90 DELAY TIMERS

The Series 90 is designed for applications requiring little or no field adjustments. No calibrated dial is supplied with the Series 90. Changes in time cycle are made by loosening the time set cam screwandoffsetting one cam arm. Load contacts are SPDT, 10 amps. rated at 115/60. Dimensions are 2 5/8x2 1/4x2 1/4. Shipping weight is 1 lb. U.L. and C.S.A. approved.

24F1843	90-6S	6 sec.	½ sec.						
24F1844	90-15S	15 sec.	1½ sec.						
24F1845	90-30S	30 sec.	3 sec.	17.00	16.15	15.30	14.45	13.60	12.75
24F1846	90-60S	60 sec.	6 sec.						
24F1847	90-90S	90 sec.	9 sec.						

RB

RB AUTOMATIC RESET DELAY TIMER

Provides an adjustable delay between the closing of one circuit and the subsequent operation of the timer load switch. The timer delay is initiated with a sustained switch closure to the synchronous motor of the timer. Series RB auomatically resets to the start setting when the sustained start circuit is opened, and the timer is then ready to perform another timing function. Versatile back panel or front mounting. Directly interchange physically and electrically with Haydon type DA. Timing cycles ranging from 5.6 sec. to 4 min. and 40 sec. Contact rating: 15 amps non-inductive @ 115/60. 115/60V AC oper. Shpg. wt., 1 lb. RB is U.L. approved.

24F331	RB-5.6S	5.6 sec.	.2 sec.						
24F332	RB-14S	14 sec	½ sec.						
24F333	RB-28S	28 sec.	1 sec.						
24F334	RB-56S	56 sec.	2 sec.	14.50	13.77	13.05	12.33	11.60	10.88
24F335	RB-84S	1 min. 24 sec.	3 sec.						
24F336	RB-168S	2 min. 48 sec.	6 sec.						
24F337	RB-4.5M	4 min. 40 sec.	10 sec.						

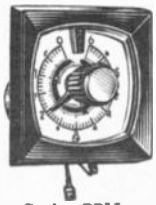
TRP

TRP LOW COST ELECTRONIC TIME DELAY

Employs electronic delay circuit. Provides a preset delay between the closing of circuit and operation of built-in SPDT contacts. Open start circuit: unit resets. Adjust with screw secured with a lock nut. Timing cycles — from 1/10 sec. to 60 sec. Load contacts isolated from timing circuit. Contact rating: 5 amps, rated at 115/60 non inductive. Start circuit or 115/60 only. 12 oz.

Stock No.	Type	Time Delay		1-3	4-5	6-11	12-24	25-49	50-99
		Min.	Max.						
24F338	TRP-5	0.1 sec.	5 sec.						
24F339	TRP-10	0.1 sec.	10 sec.						
24F340	TRP-15	0.1 sec.	15 sec.	18.50	17.57	16.65	15.72	14.80	13.87
24F341	TRP-30	0.1 sec.	30 sec.						
24F342	TRP-60	0.1 sec.	60 sec.						

Industrial Timer Controls


Series PBM

Series RS

Series PC

SC-100

PUSHBUTTON AUTORESET INTERVAL TIMER

Series PBM. When pushbutton is manually depressed the timer resets; when the pushbutton is released, load switch closes and the timing operation begins. Contacts: 25 amps non-inductive. 115 VAC. Motor: 115 Volts, 60 hz.

Stock No.	Type	Time Cycle	1-3	4-5	6-11	12-24	25-49	50-99
62F2040	PBM-15S	15 sec.	19.25	18.29	17.32	16.36	15.40	14.44
62F2041	PBM-60S	60 sec.						
62F2042	PBM-5M	5 min.						
62F2043	PBM-60M	60 min.						

SERIES RS MANUAL RESET INTERVAL TIMERS

Completely enclosed for extra ruggedness! Heavy silver contacts. Mounts in 2¾" hole, requiring 3" depth. Has 3½" flange, 18" color coded leads extend from back for direct wiring. For 115 volts, 60 hz AC. Shipping weight, 12 oz.

Stock No.	Type	Max. Time Cyc.	Dial Cal.	1-3	4-5	6-11	12-24	25-49	50-99
24F1821	RS-15M	15 min.	15 seconds	18.50	17.58	16.65	15.73	14.80	13.88
24F1822	RS-60M	60 min.	1 minute						
24F1823	RS-3H	3 hrs.	5 minutes						
24F271	RS-6H	6 hrs.	10-min. steps						
24F270	RS-12H	12 hrs.	15-min. steps						

PERCENTAGE TIMERS

Series PC. Calibrated in percentage of a given time delay. Designed to close an electrical circuit within any desired percentage of rated time cycle for timer. Knob for setting of "on" time from 3% to 97%, with 100% position for continuous circuit operation. Cam operated snap switch rated at 15 amps. 3⅞ dia. x 4 5/16 deep. 115V., 60 hz AC. 12 oz.

Stock No.	Type	Time Cycle	1-3	4-5	6-11	12-24	25-49	50-99
24F243	PC-15S	15 seconds	31.00	29.45	27.90	26.35	24.80	23.25
24F244	PC-30S	30 seconds						
24F245	PC-60S	60 seconds						

MODEL SC-100 ELECTRIC STOP-CLOCK

Provides all the functions of a mechanical stopwatch with the advantage of electrical control. Measures intervals from .01 to 60 seconds; ideal for research, time-and-motion study, sporting events. Remote-control provision permits start/stop with pushbutton on cord, etc.; reset with button unit or remotely with a series switch. Compound dial has 2 pointers measuring 1-60 sec in 1-sec increments and .01-.99 sec in .01 sec increments despectively. Synchronous motor, automatic wear compensation. 115V 60 hz AC only. 5x5x4 25/32". Shpg. wt. 5 lbs.

24F300	SC-100	....	68.50	65.08	61.65	58.23	54.80	51.38

ELAPSED TIME METERS

Provides exact record of operating hours of AC machines and appliances. Long-life synchronous self-lubricating motors, connected to counters. Series C-2A enclosed in a 3½" bakelite meter case; requires a 2⅞" diameter hole in panel for mounting. Series C-5 is resettable to zero, has a ¾" square flange and requires a 2¾" diameter mounting hole. Series C-4 open type, 2½" round flange. 2" diam. mtg. holes. All 115 V 60 hz except C-2 which is 230 volts. Shpg. wt., 1 lb. † Max. no. of minutes.

Type C-2

Type C-4

Type C-5

Stock No.	Type	Max. Hrs.	Calib.	NET EACH 1-3	4-5	6-11	12-24	25-49	50-99
55F670	C-2	10,000	1/10 hr.	20.00	19.00	18.00	17.00	16.00	15.00
55F671	C-2	10,000	1/10 hr.	21.50	20.43	19.35	18.28	17.20	16.13
55F680	C-5	10,000	1/10 hr.	42.50	40.38	38.25	36.13	34.00	31.88
24FX1816	C-2-A	100,000	1 hr.	20.00	19.00	18.00	17.00	16.00	15.00
24FX1817	C-4	10,000	1/10 hr.	16.50	15.68	14.85	14.03	13.20	12.38
24FX1841	C-2-F	100,000†	1 min.	20.00	19.00	18.00	17.00	16.00	15.00

● *NEW* AUTOMATIC RESET SERIES SAR

Provides an audible signal at the end of a pre-set time cycle. Load receptacles are provided on the side of the case for either a load to be operated during the time cycle or at the end of the time cycle. Toggle switch on front of unit. SPDT switching action. SPDT contacts rated at 10 amps. 115 volt 60 hz. Shipping weight: 3 lbs.

Stock No.	Type	Time Cycle	Calibration	NET EACH 1-3	4-5	6-11	12-24	25-49	50-99
24F343	SAR-1M	1 min.	1 sec.	39.95	37.95	35.95	33.96	31.96	29.96
24F344	SAR-5M	5 min.	5 sec.						
24F345	SAR-15M	15 min.	15 sec.						
24F346	SAR-30M	30 min.	30 sec.						
24F347	SAR-1H	1 hr.	1 min.						
24F348	SAR-3H	3 hr.	3 min.						

INTERVAL TIMERS

For applications where dependable one-unit timers are required. Feature positive adjustments, and automatic reset. These units are all manufactured to high standards of quality and will stand up under hard usage. Heavy-duty synchronous motors operate on 115 volts-60 hz. Type PAB and Type P contacts rated at 15 amps non-inductive load, all others 10 amps.

INSTANTANEOUS RESET PAB

Designed for process control where longevity and trouble-free operation is essential. Features automatic reset. In steel enclosure, 7⅛ x 5⅛ x 4 1/16". Two ½" knockouts for easy access to internal terminal strip. Shpg. wt., 6 lbs.

Stock No.	Type No.	Time Cycle	Calibration
24F283	PAB6S	6 sec.	1/10 second
24F1872	PAB15S	15 sec.	¼ second
24F1800	PAB30S	30 sec.	½ second
24F1801	PAB60S	60 sec.	1 second
24F1802	PAB3M	3 min.	3 seconds
24F1803	PAB15M	15 min.	15 seconds
24F1804	PAB30M	30 min.	30 seconds
24F1873	PAB60M	60 min.	60 seconds
24F1805	PAB3H	3 hr.	3 minutes

NET EACH

1-3	4-5	6-11	12-24	25-49	50-99
55.00	52.25	49.50	46.75	44.00	41.25

ECONOMY SERIES P

Low-cost timing units complete with AC line cord, built-in actuating start button and two receptacles on side of case for load and remote control circuits. 5 x 5 x 3¾". Shpg. wt., 3 lbs.

Stock No.	Type No.	Time Cycle	Calibration
24F269	P4R	15 sec.	¼ second
24F1813	P2R	30 sec.	½ second
24F256	P1M	60 sec.	1 second
24F274	P3M	3 min.	3 seconds
24F257	P5M	5 min.	5 seconds

NET EACH

1-3	4-5	6-11	12-24	25-49	50-99
33.00	31.35	29.70	28.05	26.40	24.75

MANUAL RESET SERIES S

Manual reset signaling timers are designed to command visual and audible attention when a time interval is completed. Sockets on side of timer provide for connection of additional lights, alarms or controlled circuits 115v 60 hz operation. 5x5x 3¾". Wt., 3 lbs.

Series S

Stock No.	Type No.	Time Cycle	Calibration
24F1836	S-1M	1 min.	1 second
24F1837	S-5M	5 min.	5 seconds
24F1814	S-15M	15 min.	15 seconds
24F1815	S-30M	30 min.	30 seconds
24F266	S1H	1 hr.	1 minute
24F267	S3H	3 hrs.	3 minutes

NET EACH

1-3	4-5	6-11	12-24	25-49	50-99
29.00	27.55	26.10	24.65	23.20	21.75

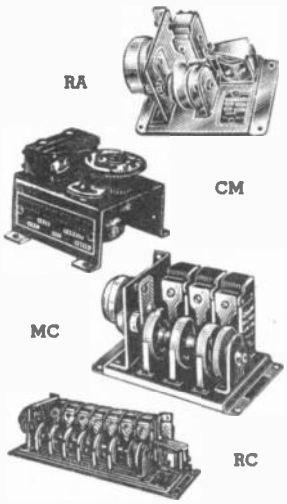
Industrial Timer Controls

HOW TO ORDER CAM TIMERS

Locate desired time cycle duration in "Gear Assemblies" chart below, and order gear-and-rack assembly listed in left-hand column. Appropriate foundation (motor-switch) units appear at top of "Time Cycle" columns: CM types are single-cicuit, recycling; MC types are multi-circuit recycling; RC types are multi-circuit, single-time-cycle (see detailed descriptions below): Example: Suppose 4 circuits are to be controlled, with a 30-second time cycle, recycling. Order gear-and-rack assembly A12, stock number 24F315, and note that foundation unit MC2 is required. At bottom of page, locate MC2 under heading "4 SWITCH CHASSIS" and order stk. no. 62F2010. All units U/L & CSA approved.

Note: in some cases RC0, RC1, MC0 and MC1 units may require a special high-torque motor. Multiply time cycle (in seconds) by 2/3; result will be maximum number of switches that can be operated by a standard unit. For example, with a time cycle of 9 seconds, up to 6 switches may be operated by a standard motor; if more circuits are to be controlled, order a high-torque motor. On RC0 and MC0 units, add $27.50 to listed price for high-torque motor; on RC1 and MC1 types price must be increased by $29.50.

Alternate Ordering Information: specify desired time cycle, number of switches, operating voltage and frequency. Such information may expedite delivery by allowing NEWARK to ship model in stock with desired time cycle.



GEAR ASSEMBLIES—TOTAL TIME CYCLE*

Stock No.	Mfrs. Type	CMO RCO MCO	MC1 CM1 RC1	CM2 MC2 RC2	CM3 MC3 RC3	CM4 MC4 RC4	CM5 RC5 MC5	CM6 MC6 RC6	CM7 MC7 RC7	CM8 MC8 RC8	CM9 MC9 RC9	CM10 MC10 RC10	CM12 MC12 RC12	NET Each
24F306	E12	40c	4S	10S	20S	40S	2M	3M20S	10M	20M	40M	2H	8H	
24F307	E15	50c	5S	12.5S	25S	50S	2M30S	4M10S	12M30S	25M	50M	2H30M	10H	
24F308	C12	1S	6S	15S	30S	60S	3M	5M	15M	30M	60M	3H	12H	
24F309	C14	70c	7S	17.5S	35S	70S	3M30S	5M50S	17M30S	35M	70M	3H30M	14H	
24F310	C15	75c	7.5S	18.75S	37.5S	75S	3M45S	6M15S	18M45S	37M30S	75M	3H45M	15H	
24F311	B12	80c	8S	20S	40S	80S	4M	6M40S	20M	40M	80M	4H	16H	
24F312	C18	90c	9S	22.5S	45S	90S	4M30S	7M30S	22M30S	45M	90M	4H3M	18H	
24F313	B15	100c	10S	25S	50S	100S	5M	8M20S	25M	50M	100M	5H	20H	
24F314	C22	110c	11S	27.5S	55S	110S	5M30S	9M10S	27M30S	55M	110M	5H30M	22H	
24F315	A12	2S	12S	30S	60S	2M	6M	10M	30M	60M	2H	6H	24H	
24F316	C26	2S10c	13S	32.5S	65S	130S	6M30S	10M50S	32M30S	65M	2H10M	6H30M	26H	
24F317	A14	2S20c	14S	35S	70S	140S	7M	11M40S	35M	70M	2H20M	7H	28H	1.75
24F318	A15	2S30c	15S	37.5S	75S	150S	12M30S	12M30S	37M30S	75M	2H30M	7H30M	30H	
24F319	A16	2S40c	16S	40S	80S	160S	8M	13M20S	40M	80M	2H40M	8H	32H	
24F320	C34	2S50c	17S	42.5S	85S	170S	8M30S	14M10S	42M30S	85M	2H50M	8H30M	34H	
24F321	A18	3S	18S	45S	90S	3M	9M	15M	45M	90M	3H	9H	36H	
24F322	A20	3S20c	20S	50S	100S	200S	10M	16M40S	50M	100M	3H20M	10H	40H	
24F323	A22	3S40c	22S	55S	110S	220S	11M	18M20S	55M	110M	3H40M	11H	44H	
24F324	A24	4S	24S	60S	2M	4M	12M	20M	60M	2H	4H	12H	48H	
24F325	A26	4S20c	26S	65S	130S	260S	13M	21M40S	65M	2H10M	4H20M	13H	52H	
24F326	A28	4S40c	28S	70S	140S	280S	14M	23M20S	70M	2H20M	4H40M	14H	56H	
24F327	A30	5S	30S	75S	150S	5M	15M	25M	75M	2H30M	5H	15H	60H	
24F328	A32	5S20c	32S	80S	160S	320S	16M	26M40S	80M	2H40M	5H20M	16H	64H	
24F329	A34	5S40c	34S	85S	170S	340S	17M	28M20S	85M	2H50M	5H40M	17H	68H	
24F330	A36	6S	36S	90S	3M	6M	18M	30M	90M	3H	6H	18H	72H	

* C=cycles (refers to 60 cps current; e.g. 50 c=⅘ sec), S= seconds, M=minutes, H=hours.

SERIES RA SINGLE-CAM SINGLE-CYCLE TIMER

Performs a single electrical cycle upon momentary actuation from a remote position. 115V 60 cycle. Order with any gear assembly (above) for time cycles from 2 to 18 minutes. Wt., 1 lb.

Stk. No.	Type	1-3	4-5	6-11	12-24	25-49	50-99
62F2000	RA5	28.75	27.31	25.87	24.43	23.00	21.57

SERIES CM SINGLE-CAM RECYCLING TIMER

Snap action totally-enclosed, dustproof SPDT switch. Rated 10A-115V, 10A-220V, non-inductive AC Cam and gear train, interchangeable for longer or shorter time cycle, attach to motor chassis by single 6-32 screw. Can be set so switch is actuated from 2% to 98% of total time cycle; each cycle automatically repeats until power is turned off. Size, 3 1/16x2 13/16x 2¼". For 115 volts—60 cycle operation. For complete timer, order Motor-Switch chassis covering reauired time range, and gear assemblies for specific time cycles. Av. shpg. wt., 1 lb

Stk. No.	Type	Stk. No.	Type	Stk. No.	Type	Stk. No.	Type	1-3	4-5	6-11	12-24	25-49	50-99
24F1827	CM0	24F1829	CM3	24F252	CM6	24F1820	CM9	18.75	17.81	16.88	15.94	15.00	14.06
24F1828	CM1	24F250	CM4	24F1819	CM7	24F254	CM10						
24F268	CM2	24F251	CM5	24F253	CM8	24F255	CM12						

SERIES MC MULTI-CAM RECYCLING TIMER

Recycling type identical in operation to CM timer but with multiple cams to operate more than one switch. The cams are mounted on a single driving shaft, coupled to the motor by a gear and rack assembly (see gear assembly chart above). Cams can be adjusted in any combination of timed sequences. Each cam is individually adjustable from 2 to 98% of the total time cycle. Order Motor-Switch chassis plus any gear assembly to achieve required time cycle. For 115 v.-60 cycle.

SERIES RC SINGLE CYCLE MULTI-CAM TIMER

Provides a single timed electrical cycle upon momentary actuation from a remote position. May be used to control several circuits; similar to MC series, except operates one cycle only. Cams are adjustable for any combination of timed sequences. Order motor-switch chassis plus any gear assembly (see "How to Order," above). For 115VAC, 60 cy.

2 SWITCH CHASSIS

Stk. No.	Type	Stk. No.	Type	1-3	4-5	6-11	12-24	25-49	50-99
62F2001	MC0	62F2052	MC6	33.75	32.06	30.37	28.69	27.00	25.51
62F2050	MC1	62F2053	MC7						
62F2002	MC2	62F2054	MC8						
62F2051	MC3	62F2055	MC9						
62F2005	MC4	62F2056	MC10						
62F2006	MC5	62F2057	MC12						
62F2003	RC0	62F2061	RC6	48.75	46.31	43.87	41.44	39.00	36.56
62F2004	RC1	62F2062	RC7						
62F2007	RC2	62F2008	RC8						
62F2058	RC3	62F2063	RC9						
62F2059	RC4	62F2064	RC10						
62F2060	RC5	62F2065	RC12						

4 SWITCH CHASSIS

Stk. No.	Type	Stk. No.	Type	1-3	4-5	6-11	12-24	25-49	50-99
62F2009	MC0	62F2068	MC6	50.75	48.21	45.67	43.14	40.60	38.06
62F2066	MC1	62F2069	MC7						
62F2010	MC2	62F2070	MC8						
62F2067	MC3	62F2071	MC9						
62F2013	MC4	62F2072	MC10						
62F2014	MC5	62F2073	MC12						
62F2011	RC0	62F2077	RC6	66.25	62.94	59.63	56.31	53.00	49.69
62F2012	RC1	62F2078	RC7						
62F2015	RC2	62F2016	RC8						
62F2074	RC3	62F2079	RC9						
62F2075	RC4	62F2080	RC10						
62F2076	RC5	62F2081	RC12						

6 SWITCH CHASSIS

Stk. No.	Type	Stk. No.	Type	1-3	4-5	6-11	12-24	25-49	50-99
62F2017	MC0	62F2084	MC6	67.25	63.89	60.53	57.17	53.80	50.44
62F2082	MC1	62F2085	MC7						
62F2018	MC2	62F2086	MC8						
62F2083	MC3	62F2087	MC9						
62F2021	MC4	62F2088	MC10						
62F2022	MC5	62F2089	MC12						
62F2019	RC0	62F2093	RC6	83.75	79.56	75.38	71.19	67.00	62.81
62F2020	RC1	62F2094	RC7						
62F2023	RC2	62F2024	RC8						
62F2090	RC3	62F2095	RC9						
62F2091	RC4	62F2096	RC10						
62F2092	RC5	62F2097	RC12						

8 SWITCH CHASSIS

Stk. No.	Type	Stk. No.	Type	1-3	4-5	6-11	12-24	25-49	50-99
62F2025	MC0	62F2100	MC6	84.25	80.04	75.82	71.61	67.40	63.19
62F2098	MC1	62F2101	MC7						
62F2026	MC2	62F2102	MC8						
62F2099	MC3	62F2103	MC9						
62F2029	MC4	62F2104	MC10						
62F2030	MC5	62F2105	MC12						
62F2027	RC0	62F2109	RC6	100.25	95.24	90.23	85.21	80.20	65.16
62F2028	RC1	62F2110	RC7						
62F2031	RC2	62F2032	RC8						
62F2106	RC3	62F2111	RC9						
62F2107	RC4	62F2112	RC10						
62F2108	RC5	62F2113	RC12						

INDUSTRIAL TIMER CONTROLS

TANDEM RECYCLING TIMER

Recycling Timer

Type A. Timing device that provides 2 adjustable and continuous time cycles. Permits practically any timing sequence. Controls: "ON"-"OFF" toggle switch. load control switch, pilot lamps, and male load plugs. Load circuit carried by SPDT relay, contact rating 15 amps AC non-inductive Control cabinet is for 115 volt/60 Hz.

Type B. Similar to Type A but designed for built-in tamper-proof applications. Contains only pilot lights and element receptacles. Load control switch located inside the cabinet. Wiring to and from unit done at terminal block. 9x11x6". 11 lbs.

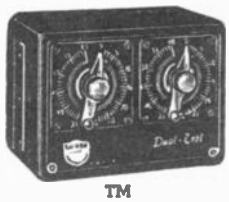
CONTROL UNITS

Stock No.	Description	1-3	4-5	6-11	12-24	25-49
24F285	Type A Unit	54.50	51.78	49.05	46.33	43.60
24F1826	Type B Unit	54.50	51.78	49.05	46.33	43.60

TIMING ELEMENT (2 REQUIRED)

Stock No.	Type	Max. Time	Dial Calib.	1-3	4-5	6-11	12-24	25-49
24F1840	ET-3S	3 sec	1/20 sec					
24F286	ET-6S	6 sec	1/10 sec					
24F287	ET-15S	15 sec	¼ sec					
24F288	ET-30S	30 sec	½ sec					
24F289	ET-60S	60 sec	1 sec	44.00	41.80	39.60	37.40	35.20
24F290	ET-3M	3 min	3 sec					
24F291	ET-5M	5 min	5 sec					
24F292	ET-15M	15 min	15 sec					
24F293	ET-30M	30 min	30 sec					
24F294	ET-60M	60 min	60 sec					
24F295	ET-3H	3 hours	3 hours					

SERIES "DUAL TROL" RECYCLING TIMERS



TM

The Dual-Trol is a compact recycling timer that continuously closes and opens a SPDT load switch. A complete unit consists of two TM timer modules—one to set the ON interval. The second to fix the OFF interval—and a control cabinet. Any two modules from the listing below may be used to achieve the desired combination of time cycles. The TM modules are complete timing mechanisms, with 4-prong plugs that match receptacles within the cabinet, for easy installation. Isolated SPDT load switch connects to terminal strip within cabinet; switch is rated 10A non-inductive at 115 VAC. 2½" knockouts are provided for wiring. Units operate from 115/60 hz. Dim. 4½x5⁹⁄₁₀x7½". Shpg. wt. 2 lbs.

CONTROL CABINET

Stk. No.	1-3	4-5	6-11	12-24	25-49	50-99
24F1870	22.50	21.38	20.85	19.13	18.00	16.87

TIMING ELEMENTS (2 REQUIRED)

Stock No.	Type	Max. Time	Min. Time	1-3	4-5	6-11	12-24	25-49
24F1860	TM-6S	6 sec	1/10 sec					
24F1861	TM-15S	15 sec	¼ sec					
24F1862	TM-30S	30 sec	½ sec					
24F1863	TM-60S	60 sec	1 sec					
24F1864	TM-3M	3 min	3 sec	27.50	26.13	24.75	23.38	22.00
24F1865	TM-5M	5 min	5 sec					
24F1866	TM-15M	15 min	15 sec					
24F1867	TM-30M	30 min	30 sec					
24F1868	TM-60M	60 min	1 min					
24F1869	TM-3H	3 hours	3 min					

JBT FREQUENCY & ELAPSED TIME METERS

TIME METERS

55F691. Type 31-EX. 110-125V. **NET** **16.75**

Type 31-EXW. 6 digits, 0-99, 999.9 hours. 60 Hz.

55F699. NET **16.95**

Type 31-EXW-5. 5 digits, 0-99, 999.9 hrs. 110-125V. 60 Hz.

55F695. NET **16.50**

55F692. Type 31-EX-200. 230 V. **NET** **17.50**

Model 31-ES. 110-125 volts, 60 Hz. As above except with square black molded case. 3" x 3".

55F698. NET **17.50**

TIME-FREQUENCY

Type 31-FE. Uses a separate exciting coil for the reeds to achieve close control of reed amplitude and freq. Tenths shown in red; all others in white on black backgrnd. Time meter reads 0-9999.9 hrs. 58-62 hz. For 100-130 VAC. 5 reeds indicate at 4.7w. 3¼" metal case. Shpg. wt. 12 oz.

55F688. NET **33.00**

FREQUENCY METERS

Each vibrating reed responds to a different frequency. Input frequency is indicated by reed with greatest swing. All operate from 100-130V; with accuracy of ±.3% or better. All have 3½" molded case. Shpg. wt. 12 Oz.

Type 31-FX. 5 reeds, 58-62 Hz.

55F685. NET **23.65**

55F686. Type 34-FX. 9 reeds cover 56-64 hz. **NET** **27.25**

55F687. Type 33-FX. 9 reeds cover 380-420 hz. **NET** **34.10**

● *NEW* 2½" METERS—5 REEDS

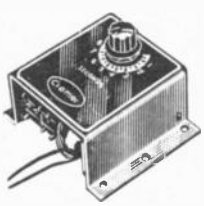
Model 21-FX. 2½" panel meter. 5 reeds cover 58-62 hz. 100-130V, 66 ohms per volt, 0.25 watt power consumption. Flush panel mounting. Meets ASA C39.1-1951 and MIL-M-6B in depth of case and mounting dim. With 2¹¹⁄₁₆" molded case. Shpg. wt 4½ oz.

55F694. NET **22.55**

CRAMER SOLID STATE TIMERS

Base Mount

Panel Mount



Chassis Mount

TIME DELAY TIMER

Type 3800. Provides adjustable time delay between closing of a maintained control circuit and actuation of timed load contacts. Resets when power is removed. Repeat accuracy ±2%. DPDT 10 amp contacts. Life up to 10,000,000 operations. 115 VAC. Plugs into octal socket.

INTERVAL TIMER

Type 3801. Same as type 3800 except plugs into 11 pin socket. Load contacts closed during timed interval and open at end of timing. Resets automatically.

DELAY ON DROP OUT TIMER

Model 3802. Same as 3800 except plugs into 11 pin socket. Provides timed interval upon opening control cir.

TIME-DELAY—CHASSIS MOUNTED

Model 3810. Provides adjustable time delay between closing of a control circuit and actuation of time load contacts. Resets when power is removed. 10 mil. oper. life. Accuracy ±5%. DPDT 10 amp contacts. 115 VAC.

BASE MOUNT

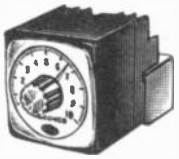
Stk. No. 3800	Stk. No. 3801	Stk. No. 3802	Time Range	1-9	10-24	25-49
55F1905	55F1910	55F1915	1 Sec.			
55F1906	55F1911	55F1916	10 Sec.			
55F1907	55F1912	55F1917	30 Sec.	31.50	28.35	26.78
55F1908	55F1913	55F1918	60 Sec.			
55F1909	55F1914	55F1919	5 Min.			

PANEL MOUNT

55F1920	55F1925	55F1930	1 Sec.			
55F1921	55F1926	55F1931	10 Sec.			
55F1922	55F1927	55F1932	30 Sec.	36.50	32.85	31.03
55F1923	55F1928	55F1933	60 Sec.			
55F1924	55F1929	55F1934	5 Min.			

Stk. No. 3810	Time Range	1-24	25-49	50-99
55F1900	1 Sec.			
55F1901	10 Sec.			
55F1902	30 Sec.	19.75	17.77	16.78
55F1903	60 Sec.			
55F1904	5 Min.			

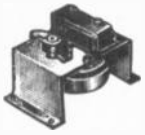
Cramer Timers and Controls



Type 280/480 635/636

Type 241E

Type 310E



Type 330

RUNNING TIME METERS

Type 635

Type 635 & 636. (Replaces types 632 & 633). Running time motor registers cumulative operating or idle time of machinery or electrical apparatus. Instant start-stop accuracy ±50 milliseconds per operation. Large diameter counting wheels provide legible display. Available with pushbutton reset (636) or non-reset (635). Bezels are 2½" round (-x) or square (-y) for standard NEMA mounting. 3½" round (-e) or square (-s) bezels are for replacement of 632 & 633 timers. 115V 60 Hz. Shpg. wt., 1 lb.

TYPE 635—NON-RESET

Stock Numbers				Range	Counts	NET
2½" Rd.	2½" Sq.	3½" Rd.	3½" Sq.			
55F4420	55F4428	55F4436	55F3178	9999.9 sec.	1/10 sec.	14.00
55F4421	55F4429	55F4437	55F3179	99999 sec.	1 sec.	
55F4422	55F4430	55F4438	55F3180	999.99 min.	1/100 min.	
55F4423	55F4431	55F4439	55F3181	9999.9 min.	1/10 min.	
55F4424	55F4432	55F4440	55F3182	99999 min.	1 min.	
55F4425	55F4433	55F4441	55F3183	999.99 hr.	1/100 hr.	
55F4426	55F4434	55F4442	55F3184	9999.9 hr.	1/10 hr.	
55F4427	55F4436	55F4443	55F3185	99999 hr.	1 hr.	

TYPE 636—PUSH BUTTON RESETTABLE

55F4444	55F4452	55F4460	55F4468	9999.9 sec.	1/10 sec.	20.00
55F4445	55F4453	55F4461	55F4469	99999 sec.	1 sec.	
55F4446	55F4454	55F4462	55F4470	999.99 min.	1/100 min.	
55F4447	55F4455	55F4463	55F4471	9999.9 min.	1/10 min.	
55F4448	55F4456	55F4464	55F4472	99999 min.	1 min.	
55F4449	55F4457	55F4465	55F4473	999.99 hr.	1/100 hr.	
55F4450	55F4458	55F4466	55F4474	9999.9 hr.	1/10 hr.	
55F4451	55F4459	55F4467	55F4475	99999 hr.	1 hr.	

TYPE 241E AUTOMATIC RESET INTERVAL TIMER

Push button start, automatic shut-off, instant reset. Start button integrate with setting knob turns on the load and starts the timer. At end of timing, load is shut off and timer automatically resets. Timer is ideal for controlling ovens., mixers, pumps and other types of batch operations. SPDT contacts rated 15 amps at 115 VAC, 60 Hz. Repeat accuracy: ±.25% except 15 sec. time range ±5%. Case dia. 3 11/16", depth 3 3/32". Timer has three hole mounting on 1.687" radius. Shpg. wt. 3lbs. 115 VAC, 60 Cy.

Stk. No.	Time Range	Calibration	NET
55F350	15 seconds	0.25 second	25.50
55F351	60 seconds	1 second	
55F352	15 minutes	15 seconds	
55F378	30 minutes	0.5 minute	
55F353	60 minutes	1 minute	
55F4476	24 hours	30.0 minute	

TIME DELAY RELAYS

Use to introduce an accurate time delay between the closing of a maintained or momentary control switch and the subsequent actuation of the timer load switch. Removal of power resets timer.

Type 310E. Provides exact and adjustable time lag. Has progress and setting indicators. Automatically resets to established delay setting. SPDT contacts rated 10 amps. at 115V, 60 Hz Overall acc. ±2%. Repeat accuracy ±.5%, case dia. 3 1/16", depth 3 3/32". U.L. approved. Shpg. wt. 3 lbs.

55F385	15 seconds	0.25 seconds	28.50
55F386	60 seconds	1.00 seconds	
55F387	120 seconds	2.00 seconds	

Type 330. Adjustable—for applications not requiring frequent timing adjustments. SPDT contacts rated 10 amps at 115V, 60 Hz. Repeat acc. ±75% of range. 115V 60 Hz. Size: H.W.D.—2.5"x2.125"x3.656". Shpg. wt. 2 lbs.

55F342	20 seconds	.....	18.00
55F343	40 seconds	.....	
55F344	80 seconds	.....	

● NEW 400 SERIES PLUG-IN TIME RELAY

Timer plugs into perm. mounted and wired housing (Furnished) for instant interchangeability of time ranges. Adjustable time delay between closing of control circuit and of load contacts. SPDT contacts 10 Amps. Repeat accuracy .25%. **Type 400E directly interchangeable with old type 412E** 115 volt 60 Hertz. Case dia. 3 1/16", length 4 5/32" behind panel. 4 lbs.

Time Range	Stock No. 400S Square	NET	Stk. No. 400E Round	NET
6 Sec.	55F4480	46.00	55F4488	47.00
15 Sec.	55F4481	44.00	55F4489	45.00
60 Sec.	55F4482	44.00	55F4490	45.00
120 Sec.	55F4483	44.00	55F4491	45.00
5 Min.	55F4484	44.00	55F4492	45.00
15 Min.	55F4485	44.00	55F4493	45.00
60 Min.	55F4486	46.00	55F4494	47.00
24 Hrs.	55F4487	50.00	55F4495	51.00

Type 412E

Type 691

Type 450A

Type 412E TOTALIZER. Electric stop-clock for precise time measurement. Instant elec. reset. Acc: .01 sec. 115V 60 Hz. Shpg. wt. 4 lbs.

TYPE 691

Stock No.	Time Range	Calibration	NET
55F369	60 seconds	.01 sec. - 1 sec.	75.00

SERIES 450A AND 450D TIME DELAY RELAYS

Flexible time delay relay with 3 million operation life, SPDT, 10 amp, 125/250 VAC load switch. Used to provide time delay between closing of control circuit and actuation of a load circuit. Instantaneous reset upon power interruption. Quick connect spade type terminals. Easily adjustable from minimum setting to full scale. For 115V, 60 Hz operation. Shpg. wt. 2 lbs. **Series 450A-panel mount. Series 450D-vertical chassis mount.**

450A PANEL MOUNT

Range	Stk. No.	NET
6 min.	55F3154	33.00
12 min.	55F3155	
30 min.	55F3156	
6 hr..	55F3159	
30 hr.	55F3161	

450D CHASSIS MOUNT

60 sec.	55F3164	26.00
30 min.	55F3168	

Write for quantity prices.

PERCENTAGE TIMERS

Type 560. Cycling timer designed to make or break electrical circuit for adjustable percentage of full cycle. Desired percentage of total cycle time is infinitely adjustable by operator, from 3% to 97%. Life expectancy-4 million mechanical operations. Repeat Accuracy: ±1% of full scale. 25 amperes snap action load switch. 115V, 60 Hz.

Stk. No.	Cycle Times	Dial Division	NET
55F3174	15 sec..	0.15 sec.	24.50
55F3175	30 sec.	0.30 sec.	
55F3176	60 sec.	0.60 sec.	
55F3177	5 min.	3.0 sec.	

ELECTRONIC TIMER SERIES 280/480

Solid state, long life, no warm up. Operates directly from 115VAC 60 Hz power line, used with flashers, X-ray equip., etc. Time ranges-0.02 to 1.0 sec.; 0.20 to 10 sec.; 2.0 to 100 sec. Repeat Accuracy: ±1.5% of full scale. Reset time: 30 milliseconds. Timing circuit life: over 40 million cycles—10 mill. for the load relay. Plug in load relay easily replaced. Complete with 8 external load connection for SPST or SPDT hook up of 2 independent circuits and remote control operation. Load contact ratings- 25 amp resistive, 120 or 240 VAC; 25 amp. inductive, 120 VAC (75% pf.); 1 H.P. 120 VAC (96 amp. locked rotor); 2 H.P. 240 VAC (72 amp. locked rotor); 25 amp. resistive, 24 VDC. Panel mount will operate in any positive. Power Consumpt.; 3 V.A. Shpg. wt. 2½ lbs.

280-Interval Timer. Sustained contact starting: load switches transfer immediately. return to initial position after interval. Control contact open to reset for second operation. Monentary contact starting: load switches transfer immediately, return to initial position after interval. Timer resets automatically. 115V. 60 Hz.

480-Time Delay Relay—Sustained contact starting: load switches do not transfer until end of timing. Switches remain transferred until control contact is opened and then reset for a second operation. 115V 60 Hz.

Stk. No.	Type	Range Sec.	NET
55F321	280	.02 to 1.0	69.50
55F322	280	.20 to 10.0	
55F323	280	2.00 to 100	
55F324	480	.02 to 1.0	
55F325	480	.20 to 10.0	
55F326	480	2.00 to 100	

Timers and Elapsed Time Indicators HAYDON®

SERIES DA TIME-DELAY RELAYS

Type DA-11. Apply wherever delay, interval, or repeat cycle timing functions are required. Manually adj. by knob. SPDT switch. 20 amps. Solder lug term. Repeat accuracy ±¾% of total time range. 5 watt motor. 120 VAC. 60 hz. Unit is rear mounted and resets to start position when power is removed. Minimum time setting is 0 sec. Size: 3⅜"W x 2¹³⁄₁₆"D x 3⅛"H. **Type DA21.** Same as DA11 but with locknut adjustment to eliminate tampering.

Maximum Setting	Reset	DA11 Stk. No.	Type	DA21 Stk. No.	Type
5.7 Sec	.25 Sec	54F000	DA11-036	.....	.....
14 Sec	1.0 Sec	54F001	DA11-031	54F006	DA21-001
57 Sec	1.5 Sec	54F002	DA11-032	54F007	DA21-002
114 Sec	9 Sec	54F003	DA11-035	54F008	DA21-005
4.5 Min	15 Sec	54F004	DA11-033	54F009	DA21-003
9.5 Min	120 Sec	54F005	DA11-034	54F010	DA21-004

1-4	5-9	10-24	25-49	50-99	100-up
14.66	13.93	13.20	12.46	11.73	11.00

SERIES DP-11 PANEL RESET MOUNT TIMERS

Adjustable Timer may be applied wherever delay, interval, or repeat cycle timing (requires two timers) are needed. Simple pointer knob for timing adjustment. Unit resets to start position when power is removed. Time elapse readout in center of adjustment knob. SPDT switch, 10 amps. 5 watt timing motor. 120 VAC 60 hz. Repeat accuracy, ±1% of total time. Screw term. Size: 3⁵⁄₁₆" sq. x 3⁹⁄₃₂" dia. Requires 3⅜" dia. mounting hole.

Stk. No.	Type DP11-	Time Setting Max	Time Setting Min	Maximum Reset Time	Dial Grads. Maj.	Dial Grads. Min.
54F072	007	6 Sec	0.3 Sec	.5 Sec	1 Sec	1 Sec
54F011	001	15 Sec	0.8 Sec	1.0 Sec	1 Sec	.2 Sec
54F012	006	30 Sec	1.5 Sec	1.5 Sec	5 Sec	.5 Sec
54F013	002	60 Sec	3.0 Sec	1.5 Sec	10 Sec	1 Sec
54F014	005	120 Sec	6.0 Sec	10 Sec	20 Sec	2 Sec
54F015	003	5 Min	0.2 Min	15 Sec	1 Min	.1 Min
54F016	004	10 Min	0.4 Min	120 Sec	1 Min	.2 Min

1-4	5-9	10-24	25-49	50-99	100-up
18.70	17.77	16.83	15.90	14.96	14.03

SERIES RG21 REPEAT CYCLE TIMERS

Cam-actuated, single switch timers for rear mounting. Runs continuously, repeating a set cycle of make-break switching operations as long as motor is energized. Also operates a single time cycle. Cam adjustable from 7° min to 169° max. (±3%). SPDT switch, 20 amps. 3.7 watt timing motor. 120 VAC, 60 hz. Solder lug terminals. 6" leads. Size: 2⁵⁄₁₆"W x 3⅛"H x 2½"D.

Stk. No.	Type	Time Range	Stk. No.	Type	Time Range
54F017	RG21-090	7½ Sec	54F022	RG21-095	10 Min
54F018	RG21-091	15 Sec	54F023	RG21-096	15 Min
54F019	RG21-092	30 Sec	54F024	RG21-097	30 Min
54F020	RG21-093	1 Min	54F025	RG21-098	60 Min
54F021	RG21-094	5 Min	54F026	RG21-099	4 Hrs.

1-4	5-9	10-24	25-49	50-99	100-up
12.33	11.71	11.09	10.48	9.86	9.24

SERIES 2T21 REAR MOUNTING RESET TIMER

Solid state electronic timer provides reset timing control adjustable through time ranges of three sec. to one minute. Ideal for application where delay, interval, or repeat cycle timing functions are required for adjustable time periods. SPDT switch, 10 amp. 117 VAC, 60 hz. Combination ¼" male spade/solder terminals. Reset time: 130 milliseconds max. Repeat Accuracy: Under constant conditions of temp. and voltage repeat accuracy within ±2% of set value can be expected.

Stk. No.	Type QT21	Time Range	1-4	5-9	10-24	25-49	50-99	100-up
54F042	003	3 Sec						
54F043	004	5 Sec						
54F044	005	10 Sec	16.50	16.05	15.60	14.70	13.95	12.95
54F045	006	15 Sec						
54F046	007	30 Sec						
54F047	008	60 Sec						

ELAPSED TIME INDICATORS

EF EN ER ED

The variety of meters available allows selection for any application where highly accurate readings of time are necessary. Rd. or sq. bezel, hrs. or min., resettable or non-resettable. Provides readout. All units operate at 120 VAC 60 Hz. except 7010 which is 115V 400 Hz. Operating temperature: —12°C to 55°C. Except 7010-004 which is —55°C to +85°C and is hermetically sealed. 7010-004 conforms to MIL-M 7793-C, MIL std. MS28053-5, Rev. "D".

SPECIFICATIONS

Type	Bezel	Depth	Mtg. Hole	Input @ 60 Hz	Leads or Terminals
EF13 Non-Reset	2⅞" Rd	1⁵¹⁄₆₄"	2 ⅛"	2.5 wts	6" Leads
ED71 Non-Reset	1¾" Sq	2³⁷⁄₆₄"	1¹⁹⁄₁₆"	2.5 wts	11¼" Leads
EN30 Non-Reset	3" Sq	3³²⁄₃₂"	2 ⅜"	3.7 wts	8-32 Studs
ER30 Reset	3" Sq	3³²⁄₃₂"	2 ⅜"	3.7 wts	8-32 Studs
ER35 Reset	3½" Rd	3³²⁄₃₂"	2 ¾"	3.7 wts	8-32 Studs
EN35 Non-Reset	3½" Rd	3³²⁄₃₂"	2¾"	2.5 wts	Solder
7010 Non-Reset	1¾" Sq	2³⁷⁄₆₄"	1¹⁹⁄₁₆"	3.7 wts	8-32 Studs

Stk. No.	Type	Time Range	1-4	5-9	10-24	25-49	50-99	100-up
54F061	EF1333	99999.9 Min	8.50	8.08	7.65	7.23	6.80	6.38
54F062	EF1335	99999.9 Hrs	8.50	8.08	7.65	7.23	6.80	6.38
54F063	ED7112	99999.9 Hrs	19.13	18.17	17.21	16.76	15.30	14.34
54F073	ED742	99999.9 Hrs	20.83	19.78	18.74	17.70	16.66	15.62
54F064	EN3010	99999.9 Min	15.30	14.54	13.77	13.01	12.24	11.48
54F065	EN3012	99999.9 Hrs	15.30	14.54	13.77	13.01	12.24	11.48
54F066	EN3510	99999.9 Min	15.30	14.54	13.77	13.01	12.24	11.48
54F067	EN3512	99999.9 Hrs	15.30	14.54	13.77	13.01	12.24	11.48
54F068	ER3020	99999.9 Min	22.10	21.00	19.89	18.79	17.68	16.58
54F069	ER3022	99999.9 Hrs	22.10	21.00	19.89	18.79	17.68	16.58
54F070	ER3520	99999.9 Min	22.10	21.00	19.89	18.79	17.68	16.58
54F071	ER3522	99999.9 Hrs	22.10	21.00	19.89	18.79	17.68	16.58
54F060	7010-004	9999.9 Hrs	39.10	37.15	35.19	33.24	31.28	29.33

SERIES RE62 REPEAT CYCLE MULTI-CAM TIMERS

Same specifications as RG21, except 2 to 6 switches may be actuated during cycle. Includes wrench to adjust friction loaded cams. Complete unit requires one switch stack and one drive motor. Size: 2⁵⁄₁₆"H x 3⁵⁄₃₂"W x 3⁹⁄₁₆"D. add 1¹⁄₁₆" to depth for each additional switch.

SWITCH STACKS

Stk. No.	Type	Swi.	1-4	5-9	10-24	25-99	50-99	100-up
54F027	RE62-091	2	11.48	10.90	10-33	9.75	9.18	8.61
54F028	RE63-092	3	15.30	14.54	13.77	13.01	12.24	11.48
54F029	RE64-093	4	19.13	18.17	17.21	16.26	15.30	14.34
54F030	RE65-094	5	23.38	22.21	21.04	19.87	18.70	17.53
54F031	RE66-095	6	27.20	25.84	24.48	23.12	21.76	20.40

DRIVE MOTORS — Order w/switch stack for complete unit

Stk. No.	Type	Time Range	Stk. No.	Type	Time Range
54F032	MP10-390	7½ Sec	54F037	MP10-395	10 Min
54F033	MP10-391	15 Sec	54F038	MP10-396	15 Min
54F034	MP10-392	30 Sec	54F039	MP10-397	30 Min
54F035	MP10-393	1 Min	54F040	MP10-398	1 Hr
54F036	MP10-394	5 Min	54F041	MP10-399	4 Hrs

1-4	5-9	10-24	25-49	50-99	100-up
5.95	5.65	5.36	5.06	4.76	4.46

SERIES QT SOLID STATE TIMERS

Panel mounting, solid state timers are highly accurate and versatile. Easy to set, low operation cost. SPDT switch rated at 10 amps. Electrical input 3 watts max. 120 VAC 60 hz. Repeat accuracy ±1% of set value. Max. reset time .05 sec. Up to 1,000,000 operations at rated load. Screw terminal block. Solid state construction for maximum performance and reliability. Timer is compact and fits into minimum space. Super rugged construction. Size: 3⅝" sq. x 4⅛"D. behind panel. Requires 3¼" dia. mounting hole.

Time Setting Max.	Time Setting Min.	Time Delay Stk. No.	Time Delay Type	Interval Stk. No.	Interval Type
1 Sec	.02 Sec	54F048	QT11-001	54F054	QT14-001
3 Sec	.04 Sec	54F049	QT11-002	54F055	QT14-002
5 Sec	.05 Sec	54F050	QT11-003	54F056	QT14-003
10 Sec	.10 Sec	54F051	QT11-004	54F057	QT14-004
15 Sec	.15 Sec	54F052	QT11-005	54F058	QT14-005
30 Sec	.30 Sec	54F053	QT11-006	54F059	QT14-006

1-4	5-9	10-24	25-49	50-99	100-up
72.25	68.64	65.03	61.41	57.80	54.19

ITT General Controls Counters

A

B

C

D

E

F

G

H

I

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K

SERIES CE40, CE60, CE600, CE620, CE800
ELECTRIC COUNTERS

Series CE40. Operates in any position. Tamper proof construction. Features large white numerals for easy readability. Actuation by switch, relay, or device with a minimum closed period of .050 sec., and min. open period of .050 sec. 5 watts power consumption. 6" leads. 600 cpm. Shpg. wt. 10 oz.

Series CE60. Non reset 6-digit totalizer. Tamper resistant. Operates from —40 to +160°F. 600 counts per min. Ideal for outdoor applications. Min. life: 1 million on AC, 6 mil. on DC. 1.74x2.50x2.25". 8 oz.

Series CE600. 6-digit. Operates in any position. Specialized armature, built-in rectification. 1000 cpm. with 50 million count life. Actuated by any switch, relay, or device with min. make and break of .030 sec. Free from AC hum when energized. 7 watt max. power consumption. Cont. duty coil housed in tamper-proof housing. Unbreakable plastic window. Shipping weight: 1⅞ lbs.

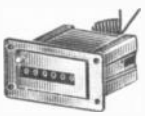
Series CE620. Operates in any position. Similar to the CE600, except this 6-digit counter has an electric reset. Reset circuit requires .100-sec. contact to make. Tot. reset time. 2 sec. 1000 cpm. 6x4x5⅛". Shpg. wt.: 6½ lbs.

Series CE800. Heavy duty 6-digit counter. Balanced armature & built-in rect. Gasket sealed and tamper proof. Plastic window. 1000 cpm. Actuated by any switch, relay, photo-electric cell or other device with min. make and break of .030 sec. Rectifier with capacitor gives top reliability to 240 V. Cont. duty coil. 200 million count life. Weight: 4⅝ lbs.

Stk. No.	Type	Fig.	V/Freq.	Reset	Mount	Digit	1-9	10-24	25-49	50-99	100-100-249
57F1800	CE40AN501	A	24AC/60	Non	Base	5					
57F1801	CE40AN502	A	120AC/60	Non	Base	5	7.75	6.59	6.20	5.81	5.43
57F1812	CE40AN5016	A	24VDC	Non	Base	5					
57F1802	CE40BN501	B	24AC/60	Non	Panel	5	8.35	7.10	6.68	6.26	5.81
57F1803	CE40BN502	B	120AC/60	Non	Panel	5	8.35	7.10	6.68	6.26	5.81
57F1804	CE40AS401	C	24AC/60	Knob	Base	4	15.25	12.96	12.20	11.44	10.68
57F1805	CE40AS402	C	120AC/60	Knob	Base	4	15.25	12.96	12.20	11.44	10.68
57F1845	CE40AS4015	C	12VDC	Knob	Base	4	15.25	12.96	12.20	11.44	10.68
57F1846	CE40AS4016	C	24VDC	Knob	Base	4	15.25	12.96	12.20	11.44	10.68
57F1806	CE40BS401	D	24AC/60	Wheel	Panel	4	15.95	13.56	12.76	11.96	11.17
57F1807	CE40BS402	D	120AC/60	Wheel	Panel	4	15.95	13.56	12.76	11.96	11.17
57F1848	CE40BS4015	D	12VDC	Wheel	Panel	4	15.95	13.56	12.76	11.96	11.17
57F1849	CE40BS4016	D	24VDC	Wheel	Panel	4	15.95	13.56	12.76	11.96	11.17
57F1866	CE60AN601	E	24AC/60	Non	Base	6	8.25	7.01	6.60	6.19	5.77
57F1867	CE60AN602	E	120AC/60	Non	Base	6	8.25	7.01	6.60	6.19	5.77
57F1868	CE60AN6016	E	24VDC	Non	Base	6	8.25	7.01	6.60	6.19	5.77
57F1869	CE60BN602	E	120AC/60	Non	Panel	6	8.75	7.44	7.00	6.56	6.12
57F1852	CE600AS601	H	1 va/60cy	Knob	Base	6	20.00	17.00	16.00	15.00	14.00
57F1808	CE600AS602	H	120VAC/60cy	Knob	Base	6	20.00	17.00	16.00	15.00	14.00
57F1850	CE600AS6015	H	12VDC	Knob	Base	6	20.00	17.00	16.00	15.00	14.00
57F1851	CE600AS6016	H	24VDC	Knob	Base	6	20.00	17.00	16.00	15.00	14.00
57F1853	CE600AS702	H	120AC/60	Knob	Base	7	22.00	18.70	17.60	16.50	15.40
57F1809	CE600BS602	F	120AC/60	Wheel	Panel	6	23.00	19.55	18.40	17.25	16.10
57F1810	CE600BK602	G	120AC/60	Key	Panel	6	30.00	25.50	24.00	22.50	21.00
57F1811	CE620BB602	I	120AC/60	Push Button	Panel	6	72.00	61.20	57.60	54.00	50.40
57F1812	CE620BA602	....	120AC/60	Remote	Panel	6	67.00	56.95	53.60	50.25	46.90
57F1813	CE800AS602	J	120VAC	Knob	Base	6	55.00	46.75	44.00	41.25	38.50
57F1814	CE800AK602	....	120VAC	Key	Base	6	60.00	51.00	48.00	45.00	42.00
57F1815	CE800BS602	K	120VAC	Wheel	Panel	6	48.75	41.44	39.00	36.56	34.12
57F1816	CE800BK602	....	120VAC	Key	Panel	6	58.75	49.94	47.00	44.06	41.12

CE47

CE59


CE61

Series CE61. High speed 6-digit counter with a push-button reset. 1000 counts/min. Count life: 10 million. Basemount: 3.19Wx 2.99Dx1.18H". Panel mount 3.30x2.87x1.69". 1 lb., 1 oz.

● *NEW* SERIES CE47, CE59, AND CE61
PUSHBUTTON RESET ELECTRIC COUNTERS

Series CE47. High speed resettable counter in DC models (1200 cpm. except (*2400 cpm). Heavy gauge frame, push button reset or electric reset. 30 mil. count life. Size: basemount: 1.79Wx 2.72Dx2.13H". Panel: 2.28x2.72x2.76. 9 oz.

Series CE59. Miniature, push button reset counter designed for quiet operation. Pwr. consum.: 5.5 watts AC. 1000 cpm. Life: 10 million counts. Basemount—3-digit: 1.04Wx2.87Dx.88H". 4-digit: 1.26x3.15x.88". Panel mount, 3-digit: 1.38x3.13x1.54"; 4-digit: 1.58 x3.60x1.53".

Stk. No.	Type	Fig.	V/Freq.	Reset	Mount	Digit	1-9	10-24	25-49	50-99	100-249
57F1870	CE47AP402	....	120AC/60	Pushbutton	Base	4	22.00	1870	17.60	16.50	15.40
57F1871	CE47AP4116	....	24VDC	Pushbutton	Base	4	20.00	17.00	16.00	15.00	14.00
57F1872	CE47AP4216*	....	24VDC	Pushbutton	Base	4	20.00	17.00	16.00	15.00	14.00
57F1873	CE47BP402	....	120AC/60	Pushbutton	Panel	4	22.00	18.70	17.60	16.50	15.40
57F1874	CE47BP4116	....	24VDC	Pushbutton	Panel	4	20.50	17.42	16.40	15.37	14.35
57F1875	CE47BP4216*	....	24VDC	Pushbutton	Panel	4	20.50	17.42	16.40	15.37	14.35
57F1876	CE47BE402	....	120AC/60	Electric	Panel	4	41.00	34.85	32.80	30.75	28.70
57F1877	CE47BE4116	....	24VDC	Electric	Panel	4	39.50	33.57	31.60	29.62	27.65
57F1878	CE47BE4216*	....	24VDC	Electric	Panel	4	39.50	33.57	31.60	29.62	27.65
57F1879	CE59AP302	....	120AC/60	Pushbutton	Base	3	18.70	15.89	14.96	14.02	13.09
57F1880	CE59AP3016	....	24VDC	Pushbutton	Base	3	18.70	15.89	14.96	14.02	13.09
57F1881	CE59BP302	....	120AC/60	Pushbutton	Panel	3	19.50	16.58	15.60	14.63	13.65
57F1882	CE59BP3016	....	24VDC	Pushbutton	Panel	3	19.50	16.58	15.60	14.63	13.65
57F1883	CE59AP402	....	120AC/60	Pushbutton	Base	4	18.90	16.06	15.12	14.17	13.23
57F1884	CE59AP4016	....	24VDC	Pushbutton	Base	4	18.90	16.06	15.12	14.17	13.23
57F1885	CE59BP402	....	120AC/60	Pushbutton	Panel	4	19.70	16.74	15.76	14.77	13.79
57F1886	CE59BP4016	....	24VDC	Pushbutton	Panel	4	19.70	16.74	15.76	14.77	13.79
57F1887	CE61AP602	....	120AC/60	Pushbutton	Base	6	25.50	21.67	20.40	18.12	17.85
57F1888	CE61BP602	....	120AC/60	Pushbutton	Panel	6	28.50	22.52	21.20	19.87	18.55

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● NEW SERIES CE62 4-DIGIT PREDETERMINED ELECTRIC COUNTER

900 cpm. Interlock mechanism. Predetermined output is held until reset is finished. 20 million count life. Switch rate: 5 amp at 125 VAC. Panel mount. 120AC/60. Pushbutton reset: 2.91x2.74x 3.78. Electric reset: 2.91x6.1x3.78". 2½ lbs.

Stk. No.	Type	Reset	1-9	10-24	25-49	50-99	100-249
57F1889	CE62BP402	Pushbutton	57.70	49.04	46.16	43.27	40.39
57F1890	CE62BE402	Electric	73.00	62.05	58.40	54.75	51.10

● NEW SERIES CM4 MECHANICAL HAND TALLY

A four-digit hand tally reset counter which features small size (1¾" diameter), and a chrome finish. Counter fits comfortably into the palm of hand. 3 oz.

Stock No.	Type	Description	Reset	1-9	10-24	25-49	50-99	100-249
57F1891	CM4CS454	Hand held	Knob	3.25	2.76	2.60	2.44	2.27

● NEW CM26 MECHANICAL REVOLUTION COUNTER

4-digit counter with pushbutton reset and rust resistant steel frame. 10 counts per shaft revolution, 3000 CPM. Count life—100 million. 2.20 x 1.30 x 1.77". Shipping weight: 4 oz.

Stk. No.	Type	Digits	Reset	Shaft Ext.	Shaft Rotation*	1-9	10-24	25-49	50-99	100-249
57F1892	CM26AP114	4	Pushbut.	Right	Going	8.00	6.80	6.40	6.00	5.60

● NEW CM33 MECHANICAL STROKE COUNTER

Extremely compact, occupies only 1.5 sq. in. Directly interchangeable with VR series 1122. Knob reset. 2.5 length x 1.44 height x 1.30 depth. Weight: 4 oz.

Stk. No.	Type	Digits	Reset	Shaft Ext.	Shaft Rotation*	1-9	10-24	25-49	50-99	100-249
57F1893	CM33AS501C	5	Knob	Right	Coming	7.25	6.16	5.80	5.44	5.07
57F1894	CM33AS502C	5	Knob	Left	Coming	7.25	6.16	5.80	5.44	5.07
57F1895	CM33BS501C	5	Knob	Right	Going	7.25	6.16	5.80	5.44	5.07
57F1896	CM33BS502C	5	Knob	Left	Going	7.25	6.16	5.80	5.44	5.07

*Top Going—clockwise facing shaft.
Top Coming—counterclockwise facing shaft.

SERIES CM52 SERIES MECHANICAL STROKE REVOLUTION COUNTERS

Series CM52 stroke counter. 200 million count life, 500 cpm. conservative rating. Large white figures ¼" high on black background. Tamperproof reset. Registers one count for each stroke of operating arm. Unbreakable window. 1 lb. 9 oz.

Five Digit Top Coming Knob Reset

Stk. No.	Type	Shaft Ext.	1-9	10-24	25-49	50-99	100-249
57F1817	CM52AS501A	Right	17.00	14.45	13.60	12.75	11.90
57F1818	CM52AS502A	Left	17.00	14.45	13.60	12.75	11.90
57F1857	CM52AK502A*	Right	22.00	18.70	17.60	16.50	15.40
57F1858	CM52AK501A*	Left	22.00	18.70	17.60	16.50	15.40
Five Digit Top Going Knob Reset							
57F1819	CM52BS501B	Right	17.00	14.45	13.60	12.75	11.90
57F1820	CM52BS502B	Left	17.00	14.45	13.60	12.75	11.90

SERIES ES4, ES5 ACTUATORS

Series ES4. small, sensitive actuators. 300 cpm. Arm motion: reciprocal 24° minimum, 59° maximum; overthrow 10 to 45°. Operating torque: field adjustable from ½ oz. to ¾ oz. at end of spring steel arm. Switching: SPST. Electrical rating: noninductive. Generally used where only lightweight objects are available to operate actuator. 3 oz.

Series ES5 heavy duty actuator. 300 cpm. Arm motion: reciprocal 31° minimum, 63° maximum by internal mechanical limit stops. Minimum operating torque: 3 inch-ounces. Switch is operated by steel arm equipped with spring return. 5 oz.

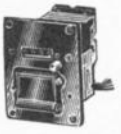
ES1B LINEAL MEASURING ROTARY ACTUATOR SWITCH

For measuring lengths of paper, fabric, lumber, rope and wire-and-rotary switching to open and close a circuit with each shaft revolution—this heavy duty switch has an expected count or contact life of 100,000,000. Available as an actuator switch with mounting bracket only. Can be used to actuate any electric counter, cut-off device solenoid or other electrical equipment. Rated maximum speed: 1,000 RPM. 2 lbs. 1 oz.

SMALL, SENSITIVE ACTUATORS

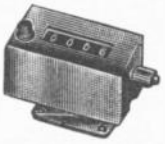
Stk. No.	Type	Description	1-9	10-24	25-49	50-99	100-249
57F1835	ES-41	Straight Spring Steel Arm, 2¾" Long	8.40	7.14	6.72	6.30	5.88
57F1836	ES-43	Straight Spring Steel Arm, 6¼" Long	8.40	7.14	6.72	6.30	5.88
57F1837	ES-5	Actuating Switch	12.50	10.63	10.00	9.38	8.75
57F1838	ES4B1	Normally closed 2¾" Spring Steel Arm	8.40	7.14	6.72	6.30	5.88
57F1861	ES1B	Lineal Act. Switch	20.00	17.00	16.00	15.00	14.00

CE62



CM4

CM26



CM33

CM52

ES4

ES5

ES1B

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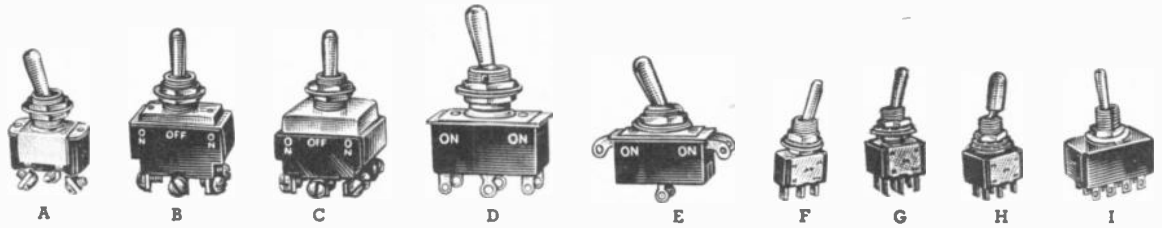
- **Quantity prices competitive with the manufacturer**

J-B-T Toggles and Sub-Miniature Switches



HEAVY DUTY — MIL, AN, AND JAN TYPES

Heavy duty switches with coin silver contacts and rocker arms. Nominal ratings: 20 amps at 125 VAC. All MS switches contain a silicone rubber bushing seal to meet sand, dust, and 15' head of water submersion tests. Size: single hole bushing $15/32$"L x $15/32$"H. Toggle $1 1/16$" long. All MIL-S 3905B series have solderable $6/32$" screw terminals; ST 40's and ST 50's have screw terminals;

MIL-S-3950C SINGLE AND D.P.. H.D. WITH LEVER SEAL FIG. A & B

Stck. No.	Type	Action	Termi-nals	Each	2-9	10-29	30-99	100-249
22F100	MS35058-22	SPST On-X-Off	2	2.26	1.76	1.32	1.08	.88
22F101	MS35058-24	SPST On-Off-X	2	2.33	1.63	1.37	1.12	.92
22F102	MS35058-25	SPST On-Off*-X	2	2.59	2.09	1.57	1.28	1.04
22F103	MS35058-28	SPST X-Off-On*	2	2.60	2.10	1.57	1.28	1.05
22F104	MS35058-29	SPST On-X-Off*	2	2.51	2.01	1.51	1.23	1.00
22F105	MS35058-30	SPST Off-X-On*	2	2.51	2.01	1.51	1.23	1.00
22F106	MS35058-21	SPDT On-Off-On	3	2.59	2.09	1.57	1.28	1.04
22F107	MS35058-23	SPDT On-X-On	3	2.59	2.09	1.57	1.28	1.04
22F108	MS35058-26	SPDT On-X-On*	3	2.75	2.25	1.69	1.38	1.12
22F109	MS35058-27	SPDT On*-Off-On*	3	2.75	2.25	1.69	1.38	1.12
22F110	MS35058-31	SPDT On-Off-On	3	2.80	2.30	1.72	1.41	1.15
22F111	MS35059-22	DPST On-X-Off	4	2.48	1.98	1.81	1.44	1.16
22F112	MS35059-24	DPST On-Off-X	4	2.48	1.98	1.81	1.44	1.16
22F113	MS35059-25	DPST On-Off*-X	4	3.12	2.62	2.39	1.90	1.53
22F114	MS35059-28	DPST X-On-Off*	4	2.95	2.45	2.24	1.78	1.44
22F115	MS35059-29	DPST On-X-Off*	4	2.95	2.45	2.24	1.78	1.44
22F116	MS35059-30	DPST Off-X-On*	4	2.80	2.30	2.10	1.67	1.35
22F117	MS35059-21	DPDT On-Off-On	6	2.80	2.30	2.10	1.67	1.35
22F118	MS35059-23	DPDT On-X-On	6	2.80	2.30	2.10	1.67	1.35
22F119	MS35059-26	DPDT On-X-On*	6	3.12	2.62	2.39	1.90	1.53
22F120	MS35059-27	DPDT On*-Off-On*	6	3.12	2.62	2.39	1.90	1.53
22F121	MS35059-31	DPDT On-Off-On*	....	3.12	2.62	2.39	1.90	1.53

MIL-S-3905C 4 POLE SERIES FIG. C

22F122	MS25068-24	4PST On-Off-X	8	5.50	4.50	3.54	2.98	2.47
22F123	MS25068-25	4PST On-off*-X	8	6.30	5.30	4.18	3.51	2.92
22F124	MS25068-28	4PST X-Off-On*	8	6.30	5.30	4.18	3.51	2.92
22F125	MS25068-21	4PDT On-off-On	12	6.22	5.22	4.11	3.46	2.87
22F126	MS25068-23	4PDT On-X-On	12	6.30	5.30	4.18	3.51	2.92
22F127	MS25068-26	4PDT On-X-On*	12	6.63	5.63	4.44	3.73	3.10
22F128	MS25068-27	4PDT On*-Off-On*	12	6.63	5.63	4.44	3.73	3.10
22F129	MS25068-31	4PDT On-off-on*	12	6.63	5.63	4.44	3.73	3.10

JAN-S-23 HEAVY DUTY SWITCHES FIG. A & B

22F498	ST 40A	SPST On-X-Off	2	1.94	1.44	1.08	.93	.75
22F499	ST 40B	SPST On-X-Off*	2	2.11	1.61	1.21	1.04	.83
22F500	ST 40C	SPST Off-X-On*	2	2.11	1.61	1.21	1.04	.83
22F501	ST 40D	SPDT On-X-On	3	2.23	1.73	1.30	1.11	.90
22F502	ST 40E	SPDT On-Off-On	3	2.23	1.73	1.30	1.11	.90
22F503	ST 40F	SPDT On-X-On*	3	2.40	1.90	1.43	1.23	.99
22F504	ST 40G	SPDT On*-Off-On*	3	2.40	1.90	1.43	1.23	.99
22F505	ST 40H	SPDT On-Off-On*	3	2.40	1.90	1.43	1.23	.99
22F506	ST 42A	SPST On-X-Off	2	1.85	1.35	1.01	.81	.66
22F507	ST 42B	SPST On-X-Off*	2	2.00	1.50	1.13	.90	.73
22F508	ST 42C	SPST Off-X-On*	2	2.00	1.50	1.13	.90	.73
22F509	ST 42D	SPDT On-X-On	3	2.10	1.60	1.20	.96	.78
22F510	ST 42E	SPDT On-Off-On	3	2.10	1.60	1.20	.96	.78
22F511	ST 42F	SPDT On-X-On*	3	2.29	1.79	1.34	1.08	.87
22F512	ST 42G	SPDT On*-Off-On*	3	2.29	1.79	1.34	1.08	.87
22F513	ST 42H	SPDT On-Off-On*	3	2.29	1.79	1.34	1.08	.87
22F514	ST 50K	DPST On-X-Off	4	2.32	1.82	1.36	1.14	.91
22F515	ST 50L	DPST On-X-Off*	4	2.63	2.13	1.60	1.33	1.06
22F516	ST 50M	DPST Off-X-On*	4	2.63	2.13	1.50	1.33	1.06
22F517	ST 50N	DPDT On-X-On	6	2.63	2.13	1.60	1.33	1.06
22F518	ST 50P	DPDT On-Off-On	6	2.63	2.13	1.60	1.33	1.06
22F519	ST 50R	DPDT On-X-On*	6	2.92	2.42	1.82	1.52	1.21
22F520	ST 50S	DPDT On*-Off-On*	6	2.92	2.42	1.82	1.52	1.21
22F521	ST 50T	DPDT On-Off-On*	6	2.92	2.42	1.82	1.52	1.21
22F522	ST 52K	DPST On-X-Off	4	2.16	1.66	1.24	1.04	.63
22F523	ST 52L	DPST On-X-Off*	4	2.35	1.85	1.39	1.16	.92
22F524	ST 52M	DPST Off-X-On*	4	2.35	1.85	1.39	1.16	.92
22F525	ST 52N	DPDT On-X-On	6	2.35	1.85	1.39	1.16	.92
22F526	ST 52P	DPDT On-Off-On	6	2.35	1.85	1.39	1.16	.92
22F527	ST 52R	DPDT On-X-On*	6	2.65	2.15	1.61	1.35	1.08
22F528	ST 52S	DPDT On*-Off-On*	6	2.65	2.15	1.61	1.35	1.08
22F529	ST 52T	DPDT On-Off-On*	....	2.65	2.15	1.61	1.35	1.08

*=Momentary; X=No Position

SNAP ACTION TOGGLE SWITCHES

General purpose switches. Nominally 6 amps @ 125 amps @ 250 VAC. Self-wiping, silver plated, double gr tacts. For use with instruments, data processing, an munication circuits. $1 1/16$" lever. Bushing $15/32$"L x $15/32$"D. including terminals, $1 1/4$"L x $1 1/16$"W x $20/32$"D. U.L. appro

MIL-S-3950C MEDIUM DUTY WITH LEVER SEAL FIG. D

Stk. No.	Type MS-	Action	Each	2-9	10-29	30-99	100-249
		SPST — 2 Term.					
22F977	25098-22	On-X-Off	1.98	1.48	1.18	1.11	1.03
22F978	25098-29	On-X-Off*	2.40	1.90	1.52	1.43	1.33
22F979	25098-30	Off-X-On*	2.40	1.90	1.52	1.43	1.33
		DPST — 4 Term.					
22F980	25098-23	On-x-On	2.19	1.69	1.35	1.27	1.18
		SPDT — 3 Term.					
22F981	25100-22	On-X-Off	2.62	2.12	1.69	1.59	1.48
22F982	25100-29	On-X-Off*	2.97	2.47	1.97	1.85	1.73
22F983	25100-30	Off-X-On*	2.97	2.47	1.97	1.85	1.73
		DPDT — 6 Term.					
22F984	25100-23	On-X-On	2.80	2.30	1.84	1.72	1.61

JAN-S-23 MEDIUM DUTY FIG. E

		SPST — 2 Term.					
22F880	ST12A	On-X-Off	1.48	.98	.78	.73	.68
22F881	ST12B	On-X-Off*	1.61	1.11	.89	.63	.78
22F882	ST12C	Off-X-On*	1.61	1.11	.89	.63	.78
22F883	ST13A +	On-X-Off	1.48	.98	.78	.73	.68
22F884	ST16A #	On-X-Off	1.48	.98	.78	.73	.68
22F885	ST16B #	On-X-Off*	1.61	1.11	.89	.83	.78
22F886	ST16C #	Off-X-On*	1.61	1.11	.89	.63	.78
22F887	ST17A +#	On-X-Off	1.48	.98	.78	.73	.68
		SPDT — 3 Term.					
22F888	ST12D	On-X-On	1.61	1.11	.89	.83	.78
22F889	ST13D +	On-X-On	1.61	1.11	.89	.83	.78
22F890	ST16C #	On-X-On	1.61	1.11	.89	.83	.78
22F891	ST17D #	On-X-On	1.61	1.11	.89	.83	.78
		DPST — 4 Term.					
22F892	ST22K	On-X-Off	1.84	1.34	1.08	1.01	.95
22F893	ST22L	On-X-Off*	1.98	1.48	1.19	1.11	1.04
22F894	ST22M	Off-X-On*	1.98	1.48	1.19	1.11	1.04
22F895	ST23K +	On-X-Off	1.84	1.34	1.08	1.01	.95
22F896	ST26K #	On-X-Off	1.84	1.34	1.08	1.01	.95
22F897	ST26L #	On-X-Off*	1.98	1.48	1.19	1.11	1.04
22F898	ST26M #	Off-X-On*	1.98	1.48	1.19	1.11	1.04
22F899	ST27K +#	On-X-Off	1.84	1.34	1.08	1.01	.95
		DPDT — 6 Term.					
22F900	ST22N	On-X-On	1.98	1.48	1.19	1.11	1.04
22F901	ST23N +	On-X-On	1.98	1.48	1.19	1.11	1.04
22F902	ST26N #	On-X-On	1.98	1.48	1.19	1.11	1.04
22F903	ST27N +#	On-X-On	1.98	1.48	1.19	1.11	1.04

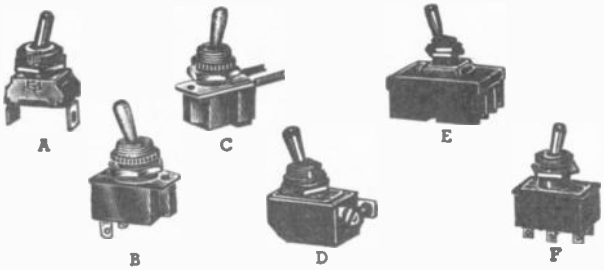
X-No Position; *-Momentary Position; + Bushing $1/4$" hi
Side Connected

SUB-MINIATURE — JMT SERIES

Designed for manually controlled, low current, solid st vices, and miniaturized circuitry. Single hole mtg. $1/4$" th bushing. Nominal rating: 5 amp @ 125 VAC; 24 VDC. Coi contacts. Mtg. hdwe: 1 lock ring; 2 hex nuts; 1 interna washer.

		SPDT — 3 Term.					
22F862	JMT-121	On-Off-On	2.45	1.95	1.43	1.30	1.20
22F863	JMT-123	On-X-On	2.15	1.65	1.21	1.10	1.01
22F864	JMT-126	On-X-On*	2.45	1.95	1.43	1.30	1.20
22F865	JMT-127	On*-Off-On*	2.60	2.10	1.54	1.40	1.29
22F866	JMT-131	On-Off-On*	2.60	2.10	1.54	1.40	1.29
22F867	JMT-134	X-On-On*	2.45	1.95	1.43	1.30	1.20
		DPDT — 6 Term.					
22F868	JMT-221	On-Off-On	3.05	2.55	1.87	1.70	1.56
22F869	JMT-223	On-X-On	2.65	2.15	1.58	1.43	1.32
22F870	JMT-226	On-X-On*	3.05	2.55	1.87	1.70	1.56
22F871	JMT-227	On*-Off-On*	3.20	2.70	1.98	1.80	1.66
22F872	JMT-231	On-Off-On*	3.20	2.70	1.98	1.80	1.68
22F873	JMT-232	On-On-On	3.35	2.85	2.09	1.90	1.75
22F874	JMT-233	On-On-On*	3.65	3.15	2.31	2.10	1.93
22F875	JMT-234	X-On-On*	3.05	2.55	1.87	1.70	1.56
		3PDT — 9 Term.					
22F876	JMT-321	On-Off-On	4.75	4.35	3.12	2.84	2.61
22F877	JMT-323	On-X-On	4.35	3.85	2.82	2.57	2.36
		4PDT — 12 Term.					
22F878	JMT-421	On-Off-On	5.95	5.45	4.00	3.64	3.34
22F879	JMT-423	On-X-On	5.35	4.85	3.56	3.24	2.98

* Momentary position; X No Position



SNAP-ACTION TOGGLE SWITCHES

General purpose light and heavy duty AC switches for AC power appliances. Employ snap-action rocker type contact mechanism. Switches have phenolic-metallic housing. All one hole mount type Bushing 15/32" Dia., 15/32" L. * 11/32" Long Bushing. U/L Approved.

6 AMP 125 V. 3 AMP 250 V AC

Stock No.	Type	Fig.	Act.	Term.	Key	1-24	25-49	50-99	100-499	500-up
23F341	7580K4	J	SPST	Screw	A	.63	.58	.49	.437	.388
23F342	7580K6	J	SPST	Lugs	A	.55	.50	.42	.378	.336
23F371	7580K9*	J	SPST	Spd.	A	.55	.50	.42	.378	.336
23F343	7581K4	K	SPDT	Screw	B	.72	.67	.56	.500	.444
23F344	7581K6	K	SPDT	Lugs	B	.59	.54	.45	.405	.360
23F372	7581K9*	K	SPDT	Spd.	B	.59	.54	.45	.405	.360
23F345	7582K4	K	SPDT	Screw	C	.72	.67	.56	.500	.444
23F346	7582K6	K	SPDT	Lugs	C	.59	.54	.45	.405	.360
23F347	7590K4	L	DPST	Screw	A	.97	.89	.75	.671	.596
23F348	7590K6	L	DPST	Lugs	A	.79	.73	.61	.545	.484
23F349	7591K4	M	DPDT	Screw	B	1.14	1.06	.88	.792	.704
23F356	7591K6	M	DPDT	Lugs	B	.88	.81	.68	.608	.540
23F374	7591K7*	M	DPDT	Lugs	B	.88	.81	.68	.608	.540
23F357	7592K4	M	DPDT	Screw	C	1.14	1.06	.88	.792	.704
23F358	7592K6	M	DPDT	Lugs	C	.88	.81	.68	.608	.540
23F376	7592K8	M	DPDT	Spd.	C	.88	.81	.68	.608	.540

HEAVY DUTY AC SWITCHES 15 AMP 125 V, 10 AMP 250 V

Stock No.	Type	Fig.	Act.	Term	Key	1-24	25-49	50-99	100-499	500-up
23F377	7500K13*	J	SPST	Screw	A	.72	.67	.56	.500	.444
23F247	7500K14	J	SPST	Screw	A	.72	.67	.56	.500	.444
23F369	7501K12*	J	SPST	Lugs	A	.63	.58	.49	.437	.388
23F230	7501K13	J	SPST	Lugs	A	.63	.58	.49	.437	.388
23F231	7503K13	K	SPDT	Lugs	B	.72	.67	.56	.500	.444
23F380	7504K4	J	SPDT	Screw	C	.85	.79	.66	.590	.524
23F232	7505K4	K	SPDT	Lugs	C	.72	.67	.56	.500	.444
23F383	7502K12*	J	SPDT	Screw	B	.85	.79	.66	.590	.524
23F265	7502K13	E	SPDT	Screw	B	.85	.79	.66	.590	.524
23F267	7560K5	L	DPST	Screw	A	1.14	1.06	.88	.792	.704
23F235	7561K4	L	DPST	Lugs	A	.97	.89	.75	.671	.596
23F268	7561K5	L	DPST	Lugs	A	.97	.89	.75	.671	.596
23F381	7561K6	L	DPST	Spd.	A	.97	.89	.75	.671	.596
23F246	7562K4	M	DPDT	Screw	B	1.41	1.30	1.09	.977	.868
23F266	7564K6	M	DPDT	Screw	C	1.41	1.30	1.09	.977	.868
23F236	7565K5	M	DPDT	Lugs	C	1.14	1.06	.88	.792	.704
23F382	7565K7	M	DPDT	Spd.	C	1.14	1.06	.88	.792	.704
23F237	7563K4	M	DPDT	Lugs	B	1.14	1.06	.88	.792	.704
23F271	7610K2	E	3PST	Screw	A	2.31	2.13	1.78	1.598	1.420
23F240	7611K2	E	3PST	Lugs	A	1.98	1.82	1.52	1.368	1.216
23F241	7613K2	E	3PDT	Lugs	B	2.44	2.55	1.88	1.688	1.500
23F243	7615K2	E	3PDT	Lugs	C	2.44	2.55	1.88	1.688	1.500
23F276	7615K4	E	3PDT	Spd.	C	2.44	2.55	1.88	1.688	1.500
23F256	7612K2	E	3PDT	Screw	B	2.93	2.70	2.25	2.025	1.800
23F257	7614K2	E	3PDT	Screw	C	2.93	2.70	2.25	2.025	1.800

10 AMP 250 V

Stock No.	Type	Fig.	Act.	Term	Key	1-24	25-49	50-99	100-499	500-up
23F242	7691K14	E	4PST	Lugs	A	2.99	2.76	2.30	2.070	1.840
23F384	7693K2	E	4PDT	Lugs	B	3.65	3.37	2.81	2.525	2.244

10 AMP AT 250 VAC ONLY. MOMENTARY CONTACT

Stock No.	Type	Fig.	Act.	Term	Key	1-24	25-49	50-99	100-499	500-up
23F233	7506K3	J	SPST	Lugs	K	.82	.76	.63	.567	.504
23F234	7510K6	K	SPDT	Lugs	G	.93	.86	.92	.644	.572
23F239	7566K4	L	DPST	Lugs	K	1.31	1.21	1.01	.909	.808
23F368	7566K5	L	DPST	Screw	K	1.49	1.37	1.15	1.031	.916
23F238	7570K4	M	DPDT	Lugs	G	1.49	1.37	1.15	1.031	.916

ON-OFF PLATE

23F248. Model 827-228F3. On-Off Plate. For Toggle, General Purpose, and Aircraft switches. Shpg. wt., 5 oz per 100.

1-49 Ea. ..... .04 50-99 Ea. ..... .03
100-499 Ea. ..... .027 500-up Ea. ..... .024

LEVER CONTROL CHART
(*) Momentary Contact

Key	Up	Center	Down	Key	Up	Center	Down
A	On	None	Off	H	On	Off	None
B	On	Off	On	I	On	Off	None
C	On	None	On	J	On	None	Off*
D	On	Off	None	K	Off	None	On*
E	On*	Off	On*	L	Off	None	On
F	On*	Off	On*	M	On	On	None
G	On	None	On*				

QUICK MAKE-BREAK TOGGLE SWITCHES

Quick make-break toggle, standard duty AC-DC switches. Small one hole mount type for flat surfaces. Designed for small motor loads, radio appliances, and other similar applications. Quick break mechanism provides speedy operation, minimizing harmful pitting of contacts. Mtg. Bushing 15/32" Dia., 15/32" L. except (*) 1/4" L. and (**) 11/32" L. U/L Approved. Shpg. wt., 3 oz.

3 AMP 250 VOLT AC-DC

Stock No.	Type	Fig.	Act.	Term	Key	1-24	25-49	50-99	100-499	500-up
23F219	8280K14*	B	SPST	Lugs	A	.63	.58	.49	.437	.388
23F385	8280K15**	B	SPST	Lugs	A	.63	.58	.49	.437	.388
23F220	8280K16	B	SPST	Lugs	A	.63	.58	.49	.437	.388
23F391	8290K15**	C	SPST	Wire	A	.76	.70	.59	.527	.468
23F335	8290K16	C	SPST	Wire	A	.76	.70	.59	.527	.468
23F336	8295K7**	D	SPST	Screw	A	.76	.70	.59	.527	.468
23F337	8295K8	D	SPST	Screw	A	.76	.70	.59	.527	.468
23F392	8360K6*	F	DPST	Lugs	A	1.14	1.05	.88	.788	.700
23F223	8360K7	F	DPST	Lugs	A	1.14	1.05	.88	.788	.700
23F393	8360K8**	F	DPST	Lugs	A	1.14	1.05	.88	.788	.700
23F394	8363K6*	F	DPDT	Lugs	C	1.31	1.21	1.01	.905	.804
23F224	8363K7	F	DPDT	Lugs	C	1.31	1.21	1.01	.905	.804
23F209	8363K8**	F	DPDT	Lugs	C	1.31	1.21	1.01	.905	.804
23F275	8365K7	G	DPDT	Screw	C	1.72	1.59	1.33	1.193	1.060

3 AMP 125 VOLT. 1 AMP 250 V AC-DC

23F395	8282K13**	F	3 Way	Lugs	C	.79	.73	.61	.549	.488
23F259	8284K14	F	2 Circ.	Lugs	C	.84	.77	.65	.481	.516
23F396	8284K12*	F	2 Circ.	Lugs	C	.84	.77	.65	.481	.516
23F222	8282K14	F	3 Way	Lugs	C	.79	.73	.61	.549	.488

6 AMP 125 V. 3 AMP 250 V AC-DC

23F338	8391K8	C	SPST	Wire	A	.85	.79	.66	.590	.524
23F221	8381K8	B	SPST	Lugs	A	.72	.67	.56	.500	.444
23F397	8396K6*	D	SPST	Screw	A	.85	.79	.66	.590	.524
23F228	8396K8	D	SPST	Screw	A	.85	.79	.66	.590	.524
23F339	8372K7	G	DPST	Screw	A	1.50	1.38	1.15	1.035	.920
23F227	8370K7	F	DPST	Lugs	A	1.22	1.13	.94	.846	.752
23F225	8370K8**	F	DPST	Lugs	A	1.22	1.13	.94	.846	.752
23F226	8373K7	F	DPDT	Lugs	C	1.40	1.30	1.08	.972	.864
23F263	8373K8**	F	DPDT	Lugs	C	1.40	1.30	1.08	.972	.864
23F340	8375K7	G	DPDT	Screw	C	1.81	1.67	1.39	1.251	1.112

3 AMP 125 VAC. .75 AMP DC

23F367	8098K3		A	SPST	Screw		.53	.49	.41	.365	.324

HEAVY DUTY SWITCHES AC-DC 16 AMP 125 V, 8 AMP 250 V

23F252	7321K3	H	SPST	Screw	A	1.27	1.17	.98	.878	.780
23F251	7320K3	H	DPST	Screw	A	1.27	1.17	.98	.878	.780
23F250	7320K2**	H	DPST	Screw	A	1.27	1.17	.98	.878	.780

15 AMP 125 V, 10 AMP 250 V AC-DC

23F270	7360K7**	H	DPST	Screw	A	2.19	2.02	1.69	1.517	1.348
23F245	7361K5	H	SPST	Screw	A	2.19	2.02	1.69	1.517	1.348
23F253	7360K8	H	DPST	Screw	A	2.19	2.02	1.69	1.517	1.348

20 AMP 250 VOLT AC-DC

23F255	7402K4	H	DPST	Screw	A	2.94	2.72	2.27	2.039	1.812

15 AMP 125 V, 10 AMP 250 V AC-DC

23F229	8690K2	H	DPDT	Screw	C	4.59	4.24	3.53	3.177	2.824

Cutler-Hammer Military Switches

AIRCRAFT SWITCHES

ST-42

ST-40

ST-52

ST-50

Meet rigid aircraft requirements. Long life under adverse conditions. Shpg. wt. 2 oz.
NOTE: **Screw lug ‡Solder lug §Flush mtd. ††Unsealed leaver.

JAN MILITARY TYPES

Stock No.	Type	JAN. No.	Switch Action	Key	1-24	25-49	50-99	100-Up
23F283	8801-K13	ST40A	SPST**	A	1.41	1.30	1.09	.868
23F286	8800-K13	ST40E	SPDT**	B	1.70	1.57	1.31	1.044
23F291	8812-K13	ST40G	SPDT**	F	1.84	1.70	1.42	1.132
23F200	8803-K10	ST42A	SPST‡	A	1.33	1.23	1.03	.820
23F277	††8803-K6	ST42A	SPST‡	A	1.27	1.17	.98	.78
23F207	8819-K9	ST42B	SPST-NC‡	J	1.48	1.36	1.14	.908
23F205	6817-K9	ST42C	SPST-NO‡	K	1.48	1.36	1.14	.908
23F323	††8816-K5	ST42D	SPDT‡	C	1.24	1.14	.95	.760
23F201	8816-K9	ST42D	SPDT‡	C	1.53	1.46	1.22	.972
23F324	††8802-K6	ST42E	SPDT‡	B	1.30	1.20	1.00	.80
23F202	8802-K10	ST42E	SPDT‡	B	1.53	1.46	1.22	.972
23F203	8805-K9	ST42F	SPDT‡	G	1.72	1.59	1.33	1.060
23F204	8818-K9	ST42G	SPDT‡	F	1.72	1.59	1.33	1.060
23F208	8815-K10	ST42H	SPDT‡	E	1.72	1.59	1.33	1.060
23F218	§8201-K6	ST45A	SPST**	A	1.64	1.52	1.27	1.012
23F292	8822-K8	ST50K	DPST**	A	1.89	1.74	1.45	1.160
23F294	††8826-K5	ST50M	DPST-NO**	K	2.33	2.15	1.80	1.436
23F295	8824-K8	ST50N	DPDT**	C	2.27	2.09	1.75	1.396
23F296	8820-K10	ST50P	DPDT**	B	2.27	2.09	1.75	1.396
23F297	8830-K5	ST50R	DPDT**	G	2.54	2.34	1.95	1.56
23F298	8834-K4	ST50S	DPDT**	F	2.54	2.34	1.95	1.56
23F299	8832-K4	ST50T	DPDT**	E	2.54	2.34	1.95	1.56
23F326	8823-K5	ST52K	DPST‡	D	1.32	1.22	1.02	.812
23F210	8823-K6	ST52K	DPST‡	D	1.73	1.60	1.33	1.064
23F215	††8827-K5	ST52M	DPST-NO‡	H	1.76	1.62	1.35	1.08
23F273	††8825-K5	ST52N	DPDT‡	C	1.48	1.36	1.14	.908
23F211	8825-K6	ST52N	DPDT‡	C	2.03	1.87	1.56	1.248
23F325	††8821-K5	ST52P	DPDT‡	B	1.48	1.36	1.14	.908
23F212	8821-K6	ST52P	DPDT‡	B	2.03	1.87	1.56	1.248
23F216	††8831-K5	ST52R	DPDT‡	M	1.89	1.74	1.45	1.16
23F217	††8835-K3	ST52S	DPDT‡	F	1.89	1.74	1.45	1.16
23F213	††8833-K3	ST52T	DPDT‡	E	1.89	1.74	1.45	1.16
23F272	§8700-K14	ST52P	DPDT**	B	4.62	4.26	3.55	2.84

POSITIVE ACTION MINIATURE SWITCHES

Positive wiping action with gold plated contacts. Rated 4 @ 28 volts DC, 1 A @ 50 volts DC, 3 A @ 115 volts AC. Min. 30 μa @ 50 mu *Mom contact. Small lever, $^{9}/_{16}$ x $^{3}/_{4}$ x $1^{11}/_{32}$—$^{35}/_{64}$. Large lever $^{9}/_{16}$ x $^{43}/_{64}$ x $1^{11}/_{32}$—$^{35}/_{64}$. Shpg. wt. 2 oz.

SMALL LEVER

Stock No.	Type	MS No.	Action	Key	1-24	25-49	50-99	100-Up
23F327	8866K1	24655-211	SPDT	B	5.04	4.65	3.88	3.10
23F328	8866K2	24655-271	SPDT*	F	5.69	5.25	4.38	3.50
23F447	8866K3	24655-311	SPDT*	E	5.69	5.25	4.38	3.50
23F329	8866K4	24655-231	SPDT	C	5.04	4.65	3.88	3.10
23F448	8866K5	24655-241	SPST	L	5.69	5.25	4.38	3.50
23F449	8866K6	24655-281	SPST*	H	5.69	5.25	4.38	3.50
23F330	8866K7	24655-221	SPST	A	5.04	4.65	3.88	3.10
23F494	8866K8	.....	SPDT	M	5.69	5.25	4.38	3.50
23F331	8867K1	24656-211	DPDT	B	6.31	5.82	4.85	3.88
23F332	8867K2	24656-271	DPDT	F	7.35	6.78	5.65	4.52
23F495	8867K3	24656-311	DPDT	E	7.35	6.78	5.65	4.52
23F333	8867K4	24656-231	DPDT	C	6.31	5.82	4.85	3.88
23F499	8867K5	24656-241	DPST	L	7.35	6.78	5.65	4.52
23F497	8867K6	24656-281	DPST	H	7.35	6.78	5.65	4.52
23F334	8867K7	24656-221	DPST	A	6.31	5.82	4.85	3.88
23F498	8867K8	.....	DPST	M	7.35	6.78	5.65	4.52

LARGE LEVER

Stock No.	Type	Action	Key	1-24	25-49	50-99	100-Up
23F781	8868K1	SPDT	B	5.14	4.74	3.95	3.16
23F782	8868K2	SPDT*	F	5.79	5.34	4.45	3.56
23F783	8868K3	SPDT*	G	5.79	5.34	4.45	3.56
23F784	8868K4	SPDT	C	5.14	4.74	3.95	3.16
23F785	8868K5	SPST	L	5.79	5.34	4.45	3.56
23F786	8868K6	SPST*	H	5.79	5.34	4.45	3.56
23F274	8868K7	SPST	A	5.14	4.74	3.95	3.16
23F787	8868K8	SPDT*	M	5.79	5.34	4.45	3.56
23F788	8869K1	DPDT	B	6.40	5.91	4.93	3.94
23F789	8869K2	DPDT*	F	7.44	6.87	5.73	4.58
23F790	8869K3	DPDT*	E	7.44	6.87	5.73	4.58
23F791	8869K4	DPDT	C	6.40	5.91	4.93	3.94
23F792	8869K5	DPST	L	7.44	6.87	5.73	4.58
23F793	8869K6	DPST*	A	7.44	6.87	5.73	4.58
23F794	8869K7	DPST	H	6.40	5.91	4.93	3.94
23F795	8869K8	DPDT*	M	7.44	6.87	5.73	4.58

POSITIVE ACTION ENVIRONMENT SEALED SWITCHES

Momentary contact. Metal parts visible when switch is mounted are dull nickel plated. "On-Off" circuit designation stamped on side of switch. All are furnished as environment sealed. Screw terminals located at rear. One hole mounting, bushing length, $^{15}/_{32}$". Rated 20A @ 28VDC, 10A @ 115 VAC. Aver. Shpg. Wt., 3 oz.

SPST

Stock No.	Type	Gov't Ms No.	Key	1-24	25-49	50-99	100-Up
23F655	8836-K6	25306-242	D	6.50	6.00	5.00	4.00
23F658	8836-K9	25306-222	A	6.24	5.76	4.80	3.84
23F660	8836-K11	25306-302	K	7.02	6.48	5.40	4.32
23F300	8801-K22	35058-22	A	1.41	1.30	1.09	.868
23F301	8801-K23	35058-24	D	1.41	1.30	1.09	.868
23F305	8811-K17	35058-30	K	1.55	1.43	1.20	.956

SPDT

Stock No.	Type	Gov't Ms No.	Key	1-24	25-49	50-99	100-Up
23F650	8836-K1	25306-212	B	6.66	6.15	5.13	4.10
23F652	8836-K3	25306-312	F	7.18	6.63	5.53	4.42
23F653	8836-K4	25306-232	C	6.66	6.15	5.13	4.10
23F654	8836-K5	25306-262	G	7.48	6.90	5.75	4.60
23F306	8810-K15	35058-23	C	1.70	1.57	1.31	1.044
23F307	8800-K16	35058-21	B	1.70	1.57	1.31	1.044
23F308	8804-K13	35058-26	G	1.84	1.70	1.42	1.132
23F309	8812-K14	35058-27	F	1.84	1.70	1.42	1.132
23F310	8809-K16	35058-31	E	1.84	1.70	1.42	1.132

DPST

Stock No.	Type	Gov't Ms No.	Key	1-24	25-49	50-99	100-Up
23F666	8837-K6	25307-242	D	9.82	9.06	7.55	6.04
23F667	8837-K7	25307-282	H	10.43	9.63	8.03	6.42
23F669	8837-K9	25307-222	A	9.56	8.82	7.35	5.88
23F311	8822-K20	35059-22	A	1.89	1.74	1.46	1.160
23F312	8822-K21	35059-24	L	1.89	1.74	1.46	1.160

DPDT

Stock No.	Type	Gov't Ms No.	Key	1-24	25-49	50-99	100-Up
23F661	8837-K1	25307-212	B	10.43	9.63	8.03	6.42
23F662	8837-K2	25307-272	E	11.31	10.44	8.70	6.96
23F663	8837-K3	25307-312	F	11.31	10.44	8.70	6.96
23F664	8837-K4	25307-232	C	10.43	9.63	8.03	6.42
23F315	8824-K14	35059-23	C	2.27	2.09	1.75	1.396
23F316	8820-K16	35059-21	B	2.27	2.09	1.75	1.396
23F317	8834-K5	35059-27	F	2.36	2.27	1.89	1.512
23F318	8832-K6	35059-31	E	2.36	2.27	1.89	1.512

4PST

Stock No.	Type	Gov't Ms No.	Key	1-24	25-49	50-99	100-Up
23F677	8838-K6	25308-242	D	22.95	21.18	17.65	14.12
23F678	8838-K7	25308-282	H	24.05	22.20	18.50	14.80
23F680	8838-K9	25308-222	A	22.95	21.18	17.65	14.12
23F269	7661-K6	.....	A	3.82	3.52	2.94	2.348

4PDT

Stock No.	Type	Gov't Ms No.	Key	1-24	25-49	50-99	100-Up
23F672	8838-K1	25308-212	B	24.05	22.20	18.50	14.80
23F674	8838-K3	25308-312	F	25.87	23.88	19.90	15.92
23F675	8838-K4	25308-232	C	24.05	22.20	18.50	14.80
23F676	8838-K5	25308-262	G	25.87	23.88	19.90	15.92
23F319	7664-K5	25068-23	C	5.16	4.76	3.97	3.166
23F264	7663-K5	.....	B	4.69	4.33	3.61	2.888
23F321	7665-K4	.....	C	4.69	4.33	3.61	2.888

PUSHBUTTON SWITCH

Aircraft Type. SPST action. Normally open circuit. Button chrome plated. Bushing $^{15}/_{32}$" — 32 thds., Screw terminal. Size $^{5}/_{8}$"x$1^{15}/_{32}$". *8A Rating — resistive load. †5A Rating — resistive load

Stock No.	Type	30V	125V	1-24	25-49	50-99	100-Up
23F281	8450-K1	4A*	1.5A†	1.82	1.68	1.40	1.12

MIL-S-6807 ROTARY SWITCHES

These switches feature an adjustable index and continuous rotation by omitting the index screws. Rated 5 amps @ 28 volts DC and 115 volts AC All switches are non-shorting and have 8 positions. All have screw terminals, $^{13}/_{32}$" shaft, $^{15}/_{32}$" bushing, hex nuts, locking ring, and washer. Average Shpg Wt., 4 oz.

Stock No.	Type	MS No.	Sec.	Action	1-24	25-49	50-99	100-Up
23F544	7261K13	25002-1	1	SP	5.69	5.25	4.38	3.50
23F545	7262K12	25002-2	2	DP	9.10	8.40	7.00	5.60
23F546	7263K11	25002-3	3	3P	12.03	11.10	9.25	7.40
23F547	7264K9	25002-4	4	4P	14.95	13.80	11.50	9.20
23F548	7265K9	25002-5	5	5P	17.88	16.50	13.95	11.00
23F549	7266K5	25002-6	6	6P	20.80	19.20	16.00	12.80

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

Cutler-Hammer Switches

• NEW DESIGNER SERIES

UL and CSA listed

For the designer who wants to add "snap" to any panel or equipment. For AC-DC service, "tease resistant" quick make—quick break contact in arc resistant phenolic case. 15/32" diam. eter, 1 1/32" long threaded item. Solder lug terminals. UL and CSA listed. Shpg. wt., 2 oz.

SPST (3A @ 250V—6A @ 125V)

Color	Lever C Stk. No.	Lever C Type	Lever D Stk. No.	Lever D Type	Lever H Stk. No.	Lever H Type
White	23F450	8381K21C	23F455	8381K21D	23F460	8381K21H
Red	23F451	8381K22C	23F456	8381K22D	23F461	8381K22H
Grey	23F452	8381K23C	23F457	8381K23D	23F462	8381K23H
Green	23F453	8381K24C	23F458	8381K24D	23F463	8381K24H
Black	23F454	8381K27C	23F459	8381K27D	23F464	8381K27H

1-24 ..... .79 ea. 25-49 ..... .73 ea. 50-99 ..... .61 ea.
100-499 ..... .549 ea. 500-999 ..... .488 ea.

SPDT (1A @ 250OV—3A @ 125V)

White	23F465	8282K21C	23F470	8282K21D	23F475	8282K21H
Red	23F466	8282K22C	23F471	8282K22D	23F476	8282K22H
Grey	23F467	8282K23C	23F472	8282K23D	23F477	8282K23H
Green	23F468	8282K24C	23F473	8282K24D	23F478	8282K24H
Black	23F469	8282K27C	23F474	8282K27D	23F479	8282K27H

1-24 ..... .87 ea. 25-49 ..... .80 ea. 50-99 ..... .67 ea.
100-499 ..... .60 ea. 500-999 ..... .532 ea.

DPST (3A @ 25V—6A @ 125V)

Color	Lever C Stk. No.	Lever C Type	Lever D Stk. No.	Lever D Type	Lever H Stk. No.	Lever H Type
White	23F480	8370K21C	23F485	8370K21D	23F490	8370K21H
Red	23F481	8370K22C	23F486	8370K22D	23F491	8370K22H
Grey	23F482	8370K23C	23F487	8370K23D	23F492	8370K23H
Green	23F483	8370K24C	23F488	8370K24D	23F493	8370K24H
Black	23F484	8370K27C	23F489	8370K27D	23F500	8370K27H

1-24 ..... 1.26 ea. 25-49 ..... 1.16 ea. 50-99 ..... .97 ea.
100-499 ..... .87 ea. 500-999 ..... .776 ea.

DPDT (3A @ 250V—6A @ 125V)

White	23F501	8373K21C	23F506	8373K21D	23F511	8373K21H
Red	23F502	8373K22C	23F507	8373K22D	23F512	8373K22H
Grey	23F503	8373K23C	23F508	8373K23D	23F513	8373K23H
Green	23F504	8373K24C	23F509	8373K24D	23F514	8373K24H
Black	23F505	8373K27C	23F510	8373K27D	23F515	8373K27H

1-24 ..... 1.43 ea. 25-49 ..... 1.32 ea. 50-49 ..... 1.10 ea.
100-499 ..... .99 ea. 500-999 ..... .88 ea.

PUSHBUTTON SWITCHES

Momentary contact (SPST) except (**) DPDT action pushbutton switches. Normally open, circuit closed only when button is held in closed position. Wide use in refrigerators, telephone booths, closets, etc. (*) Normally closed. (†) Push-"On-Off" Switch. ##Push Pull. Wt. 3 oz.

Stock No.	Type	Button Color	Fig.	Current Rating 125 VDC	125 VAC	250 VAC	Pole	Bushing	Term.	1-24	25-49	50-99	100-499	500-Up
23F439	8411K12	Black	A	3/4	3/4	1/4	1	15/32"	Screw	.48	.44	.37	.333	.296
23F260	8411K11	Black	A	3/4	3/4	1/4	1	15/32"	Lug	.43	.39	.33	.297	.264
23F359	8411K13	Red	A	3/4	3/4	1/4	1	1/4"	Lug	.43	.39	.33	.297	.608
23F440	8411K7*	Black	A	3/4	3/4	1/4	1	15/32"	Screw	.36	.33	.28	.248	.264
23F261	8411K8*	Black	A	3/4	3/4	1/4	1	15/32"	Lug	.31	.29	.24	.216	.220
23F262	8440K2	Nickel	B	....	3	1	1	15/32"	Lug	.87	.80	.67	.603	.192
23F441	8440K3	Nickel	B	....	3	1	1	15/32"	Screw	1.01	.93	.78	.698	.536
23F360	8142K4	Nickel	C	....	6	3	1	1 1/32"	Screw	.96	.89	.74	.666	.620
23F442	8443K2	Black	C	....	6	3	1	1 1/32"	Screw	.96	.89	.74	.666	.592
23F443	8444K3	Nickel	C	....	15	10	1	1 1/32"	Screw	1.03	.95	.80	.716	.592
23F361	8444K4	Nickel	C	....	15	10	1	1 1/32"	Screw	1.03	.95	.80	.716	.636
23F362	8448K2	Nickel	D	....	15	10	2	1 1/32"	Screw	1.48	1.37	1.14	1.026	.636
23F444	7190K1	Nickel	E	6	6	3	1	1/2"	Lug	1.16	1.07	.89	.801	.912
23F363	7196K1	Nickel	E	....	6	3	1	1/2"	Screw	1.28	1.18	.99	.887	.712
23F445	7199K1**	Nickel	E	6	6	3	2	1/2"	Screw	2.60	2.40	2.00	1.80	.788
23F364	7208K4†	Nickel	F	....	6	3	1	1 1/16"	Screw	.99	.91	.76	.684	1.60
23F370	7116K2††	Nickel	....	5	5	1	1	1"	Screw	1.40	1.30	1.08	.972	.864

ROCKETTE APPLIANCE SWITCHES

Enhance the appearance of any appliance. Provide safe and correct sequence of circuit. Switches are UL approved. Actuator is made of molded white nylon. Flush mounting with two #6 mounting holes. .250 spade terminals except (*) screw. (**) with off position. Wt., 4 oz.

SPST—KEY A

Stk. No.	Type	Amp @125	@250	1-24	25-49	50-99	100-499	500-Up
23F398	8134K21A1M52	6	3	.62	.57	.48	.427	.380
23F399	8144K21A1M52	15	10	.70	.65	.54	.486	.432
23F365	8144K21A1M52*	15	10	.79	.72	.61	.544	.484

SPLT—KEY B**

23F433	8134-K20A-1M52	6	3	.66	.61	.51	.457	.406
23F434	8144K-20A-1M52	15	10	.79	.73	.61	.547	.484

DPST—KEY A

23F435	8132K-21E-6M52	6	3	.92	.84	.70	.629	.562
23F436	8142K-21E-6M52	15	10	1.10	1.02	.83	.748	.664
23F366	8142K21E6M52*	15	10	1.25	1.16	.96	.864	.806

DPDT—KEY B**

23F437	8132K-20E-6M52	6	3	.99	.92	.77	.69	.612
23F438	8142K-20E-6M52	15	10	1.25	1.16	.96	.864	.836

COMMERCIAL MINIATURE TOGGLE SWITCHES

Single or double throw types. Momentary or maintained action. Rated 5 amps, 125 VAC and 28 VDC. Bushing length: 5/16". Lever extension 3/8". Term. silver solder lugs located at rear. Gold plated terminals and contacts. Has extra large .07" dia. terminal holes to accept three #22 wires.

Stock No.	Type	Action	Key	1-24	25-49	50-99	100-499	500-Up
23F766	7055K20	SPST	A	3.46	3.19	2.66	2.394	2.128
23F767	7050K20	SPDT	B	3.67	3.39	2.83	2.543	2.260
23F768	7051K20	SPDT	F	3.93	3.62	3.02	2.718	2.416
23F769	7052K20	SPDT	E	3.93	3.62	3.02	2.718	2.416
23F770	7053K20	SPDT	C	3.67	3.39	2.83	2.543	2.260
23F771	7054K20	SPDT	M	3.93	3.62	3.02	2.718	2.416
23F772	7065K20	DPST	A	4.28	3.95	3.29	2.961	2.632
23F773	7060K20	DPDT	B	4.70	4.34	3.62	3.254	2.892
23F774	7061K20	DPDT	F	6.08	5.61	4.68	4.218	3.740
23F775	7062K20	DPDT	E	6.08	5.61	4.68	4.218	3.740
23F776	7063K20	DPDT	C	4.70	4.34	3.62	3.254	2.892
23F777	7064K20	DPDT	M	6.08	5.61	4.68	4.218	3.740

NEWARK — Your 1 Point Stock Source

ROTARY SWITCHES

7011K1

8122K4

Ideal for use with fans, air conditioners, and other similar electrical uses. Types 7011K1 and 7012K4 are AC-DC and have screw terminal with a 3/8" stem. Types 8122K4 and 8123K4 are AC only and have solder lug terminals with a 3/8" stem. UL approved. Av. Shpg. wt. 6 oz.

Stock No.	Type	Action	125V	250V	1-24	25-49	50-99	100-499	500-up
23F796	7011K1	2 on, 1 off	5	2	1.34	1.24	1.03	.927	.824
23F797	7012K4	3 on, 1 off	5	2	1.38	1.27	1.06	.954	.848
23F798	8122K4	2 on, 1 off	3	.	.53	.49	.41	.369	.328
23F799	8123K4	3 on, 1 off	3	.	.58	.53	.45	.401	.356

Arrow-Hart & Hegeman Switches

POWER TYPE TOGGLE SWITCH

Standard DPST switches rated 1 HP at 125/250 VAC-DC. Bakelite case. Screw terminals. Slotted sleeves 15/32" dia. 15/32" long, except 80600 is 5/16" long; 80602 is 11/32" long. *Is rated for 1½ H.P. 125-250 v. AC—1½ HP, 250 v. DC. **Indicates Bat Handle. 80600 is standard duty, 80602 heavy-duty, and 80421 extra-heavy duty. With mounting nuts. Shpg. wt., 2 oz.

Stock No.	Mfg. No.	Poles	Rated 125 v.	Rated 250 v.	1-24	25-49	50-99	100-499	500 Up
23F035	80600	DPST	16A	8A	1.26	1.16	.97	.873	.776
23F039	80600-B	DPST	16A	8A	1.26	1.16	.97	.873	.776
23F048**	80600-BJ	DPST	16	8	1.26	1.16	.97	.873	.776
23F041*	80602	DPST	20	10A	2.19	2.02	1.69	1.52	1.348
23F047**	80602-CA	DPST	20	10A	2.19	2.02	1.69	1.52	1.348
23F038	80607-B	SPST	12	6	1.26	1.16	.97	.873	.776
23F040	80618-A	SPDT	12	6	1.26	1.16	.97	.873	.776
23F020	80421	DPST		20	2.94	2.72	2.27	2.04	1.81

2 CIRCUIT MOMENTARY PUSH BUTTON

Leaves 1 circuit "on", other "off". Rated 1 amp at 125 volts AC. Sleeve 15/32" dia., 9/16" long. *Have 7/16" long sleeve and bakelite caps. Shpg. wt., 2 oz.

Stock No.	Mfg. No.	Cap	1-24	25-49	50-99	100-499	500 Up
23F029	3392	Plain	.87	.80	.67	.603	.536
23F030	3392-AR*	Red	1.08	1.00	.83	.747	.664
23F031	3392A*	Black	1.08	1.00	.83	.747	.664
23F044	3392AE	Black	1.08	1.00	.83	.747	.664

PUSH BUTTON SWITCH

Type 80630. For standard duty applications. DPST norm. open. Mom. contacts. 8 amps, 250 volts; 16 amps, 125 volts. 1¾x15/16". Sleeve length 7/16"; 15/32" dia. Screw terminals. Wt., 2 oz.
23F036. 1-24, Ea......1.77 **25-49, Ea.**.....1.65 **50-99, Ea.**.....1.36
100-499, Ea......1.224 **500-up, Ea.**.....1.088

MOMENTARY ACTION TOGGLE SWITCHES

2 position, back connected. Slotted sleeve 15/32" dia. x 15/32" long. SPDT switches rated 1 amp, 250V and 6 amps, 125V AC-DC. Others rated 3 amps, 250V and 6 amps, 125V AC-DC. Solder lugs. 2 oz.

Stock No.	Mfg. No.	Poles	1-24	25-49	50-99	100-499	500 Up
23F002	81045-FB	SPST-NO	1.20	1.10	.92	.828	.736
23F003	81054-H	DPST-NO	1.72	1.58	1.32	1.188	1.056
23F004	81051-G	SPDT	1.30	1.20	1.00	.90	.80
23F005	81057-N	DPDT	1.88	1.73	1.45	1.30	1.156

POSITIVE CENTER-OFF SWITCH

Type 80638D. DPDT. Rated 5 amps, 250V AC-DC, 10 amps, 125V AC or ¾ HP 250 volts. 3/8" long sleeve. ¾" dia. Size: 2x15/16". UL Approved. **Shipping weight, 4 oz.**

Stk. No.	Mfg. No.	Pole	1-24	25-49	50-99	100-499	500 Up
23F060	80638D	DPDT	4.42	4.08	3.40	3.06	2.72

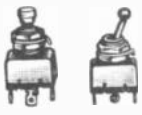
INDICATING DIAL

Type 20590-1. For switches 13/32" shank.
23F045. 1-24, Ea......4c **25-49 Ea.**.....3c **50-99, Ea.**.....2.5c
100-499, Ea......2.25c **500-up, Ea.**.....2c

TOGGLE SWITCHES—SLOW MAKE-BREAK UTILITY SIZE

Switches have molded phenolic base-bat lever and nickel finish. SPST switches rated at 10A 250V AC; 15A 125V AC. ¾ H.P. 120-240 VAC. Screw terminals Sleeve 15/32" Long, 15/32" Dia. Wt., 2 oz. *2 position (on-off). **3 position (on-off-on).

Stk. No.	Mfg.	Poles	1-24	25-49	50-99	150-499	500 Up
23F106*	82600	SPST	.72	.66	.55	.495	.440
23F107**	82602	SPDT	.85	.79	.66	.590	.524
23F108**	82608	DPDT	1.41	1.30	1.09	.977	.868



SUB-MINIATURE SWITCHES

Miniature switches, 20 thousand break cycle (min.) 5-28 hz double amplitude. Shock up to 50 g's. Wt. 3-5 gm max. All toggle, 5 amp. 115 VAC except *push-button, 1 amp, 115 VAC. Sleeve ¼x¼"L.

Stk. No.	Mfg.	Position	Contacts	1-24	25-99	100-499	500-999
59F520	PM-7	mom-N.O.*	3PST	3.31	2.65	2.48	2.32
59F521	TC-3	on-off-on	SPDT	3.00	2.40	2.25	2.10
59F522	TE-3	mom-off-on	SPDT	3.20	2.65	2.40	2.24
59F523	TG-3	mom-off-mom	SPDT	3.20	2.65	2.40	2.24
59F524	TS-3	on-on	SPDT	3.00	2.40	2.25	2.10
59F525	TS-6	on-on	DPDT	3.90	3.12	2.93	2.73
59F128	PM-3	mom*	SPDT	2.86	2.29	2.15	2.00
59F129	PM-6	mom*	DPDT	3.51	2.81	2.63	2.46

BAT HANDLE TOGGLE SWITCH

Bakelite insulation on all units. SPST type rated at 3 amps, 250 volts. All others 3 amps, 125 volts or 1 amp, 250 v. *Spring return. Underwriters' Laboratories Approved. Sleeve 13/32" long. †Sleeve 13/32" long. With mounting nuts. Shpg. wt., 2 oz.

Stk. No.	Mfg. No.	Poles	1-24	25-49	50-99	100-499	500 Up
23F125	20994-NV†	SPST	.62	.58	.48	.432	.384
23F013	20994-LH	SPST	.62	.58	.48	.432	.384
23F011	21350-EH	SPDT	.79	.73	.61	.549	.488
23F012	20902-CX	DPST	1.14	1.05	.88	.788	.700
23F126	20905-AN†	DPDT	1.31	1.21	1.01	.905	.804
23F015	20905-FR	DPDT	1.31	1.21	1.01	.905	.804
23F058	21858-X*	DPDT	2.20	2.03	1.70	1.526	1.356
23F059	21827GA*	SPDT	1.20	1.11	.93	.833	.740
23F056	20902-DN	DPST†	1.14	1.05	.88	.887	.800
23F057	20994-EW	SPST†	1.22	1.13	.94	.846	.752

BAT HANDLE TOGGLE SWITCHES—INTERMEDIATE SIZE

Molded phenolic base. Slotted sleeve, 15/32" long. Has solder lugs. Rated 3 amps, 250V or 6 amps, 125V, except SPDT, rated 1 amp, 250V or 6 amps. 125V AC-DC. Shpg. wt., 2 oz.

Stk. No.	Mfg. No.	Poles	1-24	25-49	50-99	100-499	500 Up
23F006	81015-AW	SPST	.83	.76	.64	.572	.508
23F007	81021-AV	SPDT	.99	.91	.76	.684	.608
23F008	81024-GB	DPST	1.22	1.13	.94	.846	.752
23F009	81027-CE	DPDT	1.40	1.30	1.08	.972	.864

BALL HANDLE TOGGLE SWITCH

SPST type rated at 3 amps, 250 volts. All others rated at 3 amps, 125 volts or 1 amp at 250 volts. With mounting nuts. Shpg. wt., 2 oz.

Stk. No.	Mfg. No.	Poles	Shank	1-24	25-49	50-99	100-499	500 Up
23F021	20994-CS	SPST	15/32"	.62	.58	.48	.432	.384
23F022	21615-BD	SPST	1"	.87	.80	.67	.603	.536
23F024	21350-BF	SPDT	15/32"	.79	.73	.61	.549	.488
23F023	21661-B	SPDT	1"	1.04	.96	.80	.728	.640
23F025	20902-N	DPST	25/32"	1.14	1.05	.88	.788	.700
23F026	20902-Q	DPST	1"	1.38	1.28	1.07	.959	.852
23F028	20905-BX	DPDT	15/32"	1.31	1.21	1.01	.905	.804
23F027	20905-C	DPDT	1"	1.56	1.44	1.20	1.080	.960

PUSH BUTTON SWITCHES

Plunger type, 3 amps, 250 v.; 6 amps, 125 volts. U.L. approved. Threaded Sleeve 15/32x9/16" long. With mtg. nuts. *Have bakelite buttons. Shpg. wt., 2 oz.

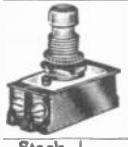
†Momentary contact 1 amp. 125VAC. ‡Push on, push off.

Stk. No.	Mfg. No.	Poles	Cap	1-24	25-49	50-99	100-499	500 Up
23F114	82403	SPST	Nickel	.86	.80	.67	.603	.536
23F032	86710‡	SPST	Nickel	1.04	.96	.80	.72	.640
23F033	86710CR*‡	SPST	Red	1.23	1.14	.95	.855	.760
23F034	86710C*‡	SPST	Black	1.23	1.14	.95	.855	.760
23F042	3391-GL*	†SPST	Black	.88	.82	.68	.612	.544
23F043	3391-GLR*	†SPST	Red	.88	.82	.68	.612	.544

MOMENTARY CONTACT PUSH BUTTON SWITCHES

Slotted sleeve 15/32" dia. 9/16" long except * ½". SPDT rated 1 amp, 250V or 6 amps. 125V. Others 3 amps, 250V or 6 amps 125V except † 3 amps, 120V. A.C. Wt., 2 ozs.

Stk. No.	Mfg. No.	Poles	Button	1-24	25-49	50-99	100-499	500 Up
23F115	†80511	SPST-NC	Plain	.47	.43	.36	.324	.288
23F116	†80541	SPST-NC	Black	.88	.82	.68	.612	.544
23F117	†80541-R	SPST-NC	Red	.88	.82	.68	.612	.544
23F118	†80511-E	SPST-NO	Plain	.47	.43	.36	.324	.288
23F119	†80541-E	SPST-NO	Black	.88	.82	.68	.612	.544
23F120	†80541-ER	SPST-NO	Red	.88	.82	.68	.612	.544
23F121	*81075-Q	SPST-NO	Plain	1.40	1.30	1.08	.972	.864
23F122	*81081-G	SPDT-NC	Plain	1.57	1.45	1.21	1.085	.964
23F123	*81084-G	DPST-NO	Plain	1.88	1.73	1.45	1.30	1.156
23F124	*81087-J	DPDT-NC	Plain	2.03	1.88	1.57	1.41	1.252
23F037	80857	2 cir. lever sw.		1.23	1.14	.95	.855	.760



DOUBLE ACTION PUSH SWITCHES

Molded phenolic base; slotted sleeve 15/32" D. 32 thrds/in. One hex nut and one knurled nut assembled. Ratings: 6A 250V, 12A 125V, 1HP 125, 250V AC-DC. Wt. 2 oz.

Stock No.	Mfg. No.	Poles	Button	1-24	25-49	50-99	100-499	500 Up
23F054	80863	DPST	Nickel	1.77	1.63	1.36	1.224	1.088

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

Arrow-Hart & Hegeman Switches

Fig. A

Fig. B

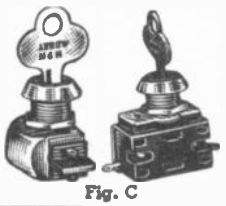


Fig. C

Fig. D

Fig. E

LEVER ACTION

A	On-Off	B	On-Off-On
C	Off	D	On-None-Off
E	On-None-On	G	On-Off-None
H	On-Mom.-Off-None	J	Off-None-Mom.-On
K	Mom.-On-Off-Mom.-On	L	None-Off-Mom.-On
M	On-None-Mom.-Off	N	On-None-Mom.-On
P	On-Off-Mom.-On	R	Mom.-On
S	Mom.-Off-Mom.	T	Mom.-Off-On

Fig. A—MIDGET WIPING ACTION SWITCHES

For aircraft, missile, electronic and other applications demanding small size, maximum performance and dependability. Commercial type, fulcrum pin assembly. Quick make and break action. Ratings: 1A @ 250 V, and 3A @ 125V, AC or DC. Solder lug terminals, double wiping blade mech. Current carrying parts silver plated. Size (including toggle): $1\frac{1}{32}$ L. x $\frac{41}{64}$" W. x $1\frac{29}{32}$" H. Sleeve $\frac{15}{32}$" long with $\frac{15}{32}$"-32 threads. With P1 knurled nut and 1 hex. nut. Wt. 1 oz.

Stk No.	Type	Lever Action	1-24	25-49	50-99	100-499	500 Up
60F2322	83050	SPST-Pos. toggle	.83	.76	.64	.572	.508
60F2323	83052	SPDT-Pos. toggle	.99	.91	.76	.684	.608
60F2324	83053	DPST-Pos. toggle	1.22	1.13	.94	.846	.752
60F2325	83054	DPDT-Pos. toggle	1.40	1.30	1.08	.972	.864
60F2326	83070	SPST-Mom. toggle	1.14	1.05	.88	.788	.700
60F2327	83072	SPDT-Mom. toggle	1.30	1.20	1.00	.900	.800
60F2328	83073	DPST-Mom. toggle	1.53	1.41	1.18	1.058	.940
60F2329	83074	DPDT-Mom. toggle	1.72	1.58	1.32	1.188	1.056
60F2330	83090-C*	SPST-Push N. on.	1.30	1.20	1.00	.900	.800
60F2331	83090-CA*	SPST-Push N. on.	1.30	1.20	1.00	.900	.800
60F2332	83095-C	SPST-Push-Push	1.02	.94	.79	.707	.628
60F2333	83097-C	SPDT-Push-Push	1.17	1.08	.90	.810	.720

Fig. B—UTILITY TOGGLE SWITCHES

High capacity AC switch on small phenolic base. Fine silver button contacts. Ball joint lever construction for long life expectancy. Slotted sleeve $\frac{15}{32}$" long with $\frac{15}{32}$"-32 threads. Solder lug terminals. 1 hex nut and 1 knurled nut supplied.

Stock No.	Type	Disc	Key	Rated @125V	Rated @250V	1-24	25-49	50-99	100-499	500 Up
60F2300	82601	SPST	A	15A	10A	.62	.58	.48	.432	.384
60F2301	83001	SPST	A	6A	3A	.54	.50	.42	.374	.332
60F2302	82607	DPST	A	15A	10A	.97	.89	.75	.671	.596
60F2303	83025	DPST	A	6A	3A	.79	.73	.61	.545	.484
60F2304	82603	SPDT	B	15A	10A	.72	.66	.55	.495	.440
60F2305	83004	SPDT	B	6A	3A	.59	.54	.45	.405	.360
60F2306	82609	DPDT	B	15A	10A	1.14	1.06	.88	.792	.704
60F2307	83028	DPDT	B	6A	3A	.88	.81	.68	.608	.540
60F2308	82605	SPDT	....	15A	10A	.72	.66	.55	.495	.440
60F2309	83007	SPDT	....	6A	3A	.59	.54	.45	.405	.360
60F2310	82611	DPDT	....	15A	10A	1.14	1.06	.88	.792	.704
60F2311	83031	DPDT	....	6A	3A	.88	.81	.68	.608	.540

Fig. C—LOCK TYPE ROTO-POWER SWITCHES

Use toggle switch mechanism converted to rotary motion for control panel, instrument, and appliance applications. Lock type switches add security and safety. Sleeve $\frac{9}{16}$ with $\frac{15}{32}$-32 thread. For SPST, 250 V AC-DC, rating is, 3A. For SPDT, DPST, DPDT, rating is 1A 250 V. 3A 125V, AC-DC except intermediate 6A 125V AC/DC. Wt., 1 oz.

Prices shown are less key.
L designation—key removable in off position only.
LE designation—key removable in both positions.

CANOPY

Stk. No.	Type	Lever Action	1-24	25-49	50-99	100-499	500 Up
60F2312	1561-L	SPST	1.48	1.37	1.14	1.026	.912
60F2313	1561-LE	SPST	1.48	1.37	1.14	1.026	.912
60F2314	1572-L	DPST	1.87	1.73	1.44	1.296	1.152
60F2315	1572-LE	DPST	1.87	1.73	1.44	1.296	1.152

INTERMEDIATE SIZE

60F2316	81715-L	SPST	1.93	1.73	1.49	1.341	1.192
60F2317	81715-LE	SPST	1.93	1.73	1.49	1.341	1.192
60F2318	81724-L	DPST	2.46	2.27	1.89	1.701	1.512
60F2319	81724-LE	DPST	2.46	2.27	1.89	1.701	1.512

REMOVABLE KEYS FOR ABOVE SWITCHES

Stk. No.	Type	Lever Action	1-24	25-49	50-99	100-499	500-up
60F2320	1561-488	Removable, Off	.18	.17	.14	.126	.112
60F2321	1561-487	Removable, On Off	.18	.17	.14	.126	.112

Fig. D—SUBMINIATURE MILITARY SWITCHES
Meets MIL-S-3950A

SP base is $\frac{1}{4}$x$\frac{1}{4}$". DP base is $\frac{1}{2}$x$\frac{1}{2}$". Sleeve is $\frac{1}{4}$" long with $\frac{1}{4}$"-40 thread. Supplied with 2 hex nuts, 1 locking ring and 1 locking washer. 4 grams.

SPDT

Stk. No.	MIL Spec.	Type	Lev. Act.	1-24	25-99	100-499
60F2334	MS75028-21	TC-3-M	B	3.20	2.56	2.40
60F2335	MS75028-22	TS-1-M	A	3.00	2.40	2.25
60F2336	MS75028-23	TS-3-M	C	3.20	2.56	2.40
60F2337	MS75028-26	TM-3-M	R	3.40	2.72	2.55
60F2338	MS75028-27	TG-3-M	S	3.40	2.72	2.55
60F2339	MS75028-31	TE-3-M	T	3.40	2.72	2.55

DPDT

60F2340	MS75029-21	TC-6-M	B	4.10	3.28	3.08
60F2341	MS75029-22	TS-2-M	A	3.60	2.28	2.70
60F2342	MS75029-23	TS-6-M	C	3.60	2.28	2.70
60F2343	MS75029-26	TM-6-M	R	5.20	4.16	3.90
60F2344	MS75029-27	TG-6-M	S	5.20	4.16	3.90
60F2345	MS75029-31	TE-6-M	T	5.20	4.16	3.90

Fig. E—HIGH ALTITUDE MILITARY SWITCHES
Meets MIL-S-3950A

Made to meet the rigid requirements of MIL-S-3950A. Sleeve length $\frac{15}{32}$: with $\frac{15}{32}$"-32 thread. Supplied with 2 hex nuts, 1 lockwasher and 1 locking ring. MS 25098 are Single Pole; MS 25100 are Double Pole. Wt., approximately 1 oz.

Stk. No.	Type	Mil. Type	Lev. Act.	1-24	25-49	50-99	100-499	500 Up
60F2368	25098-AM	MS-25098-22	E	2.03	1.87	1.56	1.404	1.248
60F2369	25098-BM	MS-25098-29	M	2.49	2.30	1.92	1.724	1.532
60F2370	25098-CM	MS-25098-30	N	2.49	2.30	1.92	1.724	1.532
60F2371	25098-DM	MS-25098-23	F	2.19	2.02	1.78	1.512	1.344
60F2372	25100-AM	MS-25100-22	E	2.49	2.30	1.92	1.724	1.532
60F2373	25100-BM	MS-25100-29	M	2.96	2.74	2.28	2.052	1.824
60F2374	25100-CM	MS-25100-30	J	2.96	2.74	2.28	2.052	1.824
60F2375	25100-DM	MS-25100-23	F	2.65	2.45	2.04	1.836	1.632

LOCKWASHER

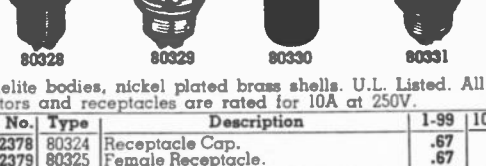
8991-1378. Bronze lockwasher for $\frac{15}{32}$" dia. sleeve.
60F2376. NET. Per 100..... **2.00**

LOCKING RING

60F2377. Type 20590-174. For $\frac{15}{32}$" dia. sleeve. NET Per 100 **3.00**

MIDGET CONNECTORS AND RECEPTACLES

80324 80325 80326 80327


80328 80329 80330 80331

Bakelite bodies, nickel plated brass shells. U.L. Listed. All connectors and receptacles are rated for 10A at 250V.

Stk. No.	Type	Description	1-99	100-999
60F2378	80324	Receptacle Cap.	.67	.60
60F2379	80325	Female Receptacle.	.67	.60
60F2380	80326	Female Flush Recp., 2 screw mt.	.80	.71
60F2381	80327	Female Flush Recp., lock nut.	1.32	1.17
60F2382	80328	Recessed Male Recpt., 2 screw mt.	.89	.80
60F2383	80329	Recessed Male Recpt., lock nut mt.	1.35	1.22
60F2384	80330	Thrd Terminal Cover for all Units.	.23	.20
60F2385	80331	Recessed Female Recp., lock nut mt.	1.35	1.22

You Can Depend on NEWARK
for Complete Stocks
Lowest Prices — Fastest Service

ALCOSWITCH Switches

MST 105
SPDT

MST 205
DPDT

MST 305
3PDT

MST 405
4PDT

ALCOSWITCH SIZES:

SPDT: .244 x .492 x .354; Contacts rated 5 amps. Over 80,0000 operations.
DPDT: .453 x .492 x .354; Contacts rated 5 amps. Over 80,000 operations.
3PDT: .644 x .472 x .453; Contacts rated 5 amps. Over 25,000 operations.
DP3T: .453 x .492 x .453; Contacts rated 5 amps. Over 15,000 operations.

GENERAL SPECIFICATIONS

Insulating Res.—over 1000 megohms @ 500 VDC.
Voltage Breakdown—1000 volts @ 60 Hz.
Contacts are solid silver. Bushings ¼-40.
***Momentary. †Special DP3P switch with 3 "on" positions take the place of 3 position rotary switch in certain applications. Imported from Japan. Shipping wt. 1 oz.**

WHITE PLASTIC CAP—18° THROW

Stock No.	Type MST-	Action	1-24	25-99	100-499	500-999
61F850	115D	SPDT On-None-On	1.70	1.16	1.02	.85
61F851	215N	DPDT On-None-On	2.20	1.47	1.32	1.10

SLIM BAT HANDLE—30° THROW

Stock No.	Type MST-	Action	1-24	25-99	100-499	500-999
61F854	105D	SPDT On-None-On	1.65	1.12	.99	.83
61F855	105E	SPDT On-Off-On	1.95	1.33	1.17	.97
61F856	105F	SPDT None-On-On	1.95	1.33	1.17	.97
61F857	105G	SPDT On*-Off On*	1.95	1.33	1.17	.97
61F858	105H	SPDT On-Off-On*	1.95	1.33	1.17	.97
61F859	205N	DPDT On-None-On	2.15	1.43	1.29	1.08
61F860	205P	DPDT On-Off-On	2.55	1.72	1.53	1.28
61F861	205R	DPDT None-On-On	2.55	1.72	1.53	1.28
61F862	205S	DPDT On*-Off-On*	2.55	1.72	1.53	1.28
61F863	205T	DPDT On-Off-On*	2.55	1.72	1.53	1.28
61F864	†205PA	DP3T On-On-On	2.85	1.90	1.71	1.42
61F865	†205TA	DP3T On-On-On*	3.15	2.14	1.89	1.58
61F866	305D	3PDT On-None-On	3.85	2.57	2.31	1.92
61F867	305E	3PDT On-Off-On	4.15	2.82	2.49	2.07
61F868	305H	3PDT On-Off-On*	4.15	2.82	2.49	2.07
61F869	405N	4PDT On-None-On	4.85	3.29	2.91	2.43
61F870	405P	4PDT On-Off-On	5.35	3.64	3.21	2.68

● *NEW* SWITCH PLATES

Economically priced ON-OFF switch plates for standard and miniature switches. SP-3, SP-4, and SLP-4 are stamped aluminum SLP-4 accepts the BND series pilot light assembly. Multiples of five only.
* Per card of five.

Stk. No.	Type	Use	1-24*	100-499*	25-99*
61F948	SP-3	¼" Dia. Bushing	.75	.54	.51
61F949	SP-4	15/32" Dia. Bushing	.75	.54	.51
61F950	SLP-4	¼" Dia. Bushing	.90	.65	.61

"MUSTANG" TOGGLE SWITCHES

Unique design! Features standard 15/32" hole mounting and large lever bat handle, but with a rear space requirement of a miniature switch! Rugged case of low loss, high impact and temperature materials with turret terminals. Bonded silver contacts. Rated 6 amps at 125 VAC. Imported from Japan. Weight 1 oz.

Stock No.	Type MSTG	Action	1-24	25-99	100-499	500-999
61F884	206N	DPDT On-None-On	2.75	1.87	1.65	1.38
61F885	206P	DPDT On-Off-On	3.35	2.28	2.01	1.68
61F886	206PA	DP3T On-On-On	3.65	2.48	2.19	1.83
61F887	306D	3PDT On-None-On	4.45	3.03	2.67	2.23
61F888	306E	3PDT On-Off-On	4.95	3.37	2.97	2.48
61F889	406N	4PDT On-None-On	5.55	3.77	3.33	2.78
61F890	406P	4PDT On-Off-On	6.15	4.18	3.69	3.08

COLOR CODED CAPS

An invaluable aid. Pkgs. of 25. Model C-10 for all series; Model C-15 for Mustang Series only.

Stock No.	Model	Color	Per Package of 25 1-3	4-19	20-39
61F880	C-10	Black	.70	.63	.55
61F881	C-10	White			
61F882	C-10	Red			
61F883	C-10	Blue			
61F951	C-15	Black	1.00	.90	.82
61F952	C-15	White			
61F953	C-15	Red			
61F954	C-15	Blue			

Stock No.	Type MST-	Action	1-24	25-99	100-499	500-999
61F852	315D	3PDT On-None-On	3.90	2.61	2.34	1.95
61F853	415N	4PDT On-None-On	4.90	3.33	2.94	2.45

NEW WATERPROOF SWITCH SERIES

Type MSTE. All new case design incorporates high voltage barriers, rugged high impact materials, low loss properties. Bonded silver contacts rated 6 amps at 115 VAC. "O" rings, permanently seals turret terminals. Imported from Japan. Wt. 1 oz.

Stock No.	Type MSTE	Action	1-24	25-99	100-499	500-999
61F871	106D	SPDT On-None-On	1.95	1.33	1.17	.975
61F872	106E	SPDT On-Off-On	2.55	1.72	1.53	1.28
61F873	206N	DPDT On-None-On	2.55	1.72	1.53	1.28
61F874	206P	DPDT On-Off-On	3.15	2.14	1.89	1.58
61F875	206PA	DP3T On-On-On	3.45	2.35	2.07	1.73
61F876	306D	3PDT On-None-On	4.25	2.89	2.55	2.13
61F877	306E	3PDT On-Off-On	4.75	3.23	2.85	2.38
61F878	406N	4PDT On-None-On	5.35	3.64	3.21	2.68
61F879	406P	4PDT On-Off-On	5.95	4.05	3.57	2.98

ADJUSTABLE STOP ½" ROTARY SWITCHES

MSRE
MRA

MRA
w/Knob

KC500A

KC500-10

Ideal where size and space limitations are a factor. Features adjustable stop, nonshorting, 36° spacing and up to 4 poles on single deck. Specifications: 500 MA @ 125VAC, 20 milliohms contact resistance. 100 megohms @ 500VDC insul. res., 1,000V. @ 60 cycles break down, silver contacts, over 10,000 switching operations at 15 to 20 rmp. ¼"-40 bushing. Imported from Japan. 1 oz. *poles on single deck.

⅛" DIAMETER SHAFT—LESS KNOB

Stock No.	Type	*	Positions	1-24	25-99	100-499	500-999
61F891	MRA-1-10S	1	2-10	3.85	2.57	2.31	1.92
61F892	MRA-2-5S	2	2-5				
61F893	MRA-3-3S	3	2-3				
61F894	MSRA-4-2	4	2 (fixed)				

5/32" DIAMETER SHAFT—WITH KNOB

Stock No.	Type	*	Positions	1-24	25-99	100-499	500-999
61F895	MRA-1-10	1	2-10	3.95	2.65	2.37	1.98
61F896	MRA-2-5	2	2-5				
61F897	MRA-3-3	3	2-3				
61F898	MSRA-4-2	4	2 (fixed)				

⅛" DIA. SHAFT WATERPROOF ROTARY SWITCHES

Non-adjustable . . . similar to MRA series, but with mechanical advantages. Less knob. Rear terminals permanently sealed.

Stock No.	Type	No. of Poles	No. of Positions	1-24	25-99	100-499	500-999
61F899	MSRE-1-10	1	10	4.85	3.29	2.91	2.43
61F900	MSRE-2-5	2	5				
61F901	MRSE-3-3	3	3				
61F902	MSRE-4-2	4	2				

⅛" DIA. SHAFT ANODIZED ALUM. KNOBS FOR MSR & MSRE

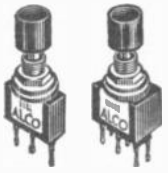
Stock No.	Type	Description	1-99	100-249	250-499	500-999
61F903	KC-500A	Natural Aluminum	.55	.49	.47	.45
61F904	KC-500B	Black Anodized	.55	.49	.47	.45
61F905	KC-500B-10	Black 0-9 Numeral	.65	.59	.56	.53

ALCOSWITCH

● NEW MSPE SERIES PUSHBUTTON SWITCHES

- **Excellently compact**
- **Accurate power reversal switches**

1 unique waterproof switch takes the place of 2 separate Normally Open or Normally Closed types. Current rating: 6 A @ 125 VAC (Resistance load). Initial contact resistance: below 10 milliohms at 2.4 Kg. Life cycle: 20,000. Supplied with black button. Additional buttons listed at right. Bushing size: ¼-40, mounts in D-hole. Size: ½" case.



Stk. No.	Type	Description	1-24	25-99	100-499	500-999
61F957	MSPE-106F	SPDT*	2.55	1.72	1.53	1.28
61F958	MSPE-206R	DPDT*	3.45	2.35	2.07	1.73
61F959	MSPE-106D	SPDT†	2.55	1.72	1.53	1.28
61F960	MSPE-206N	DPDT†	3.45	2.35	2.07	1.73
61F961	MSPE-406N	4PDT†	5.95	4.05	3.57	2.98

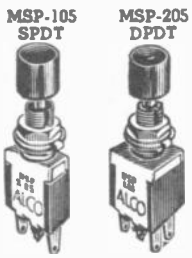
*—Momentary †—Push On-Off

SWITCH HARDWARE

Stk. No.	Type	Description	Per Pkg. of 25 1-3	4-19	20-39	40-Up
61F913	N-1	¼"-40 Knurled Nut	.70	.62	.55	.50
61F914	N-1A	¼"-40 Perfect Fit Nut	1.00	.90	.82	.75
61F915	N-1B	15/32" Perfect Fit Nut	1.40	1.25	1.10	1.00
61F916	N-2	¼"-40 Hex Nut	.55	.50	.45	.40

MINIATURE PUSH BUTTON SWITCHES

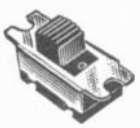
*Momentary action, usable as a NO or NC switch. Controls 2 circuits, PUSH to make contact, PUSH again to reverse action. Solid silver contacts rated 5 amps @ 115 VAC. Over 20,000 operations; ¼-40 bushing size. 1,000 VAC for 1 minute before break. 10 milliohms cont res; 100 megohms insul. res. Supplied with black button. ½x½x¾". *—Momentary action †—Push On-Off.



Stk. No.	Type	Action	1-24	25-99	100-499	500-999
61F906	MSP-105F	SPDT*	1.90	1.29	1.138	.945
61F907	MSP-205R	DPDT*	2.80	1.86	1.678	1.39
61F908	MSP-105D	SPDT†	1.90	1.29	1.138	.945
61F909	MSP-205N	DPDT†	2.80	1.86	1.678	1.39
61F910	C-12	Black Button	.05	.04	.032	.03
61F911	C-12	Red Button	.05	.04	.032	.03
61F912	C-14	Chrome Button	.06	.04	.036	.033

MINIATURE SLIDE SWITCH

Type MSS-22. Only ½ x .305 x .257". Contact rating: 2 A at 120 VAC or ½ A at 120 VDC. Cont. Res: .01 ohm max. Leak. res: 10,000 megohms. V. breakdown: 250 VRMS 60 CPS. Life: 250,000 actions. .687" mntg. centers. Phenolic base and slide block. NO-NC only.



Stk. No.	Type	1-24	25-99	100-499	500-999
61F947	MSS-22	1.75	1.17	.88	.73

GORDOS

DRY REED AND MERCURY SWITCHES

TILT-TYPE MERCURY SWITCHES

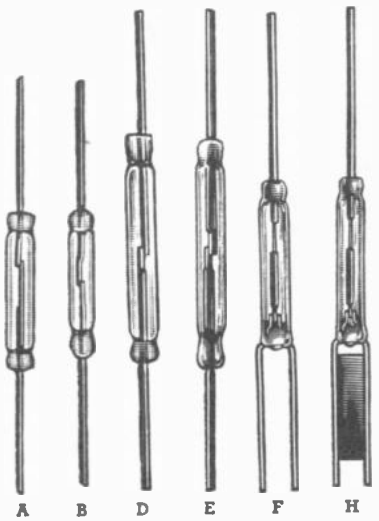
Contacts are sealed, protected and can be observed! Hermetically sealed contacts in a glass envelope containing high purity mercury. Use for float and level control, alarm systems, motion detection and other applications where quiet operation, reliability and low cost are important factors. (*) Differential angle is the required tilt angle to move mercury from a definite make circuit switch position of a definite break circuit switch position in SPST switch and break-to-make circuits in SPDT. Operating temperature is limited by mercury freezing point of —35°F to +300°F. Ratings are 115 VAC resistive. 8" long insulated leads.

Stock No.	Type	Cum. Amps	Diff. Angle	Contact Action	Size	Fig.	1-24	25-49	50-99	100-499	500-999
60F3414	HG-220L2	0.1	10°	SPST	.155 x ½"	J	1.90	1.42	1.33	1.04	.85
60F3415	HG-252L8	2.0	14°	SPST	.325 x 1"	J	1.06	.79	.74	.58	.47
60F3416	HG-421L6	15.0	10°	SPST	.450 x 1⅜ x 1½"	L	7.30	5.47	5.11	4.01	3.28
60F3417	HG-435L5	5.0	10°	SPST	.435 x 1 1/16"	J	2.55	1.91	1.78	1.40	1.14
60F3418	HG-454L9	10.0	5°	SPST	.60 x 2¼"	K	2.80	2.10	1.96	1.54	1.26
60F3419	HG-455L5	10.0	5°	SPST	.345 x 1½"	J	2.75	2.06	1.93	1.51	1.23
60F3420	HG-461L6	15.0	14°	SPDT	.450 x 1⅜ x 1½"	M	9.30	6.97	6.51	5.12	4.19
60F3421	HG-482L1	45.0	5°	SPST	.675 x 2⅛ x 2"	L	10.30	7.72	7.21	5.66	4.63
60F3422	HG-719L1	25.0	15°	SPDT	.520 x 2⅜ x 1 11/16"	M	11.00	8.25	7.70	6.05	4.95
60F3423	HG-721L1	25.0	8°	SPST	.520 x 2⅛ x 1 11/16"	L	9.50	7.13	6.65	5.22	4.27

MAGNETIC DRY REED SWITCHES

Contacts sealed in glass with inert gas . . . unique design prevents contact contamination! Contacts can be actuated by either magnets or coils; not position sensitive. Units ideally suited for use in relays, crosspoints, logic elements, scanners, liquid level counters. etc. All switches have "Di-Met" contacts. Exclusive "Di-Met" feature consists of a plating of dissimilar materials; combines gold for stability, copper for low resistance and added alloys for hardness and exceptional durability. (*) Diffused gold for lowest drop-out with maximum contact force and minimum contact balance. (†) Di-Met tungsten for power switching. Center gap except (#) offset gap, excellent for magnet operation or biasing.

Stock No.	Type	Volt Amps	Ampere Turns	Contact Action	Dia. x L.	Fig.	1-24	25-49	50-99	100-499	500-999
60F3400	MR-107	10	35 ± 10	SPST—Center gap	.100 x .750"	A	1.10	.83	.77	.61	.50
60F3401	MR-306	10	35 ± 10	SPST—Center gap	.115 x .750"	A	1.05	.79	.74	.58	.47
60F3406	MR-456#	4	35 ± 10	SPST—Offset gap	.088 x .560"	B	1.25	.94	.88	.69	.56
60F3407	MR-600#	15*	80 ± 10	SPST—Offset gap	.185 x 1.40"	E	1.00	.75	.70	.55	.45
60F3408	MR-606#	15	80 ± 10	SPST—Offset gap	.185 x 1.40"	E	1.05	.79	.74	.58	.47
60F3410	MR-706	15	80 ± 10	SPST—Center gap	.185 x 1.70"	D	.90	.68	.63	.50	.41
60F3411	MR-806#	15	80 ± 10	SPST—Offset gap	.185 x 1.70"	E	.90	.68	.63	.50	.41
60F3412	MR-906	15	80 ± 10	SPST—Center gap	.205 x 2.05"	D	.90	.68	.63	.50	.41
60F3413	MR-990	100†	80 ± 10	SPST—Center gap	.205 x 2.05"	D	2.50	1.88	1.75	1.38	1.13
60F3402	MR-200-1#	10	40 ± 10	True Form C—Polarized	.20 x 1.20"	H	2.50	1.88	1.75	1.38	1.13
60F3403	MR-200-2#	10	40 ± 10	Magnetic Latch-Bi-Stable	.20 x 1.20"	H	2.50	1.88	1.75	1.38	1.13
60F3404	MR-201#	10	40 ± 10	Spring Loaded Form C	.20 x 1.20"	F	2.50	1.88	1.75	1.38	1.13
60F3405	MR-203#	4	40 ± 10	Min-True Form C	.115 x .625"	H	5.00	3.75	3.50	2.75	2.25



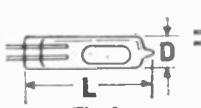


Fig. J

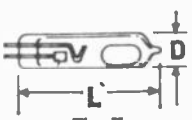


Fig. K

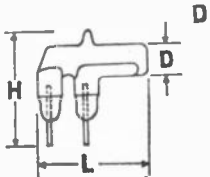


Fig. L

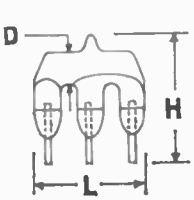


Fig. M

To Order Activating Components For Magnetic Reed Switches, See Manufacturers' Index:
JAMES ELECTRONICS for Coils
INDIANA GENERAL CORP. for Permanent Magnets

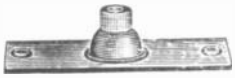
Special Purpose Components

APM SWITCH SEALING DEVICES AND SELF-SEALING SCREWS

HIGH PRESSURE SEALS FOR STANDARD TOGGLE SWITCHES

N-1030

N-1030B


2030B

High pressure seals for all standard toggle switches. Silicone rubber chemically and mechanically bonded to nut, make these boots impervious to salt water, acids, and ozone. Flexible from —160°F to +500°F. Meets MIL-B-5423. Pressure Range 15 PSI Internal and External. Wt. approx. 1 oz. per 5.

Stk. No.	Type	Thread Size	Description	1-99	100-499
30F000	N1030	15/32-32	Bush. Mtg. (Enclosed)	.69	.54
30F001	N1030A	15/32-32	Bush. Mtg. (Metal Cap)	1.25	1.05
30F002	N1030B	15/32-32	Bush. Mtg. (Open Top)	.69	.54
30F004	2030B	3 hole mtg.	Flush Mtg.	.49	.41
30F011	N5030	1/4-40	Bush. mtg. (enclosed)	.99	.84

SNAPSEELS

Designed to make standard push-button, toggle, and rotary switches both watertight and dust-proof. Material: Neoprene. Color: Black. Operating Temperatures: —40°F to +225°F. Bushing dia. for type 1211/5 & 1312/7: 3/8"; type 1111/4: 15/32". Push, toggle & rotary dia.: 1/4".

Stk. No.	Type	To Switch	1-99	100-999	1000-2499	2500-4999	5000-9999
30F097	1211/5	Push-button	.40	.199	.169	.139	.119
30F098	1111/4	Toggle					
30F099	1312/7	Rotary					

HEXSEAL

Seats for locking type potentiometers and variable capacitors. Temp. Range: —160°F to +500°F. Shaft size: 1/4". Thread size: 3/8-32". Ht. 17/32". Width 5/8".

Stock No.	Type No.	1-99	100-499
30F060	NLK-9030-1/4	1.05	.89

HIGH PRESSURE SEALS

Designed for shafts which pass through panels or housings. Meets MIL-B-5423/9. For standard rotary switches. Wt. approx. 1 oz. per 5.

Stock No.	Mfg. No.	Thread Size	Shaft Size	Depth	Hex Size	1-99	100-499
30F013	N-9030-1/4	3/8-32	1/4"	7/32"	1/2"	.59	.47
30F014	N-9040-1/8	1/4-32	1/8"	15/64"	7/16"	.59	.47
30F015	N-9060-1/4	15/32-32	1/4"	5/16"	3/4"	1.15	.92

BLADED POWER CONNECTORS

Type UP120M. Miniature. Rated 125 V-15 amps to 250 V-10 amps. Meets MIL-C-3767/3. High impact glass-filled melamine insert. 2 parallel blades.
Type UP121M or UP221M. 3 blades gnd. type MIL-C-3767/13.

Stk. No.	Type	1-99	100-499	500-999
30F016	UP120M	.83	.78	.70
30F017	UP121M, UP221M	.86	.81	.73

HIGH PRESSURE SEALS FOR STANDARD PUSHBUTTON SWITCHES

N-3030
NH-3030

NC-3030

N-5040

4080 Series

Meet MIL-B-5423. High pressure sealing is maintained by a gasket rib, which seats firmly against any panel surface to kep out maisture dust, or combustible vapors. Temp. Range: —160°F to +500°F.

Stock No.	Mfg. No.	Thread Size	Description	1-99	100-499
30F006	N-3030	15/32-32	Bush. Mtg.	.59	.47
30F007	NC-3030	15/32-32	Bush. Mtg.	.59	.47
30F008	NH-3030	1/2-32	Bush. Mtg.	.69	.54
30F009	4080	5/8-24	Dial-light seal (trans)	1.48	1.15
30F010	4082	15/32-32	Dial-light seal (trans)	1.48	1.15
30F012	N-5040	1/4-40	Bush. Mtg.	.99	.84
30F065	N-5040G	1/4-32	Bush. Mtg.	.99	.84
30F066	N-5040R	1/4-40	Bush. Mtg.	.99	.84

APM SEELSKREWS

Seelskrews are single-unit fasteners which form an absolute seal against any surface. They are grooved under the head and have a silicone rubber o-ring pressed into the groove. Maintain seal even after frequent removal from equipment. Range: —160°F to +500°F.

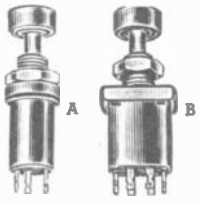
Stock No.	Size	Head Depth	Head Dia.	1-99	100-499	500-999	1000-2499
30F018	4/40x1/4"	.069	.220	.13	.0975	.0675	.0585
30F109	4/40x3/8"	.069	.220	.13	.0975	.0675	.0595
30F020	4/40x1/2"	.069	.220	.13	.0975	.0675	.0605
30F039	4/40x1"	.069	.220	.13	.0975	.0675	.0705
30F021	6/32x1/4"	.083	.271	.13	.0975	.0675	.0575
30F022	6/32x3/8"	.083	.271	.13	.0975	.0675	.0585
30F023	6/32x1/2"	.083	.271	.13	.0975	.0675	.0595
30F040	6/32x5/8"	.083	.271	.13	.0975	.0775	.0675
30F042	6/32x7/8"	.083	.271	.13	.0975	.0775	.0695
30F043	6/32x1"	.083	.271	.13	.0975	.0775	.0695
30F024	8/32x3/8"	.097	.323	.13	.0975	.0675	.0600
30F025	8/32x1/2"	.097	.323	.13	.0975	.0775	.0670
30F044	8/32x5/8"	.097	.323	.13	.0975	.0775	.0695
30F045	8/32x3/4"	.097	.323	.13	.0975	.0775	.0695
30F047	8/32x1"	.097	.323	.13	.0975	.0775	.0700
30F027	10/32x3/8"	.113	.374	.16	.1225	.0975	.0690
30F028	10/32x1/2"	.113	.374	.16	.1225	.0975	.0730
30F048	10/32x5/8"	.113	.374	.16	.1225	.0975	.0785
30F029	10/32x3/4"	.113	.374	.16	.1225	.0975	.0785
30F051	10/32x1"	.113	.374	.16	.1225	.0975	.0830
30F030	10/24x3/8"	.113	.374	.16	.1225	.0975	.0690
30F055	10/24x1"	.113	.374	.16	.1225	.0975	.0830
30F056	1/4/20x3/8"	.148	.493	.16	.1225	.0975	.0825
30F033	1/4/20x1/2"	.148	.493	.16	.1225	.0975	.0825
30F057	1/4/20x5/8"	.148	.493	.16	.1225	.1025	.0875
30F058	1/4/20x7/8"	.148	.493	.16	.1225	.1025	.0975
30F035	1/4/20x1"	.148	.493	.16	.1225	.1025	.0955
30F059	1/4/20x1 1/4"	.148	.493	.16	.1225	.1025	.0955

SILIKROME COLORED FILTERS

Silikrome colored filters can change the colors of clear incandescent miniature lamps instantly! Eliminates need for large inventories of colored lamps. Non-breakable, lightweight silikromes will operate at 500° for 1000 hours without appreciable change in color or the properties of the elastomers. Establishes parameters of color intensity and transmission which will define your requirements. Temperature range: —160°F to 500°F. Flexible, acts as a shock mount; resistant to weather, sunlight, ozone, most acids and salt spray. **Mil. Spec. models available on special order.**

Stk. No.	Type	Color	1-99	100-499
30F780	1813/2-LW-1	Lunar Wh.	.21	.1375
30F781	1813/2-R-2	Red		
30F782	1813/2-G-1	Green		
30F783	1813/7-LW-3	Lunar Wh.		
30F784	1813/7-R-3	Red		
30F785	1813/8-LW-1	Lunar Wh.	.21	.1475
30F786	1813/8-B-1	Blue Aviation		
30F787	1813/8-R-4	Red		
30F788	1813/8-G-1	Green		
30F789	1813/8-G-11/16	Green		
30F790	1813/8-A-2	Amber	.21	.1375
30F791	1813/9-LW-3	Lunar Wh.		
30F792	1813/9-R-5	Red		

GRAYHILL



SERIES 46 PUSH BUTTON SWITCH

Rated to make and break 1/4 amp, 115 VAC resistive; contact res. .010 ohms max.; cont. & term. are silver plated phosphor bronze. .187" button travel
Series 46-100. SPDT; 1/4-32NEF mtg. bushing. 46-101 (not illus.) has .125" diam. button, 46-102 (Fig. A) has .375"D cap.
Series 46-200. (Fig. B) DPDT; 1/4-32NEF mtg. bushing. Wt., 1 oz.

SERIES 46-100 SPDT

Stk. No.	Type	Button Color	1-49	50-99
23F894	46-101B	Black	1.40	1.05
23F895	46-101R	Red	1.40	1.05
23F896	46-102B	Black	1.85	1.05
23F897	46-102R	Red	1.85	1.05

SERIES 46-200 DPDT

23F898	46-200B	Black	3.10	2.33
23F899	46-200R	Red	3.10	2.33

SERIES 50 ADJUSTABLE ROTARY TAP SWITCH

10 position, single deck, rated to make or break 50 ma, carry 6 amps at 115 VAC. Contact resistance, .008 ohms initial. Life expectancy 25,000 cycles. MD (military) style has shaft - to - bushing and bushing-to-panel seal, molded diallyl base. CD (commercial) style without seal and molded phenolic base. Mtg. bushing has 1/4/28 UNF thread. Behind panel dimension .617". Non-shorting contacts. Wt., ½ oz.

Stk. No.	Type	Poles	1-49	50-99
57F1537	50CD36-01-1-ADJN	1	7.05	5.29
57F1538	50CD36-01-2-ADJN	2	8.20	6.15
57F1539	50MD36-01-1-ADJN	1	8.35	6.26
57F1540	50MD36-01-2-ADJN	2	9.50	7.13

SERIES 42D AND 44D ADJUSTABLE STOP ROTARY TAP SWITCHES

10 position (42D) and 12 position (44D) fully enclosed adjustable stop switches, completely interchangeable with fixed stop 42A and 44A series. Rated to make or break 1 amp, carry 10 amps continuous at 115 VAC. Non - shorting contacts. Bushing thread: 3/8-32 NEF. Behind panel: 1-deck, 1.025"; 2-deck, 1.371"; 3-deck, 1.717". 1.162" Diam. Wt., 1½ oz.

Stk. No.	Type	Decks	1-49	50-99
57F1541	42D36-01-1-ADJN	1	6.30	4.73
57F1542	42D36-02-1-ADJN	2	7.55	5.66
57F1543	42D36-03-1-ADJN	3	8.80	6.60
57F1544	42D36-01-2-ADJN	1*	7.10	5.33
57F1545	44D30-01-1-ADJN	1	6.50	4.88
57F1546	44D30-02-1-ADJN	2	7.85	5.89
57F1547	44D30-03-1-ADJN	3	9.20	6.90
57F1548	44D30-01-2-ADJN	1*	7.30	5.48

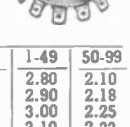
*Indicates 2 poles/deck.

SERIES 8 ULTRA-MINIATURE TAP SWITCHES

Many features of larger switches. Single pole. Rated for 1/4 amp at 115 V.A.C. Resistive make and break. Carry 4 amp. continuous. Dielectric strength. Voltage breakdown is at 1000 volts AC Life expectancy of the switch, depending on conditions, is about 100,000 operations. Solder terminals and non-shorting contacts. Length behind panel for single deck is 960". ¾ oz

Stk. No.	Type	Pos.	1-49	50-99
57F1515	8A36-01-1-2N	2	7.10	5.33
57F1516	8A36-01-1-3N	3	7.20	5.40
57F1517	8A36-01-1-4N	4	7.30	5.48
57F1518	8A36-01-1-5N	5	7.40	5.55
57F1519	8A36-01-1-6N	6	7.50	5.63
57F1520	8A36-01-1-7N	7	7.60	5.70
57F1521	8A36-01-1-8N	8	7.70	5.78
57F1522	8A36-01-1-9N	9	7.80	5.85
57F1523	8A36-01-1-10N	10	7.90	5.93

SERIES 19 POWER TAP SWITCHES



U.L. listed. Single pole. Single deck. 2 to 11 taps plus common terminal. Non - shorting contacts with 15 amp 115 VAC resistive rating. Breakdown is rated for 2500 VAC. Wt., 1¾ oz.

Stk. No	Type	Taps	1-49	50-99
57F1500	19101-2UL	2	2.80	2.10
57F1501	19101-3UL	3	2.90	2.18
57F1502	19101-4UL	4	3.00	2.25
57F1503	19101-5UL	5	3.10	2.33
57F1504	19101-6UL	6	3.20	2.40
57F1505	19101-7UL	7	3.30	2.48
57F1506	19101-8UL	8	3.40	2.55
57F1507	19101-9UL	9	3.50	2.63
57F1508	19101-10UL	10	3.60	2.70
57F1509	19101-11UL	11	3.70	2.78

SERIES 24 MINIATURE TAP SWITCH

One pole on each deck. Non-shorting contacts. Break 1 amp., carries 5 amps. 3/8-32 threaded, keyed bushing. 1 1/32" O.D. Can withstand 125 G, and 10 to 500 cps. Can operate from —55° C to +85°C, up to 50,000 ft. 5 oz. * Depth behind panel.

SINGLE-DECK SWITCHES *.58:

Stk. No.	Type	Taps	1-49	50-99
23F950	24001-2	2	2.90	2.18
23F951	24001-3	3	3.00	2.25
23F952	24001-4	4	3.10	2.33
23F953	24001-5	5	3.25	2.44
23F954	24001-6	6	3.35	2.51
23F955	24001-7	7	3.45	2.59
23F956	24001-8	8	3.55	2.66
23F957	24001-9	9	3.65	2.74
23F958	24001-10	10	3.80	2.85

2-DECK SWITCHES *1.39"

Stk. No.	Type	Taps	1-49	50-99
23F959	24002-2	2	4.30	3.23
23F960	24002-3	3	4.40	3.30
23F961	24002-4	4	4.50	3.38
23F962	24002-5	5	4.60	3.45
23F963	24002-6	6	4.75	3.56
23F964	24002-7	7	4.85	3.64
23F965	24002-8	8	4.95	3.72
23F966	24002-9	9	5.05	3.79
23F967	24002-10	10	5.15	3.85

SERIES 5000 TAP SWITCHES

Rated to break one amp at 115V AC non-inductive and to carry 5 amps. All have stops exept 10-tap units, which are continuous rotation. Non-shorting contacts Single hole panel mtg. 3/8" bushing. 1 1/32" diameter. 1 pole per deck. Shipping wt approx. 4 oz. *Depth behind panel.

SINGLE-DECK SWITCHES *.47"

Stk. No.	Type	Taps	1-49	50-99
24F225	5-001-2	2	1.60	1.20
24F226	5-001-3	3	1.65	1.24
24F227	5-001-4	4	1.70	1.27
24F228	5-001-5	5	1.75	1.31
24F229	5-001-6	6	1.80	1.35
24F230	5-001-7	7	1.85	1.39
24F231	5-001-8	8	1.90	1.42
24F232	5-001-9	9	1.95	1.48
24F233	5-001-10	10	2.00	1.50

2-DECK SWITCHES *1.25"

Stk. No.	Type	Taps	1-49	50-99
23F900	5-002-2	2	3.60	2.70
23F901	5-002-3	3	3.70	2.76
23F902	5-002-4	4	3.80	2.85
34F903	5-002-5	5	3.90	2.93
23F904	5-002-6	6	4.00	3.00
23F905	5-002-7	7	4.10	3.08
23F906	5-002-8	8	4.20	3.15
23F907	5-002-9	9	4.30	3.23
23F908	5-002-10	10	4.40	3.30

PUSH BUTTON SWITCHES

Series 2000. Momentary contact SPST. Rated 10 amps, 115 volts A.C. res. solder terminals. Size: 1.92"L.x87"D. Wt., 1 oz.
Type 2201. SPST.NO. Red button. Wt., ¾ oz.
Type 2202. SPST-NC. Black button. Wt., ¾ oz.
Type 7-26. SPDT. Red button. Wt., ¾ oz.
Type 7Z1047. Plastic button cap for 2000 series. 721047R, red 721047B black. ¾ oz

Stk. No.	Type	1-49	50-99
24F200	2201	2.05	1.54
24F201	2202	2.05	1.54
24F212	7-26R	3.50	2.63
23F973	7-26B	3.50	2.63
24F234	7Z1047R	.35	.27
24F235	7Z1047B	.35	.27

ULTRA-MINIATURE SWITCH

Series 39-1. SPST. ½ A, 115 vac. 1,000,000 operation life. Phenolic button and base. ¼"Dx19/32"L. 11/64" mtg. hole. Wt., 1 oz.
24F209. (Red Button) 1-49 1.15
50-99 .86

6-PAK ROTARY SWITCHES

AR-1. Six finger tip adjustable stop rotary switches for development, testing, prototypes, and small production runs. Contains the following 44D30-01-1ADJN, 44D30-02-1ADJN, 44D30-03-1ADJN, 42D36-01-1ADJN, 42D36-02-1ADJN, and 50CD36-01-1ADJN already listed on this page. Instant flexibility with fingertip circuitary change by merely moving a stop washer to the desired position.
57F1549. NET. **44.45**

LIGHTED PUSH BUTTON SWITCH

Series 40. Integrated switch and indicator light. Silent action, SPST, momentary contact, normally open. Life expectancy, 500,000 operations at rated load of 1 ampere, 115 VAC. 25/64" mtg. hole required. Solder-type terminals. Overall length 1.84". Shpg. wt. 1 oz.
Type 40-1. Neon lamp

Stk. No.	Color	1-49	50-99
24F210	Clear	2.45	1.84

MINIATURE MOMENTARY CONTACT SWITCH

23-1. Momentary Contact Switch. Normally open SPST. ¼ amp. 114 volts. AC non-inductive. Length 1.047" and maximum diameter. ½". Solder terminals. Red button. Shpg. wt. 1 oz.
24F204. 1-49 ..... **1.05**
50-99 ..... .79

SUB-MINIATURE SWITCH

Series 30. Push button switch with coin silver contacts and terminals. SPST. Momentary contact. Rated 1 amp.—115 VAC. OP—.375" length behind panel—.592. Length 63/64". Shpg. Wt. 1 oz.
Type 30-1. SPST-NO. Red button.
Type 30-2. SPST-NC. Black button.

Stk. No.	Type	1-49	50-99
24F205	30-1	.95	.71
24F206	30-2	.95	.71

PUSH-PULL SWITCH

Series 30-16. SPST. Rated 7 amp., 115 VAC, resistive. Life expectancy 100,000 operations. 31/64" mtg. hole; approx. .90" behind panel projection. Wt., 2 oz.
24F211. Type 30-16B. **1-49** **1.60**
23F974. Type 30-16R.
50-99 ..... 1.20

POSITIVE FEEL SWITCH

Series 30-17. SPST. Butt contact, positive feel with audible click. Rated 1 amp., 115 VAC resistive. 31/64" mtg. hole, approx. behind panel proj., .90" Wt., 2 oz.
24F224. Type 30117B. **1-49** **1.40**
23F975. Type 30-17R.
50-99 ..... 1.05

Series 35-1. Silent, Normally Open, momentary contact, push-button. DPST. ½ amp., 115 VAC Molden phenolic button housing. 11 7/64"L. x 51/64" Dia. Solder term. 100,000—operation life. Wt. ½ oz.
24F207 (Red Button) **1-49** **1.20**
50-99 ..... .90

MOMENTARY CONTACT SWITCH

Series 4000. Non-stop action switch, momentary contact, SPST. ½ amp—500M operations, 1 amp —100M operations. 115V. AC. Solder terminals. Size: 1.53"L. x 80"D. Shpg. Wt., 1 oz.
Type 4001. Normally open. Red Button.
Type 4002. Normally open. Black Button.

Stk. No.	Type	1-49	50-99
24F202	4001	.90	.68
24F203	4002	.90	.68

BUTTON GUARD FOR SERIES 2000, 4000 & 35-1

Type 10C1015. Provides protective recess for buttons. Brass' cadmium plated, fits 15/32"—32 thread. Wt., ½ oz.
23F496. 1-49 ..... **.25**
50-99 ..... .19
Type 7C1040. Decorative mtg. nut.
57F1514. 1-49 ..... **.15**
50-99 ..... .11

Oak Rotary Switches and Assemblies

MINIATURE PHENOLIC SWITCHES

Series F. Dual ball, 30° indexing. Meet MIL-S-3786, 50-Hr. salt spray finishes. Frame dim. 1 5/16" H. x 1 1/4" W; 1 3/8" over clips; 1/4" dia. x 2 3/8" L., shaft break-off points @ 3/4", 1 1/8", 1 7/8" from mtg. surf., adj. stop, except 2-pos. fixed stop. Sect. spacing, 1st spacer 5/16", 2nd, 3/8" approx. 1000V peak breakdown voltage 1 amp @ 28 VDC 0.5 amp @ 115 VAC Av. Shpg. wt. 3 oz

SHORTING TYPE "F"

Stock No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F616	399322F	1	1	2-11	2.64	2.20	1.98	1.88	1.76	1.58
57F618	399324F	2	2	2-11	3.18	2.65	2.39	2.27	2.12	1.91
57F620	399326F	1	2	2-5	2.64	2.20	1.98	1.88	1.76	1.58
57F622	399328F	2	4	2-5	3.18	2.65	2.39	2.27	2.12	1.91
57F624	399330F	1	3	2-3	2.64	2.20	1.98	1.88	1.76	1.58
57F626	399332F	2	6	2-3	3.18	2.65	2.39	2.27	2.12	1.91
57F628	399334F	1	4	2	2.64	2.20	1.98	1.88	1.76	1.58
57F630	399336F	2	8	2	3.18	2.65	2.39	2.27	2.12	1.91

NON-SHORTING TYPE "F"

57F617	399323F	1	1	2-11	2.64	2.20	1.98	1.88	1.76	1.58
57F619	399325F	2	2	2-11	3.18	2.65	2.39	2.27	2.12	1.91
57F621	399327F	1	2	2-5	2.64	2.20	1.98	1.88	1.76	1.58
57F623	399329F	2	4	2-5	3.18	2.65	2.39	2.27	2.12	1.91
57F625	399331F	1	3	2-3	2.64	2.20	1.98	1.88	1.76	1.58
57F627	399333F	2	6	2-3	3.18	2.65	2.39	2.27	2.12	1.91
57F629	399335F	1	4	2	2.64	2.20	1.98	1.88	1.76	1.58
57F631	399337F	2	8	2	3.18	2.65	2.39	2.27	2.12	1.91

SHORTING TYPE FC

50 hr. salt spray. Steel and brass parts are cadmium plated and chromite dipped. Phenolic PBE-P per MIL-P-3115; steatite per MIL-I-10A, grade L422 Silicone fiberglass; GSG per MIL-P-997. Contacts: Brass-silver plated. Electrical: Break 1 amp at 28VDC or 0.5 amp. at 110VAG, resistive. Carry 5 amps.

Stk. No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F632	399366-FC	1	1	2-11	2.94	2.45	2.21	2.10	1.96	1.76
57F634	399368-FC	2	2	2-11	4.17	3.48	3.13	2.97	2.78	2.50
57F636	399370-FC	1	2	2-5	2.94	2.45	2.21	2.10	1.96	1.76
57F640	399374-FC	1	3	2-3	2.94	2.45	2.21	2.10	1.96	1.76
57F638	399372-FC	2	4	2-5	4.17	3.48	3.13	2.97	2.78	2.50
57F644	399378-FC	1	4	2	2.94	2.45	2.21	2.10	1.96	1.76
57F642	399376-FC	2	6	2-3	4.17	3.48	3.13	2.97	2.78	2.50
57F646	399380-FC	2	8	2	4.17	3.48	3.13	2.97	2.78	2.50

NON-SHORTING TYPE EC

57F633	399367-FC	1	1	2-11	2.94	2.45	2.21	2.10	1.96	1.76
57F635	399369-FC	2	2	2-11	4.17	3.48	3.13	2.97	2.78	2.50
57F637	399371-FC	1	2	2-5	2.94	2.45	2.21	2.10	1.96	1.76
57F641	399375-FC	1	3	2-3	2.94	2.45	2.21	2.10	1.96	1.76
57F639	399373-FC	2	4	2-5	4.17	3.48	3.13	2.97	2.78	2.50
57F645	399379-FC	1	4	2	2.94	2.45	2.21	2.10	1.96	1.76
57F643	399377-FC	2	6	2-3	4.17	3.48	3.13	2.97	2.78	2.50
57F647	399381-FC	2	8	2	4.17	3.48	3.13	2.97	2.78	2.50

STEATITE CERAMIC INSULATION SWITCHES

Series JC. Single ball, 30° indexing. Meet MIL-S-3786, 50-Hr. salt spray finishes. Frame dim. 1 17/32" H. x 1 3/8" W., 1 1/2" over clips. 1/4" dia. x 2 3/8" L., shaft break-off points @ 3/4", 1 1/8", 1 7/8" from mtg. surf., adj. stop. Sect. spacing, 1st spaces 3/8", 2nd 7/16", 3rd 15/32", 4th 15/32"; approx. 1800V peak break-down voltage; 1 amp @ 28 VDC, .5 amp @ 115 VAC. Av. shpg. wt., 5 oz.

SHORTING TYPES JC

Stock No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F666	399468JC	1	1	2-12	2.46	2.05	1.85	1.76	1.64	1.48
57F668	399470JC	2	2	2-12	3.54	2.95	2.66	2.53	2.36	2.12
57F670	399472JC	3	3	2-12	4.50	3.75	3.38	3.21	3.00	2.70
57F672	399474JC	4	4	2-12	5.40	4.50	4.05	3.85	3.60	3.24
57F674	399476JC	1	2	2-6	2.46	2.05	1.85	1.76	1.64	1.48
57F676	399478JC	2	4	2-6	3.54	2.95	2.66	2.53	2.36	2.12
57F678	399480JC	3	6	2-6	4.50	3.75	3.38	3.21	3.00	2.70
57F680	399484JC	1	6	2	2.46	2.05	1.85	1.76	1.64	1.48
57F682	399486JC	2	12	2	3.54	2.95	2.66	2.53	2.36	2.12
57F855	399696JC	2	6	2-5	3.54	2.95	2.72	2.54	2.36	2.18
57F857	399698JC	4	8	2-5	5.40	4.50	4.15	3.87	3.60	3.33
57F542	399704JC	1	3	2-5	2.46	2.05	1.85	1.76	1.64	1.52
57F544	399706JC	4	8	2-6	5.33	4.45	4.00	3.82	3.56	3.29
57F546	399708JC	3	9	2-5	4.50	3.75	3.38	3.21	3.00	2.70
57F548	399710JC	2	10	2-3	3.54	2.95	2.66	2.53	2.36	2.12
57F550	399712JC	5	10	2-6	5.53	4.62	4.15	3.97	3.69	3.40
57F552	399714JC	6	12	2-6	7.57	6.30	5.67	5.42	5.03	4.66
57F554	399716JC	3	15	2-3	4.90	4.10	3.68	3.52	3.27	3.03
57F556	399718JC	3	18	2	4.90	4.10	3.68	3.52	3.27	3.03

NON-SHORTING TYPES JC

Stock No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F667	399469JC	1	1	2-12	2.46	2.05	1.85	1.76	1.64	1.48
57F669	399471JC	2	2	2-12	3.54	2.95	2.66	2.53	2.36	2.12
57F671	399473JC	3	3	2-12	4.50	3.75	3.38	3.21	3.00	2.70
57F673	399475JC	4	4	2-12	5.40	4.50	4.05	3.85	3.60	3.24
57F675	399477JC	1	2	2-6	2.46	2.05	1.85	1.76	1.64	1.48
57F677	399479JC	2	4	2-6	3.54	2.95	2.66	2.53	2.36	2.12
57F679	399481JC	3	6	2-6	4.50	3.75	3.38	3.21	3.00	2.70
57F681	399485JC	1	6	2	2.46	2.05	1.85	1.76	1.64	1.48
57F683	399487JC	2	12	2	3.54	2.95	2.66	2.53	2.36	2.12
57F856	399697JC	2	6	2-5	3.54	2.95	2.72	2.54	2.36	2.18
57F858	399699JC	4	8	2-5	5.40	4.50	4.15	3.87	3.60	3.33
57F543	399705JC	1	3	2-5	2.46	2.05	1.85	1.76	1.64	1.52
57F545	399707JC	4	8	2-6	5.33	4.45	4.00	3.82	3.56	3.29
57F547	399709JC	3	9	2-5	4.50	3.75	3.38	3.21	3.00	2.70
57F549	399711JC	2	10	2-3	3.54	2.95	2.66	2.53	2.36	2.12
57F551	399713JC	5	10	2-6	5.53	4.62	4.15	3.97	3.69	3.40
57F553	399715JC	6	12	2-6	7.57	6.30	5.67	5.42	5.03	4.66
57F555	399717JC	3	15	2-3	4.90	4.10	3.68	3.52	3.27	3.03
57F557	399719JC	3	18	2	4.90	4.10	3.68	3.52	3.27	3.03

PHENOLIC INSULATION SWITCHES

Series K. 50 Hr. Salt Spray finish. Meet MIL-S-3786. Single ball 30° indexing. Frame dim. 1 17/32H.x1 13/32" W; 1 9/16 over clips; 1/4" dia. x 2 3/8" L., shaft breakoff points @ 3/4", 1 1/8", 1 7/8" from mtg. surf., bushing 3/8"-32 thread, 3/8" L. nut & washer on all switches. Sect. spacing, 1st spacer 3/8", 2nd, 3rd, 4th 1/2" ea. approx. 1800 V, peak breakdown voltage 1 amp. @ 28 VDC, .5 amp @ 115 VAC. Av. shpg. wt. 4 oz.

SHORTING TYPE "K"

Stock No.	Type	Sec.	Poles Tot.	Poles Pos	1-4	5-9	10-24	25-49	50-99	100-249
57F648	399418K	1	1	2-12	1.86	1.55	1.40	1.33	1.24	1.12
57F650	399420K	2	2	2-12	2.67	2.28	2.05	1.95	1.78	1.60
57F656	399426K	1	2	2-6	1.86	1.55	1.40	1.33	1.24	1.12
57F658	399428K	2	4	2-6	2.67	2.28	2.05	1.95	1.78	1.60
57F660	399430K	3	6	2-6	3.36	2.80	2.52	2.39	2.24	2.02
57F652	399422K	3	3	2-12	3.36	2.80	2.52	2.39	2.24	2.02
57F654	399424K	4	4	2-12	3.96	3.30	2.97	2.82	2.64	2.38
57F662	399432K	1	6	2	1.86	1.55	1.40	1.33	1.24	1.12
57F664	399434K	2	12	2	2.67	2.28	2.05	1.95	1.78	1.60
57F859	399490K	1	3	2-5	3.30	2.75	2.52	2.38	2.20	2.04
57F861	399492K	2	6	2-5	3.30	2.75	2.52	2.38	2.20	2.04
57F863	399494K	3	9	2-5	3.96	3.30	3.04	2.84	2.64	2.44
57F562	399732K	5	5	2-11	4.68	3.90	3.51	3.3	3.12	2.89
57F564	399734K	2	6	2-3	2.67	2.28	2.05	1.95	1.78	1.60
57F566	399736K	6	6	2-11	5.40	4.50	4.05	3.87	3.60	3.33
57F568	399738K	4	8	2-5	3.96	3.30	2.97	2.82	2.64	2.38
57F570	399740K	3	12	2	3.36	2.80	2.52	2.39	2.24	2.02
57F572	399742K	5	10	2-5	4.68	3.90	3.52	3.35	3.12	2.89
57F574	399744K	6	12	2-5	5.40	4.50	4.05	3.87	3.60	3.33

NON-SHORTING TYPE "K"

Stock No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F649	399419K	1	1	2-12	1.86	1.55	1.40	1.33	1.24	1.12
57F651	399421K	2	2	2-12	2.67	2.28	2.05	1.95	1.78	1.60
67F653	399423K	3	3	2-12	3.36	2.80	2.52	2.39	2.24	2.02
57F655	399425K	4	4	2-12	3.96	3.30	2.97	2.82	2.64	2.38
57F657	399427K	1	2	2-6	1.86	1.55	1.40	1.33	1.24	1.12
57F659	399429K	2	4	2-6	2.67	2.28	2.05	1.95	1.78	1.60
57F661	399431K	3	6	2-6	3.36	2.80	2.52	2.39	2.24	2.02
57F663	399433K	1	6	2	1.86	1.55	1.40	1.33	1.24	1.12
57F665	399435K	2	12	2	2.67	2.28	2.05	1.95	1.78	1.60
57F860	399491K	1	3	2-5	3.30	2.75	2.52	2.38	2.20	2.04
57F862	399493K	2	6	2-5	3.30	2.75	2.52	2.38	2.20	2.04
57F864	399495K	3	9	2-5	3.96	3.30	3.04	2.84	2.64	2.44
57F563	399733K	5	5	2-11	4.68	3.90	3.51	3.35	3.12	2.89
57F565	399735K	2	6	2-3	2.67	2.28	2.05	1.95	1.78	1.60
57F567	399737K	6	6	2-11	5.40	4.50	4.05	3.87	3.60	3.33
57F569	399739K	4	8	2-5	3.96	3.30	2.97	2.82	2.64	2.38
57F571	399741K	3	12	2	3.36	2.80	2.52	2.39	2.24	2.02
57F573	399743K	5	10	2-5	4.68	3.90	3.52	3.35	3.12	2.89
57F575	399745K	6	12	2-5	5.40	4.50	4.05	3.87	3.60	3.33

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Oak Rotary Switches, Assemblies

PHENOLIC INSULATION SWITCHES

Series H. Dual ball, 30° indexing. Meet MIL-S-3786, 50-Hr. salt spray finishes. Frame dim. 1⅞"H. x 1 19/32"W., 1 13/16" over clips. ¼" dia. x 2⅜"L., shaft break-off points @ ¾", 1⅛", 1⅞" from mounting surf. Adj. stop. Sect. spacing 1st spacer ½"; 2nd 1"; 3rd 1" Approx. 2500V peak break-down voltage. 1 amp @ 28 VDC, .5 amp @ 115 VAC. Av. shpg. wt. 4 oz.

SHORTING TYPES "H"

Stk. No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F684	399512H	1	1	2-11	2.64	2.20	1.98	1.88	1.76	1.58
57F686	399514H	2	2	2-11	3.18	2.65	2.39	2.27	2.12	1.91
57F692	399520H	2	4	2-5	3.18	2.65	2.39	2.27	2.12	1.91
57F688	399516H	3	3	2-11	4.05	3.88	3.49	3.32	2.70	2.43
57F690	399518H	1	2	2-5	2.64	2.20	1.98	1.88	1.76	1.58
57F694	399522H	3	6	2-5	4.05	3.88	3.49	3.32	2.70	2.43

NON-SHORTING TYPES "H"

57F685	399513H	1	1	2-11	2.64	2.20	1.98	1.88	1.76	1.58
57F687	399515H	2	2	2-11	3.18	2.65	2.39	2.27	2.12	1.91
57F689	399517H	3	3	2-11	4.05	3.88	3.49	3.32	2.70	2.43
57F691	399519H	1	2	2-5	2.64	2.20	1.98	1.88	1.76	1.58
57F693	399521H	2	4	2-5	3.18	2.65	2.39	2.27	2.12	1.91
57F695	399523H	3	6	2-5	4.05	3.88	3.49	3.32	2.70	2.43
57F597	399529H	4	4	2-11	4.71	3.93	3.54	3.36	3.14	2.83
57F865	399525H	1	4	2	2.62	2.19	1.97	1.87	1.75	1.57
57F866	399527H	2	6	2-3	3.18	2.65	2.39	2.28	2.12	1.92

STEATITE CERAMIC INSULATION SWITCHES

Series HC. 50-Hr. salt spray finishes. Meet MIL-S-3786 Dual ball. 30° indexing. Frame dim. 1⅞"H.x1⅝"W. 1⅞" over clips ¼" dia.x2⅜"L, snaft break-off points @ ¾", 1⅛", 1⅞", from mounting surf. Adj. stop; Sect. spacing 1st spacer ½"; 2nd 15/16"; 3rd 1". Approx. 2500V. peak break-down voltage, 1 amp @ 28 VDC, .5 amp 115 VAC. Av. Wt., 5 oz.

SHORTING TYPES "HC"

Stk. No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F696	399562HC	1	1	2-11	2.94	2.45	2.21	2.10	1.96	1.76
57F698	399564HC	2	2	2-11	4.17	3.48	3.13	2.97	2.78	2.50
57F700	399566HC	3	3	2-11	5.37	4.48	4.03	3.83	3.58	3.22
57F702	399568HC	1	2	2-5	2.94	2.45	2.21	2.10	1.96	1.76
57F704	399570HC	2	4	2-5	4.17	3.48	3.13	2.97	2.78	2.50

NON-SHORTING TYPES "HC"

Stk. No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	100-249	50 99	25-49	10-24
57F697	399563HC	1	1	2-11	2.94	2.45	2.21	2.10	1.96	1.76
57F699	399565HC	2	2	2-11	4.17	3.48	3.13	2.97	2.78	2.50
57F701	399567HC	3	3	2-11	5.37	4.48	4.03	3.83	3.58	3.22
57F703	399569HC	1	2	2-5	2.94	2.45	2.21	2.10	1.96	1.76
57F705	399571HC	2	4	2-5	4.17	3.48	3.13	2.97	2.78	2.50
57F707	399573HC	3	6	2-5	5.37	4.48	4.03	3.83	3.58	3.22

MINIATURE SILICONE SWITCHES

Series A. Dual ball, 30° indexing finishes. Meet MIL-S-3786, 200-hr. salt spray finishes. Frame dim. 1"Hx15/16"W; 1 3/16" over clips; ¼" dia. x 2⅜"L shaft break-off points @ ¾", 1⅛", 1⅞" from mtg. surf., Adj. stop. Sect. spacing, 1st spacer 17/64", 2nd 5/32", 3rd 5/32", approx. 750V peak breakdown voltage 1 amp @ 28 VDC, 5 amp @ 115 VAC. Av. shpg. wt. 4 oz.

SHORTING—TYPE "A"

Stock No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F600	399216A	1	1	2-12	5.40	4.50	4.05	3.85	3.60	3.24
57F602	399218A	2	2	2-12	6.90	5.75	5.18	4.92	4.60	4.14
57F604	399220A	3	3	2-12	8.70	7.25	6.53	6.20	5.80	5.22
57F606	399222A	1	2	2-6	5.40	4.50	4.05	3.85	3.60	3.24
57F608	399224A	2	4	2-6	6.90	5.75	5.18	4.92	4.60	4.14
57F610	399226A	3	6	2-6	8.70	7.25	6.53	6.20	5.80	5.22
57F612	399234A	1	4	2	5.40	4.50	4.05	3.85	3.60	3.24
57F614	399236A	2	8	2	6.90	5.75	5.18	4.92	4.60	4.14

NON-SHORTING TYPE "A"

57F601	399217A	1	1	2-12	5.40	4.50	4.05	3.85	3.60	3.24
57F603	399219A	2	2	2-12	6.90	5.75	5.18	4.92	4.60	4.14
57F605	399221A	3	3	2-12	8.70	7.25	6.53	6.20	5.80	5.22
57F607	399223A	1	2	2-6	5.40	4.50	4.05	3.85	3.60	3.24
57F609	399225A	2	4	2-6	6.90	5.75	5.18	4.92	4.60	4.14
57F611	399227A	3	6	2-6	8.70	7.25	6.53	6.20	5.80	5.22
57F613	399235A	1	4	2	5.40	4.50	4.05	3.85	3.60	3.24
57F615	399237A	2	8	2	6.90	5.75	5.18	4.92	4.60	4.14

PHENOLIC INSULATED SWITCHES

Series L. Single ball, 20° indexing. 50-hr. salt spray finishes. Meet MIL-S-3786 Frame dim. 2 5/16"H.x1 31/32"W. 2⅛ over clips. ¼" dia.x2⅜"L., shaft, break-off points @ ¾", 1⅛", 1⅞", from mounting surf. Adj. stop 2-17 pos. adjustable. Sect. spacing all ½". Approx. 1000V. peak break-down voltage 1 amp @ 28 VDC, 5 amp @ 115 VAC. Av. shpg. wt., 4 oz.

SHORTING TYPES "L"

Stk. No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F708	399608L	1	1	2-17	2.34	1.95	1.76	1.67	1.56	1.40
57F710	399610L	2	2	2-17	3.36	2.80	2.52	2.39	2.24	2.02
57F712	399612L	3	3	2-17	4.38	3.65	3.29	3.13	2.92	2.63
57F714	399614L	4	4	2-17	4.95	4.03	3.63	3.45	3.30	2.97

NON-SHORTING TYPES "L"

57F709	399609L	1	1	2-17	2.34	1.95	1.76	1.67	1.56	1.40
57F711	399611L	2	2	2-17	3.36	2.80	2.52	2.39	2.24	2.02
57F713	399613L	3	3	2-17	4.38	3.65	3.29	3.13	2.92	2.63
57F715	399615L	4	4	2-17	4.95	4.03	3.63	3.45	3.30	2.97

SHORTING TYPE "MF" SERIES

50 hour salt spray. MIL-P-3115, MIL-P-997. Ball type indexing, one fixed and adjustable stop per switch. Break one amp at 28 VDC or 0.5 amp at 110 VAC, resistive. Carry 5 amps.

Stk. No.	Type	Sec.	Poles tot.	Poles pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F716	399658-MF	1	1	2-23	2.52	2.10	1.89	1.80	1.68	1.51
57F718	399660-MF	2	2	2-23	3.60	3.00	2.70	2.57	2.40	2.16
57F720	399662-MF	3	3	2-23	4.71	3.93	3.54	3.36	3.14	2.83
57F722	399664-MF	4	4	2-23	5.34	4.45	4.01	3.81	3.56	3.20

NON SHORTING TYPE "MF" SERIES

57F717	399659-MF	1	1	2-23	2.52	2.10	1.89	1.80	1.68	1.51
57F719	399661-MF	2	2	2-23	3.60	3.00	2.70	2.57	2.40	2.16
57F721	399663-MF	3	3	2-23	4.71	3.93	3.54	3.36	3.14	2.83
57F723	399665-MF	4	4	2-23	5.34	4.45	4.01	3.81	3.56	3.20

SPECIAL FUNCTIONS SECTIONS

Same dimensions and materials as complete switches. Av. wt., 2 oz.

Consecutive Shorting Function—Type A

Stk. No.	Type	1-4	5-9	10-24	25-49	50-99	100-249
57F782	399056A	2.10	1.75	1.58	1.50	1.40	1.26

Binary Coded Decimal Output Switch—Type A, Non-Shorting

57F783	399061A	2.10	1.75	1.58	1.50	1.40	1.26

SPECIAL FUNCTIONS SECTIONS

Resistor Decade—Type A, Non-Shorting

Stk. No.	Type	1-4	5-9	10-24	25-49	50-99	100-249
57F784	399057A	2.10	1.75	1.58	1.50	1.40	1.26

Capacitor Decade—Type A, Non-Shorting

57F785	399059A	2.10	1.75	1.58	1.50	1.40	1.26

ADD-ON SECTIONS — SHORTING

Suffix letter indicates Oak type; see descriptions, this and preceding page. 1 pole, 2-11 positions, except: *2-17 position, †2-23 position.

Stk. No.	Type	1-4	5-9	10-24	25-49	50-99	100-249
57F786	399058A	2.10	1.75	1.58	1.50	1.40	1.26
57F787	399060F	1.56	1.30	1.17	1.11	1.04	.94
57F788	399062FC	2.10	1.75	1.58	1.50	1.40	1.26
57F789	399064K	1.35	1.13	1.02	.97	.90	.81
57F790	399066JC	1.86	1.55	1.40	1.33	1.24	1.12
57F791	399068H	1.65	1.38	1.24	1.18	1.10	.99
57F792	399078HC	2.10	1.75	1.58	1.50	1.40	1.26
57F793	399080L*	1.71	1.43	1.29	1.23	1.14	1.03
57F794	399082MF†	1.80	1.50	1.35	1.28	1.20	1.08

CONSECUTIVE SHORTING FUNCTION TYPES "JC," & "K"

Stk. No.	Type	1-4	5-9	10-24	25-49	50-99	100-249
57F854	399438JC	1.26	1.05	.95	.90	.84	.76
57F852	399252K	.90	.75	.68	.65	.60	.54

OPPOSITE ROTATION TYPES "JC" & "K"

58F853	399436JC	1.26	1.05	.95	.90	.84	.76
57F851	399250K	.90	.75	.68	.65	.60	.54

SHORTING FUNCTION TYPES "HC"

Stk. No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F706	399572HC	3	6	2-5	5.37	4.48	4.03	3.83	3.58	3.22
57F540	399574HC	1	1	2-6	2.94	2.45	2.21	2.10	1.96	1.76

Oak Switches

200 HOUR SALT SPRAY SWITCHES

All switches are OEM preferred types. These switches have silver alloy contacts, with .000030" of an inch thick gold plating. All frame materials are stainless steel or nickel plated brass. Stainless parts are passivated. Innsulation—Silicone Fiberglass: GSC 4 KEL-F; Per MIL-P-997. Switches feature ball-type indexing one fixed & one adjustable stop per switch. Shafts are cadmium plated steel (2⅜" long); grooved for breakoff at ¾", 1⅛", and 1⅞". Douple wiping self cleaning contacts are used throughout. Break 1 amp at 28 VDC or 0.5 amp at 110 VAC, resistive. Carrier 5 amps. ⅜-32 Mounting nuts & lock washes supplied.

SHORTING

Stk. No.	Type	Sec	Poles tot.	Poles pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F724	399240A	1	1	2-12	5.70	4.75	4.28	4.07	3.80	3.42
57F726	399338F	1	1	2-11	3.24	2.70	2.43	2.31	2.16	1.94
57F728	399382FC	1	1	2-11	3.54	2.95	2.66	2.53	2.36	2.12
57F580	399724JC	2	1	2-12	4.90	4.10	3.68	3.52	3.27	3.03

NON SHORTING

57F725	399241A	1	1	2-12	5.70	4.75	4.28	4.07	3.80	3.42
57F727	399339F	1	1	2-11	3.24	2.70	2.43	2.31	2.16	1.94
57F729	399383FC	1	1	2-11	3.54	2.95	2.66	2.53	2.36	2.12
57F581	399725JC	2	1	2-12	4.90	4.10	3.68	3.52	3.27	3.03

STANDARD ROTATION CONSECUTIVE SHORTING TYPES JC & K

9 active contacts. All open in full CCW position & progressively picked-up & shorted to common contact.

Stk. No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F559	399722JC	1	1	2-10	2.16	1.80	1.62	1.54	1.44	1.30
57F578	399748K	1	1	2-10	1.86	1.55	1.40	1.33	1.24	1.12

OPPOSITE ROTATION CONSECUTIVE SHORTING TYPES JC & K

9 active contacts, all shorted to common contact CCW position, & progressively opened and dropped.

57F558	399720JC	1	1	2-10	2.16	1.80	1.62	1.54	1.44	1.30
57F576	399746K	1	1	2-10	1.86	1.55	1.40	1.33	1.24	1.12

60° INDEXING SWITCHES (PHENOLIC, NON-SHORTING)

57F577	399747K	1	1	2-6	1.86	1.55	1.40	1.33	1.24	1.12
57F579	399749K	2	1	2-6	2.64	2.20	1.98	1.88	1.76	1.58

60° HAM SWITCHES (CERAMIC, NON-SHORTING)

57F845	399729-JC	1	1	2-6	2.16	1.80	1.62	1.54	1.44	1.30
57F846	399731-JC	2	2	2-6	3.05	2.58	2.33	2.22	2.07	1.87
57F541	399581HC	3	1	2-6	4.37	3.65	3.29	3.13	2.93	2.64

130 PUSHBUTTON SWITCH

4 PDT per plunger. 2 to 12 buttons. 8 to 48 poles. Mechanism permits modification to momentary operations. ⅝ and ¾" button spacing. Buttons interlocked by common latch bar. Push rods extend 2" from mounting surface. Double wiping with gold-plate on the contacts. Rated, 1 amp at 28 VDC operation; 0.5 amp at 110 VAC. Carries 5 A. Insulation: Phenolic punching stock, conforming to MIL-P-3115 grade PBG. Slider insulators: PBE-P.

¾" BUTTON SHORTING

Stk. No.	Type	No. of Buttons	Tot. No. Poles	1-9	10-24	25-49	50-99	100-249
57F824	399850-130	2	8	4.86	4.05	3.24	2.75	2.11
57F827	399854-130	4	16	8.16	6.80	5.44	4.62	3.54
57F830	399858-130	6	24	11.70	9.75	7.80	6.63	5.07
57F833	399862-130	8	32	15.09	12.58	10.06	8.55	6.54
57F836	399866-130	10	40	18.87	15.73	12.58	10.69	8.18
57F839	399870-130	12	48	22.68	18.90	15.12	12.85	9.82

¾" BUTTON NON-SHORTING

57F825	399851-130	2	8	4.86	4.05	3.24	2.75	2.11
57F826	399853-130	3	12	6.54	5.45	4.36	3.71	2.83
57F828	399855-130	4	16	8.16	6.80	5.44	4.62	3.54
57F829	399857-130	5	20	9.99	8.33	6.66	5.66	4.33
57F831	399859-130	6	24	11.70	9.75	7.80	6.63	5.07
57F832	399861-130	7	28	13.41	11.18	8.94	7.60	5.81
57F834	399863-130	8	32	15.09	12.58	10.06	8.55	6.54
57F835	399865-130	9	36	17.18	14.30	11.44	9.72	7.44
57F837	399867-130	10	40	18.87	15.73	12.58	10.69	8.18
57F838	399869-130	11	44	21.15	17.63	14.10	11.99	9.16
57F840	399871-130	12	48	22.68	18.90	15.12	12.85	9.82

⅝" BUTTON SHORTING

Stk. No.	Type	No. of Btns.	Tot. No. Poles	1-9	10-24	25-49	50-99	100-249
57F867	399872-130	2	8	4.86	4.05	3.24	2.75	2.11
57F870	399876-130	4	16	8.16	6.80	5.44	4.62	3.54
57F873	399880-130	6	24	11.70	9.75	7.80	6.63	5.07
57F876	399884-130	8	32	15.09	12.58	10.06	8.55	6.54
57F879	399888-130	10	40	18.87	15.73	12.58	10.69	8.18
57F882	399892-130	12	48	22.86	18.90	15.12	12.85	9.82

⅝" BUTTON NON-SHORTING

57F868	399873-130	2	8	4.86	4.05	3.24	2.75	2.11
57F869	399875-130	3	12	6.54	5.45	4.36	3.71	2.83
57F871	399877-130	4	16	8.16	6.80	5.44	4.62	3.54
57F872	399879-130	5	20	9.99	8.33	6.66	5.66	4.33
57F874	399881-130	6	24	11.70	9.75	7.80	6.63	5.07
57F875	399883-130	7	28	13.41	11.18	8.94	7.60	5.81
57F877	399885-130	8	32	15.09	12.58	10.06	8.55	6.54
57F878	399887-130	9	36	17.16	14.30	11.44	9.72	7.44
57F880	399889-130	10	40	18.87	15.73	12.58	10.69	8.18
57F881	399891-130	11	44	21.15	17.63	14.10	11.99	9.16
57F883	399893-130	12	48	22.68	18.90	15.12	12.85	9.82

DELUXE BUTTONS FOR 130 SWITCH

Lighting accomplished by flooding back of panel with light. Translucent buttons light up when depressed.

57F841. Type 399930-001. NET EACH .18

TYPE 200 SERIES SLIDE SWITCHES

SPST-DPST-SPDT-DPDT. 1 & 2 poles. 2-6 contacts. 30% narrower than ordinary slide switches; gold-plated, Double-Wiping contacts which are self-cleaning. All slide switches rated 3 amps at 125 VAC operation. All non-shorting.

Stk. No.	Type	Funct.	Poles	Cont.	1-99	100-249
57F816	399275-275	SPST	1	2	.16	.144
57F817	399276-276	DPST	2	4	.21	.19
57F818	399277-277	SPDT	1	3	.16	.144
57F819	399278-278	DPDT	2	6	.21	.19

SWITCH HARDWARE

Listed for the convenience of design engineers to assist in assembling switches. Sets include hardware to build 5 1-section, spacers, strut screws, washers, nuts, sockwashers, and stopwashers.

Stk. No.	Part No.	For Types	1-4	5-9	10-24	25-49	50-99	100-249
57F842	399960	A	6.24	5.59	5.20	4.68	4.16	3.62
57F843	399961	F, FC, JC, K	14.40	12.90	12.00	10.80	9.60	8.70
57F844	399962	H, HC, L, MF	13.44	12.04	11.20	10.08	8.96	8.12

175 PUSHBUTTON SWITCH

Designed for circuit applications requiring a single pushbutton switch with low contact resistance. Shorting & non-shorting. 2 PDT: 6 contacts. 4 PDT: 12 contacts. Push-push Latching.

Stk. No.	Type	Funct.	Cont.	1-4	5-9	10-24	25-49	50-99	100-249
57F820	399810-175*	2PDT	6	2.63	2.18	1.91	1.84	1.72	1.13
57F822	399812-175*	4PDT	12	3.01	2.49	2.19	2.11	1.98	1.29
57F821	399811-175**	2PDT	6	2.63	2.18	1.91	1.84	1.72	1.13
57F823	399813-175**	4PDT	12	3.01	2.49	2.19	2.11	1.98	1.29

*Shorting **Non-shorting

TYPE 189 LEVER SWITCHES

2 poles, 3 positions. Double wiping contacts. Single sect. Gold plated contacts.

Stk. No.	Type	Poles	Pos.	Index.	1-4	5-9	10-24	25-49	50-99	100-249
57F801	399160-189*	2	3	Positive	1.31	1.10	1.00	.95	.89	.85
57F802	399161-189**	2	3	Positive	1.31	1.10	1.00	.95	.89	.85

TYPE 184 LEVER SWITCHES

5 & 6 poles, 2 & 3 positionos. Molded stator adapts to miniature circuitry. Features Double-Wiping gold-plated contacts.

57F803	399162-184*	5	3	Positive	4.94	4.09	3.60	3.45	2.82	1.83
57F805	399164-184*	6	2	Positive	4.90	4.06	3.57	3.43	3.22	2.10
57F804	399163-184**	5	3	Positive	4.94	4.09	3.60	3.45	2.82	1.83
57F806	399165-184**	6	2	Positive	4.90	4.06	3.57	3.43	3.22	2.10

TYPE 20 SERIES ROTARY SWITCHES

Shorting and non-shorting. 1 and 2 poles, 2 to 4 positions. These economical switches provide more flexibility and adaptability to circuit design. Ideally suited for all light duty circuit switching such as radio-phono, stereo channel reversing, meters, speakers and related equipment. Shaft is 2⅜" long. Grooved for break-off at ¾", 1⅛" and 1⅞" from the mounting surface. Long life and quality construction assured.

57F809	399190-23*	1	2	Positive	1.13	.95	.86	.82	.77	.70
57F810	399192-27*	1	3	Positive	1.13	.95	.86	.82	.77	.70
57F813	399196-29*	1	4	Positive	1.13	.95	.86	.82	.77	.70
57F811	399194-22*	2	2	Positive	1.13	.95	.86	.82	.77	.70
57F815	399198-28*	2	3	Positive	1.13	.95	.86	.82	.77	.70
57F812	399195-29**	1	4	Positive	1.13	.95	.86	.82	.77	.70
57F814	399197-22**	2	2	Pos. 2-1	1.13	.95	.86	.82	.77	.70
57F807	399188-28*	2	3	to cntr.	2.04	1.72	1.55	1.48	1.39	1.26
57F808	399189-28**	2	3	To cntr.	2.04	1.72	1.55	1.48	1.39	1.26

SHAFT & INDEX ASSEMBLIES

Complete hardware consisting of mounting nut and lockwasher stop washer, assembly tie rods and spacers washers, nuts. Shpg. wt., 3 oz.

NEWARK Saves You Time and Money—With One Purchase Order

Stk. No.	Type	Sec.	DIM-K	Pole Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F776	399029A	A	6 3/64	2-12	2.25	1.88	1.69	1.60	1.50	1.35
57F795	399022A	A	4 19/32	2-12	3.00	2.50	2.25	2.14	2.00	1.80
57F777	399039F-FC	F	1 1/4	2-12	1.56	1.30	1.17	1.11	1.04	.94
57F796	399021F-FC	F	6 1/8	2-12	2.49	2.08	1.88	1.79	1.66	1.50
57F778	399043K-JC	K	2 17/32	2-12	1.44	1.20	1.08	1.03	.96	.86
57F797	399024K-JC	K	6 1/8	2-12	2.37	1.98	1.78	1.69	1.58	1.42
57F779	399785H-HC	H	3 3/32	2-12	1.71	1.43	1.29	1.23	1.14	1.03
57F798	399023H-HC	H	6 1/8	2-12	2.64	2.20	1.98	1.88	1.76	1.59
57F780	399789L	L	2 19/32	2-18	1.80	1.50	1.35	1.28	1.20	1.08
57F799	399025L	L	6 1/8	2-18	2.73	2.28	2.06	1.96	1.82	1.64
57F781	399793MF	MF	2 17/32	2-24	1.95	1.63	1.47	1.40	1.30	1.17
57F800	399026MF	MF	6 1/8	2-24	2.88	2.40	2.16	2.06	1.92	1.73

SECTIONS

50 hour salt spray. Steel and brass parts are cadmium plated and chromate dipped 200 hour salt spray. Nickel plated brass and stainless steel. (+) Notched blade sections.

NON-SHORTING "A"

Stock No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F731	399033A	A	1	2-12	3.09	2.58	2.32	2.20	2.06	1.85
57F735	399037A	A	4	2	3.09	2.58	2.32	2.20	2.06	1.85
57F733	339035A	A	2	2-6	3.09	2.58	2.32	2.20	2.06	1.85

NON-SHORTING "F"

57F737	399071F	F	1	2-11	1.11	.93	.84	.80	.74	.67
57F739	399073F	F	2	2-5	1.11	.93	.84	.80	.74	.67
57F741	399075F	F	3	2-3	1.11	.93	.84	.80	.74	.67
57F734	399077F	F	4	2	1.11	.93	.84	.80	.74	.67

NON-SHORTING "FC"

57F745	399091FC	FC	1	2-11	1.41	1.18	1.06	1.01	.94	.85
57F747	399093FC	FC	2	2-5	1.41	1.18	1.06	1.01	.94	.85
57F749	399095FC	FC	3	2-3	1.41	1.18	1.06	1.01	.94	.85
57F751	399097FC	FC	4	2	1.41	1.18	1.06	1.01	.94	.85

NON-SHORTING "K"

57F753	399131K	K	1	2-12	.90	.75	.68	.65	.60	.59
57F755	399133K	K	2	2-6	.90	.75	.68	.65	.60	.59
57F757	399135K	K	6	2	.90	.75	.68	.65	.60	.59
57F583	339243-K	K	1	2-11	.90	.75	.68	.65	.60	.59
57F585	399245-K	K	2	2-5	.90	.75	.68	.65	.60	.59
57F587	399247-K	K	3	2-3	.90	.75	.68	.65	.60	.59
57F885	399255-K	K	3	2-5	.90	.75	.69	.65	.60	.56
57F589	399249-K	K	4	2	.90	.75	.68	.65	.60	.59

NON-SHORTING "JC"

57F759	399151JC	JC	1	2-12	1.26	1.05	.95	.90	.84	.76
57F761	399153JC	JC	2	2-6	1.26	1.05	.95	.90	.84	.76
57F591	399445-JC	JC	3	2-5	1.26	1.05	.95	.90	.84	.76
57F593	399447-JC	JC	5	2-3	1.26	1.05	.95	.90	.84	.76
57F763	399155 JC	JC	6	2	1.26	1.05	.95	.90	.84	.76

NON-SHORTING "H"

57F765	399751H	H	1	2-11	1.11	.93	.84	.80	.74	.67
57F767	399753H	H	2	2-5	1.11	.93	.84	.80	.74	.67
57F594	399767H	H	3	2-3	1.11	.93	.84	.80	.74	.67
57F595	399769H	H	4	2	1.11	.93	.84	.80	.74	.67

NON-SHORTING "HC"

57F769	399761HC	HC	1	2-11	1.41	1.18	1.06	1.01	.94	.84
57F771	399763HC	HC	2	2-5	1.41	1.18	1.06	1.01	.94	.84

NON-SHORTING "L"

57F773	399173L	L	1	2-17	1.14	.95	.86	.82	.76	.69

NON-SHORTING "MF"

57F775	399181MF	MF	1	2-23	1.20	1.00	.90	.85	.80	.72

SHORTING "A"

Stock No.	Type	Sec.	Poles Tot.	Poles Pos.	1-4	5-9	10-24	25-49	50-99	100-249
57F730	399032A	A	1	2-12	3.09	2.58	2.32	2.20	2.06	1.85
57F732	399034A	A	2	2-16	3.09	2.58	2.32	2.20	2.06	1.85
57F734	399036A	A	4	2	3.09	2.58	2.32	2.20	2.06	1.85

SHORTING "F"

57F736	399070F	F	1	2-11	1.11	.93	.84	.80	.74	.67
57F738	399072F	F	2	2-5	1.11	.93	.84	.80	.74	.67
57F740	399074-F	F	3	2-3	1.11	.93	.84	.80	.74	.67
57F742	399076-F	F	4	2	1.11	.93	.84	.80	.74	.67

SHORTING "FC"

57F744	399090FC	FC	1	2-11	1.41	1.18	1.06	1.01	.94	.85
57F746	399092FC	FC	2	2-5	1.41	1.18	1.06	1.01	.94	.85
57F748	399094-FC	FC	3	2-3	1.41	1.18	1.06	1.01	.94	.85
57F750	399096-FC	FC	4	2	1.41	1.18	1.06	1.01	.94	.85

SHORTING "K"

57F752	399130K	K	1	2-12	.90	.75	.68	.65	.60	.59
57F754	399132K	K	2	2-6	.90	.75	.68	.65	.60	.59
57F756	399134K	K	6	2	.90	.75	.68	.65	.60	.59
57F582	399242-K	K	1	2-11	.90	.75	.68	.65	.60	.59
57F584	399244-K	K	2	2-5	.90	.75	.68	.65	.60	.59
57F586	399246-K	K	3	2-3	.90	.75	.68	.65	.60	.59
57F884	399254-K	K	3	2-5	.90	.75	.69	.65	.60	.56
57F588	399248-K	K	4	2	.90	.75	.68	.65	.60	.59

SHORTING "JC"

57F758	399150JC	JC	1	2-12	1.26	1.05	.95	.90	.84	.76
57F760	399152-JC	JC	2	2-6	1.26	1.05	.95	.90	.84	.76
57F590	399444-JC	JC	3	2-5	1.26	1.05	.95	.90	.84	.76
57F592	399446-JC	JC	5	2-3	1.26	1.05	.95	.90	.84	.76
57F762	399154-JC	JC	6	2	1.26	1.05	.95	.90	.84	.76

SHORTING "H"

57F764	399750H	H	1	2-11	1.11	.93	.84	.80	.74	.67
57F766	399752H	H	2	2-5	1.11	.93	.84	.80	.74	.67

SHORTING "HC"

57F768	399760HC	HC	1	2-11	1.41	1.18	1.06	1.01	.94	.84
57F770	399762HC	HC	2	2-5	1.41	1.18	1.06	1.01	.94	.84
57F596	399764-HC	HC	2	2-6	1.41	1.18	1.06	1.01	.94	.84

SHORTING "L"

57F772	399172L	L	1	2-17	1.14	.95	.86	.82	.76	.69

SHORTING "MF"

57F774	399180MF	MF	1	2-23	1.20	1.00	.90	.85	.80	.72

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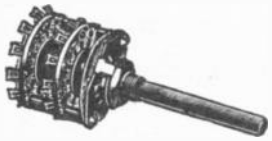
Centralab Switches

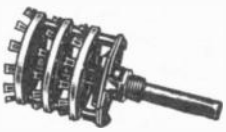
MINIATURE PHENOLIC SWITCHES



Laminated phenolic insulated rotary switches with low intercircuit capacitance. Bushing ⅜" L. cadmium-plated steel. Shaft ¼" D. full round cadmium-plated steel, 2¼" L. from mtg. surface. Index angle pos. 30° except (°) 60°. ⅜" spacing between front plate and first section; ½" space between sections. Brass silver-plated clips and rotor contacts; other metal parts cadmium-plated steel. Make and break res. load; 5.5 amp. @ 6 VDC; 2.75 amp. @ 28 VDC; 230 MA @ 115 VAC; based on 10,000 cycles. Avg. initial res. 3 milliohms. Includes mtg. nut, lockwasher, and 1¼" blk. pointer knob. Shpg. wt., 3 oz. per section.

Shorting Stk. No.	Shorting PA Type	Non-Short. Stk. No.	Non-Short. PA Type	Tot. Pol.	No. Pos.	Sec.	1-4	5-9	10-24	25-49	50-99	100-249
22F800	1000	22F801	1001	1	2-11	1	1.98	1.65	1.49	1.42	1.32	1.19
22F802	1002	22F803	1003	2	2-5	1	1.98	1.65	1.49	1.42	1.32	1.19
22F804	1004	22F805	1005	2	2-11	2	2.82	2.35	2.12	2.01	1.88	1.69
22F806	1006	22F807	1007	3	2-3	1	1.98	1.65	1.49	1.42	1.32	1.19
22F808	1008	22F809	1009	3	2-11	3	3.57	2.98	2.68	2.55	2.38	2.14
22F810	1010	22F811	1011	4	2	1	1.98	1.65	1.49	1.42	1.32	1.19
22F812	1012	22F813	1013	4	2-5	2	2.82	2.35	2.12	2.01	1.88	1.69
22F814	1014	22F815	1015	4	2-11	4	4.17	3.48	3.13	2.97	2.78	2.50
22F816	1016	22F817	1017	5	2-11	5	4.92	4.10	3.69	3.51	3.28	2.95
22F818	1018	22F819	1019	6	2-3	2	2.82	2.35	2.12	2.01	1.88	1.69
22F820	1020	22F821	1021	6	2-5	3	3.57	2.98	2.68	2.55	2.38	2.14
22F822	1022	22F823	1023	6	2-11	6	5.55	4.63	4.17	3.96	3.70	3.33
22F824	1024	22F825	1025	8	2	2	2.82	2.35	2.12	2.01	1.88	1.69
22F826	1026	22F827	1027	8	2-5	4	4.17	3.48	3.13	2.97	2.78	2.50
22F828	1028	22F829	1029	12	2	3	3.57	2.98	2.68	2.55	2.38	2.14
22F830	1030	22F831	1031	10	2-5	5	4.92	4.10	3.69	3.51	3.28	2.95
22F832	1032	22F833	1033	12	2-5	6	5.55	4.63	4.17	3.96	3.70	3.33
22F590	1040	22F835	*1035	1	2-6	1	1.98	1.65	1.49	1.42	1.32	1.19
.....	.....	22F837	*1037	2	2-6	2	2.82	2.35	2.12	2.01	1.88	1.69

MINIATURE CERAMIC ROTARY SWITCHES



Offers maximum voltage flashover with high-Q-low-loss steatite body. Bolted construction with single hole bushing mount. Bushing is ⅜" L. cad.-plated steel and locating lug on 1/16" R. ¼" D. shaft 2¼" L. from mounting surface. Index angle is 30° except (°) 60° adjustable stop or continuous rotation. ⅜" spacing between front plate and first section; ½" spacing between sections. Voltage breakdown: 1500 VAC-RMS. Clips and rotor contacts are brass, silver plated. Make and break res. load: 5.5 amp. @ 6 VDC; 2.75 amp. @ 15 VDC; 1.5 amp. @ 28 VDC; 230 MA @ 115 VAC; based on 10,000 cycles life test. Avg. initial res. 3 milliohms. Rotational life 25,000 cycles min. Includes mtg. nut, lockwasher, and 1¼" blk. pointer knob. Shpg. wt., 3 oz. per section.

Shorting Stock No.	Shorting Type	Non-Short. Stock No.	Non-Short. Type	Tot. Pol.	Tot. Sec.	No. Pos.	1-4	5-9	10-24	25-49	50-99	100-249
22F600	PA2000	22F601	PA2001	1	1	2-12	2.61	2.18	1.96	1.86	1.74	1.57
22F602	PA2002	22F603	PA2003	2	1	2-6	2.81	2.18	1.96	1.86	1.74	1.57
22F604	PA2004	22F605	PA2005	2	2	2-12	3.72	3.10	2.79	2.65	2.48	2.23
22F606	PA2006	22F607	PA2007	3	1	2-5	2.81	2.18	1.96	1.86	1.74	1.57
22F608	PA2008	22F609	PA2009	3	3	2-12	4.74	3.95	3.56	3.38	3.16	2.84
22F610	PA2010	22F611	PA2011	4	2	2-6	3.72	3.10	2.79	2.65	2.48	2.23
22F612	PA2012	22F613	PA2013	4	4	2-12	5.70	4.75	4.28	4.07	3.80	3.42
22F614	PA2014	22F615	PA2015	5	1	2-3	2.61	2.18	1.96	1.86	1.74	1.57
22F616	PA2016	22F617	PA2017	5	5	2-12	6.81	5.68	5.11	4.85	4.54	4.09
22F618	PA2018	22F619	PA2019	6	1	2	2.61	2.18	1.96	1.86	1.74	1.57
22F620	PA2020	22F621	PA2021	6	2	2-5	3.72	3.10	2.79	2.65	2.48	2.23
22F622	PA2022	22F623	PA2023	6	3	2-6	4.74	3.95	3.56	3.38	3.16	2.84
22F624	PA2024	22F625	PA2025	6	6	2-12	7.92	6.60	5.94	5.64	5.28	4.75
22F626	PA2026	22F627	PA2027	8	4	2-6	5.70	4.75	4.28	4.07	3.80	3.42
22F628	PA2028	22F629	PA2029	9	3	2-5	4.74	3.95	3.56	3.38	3.16	2.84
22F630	PA2030	22F631	PA2031	10	2	2-3	3.72	3.10	2.79	2.65	2.48	2.23
22F632	PA2032	22F633	PA2033	10	5	2-6	6.81	5.68	5.11	4.85	4.54	4.09
22F634	PA2034	22F635	PA2035	12	2	2	3.72	3.10	2.79	2.65	2.48	2.23
22F636	PA2036	22F637	PA2037	12	6	2-6	7.92	6.60	5.94	5.64	5.28	4.75
22F638	PA2038	22F639	PA2039	15	3	2-3	5.37	4.48	4.03	3.83	3.58	3.22
22F640	PA2040	22F641	PA2041	18	3	2	5.37	4.48	4.03	3.83	3.58	3.22
22F642	PA2042	22F643	PA2043	1	1	2-6	2.37	1.98	1.78	1.69	1.58	1.42
.....	.....	22F645	PA2045	2	2	2-6	3.30	2.75	2.48	2.35	2.20	1.98

MINIATURE INDEX ASSEMBLIES

Use with PA sections. Includes all hardware and knob.

30° Indexing

Stock No.	Type	For Switches	Shaft	1-4	5-9	10-24	25-49	50-99	100-249
22F650	PA-300	1 to 3 sec.	2"	1.50	1.25	1.13	1.07	1.00	.90
22F651	PA-301	4 to 6 sec.	4"	1.98	1.65	1.49	1.42	1.32	1.19
22F652	PA-302	7 to 9 sec.	6"	2.58	2.15	1.94	1.84	1.72	1.55

60° Indexing

Stock No.	Type	For Switches	Shaft	1-4	5-9	10-24	25-49	50-99	100-249
22F654	PA-304	1 to 3 sec.	2"	1.50	1.25	1.13	1.07	1.00	.90
22F655	PA-305	4 to 6 sec.	4"	2.10	1.75	1.58	1.50	1.40	1.26
Intersections Shield									
22F680	P-320	.....	.....	.30	.25	.23	.22	.20	.18

SEPARATE MINIATURE CERAMIC SECTIONS

For use with index assemblies PA-300, PA-301, PA-302 for assembly of special units of your own design. Provide maximum flexibility. Sections are .105" thick ceramic (steatite). *Unused contacts one side of common connected and shorted out. †All unused contacts connected and shorted out. ‡Progressively shorting with clockwise rotation. **Progressive shorting with counter-clockwise rotation. ††60° indexing, use with PA-304 and 305 indexes. Shipping weight, 3 oz.

Shorting Stk. No.	Shorting Type	Non-Short Stk. No.	Non-Short Type	Pls.	Pos.	1-4	5-9	10-24	25-49	50-99	100-249
22F660	PA-0	22F661	PA-1	1	2-12						
22F662	PA-2	22F663	PA-3	2	2-6						
22F664	PA-4	22F665	PA-5	3	2-5						
22F666	PA-6	22F667	PA-7	5	2-3						
22F668	PA-8	22F669	PA-9	6	2	1.32	1.10	.99	.94	.88	.79
22F670*	PA-10	22F679*	PA-19	1	2-5						
22F671‡	PA-11	22F678†	PA-18	2	2-11						
22F672‡	PA-12	.....	.....	1	2-10						
22F673**	PA-13	.....	.....	1	2-10						
22F674††	PA-20	22F677††	PA-17	1	2-6						

SEPARATE MINIATURE PHENOLIC SECTIONS

For use with index assemblies PA-300, PA-301, PA-302 for assembly of special switches to meet your requirements. Meet rigorous commercial or military applications. Sections are of 1/16" thick phenolic. *All unused contacts one side of common connected and shorted out. †All unused contacts connected and shorted out. ‡Active contacts all shorted to common contact in full CCW progressively opened and dropped with CW rotation. PA-45 is 60° indexing section, use with PA-304, 305 indexes. Shpg. wt., 2 oz.

Shorting Stk. No.	Shorting Type	Non-Short. Stk. No.	Non-Short. Type	Total Poles	Index.	Positions	1-4	5-9	10-24	25-49	50-99	100-249
22F840	PA-30	22F841	PA-31	1	30°	2-11						
22F842	PA-32	22F843	PA-33	2	30°	2-5						
22F844	PA-34	22F845	PA-35	3	30°	2-3						
22F846	PA-36	22F847	PA-37	4	30°	2	.96	.80	.72	.68	.64	.58
22F848	PA-38*	22F849	PA-39*	1	30°	2-5						
22F850	PA-40†	22F851	PA-41†	2	30°	2-11						
22F852	PA-43‡	.....	.....	1	30°	2-10						
.....		22F853	PA-45	1	60°	2-6						

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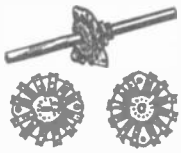
PK-20-S SWITCH KIT

- **Contact Nibbling Tool Enables Construction of Special Switches**
- **For PA-1000 and PA-2000 Series Miniature Switches**

The PK-20-S Switch Kit consists of all the component parts needed by any prototype designer or electronic engineer to build individual switches to his specifications. The sturdy metal box with its folding shelves keeps an ample supply of rotors, contacts, retainers, clips, stators, eyelets, and stops within easy reach. Contains ample parts for 25 special, four section switches. An integral part of the kit is a contact nibbling tool which enables the technician to construct a special switch with factory precision. Kit is shipped in heavy corrugated carton, complete with nibbling tool and instruction sheets.

22F599. NET 200.00

SEPARATE CERAMIC SECTIONS



Separate sections. Use with index assemblies P-270, P-271 and P-272, below to assemble switches with special characteristics. Special section PISD, one off position, nine progressively shorting positions. Sections NSD and PSD combine for resistance decade. Section QSD special for capacitance decade. Special sections GGD and FFD all unused contacts connected and shorted. Wt., 4 oz.

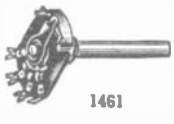
Shorting Stk. No.	Shorting Type	Non-Short. Stk. No.	Non-Short. Type	Poles	Pos.	1-4	5-9	10-24	25-49	50-99	100-249
22F482	TD	22F488	XD	1	2-6						
22F483	UD	22F489	YD	1	2-11						
22F484	RD	22F490	RRD	2	2-5						
22F485	SD	22F491	SSD	3	2-3						
22F486	VD	22F492	ZD	4	2	1.35	1.13	1.02	.97	.90	.81
22F495	PISD	22F538	FFD	See Text							
22F496	QSD	.....	.....	See Text							
22F493	NSD	.....	.....	See Text							
22F494	PSD	.....	.....	See Text							
22F487	GGD	.....	.....	See Text							

INDEX ASSEMBLIES

Use with above sections. Pos. 30° index, adjustable stop includes all hardware and knob. Shipping weight, 3 oz.

Stk. No.	Type	No. Sec.	1-4	5-9	10-24	25-49	50-99	100-249
22F540	P-270	1-3	1.65	1.38	1.24	1.18	1.10	.99
22F541	P-271	3-5	2.10	1.75	1.58	1.50	1.40	1.26
22F542	P-272	5-10	2.85	2.38	2.14	2.03	1.90	1.71

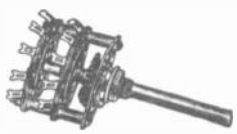
GENERAL PURPOSE SWITCHES



Die-cast, one piece frame except 1463, 1464, 1465, stamped steel frames. Make and break resistive load; 230 MA @ 115 VAC-RMS; 1.5 amps @ 28VDC. Pos. indexing exc. 1463 and 1464. Spring return. 1463. 1464 and 1472 non-shorting type, others shorting. Ship. wt., 5 oz.

Stk. No.	Type	Poles	Pos.	1-4	5-9	10-24	25-49	50-99	100-249
22F574	1460	1	2						
22F575	1461	1	3						
22F576	1462	2	2	1.08	.90	.81	.77	.72	.65
22F577	1463	1	2						
22F578	1464	2	2						
22F564	1465	1	4	1.80	1.50	1.35	1.28	1.20	1.08
22F585	1472	2	3	1.08	.90	.81	.77	.72	.65
22F586	1473	2	3	1.08	.90	.81	.77	.72	.65
22F587	1483	1	3	.75	.63	.57	.54	.50	.45
22F588	1484	1	3	.90	.75	.68	.65	.60	.54

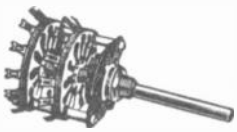
ROTARY SELECTOR SWITCHES — PHENOLIC INSULATION



Series 1400 offers compact design and quality construction. Laminated phenolic insulation. Mounting bushings ⅜ NEF-2A thread, ⅜" long. Shafts 1⅞" from end of bushing. Positive 30° index with adjustable stop. Size and current rating same as 2500 series. Breakdown voltage 1000 VAC. includes pointer knob, nut and lockwasher. Shpg. wt., 4 oz. per section.

Shorting Stk. No.	Shorting Type	Non-Short. Stk. No.	Non-Short. Type	Tot. Pls.	Tot. Sec.	No. Pos.	1-4	5-9	10-24	25-49	50-99	100-249
22F422	1400	22F438	1401	1	1	2-6						
22F423	1402	22F439	1403	1	1	2-11						
22F424	1404	22F440	1405	2	1	2-5	2.52	2.10	1.89	1.80	1.68	1.51
22F425	1406	22F441	1407	3	1	2-3						
22F426	1408	22F442	1409	4	1	2						
22F427	1410	22F443	1411	2	2	2-6						
22F428	1412	22F444	1413	2	2	2-11						
22F429	1414	22F445	1415	4	2	2-5	3.06	2.55	2.30	2.19	2.04	1.84
22F430	1416	22F446	1417	6	2	2-3						
22F431	1418	22F447	1419	8	2	2						
22F432	1420	22F448	1421	3	3	2-6						
22F433	1422	22F449	1423	3	3	2-11	3.90	3.25	2.93	2.78	2.60	2.34
22F434	1424	22F450	1425	6	3	2-5						
22F435	1426	22F451	1427	4	4	2-6						
22F436	1428	22F452	1429	4	4	2-11	4.50	3.75	3.38	3.21	3.00	2.70
22F437	1430	22F453	1431	8	4	2-5						

ROTARY SELECTOR SWITCHES — STEATITE INSULATION



Series 2500. Compact, efficient, shorting and non-shorting rotary selector switches. Low loss steatite wafers. Positive 30° index. Adjustable stop. Bushing ⅜"-32thd. ⅜" lg. Shaft ¼" full round 1⅞" from bushing. Dia. 1⅝"x1⅞". Rated 2.75 amps at 15 VDC, 350 ma. at 115 VAC. Breakdown voltage 1500 VAC. **Includes pointer knob, nut and lockwasher. Shpg. wt., 4 oz. per section.**

Shorting Stk. No.	Shorting Type	Non-Short. Stk. No.	Non-Short. Type	Tot. Pls.	Tot. Sec.	No. Pos.	1-4	5-9	10-24	25-49	50-99	100-249
22F400	2500	22F411	2501	1	1	2-6						
22F401	2502	22F412	2503	1	1	2-11	2.82	2.35	2.12	2.01	1.88	1.69
22F402	2504	22F413	2505	2	1	2-5						
22F403	2506	22F414	2507	3	1	2-3						
22F404	2510	22F415	2511	2	2	2-6						
22F405	2512	22F416	2513	2	2	2-11	4.02	3.35	3.02	2.87	2.68	2.41
22F406	2514	22F417	2515	4	2	2-5						
22F407	2516	22F418	2517	6	2	2-3						
22F408	2520	22F419	2521	3	3	2-6						
22F409	2522	22F420	2523	3	3	2-11	5.16	4.30	3.87	3.68	3.44	3.10
22F410	2524	22F421	2525	6	3	2-5						

DUAL SPEAKER SWITCH KIT

Type PK-300. Kit includes switch, etched bracket, dial plate, knob, mounting hardware, and instructions. Ship wt. 10 oz.

Stk. No.	Type	1-4	5-9	10-24	25-49	50-99	100-249
22F799	PK-300	1.05	.88	.79	.75	.70	.63

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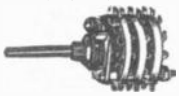
Centralab Switches

CENTRALAB
Electronics Division
GLOBE UNION INC.

SUB-MINIATURE CERAMIC SWITCHES



Ultra-small ceramic rotary switches ideal for use in transistor circuits, aircraft instruments, etc. Bolt construction with single hole bushing mount; locating lug on 3/8" radius; 1/8" D. shaft, cadmium plated steel, 1¼" long from mounting surface. Index angle positive 30° with index stop strength of 10 in.-pounds. 5/32 spacing between front plate and first section. Make, break, resistive load; 3.5 amps. at 6 V. DC; 170 ma at 115 VAC (based on 10,000 cycles). Avg. initial resistance 5 milliohms. Includes mounting nut, lockwasher, and 11/16" D. black pointer knob. Wt., 2 oz. per section.

Shorting Stk. No.	Shorting Type	Non-Short. Stk. No.	Non-Short. Type	Sec.	Total Poles	No. Pos.	1-4	5-9	10-24	25-49	50-99	100-249
22F761	PS-100	22F773	PS-101	1	1	11	4.80	4.00	3.60	3.42	3.20	2.88
22F762	PS-102	22F774	PS-103	2	2	11	6.00	5.00	4.50	4.28	4.00	3.60
22F763	PS-104	22F775	PS-105	1	2	5	4.80	4.00	3.60	3.42	3.20	2.88
22F764	PS-106	22F776	PS-107	3	3	11	7.20	6.00	5.40	5.13	4.80	4.32
22F765	PS-108	22F777	PS-109	1	3	3	4.80	4.00	3.60	3.42	3.20	2.88
22F766	PS-110	22F778	PS-111	2	4	5	6.00	5.00	4.50	4.28	4.00	3.60
22F767	PS-112	22F779	PS-113	1	4	2	4.80	4.00	3.60	3.42	3.20	2.88
22F768	PS-114	22F780	PS-115	3	6	5	7.20	6.00	5.40	5.13	4.80	4.32
22F769	PS-116	22F781	PS-117	2	6	3	6.00	5.00	4.50	4.28	4.00	3.60
22F770	PS-118	22F782	PS-119	2	8	2	7.20	6.00	5.40	5.13	4.80	4.32
22F771	PS-120	22F783	PS-121	3	9	3	7.20	6.00	5.40	5.13	4.80	4.32
22F772	PS-122	22F784	PS-123	3	12	2	7.20	6.00	5.40	5.13	4.80	4.32

SEPARATE ASSEMBLY SECTIONS FOR SUB-MINIATURE SWITCHES

These assembly sections are for use with shaft and index assemblies listed below (P-501 thru P-511). Carry same ratings as above switches. Shpg. wt., 2 oz.

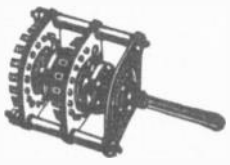
Shorting Stk. No.	Shorting Type	Non-Short. Stk. No.	Non-Short. Type	Tot. Pls.	No. Pos.	1-4	5-9	10-24	25-49	50-99	100-249
22F785	PS-20	22F789	PS-21	1	2-11	2.10	1.75	1.58	1.50	1.40	1.26
22F786	PS-22	22F790	PS-23	2	2-5						
22F787	PS-24	22F791	PS-25	3	2-3						
22F788	PS-26	22F792	PS-27	4	2						

SHAFT AND INDEX ASSEMBLIES

Hardware for sub-miniature switches. All index assemblies listed are designed for a maximum 3 sections and contain one index and shaft assembly, one P-106 pointer knob, six 3/32" spacers, two 1/16" spacers, two 1/8" spacers, two 3/16" spacers, two 1 1/8" tie bolts, nuts, lockwashers, washers, and sixteen plastic spacer washers. Shipping weight, 2 oz.

Stock No.	Type	Ind.	Pos.	1-4	5-9	10-24	25-49	50-99	100-249
22F681	P-501	30°	2	1.95	1.63	1.47	1.40	1.30	1.17
22F682	P-502	30°	3						
22F683	P-503	30°	4						
22F684	P-504	30°	5						
22F685	P-505	30°	6						
22F686	P-506	30°	7						
22F687	P-507	30°	8						
22F688	P-508	30°	9						
22F689	P-509	30°	10						
22F690	P-510	30°	11						
22F691	P-511	30°	con't						

HEAVY DUTY ROTARY POWER SWITCHES



Steatite insulation; 3/8' bushing mounted; 1/4" D shaft, double flat steel, 2¼" L. from mounting surface. Index angle is 20" with 2 adjustable stops. 1" spacing between front plate and first section. Make and break res. load: 9 amps @ 110 VAC-RMS; 15 MA @ 2500 MAC-RMS; 30 amp. @ 5 VDC, 20 amp. @ 12 VDC; 11 amp. @ 28 VDC.. Contact resistance 7 milliohms with rotational life 25,000 hz min. Comes with 2" double setscrew pointer knob, dial plate, adjustable stop pin and nut and instruction sheet. Shpg. wt., 6 oz.

Shorting Stk. No.	Shorting Type	Non-Shcrt. Stk. No.	Non-Shcrt. Type	Tol. Pol.	Tol. Sec.	No. Pos.	1-4	5-9	10-24	25-49	50-99
22F731	JV9000	22F746	JV9001	1	1	2-17	10.50	8.75	7.88	7.49	7.00
22F732	JV9032	22F747	JV9033	2	1	2-8	10.50	8.75	7.88	7.49	7.00
22F733	JV9004	22F748	JV9005	2	2	2-17	17.40	14.50	13.05	12.40	11.60
22F734	JV9002	22F749	JV9003	3	1	2-5	10.50	8.75	7.88	7.49	7.00
22F735	JV9008	22F750	JV9009	3	3	2-17	24.30	20.25	18.23	17.32	16.20
22F736	JV9034	22F751	JV9035	4	2	2-8	17.40	14.50	13.05	12.40	11.60
22F737	JV9012	22F752	JV9013	4	4	2-17	31.20	26.00	23.40	22.23	20.80
22F738	JV9016	22F753	JV9017	5	5	2-17	38.10	31.75	28.58	27.15	25.40
22F739	JV9006	22F754	JV9007	6	2	2-5	17.40	14.50	13.05	12.40	11.60
22F740	JV9036	22F755	JV9037	6	3	2-8	24.30	20.25	18.23	17.32	16.20
22F741	JV9020	22F756	JV9021	6	6	2-17	45.30	37.75	33.98	32.28	30.20
22F742	JV9038	22F757	JV9039	8	4	2-8	31.20	26.00	23.40	22.23	20.80
22F743	JV9010	22F758	JV9011	9	3	2-5	24.30	20.25	18.23	17.32	16.20
22F744	JV9014	22F759	JV9015	12	4	2-5	31.20	26.00	23.40	22.23	20.80
22F745	JV9018	22F760	JV9019	15	5	2-5	38.10	31.75	28.58	27.15	25.40

PA-3000 SERIES 18 POSITION SWITCH

Phenolic insulation par MIL-P-3115B. Voltage breakdown between parts 1000 VAC. Sections 2 3/16" highx2 11/64" wide, 1/16" thick. Rated 5.5 amp at 6 VDC; 2.75; 15VDC; 1.5 amp at 28 VDC; 230 ma at 115VAC. Adjustable stop or continuous rotation. Wt., 4 oz. per sect.

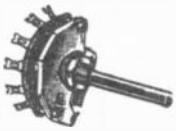
Shorting Stk. No.	Shorting Type	Non-Short. Stk. No.	Non-Short. Type	Pol.	Pos.	Sec.	1-4	5-9	10-24	25-49	50-99	100-249
57F922	PA-3000	57F923	PA-3001	1	2-17	1	2.04	1.70	1.53	1.45	1.36	1.22
57F924	PA-3002	57F925	PA-3003	2	2-17	2	2.94	2.45	2.21	2.09	1.96	1.76
57F926	PA-3004	57F927	PA-3005	3	2-17	3	3.84	3.20	2.88	2.74	2.56	2.30
57F928	PA-3006	57F929	PA-3007	4	2-17	4	4.68	3.90	3.51	3.33	3.12	2.81

PA-4000 SERIES 24-POSITION PHENOLIC SWITCH

High quality laminated phenolic insulation, meets MIL-P-3115B. Sections; 2 5/16"H, 1¾" W, 1/16" thick. Rating same as PA-3000 series. Shpg. wt., 4 oz.

Shorting Stk. No.	Shorting Type	Non-Short. Stk. No.	Non-Short. Type	Pol.	Pos.	Sec.	1-4	5-9	10-24	25-49	50-99	100-249
57F930	PA-4000	57F931	PA-4001	1	2-23	1	2.16	1.80	1.62	1.54	1.44	1.30
57F932	PA-4002	57F933	PA-4003	2	2-23	2	3.18	2.65	2.39	2.27	2.12	1.91
57F934	PA-4004	57F935	PA-4005	3	2-23	3	4.17	3.48	3.13	2.97	2.78	2.50
57F936	PA-4006	57F937	PA-4007	4	2-23	4	4.98	4.15	3.74	3.55	3.32	2.99

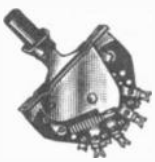
UNIVERSAL FLAT SWITCHES



Rated 1.5 amps at 28 VDC, 230 ma at 115 VAC. Phenolic insulation. Bushing 3/8x3/8", Shaft 1 7/8 lg. from bushing. Includes hardware 4 oz.

Stk. No.	Type	Poles	Pos.	Index	1-4	5-9	10-24	25-49	50-99	100-249
22F570	1450	4	2	Pos.	1.65	1.38	1.24	1.18	1.10	.99
22F571	1451	4	2	S. R.	2.40	2.00	1.80	1.72	1.60	1.44
57F991	1488	6	3	S. R.	3.60	3.00	2.70	2.57	2.40	2.16
57F992	1489	6	3	Pos. & S. R.	3.60	3.00	2.70	2.57	2.40	2.16

LEVER SWITCHES



Coil spring index design. Phenolic insulation. Single switch. 1 7/8 high x 7/16" wide x 1¼" deep behind panel. With knob and hardware Rated at 1.5 amps at 28 VDC. 230 ma at 115 volts AC. No. 1475 is the tube tester replacement switch. Weight, 3 oz.

Shorting No.	Shorting Type	Non-Short No.	Non-Short Type	Poles	Pos.	Index	1-4	5-9	10-24	25-49	50-99	100-249
22F550	1452	22F555	1454	2	3	Pos.	1.47	1.23	1.10	1.05	.98	.88
22F551	1453	22F556	1455	2	3	S. R.	1.47	1.23	1.10	1.05	.98	.88
22F552	1456	22F557	1457	4	2	S. R.	1.62	1.35	1.22	1.15	1.08	.97
22F553	1459	22F558	1458	4	2	Pos.	1.62	1.35	1.22	1.15	1.08	.97
22F554	1466	22F559	1467	2	3	Pos. & S. R.	1.47	1.23	1.10	1.05	.98	.88
		22F539	1475	1	3	Pos.	1.47	1.23	1.10	1.05	.98	.88

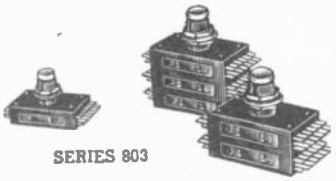
ELECTRONIC CONTROLS INC.

T-BAR SWITCHES

- Switch Up To 108 Circuits in Minimum Space
- Gold Bonded Silver Contacts

SERIES 802

Terminals Mate With T-Bar Connectors For Quick, Easy Wiring



SERIES 803

T-BAR SWITCHES

Multi-pole switches employing stacked-up enclosed contact wafers. Rated 5 amps at 115 VAC. Silver plated terminals fit T Bar Connectors (listed under T-Bar Relays—see index), or may be soldered. Temperature rating: —55 to +85°C. Dielectric strength 1000V RMS terminal to terminal.

SERIES 802 TOGGLE SWITCHES

All types are double throw. Contacts are in dust-tight plastic enclosures. Behind-panel depth only 1 5/32" per 12 poles. Mechanical life: 50,000 hz.

Stock No.	Type No.	Pls.	1-24	25-49	50-74	75-99
59F724	802-4C	4	7.74	7.37	7.00	6.66
59F725	802-8C	8	9.81	9.32	8.86	8.42
59F726	802-12C	12	10.87	10.33	9.80	9.31
59F729	802-24C	24	21.32	20.28	19.26	18.33
59F731	802-36C	36	29.50	28.04	26.58	25.26
59F744	802-48C	48	53.10	48.00	43.00	38.70
59F745	802-60C	60	66.60	60.00	54.00	48.50
59F746	802 72C	72	80.00	72.00	65.00	59.10
59F747	802-84C	84	93.00	83.60	75.50	68.00
59F748	802-96C	96	106.00	95.50	86.00	77.50
59F749	802-108C	108	120.00	108.00	97.00	87.80

SERIES 803 PUSHBUTTON SWITCHES

All types are momentary contact. Button travel, 0.07" approx. Electrically identical to Series 802; rated 5 amps at 115VAC, mechanical life 500,000 operations, dielectric strength 1000 V RMS terminal to terminal.

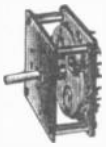
ECI "T-Bar" relays listed in relay section—see index

Stk. No.	Type	Action	1-24	25-49	50-74	75-99
59F760	803-4A	4PST(NO)	5.46	5.18	4.93	4.69
59F732	803-4C	4PDT	6.12	5.81	5.52	5.25
59F761	803-8A	8PST(NO)	7.04	6.68	6.38	6.04
59F733	803-8C	8PDT	8.18	7.77	7.39	7.03
59F762	803-12A	12PST(NO)	7.74	7.36	6.99	6.63
59F734	803-12C	12PDT	9.24	8.78	8.33	7.92
59F763	803-24A	24PST(NO)	16.05	15.22	14.47	13.78
59F737	803-24C	24PDT	19.69	18.73	17.79	16.94
59F740	803-36C	36PDT	27.87	26.49	25.10	23.87

DAVEN

ADJUSTABLE STOP SWITCHES

Allow number of switch positions to be changed at any time for maximum flexibility on all types of switch applications. All applicable paragraphs of MIL-S-3786 and MIL-E-5272 are met or exceeded. Continuous current carrying capacity (not make or break) 10 amps. Switch contacts and rotor arms are solid silver alloy.



1 Deck Non-Shorting 30° Between Positions
BB Series 1 3/8" sq.; EB Series 2 3/4" sq.

Stk. No.	Type	Replaces	Poles	Pos.	1-4	5-9
10F289	111-BB-10	....	1	10	16.25	13.00
10F291	121-BB-3	....	2	3	17.40	13.90
10F293	111-EB-12	....	1	12	21.00	16.80

1 3/4" SQUARE

1 Deck Shorting 15° Between Positions

10F204	111CM-24A	111CM-2-24	1	24	18.50	14.80
10F205	121CM-11A	121CM-2-11	2	11	20.50	16.40
10F206	131CM-7A	131CM-2-7	3	7	22.50	18.00

3 Decks Shorting 15° Between Positions

10F262	311CM-24A	311CM-2-24	1	24	42.40	33.90

1 Deck Non-Shorting 30° Between Positions

10F200	111CB-12A	111CB-2-12	1	12	18.50	14.80
10F201	121CB-6A	121CB-2-6	2	6	20.50	16.40
10F202	131CB-4A	131CB-2-4	3	4	22.50	18.00
10F203	141CB-3A	141CB-2-3	4	3	24.50	19.60

2 Decks Non-Shorting 30° Between Positions

10F229	211CB-121A	211CB2-12	1	12	30.45	24.35

1 3/4" SQUARE

1 Deck Shorting 11 1/4° Between Positions

Stk. No.	Type	Replaces	Poles	Pos.	1-4	5-9
10F212	112CM-32A	112CM-2-32	1	32	18.50	14.80
10F213	122CM-15A	122CM-2-15	2	15	20.50	16.40

2 Decks Shorting 11 1/4° Between Positions

10F241	212CM-32A	212CM-2-32	1	32	30.45	24.35

1 3/4" SQUARE (Continued)

1 Deck Non-Shorting 22 1/2° Between Positions

Stk. No	Type	Replaces	Poles	Pos.	1-4	10-24
10F208	112CB-16A	112CB-2-16	1	16	18.50	14.80
10F211	142CB-4A	142CB-2-4	4	4	24.50	19.60

2 1/4" SQUARE

1 Deck Shorting 15° Between Positions

10F220	121DM-24A	121DM-2-24 121EM-2-24	2	24	22.85	18.30

1 Deck Non-Shorting 15° Between Positions

10F216	113DB-24A	113DB-2-24 113TB-2-24	1	24	20.00	16.00

2 Decks Non-Shorting 15° Between Positions

10F245	213DB-24A	213DB-2-24 213EB-2-24	1	24	33.50	26.80

1 Deck Non-Shorting 30° Between Positions

10F217	121DB-12A	121DB-2-12 121EB-2-12	2	12	22.85	18.30
10F219	141DB-6A	141DB-2-6 141EB-2-6	4	6	28.55	22.90

2 Decks Non-Shorting 30° Between Positions

10F246	221DB-12A	221DB-2-12 221EB-2-12	2	12	39.20	31.40
10F247	231DB-6A	231DB-2-6 231EB-2-6	3	6	44.90	36.00
10F248	241DB-6A	241DB-2-6 241ED-2-6	4	6	50.60	40.60

3 Decks Non-Shorting 30° Between Positions

10F277	341DB-6A	341DB-2-6 341EB-2-6	4	6	72.65	58.30

1 Deck Shorting 11 1/4° Between Positions

10F226	122DM-32A	122DM-2-32 122EM-2-32	2	32	22.85	18.30

1 Deck Non-Shorting 22 1/2° Between Positions

10F223	122DB-16A	122DB-2-16 122EB-2-16	2	16	22.85	18.30

ATTENUATORS

"Knee action" rotor blades make these attenuators tamper proof. Gives positive contact in operation under all types of conditions. "Lock-Tite" dust cover. Low loss molded terminal board. *Tapered on last steps to cut off (infinity). †Have detents. ‡Have cue position.

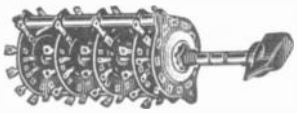
Stk. No	Model	Imped.	Steps	DB per Step	1-4	5-9
10F102	LA350EF	*250/500	20	2	26.56	21.27
10F103	LA350G	*600/600	20	2	26.56	21.27
†10F108	CP350T	100/000	20	2	17.42	13.75
‡10F109	LAQ350EF	*250/500	20	2	28.06	22.77
10F112	T330-G	*600/600	30	1.5	43.53	35.23
10F114	T321-G	*600/600	20	2	36.31	29.25

DAVENOIL. 1/2 oz. container with applicator
10F116. NET 25c

Dial and knobs for above attenuators. Specify attenuator type.
Net per set 2.25

MALLORY Quality Switches

1200L AND 1300L SERIES GANG SWITCHES



Has one fixed, one adjustable stop, silver-plated contacts and phosphor-bronze springs. 3- and 4-gang spaced 1"; all others, ½". 2" notched shaft. Shorting-type make before break. Require 7/16" mtg. hole. With bar knob and mtg. hardware, less mtg. plate. *Has additional "off" position with all circuits open. Wt. av., 8 oz.

Shorting No.	Shorting Type	Non-Shorting No.	Non-Shorting Type	Gangs	Total Poles	Pos. per Pole	1-4	5-9	10-24	25-49	50-99	100-249
22F000	1211L	22F016	1311L	1	1	11	2.10	1.75	1.58	1.50	1.40	1.26
22F001	1215L*	22F017	1315L*	1	2	5	2.10	1.75	1.58	1.50	1.40	1.26
22F002	1213L*	22F018	1313L*	1	3	3	2.10	1.75	1.58	1.50	1.40	1.26
22F003	1212L*	22F019	1312L*	1	4	2	2.10	1.75	1.58	1.50	1.40	1.26
22F004	1221L	22F020	1321L	2	2	11	2.58	2.15	1.94	1.84	1.72	1.55
22F005	1225L*	22F021	1325L*	2	4	5	2.58	2.15	1.94	1.84	1.72	1.55
.....	.....	22F023	1322L*	2	8	2	2.58	2.15	1.94	1.84	1.72	1.55
22F008	1231L	22F024	1331L	3	3	11	3.24	2.70	2.43	2.31	2.16	1.94
22F009	1235L*	22F025	1335L*	3	6	5	3.24	2.70	2.43	2.31	2.16	1.94
22F010	1241L	22F026	1341L	4	4	11	3.81	3.18	2.86	2.71	2.54	2.29
22F011	1245L*	22F027	1345L*	4	8	5	3.81	3.18	2.86	2.71	2.54	2.29
.....	.....	22F028	1351L	5	5	11	4.11	3.43	3.08	2.93	2.74	2.47
.....	.....	22F029	1356L	5	10	6	4.53	3.78	3.40	3.23	3.02	2.72
22F014	1261L	22F030	1361L	6	6	11	4.83	4.03	3.62	3.44	3.22	2.90
22F015	1266L	22F031	1366L	6	12	6	5.52	4.60	4.14	3.93	3.68	3.31
.....	.....	22F022	1323L*	2	3	3	2.58	2.15	1.94	1.84	1.72	1.55

SINGLE GANG SWITCHES

Well-constructed and versatile units for servicing and industrial use. Compact, enclosed switches with 2" notched shaft; 3/8" threaded bushing 3/8" long. With bar knob and nut. All have adjustable stops. For band switching, etc. Use plates listed at right. A volume plate and a 0-100 plate are also available. 1¼" dia. 30°; 1 11/16 dia. 20°. Shpg. wt., 4 oz.

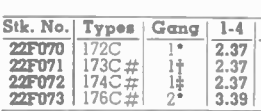
Shorting No.	Shorting Type	Non-Shorting No.	Non-Shorting Type	Poles	Pos.	Base Dia.	1-4	5-9	10-24	25-49	50-99	100-249
22F040	3115]	22F052	3215]	1	5	1¼"	1.02	.85	.77	.73	.68	.61
22F041	31112]	22F053	32112]	1	12	1¼"	1.02	.85	.77	.73	.68	.61
22F042	3122]	22F054	3222]	2	2	1¼"	1.02	.85	.77	.73	.68	.61
22F043	3123]	22F055	3223]	2	3	1¼"	1.02	.85	.77	.73	.68	.61
22F044	3126]	22F056	3226]	2	6	1¼"	1.02	.85	.77	.73	.68	.61
22F045	3134]	22F057	3234]	3	4	1¼"	1.05	.88	.79	.75	.70	.63
22F046	3142]	22F058	3242]	4	2	1¼"	1.05	.88	.79	.75	.70	.63
22F047	3143]	22F059	3243]	4	3	1¼"	1.05	.88	.79	.75	.70	.63
22F048	31117]	22F060	32117]	1	17	1 1/16"	1.56	1.30	1.17	1.11	1.04	.94
22F049	3129]	22F061	3229]	2	9	1 1/16"	1.56	1.30	1.17	1.11	1.04	.94
22F050	3136]	22F062	3236]	3	6	1 1/16"	1.65	1.38	1.24	1.18	1.10	.99
22F051	3163]	22F063	3263]	6	3	1 1/16"	1.65	1.38	1.24	1.18	1.10	.99

LEVER ACTION SWITCHES

5000 Series elongated mounting holes with mounting centers of 29/32". The 6000 Series have round holes spaced 1⅝" ctrs. May be mounted singly or grouped with ¾" between lever arm centers. Voltage breakdown rating 500 V AC-DC. Maximum and minimum breaking currents, resistive load, .125A@300V DC, 3A@6V DC, .2A@300V AC and 5A@6V AC.

Shorting Stk. No.	Shorting Type	Non-shorting Stk. No.	Non-shorting Type	No. of Poles	No. of Position	1-4	5-9	10-24	25-49	50-99	100-249
22F131	5124	22F134	5224	2	4	1.38	1.15	1.04	.98	.92	.83
22F132	6142	22F135	6242	4	2	1.20	1.00	.90	.86	.80	.72
22F133	6143	22F136	6243	4	3	1.20	1.00	.90	.86	.80	.72

CIRCUIT SELECTOR SWITCHES



Ceramic-section switches with low RF losses. Adjustable stop. 2 gang spaced ½"; 3 gang, 1". With 2" grooved shaft, knob, and hardware. *Has 1 circuit and 11 positions. †Has 2 circuits and 5 positions and ‡has 3 circuits and 3 positions per gang. # additional "off" pos. Wt. 8 oz.

Stk. No.	Types	Gang	1-4	5-9	10-24	25-49	50-99	100-249
22F070	172C	1*	2.37	1.98	1.78	1.69	1.58	1.42
22F071	173C#	1†	2.37	1.98	1.78	1.69	1.58	1.42
22F072	174C#	1‡	2.37	1.98	1.78	1.69	1.58	1.42
22F073	176C#	2*	3.39	2.83	2.54	2.42	2.26	2.03
22F074	177C#	2†	3.39	2.83	2.54	2.42	2.26	2.03
22F075	178C#	2‡	3.39	2.83	2.54	2.42	2.26	2.03
22F077	180C	3*	4.32	3.60	3.24	3.08	2.88	2.59
22F078	181C#	3†	4.32	3.60	3.24	3.08	2.88	2.59

MALLORY DECADE SWITCHES

Use for capacitors or resistors for full decade. 153L for capacitors, 154L for resistors. Phenolic insulation. Mtg. depth behind panel 1". Lateral mtg. space 2". Steel shaft is ¼" dia. x 2" long. Complete with knob and instructions. Wt. 6 oz.

Stk. No.	Type	1-4	5-9	10-24	25-49	50-99	100-249
22F087	153L	2.70	2.25	2.03	1.92	1.80	1.62
22F088	154L	2.94	2.45	2.21	2.09	1.96	1.76

DIAL PLATES FOR ROTARY SWITCHES

Types 372 to 390 for switches 1200L, 1300L and 1¼" base 3100J, 3200J types. Others are designed for 1 11/64" base 3100J and 3200J types. All are etched aluminum. Shpg. wt., 1 oz.

PLATES FOR 1¼" BASE SWITCHES 30° SPACING

No.	Type	Mark
22F150	372	1 to 2
22F151	373	1 to 3
22F152	374	1 to 4
22F153	375	1 to 5
22F154	376	1 to 6
22F155	377	1 to 7
22F156	378	1 to 8
22F157	379	1 to 9
22F158	380	1 to 10
22F159	381	1 to 11
22F160	382	1 to 12
22F161	383	off 1 to 3
22F162	384	off 1 to 4
22F163	385	off 1 to 5
22F164	386	off 1 to 6
22F165	387	off 1 to 7
22F166	388	off 1 to 8
22F167	389	off 1 to 9
22F168	390	off 1 to 10

NET EACH 12c

PLATES FOR 1-11/16" BASE SWITCHES 20° SPACING

22F169	453	1 to 3
22F170	454	1 to 4
22F171	455	1 to 5
22F172	456	1 to 6
22F173	457	1 to 7
22F174	458	1 to 8
22F175	459	1 to 9
22F176	460	1 to 10
22F177	461	1 to 11
22F178	462	1 to 12
22F179	467	1 to 17
22F180	473	off 1 to 3
22F181	474	off 1 to 4
22F184	477	off 1 to 7
22F185	478	off 1 to 8
22F186	479	off 1 to 9
22F187	480	off 1 to 10

NET EACH 12c

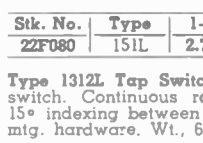
22F188. Type 369. 0-100 plate for either type switch. EA. 21c

22F189. Type 391. Volume plate for either type switch 15c

22F190. Type 395. 0-10 plate for standard controls 21c

22F292. Type 399. 0-10 for "E" type potentiometers 21c

MALLORY "HAMSWITCHES"



Type 151L. 2-section. 5-position switch. Non-shorting type. For switching meter circuits. 2¼" spacing between sections. Rated at 1000 volts AC or 1500 volts DC, 60° indexing between positions. With knob, nut, washer. Shpg. wt., 6 oz.

Stk. No.	Type	1-4	5-9	10-24	25-49	50-99	100-249
22F080	151L	2.70	2.25	2.03	1.92	1.80	1.62

Type 1312L Tap Switch. Single circuit 24-position non-shorting switch. Continuous rotation. ⅜" bushing. 2" notched shaft. 15° indexing between positions. With bar knob, dial plate and mtg. hardware. Wt., 6 oz.

Stk. No.	Type	1-4	5-9	10-24	25-49	50-99	100-249
22F085	13124L	2.76	2.30	2.07	1.97	1.84	1.66

Type 1400L Circuit Opening Switch. Opens any one of 12 "lines" for insertion of current reading meter. Maintains circuit on other 11 lines. Resistors can be wired so that switch not only opens line, but also cuts in selected resistor. With bar knob, dial plate, and hardware. Wt., 6 oz.

Stk. No.	Type	1-4	5-9	10-24	25-49	50-99	100-249
22F086	1400L	4.68	3.92	3.51	3.33	3.12	2.81

Rotary and Lever Switches

J-B-T INSTRUMENTS

SUB-MINIATURE ROTARY SWITCHES INCLUDING SRO5 STYLE TO MIL-S-3786B

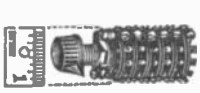


Fig. A

Fig. B

(Contacts bent only on special order) Space saving. Deck waters are epoxy-glass fabric laminations per MIL-P-18177C GEB. Deck rotor meets MIL-I-10A. Water contacts are 90% silver alloy, gold-plate, double wiping for low contact resistance, and self cleaning. Frame, detent mechanism, and shaft are stainless steel. Initial contact resistance: .005 ohms max. Dielectric strength 1000 volts RMS. Insulation resistance exceeds 100,000 megohms. Current carrying capacity: 5 amp. at standard ambient conditions. Current breaking capacity: 750MA at 30 DCV; 300 MA at 120 DCV; 1 amp at 115 ACV. non-inductive. All V and X types include A7505 knob. Positive 30° indexing. (Also available with 60° or 90° indexing). Nominal 1" diameter. Patented Series 7000 provides a full 12 live switching contacts per deck. Series 5000 has the same water design but provides nearly twice the switching capability per deck, with up to 12 contacts on the front and up to 12 contacts on the rear of the same dual-duty deck. SRO5 types designed for high performance ratings of MIL-S-3786B. C indicates superior temp., life rating, 25,000 rotational cycles —65°C to +125°C; 3 for vibration grade 3, 10 to 2000 cps; M for medium-impact.

V and X Types — Fig. A

Stock No.	Type	Decks	Poles Per Deck	Pos. Per Pole	Short or Non-Short	Shaft Dia.	NET EACH
26F745	V71121N	ONE	1	12	N-S	1/4"	4.90
26F747	X71121N		1	12	N-S	1/4"	4.70
26F749	V72061N		2	6	N-S	1/4"	5.00
26F750	V74031N		4	3	N-S	1/4"	5.20
26F751	V52111N	ONE	2	11	N-S	1/4"	5.25
26F755	V58021N		8	2	N-S	1/4"	5.55
26F756	V71122N	TWO	1	12	N-S	1/4"	6.75
26F768	X71124N	FOUR	1	12	N-S	1/8"	11.40
26F769	V71126N	SIX	1	12	N-S	1/4"	16.05

Military SR05 Type MIL-S-3786B — Fig. A

Stock No.	Designation SRO5N30C2MGC	Decks	Poles per Deck	Pos. per Pole	Short or Non-Short	Shaft Dia.	NET EACH
26F770	V71121N-SR05	ONE	1	12	N-S	1/4"	5.25
26F772	V72061N-SR05		2	6	N-S	1/4"	5.35
26F773	V74031N-SR05		4	3	N-S	1/4"	5.50
26F781	V72062N-SR05	TWO	2	6	N-S	1/4"	7.40
26F783	V52112N-SR05	TWO DUAL	2	11	N-S	1/4"	8.65
26F787	V74033N-SR05		4	3	N-S	1/4"	10.45

SINGLE DECK, NON-SHORT, SUB-MINIATURE LEVER SWITCHES — Fig. B

Stock No.	Type	Poles/Deck	Pos./Pole	Shaft Dia.	Each
26F790	VL71031N	1	3	1/4"	4.80
26F792	VL72031N	2	3	1/4"	5.05
26F793	VL58021N	8	2	1/4"	5.35

● NEW MULTI POLE MOLDED ROTARY SWITCHES

Series 20M. Made of superior molded materials, bonded and ruggedized. Provides 19 positions and off. Versatile: up to four poles per deck. Uses melamine stators and rotors. Built-in panel locator non-turn device. Rotor brushes made of phosphor bronze, heavily silver plated. All are non-shorting. Same size as MS-20 except 1/4" longer behind panel.

1-3/16" DEPTH BEHIND PANEL

Stk. No.	Type	No. of Decks	Poles Deck	No. of Pos.	NET Each
22F976	20M-1201N	1	1	Cont	3.75
22F977	20M-1191N	1	1	1-19	3.75
22F978	20M-2101N	1	2	20-15	4.15
22F979	20M-3051N	1	3	20-9	4.50
22F980	20M-4051N	1	4	20-4	4.85

1½" DEPTH BEHIND PANEL

22F981	20M1202N	2	1	Cont	5.00
22F982	20M2102N	2	2	20-9	5.80
22F983	20M3052N	2	3	20-4	6.50
22F984	20M-4052N	2	4	20-4	7.20

1-13/16" DEPTH BEHIND PANEL

22F985	20M-1203N	3	1	Cont	6.25
22F986	20M-2103N	3	2	20-9	7.45
22F987	20M-3053N	3	3	20-4	8.50
22F988	20M4053N	3	4	20-4	9.55

2-3/16" DEPTH BEHIND PANEL

22F989	20M-1204N	4	1	Cont	7.70
22F990	20M2104N	4	2	20-9	9.30
22F991	20M-3054N	4	3	20-4	10.70
22F992	20M-4054N	4	4	20-4	12.10

2-13/16" DEPTH BEHIND PANEL

22F993	20M-1206N	6	1	Cont	10.00
22F994	20M-2106N	6	2	20-9	13.20

NOTE. 1) Panel Seal Per MIL-S-3786B requirement special order. Add 1.75 per switch and prefix (PS) to type no. 2) Shorting also available special order add suffix (S) to type no. Do not include Stk. No. Add .05 per pole, per deck to price.

ENCLOSED MOLDED ROTARY SWITCHES

Interchangeable with J-B-T, SS-14 and SS-20 laminated types but offer enclosed construction. Heavy silver plated contacts are rated at 1 amp —125 VAC. inductive. Double-grip collector arms reduce contact resistance to an average of .007 ohm. Type MS-14 has a diameter of 2 3/32", while type MS-20 is 2 5/8". With bar knob. Type MS-14 switches require 25° 43', and Type MS-20 takes 180 plates. 5 oz. one-deck switch 2 7/32" deep behind panel. Extra decks 5/16" each. **All non-shorting except (**) shorting *2 position fixed stop, with no "off" position.**

MS-14 TYPE

Stk. No.	Type	Poles	Decks	Positions	NET
22F933	MS-14-1	1	1	14	2.45
22F934	MS-14-2	2	2	14	3.10
22F935	MS-14-3	3	3	14	3.75
22F936	MS-14-4	4	4	14	4.85
22F937	MS-14-6	6	6	14	7.05
	MS-20 TYPE				
22F938	MS-20-1S**	1	1	20	3.15
22F939	MS-20-2S**	2	2	20	4.00
22F940	MS-20-1	1	1	20	3.10
22F941	MS-20-2	2	2	20	3.90
22F942	MS-20-3	3	3	20	5.00
22F943	MS-20-4	4	4	20	6.20
22F944	MS-20-1-6DT	6	1	2*	3.90
22F945	MS-20-6	6	6	20	8.60

ADJUSTABE STOP 14-POS. MOLDED SWITCHES

Like molded switches above, except have adjustable stop to permit use of as many positions as desired. Enclosed adjustable stop mechanism increases overall depth 5/32" behind panel. Angular indexing is 25° 43'. **(**) Shorting Type.** Shpg. wt., 4 oz.

MAS-14 TYPE

No.	Type	Poles	Decks	Positions	NET
22F949	MAS-14-1	1	1	2-14	3.10
22F950	MAS-14-2	2	2	2-14	3.80
22F951	MAS-14-3	3	3	2-14	4.60
22F952	MAS-14-4	4	4	2-14	5.70
22F953	MAS-14-6	6	6	2-14	8.00

ETCHED DIAL PLATES

For all rotary switches on this page. Dull black, 2¾" diameter. Shpg. wt., 2 oz.

No.	Type	Calibration	Index	NET
22F954	EP-13	Off thru 13	25°43'	23c
22F955	EP-14	1 thru 14	25°43'	
22F956	EP-19	Off thru 19	18°	
22F957	EP-20	1 thru 20	18°	

Control Switches

LINEMASTER FOOT SWITCHES

A. 4141-D

B. 122-S

C. 491-S

D. B-2-S

E. T-51-S

F. 632-S

G. L-2-S

H. 476-S

Fig. A. Model 4141-D. Leave both hands. Just press lightly with your foot or knee. You can mount this DPST single phase switch on a wall or on the side of a bench. Maintained contact unit. Precision-built for long life. Rated 20 amps. AC or DC, 125 to 250 v 1 horsepower. 4x7x3¼". Shpg. wt., 5¼ lbs.

Model 4141-D1. Switch interior repl. for above.

Model 4141-S. Momentary contact.

Model 4141-S1. Switch interior repl. for above.

Fig. B. Model 122-S. A momentary contact switch for lightest pressure contact. Can be used as Single Pole, normally open or closed, or as an SPDT. 20 Amps at 115-200 V. 5½x3¼x1¼. 1 lb.

Fig. C. Model 491-S. Many industrial and commercial uses for this small, compact, and lightweight SPDT switch. Precision-made for accurate operation and sturdily built for long life. Steel housing. Skid-proof rubber base pad. Less cord and plug. Ratings: 10 amps. at both 115 v. and 230 v. Wt., 7 oz.

Model 491SC. As above but with 2-prong series plug & 6' cord.

Model 491-S1. Replacement interior for above.

Model 491SC. As above but with 3-prong series plug & 8' cord.

Fig. D. The Executive. B-2-S. Two Switches in one using the teeter-totter principle to operate only one circuit at a time. SPDT. 15 Amps at 125-250 Volts. 4x4⅝x1⅛". Shpg. wt., 14 oz.

Stk. No.	Type	1-9	10-19	20-49
24F160	4141-D	11.00	9.90	8.80
24F172	4141-D1	3.68	3.31	2.94
24F164	4141-S	11.00	9.90	8.80
24F173	4141-S1	4.35	3.92	3.68
24F161	122-S	8.50	7.65	6.80
24F165	491-S	3.25	2.93	2.60
24F162	491SC	5.00	4.50	4.00
24F174	491-S1	1.60	1.44	1.28
24F154	491SC3	5.85	5.27	4.69
24F169	B-2-S	7.50	6.75	6.00

Fig. E. The Treadlite. A small, yet versatile and rugged foot switch designed to give instantaneous and accurate control at low amperage loads. Less cord and plug set. 7 Amps at 110-250 Volts. 3½x2⅝x1". Shipping weight, 8 oz.

Model T-51-S. Single pole, double throw, momentary contact only. Can be used normally open or closed, as desired.

Model T-51-SC. As above with 2-prong series plug and 6' cord set.

Model T-51-SC3. As above with 3-prong series plug and 8' cord set.

Model T-51-S1. Replacement interior for T-51-S.

Model T-52-S. Has interiors so constructed and positioned that a partial downward stroke of the treadle actuates one interior and either opens or closes a circuit. Continued heavier pressure will either open or close a second circuit. Both are SPDT.

Fig. F. The Clipper. A rugged Unit designed for continued operation under heavy loads. Rated 20 Amps at 125-250 Volts. SPDT. 4½x3½x1½". Shipping weight, 2¼ lbs. Two models. 6325 momentary, 632-D maintained contact.

Fig. G. The Lektro-Lok. L-2-S. This switch operates on the teeter-totter principle with selective circuits. Mechanical interlock prevents both circuits from being operative at the same time. SPDT. Can be wired normally open or normally closed. Rated 15 amps at 125-250 Volts. AC only. 10 oz.

Fig. H. Model 476S. Two SPDT switches in double-pressure housing. Light spring for seated operation, may be wired as Single Pole, normally open or closed, are 8½x3½x2". Shipping weight, 1¾ lbs.

Stk. No.	Type	1-9	10-19	20-49
24F163	T-51-S	2.75	2.48	2.20
24F155	T-51-SC	4.00	3.60	3.20
24F156	T-51-SC3	5.00	4.50	4.00
24F175	T-51-S1	.75	.68	.60
24F167	T-52-S	4.65	4.19	3.72
24F170	632-S	8.25	7.43	6.60
24F171	632-D	11.00	9.90	8.80
24F168	L-2-S	5.80	5.22	4.64
24F166	476S	16.50	14.85	13.20

STACKPOLE SWITCHES

SIZE CHART

Code*	Size
A	17_{32}x13_{8}x9_{32}"
B	17_{32}x13_{8}x11_{32}"
C	17_{32}x157_{64}x31_{64}"
D	17_{32}x157_{64}x9_{32}"
E	17_{32}x157_{64}x11_{32}"

Attractive low-cost AC-DC switches for hundreds of different applications. Mtg. holes are .136 .140" clearance holes. All switches are non-shorting types, break before make. Solder lug terminals designed to accept AMP Faston Series 110 or the equivalent. U.L. and CSA listed.

Slide Switch

Flush Bracket

Offset Bracket

SLIDE SWITCHES

The triggers are made of a high impact resistant molded black phenolic or nylon. 11_{32}" high. †Push button, momentary contact.

Stock No.	Type	Action	Amps @ 125VAC	*	1-24	25-49	50-99	100-499	500-999
60F3300	SS-15-1	SPST†	3.0	A	.34	.27	.22	.179	.129
60F3301	SS-26	SPST	4.0	A	.28	.22	.17	.142	.092
60F3302	SS-26-1	SPDT	4.0	A	.29	.23	.18	.144	.094
60F3303	SS-50	DPDT	3.0	B	.30	.24	.19	.158	.108
60F3304	SS-16	DP3T	6.0	C	.40	.32	.26	.212	.162
60F3305	SS-18	DP4T	3.0	C	.44	.35	.28	.233	.183
60F3306	SS-34	3PDT	6.0	C	.55	.44	.35	.287	.237
60F3307	SS-36	SPST	6.0	A	.30	.24	.19	.159	.109
60F3308	SS-36-1	SPDT	6.0	A	.30	.24	.19	.159	.109
60F3309	SS-31	SP3T	6.0	A	.35	.28	.23	.185	.135
60F3310	SS-33	DPDT	6.0	C	.39	.31	.25	.209	.159
60F3311	SS-38	DP3T	6.0	C	.44	.35	.28	.233	.183
60F3312	SS-47	SPST	10.0	A	.38	.30	.24	.198	.148
60F3313	SS-47-1	SPDT	10.0	A	.41	.33	.26	.214	.164

ROCKER SWITCHES

Rocker knobs made of molded Delrin. Approx. 1_{16}" above switch body. Two bracket configurations available. Fig. A, flush bracket (FB), Fig. B offset bracket (OB). SPST and SPDT types rated 4 amps @ 125 VAC, DPDT rated 3 amps @ 125 VAC.

Stock No.	Type & Bracket	Action	Knob Color	*	1-24	25-49	50-99	100-499	500-999
60F3314	RS-26-FB	SPST	Blk	A	.48	.38	.30	.248	.198
60F3315	RS-26-FB	SPST	Wt	A	.53	.42	.33	.273	.209
60F3316	RS-26-FB	SPST	Red	A	.53	.42	.33	.273	.209
60F3317	RS-26-OB	SPST	Blk	D	.49	.39	.31	.255	.205
60F3318	RS-26-OB	SPST	Wt	D	.54	.43	.34	.28	.216
60F3319	RS-26-OB	SPST	Red	D	.54	.43	.34	.28	.216
60F3320	RS-26-1-FB	SPDT	Blk	A	.48	.38	.30	.248	.198
60F3321	RS-26-1-FB	SPDT	Wt	A	.53	.42	.33	.273	.209
60F3322	RS-26-1-FB	SPDT	Red	A	.53	.42	.33	.273	.209
60F3323	RS-26-1-OB	SPDT	Blk	D	.49	.39	.31	.255	.205
60F3324	RS-26-1-OB	SPDT	Wt	D	.54	.43	.34	.28	.216
60F3325	RS-26-1-OB	SPDT	Red	D	.54	.43	.34	.28	.216
60F3326	RS-50-FB	DPDT	Blk	B	.50	.40	.32	.266	.216
60F3327	RS-50-FB	DPDT	Wt	B	.59	.47	.37	.291	.227
60F3328	RS-50-FB	DPDT	Red	B	.59	.47	.37	.291	.227
60F3329	RS-50-OB	DPDT	Blk	E	.53	.42	.33	.273	.223
60F3330	RS-50-OB	DPDT	Wt	E	.60	.48	.38	.298	.234
60F3331	RS-50-OB	DPDT	Red	E	.60	.48	.38	.298	.234

MAKE NEWARK YOUR DEPENDABLE SOURCE FOR ALL ELECTRONIC COMPONENTS

Whether ordering in quantity for production or in small lots for specialized use, make Newark your headquarters for every electronic component.—Get the exact part you need from an inventory of over 70,000 units! Top Quality, Lowest Prices, Fastest Service.

CONTROLS COMPANY OF AMERICA, INDUSTRIAL and COMMERCIAL DIV.

DOUBLE T SOLENOIDS

- **Zinc Dichromatic Finish**
- **Sturdy One Piece Construction**

Coil windings and terminals are imbedded in a heavy shock resistant layer of epoxy Zinc dichromatic finish. Sturdy one piece construction. Sizes: Types 801, 1 3/16x1 5/8x1 1/2"; Types 812-101 thru 812-103, 1 13/16x2 1/2x2"; Other types 813, 2 1/16x2 1/2x2"; Types 821, 2 3/8x5 7/8x2 15/16". For 110-120V 60 Hz. *Duty is intermittent, others are continuous. Shpg. wt. 1 1/4 lbs.

Max. Stroke 1 1/16"

Stk. No.	Type	Max. Pull Lbs.	1-9	10-24	25-49	50-99	100-249	250-499	500-999
24F1600	801-101-2	5	5.73	4.60	4.31	3.45	2.88	2.30	1.94
24F1601	801-102-2*	6 1/2	5.73	4.60	4.31	3.45	2.88	2.30	1.94
24F1602	801-103-2**	5	5.94	4.76	4.46	3.57	2.98	2.38	2.01

Max. Stroke 1 1/16"

Stk. No.	Type	Max. Pull Lbs.	1-9	10-24	25-49	50-99	100-249	250-499	500-999
24F1603	801-101-1	11	7.47	6.02	5.69	4.57	3.78	3.02	2.55
24F1604	812-102-2*	13	7.30	5.88	5.56	4.35	3.65	2.91	2.46
24F1605	812-103-2**	13	7.68	6.19	5.85	4.70	3.88	3.11	2.62
24F1606	813-101-2	13	8.42	6.71	6.27	5.02	4.19	3.35	2.78
24F1607	813-102-2*	15.9	7.85	6.30	5.88	4.70	3.95	3.17	2.65
24F1608	813-103-2**	13	8.63	6.87	6.43	5.14	4.30	3.44	2.86

Max. Stroke 1 3/8"

24F1609	821-101-2	15	10.71	8.56	8.02	6.46	5.41	4.31	3.66
24F1610	821-102-2*	24	9.96	7.97	7.42	5.92	5.02	3.98	3.38
24F1611	821-103-2**	13	10.92	8.73	8.18	6.58	5.52	4.39	3.74

TYPE 700 TIME DELAY SWITCH

Type 700-150 Time Delay Switch. Gives positive make and break action. Time delay is pneumatically controlled. Non-sensitive to vibration and shock. Variable—3 to 40 sec. Rating: 10 amp 250v AC; 10 amp 125v AC; 1/3hp 125/250v AC. SPDT contacts. Listed by Underwriters Laboratories, Inc. Size: 2 31/32x3 3/16" dia. Shpg. wt., 5 oz.

Stk. No.	Type	Travel	Press.	1-9	10-24	25-49	50-99	100-199
24F1637	700-150	1 1/64" to 1 15/64"	1 1/2 lbs.	5.10	4.59	4.08	3.57	3.32

SERIES 701 TIME SWITCHES

The solenoid-operated time delay switch may be operated on variable time sequence 2 to 60 seconds. Silver contacts provide excellent electrical contact and overload protection. Can be mounted at any angle: 360° orientation. 60 cps. frequency.

60F951. Type 701-112. Time delay after de-energizing 110V AC.
60F955. Type 701-211. Time delay after energizing 24V AC.
60F956. Type 701-212. Time delay after energizing 110V AC.

1-9 ..... 14.40 10-24 ..... 13.15 25-49 ..... 12.10
50-99 ..... 10.20 100-249 ..... 9.00

KVC200-2 EIGHT SWITCH EXPANDER KIT

A supplementary 8 switch expander kit to be used with the KVC200-1 consists of 6 SPDT snap switches, rated at 15 Amps. non inductive, 2 end brackets, 6 sets of adjustable cams, cam shaft and 4 spacer rods. Total of 8 SPDT switches can be achieved when integrated with KVC200-1. Shpg. wt. 18 oz.

24F1659. NET 19.95

KVC200-1 INDUSTRIAL RECYCLING TIMER KIT

Assembled basic timer, 4 synchronous timing motors operate on 115 V AC 60 cycle, 3 gear reductions, 2 S.P.D.T. snap switches rated at 15 Amps.
Kit features 11 different total time cycles — 7 1/2 sec., 15 sec., 30 sec., 1 min., 2 min., 2 1/2 min., 5 min., 7 1/2 min., 10 min., 15 min., and 30 min. Cams adjustable from 3% to 97% of total time cycle to switch current "on" or "off". Wt. 1 3/4 lbs.

24F1658. NET 24.95

NEWARK STOCKS THE WORLD'S MOST COMPLETE INVENTORY OF INDUSTRIAL ELECTRONIC COMPONENTS

700-150

701

750-150

750-250

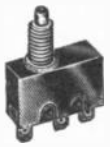
750-251

750-350

755

760-150

760-250



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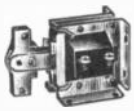


831

TYPE 750 SNAP ACTION SWITCHES

Instantaneous, positive make and break action. High contact pressure. Nonsensitive to vibration and shock. Stable under momentary high overload. 15 amp 125v AC; 10 amp 250v AC; 1/2hp 125/250v AC. Case: molded phenolic. Listed by Underwriters' Laboratories, Inc. Sizes: Type 750, 1 7/8x2 5/32x1 9/32". Type 755, 1 7/8x1 1/8x1 9/32". Shpg. wt., 4 oz.

Stock No.	Type	Description	Total Trav.	Oper. Press	1-9	10-24	25-49	50-99	100-249
24F1625	750-150	Pin Plunger SPDT	3/32"-1/8"	6 to 8 oz	.72	.68	.62	.52	.46
24F1626	750-250	Lever Action SPDT	7/32"-9/32"	4 to 9 oz	.81	.78	.72	.60	.52
24F1627	750-251	Lever Action SPDT	17/32"-3/4"	4 to 6.5 oz	.85	.82	.76	.63	.55
24F1628	750-350	Panel Mount SPDT	1/4"-3/4"	6 to 13 oz	1.01	.96	.89	.74	.64
24F1629	755-150	Double Circuit DPDT Pin Plunger	3/32"-5/32"	10 to 26 oz	1.44	1.30	1.17	1.05	.98

SERIES 760 SNAP SWITCHES

Direct control for high capacity in industrial uses. Easily gang mounted. Silver contacts for overload protection. Shock proof design. Completely sealed against dust, moisture and dirt. Approved to 250V AC at 7.5 amps. SPDT.

Stk. No.	Model	Type	Oper. Press.	Pre. Travel	1-9	10-24	25-49	50-99	100-249
60F964	760-150	Pin	12 oz.	3/64"	.68	.61	.55	.48	.32
60F965	760-250	Lever	12 oz.	27/64"	.76	.68	.61	.54	.36
60F966	760-350	Panel	12 oz.	3/64"	.94	.86	.77	.68	.53
60F967	760-280	Hinge	8 oz.	3/32"	.85	.74	.68	.60	.40

831 SERIES INDUSTRIAL SOLENOIDS

Double T plunger design provides virtually level pull characteristics. No power drop off at 2/3 stroke. Beryllium copper core. Moisture proof: heavy epoxy encapsulation protected coil and frame. Universal mounting. 60 cps operation.

PULL TYPE

Stk. No.	Type	Volts	Max. Stroke	Max. Pull	1-9	10-24	25-49	50-99	100-249
60F960	831-101	115	1"	2.51 lb.	8.05	7.24	6.24	6.05	5.86
60F961	831-201	230	1"	3.93 lb.	13.32	11.10	9.56	9.30	9.02

PUSH TYPE

Stk. No.	Type	Volts	Max. Stroke	Max. Pull	1-9	10-24	25-49	50-99	100-249
60F962	831-401	115	1"	2.51 lb.	8.05	7.24	6.24	6.05	5.86
60F963	831-501	230	1"	3.93 lb.	12.32	11.10	9.56	9.30	9.02

LICON® Switches

Type 10

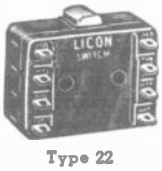
Type 11

Type 14

Type 16

Type 18

Type 19



Type 22

Type 23

Type 25

Type 26

BASIC SWITCHES — TYPE 10

Stk. No.	Type	Description	Microswitch Equivalent	1-9	10-19	20-49	50-99	100-199
23F151	10-122	Pin Plunger .020" gap	BZ-2RT	1.70	1.53	1.36	1.19	1.105
23F154	10-222	Spring Plunger	BZ-2RST	2.10	1.89	1.68	1.47	1.365
23F155	10-322	Panel Mount Plunger	BZ-2RQ1T	3.60	3.24	2.88	2.52	2.340
23F156	10-422	Leaf Spring	BZ-2RLT	1.80	1.62	1.44	1.26	1.170
23F157	10-522	Roller Leaf Spring	BZ-2RL2T	2.49	2.24	1.99	1.75	1.620
23F158	10-622	Pivoted Lever	.....	2.10	1.89	1.68	1.47	1.365
23F159	10-722	Pivoted Roller Lever	BZ-2RW82T	2.65	2.39	2.12	1.86	1.723
23F160	10-822	Compact Plunger	BZ-ROT	2.10	1.89	1.68	1.47	1.365
23F181	10-922	Roller Plunger	BZ-2RO18T	6.37	5.74	5.10	4.46	4.141

MINIATURE SWITCHES — TYPE 11

23F161	11-104	End Solder Terminal	1TB1-2	1.40	1.26	1.12	.98	.910
23F162	11-204	End Screw Terminal	1TB1-1	1.50	1.35	1.20	1.05	.975
23F163	11-304	Side Solder Terminal	1TB1-3	1.47	1.32	1.18	1.03	.956
23F164	11-114	Reset-End Solder Term	.....	1.65	1.49	1.32	1.16	1.073
23F165	11-214	Reset-End Screw Term	.....	1.75	1.58	1.40	1.23	1.138

AUXILIARY ACTUATORS FOR TYPE 11 SWITCHES

23F168	71-1040	Rigid Roller Lever	.....	.80	.72	.64	.56	.520
23F169	71-2010	Overtravel Plunger	.....	1.25	1.13	1.00	.88	.793
23F170	71-3010	Spring Lever	JT-1	.40	.36	.32	.28	.260
23F171	71-3020	Spring Roller Lever	JT-5	.70	.63	.56	.49	.455

HEAVY DUTY SWITCHES — TYPE 14

Stk. No.	Type	Description	Microswitch Equivalent	1-9	10-19	20-49	50-99	100-199
23F178	14-12403	Basic Switch	.....	2.90	2.61	2.32	2.03	1.885
23F180	14-12804	Basic Switch	.....	2.70	2.43	2.16	1.89	1.755

SUBMINIATURE SWITCH — TYPE 16

23F179	16-104	End Solder Terminal	.....	2.25	2.03	1.80	1.58	1.463
23F182	16-304	Side Solder Terminal	.....	2.25	2.03	1.80	1.58	1.463
23F183	16-404	Bottom Solder Term	.....	2.25	2.03	1.80	1.58	1.463
23F184	16-114	Reset-End Solder Term	.....	2.50	2.25	2.00	1.75	1.625
23F187	16-504	Bottom Taper Tab	.....	2.25	2.03	2.00	1.58	1.463

AUXILIARY ACTUATORS FOR TYPE 16 SWITCHES

23F188	76-1200	Rigid roller lever	.....	.90	.81	.72	.68	.585
23F189	76-1210	Rigid lever	.....	.50	.45	.40	.35	.322
23F190	76-3200	Spring lever	.....	.35	.32	.28	.25	.282
23F191	76-3210	Spring roller lever	.....	.75	.68	.60	.53	.488

SUB-SUBMINIATURE SWITCHES — TYPE 18

Stk. No.	Type	Description	Microswitch Equivalent	1-9	10-19	20-49	50-99	100-199
60FX1950	18-40121	Form Y	.....	3.00	2.70	2.40	2.10	1.95
60FX1951	18-40221	Form X	.....	3.00	2.70	2.40	2.10	1.95
60FX1952	18-40421	Form Z Hi temps	.....	3.00	2.70	2.40	2.10	1.95

SUBMINIATURE SWITCHES — TYPE 19

60FX1953	19-103	Solder terminal, silver contact	1SM1	1.20	1.08	.96	.84	.78
60FX1954	19-203	Single turret, silver contact	1SM1-T	1.20	1.08	.96	.84	.78
60FX1955	19-303	Double turret, silver contact	1SM1-T2	1.25	1.13	1.00	.83	.81
60FX1956	79-2810/103	Push button, 1/4" bushing	1PB5	3.50	3.15	2.80	2.45	2.27
60FX1957	79-4810/102	Toggle, 1/4" bushing	6AT2	3.40	3.06	2.72	2.38	2.21

DOUBLE POLE SWITCH — TYPE 22

Stk. No.	Type	Description	Microswitch equivalent	1-9	10-19	20-49	50-99	100-199
23F185	22-304	DPDT Side Term	41TB5-3	4.70	4.23	3.76	3.29	3.055

AUXILIARY ACTUATORS FOR DOUBLE POLE SWITCH

23F192	72-1150	Rigid lever	.....	.50	.45	.40	.35	.322
23F193	72-1160	Rigid roller lever	.....	1.00	.90	.80	.70	.65
23F194	72-2080	Overtravel plunger	.....	1.50	1.35	1.20	1.05	.995

HIGH CAPACITY SWITCHES — TYPE 23

60FX1958	23-114	Solder terminals SPDT	V3-19	1.04	.94	.83	.73	.68
60FX1959	23-124	Screw terminals SPDT	V3-1	1.10	.99	.88	.77	.71
60FX1960	23-154	187 Series Amp Connect.	V3-1D8	.95	.85	.76	.66	.62

HIGH CAPACITY SINGLE BREAK MINIATURE TYPE 25

Stk. No.	Type	Description	Acro Equiv.	1-9	10-19	20-49	50-99	100-199
60FX1963	25-100000*	3-6 oz O.F.	1MD1-1A					
60FX1964	25-101000*	6-10 oz O.F.	2MD1-1A					
60FX1965	25-102000*	12-16 oz O.F.	3MD1-1A	1.45	1.31	1.16	1.02	.94
60FX1966	25-205000**	27 gr max. O.F.	1CMD1-2AXX					
60FX1967	25-206000**	44 gr max. O.F.	2CMD1-2AXX					
60FX1968	25-207000**	60 gr max. O.F.	3CMD1-2AXX					

*On center. **Off center plunger.

DOUBLE POLE SUBMINIATURE — TYPE 26

60FX1961	26-804	Form ZZ End Solder Terminal	.....	5.50	4.95	4.40	3.85	3.57
60FX1962	26-904	Form ZZ Side Solder Terminal	.....	5.75	5.18	4.60	4.03	3.74

BASIC SWITCHES

Type 10 highly sensitive utilizes one piece mechanism. No pivot points means high vibration resistance and positive snap action. 1" mounting centers rated 15 amperes 125, 250 or 480 AC. 1/2 ampere at 115 VDC 2" x 1" x 1 1/16". Shpg. wt., 1.3 oz.

MINIATURE SWITCH

Type 11. High capacity two circuit Double break mechanism with wiping action prevents teasing and "dead break." Rated 10 amperes at 125/250 V AC. Over 20 million operations. 1 1/4"x1/2"x1/2". Ship wt., 3/10 oz.

HEAVY DUTY SWITCH

Type 14 Industrial limit switch. Uses double break mechanism for high electrical rating. Nylon operating button eliminates drift in oper. point. 20 amps at 125/250/480 VAC. 1 3/4"x3/4"x3/4". Shpg. wt., 1 1/4 oz.

SUBMINIATURE SWITCH

Type 16 double break. 2 circuit rated 10 amps 125/250 VAC. Size 25/32"x7/16"x 1/4". Double break mechanism tested over 20 million cyc. Shpg. wt., .12 oz.

SUB-SUBMINIATURE

Type 18. Double break. Rated: 8 amps @ 125/250 VAC; 4 amps inductive @ 28 VDC. 20 million cyc. life. Size: .2x.5x.38". Shpg. wt., .003 lb.

SUBMINIATURE

Type 19. Single break with standard movement differential of .003" max. Rated 5 amps @ 125/250 VAC; 4 amps resistive @ 28 VDC. Size: .78x.36x.25". Shpg. wt., .005 lb.

DOUBLE POLE SWITCH

Type 22 DPDT high current interruption. Rated: 10 amps @ 125/250 VAC; 15 amps @ RES 30 VDC. Double . bearing guide Wiping action. Dust proof case. Beryllium copper switch blades. Size: 7/8x 1 1/4x1/2". Shpg. wt., 1/2 oz.

HIGH CAPACITY SWITCH

Type 23. Hi-capacity single break with unique "heat dam" to omit flow of solder and flux inside models having solder terminals. UL rated 8 amps @ 125/250 VAC. 10 amps resistive and 6 amps inductive @ 30 VDC. Size: 1.34x.625x.41". Shpg. wt., 3/10 oz.

SINGLE BREAK MINIATURE

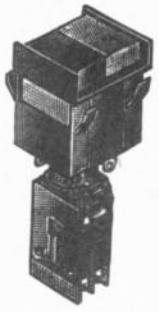
Type 25. Internal wiping action insures high contact weld. Center line plunger rated at 12.5 amps @ 125/250 VDC. Mechanical life 20 million cycles. 9/32x53/64x1 1/2". Shp. wt., 3/10 oz.

DOUBLE POLE SUBMIN.

Type 26. Two BUTTERFLY double break mechanisms. Both poles operate simultaneously due to special linkage. Uses type 76 actuators. UL rated 8 amps @ 125/250 VAC. 10 amps res., 7.5 ind. @ 28 VDC. 23/32"x.761"x1/4". Sh. wt., 2/10 oz.

● NEW TWO LIGHT PUSHBUTTON SWITCH

Model 02-800. A new economical 2-lite version of the 01-800 with efficient snap-in mounting and attractive bezel-barrier appearance. External mounting dimensions are the same as the 01-800. Meets the requirements for MIL-S-22885. Employs the 76-27XX series snap-on switch module. Shipping wt., 2 oz.



02-800

SWITCH MODULES (FOR 02, 04, AND 44 TYPES)

Stk. No.	Type	Description	1-24	25-99	100-499
42F870	76-2713	Maint. cont. 1 pole Form Z	4.40	3.96	3.61
42F871	76-2723	Maint. cont. 2 pole Form Z	5.55	5.00	4.55
42F872	76-2753	Momentary 1 pole Form Z	2.90	2.61	2.38
42F873	76-2763	Momentary 2 pole Form Z	3.90	3.51	3.20

LENS CAP

Indicate desired colors by replacing the "X's" with appropriate numbers: 1—white, 2—red, 3—green, 4—blue, 7—orange.

Stk. No.	Type	Description	1-24	25-99	100-499
60FX2063	02-61XX	Full screen, solid color	.70	.63	.574
60FX2064	02-62XX	Vertical split, solid color	1.25	1.13	1.025
60FX2065	02-63XX	Horizontal split, solid color	1.25	1.13	1.025
60FX2066	02-73	Snap-in mtg.-flange base lamp socket	1.95	1.76	1.599

TRIPLE POLE SUBMINIATURE TYPE 36

Compact triple pole double break switch. Three exclusive Butterfly double break mechanisms offer a mechanical life of 20 million cycles. Rated at 10 amps 125/250 VDC. Simultaneous handling for up to 6 circuits in a single switch. Uses 76 series actuators. 1.187x.796x250. Shipping weight, 1 oz.

Type 36

Stock No.	Type	Description	1-9	10-19	20-49	50-99	100-199
60F1969	36-604	End solder term. simul.	8.50	7.65	6.80	5.95	5.53
60F1970	36-60401	End solder term. Non-simul.	7.50	6.75	6.50	5.25	4.88
60F1971	36-704	Side solder term. Simul.	8.75	7.88	7.00	6.13	5.69
60F1972	36-70401	Side solder term. Non-simul.	7.75	6.98	6.20	5.43	5.04

LIGHTED PUSHBUTTON SWITCH

Series 01. Stationary lamp socket. There is a wide selection of lens cap shapes, sizes, and colors. Non turn positive snap on lens caps. Front of panel lamp servicing without any tool. Choice of projected color or solid colored lens illumination. Uses T-1¾ screw base lamp. Less lamp.

Lighted pushbutton switches cut control console costs by combining indicating and manual switching functions in a single compact package. Serves as the color and/or legend coded panel indicator and actuates one or more subminiature snap-action switches. The single light Type 01 replaces conventional systems of separate panel lights and push-button or toggle switches, thus reducing panel size requirements and installation time. Designed for commercial and military use to meet the requirements of MIL-S-22885. Consists of a removable lens cup and a switch-lamp socket assembly. For greater reliability the lamp socket remains stationary when the pushbutton is actuated. The basic switch is the Licon type 16 subminiature doublebreak miniature doublebreak long life switch rated up to 10 amps. Maint.: 4 9/64x2 1/32x 2 5/32". Moment: 4 3/64x1 29/32x2 5/32". Shpg. wt., 2 oz.

Type 01

SERIES 01 SINGLE LITE PUSHBUTTON SWITCH—15/32" BUSHINGS

Stk. No.	Type	Description	1-24	25-99	100-499
60F1973	01-145000	Indicator	3.20	2.88	2.62
60F1974	01-145130	Maint. Cont. 1 pole form Z	7.40	6.66	6.07
60F1975	01-145230	Maint. cont. 2 pole form Z	9.35	8.42	7.67
60F1976	01-145530	Momentary 1 pole form Z	5.15	4.64	4.22
60F1977	01-145630	Momentary 2 pole form Z	7.10	6.39	5.82

LENS CAPS—SOLID COLOR—5/8" SQUARE

Color	15/32" bushing Stk. No.	15/32" bushing Type	5/8" bushing Stk. No.	5/8" bushing Type	1-24	25-99	100-499
White	60F1983	01-911311	60F1993	01-921311	.40	.36	.328
Red	60F1984	01-911312	60F1994	01-921312			
Green	60F1985	01-911313	60F1995	01-921313			
Blue	60F1986	01-911314	60F1996	01-921314			
Yellow	60F1987	01-911315	60F1997	01-921315			

LENS CAPS—SOLID COLOR—3/4" SQUARE

White	60F1988	01-911411	60F1998	01-921411	.50	.45	.41
Red	60F1989	01-911412	60F1999	01-921412			
Green	60F1990	01-911413	60F2000	01-921413			
Blue	60F1991	01-911414	60F2001	01-921414			
Yellow	60F1992	01-911415	60F2002	01-921415			

LENS CAPS—PROJECTED COLOR—5/8" SQUARE

White	60F2023	01-911321	60F2033	01-921321	.80	.72	.656
Red	60F2024	01-911322	60F2034	01-921322			
Green	60F2025	01-911323	60F2035	01-921323			
Blue	60F2026	01-911324	60F2036	01-921324			
Yellow	60F2027	01-911325	60F2037	01-921325			

LENS CAPS—PROJECTED COLOR—3/4" SQUARE

White	60F2028	01-911421	60F2038	01-921421	.90	.81	.738
Red	60F2029	01-911422	60F2039	01-921422			
Green	60F2030	01-911423	60F2040	01-921423			
Blue	60F2031	01-911424	60F2041	01-921424			
Yellow	60F2032	01-911425	60F2042	01-921425			

SERIES 01 SINGLE LITE PUSHBUTTON SWITCH—5/8" BUSHINGS

60F1978	01-345000	Indicator	3.20	2.88	2.62
60F1979	01-345130	Maint. cont. 1 pole form Z	7.40	6.66	6.07
60F1980	01-345230	Maint. cont. 2 pole form Z	9.35	8.42	7.67
60F1981	01-345530	Momentary 1 pole form Z	5.15	4.64	4.22
60F1982	01-345630	Momentary 2 pole form Z	7.10	6.39	5.82

LENS CAPS—SOLID COLOR—5/8" ROUND

White	60F2003	01-931311	60F2013	01-941311	.40	.36	.328
Red	60F2004	01-931312	60F2014	01-941312			
Green	60F2005	01-931313	60F2015	01-941313			
Blue	60F2006	01-931314	60F2016	01-941314			
Yellow	60F2007	01-931315	60F2017	01-941315			

LENS CAPS—SOLID COLOR—3/4" ROUND

White	60F2008	01-931411	60F2018	01-941411	.50	.45	.41
Red	60F2009	01-931412	60F2021	01-941412			
Green	60F2010	01-931413	60F2022	01-941413			
Blue	60F2011	01-931414	60F2019	01-041414			
Yellow	60F2012	01-931415	60F2020	01-941415			

LENS CAPS—PROJECTED COLOR—5/8" ROUND

White	60F2043	01-931321	60F2053	01-941321	.80	.72	.656
Red	60F2044	01-931322	60F2054	01-941322			
Green	60F2045	01-931323	60F2055	01-941323			
Blue	60F2046	01-931324	60F2056	01-941324			
Yellow	60F2047	01-931325	60F2057	01-941325			

LENS CAPS—PROJECTED COLOR—3/4" ROUND

White	60F2048	01-931421	60F2058	01-941421	.90	.81	.738
Red	60F2049	01-931422	60F2059	01-941422			
Green	60F2050	01-931423	60F2060	01-941423			
Blue	60F2051	01-931424	60F2061	01-941424			
Yellow	60F2052	01-931425	60F2062	01-941425			

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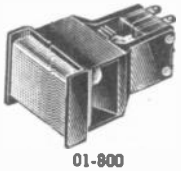

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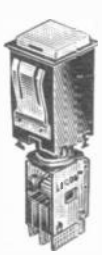
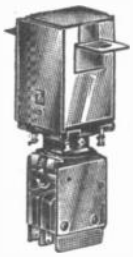
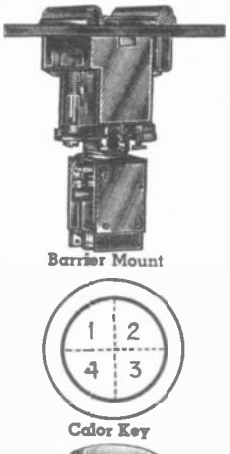


Bezel

Bezel Barrier

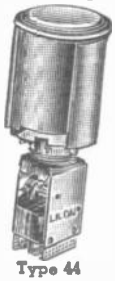


Flange Mount



Barrier Mount

Color Key



Type 44

Type 01-700

TYPE 01-800 SINGLE LITE PUSHBUTTON SWITCH

Single lamp indicator/pushbutton switch designed to provide the ultimate in function and beauty. Time saving with front mounting. The bezel barrier eliminates misguided actuation. Solid color lens-brilliant hue when illuminated, color visible when unlit. Projected color lens-white translucent screen, color projected thru permanently fixed color filter. Color not visible when unlit. For panels 1/16" to 1/8" thick. Uses T-1 3/4 flange base lamp socket. U.L. listed, rated 10 amps. Switch module—supplied less lamp. Shpg. wt. 2 oz.

Stk. No.	Type	Description	1-24	25-99	100-499
42F850	01-865000	Indicator only	2.15	1.94	1.76
42F851	01-865130	Maint. contact 1 pole—Form Z	5.80	5.22	4.76
42F852	01-865230	Maint. contact 2 pole—Form Z	7.50	6.75	6.15
42F853	01-865530	Momentary 1 pole—Form Z	3.85	3.47	3.16
42F854	01-865630	Momentary 2 pole—Form Z	5.55	5.00	4.55

LENS CAP—1 1/8 x 7/8"

Color	Projected Color Stk. No.	Projected Color Type	1-24	25-99	100-499	Solid Color Stk. No.	Solid Color Type	1-24	25-99	100-499
White	42F855	01-951921	1.10	.99	.902	42F842	01-951911	.70	.63	.574
Red	42F856	01-951922				42F843	01-951912			
Green	42F857	01-951923				42F844	01-951913			
Blue	42F858	01-951924				42F845	01-951914			
Yellow	42F859	01-951925				42F846	01-951915			

TYPE 04 FOUR LITE PUSHBUTTON SWITCH

Complete series of four lamp lighted switches designed to conserve panel space. Combines a switching function with wide variety of high quality color displays. Module construction consists of a light module housing and switch modules which snap together for max. versatility. Uses four T-1 3/4, flange base incandescent lamps in each module. Lamps not supplied with unit. Shpg. wt. 3 oz.

LIGHT MODULES

Stk. No.	Type	Description	1-24	25-99	100-499
42F860	04-601	Full screen translucent proj. color	2.75	2.48	2.255
42F861	04-602	Vertical split translucent proj. color	3.15	2.84	2.583
42F862	04-603	Horizontal split translucent proj. color	3.15	2.84	2.583
42F863	04-607	Quad split translucent proj. color.	3.55	3.20	2.91
42F864	04-604	Full screen solid color	2.75	2.48	2.255

Indicate color filter combination for projected screen color by listing color designating letters clockwise in accordance with the color key diagram at right. Example: Vertically split, green at left, red at right—order 04-602GRRG. R=red, G=green, A=amber, Y=yellow, W=white, B=blue, O=orange.

HOUSINGS

For up to 1/4" panel thickness. Flange mt.—.890" sq. panel cutout Plastic Barrier Mt.—.890 x 1.265", and push in Mt.—.890 x 1.000".

Stk. No.	Type	Description	1-24	25-99	100-499
42F865	04-71	Flange mount 1/8" panel Flush Mount	4.15	3.74	3.403
42F866	04-72	Flange mount 1/4" panel, Flush Mount	4.15	3.74	3.403
42F867	04-75	Barrier with screw mounting	3.90	3.51	3.198
42F868	04-77	Bezel mounting snap in mounting	4.15	3.74	3.403
42F869	04-79	Bezel barrier snap in mounting	4.15	3.74	3.403

SWITCH MODULES (For 04 types above and 44 types below)—U.L. Listed, rated 10 amps.

42F870	76-2713	Maint. cont. 1 pole Form Z	4.40	3.96	3.61
42F871	76-2723	Maint. cont. 2 pole Form Z	5.55	5.00	4.55
42F872	76-2753	Momentary 1 pole Form Z	2.90	2.61	2.38
42F873	76-2763	Momentary 2 pole Form Z	3.90	3.51	3.20

BARRIERS FOR 04-75 HOUSINGS

Color	Flush Barrier Stk. No.	Flush Barrier Type	Protruding Barrier Stk. No.	Protruding Barrier Type	1-24	25-99	100-499
Black	42F874	70-3051	42F847	70-3061	.40	.36	.328
White	42F875	70-3052	42F848	70-3062			
Gray	42F876	70-3053	42F849	70-3063			

TYPE 44 ROUND FOUR LITE PUSHBUTTON SWITCH

Round four lamp lighted pushbutton switch can be splash proof sealed. All the display features and varieties of the 04 series are found in the 44. Same type of modular construction applies. Sh. wt. 3 oz.

LIGHT MODULES (See how to order above 04 series)

All are white translucent projected screens, except *solid color.

Description	Unsealed Version Stk. No.	Type	1-24	25-99	100-499	Sealed Version Stk. No.	Type	1-24	25-99	100-499
Full screen	42F877	44-101	2.75	2.48	2.255	42F893	44-601	3.25	2.93	2.665
Vertical split	42F878	44-102	3.15	2.84	2.583	42F894	44-602	3.65	3.29	2.993
Horizonal split	42F879	44-103	3.15	2.84	2.583	42F895	44-603	3.65	3.29	2.993
Quad split	42F880	44-107	3.55	3.20	2.911	42F896	44-607	4.05	3.65	3.321
Full screen, sol. color	42F881	44-104*	2.75	2.48	2.255	42F897	44-604*	3.25	2.93	2.665

HOUSINGS

Description	Unsealed Version Stk. No.	Type	1-24	25-99	100-499	Sealed Version Stk. No.	Type	1-24	25-99	100-499
Clamp on MTG. Bracket	42F882	44-28	4.15	3.74	3.403	42F898	44-78	4.65	4.19	3.813

01-700 SERIES MOMENTARY ONE LITE

Low cost momentary one-lite switch in one piece lexan housing. UL listed. 10 amps @ 125 VAC. Order switch and lens separately. Uses screw base T 1 3/4 incandescent lamp, not supplied. Size: 1 17/32 x 39/64 x 25/32" with 15/32" bushing. Shpg. wt. 2 oz.

SWITCHES

Stk. No.	Type	Description	1-24	25-99	100-499
42F883	01-745000	Indicator	1.80	1.62	1.476
42F884	01-745510	1 pole form C	3.10	2.79	2.542
42F885	01-745530	1 pole form Z	3.30	2.97	2.706
42F886	01-745610	2 pole form C	3.80	3.42	3.116
42F887	01-745630	2 pole form Z	4.20	3.78	3.444

LENS CAPS (1 1/32" Dia.)

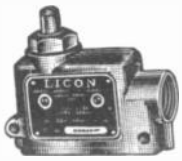
Stk. No.	Type	Color	1-24	25-99	100-499
42F888	80-010768	White	.20	.18	.164
42F889	80-010765	Red			
42F890	80-010764	Green			
42F891	80-010767	Blue			
42F892	80-010766	Yellow			

LICON

DIECAST ENCLOSED SWITCHES — TYPE 30

Type 30. For industrial control limit, safety applications. Polyethyelene diaphram provides a positive switch seal with unlimited life, minimizes "pumping" by its minute movement and eliminates customary problems of tearing and cracking. "O" ring prevents extrusion of gaskets. Aluminum diecast housing provides rugged enclosure, ½"—14 internal tap conduit hub, 15 amps 125/250/480 V AC, .5 amps @ 115 V DC. Size: 3"x1"x2"x½". Shpg. wt., 10 oz.

Stock No.	Type	Description	Micro Switch Equivalent	1-9	10-19	20-49	50-99	100-199
23F172	30-200	Sealed Plunger	BZE-2RN BZV-2RN	6.05	5.45	4.84'	4.24	3.93
23F173	30-400	Adjustable Sealed Roller Arm	BZE-2RN2 BZV-2RN2	9.35	8.42	7.48	6.55	6.08
23F174	30-600	Sealed Palm Button	BZE-2RN4	9.85	8.87	7.85	6.90	6.373
23F175	30-100	Overtravel Plunger	BZE-2RQ BZX-2RQ	4.60	4.14	3.68	3.22	2.99
23F176	30-300	Adj. Roller Lever	BZE-2RQ2	8.25	7.43	6.60	5.78	5.368
23F177	30-500	Roller Plunger	BZE-2RQ8 BZV-2RQ8 BZE-2RQ81 BZV-2RQ81 BZE-2RO9 BZV-2RO9	8.25	7.43	6.60	5.78	5.363
23F186	30-030	Diecast Term Encl.	3PA1, 3PA2	1.75	1.58	1.23	1.40	1.14



Plunger Switch

Roller Arm

● *NEW* SPLIT DIECAST TYPE 30 ENCLOSED LIMIT SWITCH — SIDE MOUNT

"Easy-wire" split diecast version of the Licon Type 30 above offers all the features and advantages of the regular diecast version with one important added feature: the entire bottom half of the protective case can be removed for ease in wiring. Bottom half enclosure is made of high impact, chemically resistant polyvinyl dichloride which eliminates any possibility of shorting out the basic switch.

Stock No.	Type	Description	Micro Switch Equivalent	1-9	10-19	20-49	50-99	100-199
60F2067	30-100301	Overtravel plunger—side mount	BZE6-2RQ	5.10	4.59	4.08	3.57	3.315
60F2068	30-200301	Sealed plunger—side mount	BZE6-2RN	6.55	5.91	5.24	4.59	4.258
60F2069	30-300301	Adjust. roller lever—side mount	BZE6-2RQ2	8.75	7.87	7.00	6.13	5.688
60F2070	30-400301	Sealed adjust. roller lever—side mount	BZE6-2RN2	9.85	8.87	7.88	6.90	6.403
60F2071	30-500301	Roller plunger—side mount	BZE6-2RQ8	8.75	7.87	7.00	6.13	5.688
60F2072	30-600301	Sealed palm button—side mount	BZE6-2RN4	10.35	9.32	8.28	7.25	6.728
60F2073	30-800301	Sealed one-way roller—side mount	BZE6-2RN28	11.35	10.22	9.08	7.95	7.378
60F2074	30-900301	One way roller actuator—side mount		10.35	9.32	8.28	7.25	6.728

Roller Plunger

Type 30

NOTE: Bottom mount versions available upon special order at same price: Use #2 for last digit instead of #1. Exclude Stock Number.

AMPHENOL

COAXIAL SWITCHES — MANUAL AND SOLENOID-OPERATED

20 millisecond max. operate and release time. Mech. life exceeds 1,000,000 Hz. Silver plated for complete shielding. Gold-over-sil. plated contacts 100 watt RF power rating. Vacuum impregnated coils withstand high humidity. Rated for cont. duty from —65°C to +85°C. Terminations are all shorting except (°). ** INDICATES that the marked switches are either rotary manual (57F1108 and 57F1105) or lever manual (57F1104 and 57F1106).

Stk. No.	Type No.	Freq (Mc)	Coil Volts	Func.	Plug Type	1-4	5-9	10-24	25-49	50-up
57F1100	315-010002-3*	1000	26DC	SPDT	BNC	23.00	19.09	16.45	14.49	12.77
57F1101	315-010022-3*	1000	26DC	SPDT	MB	23.00	19.09	16.45	14.49	12.77
57F1102	316-010082-3	2750	26DC	SPDT	BNC	25.70	21.34	18.38	16.20	14.27
57F1103	317-010255-8*	4000	115AC	SPDT	N	27.70	23.00	19.81	17.46	15.38
57F1104	318-010381-0*	2750	**	SPDT	BNC	25.70	21.34	18.38	16.20	14.27
57F1105	319-011141-0*	1000	**	SPDT	BNC	42.00	34.86	30.03	26.46	23.31
57F1106	321-011062-0*	1000	**	DPDT	BNC	39.20	32.54	28.03	24.70	21.76
57F1107	321-011064-3*	1000	26DC	DPDT	BNC	35.40	29.39	25.32	22.31	19.65
57F1108	322-011431-0*	2750	**	SP4T	BNC	57.00	47.31	40.76	35.91	31.64
57F1109	323-011506-3	900	26DC	SP4T	BNC	50.80	42.17	36.33	32.01	28.20
57F1110	324-011442-0*	900	26DC	SP6T	BNC	59.70	49.56	42.69	37.62	33.14
57F1111	325-011635-3	900	26DC	SP6T	BNC	64.00	53.12	45.76	40.32	35.52

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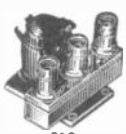
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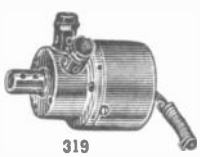
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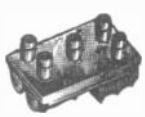
Type 323

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VISIT ANY ONE OF NEWARK'S
TEN STOCKING WAREHOUSES:

• LOS ANGELES • DETROIT • NEW YORK
• HOUSTON • CINCINNATI • CHICAGO • DENVER
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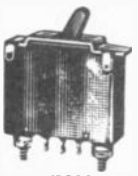
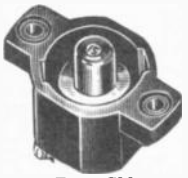
KLIXON® Circuit Breakers

2MC1

3MC1


4MC1

Type 6363


Type CM

Type 6752-12

Type 6752-2

Type 7274

MINIATURE MAGNETIC CIRCUIT BREAKERS

Type 2MC1-100, -3. Toggle actuated. Instantaneous series trip. Current sensing to 32 VDC/120VAC. 1½x1¾x⅝".

Stk. No.	AC Type Amps	Stk. No.	DC Type Amps	1-9	10-24	25-99	100-up
59F929	2MC1-100-.250	59F940	2MC1-3-.250	12.70	11.44	10.72	8.58
59F930	2MC1-100-.500	59F941	2MC1-3-.500	12.70	11.44	10.72	8.58
59F932	2MC1-100-1	59F943	2MC1-3-1	10.70	9.65	9.05	7.25
59F933	2MC1-100-2	59F944	2MC1-3-2	10.70	9.65	9.05	7.25
59F934	2MC1-100-3	59F945	2MC1-3-3	10.70	9.65	9.05	7.25
59F935	2MC1-100-5	59F946	2MC1-3-5	10.70	9.65	9.05	7.25
59F936	2MC1-100-7.5	59F947	2MC1-3-7.5	10.70	9.65	9.05	7.25
59F937	2MC1-100-10	59F948	2MC1-3-10	10.70	9.65	9.05	7.25
59F938	2MC1-100-15	59F949	2MC1-3-15	10.70	9.65	9.05	7.25
59F939	2MC1-100-20	59F950	2MC1-3-20	10.70	9.65	9.05	7.25

Type 2MC1-101, -4. Same as types 2MC1-100 and 2MC1-3 except for .1 to 1 second time delay at 200% rated current. 1½x1¾x⅝".

59F953	2MC1-101-.750	59F964	2MC1-4-.750	12.70	11.44	10.72	8.58
59F954	2MC1-101-1	59F965	2MC1-4-1	10.70	9.65	9.05	7.25
59F955	2MC1-101-2	59F966	2MC1-4-2	10.70	9.65	9.05	7.25
59F956	2MC1-101-3	59F967	2MC1-4-3	10.70	9.65	9.05	7.25
59F957	2MC1-101-5	59F968	2MC1-4-5	10.70	9.65	9.05	7.25
59F958	2MC1-101-7	59F969	2MC1-4-7	10.70	9.65	9.05	7.25
59F959	2MC1-101-10	59F970	2MC1-4-10	10.70	9.65	9.05	7.25
59F960	2MC1-101-15	59F971	2MC1-4-15	10.70	9.65	9.05	7.25

Type 3MC1-100, -3. Push button actuated. Instantaneous series trips. Current sensing to 32VDC/120VAC. 1½x1¾x⅝".

59F973	3MC1-100-.250	59F984	3MC1-3-.250	12.70	11.44	10.72	8.58
59F974	3MC1-100-.500	59F985	3MC1-3-.500	12.70	11.44	10.72	8.58
59F975	3MC1-100-.750	59F986	3MC1-3-.750	10.70	9.65	9.05	7.25
59F976	3MC1-100-1	59F987	3MC1-3-1	10.70	9.65	9.05	7.25
59F977	3MC1-100-2	59F988	3MC1-3-2	10.70	9.65	9.05	7.25
59F978	3MC1-100-3	59F989	3MC1-3-3	10.70	9.65	9.05	7.25
59F979	3MC1-100-5	59F990	3MC1-3-5	10.70	9.65	9.05	7.25
59F981	3MC1-100-10	59F992	3MC1-3-10"	10.70	9.65	9.05	7.25
59F982	3MC1-100-15	59F993	3MC1-3-15	10.70	9.65	9.05	7.25

Type 3MC1-101, -4. Same as 2MC1-101 and 2MC1-4 except for .1 to 1 second time delay at 200% rated current. 1½x1¾x⅝".

59F997	3MC1-101-.750	59F1008	3MC1-4-.750	12.70	11.44	10.72	8.58
59F998	3MC1-101-1	59F1009	3MC1-4-1	10.70	9.65	9.05	7.25
59F999	3MC1-101-2	59F1010	3MC1-4-2	10.70	9.65	9.05	7.25
59F1000	3MC1-101-3	59F1011	3MC1-4-3	10.70	9.65	9.05	7.25
59F1001	3MC1-101-5	59F1012	3MC1-4-5	10.70	9.65	9.05	7.25
59F1003	3MC1-101-10	59F1014	3MC1-4-10	10.70	9.65	9.05	7.25
59F1004	3MC1-101-15	59F1015	3MC1-4-15	10.70	9.65	9.05	7.25

Type 4MC1-106.—1. Instantaneous series trip with SPDT auxiliary circuit for interlocking or remote indication. Low voltage drop; 20% less than comparable units. 2¼x¾x2".

59F1019	4MC1-106-.250	59F1032	4MC1-1-.250	9.33	8.31	7.79	6.20
59F1020	4MC1-106-.500	59F1033	4MC1-1-.500	9.33	8.31	7.79	6.20
59F1021	4MC1-106-1	59F1034	4MC1-1-1	8.00	7.20	6.75	5.38
59F1022	4MC1-106-2	59F1035	4MC1-1-2	8.00	7.20	6.75	5.38
59F1024	4MC1-106-5	59F1037	4MC1-1-5	8.00	7.20	6.75	5.38
59F1025	4MC1-106-7.5	59F1038	4MC1-1-7.5	8.00	7.20	6.75	5.38
59F1026	4MC1-106-10	59F1039	4MC1-1-10	8.00	7.20	6.75	5.38
59F1027	4MC1-106-15	59F1040	4MC1-1-15	8.00	7.20	6.75	5.38
59F1028	4MC1-106-35	59F1041	4MC1-1-35	8.00	7.20	6.75	5.38
59F1029	4MC1-106-50	59F1042	4MC1-1-50	8.00	7.20	6.75	5.38

Type CA and CM. Will hold 100% of nominal rating. Trip ultimately at 125%. Rating 30 VDC or 110/220VAC. Type CA, automatic reset; Type CM, manual. Size: 2 x 1¾16 x 1 15/64". Wt. 1 oz.

Amp. Rating	Stk. No.	Type	1-29	30-74	75-299	Stk. No.	Type	1-29	30-74	75-299
2	59F874	CA	1.77	1.61	1.52	59F884	CM	1.95	1.77	1.67
3	59F875	CA	1.77	1.61	1.52	59F885	CM	1.95	1.77	1.67
5	59F868	CA	1.77	1.61	1.52	59F878	CM	1.95	1.77	1.67
8	59F869	CA	1.77	1.61	1.52	59F886	CM	1.95	1.77	1.67
10	59F876	CA	1.77	1.61	1.52	59F879	CM	1.95	1.77	1.67
12½	59F870	CA	1.62	1.46	1.37	59F880	CM	1.80	1.62	1.52
15	59F871	CA	1.62	1.46	1.37	59F881	CM	1.80	1.62	1.52
20	59F872	CA				59F882	CM			
30	59F877	CA				59F887	CM			
40	59F873	CA				59F883	CM			

Type CDA and CDM. As above, except with dust cover. Size: 1 3/16 x 1 15/64".. CDA automatic reset; CDM manual reset.

10	59F889	CDA	2.23	2.01	1.88	59F895	CDM	2.84	2.56	2.40
15	59F890	CDA	2.23	2.01	1.88	59F896	CDM	2.84	2.56	2.40
20	59F891	CDA	2.23	2.01	1.88	59F897	CDM	2.84	2.56	2.40
25	59F892	CDA	2.23	2.01	1.88	59F898	CDM	2.84	2.56	2.40
30	59F893	CDA	2.23	2.01	1.88	59F899	CDM	2.84	2.56	2.40
40	59F888	CDA	2.23	2.01	1.88	59F894	CDM	2.84	2.56	2.40

Type CLA. Similar to CA. Ratings 35-150 amps. Automatic reset. Size: 3 5/32x1 7/8x1 1/32". Wt. 3¼ oz.

Type CDLA and CDLM. Same as CLA above, but with dust cover. Type CDLA, automatic reset; Type CDLM manual

Amp Rating	Stk. No.	Type	1-29	30-74	75-299	Stk. No.	Type	1-29	30-74	75-299
40	59F908	CLA	3.32	2.98	2.80	59F913	CDLA	4.32	3.89	3.64
60	59F909	CLA	3.32	2.98	2.80	59F914	CDLA	4.32	3.89	3.64
90	59F910	CLA	3.32	2.98	2.80	59F915	CDLA	4.32	3.89	3.64
105	59F911	CLA	3.32	2.98	2.80	59F916	CDLA	4.32	3.89	3.64
150	59F912	CLA	3.32	2.98	2.80	59F917	CDLA	4.32	3.89	3.64
						59F918	CDLM	4.32	3.89	3.64

Type PSM. Precision manual reset type. Hold 110% and trip 130% rating. Rating 2-35 amps. Size 2 11/16x3/4x1 11/32".

Stock No.	Type No.	Amp. Rating	MS No.	1-9	10-24	25-99	100-249
59F921	PSM-2	2	39067-2	4.92	4.45	4.15	3.30
59F922	PSM-5	5	39067-5	4.92	4.45	4.15	3.30

Type PDLM. Manual reset. Ratings 35-150 amp. Trip free. Same as CDLM type, except will hold 110% rating indefinitely. Will trip ultimately at 130% of nominal rating.

59F919	PDLM-105	105	39065-4	6.80	6.13	5.75	4.56
59F920	PDLM-150	150	39065-6	6.80	6.13	5.75	4.56

Type 6752-2. Push-pull. Thermal magnetic circuit breaker meets MIL-C-5809. Trip free. 30VDC-120VAC. Trip 15-60 seconds at 200% load. Size 2.189 x ¾ x 2". Wt. 2.5 oz.

59F806	6752-2-5	5	MS25017-5	6.57	5.90	5.55	4.41
59F807	6752-2-7.5	7.5	MS25017-7	6.75	5.90	5.55	4.41
59F808	6752-2-10	10	MS25017-10	6.75	5.90	5.55	4.41
59F809	6752-2-15	15	MS25017-15	6.75	5.90	5.55	4.41
59F810	6752-2-20	20	MS25017-20	6.75	5.90	5.55	4.41
59F811	6752-2-25	25	MS25017-25	6.75	5.90	5.55	4.41
59F812	6752-2-30	30	MS25017-30	6.75	5.90	5.55	4.41
59F813	6752-2-35	35	MS25017-35	6.75	5.90	5.55	4.41
59F814	6752-2-50	50	MS25017-50	6.75	5.90	5.55	4.41

Type 6752-12. Ambient compensated —65°F to 250°F. Meets MIL-C-27715. Wt. 2.5 oz. 2.189 x .75 x 2.37".

59F815	6752-12-2	2.5	MS24571-2	21.60	19.45	18.25	14.52
59F816	6752-12-5	5	MS24571-5	21.60	19.45	18.25	14.52
59F817	6752-12-7	7.5	MS24571-7	21.60	19.45	18.25	14.52
59F818	6752-12-10	10	MS24571-10	21.60	19.45	18.25	14.52
59F819	6752-12-15	15	MS24571-15	21.60	19.45	18.25	14.52
59F820	6752-12-20	20	MS24571-20	21.60	19.45	18.25	14.52
59F821	6752-12-50	50	MS24571-50	21.60	19.45	18.25	14.52

Type 6363. Thermal type toggle circuit breaker 30 VDC-115 VAC. Holds 110% trip at 130% rated current. Ratings: 2-30 amps. Size: 2.203x.765x1.431. Wt. 1.75 oz.

59F800	6363-1-2	2	7.00	6.30	5.93	4.70
59F801	6363-1-5	5	7.00	6.30	5.93	4.70
59F802	6363-1-10	10	7.00	6.30	5.93	4.70
59F803	6363-1-15	15	6.85	6.15	5.78	4.60
59F804	6363-1-20	20	6.85	6.15	5.78	4.60
59F805	6363-1-30	30	6.85	6.15	5.78	4.60

Type 7270. Miniature trip free thermal breaker meets MS 24509 Toggle type, Neck mounting 15/32-32N2A threaded ¼" long. Rating: 3-35 amp. Size: 1⅜"x¾"x1 5/16". 1.4 oz.

Stock No.	Type	Amp.	MS-No.	1-9	10-24	25-99	100-249
59F1051	7270-1-3	3	MS-24509-3	9.61	8.57	8.05	6.38
59F834	7270-1-5	5	MS-24509-5	9.61	8.57	8.05	6.38
59F835	7270-1-7	7.5	MS-24509-7	9.61	8.57	8.05	6.38
59F836	7270-1-10	10	MS-24509-10	9.61	8.57	8.05	6.38
59F837	7270-1-15	15	MS-24509-15	9.46	8.42	7.90	6.28
59F838	7270-1-10	20	MS-24509-20	9.46	8.42	7.90	6.28
59F839	7270-1-25	25	MS-24509-25	9.46	8.42	7.90	6.28
59F840	7270-1-30	30	MS-24509-30	9.46	8.42	7.90	6.28
59F1052	7270-1-35	35	MS-24509-35	9.46	8.42	7.90	6.28

Type 7271. Same as above, but Push-Button Type and neck bushing 11/32" Long.

59F1053	7271-8-3	3	MS-24510-3	9.61	8.57	8.05	6.38
59F841	7271-8-5	5	MS-24510-5	9.61	8.57	8.05	6.38
59F842	7271-8-7	7.5	MS-24510-7	9.61	8.57	8.05	6.38
59F843	7271-8-10	10	MS-24510-10	9.61	8.57	8.05	6.38
59F844	7271-8-15	15	MS-24510-15	9.46	8.42	7.90	6.28
59F845	7271-8-20	20	MS-24510-20	9.46	8.42	7.90	6.28
59F846	7271-8-25	25	MS-24510-25	9.46	8.42	7.90	6.28
59F847	7271-8-30	30	MS-24510-30	9.46	8.42	7.90	6.28
59F1054	7271-8-35	35	MS-24510-35	9.46	8.42	7.90	6.28

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

ICMDI-2AXX

ICMDI-1AXX-A23M

ICMDI-2AXX-A22

ICMDI-2AXX-A24

3 DO5-5P

IMDI-1A

IMDI-1A-A18

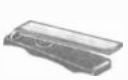
IMDI-1A-A18M

IMDI-1A-A14

BRD2-5L15

BRD2-LW228-1S

BRD2-24P-1S



BRD2-LW8-1S

BRD2-1P-1S

BRD2-10-1S

SF-BRD2-2PN-2

SF-BRD2-8PR

MINIATURE MODEL CM

Mechanical life of up to 50 million cycles. Light operating force. Electrical rating: 3 amps, 125-250 VAC; 3 amps, 28 VDC. Environmental temperature —90°F to 250°F.

Stock No.	Type	Operating Force	Pretravel	Overtravel	Terminal	1-9	10-19	20-49	50-99	100-199	200-499
23F415	1CMD1-2AXX	20-27 g.	.040 in. Max.	.050 in. Max.	.....	1.45	1.31	1.16	1.02	.94	.92
23F426	2CMD1-2AXX	33-44 g.	.040 in. Max.	.050 in. Max.	Solder	1.45	1.31	1.16	1.02	.94	.92
60F1900	3CMD1-2AXX	45-60 g.	.040 in. Max.	.050 in. Max.	Solder	1.45	1.31	1.16	1.02	.94	.92
60F1901	1CMD1-2AXX-A22	2.5 g. Max.	.....	.....	Solder	1.75	1.58	1.40	1.23	1.14	1.10
60F1902	1CMD1-1AXX-A23M	5-8 oz.	.040 in. Max.	.050 in. Max.	.....	1.75	1.58	1.40	1.23	1.14	1.10
23F416	1CMD1-2AXX-A24	2.5 g. Max.	.....	.....	.....	1.75	1.58	1.40	1.23	1.14	1.10
23F427	2CMD1-2AXX-A24	4 g. Max.	.....	.....	.....	1.75	1.58	1.40	1.23	1.14	1.10

SNAP-ACTION PUSHBUTTON SWITCHES

Overtravel plug type. 250 VAC; 12 amps.

Stock No.	Type	Operating Force	Pretravel	Overtravel	Terminal	1-9	10-19	20-49	50-99	100-199	200-499
60F1935	3D05-5P	10-15 oz.	0.10"	.007"	Solder	1.75	1.58	1.40	1.23	1.14	1.10

MINIATURE MODEL M

Mechanical life of up to 10 million cycles. U.L. electrical rating: 10 amps, 125-250 VAC. All have solder terminals and stainless steel actuator pins. Temp. —90°F to 250°F.

Stock No.	Type	Operating Force	Pretravel	Overtravel	Description	1-9	10-19	20-49	50-99	100-199	200-499
23F414	1MD1-1A	6 oz. Max.	1/32 in. Max.	.025 in. Max.	Pin Plunger	1.45	1.31	1.16	1.02	.94	.92
23F428	2MD1-1A	10 oz. Max.	1/32 in. Max.	.025 in. Max.	Pin Plunger	1.45	1.31	1.16	1.02	.94	.92
23F425	3MD1-1A	16 oz. Max.	1/32 in. Max.	.025 in. Max.	Pin Plunger	1.45	1.31	1.16	1.02	.94	.92

ACTUATORS FOR ABOVE MINIATURE MODEL M PIN PLUNGERS

Stk. No.	Type	Description	1-9	10-19	20-49	50-99	100-199	200-499
23F429	A18	Flat leaf, side mount actuator.	.40	.36	.32	.28	.26	.25
23F430	A18M	Roller leaf, side mount actuator.	.60	.54	.48	.42	.39	.38
60F1903	A14	Plunger actuator for two switches.	1.20	1.08	.96	.84	.78	.76

GENERAL PURPOSE MODEL B

Mechanical life of over 10 million cycles. High contact pressure rolling spring has minimum contact bounce and low traverse time. Uniform mating cover onto base. Spring loaded assembly. Contacts rated at 15 amps, 120-240-480 volts AC; ¼ amp, 240 VDC. ½ amp, 120 VDC. Step Base 6-32. Screw terminals are standard. Flat base available on special order.

Stock No.	Type	Operating Force	Pretravel	Overtravel	Movement Differential	1-9	10-19	20-49	50-99	100-199	200-499
60F1904	BRD2-1A-1S	9-13 oz.	.020" Max.	.005" Min.	.003" Max.	1.65	1.49	1.32	1.16	1.07	1.04
23F402	BRD2-5L-1S	5 oz. Max.	.156" Max.	1/32" Min.	.050" Max.	1.75	1.58	1.40	1.23	1.14	1.10
23F406	BRD2-LW8-1S	2½ oz. Max	9/32"-13/32"	.187" Min.	.016"-.078"	2.00	1.80	1.60	1.40	1.30	1.26
60F1905	BRD2-LW48-1S	1 oz. Max.	.156"-.328"	.187" Min.	.016"-.078"	2.00	1.80	1.60	1.40	1.30	1.26
23F407	BRD2-2M-1S	5 oz. Max.	.156" Max.	1/32" Min.	.050" Max.	2.25	2.03	1.80	1.58	1.46	1.42
23F409	BRD2-LW228-1S	6 oz. Max.	.045"-.140"	.080" Min.	.006"-.031"	2.50	2.25	2.00	1.75	1.63	1.58
60F1907	BRD2-LW28-1S	3½ oz. Max.	.125"-.281"	.156" Min.	.012"-.062"	2.50	2.25	2.00	1.75	1.63	1.58
23F401	BRD2-70-1S	9-13 oz.	.010"-.025"	1/16" Min.	.003" Max.	1.95	1.78	1.56	1.37	1.27	1.23
23F405	BRD2-10-1S	9-13 oz.	.010"-.025"	1/16" Min.	.003" Max.	1.95	1.78	1.56	1.37	1.27	1.23
60F1908	BRD2-3P-1S	9-13 oz.	.010"-.025"	7/32" Min.	.003" Max.	3.06	2.75	2.45	2.14	1.99	1.93
23F404	BRD2-1P-1S	9-13 oz.	.010"-.025"	7/32" Min.	.003" Max.	3.55	3.20	2.84	2.49	2.31	2.14
60F1909	BRD2-22P-1S	9-13 oz.	.010"-.025"	.140" Min.	.003" Max.	6.25	5.63	5.00	4.38	4.06	3.94
60F1912	BRD2-24P-1S	9-13 oz.	.010"-.025"	.140" Min.	.003" Max.	6.25	5.63	5.00	4.38	4.06	3.94
60F1913	BRD2-LW6-1S	8 oz. Max.	3/64"-7/64"	3/64" Min.	.020" Max.	2.95	2.66	2.36	2.07	1.92	1.85
60F1914	BRD2-LW5-1S	6 oz. Max.	1/16"-9/64"	.094" Min.	.005"-.025"	2.95	2.66	2.36	2.07	1.92	1.85

● *NEW* SUBMINIATURE MODEL Z

Switches have post terminals. Pin actuator can be ordered with any one of five terminals: post (solder), turret, double turret, baton (.057 dia.), ano quick connect (.110 wide). Other actuators are available only with post terminal (solder).

Stk. No.	Type	Optrating Force	Pretravel	Overtravel	Movement Differential	1-9	10-19	20-49	50-99	100-199	200-499
60F1936	ZD-0024	85-140 gms.	008-.020 in.	.010 in. min.	.001-.004 in.	1.18	1.06	.94	.826	.767	.743
60F1937	ZLD-0036	2 oz. max.	1/32 in. max.	.045 in. min	.015 in. max.	1.64	1.48	1.31	1.148	1.066	1.033
60F1938	ZLD-0037	2 oz. max.	1/32 in. max.	.045 in. min	.015 in. mar.	1.98	1.78	1.58	1.386	1.287	1.247
60F1939	ZPD-0078	10 oz. max.	.050 in. max	.125 in. min	.030 in. max.	4.55	4.10	3.64	3.185	2.958	2.867
60F1940	ZPD-0101	10 oz. max.	.050 in. max.	125 in. min.	.030 in. max.	6.25	5.63	5.00	4.375	4.063	3.938
60F1941	ZTD-0081	(Hand Operated)				3.45	3.11	2.76	2.415	2.243	2.174
60F1942	ZPD-0092	15 oz. max.	.010 in. max.	.010 in. min.	.010 in. max.	5.00	4.50	4.00	3.50	3.25	3.15

ONE-PIECE METAL ENCLOSURE MODEL BH

Each switch packaged for side or flange mounting #6-32 x 1½" Round Head Machine Screws with lead sealing washers supplied for side mount. Flange mount uses #8 screws. U.L. and C.S.A. listed. Supplied with sealed plungers. Dust and oil tight. Enclosure is 3" L. x 1 25/32" H. x 1" W. Approx. shipping weight 1 lb.

23F410	SF-BRD2-7PN	9-24 oz.	.078" Max.	.218" Min.	.003"	6.05	5.45	4.84	4.24	3.93	3.81
23F411	SF-BRD2-6PQ	9-13 oz.	.020" Max.	1/32" Min.	.003"	4.65	4.19	3.72	3.26	3.02	2.93
23F413	SF-BRD2-8PR	9-13 oz.	.020" Max.	9/64" Min.	.003"	8.10	7.29	6.48	5.67	5.27	5.10
60F1928	SF-BRD2-8PR1	9-13 oz.	.020" Max.	9/64" Min.	.003"	8.10	7.29	6.48	5.67	5.27	5.10
23F412	SF-BRD2-8PQ2	10-18 oz.	9/64" Max.	1/32" Min.	.006"	8.10	7.29	6.48	5.67	5.27	5.10
60F1929	SF-BRD2-2PN2	10-20 oz.	.172" Max.	1/32" Min.	.008"	9.25	8.33	7.40	6.48	6.01	5.83
60F1930	SF-BRD2-2PN28	8-20 oz.	13/64" Max.	1/32" Min.	.008"	10.70	9.63	8.56	7.49	3.96	6.74
60F1931	SF-BRD2-8PQ4	10-18 oz.	.266" Max.	.219" Min.	.006"	8.60	7.74	6.88	6.02	5.59	5.42
60F1932	SF-BRD2-2PN4	10-20 oz.	11/64" Max.	1/32" Min.	.006"	9.50	8.55	7.60	6.65	5.18	5.99
60F1933	SF-BRD2-8PQ26	2-5 oz.	.718" Max.	.838" Min.	.229"	8.10	7.29	6.48	5.67	5.27	5.10

Wood Electric Circuit Breakers

Wood Electric thermal and magnetic circuit breakers are precision calibrated and inspected to rigid quality control standards. All have unique trip free mechanism which prevents contacts from closing as long as overload persists. Meet requirements of Mil-E-5272C for humidity and salt spray. Withstand vibration of 10 g's at 10-55 hz, shock of 25 g's.

SINGLE POLE MAGNETIC—TOGGLE TYPE

Model 122. Designed for use on circuits requiring protection up to 50 amps on voltages up to 250 volts AC 60 hz. Calibrated to carry 100% of rated load and to trip between 101% and 125%. Trip times at 200% of rated load are 3-10 seconds.

Stock No.	AC Type	Amps	1-9	10-25	26-99	100-249
56F762	122-201-101	1				
65F763	122-202-101	2				
56F764	122-203-101	3				
56F765	122-204-101	4				
56F766	122-205-101	5				
56F767	122-207-101	7				
56F768	122-210-101	10	7.20	6.00	5.20	4.60
56F769	122-215-101	15				
56F770	122-220-101	20				
56F771	122-225-101	25				
56F772	122-230-101	30				
56F773	122-235-101	35				
56F774	122-240-101	40				
56F775	122-250-101	50				

TWO POLE MAGNETIC—TOGGLE TYPE

Model 190. Designed for use on circuits requiring protection up to 50 amps on voltages up to 250 volts AC 60 hz. Calibrated to carry 100% of rated load and to trip between 101% and 125%. Trip times at 200% of rated load are 3-10 seconds. Both poles are internally interlocked to insure simultaneous tripping in the event of an overload.

Stock No.	AC Type	Amps	1-9	10-25	26-99	100-249
56F790	190-201-101	1				
56F791	190-202-101	2				
56F792	190-203-101	3				
56F793	190-204-101	4				
56F794	190-205-101	5				
56F795	190-207-101	7				
56F796	190-210-101	10	18.63	15.53	13.46	11.90
56F797	190-215-101	15				
56F798	190-220-101	20				
56F799	190-225-101	25				
56F810	190-230-101	30				
56F811	190-235-101	35				
56F812	190-240-101	40				
56F813	190-250-101	50				

THREE POLE MAGNETIC—TOGGLE TYPE

Model 220. Designed for use on circuits requiring protection up to 50 amps on voltages up to 250 volts AC 60 hz. Calibrated to carry 100% of rated load and to trip between 101% and 125%. Trip times at 200% of rated load are 3-10 seconds. All three poles are internally interlocked to insure simultaneous tripping in the event of an overload.

Stock No.	AC Type	Amps	1-9	10-25	26-99	100-249
56F828	220-201-101	1				
56F829	220-202-101	2				
56F830	220-203-101	3				
56F831	220-204-101	4				
56F832	220-205-101	5				
56F833	220-207-101	7				
56F834	220-210-101	10	28.71	23.93	20.74	18.34
56F835	220-215-101	15				
56F836	220-220-101	20				
56F837	220-225-101	25				
65F838	220-230-101	30				
56F839	220-235-101	35				
56F840	220-240-101	40				
56F841	220-250-101	50				

SINGLE POLE THERMAL—PUSH/PULL TYPE

Model 105. Designed to meet requirements of Mil-C-5809 and MS dwg. no. 25244. Maximum operating voltages are 250 volts AC and 32 volts DC. Calibrated to hold 115% of rated load indefinitely and trip within 138% at 25°C.

Stk. No.	Type	Amp	1-9	10-25	26-99	100-249
56F708	105-205-101	5				
56F709	105-507-101	7.5				
56F710	105-210-101	10				
56F711	105-215-101	15				
56F712	105-220-101	20	8.10	6.75	5.85	5.18
56F713	105-225-101	25				
56F740	105-230-101	30				
56F714	105-235-101	35				
56F741	105-240-101	40				
56F715	105-250-101	50				

SINGLE POLE THERMAL—PUSH/PULL TYPE

Model 109. Designed for circuits requiring protection from 5 to 50 amps. Maximum operating voltages are 250 volts AC and 32 volts DC. Calibrated to hold 100% of rated load indefinitely and trip within 135% at 25°C.

Stock No.	Type	Amp	1-9	10-25	26-99	100-249
56F716	109-205-101	5				
56F717	109-507-101	7.5				
56F718	109-210-101	10				
56F719	109-215-101	15				
56F720	109-220-101	20	4.41	3.68	3.19	2.82
56F721	109-225-101	25				
56F722	109-230-101	30				
56F723	109-235-101	35				
56F724	109-250-101	50				

SINGLE POLE THERMAL—PUSH/PULL TYPE

Model 111. Designed for circuits requiring protection from 1 to 4 amps. Maximum operating voltages are 250 VAC or 32 volts DC. Calibrated to hold 100% of rated load indefinitely and trip within 135% at 25°C.

Stock No.	Type	Amp	1-9	10-25	26-99	100-249
56F734	111-201-101	1				
56F735	111-202-101	2	8.64	7.20	6.24	5.52
56F736	111-203-101	3				
56F737	111-204-101	4				

SINGLE POLE THERMAL—TOGGLE TYPE

Model 112. Designed for circuits requiring protection from 5 to 50 amps. Main contacts 250 VAC to 400 hz, 32 VDC. Aux. contacts rated 3A/115 VAC, 1A/50 VDC. Calibrated to hold 100% of rated load indefinitely and trip within 135% at 25°C.

Stock No.	Type	Amp	1-9	10-25	26-99	100-249
56F725	112-205-101	5				
56F726	112-507-101	7.5				
56F727	112-210-101	10				
56F728	112-215-101	15				
56F729	112-220-101	20	4.59	3.83	3.32	2.93
56F730	112-225-101	25				
56F731	112-230-101	30				
56F732	112-235-101	35				
56F742	112-240-101	40				
56F733	112-250-101	50				

SINGLE POLE THERMAL—PUSH TO RESET

Model 374. Designed for circuits requiring protection from 1 to 4 amps. Max. oper. volts: 250V AC to 400 hz, 32V DC. Push to reset, only cannot be interrupted manually. Calibrated to hold 100% of rated load indefinitely and will trip within 145% at 25°C.

Stock No.	Type	Amp	1-9	10-25	26-99	100-249
56F870	374-201-101	1				
56F871	374-202-101	2	2.77	2.31	2.00	1.77
56F872	374-203-101	3				
56F873	374-204-101	4				

SINGLE POLE THERMAL—PUSH TO RESET

Model 375. Designed for circuits requiring protection from 5 to 20 amps. Max. oper. volts: 250V AC to 400 hz, 32V DC. Push to reset, only cannot be interrupted manually. Calibrated to hold 100% of rated load indefinitely and will trip within 145% at 25° C.

Stock No.	Type	Amp	1-9	10-25	26-99	100-249
56F874	375-205-101	5				
56F875	375-207-101	7				
56F876	375-210-101	10	1.71	1.43	1.24	1.09
56F877	375-215-101	15				
56F878	375-220-101	20				

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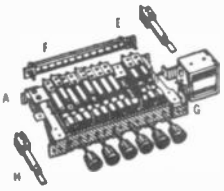
Multi-Switches SWITCHCRAFT INC.



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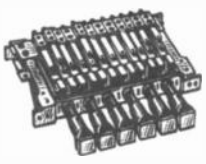

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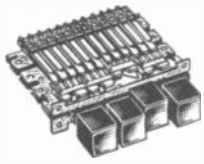

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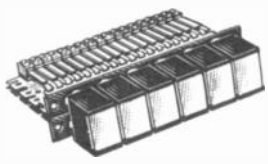

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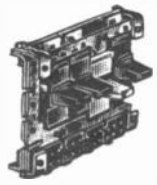


Multiple station push button switches, non-illuminated and illuminated types. Complete flexibility in number of switching stations, functions, lighting, circuitry. Available functions on all Series: Interlock — actuating a button restores to normal button previously actuated. Non-lock — each button has momentary action. All-lock — all buttons lock when depressed, all buttons restored to normal by actuating release button. Push-to-lock, push-to-release — the button locks when depressed and is released when again depressed. For a complete multiple station assembly, specify switch function, order the proper frame, necessary stack switches. Optional accessories include lock-out bar and solenoid release.

FIG. A—SERIES 7000 NON-ILLUMINATED FRAMES

Mount on panels up to 3/8" thick, 31/16" depth behind panel. Brown push-on button for each station, extra red button for release. Buttons on 5/8" centers. Function and circuit changes can be made in the field. By adjusting "Stop Plate" interlock switch changes to non-lock; by re-positioning "latch bar spring" interlock switch changes to all-lock. Only the most commonly used frames are listed; frames available from 1 to 37 stations. Shpg. wt. 1½ lbs.

Stk. No.	Type	Stns.	1-9	10-24	25-49	50-99	100-249	250-499	500-999
22F350	7200	2	6.80	5.10	4.68	4.25	3.40	3.23	3.06
22F352	7400	4	9.60	7.20	6.60	6.00	4.80	4.56	4.32
22F354	7600	6	12.80	9.60	8.80	8.00	6.40	6.08	5.76
22F356	7800	8	16.00	12.00	11.00	10.00	8.00	7.60	7.20
22F358	71000	10	19.20	14.40	13.20	12.00	9.60	9.12	8.64
22F360	71200	12	22.40	16.80	15.40	14.00	11.20	10.64	10.08

FIG. B—SERIES 21000 ILLUMINATED FRAMES

Similar to Series 7000 but feature modern sq. buttons. Knurled retaining collar holds lamp securely in socket and diffuses light. Up-front lamp replacement. Buttons light in "IN" positions, other lighting available on special order. Use either 6V or 28V lamps. Frames supplied less lamps and stack switches. Shpg. wt. 1½ lbs.

26F728	21200	2	11.60	8.70	7.98	7.25	5.80	5.51	5.22
26F730	21400	4	19.60	14.70	13.48	12.25	9.80	9.31	8.82
26F732	21600	6	27.60	20.70	18.98	17.25	13.80	13.11	12.42
26F734	21800	8	36.00	27.00	24.75	22.50	18.00	17.10	16.20
26F736	211000	10	44.00	33.00	30.25	27.50	22.00	20.90	19.80
26F738	211200	12	52.00	39.00	35.75	32.50	26.00	24.70	23.40

FIG. C—SERIES 35000 littel NON-ILLUMINATED FRAMES

Non-illuminated frames similar to Series 7000, but new compact low silhouette design. Only 3/4" height; 25/16" depth behind panel. Plunger on 5/8" centers. All functions available. Interlock, Non-lock, All-lock and Push-to-Lock, Push-to-Release. Only Interlock function with "built-in" lock-out listed below — other functions available on special order. Frames furnished with modern square black buttons for all stations. Other frames available from 1 to 18 stations. Frames supplied less stack switches. Shpg. wt. 1½ lbs.

26F867	35021	2	6.80	5.10	4.68	4.25	3.40	3.23	3.06
26F868	35041	4	9.60	7.20	6.60	6.00	4.80	4.56	4.32
26F869	35061	6	12.80	9.60	8.80	8.00	6.40	6.08	5.76
26F870	35081	8	16.00	12.00	11.00	10.00	8.00	7.60	7.20
26F871	35101	10	19.20	14.40	13.20	12.00	9.60	9.12	8.64
26F872	35121	12	22.40	16.80	15.40	14.00	11.20	10.64	10.08

FIG. D—SERIES 37000 litell ILLUMINATED FRAMES

All operating functions described above are available in this new illuminated multiple station pushbutton switch. Each pushbutton station serves as a color and legend coded panel indicator light which actuates up to 6PDT switching. Choice of three lighting arrangements by wiring to special H83P Lighting stack switches listed below. "L" type button lights in "IN" position: "M" type button lights in "OUT" position. "N" type button lights in "IN" and "OUT" position. Use 6V or 28V lamps. Avg. Shpg. wt. 5 oz.

26F873	37021	2	9.52	7.14	6.55	5.95	4.76	4.52	4.28
26F874	37041	4	15.44	11.58	10 62	9.65	7.72	7.33	6.95
26F875	37061	6	21.36	16.02	14.69	13.35	10.68	10.15	9.61
26F876	37081	8	27.68	20.76	19.03	17.30	13.84	13.15	12.46
26F877	37101	10	33.60	25.20	23.10	21.00	16.80	15.96	15.12
26F878	37121	12	39.52	29.64	27.17	24.70	19.76	18.77	17.78

TO SERVE YOU BETTER!
Ten Stocking Warehouses from Coast-to-Coast. Call, Wire or Write for Items Not Listed in this Catalog. Use the Services of the Facility Nearest You.

FIG. H—SERIES 39000 "MULTI SLIDE" SWITCH

Switch features full interlock, non-lock, and all-lock functions. Special slide to release cancelling operation. From 1 to 18 stations in row. To 3PDT circuitry per station. 3/4" depth. Shpg. wt. 1½ lbs.

Stk. No.	Type	Sta.	1-9	10-24	25-49	50-99	100-249	250-499	500-999
27F036	39021	2	7.60	5.70	5.23	4.75	3.80	3.61	3.42
27F037	39041	4	11.60	8.70	7.98	7.25	5.80	5.51	5.22
27F038	39061	6	14.40	10.80	9.90	9.00	7.20	6.84	6.48
27F039	39081	8	18.00	13.50	12.38	11.25	9.00	8.55	8.10
27F040	39101	10	21.60	16.20	14.85	13.50	10.80	10.26	9.72
27F041	39121	12	25.20	18.90	17.33	15.75	12.60	11.97	11.34

LAMPS FOR SERIES 21000 AND 37000

25F123. Ind. No. 328 6 volt lamp. **Each .53. Lots of 10 each 3.29**
25F122. Ind. No. 327 28 volt lamp. **Each .71. Lots of 10 each 4.20**

FIG. E—STACK SWITCHES

For Series 7000, 21000. Series 70, silver contacts for power circuits; Series 70P, welded cross bar palladium contacts for low level circuits. Both rated at 3 amps, 300 watts, max., A.C. non-inductive load. If more than one circuit is required specify two or more stacks in order to balance load on switch plunger. Two mtg. screws and one pressure plate furnished. Shp. wt., 1 oz.

SERIES 70 SILVER CONTACTS

Stk. No.	Cont.	Type	1-9	10-24	25-49	50-99	100-249	250-499	500-999
22F361	1-A	71	.48	.36	.33	.30	.24	.228	.216
22F362	1-B	72	.48	.36	.33	.30	.24	.228	.216
22F363	1-C	73	.56	.42	.39	.35	.28	.266	.252
22F365	2-A	74	.80	.60	.55	.50	.40	.38	.36
22F366	2-B	75	.80	.60	.55	.50	.40	.38	.36
22F367	2-C	76	.92	.69	.63	.58	.46	.437	.414

SERIES 70P PALLADIUM CONTACTS

22F369	1-A	71P	.56	.42	.39	.35	.28	.266	.252
22F370	1-B	72P	.56	.42	.39	.35	.28	.266	.252
22F371	1-C	73P	.72	.54	.50	.45	.36	.342	.324
22F373	2-A	74P	.92	.69	.63	.58	.46	.437	.414
22F374	2-B	75P	.92	.69	.63	.58	.46	.437	.414
22F375	2-C	76P	1.08	.81	.74	.68	.54	.513	.486
27F042	1-D	83PD	.80	.60	.55	.50	.40	.38	.36

FIG. F—LOCK-OUT BAR

Prevents operation of more than one button at a time. Mounts on back of Series 7000, 21000 frame. Supplied with mtg. hardware.

Stk. No.	Type	Stn.	1-9	10-24	25-49	50-99	100-249	250-499	500-999
22F280	K-02	2	2.40	1.80	1.65	1.50	1.20	1.14	1.08
22F282	K-04	4	2.60	1.95	1.79	1.63	1.30	1.24	1.17
22F284	K-06	6	2.80	2.10	1.93	1.75	1.40	1.33	1.26
22F286	K-08	8	3.00	2.25	2.06	1.88	1.50	1.43	1.35
22F288	K-10	10	3.40	2.55	2.34	2.13	1.70	1.62	1.53
22F290	K-12	12	3.60	2.85	2.61	2.38	1.90	1.81	1.71

FIG. G—SOLENOID RELEASE

For Series 7000, 21000. Automatic remote release of depressed stations. 115V A.C., 60 cycle with mtg. brkt. and screws.

Stock No.	Type	Function	1-9	10-24	25-49	50-99	100-249	250-499	500-999
22F295	J-1	Interlock	7.60	5.70	5.23	4.75	3.80	3.61	3.42
22F296	J-3	All-Lock	8.00	6.00	5.50	5.00	4.00	3.80	3.60

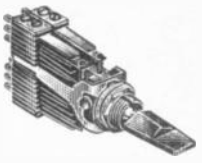
STACK SWITCHES FOR littel "MULTI-SWITCHES"

Switch stacks for Series 35000, 37000. Series 80P cross-bar welded palladium contacts rated at 3 amps, 300 watts, max., A.C. non-inductive load; Series H-83P same as 80P, but with lighting convenience blade for rear of switch frame wiring on Series 37000. Order 80P for switching only, H-83P for lighting (2 per station). With pressure plate and screws. Shpg. wt., 1 oz.

Stk. No.	Cont.	Type	1-9	10-24	25-49	50-99	100-249	250-499	500-999
26F882	1-A	81P	.56	.42	.39	.35	.28	.266	.252
26F883	1-B	82P	.56	.42	.39	.35	.28	.266	.252
26F884	1-C	83P	.72	.54	.50	.45	.36	.342	.324
26F885	1-C	H83P	1.00	.75	.69	.63	.50	.475	.450

All other Switchcraft "Multi-Switches" available from NEWARK. Write for FREE Catalog 26F739 and 26F741.

● NEW SERIES 41000 "LT" SWITCH



Telever telephone type lever switch. Features unique "U" shaped construction with a "Can't Cheat" detent guide which prevents accidental actuator by-pass of a switching position. Welded cross bar palladium contacts rated at 3 amps., 200 watts max., A.C., non-inductive load, are standard. Mounts on 2 3/32" centers, in a 15/32" dia. hole, in panels up to 1/4". Insulation is paper base phenolic with plastic tubing through the stack assembly. Frame is steel, iridescent iridite finish over cadmium plating. With mtg. hdwe.

2-POSITION TYPE

Type	Non-Lock	Locking	Cont. Form	1-24	25-99	50-99	100-249	250-499	500-999
41203	22F341	22F345	1-C	2.40	2.20	2.00	1.60	1.52	1.44
41206	22F342	22F346	2-C	3.00	2.75	2.50	2.00	1.90	1.80
41208	22F343	22F347	4-A	3.30	3.03	2.75	2.20	2.09	1.98
41212	22F344	22F348	4-C	4.05	3.71	3.38	2.70	2.57	2.43

3-POSITION TYPE

41306	22F377	22F381	1-C	3.00	2.75	2.50	2.00	1.90	1.80
41308	22F378	22F382	2-A	3.30	3.03	2.75	2.20	2.09	1.98
41312	22F379	22F383	2-C	4.05	3.71	3.38	2.70	2.57	2.43
41324	22F380	22F384	4-C	6.00	5.50	5.00	4.00	3.80	3.60

LEVER LITE 25000 SERIES SWITCH

An illuminated switch to color code switching position. Available in 2 or 3 position models. individual colors to indicate individual circuit. Requires only 2 1/4" behind panel. Ideal for multi operation. Complete with 6 volt 200 Ma lamp and six color chips. 2 1/4 x 39/64 x 1-11/32". Wt. 5 oz. *Kit contains 5 colors: green, amber, yellow, blue and white.

2 POSITION TYPE

Type	Non-lock	lock-ing	Cont. Form	1-24	25-49	50-99	100-249	250-499	500-999
25201	26F704	26F700	1-A	2.40	2.20	2.00	1.60	1.52	1.44
25203	26F705	26F701	1-C	2.55	2.34	2.13	1.70	1.62	1.53
25206	26F706	26F702	2-C	3.00	2.75	2.50	2.00	1.90	1.80
25209	26F707	26F703	3-C	3.45	3.16	2.88	2.30	2.19	2.07

3 POSITION TYPE

25304	26F712	26F708	1-A	2.70	2.48	2.25	1.80	1.71	1.62
25306	26F713	26F709	1-C	3.00	2.75	2.50	2.00	1.90	1.80
25308	26F714	26F710	2-A	3.30	3.03	2.75	2.20	2.09	1.98
25312	27F715	26F711	2-C	3.60	3.30	3.00	2.40	2.28	2.16
K-105	26F716	Color Chip Kit*		.24	.22	.20	.16	.152	.144
531	26F740	Escutcheon Plate		.09	.08	.075	.06	.057	.054

"LEVER LITE" SWITCH SERIES 27000

Same as 25000 Series except lever and filters. Mounts on 3/4" centers, panels to 3/32" thk., depth 2 31/32". On 2 pos., AMBER in "Neutral"; GREEN in "Down". On 3 pos. RED in "Up"; AMBER in "Neutral"; GREEN in "Down". W/6V lamp. 2 oz.

2 POSITION TYPE

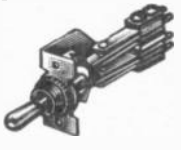
27206	26F832	26F834	2-C	3.90	3.58	3.25	2.60	2.47	2.34
27212	26F833	26F835	4-C	4.80	4.40	4.00	3.20	3.04	2.88

3 POSITION TYPE (+Ea. sec.)

27306	26F836	26F839	+1-C	3.90	3.58	3.25	2.60	2.47	2.34
27307	26F837	26F840	+1-C*	3.98	3.66	3.33	2.66	2.53	2.39
27312	26F838	26F841	+2-C	4.88	4.40	4.00	3.20	3.04	2.88

*n.o. center position off

SERIES 29000 FEATHER-LEVER SWITCH



Steel frame, nylon roller, silver contacts at 2 amps., 200 W max., A.C., non-inductive load. Bushing mount, in 9/16: O.D., hole in panels to 1/8" thk. Depth behind panel, 1 9/32", + n. o. cir. position off. ‡ InterCom "Talk-Listen" switch leverlock on one side of neutral and on-locking on other. 3 oz.

2 POSITION TYPE

Type	Non-lock	lock-ing	Cont. Form	1-24	25-49	50-99	100-249	250-499	500-999
29201	26F843	26F847	1-A	1.17	1.07	.98	.78	.741	.702
29203	26F844	26F848	1-C	1.35	1.24	1.13	.96	.855	.81
29204	26F845	26F849	2-A	1.50	1.38	1.25	1.00	.95	.90
29206	26F846	26F850	2-C	1.65	1.51	1.38	1.10	1.05	.99

3 POSITION TYPE (+ea. sec.)

29304	26F852	26F857	+1-A	1.56	1.43	1.30	1.04	.988	.936
29306	26F853	26F858	+1-C	1.74	1.60	1.45	1.16	1.10	1.04
29312	26F855	26F860	+2-C	2.25	2.06	1.88	1.50	1.43	1.35

‡ Intercom. switches

29303T	26F861	.....	1-C	1.50	1.38	1.25	1.00	.95	.90
29307T	26F862	.....	2-C	1.77	1.62	1.48	1.18	1.12	1.06
532	26F842	Escutcheon Plate		.15	.14	.13	.10	.095	.09

LEV-R SWITCHES SERIES 3000 & 13000

Small lever action switches in two and three position types, locking and non-locking action. Types 3033 and 13033 are 3 position switches with 1 form C only. Supplied with locknut and screw-on black knob. Fine silver contacts rated at 3 amps, 300 watts, max. AC non-inductive load. Non-locking types have spring return. Series 300 mounts in panels up to 3/32" thick; Series 13000 mounts in panels up to 1/4" thick. Both series are 5/8" wide; requires 2 1/4" behind panel; mounts in single 1/2" dia. hole. 1 n.o. center position off. † Inter communications "Talk-Listen" switches, lever locks on one side of neutral and operates non-locking on the other side. 3 position switches have same contact for both sections on each side. wt.: 3 oz.

2 POSITION TYPE

Type	Stk. No. Non-lock	Stk. No. lock-ing	Cont. Form	1-24	25-49	50-99	100-249	250-499	500-999
3001	22F300	22F311	1-A	1.20	1.10	1.00	.80	.76	.72
3002	22F301	22F312	1-B	1.20	1.10	1.00	.80	.76	.72
3003	22F302	22F313	1-C	1.41	1.29	1.18	.94	.893	.846
3005	22F303	22F314	2-B	1.56	1.43	1.30	1.04	.988	.936
3006	22F305	22F316	2-C	1.71	1.57	1.43	1.14	1.08	1.03
3033	22F306	22F317	1-C†	1.56	1.43	1.30	1.04	.988	.936
3034	22F307	22F318	1-A	1.62	1.49	1.35	1.08	1.03	.972
3035	22F308	22F319	1-B	1.62	1.49	1.35	1.08	1.03	.972
3036	22F309	22F320	1-C	1.80	1.65	1.50	1.20	1.14	1.08
3037	22F310	22F321	1-C†	1.83	1.68	1.53	1.22	1.16	1.10

3 POSITION TYPE

13001	27F043	27F051	1-A	1.32	1.21	1.10	.88	.836	.792
13003	27F044	27F052	1-C	1.50	1.38	1.25	1.00	.95	.90
13006	27F045	27F053	2-C	1.71	1.57	1.43	1.14	1.08	1.03
13009	27F046	27F054	3-C	2.40	2.20	2.00	1.60	1.52	1.44
13033	27F047	27F055	1-C†	1.65	1.51	1.38	1.10	1.05	.99
13034	27F048	27F056	1-A	1.71	1.57	1.43	1.14	1.08	1.03
13036	27F049	27F057	1-C	2.01	1.84	1.68	1.34	1.27	1.21
13037	27F050	27F058	1-C†	2.01	1.84	1.68	1.34	1.27	1.21

SERIES 6000 TELEVER SWITCHES

Featuring "T-Beam" construction with Irridite finished steel frame. Palladium contacts rated at 3 A., 120 volts, non-inductive load. Size, 4 9/32 x 1 5/8 x 7/8". Wt., 3 oz.

2-POSITION TYPE

Non-Locking Stk No.	Type	Locking Stk. No.	Type	Cont. Form	1-24	25-49	50-99	100-249	250-499	500-999
22F322	6006	22F331	6006L	2-C	3.00	2.75	2.50	2.00	1.90	1.80
22F323	6008	22F332	6008L	4-A	3.36	3.08	2.80	2.24	2.13	2.02
.....	.....	22F333	6009L	3-C	3.80	3.30	3.00	2.40	2.28	2.16
22F325	60012	22F334	60012L	4-C	4.08	3.74	3.40	2.72	2.58	2.45

3-POSITION TYPE

22F327	6036	22F336	6036L	1-C	3.00	2.75	2.50	2.00	1.90	1.80
.....	.....	22F337	6038L	2-A	3.36	3.08	2.80	2.24	2.13	2.02
22F329	60312	22F338	60312L	2-C	4.08	3.74	3.40	2.72	2.58	2.45
22F330	60324	22F339	60324L	4-C	6.00	5.50	5.00	4.00	3.80	3.60
22F340. 530 Escutcheon Plate.					.36	.33	.30	.24	.228	.216

SERIES 16000 TELEVER SWITCHES

Similar to the 6000 Series. Single hole mounting; mounts in 1/2" dia. hole for panels up to 1/4" thick. Size: 4 1/16 x 1 7/8 x 7/8". Shpg. wt., 3 oz. May be converted to "locking" by removing stop plate.

2-POSITION TYPE

Non-locking Stk. No.	Type	Contact Form	1-24	25-49	50-99	100-249	250-499	500-999
22F215	16006	2-C	3.00	2.75	2.50	2.00	1.90	1.80
22F216	16006D	2-D	3.36	3.08	2.80	2.24	2.13	2.02
22F217	16008	4-A	3.36	3.08	2.80	2.24	2.13	2.02
22F218	16009	3-C	3.60	3.30	3.00	2.40	2.28	2.16
22F219	160012	4-C	4.08	3.74	3.40	2.72	2.58	2.45
22F220	160012D	4-D	4.50	4.13	3.75	3.00	2.85	2.70
22F221	160024	8-C	6.00	5.50	5.00	4.00	3.80	3.60

3-POSITION TYPE

22F222	16036	1-C	3.00	2.75	2.50	2.00	1.90	1.80
22F223	16036D	1-D	3.36	3.08	2.80	2.24	2.13	2.02
22F224	16038	2-A	3.36	3.08	2.80	2.24	2.13	2.02
22F225	160312	2-C	4.08	3.74	3.40	2.72	2.58	2.45
22F226	160312D	2-D	4.50	4.13	3.75	3.00	2.85	2.70
22F227	160316	4-A	5.28	4.84	4.40	3.52	3.34	3.17
22F228	160324	4-C	6.00	5.50	5.00	4.00	3.80	3.60

LAMPS FOR "LEVER-LITE" AND "LITTEL-LITE" SWITCHES

Stk. No.	Type	Volt.	Base	Current	Ea.	10 for	100 for
25F149	1768	6V	Screw	200 Ma	.87	5.21	47.09
26F508	335	28V	Screw	40 Ma	1.45	8.76	78.84

NOTE: On all switches listed on this page add suffix letter L to manufacturer's type number to indicate locking type.

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

Switches and Connectors

SWITCHCRAFT INC.

LITTEL SWITCHES

These are momentary contact switches, no bigger than a small phone jack. Available in three circuits with red or black, one-piece push-button (non-locking only). All contacts are thoroughly insulated from panel bushing with interlocking phenolic washers. Springs are special nickel-silver alloy. Integral contacts; recommended for low current circuits only. Plastic button and shaft need not be removed for mounting. Mounts in ⅜" dia. hole in panels up to ¼". Complete with locknut and washer. Shpg. wt., 1 oz.

CONTACT CIRCUITS FOR LITTEL SWITCHES

BLACK BUTTON

Stock No.	Type	Circuit Figure	Switch Action	1-24	25-49	50-99	100-249
22F207	201	I	SPST NO	.57	.52	.48	.38
22F208	202	II	SPST NC	.57	.52	.48	.38
22F209	203	III	SPDT	.66	.61	.55	.44

RED BUTTON

22F210	101	I	SPST NO	.57	.52	.48	.38
22F211	102	II	SPST NC	.57	.52	.48	.38
22F212	103	III	SPDT	.66	.61	.55	.44

ILLUMINATED "LITTEL-LITE" SWITCHES

Series 210 are small, momentary contact, illuminated pushbutton types. One piece, clear plastic button and shaft is illuminated by a single miniature lamp. Includes kit of 4 color chips (red, amber, green, and yellow). Recommended for low level circuits. Switches with suffix "S" have fine silver contacts rated at 3 amps. 300 watts, max., AC, non-inductive load. Lighting circuit is independent of switching circuit. Mounts on ⅜" centers, panels to ¼" thick.

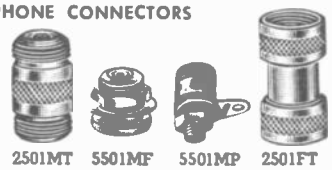
26F800	211	I	SPST NO	1.02	.94	.85	.68
26F801	212	II	SPST NC	1.02	.94	.95	.68
26F802	213	III	SPDT	1.20	1.10	1.00	.80
26F803	211S	I	SPST NO	1.17	1.07	.98	.78
26F804	212S	II	SPST NC	1.17	1.07	.98	.78
26F805	213S	III	SPDT	1.35	1.24	1.13	.90
26F806	K106	...	Chip Kit	.18	.17	.15	.12

SERIES DA SWITCH

Miniature momentary action pushbutton switch. Meets Human Factor Engineering considerations. Mounts on 17/32" centers. Available in six colors for control panel coding. Body of anodized aluminum protects the contacts. Terminals come straight out in back for easy wiring. Data Switches provide an A A - B arrangement, which may be wired externally to provide 1-C switching. Hard-gold contacts rated 500 ma., 50 watts max. A.C., non-inductive load.

Stock No.	Type No.	Color	1-21	25-49	50-99	100-249	250-499	500-999
27F000	DA-01-3	Red						
27F001	DA-02-3	Black						
27F002	DA-03-3	Green	1.35	1.24	1.13	.90	.855	.81
27F003	DA-04-3	Blue						
27F004	DA-05-3	White						
27F005	DA-08-3	Yellow						

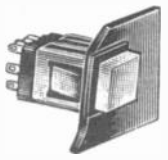
MICROPHONE CONNECTORS



Microphone type connectors used with miniaturized audio equipment. Accepts single conductor shielded cables up to 3/16". O.D. nickel plated brass bodies. Connectors are about ½ the size of standard. Coupling ring on Type 5501F is removable for quick change of female to male type. Type 5501MF mounts by locknut on front side of panel in ⅜" hole. Type 5501MP mounts back side of panel in 3/16" dia. hole.

Stock No.	Type	Description	1-24	25-49	50-99	100-249	250-499	500-999
22F271	2501FT	female	.75	.69	.63	.50	.475	.45
22F272	2501MT	male	.75	.69	.63	.50	.475	.45
39F776	5501F	female	.39	.36	.33	.26	.217	.234
39F777	5501M	male	.30	.28	.25	.20	.190	.180
39F778	5501MP	male, panel	.24	.22	.20	.16	.152	.144
22F213	5501MF	pnl. con. male	.30	.28	.25	.20	.190	.180
22F214	5501MPC	pnl. con. male	.48	.44	.40	.32	.304	.288

● NEW BOX SWITCH



A flush mounted, momentary action push-button switch. Offers broad switching capabilities in minimum panel space. For control panel application in computers, data processors, ground support equipment, machine and process controls, test equipment, and telephones. 11/16" square. 4 switching poles; 2 limited to single throw. Solder lug terms. Silver plated, brass integral contacts.

Stock No.	Type	Contact Assembly	Button Color	1-24	25-49	50-99	100-249	250-499	500-999
22F960	BX-01-1	1-A	Red	1.95	1.79	1.63	1.30	1.24	1.17
22F961	BG-01-3	1-C	Red	2.04	1.87	1.70	1.36	1.29	1.22
22F962	BX-01-6	2-C	Red	2.25	2.06	1.88	1.50	1.43	1.35
22F963	BX-01-10	2-C, 2-A	Red	2.55	2.34	2.13	1.70	1.62	1.53
22F964	BX-02-1	1-A	Black	1.95	1.79	1.63	1.30	1.24	1.17
22F965	BX-02-3	1-C	Black	2.04	1.87	1.70	1.36	1.29	1.22
22F966	BX-02-6	2-C	Black	2.25	2.06	1.88	1.50	1.43	1.35
22F967	BX-02-10	2-C, 2-A	Black	2.55	2.34	2.13	1.70	1.62	1.53
22F968	BX-03-1	1-A	Green	1.95	1.79	1.63	1.30	1.24	1.17
22F969	BX-03-3	1-C	Green	2.04	1.87	1.70	1.36	1.29	1.22
22F970	BX-03-6	2-C	Green	2.25	2.06	1.88	1.50	1.43	1.35
22F971	BX-03-10	2-C, 2-A	Green	2.55	2.34	2.13	1.70	1.62	1.53
22F972	BX-05-1	1-A	White	1.95	1.79	1.63	1.30	1.24	1.17
22F973	BX-05-3	1-C	White	2.04	1.87	1.70	1.36	1.29	1.22
22F974	BX-05-6	2-C	White	2.25	2.06	1.88	1.50	1.43	1.35
22F975	BX-05-10	2-C, 2-A	White	2.55	2.34	2.13	1.70	1.62	1.53

BUTTON SWITCHES

Non-locking, push button switch. Rated at 250 mils., non-inductive load, AC, 30 watts max. Size: ½"Dx1"L. Wt. 2 oz. *Numeral indicates No. of sets of contacts.

Stk. No.	Type	Description	Contact* Arrange.	1-24	25-49	50-99	100-249
22FX229	903	Red button	1C				
22FX230	903D	Red button	1D	.84	.77	.70	.56
22FX233	913	Black button	1C				
22FX234	913D	Black button	1D				
22FX231	923	Red button	1C				
22FX232	923D	Red button	1D	.90	.83	.75	.60
22FX235	933	Black button	1C				

TINY SWITCHES

Subminiature design. Integral silver contacts for low level circuits where low contact resistance is not a factor. Size: 7/16D.x1 1/16"L.

22FX237	951	Red button	1A				
22FX238	952	Red button	1B	.57	.52	.48	.38
22FX240	961	Black button	1A				
22FX241	962	Black button	1B				
22FX239	953	Red button	1C	.66	.61	.55	.44
22FX242	963	Black button	1C				

CORD OR PENDANT SWITCHES

Nickel plated housing incorporates Series 903 and 913 button switches shown above. Dia. 11/16". Approx. length 2 3/16". Wt. 3 oz.

22FX243	E903	Red button	1C				
22FX244	E903D	Red button	1D	1.35	1.24	1.13	.90
22FX245	E913	Black button	1C				
22FX246	E913D	Black button	1D				

FLAT FRAME PUSH BUTTON SWITCHES

One piece, black plastic, push button, all common circuit model. Fine silver contacts used for minimum resistance. Rated at 3 amps, 300 watts, max. AC non-inductive load. Shaft and button need not be removed for mounting. Mounts in single ⅜" hole, panels up to ¼" thick. Size: 1 29/32" l. by ¾" w. Shpg. wt., each 2 oz.

CONTACT CIRCUITS FOR FLAT FRAME SWITCHES

Stock No.	Type	Circuit Figure	Switch Action	1-24	25-49	50-99	100-249
22F200	FF1001	I	SPST NO	.69	.63	.58	.46
22F201	FF1002	II	SPST NC	.69	.63	.58	.46
22F202	FF1003	III	SPDT	.78	.72	.65	.52
22F203	FF1004	IV	DPST NO	.87	.80	.73	.58
22F204	FF1005	V	DPST NC	.87	.80	.73	.58
22F205	FF1006	VI	DPDT	1.02	.94	.85	.68
22F206	FF1009	VII	3PDT	1.38	1.27	1.15	.92

SWITCHCRAFT INC. Plugs and Jacks

MIL-P-642(A) DESIGN PHONE PLUGS

These "Littel Plugs" meet exacting JAN specs. Handle type—Black. Lug type—Screw, except * metal handle. Fit standard phone jacks. Extremely rugged. Shpg. wt., 2 oz.

Stock No.	Mfr's. Type	JAN Type	Signal Corps	Cond.	1-24	25-49	50-99	100-249	250-499	500-999
39F792	440	PJ-055B	PL-55	2	.90	.83	.75	.60	.57	.54
39F791	480	PJ-068	PL-68	3	2.16	.98	.80	1.44	1.37	1.30
22F276	430	PJ-054B	PL-54	2	.90	.83	.75	.60	.57	.54
22F277	470	PJ-055M	PL-125	2	1.26	1.16	1.05	.84	.798	.756
22F278	*475	PJ-636	.....	2	1.32	1.21	1.10	.88	.836	.792

"LITTEL-PLUGS"—MIL DESIGN

22F389	420	PJ047B	PL47	2	1.05	.96	.88	.70	.665	.63
22F391	482	PJ051R	PL51	3	2.40	2.20	2.00	1.60	1.52	1.44

"TWIN-PLUGS"—MIL DESIGN

22F392	411	PJ327	491242	2	3.15	2.89	2.63	2.10	2.00	1.89

"LITTEL-PLUG" PHONE PLUGS

A

B

For 2 and 3-conductor cables. Fit standard jack, except S-250* and S-280*. Solder types have cable clamp that clamps over metal braid of shielded cable, or outer cover of insulated cable. Screw terminal types have no cable clamp. †Shielded plugs nickel-plated brass handles. Size, 25⁷⁄₆₄"x½". Shpg. wt., 3 oz.

*Special thin-shank ((.206 dia.) plug. Mates with Switchcraft S-11, S-12B, S-13B jacks above. R-280 mates with No. 126 "Ext. Jax".

**Special two-conductor plug with wide insulator between tip and sleeve for use in 3-conductor jack without shorting.

Fig. A

Stock No.	Mfr. Typ	Descrip.	No. Cond.	Lug Type	1-24	25-49	50-99	100-249	250-499	500-999
39F761	245	Red Plastic	2	Screw	.51	.47	.43	.34	.323	.306
39F674	255	Red Plastic	2	Solder	.48	.44	.40	.32	.304	.288
39F676	269	Red Plastic	3	Solder	.72	.66	.60	.48	.456	.432
39F760	240	Blk. Plastic	2	Screw	.51	.47	.43	.34	.323	.306
39F763	250	Blk. Plastic	2	Solder	.48	.44	.40	.32	.304	.288
39F675	260	Blk. Plastic	3	Screw	.81	.74	.68	.54	.513	.486
39F771	267	Blk. Plastic	3	Solder	.72	.66	.60	.48	.456	.432
39F677	S-250	Blk. Plastic	2	Solder	.51	.47	.43	.34	.323	.306

Fig. B

Stock No.	Mfr.	Descrip.	No. Cond.	Lug Type	1-24	25-49	50-99	100-249	250-499	500-999
39F765	270	Shielded†	2	Screw	.72	.66	.60	.48	.456	.432
39F764	280	Shielded†	2	Solder	.69	.64	.58	.46	.437	.414
39F766	290	Shielded†	3	Screw	.96	.88	.80	.64	.608	.576
39F767	297	Shielded†	3	Solder	.90	.83	.75	.60	.57	.54
39F678	288**	Shielded†	2	Solder	.72	.66	.60	.48	.456	.432
39F672	S-280	Shielded†	2	Solder	.69	.63	.58	.46	.437	.414
39F784	R-280	Shielded†	2	Solder	.90	.83	.75	.60	.57	.54
22F275	170	Shielded†	2	Screw	1.11	1.02	.93	.74	.703	.666

FLAT PLUGS

Flat design . . . projects only 15⁄32" from jack! Ideal where conventional plug interferes with operation or placement of equipment. Screw-type terminals. Accept standard phone jacks. Black handle. Wt. 4 oz.

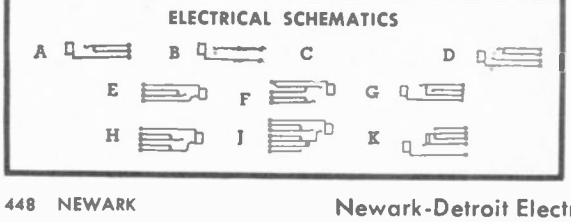
Stk. No.	Type	Cond.	1-24	25-49	50-99	100-249	250-499	500-999
39F768	220	2	.75	.69	.63	.50	.475	.45
39F769	230	3	.93	.85	.78	.62	.589	.558

"MICRO-JAX" AND "MICRO-PLUG" SERIES

TR-2A. "Micro-Jax." Ultra-Miniaturized jacks. A 2 conductor single closed circuit design with keyed nylon insulation, interlock springs and solder lugs. Size: 7⁄16" L, ¼" Dia. THD .101". **Type 850.** Ultra-min. plug. Features screw-on black aluminum handle. Clamp Lug. Cable up to 7⁄64" Dia. Size: 1¹⁄₆₄" L; ¼" O.D.

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499	500-999
22F394	TR-2A	.30	.28	.25	.20	.19	.18
22F395	850	.45	.41	.38	.30	.285	.27

ELECTRICAL SCHEMATICS



"LITTEL-JAX" PHONE JACKS

Parts interlocked firmly to prevent rotation of contacts. Nickel-silver springs long lasting, hold mating plug firmly. Mount in ⅜" hole. C-11 equals Jan JJ-034, C12-A equals JJ-089, C-12B equals JJ-033.

*Special jack for thin-shank (.206 dia.) plugs. Also mates with S-250 and S-280 plugs below.

**S-11, S-12B, S-13B sleeve bushing to fit WE plug 309 and Signal Corps plug PL-68.

Stock No.	Mfr. Type	No. Cond.	Circuit Type	1-24	25-49	50-99	100-249	250-499	500-999
39F782	11	2	Open	.27	.25	.23	.18	.171	.162
39F662	C-11	2	Open	.39	.36	.33	.26	.247	.234
39F663	S-11*	2	Open	.30	.28	.25	.20	.190	.180
39F783	12-A	2	Single Closed	.30	.28	.25	.20	.190	.180
39F664	C12-A	2	Single Closed	.48	.44	.40	.32	.304	.288
39F665	12-B	3	Open	.36	.33	.30	.24	.228	.216
39F666	S-12B**	3	Open	.45	.41	.38	.30	.285	.27
39F667	C-12B	3	Open	.48	.41	.40	.32	.304	.285
39F668	13B	3	Single Closed	.51	.47	.43	.34	.323	.306
39F669	S-13B**	3	Single Closed	.63	.58	.53	.42	.399	.378

"TINI-D JAX" SUBMINIATURE PHONE JACKS

Completely enclosed molded phone jack. Mates with Type 750 "TINI-PLUG." Bifurcated beryllium copper spring contacts hold plugs tightly. Type 142A has threaded bushing, comes with locknut and washer for panel mtg. Type PC-142A is for printed circuit mounting. Both types mount on ⅜" centers. Size ⅝ x ⅜ x ½"; wt. 3.6 gms.

Stk. No.	Type	Cont. Form	1-24	25-49	50-99	100-249	250-499	500-999
27F006	142A	B	.30	.28	.25	.20	.19	.18
27F007	PC-142A	B	.33	.30	.28	.22	.209	.198

"HI-D JAX" PHONE JACKS

Compact jacks; mate with ¼" plugs. Silver-plated, nickel silver springs. Low contact resistance and elec. leakage; mounts on ⅝" centers. For P.C. board mounting. Mounts in single ⅜" hole, in panels up to 5⁄32" thick. depth behind panel, 1³⁄₃₂". Wt. 7½g.

TWO-CONDUCTOR TYPES

Stock No.	Type	Schem. No.	Mating Plug	1-24	25-49	50-99	100-249	250-499	500-999
39F656	111	A	250	.27	.25	.23	.18	.171	.162
39F657	112A	B	250	.30	.28	.25	.20	.19	.18
THREE-CONDUCTOR TYPES									
39F658	112B	C	267	.33	.30	.28	.22	.209	.198
39F659	113B	D	267	.45	.41	.38	.30	.285	.27
39F660	113F	E	267	.45	.41	.38	.30	.285	.27
39F661	114B	F	267	.51	.47	.43	.34	.323	.306

JACK PANELS

Polished Black phenolic panels, reinforced with steel, supports "T-Jax" or "MT-Jax". Slotted mounting brackets for standard 19" relay racks. Less jacks.

Series 1200. Single row 1¾" wide for 24 Jacks. Spaced so no shorting results. Shpg. wt., 3¼ lbs.

Series 2400. Double row Panel, 2⅛" wide for 48 Jacks. Jacks spaced ⅝" to permit use of double plug. Shpg. wt., 5 lbs.

Series 2600. Double row Panel 1¾" wide for 52 Jacks. Jacks spaced ⅝" centers Shpg. wt., 5 lbs.

Stk. No.	Type	1-24	25-49	50-99	100-249
22FX252	1200	8.70	7.98	7.25	5.80
22FX253	2400	9.00	8.25	7.50	6.00
22FX254	2600	10.80	9.90	9.00	7.20

"MT-JAX"

Long frame type, commonly referred to as telephone switchboard Jack. Pressure welded steel frame provides rigidity. Welded cross bar palladium contacts in all switching circuits. Mating plug: (*) PJ-055. (**) PJ-051. (†) PJ-068.

Stock No.	Type	Dia.	Mil. Spec.	Ht.	1-24	25-49	50-99	100-249	250-499	500-999
22FX255	MT-331*	A	JJ-086	7⁄16"	.75	.69	.63	.50	.475	.45
22FX256	MT-332A*	B	JJ-024	½"	.87	.80	.73	.58	.551	.522
22FX257	MT-332B**	C	JJ-022	9⁄16"	.87	.80	.73	.58	.551	.522
22FX258	MT-332C**	D	JJ-016	9⁄16"	1.02	.94	.85	.68	.646	.612
22FX259	MT-334B**	E	JJ-042	⅝"	1.05	.96	.88	.70	.665	.63
22FX260	MT-336C**	F	JJ-073	¾"	1.50	1.38	1.25	1.00	.95	.90
22FX261	MT-344B†	...	.....	⅝"	1.20	1.10	1.00	.80	.76	.72
22F297	MT-334F*	...	JJ035	⅝"	1.05	.96	.88	.70	.665	.63

SWITCHCRAFT INC.

PLUG AND JACK

Make ideal connectors for hearing aids, speaker extensions, carbon microphones and other devices where space is limited. Only 1⅝" long by 17/32" wide by ⅜" thick. Two-conductor precision. Army type. Molded black bakelite case. Machined brass pins and sockets. Sockets have strong spring contacts and solder lugs. Shpg. wt., 3 oz.

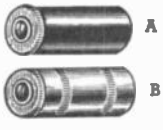
Stk. No.	MIL	Type	1-24	25-49	50-99	100-249	250-499	500-999
39F798	PJ291	410 Plug	.60	.55	.50	.40	.380	.360
39F799	JJ048	810 Jack	.72	.66	.60	.48	.456	.432

"4-LEAF CLOVER JACK"

Available in 4 models: open circuit, closed circuit, grounded and ungrounded. Offers dual contact surfaces for min. shunt resistance. Tip spring with shunt form dual contact around pin of phono plug upon insertion. High di-electric body for low leakage. Requires no hand adjusting. Mates with any phono jack with a ⅛" diameter. Mounts on ¾" centers in a 13/32" hole, in panels 13/64" thick. Depth behind panel, ⅜". Shpg. wt. 2 oz.

Stk. No.	Type	Description	1-24	25-49	50-99	100-249	250-499	500-999
26F863	3511	Open Circuit	.18	.17	.15	.12	.114	.108
26F864	3511A	Open Circuit Grounded	.18	.17	.15	.12	.114	.108
26F865	3512	Closed Circuit	.21	.19	.18	.14	.133	.126
26F866	3512A	Closed Circuit Grounded	.21	.19	.18	.14	.133	.126

EXTENSION JACKS



Clamp-type terminals provide solid cable anchor. Solder lug terminals mechanically interlock. Shielded types have nickel-plated brass shell. All fit standard phone plugs, except * special jack for thin-shank (.206" dia) plugs. Shpg. wt ea., 4 oz.

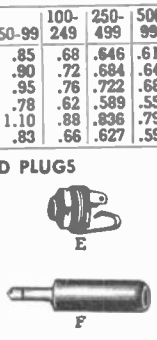
HANDLE TYPE—BLACK

Stock No.	Mfr. Type	Fig.	No. Cond.	Lug Type	1-24	25-49	50-99	100-249	250-499	500-999
39F670	80	A	2	Screw	.75	.69	.63	.50	.475	.450
39F671	88	A	2	Solder	.66	.61	.55	.44	.418	.396
22F269	830	A	3	Screw	1.02	.94	.86	.68	.646	.612

HANDLE TYPE—SHIELD

Stock No.	Mfr. Type	Fig.	No. Cond.	Lug Type	1-24	25-49	50-99	100-249	250-499	500-999
39F672	120	B	2	Screw	1.02	.94	.85	.68	.646	.612
22F247	121	...	2	Solder	1.08	.99	.90	.72	.684	.648
39F785	126	B	2	Solder	1.14	1.05	.95	.76	.722	.684
39F673	128	B	2	Solder	.93	.85	.78	.62	.589	.558
39F757	1230	B	3	Screw	1.32	1.21	1.10	.88	.836	.792
39F772	S-128*	B	2	Solder	.99	.91	.83	.66	.627	.594

"TINI-JAX" PHONE JACKS AND PLUGS



"Tini-Jax" is a sub-min. phone jack weighing less than ⅛ ounce. Mounts in ¼" dia. hole in panels up to ⅛" thick. "Tini-Plug" is a sub-min. 2 conductor phone plug designed for use with the above jacks. For use with cables up to 3/16" O.D. Available in black or red plastic handles or shielded brass nickel plated handle.

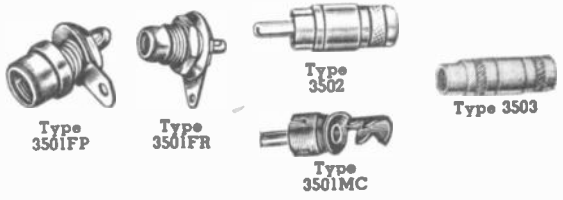
Stock No.	Mfr. Type	Fig.	Description	1-24	25-49	50-99	100-249	250-499	500-999
39F744	41	E	2-conductor open circuit jack	.27	.25	.23	.18	.171	.162
39F745	42A	E	2-conductor closed circuit jack	.30	.28	.25	.20	.190	.180
39F746	750	F	Blk. plastic clamp lug handle plug	.48	.44	.40	.32	.304	.288
39F747	755	F	Red plastic clamp lug handle plug	.48	.44	.40	.32	.304	.288
39F748	780	F	Shielded handle plug	.66	.61	.55	.44	.418	.396
22F248	125		2-cond. solder lug Shielded ext. jack	.81	.75	.68	.54	.513	.486

PHONE PLUGS

High quality general-purpose phone plugs for two or three conductors. Fit all standard phone jacks. Offered with black plastic or nickel-plated brass handles. Shpg. wt., 5oz. *Solder term.

Stock No.	Mfr's. Type	Cond.	Handle Type	Handle Length	1-24	25-49	50-99	100-249	250-499	500-999
39F679	40	2	Black	2 1/16"	.51	.47	.43	.34	.323	.306
39F680	70	2	Shield	2 1/16"	.84	.77	.70	.56	.532	.504
39F681	160	2	Shield	1"	.66	.61	.55	.44	.418	.396
39F682	60*	3	Black	2 1/16"	.69	.63	.58	.46	.437	.414
39F683	90*	3	Shield	1"	.90	.83	.75	.60	.570	.540

PHONO PLUGS AND JACKS



"PHONO JAX"

Model 3501FP. Standard phono jack mounts through panel and chassis with ¼"-32 nut. Fits panels up to ⅛" thick. Outside dia. 7/16". Shpg. wt., 3 oz.

Model 3501FR. Standard phono jack mounts from rear. Uses ⅜"-32 threaded locknut on panels up to 13/64" thick. 7/16" mtg. hole dia. Shpg. wt., 3 oz.

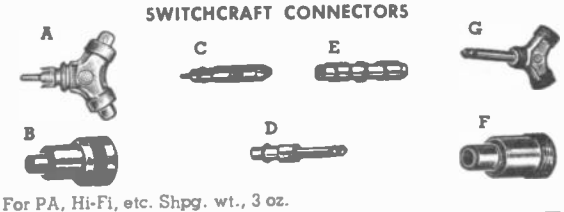
Model 3502. Connects easily to cable. Terminals are designed so they may be crimped with a pliers for all temp. connection. "Handle" can be removed to expose terminals. Pin 5/8" long. Shpg. wt., 3 oz.

Model 3503. Removable handle, shielded cable clamp. Durable nickel plated body and handle. Max. cable dia. 11/64". Jack length 17/32". Shpg. wt., 3 oz

Model 3501MC is a simple Phono Plug that provides a convenient cable clamp. It eliminates the problem of shielded cable "breaking" loose from the old style Phono Plugs.

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499	500-999
39F684	3501FP	.21	.19	.18	.14	.133	.126
39F686	3501FR	.27	.25	.23	.18	.171	.162
39F685	3502	.30	.28	.25	.20	.190	.180
22F250	3503	.39	.36	.33	.26	.247	.234
39F687	3501MC	.09	.08	.08	.06	.057	.054

SWITCHCRAFT CONNECTORS



For PA, Hi-Fi, etc. Shpg. wt., 3 oz.

Stock No.	Type	Fig.	Input Conn.	Output Conn.	EACH
22F265	330F	A	Phono jack (two)	Phono plug	1.17
22F266	334A	B	Phono jack	Femle mike	.96
22F267	336A	C	Phono jack	Phone plug	1.17
22F268	345A	D	Phono jack	Phone plug	.87
22F270	349A	E	Phono plug	Phono plug	.75
22F273	334B	F	Phono jack	Male mike	.87
22F274	330M	G	Male mike (two)	Phono plug	1.35

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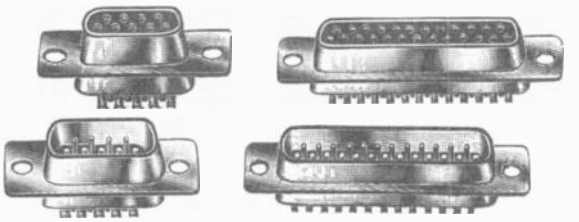
Cinch-Jones Connectors

"D" SUBMINIATURE CONNECTORS

Original "D" Connectors utilize a 2-piece nylon insulator housed in a variety of 5 basic shell sizes, E, A, B, C and D. Shell sizes contain 9, 15, 25, 37 and 50, #20 solder pot contacts. Std. contact terminations accommodate up to #20 AWG stranded wire. Current rating is .5 amperes. Operating temp. range:—65°F to +250°. Shells: steel cadmium plated with yellow chromate supplementary coating. pin contacts: brass, gold plated (.00003) over silver plate (.0002). Phosphor bronze socket contacts, gold plated (.00003) over silver plate (.0002). Shpg. wt. 2 oz.



ORIGINAL "D" (NYLON INSULATORS)

Stock No.	Description	DWG Number	1-9	10-49	50-99	100-249	250-499
43F200	DE 9P	019808-0002	1.12	1.01	.84	.67	.62
43F201	DE 9S	019808-0001	1.60	1.44	1.20	.96	.88
43F202	DA 15P	019603-0002	1.58	1.42	1.19	.95	.87
43F203	DA 15S	019603-0001	2.34	2.11	1.76	1.40	1.29
43F205	DB 25P	019604-0002	2.29	2.06	1.72	1.37	1.26
43F206	DB 25S	019604-0001	3.58	3.22	2.69	2.15	1.97
43F208	DC 37P	019605-0002	3.11	2.80	2.33	1.87	1.71
43F209	DC 37S	019605-0001	5.08	4.57	3.81	3.05	2.79
43F210	DD 50P	019606-0002	4.05	3.65	3.04	2.43	2.23
43F211	DD 50S	019606-0001	6.69	6.02	5.02	4.01	3.68

JUNCTION SHELLS—STRAIGHT CLAMP TYPE

43F212	(DA-19678-1)	019678-0001	.98	.88	.74	.59	.54
43F213	(DB-19678-2)	019678-0002	1.16	1.04	.87	.70	.64
43F214	(DC-19678-3)	019678-0003	1.38	1.24	1.04	.83	.76
43F215	(DD-19678-4)	019678-0004	1.51	1.36	1.13	.91	.83

JUNCTION SHELLS—RIGHT ANGLE TYPE

Stock No.	Description	DWG Number	1-9	10-49	50-99	100-249	250-499
43F216	(DA-19977-1)	019977-0001	1.27	1.14	.95	.76	.70
43F217	(DB-19377-2)	019977-0002	1.40	1.26	1.05	.84	.77
43F218	(DC-19977-3)	019977-0003	1.48	1.33	1.11	.89	.81
43F219	(DD-19977-4)	019977-0004	1.60	1.44	1.20	.96	.88
43F220	(DE-19977-5)	019977-0005	1.62	1.46	1.22	.97	.89

DATAPHONE CONNECTORS & HOODS

Stock No.	Description	DWG No.	1-9	10-49	50-99	100-249	250-499
43F246	DA-19603-404 15-cont. socket	230-15-61-099	5.70	5.23	4.76	4.28	3.81
43F247	DB-19604-433 25-cont. socket	230-25-61-099	8.93	8.18	7.44	6.69	5.95
43F248	DC-19605-403 37-cont. socket	230-37-61-099	12.08	11.08	10.07	9.06	8.06
43F249	DA-19603-403 15-pin plug	231-15-61-133	2.53	2.37	2.14	1.90	1.82
43F250	DB-19604-432 25-pin plug	231-25-61-125	3.49	3.26	2.92	2.57	2.46
43F251	DC-19605-402 37 pin plug	231-37-61-123	4.65	4.34	3.87	3.41	3.25

MOLDED HOODS FOR ABOVE PLUGS OR SOCKETS

43F252	DA-51225-1 for 15 cont.	239-13-99 069	1.27	1.14	.91	.84	.77
43F253	DB-51226-1 for 25 cont.	239-13-99-070	1.41	1.18	.94	.86	.79

SCREW LOCK ASSEMBLIES *Male †Female

43F230	D20418-2† (DA-DB-DC-DD-DE)	020418-0002	.38	.34	.29	.23	.21
43F231	D20419* (DA-DB-DC-DE)	020419-0000	.23	.21	.17	.14	.13
43F232	D20420*(DD)	020420-0000	.35	.32	.26	.21	.19

MARK I GOLDEN "D" CONNECTORS

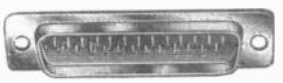
Features solder pot closed entry contacts in a monobloc insulator for improved temperature characteristics and increased moisture resistance. Shells: steel, cadmium plated with yellow chromate supplementary coating. Diallyl phthalate, glass fibre filled insulators, per MIL-M-14F. #20 contacts: pins and sockets, brass, gold plated (.00003) over silver (.0002). Insulation resistance greater than 5,000 megohms in accordance with MIL-STD-202A, Method 302.

Stock No.	Description	DWG Number	1-9	10-49	50-99	100-249	250-499
43F233	DEM 9P	053516-0012	2.21	1.99	1.66	1.33	1.22
43F234	DEM 9S	053516-0013	3.06	2.73	2.30	1.84	1.68
43F235	DAM 15P	053512-0028	3.19	2.87	2.39	1.91	1.75
43F236	DAM 15S	053512-0029	4.53	4.08	3.40	2.72	2.49
43F238	DBM 25P	053513-0022	4.70	4.23	3.53	2.82	2.59
43F239	DBM 25S	053513-0023	6.98	6.28	5.24	4.19	3.84
43F241	DCM 37P	053514-0017	6.57	5.91	4.93	3.94	3.61
43F242	DCM-37S	053514-0018	9.94	8.95	7.46	5.96	5.47
43F243	DDM 50P	053515-0014	8.51	7.66	6.38	5.11	4.68
43F244	DDM 50S	053515-0015	13.05	11.75	9.79	7.83	7.18

DUST CAPS (CLEAR POLYPROPYLINE)

Stock No.	Type	For Use With	1-9	10-49	50-99	100-249	250-499
43F267	DE-59-20	DE-9S	.16	.14	.12	.10	.09
43F268	DE-60-20	DE-9P					
43F269	DA-59-20	DA-15S					
43F270	DA-60-20	DA-15P					
43F271	DB-59-20	DB-25S					
43F272	DB-60-20	DB-25P					
43F273	DC-59-20	DC-37S					
43F274	DC-60-20	DC-37P					
43F275	DD-59-20	DD-50S					
43F276	DD-60-20	DD-50P					

GOLDEN D MARK II



Plugs feature snap-in, removable crimp type contacts in a monobloc insulator. Coupling is by friction. Crimp terminals accommodate up to #20 AWG stranded wire and are rated for 5 amperes. Steel, cadmium plated shell with yellow chromate coating. Contacts are leaded copper, gold plated over silver plate. Contact voltage: 2.67 millivolts max per amp. Exceeds moisture, vibration and shock requirements of MIL-STD-202A. Corrosion resistant. Packaged individually, containing shell, monobloc insulator and sufficient number of plug or socket contacts to assemble unit desired. Tools for crimping, insertion and extraction listed below.

Stk. No.	Description	Cinch Factory No.	1-9	10-49	50-99	100-249	250-499
43F254	DESM-9P	231-09-09-103	5.84	5.26	4.38	3.50	3.21
43F255	DESM-9S	230-09-09-103	6.11	5.50	4.58	3.67	3.36
43F256	DASM-15P	231-15-09-103	7.91	7.12	5.93	4.75	4.35
43F257	DASM-15S	230-15-09-103	8.90	8.01	6.68	5.34	4.90
43F258	DBSM-25P	231-25-09-103	11.33	10.20	8.50	6.80	6.23
43F259	DBSM-25S	230-25-09-103	13.72	12.35	10.29	8.23	7.55
43F260	DCSM-37P	231-37-09-103	15.43	13.89	11.57	9.26	8.49
43F261	DCSM-37S	230-37-09-103	19.06	17.15	14.30	11.44	10.48
43F262	DDSM-50P	231-50-09-103	19.87	17.88	14.90	11.92	10.93
43F263	DDSM-50S	230-50-09-103	25.06	22.55	18.80	15.04	13.78

TOOLS FOR USE WITH MARK II CONNECTORS

Type CCT-2016-1. For crimping #20, 22 and 24 AWG wire into pin and socket contacts.
43F264. NET. .....

Type CIT-20-14. For inserting pin and socket contacts into the insulator of the Mark II Series.
43F265. NET. .....

Type CET-20-5A. For removal of pin and socket contacts.
43F266. NET. .....

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Cinch-Jones Connectors

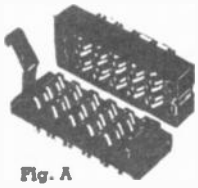


Fig. A

Fig. B

Maximum number of contacts in a minimum space. Designed to take alternate lock when required. Easy engagement and disengagement an outstanding feature. Engaged with normal pressure, disengaged by spring action of contacts when lock is released. Simple locking device insures positive contact. Type 37 plugs and sockets are of black Bakelite type CFG. All 1⅛" wide.

Fig. A—HINGE CONNECTORS

SOCKETS WITH LOCKS—FIG. A							PLUGS W/O LOCKS Mates With Sockets At Left						
Stk. No.	Type No.	1-24	25-49	50-99	100-249	250-499	Stk. No.	Type No.	1-24	25-49	50-99	100-249	250-499
29F906	37F20L	2.51	2.00	1.67	1.34	1.27	29F933	37M20	2.25	1.80	1.50	1.20	1.14
29F907	37F30L	2.96	2.36	1.97	1.58	1.50	29F934	37M30	2.70	2.16	1.80	1.44	1.37
29F908	37F40L	3.41	2.72	2.27	1.82	1.73	29F935	37M40	3.15	2.52	2.10	1.68	1.60
29F909	37F50L	3.86	3.08	2.57	2.06	1.95	29F936	37M50	3.60	2.88	2.40	1.92	1.82
29F910	37F60L	4.31	3.44	2.87	2.30	2.18	29F937	37M60	4.05	3.24	2.70	2.16	2.05
29F911	37F70L	4.76	3.80	3.17	2.54	2.41	29F938	37M70	4.50	3.60	3.00	2.40	2.28
29F912	37F80L	5.21	4.16	3.47	2.78	2.63	29F939	37M80	4.95	3.96	3.30	2.64	2.51
29F913	37F90L	5.66	4.52	3.77	3.02	2.87	29F940	37M90	5.40	4.32	3.60	2.88	2.74
29F914	37F100L	6.11	4.88	4.07	3.26	3.09	29F941	37M100	5.85	4.68	3.90	3.12	2.96
SOCKETS W/O LOCKS—FIG. A							**PLUGS WITH LOCKS Mates With Sockets At Left**						
29F915	37F20	2.25	1.80	1.50	1.20	1.14	29F924	37M20L	2.51	2.00	1.67	1.34	1.27
29F916	37F30	2.70	2.16	1.80	1.44	1.37	29F925	37M30L	2.96	2.36	1.97	1.58	1.50
29F917	37F40	3.15	2.52	2.10	1.68	1.60	29F926	37M40L	3.40	2.72	2.27	1.82	1.73
29F918	37F50	3.60	2.88	2.40	1.92	1.82	29F927	37M50L	3.86	3.08	2.57	2.06	1.95
29F919	37F60	4.05	3.24	2.70	2.16	2.05	29F928	37M60L	4.30	3.44	2.87	2.30	2.18
29F920	37F70	4.50	3.60	3.00	2.40	2.28	29F929	37M70L	4.76	3.80	3.17	2.54	2.41
29F921	37F80	4.95	3.96	3.30	2.64	2.51	29F930	37M80L	5.21	4.16	3.47	2.78	2.64
29F922	37F90	5.40	4.32	3.60	2.88	2.74	29F931	37M90L	5.66	4.52	3.77	3.02	2.87
29F923	37F100	5.85	4.68	3.90	3.12	2.96	29F932	37M100L	6.11	4.88	4.07	3.26	3.09

Fig. B—CAPS TO FIT HINGE CONNECTORS LISTED ABOVE

Caps are furnished with liners, cable clamps and designed to take the alternate lock when required. Caps are finished in black wrinkle and cable clamps are steel cadmium. Liners are formed fibre. The cable entrance hole is in the top of the cap.

Stk. No.	Type	For Types	Hole Size	1-24	25-49	50-99	100-249	250-499
29F942	37C20	M/F20	¾"	3.49	2.79	2.33	1.86	1.77
29F943	37C30	M/F30	13/16x1"	3.53	2.82	2.35	1.88	1.79
29F944	37C40	M/F40	13/16x1"	3.56	2.85	2.38	1.90	1.81
29F945	37C50	M/F50	13/16x1"	3.60	2.88	2.40	1.92	1.82
29F946	37C60	M/F60	13/16x1½"	3.64	2.91	2.43	1.94	1.85
29F947	37C70	M/F70	13/16x1½"	3.68	2.94	2.45	1.96	1.86
29F948	37C80	M/F80	13/16x1½"	3.71	2.97	2.47	1.98	1.88
29F949	37C90	M/F90	13/16x1½"	3.75	3.00	2.50	2.00	1.90
29F950	37C100	M/F100	13/16x1½"	3.79	3.03	2.53	2.02	1.92

ALTERNATE LOCK NO. 37AL

For secure locking, has hook at the top that fits into a cut-out in the cap. Prevents accidental unlocking of the cap. Shpg. wt. 2 oz

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499
29F951	37AL	.59	.47	.39	.31	.30

TYKON EDGE CONNECTORS

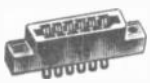
Outstanding high density (.050" centers) edge connectors for .062" printed circuit boards. Potential applications include diode on insulating substrates, memory planes (standard and thin film types) and almost any type of modular plug-in unit. Tykon connectors are furnished with conventional wiring tails suitable for welding or soldering. Highly rated electrical and mechanical performances

Stock No.	Type No.	Description	1-24	25-49	50-99	100-249	250-499
29F980	50-12A-40	6 dbl. row contacts	3.35	2.68	2.23	1.78	1.76
29F981	50-20A-40	10 dbl. row contacts	4.13	4.13	2.75	2.20	2.09
29F982	50-30A-40	15 dbl. row contacts	5.10	4.09	3.41	2.72	2.59
29F983	50-40A-40	20 dbl. row contacts	6.08	4.86	4.05	3.24	3.08
29F984	50-50A-40	25 dbl. row contacts	7.05	5.64	4.70	3.76	3.57
29F985	50-MC	Mounting Clip	.15	.12	.10	.09	.08
29F986	50-PK	Polarizing Key	.15	.12	.10	.09	.08

BIFURCATED CONTACT EDGE CONNECTORS

Have two flexing surfaces to provide positive contact. Accommodates irregularities in printed circuit boards.

TYPE 250



Insulation is glass filled diallyl phthalate, type SDGF per Mil. M-14F. Contacts are phosphor bronze with .00003 Min. Sel-Rex gold plate.

Stk. No.	Type	Cont. Pos.	Cont.	1-24	25-49	50-99	100-249	250-499
29F952	50- 6A-20	6	6	1.23	.98	.82	.66	.62
29F953	50-10A-20	10	10	1.65	1.32	1.10	.88	.84
29F954	50-12A-20	12	12	1.86	1.49	1.24	.99	.94
29F955	50-15A-20	15	15	2.18	1.74	1.45	1.16	1.10
29F956	50-18A-20	18	18	2.49	1.99	1.66	1.33	1.26
29F957	50-22A-20	22	22	2.91	2.33	1.94	1.55	1.47

One plastic polarizing key is furnished unassembled with each connector.

TYPE 251

Similar to type 250 except that the contact positions have two contacts instead of one. Insulation material and finish are the same type as type 250.

Stk. No.	Type	Cont. Pos.	Cont.	1-24	25-49	50-99	100-249	250-499
29F958	50-12A-30	6	12	1.23	.98	.82	.66	.62
29F959	50-20A-30	10	20	1.65	1.32	1.10	.88	.84
29F960	50-24A-30	12	24	1.86	1.49	1.24	.99	.94
29F961	50-30A-30	15	30	2.18	1.74	1.45	1.16	1.10
29F962	50-36A-30	18	36	2.49	1.99	1.66	1.33	1.27
29F963	50-44A-30	22	44	2.91	2.33	1.94	1.55	1.47

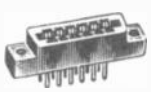
MOLDED EDGE CONNECTORS

Meets Military Specification MIL-C-21097B. These date-coded connectors are molded of glass-filled diallyl phthalate.

- Meets Military Specifications

Stk. No.	Type	MIL No.	1-24	25-49	50-99	100-249	250-499
28F1112	50-6A-20M	M21097/1-001	1.58	1.26	1.05	.84	.80
28F1113	50-10A-20M	M21097/1-037	2.21	1.76	1.47	1.18	1.12
28F1114	50-15A-20M	M21097/1-073	2.99	2.39	2.00	1.60	1.52
28F1115	50-18A-20M	M21097/1-109	3.47	2.77	2.31	1.85	1.76
28F1116	50-22A-20M	M21097/1-145	4.10	3.28	2.73	2.18	2.08
28F1117	50-12A-30M	M21097/1-019	1.58	1.26	1.05	.84	.80
28F1118	50-20A-30M	M21097/1-055	2.21	1.76	1.47	1.18	1.12
28F1119	50-30A-30M	M21097/1-091	2.99	2.39	2.00	1.60	1.52
28F1120	50-36A-30M	M21097/1-127	3.47	2.77	2.31	1.85	1.76
28F1121	50-44A-30M	M21097/1-163	4.10	3.28	2.73	2.18	2.08

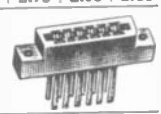
TYPE 252



Similar to type 251 except contact tails are for DIP soldering and will fit into .051 dia. holes. Contact positions contain two contacts.

Stk. No.	Type	Cont. Pos.	Cont.	1-24	25-49	50-99	100-249	250-499
29F964	50-12B-10	6	12	1.23	.98	.82	.66	.62
29F965	50-20B-10	10	20	1.65	1.32	1.10	.88	.84
29F966	50-24B-10	12	24	1.86	1.49	1.24	.99	.94
29F967	50-30B-10	15	30	2.18	1.74	1.45	1.16	1.10
29F968	50-36B-10	18	36	2.49	1.99	1.66	1.33	1.26
29F969	50-44B-10	22	44	2.91	2.33	1.94	1.55	1.47

TYPE 253—STANDARD CONTACT

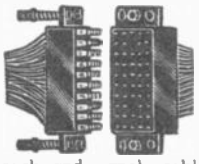


Similar to type 251 except that the contact tails are for WRAPOST connections. Contact positions contain two contacts.

Stk. No.	Type	Cont. Pos.	Cont.	1-24	25-49	50-99	100-249	250-499
29F970	50-12B-20	6	12	3.00	2.40	2.00	.....	.....
29F971	50-20B-20	10	20	3.75	3.00	2.50	.....	.....
29F972	50-24B-20	12	24	4.13	3.30	2.75	.....	.....
29F973	50-30B-20	15	30	4.69	3.75	3.13	.....	.....
29F974	50-36B-20	18	36	5.25	4.20	3.50	.....	.....
29F975	50-44B-20	22	44	6.00	4.80	4.00	.....	.....

Cinch-Jones Connectors

MINI-JONES CRIMP-ON, SNAP-IN CONNECTORS



"MINI-JONES" is a light-duty, multiple-contact connector, consisting of casting and bulk pins or contacts to make complete unit of your choice. No insertion tool needed. Applications include computers, communications systems and automatic vending equipment. Contact density of 25 contacts per square inch results in space saving. Can be used for rack and panel, cable-to-cable mounting or cable-to-chassis. Pin and contact terminations accommodate following stranded wire sizes: one AWG 18, 20, 22, or 24; also two AWG 22 or 24. Voltage rating: 830 VRMS, 1230 VDC; Current rating 4.0 amps; Contact resistance: .0065 ohms maximum; Low level contact resistance: current flow at 0.1 micro volts, no variation of contact res. at 6.5ma and 16.25 ma; Insulation resistance: 1000 megohms. Contacts are of Phosphor and Bronze material. Polarizing pins and lock nuts—brass; Locking screw—steel; Locking spring—music wire. MJP-2/MJS-2 series have provision for MJ-SL screw locks:

Stock No.	Mfg. No.	Pins or Contacts Supplied	1-24	25-49	50-99	100-249	250-499
28F1122	MJP-19	19	1.65	1.32	1.10	.88	.84
28F1123	MJP-29	29	1.95	1.56	1.30	1.04	.99
28F1124	MJP-39	39	2.25	1.80	1.50	1.20	1.14
28F1125	MJP-48	48	2.70	2.16	1.80	1.44	1.37
28F1126	MJP-58	58	3.00	2.40	2.00	1.60	1.52
28F1127	MJP-68	68	3.30	2.64	2.20	1.76	1.67
28F1128	MJP-2-19	19	2.48	1.98	1.65	1.32	1.25
28F1129	MJP-2-29	29	2.78	2.22	1.85	1.48	1.41
28F1130	MJP-2-39	39	3.08	2.46	2.05	1.64	1.56
28F1131	MJP-2-48	48	3.53	2.82	2.35	1.88	1.79
28F1132	MJP-2-58	58	3.83	3.06	2.55	2.04	1.94
28F1133	MJP-2-68	68	4.13	3.30	2.75	2.20	2.09
28F1134	MJS-19	19	1.43	1.14	.95	.76	.72
28F1135	MJS-29	29	1.65	1.32	1.10	.88	.84
28F1136	MJS-39	39	1.88	1.50	1.25	1.00	.95
28F1137	MJS-48	48	2.03	1.62	1.35	1.08	1.03
28F1138	MJS-58	58	2.25	1.80	1.50	1.20	1.14
28F1139	MJS-68	68	2.48	1.98	1.65	1.32	1.25
28F1140	MJS-2-19	19	2.25	1.80	1.50	1.20	1.14
28F1141	MJS-2-29	29	2.48	1.98	1.65	1.32	1.25
28F1142	MJS-2-39	39	2.70	2.16	1.80	1.44	1.37
28F1143	MJS-2-48	48	2.85	2.28	1.90	1.52	1.44
28F1144	MJS-2-58	58	3.08	2.46	2.05	1.64	1.56
28F1145	MJS-2-68	68	3.30	2.64	2.20	1.76	1.67

SCREW LOCK AND SPRING

Type MJ-SL. Spring-loaded stud-lock which fits MJP-2/MJS-2 series plugs and sockets interchangeably to complete lock.

Stock No.	Type	1-24	25-49	50-99	100-249	250-499
28F1146	MJ-SL	.53	.42	.35	.28	.27

PLUG PINS

Type MJP-P. Extra plug pins available for the Cinch Mini-Jones crimp-on, snap-in connector series. 100 plug pins per bag.

28F1147. NET, Per 100 ..... **2.00**

SOCKET CONTACTS

Type MJS-C. Extra socket contacts available for the Cinch Mini-Jones crimp-on, snap-in connector series. 100 per bag.

28F1148. NET, Per 100 ..... **2.00**

CRIMPING TOOL

Type CT-5B. Versatile, manually operated tool for crimping wire to "MINI-JONES" plug or receptacle contacts. Cycle controlled to assure correct crimping operation.

28F1149. NET **43.75**

PIN REMOVAL TOOL

Type CT-5A. Special nylon hand tool with separate tips for removing contacts from "MINI-JONES" plug or receptacle.

28F1150. NET ..... **.75**

SERIES 300 SB AND DB PLUGS AND SOCKETS

DB

SB

Designed for medium duty applications small in size with good separation between contacts. Arranged for either cap or panel mounting. All plugs and sockets are polarized. Plugs with 24 to 33 contacts have a special polarizing pin to facilitate correct positioning of mating plug and socket. Insulating material is molded bakelite. Phosphor-bronze "knife-switch" type socket contacts engage both sides of flat plug contacts, providing double contact area. All contacts are cadmium plated. Plug prongs are 5/32" wide and 3/64" thick. Formed metal caps are finished in black wrinkle. Feature MONO-BLOCK construction which is compatible with the old two-piece types. New construction eliminates internal moisture traps and permits external pre-wiring as well as removal and replacement of individual contacts if necessary. Contacts are "locked-in" to withstand wiring stress. Rated Voltage: 730 Volts rms; Contact Resistance: 016 Ohms max. Rated Current: (2-12 contacts) . . . 7.5 amperes, (15-33 contacts) . . . 4.5 amperes; Rated Wattage: (2-12 contacts) . . . 1875 watts, (15-33 contacts) . . . 1125 watts.

Type SB. Sockets with shallow bracket for flush mounting.

Type DB. Sockets with deep bracket for recessed mounting.

PLUGS

Stk. No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
28F1092	P-302-DB	2	.72	.58	.48	.38	.37
28F1093	P-303-DB	3	.73	.58	.49	.39	.37
28F1094	P-304-DB	4	.77	.61	.51	.41	.39
28F1095	P-306-DB	6	.86	.68	.57	.46	.43
28F1096	P-308-DB	8	.92	.74	.62	.49	.47
28F1097	P-312-DB	12	1.06	.85	.71	.56	.54
28F1098	P-315-DB	15	1.30	1.04	.87	.69	.66
28F1099	P-318-DB	18	1.55	1.24	1.04	.83	.79
28F1100	P-321-DB	21	1.86	1.49	1.24	.99	.94
28F1101	P-324-DB	24	2.18	1.75	1.46	1.16	1.11
28F1102	P-327-DB	27	2.50	2.00	1.67	1.33	1.27
28F1103	P-330-DB	30	2.81	2.25	1.88	1.50	1.43
28F1104	P-333-DB	33	3.12	2.50	2.08	1.66	1.58
28F1105	P-315-SB	15	1.30	1.04	.87	.69	.66
28F1106	P-318-SB	18	1.55	1.24	1.04	.83	.79
28F1107	P-321-SB	21	1.86	1.49	1.24	.99	.94
28F1108	P-324-SB	24	2.18	1.75	1.46	1.16	1.11
28F1109	P-327-SB	27	2.50	2.00	1.67	1.33	1.27
28F1110	P-330-SB	30	2.81	2.25	1.88	1.50	1.43
28F1111	P-333-SB	33	3.12	2.50	2.08	1.66	1.58

SOCKETS

Stk. No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
29F873	S-302-DB	2	.74	.59	.50	.40	.38
29F874	S-303-DB	3	.74	.59	.50	.40	.38
29F875	S-304-DB	4	.79	.63	.53	.42	.40
29F876	S-306-DB	6	.89	.71	.59	.47	.45
29F877	S-308-DB	8	.99	.79	.66	.53	.50
29F878	S-312-DB	12	1.22	.97	.81	.65	.62
29F893	S-315-DB	15	1.45	1.16	.97	.77	.73
29F894	S-318-DB	18	1.68	1.34	1.12	.90	.85
29F895	S-321-DB	21	2.00	1.60	1.33	1.06	1.01
29F896	S-324-DB	24	2.32	1.85	1.55	1.24	1.17
29F897	S-327-DB	27	2.63	2.10	1.75	1.40	1.33
29F898	S-330-DB	30	2.96	2.37	1.98	1.58	1.50
29F899	S-333-DB	33	3.27	2.62	2.18	1.74	1.66
29F886	S-315-SB	15	1.45	1.16	.97	.77	.73
29F887	S-318-SB	18	1.68	1.34	1.12	.90	.85
29F888	S-321-SB	21	2.00	1.60	1.33	1.06	1.01
29F889	S-324-SB	24	2.32	1.85	1.55	1.24	1.17
29F890	S-327-SB	27	2.63	2.10	1.75	1.40	1.33
29F891	S-330-SB	30	2.96	2.37	1.98	1.58	1.50
29F892	S-333-SB	33	3.27	2.62	2.18	1.74	1.66

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Jones Plugs and Sockets

Cinch Jones

JONES SERIES 300 PLUGS AND SOCKETS

AB

FP

CCT

RP

CCT-L

CCT-K

Compact connectors with phosphor-bronze "knife switch" type socket contacts. Black crystal-finished metal caps cover bakelite body. Rated: 730 volts rms at 10 amps. 2-contact types are round, all others are rectangular. Shpg. wt., 3 oz.

PLUGS WITH ANGLE BRACKETS

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F200	P-302-AB	2	.29	.23	.20	.16	.15
39F201	P-303-AB	3	.33	.26	.22	.18	.17
39F202	P-304-AB	4	.37	.29	.25	.20	.19
39F203	P-306-AB	6	.46	.37	.31	.24	.23
39F204	P-308-AB	8	.53	.42	.35	.28	.27
39F205	P-310-AB	10	.59	.47	.40	.32	.30
39F206	P-312-AB	12	.66	.53	.44	.35	.33
39F207	P-315-AB	15	.89	.71	.59	.47	.45
39F208	P-318-AB	18	1.07	.85	.71	.57	.54
39F209	P-321-AB	21	1.34	1.07	.89	.71	.68
39F210	P-324-AB	24	1.62	1.30	1.08	.86	.82
39F211	P-327-AB	27	1.90	1.52	1.27	1.01	.96
39F212	P-330-AB	30	2.18	1.74	1.45	1.16	1.10
39F213	P-333-AB	33	2.45	1.96	1.63	1.30	1.24

SOCKETS

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F220	S-302-AB	2	.31	.25	.21	.16	.16
39F221	S-303-AB	3	.35	.28	.23	.18	.18
39F222	S-304-AB	4	.39	.31	.26	.21	.20
39F223	S-306-AB	6	.49	.39	.33	.26	.25
39F224	S-308-AB	8	.59	.47	.40	.32	.30
39F225	S-310-AB	10	.69	.55	.46	.37	.35
39F226	S-312-AB	12	.82	.65	.55	.44	.41
39F227	S-315-AB	15	1.04	.83	.69	.55	.52
39F228	S-318-AB	18	1.19	.95	.80	.64	.60
39F229	S-321-AB	21	1.47	1.18	.98	.78	.75
39F230	S-324-AB	24	1.75	1.40	1.17	.93	.89
39F231	S-327-AB	27	2.03	1.62	1.35	1.08	1.03
39F232	S-330-AB	30	2.33	1.86	1.55	1.24	1.18
39F233	S-333-AB	33	2.60	2.08	1.73	1.38	1.32

PLUGS WITH FLUSH PLATE

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F240	P-302-FP	2	.49	.39	.33	.26	.25
39F241	P-303-FP	3	.52	.42	.35	.28	.26
39F242	P-304-FP	4	.56	.44	.37	.30	.28
39F243	P-306-FP	6	.65	.52	.43	.34	.33
39F244	P-308-FP	8	.71	.57	.48	.38	.36
39F245	P-310-FP	10	.78	.62	.52	.42	.40
39F246	P-312-FP	12	.85	.68	.57	.45	.43

SOCKETS WITH FLUSH PLATE

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F250	S-302-FP	2	.51	.41	.34	.27	.26
39F251	S-303-FP	3	.53	.43	.36	.28	.27
39F252	S-304-FP	4	.58	.46	.39	.31	.29
39F253	S-306-FP	6	.68	.54	.45	.36	.34
39F254	S-308-FP	8	.78	.62	.52	.42	.40
39F255	S-310-FP	10	.88	.70	.59	.47	.45
39F256	S-312-FP	12	1.00	.80	.67	.54	.51

PLUGS WITH CABLE CLAMP IN TOP

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F280	P-302-CCT	2	.60	.48	.40	.32	.30
39F281	P-303-CCT	3	.66	.53	.44	.35	.33
39F282	P-304-CCT	4	.70	.56	.47	.37	.35
39F283	P-306-CCT	6	.80	.64	.53	.42	.40
39F284	P-308-CCT	8	.86	.69	.58	.46	.44
39F285	P-310-CCT	10	.95	.76	.64	.51	.48
39F286	P-312-CCT	12	1.03	.82	.69	.55	.52
39F287	P-315-CCT	15	1.37	1.10	.92	.73	.70
39F288	P-318-CCT	18	1.60	1.28	1.07	.85	.81
39F289	P-321-CCT	21	1.91	1.53	1.28	1.02	.97
39F290	P-324-CCT	24	2.24	1.79	1.50	1.20	1.14
39F291	P-327-CCT	27	2.57	2.05	1.71	1.37	1.30
39F292	P-330-CCT	30	2.89	2.31	1.93	1.54	1.46
39F293	P-333-CCT	33	3.20	2.56	2.14	1.71	1.62

SOCKETS WITH CABLE CLAMP IN TOP

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F300	S-302-CCT	2	.62	.50	.42	.33	.32
39F301	S-303-CCT	3	.68	.54	.45	.36	.34
39F302	S-304-CCT	4	.72	.58	.48	.38	.37
39F303	S-306-CCT	6	.83	.68	.55	.44	.42
39F304	S-308-CCT	8	.93	.74	.62	.50	.47
39F305	S-310-CCT	10	1.05	.84	.70	.56	.53
39F306	S-312-CCT	12	1.19	.95	.79	.63	.60
39F307	S-315-CCT	15	1.52	1.22	1.02	.81	.77
39F308	S-318-CCT	18	1.73	1.38	1.15	.92	.87
39F309	S-321-CCT	21	2.05	1.64	1.37	1.09	1.04
39F310	S-324-CCT	24	2.37	1.90	1.58	1.26	1.20
39F311	S-327-CCT	27	2.69	2.15	1.80	1.44	1.36
39F312	S-330-CCT	30	3.04	2.43	2.03	1.62	1.54
39F313	S-333-CCT	33	3.35	2.68	2.24	1.79	1.70

PLUGS WITH RECESSED PLATE

Stk. No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F260	P-302-RP	2	.56	.45	.38	.30	.29
39F261	P-303-RP	3	.59	.47	.40	.32	.30
39F262	P-304-RP	4	.63	.50	.42	.34	.32
39F263	P-306-RP	6	.72	.58	.48	.38	.37
39F264	P-308-RP	8	.83	.66	.55	.44	.42
39F265	P-310-RP	10	.93	.74	.62	.50	.47
39F266	P-312-RP	12	1.04	.83	.69	.55	.52

SOCKETS WITH RECESSED PLATE

Stk. No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F270	S-302-RP	2	.59	.47	.39	.31	.30
39F271	S-303-RP	3	.61	.49	.41	.32	.31
39F272	S-304-RP	4	.65	.52	.44	.35	.33
39F273	S-306-RP	6	.75	.60	.50	.40	.38
39F274	S-308-RP	8	.89	.71	.60	.48	.45
39F275	S-310-RP	10	1.04	.83	.69	.55	.52
39F276	S-312-RP	12	1.19	.95	.80	.64	.60

PLUGS — CABLE CLAMP IN TOP WITH LATCHES

Stk. No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
29F859	P-302-CCT-L	2	.75	.60	.50	.40	.38
29F860	P-303-CCT-L	3	.81	.65	.54	.43	.41
29F861	P-304-CCT-L	4	.85	.68	.57	.45	.43
29F862	P-306-CCT-L	6	.95	.76	.63	.50	.48
29F863	P-308-CCT-L	8	1.01	.81	.68	.54	.51
29F864	P-310-CCT-L	10	1.10	.88	.74	.59	.56
29F865	P-312-CCT-L	12	1.18	.94	.79	.63	.60

SOCKETS — CABLE CLAMP IN TOP WITH KEEPERS

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
29F866	S-302-CCT-K	2	.77	.62	.52	.41	.39
29F867	S-303-CCT-K	3	.83	.66	.55	.44	.42
29F868	S-304-CCT-K	4	.87	.70	.58	.46	.44
29F869	S-306-CCT-K	6	.98	.78	.65	.52	.49
29F870	S-308-CCT-K	8	1.08	.86	.72	.58	.55
29F871	S-310-CCT-K	10	1.20	.96	.80	.64	.61
29F872	S-312-CCT-K	12	1.34	1.07	.89	.71	.68

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Plugs, Sockets & Terminal Blocks

SERIES 400 AND 2400 PLUGS AND SOCKETS

P-406-AB

S-406-AB

P-406-CCT

S-406-CCT

P-406-DB

S-2406-DB

Series 400 plugs and sockets are made in 2, 4, 6, 8, 10, and 12 contacts. Phosphor bronze knife switch type socket contacts engage both sides of plug. Plug prongs are of heavy brass ¼" wide x 1/16" thick. Caps are finished in black crystal and equipped with fibre lining. Body of Molded Bakelite. Rated at 1100 RMS volts at 15 amps.

Series 2400 sockets and plugs are designed for high electrical and mechanical efficiency. They are similar to the 400 series except that their design increases the creepage distances and can take higher voltages. They are interchangeable with the 400 series. Rated at 1700 RMS Volts at 15 amps. Shpg. wt., 5 oz.

SERIES 400 PLUGS WITH ANGLE BRACKETS

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F320	P-402-AB	2	.71	.57	.48	.38	.36
39F321	P-404-AB	4	.87	.70	.58	.46	.44
39F322	P-406-AB	6	1.03	.82	.69	.55	.52
39F323	P-408-AB	8	1.19	.95	.79	.63	.60
39F324	P-410-AB	10	1.34	1.07	.90	.72	.68
39F325	P-412-AB	12	1.50	1.20	1.00	.80	.76

SERIES 400 PLUGS WITH CABLE CLAMP ON TOP

39F340	P-402-CCT	2	1.19	.95	.79	.63	.60
39F341	P-404-CCT	4	1.35	1.08	.90	.72	.68
39F342	P-406-CCT	6	1.55	1.24	1.04	.83	.79
39F343	P-408-CCT	8	1.72	1.37	1.15	.92	.87
39F344	P-410-CCT	10	1.98	1.58	1.32	1.06	1.00
39F345	P-412-CCT	12	2.16	1.73	1.44	1.15	1.09

SERIES 400 PLUGS WITH DEEP BRACKET FOR RECESSED MOUNTING

29F514	P-402-DB	2	.95	.76	.63	.50	.48
29F515	P-404-DB	4	1.15	.92	.77	.61	.58
29F516	P-406-DB	6	1.35	1.08	.90	.72	.68
29F517	P-408-DB	8	1.55	1.24	1.04	.83	.79
29F518	P-410-DB	10	1.76	1.40	1.17	.94	.89
29F519	P-412-DB	12	1.96	1.57	1.31	1.04	.99

SERIES 2400 PLUG WITH CABLE CLAMP ON TOP

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
29F523	P-2402-CCT	2	1.25	1.00	.83	.66	.63
29F524	P-2404-CCT	4	1.42	1.13	.95	.76	.72
29F525	P-2406-CCT	6	1.59	1.27	1.06	.85	.81
29F526	P-2408-CCT	8	1.76	1.41	1.18	.94	.89
29F527	P-2410-CCT	10	1.94	1.55	1.29	1.03	.98
29F528	P-2412-CCT	12	2.03	1.63	1.36	1.08	1.03

SERIES 400 SOCKETS WITH SHALLOW BRACKET FOR FLUSH MOUNTING

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F380	S-402-SB	2	1.03	.82	.69	.55	.52
39F381	S-404-SB	4	1.31	1.05	.88	.70	.67
39F382	S-406-SB	6	1.60	1.28	1.07	.85	.81
39F383	S-408-SB	8	1.88	1.51	1.26	1.00	.95
39F384	S-410-SB	10	2.17	1.73	1.45	1.16	1.10
39F385	S-412-SB	12	2.45	1.96	1.64	1.31	1.24

SERIES 400 SOCKETS WITH ANGLE BRACKETS

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
39F330	S-402-AB	2	.83	.66	.55	.44	.42
39F331	S-404-AB	4	1.07	.85	.71	.57	.54
39F332	S-406-AB	6	1.31	1.04	.87	.70	.66
39F333	S-408-AB	8	1.55	1.24	1.03	.82	.78
39F334	S-410-AB	10	1.79	1.43	1.19	.95	.90
39F335	S-412-AB	12	2.03	1.62	1.35	1.08	1.08

SERIES 400 SOCKETS WITH CABLE CLAMP ON TOP

39F346	S-402-CCT	2	1.34	1.07	.89	.71	.68
39F347	S-404-CCT	4	1.60	1.28	1.07	.85	.81
39F348	S-406-CCT	6	1.86	1.49	1.24	.99	.94
39F349	S-408-CCT	8	2.12	1.70	1.42	1.13	1.08
39F350	S-410-CCT	10	2.39	1.91	1.60	1.28	1.21
39F351	S-412-CCT	12	2.66	2.12	1.77	1.42	1.35

SERIES 2400 SOCKETS WITH DEEP BRACKET FOR RECESSED MOUNTING

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
29F900	S-2402-DB	2	1.05	.84	.70	.56	.53
29F901	S-2404-DB	4	1.22	.98	.82	.65	.62
29F902	S-2406-DB	6	1.40	1.12	.93	.74	.71
29F903	S-2408-DB	8	1.57	1.25	1.05	.84	.79
29F904	S-2410-DB	10	1.74	1.39	1.16	.93	.88
29F905	S-2412-DB	12	1.91	1.53	1.28	1.02	.97

SERIES 2400 SOCKET WITH CABLE CLAMP ON TOP

29F529	S-2402-CCT	2	1.36	1.09	.91	.72	.69
29F530	S-2404-CCT	4	1.50	1.20	1.00	.80	.76
29F531	S-2406-CCT	6	1.68	1.34	1.12	.90	.85
29F532	S-2408-CCT	8	1.86	1.49	1.24	.99	.94
29F533	S-2410-CCT	10	2.04	1.63	1.36	1.09	1.03
29F534	S-2412-CCT	12	2.22	1.78	1.48	1.18	1.13

SERIES 2400 SOCKETS WITH SHALLOW BRACKET FOR FLUSH MOUNTING

Stock No.	Mfr. No.	Cont.	1-24	25-49	50-99	100-249	250-499
29F535	S-2402-SB	2	.98	.78	.65	.52	.49
29F536	S-2404-SB	4	1.15	.92	.77	.61	.58
29F537	S-2406-SB	6	1.32	1.06	.88	.70	.67
29F538	S-2408-SB	8	1.49	1.19	1.00	.80	.76
29F539	S-2410-SB	10	1.67	1.33	1.11	.89	.84
29F540	S-2412-SB	12	1.84	1.47	1.23	.98	.93

SERIES 140 AND 140-Y BARRIER TERMINAL BLOCKS

140

140-Y

Series 140. Base: ⅞" W x 1 1/32" H molded bakelite. Eyelets and binder head screws are brass, nickel plated. 5-40 x 3/16" screws. Leakage path ½". Shpg. wt., 3 oz. Use with Series 160 Fanning strips listed on following page.

Series 140-Y. Same as Series 140 but with Thru-panel solder lugs.

SERIES 140

Stk. No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
28F700	2-140	2	.23	.19	.16	.13	.12
28F701	3-140	3	.27	.22	.18	.15	.14
28F702	4-140	4	.33	.26	.22	.18	.17
28F703	5-140	5	.41	.32	.27	.22	.21
28F704	6-140	6	.47	.37	.31	.25	.24
28F705	7-140	7	.53	.43	.36	.28	.27
28F706	8-140	8	.61	.49	.41	.32	.31
28F707	9-140	9	.68	.54	.45	.36	.34
28F708	10-140	10	.75	.60	.50	.40	.38
28F709	11-140	11	.81	.65	.54	.43	.41
28F710	12-140	12	.89	.71	.59	.47	.45
28F869	13-140	13	.95	.76	.64	.51	.48
28F870	14-140	14	1.03	.82	.69	.55	.52
28F871	15-140	15	1.10	.88	.73	.58	.56
28F872	16-140	16	1.16	.93	.78	.62	.59
28F873	17-140	17	1.23	.98	.82	.66	.62
28F874	18-140	18	1.30	1.04	.87	.69	.66
28F875	19-140	19	1.37	1.09	.91	.73	.69
28F876	20-140	20	1.43	1.15	.96	.76	.73
28F877	21-140	21	1.51	1.21	1.01	.80	.76

SERIES 140-Y

Stk. No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
29F749	2-140-Y	2	.29	.23	.20	.16	.15
29F750	3-140-Y	3	.36	.29	.24	.19	.18
29F751	4-140-Y	4	.46	.37	.31	.24	.23
29F752	5-140-Y	5	.56	.45	.38	.30	.29
29F753	6-140-Y	6	.66	.53	.44	.35	.33
29F754	7-140-Y	7	.78	.61	.51	.40	.38
29F755	8-140-Y	8	.86	.69	.58	.46	.44
29F756	9-140-Y	9	.97	.77	.65	.52	.49
29F757	10-140-Y	10	1.07	.86	.72	.57	.54
29F758	11-140-Y	11	1.16	.93	.78	.62	.59
29F759	12-140-Y	12	1.27	1.01	.85	.68	.64
29F760	13-140-Y	13	1.37	1.10	.92	.73	.70
29F761	14-140-Y	14	1.48	1.18	.99	.79	.75
29F762	15-140-Y	15	1.58	1.26	1.05	.84	.80
29F763	16-140-Y	16	1.67	1.34	1.12	.89	.85
29F764	17-140-Y	17	1.78	1.42	1.19	.95	.90
29F765	18-140-Y	18	1.88	1.50	1.25	1.00	.95
29F766	19-140-Y	19	1.97	1.58	1.32	1.05	1.00
29F767	20-140-Y	20	2.07	1.66	1.38	1.10	1.05
29F768	21-140-Y	21	2.18	1.75	1.46	1.18	1.11

Barrier Terminal Blocks & Accessories

SERIES 140 BARRIER BLOCKS AND ACCESSORIES CONT.

IMPRINTED MARKER STRIPS FOR USE WITH SERIES 140

Strips are of 1/32" black fibre and have same mounting holes as barrier strips. Shpg. wt., 2 oz.

Type MS-140

Stock No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
29F804	MS- 2-140	2	.13	.10	.09	.08	.07
29F805	MS- 3-140	3	.13	.10	.09	.08	.07
29F806	MS- 4-140	4	.13	.10	.09	.08	.07
29F807	MS- 5-140	5	.13	.10	.09	.08	.07
29F808	MS- 6-140	6	.13	.10	.09	.08	.07
29F809	MS- 7-140	7	.15	.12	.10	.09	.08
29F810	MS- 8-140	8	.15	.12	.10	.09	.08
29F811	MS- 9-140	9	.15	.12	.10	.09	.08
29F812	MS-10-140	10	.17	.13	.11	.10	.09
29F813	MS-11-140	11	.17	.13	.11	.10	.09
29F814	MS-12-140	12	.17	.13	.11	.10	.09
29F815	MS-13-140	13	.19	.15	.13	.11	.10
29F816	MS-14-140	14	.19	.15	.13	.11	.10
29F817	MS-15-140	15	.19	.15	.13	.11	.10
29F818	MS-16-140	16	.21	.17	.14	.12	.11
29F819	MS-17-140	17	.21	.17	.14	.12	.11
29F820	MS-18-140	18	.21	.17	.14	.12	.11
29F821	MS-19-140	19	.23	.19	.16	.13	.12
29F822	MS-20-140	20	.23	.19	.16	.13	.12
29F823	MS-21-140	21	.23	.19	.16	.13	.12

SOLDER TERMINALS FOR USE WITH SERIES 140

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499
28F791	3/4W-140	.08	.07	.06	.05	.04
28F797	W-140	.08	.07	.06	.05	.04
28F794	Y-140	.08	.07	.06	.05	.04

JUMPERS FOR 140 BARRIER BLOCK SERIES

Units are used for making permanent connections between adjacent barrier block terminals. for Barrier block series 140.

Stock No.	Type No.	1-24	25-49	50-99	100-249	250-499
28F833	140J-1	.07	.06	.05	.04	.03

SERIES 160 FANNING STRIPS

Fits 140 Series Barrier Strips. Brass, cadmium plated .032" terminals are mounted on 3/32" bakelite, 1/2" wide and on 3/8" centers. Wt., 3 oz. Mounting hole on left.

Stock No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
28F750	2-160-L	2	.19	.15	.13	.11	.10
28F751	3-160-L	3	.23	.19	.16	.13	.12
28F752	4-160-L	4	.29	.23	.20	.16	.15
28F753	5-160-L	5	.34	.27	.23	.18	.17
28F754	6-160-L	6	.38	.30	.25	.20	.19
28F755	7-160-L	7	.44	.35	.29	.23	.22
28F756	8-160-L	8	.48	.38	.32	.26	.24
28F757	9-160-L	9	.55	.44	.37	.29	.28
28F758	10-160-L	10	.61	.49	.41	.32	.31
28F759	11-160-L	11	.67	.53	.45	.36	.34
28F760	12-160-L	12	.75	.60	.50	.40	.38
Mounting hole on right.							
28F800	2-160-R	2	.19	.15	.13	.11	.10
28F801	3-160-R	3	.23	.19	.16	.13	.12
28F802	4-160-R	4	.29	.23	.20	.16	.15
28F803	5-160-R	5	.34	.27	.23	.18	.17
28F804	6-160-R	6	.38	.30	.25	.20	.19
28F805	7-160-R	7	.44	.35	.29	.23	.22
28F806	8-160-R	8	.48	.38	.32	.26	.24
28F807	9-160-R	9	.55	.44	.37	.29	.28
28F808	10-160-R	10	.61	.49	.41	.32	.31
28F809	11-160-R	11	.67	.53	.45	.36	.34
28F810	12-160-R	12	.75	.60	.50	.40	.38

SERIES 170 TERMINAL BLOCKS

.032" brass, tin plated Solder Term. Black molded Bakelite. Size: 5/16" W. x 1/4" H. Mtg. on 3/8" ctrs.

Stock No	Type	Contact	1-24	25-49	50-99	100-249	250-499
29F740	2-170	2	.27	.22	.18	.15	.14
29F741	3-170	3	.34	.27	.23	.18	.17
29F742	4-170	4	.38	.30	.25	.20	.19
29F743	5-170	5	.43	.34	.29	.23	.22
29F744	6-170	6	.48	.38	.32	.26	.24
29F745	7-170	7	.54	.43	.36	.29	.27
29F746	8-170	8	.59	.47	.40	.32	.30
29F747	9-170	9	.65	.52	.43	.34	.33
29F748	10-170	10	.71	.56	.47	.38	.36

SERIES 164 TERMINAL BLOCKS

Same as Series 140 except has 6-32 binder head screws instead of 5-40. Maximum volts r.m.s. without marker strip: 1100; with marker strip: 1200. Max. current in amps: 15. Max. watts per terminal: 3750.

Stock No.	Type No.	Contacts	1-24	25-49	50-99	100-249	250-499
28F840	2-164	2	.26	.20	.17	.14	.13
28F841	3-164	3	.32	.25	.21	.17	.16
28F842	4-164	4	.40	.32	.27	.21	.20
28F843	5-164	5	.47	.38	.32	.25	.24
28F844	6-164	6	.56	.44	.37	.30	.28
28F845	7-164	7	.63	.50	.42	.34	.32
28F846	8-164	8	.71	.57	.48	.38	.36
28F847	9-164	9	.79	.63	.53	.42	.40
28F848	10-164	10	.87	.70	.58	.46	.44
28F849	11-164	11	.95	.76	.63	.50	.48
28F891	12-164	12	1.03	.82	.69	.55	.52
28F892	13-164	13	1.11	.89	.74	.59	.56
28F893	14-164	14	1.20	.96	.80	.64	.61
28F894	15-164	15	1.29	1.02	.85	.68	.65
28F895	16-164	16	1.37	1.09	.91	.73	.69
28F896	17-164	17	1.43	1.15	.96	.76	.73
28F897	18-164	18	1.52	1.22	1.02	.81	.77
28F898	19-164	19	1.60	1.28	1.07	.85	.81
28F899	20-164	20	1.69	1.35	1.13	.90	.86
28F900	21-164	21	1.77	1.42	1.18	.94	.90

SERIES 141 AND 141-Y BARRIER TYPE TERMINAL BLOCKS

Increased insulation barriers placed between each terminal. Long leakage path prevents direct shorts from frayed wire at terminal. Base: 1 1/8" W x 1/2" H. molded bakelite. Series 141-Y has thru panel solder lugs. 6-32x1/4" screw. Use with Series 161 Fanning Strips. Shp. Wt. 3 oz.

141

141-Y

SERIES 141

Stk. No	Type	Cont.	1-24	25-49	50-99	100-249	250-499
28F711	2-141	2	.26	.20	.17	.14	.13
28F712	3-141	3	.34	.27	.23	.18	.17
28F713	4-141	4	.43	.34	.29	.23	.22
28F714	5-141	5	.52	.41	.35	.28	.26
28F715	6-141	6	.59	.47	.40	.32	.30
28F716	7-141	7	.70	.56	.47	.37	.35
28F717	8-141	8	.78	.62	.52	.42	.40
28F718	9-141	9	.86	.69	.58	.46	.44
28F719	10-141	10	.96	.77	.64	.51	.49
28F720	11-141	11	1.04	.83	.70	.56	.53
28F721	12-141	12	1.13	.90	.75	.60	.57
28F878	13-141	13	1.22	.97	.81	.65	.62
28F879	14-141	14	1.31	1.04	.87	.70	.66
28F880	15-141	15	1.39	1.11	.93	.74	.70
28F881	16-141	16	1.48	1.18	.99	.79	.75
28F882	17-141	17	1.57	1.25	1.05	.84	.79
28F883	18-141	18	1.66	1.33	1.11	.88	.84
28F884	19-141	19	1.75	1.40	1.17	.93	.89
28F885	20-141	20	1.84	1.47	1.23	.98	.93

SERIES 141-Y

Stk. No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
29F769	2-141-Y	2	.35	.28	.23	.18	.18
29F770	3-141-Y	3	.47	.38	.32	.25	.24
29F771	4-141-Y	4	.61	.49	.41	.32	.31
29F772	5-141-Y	5	.74	.59	.49	.39	.37
29F773	6-141-Y	6	.85	.68	.57	.45	.43
29F774	7-141-Y	7	1.00	.80	.67	.53	.51
29F775	8-141-Y	8	1.12	.89	.75	.60	.57
29F776	9-141-Y	9	1.24	.99	.83	.66	.63
29F777	10-141-Y	10	1.38	1.10	.92	.74	.70
29F778	11-141-Y	11	1.51	1.21	1.01	.80	.76
29F779	12-141-Y	12	1.64	1.31	1.09	.87	.83
29F780	13-141-Y	13	1.78	1.42	1.19	.95	.95
29F781	14-141-Y	14	1.91	1.53	1.28	1.02	.97
29F782	15-141-Y	15	2.04	1.63	1.36	1.09	1.03
29F783	16-141-Y	16	2.18	1.75	1.46	1.16	1.11
29F784	17-141-Y	17	2.32	1.85	1.55	1.24	1.17
29F785	18-141-Y	18	2.45	1.96	1.64	1.31	1.24
29F786	19-141-Y	19	2.60	2.08	1.73	1.38	1.32
29F787	20-141-Y	20	2.73	2.18	1.82	1.46	1.38

SOLDER TERMINALS FOR SERIES 141 BARRIER STRIPS

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499
28F792	3/4W-141	.08	.07	.06	.05	.04
28F798	W-141	.09	.08	.07	.06	.05
28F795	Y-141	.09	.08	.07	.06	.05

Solderless Terminals For Use With Cinch-Jones Barrier Blocks — See Waldom Listing

Terminal Blocks and Accessories

SERIES 141 TERMINAL BLOCKS AND ACCESSORIES

IMPRINTED MARKER STRIPS FOR USE WITH SERIES 141 BARRIER TERMINAL BLOCKS

Strips are of 1/32" black fibre and have same mounting holes as barrier strips. Serves as an insulator on metal.

Stk. No.	Type	Cont.	1-24	25-49	50-49	100-249	250-499
29F824	MS- 2-141	2	.13	.10	.09	.08	.07
29F825	MS- 3-141	3	.13	.10	.09	.08	.07
29F826	MS- 4-141	4	.13	.10	.09	.08	.07
29F827	MS- 5-141	5	.15	.12	.10	.09	.08
29F828	MS- 6-141	6	.15	.12	.10	.09	.08
29F829	MS- 7-141	7	.15	.12	.10	.09	.08
29F830	MS- 8-141	8	.17	.13	.11	.10	.09
29F831	MS- 9-141	9	.17	.13	.11	.10	.09
29F832	MS-10-141	10	.17	.13	.11	.10	.09
29F833	MS-11-141	11	.19	.15	.13	.11	.10
29F834	MS-12-141	12	.19	.15	.13	.11	.10
29F835	MS-13-141	13	.21	.17	.14	.12	.11
29F836	MS-14-141	14	.21	.17	.14	.12	.11
29F837	MS-15-141	15	.23	.19	.16	.13	.12
29F838	MS-16-141	16	.23	.19	.16	.13	.12
29F839	MS-17-141	17	.26	.20	.17	.14	.13
29F840	MS-18-141	18	.26	.20	.17	.14	.13
29F841	MS-19-141	19	.27	.22	.18	.15	.14
29F842	MS-20-141	20	.27	.22	.18	.15	.14

Type 141-J. JUMPER for Series 140 and 141 Terminal Blocks.

Stock No.	Type	1-24	25-49	50-99	100-249	250-499
28F790	141-J	.08	.07	.06	.05	.04

Type QC-1. QUICK CLAMP TERMINAL for Series 141 and 541.

28F740	QC-1	.11	.09	.08	.07	.06

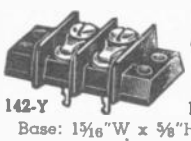
SERIES 161 FANNING STRIPS

Series 161. Fit Series 141 Barrier Strips. Brass, cadmium plated .032" terminals are mounted on 3/32" bakelite, 5/8" wide and on 7/16" ctrs. Ave. Shpg. wt., 3 oz. Mounting holes on left.

Stk. No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
28F761	2-161-L	2	.21	.17	.14	.12	.11
28F762	3-161-L	3	.26	.20	.17	.14	.13
28F763	4-161-L	4	.29	.23	.20	.16	.15
28F764	5-161-L	5	.35	.28	.24	.19	.18
28F765	6-161-L	6	.40	.32	.27	.21	.20
28F766	7-161-L	7	.46	.37	.31	.24	.23
28F767	8-161-L	8	.50	.40	.34	.27	.26
28F768	9-161-L	9	.55	.44	.37	.29	.28
28F769	10-161-L	10	.63	.50	.42	.34	.32
28F770	11-161-L	11	.71	.57	.48	.38	.36
28F771	12-161-L	12	.77	.62	.52	.41	.39
Mounting hole on right.							
28F811	2-161-R	2	.21	.17	.14	.12	.11
28F812	3-161-R	3	.26	.20	.17	.14	.13
28F813	4-161-R	4	.29	.23	.20	.16	.15
28F814	5-161-R	5	.35	.28	.24	.19	.18
28F815	6-161-R	6	.40	.32	.27	.21	.20
28F816	7-161-R	7	.46	.37	.31	.24	.23
28F817	8-161-R	8	.50	.40	.34	.27	.26
28F818	9-161-R	9	.55	.44	.37	.29	.28
28F819	10-161-R	10	.63	.50	.42	.34	.32
28F820	11-161-R	11	.71	.57	.48	.38	.36
28F821	12-161-R	12	.77	.62	.52	.41	.39

SERIES 142 TERMINAL BLOCKS AND ACCESSORIES

SERIES 142 AND 142-Y BARRIER TYPE TERMINAL BLOCKS



142-Y

142

Series 142. Increased insulation is provided by having barriers placed between each terminal. Long leakage path prevents direct shorts from frayed wire at terminal. Base: 1 5/16"W x 5/8"H. molded bakelite. Eyelets and binder head screws are brass, nickel plated. 8-32 x 5/16" screw. Use with Series 162 Fanning Strips. Shpg. wt., 3 oz.

Stock No.	Type No.	Cont.	1-24	25-49	50-99	100-249	250-499
28F722	2-142	2	.30	.24	.20	.16	.15
28F723	3-142	3	.41	.32	.27	.22	.21
28F724	4-142	4	.51	.41	.34	.27	.26
28F725	5-142	5	.62	.49	.41	.33	.31
28F726	6-142	6	.73	.58	.49	.39	.37
28F727	7-142	7	.84	.67	.56	.45	.43
28F728	8-142	8	.95	.76	.63	.50	.48
28F729	9-142	9	1.05	.84	.70	.56	.53
28F730	10-142	10	1.17	.94	.78	.62	.59
28F731	11-142	11	1.28	1.02	.85	.68	.65
28F732	12-142	12	1.39	1.11	.93	.74	.70
28F886	13-142	13	1.50	1.20	1.00	.80	.76
28F887	14-142	14	1.61	1.29	1.08	.86	.82
28F888	15-142	15	1.73	1.38	1.15	.92	.87
28F889	16-142	16	1.84	1.47	1.23	.98	.93
28F890	17-142	17	1.95	1.56	1.30	1.04	.99
Series 142-Y. Same as above but with Thru-panel solder lugs.							
29F788	2-142-Y	2	.42	.34	.28	.22	.21
29F789	3-142-Y	3	.57	.46	.38	.30	.29
29F790	4-142-Y	4	.74	.59	.49	.39	.37
29F791	5-142-Y	5	.89	.71	.60	.48	.45
29F792	6-142-Y	6	1.07	.85	.71	.57	.54
29F793	7-142-Y	7	1.23	.98	.82	.66	.62
29F794	8-142-Y	8	1.39	1.11	.93	.74	.70
29F795	9-142-Y	9	1.55	1.24	1.03	.82	.78
29F796	10-142-Y	10	1.73	1.38	1.15	.92	.87
29F797	11-142-Y	11	1.88	1.51	1.26	1.00	.95
29F798	12-142-Y	12	2.05	1.64	1.37	1.09	1.04
29F799	13-142-Y	13	2.22	1.78	1.48	1.18	1.13
29F800	14-142-Y	14	2.38	1.90	1.59	1.27	1.21
29F801	15-142-Y	15	2.55	2.04	1.70	1.36	1.29
29F802	16-142-Y	16	2.72	2.18	1.82	1.45	1.38
29F803	17-142-Y	17	2.88	2.30	1.92	1.54	1.46

SOLDER TERMINALS FOR SERIES 142 TERMINAL BLOCKS

Stock No.	Mfg. No.	For Use With	1-24	25-49	50-99	100-249	250-499
28F793	3/4W-142	-142	.09	.08	.07	.06	.05
28F799	W-142	142	.09	.08	.07	.06	.05
28F796	Y-142	142	.09	.08	.07	.06	.05

QUICK CLAMP TERMINALS

For use with 142 Barrier Block Series. For wire gauge 8-16.

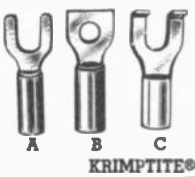
Stock No.	Type No.	1-24	25-49	50-99	100-249	250-499
28F741	QC-2	.13	.10	.09	.08	.07

SERIES 162 FANNING STRIPS

Series 162. Fit 142 Series Barrier Strips. Brass, cadmium plated .432" terminals mounted on 3/32" bakelite, 5/8" wide on 9/16" mtg. centers. Ave. shpg. wt., 3 oz. Mounting hole on left.

Stk. No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
28F772	2-162-L	2	.23	.19	.16	.13	.12
28F773	3-162-L	3	.27	.22	.18	.15	.14
28F774	4-162-L	4	.34	.27	.23	.18	.17
28F775	5-162-L	5	.38	.30	.25	.20	.19
28F776	6-162-L	6	.44	.35	.29	.23	.22
28F777	7-162-L	7	.48	.38	.33	.26	.24
28F778	8-162-L	8	.55	.44	.37	.29	.28
28F779	9-162-L	9	.65	.52	.44	.35	.33
28F780	10-162-L	10	.59	.47	.39	.31	.30
28F781	11-162-L	11	.73	.58	.49	.39	.37
28F782	12-162-L	12	.82	.65	.55	.44	.41
Mounting holes on right.							
28F822	2-162-R	2	.23	.19	.16	.13	.12
28F823	3-162-R	3	.27	.22	.18	.15	.14
28F824	4-162-R	4	.34	.27	.23	.18	.17
28F825	5-162-R	5	.38	.30	.25	.20	.19
28F826	6-162-R	6	.44	.35	.29	.23	.22
28F827	7-162-R	7	.48	.38	.32	.26	.24
28F828	8-162-R	8	.55	.44	.37	.29	.28
28F829	9-162-R	9	.59	.47	.39	.31	.30
28F830	10-162-R	10	.65	.52	.44	.35	.33
28F831	11-162-R	11	.73	.58	.49	.39	.37
28F832	12-162-R	12	.82	.85	.55	.44	.41

Barrier Block Solderless Terminals



A B C

To eliminate circuit failure in barrier blocks, WALDOM has produced exactly the right shape and width terminal to fit the above barrier blocks. They cannot turn sideways, loosen, arc, or fail. Give neat, line appearance.

KRIMPTITE®—NON-INSULATED TERMINALS

For Jones Series	Wire Range	Stud Size	Spade Stk. No.	Flanged Spade Stk. No.	Rect. Stk. No.	Pkg. of 100	Pkg. of 1000
140	22-18	5	31F519	31F528	28F2022	2.16	15.55
	16-14		31F522	31F529	28F2023	2.26	16.25
141	22-18	6	28F2014	28F2018	28F2024	2.16	15.55
	16-14		28F2015	28F2019	28F2025	2.26	16.25
142	22-18	8	28F2016	28F2020	28F2026	2.16	15.55
	16-14		28F2017	28F2021	28F2027	2.26	16.25

INSULKRIMP—VINYL INSULATED TERMINALS

140	22-18	5	31F533	31F540	28F2008	4.47	33.05
	16-14		31F536	31F543	28F2009		
141	22-18	6	28F2000	28F2004	28F2010		
	16-14		28F2001	28F2005	28F2011		
142	22-18	8	28F2002	28F2006	28F2012		
	16-14		28F2003	28F2007	28F2013		

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

IMPRINTED MARKER STRIPS FOR USE WITH SERIES 142 BARRIER TERMINAL BLOCKS

Type MS-142. 1/32" black fibre. Have same mounting holes as barrier strips. Serve as an insulator on metal. Wt., 2 oz.

Stk. No.	Type	Cont.	1-24	25-49	50-99	100-249	250-500
29F843	MS- 2-142	2	.13	.10	.09	.08	.07
29F844	MS- 3-142	3	.13	.10	.09	.08	.07
29F845	MS- 4-142	4	.15	.12	.10	.09	.08
29F846	MS- 5-142	5	.15	.12	.10	.09	.08
29F847	MS- 6-142	6	.15	.12	.10	.09	.08
29F848	MS- 7-142	7	.17	.13	.11	.10	.09
29F849	MS- 8-142	8	.17	.13	.11	.10	.09
29F850	MS- 9-142	9	.19	.15	.13	.11	.10
29F851	MS-10-142	10	.21	.17	.14	.12	.11
29F852	MS-11-142	11	.21	.17	.14	.12	.11
29F853	MS-12-142	12	.23	.19	.16	.13	.12
29F854	MS-13-142	13	.23	.19	.16	.13	.12
29F855	MS-14-142	14	.26	.20	.17	.14	.13
29F856	MS-15-142	15	.26	.20	.17	.14	.13
29F857	MS-16-142	16	.29	.23	.20	.16	.15
29F858	MS-17-142	17	.32	.25	.21	.17	.16

JUMPERS FOR SERIES 142 BARRIER TERMINAL BLOCKS

Stk. No.	Type	1-24	25-49	50-99	100-249	250-500
28F789	95B	.15	.12	.10	.09	.08
28F742	142J-1	.09	.08	.07	.06	.05
28F743	142J-2	.08	.07	.06	.05	.04

SERIES 150

Fits std. 50 amp. solder lug for 6 Ga. stranded wire. Base: 1 13/16" W. x 2 5/32" H. Molded bakelite. Screws: 10-32x5/16" brass, burnished nickel plate. 1 1/16" mtg. ctrs.

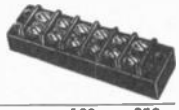
Stk. No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
29F731	2-150	2	.75	.60	.50	.40	.38
29F732	3-150	3	1.05	.84	.70	.56	.53
29F733	4-150	4	1.36	1.09	.91	.72	.69
29F734	5-150	5	1.67	1.33	1.11	.89	.84
29F735	6-150	6	1.97	1.58	1.32	1.05	1.00
29F736	7-150	7	2.28	1.82	1.52	1.21	1.16
29F737	8-150	8	2.59	2.07	1.73	1.38	1.31
29F738	9-150	9	2.90	2.32	1.93	1.54	1.47
29F739	10-150	10	3.20	2.56	2.14	1.71	1.62

SERIES 171

Miniature 1 3/32" W. x 5/16" H. Single Screw Terminals. 2-56x1/4" binder head screws. 1/8" Dia. Mtg. Holes, 1/4" Mtg. Centers.

Stk. No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
28F901	2-171	2	.27	.22	.18	.14	.14
28F902	3-171	3	.34	.27	.23	.18	.17
28F903	4-171	4	.40	.32	.27	.21	.20
28F904	5-171	5	.46	.37	.31	.24	.23
28F905	6-171	6	.53	.42	.35	.28	.27
28F906	7-171	7	.59	.47	.39	.31	.30
28F907	8-171	8	.65	.52	.43	.34	.33

SERIES 172



Double screw terminals. 5/8" W. x 5/16" H. Mtg. on 1/4" centers. 2-56x1/4" binder head screws. 1/8" Dia. Mtg. holes.

Stk. No.	Type	Cont.	1-24	25-49	50-99	100-249	250-499
28F909	2-172	2	.47	.37	.31	.25	.24
28F910	3-172	3	.59	.47	.40	.32	.30
28F911	4-172	4	.72	.58	.48	.39	.37
28F912	5-172	5	.84	.67	.56	.45	.43
28F913	6-172	6	.97	.77	.65	.52	.49
28F914	7-172	7	1.10	.88	.73	.58	.56
28F915	8-172	8	1.22	.97	.81	.65	.62
28F916	9-172	9	1.34	1.07	.90	.72	.68
28F917	10-172	10	1.47	1.18	.98	.78	.75
28F918	11-172	11	1.59	1.27	1.06	.85	.81
28F919	12-172	12	1.72	1.37	1.15	.92	.87
28F920	13-172	13	1.84	1.47	1.23	.98	.93
28F921	14-172	14	1.97	1.57	1.31	1.05	1.00

SERIES 173

Single screw terminals. 3/4"Wx1/2"H. Mtg. on 3/8" centers. 4-40x3/16". Sems type Binder head screws. 5/32" Dia. Mtg. Holes.

28F923	2-173	2	.28	.22	.19	.15	.14
28F924	3-173	3	.38	.30	.25	.20	.19
28F925	4-173	4	.47	.38	.32	.25	.24
28F926	5-173	5	.57	.46	.38	.30	.29
28F927	6-173	6	.67	.53	.45	.36	.34
28F928	7-173	7	.77	.61	.51	.41	.39
28F929	8-173	8	.86	.68	.57	.46	.43
28F930	9-173	9	.95	.76	.64	.51	.48
28F931	10-173	10	1.05	.84	.70	.56	.53

500 SERIES BARRIER TERMINAL BLOCKS

For especially critical electrical and mechanical performance requirements. Enclosed bottoms; Knockouts molded into base for Y terminals. Heavy construction adds strength to the block, minimizing warpage and shrinkage. Screws and terminals are brass-nickel plated. Material of the block is general purpose black bakelite.

Series 540. 1 to 21 contacts. Base: 1 1/8" wide, barrier: 1 1/8" wide by 5/8" high, body 19/32" wide by 5/16" high. Web at base, 5/64" thick. 5-40x3/16" screw. Wt., 5 oz.

Stk. No.	Type	Terms.	1.24	25-49	50-99	100-249	250-499
28F1000	2-540	2	.50	.40	.34	.27	.26
28F1001	3-540	3	.62	.50	.42	.33	.32
28F1002	4-540	4	.75	.60	.50	.40	.38
28F1003	5-540	5	.88	.70	.59	.47	.45
28F1004	6-540	6	1.00	.80	.67	.53	.51
28F1005	7-540	7	1.13	.90	.75	.60	.57
28F1006	8-540	8	1.25	1.00	.84	.67	.64
28F1007	9-540	9	1.37	1.10	.92	.73	.70
28F1008	10-540	10	1.50	1.20	1.00	.80	.76
28F1009	11-540	11	1.63	1.30	1.09	.87	.83
28F1010	12-540	12	1.67	1.34	1.12	.89	.85
28F1011	13-540	13	1.88	1.50	1.25	1.00	.95
28F1012	14-540	14	2.00	1.60	1.34	1.07	1.02
28F1013	15-540	15	2.12	1.70	1.42	1.13	1.08
28F1014	16-540	16	2.25	1.80	1.50	1.20	1.14
28F1015	17-540	17	2.38	1.90	1.59	1.27	1.21
28F1016	18-540	18	2.50	2.00	1.67	1.33	1.27
28F1017	19-540	19	2.63	2.10	1.75	1.40	1.33
28F1018	20-540	20	2.75	2.20	1.84	1.47	1.40
28F1019	21-540	21	2.87	2.30	1.91	1.52	1.46
28F1064	22-540	22	3.00	2.40	2.00	1.80	1.52
28F1065	23-540	23	3.13	2.50	2.09	1.67	1.59
28F1066	24-540	24	3.25	2.60	2.17	1.73	1.65
28F1067	25-540	25	3.38	2.70	2.25	1.80	1.71
28F1068	26-540	26	3.50	2.80	2.34	1.87	1.78
28F1069	27-540	27	3.62	2.90	2.41	1.93	1.84
28F1070	28-540	28	3.75	3.00	2.50	2.00	1.90
28F1071	29-540	29	3.88	3.10	2.59	2.07	1.97
28F1072	30-540	30	4.00	3.20	2.67	2.13	2.03
28F1073	31-540	31	4.13	3.30	2.75	2.20	2.09

Series 541. 2 to 30 contacts. Base: 1 3/8" wide. Barrier: 1 3/8" by 1 1/16" high. Body, 3/4" wide by 3/8" high. Web 7/64" thick at base. 6-32x1/4" screw. Shpg. wt. 5 oz.

Stk. No.	Type	Terms.	1-24	25-49	50-99	100-249	250-499
28F1020	2-541	2	.62	.50	.42	.33	.32
28F1021	3-541	3	.75	.60	.50	.40	.38
28F1022	4-541	4	.88	.70	.59	.47	.45
28F1023	5-541	5	1.00	.80	.67	.53	.51
28F1024	6-541	6	1.13	.90	.75	.60	.57
28F1025	7-541	7	1.28	1.02	.85	.68	.65
28F1026	8-541	8	1.40	1.12	.93	.74	.71
28F1027	9-541	9	1.52	1.22	1.02	.81	.77
28F1028	10-541	10	1.65	1.32	1.10	.88	.84
28F1029	11-541	11	1.77	1.42	1.18	.94	.90
28F1030	12-541	12	1.92	1.54	1.28	1.02	.97
28F1031	13-541	13	2.04	1.63	1.36	1.09	1.03
28F1032	14-541	14	2.17	1.73	1.45	1.16	1.10
28F1033	15-541	15	2.30	1.84	1.53	1.22	1.16
28F1034	16-541	16	2.42	1.93	1.61	1.29	1.22
28F1035	17-541	17	2.57	2.05	1.71	1.37	1.30
28F1036	18-541	18	2.68	2.14	1.79	1.43	1.36
28F1037	19-541	19	2.81	2.25	1.88	1.50	1.43
28F1038	20-541	20	2.94	2.35	1.96	1.57	1.49
28F1074	21-541	21	3.06	2.45	2.04	1.63	1.55
28F1075	22-541	22	3.21	2.56	2.14	1.71	1.63
28F1076	23-541	23	3.34	2.67	2.23	1.78	1.69
28F1077	24-541	24	3.46	2.77	2.31	1.84	1.75
28F1078	25-541	25	3.59	2.87	2.39	1.91	1.82
28F1079	26-541	26	3.71	2.97	2.48	1.98	1.88
28F1080	27-541	27	3.86	3.08	2.57	2.06	1.95
28F1081	28-541	28	3.98	3.19	2.66	2.12	2.02
28F1082	29-541	29	4.10	3.28	2.74	2.19	2.08
28F1083	30-541	30	4.23	3.38	2.82	2.26	2.14

NEWARK—YOUR DEPENDABLE SOURCE FOR ALL YOUR ELECTRONIC NEEDS

NEWARK Saves You Time and Money—One Purchase Order—To One Source for All Electronic Components.

Terminal Strips & Sockets

500 SERIES BARRIER TERMINAL BLOCKS (CON'T.)

Series 542. 2 to 26 contacts. Base: 1⅝" wide. Barrier: 1⅝" wide by ⅞" high. Body ⅞" wide by ½" high. Shpg. wt., 5 oz.

Stk. No.	Type	Terms	1-24	25-49	50-99	100-249	250-499
28F1039	2-542	2	.67	.53	.45	.36	.34
28F1040	3-542	3	.83	.67	.56	.44	.42
28F1041	4-542	4	1.00	.80	.67	.53	.51
28F1042	5-542	5	1.16	.93	.78	.62	.59
28F1043	6-542	6	1.33	1.06	.89	.71	.67
28F1044	7-542	7	1.50	1.20	1.00	.80	.76
28F1045	8-542	8	1.67	1.33	1.11	.89	.84
28F1046	9-542	9	1.83	1.46	1.22	.98	.93
28F1047	10-542	10	2.00	1.60	1.33	1.06	1.01
28F1048	11-542	11	2.17	1.73	1.45	1.16	1.10
28F1049	12-542	12	2.33	1.86	1.55	1.24	1.18
28F1050	13-542	13	2.50	2.00	1.67	1.33	1.27
28F1051	14-542	14	2.66	2.13	1.78	1.42	1.35
28F1052	15-542	15	2.82	2.26	1.89	1.51	1.43
28F1053	16-542	16	3.00	2.40	2.00	1.60	1.52
28F1054	17-542	17	3.17	2.53	2.11	1.69	1.60
28F1055	18-542	18	3.33	2.66	2.22	1.78	1.69
28F1056	19-542	19	3.50	2.80	2.33	1.86	1.77
28F1057	20-542	20	3.67	2.93	2.45	1.96	1.86
28F1058	21-542	21	3.83	3.07	2.56	2.04	1.94
28F1059	22-542	22	4.00	3.20	2.67	2.13	2.03
28F1060	23-542	23	4.16	3.33	2.78	2.22	2.11
28F1061	24-542	24	4.33	3.46	2.89	2.31	2.19
28F1062	25-542	25	4.50	3.60	3.00	2.40	2.28
28F1063	26-542	26	4.67	3.73	3.11	2.49	2.36

JUMPERS FOR SERIES ABOVE

Stock No.	Type No.	For A.W.G.	1-24	25-49	50-99	100-249	250-499
28F744	540-J	540	.29	.23	.20	.16	.15
28F745	541-J	541	.32	.25	.21	.17	.16
28F746	542-J	542	.34	.27	.23	.18	.17

QUICK CLAMP TERMINALS

Stock No.	Type No.	For Use With	For A.W.G.	1-24	25-49	50-99	100-249	250-499
28F740	QC-1	141, 541	14-22	.11	.09	.08	.07	.06
28F741	QC-2	142, 542	8-16	.13	.10	.09	.08	.07

53E

LUG TYPE TERMINAL STRIPS

Solder coated steel lugs on ⅜" centers with .140 mtg. holes. Bakelite strips 1/16" thick and ⅜" wide. Shpg. wt., 1 oz.

Stock No.	Type No.	Description	Mtg. Ctr.	1-24	25-49	50-99	100-249	250-499
28F650	51	1 Lug		.06	.05	.04	.03	.02
29F567	51A	2 Lugs; 1 Gnd.		.06	.05	.04	.03	.02
29F568	51B	1 Lug		.06	.05	.04	.03	.02
29F569	51C	2 Lugs; 1 Gnd.		.06	.05	.04	.03	.02
29F570	51F	1 Lug		.06	.05	.04	.03	.02
29F573	51T	Double Lug		.07	.06	.05	.04	.03
28F651	52	2 Lugs		.06	.05	.04	.03	.02
29F574	52A	3 Lugs; 1 Gnd.		.06	.05	.04	.03	.02
29F575	52B	2 Lugs		.06	.05	.04	.03	.02
29F576	52C	3 Lugs; 1 Gnd.		.06	.05	.04	.03	.02
29F578	52T	2 Double Lugs		.08	.07	.06	.05	.04
28F652	53	3 Lugs	1½"	.07	.06	.05	.04	.03
29F582	53E	3 Luge		.07	.06	.05	.04	.03
29F583	53F	4 Lugs; 1 Gnd.		.07	.06	.05	.04	.03
29F584	53T	3 Double Lugs		.09	.08	.07	.06	.05
28F653	54	4 Lugs	1⅞"	.07	.06	.05	.04	.03
29F585	54A	6 Lugs; 2 Gnd.	1⅞"	.07	.06	.05	.04	.03
29F586	54B	4 Lugs		.07	.06	.05	.04	.03
29F587	54C	5 Lugs; 1 Gnd.		.07	.06	.05	.04	.03
28F654	55	5 Lugs	2¼"	.08	.07	.06	.05	.04
29F588	55A	7 Lugs; 2 Gnd.	2¼"	.08	.07	.06	.05	.04
29F590	55C	7 Lugs; 2 Gnd.	1½"	.08	.07	.06	.05	.04
28F655	56	6 Lugs	2⅝"	.08	.07	.06	.05	.04
29F591	56A	8 Lugs; 2 Gnd.	2⅝"	.08	.07	.06	.05	.04
29F593	56C	8 Lugs; 2 Gnd.	1⅞"	.08	.07	.06	.05	.04

SCREW TYPE TERMINAL STRIPS

Ideal for breadboard layouts. Solder coated brass term. .136" dia. mtg. holes. 1-6 lug strips 1/16" bakelite, 7-10 lug strips, 3/32" bakelite. Screws are captive to prevent removal. Terminals spaced on 1/16" centers.

Stk. No.	Type	Term.	Mtg. Ctr.	1-24	25-49	50-99	100-249	250-499
29F551	17-1	1	⅞"	.08	.07	.06	.05	.04
29F552	17-2	2	1 5/16"	.09	.08	.07	.06	.05
29F553	17-3	3	1¾"	.11	.09	.08	.07	.06
29F554	17-4	4	2 3/16"	.15	.12	.10	.09	.08
29F555	17-5	5	2⅝"	.17	.13	.11	.10	.09
29F556	17-6	6	3 1/16"	.21	.17	.14	.12	.11
29F557	17-7	7	3½"	.26	.20	.17	.14	.13
29F558	17-8	8	3 15/16"	.27	.22	.18	.15	.14
29F559	17-9	9	4⅜"	.32	.25	.21	.17	.16
29F560	17-10	10	4 13/16"	.34	.27	.23	.18	.17

JONES "2000" TERMINALS

Bakelite insulation with cadmium steel brackets. Terminals are made of .019" tinned brass on 5/10" centers. Wt., 3 oz.

Stk. No.	Type	Term.	1-24	25-.49	50-99	100-249	250-499
28F680	2002	2	.10	.09	.08	.07	.06
28F681	2003	3	.11	.10	.08	.07	.06
28F682	2004	4	.12	.10	.09	.08	.07
28F683	2005	5	.13	.11	.09	.08	.07
28F684	2006	6	.14	.11	.10	.09	.08
28F685	2007	7	.15	.12	.10	.09	.08
28F686	2008	8	.17	.13	.11	.10	.09
28F687	2009	9	.18	.14	.12	.11	.10
28F688	2010	10	.19	.15	.13	.11	.10
28F689	2011	11	.20	.16	.14	.12	.11
28F690	2012	12	.21	.17	.14	.12	.11
28F691	2013	13	.23	.19	.16	.13	.12

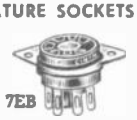
NOVAR SOCKETS

Molded from high dielectric black bakelite or mica-filled low-loss bakelite. Cadmium plated brass contacts. 1½" mounting centers.

Stk. No.	Type	Mfg.	Desc.	1-24	25-49	50-99	100-249	250-499
29F976	9NS-B	Bottom	Black	.15	.12	.10	.09	.08
29F994	9NS-M	Bottom	Mica	.17	.13	.11	.10	.09
29F995	9NS-B-1	Top	Black	.23	.19	.16	.13	.12
29F996	9NS-M-1	Top	Mica	.26	.20	.17	.14	.13

MINIATURE SOCKETS

7AB1


7EB

71M3

7 PIN MINIATURE SOCKETS—MOLDED SADDLE TOP MOUNT

Stk. No.	Type	Desc.	1-24	25-49	50-99	100-249	250-499
38F633	7AB1	Black	.13	.10	.09	.08	.07
38F634	7AM1	Mica	.15	.12	.10	.09	.08

7 PIN—MOLDED SADDLE TYPE—BOTTOM MOUNT

Stk. No.	Type	Desc.	1-24	25-49	50-99	100-249	250-499
38F636	7EB	Black	.11	.09	.08	.07	.06
38F637	7EM	Mica-Filled	.13	.10	.09	.08	.07

7 PIN—SHIELD BASE TYPE

Stk. No.	Type	Desc.	1-24	25-.49	50-99	100-249	250-499
38F674	7XB1	Black	.15	.12	.10	.09	.08
38F675	7XM1	Mica-Filled	.19	.15	.13	.11	.10
38F676	7XC	Ceramic	.40	.32	.27	.21	.20

7 PIN—SHIELDED BASE—MIL-12883A

Stk. No.	Type	Mil. No.	Desc.	1-24	25-49	50-99	100-249	250-499
29F657	7JC-2	TS102C01	Ceramic	.35	.28	.24	.19	.18
29F658	7JC-3	TS102C03	Ceramic	.34	.27	.23	.18	.17
29F659	7JCN-1	TS102C02	Ceramic	.34	.27	.23	.18	.17
29F660	7JM-2	TS102P01	Mica	.26	.20	.17	.14	.13
29F661	7JM-3	TS102P03	Mica	.21	.17	.14	.12	.11
29F662	7JMN-1	TS102P02	Mica	.21	.17	.14	.12	.11

9 PIN SOCKETS

9 PIN MOLDED MIN. SOCKETS—SADDLE TYPE TOP MOUNT

Stk. No.	Type	Desc.	1-24	25-49	50-99	100-249	250-499
38F677	9AB	Black	.13	.10	.09	.08	.07
38F678	9AM	Mica-Filled	.15	.12	.10	.09	.08

9 PIN MOLDED SADDLE TYPE BOTTOM MOUNT

Stk. No.	Type	Desc.	1-24	25-49	50-99	100-249	250-499
38F679	9EB	Black	.13	.10	.09	.08	.07
38F680	9EM	Mica-Filled	.15	.12	.10	.09	.09

9 PIN MINIATURE SOCKETS—SHIELD BASE TYPE

Stk. No.	Type	Desc.	1-24	25-49	50-99	100-249	250-499
38F681	9XB	Black	.19	.15	.13	.11	.10
38F682	9XM	Mica	.21	.17	.14	.12	.11
38F683	9XC	Ceramic	.32	.25	.21	.17	.16

9 PIN SOCKETS WITH SHIELD BASE (MIL-12883A)

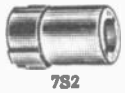
Mtg. hole: .125" dia.

Stock No.	Type	Material	MIL No.	Mfg. Ctrs.	1-24	25-49	50-99	100-249	250-499
29F667	9JC-2	Ceramic	TS103C01	.....	.38	.30	.25	.20	.19
29F668	9JC-3	Ceramic	TS103C03	⅞"	.40	.32	.27	.21	.20
29F669	9JLN-1	Ceramic	TS103C02	.....	.40	.32	.27	.21	.20
29F670	9JM-2	Mica	TS103P01	.....	.27	.22	.18	.15	.14
29F671	9JM-3	Mica	TS103P03	⅞"	.26	.20	.17	.14	.13
29F672	9JMN-1	Mica	TS103P02	.....	.26	.20	.17	.14	.13

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

Sockets and Accessories

MINIATURE TYPE SHIELDS AND SHIELD BASES


7S2

7S1

7SB1

7 PIN—TUBE SHIELDS—"J" SLOT TYPE

Stk. No.	Type	Description	1-24	25-49	50-99	100-249	250-499
29F682	7S2	1⅜" Long	.15	.12	.10	.09	.08
29F683	7S3	1¾" Long	.17	.13	.11	.10	.09
29F684	7S4	2¼" Long	.23	.19	.16	.13	.12

TUBE SHIELDS—"J" SLOT TYPE (JAN S-28A)

Stk. No.	Type	Mil. No.	Description	1-24	25-49	50-99	100-249	250-499
29F673	7S]2-1	TS102U01	7-pin 1⅜" L.	.23	.19	.16	.13	.12
29F674	7S]3-1	TS102U02	7-pin 1¾" L.	.26	.20	.17	.14	.13
29F675	7S]4-1	TS102U03	7-pin 2¼" L.	.29	.23	.20	.16	.15

7 PIN SHIELD BASES FOR "J" SLOT TYPE

29F685	7SB1	.....	⅝" H. Steel	.11	.09	.08	.07	.06
29F686	7SB2	.....	⅝" H. Brass	.15	.12	.10	.09	.08

TUBE SHIELDS WITH "J" SLOT

29F697	9S1	.....	1½" Long	.32	.25	.21	.17	.16
29F698	9S2	.....	1 15/16" Long	.21	.17	.14	.12	.11
29F699	9S3	.....	2⅜" Long	.40	.32	.27	.21	.20

SHIELD BASE FOR 9 PIN WAFER OR SADDLE TYPE

29F700	9SB1	.....	1⅛" mtg. ctr.	.13	.10	.09	.08	.07

9 PIN TUBE SHIELD "J" SLOT (JAN-S-28A)

29F676	9S]1-1	TS103U01	1½" L.	.27	.22	.18	.15	.14
29F677	9S]2-1	TS103U02	1 15/16" L.	.32	.25	.21	.17	.16
29F678	9S]3-1	TS103U03	2⅜" L.	.34	.27	.23	.18	.17

MOLDED TUBE SOCKETS

8AB

Cinch sockets are standard! Precision-engineered for rugged use. All-brass solder-coated contacts. *Black, **Chassis thickness, †Mica, ‡Ceramic.

MOLDED OCTAL 1-5/16" MOUNTING CENTERS

Stk. No.	Type	Mtg. Hole	1-24	25-49	50-99	100-249	250-499
38F670*	8AB	.136 D.	.13	.10	.09	.08	.07
38F671†	8AM	.136 D.	.15	.12	.10	.09	.08

MOLDED OCTAL 1½" MOUNTING CENTERS

38F672*	8EB	.143 D.	.13	.10	.09	.08	.07
38F673†	8EM	.140 D.	.15	.12	.10	.09	.08

RING MOUNT OCTAL

29F689*	8R1	1/16"**	.19	.15	.13	.11	.10
29F690*	8R2	⅛"**	.32	.25	.21	.17	.16
29F691†	8R3	1/16"**	.23	.19	.16	.13	.12
29F692*	8R4	3/32"**	.32	.25	.21	.17	.16
29F693†	8R5	3/32"**	.44	.35	.29	.23	.22
29F694†	8R6	⅛"**	.44	.35	.29	.23	.22
29F695	8R0	Retainer ring.	.08	.07	.06	.05	.04

ADAPTER PLATE

Type 8AP. For use alone or in conjunction with above 8R1-8R6 Ring Mount Octal Sockets and 8R0 Retainer Ring.

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499
29F696	8AP	.09	.08	.07	.06	.05

TOP MOUNTED RELAY SOCKETS

Mica. 1¼" mtg. ctr.

Stock No.	Type No.	Cont.	1-24	25-49	50-99	100-249	250-499
29F987	20RS	20	1.94	1.55	1.29	1.03	.98

BOTTOM MOUNTED SOCKETS

Beryllium copper, silver-plated contacts with hot tinned tails. Steel saddle. 1 5/16" mtg. centers. Casting of mica insulation.

29F710	14RS	14	.77	.62	.52	.41	.39
29F988	20RS-1	20	1.94	1.55	1.29	1.03	.98
29F989	16RS-1	16	1.56	1.25	1.04	.83	.79
29F990	14RS-1	14	1.29	1.03	.86	.69	.65

RELAY PIN SOCKETS

Mate with Automatic Electric "EIN" and C.P. Clare "J" relays. Molded of high dielectric black phenolic. Cadmium plated except (*) gold plated. 1.2" mtg. ctr.

29F499	16RS-2	16	.90	.72	.60	.48	.46
29F498	16RS-3*	16	1.09	.87	.73	.58	.55
29F497	28RS	28	1.35	1.08	.90	.72	.68
29F496	28RS-1*	28	1.65	1.32	1.10	.88	.84

CRYSTAL SOCKETS

2KB

2 prong. 31/64" Mtg. Ctrs.

Stk. No.	Type	Mfg.	1-24	25-49	50-99	100-249	250-499
29F705	2KB	9827	.17	.13	.11	.10	.09
29F706	2KM	9816	.19	.15	.13	.11	.10

VIDICON SOCKETS

Type 7VT. 7 contact socket for RCA Vidicon Tube Nos. 6198 and 7038. Casting material is mica. Contacts are silver-plated phosphor bronze. JETEC No. E8-11.

Stock No.	Type No.	1-24	25-49	50-99	100-249	250-499
29F997	7VT	2.38	1.90	1.59	1.27	1.21
29F999	8VT	2.38	1.90	1.59	1.27	1.21

PHOTO-MULTIPLIER SOCKET

Type 20-PM. 20 contact socket for RCA photo-multiplier tube nos. 6810, C7187A, C7122. and 7265. Casting material is MA1-60 Alkyd Glass Fiber. JETEC No. 20-102.

29F998	20-PM	5.00	4.00	3.34	2.67	2.54

CETRON TUBE SOCKET

Designed for use in such applications as electric eye doors and motion picture projectors. Contacts spring brass.

Stk. No.	Type	Descrip.	1-24	25-49	50-99	100-249	250-499
29F652	2B2	Black	.75	.60	.50	.40	.38
29F653	2M2	Mica	1.10	.88	.74	.59	.56

STRAP NUTS

29F679	7SN	For 7-pin Min.	.26	.20	.17	.14	.13
29F680	9SN	For 9-pin Min.	.27	.22	.18	.15	.14

TRANSISTOR SOCKETS

2TS-1

2TS-2

Stk. No.	Type	Description	1-24	25-49	50-99	100-249	250-499
38F684	2TS-1	6-20 Threaded Mtg. Holes	.11	.09	.08	.07	.06
38F685	2TS-2	Unthreaded	.11	.09	.08	.07	.06

8-PIN RELAY SOCKET

Molded of mica filled phenolic and is attached to chassis with cold rolled steel clip that is cadmium plated. Contacts are beryllium copper, silver plated. Furnished with No. 20731 Mtg. Clip.

Stock No.	Type No.	1-24	25-49	50-99	100-249	250-499
29F729	8RS	.50	.40	.34	.27	.26

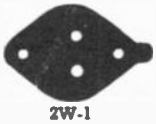
NUVISTOR SOCKETS

5NS

5NS fastens to chassis by two tabs. 5NS-1, conventional mtg., screws, eyelets, etc. 5NS-2 for P.C. circuits. 5NS-3, heat dissipating.

29F730	5NS	.17	.13	.11	.10	.09
29F992	5NS-1	.26	.20	.17	.14	.13
29F993	5NS-2	.42	.34	.28	.22	.21
29F991	5NS-3	.23	.19	.16	.13	.12

HEAT SINKS


2W-1

2W-2

2W-3

Stk. No.	Type	Mfr. No.	Description	1-24	25-49	50-99	100-249	250-499
29F654	2W1	294457	For Mot. 2N-179, 2N-176, 2N-554	.32	.25	.21	.17	.16
29F655	2W2	294665	For Delco 2N174	.34	.27	.23	.18	.17
29F656	2W3	294666	For Tex. Inst. 2N-389	.32	.25	.21	.17	.16

MOLDED CONNECTOR PLUGS AND SOCKETS

8PB

11PB

11RB

Stk. No.	Type	Mfr. No.	Contacts	1-24	25-49	50-99	100-249	250-499
29F701	8PB	54B16021	8 plugs	.21	.17	.14	.12	.11
29F702	11PB	54B13795	11 plugs	.26	.20	.17	.14	.13
29F703	11RB	54A13783	11 sockets	.29	.23	.20	.16	.15

Sockets & Accessories

GENERAL PURPOSE TRANSISTOR SOCKET

Type 2TS-4. Designed for triangular base layout .2"x.1" (JETEC-30) contact centers, as well as three-contact-in-line (.048x.192 contact centers). Casing molded of general purpose Bakelite; contacts are of phosphor bronze, cadmium-plated.

Stock No.	Type	1-24	25-49	50-99	100-249	250-499
38F687	2TS-4	.15	.12	.10	.09	.08

COMPACTRON TUBE SOCKETS

Designed for use with Compactron tube. 12-contact type for normal use and 8-contact type for high voltage available. Molded from high dielectric (*) black phenolic or (**) mica-filled low loss phenolic. Contacts cadmium-plated brass. mtg. hole centers: 1 5/16", dia. .144".

Stock No.	Type	No. of Contacts	1-24	25-49	50-99	100-249	250-499
39F385	8CS-B*	8	.44	.35	.29	.23	.22
39F387	8CS-M**	8	.42	.38	.32	.26	.24
39F388	12CS-B*	12	.15	.12	.10	.09	.08
39F389	12CS-M**	12	.59	.47	.39	.31	.30

PRINTED CIRCUIT SOCKETS WITH SHIELD BASES

These stand-off sockets have an attached bayonet-type shield base with ground tab. For use with 1/16" printed circuit boards. Castings are low loss mica-filled phenolic (MFE). Contacts are phosphor bronze with a hot-tinned finish. Center shield and ground tab are brass, hot-tinned, and base is brass, nickel-plated.

Stk. No.	Type	Description	1-24	25-49	05-99	100-249	250-499
29F602	7PC-M2	7-pin Min.	.90	.72	.60	.48	.46
29F603	9PC-M2	9-pin Min.	1.00	.80	.67	.53	.51

CONVENTIONAL STAND-OFF TYPE PRINTED CIRCUIT SOCKETS

7PC-B **7PC-B1** **8PC-B** **9PC-B** **9PC-B1**

Stand-off sockets resting on shoulder of contact tail providing air gap for cooling and eliminating moisture. Designed for 1/16" printed circuit boards having bottom circuitry. Center shield and tabs * or none. **

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499
29F604	7PC-B*	.11	.09	.08	.07	.06
29F605	7PC-B1**	.09	.08	.07	.06	.05
29F607	9PC-B*	.13	.10	.09	.08	.07
29F608	9PC-B1**	.13	.10	.09	.08	.07
29F520	8PC-B*	.13	.10	.09	.08	.07

TV PICTURE TUBE SOCKETS

3M11. Mica socket. Magnal—11 prong. For use with 5BP1, 2AP1, 1P21, 931A, and 3KP1 type CR tubes. Mica-filled low loss bakelite. Shpg. wt., 3 oz.

3R11. Steel mounting ring for above.

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499
29F711	3M11	4.50	3.60	3.00	2.40	2.28
29F712	3R11	.53	.42	.35	.28	.27

3M12. Mica socket. Duodecal—12 prong. For use with 10BP4, 2BP1, 5TP4, etc. Tube types. Also RCA 6199 tube with JAN NO. B12-43. Mica-filled low loss bakelite. Shpg. wt. 3 oz.

3B12. Same as above but black bakelite.

29F714	3M12	1.82	1.45	1.21	.97	.92
29F713	3B12	.61	.49	.41	.32	.31

3M14. Mica socket. Diheptal—14 prong for RCA 6217, 5819 photo tubes and JETEC No. B12-37. Mica-filled low loss bakelite 2 7/32"w x 1 1/8h". Shpg. wt. 3 oz.

3B14. Same as above but high dielectric black bakelite.

3R14. Steel mounting ring for above

29F715	3B14	1.58	1.27	1.06	.84	.80
39F390	3M14	1.67	1.33	1.11	.89	.84
39F391	3R14	.59	.41	.39	.31	.30

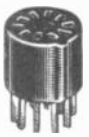
CAPACITOR "PLUG IN" SOCKETS

2C5. Designed for use with Mallory and Magnavox 1" FP type condensers. Molded black bakelite. Steel mounting saddle has 4 ground lugs. 1½" mtg. ctr. Mtg. hole diam. .140". Shpg. Wt. 5 oz

2C7. Designed for use with Mallory and Magnavox 1 3/8" FP type condensers. Molded black bakelite. Steel saddle has 2 7/32" mtg. ctr. Mtg. hole diam. .156". Shpg. wt., 5 oz.

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499
29F549	2C5	.49	.39	.33	.26	.25
29F550	2C7	.71	.57	.48	.38	.36

INTEGRATED CIRCUIT SOCKETS



6-ICS. Newly designed sockets for interconnection of integrated circuits mounted in 6-lead, TO-5 case. Molded of diallyl phthalate, type SDG per MIL-M-18794. Gold plated, beryllium copper contacts.

8-ICS. Similar to above but with 8 pins.

10-ICS. Similar to above but with 10 pins.

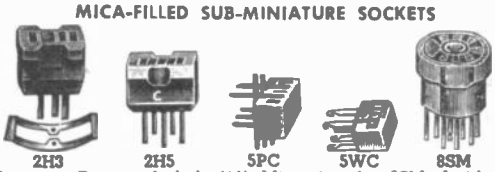
Stock No.	Type	1-24	25-49	50-99	100-249	250-499
29F541	6-ICS	.50	.40	.34	.27	.26
29F542	8-ICS	.61	.49	.41	.32	.31
29F521	10-ICS	.67	.53	.45	.36	.37

STAND-OFF TYPE PRINTED CIRCUIT SOCKETS

Sockets have contact tails so they can be pressed into chassis holes. Provides mechanical retention prior to dip soldering in 1/16" printed circuit board. Center shield on B5 and M5 models made of brass, hot tin dipped. Insulator bodies available in (*)black phenolic or (†)mica-filled low loss phenolic.

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499
29F594	7PC-B4*	.11	.09	.08	.07	.06
29F595	7PC-M4†	.11	.09	.08	.07	.06
29F596	7PC-B5*	.11	.09	.08	.07	.06
29F597	7PC-M5†	.11	.09	.08	.07	.06
29F598	9PC-B4*	.13	.10	.09	.08	.07
29F599	9PC-M4†	.13	.10	.09	.08	.07
29F600	9PC-B5*	.13	.10	.09	.08	.07
29F601	9PC-M5†	.13	.10	.09	.08	.07

MICA-FILLED SUB-MINIATURE SOCKETS



2H3 **2H5** **5PC** **5WC** **8SM**

*Mounting Ring included. (**) Mtg. ring for 8SM. †with mtg. plate.

Stk. No.	Type	Mfr. No.	Prongs	1-24	25-49	50-99	100-249	250-499
38F639	2H3*	46A20928	3	.23	.19	.16	.13	.12
38F630	2H5*	46A11953	5	.19	.15	.13	.11	.10
38F631	2H6*	46A11955	6	.90	.72	.60	.48	.46
38F632	2H7*	46A11957	7	.34	.27	.23	.18	.17
38F629	8SM*	46A13886	8	.50	.40	.34	.27	.26
29F718	8SMP†	46B14513	8	.63	.50	.42	.34	.32
29F719	2MR**	20K13702		.07	.06	.05	.04	.03

SERIES 202 PLUGS AND SOCKETS

P-202-CCT S-202-B

Phosphor bronze "knife switch" type socket contacts engage both sides of flat brass plug contacts, doubling contact area. Have two polarized contacts. Metal parts are brass with bright nickel finish. Molded bakelite insulation. Formed fibre linings in caps. Knurled nut as 3/4"-27 threads. Socket mounting holes—No. 30 drill size on 1" centers.

29F507	P-202-CCT	Plug with cable clamps	.89	.71	.60	.48	.45
29F508	S-202-CCT	Socket with cable clamps	.92	.73	.61	.49	.46
29F509	S-202-CCT-THR	S-202-CCT w/ threaded body	1.21	.97	.81	.64	.61
29F512	S-202-B	Socket with mtg. base	1.09	.87	.73	.58	.55
29F513	P-202-B	Plug with mtg. base	1.07	.85	.71	.57	.54

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CINCH JONES

PHONO JACKS

81A

81A. Single prong positive grip phono jack mounted on 1/16" chocolate bakelite disc with 11/16" mtg. centers. Use 13A phono plug with this jack. Shpg. wt. 4 oz.

81B

81B. Two positive grip phono jacks mtg. on 1/16" bakelite panel with 1 5/16 mtg. centers. Jacks are spaced on 7/16" centers. Panel size: 1 1/2"x1". Use 13A phono plug with this jack. Shpg. wt. 4 oz.

Stk. No.	Type	Mfr. No.	1-24	25-49	50-99	100-249	250-499
39F797	81A	14H20604	.11	.09	.08	.07	.06
39F795	81B	8113	.15	.12	.10	.09	.08

PLUG CAP

Type 18A-1. Cadmium plated steel shell with rolled edge on 5/16" diameter neck opening. Outside diameter at base .625. Four 1/8" prongs coincide with notches on plugs. Designed for use with Cinch No. 5A1 and 5B1A type battery plugs.

Stk. No.	Type	Mfg. No.	1-24	25-49	50-99	100-249	250-499
29F612	18A-1	16A20377P24	.09	.08	.07	.06	.05

110-250 VOLT 2 PRONG SOCKET

2R2

2R2. Rated at 15 amps 110V or 10 amps at 250V Molded from high dielectric black bakelite. Mounts in 25/64x25/32" hole. .144 diam. mtg. holes on 1 1/8" centers. Shpg. wt. 4 oz.

Stk. No.	Type	Mfr. No.	1-24	25-49	50-99	100-249	250-499
39F394	2R2	54A12844	.19	.15	.13	.11	.10

SECOND ANODE CONNECTOR

3A1

3A1. For diheptal based tubes. Snaps over .096 diam. prong on side of diheptal tubes. Shpg. wt. 4 oz.

29F649	3A1	8657P24	1.04	.83	.70	.56	.53

PLUG BUTTONS

Used to cover holes in metal, wood, fibre, etc. Nickel plated steel. Av. Shpg. wt. 2 oz.
*Screen Type for 1" diam. (Bright zinc plated)

Stk. No.	Type	Mfg. No.	Hole Dia.	1-24	25-49	50-99	100-249	250-499
29F633	41A	48151P34	1/4"	.07	.06	.05	.04	.03
29F634	41B	48192P34	3/8"	.07	.06	.05	.04	.03
29F635	41C	48152P34	1/2"	.07	.06	.05	.04	.03
29F636	41D	48172P34	5/8"	.07	.06	.05	.04	.03
29F637	41E	51026P34	3/4"	.08	.07	.06	.05	.04
29F638	41F	48155P34	7/8"	.08	.07	.06	.05	.04
29F639	41G	48143P34	1"	.08	.07	.06	.05	.04
29F640	41H	50726P34	1 1/4"	.11	.09	.08	.07	.06
29F641	41V*	99522P24	1"	.15	.12	.10	.09	.08

ANTENNA CONNECTOR

Shielded jack has flange with 15/16" mtg. ctrs. and .136 dia. mtg. holes. Mounts with screws or rivets. Use with 13B.

Stk. No.	Type	Description	1-24	25-49	50-99	100-249	250-499
39F305	81F	Socket	.19	.15	.13	.11	.10

BATTERY PLUGS

5D

5D1

5F

5M

Plated brass pin mounted on laminated bakelite.

Stk. No.	Type	Mfg. No.	Hole Dia.	1-24	25-49	50-99	100-249	250-499
39F830	5A1	2744	1 1/2 "A"	.09	.08	.07	.06	.05
39F833	5A4	2793	6 "A"	.09	.08	.07	.06	.05
39F834	5A5	M-77	7 1/2 "A"	.13	.10	.09	.08	.07
39F835	5B1A	2730	45 "B"	.09	.08	.07	.06	.05
39F839	5M	52384	67 1/2 "B"	.08	.07	.06	.05	.04
39F840	5F	52383	67 1/2 "B"	.08	.07	.06	.05	.04
39F829	5D	155113	45 "B"	.94	.75	.63	.50	.48
39F842	5D1	155112	67 1/2 "B"	.59	.47	.39	.31	.30
39F843	5D2	155104	90 "B"	.29	.23	.20	.16	.15
39F841	5MFA	153965	67 1/2 "B"	.44	.35	.29	.23	.22

PLUGS

13A

13B

13A. Phono plug. Nickel plated 1/8 in. dia. tube pin. 9/16 in. L. Use with 81A and 81B phono jacks. Shpg. wt. 3 oz.
13B. Motorola type antenna plug. Nickel plated 1/8 tube extends 7/32 in. from cadmium plated split brass shell. Use with 81C or 81F connector. Shpg. wt. 4 oz.

Stk. No.	Type	Mfr. No.	1-24	25-49	50-99	100-249	250-499
39F796	13A	1336	.09	.08	.07	.06	.05
39F396	13B	1320	.15	.12	.10	.09	.08

TV PLUGS

2RP

2FP

Type 2RP. Recessed sub-panel mounting type plug. UL approved for 125 volts 7 amps. 1 1/4" mtg. centers. Length 1 5/8", width 5/8", depth 5/16". Shpg. wt. 4 oz.
Type 2FP connector plug. Two prongs mounted on 1/16" Bakelite. 1 5/8" x 3/4". .135" mounting holes are on 1 1/4" centers.

Stk. No.	Type	Mfr. No.	1-24	25-49	50-99	100-249	250-499
36F881	2RP-1	15M14684	.11	.09	.08	.07	.06
29F619	2FP	15F17982	.11	.09	.08	.07	.06

CABLE CLAMPS

85A 85B 85C 85D 85E 85F

Cadmium plated steel. Av. shpg. wt. 2 oz.

Stk. No.	Type	Mfg. No.	Dia. of Arc	1-24	25-49	50-99	100-249	250-499
29F627	85A	1065P24	1/8"	.08	.07	.06	.05	.04
29F628	85B	1051P24	5/16"	.08	.07	.06	.05	.04
29F629	85C	8545P24	5/16"	.08	.07	.06	.05	.04
29F630	85D	8339P27	5/16"	.08	.07	.06	.05	.04
29F631	85E	8522P24	1/2"	.08	.07	.06	.05	.04
29F632	85F	292-LP24	5/8"	.08	.07	.06	.05	.04

GENERAL RADIO

DOUBLE BANANA PLUG

General Radio. Type 274-MB. Rated 4000 volts, 15 amps, peak. Spacing between prong centers 3/4". Shpg. wt., 2 oz.
28F589. NET ..... **.70**

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Amphenol Industrial Tube & Relay Sockets

146-103, 146-104

146-105, 146-109

146-817

146-101

146-121

Stk. No.	Type	Description	Wt.	1-24	25-99	100-249	250-499	500-999
38F930	146-103	8 contact standard socket without tie point inserts top mounted. Molded in one piece of Melamine. Removable contacts. 1250 V. RMS, 5 amps.	8 oz.	1.50	1.25	1.051	.900	.799
38F931	146-104	8 contact socket with 4 molded-in treaded inserts for tie points. Top mounted. Molded in one piece of Melamine. Removable contacts.	8 oz.	1.90	1.59	1.337	1.145	1.017
38F933	146-203	Same as 146-103 above except bottom mounted.	8 oz.	1.50	1.25	1.051	.900	.799
38F934	146-204	Same as 146-104 above except bottom mounted.	8 oz.	1.90	1.59	1.337	1.145	1.017
38F928	146-105	4 contact bracket type. For jumbo 4 pin tubes.	6 oz	4.68	3.92	3.285	2.813	2.498
39F1246	146-109	4 contact bracket type. For UX4-pin tubes.	6 oz.	4.89	4.09	3.431	2.938	2.609
39F1247	146-817	11 contact socket with 4 molded-in threaded inserts. 600 VRMS, 10 Amps.	10 oz	3.47	2.91	2.438	2.088	1.854
38F920	146-101	High Voltage Octal Socket. For 5Y4-G, 5U4-G, 6L6-G and others. Molded Melamine. Underwriters shield. 2.031" mtg. ctrs.	2 oz.	.88	.73	.62	.55	.49
38F932	146-121	Photo Tube Socket. For cartridge type photo tubes. Made of one piece, molded bakelite, mica filled. Nickel plated brass contacts.	5 oz.	NET 1.80				

MINIATURE SOCKETS

A

B

147 series mount in 5/8" chassis hole and have 7/8" mounting centers with 1/8" screw holes. 59 series mount in 3/4" chassis hole and have 1 1/8" mounting centers with .095" rivet holes. All are Bottom-Mounting Type-Fig. A except those with *, which are Top-Mounting Type-Fig. B. (Tube Shield Base included) Shpg. wt. 2 oz.

Stock No.	Type	Insul.	Pins	1-24	25-99	100-249	250-499	500-999
38F870	147-500	Bakelite	7	.31	.259	.218	.186	.165
38F872	147-505	Mica	7	.31	.258	.216	.185	.164
38F875	*147-905	Bakelite	7	.35	.289	.242	.208	.184
38F877	*147-913	Mica	7	.34	.287	.241	.206	.183

Stock No.	Type	Insul.	Pins	1-49	50-249	250-499	500-999	1000-2500
38F873	59-409	Bakelite	9	.35	.292	.245	.210	.186
38F874	59-410	Mica	9	.36	.301	.253	.216	.192
38F878	*59-407	Bakelite	9	.41	.346	.291	.249	.221
38F879	*59-406	Mica	9	.40	.338	.283	.243	.215

MINIATURE TUBE SHIELDS

For 7 and 9 pin miniature sockets above. Steel shell, cadmium plated. Shpg. wt., 2 oz.

Stock No.	Type	Height	For	1-49	50-249	250-499	500-999	1M-2499
38F880	5-401	1 3/8"	7 pin	.21	.176	.147	.126	.112
38F881	5 402	1 3/4"	7 pin	.22	.181	.152	.130	.115
38F882	5-405	1 1/2"	9 pin	.21	.177	.149	.128	.113
38F883	5-408	1 15/16"	9 pin	.25	.211	.177	.151	.134
38F884	5-409	2 3/8"	9 pin	.31	.256	.215	.184	.163

FLOATING SOCKET

Type 77-MIP-8FK. Vibration proofed octal socket to eliminate microphonics. Has live rubber grommets, mounting screws, nuts and washers. Mounts in 1 3/16" holes on 1 1/2" ctrs. Shpg. wt., 5 oz.

Stock No.	1-49	50-249	250-499	500-999	1M-2499
38F855	.39	.325	.273	.234	.208

TYPE RS SOCKETS

Molded bakelite replacement sockets. Removable adapter plate permits replacement of wafer sockets. Slotted mtg. holes to fit centers from 1 1/2 to 1 7/8". Shpg. wt., 2 oz.

Stock No.	Type	Prongs	1-49	50-249	250-499	500-999	1M-2499
38F800	78RS4	4	.26	.218	.183	.156	.139
38F801	78RS5	5	.28	.233	.196	.168	.149
38F802	78RS6	6	.30	.251	.210	.180	.160
38F803	78RS7S	7S	.32	.268	.225	.193	.171
38F806	78RS8	Octal	.29	.238	.200	.121	.152
38F807	78RS8L	Loktal	.40	.336	.282	.241	.214
38F808	78RS9	9	.31	.259	.218	.186	.165
38F809	78RS11	11	.35	.294	.247	.211	.188

TYPE RSS STEATITE SOCKETS

Low-loss steatite for high frequency transmitters, amplifiers and power supplies. Ideal for use in high temperatures. Mtg. hole, 1 3/16" except (*) 1 21/64". Universal removable mounting plate with slotted holes. Shpg. wt., 3 oz.

Stock No.	Type	Prongs	1-49	50-249	250-499	500-999	1M-2499
38F860	49RSS4	4	.92	.769	.645	.553	.491
38F861	49RSS5	5	.94	.783	.657	.563	.500
38F863	49RSS7S	7 small	1.31	1.100	.921	.789	.700
38F864	*49RSS7L	7 large	1.69	1.420	1.190	1.020	.904
38F865	49RSS8	Octal	1.12	.934	.784	.671	.596

TYPE MIP SOCKETS

High dielectric bakelite body with molded in steel plate. *Requires 1 1/8" hole for mounting. **Requires 1 9/32" hole. All others mount in 1 5/32" hole. †Mica-filled phenolic socket. Shpg. wt., 2 oz.

Stock No.	Type	Prongs	1-49	50-249	250-499	500-999	1M-2499
38F840	77MIP4	4	.19	.155	.130	.111	.099
38F841	77MIP5	5	.21	.172	.145	.124	.110
38F842	77MIP6	6	.23	.190	.159	.136	.121
38F843	77MIP7S	7S	.25	.209	.175	.150	.133
38F844	**77MIP7L	7L	.28	.231	.194	.166	.148
38F845	77MIP8	Octal	.21	.179	.150	.129	.114
38F839	†77MIP8T	Octal	.25	.212	.178	.153	.135
39F1244	†77MIP11T	11	.31	.261	.219	.188	.167
38F846	*88-8	Octal	.23	.188	.158	.135	.120
38F847	*88-8X	Loktal	.33	.273	.229	.196	.174
38F848	77MIP9	9	.25	.207	.174	.149	.132
38F849	77MIP11	11	.29	.238	.200	.171	.152
38F850	77MIP12	12	.30	.249	.209	.179	.159
39F149	77MIP20	20	.67	.559	.469	.401	.356

TYPE S SOCKETS

Retainer ring sockets. For easy assembly to chassis or panel from 19 gauge (.044") to 16 gauge (.062") with tempered steel retainer ring. High di-electric molded bakelite. Rotation feature permits lining up contacts. All mount in 1 11/64" to 1 7/32" hole. With retainer. Wt., 2 oz.

Stk. No.	Type	Prongs	1-49	50-249	250-499	500-999	1M-2499
38F810	78S4	4	.18	.153	.128	.110	.098
38F811	78S5	5	.20	.171	.143	.123	.109
38F812	78S6	6	.22	.186	.156	.134	.119
38F813	78S7S	7 small	.25	.205	.172	.148	.131
38F818	78S8	Octal	.21	.176	.147	.126	.112
39F1045	78S8T	8	.25	.209	.175	.150	.133
38F817	78S9	9	.24	.197	.165	.141	.125
38F818	78S8L	Loktal	.32	.271	.228	.195	.173
38F819	78-A7P	7 min.	.47	.390	.327	.280	.249
38F820	78-A9P	9 min.	.35	.289	.242	.208	.184
38F821	78-S11	11	.28	.231	.194	.166	.148
39F1046	78S11T	11	.32	.266	.223	.191	.170

MINIATURE RETAINER RING SOCKETS

For installation in compact electronic equipment. Black molded bakelite bodies. Mount in 5/8" round or "D" shaped hole with ring provided. Wt., 2 oz.

Stk. No.	Type	Prongs	1-49	50-249	250-499	500-999	1M-2499
38F825	78-S3S	3	.12	.101	.085	.073	.064
38F826	78-S4S	4	.16	.132	.111	.095	.084
38F827	78-S5S	5	.21	.176	.147	.126	.112
38F828	78-S6S	6	.22	.184	.155	.133	.118
38F830	78-7P	7	.29	.245	.206	.176	.157

CATHODE-RAY TUBE SOCKETS

Type 59-402. Duodecal socket for cathode-ray tubes with 12 equally spaced pins on circle dia. of 1.063". Bakelite body, removable cap.

Stock No.	1-49	50-249	250 4°9	500-999	1M-24°°
38F901	.93	.778	.653	.559	.496

MAGNAL 11-CONTACT SOCKET

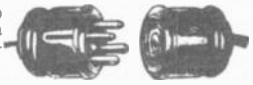
Type 49-SS11L. Has 1 1/16" pin circle for C-R tubes with magnal 11-prong base. Made of low-loss steatite. Has steel retaining ring for quick assembly. Requires 1 3/8" mounting hole.

Stock No.	1-49	50-249	250-499	500-9°°	1M-2499
38F900	1.59	1.33	1.12	.956	.849

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

Amphenol Connectors, Receptacles & Plugs

TYPE 86-PM SHIELDED MULTI-WIRE CONNECTORS



Consists of Amphenol "S" type sockets or "CP" plug and snap-on black steel caps with rubber grommets. Takes cable up to 7/16" dia. Size, 1 3/16 x 1 3/32". Wt., 2 oz.

MALE

Stk. No.	Type	Contacts	1-49	50-249	250-499	500-999	1000-2499
39F120	86-PM4	4	.45	.376	.315	.270	.240
39F121	86-PM5	5	.45	.379	.318	.273	.242
39F122	86-PM6	6	.47	.395	.331	.284	.252
39F123	86-PM7S	7S	.57	.480	.403	.345	.306
39F125	86-PM8	8 oct.	.47	.397	.333	.285	.253
39F126	86-PM9	9	.48	.404	.339	.290	.258
39F127	86-PM11	11	.49	.411	.345	.295	.262
42F025	86-PM12	12	.50	.416	.349	.299	.265
42F026	86-PM20	20	.69	.567	.476	.408	.362

FEMALE

39F140	78-PF4	4	.41	.339	.285	.244	.216
39F141	78-PF5	5	.43	.357	.299	.256	.228
39F142	78-PF6	6	.45	.372	.312	.268	.238
39F143	78-PF7S	7S	.47	.392	.329	.281	.250
39F145	78-PF8	8 oct.	.43	.362	.304	.260	.231
39F146	78-PF9	9	.46	.385	.323	.276	.245
39F147	78-PF11	11	.50	.418	.350	.300	.266

CAPS AND CABLE CLAMPS

Stk. No.	Type	Description	1-49	50-249	250-499	500-999	1000-2499
42F017	3-13	Cap. with end grommet	.14	.117	.098	.084	.074
42F018	3-17	Cap. with side grommet	.20	.171	.143	.123	.109
42F019	3-24	Cap. with cable clamp	.23	.191	.161	.138	.122

Stk. No.	Type	Description	1-24	25-99	100-249	250-499	500-999
39F150	79-CC4	Cable Clamp	.09	.075	.063	.054	.048

MULTI-WIRE CONNECTORS WITH CABLE CLAMPS

All specifications are as above, but with high quality cable clamps. Takes cable up to 7/16" dia. Size, 1 3/16 x 1 3/32". Shpg. wt. 3 oz.

MALE

Stk. No.	Type	Contacts	1-49	50-249	250-499	500-999	1000-2499
42F000	86-PM4-11	4	.54	.454	.381	.326	.289
42F001	86-PM5-11	5	.55	.459	.385	.330	.293
42F002	86-PM6-11	6	.57	.473	.397	.340	.302
42F003	86-PM7S-11	7S	.48	.402	.337	.289	.256
42F005	86-PM8-11	8	.57	.475	.399	.341	.303
42F006	86-PM9-11	9	.58	.482	.404	.346	.307
42F007	86-PM11-11	11	.58	.489	.410	.351	.312
42F027	86-PM12-11	12	.59	.496	.416	.356	.316

FEMALE

42F009	78-PF4-11	4	.50	.418	.350	.300	.266
42F010	78-PF5-11	5	.52	.435	.365	.313	.278
42F011	78-PF6-11	6	.54	.451	.378	.324	.287
42F012	78-PF7S-11	7S	.56	.470	.394	.338	.300
42F014	78-PF8-11	8	.53	.440	.369	.316	.281
42F015	78-PF9-11	9	.55	.463	.388	.333	.295
42F016	78-PF11-11	11	.60	.498	.418	.358	.317

"CP" PLUGS

Can be assembled in any one of the plug caps or receptacle shells. Ideal for use as chassis connectors, with plug-in units. Plugs with 4, 5, 6 and 7 contacts do not have center guide post. Current rating is 5 amps except (†) 3 amps. (*) Mica filled phenolic. Size: 1 3/4 x 1 7/16". Wt. 2 oz.

42F030	86-CP4	4	.23	.190	.159	.136	.121
42F031	86-CP5	5	.23	.193	.162	.139	.123
42F032	86-CP6	6	.25	.209	.175	.150	.133
42F033	86-CP7S	7 small	.26	.216	.181	.155	.138
42F034	86-CP8	8 octal	.25	.211	.177	.151	.134
42F035	86-CP8T*	8	.26	.218	.183	.156	.139
42F036	86-CP9	9	.26	.218	.183	.156	.139
42F037	86-CP11	11	.27	.224	.188	.161	.143
42F038	86-CP12†	12	.28	.230	.193	.165	.147

STEEL MOUNTING SHELLS

Type 23-1S extends 1 3/16" above or below chassis. Mounts in 1 3/4" hole. 3 notch holes for #6 screws. Type 61-61 recesses 1 3/16" only. Mounts in 1 7/16" hole. Two 9/32" screw holes on 1 3/4" center. Shpg. wt. 5 oz.

61-61 23-1S

Stock No.	Type	1-49	50-249	250-499	500-999	1000-2499
39F1242	23-1S	.26	.218	.183	.156	.139
39F1243	61-61	.14	.120	.101	.086	.077

RECEPTACLES AND PLUGS

A B C D

Mount on or below panels, or with cable terminals. Rated 110 volts, 15 amps or 250 volts, 10 amps. Bakelite insulation. Retainer ring types require 1 11/64" hole. Mounting plate types require 1 9/32" hole & mounting centers, slotted 1 1/2" to 1 7/8"; recessed shell types require 1 3/8" hole with mounting centers, 1 3/4". Two pole female receptacles take standard or polarized plugs. Fig. A, with retainer ring, Fig. B, with removable mounting plate. Fig. C, with recessed shell. Fig. D, with shielded cable clamp. U.L. Approved. Av. shpg. wt., 3 oz.

Stk. No.	Type	Poles	Descrip.	Fig.	1-49	50-249	250-499	500-999	1000-2499
39F100	61-F	2	Fem. univ.	A	.37	.308	.258	.221	.196
39F101	60-F	3	Fem. Pol.	A	.45	.374	.314	.269	.239
39F102	61-M	2	Male Std.	A	.37	.310	.260	.223	.198
39F103	61-MP	2	Male Pol.	A	.35	.296	.248	.213	.189
39F104	60-M	3	Male Pol.	A	.52	.435	.365	.313	.278
39F110	61-F10	2	Fem. Univ.	C	.56	.472	.396	.339	.301
39F111	61-M10	2	Male Std.	C	.57	.473	.397	.340	.302
39F112	61-MP10	2	Male Pol.	C	.51	.480	.403	.345	.304
39F105	61-F1	2	Fem. univ	B	.44	.369	.310	.265	.235
39F106	60-F1	3	Fem. Pol.	B	.52	.433	.364	.311	.276
39F107	61-M1	2	Male Std.	B	.46	.388	.326	.279	.248
39F108	61-MP1	2	Male Pol.	B	.43	.357	.300	.256	.226
39F109	60-M1	3	Male Pol.	B	.59	.494	.415	.355	.315
39F113	61-F11	2	Fem. Univ.	D	.58	.482	.404	.346	.307
39F114	61-M11	2	Male Std.	D	.58	.484	.406	.348	.309
39F115	61-MP11	2	Male Pol.	D	.56	.470	.394	.338	.297
39F116	Type 61-M1P-61F. Molded in plate receptacle. Takes 2 pole plug.				.40	.331	.277	.238	.211

MINIATURE CABLE CONNECTORS

E F G

For cables up to six conductors. Bakelite elements are housed in cadmium plated brass shells. Plugs are 1 5/8" long. Chassis units mount on 1 1/4" centers.

SERIES 78 & 91

Stk. No.	Type	Fig.	Cont.	1-49	50-249	250-499	500-999	1000-2499
39F080	91-MPF3L	E	3	.47	.393	.330	.283	.251
39F082	91MPM3L	F	3	.42	.350	.293	.251	.223
39F084	91-MPM5L	F	5	.44	.369	.310	.265	.235
39F081	91-MPF4L	E	4	.49	.409	.343	.294	.261
39F083	91-MPM4L	F	4	.43	.360	.302	.259	.230
39F085	91-MPM6L	F	6	.47	.390	.327	.280	.249

Stock No.	Type	Fig.	Cont.	1-49	50-249	250-499	500-999	1000-2499
39F090	78-PCG3	G	3	.31	.259	.218	.186	.165
39F091	78-PCG4	G	4	.35	.289	.242	.208	.184
39F092	78-PCG5	G	5	.39	.322	.270	.231	.205
39F093	78-PCG6	G	6	.40	.331	.277	.238	.211

RECTANGULAR PLUGS AND SOCKETS

Molded of black bakelite with molded-in mounting plate. Type 70-26 is plug; 77-26 is a socket. Wt., 3 oz.

Stk. No.	Type	Pins	1-49	50-249	250-499	500-999	1000-2499
39F165	70-26	4	.15	.124	.104	.089	.079
39F166	77-26	4	.28	.230	.193	.165	.147

2-POLE GROUNDING TYPE RECEPTACLES AND PLUGS

160-2 160-4 160-9

Rated 15 amps, 110 volts. Mtg. Ctr. A mount in 1 9/32" dia. center hole and two 5/32" holes on 1 1/2" to 1 55/64" centers. Mtg. Ctr. B mount in 1 7/16" hole; two 5/32" screw holes on 1 3/4" centers. Mtg. Ctr. C 7/16" I.D. grommet or clamp to 3/8" O.D. Mtg. Ctr. D meets MIL-M-14F req. Mount in 1 11/64" keyed hole. Wt. 3 oz. * w/Grommet. † w/Clamp.

Stk. No.	Type	Description	Mtg. Ctr.	1-24	25-99	100-249	250-499	500-999
39F1230	160-2	Fem. MIP	A	.93	.78	.654	.568	.497
39F1231	160-3	Male MIP	A	1.10	.92	.772	.661	.587
39F1232	160-4	Fem. Flush Mtr.	B	1.08	.90	.758	.649	.576
39F1233	160-5	Male Flush Mtr.	B	1.25	1.05	.880	.754	.669
39F1234	*160-6	Fem. Shl'd	C	.98	.82	.685	.586	.521
39F1235	*160-7	Male Shl'd	C	1.14	.95	.797	.683	.606
39F1236	†160-8	Fem. Shl'd	C	1.06	.88	.740	.634	.563
39F1237	†160-9	Male Shl'd	C	1.22	1.02	.853	.730	.648
39F1238	160-10	Fem. Insert	D	.85	.71	.596	.510	.453
39F1239	160-11	Male Insert	D	1.01	.85	.710	.608	.539

"MS" Connector Insert Contact Arrangements

Each insert is available with all male or female contacts. Contacts are non-rotating with all solder cups aligned for maximum wiring speed. Contact sizes correspond in number coding to wire sizes. Meet MIL-C-5015.

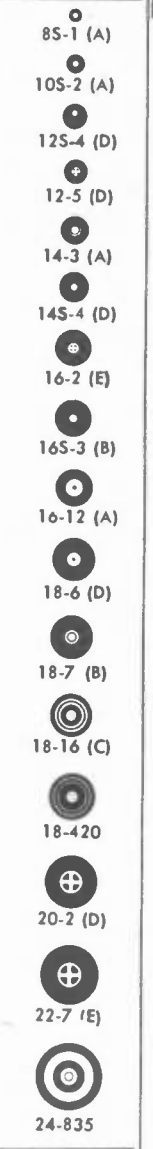
CURRENT RATING:

Contact Size	20	16	12	8	4	0
Amperes	10	23	41	73	135	245

ALTERNATE INSERT POSITIONS—

(H) W, X, Y, or Z
(J) W, X, or Y
(K) W, Y, or Z
(L) X or Y
(M) X
(N) W or Z
(P) W or Y

1 Contact



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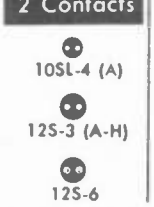

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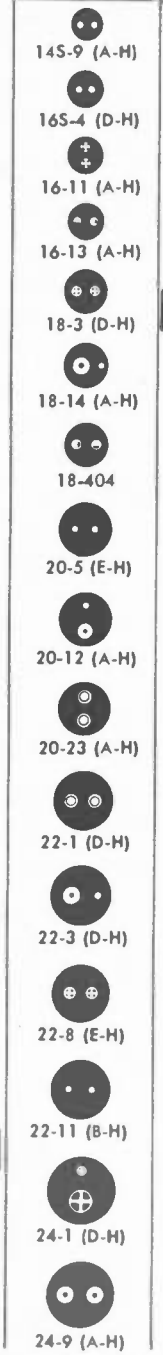

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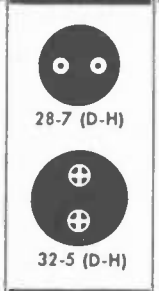

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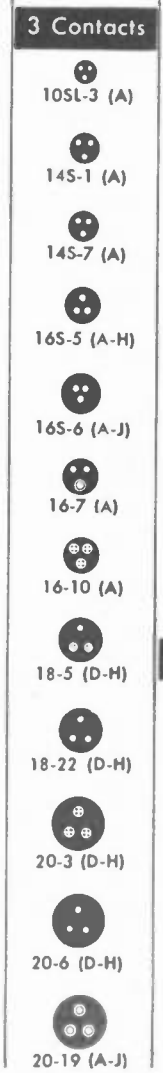

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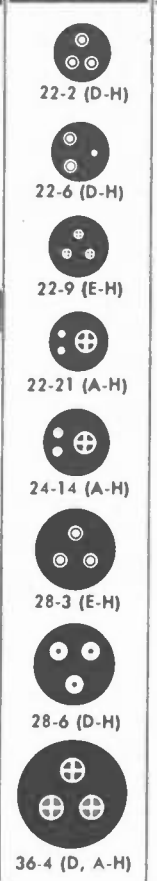

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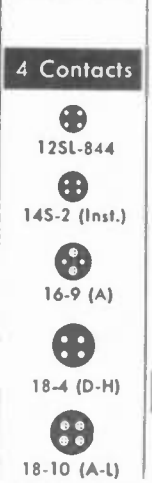

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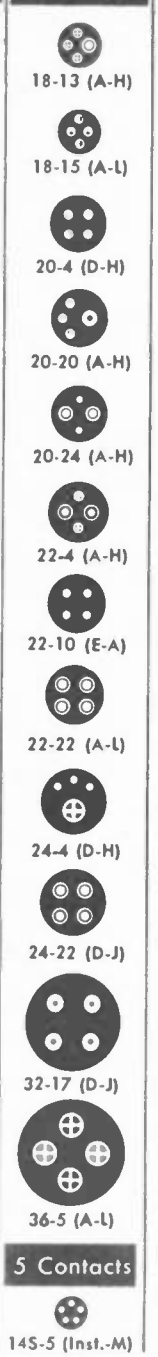
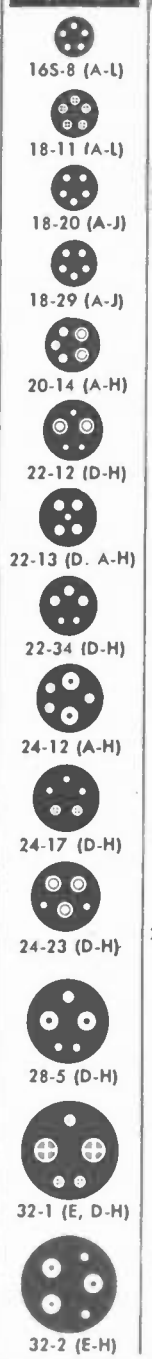


5 Contacts

5 Contacts (Con't.)



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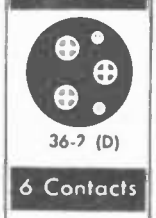

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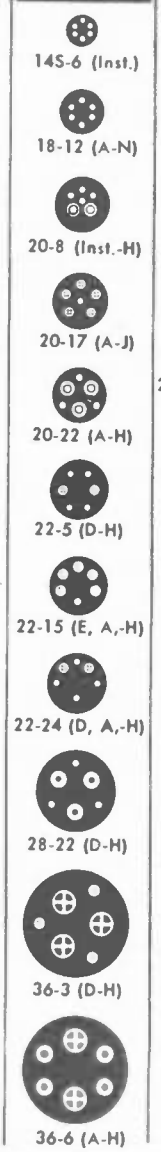
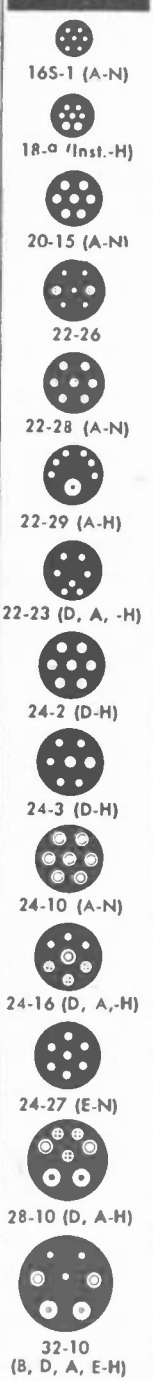


7 Contacts



Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

"MS" Connector Insert Contact Arrangements

Service—Limiting Operating Voltages @ Sea Level						
	Inst.	A	D	E	B	C
DC	250	700	1250	1750	2450	4200
AC (rms)	200	500	900	1250	1750	3000

CODE OF WIRE SIZES

8 Contacts

18-8 (A-N)

20-7 (D, A-H)

20-9 (D, A-H)

22-18 (A-H)

22-23 (D, A-P)

22-36 (D, A-P)

22-404

24-6 (D, A-H)

32-15 (D-H)

9 Contacts

20-16 (A-H)

20-18 (A-H)

22-16 (A-H)

22-21 (A-H)

22-17 (D, A-H)

9 Contacts (Con't.)

22-20 (A-H)

22-27 (D, A-K)

24-11 (A-H)

28-1 (D, A-H)

28-4 (D, E-H)

32-3 (D-H)

10 Contacts

18-1 (A, Inst.)

18-19 (A)

24-21 (D)

28-19 (A, B, D)

11 Contacts

20-33 (A)

24-20 (D-H)

11 Contacts (Con't.)

28-14 (D-H)

12 Contacts

24-19

28-8 (A, D, E-H)

28-9 (D-H)

28-18 (Inst., A, C, D-H)

32-101 (D-H)

13 Contacts

20-11 (Inst.)

14 Contacts

20-27 (Inst., A-H)

22-19 (A-H)

28-2 (D-H)

14 Contacts (Con't.)

28-20 (A-H)

32-4 (A, D-H)

32-9 (D-H)

32-102 (A, C, D-H)

15 Contacts

28-17 (A, B, D-H)

32-12(A, D, -H)

36-405

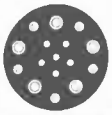
36-407

40-5 (A-H)

16 Contacts

24-5 (A-H)

24-7 (A-H)


36-14 (D-J)

17 Contacts

20-29 (A-N)

36-13 (A, E-H)

19 Contacts

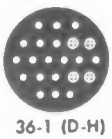
22-14 (A-H)

20 Contacts

28-16 (A-H)

22 Contacts

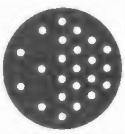
28-11 (A-H)

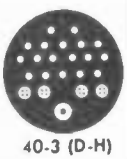

36-1 (D-H)

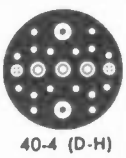
23 Contacts

32-6 (A-H)

32-13 (D-H)


40-2 (B, D-H)


40-3 (D-H)


40-4 (D-H)

24 Contacts

24-28 (Inst.-H)

26 Contacts

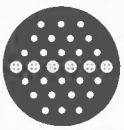
28-12 (A-J)

29 Contacts

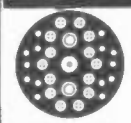
40-10 (A-H)

30 Contacts

32-8 (A-H)

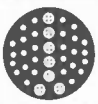

40-1 (D-H)

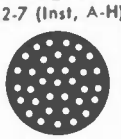
31 Contacts


36-9 (A-H)

35 Contacts

28-15 (A-H)


32-7 (Inst, A-H)


36-15 (A, D-H)

37 Contacts

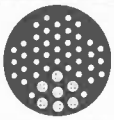
28-21 (A-H)

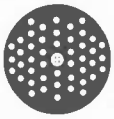
36-406 (A)

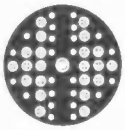
42 Contacts

44-1 (D-H)

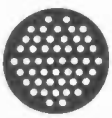
47 Contacts


36-7 (A-H)


36-8 (A-H)

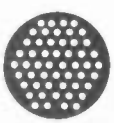

40-9 (A-H)

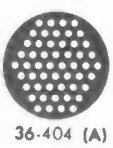
48 Contacts


36-10 (A-H)

52 Contacts

32-414 (A)


36-403 (A)


36-404 (A)

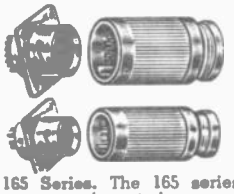
Amphenol "MS" & Miniature Connectors

AMPHENOL 67 SERIES MINNI "E" MINIATURE CONNECTORS

Amphenol's 67 Series of MINNI "E" connectors quick-disconnect, multi-contact, miniature bayonet lock types. First miniature connectors to fully meet the "E" requirements of MIL-C-5015. MINNI "E" Connectors are available as Plugs, Cable and Panel Receptacles and Single Hole Mounting Receptacles in four constructions, five shell sizes and 17 insert arrangements. Positive locking action. Type P construction for potting. Disposable polyethylene potting form. Type E has unitized grommet/clamp individually sealing conductor at back.

	67-01						67-02			67-03			67-06					
	E			P			E			E			E			P		
Shell Insert	1-24	25-99	100-199	1-24	25-99	100-199	1-24	25-99	100-199	1-24	25-99	100-199	1-24	25-99	100-199	1-24	25-99	100-199
12-60S	10.44	9.14	7.83	8.28	7.25	6.21	6.30	5.51	4.73	13.24	11.59	9.93	10.02	8.77	7.52	7.84	6.86	5.88
14-9S	10.02	8.77	7.52	7.76	6.79	5.82	6.48	5.67	4.86	7.00	6.13	5.25	10.14	8.87	7.61	7.56	6.62	5.67
14-12P	8.70	7.61	6.53	6.66	5.83	5.00	5.34	4.67	4.01	5.86	5.13	4.40	8.48	7.42	6.36	6.44	5.64	4.83
14-12S	10.14	8.87	7.61	8.10	7.09	6.08	7.14	6.25	5.36	7.66	6.70	5.75	9.92	8.68	7.44	7.88	6.90	5.91
18-24P	10.38	9.08	7.79	7.46	6.53	5.60	6.60	5.78	4.95	7.16	6.27	5.37	10.38	9.08	7.79	7.46	6.53	5.60
18-24S	13.82	12.09	10.37	10.90	9.54	8.18	9.92	8.68	7.44	10.52	9.21	7.89	13.82	12.09	10.37	10.90	9.54	8.18
18-64P	11.06	9.68	8.30	8.48	7.42	6.36	7.08	6.20	5.31	7.66	6.70	5.75	11.06	9.68	8.30	8.48	7.42	6.36
18-64S	12.04	10.54	9.03	9.46	8.28	7.10	8.12	7.11	6.09	8.70	7.61	6.53	12.04	10.54	9.03	9.46	8.28	7.10
20-37P	13.76	12.04	10.32	11.28	9.87	8.46	11.08	9.70	8.31	11.84	10.36	8.88	13.80	12.08	10.35	11.34	9.92	8.51
20-37S	18.62	16.29	13.97	16.22	14.19	12.17	14.58	12.76	10.94	15.38	13.46	11.54	18.66	16.33	14.00	16.20	14.18	12.15
22-48P	13.76	12.04	10.32	12.54	10.97	9.41	11.82	10.34	8.87	13.34	11.67	10.01	13.48	11.80	10.11	12.26	10.73	9.20
22-48S	19.86	17.38	14.90	18.64	16.31	13.98	17.66	15.45	13.25	19.18	16.78	14.39	19.58	17.13	14.69	18.36	16.07	13.77

AMPHENOL 165 SERIES MINIATURE MS TYPE CONNECTORS



Size	Small	Large
Plug diameter	5/8"	1"
Recpt. mtg. ctrs.	25/32"	.968"
Plug length	2 3/4"	2 3/4"
Cable opening	3/8"	1 1/32"
Recpt. flange	1 1/16"	1 5/16"
Mounting hole	13/16"	1 1/16"

165 Series. The 165 series are pressure-proof and completely waterproof, mated or apart. Weights average about one third that of standard "MS" connectors. Withstand government salt-spray tests by many hours in excess of standards. Extremely efficient in operation, the contacts are bronze, gold plated over silver. Features built-in cable clamp. Av. Shpg. wt., 3 oz.

No.	Type	Description	Contacts @ AWG	1-49	50-99
38F300	165-9	Sml.plug	12-#20 male	4.08	3.25
38F301	165-10	Sml.plug	12-#20 female	6.08	4.84
38F302	165-11	Sml. recpt.	12-#20 male	3.07	2.44
38F303	165-12	Sml. recpt.	12-#20 female	5.04	4.00

No.	Type	Description	Contacts @ AWG			1-49	50-99
38F304	165-13	Sml. plug	9-#20	-	male	3.87	3.09
38F305	165-14	Sml. plug	9-#20	-	fem.	5.95	4.74
38F306	165-15	Sml. recpt.	9-#20	-	male	2.87	2.28
38F307	165-16	Sml. recpt.	9-#20	-	fem.	3.87	2.93
38F308	165-17	Lge. plug	7-#20	4-#16	male	5.42	4.31
38F309	165-18	Lge. plug	7-#20	4-#16	fem.	6.83	5.28
38F310	165-19	Lge. recpt.	7-#20	4-#16	male	3.42	2.72
38F311	165-20	Lge. recpt.	7-#20	4-#16	fem.	4.81	3.67
38F312	165-25	Lge. plug	24-#20	-	male	6.41	5.10
38F313	165-26	Lge. plug	24-#20	-	fem.	8.42	6.70
38F314	165-27	Lge. recpt.	24-#20	-	male	4.42	3.53
38F315	165-28	Lge. recpt.	24-#20	-	fem.	6.41	5.10
38F316	165-29	Lge. plug	14-#16	-	male	5.53	4.40
38F317	165-30	Lge. plug	14-#16	-	fem.	7.68	6.12
38F318	165-31	Lge. recpt.	14-#16	-	male	3.56	2.84
38F319	165-32	Lge. recpt.	14-#16	-	fem.	5.68	4.52
38F320	165-33	Sml. plug	5-#20	-	male	3.73	2.94
38F321	165-34	Sml. plug	5-#20	-	fem.	5.05	4.03
38F322	165-35	Sml. recpt.	5-#20	-	male	2.64	2.11
38F323	165-36	Sml. recpt.	5-#20	-	fem.	3.20	2.54

"MS" CONNECTORS

Amphenol "MS" connectors approved under Specification MIL-C-5015-D. Connectors built to this new specification mate with connectors built to previous specs. Connectors and fittings will be furnished in olive drab finish as required by current military specs. Alternate insert positions available from stock, special insert materials and finishes are available on special order. By referring to the illustrations and the type descriptions at right, the correct number may be located to properly mate an existing connector or for a new application. Av. Shpg. wt. 3 oz.

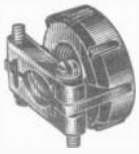
Newark can supply the Amphenol "MS" connectors for potting, as well as the pressurized, fireproof and explosion-proof types. Literature and prices on request.

Plug Dust Cap	1-49	50-99	100-999	Fits Conn. Size	Dust Cap	1-49	50-99	100-999
9760-10P	.75	.63	.50	10S, 10SL	9760-10	.50	.41	.33
9760-12P	.83	.69	.55	12, 12S, 12SL	9760-12	.56	.46	.37
9760-14P	.95	.79	.63	14, 14S	9760-14	.60	.50	.40
9760-16P	1.08	.90	.72	16, 16S	9760-16	.66	.55	.44
9760-18P	1.11	.93	.74	18	9760-18	.78	.65	.52
9760-20P	1.14	.95	.76	20	9760-20	.86	.71	.57
9760-22P	1.43	1.19	.95	22	9760-22	.98	.81	.75
9760-24P	1.71	1.43	1.14	24	9760-24	1.14	.95	.76
9760-28P	1.80	1.50	1.20	28	9760-28	1.37	1.14	.91
9760-32P	2.64	2.20	1.76	32	9760-32	1.59	1.32	1.06
9760-36P	2.73	2.28	1.82	36	9760-36	1.76	1.46	1.17

97-3057-10-6 Step down cable clamp for size 18 connector.
1-49.....**.77** 50-99.....**.64** 100-999.....**.51**

97-3057-12-6 Step down cable clamp for size 20 and 22 connectors.
1-49.....**.81** 50-99.....**.68** 100-999.....**.54**

CABLE CLAMP AND BOOT



MS3057-A Series. Clamp gives aid to cable at plug or receptacle. Relieves strain placed on soldered connections. Made of die-cast aluminum, insuring strength and light weight. Both sides of cable clamp move, automatically center cable. Includes AN3420 boot for added cable support. For small O.D. cables, additional AN3420 boots may be used. Shpg. wt. 1½ oz.

Part No.	Fits Connector Size	1-9	10-49	50-99	100-999
MS3057-4A	10SL, 12, 12S	.69	.62	.55	.45
MS3057-6A	12SL, 14, 14S	.69	.62	.55	.45
MS3057-8A	16, 16S	.72	.63	.56	.46
MS3057-10A	18	.79	.69	.62	.52
MS3057-12A	20, 22	.87	.77	.68	.56
MS3057-16A	24, 28	1.18	1.02	.92	.76
MS3057-20A	32	1.39	1.21	1.07	.89
MS3057-24A	36	1.79	1.46	1.29	1.15

TELESCOPING BOOTS

AN3420 Series. Neoprene boot weather & dust proofs cable clamp. Telescoping boots reduce clamp I.D. for pos. grip & strain relief of smaller cables. ¼ oz.

Part No.	1-9	10-49	50-99	100-999
AN3420-3	.09	.08	.07	.06
AN3420-4	.09	.08	.07	.06
AN3420-6	.10	.09	.08	.07
AN3420-8	.12	.09	.08	.07
AN3420-10	.15	.12	.11	.10
AN3420-12	.15	.12	.11	.10
AN3420-16	.19	.15	.14	.12
AN3420-20	.28	.23	.20	.18

ECONOMY CABLE CLAMPS

Cable Clamp	Fits Connector Size	1-49	50-99	100-999	Cable Clamp	Fits Connector Size	1-49	50-99	100-999	Water Proof Cable Clamp	1-49	50-99	100-999
3057-3	8, 10S	.56	.48	.37	3057-12	20, 22	.75	.63	.50	.....	.....	.....	.....
3057-4	10SL, 12, 12S	.57	.48	.38	3057-16	24, 28	.92	.76	.61	.....	.....	.....	.....
3057-6	12SL, 14, 14S	.57	.48	.38	3057-20	32	1.13	.94	.75	9767-6	.68	.56	.45
3057-8	16, 16S	.59	.49	.39	3057-24	36	1.56	1.20	1.04	9767-8	.69	.58	.46
3057-10	18	.71	.59	.47	3057-28	40	1.94	1.61	1.29	9767-10	.87	.73	.58
					3057-32	44	2.33	1.94	1.55	.....	.....	.....	.....

Amphenol "MS" Connectors

3100A

3101A

3102A

3106A

3106B

FOR RIGHT ANGLE PLUGS
MS-3108A -3108B SEE
END OF THIS LISTING

Shell Insert	MS/3100 A				MS/3101 A				MS/3102 A				MS/3106 A				MS/3106 B			
	1-9	10-49	50-99	100-999	1-9	10-49	50-99	100-999	1-9	10-49	50-99	100-999	1-9	10-49	50-99	100-999	1-9	10-49	50-99	100-999
8S-1P	1.57	1.30	1.16	1.05	1.47	1.22	1.08	.98	.88	.73	.65	.59	1.02	.84	.75	.68				
8S-1S	1.57	1.30	1.16	1.05	1.47	1.22	1.08	.98	.88	.73	.65	.59	1.02	.84	.75	.68				
10S-2P	1.63	1.34	1.19	1.08	1.33	1.10	.98	.89	.61	.50	.44	.40	1.42	1.17	1.04	.94				
10S-2S	1.64	1.36	1.21	1.09	1.35	1.12	.99	.90	.62	.51	.46	.41	1.44	1.19	1.05	.95				
10SL-3P	1.04	.86	.76	.69	1.54	1.27	1.13	1.02	.80	.66	.58	.53	1.23	1.02	.90	.82				
10SL-3S																				
10SL-4P	1.02	.84	.75	.68	1.45	1.20	1.07	.97	.80	.66	.58	.53	1.21	1.00	.89	.81				
10SL-4S																				
12S-1P	1.23	1.02	.90	.82	1.42	1.17	1.04	.94	.71	.59	.52	.47	1.16	.96	.85	.77				
12S-1S	1.28	1.06	.94	.85	1.44	1.19	1.05	.95	.73	.60	.53	.48	1.18	.97	.86	.78				
12S-3P	1.11	.92	.81	.74	1.80	1.07	.95	.86	.59	.49	.43	.39	1.04	.86	.76	.69				
12S-3S	1.14	.94	.84	.76	1.33	1.10	.98	.89	.62	.51	.46	.41	1.07	.89	.79	.71				
12S-4P	1.16	.96	.85	.77	1.35	1.12	.99	.90	.64	.53	.47	.43	1.09	.90	.80	.72				
12S-4S	1.16	.96	.85	.77	1.35	1.12	.99	.90	.64	.53	.47	.43	3 48	.90	.80	.72				
12S-6P	3.55	2 93	2 60	2.36	3.74	3 09	2.74	2.48					3.70	2.87	2.55	2.31				
12S-6S	3.77	3 12	2.77	2 51	3.96	3.27	2 91	2.63	3.25	2.69	2.39	2.16		3.06	2.72	2.46				
12SL-844P									1.44	1.19	1.05	.95	2.66							
12SL-844S													1.37	2.20	1.96	1.77				
12-5P	1.35	1.12	.99	.90	1.51	1.24	1.10	1.00	.85	.70	.62	.56	1.47	1.13	1.00	.91				
12-5S	1.45	1.20	1.07	.97	1.61	1.33	1.18	1.07	.95	.79	.70	.63	1.19	1.22	1.08	.98				
14S-1P	1.19	.99	.88	.79	1.45	1.20	1.07	.97	.78	.64	.57	.52	1.21	.99	.88	.79	1.44	1.19	1.05	.95
14S-1S	1.21	1.00	.89	.81	1.47	1.22	1.08	.98	.80	.66	.58	.53	1.18	1.00	.89	.81	1.45	1.20	1.07	.97
14S-2P	1.18	.97	.86	.78	1.44	1.19	1.05	.95	.76	.63	.56	.51	1.26	.97	.86	.78	1.42	1.17	1.04	.94
14S-2S	1.26	1.04	.93	.84	1.52	1.26	1.12	1.01	.85	.70	.62	.56	1.12	1.04	93	.84	1.51	1.24	1.10	1.00
14S-4P	1.12	.93	.83	.75	1.38	1.14	1.02	.92	.71	.59	.52	.47	1.15	.93	.83	.75	1.37	1.13	1.00	.91
14S-4S	1.16	.96	.85	.77	1.42	1.17	1.04	.94	.74	.61	.55	.49	1.30	.96	.85	.77	1.40	1.16	1.03	.93
14S-5P	1.30	1.07	.95	.86	1.56	1.29	1.14	1.04	.88	.73	.65	.59	1.35	1.07	.95	.86	1.54	1.27	1.13	1.02
14S-5S	1.35	1.12	.99	.90	1.61	1.33	1.18	1.07	.93	.77	.69	.62	1.35	1.12	.99	.90	1.59	1.32	1.17	1.06
14S-6P	1.35	1.12	.99	.90	1.61	1.33	1.18	1.07	.93	.77	.69	.62	1.38	1.12	.99	.90	1.59	1.32	1.17	1.06
14S-6S	1.38	1.14	1.02	.92	1.64	1.36	1.21	1.09	.97	.80	.71	.64	1.19	1.14	1.02	.92	1.63	1.34	1.19	1.08
14S-7P	1.19	.99	.88	.79	1.45	1.20	1.07	.97	.78	.64	.57	.57	1.21	.99	.88	.79	1.44	1.19	1.05	.95
14S-7S	1.21	1.00	.89	.81	1.47	1.22	1.08	98	.80	.66	.58	.53	1.12	1.00	.89	.81	1.45	1.20	1.07	.97
14S-9P	1.12	.93	.83	.75	1.38	1.14	1.02	92	.71	.59	.52	.47	1.14	.93	.83	.75	1.37	1.13	1.00	.91
14S-9S	1.14	94	.84	.76	1.40	1.16	1.03	.93	.73	60	.53	.48	1.30	.94	.84	.76	1.38	1.14	1.02	.92
14S-10P	1.30	1.07	.95	.86	1.56	1.29	1.14	1.04	88	.73	.65	.59	1.40	1.07	.95	.86	1.54	1.27	1.13	1.02
14S-10S	1.40	1.16	1.03	.93	1.66	1.37	1.22	1.10	99	.82	72	.66	1.35	1.16	1.03	.93	1.64	1.36	1.21	1.09
16S-1P	1.51	1.24	1.10	1.00	1.63	1.34	1.19	1.08	95	.79	.70	.63	1.51	1.12	.99	.90	1.73	1.43	1.27	1.15
16S-1S	1.66	1.37	1.22	1.10	1.78	1.47	1.31	1.18	1.11	.92	.81	.74	1.18	1.24	1.10	1.00	1.89	1.56	1.38	1.25
16S-3S	1.33	1.10	.98	.89	1.45	1.20	1.07	.97	.78	64	.57	.52	1.18	.97	.86	.78	1.56	1.29	1.14	1.04
16S-4P	1.33	1.10	.98	89	1.45	1.20	1.07	.97	.78	.64	.57	.52	1.23	.97	.86	.78	1.56	1.29	1.14	1.04
16S-4S	1.38	1.14	1.02	.92	1.51	1.24	1.10	1.00	.83	.69	.61	.55	1.26	1.02	.90	.82	1.61	1.33	1.18	1.07
16S-5P	1.42	1.17	1.04	.94	1.54	1.27	1.13	1.02	.87	.72	.64	.58	1.30	1.04	.93	.84	1.64	1.36	1.21	1.09
16S-5S	1.45	1.20	1.07	.97	1.57	1.30	1.16	1.05	.90	.74	.66	.60	1.30	1.07	.95	.86	1.68	1.39	1.23	1.12
16S-6P	1.45	1.20	1.07	.97	1.57	1.30	1.16	1.05	.90	.74	.66	.60	1.30	1.07	.95	.86	1.68	1.39	1.23	1.12
16S-6S	1.45	1.20	1.07	.97	1.57	1.30	1.16	1.05	.90	.74	.66	.60	1.31	1.07	.95	.86	1.68	1.39	1.23	1.12
16S-8P	1.47	1.22	1.08	.98	1.59	1.32	1.17	1.06	.92	.76	.67	.61	1.37	1.09	.97	.87	1.70	1.40	1.24	1.13
16S-8S	1.52	1.26	1.12	1.01	1.64	1.36	1.21	1.09	.97	.80	.71	.64	1.37	1.13	1.00	.91	1.75	1.44	1.28	1.16
16S-15P	1.52	1.26	1.12	1.01	1.64	1.36	1.21	1.09	.97	.80	.71	.64	1.42	1.13	1.00	.91	1.75	1.44	1.28	1.16
16S-15S	1.57	1.30	1.16	1.05	1.70	1.40	1.24	1.13	1.02	.84	.75	.68	1.37	1.17	1.04	.94	1.80	1.49	1.32	1.20
16-2P	1.45	1.20	1.07	.97	1.51	1.24	1.10	1.00	.81	67	.60	.54	1.51	1.13	1.00	.91				
16-2S	1.59	1.32	1.17	1.06	1.64	1.36	1.21	1.09	95	.79	.70	.63	1 68	1.24	1.10	1.00				
16-7P	1.76	1.46	1.30	1.17	1.82	1.50	1.33	1.21	1 12	.93	.83	.75	1 94	1.39	1.23	1.12				
16-7S	2.02	1.67	1 49	1.35	2.08	1.72	1.52	1.38	1.38	1.14	1.02	.92	1.57	1.60	1.42	1.29				
16-9P	1.66	1.37	1.22	1.10	1.71	1.42	1.26	1.14	1.02	.84	.75	.68	1.78	1.30	1.16	1.05				
16-9S	1.87	1.54	1.37	1.24	1.92	1.59	1.41	1.28	1.23	1.02	.90	.82		1.47	1.31	1.18				
16-10P	1.61	1.33	1.18	1.07	1.66	1.37	1.22	1.10	.97	.80	.71	.64	1.52	1.26	1.12	1.01				
16-10S	1.80	1.49	1.32	1.20	1.85	1.53	1.36	1.23	1.16	.96	.85	.77	1.71	1.42	1.26	1.14				
16-11P	1.51	1.24	1.10	1.00	1.56	1.29	1.14	1.04	.87	.72	.64	.58	1.42	1.17	1.04	.94				
16-11S	1.70	1.40	1.24	1.13	1.75	1.44	1.28	1.16	1.06	.87	.77	.70	1 61	1 33	1.18	1.07				
16-12P	1.73	1.43	1.27	1.15	1.78	1.47	1.31	1.18	1.09	.90	.80	.72	1.64	1.36	1.21	1.09				
16-13P	3.67	3.03	2.69	2.44	3.72	3.07	2.73	2.47	3 03	2.50	2.22	2.01	3.58	2.96	2.63	2.38				
16-13S	4.24	3.50	3.11	2.82	4.29	3.55	3.15	2.85	3 60	2.97	2.64	2.39	4.15	3.43	3 05	2 76				
18-1P	1.87	1.54	1.37	1.24	2.09	1.73	1.54	1.39	1.28	1.06	.94	.85	1.78	1.47	1.31	1.18	2.13	1.76	1.56	1.41
18 1S	2.02	1.67	1 49	1.35	2.25	1.86	1.65	1.50	1.44	1.19	1.05	.95	1.94	1.60	1 42	1 29	2.28	1.89	1 68	1.52
18-3P	1.49	1.23	1.09	.99	1.71	1.42	1.26	1.14	.90	.74	.66	.60	1.40	1 16	1 03	.93	1.75	1.44	1.28	1.16
18-3S	1.83	1.52	1.35	1.22	2.06	1.70	1.51	1.37	1.25	1.03	.91	.83	1.75	1.44	1.28	1.16	2.09	1.73	1.54	1.39
18-4P	1.51	1.24	1.10	1.00	1 73	1.43	1.27	1.15	.92	.76	.67	.61	1.42	1.17	1.04	.94	1.76	1.46	1.30	1.17
18-4S	1.63	1.34	1.19	1.08	1.85	1.53	1.36	1.23	.85	.86	.76	.69	1.54	1.27	1.13	1.02	1.89	1.56	1.38	1.25
18-5P	1.44	1.19	1.05	.95	1.66	1.37	1.22	1.10	1.04	.70	.62	.56	1.35	1.12	.99	.90	1.70	1.40	1.24	1.13
18-5S	1.63	1.34	1.19	1.08	1.85	1.53	1.36	1.23	.99	.86	.76	.69	1.54	1.27	1.13	1.02	1.89	1.56	1.38	1.25
18-6P	1.57	1.30	1.16	1.05	1.80	1.49	1.32	1.20	1.28	.82	.72	.66	1.49	1.23	1.09	.99	1.83	1.52	1.35	1.22
18-6S	1.87	1.54	1.37	1.24	2.09	1.73	1.54	1.39	.90	1.06	.94	.85	1.78	1.47	1.31	1.18	2.13	1.76	1.56	1.41
18-7P	1.49	1.23	1.09	.99	1.71	1.42	1.26	1.14	1.28	.74	.66	.60	1.40	1.16	1.03	.93	1.75	1.44	1.28	1.16
18-8P	1.87	1.54	1.37	1.24	2.09	1.73	1.54	1.39	1.40	1.06	.94	.85	1.78	1.47	1.31	1.18	2.13	1.76	1.56	1.41
18-8S	1.99	1.64	1.46	1.32	2.21	1.83	1.63	1.47	1.18	1.16	1.03	.93	1.90	1.57	1.40	1.27	2.25	1.86	1.65	1.50
18-9P	1.76	1.46	1.30	1.17	1.99	1.64	1.46	1.32	1.31	.97	.86	.78	1.68	1.39	1.23	1.12	2.02	1.67	1.49	1.35
18-9S	1.90	1 57	1.40	1.27	2.13	1.76	1.56	1.41	1.21	1.09	.97	.87	1.82	1.50	1.33	1.21	2.16	1.79	1.59	1.44
18-10P	1.80	1.49	1.32	1.20	2.02	1.67	1.49	1.35		1.00	.89	.81	1.71	1.42	1.26	1.14	2.06	1.70	1.51	1.37

Amphenol "MS" Conenctors

CONTINUED FROM PRECEDING PAGE

SEE END OF LISTING FOR RIGHT ANGLE PLUGS

Shell Insert	MS/3100 A				MS/3101 A				MS/3102 A				MS/3106 A				MS/3106 B			
	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999
18-10S	1.99	1.64	1.46	1.32	2.21	1.83	1.63	1.47	1.40	1.16	1.03	.93	1.90	1.57	1.40	1.27	2.25	1.86	1.65	1.50
18-11P	1.80	1.49	1.32	1.20	2.02	1.67	1.49	1.35	1.21	1.00	.89	.81	1.71	1.42	1.26	1.14	2.06	1.70	1.51	1.37
18-11S	1.87	1.54	1.37	1.24	2.09	1.73	1.54	1.39	1.28	1.06	.94	.85	1.78	1.47	1.31	1.18	2.13	1.76	1.56	1.41
18-12P	1.68	1.39	1.23	1.12	1.80	1.57	1.40	1.27	1.09	.90	.80	.72	1.59	1.32	1.17	1.06	1.94	1.60	1.42	1.29
18-12S	1.80	1.49	1.32	1.20	2.02	1.67	1.49	1.35	1.21	1.00	.89	.81	1.71	1.42	1.26	1.14	2.06	1.70	1.51	1.37
18-13P	1.82	1.50	1.33	1.21	2.04	1.69	1.50	1.36	1.23	1.02	.90	.82	1.73	1.43	1.27	1.15	2.08	1.72	1.52	1.38
18-16P	1.63	1.34	1.19	1.08	1.85	1.53	1.36	1.23	1.04	.86	.76	.69	1.54	1.27	1.13	1.02	1.89	1.56	1.38	1.25
18-16S	1.90	1.57	1.40	1.27	2.13	1.76	1.56	1.41	1.31	1.09	.97	.87	1.82	1.50	1.33	1.21	2.16	1.79	1.59	1.44
18-18P	2.02	1.67	1.49	1.35	2.25	1.86	1.65	1.50	1.44	1.19	1.05	.95	1.94	1.60	1.42	1.29	2.28	1.89	1.68	1.52
18-18S	2.04	1.69	1.50	1.36	2.27	1.87	1.66	1.51	1.45	1.20	1.07	.97	1.95	1.62	1.44	1.30	2.30	1.90	1.69	1.53
18-19P	2.53	2.09	1.85	1.68	2.75	2.27	2.02	1.83	1.94	1.60	1.42	1.29	2.44	2.02	1.79	1.62	2.79	2.30	2.04	1.85
18-19S	2.06	1.70	1.51	1.37	2.28	1.89	1.68	1.52	1.47	1.22	1.08	.98	1.97	1.63	1.45	1.31	2.32	1.92	1.70	1.54
18-20P	1.61	1.33	1.18	1.07	1.83	1.52	1.35	1.22	1.02	.84	.75	.68	1.52	1.26	1.12	1.01	1.87	1.54	1.37	1.24
18-20S	1.71	1.42	1.26	1.14	1.94	1.60	1.42	1.29	1.12	.93	.83	.75	1.63	1.34	1.19	1.08	1.97	1.63	1.45	1.31
18-22P	1.49	1.23	1.09	.99	1.71	1.42	1.26	1.14	.90	.74	.66	.60	1.40	1.16	1.03	.93	1.75	1.44	1.28	1.16
18-22S	1.61	1.33	1.18	1.07	1.83	1.52	1.35	1.22	1.02	.84	.75	.68	1.52	1.26	1.12	1.01	1.87	1.54	1.37	1.24
18-29P	1.63	1.34	1.19	1.08	1.85	1.53	1.36	1.23	1.04	.86	.76	.69	1.54	1.27	1.13	1.02	1.89	1.56	1.38	1.25
18-29S	1.63	1.34	1.19	1.08	1.85	1.53	1.36	1.23	1.04	.86	.76	.69	1.54	1.27	1.13	1.02	1.89	1.56	1.38	1.25
18-420P	2.91	2.40	2.13	1.93	.....	.....	.....	.....	2.72	2.25	1.99	1.81	3.71	3.07	2.73	2.47	4.12	3.40	3.02	2.74
18-420S	3.30	2.73	2.43	2.20	.....	.....	.....	.....	2.94	2.43	2.16	1.96	3.91	3.25	2.88	2.61	4.31	3.56	3.16	2.86
20-2P	2.37	1.96	1.74	1.58	2.49	2.06	1.83	1.66	1.68	1.39	1.23	1.12	2.56	2.12	1.88	1.70	2.82	2.33	2.07	1.87
20-2S	2.61	2.16	1.92	1.74	2.73	2.26	2.01	1.82	1.92	1.59	1.41	1.28	2.80	2.32	2.06	1.86	3.06	2.53	2.25	2.04
20-3P	1.78	1.47	1.31	1.18	1.80	1.57	1.40	1.27	1.09	.90	.80	.72	1.97	1.63	1.45	1.31	2.23	1.84	1.64	1.48
20-3S	2.34	1.93	1.71	1.55	2.46	2.03	1.80	1.63	1.64	1.36	1.21	1.09	2.52	2.09	1.85	1.68	2.77	2.30	2.04	1.85
20-4P	1.89	1.56	1.38	1.25	2.01	1.66	1.47	1.33	1.19	.99	.88	.79	2.07	1.72	1.52	1.38	2.34	1.93	1.71	1.55
20-4S	2.15	1.77	1.57	1.43	2.27	1.87	1.66	1.51	1.45	1.20	1.07	.97	2.33	1.93	1.71	1.55	2.60	2.15	1.91	1.73
20-5P	1.85	1.53	1.36	1.23	1.97	1.63	1.45	1.31	1.16	.96	.85	.77	2.04	1.69	1.50	1.36	2.30	1.90	1.69	1.53
20-5S	2.01	1.66	1.47	1.33	2.13	1.76	1.56	1.41	1.31	1.09	.97	.87	2.19	1.82	1.61	1.46	2.46	2.03	1.80	1.63
20-6P	1.60	1.40	1.24	1.13	1.70	1.49	1.32	1.20	.99	.82	.72	.66	1.87	1.54	1.37	1.24	2.13	1.76	1.56	1.41
20-6S	1.71	1.42	1.26	1.14	1.83	1.52	1.35	1.22	1.02	.84	.75	.68	1.90	1.57	1.40	1.27	2.16	1.79	1.59	1.44
20-7P	1.89	1.56	1.38	1.25	2.01	.....	.....	.....	1.19	.99	.88	.79	2.07	1.72	1.52	1.38	2.34	1.93	1.71	1.55
20-7S	2.04	1.69	1.50	1.36	2.16	1.79	1.59	1.44	1.35	1.12	.99	.90	2.23	1.84	1.64	1.48	2.49	2.06	1.83	1.66
20-8P	2.15	1.77	1.57	1.43	2.27	1.87	1.66	1.51	1.45	1.20	1.07	.97	2.34	1.93	1.71	1.55	2.60	2.15	1.91	1.73
20-8S	2.49	2.06	1.83	1.66	2.61	2.16	1.92	1.74	1.80	1.49	1.32	1.20	2.68	2.22	1.97	1.78	2.94	2.43	2.16	1.96
20-9P	2.02	1.67	1.49	1.35	2.15	1.77	1.57	1.43	1.33	1.10	.98	.89	2.21	1.83	1.63	1.47	2.47	2.04	1.82	1.64
20-9S	2.06	1.70	1.51	1.37	2.18	1.80	1.60	1.45	1.37	1.13	1.00	.91	2.25	1.86	1.65	1.50	2.51	2.07	1.84	1.67
20-11P	2.39	1.97	1.75	1.59	2.51	2.07	1.84	1.67	1.70	1.40	1.24	1.13	2.58	2.13	1.89	1.71	2.84	2.35	2.08	1.89
20-11S	3.65	3.02	2.68	2.43	3.77	3.12	2.77	2.51	2.96	2.45	2.17	1.97	3.84	3.17	2.82	2.55	4.10	3.39	3.01	2.73
20-12P	1.89	1.56	1.38	1.25	.....	1.66	1.47	1.33	1.19	.99	.88	.79	2.08	1.72	1.52	1.38	2.34	1.93	1.71	1.55
20-15P	2.08	1.72	1.52	1.38	2.20	1.82	1.61	1.46	1.38	1.14	1.02	.92	2.27	1.87	1.66	1.51	2.53	2.09	1.85	1.68
20-15S	2.82	2.33	2.07	1.87	2.94	2.43	2.16	1.96	2.13	1.76	1.56	1.41	3.01	2.49	2.21	2.00	3.27	2.70	2.40	2.17
20-16P	2.09	1.73	1.54	1.39	2.21	1.83	1.63	1.47	1.40	1.16	1.03	.93	2.28	1.89	1.68	1.52	2.54	2.10	1.87	1.69
20-16S	2.23	1.84	1.64	1.48	2.35	1.94	1.73	1.56	1.54	1.27	1.13	1.02	2.42	2.00	1.78	1.61	2.68	2.22	1.97	1.78
20-17P	2.06	1.70	1.51	1.37	2.35	1.94	1.73	1.56	1.37	1.13	1.00	.91	2.25	1.86	1.65	1.50	2.51	2.07	1.84	1.67
20-17S	2.41	2.07	1.84	1.67	2.63	2.17	1.93	1.75	1.82	1.50	1.33	1.21	2.70	2.23	1.98	1.79	2.96	2.45	2.17	1.97
20-18P	2.18	1.80	1.60	1.45	2.30	1.90	1.69	1.53	1.49	1.23	1.09	.99	2.37	1.96	1.74	1.58	2.63	2.17	1.93	1.75
20-18S	2.40	1.99	1.77	1.60	2.53	2.09	1.85	1.68	1.71	1.42	1.26	1.14	2.60	2.15	1.91	1.73	2.85	2.36	2.10	1.90
20-22P	2.39	1.97	1.75	1.59	2.51	2.07	1.84	1.67	1.70	1.40	1.24	1.13	2.56	2.12	1.88	1.70	2.84	2.35	2.06	1.89
20-22S	2.82	2.33	2.07	1.87	2.94	2.43	2.16	1.96	2.13	1.76	1.56	1.41	3.01	2.49	2.21	2.00	3.27	2.70	2.40	2.17
20-23P	2.01	1.66	1.47	1.33	2.13	1.76	1.56	1.41	1.31	1.09	.97	.87	2.20	1.82	1.61	1.46	2.46	2.03	1.80	1.63
20-23S	2.20	1.82	1.61	1.46	2.32	1.92	1.70	1.54	1.51	1.24	1.10	1.00	2.39	1.97	1.75	1.59	2.65	2.19	1.94	1.76
20-24P	2.06	1.70	1.51	1.37	2.18	1.80	1.60	1.45	1.37	1.13	1.00	.91	2.25	1.86	1.65	1.50	2.51	2.07	1.84	1.67
20-24S	2.56	2.12	1.88	1.70	2.68	2.22	1.97	1.78	1.87	1.54	1.37	1.24	2.75	2.27	2.02	1.83	3.01	2.49	2.21	2.00
20-27P	2.15	1.77	1.57	1.43	2.27	1.87	1.66	1.51	1.45	1.20	1.07	.97	2.34	1.93	1.71	1.55	2.60	2.15	1.91	1.73
20-27S	2.35	1.94	1.73	1.56	2.47	2.04	1.82	1.64	1.66	1.37	1.22	1.10	2.54	2.10	1.87	1.69	2.80	2.32	2.06	1.86
20-29P	2.32	1.92	1.70	1.54	2.44	2.02	1.79	1.62	1.63	1.34	1.19	1.08	2.51	2.07	1.84	1.67	2.77	2.29	2.03	1.84
20-29S	2.58	2.13	1.89	1.71	2.60	2.23	1.98	1.79	1.89	1.56	1.38	1.25	2.77	2.29	2.03	1.84	3.03	2.50	2.22	2.01
20-33P	2.20	1.90	1.69	1.53	2.42	2.00	1.78	1.61	1.61	1.33	1.18	1.07	2.49	2.06	1.83	1.66	2.75	2.27	2.02	1.83
20-33S	2.37	1.96	1.74	1.58	2.49	2.06	1.83	1.66	1.68	1.39	1.23	1.12	2.56	2.12	1.88	1.70	2.82	2.33	2.07	1.87
22-1P	2.13	1.76	1.56	1.41	2.23	1.84	1.64	1.48	1.28	1.06	.94	.85	2.13	1.76	1.56	1.41	2.42	2.00	1.78	1.61
22-1S	2.47	2.04	1.82	1.64	2.50	2.13	1.89	1.71	1.66	1.37	1.22	1.10	2.47	2.04	1.82	1.64	2.80	2.32	2.06	1.86
22-2P	2.27	1.87	1.66	1.51	2.37	1.96	1.74	1.58	1.45	1.20	1.07	.97	2.27	1.87	1.66	1.51	2.60	2.15	1.91	1.73
22-2S	2.77	2.29	2.03	1.84	2.87	2.37	2.11	1.91	1.95	1.62	1.44	1.30	2.77	2.29	2.03	1.84	3.10	2.56	2.27	2.06
22-4P	2.35	1.94	1.73	1.56	2.46	2.03	1.80	1.63	1.54	1.27	1.13	1.02	2.35	1.94	1.73	1.56	2.68	2.22	1.97	1.78
22-4S	2.66	2.20	1.96	1.77	2.77	2.29	2.03	1.84	1.85	1.53	1.36	1.23	2.66	2.20	1.96	1.77	2.99	2.47	2.20	1.99
22-5P	2.10	1.82	1.61	1.46	2.20	1.90	1.69	1.53	1.38	1.14	1.02	.92	2.20	1.82	1.61	1.46	2.53	2.09	1.85	1.68
22-5S	2.21	1.83	1.63	1.47	2.32	1.92	1.70	1.54	1.40	1.16	1.03	.93	2.21	1.83	1.63	1.47	2.54	2.10	1.87	1.69
22-6P	2.16	1.79	1.59	1.44	2.27	1.87	1.66	1.51	1.35	1.12	.99	.90	2.16	1.79	1.59	1.44	2.49	2.06	1.83	1.66
22-7P	2.28	1.89	1.68	1.52	2.39	1.97	1.75	1.59	1.47	1.22	1.08	.98	2.28	1.89	1.68	1.52	2.61	2.16	1.92	1.74
22-7S	2.56	2.12	1.88	1.70	2.66	2.20	1.96	1.77	1.75	1.44	1.28	1.16	2.56	2.12	1.88	1.70	2.89	2.39	2.12	1.92
22-8P	1.85	1.53	1.36	1.23	1.95	1.62	1.44	1.30	1.04	.86	.76	.69	1.85	1.53	1.36	1.23	2.18	1.80	1.60	1.45
22-8S	2.34	1.93	1.71	1.55	2.44	2.02	1.79	1.62	1.52	1.26	1.12	1.01	2.34	1.93	1.71	1.55	2.66	2.20	1.96	1.77
22-9P	1.94	1.60	1.42	1.29	2.04	1.69	1.50	1.36	1.12	.93	.83	.75	1.94	1.60	1.42	1.29	2.27	1.87	1.66	1.51
22-9S	2.47	2.04	1.82	1.64	2.58	2.13	1.89	1.71	1.66	1.37	1.22	1.10	2.47	2.04	1.82	1.64	2.80	2.32	2.06	1.86
22-10P	1.94	1.60	1.42	1.29	2.04	1.69	1.50	1.36	1.12	.93	.83	.75	1.94	1.60	1.42	1.29	2.27	1.87	1.66	1.51
22-10S	2.02	1.67	1.49	1.35	2.13	1.76	1.56	1.41	1.21	1.00	.89	.81	2.02	1.67	1.49	1.35	2.35	1.94	1.73	1.56
22-11P	1.70	1.49	1.32	1.20	1.90	1.57	1.40	1.27	.99	.82	.72	.66	1.80	1.49	1.32	1.20	2.13	1.76	1.56	1.41
22-11S	1.94	1.60	1.42	1.29	2.04	1.69	1.50	1.36	1.12	.93	.83	.75	1.94	1.60	1.42	1.29	2.27	1.87	1.66	1.51
22-12P	2.35	1.94	1.73	1.56	2.46	2.03	1.80	1.63	1.54	1.27	1.13	1.02	2.35	1.94	1.73	1.56	2.68	2.22	1.97	1.78
22-12S	2.72	2.25	1.99	1.81	2.82	2.33	2.07	1.87	1.90	1.57	1.40	1.27	2.72	2.25	1.99	1.81	3.04	2.52	2.24	2.02
22-13P	2.18	1.80	1.60	1.45	2.28	1.89	1.68	1.52	1.37	1.13	1.00	.91	2.18	1.80	1.60	1.45	2.51	2.07	1.84	1.67

Amphenol "MS" Connectors

Shell Insert	MS/3100 A				MS/3100 A				MS/3100 A				MS/3100 A				MS/3100 B			
	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999
22-13S	2.42	2.00	1.78	1.61	2.53	2.09	1.85	1.68	1.61	1.33	1.18	1.07	2.42	2.00	1.78	1.61	2.75	2.27	2.02	1.83
22-14P	2.60	2.15	1.91	1.73	2.70	2.23	1.98	1.79	1.78	1.47	1.31	1.18	2.60	2.15	1.91	1.73	2.92	2.42	2.15	1.94
22-14S	2.98	2.46	2.18	1.98	3.08	2.55	2.26	2.05	2.16	1.79	1.59	1.44	2.98	2.46	2.18	1.98	3.30	2.73	2.43	2.20
22-15P	2.32	1.92	1.70	1.54	2.42	2.00	1.78	1.61	1.51	1.24	1.10	1.00	2.32	1.92	1.70	1.54	2.65	2.19	1.94	1.76
22-15S	2.84	2.35	2.08	1.89	2.94	2.43	2.16	1.96	2.02	1.67	1.49	1.35	2.84	2.35	2.08	1.89	3.17	2.62	2.32	2.10
22-16P	2.42	2.00	1.78	1.61	2.53	2.09	1.85	1.68	1.61	1.33	1.18	1.07	2.42	2.00	1.78	1.61	2.75	2.27	2.02	1.83
22-16S	2.47	2.04	1.82	1.64	2.58	2.13	1.89	1.71	1.66	1.37	1.22	1.10	2.47	2.04	1.82	1.64	2.80	2.32	2.06	1.86
22-17P	2.32	1.92	1.70	1.54	2.42	2.00	1.78	1.61	1.51	1.24	1.10	1.00	2.32	1.92	1.70	1.54	2.65	2.19	1.94	1.76
22-17S	2.39	1.97	1.75	1.59	2.49	2.06	1.63	1.66	1.57	1.30	1.16	1.05	2.39	1.97	1.75	1.59	2.72	2.25	1.99	1.81
22-18P	2.16	1.79	1.59	1.44	2.27	1.87	1.66	1.51	1.35	1.12	.99	.90	2.16	1.79	1.59	1.44	2.49	2.06	1.83	1.66
22-18S	2.20	1.82	1.61	1.46	2.30	1.90	1.69	1.53	1.38	1.14	1.02	.92	2.20	1.82	1.61	1.46	2.53	2.09	1.85	1.68
22-19P	2.56	2.12	1.88	1.70	2.66	2.20	1.96	1.77	1.75	1.44	1.28	1.16	2.56	2.12	1.88	1.70	2.89	2.39	2.12	1.92
22-19S	2.60	2.15	1.91	1.73	2.70	2.23	1.98	1.79	1.78	1.47	1.31	1.18	2.60	2.15	1.91	1.73	2.92	2.42	2.15	1.94
22-20P	2.23	1.84	1.64	1.48	2.34	1.93	1.71	1.55	1.42	1.17	1.04	.94	2.23	1.84	1.64	1.48	2.56	2.12	1.88	1.70
22-20S	2.34	1.93	1.71	1.55	2.44	2.02	1.79	1.62	1.52	1.26	1.12	1.01	2.34	1.93	1.71	1.55	2.66	2.20	1.96	1.77
22-22P	2.61	2.16	1.92	1.74	2.72	2.25	1.99	1.81	1.80	1.49	1.32	1.20	2.61	2.16	1.92	1.74	2.94	2.43	2.16	1.96
22-22S	3.29	2.72	2.41	2.19	3.39	2.80	2.49	2.25	2.47	2.04	1.82	1.64	3.29	2.72	2.41	2.19	3.52	2.99	2.65	2.40
22-23P	2.51	2.07	1.84	1.67	2.61	2.16	1.92	1.74	1.70	1.40	1.24	1.13	2.51	2.07	1.84	1.67	2.84	2.35	2.08	1.89
22-23S	3.22	2.66	2.36	2.14	3.32	2.75	2.44	2.21	2.40	1.99	1.77	1.60	3.22	2.66	2.36	2.14	3.55	2.93	2.60	2.36
22-26P	2.40	1.99	1.77	1.60	2.51	2.07	1.84	1.67	1.59	1.32	1.17	1.06	2.40	1.99	1.77	1.60	2.73	2.26	2.01	1.82
22-26S	2.72	2.25	1.99	1.81	2.82	2.33	2.07	1.87	1.90	1.57	1.40	1.27	2.72	2.25	1.99	1.81	3.04	2.52	2.24	2.02
22-27P	2.47	2.04	1.82	1.64	2.58	2.13	1.89	1.71	1.66	1.37	1.22	1.10	2.47	2.04	1.82	1.64	2.80	2.32	2.06	1.86
22-27S	2.66	2.20	1.96	1.77	2.77	2.29	2.03	1.84	1.85	1.53	1.36	1.23	2.66	2.20	1.96	1.77	2.99	2.47	2.20	1.99
22-28P	2.37	1.96	1.74	1.58	2.47	2.04	1.82	1.64	1.56	1.29	1.14	1.04	2.37	1.96	1.74	1.58	2.70	2.23	1.98	1.79
22-28S	3.27	2.70	2.40	2.17	3.37	2.79	2.48	2.24	2.46	2.03	1.80	1.63	3.27	2.70	2.40	2.17	3.60	2.97	2.64	2.39
22-29P	2.58	2.13	1.89	1.71	2.68	2.22	1.97	1.78	1.76	1.46	1.30	1.17	2.56	2.13	1.89	1.71	2.91	2.40	2.13	1.93
22-29S	2.92	2.42	2.15	1.94	3.03	2.50	2.22	2.01	2.11	1.74	1.55	1.40	2.92	2.42	2.15	1.94	3.25	2.69	2.39	2.16
22-34P	2.18	1.80	1.60	1.45	2.28	1.89	1.68	1.52	1.37	1.13	1.00	.91	2.18	1.80	1.60	1.45	2.51	2.07	1.84	1.67
22-34S	2.27	1.87	1.66	1.51	2.37	1.96	1.74	1.58	1.45	1.20	1.07	.97	2.27	1.87	1.66	1.51	2.60	2.15	1.91	1.73
22-36P	11.33	9.37	8.32	7.53	11.44	9.45	8.39	7.60	10.52	8.69	7.72	6.99	11.33	9.37	8.32	7.53	11.44	9.64	8.56	7.75
22-36S	12.40	10.25	9.11	8.25	12.51	10.34	9.18	8.31	11.59	9.58	8.51	7.71	12.33	10.25	9.11	8.25	12.73	10.52	9.35	8.46
22-40AP	11.33	9.37	8.32	7.53	11.44	9.45	8.39	7.60	10.52	8.69	7.72	6.99	11.33	9.37	8.32	7.53	11.66	9.64	8.56	7.75
22-40AS	12.40	10.25	9.11	8.25	12.51	10.34	9.18	8.31	11.59	9.58	8.51	7.71	12.40	10.20	9.06	8.20	12.73	10.52	9.35	8.46
24-1P	2.77	2.29	2.03	1.84	2.79	2.30	2.04	1.85	1.82	1.50	1.33	1.21	2.82	2.33	2.07	1.87	3.41	2.82	2.50	2.27
24-1S	3.29	2.72	2.41	2.19	3.30	2.73	2.43	2.20	2.34	1.93	1.71	1.55	3.34	2.76	2.45	2.22	3.93	3.25	2.88	2.61
24-2P	2.63	2.17	1.93	1.75	2.65	2.19	1.94	1.76	1.68	1.39	1.23	1.12	2.68	2.22	1.97	1.78	3.27	2.70	2.40	2.17
24-2S	3.18	2.63	2.34	2.12	3.20	2.65	2.35	2.13	2.23	1.84	1.64	1.48	3.24	2.67	2.37	2.15	3.82	3.16	2.81	2.54
24-5P	2.92	2.42	2.15	1.94	2.94	2.43	2.16	1.96	1.97	1.63	1.45	1.31	2.98	2.46	2.18	1.98	3.56	2.95	2.62	2.37
24-5S	3.29	2.72	2.41	2.19	3.30	2.73	2.43	2.20	2.34	1.93	1.71	1.55	3.34	2.76	2.45	2.22	3.93	3.25	2.88	2.61
24-6P	2.73	2.26	2.01	1.82	2.75	2.27	2.02	1.83	1.64	1.47	1.31	1.18	2.79	2.30	2.04	1.85	3.37	2.79	2.48	2.24
24-6S	3.56	2.95	2.62	2.37	3.58	2.96	2.63	2.38	1.94	2.16	1.92	1.74	3.62	2.99	2.65	2.40	4.20	3.47	3.09	2.79
24-7P	3.04	2.25	2.24	2.02	3.06	2.53	2.25	2.04	2.85	1.73	1.54	1.39	3.10	2.56	2.27	2.06	3.68	3.05	2.71	2.45
24-7S	3.29	2.27	2.41	2.19	3.30	2.73	2.43	2.20	3.58	1.93	1.71	1.55	3.34	2.76	2.45	2.22	3.93	3.25	2.88	2.61
24-8P	2.60	2.15	1.91	1.73	2.61	2.16	1.92	1.74	2.30	1.36	1.21	1.09	2.65	2.19	1.94	1.76	3.24	2.67	2.37	2.15
24-8S	2.89	2.39	2.12	1.92	2.91	2.40	2.13	1.93	3.18	1.60	1.42	1.29	2.94	2.43	2.16	1.96	3.53	2.92	2.59	2.35
24-10P	3.81	3.15	2.79	2.53	3.82	3.16	2.81	2.54	2.44	2.36	2.10	1.90	3.86	3.19	2.83	2.56	4.45	3.68	3.26	2.96
24-10S	4.36	3.60	3.20	2.90	4.38	3.62	3.21	2.91	3.11	2.96	2.63	2.38	4.91	3.65	3.24	2.93	5.00	4.13	3.67	3.32
24-11P	3.25	2.69	2.39	2.16	3.27	2.70	2.40	2.17	1.42	1.90	1.69	1.53	3.30	2.73	2.43	2.20	3.89	3.22	2.86	2.59
24-11S	4.13	3.42	3.04	2.75	4.15	3.43	3.05	2.76	2.72	2.63	2.34	2.12	4.19	3.46	3.07	2.78	4.77	3.95	3.51	3.17
24-12P	3.39	2.80	2.49	2.25	3.41	2.82	2.50	2.27	1.97	2.02	1.79	1.62	3.44	2.85	2.53	2.29	4.03	3.33	2.96	2.68
24-12S	4.07	3.36	2.98	2.70	4.08	3.37	3.00	2.71	2.16	2.57	2.29	2.07	4.12	3.40	3.02	2.74	4.71	3.89	3.45	3.13
24-18P	2.37	1.96	1.74	1.58	2.39	1.97	1.75	1.59	1.76	1.17	1.04	.94	2.42	2.00	1.78	1.61	3.01	2.49	2.21	2.00
24-18S	3.67	3.03	2.69	2.44	3.68	3.05	2.71	2.45	1.80	2.25	1.99	1.81	3.72	3.07	2.73	2.47	4.31	3.56	3.16	2.86
24-19P	2.92	2.42	2.15	1.94	2.94	2.43	2.16	1.96	1.97	1.63	1.45	1.31	2.98	2.46	2.18	1.98	3.56	2.95	2.62	2.37
24-19S	3.11	2.57	2.29	2.07	3.13	2.59	2.30	2.08	2.15	1.79	1.59	1.44	3.17	2.62	2.32	2.10	3.75	3.10	2.76	2.50
24-20P	2.72	2.25	1.99	1.81	2.78	2.26	2.01	1.82	2.89	1.46	1.30	1.17	2.77	2.29	2.03	1.84	3.36	2.77	2.46	2.23
24-20S	2.75	2.27	2.02	1.83	2.77	2.29	2.03	1.84	2.82	1.49	1.32	1.20	2.80	2.32	2.06	1.86	3.39	2.80	2.49	2.25
24-21S	2.92	2.42	2.15	1.94	2.94	2.43	2.16	1.96	1.38	1.63	1.45	1.31	2.98	2.46	2.18	1.98	3.56	2.95	2.62	2.37
24-22P	3.10	2.56	2.27	2.06	3.13	2.57	2.29	2.07	1.45	1.77	1.57	1.43	3.15	2.60	2.31	2.09	3.74	3.09	2.74	2.48
24-22S	3.84	3.17	2.82	2.55	2.78	3.19	2.83	2.56	2.25	2.39	2.12	1.92	3.89	3.22	2.86	2.59	4.48	3.70	3.29	2.98
24-23S	3.77	3.12	2.77	2.51	2.77	3.13	2.78	2.52	2.66	2.33	2.07	1.87	3.82	3.16	2.81	2.54	4.41	3.65	3.24	2.93
24-27P	2.34	1.93	1.71	1.55	2.94	1.94	1.73	1.56	2.47	1.14	1.02	.92	2.39	1.97	1.75	1.59	2.98	2.46	2.18	1.98
24-27S	2.40	1.99	1.77	1.60	3.11	2.00	1.78	1.61	3.67	1.20	1.07	.97	2.46	2.03	1.80	1.63	3.04	2.52	2.24	2.02
24-28P	3.20	2.65	2.35	2.13	3.86	2.66	2.36	2.14	1.80	1.86	1.65	1.50	3.25	2.69	2.39	2.16	3.81	3.15	2.79	2.53
24-28S	3.82	2.99	2.65	2.40	3.79	3.00	2.67	2.42	2.44	2.20	1.96	1.77	3.67	3.03	2.69	2.44	4.26	3.52	3.12	2.83
24-768P	3.43	2.83	2.51	2.28	2.35	2.85	2.53	2.29	2.46	2.04	1.82	1.64	3.48	2.87	2.55	2.31	4.07	3.36	2.98	2.70
24-768S	4.62	3.82	3.39	3.07	2.42	3.83	3.40	3.08	2.09	3.03	2.69	2.44	4.67	3.86	3.43	3.11	5.26	4.35	3.86	3.50
24-835P	2.75	2.27	2.02	1.83	3.22	2.29	2.03	1.84	2.30	1.49	1.32	1.20	2.80	2.32	2.06	1.86	3.39	2.80	2.49	2.25
24-835S	3.39	2.80	2.49	2.25	3.63	2.82	2.50	2.27	2.20	2.02	1.79	1.62	3.44	2.85	2.53	2.29	4.03	3.33	2.96	2.68
28-1P	3.36	2.77	2.46	2.23	3.44	3.05	2.71	2.45	2.39	2.03	1.80	1.63	3.48	2.87	2.55	2.31	3.79	3.13	2.78	2.52
28-2P	2.99	2.47	2.20	1.99	4.64	2.75	2.44	2.21	2.09	1.73	1.54	1.39	3.13	2.59	2.30	2.08	3.43	2.83	2.51	2.28
28-2S	3.20	2.65	2.35	2.13	2.77	2.92	2.59	2.35	2.53	1.90	1.69	1.53	3.32	2.75	2.44	2.21	3.63	3.00	2.67	2.42
28-3P	3.10	2.56	2.27	2.06	3.41	2.83	2.51	2.28	2.73	1.82	1.61	1.46	3.22	2.66	2.36	2.14	3.53	2.92	2.59	2.35
28-3S	3.29	2.72	2.41	2.19	3.68	2.99	2.65	2.40	3.17	1.97	1.75	1.59	3.41	2.82	2.50	2.27	3.70	3.07	2.73	2.47
28-5P	2.99	2.47	2.20	1.99	3.32	2.75	2.44	2.21	2.20	1.73	1.54	1.39	3.11	2.57	2.29	2.07	3.43	2.83	2.51	2.28
28-5S	3.43	2.83	2.51	2.28	3.53	3.10	2.76	2.50	2.58	2.09	1.85	1.68	3.55	2.93	2.60	2.36	3.86	3.19	2.83	2.56
28-6P	3.63	3.00	2.67	2.42	3.43	3.27	2.91	2.63	2.09	2.26	2.01	1.82	3.75	3.10	2.76	2.50	4.07	3.36	2.98	2.70
28-6S	4.07	3.36	2.98	2.70	3.62	3.63	3.23	2.92	2.20	2.62	2.32	2.10	4.19	3.46	3.07	2.78	4.50	3.72	3.30	2.99
28-7P	3.10	2.56	2.27	2.06	3.32	2.83	2.51	2.28	2.27	1.82	1.61	1.46	3.22	2.66	2.36	2.14	3.53	2.92	2.59	2.35
28-7S	3.48	2.87	2.55	2.31	3.75	3.15	2.79	2.53	2.56	2.13	1.89	1.71	3.60	2.97	2.64	2.39	3.91	3.23	2.87	2.60
28-8P	2.99	2.47	2.20	1.99	3.96	2.75	2.44	2.21		1.73	1.54	1.39	3.11	2.57	2.29	2.07	3.43	2.83	2.51	2.28
28-8S	3.10	2.56	2.27	2.06	4.39	2.83	2.51	2.28		1.82	1.61	1.46	3.22	2.66	2.36	2.14	3.53	2.92	2.59	2.35
28-9P	3.17	2.62	2.32	2.10	3.43	2.89	2.57	2.32		1.87	1.66	1.51	3.29	2.72	2.41	2.19	3.80	2.97	2.64	2.39
28-9S	3.46	2.86	2.54	2.30	3.81	3.13	2.78	2.52		2.12	1.88	1.70	3.58	2.96	2.63	2.38	3.89	3.22	2.86	2.59

Amphenol "MS" Connectors

CONTINUED FROM PRECEDING PAGE

Shell Insert	MS/3100 A				MS/3101 A				MS/3102 A				MS/3106 A				MS/3106 B			
	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999	1-99	49 10-	50-99	100-999	1-99	10-49	50-99	100-999	1-99	10-49	50-99	100-999
28-10P	4.10	3.39	3.01	2.73	4.43	3.66	3.25	2.94	3.20	2.65	2.35	2.13	4.22	3.49	3.10	2.81	4.53	3.75	3.33	3.01
28-10S	5.17	4.28	3.80	3.44	5.50	4.55	4.04	3.66	4.27	3.53	3.14	2.84	5.29	4.38	3.89	3.52	5.61	4.63	4.11	3.73
28-11P	3.39	2.80	2.49	2.25	3.72	3.07	2.73	2.47	2.49	2.06	1.83	1.66	3.51	2.90	2.58	2.33	3.82	3.16	2.81	2.54
28-11S	4.12	3.40	3.02	2.74	4.45	3.68	3.26	2.96	3.22	2.66	2.36	2.14	4.24	3.50	3.11	2.82	4.55	3.76	3.34	3.02
28-12P	3.53	2.92	2.59	2.35	3.86	3.19	2.83	2.56	2.63	2.17	1.93	1.75	3.65	3.02	2.68	2.43	3.96	3.27	2.91	2.63
28-12S	4.12	3.40	3.02	2.74	4.45	3.68	3.26	2.96	3.22	2.66	2.36	2.14	4.24	3.50	3.11	2.82	4.55	3.76	3.34	3.02
28-13P	3.89	3.22	2.86	2.59	4.22	3.49	3.10	2.81	2.98	2.47	2.20	1.99	4.01	3.32	2.95	2.67	4.33	3.58	3.18	2.88
28-13S	4.52	3.73	3.31	3.00	4.84	4.00	3.56	3.22	3.62	2.99	2.65	2.40	4.64	3.83	3.40	3.08	4.95	4.09	3.63	3.29
28-14P	3.37	2.79	2.48	2.24	3.70	3.06	2.72	2.46	2.47	2.04	1.82	1.64	3.48	2.89	2.57	2.32	3.81	3.15	2.79	2.53
28-14S	3.70	3.06	2.72	2.46	4.03	3.33	2.96	2.68	2.80	2.32	2.06	1.86	3.82	3.16	2.81	2.54	4.13	3.42	3.04	2.75
28-15P	3.96	3.27	2.91	2.63	4.29	3.55	3.15	2.85	3.06	2.53	2.25	2.04	4.08	3.37	3.00	2.71	4.39	3.63	3.23	2.92
28-15S	4.57	3.78	3.35	3.04	4.90	4.05	3.59	3.25	3.67	3.03	2.69	2.44	4.69	3.88	3.44	3.12	5.00	4.13	3.67	3.32
28-16P	3.49	2.89	2.57	2.32	3.82	3.16	2.81	2.54	2.60	2.15	1.91	1.73	3.62	2.99	2.65	2.40	3.93	3.25	2.88	2.61
28-16S	3.53	2.92	2.59	2.35	3.86	3.19	2.83	2.56	2.63	2.17	1.93	1.75	3.65	3.02	2.68	2.43	3.96	3.27	2.91	2.63
28-17P	2.96	2.45	2.17	1.97	3.29	2.72	2.41	2.19	2.06	1.70	1.51	1.37	3.08	2.55	2.26	2.05	3.39	2.80	2.49	2.25
28-17S	3.17	2.62	2.32	2.10	3.49	2.89	2.57	2.32	2.27	1.87	1.66	1.51	3.29	2.72	2.41	2.19	3.60	2.97	2.64	2.39
28-18P	2.89	2.37	2.11	1.91	3.20	2.65	2.35	2.13	1.95	1.62	1.44	1.30	2.99	2.47	2.20	1.99	3.30	2.73	2.43	2.20
28-18S	3.13	2.59	2.30	2.08	3.46	2.86	2.54	2.30	2.23	1.84	1.64	1.48	3.25	2.69	2.39	2.16	3.56	2.95	2.62	2.37
28-19P	2.91	2.40	2.13	1.93	3.24	2.67	2.37	2.15	2.01	1.66	1.47	1.33	3.03	2.50	2.22	2.01	3.32	2.76	2.45	2.22
28-19S	3.53	2.92	2.59	2.35	3.86	3.19	2.83	2.56	2.63	2.17	1.93	1.75	3.65	3.02	2.68	2.43	3.96	3.27	2.91	2.63
28-20P	3.43	2.83	2.51	2.28	3.75	3.10	2.76	2.50	2.53	2.09	1.85	1.68	3.55	2.93	2.60	2.36	3.86	3.19	2.83	2.56
28-20S	3.81	3.15	2.79	2.53	4.13	3.42	3.04	2.75	2.91	2.40	2.13	1.93	3.93	3.25	2.88	2.61	4.24	-3.50	3.11	2.82
28-21P	4.08	3.37	3.00	2.71	4.41	3.65	3.24	2.93	3.10	2.63	2.34	2.12	4.20	3.47	3.09	2.79	4.52	3.73	3.31	3.00
28-21S	4.64	3.83	3.40	3.08	4.97	4.10	3.64	3.30	3.74	3.09	2.74	2.48	4.76	3.93	3.49	3.16	5.07	4.19	3.72	3.37
28-22P	4.01	3.32	2.95	2.67	4.34	3.59	3.19	2.89	3.11	2.57	2.29	2.07	4.13	3.42	3.04	2.75	4.45	3.68	3.26	2.96
32-4S	3.88	3.20	2.84	2.58	4.17	3.45	3.06	2.77	2.89	2.39	2.12	1.92	4.60	3.80	3.38	3.06	4.64	3.83	3.40	3.08
32-5P	4.24	3.50	3.11	2.82	4.53	3.75	3.33	3.01	3.25	2.69	2.39	2.16	4.97	4.10	3.64	3.30	5.00	4.13	3.67	3.32
32-5S	4.69	3.88	3.44	3.12	4.98	4.12	3.66	3.31	3.70	3.06	2.72	2.46	5.41	4.48	3.98	3.60	5.45	4.50	4.00	3.62
32-6P	4.57	3.78	3.35	3.04	4.86	4.02	3.57	3.23	3.58	2.96	2.63	2.38	5.28	4.38	3.89	3.52	5.33	4.40	3.91	3.54
32-6S	6.49	5.36	4.76	4.31	6.78	5.61	4.98	4.51	5.50	4.55	4.04	3.66	7.21	5.96	5.30	4.80	7.25	5.99	5.32	4.82
32-7P	4.33	3.58	3.18	2.88	4.62	3.82	3.39	3.07	3.34	2.76	2.45	2.22	5.05	4.18	3.71	3.36	5.09	4.20	3.73	3.38
32-7S	5.50	4.55	4.04	3.66	5.80	4.79	4.25	3.85	4.52	3.73	3.31	3.00	6.23	5.15	4.57	4.14	6.26	5.18	4.60	4.16
32-8P	4.72	3.90	3.47	3.14	5.02	4.15	3.68	3.34	3.74	3.09	2.74	2.48	5.45	4.50	4.00	3.62	5.48	4.53	4.03	3.65
32-8S	4.79	3.96	3.52	3.19	5.09	4.20	3.73	3.38	3.81	3.15	2.79	2.53	5.52	4.56	4.05	3.67	5.55	4.59	4.08	3.69
32-9P	4.05	3.35	2.97	2.69	4.34	3.59	3.19	2.89	3.06	2.53	2.25	2.04	4.77	3.95	3.51	3.17	4.81	3.98	3.53	3.20
32-9S	4.62	3.82	3.39	3.07	4.99	4.06	3.61	3.27	3.63	3.00	2.67	2.42	5.35	4.42	3.92	3.55	5.38	4.45	3.95	3.58
32-12P	3.53	2.92	2.59	2.35	3.82	3.16	2.81	2.54	2.54	2.10	1.87	1.69	4.26	3.52	3.12	2.83	4.29	3.55	3.15	2.85
32-12S	4.39	3.63	3.23	2.92	4.69	3.88	3.44	3.12	3.41	2.82	2.50	2.27	5.12	4.23	3.76	3.40	5.16	4.26	3.78	3.43
32-13P	3.91	3.23	2.87	2.60	4.20	3.47	3.09	2.79	2.92	2.42	2.15	1.94	4.64	3.83	3.40	3.08	4.67	3.86	3.43	3.11
32-13S	4.46	3.69	3.28	2.97	4.76	3.93	3.49	3.16	3.48	2.87	2.55	2.31	5.19	4.29	3.81	3.45	5.22	4.32	3.84	3.47
32-15P	5.36	4.43	3.94	3.57	5.66	4.68	4.15	3.76	4.38	3.62	3.21	2.91	6.09	5.03	4.47	4.05	6.12	5.06	4.50	4.07
32-15S	5.90	4.88	4.33	3.92	6.19	5.12	4.55	4.12	4.91	4.06	3.61	3.27	6.63	5.48	4.86	4.40	6.66	5.51	4.89	4.43
32-17P	5.31	4.39	3.90	3.53	5.61	4.63	4.11	3.73	4.33	3.58	3.18	2.88	6.04	4.99	4.43	4.01	6.07	5.02	4.46	4.04
32-17S	5.81	4.80	4.27	3.86	6.11	5.05	4.48	4.06	4.83	3.99	3.54	3.21	6.54	5.41	4.80	4.35	6.57	5.43	4.83	4.37
32-101P	9.98	8.25	7.33	6.64	10.28	8.49	7.54	6.83	9.00	7.44	6.60	5.98	10.71	8.85	7.86	7.12	10.74	8.88	7.89	7.14
32-102P	7.35	6.08	5.40	4.89	7.65	6.32	5.61	5.08	6.37	5.26	4.67	4.23	8.08	6.68	5.93	5.37	8.11	6.71	5.96	5.39
32-102S	8.55	7.06	6.27	5.68	8.84	7.31	6.49	5.88	7.56	6.25	5.55	5.03	9.27	7.66	6.81	6.16	9.31	7.69	6.83	6.19
32-414P	6.54	5.41	4.80	4.35	6.83	5.65	5.02	4.54	5.55	4.59	4.08	3.69	7.27	6.01	5.33	4.83	7.30	6.03	5.36	4.85
32-414S	8.79	7.22	6.41	5.81	9.03	7.46	6.63	6.00	7.75	6.41	5.69	5.15	9.46	7.82	6.95	6.29	9.50	7.85	6.97	6.31
36-1S	5.59	4.62	4.10	3.71	5.73	4.73	4.20	3.91	4.12	3.40	3.02	2.74	6.18	5.11	4.53	4.11	6.30	5.21	4.62	4.19
36-2S	7.94	6.56	5.83	5.28	8.08	6.68	5.93	5.37	6.43	5.35	4.75	4.30	8.53	7.05	6.26	5.67	8.65	7.15	6.35	5.75
36-3P	6.40	5.29	4.70	4.26	6.54	5.41	4.80	4.35	4.93	4.08	3.62	3.28	6.99	5.78	5.13	4.65	7.11	5.88	5.22	4.73
36-3S	8.20	6.78	6.02	5.45	8.34	6.89	6.12	5.54	6.73	5.56	4.94	4.47	8.79	7.26	6.45	5.84	8.91	7.36	6.54	5.92
36-4P	6.37	5.26	4.67	4.23	6.50	5.38	4.78	4.32	4.90	4.05	3.59	3.25	6.95	5.75	5.11	4.62	7.08	5.85	5.19	4.70
36-4S	7.53	6.22	5.52	5.00	7.66	6.33	5.63	5.09	6.06	5.01	4.45	4.03	8.11	6.71	5.96	5.39	8.23	6.81	6.05	5.47
36-6P	7.79	6.44	5.72	5.18	7.92	6.55	5.82	5.27	6.31	5.22	4.64	4.20	8.37	6.92	6.15	5.57	8.49	7.02	6.24	5.65
36-7P	6.14	5.08	4.51	4.08	6.28	5.19	4.61	4.17	4.67	3.86	3.43	3.11	6.73	5.56	4.94	4.47	6.85	5.66	5.03	4.55
36-7S	6.78	5.61	4.98	4.51	6.92	5.72	5.08	4.60	5.31	4.39	3.90	3.53	7.37	6.09	5.41	4.90	7.49	6.19	5.50	4.98
36-8P	5.95	4.92	4.37	3.96	6.09	5.03	4.47	4.05	4.48	3.70	3.29	2.98	6.54	5.41	4.80	4.35	6.66	5.51	4.89	4.43
36-8S	6.37	5.26	4.67	4.23	6.50	5.38	4.78	4.32	4.90	4.05	3.59	3.25	6.95	5.75	5.11	4.62	7.08	5.85	5.19	4.70
36-9P	7.08	5.85	5.19	4.70	7.21	5.96	5.30	4.80	5.81	4.63	4.11	3.73	7.66	6.33	5.63	5.09	7.79	6.44	5.72	5.18
36-9S	8.58	7.09	6.30	5.70	8.72	7.21	6.40	5.80	7.11	5.88	5.22	4.73	9.17	7.58	6.73	6.10	9.29	7.68	6.82	6.18
36-10P	5.86	4.85	4.31	3.90	6.00	4.96	4.41	3.99	4.39	3.63	3.23	2.92	6.44	5.32	4.72	4.28	6.57	5.43	4.83	4.37
36-10S	6.33	5.23	4.65	4.21	6.47	5.35	4.75	4.30	4.86	4.02	3.57	3.23	6.92	5.72	5.08	4.60	7.04	5.82	5.17	4.68
36-14P	7.82	6.46	5.74	5.20	7.96	6.58	5.84	5.29	6.35	5.25	4.66	4.22	8.41	6.95	6.17	5.59	8.53	7.05	6.26	5.67
36-14S	8.37	6.92	6.15	5.57	8.51	7.04	6.25	5.66	6.90	5.71	5.07	4.59	8.96	7.41	6.58	5.96	9.08	7.51	6.67	6.04
36-15P	4.98	4.12	3.66	3.31	5.12	4.23	3.76	3.40	3.51	2.90	2.58	2.33	5.57	4.60	4.09	3.70	5.69	4.70	4.18	3.78
36-15S	5.47	4.52	4.01	3.63	5.47	4.52	4.01	3.63	3.97	3.30	2.93	2.66	6.06	5.01	4.45	4.03	6.18	5.11	4.53	4.11
36-403P	7.08	5.85	5.19	4.70	7.27	5.96	5.30	4.80	5.61	4.63	4.11	3.73	7.66	6.33	5.63	5.09	7.79	6.44	5.72	5.18
36-403S	9.50	7.85	6.97	6.31	9.84	7.97	7.07	6.41	8.03	6.64	5.89	5.34	10.09	8.34	7.40	6.70	10.21	8.44	7.49	6.79
36-404P	8.22	6.79	6.03	5.46	8.36	6.91	6.13	5.55	6.75	5.58	4.95	4.49	8.81	7.28	6.46	5.85	8.93	7.38	6.55	5.93
36-404S	9.72	8.04	7.14	6.46	9.86	8.15	7.24	6.56	8.25	6.82	6.06	5.49	10.31	8.52	7.57	6.85	10.43	8.62	7.66	6.93
36-405P	9.71	8.02	7.12	6.45	9.84	8.14	7.23	6.54	8.23	6.81	6.05	5.47	10.29	8.51	7.56	6.84	10.41	8.61	7.65	6.92
36-405S	12.18	10.07	8.94	8.10	12.32	10.18	9.04	8.19	10.71	8.85	7.86	7.12	12.77	10.55	9.37	8.49	12.89	10.65	9.46	8.57
36-406P	8.62	7.12	6.32	5.73	8.75	7.24	6.43	5.82	7.14	5.91	5.25	4.75	9.20	7.61	6.76	6.12	9.32	7.71	6.85	6.20
40-1P	6.16	5.09	4.52	4.09	6.26	5.18	4.60	4.16	4.24	3.50	3.11	2.82	8.10	6.69	5.94	5.38				
40-1S	7.70	6.36	5.65	5.12	7.80	6.45	5.73	5.19	5.78	4.78	4.24	3.84	9.64	7.97	7.07	6.41				
40-5P	10.47	8.65	7.68	6.96	10.57	8.74	7.76	7.03	8.55	7.06	6.27	5.68	12.40	10.25	9.11	8.25				
40-5S	13.00	10.83	9.61	8.71	13.20	10.91	9.69	8.77	11.18	9.24	8.20	7.43	15.03	12.43	11.04	9.99				
40-9P	8.22	6.79	6.03	5.46	8.32	6.88	6.11	5.53	6.35	5.21	4.62	4.19	10.16	8.39	7.45	6.75				
40-9S	11.18	9.24	8.20	7.43	11.28	9.32	8.28	7.50	9.18	7.65	6.79	6.15	13.11	10.84	9.63	8.72				
40-10P	11.69	9.67	8.59	7.77	11.80	9.75	8.66	7.84	9.77	8.08	7.18	6.50	13.63	11.27	10.01	9.06				
40-10S	13.49	11.15	9.91	8.97	13.60	11.24	9.98	9.04	11.57	9.57	8.50	7.69	15.43	12.76	11.33	10.26				

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

3108A

3108B

Shell Insert	MS/3108 A				B			
	1-9	10-49	50-99	100-999	1-9	10-49	50-99	100-999
8S-1P	1.75	1.44	1.28	1.16	...	...	...	...
8S-1S	1.75	1.44	1.28	1.16	...	...	...	...
10S-2P	2 23	1.84	1.64	1.48	1.16	.96	.85	.77
10S-2S	2.25	1.86	1.65	1.50	1.18	.97	.86	.78
10SL-3P	...	...	...	...	...	...	...	...
10SL-3S	2 21	1.83	1.63	1.47	1.16	.96	.85	.77
10SL-4P	...	...	...	...	...	...	...	...
10SL-4S	2 20	1.82	1.61	1.46	1.12	.93	.83	.75
12S-1P	2.63	2.17	1.93	1.75	1.47	1.22	1.08	.98
12S-1S	2 65	2.19	1.94	1.76	1.47	1.23	1.09	.99
12S-3P	2.49	2.06	1.83	1.66	1.35	1.12	.99	.90
12S-3S	2.53	2.09	1.85	1.68	1.30	1.14	1.02	.92
12S-4P	2.54	2.10	1.87	1.69	1.40	1.16	1.03	.93
12S-4S	2.54	2.10	1.87	1.69	3.79	3.13	2.78	2.52
12S-6P	4.93	4.08	3.62	3.28	4.01	3.13	2.78	2.52
12S-6S	5.16	4.26	3.78	3 43	...	3.32	2.95	2.67
12SL-844P	...	...	...	...	...	...	...	...
12SL-844S	4.01	3 32	2.95	2.67	1.45	...	...	...
12-5P	2.47	2.04	1.82	1.64	1.56	1.20	1.07	.97
12-5S	2.58	2 13	1.89	1.71	1.33	1.29	1.14	1.04
14S-1P	2.46	2.03	1.80	1.63	1.35	1.10	.98	.89
14S-1S	2 47	2 04	1.82	1.64	1.31	1.12	.99	.90
14S-2P	2.44	2 02	1.79	1.62	1.40	1.09	.97	.87
14S-2S	2.53	2.09	1.85	1.68	1.26	1.16	1.03	.93
14S-4P	2.39	1.97	1.75	1.59	1.30	1.04	.93	.84
14S-4S	2.42	2.00	1.78	1.61	1.44	1.07	.95	.86
14S-5P	2.56	2.12	1.88	1.70	1.49	1.19	1.05	.95
14S-5S	2.61	2.16	1.92	1.74	1.49	1.23	1.09	.99
14S-6P	2.61	2.16	1.92	1.74	1.52	1.23	1.09	.99
14S-6S	2.65	2.19	1.94	1.76	1.33	1.26	1.12	1.01
14S-7P	2.46	2.03	1.80	1.63	1.35	1.10	.98	.89
14S-7S	2.47	2.04	1.82	1.64	1.26	1.12	.99	.90
14S-9P	2.39	1.97	1.75	1.59	1.28	1.04	.93	.84
14S-9S	2.40	1.99	1.77	1.60	1.44	1.06	.94	.85
14S-10P	2.56	2.12	1.88	1.70	1.54	1.19	1.05	.95
14S-10S	2.66	2.20	1.96	1.77	1.61	1.27	1.13	1.02
16S-1P	3.15	2 60	2.31	2.09	1.76	1.33	1.18	1.07
16S-1S	3.30	2.73	2.43	2.20	1.35	1.46	1.30	1.17
16S-3P	2.89	2 39	2.12	1.92	1.44	1.12	.99	.90
16S-3S	2.98	2 46	2.18	1.98	1.44	1.19	1.05	.95
16S-4P	2.98	2 46	2.18	1.98	1.49	1.19	1.05	.95
16S-4S	3 03	2 50	2.22	2.01	1.52	1.23	1.09	.99
16S-5P	3.06	2 53	2.25	2.04	1.56	1.26	1.12	1.01
16S-5S	3 10	2 56	2.27	2.06	1.56	1.29	1.14	1.04
16S-6P	3.10	2 56	2.27	2.06	1.56	1.29	1.14	1.04
16S-6S	3.10	2 56	2.27	2.06	1.57	1.29	1.14	1.04
16S-8P	3.11	2 57	2.29	2.07	1.63	1.30	1.16	1.05
16S-8S	3.17	2 62	2.32	2.10	1.63	1.34	1.19	1.08
16S-15P	3.17	2 62	2.32	2.10	1.68	1.34	1.19	1.08
16S-15S	3.22	2 66	2.36	2.14	1.75	1.39	1.23	1.12
16-2P	2.84	2 35	2.08	1.89	1.89	1.44	1.28	1.16
16-2S	2.98	2 46	2.18	1.98	2.06	1.56	1.38	1.25
16-7P	3.15	2 60	2.31	2.09	2.32	1.70	1.51	1.37
16-7S	3.41	2.82	2.50	2.27	1.95	1.92	1.70	1.54
16-9P	3.04	2 52	2.24	2.02	2.16	1.62	1.44	1.30
16-9S	3.25	2 69	2.39	2.16	1.90	1.79	1.59	1.44
16-10P	2.99	2 47	2.20	1.99	2.09	1.57	1.40	1.27
16-10S	3.18	2.63	2.34	2.12	1.80	1.73	1.54	1.39
16-11P	2.89	2 39	2.12	1.92	1.99	1.49	1.32	1.20
16-11S	3.08	2.55	2.26	2.05	2.02	1.64	1.46	1.32
16-12P	3.11	2 57	2.29	2.07	3.96	1.67	1.49	1.35
16-13P	5.05	4 18	3.71	3.36	4.53	3.27	2.91	2.63
16-13S	5.62	4.65	4.13	3.74	2.21	3.75	3.33	3.01
18-1P	3.62	2.99	2.65	2.40	2.37	1.83	1.63	1.47
18-1S	3.77	3.12	2.77	2.51	1.83	1.96	1.74	1.58
18-3P	3.24	2.67	2.37	2.15	2.18	1.52	1.35	1.22
18-3S	3.58	2.96	2.63	2.38	1.85	1.80	1.60	1.45
18-4P	3.25	2.69	2.39	2.16	1.97	1.53	1.36	1.23
18-4S	3.37	2.79	2.48	2.24	1.78	1.63	1.45	1.31
18-5P	3.16	2.63	2.34	2.12	1.97	1.47	1.31	1.18
18-5S	3.37	2.79	2.48	2.24	1.92	1.63	1.45	1.31
18-6P	3.32	2.75	2.44	2.21	2.21	1.59	1.41	1.28
18-6S	3.62	2.99	2.65	2.40	1.83	1.83	1.63	1.47
18-7P	3.24	2.67	2.37	2.15	2.21	1.52	1.35	1.22
18-8P	3.82	2.99	2.65	2.40	2.34	1.83	1.63	1.47
18-8S	3.74	3.09	2.74	2.48	2.11	1.93	1.71	1.55
18-9P	3.51	2.90	2.58	2.33	.....	1.74	1.55	1.40
18-9S	3.65	3.02	2.68	2.43	2.25	1.86	1.65	1.50
18-10P	3.55	2.93	2.60	2.36	2.15	1.77	1.57	1.43
18-10S	3.74	3.09	2.74	2.48	2.34	1.93	1.71	1.55
18-11P	3.55	2.93	2.60	2.36	2.15	1.77	1.57	1.43
18-11S	3.62	2.99	2.65	2.40	2.21	1.83	1.63	1.47
18-12P	3.43	2.83	2.51	2.28	2.02	1.67	1.49	1.35
18-12S	3.55	2.93	2.60	2.36	2.15	1.77	1.57	1.43
18-13P	3.56	2.95	2.62	2.37	2.16	1.79	1.59	1.44
18-16P	3.37	2.79	2.48	2.24	1.97	1.63	1.45	1.31
18-16S	3.85	3.02	2.68	2.43	2.25	1.86	1.65	1.50
18-18P	3.77	3.12	2.77	2.51	2.37	1.96	1.74	1.58
18-18S	3.75	3.13	2.78	2.52	2.39	1.97	1.75	1.59
18-19P	3.77	3.53	3.14	2.84	2.87	2.37	2.11	1.91
18-19S	4 25	3.15	2.79	2.53	2.40	1.99	1.77	1.60
18-20P	3.78	2.77	2.46	2.23	1.95	1.62	1.44	1.30
18-20S	3.34	2.86	2.54	2.30	2.06	1.70	1.51	1.37
18-22P	3.44	2.67	2.37	2.15	1.83	1.52	1.35	1.22
18-22S	3.36	2.77	2.46	2.23	1.95	1.62	1.44	1.30
18-29P	3.37	2.79	2.48	2.24	1.97	1.63	1.45	1.31
18-29S	3.37	2.79	2.48	2.24	1.97	1.63	1.45	1.31
18-420P	5 57	4.60	4.09	3.70	...	...	.....	...
18-420S	5.80	4.79	4.25	3.85	...	...	...	...
20-2P	4 45	3.68	3.26	2.96	2.94	2.43	2.16	1.96
20-2S	4.69	3.88	3.44	3.12	3.18	2.63	2.34	2.12
20-3P	3.86	3.19	2.83	2.56	2.35	1.94	1.73	1.56
20-3S	4 41	3.65	3.24	2.93	2.91	2.40	2.13	1.93
20-4P	3.96	3.27	2.91	2.63	2.46	2.03	1.80	1.63
20-4S	4.22	3.49	3.10	2.81	2.72	2.25	1.99	1.81
20-5P	3.93	3.25	2.88	2.61	2.42	2.00	1.78	1.61
20-5S	4.08	3.37	3.00	2.71	2.58	2.13	1.89	1.71
20-6P	3.75	3.10	2.76	2.50	2.25	1.86	1.65	1.50
20-6S	3.79	3.13	2.78	2.52	2.28	1.89	1.68	1.52
20-7P	3.96	3.27	2.91	2.63	2.46	2.03	1.80	1.63
20-7S	4.12	3.40	3.02	2.74	2.61	2.16	1.92	1.74
20-8P	4.22	3.49	3.10	2.81	2.72	2.25	1.99	1.81
20-8S	4.57	3.78	3.35	3.04	3.06	2.53	2.25	2.04
20-9P	4.10	3.39	3.01	2.73	2.60	2.15	1.91	1.73
20-9S	4.13	3.42	3.04	2.75	2.63	2.17	1.93	1.75
20-11P	4.46	3.69	3.28	2.97	2.96	2.45	2.17	1.97
20-11S	5.73	4.73	4.20	3.81	4.22	3.49	3.10	2.81
20-12P	3.96	3.27	2.91	2.63	2.46	2.03	1.80	1.63
20-15P	4.15	3.43	3.05	2.76	2.65	2.19	1.94	1.76
20-15S	4.90	4.05	3.59	3.25	3.39	2.80	2.49	2.25
20-16P	4.17	3.45	3.06	2.77	2.66	2.20	1.96	1.77
20-16S	4.31	3.56	3.16	2.86	2.80	2.32	2.06	1.86
20-17P	4.13	3.42	3.04	2.75	2.63	2.17	1.93	1.75
20-17S	4.58	3.79	3.37	3.05	3.08	2.55	2.26	2.05
20-18P	4.26	3.52	3.12	2.83	2.75	2.27	2.02	1.83
20-18S	4.48	3.70	3.29	2.98	2.94	2.43	2.16	1.96
20-22P	4.46	3.69	3.28	2.97	2.96	2.45	2.17	1.97
20-22S	4.90	4.05	3.59	3.25	3.39	2.80	2.49	2.25
20-23P	4.08	3.37	3.00	2.71	2.58	2.13	1.89	1.71
20-23S	4.27	3.53	3.14	2.84	2.77	2.29	2.03	1.84
20-24P	4.13	3.42	3.04	2.75	2.63	2.17	1.93	1.75
20-24S	4.64	3.83	3.40	3.08	3.13	2.59	2.30	2.08
20-27P	4.22	3.49	3.10	2.81	2.72	2.25	1.99	1.81
20-27S	4.43	3.66	3.25	2.94	2.92	2.42	2.15	1.94
20-29P	4.39	3.63	3.23	2.92	2.89	2.39	2.12	1.92
20-29S	4.65	3.85	3.42	3.09	3.15	2.60	2.31	2.09
20-33P	4.38	3.62	3.21	2.91	2.87	2.37	2.11	1.91
20-33S	4.45	3.68	3.26	2.96	2.94	2.43	2.16	1.96
22-1P	4.17	3.45	3.06	2.77	2.58	2.13	1.89	1.71
22-1S	4.55	3.76	3.34	3.02	2.96	2.45	2.17	1.97
22-2P	4.34	3.59	3.19	2.89	2.75	2.27	2.02	1.83
22-2S	4.84	4.00	3.56	3.22	3.25	2.69	2.39	2.16
22-4P	4.43	3.66	3.25	2.94	2.84	2.35	2.08	1.89
22-4S	4.74	3.92	3.48	3.15	3.15	2.60	2.31	2.09
22-5P	4.27	3.53	3.14	2.84	2.68	2.22	1.97	1.78
22-5S	4.29	3.55	3.15	2.85	2.70	2.23	1.98	1.79
22-6P	4.24	3.50	3.11	2.82	2.65	2.19	1.94	1.76
22-7P	4.36	3.60	3.20	2.90	2.77	2.29	2.03	1.84
22-7S	4.64	3.83	3.40	3.08	3.04	2.52	2.24	2.02
22-8P	3.93	3.25	2.88	2.61	2.34	1.93	1.71	1.55
22-8S	4.41	3.65	3.24	2.93	2.82	2.33	2.07	1.87
22-9P	4.01	3.32	2.95	2.67	2.42	2.00	1.78	1.61
22-9S	4.55	3.76	3.34	3.02	2.96	2.45	2.17	1.97
22-10P	4.01	3.32	2.95	2.67	2.42	2.00	1.78	1.61
22-10S	4.10	3.39	3.01	2.73	2.51	2.07	1.84	1.67
22-11P	3.88	3.20	2.84	2.58	2.28	1.89	1.68	1.52
22-11S	4.01	3.32	2.95	2.67	2.42	2.00	1.78	1.61
22-12P	4.43	3.66	3.25	2.94	2.84	2.35	2.08	1.89
22-12S	4.79	3.96	3.52	3.19	3.20	2.65	2.35	2.13
22-13P	4.26	3.52	3.12	2.83	2.66	2.20	1.96	1.77

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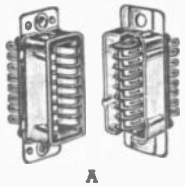
Amphenol "MS" Connectors

CONTINUED FROM PRECEDING PAGE

Shell Insert	MS/3108 A 1-99	A 10-49	A 50-99	A 100-999	B 1-99	B 10-49	B 50-99	B 100-999
22-13S	4.50	3.72	3.30	2.99	2.91	2.40	2.13	1.93
22-14P	4.67	3.86	3.43	3.11	3.08	2.55	2.26	2.05
22-14S	5.05	4.18	3.71	3.36	3.46	2.86	2.54	2.30
22-15P	4.39	3.63	3.23	2.92	2.80	2.32	2.06	1.86
22-15S	4.91	4.06	3.61	3.27	3.32	2.75	2.44	2.21
22-16P	4.50	3.72	3.30	2.99	2.91	2.40	2.13	1.93
22-16S	4.55	3.76	3.34	3.02	2.96	2.45	2.17	1.97
22-17P	4.37	3.63	3.23	2.92	2.80	2.32	2.06	1.86
22-17S	4.46	3.69	3.28	2.97	2.87	2.37	2.11	1.91
22-18P	4.24	3.50	3.11	2.82	2.65	2.19	1.94	1.76
22-18S	4.27	3.53	3.14	2.84	2.68	2.22	1.97	1.78
22-19P	4.64	3.83	3.40	3.08	3.04	2.52	2.24	2.02
22-19S	4.67	3.86	3.43	3.11	3.08	2.55	2.26	2.05
22-20P	4.31	3.56	3.16	2.86	2.72	2.25	1.99	1.81
22-20S	4.41	3.65	3.24	2.93	2.82	2.33	2.07	1.87
22-22P	4.69	3.88	3.44	3.12	3.10	2.56	2.27	2.06
22-22S	5.36	4.43	3.94	3.57	3.77	3.12	2.77	2.51
22-23P	4.58	3.79	3.37	3.05	2.99	2.47	2.20	1.99
22-23S	5 29	4.38	3.89	3.52	3.70	3.06	2.72	2.46
22-26P	4.48	3.70	3.29	2.98	2.89	2.39	2.12	1.92
22-26S	4.79	3.96	3.52	3.19	3.20	2.65	2.35	2.13
22-27P	4.55	3.76	3.34	3.02	2.96	2.45	2.17	1.97
22-27S	4.74	3.92	3.48	3.15	3.15	2.60	2.31	2.09
22-28P	4.45	3.68	3.26	2.96	2.85	2.36	2.10	1.90
22-28S	5.35	4.42	3.92	3.55	3.75	3.10	2.76	2.50
22-29P	4.65	3.85	3.42	3.09	3.06	2.53	2.25	2.04
22-29S	5.00	4.13	3.67	3.32	3.41	2.82	2.50	2.27
22-34P	4.26	3.52	3.12	2.83	2.66	2.20	1.96	1.77
22-34S	4.34	3.59	3.19	2.89	2.75	2.27	2.02	1.83
22-36P	13.41	11.08	9.84	8.91	11.82	9.77	8.67	7.85
22-36S	14.48	11.97	10.63	9.63	12.89	10.65	9.46	8.57
22-404P	13.41	11.08	9.84	8.91	11.82	9.77	8.67	7.85
22-404S	14.48	11.97	10.63	9.63	12.89	10.65	9.46	8.57
24-1P	5.05	4.18	3.71	3.36	3.11	2.57	2.29	2.07
24-1S	5.57	4.60	4.09	3.70	3.63	3.00	2.67	2.42
24-2P	4.91	4.06	3.61	3.27	2.96	2.46	2.18	1.98
24-2S	5.47	4.52	4.01	3.63	3.53	2.92	2 59	2.35
24-5P	5.21	4.30	3.82	3.46	3.27	2 70	2.40	2.17
24-5S	5.57	4.60	4.09	3.70	3.63	3 00	2.67	2.42
24-6P	5.02	4.15	3.68	3.34	3.08	2.55	2.26	2.05
24-6S	5.85	4.83	4.29	3 89	3.91	3.23	2.87	2.60
24-7P	5.35	4.40	3.91	3.54	3.39	2.80	2.49	2.25
24-7S	5.57	4.60	4.09	3.70	3.63	3.00	2.67	2.42
24-9P	4.88	4.03	3.58	3.24	2.94	2.43	2.16	1.96
24-9S	5.17	4.28	3.80	3.44	3.24	2.67	2.37	2.15
24-10P	6.09	5.03	4.47	4.05	4.15	3.43	3.05	2.76
24-10S	6.64	5.49	4.88	4.42	4.71	3.89	3.45	3.13
24-11P	5.54	4.58	4.06	3.68	3.60	2.97	2.64	2.39
24-11S	6.42	5.31	4.71	4.27	4.48	3.70	3.29	2.98
24-12P	5.67	4.69	4.17	3.77	3.74	3.09	2.74	2.48
24-12S	6.35	5.25	4.66	4.22	4.41	3.65	3.24	2.93
24-18P	4.65	3.85	3.42	3.09	2.72	2.25	1.99	1.81
24-18S	5.95	4.92	4.37	3.96	4.01	3.32	2.95	2.67
24-19P	5.21	4.30	3.82	3.46	3.27	2.70	2.40	2.17
24-19S	5.40	4.46	3.96	3.59	3.46	2.86	2.54	2.30
24-20P	5.00	4.13	3.67	3.32	3.06	2.53	2.25	2.04
24-20S	5.03	4.16	3.70	3.35	3.10	2.56	2.27	2.06
24-21S	5.21	4.30	3.82	3.46	3.27	2.70	2.40	2.17
24-22P	5.38	4.45	3.95	3.58	3.44	2.85	2.53	2.29
24-22S	6.12	5.06	4.50	4.07	4.19	3.46	3.07	2.78
24-23S	6.06	5.01	4.45	4.03	4.12	3.40	3.02	2.74
24-27P	4.62	3.82	3.39	3.07	2.68	2.22	1.97	1.78
24-27S	4.69	3.88	3.44	3.12	2.75	2.27	2.02	1.83
24-28P	5.48	4.53	4.03	3.65	3.55	2.93	2.60	2.36
24-28S	5.90	4.88	4.33	3.92	3.96	3.27	2.91	2.63
24-768P	5.71	4.72	4.19	3.80	3.77	3.12	2.77	2.51
24-768S	6.90	5.71	5.07	4.59	4.97	4.10	3.64	3.30
24-835P	5.03	4.16	3.70	3.35	3.10	2.56	2.27	2.06
24-836S	5.67	4.69	4.17	3.77	3.74	3.09	2.74	2.48
28-1P	5.69	4.70	4.18	3.78	3.82	3.16	2.81	2.54
28-2P	5.33	4.40	3.91	3.54	3.46	2.88	2.54	2.30
28-2S	5.54	4.58	4.06	3.68	3.67	3.03	2.69	2 44
28-3P	5.43	4.49	3.99	3.61	3.56	2.95	2.62	2.37
28-3S	5.62	4.65	4.13	3.74	3.75	3.10	2.76	2.50
28-5P	5.33	4.40	3.91	3.54	3.46	2.86	2.54	2.30
28-5S	5.76	4.76	4.23	3.83	3.89	3.22	2.86	2.59
28-6P	5.97	4.93	4.38	3.97	4.10	3.39	3.01	2.73
28-6S	6.40	5.29	4.70	4.26	4.53	3.75	3.33	3.01
28-7P	5.43	4.49	3.99	3.61	3.56	2.95	2.62	2.37
28-7S	5.81	4.80	4.27	3.86	3.94	3.26	2.90	2.62
28-8P	5.33	4.40	3.91	3.54	3.46	2.86	2.54	2.30
28-8S	5.43	4.49	3.99	3.61	3.56	2.95	2.62	2.37

Shell Insert	MS/3108 A 1-99	A 10-49	A 50-99	A 100-999	B 1-99	B 10-49	B 50-99	B 100-999
28-9P	5.50	4.55	4.04	3.66	3.63	3.00	2.67	2.42
28-9S	5.80	4.79	4.25	3.85	3.93	3.25	2.88	2.61
28-10P	6.44	5.32	4.72	4.28	4.57	3.78	3.35	3.04
28-10S	7.51	6.21	5.51	4.99	5.64	4.66	4.14	3.75
28-11P	5.73	4.73	4.20	3.81	3.86	3.19	2.83	2.56
28-11S	6.45	5.33	4.74	4.29	4.58	3.79	3.37	3.05
28-12P	5.86	4.85	4.31	3.90	7.00	3.30	2.93	2.66
28-12S	6.45	5.33	4.74	4.29	4.58	3.79	3.37	3.05
28-13P	6.23	5.15	4.57	4.14	4.36	3.60	3.20	2.90
28-13S	6.85	5.66	5.03	4.55	4.98	4.12	3.66	3.31
28-14P	5.71	4.72	4.19	3.80	3.84	3.17	2.82	2.55
28-14S	6.04	4.99	4.43	4.01	4.17	3.45	3.06	2.77
28-15P	6.30	5.21	4.62	4.19	4.43	3.66	3.25	2.94
28-15S	6.90	5.71	5.07	4.59	5.03	4.16	3.70	3.35
28-16P	5.83	4.82	4.28	3.88	3.96	3.27	2.91	2.63
28-16S	5.86	4.85	4.31	3.90	4.00	3.30	2.93	2.66
28-17P	5.29	4.38	3.89	3.52	3.39	2.80	2.49	2.25
28-17S	5.50	4.55	4.04	3.66	3.63	3.00	2.67	2.42
28-18P	5.21	4.30	3.82	3.46	3.34	2.76	2.45	2.22
28-18S	5.47	4.52	4.01	3.63	3.60	2.97	2.64	2.39
28-19P	5.24	4.33	3.85	3.48	3.37	2.79	2.48	2.24
28-19S	5.86	4.85	4.31	3.90	4.00	3.30	2.93	2.66
28-20P	5.76	4.76	4.23	3.83	3.89	3.22	2.86	2.59
28-20S	6.14	5.08	4.51	4.08	4.27	3.53	3.14	2.84
28-21P	6.42	5.31	4.71	4.27	4.55	3.76	3.34	3.02
28-21S	6.97	5.76	5.12	4.63	5.10	4.22	3.75	3.39
28-22P	6.35	5.25	4.66	4.22	4.48	3.70	3.29	2.98
32-4S	7.20	5.95	5.28	4.78	4.90	4.05	3.59	3.25
32-5P	7.56	6.25	5.55	5.03	5.26	4.35	3.86	3.50
32-5S	8.01	6.62	5.88	5.32	5.71	4.72	4.19	3.80
32-6P	7.89	6.52	5.79	5.24	5.59	4.62	4.10	3.71
32-6S	9.81	8.11	7.20	6.52	7.51	6.21	5.51	4.99
32-7P	7.65	6.32	5.61	5.08	5.35	4.42	3.92	3.55
32-7S	8.82	7.29	6.48	5.87	6.52	5.39	4.79	4.34
32-8P	8.04	6.65	5.91	5.35	5.74	4.75	4.22	3.82
32-8S	8.17	6.71	5.96	5.39	5.81	4.80	4.27	3.86
32-9P	7.37	6.09	5.41	4.90	5.07	4.19	3.72	3.37
32-9S	7.94	6.56	5.83	5.28	5.64	4.66	4.14	3.75
32-12P	6.85	5.66	5.03	4.55	4.55	3.76	3.34	3.02
32-12S	7.72	6.38	5.66	5.13	5.41	4.48	3.98	3.60
32-13P	7.29	5.98	5.31	4.81	4.93	4.08	3.62	3.28
32-13S	7.79	6.44	5.72	5.18	5.48	4.53	4.03	3.65
32-15P	8.68	7.18	6.38	5.77	6.38	5.28	4.69	4.24
32-15S	9.22	7.62	6.77	6.13	6.92	5.72	5.08	4.60
32-17P	8.63	7.14	6.34	5.74	6.33	5.23	4.65	4.21
32-17S	9.13	7.55	6.71	6.07	6.88	5.65	5.02	4.54
32-101P	13.30	11.00	9.77	8.84	11.00	9.09	8.08	7.31
32-102P	10.67	8.82	7.84	7.10	8.37	6.92	6.15	5.57
32-102S	11.87	9.81	8.71	7.89	9.57	7.91	7.02	6.37
32-414P	9.86	8.15	7.24	6.56	7.56	6.25	5.55	5.03
32-414S	12.06	9.97	8.85	8.02	9.76	8.07	7.16	6.49
36-1S	8.98	7.42	6.59	5.97	6.69	5.48	4.86	4.40
36-2S	11.33	9.37	8.32	7.53	8.98	7.42	6.59	5.97
36-3P	9.97	8.09	7.19	6.51	7.44	6.15	5.46	4.95
36-3S	11.59	9.58	8.51	7.71	9.29	7.64	6.78	6.14
36-4P	9.76	8.07	7.16	6.49	7.40	6.12	5.44	4.92
36-4S	10.92	9.02	8.01	7.26	8.55	7.08	6.29	5.69
36-5P	11.18	9.24	8.20	7.43	8.82	7.29	6.48	5.87
36-7P	9.53	7.88	7.00	6.34	7.16	5.93	5.27	4.77
36-7S	10.17	8.41	7.47	6.76	7.82	6.46	5.74	5.20
36-8P	9.34	7.72	6.86	6.21	6.99	5.78	5.13	4.65
36-8S	9.76	8.07	7.16	6.49	7.40	6.12	5.44	4.92
36-9P	10.47	8.65	7.68	6.96	8.11	6.71	5.96	5.39
36-9S	11.97	9.90	8.79	7.96	9.52	7.95	7.06	6.39
36-10P	9.26	7.65	6.79	6.15	6.90	5.71	5.07	4.59
36-10S	9.72	8.04	7.14	6.46	7.37	6.09	5.41	4.90
36-14P	11.21	9.27	8.23	7.45	8.86	7.32	6.50	5.89
36-14S	11.76	9.72	8.64	7.82	9.41	7.78	6.91	6.26
36-15P	8.37	6.92	6.15	5.57	6.02	4.98	4.42	4.00
36-15S	8.86	7.32	6.50	5.89	6.50	5.38	4.78	4.32
36-403P	10.47	8.65	7.68	6.96	8.17	6.71	5.96	5.39
36-403S	12.87	10.65	9.46	8.57	10.54	8.71	7.73	7.00
36-404P	11.61	9.60	8.52	7.72	9.26	7.65	6.79	6.15
36-404S	13.11	10.84	9.63	8.72	10.76	8.89	7.90	7.15
36-405P	13.10	10.63	9.61	8.71	10.74	8.88	7.89	7.14
36-405S	15.57	12.87	11.43	10.35	13.22	10.93	9.70	8.79
36-406P	12.01	9.92	8.81	7.98	9.65	7.98	7.09	6.42
40-1P					7.66	6.33	5.63	5.09
40-1S					9.20	7.61	6.76	6.12
40-5P					11.97	9.90	8.79	7.96
40-5S					14.60	12.07	10.72	9.71
40-9P					9.72	8.04	7.14	6.46
40-9S					12.68	10.48	9.31	8.43
40-10P					13.20	10.91	9.69	8.77
40-10S					15.00	12.40	11.01	9.97
44-1P								
44-1S								

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222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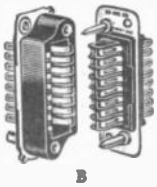
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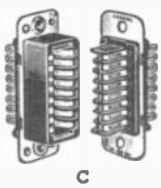
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F

AMPHENOL BLUE RIBBON® CONNECTORS

Barrier polarization type connectors are designed for interconnecting electronic sub-assemblies, circuit switching, rerouting and other multi-contact applications. Interlocking design of mating dielectric bodies provide positive polarization. The dimensional stability and high tensile strength of Amphenol "Blue" dielectric make this type of polarization possible. Float mounted receptacle corrects misalignment of plug and receptacle. Corrosion resistant, stainless steel molded-in mounting plates and housing. Rated: 5 amps, 800 volts DC at sea level, 300 volts at 70,000 ft. altitude. Av. Shpg. Wt., 3 oz.

(A) BARRIER POLARIZATION CONNECTORS WITH KEYED SHELLS

Male

Stk. No.	Type	Con.	1-9	10-49	50-99	100-249	250-999
42F182	26-4101-8P	8	2.08	1.75	1.42	1.28	1.05
42F183	26-4101-16P	16	3.14	2.65	2.14	1.93	1.59
42F184	26-4101-24P	24	3.62	3.05	2.48	2.23	1.83
42F185	26-4101-32P	32	4.16	3.50	2.84	2.55	2.10
			Female				
42F186	26-4201-8S	8	2.40	2.02	1.64	1.48	1.21
42F187	26-4201-16S	16	3.26	2.75	2.23	2.00	1.65
42F188	26-4201-24S	24	3.91	3.29	2.67	2.39	1.97
42F189	26-4201-32S	32	4.53	3.82	3.09	2.78	2.29

(B) PIN POLARIZATION TYPE CONNECTORS

Male

Stk. No.	Type	Con.	1-9	10-49	50-99	100-249	250-999
39F132	26-159-16	16	2.12	1.79	1.45	1.30	1.07
39F134	26-159-24	24	2.40	2.01	1.63	1.47	1.21
39F136	26 159-32	32	3.02	2.54	2.07	1.86	1.52
			Female				
39F133	26 190-16	16	2.70	2.27	1.85	1.66	1.37
39F135	26-190-24	24	3.23	2.72	2.21	1.98	1.63
39F137	26-190-32	32	3.81	3.20	2.60	2.34	1.92

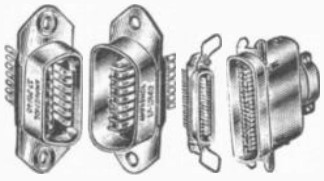
(C) BARRIER POLARIZATION TYPE CONNECTORS

Male

Stk. No.	Type	Con.	1-9	10-49	50-99	100-249	250-999
39F130	26-182	8	1.16	0.98	0.79	0.71	.59
42F150	26-4100-8P	8	1.06	0.89	0.72	0.65	.54
42F151	26-4100-16P	16	1.98	1.67	1.35	1.22	1.00
42F152	26-4100-24P	24	2.38	2.01	1.63	1.46	1.20
42F153	26-4100-32P	32	2.77	2.33	1.89	1.70	1.40
			Female				
39F131	26-183	8	1.83	1.53	1.25	1.12	.92
42F154	26-4200-8S	8	1.73	1.46	1.19	1.06	.87
42F155	26-4200-16S	16	2.52	2.12	1.72	1.54	1.27
42F156	26-4200-24S	24	2.98	2.51	2.04	1.83	1.50
42F157	26-4200-32S	32	3.56	2.99	2.43	2.18	1.80

MICRO-RIBBON CONNECTORS

Series 57. For cable-to-chassis connections. Molded of diallylphthalate. Cont.: gold plated over silver. Shells: cadmium plated brass. Float: .020 V. Rating: 5 amps; 700 V. sea level, 200 at 70,000 ft. altitude. *Cable-to-chassis plug: Latch-type receptacle.



Stk. No.	Type	Cont.	Descrip.	1-9	10-49	50-99	100-249	250-999
42F190	57-10140	14	Male	1.85	1.55	1.26	1.14	.94
42F193	57-20140	14	Female	1.90	1.80	1.29	1.17	.86
42F191	57-10240	24	Male	2.47	2.07	1.79	1.51	1.25
42F194	57-20240	24	Female	2.52	2.12	1.73	1.55	1.28
42F192	57-10360	36	Male	2.83	2.38	1.93	1.74	1.42
42F195	57-20360	36	Female	2.90	2.44	1.98	1.78	1.46
42F126	57-30140	14	Male	3.55	2.98	2.42	2.19	1.79
42F127	57-40140†	14	Female	2.33	1.97	1.60	1.44	1.18
42F128	57-30240*	24	Male	3.90	3.28	2.65	2.40	1.96
42F129	57-40240†	24	Female	2.78	2.33	1.90	1.71	1.40
42F130	57-30360*	36	Male	4.77	4.02	3.25	2.94	2.42
42F131	57-40360†	36	Female	3.00	2.52	2.04	1.83	1.51
42F132	57-10500	50	Male	3.73	3.15	2.55	2.28	1.87
42F133	57-20500	50	Female	3.77	3.19	2.58	2.32	1.91
42F134	57-30500*	50	Male	5.23	4.40	3.58	3.22	2.65
42F135	57-40500†	50	Female	3.92	3.30	2.67	2.40	1.98

RIGHT-ANGLE MICRO RIBBON CONNECTORS

Rt. angle 50 contact connectors provide max. contact density in min. space. With polyethlyene dust covers, cadmium plated brass shell, 5 Amps, 700 VDC.

Stk. No.	Type	Cont.	Cont.	1-9	10-49	50-99	100-249	250-999
42F198	57-10500-7	50	Plug	4.42	3.73	3.03	2.62	2.22
42F199	57-20500-7	50	Recp.	4.70	3.96	3.22	2.88	2.37

(D) CABLE TYPE—END OUTLET—KEYED LOCK SHELLS

Mate with 4401 series plugs and sockets.

Male

Stk. No.	Type	Con.	1-9	10-49	50-99	100-249	250-999
42F158	26-4301-8P	8	5.36	4.50	3.65	3.29	2.71
42F159	26-4301-16P	16	6.72	5.65	4.59	4.13	3.39
42F160	26-4301-24P	24	7.53	6.33	5.13	4.62	3.80
42F161	26-4301-32P	32	8.39	7.06	5.72	5.15	4.23
			Female				
42F162	26-4301-8S	8	6.51	5.48	4.44	4.00	3.29
42F163	26-4301-16S	16	7.26	6.10	4.95	4.45	3.65
42F164	26-4301-24S	24	8.47	7.13	5.79	5.20	4.28
42F165	26-4301-32S	32	9.17	7.21	6.26	5.63	4.63

(E) CABLE TYPE—SIDE OUTLET—KEYED LATCH LOCK SHELLS

Mate with 4401 Series plugs and sockets.

Male

Stk. No.	Type	Con.	1-9	10-49	50-99	100-249	250-999
42F174	26-4501-8P	8	5.76	4.50	3.65	3.29	2.71
42F175	26-4501-16P	16	6.72	5.65	4.59	4.13	3.39
42F176	26-4501-24P	24	7.53	6.33	5.13	4.62	3.80
42F177	26-4501-32P	32	8.39	7.06	5.72	5.15	4.23
			Female				
42F178	26-4501-8S	8	6.03	5.07	4.12	3.70	3.05
42F179	26-4501-16S	16	7.23	6.10	4.95	4.45	3.66
42F180	26-4501-24S	24	8.20	6.90	5.60	5.03	4.14
42F181	26-4501-32S	32	9.05	7.61	6.17	5.55	4.57

(F) CHASSIS TYPE—KEYED LATCH—LOCK SHELLS

Mate with 4301 and 4501 Series plugs and sockets.

Male

Stk. No.	Type	Con.	1-9	10-49	50-99	100-249	250-999
42F166	26-4401-8P	8	3.23	2.72	2.21	1.98	1.63
42F167	26-4401-16P	16	4.25	3.57	2.90	2.61	2.14
42F168	26-4401-24P	24	4.78	4.02	3.27	2.93	2.42
42F169	26-4401-32P	32	5.21	4.47	3.62	3.27	2.68
			Female				
42F170	26-4401-8S	8	3.93	3.31	2.68	2.42	1.98
42F171	26-4401-16S	16	4.81	4.04	3.28	2.95	2.43
42F172	26-4401-24S	24	5.43	4.57	3.71	3.33	2.74
42F173	26-4401-32S	32	6.12	5.15	4.18	3.76	3.09

RACK & PANEL CONNECTOR

Type 126. Cable units have protective can and clamp. Each connector accommodates No. 16 and No. 20 wire. Molded of mica-filled phenolic. Silver-plated brass male contacts, silver-plated beryllium copper female contacts. Gold flash on all contacts. Rated at 500 volts, 60 cycles AC. Wt., 3 oz.

CHASSIS PLUG

Stock No.	Mfrs. Type	Total	Contacts #16	Contacts #20	1-49	50-99	100-249
39FX050	126-804	11	2	9	.91	.72	.59
39FX054	126-151	11	3	12	1.20	.95	.78
39FX058	126-806	20	4	16	1.44	1.13	.94

CHASSIS SOCKET

Stock No.	Mfrs. Type	Total	Contacts #16	Contacts #20	1-49	50-99	100-249
39FX051	126-805	11	2	9	.94	.74	.62
39FX055	126-150	15	3	12	.91	.72	.59
39FX059	126-807	20	4	16	1.15	.90	.75

CABLE PLUG

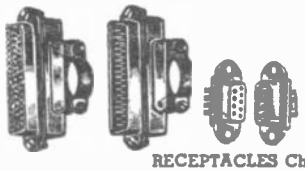
Stock No.	Mfrs. Type	Total	Contacts #16	Contacts #20	1-49	50-99	100-249
39FX052	126-809	11	2	9	1.49	1.17	.97
39FX056	126-152	15	3	12	2.33	1.84	1.52
39FX060	126-811	20	4	16	2.31	1.82	1.51

CABLE SOCKET

Stock No.	Mfrs. Type	Total	Contacts #16	Contacts #20	1-49	50-99	100-249
39FX053	126-808	11	2	9	1.52	1.20	1.00
39FX057	126-153	15	3	12	1.81	1.43	1.19
39FX061	126-810	20	4	16	2.02	1.59	1.32

Amphenol Connectors

MIN RAC 17 MINIATURE RACK AND PANEL CONNECTORS



Newest in the Amphenol line, for solder type contacts. Weight saving of 50% over old style. Uniform assembly separate from the connector plus removability at any time for circuit changes. Contacts are gold over silver plated.

RECEPTACLES Chromate finish

Stk. No.	No. of Contacts	Type	1-9	10-49	50-99	100-249	250-499	500-999	1M-2499
39F1360	9	17-10090	1.48	1.32	1.09	.97	.81	.78	.74
39F1361	15	17-10150	2.02	1.81	1.49	1.32	1.11	1.06	1.01
39F1362	25	17-10250	3.04	2.72	2.23	1.99	1.67	1.60	1.52
39F1363	37	17-10370	4.18	3.74	3.07	2.74	2.30	2.20	2.09
39F1364	50	17-10500	5.38	4.82	3.95	3.52	2.96	2.83	2.69

RECEPTACLES gold iridite fin.

39F1365	9	17-11090	1.48	1.32	1.09	.97	.81	.78	.74
39F1366	15	17-11150	2.02	1.81	1.49	1.32	1.11	1.06	1.01
39F1367	25	17-11250	3.04	2.72	2.23	1.99	1.67	1.60	1.52
39F1368	37	17-11370	4.18	3.74	3.07	2.74	2.30	2.20	2.09
39F1369	50	17-11500	5.38	4.82	3.95	3.52	2.96	2.83	2.69

PLUGS Chromate finish

Stk. No.	Contact	Type	1-9	10-49	50-99	100-249	250-499	500-999	1M-2499
39F1370	9	17-20090	1.04	.93	.76	.68	.57	.55	.52
39F1371	15	17-20150	1.26	1.13	.93	.83	.69	.66	.63
39F1372	25	17-20250	1.82	1.63	1.34	1.19	1.00	.96	.91
39F1373	37	17-20370	2.50	2.24	1.84	1.63	1.38	1.31	1.25
39F1374	50	17-20500	3.22	2.88	2.37	2.11	1.77	1.69	1.61

PLUGS gold iridite fin.

39F1375	9	17-21090	1.04	.93	.76	.68	.57	.55	.52
39F1376	15	17-21150	1.26	1.13	.93	.83	.69	.66	.63
39F1377	25	17-21250	1.82	1.63	1.34	1.19	1.00	.96	.91
39F1378	37	17 21370	2.50	2.24	1.84	1.63	1.38	1.31	1.25
39F1379	50	17-21500	3.22	2.88	2.37	2.11	1.77	1.69	1.61

CABLE CLAMP ASSEMBLIES
For use with either receptacle or plug
Chromate fin.

Stk. No.	Contact	Type	1-9	10-49	50-99	100-249	250-499	500-999	1M-2499
39F1380	9	17-310-01	1.13	.95	.76	.68	.57	.52	.49
39F1381	15	17-311-01	1.18	.99	.78	.71	.59	.54	.50
39F1382	25	17-312-01	1.24	1.02	.82	.74	.62	.57	.53
39F1383	37	17-313-01	1.28	1.07	.86	.77	.64	.59	.55
39F1384	50	17-314-01	1.31	1.09	.87	.79	.65	.60	.56

Gold iridite

39F1385	9	17-310-02	1.13	.95	.76	.68	.57	.52	.49
39F1386	15	17-311-02	1.18	.99	.78	.71	.59	.54	.50
39F1387	25	17-312-02	1.24	1.02	.82	.74	.62	.57	.53
39F1388	37	17-313-02	1.28	1.07	.86	.77	.64	.59	.55
39F1389	50	17-314-02	1.31	1.09	.87	.79	.65	.60	.56

MIN RAC LOCKING ASSEMBLIES
CLEAR CHROMATE FINISH

For positive latching in cable to panel applications. Use with cable clamp assemblies.

Stk. No.	Type	Use With	1-9	10-49	50-99	100-249	250-499	500-999
39F1390	17-529	All except 50 cont. spring	.65	.59	.49	.40	.36	.30
39F1391	17-768	All sizes screw	.72	.65	.54	.44	.40	.33
39F1392	17-770	50 cont. spring	.65	.59	.49	.40	.36	.30
39F1393	17-769	All float screws	.61	.55	.46	.37	.34	.28

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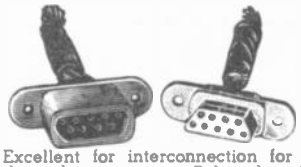


SERIES 223 TINY-TIM

- **Meets Mil-C 8384B**
- **Snap latch engagement locking device.**

Excellent for interconnection for circuit modules. For five to thirty-three contacts. Polycarbonate resin dielectric. The trapezoidal shape prevents mismating. Guide pins are used for keying. Cable clamp used for cable to panel or cable cable applications. Clamp fit plug or to to receptacle. Mounting holes 0.10. Shpg. wt., 1½ oz.

Stock No.	Type	Contacts	Description	1-9	10-49	50-99	100-249
39F1425	223-1105	5	plug	.60	.50	.41	.35
39F1426	223-1205	5	rec.	.57	.48	.38	.33
39F1427	223-1109	9	plug	.53	.44	.35	.30
39F1428	223-1209	9	rec.	.57	.48	.38	.33
39F1429	223-1117	17	plug	.62	.52	.42	.36
39F1430	223-1217	17	rec.	.60	.49	.39	.34
39F1431	223-1125	25	plug	.55	.46	.37	.32
39F1432	223-1225	25	rec.	.60	.50	.41	.34
39F1433	223-1133	33	plug	.67	.55	.45	.38
39F1434	223-1233	33	rec.	.62	.50	.41	.35

SERIES 143 PRIN-CIR CONNECTORS

Fit .054"-.070" circuit boards or series 133 plugs. Gold-plated silver contacts have only 5 millivolt drop at 2 amps, readily withstand repeated insertions. Contacts are on .156" centers except for 28-cont. style which has .125" centers. Last 2 digits in type no. indicate contact style: —01 eyelet; —02 lug; —03 pin. Card insertion depth .333", height .458", weight 3 oz.

Stock No.	Type No.	Cont.	1-49	50-99	100-249	250-999	1M-2499
42F304	143-006-01	6	1.04	.87	.73	.63	.56
42F300	143-010-01	10	1.16	.97	.82	.70	.62
42F308	143-012-01	12	1.27	1.06	.89	.76	.68
42F301	143-015-01	15	1.25	1.04	.88	.75	.67
42F302	143-018-01	18	1.44	1.20	1.01	.86	.77
42F303	143-022-01	22	1.68	1.41	1.18	1.01	.90
42F306	143-022-02	22	1.81	1.51	1.27	1.09	.97
42F309	143-006-03	6	1.10	.92	.77	.66	.59
42F310	143-010-03	10	1.29	1.08	.91	.78	.69
42F311	143-012-03	12	1.35	1.13	.95	.81	.72
42F312	143-015-03	15	1.37	1.15	.96	.83	.73
42F313	143-018-03	18	1.58	1.32	1.11	.95	.84
42F314	143-022-03	22	1.87	1.57	1.311	1.13	1.00
42F315	143-036-03	36	3.70	3.10	2.60	2.23	1.94
42F305	143-953	Polarizing key for above. NET					.02

SERIES 133—MATES FOR SERIES 143

Double tail solder type, rated 600V RMS. 5 amp. Ht. .458".

Stock No.	Type No.	Cont.	1-49	50-99	100-249	250-999	1M-2499
42F316	133-010-03	10	1.93	1.62	1.36	1.16	1.01
42F317	133-012-03	12	2.23	1.86	1.56	1.34	1.19
42F318	133-015-03	15	2.27	1.90	1.59	1.36	1.21
42F319	133-018-03	18	2.64	2.21	1.85	1.59	1.41
42F320	133-022-03	22	2.77	2.31	1.94	1.66	1.48
42F307	133-006-03	6	1.73	1.44	1.21	1.04	.90
42F196	133-006-21	6	1.77	1.48	1.24	1.06	.93
42F136	133-010-21	10	2.00	1.67	1.40	1.20	1.05
42F137	133-015-21	15	2.39	2.00	1.68	1.44	1.28
42F138	133-018-21	18	2.70	2.26	1.90	1.63	1.44
42F139	133-022-21	22	2.93	2.45	2.06	1.76	1.57

SERIES 222 MIGHTY-MITE CABLE CONNECTORS

4-Hole Square Flange Receptacle | **Receptacle w/o Clamp** | **Fig. A—Plug with Clamp** | **Fig. B—Receptacle with Clamp**

Designed for cable to cable, or panel to panel applications. To make cable connector use strain relief with either plug (Fig. A) or receptacle (Fig. B). Contacts are spaced on 0.085 centers. Shpg. wt., 3 oz

Stock No.	Type	Contacts	Description	1-9	10-49	50-99	100-249
39F1416	222-11N19	19	plug	1.00	.83	.67	.57
39F1417	222-12N19	19	rec.	.80	.67	.54	.46
39F1397	222-22N19	19	sq. flange rec.	.83	.68	.55	.47
39F1418	222-518	19	cable clamp	1.68	1.39	1.13	.96
39F1419	222-11N31	31	plug	1.00	.82	.66	.57
39F1420	222-12N31	31	rec.	.80	.66	.54	.46
39F1398	222-22N31	31	sq. flange rec.	.75	.62	.50	.43
39F1421	222-519	31	cable clamp	1.80	1.48	1.20	1.02
39F1422	222-11N61	61	plug	1.08	.89	.72	.61
39F1423	222-12N61	61	rec.	.85	.71	.57	.49
39F1399	222-22N61	61	sq. flange rec.	.90	.73	.59	.51
39F1424	222-520	61	cable clamp	4.10	3.39	2.74	2.33

MULTI-PURPOSE STRIP CONNECTORS

Series 221. Stack several strip connectors for a block breadboard connector, or cut with a knife or hacksaw for a smaller connector. Cutting eliminates the contact cavity. Connectors can be cut to any size of your various requirements. Guide pins are used to polarize, key, and pre-align contact. Shpg. Wt. 1 oz.

Stk. No.	Type	Contacts	Description	Spacing	1-9	10-49	50-99	100-249
39F1411	221-1160	60	6" plug	.108"	1.02	.85	.69	.58
39F1412	221-1260	60	6" rec.	.100"	.70	.57	.46	.39
39F1413	221-2153	53	4" plug	.075"	1.65	1.38	1.11	.94
39F1414	221-2253	53	4" rec.	.075"	1.22	1.02	.83	.70
39F1404	221-535	Guide Pin			Pkg. of 10 2.00			

MICRO-RAC CONNECTORS

Series 220. Designed for rack and panel or module applications. High contact density in an extremely small space. Guide hardware is supplied with receptacle and pre-aligns mating connectors. Monoblock body, injection molded of polycarbonate resin, with molded in contact identification numbers. Fifty-two contacts in a connector only 1.888" long, 104 contact connector only 3.017" long. Mounting centers for 52 contacts; 1.492. For 104; 2.6111. Shpg. Wt. 1 oz.

Stk. No.	Type	Contacts	Description	1-9	10-49	50-99	100-249
39F1405	220-1N052	52	plug	1.67	1.38	1.11	.95
39F1406	220-2N052	52	rec.	1.02	83	.67	.58
39F1407	220-5	52	cable clamp	1.95	1.61	1.29	1.17
39F1408	220-1N104	104	plug	1.95	1.59	1.38	1.10
39F1409	220-2N104	104	rec.	1.35	1.11	.91	.78
39F1410	220-6	104	cable clamp	2.00	1.66	1.33	1.19

MINIATURE CONNECTORS

For inter-connecting miniature electronic equipment. Designed to cover a wide range of applications by use of interchangeable nickel-plated, brass hardware and non-corrosive, gold-finished contacts. Bodies are molded of new Amphenol 1-501 dielectric, bases are silver-plated. For No. 20AWG or No. 22 JAN-C-76 wire. Has 5/8" threaded body with hex nut for panel mounting. Shpg. wt., 2 oz.

Stock No.	Mfr. Type	Contacts	Description	1-49	50-99	100-24
42FX100	126-010	5	Chassis Plug	.63	.50	.41
42FX101	126-011	5	Chassis Socket	1.01	.80	.66
42FX104	126-191	7	Chassis Plug	.74	.58	.48
42FX105	126-192	7	Chassis Socket	1.28	1.01	.84
42FX102	126-012	9	Chassis Plug	.86	.68	.56
42FX103	126-013	9	Chassis Socket	1.59	1.26	1.04
42FX108	126-1063	Hood and clamp assembly		.53	.42	.35
42FX109	126-1064	Locking sleeve for cord conn.		.31	.24	.20
42FX110	126-1069	Clip retainer for chassis unit.		.05	.04	.04

WITH HOOD AND CLAMP

Stock No.	Mfr. Type	Cont.	Desc.	1-49	50-99	100-24
42FX119	126-215	4	Socket	1.30	1.03	.85
42FX120	126-217	5	Plug	1.40	1.11	.92
42FX121	126-223	5	Socket	1.81	1.43	1.19
42FX122	126-195	7	Plug	1.54	1.22	1.01
42FX123	126-196	7	Socket	2.09	1.65	1.37
42FX124	126-220	9	Plug	1.66	1.31	1.09
42FX125	126-222	9	Socket	2.39	1.89	1.57

WITH LOCKING CLIP

Stock No.	Mfr. Type	Cont.	Desc.	1-49	50-99	100-249
42FX112	126-214	4	Plug	.77	.61	.50
42FX113	126-216	5	Plug	.67	.53	.44
42FX114	126-218	5	Socket	1.08	.85	.71
42FX115	126-197	7	Plug	.80	.63	.53
42FX116	126-198	7	Socket	1.35	1.07	.89
42FX117	126-219	9	Plug	.92	.73	.60
42FX118	126-221	9	Socket	1.66	1.31	1.09

MICRO-MINIATURE CONNECTORS

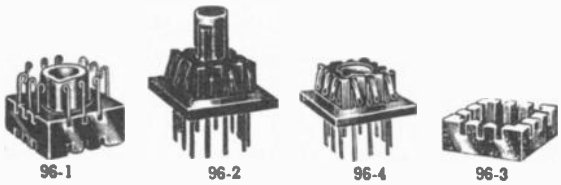
902 S01 P01 S01

Series 220. Wire-Form contact has spring tension in the pin contact (wire pin contact is always recessed within the plug). Newly designed solid pin Relia-Tac contact (Relia-Tac socket contact recessed within the plug). Guide pins are used for polarization, keying, and/or pre-aligning the mating connectors. They take the place of one pair of connectors and are inserted in the plug. Wire range22-28. Current rating: 3amps. Shpg. wt. 2 oz.

Stk. No.	Type	Description	Per Pkg. of 100 1-9	10-99	100 up
39F1400	220-PO2*	Pin cont. Relia-tac	3.70	2.90	2.50
39F1401	220-S02**	Sock. Cont. wireform	8.90	7.10	6.10
39F1402	220-P01*	Pin	6.10	4.90	4.20
39F1403	220-S01**	Socket	2.80	2.20	1.90

*Male **Female

MICRO-MOD CONNECTORS



96-1 96-2 96-4 96-3

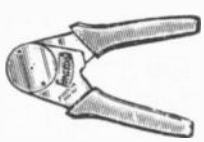
Micro-Mod connectors for modular or "stick" circuitry. Have unique double-spring design contacts with elastic reserve. Contacts, on .075" centers, are made of .010" beryllium copper wire, gold-over-silver plated. Micro-Mod connectors have durable glass-filled diallyl phthalate dielectric. The 96-4 plug mates with 96-3 receptacle, which is supplied without contacts (the module leads form the female contacts). This pair is recommended for modular or "stick" applications that have AWG #28 module leads (.012"). The 96-1 receptacle and 96-2 plug with polarizing key are supplied with contacts. The plug has a cadmium-plated molded-in brass polarizing key while the receptacle has a base and a keyway. This version can be used for cable-to-chassis, cable-to-cable, or modular applications. Dimensions: Model 96-1 Receptacle .380" sq. x .170" H; Model 96-2 plug .380" sq. x .742" H; Model 96-3 Receptacle .380" sq. x .130" H; Model 96-4 Plug .380" sq. x .577" H. Av. Wt., .03 oz.

12 Contact

Stk. No.	Type	Descriptions	1-9	10-49	50-99	100-249
39F1355	96-1	pol. receptacle	4.14	3.33	2.99	2.62
39F1356	96-2	pol. plug	6.11	4.93	4.43	3.87
39F1357	96-3	receptacle	.52	.42	.38	.33
39F1358	96-4	plug	5.16	4.16	3.74	3.27

RELIA-TAC WIRE TOOLS

ECONOMY CRIMPING TOOL



Type 294-188. An economical 4 indent crimping tool used with both Wireform and Relia-Tac Contacts. 4 indent crimp insures most positive retention while causing no distortion of contact.

39F1415. NET..... 49.95

CONTACT REMOVAL TOOL

294-137 294-205

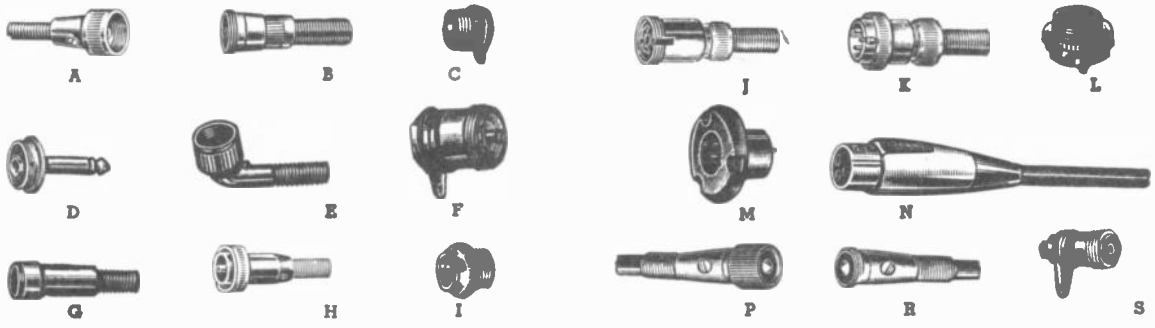
Stock No.	Type	Description	Net
39F1436	294-137	Wire Form	8.32
39F1437	294-205	Relia Tac	8.32

INSERTION TOOL

294-123

Stock No.	Type	Description	Net
39F1435	294-123	Contact insertion tool.	4.43

Amphenol Connectors



MICROPHONE CONNECTORS

Top-quality microphone connectors, chrome-plated brass, threaded coupling spring clamps. All microphones listed in this Catalog are supplied less connector—choose the one to meet your application from the complete selection below. Receptacles are for panel mounting. Plugs will fit either Jacks or Receptacles. Av. shpg. wt. 3 oz.

SERIES 75 SINGLE BUTTON CONTACT

Flat button contact means no pins to bend. Straight plug may be converted to jack by removing coupling ring. Phono plug adapter, 75 MCIP; screws into plug. Av. shpg. wt., 3 oz.

Stk. No.	Type	Fg.	Con	Desc.	1-49	50-249	250-499	500-999	1M-2499
39F000	75-MC1F	A	1	Plug	.64	.53	.447	.383	.340
39F001	75-MC1M	B	1	Jack	.46	.38	.320	.274	.243
39F002	75-PC1M	C	1	Receptacle	.41	.35	.291	.249	.221
39F003	75-MC1P	D	1	Phone Plug Adapter	.52	.43	.364	.311	.276
39F004	75-MC1FA	E	1	90° Plug	1.31	1.09	.917	.785	.697
39F005	75-CL-PC1M	F	1	Receptacle Shorting	.67	.56	.472	.404	.359
39F1280	75-CCC1	....	....	Cap, Chain	.45	.37	.314	.269	.239

SERIES 75 MINIATURE MICROPHONE CONNECTORS

Miniaturized version of the single contact mike connectors, have same rugged characteristics of standard 75 series mike connectors. Available in a male, female and chassis or panel type. Female is $1\frac{11}{64}$" long, male is 1" long, chassis is $\frac{5}{8}$" long. Threads are $\frac{3}{8}$-32, all parts machined brass nickel plated, Coupling ring removable for versatility. Accepts maximum cable OD of .208 inches. Wt., 3 oz.

Stk. No.	Model	Desc.	Fig.	1-49	50-249	250-499	500-999	1M-2499
39F094	75-1	Str. Plug	P	.40	.34	.282	.241	.214
39F095	75-2	Cable Jack	R	.28	.24	.197	.169	.150
39F096	75-3	Receptacle	S	.50	.42	.349	.299	.265

JACKS AND PLUGS

Single-contact units of molded bakelite. Contacts recessed $\frac{1}{8}$", to prevent shorts. All are for $\frac{3}{32}$" jacks or plugs except * which are for $\frac{1}{8}$", † $\frac{5}{32}$", ‡ take standard phone tips. 2 oz.

FIG. T—SERIES 78 TIP JACKS

Stk. No.	Type	Color	1-49	50-249	250-499	500-999	1000-2499
39F180	78-1S	Red	.09	.073	.061	.053	.047
39F181	78-1S	Black	.12	.097	.082	.070	.062
39F182	78-1M	Red*	.08	.064	.054	.046	.041
39F183	78-1M	Black*	.08	.068	.057	.049	.043
39F184	78-1L	Red†	.08	.066	.055	.048	.042
39F185	78-1L	Black†	.08	.064	.054	.046	.041
39F186	78-1P	Red‡	.09	.073	.061	.053	.047
39F187	78-1P	Black‡	.09	.078	.066	.056	.050

FIG. W—SERIES 71 PLUGS

Stk. No.	Type	Color	1-49	50-249	250-499	500-999	1000-2499
39F188	71-1S	Red	.05	.044	.037	.031	.028
39F189	71-1S	Black	.05	.044	.037	.031	.028
39F190	71-1M	Red*	.06	.052	.044	.038	.033
39F191	71-1M	Black*	.06	.049	.041	.035	.031
39F192	71-1L	Red†	.06	.052	.044	.038	.033
39F193	71-1L	Black†	.06	.050	.042	.036	.032

BAKELITE MINIATURE CABLE PLUGS

For series 78 sockets. Have plated brass prongs. Wt., 2 oz.

Stk. No.	Type	Pins	1-49	50-249	250-499	500-999	1000-2499
39F160	71-3S	3	.11	.096	.080	.069	.061
39F161	71-4S	4	.14	.113	.095	.081	.072
39F162	71-5S	5	.15	.122	.102	.088	.078
39F163	71-6S	6	.17	.144	.121	.104	.092

SERIES 80 ONE PIN CONTACT

Stk. No.	Type	Fg.	Con	Desc.	1-49	50-249	250-499	500-999	1M-2499
39F006	80-F	G	1F	Jack	.65	.541	.454	.389	.345
39F1281	80-F1	....	1F	Plug	.69	.578	.483	.414	.367
39F007	80-M	H	1M	Plug	.69	.559	.469	.401	.356
39F1282	80-M1	....	1M	Jack	.62	.522	.438	.375	.333
39F008	80-C	I	1F	Recpt.	.54	.447	.375	.321	.285
39F1283	80-C1	....	1M	Recpt.	.55	.461	.387	.331	.294

SERIES 80 TWO PIN CONTACT

Stk. No.	Type	Fg.	Con	Desc.	1-49	50-249	250-499	500-999	1M-2499
39F009	80-MC2F	G	2F	Jack	.71	.590	.495	.424	.376
39F1284	80-MC2F1	....	2F	Plug	.75	.626	.526	.450	.400
39F010	80-MC2M	H	2M	Plug	.69	.574	.482	.413	.366
39F1285	80-MC2M1	....	2M	Jack	.65	.539	.453	.388	.344
39F011	80-PC2F	I	2F	Recpt.	.60	.498	.418	.358	.317
39F1286	80-PC2M	....	2M	Recpt.	.57	.477	.400	.343	.304

SERIES 91 THREE PIN CONTACT

Stk. No.	Type	Fg.	Con	Desc.	1-49	50-249	250-499	500-999	1M-2499
39F012	91-MC3F	J	3F	Jack	1.07	.89	.749	.641	.569
39F1287	91-MC3F1	J	3F	Plug	1.10	.92	.771	.660	.586
39F013	91-MC3M	K	3M	Plug	1.01	.85	.710	.608	.539
39F1288	91-MC3M1	K	3M	Jack	.97	.81	.683	.585	.519
39F014	91-PC3F	L	3F	Recpt.	.73	.61	.515	.441	.392
39F1289	91-PC3M	....	3M	Recpt.	1.14	.95	.800	.685	.608

SERIES 91 FOUR PIN CONTACT

Stk. No.	Type	Fg.	Con	Desc.	1-49	50-249	250-499	500-999	1M-2499
39F015	91-MC4F	J	4F	Jack	1.10	.92	.774	.663	.588
39F1290	91-MC4F1	....	4F	Plug	1.14	.95	.800	.685	.608
39F016	91-MC4M	K	4M	Plug	1.03	.86	.721	.618	.548
39F1291	91-MC4M1	....	4M	Jack	.99	.83	.694	.594	.527
39F017	91-PC4F	L	4F	Recpt.	.72	.60	.505	.433	.384
39F1292	91-PC4M	....	4M	Recpt.	.98	.82	.686	.588	.522

"QUIK-MIKE" MICROPHONE CONNECTORS

Figs. M & N. Body is high grade zinc alloy. Gold plated contacts for easy soldering. Nickel finish insures resistance to corrosion. M—Male; F—Female. Av. shpg. wt. 5 oz.

Stk. No.	Type	Con.	Desc.	1-24	25-99	100-249	250-499	500-999
39F151	91-853	3M	Plug	1.73	1.45	1.216	1.041	.925
39F152	91-854	3F	Jack	2.27	1.90	1.581	1.363	1.210
39F153	91-855	3M	Recpt.	1.38	1.15	.968	.829	.736
39F154	91-856	3F	Recpt.	3.14	2.63	2.205	1.888	1.676
39F155	91-857	4M	Plug	1.82	1.52	1.276	1.093	.970
39F156	91-858	4F	Jack	2.52	2.11	1.767	1.513	1.343
39F157	91-859	4M	Recpt.	1.49	1.24	1.044	.894	.794
39F158	91-860	4F	Recpt.	3.37	2.82	2.365	2.025	1.798

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Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

Small, weatherproof low-voltage connectors with bayonet action for quick-disconnect applications. Non-constant impedance types for RG-55 and 58/U cables, and modified types for RG-59, 62, and 71/U cables. Shells, couplings, and male contacts are accurately machined from brass . . . springs are beryllium copper. All parts are silver-plated. Improved Series BNC connectors (Note 1) are constant-impedance 50 ohm types with excellent electrical performance up to 10,000 megacycles. Modified UG-290/U connectors (Note 2) are for RG-62 and 71/U cables, and are not matched. Shp. wt. 3 oz. ea.

A

B

C

D

E

F

G

H

J

K

L

M

TYPE "BNC" CONNECTORS

Stock No.	Type	JAN Type	Fig.	Description	RG/U Cables	Max. Jkt. Dia.	1-24	25-99	100-499	500-999	1M-2499
39F1000	31-006	CW-123/U	E	Cap & chain	.....	.....	.64	.53	.44	.38	.34
39F1009	31-026	CW123A/U	E	Cap & chain (1)	.....	.....	.43	.35	.30	.26	.23
39F072	31-007	CW155/U	....	Cap	.....	.....	.28	.23	.19	.17	.15
39F1010	31-027	CW155A/U	....	Cap	.....	.....	.41	.33	.28	.24	.21
39F1002	31-017	CW-159/U	E	Shorting plug	.....	.....	.87	.72	.60	.52	.46
39F1025	31-210	CW-282/U	E	Cap & chain (1)	.....	.....	.70	.58	.49	.42	.....
39F063	31-002	UG-88/U	B	Plug	55, 58	.206	.64	.53	.44	.38	.34
39F1003	31-018	UG-88B/U	B	Plug	55, 58	.206	.77	.63	.53	.46	.40
39F1018	31-202	UG-88C/U	B	Plug (1)	55, 58	.206	.70	.58	.49	.42	.37
39F064	31-005	UG-89/U	D	Jack	55, 58	.206	.96	.79	.66	.57	.50
39F1004	31-019	UG-89A/U	D	Jack	55, 58	.206	1.00	.82	.69	.....	.....
39F1021	31-205	UG-89B/U	D	Jack (1)	55, 58	.206	.89	.73	.62	.53	.47
39F1017	31-201	UG-291B/U	A	Panel jack (1)	55, 58	.206	1.15	.94	.79	.68	.60
39F1001	31-016	UG-254A/U	H	Receptacle*	.....	.....	4.22	3.47	2.91	2.51	.....
39F065	31-012	UG-260/U	B	Plug	59, 62, 71	.250	.68	.56	.47	.41	.36
39F1006	31-021	UG-260A/U	B	Plug	59, 62, 71	.250	.79	.65	.54	.47	.41
39F1027	31-212	UG-260B/U	B	Plug (1)	59, 62, 71	.250	.81	.67	.56	.48	.43
39F066	31-015	UG-261/U	D	Jack	59, 62, 71	.250	1.13	.93	.78	.67	.59
39F1007	31-022	UG-261A/U	D	Jack	59, 62, 71	.250	1.23	1.01	.85	.73	.....
39F1028	31-215	UG-261B/U	D	Jack (1)	59, 62, 71	.250	1.15	.94	.79	.68	.60
39F067	31-011	UG-262/U	A	Panel jack	59, 62, 71	.250	1.21	1.00	.84	.72	.64
39F1008	31-023	UG-262A/U	A	Panel jack	59, 62, 71	.250	1.64	1.39	1.13	.....	.....
39F1026	31-211	UG-262B/U	A	Panel jack (1)	59, 62, 71	.250	1.30	1.07	.89	.77	.....
39F068	31-008	UG-274/U	F	Tee adapter	.....	.....	2.15	1.76	1.48	1.28	1.13
39F1024	31-208	UG-274A/U	F	Tee adapter	.....	.....	2.27	1.87	1.57	1.35	1.14
39F069	31-003	UG-290/U	C	Receptacle	.....	.....	.72	.60	.50	.43	.38
39F1019	31-203	UG-290A/U	C	Receptacle (1)	.....	.....	.79	.65	.54	.47	.41
39F070	31-001	UG-291/U	A	Panel jack	55, 58	.206	1.06	.87	.73	.63	.56
39F1005	31-020	UG-291A/U	A	Panel jack	55, 58	.206	1.19	.98	.82	.71	.....
39F071	31-009	UG-306/U	G	90° adapter	.....	.....	1.87	1.54	1.29	1.11	.98
39F1071	31-209	UG-306A/U	G	90° adapter	.....	.....	2.02	1.66	1.39	1.20	1.06
39F1036	31-817	UG-447/U	C	Receptacle (2)	.....	.....	.94	.77	.65	.56	.49
39F1031	31-218	UG-491A/U	....	Adapter (1)	.....	.....	2.12	1.74	1.46	1.26	1.11
39F1337	31-236	UG-625B/U	....	Receptacle, 7/16"	.....	.....	.72	.60	.50	.43	.38
39F073	31-102	UG-657/U	J	Receptacle*	.....	.....	1.13	.93	.78	.67	.59
39F1033	31-220	UG-492A/U	....	Bulk. adapter*	.....	.....	2.53	2.07	1.74	1.50	1.32
39F1022	31-206	UG-909/U	L	Bulk. jack (1)	55, 58	.206	1.38	1.14	.95	.82	.73
39F1023	31-207	UG-910/U	L	Bulk. jack (1)	59, 62, 71	.250	1.53	1.26	1.06	.91	.80
39F1339	31-238	UG-912/U	....	Receptacle, 13/32"	.....	.....	1.72	1.41	1.19	1.02	.90
39F1020	31-204	UG-913/U	K	90° plug (1)	55, 58	.206	2.97	2.44	2.05	1.77	1.56
39F1030	31-217	UG-349A/U	M	Adapter†	.....	.....	2.31	1.90	1.60	1.35	1.21
39F1032	31-219	UG-914/U	....	St. adapter (1)	.....	.....	1.23	1.01	.85	.73	.65
39F075	31-221	UG-1094/U	....	Receptacle (2)	.....	.....	.68	.56	.47	.41	.36
39F1034	31-222	UG-1098/U	....	Bulk Recep.	.....	.....	2.55	2.09	1.76	1.52	1.34
39F1012	31-104	.....	C	90° Receptacle	.....	.....	1.47	1.20	1.01	.87	.....
39F1013	31-105	.....	C	Receptacle (2)	.....	.....	1.04	.86	.72	.62	.....
39F1035	31-759	.....	....	Ground lug	.....	.....	.15	.13	.11	.09	.08
39F1039	31-842	.....	C	Receptacle (2)	.....	.....	1.32	1.08	.91	.....	.....
39F1040	31-850	.....	K	90° plug	59, 62, 71	.250	3.12	2.56	2.15	1.86	1.64
39F1041	31-851	.....	....	Cable feed-thru	58	.206	.62	.51	.43	.37	.33
39F1042	31-351	.....	....	Plug	58, 141	.....	3.06	2.51	2.11	1.82	1.60
39F1043	31-356	.....	....	Jack	58, 141	.....	2.63	2.16	1.81	1.57	.....
39F1044	31-359	.....	....	Plug	59, 62, 140	.....	3.06	2.51	2.11	1.82	1.60

BNC TYPE

Stock No.	Type	JAN Type	Fig.	Description	1-24	25-99	100-499	500-999	1M-2499
39F1302	1300	UG-90/U	M	Panel jack, sq. flange RG55, 58	3.61	2.96	2.49	.....	.....
39F1311	4500	UG-185/U	....	Receptacle, sq. flange	1.02	.84	.70	.61	.54
39F1331	47000	UG-414/U	....	2 Female ends, sq. flange	1.55	1.27	1.07	.92	.81
39F1313	5675	UG-535/U	....	Angle receptacle, sq. flange	1.98	1.62	1.36	1.18	1.04
39F1312	5575	UG-625/U	....	Receptacle, 7/16" single hole mtg.	.64	.53	.44	.38	.34
39F1335	84975	UG-1033/U	L	Plug, improved, RG122	1.38	1.14	.95	.82	.73
39F1315	8525	.....	....	Angle plug, RG55, 58	2.25	1.85	1.55	1.34	1.18
39F1072	36775	.....	.....	Straight plug, RG58. 141U	.89	.73	.62	.53	.47

CAPTIVATED CONTACT CONNECTORS 50 OHM BNC SERIES

Stock No.	Type	Similar to	Fig.	Description	RG-/U Cables	Max. Jkt. Dia.	1-24	25-99	100-499	500-999	1M-2499
39F1220	31-301	UG-88C/U	B	Plug (1)	55,58,141,142	.206	1.38	1.14	.95	.82	.73
39F1221	31-302	UG-89B/U	D	Jack (1)	55,58,141,142	.206	1.93	1.59	1.33	1.15	.....
39F1223	31-304	UG-260B/U	B	Plug (1)	59,62,71,140	.250	1.42	1.17	.98	.85	.75
39F1219	31-300	UG-291B/U	A	Panel jack (1)	55,58,141,142	.206	2.15	1.76	1.48	1.28	.....

NOTES:
*Pressurized Types.
†Connects Male Series N and Female Series BNC.
1) Improved Series BNC Connectors.
2) Modified UG-290/U for RG-62 and 71/U Cables.

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Amphenol Connectors

Assembly Unit

Mil Crimp

Ferrule

Plug Body

AMPHENOL MIL-CRIMP BNC CONNECTORS

Terminates with 100% crimp or at the option of the user, with center contact soldered. Constant 50 ohm inped. VSWR identical to solder type BNC connectors up through 10,000 Mc.
1.25 to 1 max. cable retension equal to braid. Center contact completely captivated. Inter-mateable with all BNC connectors. Sizes: plug, $1\frac{17}{64} \times \frac{9}{16}$" dia. right angle plug, $1\ \frac{9}{16} \times 1\frac{1}{8} \times \frac{9}{16}$" dia. cable jack, $1\ 1\frac{1}{32} \times \frac{9}{16}$" dia. blkhd. jack, $1\frac{5}{16} \times 1\frac{1}{16}$" dia.—½" "D" mounting hole.

AMPHENOL MIL-CRIMP BNC CONNECTORS

USE WITH AMPHENOL COAX CABLES RG58, RG58A, RG58C, RG-141, RG-141A

Stock No.	Mfgs. Type	Description	1-24	25-99	100-499	500-999	1000-2499
39F1438	31-320	Plug	1.11	.91	.76	.66	.58
39F1439	31-335	Ang. Pllug	3.35	2.75	2.31	1.99	...
39F1440	31-327	Jack	1.32	1.08	.91	..	..
39F1441	31-342	Blkhd. Jack	1.76	1.45	1.22	1.05	..

USE WITH AMPHENOL COAX CABLES RG55, RG55A, RG55B, RG-142, RG-142A, RG-142B, RG-223

39F1442	31-326	Plug	.94	.77	.65	.56	.49
39F1443	31-334	Ang. Plug	3.35	2.75	2.31	.	..
39F1444	31-333	Jack	1.32	1.08	.91	.....	.....
39F1445	31-341	Blkhd. Jack	1.76	1.45	1.22	1.05	.

USE WITH AMPHENOL COAX CABLES RG59, RG59A, RG59B, RG62, RG62B, RG62C, RG-140

39F1446	31-321	Plug	1.11	.91	.76	.66	.58
39F1447	31-336	Ang. Plug	3.35	2.75	2.31	1.99	.....
39F1448	31-328	Jack	1.38	1.14	.95	...	.....
39F1449	31-343	Blkhd. Jack	1.76	1.45	1.22	1.05	.93

USE WITH AMPHENOL COAX CABLES RG71, RG71A, RG71B

39F1450	31-322	Plug	1.11	.91	.76	.66	.
39F1451	31-337	Ang. Plug	3.35	2.75	2.31	. ...	.... .
39F1452	31-329	Jack	1.38	1.14	.95	. ...	.....
39F1453	31-344	Blkhd. Jack	1.76	1.45	1.22	...	..

USE WITH AMPHENOL COAX CABLES RG180, RG180A, RG180B, RG195, RG195A

39F1454	31-323	Plug	1.25	1.03	.87	.75	.66
39F1455	31-338	Ang. Plug	3.35	2.75	2.31	.....	.....
39F1456	31-330	Jack	1.38	1.14	.95	.....	.....
39F1457	31-345	Blkhd. Jack	1.75	1.45	1.22	.....	.....

USE WITH AMPHENOL COAX CABLES RG122

39F1458	31-324	Plug	1.25	1.03	.87	.	.
39F1459	31 339	Ang. Plug	3.35	2.75	2.31	.....	. .
39F1460	31-331	Jack	1.76	1.45	1.22	... .	. ...
39F1461	31-345	Blkhd. Jack	1.76	1.45	1.22	.	.
39F1462	31-325	Plug	1.25	1.03	.87	.75	.66
39F1463	31-340	Ang. Plug	3.35	2.75	2.31	.....	...
39F1464	31-332	Jack	1.76	1.45	1.22	.... .	. ..
39F1465	31-347	Blkhd. Jack	2.12	1.74	1.46	.....	.....

HEX CRIMP TOOLS

Stk. No.	Tool P/N	Die P/N Included	Connector Series	Die Cavity	Crimps	RG Cable	NET
39F1466	227-350	227-292-1	BNC/TNC	A	Braid	55, 48, 141, 142, 233, 122, 180, 195. 21-597,	97.00
39F1467	227-375	227-920-2	BNC/TNC	B	Braid	421-637, 71, 59, 62, 140	97.00

Series 27. Available in push-on & screw-on types in both 50 and 75 ohm impedance. Machined brass with spring brass working members, gold finished for corrosion resistance, beryllium copper female contacts, brass male contacts. Teflon insulation except hermetically sealed receptacles which are glass and Teflon. Advanced subminiaturized design incorporates latest elements for greater operational efficiency. Field serviceable types require no crimping. Fv shpg. wt. 3 oz.

Note: 50 ohm connectors can be used with Amphenol 21-596 and 21-598 min. cable. 75 ohm connectors can be used with Amphenol 21-597 miniature coaxial cable.

SUB-MINIATURE RF CONNECTORS

50 OHM PUSH-ON

Stock No.	Type No.	Description	Tool No.	1-24	25-99	100-499	500-999	1000-2499
42F201	27-1	Plug	227.900	.72	.60	.50	.43	.38
42F202	27-2	Jack	227.900	.75	.61	.52	.45	.39
42F203	27-3	Recptable, Blkh.	None	1.15	.94	.79	.68	.60
42F204	27-4	Jack Bulkhead	227-900	1.02	.84	.70	.61	.54

50 OHM SCREW-ON

42F207	27-7	Plug	227.900	.68	.56	.47	.41	.36
42F208	27-8	Jack	227-900	.77	.63	.53	.46	.40
42F209	27-9	Receptacle	None	.64	.53	.44	.38	.34
42F210	27-10	Jack, Bulkhead	227-900	1.02	.84	.70	.61	.54
42F212	27-12	Recpt. Hermetic	227-900	1.47	1.20	1.01	..	..
42F226	27-26	Plug Right Angle	None	1.68	1.38	1.16	1.00	.88
39F1217	27-28	Adapter, Subminax to BNC	None	1.87	1.54	1.29	1.11	.98
39F1216	27-800	Receptacle, Prtd. Circuit	None	1.76	1.45	1.22	1.05	.93

75 OHM PUSH-ON

Stock No.	Type No.	Description	Tool No.	1-24	25-99	100-499	500-999	1000-2499
42F213	27-13	Plug	227-901 & 227-902	1.36	1.12	.94	.81	.71
42F214	27-14	Jack	227-901 & 227-902	.79	.65	.54	...	...
42F215	27-15	Receptacle	None	1.21	1.00	.84	.72	.64

75 OHM SCREW-ON

42F219	27-19	Plug	227-901	.94	.77	.65	.56	.49
42F220	27-20	Jack	227-901	2.84	2.34	1.96	.....	.....
42F221	27-21	Receptacle	None	1.21	1.00	.84	.72	.64
42F222	27-22	Jack, Bulkhead	227-901	1.58	1.31	1.10	.95	.84
42F224	27-24	Recept. Hermetic	None	4.99	4.09	3.44	2.97	2.61
42F225	27-25	Angle Plug	227-901	2.55	2.09	1.76	1.52	1.34

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

TYPE N CONNECTORS

Weatherproof low-voltage connectors of constant impedance. All are 50 ohm types except (1), which are 70 ohms.

Stk. No.	Type	Jan Type	Fig.	Description	For RG-/U Cable	Max. Jkt. Dia.	1-24	25-99	100-499	500-999	1000-2499
39F1101	82-86	UG-18B/U	C	Plug	5, 6, 21	.332	1.95	1.60	1.35	1.16	1.03
39F1119	82-203	UG-18C/U	C	Plug	5, 6, 21	.332	2.84	2.34	1.96	1.69	.....
39F1103	82-88	UG-20B/U	E	Jack	5, 6, 21	.332	2.76	2.27	1.90	.....	.....
39F1124	82-210	UG-20C/U	E	Jack	5, 6, 21	.332	2.57	2.11	1.77	.....	.....
39F1108	82-96	UG-21C/U	C	Plug	8, 9, 10	.332	1.40	1.15	.97	.84	.74
39F019	82-61	UG-21B/U	C	Plug	8, 9, 10	.332	1.17	.96	.81	.70	.61
39F1118	82-202	UG-21D/U	C	Plug	8, 9, 10	.332	1.17	.96	.81	.70	.61
39F1107	82-95	UG-22C/U	D	Panel jack	8, 9, 10	.332	2.00	1.64	1.38	.....	.....
39F020	82-62	UG-22B/U	D	Panel jack	8, 9, 10	.332	1.76	1.45	1.22	1.05	.....
39F1122	82-208	UG-22D/U	D	Panel jack	8, 9, 10	.332	1.98	1.62	1.36	.....	.....
39F021	82-63	UG-23B/U	E	Jack	8, 9, 10	.332	1.42	1.17	.98	.85	.75
39F1106	82-94	UG-23C/U	E	Jack	8, 9, 10	.332	1.76	1.45	1.22	1.05	.....
39F1123	82-209	UG-23D/U	E	Jack	8, 9, 10	.332	1.62	1.33	1.11	.96	.85
39F076	82-64	UG-27A/U	F	90° adapter	.....	.....	3.06	2.51	2.11	1.82	1.60
39F1109	82-98	UG-27B/U	F	90° adapter	.....	.....	3.31	2.72	2.28	1.97	1.74
39F1127	82-213	UG-27C/U	F	90° adapter	.....	.....	2.76	2.27	1.90	1.64	1.45
39F1110	82-93	UG-28A/U		Tee adapter	.....	.....	3.31	2.72	2.28	1.97	.....
39F077	82-65	UG-29A/U	G	St. adapter	.....	.....	1.89	1.55	1.30	1.13	.99
39F1112	82-101	UG-29B/U	G	St. adapter	.....	.....	1.68	1.38	1.16	1.00	.88
39F022	82-66	UG-30/U		Bulk. adapter	.....	.....	3.90	3.21	2.69	2.32	2.05
39F1117	82-201	UG-30C/U		Bulk. adapter	.....	.....	4.60	3.78	3.17	2.74	2.41
39F1111	82-100	UG-57B/U	H	St. adapter	.....	.....	2.15	1.76	1.48	1.28	1.13
39F023	82-24	UG-58/U	A	Receptacle	.....	.....	.81	.67	.56	.48	.43
39F028	82-97	UG-58A/U	B	Receptacle	.....	.....	.85	.70	.59	.51	.45
39F024	82-84	UG-94A/U	C	Plug (1)	11-13	.420	2.02	1.66	1.39	1.20	1.06
39F1104	82-83	UG-95A/U	E	Jack (1)	11-13	.420	2.15	1.76	1.48	1.28	.....
39F025	82-90	UG-96A/U	D	Panel jack (1)	11-13	.420	2.25	1.85	1.55	.....	.....
39F018	82-36	UG-107A/U	B	Tee adapter	.....	.....	5.98	4.91	4.12	3.56	.....
39F078	82-102	UG-107B/U	B	Tee adapter	.....	.....	5.73	4.70	3.95	3.41	3.00
39F1113	82-105	UG-204A/U	J	Plug	14, 74	.545	5.83	4.79	4.02	.....	.....
39F1128	82-811	UG-680/U	K	Bulk. recpt.	.....	.....	2.21	1.81	1.52	1.31	1.16
39F1114	82-106	MX-913/U		Cap & chain	.....	.....	.53	.44	.37	.32	.28
39F1115	82-112	.....	B	Receptacle	.....	.....	1.78	1.47	1.23	1.06	.94
39F1129	82-835	.....	L	Angle plug	8, 9, 10	.332	3.95	3.24	2.72	2.35	2.07
39F1130	82-1275	.....		Grounding lug	.....	.....	.13	.11	.09	.....	.....
39F1340	91100	UG-30D/U	C	Adpg 2F Ends	.....	.....	3.01	2.47	2.08	1.79	1.58
39F1323	34000	UG-536/U		Plug R, 55, 58	.....	.....	1.98	1.62	1.36	1.18	1.04
39F1324	34025	UG-536B/U	C	Plug, Improved R, 55	.....	.....	1.45	1.19	1.00	.86	.76
39F1073	82-342	UG-1695/U	L	Plugs	11, -A, 149	.813	1.30	1.06	.89	.77	.68
39F1074	82-340	UG-1681/U	L	Plugs		.813	1.18	.97	.81	.70	.62
39F1075	82-349	UG-1707/U	M	Angle plugs		.813	4.51	3.70	3.10	2.68	2.36
39F1076	82-337	UG-1688/U	P	Jacks	8, 8A,	.687	1.40	1.15	.96	.83	.73
39F1077	82-343	UG-1697/U	N	Panel jacks	213	1.00	1.63	1.34	1.12	.97	.86
39F1078	82-346	UG-1700/U	O	Bulkhead jacks		.875	2.55	2.09	1.75	1.51	1.33

TYPE "C" CONNECTORS

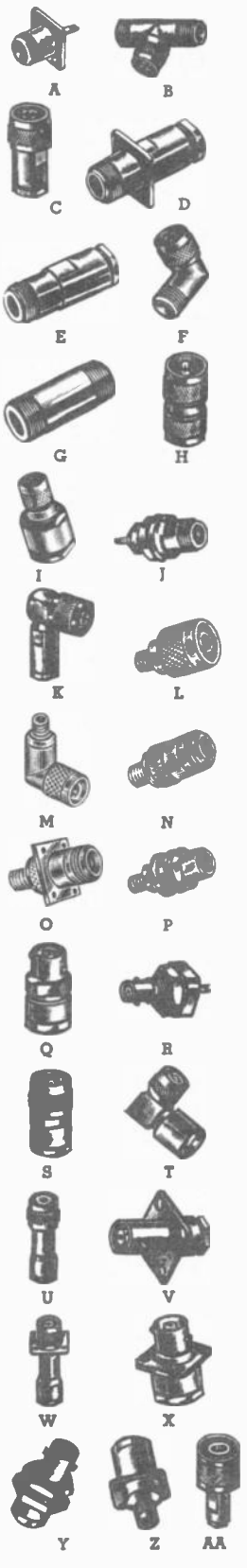
Improved design for 50 ohm RF cables. Will also fit 70 ohm cables where impedance match is not critical. Employ quick-disconnect bayonet-type lock. Silver-coated, has teflon dielectric. Shpg. wt., 4 oz.

39F087	82-530	UG-573A/U	T	Plug	8, 9	.420	2.06	1.69	1.42	1.23	1.08
39F1135	82-508	UG-564/U	....	.....	...	....	3.40	2.79	2.34	.....	.....
39F1149	82-536	UG-566A/U	B	Tee adapter	.....	.....	9.25	7.59	6.37	.....	.....
39F1148	82-535	UG-567A/U	V	90° adapter	.....	.....	4.20	3.45	2.89	.....	.....
39F1133	82-504	UG-568/U	A	Receptacle	...	.....	1.74	1.43	1.20	1.04	.91
39F1134	82-505	UG-569/U	R	Bulk. recpt.	.....	.....	2.34	1.92	1.61	.....	.....
39F1131	82-502	UG-570/U	N	Bulk. jack	8, 9	.420	2.80	2.30	1.93	1.67	.....
39F086	82-501	UG-571/U	M	Panel jack	8, 9	.420	2.42	1.99	1.67	.....	.....
39F1132	82-503	UG-572/U	P	Jack	8, 9	.420	2.19	1.80	1.51	.....	.....
39F1145	82-532	UG-628A/U	T	HV plug	8, 9A	.420	2.82	2.32	1.95	1.68	1.48
39F1143	82-521	UG-632/U	N	Bulk. HV jack	8, 9A	.420	3.29	2.70	2.27	.....	.....
39F1140	82-514	UG-643/U	....	.....	....	....	2.27	1.87	1.57	.....	.....
39F1141	82-515	UG-634/U	R	Bulk. recpt.	.....	.....	2.72	2.23	1.87	1.62	.....
39F1137	82-511	UG-705/U	R	Bulk. recpt	.....	.....	4.41	3.62	3.04	2.62	.....
39F1147	82-534	UG-709A/U	C	Plug	55, 58	.206	2.38	1.95	1.64	1.42	1.25
39F1144	82-531	UG-710A/U	V	90° plug	.....	.....	4.10	3.36	2.82	2.44	2.15
39F1138	82-512	MX-1142/U		Cap & chain	.....	.....	1.02	.84	.70	.61	.54

TYPE "HN" CONNECTORS

Have 5 kv peak rating, when used with Amphenol 307 Silicone compound. Machined brass. 4 oz.

39F026	82-804	UG-59B/U	X	Plug	8-10	.420	2.95	2.42	2.03	1.76	1.55
39F1150	82-38	UG-59A/U	X	Plug	8-10	.420	3.18	2.61	2.19	1.89	1.67
39F1151	82-39	UG-60A/U	Y	Jack	8-10	.420	3.54	2.91	2.44	.....	.....
39F1164	82-814	UG-60B/U	Y	Jack	8-10	.420	3.06	2.51	2.11	.....	.....
39F1152	82-40	UG-61A/U	Y	Panel jack	8-10	.420	5.18	4.25	3.57	.....	.....
39F1165	82-815	UG-61B/U	Y	Panel jack	8-10	.420	5.03	4.13	3.46	.....	.....
39F1156	82-91	UG-212A/U	Z	90° adapter	...	....	6.07	4.98	4.18	.....	.....
39F1154	82-56	UG-333/U	AA	Jack	17, 18	.870	15.08	12.38	10.38	.....	.....
39F1159	82-107	UG-333A/U	Z	Panel jack	17, 18	.870	12.58	10.32	8.66	.....	.....
39F1160	82-108	UG-334A/U	J	Panel jack	17, 18	.870	13.25	10.88	9.13	.....	.....
39F1158	82-92	UG-496/U	A	Receptacle	.....	.....	2.55	2.09	1.76	1.52	1.34
39F027	82-805	UG-560/U	A	Receptacle	.....	.....	2.91	2.39	2.00	1.73	1.52
39F1163	82-130	.....	..	Cap & chain	54A	....	1.42	1.17	.98	.....	.....
39F1166	82-816	.....	BB	Plug	8-10	.250	3.54	2.91	2.44	2.11	1.86
39F1167	82-833	.....	L	Angle plug	.....	.420	6.39	5.24	4.40	3.80	3.35
39F1168	82-836	.....	K	Receptacle	.....	.....	4.67	3.83	3.22	2.78	2.45
39F1169	82-843	.....	....	HV receptacle	8-10	.....	6.30	5.17	4.34	3.75	.....
39F1170	82-856	.....	L	Angle plug	.....	.420	6.58	5.40	4.53	3.91	3.45



Amphenol RF Connectors

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MISCELLANEOUS CONNECTORS AND ADAPTERS

*55, 58, 59, 60, 71. †8-10, 87A, 115, 115A.

Stk. No.	Type	Jan Type	Fig.	Description	Max. Jkt. RG-/U Cables	Max. Jkt. Dia.	1-24	25-99	100-499	500-999	10000-2499
39F1171	82-21	UG-85/U	....	Plug	(*)	.242	5.92	4.86	4.08	.....	.....
39F1174	82-42	UG-87/U	....	Receptacle	.....	.....	3.93	3.22	2.71	.....	.....
39F1175	82-59	UG-154/U	A	Plug	17, 18	.870	21.92	18.00	15.10	.....	.....
39F1176	82-80	UG-352/U	B	Receptacle	.....	.....	7.59	6.22	5.22	.....	.....
39F1177	82-110	UG-352A/U	B	Receptacle	.....	.....	13.15	10.79	9.06	.....	.....
39F1195	82-540	UG-565A/U	....	.....	.....	.....	4.71	3.87	3.25	2.80	.....
39F1213	82-538	UG-943A/U	C	Plug	10, 12	.405	4.35	3.57	3.00	.....	.....
39F1187	82-312	UG-1185/U	...	Plug	(†)	.425	1.40	1.15	.97	.84	.74
39F1188	82-313	UG-1186/U	....	Jack	(†)	.425	2.46	2.02	1.70	1.47	1.29
39F1190	82-320	UG-1213/U	...	Plug	(†)	.425	4.39	3.61	3.03	2.61	2.30
39F1180	82-150	.....	....	Splice adpt.	8-10	.420	17.39	14.27	11.98	.....	.....
39F1196	82-830	.....	D	Push-on plug	55, 58	.206	.60	.49	.41	.36	.31
39F1197	82-831	.....	E	Push-on recpt.	.....	.....	1.04	.86	.72	.62	.55
39F1198	82-832	.....	D	Push-on plug	62, 71	.250	.64	.53	.44	.38	.34
39F1199	82-841	.....	E	Push-on recpt.	.....	.....	1.19	.98	.82	.71	.63
39F1200	82-842	.....	D	Push-on plug	.....	.....	.60	.49	.41	.36	.....
39F1201	82-845	.....	....	Push-on plug	55, 58	.206	.86	.79	.66	.57	.50
39F1202	82-846	.....	F	Push on jack	55, 58	.206	1.19	.98	.82	.71	.....
39F1205	82-888	.....	G	.....	.....	.....	1.66	1.36	1.14	.99	.87

TAPERING TOOL

Model 103-301. Tapering tool for RG-/U cables. 8-10. Military No. MX-103/U. Shpg. wt., 2 oz.
42F246. NET 7.95

BETWEEN SERIES ADAPTERS

Stk. No.	MIL.	Type	Mates With	1-24	25-99	100-499	500-999	1000-2499
39F1038	UG-201/U	31-830	N female and BNC male	2.34	1.92	1.61	1.39	1.23
39F1029	UG-201A/U	31-216	N female and BNC male	1.62	1.33	1.11	.96	.85
39F074	UG-273/U	31-028	BNC male and UHF 49194	1.34	1.10	.92	.80	.70
39F1030	UG-349A/U	31-217	N male and BNC female	2.31	1.90	1.60	1.39	1.21
39F1135	UG-564/U	82-508	C male and N female	3.40	2.79	2.34	2.80	.....
39F1195	UG-565A/U	82-540	C female and N male	4.71	3.87	3.25	.....	.....
39F1217	.....	27-28	BNC female to 50 ohm Screw-on subminax male	1.87	1.54	1.29	1.11	.98
39F1310	UG-146/U	4400	UHF female and N male	2.89	2.46	2.06	1.78	1.57
39F1307	UG-255/U	2900	BNC male and UHF fem.	2.17	1.78	1.49	1.29	1.14
39F1320	UG-318/U	26700	N male and UHF female	5.52	4.53	3.80	.....	.....

TYPE UHF CONNECTORS

Series UHF RF connectors will operate satisfactorily at frequencies up to 200 megacycles without any special precautions, and used at frequencies up to 500 megacycles under certain conditions. These connectors will also handle all peak votages up to 500 without danger of breakdown. Large single and twin-contact connectors are provided with rubber sealing gasket for weather-proofing, while small single and twin-contact types can be waterproofed by application of Amphenol 307 Silicone Compound to mating insulator surfaces. Metal surfaces are silver-plated. Beaded chains for caps are nickel-plated brass. Shipping weight each, 4 oz. approx.

Stock No.	Type	Jan Type	Fig.	Description	For RG-/U Cables	Mx. Jkt. Dia.	1-24	25-99	100-499	500-999	1000-2999
39F034	83-1T	M-358	H	Tee adapter (1)	.....	.....	2.97	2.44	2.05	1.77	1.56
39F1060	83-58	M-359A	I	90° adapter (1)	.....	.....	1.64	1.34	1.12	.97	.86
39F035	83-1J	PL-258	...	St. adapter (1)	.....	.....	1.11	.91	.76	.66	.58
39F030	83-1SP	PL-259	J	Plug (1)	8-13, 63	.420	.56	.46	.38	.33	.29
39F031	83-1SPN	PL-259A	J	Plug (1)	8-13, 63	.420	.98	.80	.68	.58	.51
39F1065	83-756	49195	J	Plug (1)	8-12	.420	1.34	1.10	.92	.80	.70
39F047	83-22F	PL-275	K	Bulk adapter (2)	.....	.....	3.21	2.63	2.21	.....	.....
39F1056	83-2SP	PL-295	L	Plug (4)	57, 130	.625	4.71	3.87	3.25	.....	.....
39F039	83-1R	SO-239	M	Receptacle (1)	.....	.....	.53	.44	.37	.32	.28
39F1055	83-2R	SO-265	M	Receptacle (4)	.....	.....	3.97	3.26	2.73	.....	.....
39F043	83-22SP	UG-102/U	L	Plug (2)	22	.405	1.21	1.00	.84	.72	.64
39F048	83-22R	UG-103/U	M	Receptacle (2)	.....	.....	1.04	.86	.72	.62	.55
39F044	83-22AP	UG-104/U	I	90° Bulk adap. (2)	.....	.....	2.12	1.74	1.46	1.26	.....
39F046	83-22J	UG-105/U	...	St. adapter (2)	.....	.....	1.55	1.27	1.07	.92	.....
39F037	83-1H	UG-106/U	N	Hood (1-2)	22	.405	.32	.27	.22	.19	.71
39F1064	83-750	UG-111/U	J	Plug (1)	59, 62, 71	.250	.87	.72	.60	.50	.46
39F040	83-185	UG-175/U	...	Reducing adap.	58	.195	.17	.14	.12	.10	.09
39F041	83-168	UG-176/U	...	Reducing adap.	59, 62, 71	.250	.17	.14	.12	.10	.09
39F038	83-765	UG-177/U	N	Hood (1)	29, 55, 58	.206	.32	.27	.22	.19	.17
39F045	83-22T	UG-196/U	...	Tee adapter (2)	.....	.....	3.06	2.51	2.11	.....	.....
39F032	83-776	UG-203/U	J	Plug (1)	55,59,62,71	.250	1.47	1.20	1.01	.87	.77
39F1051	83-1HP	UG-372/U	N	Hood (1)	8-13, 63	.420	.41	.33	.28	.24	.21
39F1058	83-21R	UG-357/U	M	Receptacle (2)	.....	.....	3.31	2.72	2.28	.....	.....
39F1059	83-21SP	UG-358/U	J	Plug (3)	34	.625	5.20	4.27	3.58	3.09	.....
39F036	83-1F	UG-363/U	K	Bulk adapter (1)	.....	.....	2.27	1.87	1.57	1.35	1.19
39F033	83-1AP	UG-646/U	I	90° adapter (1)	.....	....	1.62	1.33	1.11	.96	.85
39F042	83-1AC	.....	...	Cap & chain (1-2)	.....	.....	.72	.60	.50	.43	.38
39F1050	83-1BC	.....	...	Cap & Chain (1-2)	.....	.....	1.19	.98	.82	.71	.63
39F1052	83-1RTY	SO-239	M	Receptacle (1)	.....	.870	.85	.70	.59	.51	.45
39F1061	83-59	.....	P	90° Plug (1)	17, 18	...	3.50	2.88	2.41	2.09	1.84
39F1062	83-65	.....	...	Reducing adap.	.250 Diam.	.870	.22	.18	.15	.13	.12
39F1070	83-86	.....	...	UHF cable conn.	17	....	15.37	12.62	10.59	.....	.....
39F1063	83-716	.....	M	Receptacle* (1)	.....	....	3.86	3.17	2.66	.....	.....
39F1066	83-786	.....	N	Hood & nut (1)	29, 55, 58	.206	.75	.61	.52	.45	.39
39F049	83-798	SO-239A	M	.....	.....	.....	1.17	.96	.81	.20	.61
39F1068	83-821	.....	H	Plug (2) Teflon	22	.405	1.85	1.52	1.27	1.10	.97
39F1225	83-822	49190	J	Plug (1) Teflon	...	.....	.68	.56	.47	.41	.36
39F088	83-850	.....	...	Solderless plug	11	.405	2.72	2.23	1.87	.....	.....
39F089	83-851	.....	...	Solderless plug	8-13, 63	.420	1.89	1.55	1.30	1.13	.....

*Pressurized types

NOTES: 1) Small single-contact connectors 2) Small twin-contact connectors 3) Large single-contact connectors 4) Large twin-contact connectors

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

AMPHENOL RF CONNECTORS

SOLDERLESS RF CONNECTORS

Solderless Amphenol connectors eliminate two common soldering operations in connector-cable assembly. Both are similar to the standard Amphenol 83-ISP plug.

Stock No.	Type	Max. Oper. Freq. (mc)	Shpg. Wt. (lbs.)	For RG-/U Cables	Max. Jkt. Dia.	1-24	25-99	100-499	500-999	1000-2499
39F088	83-850	200	.083	11	.405	2.72	2.23	1.87	.....	.....
39F089	83-851	200	.082	65	.....	1.89	1.55	1.30	1.13	.....

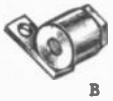
83-850—83-851

CABLE TERMINATIONS

Designed to terminate coax shield without soldering and permitting the inner conductor to extend beyond the termination. (*) Mount in 5/16" hole. Average wt., 4 oz.

Stock No.	Type	Jan Type	Fig.	RG/U Cable	Max. Jkt. Dia.	Mounting	1-24	25-99	100-499	500-999	1000-2499
39F1301	1050	MC1530/U*	A	59, 62, 71	.250	Locknut	.53	.44	.37	.32	.28
39F1300	1025	MX1684/U*	A	56, 58	.195	Locknut	.58	.47	.40	.34	.30
39F1309	4025	MX1801/U	B	59, 62, 71	.250	Rt. Strap	.68	.56	.47	.....	.....

A



B

COAXIAL PLUG-IN CONNECTORS

Commonly used on drawer-type chassis for direct plug-in connections. Plug and receptacle mount in 5/16" hole. 2,000 volts. Average wt., 4 oz.

Stock No.	IPC Type	Jan Type	Fig.	Description	1-24	25-99	100-499	500-999	1000-2499
39F1305	2225	UG1050/U	E	Male	.72	.60	.50	.43	.38
39F1304	2175	UG1051/U	E	Female	.87	.72	.60	.52	.46
39F1306	2325	.....	.	Right angle hood	.98	.80	.68	.58	.51
39F1308	3425	.....	..	Male, gold plated	.89	.73	.62	.....	. .

C

D

MB COAXIAL CONNECTORS

Excellent electrical and mechanical properties at low cost. Extremely small, use up to 500 mc, 500 volts, 400°F. Bayonet lock. Average weight, 4 oz.

Stock No.	Jan Type	Fig.	Description	For RG-/U Cable	Max. Jkt. Dia.	1-24	25-99	100-499	500-999	1000-2499
39F1326	45000	G	Plug	58	.195	1.17	.96	.81	.70	.61
39F1329	46000	H	Receptacle, nylon	.....	.	1.16	.87	.73	.63	.56
39F1330	46025	H	Receptacle, Kel-F	.	.	1.06	.87	.73	.63	.56
39F1334	48850	G	Plug with Jacket Clamp	195	.....	1.25	1.03	.87	.75	.66

E

F

MHV COAXIAL CONNECTORS

Miniature high voltage connectors are small bayonet-lock connectors for use up to 50 mc., 5,000 volts, 5 amps. Similar, but do not mate with BNC Connectors. Average Shpg. wt., 4 oz.

Stk. No.	IPC Type	Jan Type	Fig.	For RG-/U Cable	Max. Jkt. Dia.	1-24	25-99	100-499	500-999	1000-2499
39F1321	27000	UG931/U	C	...	.....	1.70	1.40	1.17	1.01	.89
39F1322	28000	UG932/U	D	59	.242	1.72	1.41	1.19	1.02	.90

G

H

TWINAX

Have a nominal impedance of 95 ohms and are weather-proof. All are polarized to preserve continuity of the individual conductors. These conductors can normally be used at frequencies up to 200 mc, and in some cases to 500 mc with caution. Maximum peak operating voltage is 500 volts. Type 309-6275 plug for RG-U 22 cable. Average shpg. wt., 4 ounces.

Stk. No.	IPC Type	Jan Type	Fig.	Description	Max. Jkt. Dia.	1-24	25-99	100-499	500-999	1000-2499
39F1314	6275	UG-421/U	...	Plug	.405	2.84	2.34	1.96	1.69	1.49
39F1341	6225	UG-422/U	....	Receptacle, sq. flange	..	3.06	2.51	2.11	1.82	1.60
39F1342	6175	UG-423/U	F	Panel Jack, sq. flange	..	3.35	2.75	2.31	.. ...	.....

ALCOSWITCH

CERAMIC TERMINAL STRIPS

Silver plated and tinned to facilitate soldering of components and leads without harm to strip. Features permanent bond between metal and ceramic has tinned copper plate on silvered ceramic. Available in thread or snap mounting. Extra long stud can be cut to any desired length. Board ht. 0.590" (above studs) # board depth 0.119" at top, sloping to 0.276" at bottom. Depth of slots 0.197". Dielectric Strength: more than 10 seconds at 1500VDC between terminals. Insulated resistance: over 1,000 Megaohms at 500VDC megger. Materials: terminal strip, steatite, bushing, polypropolyne.

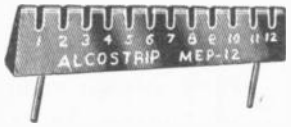
SNAP MOUNT TYPES

Stk. No.	Type	Terms.	Dimensions: Overall Width	Dimensions: Mtg. Ctrs.	Each 1-4	Per Pkg. of 5: 1-4	5-19	20-99	100-199
61F924	MEP-NB-3	3	.600	.....	.72	2.40	1.63	1.45	1.30
61F925	MEP-NB-5	5	.885	.490	.99	3.30	2.25	1.97	1.77
61F926	MEP-NB-7	7	1.165	.490	1.20	4.05	2.72	2.40	2.17
61F927	MEP-NB-9	9	1.445	.750	1.30	4.35	2.95	2.60	2.35
61F928	MEP-NB-13	13	2.140	1.500	1.65	5.55	3.77	3.32	3.00
61F929	MEP-NB-16	16	2.440	1.500	2.00	6.75	4.60	4.05	3.65
61F930	MEP-NB-20	20	3.020	2.520	2.50	8.25	5.60	4.95	4.45

Snap Mount

THREAD MOUNT TYPES

61F931	MEP-2	2	.650	.....	.54	1.80	1.20	1.05	.85
61F932	MEP-4	4	1.161	.512	.67	2.25	1.50	1.25	1.05
61F933	MEP-6	6	1.673	1.024	.90	3.00	2.00	1.70	1.40
61F934	MEP-8	8	2.185	1.535	1.10	3.75	2.50	2.10	1.75
61F935	MEP-10	10	2.697	2.047	1.30	4.35	2.90	2.45	2.05
61F936	MEP-12	12	3.209	2.560	1.50	4.95	3.30	2.80	2.30



Threaded-Mount

MOUNTING SUGGESTIONS

ELEVATED

FLUSH*

*Cut and fuse

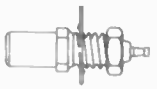
SPECIAL AT ½ PRICE! MEP and MEP-NB SAMPLER KITS

• 2 each, MEP-NB Snap Mount Terminal Strips listed above—14 pcs.
61F945. NET **10.00**

• 2 each, MEP Thread Mount Terminal Strips listed above—12 pcs.
61F946. NET **6.00**

OEM Prices — Complete Stocks — Same Doy Shipment

Microdot Coaxial Cable and Connectors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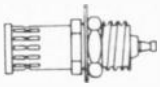
S-50, 033-0053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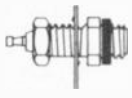
S-50, 031-0059

SOS-50, 032-0055

S-50, 033-0101

S-50, 032-0023


S-50, 031-0050

MINIATURE COAXIAL CABLES

The variety of Microdot coaxial cables now being stocked at Newark offer design solution for your application. Features: light weight, small diameter, convenient bend radius and high operating temperatures. The dielectric material is "Teflon" for most types. 50-3804 is polyethylene attenuation. At 400 mhz (db/ft). Av. Shipping wt., 2½ lbs. per 100 ft.

Stock No.	Type No.	Ohms	Attenuation*	MMF per	O.D. Max. (in.)	PER FOOT 1-99	100-499	500-up
37F820	202-3927	125	.27	11	.120	.46	.42	.39
37F814	202-3934	160	27	9	.168	.77	.71	.66
37F812	250-3902	50	.25	17	.075	.15	.125	.116
37F817	250-4012	50	.29	29	.075	.19	.169	.157
37F800	250-3804	54	.30	29	.088	.18	.165	.15
37F808	250-3808	50	.35	29	.085	.48	.45	.415
37F827	250-3957	50	.29	29	.075	.20	.173	.161
37F802	250-3920	50	.17	16	.135	.25	.218	.202
37F833	250-3960	50	.29	29	.080	.25	.219	.204
37F829	275-3925	75	.21	19	.105	.22	.193	.179
37F804	275-3920	75	.21	19	.110	.29	.25	.232
37F819	293-3920	93	.17	16	.135	.50	.46	.42
37F811	293-3913	100	.25	12	.130	.15	.127	.118

Microdot Type	Comparable to MIL-C-17
250-3957	RG-178B/U
250-3920	RG-196-U
250-3960	RG-196X A/U
275-3925	RG-179B/U
275-3920	RG-187/U

MICRODOT ASSEMBLY HAND TOOLS

Positive crimping of all Microdot connections. Light weight.

Stk. No.	Type	Description	Shpg. wt. oz.	Each
39F1919	010-0016-0000	Steel	2	2.95
39F1920	010-0003-0000	Stainless S	3	10.00
39F1884	010-0017-0000	Stainless S	2	2.95
39F1885	010-0007-0000	Stainless S	2	15.00

KEY TO ASSEMBLY TOOLS FOR MICROMINIATURE CONNECTORS

(A) Use asembly tool 010-0003-0000

(B) Use assembly tool 010-0016-0000

(C) Use assembly tool 010-0017-0000

(D) Use assembly tool 010-0007-0000

MICROMINIATURE CONNECTORS

50 ohm conductors matched to 50 ohm cables through S band. Specs. show the high performance. Voltage rating: rated 850 volts peak. Finish: shield parts silver plated .0002 min., for 48 hour salt spray rating; center contact parts are gold plated .00003 min. Dielectrics: "Teflon" (except for occasional Epoxy and other seals). Insulation Resistance: over 10^{11} ohms. Contact Resistance: all less than 0.002 ohms. Two types of connectors differentiated by "S" meaning Screw type and "SOS" meaning Slide-On type. Code with a suffix (of the type number) for characteristic impedance attaching cables, as "S-50", "SOS-93". Avg. Shipping wt., 1 oz.

SERIES S-50

Stock No.	Type	Description	1-24	25-99	100-249	250-499	500-999
39F1900	031-0001-0001	Bulkhead receptacle for 1/16" panel, has solder pot, no keying	2.40	2.25	2.10	1.80	1.65
39F1901	031-0002-0001	Bulkhead receptacle for 1/8" panel, has solder pot, no keying	2.70	2.54	2.36	2.02	1.86
39F1902	031-0003-0001	Bulkhead receptacle for 1/8" panel, threads into panel, sold. pot	2.19	2.06	1.92	1.64	1.51
39F1903	031-0050-0001	Bulkhead receptacle for 1/8" panel with rnd. or "D" shaped hole for keying	2.35	2.20	2.06	1.76	1.62
39F1904	031-0034-0001	Jack 1/4" Dia. (A)	2.44	2.28	2.12	1.84	1.67
39F1905	031-0033-0001	Bulkhead jack (A)	3.04	2.86	2.66	2.28	2.10
39F1906	031-0059-0001	Printed Cir. Recpt.	3.18	3.00	2.78	2.28	2.18
39F1907	031-0061-0001	Printed circuit recept.—Right angle	5.45	5.15	4.80	4.10	3.76
39F1908	032-0015-0001	Angle plug 1/4" Dia. (B)	3.65	3.42	3.19	2.75	2.51
39F1909	032-0021-0001	Plug—solderless (A)	2.10	1.95	1.80	1.55	1.45
39F1910	032-0023-0001	Plug with 2 Teflon bushings (A)	2.10	1.95	1.80	1.55	1.45
39F1911	033-0001-0001	Coupling	2.50	2.35	2.10	1.80	1.65
39F1912	033-0053-0001	Bulkhead feedthru for S-50 series	3.20	3.00	2.80	2.40	2.20
39F1913	033-0101-0001	S-50 jack to BNC adapter with UG-88 C/U plug end	5.45	5.10	4.78	4.10	3.75
39F1914	033-0102-0001	Same as 33-101 with UG89B/U jack end	8.95	8.40	7.80	6.70	6.15
39F1915	033-0103-0001	S-50 plug to BNC adapter with UG-88 C/U plug end	5.65	5.30	4.95	4.30	3.90
39F1916	033-0104-0001	Same as 33-103 with UG-89 B/U jack end	8.05	7.55	7.05	6.05	5.55
39F1960	031-0024-0001	Ins. Bulkhead Recept.	3.88	3.62	3.38	2.90	2.66
39F1917	051-0049-0001	Hermetic Seal Recept.	4.72	4.42	4.13	3.54	3.25
39F1881	051-0079-0001	Modified 31-01.	3.63	3.41	3.17	2.72	2.50

SERIES S-70

39F1922	031-0017-0001	Bulkhead receptacle for 1/16" panel, has solder pot, no keying	2.90	2.72	2.54	2.18	2.00
39F1923	031-0051-0001	Bulkhead receptacle for 1/8" panel with round or "D" shaped hole for keying	2.44	2.30	2.16	1.84	1.68
39F1924	032-0010-0001	Plug—solderless	2.10	1.95	1.80	1.55	1.45
39F1925	032-0013-0001	Plug—Right angle (B)	3.65	3.42	3.19	2.75	2.51

SERIES S-93

39F1928	031-0016-0001	Bulkhead receptacle for 1/16" panel, has solder pot, no keying	2.18	2.06	1.92	1.64	1.51
39F1929	031-0037-0001	Jack, 5/16" Dia.	2.44	2.28	2.12	1.84	1.67
39F1930	031-0052-0001	Bulkhead receptacle for 1/8" panel with round or "D" shaped hole for keying	2.28	2.14	2.00	1.72	1.57
39F1931	031-0067-0001	Printed cir. recept.	3.16	2.98	2.78	2.38	2.18
39F1932	032-0011-0001	Plug—solderless	2.10	1.95	1.80	1.55	1.45
39F1933	032-0014-0001	Plug—right angle (C)	3.65	3.42	3.19	2.75	2.51
39F1934	032-0017-0001	Plug 5/16" Dia.	2.10	1.95	1.80	1.55	1.45
39F1935	032-0068-0001	Angle plug—takes 95 ohm cable (C)	3.65	3.42	3.19	2.75	2.51
39F1882	033-0111-0001	S-93 plug—as above	5.65	5.30	4.95	4.30	3.90
39F1993	031-0085-0001	Receptacle	3.12	2.92	2.74	2.36	2.14

SERIES SOS (50-70-93)

39F1940	031-0049-0001	Bulkhead recept.	2.92	2.74	2.56	2.20	2.02
39F1942	031-0060-0001	Printed circuit recept.	2.20	2.06	1.92	1.65	1.51
39F1943	031-0070-0001	Printed circuit recept. —right angle	7.10	6.70	6.25	5.35	4.90
39F1945	032-0042-0001	Receptacle plug	2.96	2.78	2.59	2.22	2.04

SERIES SOS-50

39F1946	032-0055-0001	Plug-modified for min. mating force ((D'	2.46	2.31	2.16	1.85	1.69
39F1948	032-0063-0001	Right angle plug (B)	3.65	3.42	3.19	2.75	2.51

SERIES SOS-93

39F1947	032-0059-0001	Right angle plug (C)	3.65	3.42	3.19	2.55	2.51
39F1949	032-0084-0001	Straight plug	4.72	4.43	4.13	3.51	3.25
39F1992	031-0082-0001	Jack-bulkhead mt.	3.04	2.86	2.66	2.28	2.10

MICRODOT CONNECTORS

132-0112-0002

132-0112-0003

131-0134-0001

131-0135-0001

131-0138-0001

131-0141-0001

"GOLDEN CRIMP" CONNECTORS

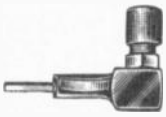
Easy to assemble. Meets MIL-SPEC-C22557A. Temperature rating of 200° C. Withstand virbrations to 2000 Hz at 20 G'S.

Stock No.	Type (50 ohm RE 186)	1-24	25-49	50-99	100-249	250-499
39F1840	132-0112-0002	1.75	1.59	1.45	1.30	1.17
39F1841	132-0112-0003	1.85	1.69	1.55	1.40	1.27
39F1842	131-0134-0001	1.75	1.59	1.45	1.30	1.17
39F1843	131-0135-0001	1.75	1.59	1.45	1.30	1.17
39F1844	131-0138-0001	1.85	1.62	1.47	1.33	1.18
39F1845	131-0141-0001	2.10	1.85	1.67	1.53	1.34
39F1846	132-0116-0002	3.85	3.60	3.25	2.98	2.75

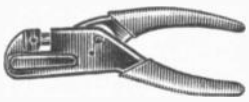
ASSEMBLY TOOLS FOR ABOVE

Stk. No.	Type	Description	NET
39F1849	010-0081-0000	50 ohm shield crimp tool	67.50
39F1848	010-0065-0000	Center conductor crimp tool	52.00

131-0142-0001


132-0116-0002

Quick Connect Series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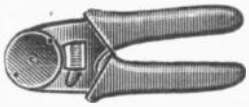
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COAXIAL TERMINALS

Stock No.	Type	Cable	1-24	25-99	100-249	250-499	500-999
39F1850	053-0389-0001		.19	.18	.17	.14	.13
39F1851	053-0265-0001	93-95 ohm	.37	.31	.25	.22	.19
39F1852	053-0293-0001		.28	.25	.22	.20	.18
39F1918	053-0020-0001	50 ohm	.25	.23	.20	.18	.15
39F1998	053-0021-0001	70 ohm	.25	.23	.20	.18	.15
39F1999	053-0022-0001	93 ohm	.25	.23	.20	.18	.15

QUICK CONNECT SERIES

Stock No.	Type	Description	1-24	25-99	100-249	250-499	500-999
39F1854	032-0002-0001*	QC-50 Plug	2.10	1.95	1.80	1.55	1.45
39F1991	031-0057-0001	QC-50, QC-70 Recept.	2.35	2.20	2.06	1.76	1.62
39F1994	032-0079-0001*	QC-70 Plug	2.10	1.95	1.80	1.55	1.45

*Use assembly tool 010-0007-0000.

ATLEE PRODUCTS

COMPONENT HOLDERS

Protects against shock and vibration. SAE #1065 annealed carbon steel. Cadmium plated. These holders withstand vibrations of 90 G's at 500 Hz for one minute and 1750 impact shocks of 200 G's. *Three mounting holes, † 2 holes, rest have 1 hole. Diam. in inches. Approx. shpg. wt., 1 oz.

Stk. No.	Type 100-200	Comp. Dia.	Ht.	Wth.	Lg.	Mtg. dia.	1-9	10-99	100-499	500-999
43F000	1-0†	.175	.250	.20	5/8	.071	.12	.11	.093	.085
43F001	2-0†	.195	.270	.210	5/8	.071	.12	.11	.094	.087
43F002	4-0†	.235	.325	.260	5/8	.093	.12	.11	.095	.089
43F003	4A-0†	.260	.340	.280	1/2	.093	.12	.11	.093	.086
43F004	4A-1	.260	.340	.280	1/4	.093	.12	.11	.093	.086
43F005	5-0†	.312	.380	.344	3/4	.093	.12	.11	.098	.090
43F006	6-0†	.375	.480	.4111	1 1/8	.103	.12	.11	.098	.090
43F007	7-0†	.400	.489	.436	3/4	.103	.12	.11	.098	.090
43F008	9-0*	.562	.690	.608	1	.127	.14	.13	.109	.099
43F009	11-0*	.670	.820	.720	1 3/8	.127	.19	.16	.141	.130
43F010	12-0*	.750	.920	.808	2	.144	.22	.20	.168	.153
43F084	11-1	.670	.820	.72	15/16	.128	.16	.14	.124	.114

Stk. No.	Type 100-200	Comp. Dia.	Ht.	Wth.	Lg.	Mtg. dia.	1-9	10-99	100-499	500-999
43F006	12-28	.750	.90	.78	1 1/4	.144	.19	.16	.137	.126
43F012	16-0*	.400	490	.420	13/16	.093	.13	.12	.099	.090
43F013	13-0*	1.00	1.22	1.06	1 7/8	.144	.25	.20	.177	.167
43F014	15-0*	1.125	1.34	1.19	1 3/8	.162	.31	.23	.203	.191
43F015	10-0*	.562	.690	.600	1 5/8	.128	.15	.14	.118	.108
43F016	1-2	.175	.250	.200	1/4	.071	.12	.11	.093	.085
43F017	1-9	.175	.250	.200	1/8	035	.12	.11	.093	.085
43F018	2-6	.195	.270	.220	5/16	.071	.12	.11	.094	.087
43F019	4-4	.235	.320	.260	5/16	.093	.12	.11	.095	.089
43F020	5-12†	.312	.380	.340	3/4	.093	.12	.11	.098	.090
43F021	5-14	.312	.380	.340	3/16	.093	.12	.11	.098	.090
43F022	14-1†	.375	.460	.400	29/32	.093	.12	.11	.098	.089
43F023	16-1†	.400	.490	.420	29/32	093	.12	.11	.098	.089
43F024	16-8	.400	.490	.420	3/8	.093	.12	.11	.098	.088
43F078	5-5†	.312	.380	.344	1 3/4	.093	.12	.11	.098	.090
43F080	13-3	1.00	1.22	1.06	1 7/8	.144	.25	.19	.176	.155
43F081	10-5	.562	.690	.600	1 5/8	.128	.13	.12	.106	.097
43F083	12-3	.750	.920	.808	1 1/4	.144	.19	.16	.137	.126

100-245

100-239

102-317

101-329-1

106-312-1

106-358-1

101-322-1

11004

CLIPS AND HEAT SINK

Stk. No.	Type	Description	1-9	10-99	100-499	500-999
43F065	100-245	Universal clip for JETEC 30 cad. plated steel	.12	.10	.080	.050
43F066	101-345-0	As above but silver plated beryllium copper	.30	.21	.19	.17
43F067	102-317-0	Heat Sink for 2N145, 2N172, 2N343	.22	.15	.13	.12
43F073	100-239-0	For GE 2N43	.13	.12	.103	.096

CRYSTAL CLIP

Stock No.	Type	Material	1-9	10-99	100-499	500-999
43F162	11004	Nickel Plated Steel	.07	.05	.041	.037

PRINTED CIRCUIT BOARD HOLDERS

High retention of printed circuit board under shock and vibration. Easy insertion and withdrawals of boards. Rigidly mounted in racks and other types of assemblies. Material: Bery Copper.

Stock No.	Type	Length	1-9	10-99	100-499	500-999
43F153	11903-300-5	4	.68	.58	.42	.38
43F157	11903-300-1		.49	.39	.24	.22

TRANSISTOR CLIPS

Material: Bery Copper. Approx. shpg. wt. 4 oz./1000.

Stock No.	Type	Diameter Range	Tab	1-9	10-99	100-499	500-999
43F087	106-312-1	.280"-.335"	A,C	.34	.23	.215	.190
43F089	101-322-1	.220"-.350"	A,C	.32	.22	.201	.180
43F091	106-358-2	.300"-.324"	A	.35	.27	.224	.223

To Serve You Better — Ten Stocking Warehouses from Coast-to-Coast

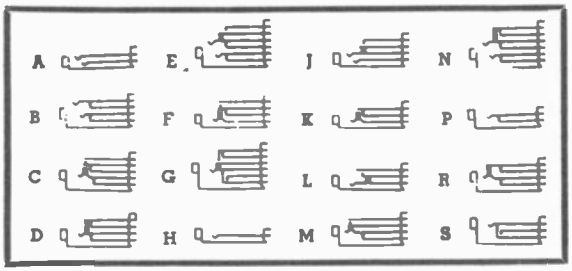
Use the Services of the NEWARK Facility Nearest You

ADC Panel Connectors, Terminal Blocks

JACKS

Unique one-piece frame, which provides both dimensional stability and maximum strength. Connecting lugs are hot-tinned. Coin silver contacts are welded to springs. Insulation is XXX phenolic to meet military requirements. Shpg. wt., 3 oz.

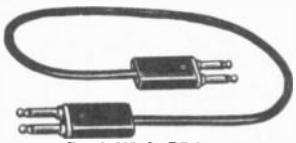
Stock No.	Type	W.E. Equiv.	Config.	NET
57F112	PJ238	238A	A	.66
57F113	PJ240	240C	E	1.23
57F114	PJ241	241A	J	1.02
57F115	PJ242	242C	N	1.23
57F116	PJ339	239A	B	.92
57F117	PJ226	226A	F	1.02
57F119	PJ318	218A	P	.66
57F120	PJ336	236C	C	1.14
57F121	PJ338	438C	G	1.23
57F122	PJ418	218C	P	.69
57F123	PJ115	215A	L	.90
57F125	PJ117	217A	D	.90
57F126	PJ123	223A	H	.60
57F127	PJ125	225A	M	1.02
57F128	PJ203	303A	S	.78



PJ-1. Equivalent, WE-241, heavy duty die cast frame. Black phenolic shell. Self aligning plug prongs on 5/8" center for use with all standard jack panels. Two tip conductors, plus sleeve connection common to both sleeves.

57F130. 1-24.....2.55 **25-49**.....2.13

PATCH CORDS



Cord With PJ-3 Plugs

Shielded cords made of tinned copper conductor wire. Cords, as well as cord assemblies with PJ-1 double plugs, PJ-5 or PJ-3 single plugs and standard black patch cords with shields grounded both ends.

Replacement Cords for PJ-3 Plugs

Stock No.	Type	Lgth.	1-24	25-49	Stock No.	Type	Lgth.	Net
57F133	PJ-82	2-feet	5.28	4.40	57F136	PJ-62	2-feet	2.10
57F134	PJ-84	4-feet	5.88	4.90	57F137	PJ-64	4-feet	2.40
57F135	PJ-86	6-feet	6.60	5.50	57F138	PJ-66	6-feet	2.82

Cord With PJ-1 Plugs

57F139	PJ-10½	6-inch	6.38	5.32	57F143	PJ-14	4-feet	7.13
57F140	PJ-11	1-foot	6.60	5.50				
57F141	PJ-12	2-feet	6.75	5.63	57F145	PJ-16	6-feet	7.58
57F142	PJ-13	3-feet	6.90	5.75				

Cord With PJ-5 Plugs

57F147	PJ-50½	6-inch	3.48	2.90	57F151	PJ-54	4-feet	4.40
57F148	PJ-51	1-foot	3.63	3.03	57F153	PJ-56	6-feet	5.25
57F149	PJ-52	2-feet	3.84	3.20	57F154	PJ-50	10-feet	5.82
57F150	PJ-53	3-feet	4.11	3.43				

Replacement Cords for PJ-1 and PJ-5

57F157	PJ-22	2-feet	1.65	1.38	57F156	PJ-21	1-foot	1.50
57F158	PJ-23	3-feet	1.74	1.45	57F160	PJ-25	5-feet	1.89
57F159	PJ-24	4-feet	1.80	1.50				

Depend on NEWARK for the Latest Top-Quality Equipment. Complete On-the-Shelf Stocks — Lowest Prices — Fast Service.

BANTAM JACK PANELS

Design for more compact patchfields in modern electronic and communication equipment. Requiring only ½ the rack space the new panel assembly weighs only 65% of older conventional units. Offering 96 jacks 48 pairs in 1¾"x19" standard panel. The jacks are spaced to prevent cross patching from adjacent circuits when using double plugs. Constructed of Aluminum alloy with Anodized black finish incorporating a clear plastic designation strip.

Stk. No.	Type	Description	1-9	10-24
57F173	PJ731	Dbl. pan. less jack	19.20	16.00
57F174	PJ737	Dbl. pan. w/ PJ818 jacks	92.40	77.00
57F175	PJ739	Dbl. pan. w/ PJ839 jacks	116.40	97.00
57F177	PJ700	pan. inst. blank	1.20	1.00

BANTAM PATCH CORDS

Plastic jacketed, shielded tinned copper conductor. Plugs of connector are brass with a molded polystyrene insulation which also aids strain relief.

2 CONDUCTOR—SINGLE PLUG

Stk. No.	Type	Length	1-24	25-49
57F185	PJ-701	6"	3.30	2.75
57F187	PJ-704	24"	3.42	2.85
57F188	PJ-706	36"	3.48	2.90

2 CONDUCTOR—DOUBLE PLUG

57F192	PJ-754	24"	4.08	3.48
57F193	PJ-756	36"	4.14	3.45

3 CONDUCTOR—SINGLE PLUG

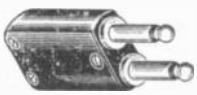
57F195	PJ-711	6"	3.90	3.25
57F196	PJ-712	12"	3.96	3.30
57F197	PJ-714	24"	4.02	3 35
57F198	PJ 716	36"	4.08	3 40
57F199	PJ-718	48"	4.20	3.50

JACK PANELS

Panels are molded of solid phenolic, reinforced with steel to provide maximum rigidity and strength. Jacks are spaced to permit use of any standard double plug with 5/8" spacing. Mounting brackets and designation strips furnished with each panel. Fit standard relay rack.

Stk. No.	Type	Description	Hgt.	Net
57F106	PJ-31	Dbl. pan. less jacks	2⅛"	9.45
57F107	PJ-341	Dbl. pan. w/PJ-318 jacks	2⅛"	42.75
57F108	PJ-30	Dbl. pan. less jacks	1¾"	12.90
57F109	PJ-340	Dbl. pan. w/PJ-318 jacks	1¾"	49.50
57F110	PJ-33	Sngl. pan. less jacks	1¾"	8.52
57F111	PJ-343	Sngl. pan. w/PJ-318 jacks	1¾"	25.14

TWIN PLUG



PJ-327. Twin plug. Provides two electrically independent, 2 conductor plugs in a phenolic shell. Self aligning plug sleeves are on 5/8" ctrs. For MIL P-642A & WE 327.
57F163. NET 2.55

PJ-3. Equivalent, PJ-051, WE-310. Designed for use with ¼" tip, ring and sleeve jacks. Molded insulation, red plastic shell. Three conductor.
57F131. NET 1.32

PJ-5. Equivalent, PJ-055 (old style PL-55), WE-47, fits ¼" phone jacks. Black plastic shell. Screw terminals. Two conductor.
57F129. NET .78

PJ-6. Equivalent, WE-213. Designed for applications requiring two separate 3 conductor circuits. Self aligning plug prongs on 1 1/16" centers.
57F132. NET 5.40

TERMINAL BLOCKS

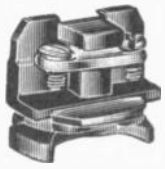
The one piece base and individual terminal separators molded. Interchangeable with popular telephone type blocks 100A through 100D and L3A through L6A. Terminals are .040 brass. Rows of terminals are graduated in length for ease of wiring and the top row of terminals is identified by numbering. The PJ-106 terminal block provides 120 terminals six rows of 20 terminals each.

Stock No.	Type	Rows of Terms.	No. of Terms.	Height	NET
57F100	PJ-101	1	20	1 29/32	3.45
57F101	PJ-102	2	40	2¼	4.65
57F102	PJ-103	3	60	2 19/32	5.85
57F103	PJ-104	4	80	2 5/16	7.05
57F104	PJ-105	5	100	3 9/32	8.25
57F105	PJ-106	6	120	3⅝	9.45

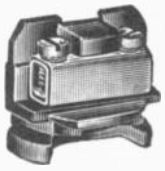
Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

General Electric Terminal Boards and Accessories

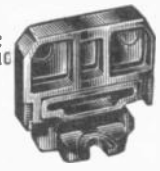
C0100AB



C0300AB
C02300AB



CR151C
CR151C10



Mounting Clamp

Mounting Channel

CR1071D10102

CR151-C SECTIONAL TERMINAL BOARDS

Well suited for use on any equipment where it is desireable to group wiring connections. 25 and 50 amp boards have creepage and clearance distances that meet 300 volt requirement for industrial control equipment. 50 amp boards meet 600 volt requirements. Factory assembled boards of any one terminal type are available with up to 12 points of 25 amp or 6 points of 50 amp or up to 99 points for channel mounting. Individual sections may be combined and terminal identification may be marked on forms.

Stock No.	Type CR151-	Description	1-249	250-499	500-999	1000-up
40F5200	-C0100AB	Basic Screw-25 amp	.229	.217	.206	.194
40F5201	-C0300AB	Box clamp-25 amp	.30	.285	.27	.255
40F5202	-C02300AB	Box clamp-50 amp	.372	.353	.335	.316
40F5203	-C1	End-25 amp	.091	.087	.082	.078
40F5204	-C10	End-50 amp	.113	.108	.102	.096
40F5205	-C2	Mtg. channel 4'	.024	.023	.022	.021
40F5205	-C7	Mtg. clamp*	.055	.052	.049	.047

*Need 2 per channel

ONE PIECE TERMINAL BOARDS—CR151-D

One piece terminal boards available in 3 sizes, for use on equipment where it is desirable to group wiring connections. Terminal identification can be made on spaces provided on the board or on vinyl marking strips.

ONE PIECE TERMINAL BOARDS—CR151-D1—15 AMPERES

Stock No.	Type CR151-	Cont.	1-24	25-49	50-99	100-249	250-499
40F5207	D10102	2	.18	.14	.12	.10	.09
40F5208	D10103	3	.25	.20	.16	.13	.12
40F5209	D10104	4	.32	.25	.21	.17	.15
40F5210	D10105	5	.38	.31	.25	.20	.18
40F5211	D10106	6	.44	.35	.29	.24	.21
40F5212	D10107	7	.51	.41	.34	.27	.24
40F5213	D10108	8	.58	.46	.38	.31	.27
40F5214	D10109	9	.64	.52	.43	.34	.31
40F5215	D10110	10	.71	.57	.47	.38	.34
40F5216	D10111	11	.77	.62	.51	.41	.37
40F5217	D10112	12	.84	.67	.56	.45	.40
40F5218	D10113	13	.91	.73	.60	.49	.43
40F5219	D10114	14	.98	.78	.65	.52	.47
40F5220	D10115	15	1.05	.84	.70	.56	.50
40F5221	D10116	16	1.12	.89	.74	.60	.53
40F5222	D10117	17	1.18	.94	.79	.63	.56
40F5223	D10118	18	1.25	1.00	.83	.67	.59
40F5224	D10119	19	1.31	1.05	.87	.70	.62
40F5225	D10120	20	1.38	1.11	.92	.74	.66
40F5226	D10121	21	1.44	1.15	.96	.77	.68

ONE PIECE TERMINAL BOARDS—CR151-D2—20 AMPERE

Stock No.	Type CR151-	Cont.	1-24	25-49	50-99	100-249	250-499
40F5227	D20102	2	.23	.19	.15	.12	.11
40F5228	D20103	3	.31	.25	.21	.17	.15
40F5229	D20104	4	.40	.32	.27	.22	.19
40F5230	D20105	5	.48	.39	.32	.26	.23
40F5231	D20106	6	.56	.45	.37	.30	.27
40F5232	D20107	7	.66	.53	.44	.35	.31
40F5233	D20108	8	.74	.59	.49	.40	.35
40F5234	D20109	9	.82	.66	.55	.44	.39
40F5235	D20110	10	.91	.73	.61	.49	.43
40F5236	D20111	11	.99	.79	.66	.53	.47
40F5237	D20112	12	1.08	.86	.72	.58	.51
40F5238	D20113	13	1.17	.93	.78	.62	.55
40F5239	D20114	14	1.25	1.00	.83	.67	.60
40F5240	D20115	15	1.33	1.07	.89	.71	.63
40F5241	D20116	16	1.43	1.14	.95	.76	.68
40F5242	D20117	17	1.50	1.20	1.00	.81	.71
40F5243	D20118	18	1.59	1.27	1.06	.85	.76
40F5244	D20119	19	1.66	1.33	1.11	.89	.79
40F5245	D20120	20	1.76	1.41	1.17	.94	.84

ONE PIECE TERMINAL BOARDS—CR151-D3—30 AMPERES

Stock No.	Type CR151-	Cont.	1-24	25-49	50-99	100-249	250-499
40F5246	D30102	2	.27	.22	.18	.14	.13
40F5247	D30103	3	.38	.31	.25	.20	.18
40F5248	D30104	4	.49	.39	.32	.26	.23
40F5249	D30105	5	.58	.47	.39	.31	.28
40F5250	D30107	6	.69	.55	.46	.37	.33
40F5251	D30106	7	.80	.64	.53	.43	.38
40F5252	D30108	8	.90	.72	.60	.48	.43
40F5253	D30109	9	1.01	.81	.67	.54	.48
40F5254	D30110	10	1.12	.89	.74	.60	.53
40F5255	D30111	11	1.21	.97	.80	.65	.57
40F5256	D30112	12	1.32	1.05	.88	.70	.63
40F5257	D30113	13	1.43	1.14	.95	.76	.68
40F5258	D30114	14	1.53	1.22	1.02	.82	.73
40F5259	D30115	15	1.63	1.31	1.09	.87	.78
40F5260	D30116	16	1.74	1.39	1.15	.93	.82
40F5261	D30117	17	1.84	1.47	1.22	.98	.87

QUICK-CONNECT ACCESSORIES

Flat

Flat-Flat

45°-45°

45°-Flat

For CR151 terminal boards. Terminal pieces for conversion of screw type terminal boards One, two, or three may be added per terminal board point. Complete boards may be ordered to specifications in any combination of one, two, or three quick-connect terminals on either side, flat or wire angles of 45° or 90°.

Complete set of G.E. catalogs covering terminal boards, relays, and switches listing applications, dimensions and engineering data. **24F3103. NET** ..... **Free**

Stk. No.	Type CR151-	Description	Use With	Per Pkg. of 100 1-4	5-9	10 Up
40F5262	—X102	Flat — None	CR151D1	1.50	1.20	.90
40F5263	—X105	Flat — Flat	CR151D1			
40F5264	—X106	45° — Flat	CR151D1			
40F5265	—X108	45° — 45°	CR151D1			
40F5266	—X202	Flat — None	CR151D2	2.10	1.68	1.26
40F5267	—X205	Flat — Flat	CR151D2			
40F5268	—X206	45° — Flat	CR151D2			
40F5269	—X208	45° — 45°	CR151D2			
40F5270	—X302	Flat — None	CR151D3	2.75	2.20	1.65
40F5271	—X305	Flat — Flat	CR151D3			
40F5272	—X306	45° — Flat	CR151D3			
40F5273	—X308	45° — 45°	CR151D3			

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Grayhill® Sockets—Binding Posts

MOLDED INSULATING WASHERS

Molded insulating washers made from black electric grade phenolic. Manufactured under specifications MIL-P-14 Type CFG. The finest grade of insulating washers. For all applications. Overall dia. .500" except (*) .625 and (†) .375. Shoulder dia. .375" except (*) .500 and (†) .250. Base height .063". Shoulder height .031". Shpg. wt. 2 oz.

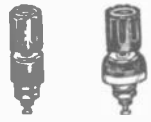
Stk. No.	Mfg. No.	Screw Size	Per Pkg. of 10	
			1-49	50-99
28F572	21B1001-2	No. 6	1.00	.80
28F573	21B1002-2	No. 8		
28F574	21B1003-2	No. 10		
28F575	21B1004-2	¼"		
28F576	21B1005-2	5/16"		
28F577	21B1006-2*	⅜"		
28F578	21B1021-2†	No. 6		

MATING INSULATING WASHERS

No. 21B78-2. insulates jack with ⅜" bushing from panel. Molded black electric grade phenolic (MIL-P-14). Rear washer index hole fits non-turn jack tab. Front washer fits under hex mtg. nut. 1/16" min. panel thickness. Wt., 1 oz.

28F579. NET PER PKG. 10 . . **2.00**

COMPACT BINDING POSTS



Series 29. ½" and ⅜" mounting hole. Phenolic washers to MIL-M-14, with nickel-plated brass metal parts. Integral solder studs. For panels to 3/16". Wt., 3 oz. *Spring loaded.

Stk. No.	Type	Color	Hole	1-499	500-999
28F567	29-1B	Black	⅜"	.40	.35
28F566	29-1R	Red	⅜"		
28F569	29-3B	Black	½"		
28F568	29-3R	Red	½"		
*28F631	29-33B	Black	½"		
*28F630	29-33R	Red	½"		

BINDING POST BASES

Designed for use with No. 29-1 binding post to make assembled units of two or three posts. Post placed at ¾" centers. Insulates from chassis. Molded phenolic to MIL-M-14. Shpg. wt. 2 oz.

Stk. No.	Mfg. No.	Color	Per Pkg. of 10	
			1-49	50-99
28F557	29B11-1	Black	1.00	.90
28F558	29B11-2	Red		

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- Houston, Texas

TRANSISTOR SOCKETS

Designed for JETEC series transistor. Leads fit 100 MIL printed circuit grid. Dia. of pin centers .200. Contacts: are wrap-around type, silver plated beryllium copper with gold flash. **22-11** and **22-16** have bases molded of mica filled phenolic per Mil-M-14, type MFE. **22-18** bases are molded Melamine per Mil-M-14 type CMG. **22-11** fits ehrough ⅜" hole for fastening with rivets or #2 screws. **22-16** is designed for soldering directly into printed circuits. Type 22-101-3. For TO-18, 28, and 46 outlines. Shpg. wt. 2 oz.

22-11

22-16-3

22-18-3

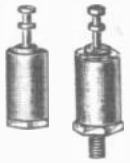
Stk. No.	Type	Pins	Clr.	1-49	50-99
28F632	22-11	4	Nat	.35	.26
28F633	22-16-3	3	Nat	.30	.23
28F634	22-16-4	4	Nat	.35	.26
28F620	22-18-3-10	3	Blk	.40	.30
28F621	22-18-3-12	3	Red	.40	.30
28F622	22-18-4-10	4	Blk	.45	.39
28F623	22-18-4-12	4	Red	.45	.39
28F635	22-101-4	3	Nat	1.45	1.16

B1 PIN LAMP SOCKET

Plugs into printed circuit board and eases lamp replacement. Obsoletes practice of soldering lamps directly into circuit. For T 1¾ lamps, leads must be cut to 150" long for proper fit. Molded plastic body. Terminals and contacts beryllium copper. Shpg. wt. 2 oz.

Stk. No.	Type	1-49	50-99
28F619	22-202	.90	.68

STANDOFF INSULATORS



Bodies are molded of mica-filled phenolic (MIL-M-14 type MFE) for low loss at high frequencies, low moisture absorption and fungus resistance. Offer high dielectric strength. The brass solder terminals are silver plated for ease in soldering. Length, front of panel, 15/16" — diameter 5/16". Average Shipping Weight is 3 oz.

Stock No.	Type	Description	1-499	590-999
37F198	18-1	Female 4-40	.35	.28
37F199	18-2	Male 4-40	.40	.32

PUSH POST

29-100

Type 29-100. Quick positive connections by depressing plunger. To operate, button is depressed, lead is placed in slot, and button is released. Spring pressure assures firm positive contact. Extends only ⅞" above mounting surface. Nickel plated brass with a molded phenolic button cap. #8-32 threaded stud. Shpg. wt. 2 oz.

29-101

Type 29-101. Similar to 29-100 except mounted on standard banana plug.

29-104

Type 29-104. Similar to 29-100 except supplied with molded insulating washers.

Stock No.	Mfg. No.	Color	1-499	500-999
28F417	29-100R	Red	.35	.305
28F418	29-100B	Black		
28F419	29-101R	Red	.50	.435
28F420	29-101B	Black		
28F421	29-104R	Red		
28F422	29-104B	Black		

TEST CLIPS

Type 2-0. Threaded stud mounts on insulated panel. Leads of device under test slip easily in and out of clamp. Adjustable spring action. 1 9/16" long. Shpg. wt. 2 oz.

28F550. NET . . . . . **.20c**

2-0

Type 2-1. Banana Plug Clip For "Q" meters and other equipment with irregularly spaced jacks. 1⅛" long. Shpg. wt. 2 oz.

28F554. NET **35c**

2-1

Type 2-4. Insulated Clip has molded phenolic washers to insulate from metal panel. Wt., 2 oz.

28F411. NET **35c**

2-4

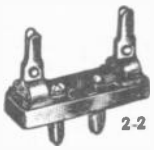
Type 2-6. Phone Tip Clip. Mounted on standard phone tip to fit jacks. Shpg. wt. 2 oz.

28F412. NET **35c**

2-6

Type 2-2. Plug-in Adapter. Useful in testing resistors and other pigtail units. Two nickel-plated clips on molded phenolic board to MIL-M-14. Banana plugs spaced on centers ¾". Shpg. wt. 3 oz.

28F553. NET **1.40**



2-2

Type 2-7. Similar to Type 2-2 Plug-in-Adapter above except adjustable from ¾ to 1¼ centers.

28F413. NET **1.50**

INSULATED ALLIGATOR CLIPS

Series 16. Fully insulated test clips that can be placed side-by-side without electrical short-circuit! Silver overlay contacts. Shpg. wt. 2 oz.

28F551. Type 16R. Red. **NET** 1.25

28F552. Type 16B. Black. **NET** 1.25

MINIATURE TEST CLIPS

Type 2-20. Rapid connections without manually opening and closing jaws. Extends ¾" above surface. Nickel plated brass with 6-32 thrd. stud. Hex nut tension adjustment. 2 oz.

28F414. NET 25

2-20

Type 2-21. Similar to 2-20 except mounted on a standard banana plug. Rapid connections without manually opening and closing jaws. Extends ¾" above surface

28F415. NET **40c**

2-21

Type 2-24. Similar to 2-20 except with two shoulder insulating washers. Nickel plated brass with 6-32 thrd. stud. Hex nut tension adjustment.

28F416. NET **40c**

2-24

Type 2-41 & 2-42. For simplified, rapid testing of "pig-tail" components, also single wire connections and bread board work Panel area, exclusive of nut, single unit—3/16" x ⅛", double unit—¼" x ⅛". Mtg. stud—⅜" long. Nickel plated brass with nickel plated, heat treated beryllium copper spring. Hex nut under spring adjusts tension.

28F624. 2-41 single. **NET EA.** .25

28F625. 2-42 double. **NET EA.** .30

2-41

2-42

H. H. Smith Connectors

MOLDED CROSS PATCH CORDS

Consist of 10,000V. rubber covered flexible wire (65 stds. #36) O.D. .140" cabled to two molded plastic banana plugs with four leaved beryllium copper, nickel plated springs. Interconnects unlimited number of multiple circuits. Contacts for banana plugs on top and side. With 19/32"* or 13/32"† spring plug.

Stk. No.	Type	Lt.	Color	10 for	EACH
35F910	1515-8*	8"	Red	1.00	9.00
35F911	1515-8*	8"	Black		
35F912	1515-8†	8"	Red		
35F913	1515-8†	8"	Black		
35F833	1510-12*	12"	Red		
35F834	1510-12*	12"	Black		
35F835	1510-12†	12"	Red		
35F836	1510-12†	12"	Black		

Stk. No.	Type	Lt.	Color	1-99 ea.	1C-499 per 100	5C-999 per 100	1000-Up per 100
35F791	1510-24*	24"	Red	1.05	89.25	78.75	70.00
35F792	1510-24*	24"	Black				
35F793	1515-24†	24"	Red				
35F794	1515-24†	24"	Black				
35F794	1510-36*	36"	Red	1.10	93.50	82.50	73.00
35F796	1510-36*	36"	Black				
35F797	1510-36†	36"	Red				
35F798	1510-36†	36"	Black				

JUMPERS (STANDARD ALLIGATOR CLIPS BOTH ENDS)

Stock No.	Type	Color	Descript. Length	1-99 ea.	1C-499 per 100	5C-999 per 100	1M-Up per 100
35F677	1596-12	Red	12"	.40	34.00	30.00	26.00
35F684	1596-12	Black	12"	.40	34.00	30.00	26.00
35F678	1596-36	Red	36"	.48	40.80	36.00	32.00
35F685	1596-36	Black	36"	.48	40.80	36.00	32.00

STANDARD ALLIGATOR CLIP TO BANANA PLUG

Stock No.	Type	Color	Insul.	1-99 ea.	1C-499 per 100	5C-999 per 100	1M-Up per 100
35F722	1866-36	Black	Polyeth.	.55	46.75	41.25	36.00
35F723	1866-36	Red	Polyeth.	.55	46.75	41.25	36.00

DOUBLE PLUG—36"

Stock No.	Type	Color	Insul.	1-99 ea.	1C-499 per 100	5C-999 per 100	1M-Up per 100
35F724	1530-36	Grey	Vinyl	2.40	204.00	180.00	160.00
35F725	1540-36	Grey	Polyeth.				
35F726	1580-36	Black	Polyeth.				

CLIP ADAPTERS

Cadmium plated steel springs. Plastic handle. With brass body and bronze phosphor spring.

Stk. No.	Type	Col.	Description	1-99 ea.	1C-499 p. 100	5C-999 p. 100	1M-Up p. 100
28F604	304	Red	Adapts phone tip plug to alligator clip.	.33	28.05	24.75	22.00
28F605	304	Blk.					
35F948	305	Red	Adapts std. phone tip or banana plug to alligator clip.	.39	33.25	29.25	26.00
35F949	305	Blk.					
39F1652	336	Red	As 304 except plastic insul.	.36	30.60	27.00	24.00
39F1653	336	Blk.					
39F1650	337	Red	As 336 but with solder conn., not jack.	.24	20.40	18.00	16.00
39F1651	337	Blk.					
35F670	338		Min. clip, 3/16" jaw opening. Solder conn. & ears for crimp.	.04	3.40	3.00	2.70
35F671	301	Red	accepts std. banana plug in rear.	.08	6.80	6.00	5.30
35F683	301	Blk.					

INSULATED JUMBO ALLIGATOR CLIPS

Solder connection with plastic handle. 5/8" jaw opening. For heavy terminal use.

Stk. No.	No.	Type	Color	1-99 ea.	1C-499 p. 100	5C-999 p. 100	1M-Up p. 100
35F848	397	Solid copper	Red	.24	20.40	18.00	16.00
35F849	397	Solid copper	Black	.24	20.40	18.00	16.00

RECESSED RUBBER BUMPERS

*Supplied with 9/32x1/2" screw and nut.

Stock No.	Type	Cap. Dia.	O.D.	Ht.	1-99 ea.	1C-499 p. 100	5C-999 p. 100	1M-Up p. 100
35F530	2193	1/4"	5/8"	5/16"	.02	1.70	1.50	1.30
35F531	2194	9/32"	3/4"	3/8"	.03	2.55	2.25	2.00
35F532	2196*	9/32"	3/4"	3/8"	.08	6.80	6.00	5.30

BRASS THREADED SPACERS—CADMIUM PLATED

Stock No.	Type	Thrd.	Lgth.	O.D.	1-99 ea.	1C-499 per 100	5C-999 per 100	1M-Up per 100
35F551	2372	4-40	1/2"	1/4"	.06	5.10	4.50	4.00
35F552	2373	4-40	3/4"	1/4"	.08	6.80	6.00	5.30
35F553	2120	6-32	1/4"	1/4"	.04	3.40	3.00	2.70
35F562	2124	6-32	1"	1/4"	.05	4.25	3.75	3.30
35F554	2122	6-32	1/2"	1/4"	.06	5.10	4.50	4.00
35F555	2123	6-32	3/4"	1/4"	.08	6.80	6.00	5.30
35F561	2121	6-32	3/8"	1/4"	.10	8.50	7.50	6.70
35F556	2125	8-32	1/4"	1/4"	.04	3.40	3.00	2.70
35F557	2126	8-32	3/8"	1/4"	.05	4.25	3.75	3.30
35F558	2127	8-32	1/2"	1/4"	.06	5.10	4.50	4.00
35F559	2128	8-32	3/4"	1/4"	.08	6.80	6.00	5.30
35F560	2129	8-32	1"	1/4"	.10	8.50	7.50	6.70

BRASS SPACERS—CADMIUM PLATED

Stock No.	Type	For screw	Lgth.	O.D.	1-99 ea.	1C-499 p. 100	5C-999 p. 100	1M-Up p. 100
35F533	2340	#4	1/4"	1/4"	.03	2.55	2.25	2.00
35F534	2341	#4	3/8"	1/4"	.04	3.40	3.00	2.70
35F535	2342	#4	1/2"	1/4"	.05	4.25	3.75	3.30
35F536	2100	#6	1/4"	1/4"	.03	2.55	2.25	2.00
35F537	2101	#6	3/8"	1/4"	.04	3.40	3.00	2.70
35F538	2102	#6	1/2"	1/4"	.05	4.25	3.75	3.30
35F539	2103	#6	3/4"	1/4"	.06	5.10	4.50	4.00
35F540	2104	#6	1"	1/4"	.07	5.95	5.25	4.70
35F541	2105	#8	1/4"	1/4"	.03	2.55	2.25	2.00
35F563	2106	#8	3/8"	1/4"	.04	3.40	3.00	2.70
35F564	2107	#8	1/2"	1/4"	.05	4.25	3.75	3.30
35F565	2109	#8	1"	1/4"	.07	5.95	5.25	4.70
35F542	2115	#8	1/4"	3/8"	.05	4.25	3.75	3.30
35F543	2116	#8	3/8"	3/8"	.06	5.10	4.50	4.00
35F544	2117	#8	1/2"	3/8"	.08	6.80	6.00	5.30
35F545	2118	#8	3/4"	3/8"	.11	9.35	8.25	7.30
35F546	2119	#8	1"	3/8"	.14	11.90	10.50	9.30

MIL-F-1148A FIBRE SPACERS

35F547	2130	#6	1/4"	1/4"	.04	3.40	3.00	2.70
35F548	2133	#6	3/4"	1/4"	.07	5.95	5.25	47.00
35F549	2134	#6	1"	1/4"	.08	6.80	8.00	5.30
35F550	2140	#8	1/4"	1/4"	.04	3.40	3.00	2.70
35F566	2143	#8	3/4"	1/4"	.08	6.80	6.00	5.30

RUBBER GROMMETS

Stock No.	Type	Hole Dia.	O.D.	Thck.	1-99 ea.	1C-499 p. 100	5C-999 p. 100	1M-Up p. 100
35F520	2185	1/8"	5/16"	3/16"	.02	1.70	1.50	1.30
35F521	2172	5/16"	7/16"	3/16"	.02	1.70	1.50	1.30
35F522	2170	1/4"	5/8"	1/4"	.02	1.70	1.50	1.30
35F523	2174	5/16"	5/8"	1/4"	.02	1.70	1.50	1.30
35F524	2175	3/8"	21/32"	1/4"	.02	1.70	1.50	1.30
35F525	2177	7/16"	3/4"	1/4"	.02	1.70	1.50	1.30
35F526	2186	1/2"	1 1/16"	5/16"	.05	4.25	3.75	3.30
35F527	2187	5/8"	1 1/8"	5/16"	.04	3.40	3.00	2.70
35F528	2188	9/16"	1 1/16"	5/16"	.04	3.40	3.00	2.70
35F529	2189	3/4"	1"	5/32"	.05	4.25	3.75	3.30

FIBRE WASHERS

Stk. No.	Type	Description	Hole Size	O.D.	Thk.	Per 100
35F500	2151	Fibre Shoulder	.110"	1/4"	.062"	.82
35F501	2154	Fibre Shoulder	.250"	1/2"	.068"	.97
35F502	2155	Fibre Shoulder	.172"	3/8"	.093"	.91
35F503	2162	Flat Fibre	.140"	3/8"	.063"	.78
35F504	2163	Flat Fibre	.172"	3/8"	.063"	.76

NYLON STRAIN RELIEF BUSHINGS

Stock No.	Type	Description	1-99 ea.	1C-499 p. 100	5C-999 p. 100	1M-Up p. 100
35F673	937	For small mike cables.	.04	3.40	3.00	2.70
35F674	938	For line cords.	.04	3.40	3.00	2.70
35F675	939	For Co-Ax Wire.	.04	3.40	3.00	2.70
35F676	164	Flexible Coupling	1.15	97.75	86.25	77.00

NYLON CABLE CLIPS

MIL P17091A. Amend 2. For Temp. —60 to 250°.

Stk. No.	Type	Hole Dia.	1-99 ea.	1C-499 p. 100	5C-999 p. 100	1M-Up p. 100
35F505	771	1/8	.04	3.40	3.00	2.70
35F506	772	5/16	.04	3.40	3.00	2.70
35F507	773	1/4	.04	3.40	3.00	2.70
35F508	774	5/16	.05	4.25	3.75	3.30
35F509	775	3/8	.05	4.25	3.75	3.30
35F510	776	7/16	.05	4.25	3.75	3.30
35F511	777	1/2	.05	4.25	3.75	3.30
35F512	778	9/16	.07	5.95	5.25	4.70
35F513	779	5/8	.07	5.95	5.25	4.70
35F514	780	11/16	.08	6.80	6.00	5.30
35F515	781	3/4	.08	6.80	6.00	5.30
35F516	782	7/8	.09	7.65	6.75	6.00
35F517	783	1	.10	8.50	7.50	6.70
35F518	784	1 1/8	.12	10.20	9.00	8.00
35F519	785	1 1/4	.14	11.90	10.50	9.30

H. H. Smith Connectors

INSULATED PHONE TIP JACK AND PLUGS

202

203

Nickel plated brass body. Molded 7/16 inch bakelite head w/hex nut and fibre washer. Mounts in 5/16 inch holes in panels up to 3/8 inch thick.

Stk. No.	Type	Color	Description	1-99 ea.	1C-499	5C-999	1M-Up
					per 100		
39F856	202	Red	Accepts std.	.14	11.90	10.50	9.30
39F857	202	Black	Phone tip	.14	11.90	10.50	9.30
39F858	202	Green	plug. Length	.14	11.90	10.50	9.30
39F859	202	Yel.	1".	.14	11.90	10.50	9.30
35F687	203R	Red	Ins. short	.12	10.20	9.00	8.00
35F688	203B	Black	tip plug	.12	10.20	9.00	8.00
35F689	237R	Red	Ins. tip plug	.11	9.35	8.25	7.35
35F690	237B	Black	Solder type	.11	9.35	8.25	7.35

ALL NYLON TIP JACKS

1502
1506

1501
1505

Self insulating nylon molded body. Hex nut: brass nickel plated. Mounts in 1/4 inch hole in panels up to 1/4 inch thick.

35F750	1505	White	Wrap around type. Fits all standard phone tip plugs. L. 59/64".	.21	18.00	15.75	14.00
35F751	1505	Red					
35F752	1505	Black					
35F753	1505	Green					
35F754	1505	Blue					
35F755	1505	Yel.					
35F756	1506	White	Spade terminal type. Fits all standard phone tip plugs. L. 63/64".	.30	25.50	22.50	20.00
35F757	1506	Red					
35F758	1506	Black					
35F759	1506	Green					
35F760	1506	Blue					
35F761	1506	Yel.					
35F700	1501	White	Wrap around type. With metal shell. Meets MS-16108. L. 59/64".	.30	25.50	22.50	20.00
35F701	1501	Red					
35F702	1501	Black					
35F703	1501	Green					
35F704	1501	Blue					
35F705	1501	Yel.					
35F706	1502	White	Spade terminal type. With metal shell. Meets MS-16108. L. 59/64".	.42	35.70	31.50	28.00
35E707	1502	Red					
35F708	1502	Black					
35F709	1502	Green					
35F710	1502	Blue					
35F711	1502	Yel.					

INSULATED BANANA JACKS

219

205

251

Nickel plated brass body and molded bakelite head. Supplied w/hex nut and fibre washer. Mount in 5/16 inch holes in panels up to 3/8 inch thick.

39F967	219	Red	Body is	.16	13.60	12.00	11.00
39F968	219	Black	recessed.	.16	13.60	12.00	11.00
39F969	219	Yel.	Also supplied	.16	13.60	12.00	11.00
39F970	219	Green	w/lockwasher	.16	13.60	12.00	11.00
39F971	219	Blue	and brass tinned lug. L. 47/64".	.16	13.60	12.00	11.00
39F868	205	Red	Accepts std.	.14	11.90	10.50	9.30
39F869	205	Black	banana plug.	.14	11.90	10.50	9.30
39F870	205	Green	Also supplied	.14	11.90	10.50	9.30
39F871	205	Yel.	w/brass tinned lug. L. 47/64".	.14	11.90	10.50	9.30
35F631	251	Red	Suitable	.21	18.00	15.75	14.00
35F632	251	Black	where long	.21	18.00	15.75	14.00
35F633	251	Yel.	leads are	.21	18.00	15.75	14.00
35F634	251	Green	required. Accepts std. banana plugs. L. 1 1/2"	.21	18.00	15.75	14.00

INSULATED MIDGET BANANA JACK

221

Molded nylon 3/8" head and washer. Nickel plated brass body. W/hex nut and brass tinned lug. For std. banana plugs. 1 3/8" L.

39F972	221	Red	Insul. from	.24	20.40	18.00	16.00
39F973	221	Black	panel. Mfs.				
39F974	221	Yel.	in 5/16" hole				
39F975	221	Green	in panels up				
39F976	221	Blue	to 1/4" thick.				

TELEPHONE PLUGS AND JACKS

226

276

Type 226. Telephone plug Brass, nickel plated. Has tubular insulation. Tested at 1000 VAC. Fits above jack and all standard phone jacks. Solder terminals.

Type 276. Telephone jack. Brass, nickel plated bushing. Has Bakelite insulation. Comes with brass hex nut and with steel mounting washer, 2-conductor closed.

Stk. No.	Type	Description	1-99 ea.	100-4999 per 100	500-999 per 100	1M-Up /100
35787	276	2-Conductor Closed	.27	23.00	20.25	18.00
35788	226	2-Circuit Solder	.60	51.00	45.00	40.00
35787	276		.27	22.95	20.25	18.00

NYLON BANANA JACK—FULL ROUND BODY

Molded nylon per MIL-P-20693A. Brass, cadmium plated contact.

Stk. No.	Type	Color	Description	1-99 Ea.	1C-499	5C-999	1M-Up
					per 100		
35F712	1508	White	Accepts std.	.12	10.20	9.00	8.00
35F713	1508	Red	banana plug.				
35F714	1508	Black	Mounts in 5/16"				
35F715	1508	Green	hole in panels				
35F716	1508	Blue	up to 5/16"				
35F717	1508	Yel.	thick. 29/32" L.				

NON-INSULATED JACKS

109

107

Type 107. Phone Tip Jack. Accepts std. phone tip plugs. Supplied w/hex nut.

Type 109. Banana Jack Accepts std. banana plugs. W/hex nut and brass tinned lug.

Stk. No.	Type	Description	1-49	50-99	100-499	500-up
39F855	107	29/32" H.	.12	10.20	9.00	8.00
39F867	109	5/8" H.	.12	10.20	9.00	8.00

COMBINATION-PHONE TIP AND BANANA JACK

206

Insulated. Accepts std. phone tip or banana plug. Length: 1 5/32".

Stk. No.	Type	Color	1-99 ea.	1C-499	5C-999	1M-up
				per 100		
39F860	206	Red	.17	14.45	12.75	11.00
39F861	206	Black	.17	14.45	12.75	11.00

RIGHT ANGLE PRINTED CIRCUIT TEST JACK

Double entry design. Accepts probes .074-.084".

Stk. No.	Type	1-99 ea.	1C-499	5C-999	1M-Up
			per 100		
35F672	430	.10	8.50	7.50	6.70

DUAL ASSEMBLIES

284

269

Molded black styrene washer, cross slotted to accept std. phone tips in post either forward, or side ways. Mts. in two 1/2" holes on 3/4" mtg ctrs. in panels up to 1/4" thick. Supplied with 4 hex nuts and 2 washers. 284 connectors have captive type nylon heads with nickel plated brass insert; 269 connectors have captive type plated brass insert and accepts std. dual banana plug.

Stk. No.	Type	Color	1-99 ea.	1C-499	5C-999	1M-up
				per 100		
39F1654	284BB	2 black heads	.65	55.25	48.75	43.00
39F1655	284RR	2 red heads	.65	55.25	48.75	43.00
39F1656	284RB	1 black—1 red head	.65	55.25	48.75	43.00
35F845	269BB	2 black heads	.70	59.50	52.50	47.00
35F846	269RR	2 red heads	.70	59.50	52.50	47.00
35F847	269RB	1 black—1 red head	.70	59.50	52.50	47.00

BINDING POSTS

136 265 266 220 379 257

Brass nickel plated head and body. Accepts std. phone tips or banana plug. 3/8" head dia. 11/16" long.

Stk. No.	Type	Description	1-99 ea.	1C-499	5C-999	1M-up
				per 100		
38F293	136	Metal Binding Post	.21	18.00	15.75	14.00
35F108	137	Metal Binding Post	.25	21.25	18.75	17.00

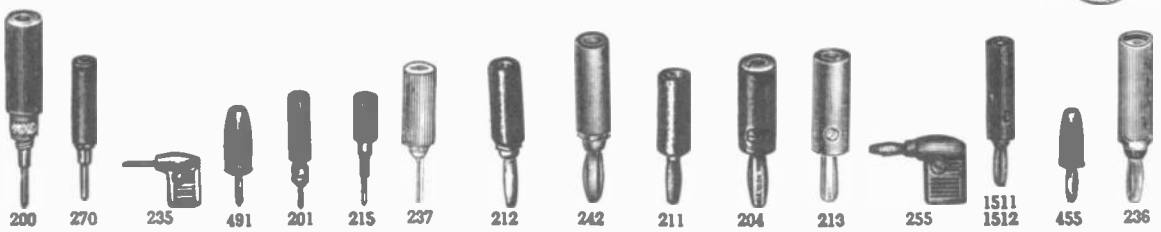
Molded bakelite head with molded in brass threaded insert. Complete with 8-32 threaded screw 1/2" long and nickel plated brass lockwasher. 1/2" head dia.

Stk. No.	Type	Color	Description	1-99 ea.	1C-499	5C-999	1M-up
					per 100		
35F827	265	Red	Binding Post	.24	20.40	18.00	16.00
35F832	265	Black	Binding Post	.24	20.40	18.00	16.00
35F828	266	Red	Binding Post	.24	20.40	18.00	16.00
35F831	266	Black	Binding Post	.24	20.40	18.00	16.00

Captive, molded plastic head and nickel plated brass body. Accepts phone tip plug, spade lug, banana plug, alligator clip or wire strand. Insulating washer supplied. 2 hex nuts supplied. 8-32 x 1/2 long threaded stud length 11 1/32 x 1/2".

38F296	220	Red	5-way grnd.	.22	18.70	16.50	15.00
38F297	220	Blk.	5-way grnd.	.22	18.70	16.50	15.00
35F629	230	Red	5-way insul. washer	.22	18.70	16.50	15.00
35F630	230	Blk.	5-way insul. washer	.22	18.70	16.50	15.00
35F799	379	Red	grnd. type	.25	21.25	18.75	16.00
35F748	379	Blk.	grnd. type	.25	21.25	18.75	16.00
35F749	257	Blk.	5-way insu. washer	.40	34.00	30.00	26.00
35F844	257	Red	5-way insul. washer	.40	34.00	30.00	26.00

H. H. Smith Connectors



INSULATED TIP PLUGS

Nickel Plated Brass Plugs. Fit Std. Phone Tip Jack.

Stk. No.	Type	Color	Description	1-99 ea.	1C-499 per 100	5C-999 per 100	1M-Up per 100
39F852 39F853 39F848 39F849	200 200 200 200	Red Black Green Yel.	Solderless Threaded type. 2⅛" l. Bakelite handle.	.15	12.75	11.25	10.00
39F846 39F847	270 270	Red Black	Sum-miniature type. 1 23/32" l. Fibre handle.	.18	15.30	13.50	12.00
39F963 39F964	235 235	Red Black	Meter type. Bakelite handle.	.27	23.00	20.25	18.00
35F769 35F770 35F771 35F772 35F773 35F774	491 491 491 491 491 491	White Red Black Green Blue Yel.	Short tip type. 1⅜" l. Nylon handle.	.15	12.75	11.25	10.00
35F775 35F776 35F777 35F778	201 201 201 201	Red Black Green Yel.	Solderless insul. Threaded type. 1 29/32" l. Bakelite handle.	.15	12.75	11.25	10.00
35F689 35F690	237R 237B	Red Black	Ins. tip plug Solder type	.11 .11	9.35 9.35	8.25 8.25	7.35 7.35
35F785 35F786	215 215	Red Black	Adapter. Accepts std. banana plug, adapts to std. tip plug. 1¾" l.	.15	12.75	11.25	10.00

NON INSULATED PLUGS

Solderless tip plugs. Wire fits through body of tip, and is wrapped around screw portion and tightened with knurled collar. Fits std. phone tip jacks.

Stk. No.	Type	Description	1-99 ea.	1C-499 per 100	5C-999 per 100	1M-Up per 100
39F850 39F851	105 106	Sr. type 1 29/32" long. Jr. type 1 3/16" long	.12 .12	10.20 10.20	9.00 9.00	8.00 8.00

Solder type. For std. phone tip jacks.

39F854	108	Phone cord repl. tip	.025	2.1	1.97	1.7

Banana plugs. Supplied with hex nut and phosphor bronze lug. Hex brass nickel plated body. Fits std. banana jacks. With phos.-spring, except (*) 104. Thread: 9/32 x ½ except (†) x ⅜.

38F292	104*	Split type cross slotted body	.14	11.90	10.50	9.30
38F298	403	4 leaved spring	.20	17.00	15.00	13.00
38F290	102†	4 leaved spring	.20	17.00	15.00	13.00
38F291	103†	4 leaved spring	.20	17.00	15.00	13.00

GIANT BANANA PLUGS AND JACKS

TYPE 285 AND 186 PLUGS. Hex brass, nickel plated body, 6 leaved, phosphor bronze, nickel plated spring.
TYPE 286 JACK. Supplied with hex nut fibre washer, lockwasher, screw and tinned copper lug. Mtgs. in ½" hole, ¾" thick hex nut and brass tinned lug. Mtg. hole ⅜", ½" thick.
TYPE 187 JACK. With hex nut and brass tinned lug.

Stk. No.	Type	Color	Description	1-99 Ea.	1C-499	5C-999	1M-Up per 100
32F289 32F290	285 285	Red Black	Insul. Large internal well. 2 25/32"	.75 .75	63.75 63.75	56.25 56.25	50.00 50.00
32F295	186	Nickl. Platd.	Screw and lug. 1 5/32"	.35	29.75	26.25	23.00
35F789	286	Red	Mtgs. in ½"	.46	39.10	34.50	31.00
35F946	286	Black	Mtgs. in ½"	.46	39.10	34.50	31.00
35F947	187	Brass	Mtgs. in ½"	.30	25.10	22.50	20.00

INSULATED BANANA PLUGS AND ADAPTERS

Nickel Plated Brass Plugs. Fit Std. Banana Jack.

Stk. No.	Type	Color	Description	1-99 ea.	1C-499 per 100	5C-999 per 100	1M-Up per 100
39F934 39F935 39F936 39F937 39F938 39F939	212 212 212 212 212 212	Red Black Yellw. Green Blue White	4 leaved phosphor bronze nickel plated springs. 1 13/16" long. Bakelite handle.	.23	19.55	17.25	15.00
39F844 39F845	242 242	Red Black	Same as 212 except 4 leaved beryllium copper, nickel plated spring.	.32	27.20	24.00	21.00
39F944 39F840 39F941 39F942 39F943 39F945	211 211 211 211 211 211	Red Black Yellw. Green Blue White	Same as 212 except 1⅝" long. Bakelite handle.	.19	16.15	14.25	13.00
39F863 39F864 39F865 39F866	204 204 204 204	Red Black Green Yel.	With side wire locking set screw. 4 leaved phosphor bronze spring. 1 9/16" long	.19	16.15	14.25	13.00
39F957 39F958 39F959 39F960 39F961 39F962	213 213 213 213 213 213	Red Black Yel. Green Blue White	Split type with side screw. No soldering. Cross slotted for spring tension. 1 9/16" long.	.18	15.30	13.50	12.00
39F965 39F966	255 255	Red Black	Meter type Bakelite handle.	.36	30.60	27.00	24.00
35F914 35F915	1511 1511	Red Black	Stack type Fits std. banana plugs in top and side. 4 leaved phosphor bronze spring. 2" long.	.33	28.05	24.75	22.00
35F916 35F917	1512 1512	Red Black	Same as 1511 but with beryllium copper spring. Solderless.	.36	30.60	27.00	24.00
35F779 35F780 35F781 35F782 35F783 35F784	455 455 455 455 455 455	White Red Black Green Blue Yel.	Solderless. 1½" l. Nylon handle.	.21	18.00	15.75	14.00
35F635 35F640	236 236	Red Black	4-leaved phosphor bronze, nickel plated. Hex brass, nickel plated. Fits std. banana jacks.	.35	29.75	26.25	23.00
35F636 35F641	245 245	Red Black	Brass insert. Banana plug splice. Accepts std. banana plugs.	.24	20.40	18.00	16.00
35F637 35F642 35F643 35F644	295 295 295 295	Yel. Green Blue White	Similar to 236. Solderless.	.25	21.25	18.75	17.00

1-11/16" INSULATED SPADE LUG

With banana jack. .030' hot tinned steel.

Stk. No.	Type	Color	1-99 ea.	1C-499 per 100	5C-999 per 100	1M-Up per 100
39F977	218	Red	.11	9.35	8.25	7.30
39F978	218	Black	.11	9.35	8.25	7.30

Depend On Newark For All Your Industrial Electronic Needs

POMONA Patch Cords, Test Leads and Plugs

PECO STACK-UP PATCH CORDS, TEST AND CONNECTING LEADS

Fig. A

Fig. B

Fig. C

Fig. D

Fig.E

Fig. F

Fig. G

Fig. H

Fig. J

¾" double banana plug cabled to a variety of plugs, connectors, clips and tips as indicated below. The double banana plug permits parallel multiple stacking and has a clearly marked ground connection. Color of plug body matches cable color, av. wt. 5 oz. *Two conductor twisted 18 ga. (65x36) wire. Vinyl jacket and insulation. Nom. cap. 30 mmf/ft., gray color. **Shielded microphone cable. Polyethylene insulation. Vinyl jacket. Nom. cap. 25 mmf/ft., gray color. †Coaxial shielded cable, RG 58 c/u clr: blk.

WITH DOUBLE PLUGS EACH END—Fig. A

Stk. No.	Type	Length	1-9	10-24	25-49	50-99
34F801	2BA-36*	36"	4.85	4.37	4.13	3.40
34F803	2BB-36**	36"				
34F805	2BC-36†	36"				

WITH ALLIGATOR CLIPS—Fig. B

Stk. No.	Type	Length	1-9	10-24	25-49	50-99
34F807	2BA-AL-36*	36"	5.85	5.27	4.97	4.10
34F809	2BB-AL-36**	36"				
34F811	2BC-AL-36†	36"				

WITH UG88E/U MALE BNC CONNECTOR—Fig. C

Stk. No.	Type	Length	1-9	10-24	25-49	50-99
34F813	2BB-BNC-36**	36"	5.85	5.27	4.97	4.10
34F815	2BC-BNC-36†	36"	5.85	5.27	4.97	4.10

WITH .080 DIA. PHONE TIP PLUG—Fig. D

Stk. No.	Type	Length	1-9	10-24	25-49	50-99
34F821	2BC-PP-36†	36"	7.50	6.75	6.38	5.25

WITH PL259 MALE UHF CONNECTOR—Fig. E

Stk. No.	Type	Length	1-9	10-24	25-49	50-99
34F831	2BC-UHF-36†	36"	5.85	5.27	4.97	4.10

WITH MINIGATOR CLIPS—Fig. F

Stk. No.	Type	Length	1-9	10-24	25-49	50-99
34F823	2BA-MG-36*	36"	5.85	5.27	4.97	4.10
34F825	2BB-MG-36**	36"				
34F827	2BC-MG-36†	36"				

ALLIGATOR CLIPS TO PL259 UHF CONNECTOR—Fig. G

Stk. No.	Type	Length	1-9	10-24	25-49	50-99
34F835	AL-C-UHF-36†	36"	5.85	5.27	4.97	4.10

UG88E/U MALE BNC CONNECTOR BOTH ENDS—Fig. H

Stk. No.	Type	Length	1-9	10-24	25-49	50-99
34F842	BNC-C-24†	24"	5.85	5.27	4.97	4.10
34F843	BNC-C-36†	36"	5.85	5.27	4.97	4.10

ALLIGATOR CLIPS TO UG88E/U MALE BNC CONNECTOR—Fig. J

Stk. No.	Type	Length	1-9	10-24	25-49	50-99
34F839	AL-C-BNC-36†	36"	5.85	5.27	4.97	4.10

SOCKET SAVERS

SS-7 SS-9 SS-8

Designed to be installed on tube checkers and other electronic equipment to prevent wear and tear of sockets on original equipment. Easy to install and remove. Beryllium Copper long-life contacts.

Stk. No.	Type	Description	1-49	50-99	100-249
34F861	SS-7	7-pin min.	1.75	1.50	1.40
34F862	SS-9	9-pin min.	1.75	1.50	1.40
34F863	SS-8	8-octal	1.75	1.50	1.40

NOVAR MODEL 1751 SOCKET SAVER

Beryllium Copper—long life contacts. Shpg. wt., 2 oz.

Stock No.	1-49	50-99	100-249
34F868	1.95	1.66	1.56

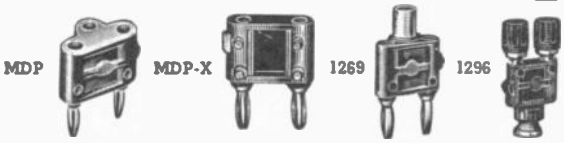
TEST SOCKET ADAPTERS

TVS-12 TVS-7 TVS-8

Features extended test tabs for ease of use with test prods or alligator clips. Low R.F. loss, phenolic construction: power factor less than 0.010 at 10 Mc. Insulation exceeds 500,000 megohms

Stk. No.	Type	Description	1-49	50-99	100-249
34F527	TVS-7	7 pin. min.	1.65	1.40	1.35
34F545	TVS-8	Octal	1.75	1.50	1.40
34F546	TVS-9	9 pin min.	1.85	1.57	1.52
34F548	TVS-1	Duo-Ducal	1.95		
34F869	TVS-12	Compactron	2.55	2.29	2.17
34F883	1779	Novar	2.25	1.91	1.80

¾" MOLDED DOUBLE PLUG STACK-UP ACCESSORIES


MDP MDP-X 1269 1296

Model MDP. Internal set screws for cable connection. Has .171" dia. stack up connections. 15A cont., 30A int. Working V.: 5000 VDC. Cap: 0.8 mmf at 10 mc.
Model MDP-S. Has internal solder bonded shorting bar.
Model MDP-X. Jacks and plugs lead to 4 isolated terminals.
Model 1269. Adapter: BNC jack to double banana plug.
Model 1296. Adapter: binding posts to BNC plug.

Stock No.	Model	Color	1-24	25-49	50-99	100-249
34F856	MDP	Red	.75	.68	.64	.53
34F857	MDP	Black	.75	.68	.64	.53
34F858	MDP-S	Natural	.95	.86	.81	.67
34F859	MDP-X	Red	3.25	2.93	2.76	2.28
34F860	1269	Black	2.85	2.57	2.42	2.00
34F870	1296	Black	4.85	4.37	4.13	3.40

BREADBOARD SURFACE MOUNTED SOCKETS

XS-7 XS-9 XS-8

An insulated base prevents connection from shorting to the chassis. Eliminates double chassis design. Circuits may be wired in enclosed unit, base connections are numbered for easy identification. Phosphor bronze spring contacts.

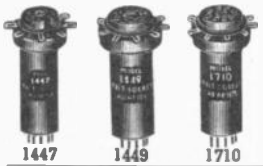
Stk. No.	Type	Description	1-49	50-99	100-249
34F864	XS-7	7-pin min.	.59	.54	.50
34F865	XS-9	9-pin min.	.69	.63	.59
34F866	XS-8	Octal	.75	.68	.64

MODEL TS-187 TRANSISTOR TEST SOCKET

For use in testing 3 lead transistors with .017 dia. leads. Beryllium copper springs for long life. Withstands temperature over 300°C. Insulation resistance 10,000 megohms min. at 40% R.H. at 24 C. Useful for aging racks, incoming inspection life testing etc. Color: Black.

Stock No.	1-24	25-49	50-99	100-249
34F867	1.75	1.58	1.50	1.23

TV TUNER SOCKET TUBE ADAPTERS


1447 1449 1710

The 7, 9 or 10-HIGH adapter rises above the shields and places testing in the open. Shields or tuner covers do not have to be removed. All construction is the highest quality. Interelement distributed capacity is approximately 1.5 micro-micro farad. Voltage breakdown elements exceed 1600 VAC or DC.

Stk. No.	Type	Description	1-49	50-99	100-249
34F872	1710	10 pin min.	2.25	1.91	1.80
34F873	1449	9 pin min.	1.95	1.66	1.56
34F874	1447	7 pin mni.	1.85	1.57	1.52
34F884	2599A	9 pin Novar	3.75	3.19	3.00
34F885	2610	10 pin Decal	2.55	2.17	2.04

STACK-UP CONNECTING LEADS
(Banana Plugs Both Ends)

Model B. Fits all standard banana jacks. Permit stack-up and side connections.

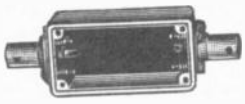
Stk. No.	Type	Length	Color	1-24	25-49	50-99	100-249
34F875	B-4	4"	Red	1.50	1.35	1.28	1.05
34F876	B-4	4"	Black				
34F877	B-8	8"	Red				
34F878	B-8	8"	Black				
34F879	B-12	12"	Red				
34F880	B-12	12"	Black				
34F881	B-18	18"	Red				
34F882	B-18	18"	Black				
34F848	B-24	24"	Red				
34F849	B-24	24"	Black				
34F850	B-36	36"	Red				
34F851	B-36	36"	Black				

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

POMONA ELECTRONIC PLUGS

● NEW COMPONENT MOUNTING BOXES

2390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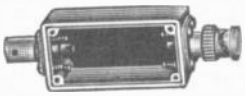
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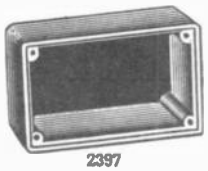

2397

MODEL 2398 BANANA JACKS TO DOUBLE BANANA PLUG. Junior size "black box." Ideal for packaging components and circuitry. Upper end—Banana jacks: 166" dia; solder turret terminals on ¾" centers; brass, nickel plate; and polarity indicator. Lower end; Banana plugs on ¾" centers; beryllium copper spring, nickel plated. 1.75 x 1.44 x .69". Shpg. Wt: 4 oz.

Model 2224. King size "black box." Like above, but 2.38 x 1.53 x 1.53".

MODEL 2390 BNC RECEPTACLE BOTH ENDS. Shielded black box. Has UG290-A/U jack at both ends. 2.25 x 1.13 x .88". With cover plate. Shipping weight: 4 oz.

MODEL 2391 BNC JACK TO BNC PLUG. Shielded black box. UG290-A/U jack at one end & UG1104-A/U plug at other end.

MODEL 2397 SHIELDED "BLACK BOXES." Fulfill requirements for RF applications. Die cast aluminum. Solder turret terminals. Finish is blue backed enamel. 2.09 x .97 x .88". Cover plate.

Model 2417. Shielded black box. Like 2397, except 2.09 x 1.22 x 1.00". Both 2 oz.

Stk. No.	Type	1-24	25-49	50-99	100-249
34F950	2098	2.85	2.57	2.42	2.00
34F951	2224	2.95	2.65	2.51	2.07
34F952	2390	6.85	6.17	5.84	4.80
34F953	2391	7.85	7.05	6.67	5.48
34F954	2397	1.50	1.35	1.28	1.05
34F955	2417	1.50	1.35	1.28	1.05

● NEW TEST LEAD HOLDER

Model 1508. Patch cords and cable assembliles can be filed for instant selection. Holder mounts easily on any vertical surface. Test leads are easy to store and easy to remove. Accepts cables up to .210" diameter. Cold rolled steel with orange baked enamel finish. Wt. 5 oz.

Model 2708. RG cable holder. Similar to 1508, but with .450" slots for coax cable. Blue finish. 11"Lx3.5"W; p slots.

Stk. No.	Type	1-24	25-49
34F956	1508	2.50	2.25
34F957	2708	2.95	2.65

● NEW 90° PATCH CORD

Model 2700. 18 AWG Cable, rated 15 amps, 90° banana plug at each end. Volt, 10,000 VDC. Operating temp. range: 0-105°C. Plugs fit standard banana jacks. Ideal for crowded panelboards or wherever space is at a premium. Heat treated beryllium spring. Nickel plate finish.

Stk. No.	Type	Color	Length	1-24	25-49	50-99	100-249
34F958	2700-12	red	12"	1.00	.91	.86	.72
34F959	2700-12	black	12"				
34F960	2700-18	red	18"				
34F961	2700-18	black	18"				
34F962	2700-24	red	24"				
34F963	2700-24	black	24"				

● NEW BREAK-OUT CABLE

Model 2630. BNC jack — alligator clips. 2.18-AWG stranded leads. Cable and clips are color coded, 1 red & 1 black. 500V peak. Operating temp. range: —25 to 85°C. 7" long.

Model 2631. Same as 2630, except with minigator clips rather than standard alligator clips.

Stk. No.	Type	1-24	25-49	50-99
34F964	2630	3.45	3.10	2.93
34F965	2631	3.45	3.10	2.93

ITT-CANNON AUDIO PLUGS

XLR SERIES

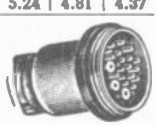
Protects against mechanical interference. Integral cable clamp, neoprene cable relief, and time tested latch lock. Shpg. wt. 3 oz.

STEEL & SATIN NICKEL FINISH SHELLS

Stk. No.	Type	Description	Pins	1-9	10-49	50-99
39F475	XLR-3-11SC	Cable Conn. F	3	4.54	4.16	3.78
39F476	XLR-3-12SC	Cable Conn. M	3	3.48	3.32	3.02
39F477	XLR-4-11SC	Cable Conn. F	4	4.62	4.24	3.85
39F478	XLR-4-12SC	Cable Conn. M	4	3.73	3.42	3.11
39F481	XLR-4-11C	Cable Conn. F	4	1.80	1.65	1.51
39F483	XLR-4-12C	Cable Conn. M	4	1.32	1.21	1.10
39F465	XLR-4-13	Panel Mt.-Flg. F	4	2.12	1.95	1.77
39F466	XLR-4-13N	Panel Mt.-Nut F	4	2.86	2.63	2.39
39F467	XLR-4-14	Panel Mt.-Flg. M	4	.96	.88	.80
39F468	XLR-4-14N	Panel Mt. Nut M	4	2.43	2.22	2.03
39F469	XLR-4-15	90° Cable Conn. F	4	4.43	4.07	3.71
39F485	XLR-4-31	Wall Mt. F	4	2.19	2.00	1.83
39F487	XLR-4-32	Wall Mt. M	4	1.59	1.46	1.33
39F480	XLR-3-11C	Cable Conn.F	3	1.42	1.30	1.19
39F482	XLR-3-12C	Cable Conn. M	3	1.24	1.13	1.03
39F455	XLR-3-13	Panel Mt.-Flg. F	3	2.04	1.89	1.71
39F456	XLR-3-13N	Panel Mt. F	3	2.78	2.55	2.31
39F457	XLR-3-14	Panel Mt.-Flg. M	3	.91	.84	.77
39F458	XLR-3-14N	Panel Mt. M	3	2.25	2.07	1.89
39F459	XLR-3-15	90° Cable Conn. F	3	4.39	4.03	3.67
39F484	XLR-3-31	Wall Mt. F	3	2.12	1.95	1.77
39F486	XLR-3-32	Wall Mt. M	3	1.21	1.11	1.01
39F460	XLR-3-35	Single Box Mt. F	3	5.24	4.81	4.37

STANDARD TELEVISION CAMERA PLUGS FOR REPLACEMENT

Replacement units for connecting TV cameras. Shells are made of die-cast aluminum with cadmium-plated finish. All are 24-contact types. Shpg. wt., 4 oz.



Stk. No.	Type	1-9	10-49	50-99
39F403	LKT-R24C-22⅞	40.22	36.20	30.17
39F408	LKT-R24C-21⅞	44.63	40.17	33.47

P SERIES AUDIO PLUGS

Plugs have split shell. 2-6 contact inserts take #10 wire. 8 contact takes #14 wire. Panel mtg. except *Cable connector. Avg. shpg. wt. 4 oz.

P4-13

P-CG-11S

Stk. No.	Pins	Male	1-24	25-99	100-499
39F531	3	P3-CG-12S*	7.20	6.12	5.40
39F532	4	P4-CG-12S*	7.22	6.14	5.42
39F533	5	P5-CG-12S*	7.47	6.35	5.60
39F534	6	P6-CG-12S*	7.90	6.72	5.93
39F535	8	P8-CG-12S*	7.27	6.18	5.45
39F543	3	P3-14	4.73	4.02	3.55
39F544	4	P4-14	5.33	4.53	4.00
39F546	6	P6-14	6.01	5.11	4.51
39F547	8	P8-14	5.54	4.71	4.16

Stk. No.	Pins	Female	1-24	25-99	100-499
39F537	3	P3-CG-11S*	7.84	6.66	5.88
39F538	4	P4-CG-11S*	8.42	7.16	6.32
39F539	5	P5-CG-11S*	8.36	7.11	6.27
39F540	6	P6-CG-11S*	8.88	7.55	6.66
39F541	8	P8-CG-11S*	8.88	7.55	6.66
39F549	3	P3-13	5.74	4.88	4.31
39F550	4	P4-13	6.74	5.73	5.06
39F551	5	P5-13	6.68	5.68	5.01
39F552	6	P6-13	7.19	6.11	5.39
39F553	8	P8-13	7.19	6.11	5.39
39F556	3	P3-35	9.57	8.13	7.18

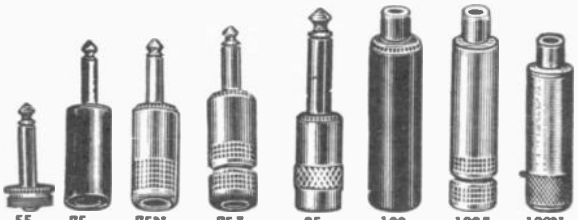
UA RETMA STANDARD PLUGS

Standard 3-contact microphone plugs. Latch-locking, gold-plated contacts, rubber relief collar and bushings on plugs, with flat-top polarized. 15 amps. ½" cbl. entry. St. plg. shell. *Pin insert

Stk. No.	Type	Description	1-24	25-99	100-499
39F570	UA-3-11	Straight cord plug	11.20	9.52	8.40
39F571	UA-3-12	*Straight cord plug	7.10	6.04	5.33
39F572	UA-3-13	Round wall mount	8.66	7.36	6.50
39F573	UA-3-14	*Round wall mount	4.70	4.00	3.53
39F574	UA-3-31	Rect. wall mount	7.46	6.34	5.60
39F575	UA-3-32	*Rect. wall mount	4.72	4.01	3.54

MALLORY Plugs and Jacks

PHONE AND MICROPHONE JACKS



55 75 75N 75A 85 100 100A 100N

Type 55. Adapts standard microphone connector for use with conventional jack. Length, 1 1/16". Shpg. wt., 4 oz.

Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F742	55	.30	.27	.25	.225	.20

Type 75. Two-way phone plug with tie-cord anchor and insulated phenolic shell. Brass terminals for either phone tips or wire. Length 2 13/16". Handle, 1 9/16" long. Shpg. wt., 3 oz.

Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F700	75	.45	.41	.38	.338	.30

Type 75N. Two-way phone plug with tie-cord anchor and polished shielded nickel shell. Brass screw terminals. Overall length, 2 13/16". Handle, 1 5/8". Shpg. wt., 8 oz.

Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F701	75N	.66	.59	.55	.495	.44

Type 75A. Two-way phone plug with tie-cord anchor and polished, shielded nickel shell and cable clamp. Brass screw terminals. Length 3 1/16". Handle, 1 13/16". Shpg. wt., 4 oz.

Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F702	75A	1.05	.95	.88	.788	.70

Type 76. Similar to type 75. Three-way microphone plug with insulated phenolic shell. Silver-plated lug terminals. Overall length, 2 13/16". Handle, 1 9/16" long. Shpg. wt., 3 oz.

Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F703	76	.90	.81	.75	.675	.60

Type 76A. Similar to 75A. Three way mike plug in polished, shielded nickel shell with cable clamp. Silver-plated lug terminals. Length, 3". 1 13/16" handle. Shpg. wt., 4 oz.

Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F704	76A	1.17	1.05	.98	.878	.78

Type 85. Two-way miniature phone plug. 2 1/4" long. Wt., 4 oz.

Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F743	85	.36	.32	.30	.27	.24

EXTENSION TYPE JACKS

Type 100. Two-way extension jack for type 75 phone plug. Fiber shell. 2 3/4" long. Overall length, 3 1/4". Shpg. wt., 4 oz.

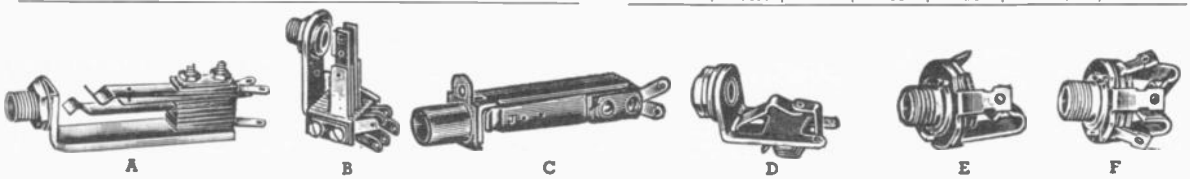
Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F705	100	1.08	.97	.90	.81	.72

Type 100N. Two-way extension jack for type 75N phone plug. Highly polished, shielded nickel shell. Overall length, 3 5/16". Shpg. wt., 6 oz.

Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F706	100N	1.08	.97	.90	.81	.72

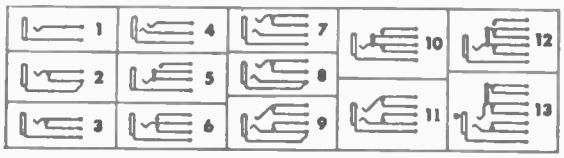
Type 100A. Two-way extension jack for type 75A phone plug. Shielded nickel shell with built-in cable clamp. Overall length, 3 1/16". Shpg. wt., 5 oz.

Stk. No.	Type	1-9	10-49	50-99	100-249	250-499
39F707	100A	1.50	1.35	1.25	1.125	1.00



A B C D E F

CIRCUIT DIAGRAM



LONG FRAME JACKS

Fig. A. Long-frame jacks mount in 7/16" hole in panels up to 1/4" thick by means of a 3/8" diameter threaded shank. All take standard 1/4" plugs. Nickel-plated alloy springs, silver contacts, cadmium-plated frames. Supplied with mounting nut and washer. Shpg. wt., 4 oz.

Stk. No.	Type	Cir. Diag.	1-9	10-49	50-99	100-249	250-499
39F708	1	1	.45	.41	.38	.338	.30
39F709	2	2	.57	.51	.48	.428	.38
39F710	2A	3	.57	.51	.48	.428	.38
39F711	2B	4	.57	.51	.48	.428	.38
39F712	3	5	.60	.54	.50	.45	.40
39F714	3B	7	.60	.54	.50	.45	.40
39F717	4A	10	.75	.68	.63	.563	.50
39F718	4B	11	.75	.68	.63	.563	.50
39F719	5	12	.90	.81	.75	.675	.60
39F720	6	13	1.05	.95	.88	.788	.70

JUNIOR JACKS

Fig. B. "Junior" jacks for standard 1/4" plugs. Mounts in 3/8" hole in panels up to 5/16" thick. Nickel plated brass frames and bushings. Supplied with mounting nut & washer. Shpg. wt., 3 oz.

39F724	701	1	.45	.41	.38	.338	.30
39F725	702	2	.51	.46	.43	.383	.34
39F726	702A	3	.57	.51	.48	.428	.38
39F727	702B	4	.57	.51	.48	.428	.38
39F728	703	5	.60	.54	.50	.45	.40
39F729	703A	6	.60	.54	.50	.45	.40
39F730	703B	7	.60	.54	.50	.45	.40
39F731	703C	8	.60	.54	.50	.45	.40
39F732	704	9	.69	.62	.58	.518	.46
39F733	704A	10	.69	.62	.58	.518	.46
39F734	704B	11	.69	.62	.58	.518	.46
39F735	705	12	.75	.68	.63	.563	.50

SWITCHBOARD AND INDUSTRIAL JACKS

Fig. C. Industrial jacks similar to long frame jacks but have special frame angle for greater support; plain unthreaded bushing. Mount with single screw. Fits standard plugs. Shpg. wt., 4 oz.

Stk. No.	Type	Cir. No.	Description	1-9	10-49	50-99	100-249	250-499
39F721	XP-1	1	Open Cir. Jack	.63	.57	.53	.473	.42
39F722	XP-2B	3	Mike Jack	.75	.68	.63	.563	.50
39F723	XP-3B	6	Sgl. Cir. Make Brk.	.90	.81	.75	.675	.60

MIDGET TYPES

Fig. D. Midget jacks have a shorter frame and spring than the Junior jack. For minimum clearance positions. Extend 19/32" behind panel; take standard plugs. Shpg. wt., 2 oz.

39F737	A-1	1	Open Cir. Jack	.33	.30	.28	.248	.22
39F738	A-2	2	Shorting Jack	.48	.43	.40	.36	.32
39F739	A-2A	3	Closed Cir. Jack	.57	.51	.48	.428	.38
39F740	A-3A	6	Sgl. Cir. Make Brk.	.66	.59	.55	.495	.44
39F741	GJ-1	1	Aircraft Grounding Jack	.36	.32	.30	.27	.24

SC JACKS

Fig. E. SC-1A Phone Jack. 2-conductor. Commercial equivalent of military jack No. JJ-034. Requires 7/8" mounting space behind panel. Designed to receive these plugs: Mallory 75, West. Electric 47A and 47B, Signal Corps PL-47, PL-48, PL-55, PL-148, PL-155, PL-125 and Jan plugs PJ-055, PJ-155, PJ-634, PJ-636, and PJ-047. Shpg. wt., 2 oz.

Fig. F. SCA-2B. Microphone Jack. 3 conductor. Commercial equivalent of Military Jack No. JJ-033. Requires 7/8" mounting space behind panel. Designed to receive these plugs: West. Electric 109, and Signal Corps PL-68, PL-168, and Jan plugs PJ-068, PJ-168, and PJ-309. Shpg. wt., 2 oz.

LA JACKS

Similar to SC1A and SCA2B Signal Corps jacks but have commercial construction for use in electronic equipment. Have 3/8" x 32 brass bushings, cadmium-plated. Contact springs silver plated; spring brass to assure low contact resistance. Insulation high-grade phenolic. Mounting behind panel 1". Mounting radius approximately 1/2". Use with No. 75, 75N, 75A or 85 phone plugs. Shpg. wt., 2 oz.

Stk. No.	Type	Cir. Diag.	Description	1-9	10-49	50-99	100-249	250-499
39F780	SC-1A	1	Open Circuit	.36	.32	.30	.27	.24
39F781	SCA-2B	4	Open Circuit	.42	.38	.35	.315	.28
35F838	LA-1	1	Open Cir. Jack	.36	.32	.30	.27	.24
35F839	LA-2	2	Shorting Jack	.42	.38	.35	.315	.28
35F840	LA-2A	3	Closed	.48	.43	.40	.36	.32

Newark Electronics Corp., 500 N. Pulaski Rd., Chicago, Ill. 60624

DOUBLE ASSEMBLY 5-WAY BINDING POST

Fig. A. For instrument and equip. panels requiring ¾" centers. Rated for a current capacity of 30 amps. & working voltage of 1000 V. Gold plated brass pts. 5 ways to make connections. 0.098" diam. wire holes. Color coded captive thumbnuts.
Fig. B. Dual adapter type. 125VAC, 15A

Fig. A

Fig. B

Stk. No.	Type	Color Thumbnut	Fig.	1-9	10-99
6F078	DAP15BWC	Black & White	B	1.50	1.13
6F085	DF30-2-BWTC	Black & White	A	.85	.64
6F086	DF30-2-BBC	Black & White	A		
6F087	DF30-2-BRC	Red & Black	A		

MINIATURE 5-WAY BINDING POSTS

Rated for 15 amperes, 1000 working volts. Nylon plastic parts meet Mil Spec MIL-P-20693. Gold-plated brass parts. Fluted thumb nut design only.

Stk. No.	Type	Color	1-99	100-999
6F079	DF21RC	Red	.40	.30
6F080	DF21WTC	White		
6F081	DF21BC	Black		
6F082	DF21BLC	Blue		
6F083	DF21YC	Yellow		
6F084	DF21GNC	Green		

HEX-NUT 5-WAY BINDING POSTS

Can mount and lock in any panel from 1/16" to 1/4" thick. For permanent clamping, spade lug, clip-lead, banana plug, or looping and clapping. Shaft has 1/8" solder tip and 0.098" dia. wire holes. Rated: 1000 V. 30 amp. Gold-plated metal parts. Plastic parts are of nylon compounded to meet military specifications MIL-P-20693. Shpg. wt. 1 oz.

Stk. No.	Type	Color	1-99	100-900
5F760	DF30BC	Black	.40	.30
5F761	DF30BLC	Blue		
5F762	DF30RC	Red		
5F763	DF30GNC	Green		
5F764	DF30WTC	White		
5F765	DF30YC	Yellow		
5F759	GP30NC	Nickel		

FLUTED NUT 5-WAY BINDING POSTS

Plastic parts of standard size types molded of Lexan polycarbonate resin; brass parts are gold-plated. Rated for 30 amperes, 1000 volts working. Shipping wt. 2 oz.

Stk. No.	Type	Color	1-99	100-900
6F088	DF31RC	Red	.40	.30
6F089	DF31BLC	Blue		
6F090	DF31GNC	Green		
6F091	DF31WTC	White		
6F092	DF31BC	Black		
6F093	DF31YC	Yellow		

SUPERCON ELECTRICAL CONNECTORS

- **Positive-Grip Design**
- **Nylon Plastic Parts**

Supercon flexible soldered or solderless plugs and receptacles

Stock No.	Type	Color	Desc.	1-19	20-99	100-199
6F048	RS25GB	black	25 amp Socket Receptacles	2.00	1.60	1.40
6F049	RS25GY	yellow				
6F050	RH25GR	red				
6F051	RH25GBL	blue				
6F052	RH25GGN	green				
6F053	RH25GWT	white				
6F060	PP25GB	black	25 amp Pin Plugs	2.00	1.60	1.40
6F061	PP25GY	yellow				
6F062	PP25GR	red				
6F063	PP25GBL	blue				
6F064	PP25GGN	green				
6F065	PP25GWT	white				
6F000	RH50GB	black	50 amp Socket Receptacles	2.75	2.20	1.93
6F001	RH50GY	yellow				
6F002	RS50GR	red				
6F003	RS50GBL	blue				
6F004	RH50GGN	green				
6F005	RH50GWT	white				
6F030	PP50GB	black	50 amp Pin Plugs	2.75	2.20	1.93
6F031	PP50GY	yellow				
6F032	PP50GR	red				
6F033	PP50GBL	blue				
6F034	PP50GGN	green				
6F035	PP50GWT	white				
6F038	PS100GB	black	100 amp Socket Plugs	3.50	2.80	2.45
6F037	PS100GY	yellow				
6F038	PS100GR	red				
6F039	PS100GBL	blue				
6F040	PS100GGN	green				
6F041	PS100GWT	white				
6F018	RP100GB	black	100 amp Pin Receptacles	3.50	2.80	2.45
6F019	RP100GY	yellow				
6F020	RP100GR	red				
6F021	RP100GBL	blue				
6F022	RP100GGN	green				
6F023	RP100GWT	white				
6F672	PS250GB	black	250 amp Socket Plugs	6.00	4.80	4.20
6F673	PS250GY	yellow				
6F674	PS250GR	red				
6F145	PS250GBL	blue				
6F146	PS250GGN	green				
6F147	PS250GWT	white				

Stock No.	Type	Color	Desc.	1-19	20-99	100-199
6F054	RP25GB	black	25 amp Pin Receptacles	2.00	1.60	1.40
6F055	RP25GY	yellow				
6F056	RP25GR	rde				
6F057	RP25GBL	blue				
6F058	RP25GGN	green				
6F059	RP25GWT	white				
6F066	PS25GB	black	25 amp Socket Plugs	2.00	1.60	1.40
6F067	PS25GY	yellow				
6F068	PS25GR	red				
6F069	PS25GBL	blue				
6F070	PS25GGN	green				
6F071	PS25GWT	white				
6F024	PS50GB	black	50 amp Socket Plugs	2.75	2.20	1.93
6F025	PS50GY	yellow				
6F026	PS50GR	red				
6F027	PS50GBL	blue				
6F028	PS50GGN	green				
6F029	PS50GWT	white				
6F006	RP50GB	black	50 amp Pin Receptacles	2.75	2.20	1.93
6F007	RP50GY	yellow				
6F008	RP50GR	red				
6F009	RP50GBL	blue				
6F010	RP50GGN	green				
6F011	RP50GWT	white				
6F012	RS100GB	black	100 amp Socket Receptacles	3.50	2.80	2.45
6F013	RS100GY	yellow				
6F014	RS100GR	red				
6F015	RS100GBL	blue				
6F016	RS100GGN	green				
6F017	RS100GWT	white				
6F042	PP100GB	black	100 amp Pin Plugs	3.50	2.80	2.45
6F043	PP100GY	yellow				
6F044	PP100GR	red				
6F045	PP100GBL	blue				
6F046	PP100GGN	green				
6F047	PP100GWT	white				
6F675	RP250GB	black	250 amp Pin Receptacles	6.00	4.80	4.20
6F676	RP250GY	yellow				
6F677	RP250GR	red				
6F148	RP250GBL	blue				
6F149	RP250GGN	green				
6F150	RP250GWT	white				

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E. F. JOHNSON Plugs and Jacks

NYLON INSULATED SOLDERLESS TIP PLUG

Companion unit for the famous JOHNSON nylon tip jack. Durable molded nylon insulating sleeve designed so no metal surfaces are exposed when plug is inserted in jack. Quick, sure solderless connection of up to 16 gauge stranded wire. Withstands extremely high voltages and a wide temperature range. Current rating is 10 amperes. Standard .081 inch diameter pin fits all standard tip jacks. Size: 1 1/16" x 3/8". Shpg. wt., 2 oz.

No.	Type	Color	1-49	50-99	100-499	500-up
39F1513	105-301	White				
39F1514	105-302	Red				
39F1515	105-303	Black				
39F1516	105-304	Green				
39F1518	105-306	Orange	.15	.14	12.40 Per 100	11.30 Per 100
39F1519	105-307	Yellow				
39F1520	105-308	Brown				
39F1522	105-310	Blue				
39F1524	105-312	Violet				
39F1525	105-313	Gray				

BANANA JACKS

Completely insulated banana jack. Retains low-loss characteristics through wide temp. range and high rel. humidity conditions. Voltage breakdown: 12,500 V. DC. For banana plugs of nom. .175" diam. Shpg. wt., 2 oz.

No.	Type	Color	1-49	50-99	100-499	500-up
39F1570	108-901	White				
39F1574	108-902	Red				
39F1575	108-903	Black				
39F1576	108-904	Green				
39F1578	108-906	Orange	.10	.09	8.25 Per 100	7.55 Per 100
39F1579	108-907	Yellow				
39F1580	108-908	Brown				
39F1582	108-910	Blue				
39F1584	108-912	Violet				
39F1585	108-913	Gray				

NYLON TIP JACKS

Molded of tough, low-loss nylon. Have high DC breakdown, 11,000 volts, and low capacity to panel, 2.0 mmf. Contacts recessed to avoid accidental shorting. Silver plated beryllium copper contacts. Mating pin, .081" diameter. Mtg. hole req. 17/32". Head diam. 3/8". Body threaded 1/4"-32. Wt., 1 oz.

39F878	105-601	White				
39F879	105-602	Red				
39F880	105-603	Black				
39F881	105-604	Green				
39F882	105-606	Orange	.15	.14	12.40 Per 100	11.30 Per 100
39F883	105-607	Yellow				
39F884	105-608	Brown				
39F885	105-610	Blue				
39F1558	105-612	Violet				
39F1559	105-613	Gray				

NYLON JACKS AND SLEEVE ASSEMBLIES

Nylon tip jack equipped with an inside threaded molded nylon insulating sleeve. Shpg. wt., 3 oz.

39F1500	105-701	White				
39F1501	105-702	Red				
39F1502	105-703	Black				
39F1503	105-704	Green				
39F1505	105-706	Orange	.20	.16	16.55 Per 100	15.10 Per 100
39F1506	105-707	Yellow				
39F1507	105-708	Brown				
39F1509	105-710	Blue				
39F1511	105-712	Violet				
39F1512	105-713	Gray				

BANANA PLUGS AND JACKS

A B C

Complete selection. Banana plugs have nickel silver springs. Jacks are nickeled brass. Type 108-740 is 5/8" long. 108-760 is 1" long. Studs extend full length of sleeves for added support. With nuts and lugs. Shpg. wt., 2 oz.

No.	Type	Fig.	Descriptions	1-49	50-99	100-499 Per 100	500-up Per 100
39F888	108-750	A	Plug, 3/8" stud	.15	.14	12.40	11.30
39F889	108-750-2	A	Plug, 3/4" stud	.16	.14	13.20	12.10
39F890	108-753	B	Plug, 6-32 screw	.16	.14	13.20	12.05
39F891	108-770	A	Jumbo type plug	.35	.32	29.00	26.40
39F892	108-771	B	Jumbo type plug	.45	.41	37.25	34.00
39F893	108-740	C	Standard jack	.13	.12	10.75	9.80
39F894	108-760	C	Jumbo jack	.40	.36	33.00	30.20

NYLON SIX-WAY BINDING POST

Compact, completely insulated, pre-assembled 6-way binding post. Molded nylon body. Silver-plated brass shank. Current capacity 15 amps. Voltage breakdown 8000 V DC. Single 5/16"-32 nut furnished for mounting — no auxiliary hardware needed. Shpg. wt., 3 oz.

No.	Type	Color	1-49	50-99	100-499	500-up
39F1545	111-101	White				
39F1546	111-102	Red				
39F1547	111-103	Black				
39F1548	111-104	Green				
39F1550	111-106	Orange	.30	.27	24.80 Per 100	22.60 Per 100
39F1551	111-107	Yellow				
39F1552	111-108	Brown				
39F1554	111-110	Blue				
39F1556	111-112	Violet				
39F1557	111-113	Gray				

INSULATED BANANA PLUGS

Compact high voltage insulated plug for a wide variety of applications. Easy solderless connection of up to 16 gauge stranded wire. Nylon insulating sleeve retains strength and low loss characteristics over a wide range of temperatures and withstands high voltages. Shpg. wt., 3 oz.

39F1530	108-301	White				
39F1531	108-302	Red				
39F1532	108-303	Black				
39F1533	108-304	Green				
39F1535	108-306	Orange	.19	.17	15.70 Per 100	14.30 Per 100
39F1536	108-307	Yellow				
39F1537	108-308	Brown				
39F1539	108-310	Blue				
39F1541	108-312	Violet				
39F1542	108-313	Gray				

LOW COST NYLON TIP JACKS

Low cost nylon tip jacks with formed silver-plated phosphor bronze contact. Current rating: 10 amps. Voltage breakdown: 9000 volts DC; capacity to 1/8" panel, 2.0 mmf 1/4"-32 nut furnished; mounts in 17/64" hole. Shpg. wt., 2 oz.

39F1560	105-801	White				
39F1561	105-802	Red				
39F1562	105-803	Black				
39F1563	105-804	Green				
39F1565	105-806	Orange	.13	.12	10.75 Per 100	9.80 Per 100
39F1566	105-807	Yellow				
39F1567	105-808	Brown				
39F1569	105-810	Blue				
39F1571	105-812	Violet				
39F1572	105-813	Gray				

METAL-CLAD NYLON TIP JACKS

Shock-proof nylon and metal construction. Nickel-plated machined brass jacket protects nylon body—assures positive fastening to mounting surface. Current rating: 10 amperes, internal silver-plated contact recessed in head—accommodates tip plugs of nominal .081" diameter. 1/4"-32 nut furnished. Mounts in 17/64" diameter hole. Capacity to 1/8" metal is 3.8 Mmf. Variations of two available grades listed below. Av. shpg. wt., 3 oz.

STANDARD TYPE

These low cost metal-clad jacks have nylon tips for extremely long wear. Each is provided with formed silver-plated phosphor-bronze contact to insure optimal performance. Voltage breakdown is 7,000 volts DC.

Stk. No.	Mfg. No.	Color	1-49	50-99	100-499 per C	500-Up per C
39F1700	105-251-1	White				
39F1701	105-252-1	Red				
39F1702	105-253-1	Black				
39F1703	105-254-1	Green				
39F1705	105-256-1	Orange	.18	.16	14.90	13.60
39F1706	105-257-1	Yellow				
39F1707	105-258-1	Brown				
39F1709	105-260-1	Blue				
39F1711	105-262-1	Violet				
39F1712	105-263-1	Grey				

MILITARY TYPE

Military type designed to comply with MS-16108 R2V f 08 MIL-STD-242A. Heavy nickel plated brass jacket. High insulation resistance of nylon body. Gold plated beryllium copper contact spring. Voltage breakdown: 8,000 volts DC.

Stk. No.	Mfg. No.	Color	1-49	50-99	100-499 per C	500-Up per C
39F1726	105-201-200	White				
39F1727	105-202-200	Red				
39F1728	105-203-200	Black				
39F1729	105-204-200	Green				
39F1731	105-206-200	Orange	.30	.27	24.80	22.60
39F1732	105-207-200	Yellow				
39F1733	105-208-200	Brown				
39F1735	105-210-200	Blue				
39F1737	105-212-200	Violet				
39F1738	105-213-200	Grey				

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

DUAL SOLDERLESS BANANA PLUG

Extremely versatile. Molded body incorporates polarity indication and strain relief hole for wire leads. Springs are high quality nickel silver—bodies are nickel-plated. Accurately machined brass studs extend the full length of pins for extra strength. Voltage breakdown: 10,000 volts DC. Capacity plug to plug: 1.3 mmf. Current carrying capacity: 15 amps.

Stk. No.	Type 108-	Color	1-49	50-99	100-499 per 100
39F895	202	Red	.70	.63	58.00
39F896	203	Black	.70	.63	58.00

GRID BY-PASS CAPACITORS

Type 124-113-1. 1450 pf circular silvered-mica screen grid by-pass capacitor. Dielectric strength tested at 1000 volts, DC. Low inductance silver plated beryllium copper, screen grid contact fingers are heat treated. Shpg. wt. 4 oz.

Stk. No.	Type	1-9	10-49
39F1527	124-113-1	4.25	3.75

INSULATED BANANA PLUGS

Standard size. With plastic handles, brass nickel-plated bodies, nickel-silver springs. 2⅛" L. x 7/16" Max. Dia.

Stk. No.	Type 106-	Color	1-49	50-99	100-499 per 100
39F897	752-1	Black	.30	.27	24.80
39F898	752-2	Red	.30	.27	24.80

BAYONET SOCKETS

Type 123-210-1. Porcelain base socket for tubes with 4 prong "UX" base. Has phosphor bronze contacts, aluminum shell. Takes 852, 860, 866 tubes. etc. HV spacing between contacts and shell. 2 mtg. holes, 2 1/16" between ctrs. Shpg. wt., 10 oz.

Type 123-211-1. Porcelain base socket for "jumbo" 4-pin tubes. Takes 211, 872, etc. 2 13/16" mtg. ctrs. Wt., 1 lb.

Type 123-209-1. Porcelain base. Top, sides glazed. For med. 4 pin tubes A4-10. 2 5/16" mtg. ctrs. Wt., 10 oz.

Stk. No.	Type	1-9	10-49	50-99
38F756	123-210-1	1.90	1.75	1.59
38F757	123-211-1	2.50	2.30	2.09
38F762	123-209-1	1.90	1.75	1.59

JUMBO STEATITE SOCKETS

Type 122-237-1. Perfect for transmitting tubes with "giant" 7-pin base. Takes 813, 8001, 3D22, 4E27, HK257, etc. 2 5/8" sq. 4 mtg. holes, 1 7/8" between ctrs.

Type 122-247-1. For 7-pin tubes. Aluminum shield. Ceramic base, 2 5/8" sq. Wt., ½ lb. Can be used with 7094 tube.

Type 122-248-1. As above, 2⅜" sq.

Type 122-275-1. Giant 5-pin wafer socket for tubes such as 4-125A, 4-250A and RK-48. .190" mtg. holes on 2¼" sq. Shipping wt., ½ lb

Stk. No.	Type	1-9	10-49	50-99
38F770	122-237-1	1.50	1.38	1.26
38F771	122-247-1	1.75	1.61	1.48
38F776	122-248-1	1.60	1.47	1.34
38F778	122-275-1	2.35	2.16	1.98

LIGHTWEIGHT BASIC SOCKET

Type 124-114-1. Insulated cathode terminals. Mounts below chassis through 1 21/32" dia. hole.

39F1528. 1-9 ..... 5.10
10-49 ..... 4.52

SOCKETS FOR RCA 8072, 8121, 8122, AND SIMILAR TUBES

For high frequency tubes. Continuous heat resistance to 500°F. Glass-filled silicon base. Heat treated beryllium copper contacts. Base material of low dielectric constant, which results in low pin-to-pin and shunt capacity. Teflon chimney. Elevation pads. Socket contacts grip tube pins at base of tube—providing minimum inductance. Barriers between terminals. Large center hole and basic configuration results in low capacity; three mounts provide stable mounting. With numbered terminals. Low inductance screen by-pass capacitor available for VHF and UHF operation.

Stk. No.	Cat. No.	Description	Net
38F772	124-311-100	Socket	1.30
38F773	124-119-1	Teflon chimney	.66

SOCKET FOR 4X150A, 4X150D, 4X250B, & 4X250F.

For ultra high freq. use with high power tubes. Two section construction. One for insulation, one for strength.

Stk. No.	Type	Desc.	1-9	10-49
38F763	124-109-1	1 21/32" Mtg.	4.25	3.78
38F766	124-107-1	Mtg. Saddle	5.30	4.70
38F767	124-108-1	Saddle, grd.	5.50	4.90
38F768	124-111-1	Steatite Chimney	.45	.41

COUPLINGS

Provide flexibility without backlash. Steatite insulation except * bakelite, for low voltage. Wt., 2 oz.

Stk. No.	Type	Fig.	Use	1-9	10-49	50-99
26F240	104-250	A	For ¼" shaft	1.15	1.06	.97
26F241	104-251-1	A	For ⅜" shaft	1.75	1.61	1.47
26F242	104-252	B	Solid ¼"	1.00	.92	.84
26F243	104-258	C	¼" clamp	.45	.41	.38
26F249	104-264	A*	For ¼" shaft	.90	.83	.76

COUNTER DIAL

Vernier dial calibrated 0-100 over 360°, making possible accurate return to any pre-determined setting. Built-in dial lock. Furnished with mounting template for easy installation. Shpg. Wt. 1 lb.

26F033. 116-208-1. 1-9..... ...11.50 10-49.....10.20

VHF SEPTAR SOCKETS

Takes ⅓ less space than previously available types—permits compact design with medium button septar bases such as the 5894, 6524, and 6252 with E.I.A. Base No. E7-20. Molded contact recesses in the base prevents turning. Aluminum shell submounts tube for maximum input and output shielding. ⅜" holes provide adequate ventilation.

Stk. No.	Cat. No.	Type	Net
38F774	122-105-100	Industrial	1.90
38F775	122-105-200	Military	2.25

STANDARD STEATITE WAFERS

For receiving and low-power transmitting tubes. Cadmium plated contacts reinforced with plated steel springs and recessed in wafer. Size, 2 5/16 x 1 11/16". Mtg. ctrs. 1 11/16" to 1 13/16". 4 oz.

Stk. No.	Type	Contacts	1-9	10-49	50-99
38F780	122-224-1	4	.76	.70	.64
38F781	122-225-1	5	.83	.76	.70
38F783	122-227-1	7 Med.	1.20	1.10	1.01
38F785	122-228-1	Octal	1.05	.97	.89

PANEL BEARINGS FOR ¼" SHAFTS

Nickel plated brass for ¼" shaft and up to ⅜" panels. Also 3" and 6" nickel plated brass shafts. Shpg. wt., 2 oz.

Stk. No.	Type	Fig.	Length	1-49	50-99	100-499 per C
26F244	115-255	D	Bearing only	.20	.18	16.75
26F245	115-256	D	3"	.41	.38	34.30
26F246	115-256-2	D	6"	.58	.53	48.50

¼" FLEXIBLE SHAFTS

Phosphor bronze, non-rusting. Permit out of line or up to 90° angular control. 3 oz.

26F248	115-254	E	6"	.86	.79	72.45
26F247	115-253	E	3"	.60	.55	50.15

PANEL LIGHT

For front panel illumination. Has polished nickel plated hood. Rotates to any position. Fits ½" mounting hole. T3¼ or G3½ type bulbs. 3 oz.

Stk. No.	Type	Base	1-9	10-49	50-99
25F320	147-330	Screw	1.15	1.06	.96
25F321	147-329	Bayonet	1.25	1.15	1.05

ETCHED ALUMINUM MOUNTING PLATE

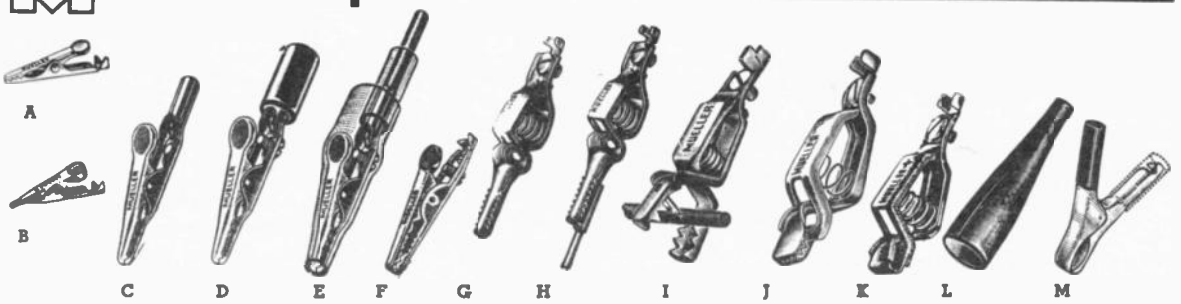
Type 111-20. Pre-punched, etched aluminum mounting plate permits simple, accurate and fast mounting of either two nylon binding posts, or two nylon banana jacks in 21/64" diameter holes on exact ¾" centers.

Shipping weight, 1 oz.

39F1526. NET EACH ..... .02

100-499, per 100.....1.65 500-up, per 100.....1.50

Mueller Clips



For making quick temporary electrical connections. Clips are *solid copper, †cadmium-plated steel, ‡solid bronze, (**) lead plated steel.

MINI-GATOR CLIPS

Miniaturized clip designed for No. 20 wire, provides quick, strong connection even in smallest areas. Penetrates corrosion. Easily removed. 1 1/16" length, 3/16" jaw spread. Shpg. wt. 1/4 lb. per 100.

No.	Type	Fig.	Description	NET	10 for	100 for
28F528	30	A	Steel Cad. Plated	.07	.49	4.20
28F529	30C	A	Copper	.09	.61	5.30

MICRO-GATOR CLIPS

Designed for printed circuits, tight spots, and crowded tiny terminals. Tip is no bigger than the head of a pin yet will stand up straight on the smallest terminals. Uses No. 20 or smaller wire. Length, 1 3/32". Jaw spread, 7/32". Tips, 1/32" across. Shpg. wt., 1/4 lb. per 100.

Stk. No.	Type	Fig.	Description	NET	10 for	100 for
28F496	34	B	Cad. Plated Steel	.06	.41	3.60
28F497	34C	B	Copper	.08	.53	4.60

ALLIGATOR CLIPS

Stock No.	Mfr's. Type	Fig.	Description	Size	Ea.	10 for	100 for
28F500	60	C	†Solder connection	2"	.07	.48	4.20
28F501	60-S	C	†Screw connection	2"	.08	.58	5.00
28F502	60-CS	C	*Screw connection	2"	.12	.86	7.40

INSULATED ALLIGATOR CLIPS

Fully insulated alligator clips. Consists of Mueller No. †60S or *60CS complete with skin-tight flexible insulation. Barrel takes wire or banana plug. 2 1/8" long.

28F503	60-HS	D	†Screw conn. Red	2 1 1/32"	.12	.80 6.90
28F504	60-HS	D	†Screw conn. Black	2 1 1/32"	.12	.80 6.90
28F505	60-CHS	D	*Screw conn. Red	2 1 1/32"	.15	1.06 9.10
28F506	60-CHS	D	*Screw conn. Black	2 1 1/32"	.15	1.06 9.10

Stock No.	Mfr's. Type	Fig.	Color	Construction	NET EA.	10 for	100 for
28F533	63	E	Black	Cadmium Ptd. Steel	.19	1.30	11.00
28F534	63	E	Red	Cadmium Ptd. Steel	.19	1.30	11.00
28F535	63C	E	Black	Solid Copper	.22	1.50	13.00
28F536	63C	E	Red	Solid Copper	.22	1.50	13.00

INSULATION PIERCING ALLIGATOR CLIP

Needle in nose pierces insulation on wire gripped in jaws. Ideal for trailer-light hook-up, etc.

28F499	60NS	C	†Screw connection	2"	.18	1.30	11.00

SERIES 70 CLIPS

Designed similar to No. 30 mini-gator clip but with dimensions of popular No. 60 alligator. In either *solid copper or †cadmium plated steel. Strong spring gives bite. Meshing teeth and slim jaws.

No.	Type	Fig.	Description	NET	10 for	100 for
28F530	70	F	†Solder connection	.07	.42	3.60
28F531	70S	F	‡Screw connection	.08	.50	4.30
28F532	70CS	F	*Screw connection	.11	.77	6.60

CROCODILE CLIPS

Nesting teeth give solid contact along entire length of jaw. Jaws open 5/16". Shpg. wt.: 1 1/2 lbs. per 100.

Stock No.	Type	Fig.	Description	Size	EA.	10 for	100 for
28F507	85	G	†Screw connection	2 1/8"	.10	.71	6.10
28F508	85-C	G	*Screw connection	2 1/8"	.19	1.30	11.20
28F509	85-T	H	†"Tip Clip" phone tip	2 5/8"	.25	1.73	14.80
28F510	50-C	I	‡Needle clip, screw conn.	2 1/4"	.28	2.00	16.60
28F511	51-C	I	‡Less needle, screw conn.	2 1/4"	.20	1.37	11.80

"PEE WEE" CLIPS

Type 45. Steel, cadmium plated. A very small clip for general test purposes. Jaw teeth mesh. Shipping weight: 1 lb. per 100. **Type 45C.** Solid copper, phosphor bronze spring, brass screw connection. No heating from hysteresis effect. 1 1/4 lbs. per 100.

Stock No.	Mfr's. Type	Fig.	Amp.	Size	Open	EACH	10 for	100 for
28F513	45†	K	5	1 1/2"	5/16"	.09	.60	5.00
28F514	45C*	K	10	1 1/2"	1/4"	.14	1.00	8.50

3-SIDED MESH TEETH CLIPS

Stock No.	Type	Fig.	Amp.	Size	Open	EA.	10 for	100 for
28F523	27†	J	20	2 1/16"	5/8"	.15	1.00	8.60
28F524	27C*	J	40	2 1/16"	5/8"	.24	1.70	14.40
28F515	48B†	J	10	2"	1/2"	.12	.86	7.40
28F538	48C*	J	20	2"	1/2"	.17	1.20	10.40

HEAVY DUTY SOLID COPPER CLIPS

Type 25-C shipping weight is 6 3/4 lbs. per 100, type 21-c is 18 lbs. per 100, and types 11-C and 33-C are 41 lbs. per 100.

28F519	25C*	J	75	3"	3/4"	.43	3.00	26.00
28F520	21C*	K	100	4 1/2"	1 1/16"	1.05	7.30	63.00
28F521	11C*	K	200	6"	1 5/8"	1.96	13.70	118.00
28F522	33C*	K	300	7 3/4"	2 1/4"	3.75	26.20	224.00

BATTERY CLIPS

Type 24 features a 25 ampere capacity; type 21A has a 50 ampere capacity; and the 11-A has a 100 ampere capacity.

28F516	24A**	K	25	2 7/8"	3/4"	.24	1.63	14.00
28F517	21A**	K	50	4"	1 1/16"	.43	3.00	26.00
28F518	11A**	K	100	6"	1 5/8"	1.12	7.80	67.00

PLIER-TYPE BATTERY CLIPS

Type 41. Clip for fast chargers, battery booster cables. 100 amp capacity. Steel, bright copper plated. 41 lbs. per 100.

Stock No.	Mfr's. Type	Color	Fig.	Amp.	Size	Open	NET EACH
28F468	46A	Red	M	50	3"	1 1/8"	.15
28F467	46A	Black	M	50	3"	1 1/8"	.15
28F465	41A	Red	M	100	6"	1 9/16"	.45
28F466	41A	Black	M	100	6"	1 9/16"	.45

FLEXIBLE INSULATORS FOR CLIPS LISTED ABOVE

Protect against electric shock and short circuit. Vinylite except (*) rubber compound. Vinyl insulators available also in white, blue, yellow and green on special order. Add 10% to price. All are figure L except Type 93.

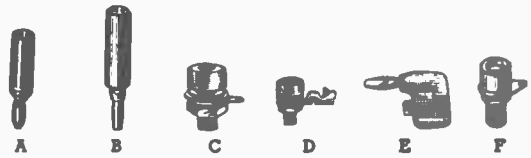
Stock No.	Type	Color	For Clip	NET EA.	10 for	100 for
28F476	47	Red	45, 45C	.06	.40	3.50
28F477	47	Blk	45, 45C	.06	.40	3.50
28F478	49	Red	48B-C, 50-51C	.09	.65	5.40
28F479	49	Blk	48B-C, 50-51C	.09	.65	5.40
28F480	35*	Red	33C	3.13	21.90	188.00
28F481	35*	Blk	33C	3.13	21.90	188.00
28F482	26	Red	24A, 25, 25C	.21	1.50	13.00
28F483	26	Blk	24A, 25, 25C	.21	1.50	13.00
28F484	23	Red	21A-21C	.40	2.80	23.70
28F485	23	Blk	21A-21C	.40	2.80	23.70
28F472	32	Red	30, 30C	.05	.30	2.50
28F473	32	Blk	30, 30C	.05	.30	2.50

Stock No.	Type	Color	For Clip	NET EA.	10 for	100 for
28F498	36	Blk	34, 34C	.05	.30	2.50
28F499	36	Red	34, 34C	.05	.30	2.50
28F474	72	Red	70, 70S, 70CS	.05	.35	3.00
28F475	72	Blk	70, 70S, 70CS	.05	.35	3.00
28F486	29	Red	27, 27C	.13	.90	7.60
28F487	29	Blk	27, 27C	.13	.90	7.60
28F488	13	Red	11C, 11A	.80	5.60	48.00
28F489	13	Blk	11C, 11A	.80	5.60	48.00
28F490	87	Red	85, 85C, 85T	.06	.40	3.50
28F491	87	Blk	85, 85C, 85T	.06	.40	3.50
28F492	62	Red	60, 60CS, 60S	.05	.35	3.00
28F493	62	Blk	60, 60CS, 60S	.05	.35	3.00

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

Birnbach Electronic Components

INSULATED BANANA PLUGS



INSULATED MIDGET BANANA PLUG FIG. A

Spring type. Fits all standard banana jacks. Wire soldered directly into plug. Size: 1 3/16 x 1/4".

Stk. No.	Type	Color	Spring	Plating	NET
29F020	455	Black	Phos. Brz.	Nickel	.21
29F021	455	Red	Phos. Brz.	Nickel	.21
29F022	455BC	Black	Beryl. Cop.	Silver	.30
29F023	455BC	Red	Beryl. Cop.	Silver	.30
29F024	455A	Black	Phos. Brz.	Silver	.24
29F025	455A	Red	Phos. Brz.	Silver	.24
29F026	455A-BC	Black	Beryl. Cop.	Nickel	.29
29F027	455A-BC	Red	Beryl. Cop.	Nickel	.29

INSULATED GIANT PLUG FIG. B

Plug brass nickel plated. Wire can be soldered to plug. Spring type. Fits giant banana jacks. Plastic handle. Size: 2 7/8 x 5/8".

Stk. No.	Type	Color	Spring	NET
29F028	392	Black	Phos. Brz.	.66
29F029	392	Red	Phos. Brz.	.66
29F030	392B	Black	Beryl. Cop.	.90
29F031	392B	Red	Beryl. Cop.	.90

INSULATED BANANA JACK FIG. C

Takes all standard banana plugs. Body, brass nickel plated. Mounts in 5/16" hole in panels up to 3/8" thick. Molded head. Size: 1 1/16 x 7/16".

Stk. No.	Type	Color	NET
29F032	406	Black	.16
29F033	406	Red	.16

INSULATED BANANA JACK FIG. D

Accommodates all standard banana plugs. Body is brass nickel plated. Mounts in 5/16" hole in panels up to 3/8" thick. Complete with all hardware. Molded head: Size: 25/32 x 1/2".

Stk. No.	Type	Color	NET
29F034	391	Black	.18
29F035	391	Red	.18

PUSH BUTTON BANANA PLUG FIG. E

Wire is fastened easily, speedily, and securely without soldering. Simply by pressing the push buttons the bare wire can be inserted into the opening of the plug. Size: 15/16 x 3/4".

Stk. No.	Type	Color	NET
29F036	122	Black	.40
29F037	122	Red	.40

IINSULATED GIANT JACK FIG. F

Accommodates all giant plugs. Body is brass nickel plated. Mounts in 3/8" hole in panels up to 5/8" thick. Molded plastic head. Size: 1 5/16 x 5/8".

Stk. No.	Type	Color	NET
39F038	393	Black	.47
29F039	393	Red	.47

HEAVY DUTY HIGH VOLTAGE TEST LEADS

Type 562. Tips, brass nickel plated. Heavy duty bakelite prods. Color coded red and black. Uses our Hi-volt kinkless test lead wire. Overall length, 60".
29F040. NET **1.99**

HEAVY DUTY HIGH VOLTAGE TEST PROD HANDLE

Type 559. Tip, brass nickel plated. Bakelite finger guard. For 1N-34 diode and condenser for use as RF probe.
29F041. NET ..... **.79**

AIRPLANE INSULATORS

Used on mobile antenna installations. Made of white glazed low absorption porcelain.

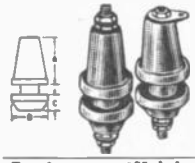
Stk. No.	Type	Color	Size	NET
29F042	473	White	2"	.22
29F043	474	White	1 1/2"	.23

Depend On Newark For All Your Industrial Electronic Needs

TRANSISTOR HEAT SINKS

Made of berylium oxide. Gives increased transistor life and output, freedom from outgassing, extremely shock resistant, and vibration and moisture resistant. Infinite shelf life. Physical properties: Chem. Purity, 99+ per cent Beryllium Oxide. Den: 2.9g/cc. Melting point: 4650°F: 0.3 BTU/lb. Thermal Expansion: 3.2x10-6°F. Thermal conductivity: 140 BTU/FT²/HR°F-FT. Transverse Strength: 25,000 PSI. Elastic Modulus: 40x10⁶PSI.

Stock No.	Type	For Jedec Transistor Case Type	NET	Stock No.	Type	For Jedec Transistor Case..Type	NET
29F044	BHS-1	MT-1	1.73	29F054	BHS-10	MT-10	1.71
29F045	BHS-3	TO-3	2.28	29F055	BHS-11	TO-11	1.14
29F046	BHS-3A	MT-3	1.71	29F056	BHS-12	TO-12	1.14
29F098	BHS-3C	TO-3	2.39	29F057	BHS-16	TO-16	1.41
29F047	BHS-4	DO-4	1.52	29F058	BHS-18	TO-18	.86
29F048	BHS-5	TO-5	1.14	29F059	BHS-33	TO-33	1.47
29F049	BHS-5A	DO-5	1.75	29F060	BHS-36	TO-36	2.38
29F050	BHS-5B	MT-5	1.02	29F061	BHS-38	TO-38	1.98
29F051	BHS-6	TO-6	2.38	29F062	BHS-39	TO-39	1.14
29F052	BHS-8	TO-8	1.32	29F063	BHS-43	TO-43	1.14
29F053	BHS-9	TO-9	1.14	29F064	BHS-46	TO-46	.86

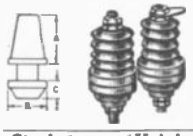


FEEDTHRU INSULATORS

Highly vitrified, low absorption smoothly glazed porcelain. Prevents gathering of dust. Max. strength achieved by proper proportions and flat mounting surfaces. Long insulating sleeves contribute much to their performance on high voltages. Brass Nickel-plated hardware.

Stock No.	Type	Height A	Dimen. B	Dimen. C	Mounting Hole	Hardware	NET
29F065	458	5/8"	11/16"	1/4"	5/16"	6-32	.27
29F066	478	1"	13/16"	7/16"	7/16"	10-32	.41
29F067	478J	1"	13/16"	7/16"	7/16"	No. 403 Jack	.49
29F068	4125	1 1/4"	7/8"	3/8"	7/16"	10-32	.47
29F069	4125J	1 1/4"	7/8"	3/8"	7/16"	No. 403 Jack	.54
29F070	4234	2 3/4"	2"	1"	3/4"	1/4-20	1.05
29F071	4175	2 3/4"	1 1/4"	3/4"	5/8"	1/4-20	1.03
29F072	4175J	2 3/4"	1 1/4"	3/4"	5/8"	No. 394 Jack	1.30

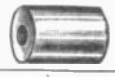
CORRUGATED FEEDTHRU INSULATORS



Has more than twice the leakage path of the straight type because of increased surface of the corrugations. Recommended where a straight side insulator of equal height is not satisfactory because of shorter leakage path. Brass nickel plated hardware. Cork mounting washer supplied.

Stock No.	Type	Height A	Dimen. B	Dimen. C	Mounting Hole	Hardware	NET
29F073	479	1 3/8"	1 1/4"	1 1/16"	9/16"	10-32	.71
29F074	479J	1 3/8"	1 1/4"	1 1/16"	9/16"	No. 403 Jack	.87
29F075	4276	2 3/4"	1 5/8"	1"	3/4"	1/4-20	1.26
29F076	4276J	2 3/4"	1 5/8"	1"	3/4"	No. 403 Jack	1.44
29F077	4452	4 1/2"	2 1/8"	1 1/2"	1"	No. 403 Jack	1.79
29F078	4452J	4 1/2"	2 1/8"	1 1/2"	1"	No. 394 Jack	2.09

STEATITE PILLARS



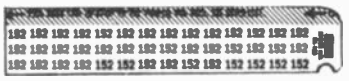
Jan-1-8 and Jan-1-10 Specs. (Less Hardware) Unmounted and threaded pillars. One hole mounting. Parallel mounting surfaces. L5 Glazed Steatite, threaded holes on both sides.

Stock No.	Type	Old Jan Type Designation	New Mil Type Designation	H	D	Length of Thread	Thread	NET
29F079	442A	NS5W0104	NL633W01-004	1/2"	1/8"	5/32"	6-32	.19
29F080	444B	NS5W0106	NL633W01-006	3/4"	3/8"	1/4"	6-32	.21
29F081	445B	NS5W0108	NL633W01-008	1"	3/8"	3/8"	6-32	.22
29F082	446B	NS5W0110	NL633W01-010	1 1/4"	3/8"	3/8"	6-32	.24
29F083	446A	NS5W0112	NL633W01-012	1 1/2"	3/8"	3/8"	6-32	.25
29F084	446C	NS5W0116	NL633W01-016	2"	3/8"	3/8"	6-32	.26
29F085	440A	NS5W0206	NL633W02-006	3/4"	1/2"	1/4"	8-32	.19
29F086	440B	NS5W0208	NL633W02-008	1"	1/2"	3/8"	8-32	.20
29F087	440C	NS5W0210	NL633W02-010	1 1/4"	1/2"	3/8"	8-32	.23
29F088	440D	NS5W0212	NL633W02-012	1 1/2"	1/2"	3/8"	8-32	.28
29F089	440E	NS5W0216	NL633W02-016	2"	1/2"	3/8"	8-32	.34
29F090	440F	NS5W0220	NL633W02-020	2 1/2"	1/2"	3/8"	8-32	.31
29F091	440G	NS5W0224	NL633W02-024	3"	1/2"	3/8"	8-32	.35
29F092	445C	NS5W0308	NL633W03-008	1"	3/4"	3/8"	10-32	.43
29F093	445D	NS5W0310	NL633W03-010	1 1/4"	3/4"	3/8"	10-32	.31
29F094	445E	NS5W0312	NL633W03-012	1 1/2"	3/4"	3/8"	10-32	.38
29F095	445F	NS5W0316	NL633W03-016	2"	3/4"	3/8"	10-32	.42
29F096	145G	NS5W0320	NL633W03-020	2 1/2"	3/4"	3/8"	10-32	.45
29F097	145H	NS5W0324	NL633W03-024	3"	3/4"	3/8"	10-32	.50

BRADY Products Wire Markers and Accessories

WIRE MARKERS

Sub-surface printed under tough, transparent Mylar cover. Self-sticking, thermo-resistant adhesive. Insensitive to moisture, solvents, abrasion; will not dry out or embrittle. Furnished on convenient dispenser cards. Standard strips are 1½" long, for use on cable of up to 7/16" O.D. Miniature sizes are ½" long for use on hookup wire and miniature cable of up to 5/32" O.D. Made-to-order markers on request.



B600 STANDARD SIZE TYPES

SOLID NUMBERS

Stk. No.	Number	1-24	25-99	100-up
30F213	0-200	.22	.20	.16

When ordering, specify individual number(s) desired. Cards contain 36 markers, except numbers 100 and over come 25 per card.

SOLID LETTERS

Stk. No.	Letter	1-24	25-99	100-up
30F214	A-Z	.22	.20	.16

When ordering specify individual letter A to Z. 36 markers per card.

CONSECUTIVE NUMBERS & LETTERS

Stk. No.	Marking	1-24	25-99	100-up
30F215	1-33	.22	.20	.16
30F216	34-66			
30F217	67-99			
30F218	100-124			
30F219	A-Z			

Cards contain one marker for each number or letter in the range listed.

CONNECTOR STRIPS

B-204 black precision slit tape with transparent adhesive conforms to angles and curves readily. Strip Rolls available in 10 fractional widths. Rolls 18 yds long on 1" dia. core.

Stk No.	Type	Size	1-24	25-99	100-up
30F225	CSR015	.015"x18 yds.	.75	.70	.65
30F226	CSR031	.031"x18 yds.	.75	.70	.65
57F1055	CSR062	.062"x18 yds.	.80	.75	.70
57F1056	CSR080	.080"x18 yds.			
57F1057	CSR093	.093"x18 yds.			
57F1058	CSR100	.100"x18 yds.			
30F227	CSR125	.125"x18 yds.			
57F1059	CSR156	.156"x18 yds.	.90	.85	.80
57F1060	CSR200	.200"x18 yds.			
30F228	CSR250	.250"x18 yds.			
30F229	CSR500	.500"x18 yds.	1.50	1.45	1.40

B600 MINIATURE TYPES

SOLID NUMBERS

Stock No.	Numbers	1-24	25-99	100-up
57F1061	1-25	.30	.27	.22

Each card contains 150 identical markers. Specify number(s) desired when ordering.

SOLID LETTERS

Stock No.	Letters	1-24	25-99	100-up
57F1062	A-Z	.30	.27	.22

Each card contains 150 identical letters. Specify letter(s) desired when ordering.

CONSECUTIVE NUMBERS

Stock No.	Numbers	1-24	25-99	100-up
57F1063	0-49	.30	.27	.22
57F1064	50-99			
57F1065	100-132			
57F1066	133-165			
57F1067	166-198			

Cards contain 3 markers of each number in the range listed.

STOCK TERMINAL CIRCLES

Terminal circles are pre-cut to precise dimensions. Concentricity held to ±.005". Mounted on convenient Blue Streak Dispenser Cards. Available in B-202 Black with smudge-proof transparent adhesive. Always order by number of cards, and not by individual pieces.

Stk. No.	Type	O.D.	I.D.	1-24	25-99	100-up
30F220	TC125-031	.125	.031	.33	.30	.24
30F221	TC187-062	.187	.062			
30F222	TC250-062	.250	.062			
30F223	TC312-062	.312	.062			
30F224	TC375-062	.375	.062			
57F1050	TC375-094	.375	.094			
57F1051	TC400-095	.400	.095			
57F1052	TC437-062	.437	.062			
57F1053	TC500-062	.500	.062			
57F1054	TC500-125	.500	.125			

QUIK-LINE TAPE PEN

30F230. BCA-1. Beam Compass Attachment for TP-4.....12.50
30F231. TP-4. Tape Pen and parts in case.....14.95

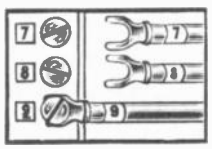
QUIK-ALIGN LETTER AND NUMBER KITS

Do-it-yourself lettering kits. Easy to apply lettering, interlocking notches guarantee professional results. No glueing or moistening tools necessary; self adhesive letters stick tight permanently. Kits contain letters and numbers in relation to the quantities used.

Stock No.	Type Black	Stock No.	Type White	Letter Size	Shpg. Weight	NET
57F1068	QAV533-1B	57F1076	QAV533-1W	1"	1 lb. 6 oz.	26.50
57F1070	QAV533-2B	57F1072	QAV533-2W	2"	2 lb. 5 oz.	32.00
57F1073	QAV533-3B	57F1075	QAV533-3W	3"	4 lb. 3 oz.	40.00

Stock No.	Type Yellow	Stock No.	Type Red	Letter Size	Shpg. Weight	NET
57F1069	QAV533-1Y	57F1077	QAV533-1R	1"	1 lb. 6 oz.	26.50
57F1071	QAV533-2Y	57F1078	QAV533-2R	2"	2 lb. 5 oz.	32.00
57F1074	QAV533-3Y	57F1079	QAV533-3R	3"	4 lb. 3 oz.	40.00

● NEW PORTA-PACK WIRE MARKERS



Pocket-size book of 450 vinyl cloth wire markers, which are self sticking, moisture and abrasion resistant; plus matching terminal markers. Save tracing, rewiring, hookup, and service time by marking wires when installing, trouble-shooting, or repairing electrical equipment. Eliminate ringing out, tagging and notching wires. Can be applied anytime; before, during, or after hookup. Flip-Strip Dispenser Cards "pop up" the markers you choose. Card snaps back into place when marking is completed. "Ten Pack" Flip-Strip Dispenser Cards are stocked in 121 different alphabetical, numerical, and symbolic sequences.

Stk. No.	Type	Porta-Pack Books of Markers
57F1081	PWM-PK-1	45 each, 0-9
57F1082	PWM-PK-2	10 each, A-Z and 0-15
57F1083	PWM-PK-3	10 each, 1-45
57F1084	PWM-PK-4	150 each, 1,2,3
57F1085	PWM-PK-5	150 each, A,B,C
57F1086	PWM-PK-6	150 each, T1, T2, T3
57F1087	PWM-PK-7	150 each, L1, L2, L3
57F1088	PWM-PK-8	6 ea., 0-15; 4 ea. 16-90; 2 ea., A-Z
57F1089	PWM-PK-9	45 ea., 1-3, A-C; 30 ea., T1-T-3, L1-L3
57F1090	PWM-PK-10	45 ea., 10 different NEMA colors
57F1091	PWM-PK-11	15 each, 1-30
57F1092	PWM-PK-12	15 ea., A-Z, +, —; 21 blanks
57F1093	PWM-PK-13	45 ea., +, —, AC, DC,; 33 ea., POS. NEG, GND; 27 NEUT; 21 ea., SPARE, blk

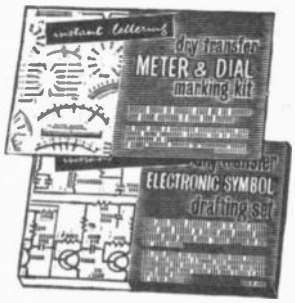
No. of Packs	1-9	10-49	50-99	100-249	250-499	500-999
Price each	2.50	2.25	2.00	1.75	1.63	1.56

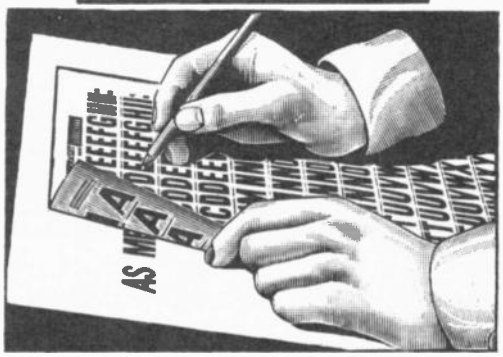
MAKE NEWARK YOUR DEPENDABLE SOURCE FOR ALL ELECTRONIC COMPONENTS

Whether ordering in quantity for production or in small lots for specialized use, make Newark your headquarters for every electronic component.—Get the exact part you need from an inventory of over 70,000 units! Top Quality, Lowest Prices, Fastest Service.

DATAK PRODUCTS

instant lettering





INSTANT LETTERING

Individual letters or words can be transferred quickly and neatly to any oil-free surface. Completely dry pressure sensitive ink. Gives a professional finish to chassis, schematics. Each box contains 12 sheets in easy-to-handle 3x5" size. All letters and numbers ⅛" high.

Stk. No.	Type	Character	Color	Each
31F395	9601	Alphabet only	Black	2.50
31F396	9611	Alphabet only	White	2.50
31F397	9612	Numerals only	Black	2.50
31F398	9631	Numerals only	White	2.50

TITLE KIT FOR ELECTRONIC EQUIPMENT

Preprinted dry transfer titles—hundreds of pre-set words. 95% of all electronic panel markings included. 24 sheets—3x5".

Stk. No.	Type	Character	Color	Each
31F393	9581	Alph./words/numerals	Black	4.95
31F394	9591	Alph./words/numerals	White	4.95

METER AND DIAL MARKINGS

Switch patterns, arcs, etc., plus letters and numbers for standard and special rotary tap switches, potentiometers; #968.
31F401. NET **4.95**

MODEL 970-2 DRAFTING SYMBOL—SPECIAL ASSORTMENT

970 Symbol Set with Rapidograph pen, ink, burnishing tool.
31F406. NET **18.95**

TERMINAL AND CHASSIS MARKING KIT

Set contains all the standard component identification letters, letter combinations, and numerals used in marking chassis, printed circuit and terminal boards, electronic panels. Marks any oil-free surface. In black or white.
31F400. Type 967 White. **NET** **4.95**
31F402. Type 966 Black. **NET** **4.95**

971 LOGIC SYMBOLS DIAGRAM KIT

Line width .020". Opaque black. Eight 4¾ x 7½ sheets. 3 oz.
31F399 NET **3.50**

ELECTRONIC DRAFTING SYMBOL SET

All common schematic symbols. Line widths and symbol sizes fit in with standard military and industrial drawing procedures. 20 mil line width meet MIL. STD. 15-1. #970 Black.
31F403. NET **15.95**

DATAKOAT PROTECTIVE COATING KIT

Type 04176. Protective coating for lettering transfers effective non-porous surfaces. Kit contains 1 oz. bottle of Datakoat with brush-on cap and 1 oz. bottle of thinner.
31F404. NET **1.00**

DATAKOAT CLEAR PROTECTIVE SPRAY

Type 04177. Large, 16 oz. supply of DATAKOAT protective covering under pressure for aerosol spraying. Protects large areas.
31F405. NET **2.95**

TYPE 04178 DATAKOAT MATTE PROTECTIVE SPRAY

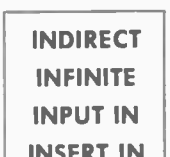
For panels, displays, where gloss is objectionable.
31F407. NET **2.95**

RUSSELL INDUSTRIES MARKITS — DRY TRANSFER LETTERING

ELECTRONIC WORDS

An electronics glossary containing over 1000 words from "AC" to "zooms" in alphabetical order.

Stk. No.	Type	Color	1-5	6-11	12 & Up
30F400	EM-1	Black	4.95	4.50	4.25
30F426	EM-1W	White	4.95	4.50	4.25

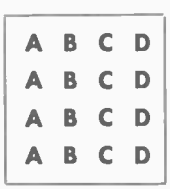


Electronic Words

ALPHABET

Complete alphabet. W suffix indicates white letters — without suffix indicates black letters.

Stk. No.	Type	Size	1-5	6-11	12 & up
30F402	AM-1	⅛"	4.95	4.50	4.25
30F403	AM-1W	⅛"	4.95	4.50	4.25
30F404	AM-2	¼"	4.95	4.50	4.25
30F405	AM-2W	¼"	4.95	4.50	4.25
30F406	AM-3	⅜"	4.95	4.50	4.25
30F407	AM-3W	⅜"	4.95	4.50	4.25
30F408	AM-4	½"	4.95	4.50	4.25
30F409	AM-4W	½"	4.95	4.50	4.25
30F410	AM-5	21/32"	4.95	4.50	4.25
30F411	AM-5W	21/32"	4.95	4.50	4.25
30F412	AM-6	25/32"	4.95	4.50	4.25
30F413	AM-6W	25/32"	4.95	4.50	4.25



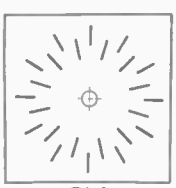
Alphabet

DIAL MARKING—DM-1

Contains 14 sheets in black and 13 sheets in white dial patterns, switch symbols arcs, wedges, dots, lines, calibrated meter dials, graduation lines, etc.
30F427. 1-5. NET **4.95**
6-11 ..... 4.50 **12-Up** 4.25

TERMINAL CHASSIS—TC-1

Contains 15 sheets in black and 12 in white of numbers 0 to 200 plus complete alphabets. Size ⅛".
30F428. 1-5. NET **4.95**
6-11 ..... 4.50 **12-Up** 4.25


Dial Marking

PRINTED CIRCUIT PADS

PC-1. Containing thousands of printed circuit pads: circles (with center hole), teardrops (with vanishing point), double end teardrops, double end teardrops (with vanishing points), elbows, terminal), T-connectors, fillets, ovals.

Stk. No.	1-5	6-11*	12 & up*
30F401	4.95	450	4.25

Printed Circuit

NUMERAL

W suffix indicates white numbers—without suffix indicates black letters.

Stk. No.	Type	Size	1-5	6-11*	12 & up*
30F414	NM-1	⅛"	4.95	4.50	4.25
30F415	NM-1W	⅛"	4.95	4.50	4.25
30F416	NM-2	¼"	4.95	4.50	4.25
30F417	NM-2W	¼"	4.95	4.50	4.25
30F418	NM-3	⅜"	4.95	4.50	4.25
30F419	NM-3W	⅜"	4.95	4.50	4.25
30F420	NM-4	½"	4.95	4.50	4.25
30F421	NM-4W	½"	4.95	4.50	4.25
30F422	NM-5	21/32"	4.95	4.50	4.25
30F423	NM-5W	21/32"	4.95	4.50	4.25
30F424	NM-6	25/32"	4.95	4.50	4.25
30F425	NM-6W	25/32"	4.95	4.50	4.25

*assorted.

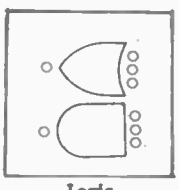
Numerals

LOGIC DIAGRAM SYMBOLS

LD-1. Contains Flip Flops, Arrows, arrow heads, time delays, And, Nand, Or, Nor, registers, shift registers, connection dots, Schmidt triggers, single shots.
30F429. 1-5. NET **4.95**
6-11 ..... 4.50 **12-Up** 4.25

ETCHING SOLUTION—PCE-1

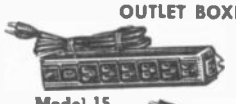
One pint liquid in unbreakable plastic container. Weight approximately 28 ozs.
30F430. NET **3.00**


Logic Symbols

W suffix indicates white letters. Without suffix indicates black.

waber Powerline Outlet Boxes

"IN-LINE" TYPE "U" GROUND OUTLET BOXES



Model 15

Model 17

Series stringing possible. Model 15 is control unit, with fuse or circuit breaker, on-off switch, neon pilot light, and 7 "U" ground outlets. Model 17 is slave unit with 9 outlets; can be used independently when outlets only are required. UL approved components. Size 13⅛"x2⅜"x1⅝"; rated 15 amps., 130v cont. Steel case, tough neoprene cord set.

Stk. No.	Model	Description	NET
60F2407	15	fuse, 6' cd. set	8.75
60F2408	15-15	fuse, 15' cd. set	9.75
60F2440	15CB	ckt. brkr., 6' cd. set	9.75
60F2409	15CB-15	ckt. brkr., 15' cd. set	10.75
60F2410	17	6' cord set	6.75
60F2411	17-15	15' cord set	7.75

HEAVY DUTY OUTLET BOXES

Model 20

Model 24

Features of both model types include: Panel mtd. fuse or ckt. brkr.; On-Off switch; Bright neon pilot light; UL approved components; Rated 15 amps, 130V continuous duty; 12¾" mtg. ctrs.; Size, 13⅛"x2⅜"x1⅝"; Steel case.

Model 20 2-Wire Outlet Box

St. No.	Model	Description	NET
60F2402	20	fuse, 10' crd. set	5.95
60F2403	20CB	ckt. brkr., 10' cd. set	6.95

Model 24 "U" Ground Outlet Box

60F2400	24	fuse, 6' cd. set	8.50
60F2438	24-15	fuse, 15' cd. set	9.50
60F2401	24CB	ckt.-bkr., 6' cd. set	9.50
60F2439	24CB-15	ckt.-bkr., 15' cd. set	10.50

"U" GROUND OUTLETS

Model 602

Model 603

Model 605

Models 602, 603, and 605. Tough neoprene cord set. UL approved, Rated at 15 amperes, 130 volts continuous duty. Steel case finished in silver gray textured hammertone. Fuse or push to reset circuit breaker. 8¼" mounting ctrs. Size: 8⅝x2¼x1½".

Model 602. "U" Ground Outlets Only

Stk. No.	Model	Description	Net
60F2420	602	6' cord set	4.80
60F2421	602-15	15' cord set	5.80

Model 603. "U" Ground Outlets—Fuse or Circuit Breaker

60F2422	603	Fuse 6' cord set	5.25
60F2443	603-15	Fuse 15' cord set	6.25
60F2444	603CB	Ckt. brkr. 6' cord set	6.25
60F2445	603CB-15	Ckt. brkr. 15' cd. set	7.25

Model 605. "U" Ground Outlets Pilot Light On-Off Switch Fuse or Circuit Breaker

60F2446	605	Fuse, 6' cord set	5.95
60F2447	605-15	Fuse 15' cord set	6.95
60F2448	605CB	Ckt. brkr. 6' cd. set	6.95
60F2449	605CB-15	Ckt. brkr. 15' cd. set	7.95

COLOR CODED SWITCH-OUTLET BOXES

Model 30

Model 32

Four color keyed switch-outlet groups. Both models available with panel mounted fuse or circuit breaker. Model 30 is the two wire type with a rugged 10' Neoprene cord-set. Model 32 is the "U" ground type with a choice of six or fifteen foot Waber high quality neoprene cord-set.

Model 30-2-Wire Type

Stk. No.	Model	Description	Net
60F2404	30	Fuse, 10' cord set	5.95
60F2405	30CB	Ckt. brkr. 10' cd. set	6.95

Model 32-"U" Ground Type

60F2412	32	Fuse 6' cord set	8.50
60F2413	32-15	Fuse 15' cord set	9.50
60F2414	32CB	Ckt. brkr. 6' cd. set	9.50
60F2415	32CB-15	Ckt. brkr. 15' cd. set	10.50

Model 32P. "U" Ground Type with neon lite for each switch to show power is on.

60F2450	32P	Fuse 6' cord set	10.50
60F2451	32P-15	Fuse 15' cord set	11.50
60F2452	32PCB	Ckt. brkr. 6' cd. set	11.50
60F2453	32PCB-15	Ckt. brkr. 15' cd. set	12.50

DELUXE COLOR CODED POWER CONTROL CENTER OUTLET BOXES

Model 25 and Model 35 series feature: Individual control, Master control, and Center write-on strip; Master on-off switch plus seven switch outlet sets. Plus other general characteristics featured on listed, preceding series of Waber Industrial Outlet Boxes.

Model 35-2-Wire Type

Stk. No.	Model	Description	Net
60F2418	35	Fuse 10' cord set	13.50
60F2419	35CB	Ckt. brkr. 10' cd. set	14.50

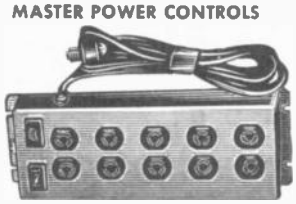
Model 25. "U" Ground Type

60F2416	25	Fuse 6' cord set	15.50
60F2417	25-15	Fuse 15' cord set	16.50
60F2441	25CB	Ckt. brkr. 6' cord set	16.50
60F2442	25CB-15	Ckt. brkr. 15' cd. set	17.50

Model 25P. "U" Ground Type with neon lite for each switch to show power is on.

60F2454	25P	Fuse 6' cord set....	19.50
60F2455	25P-15	Fuse 15' cord set	20.50
60F2456	25PCB	Ckt. brkr. 6' cord set	20.50
60F2457	25PCB-15	Ckt. brkr. 15' cd. set	21.50

800 SERIES DUPLEX MASTER POWER CONTROLS

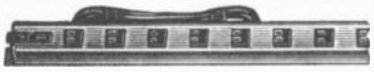


"U" Ground outlets. Features: 12⅞x2⅞" mtg. ctrs.; On-Off switch; Rated at 15 amps, 130V continuous duty; Neoprene cord set; Choice of fuse or push-to-reset ckt. bkr.; Steel case of textured hammertone; bright neon pilot light. Size, 13¼x4¼x1½".

Stk. No.	Model	Description	Net
60F2429	800	Fuse 6' cord set	13.50
60F2430	800CB-15	Ckt. brkr. 15' cd. set	15.50
60F2458	800-15	Fuse 15' cord set	14.50
60F2459	800CB	Ckt. brkr. 6' cord set	14.50

"LONG JOHN" SERIES HEAVY DUTY OUTLET BOXES

Model 700



Model 705

Giant 4' outlet boxes. Features: 48¾" mtg ctrs.; Size, 49x2x1½"; UL app'd. components; Rated at 15 amps, 130V continuous duty; Neon pilot light; Neoprene cords; On-Off switch; Steel case finished in silver gray textured hammertone.

Model 700 Series, 8 "U" Ground Outlets On-Off Switch, Bright Pilot Light

Stk. No.	Model	Description	Net
60F2423	700	Fuse 6' cord set	14.95
60F2424	700-15	Fuse 15' cord set	15.95
60F2406	700CB	Ckt. brkr. 6' cord set	15.95
60F2460	700CB-15	Ckt. brkr. 15' cd. set	16.95

Model 705 Series, 15 "U" Ground Outlets On-Off Switch, Bright Pilot Light

60F2425	705	Fuse 6' cord set	18.95
60F2426	705CB	Ckt. brkr. 6' cord set	19.95
60F2427	705CB-15	Ckt. brkr. 15' cd. set	20.95
60F2461	705-15	Fuse 15' cord set	19.95

Model 710 Series, 8 "U" Ground Outlets Only

60F2428	710	6' cord set	12.95
60F2462	710-15	15' cord set	13.95

Model 715 Series. 15. "U" Ground Outlets Only

60F2463	715	6' cord set	16.95
60F2464	715-15	15' cord set	17.95

"STRING BEAN" SERIES OUTLET BOXES

Space-saver size in a sturdy steel case. Completely wired for instant use. Other features include: Tough neoprene cord set; On-Off switch; UL approved components; Rated at 15 amps, 130V continuous duty; Size, 49x1½x1⅛"; Steel case finished in silver gray textured hammertone.

Model 1000 Series, 12. "U" Ground Outlets On-Off Switch, Bright Pilot Light.

Stk. No.	Model	Description (Set)	Net
60F2465	1000	Fuse 6' cord	15.95
60F2466	1000-15	Fuse 15' cord	16.95
60F2435	1000CB	Ckt. brkr. 6' cord	16.95
60F2468	1000CB-15	Ckt. brkr. 15' cd.	17.95

Model 1002 Series 12. "U"-Ground Outlets Only

60F2469	1002	6' cord	13.95
60F2470	1002-15	15' cord	14.95

Model 1010 Series. Master On-Off Switch Pilot Light & 8 Sets of "U" Ground Outlets, Pilot Lights and On-Off Switches.

60F2467	1010	Fuse 6' cord	19.95
60F2471	1010-15	Fuse 15' cord	20.95
60F2436	1010-CB	Ckt. brkr. 6' cord	20.95
60F2472	1010CB-15	Ckt. brkr. 15' cd.	21.95

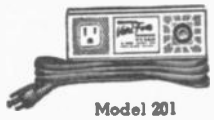
VARI-FINE SPEED CONTROLLER

Model 200. For the home, lab, or school. Provides stepless control from zero to maximum. Solid state. Provides infinite control of motor speed and light intensity. Used to vary speed of AC/DC motors of universal types. Rating: 7 amps @ 117v, 60c. max. May be plugged into any standard wall outlet. Fused for circuit protection. Has mounting ears for use for a fixed installation. Is "U" ground type with neoprene insulation on inner conductors and on overall neoprene jacket.

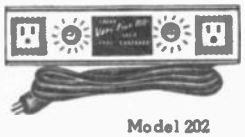
60F2473. EACH **14.95**

Electrical Accessories

"VARI-FINE" SOLID STATE AC-DC AC-DC MOTOR SPEED CONTROLLERS



Model 201



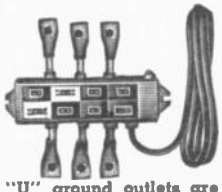
Model 202

Space saving "twins" tops for test and production application!

Solid state devices for speed and light control, featuring stepless changes from zero to maximum. Provide infinite control of motor speed and light intensity, and can be used to vary the speed of AC/DC motors of the universal type. Handle load currents up to the maximum rating at 117 volts, 60 hz. Self contained units may be plugged into any wall outlet and are fused for circuit protection. Compact . . . portable. Ideal for applications in the home, laboratory, school, or industry where regulation of motors or light is desirable.

Stock No.	Type	Rated @ 117 VAC	NET
60F2561	201	12 amp	19.95
60F2562	202	Twin; 7 amp each side	28.95
60F2563	203	Twin; 12 amp each side	34.95

UDDER LINE WITH "U" GROUND OUTLETS



Flexible "U" ground outlets are the big feature in this new Waber "Udder" line!

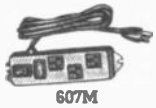
Model 609CB-15. Has 6 color-coded switch outlet sets with master switch and pilot light, 15' cord set and push-to-reset circuit breaker.
60F2564. NET **15.50**

Model 610CB-15. Gives you 4 color coded switch outlet sets with individual pilot lights. 15' cord set, push to reset circuit breakers.
60F2565. NET **14.50**

Model 290CB-15. Provides five "udder" "U" ground color coded outlets in a small size case 4¾ x 2⅛" with 4⅜" mounting centers. With circuit breaker and 15' cord.
60F2566. NET **7.90**

METER MODELS

24M



607M

220M

230M

Illuminated crystal clear wide angle, edgewise reading AC Voltmeter in a chrome slated steel case. Reads from 0 to 150v.

Model 230M. Line Voltage Checker

Stk. No.	Model	Description	Net
60F2478	230M	Fuse, 6' cord	7.50
60F2479	230M-15	Fuse 15' cord	8.50
60F2480	230MCB	Ckt. bkr. 6' cd.	8.50
60F2481	230MCB-15	Ckt. bkr, 15' cd.	9.50

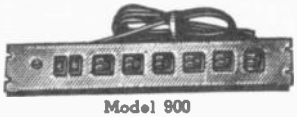
Model 607M. "U" Ground Outlets, On-Off Switch, Fuse or Push-to-Reset Ckt. Bkr.

60F2482	607M	Fuse, 6' cord	8.95
60F2483	607M-15	Fuse, 15' cord	9.95
60F2484	607MCB	Ckt. bkr, 6' cd.	9.95
60F2485	607MCB-15	Ckt. bkr, 15' cd.	10.95

Model 24M. "U" Ground Outlets, On-Off Switch, Fuse or Push-to-Reset Ckt. Bkr.

60F2486	24M	Fuse, 6' cord	11.95
60F2487	24M-15	Fuse, 15' cord	12.95
60F2488	24MCB	Ckt. bkr, 6' cd.	12.95
60F2489	24MCB-15	Ckt. bkr, 15' cd.	13.95

RACK MOUNTS—MASTER POWER CONTROLS



Model 900

Model 900. Has 6 "U" ground outlets controlled by an on-off switch, with a pilot light, and fuse or ckt. bkr. The 6 or 15 foot cord-set is of tough neoprene.

Stk. No.	Model	Description	Net
60F2431	900	Fuse, 6' cord set	10.95
60F2490	900-15	Fuse, 15' cord set	11.95
60F2432	900CB	Ckt. bkr. 6' cd. set	11.95
60F2491	900CB-15	Ckt. bkr. 15' cd. set	12.95

Model 904 series very similar to 900 series, but with 2 outlets in front, 4 in back. Made to be mtd. on a rack panel for remote control of other Waber power outlet boxes mtd. inside the rack cabinet. Size, 3½x19".

60F2433	904	Fuse, 6' cord set	12.95
60F2434	904-15	Fuse, 15' cd. set	13.95
60F2492	904CB	Ckt. Bkr. 6' cd. set	13.95
60F2493	904CB-15	Ckt. Bkr. 15' cd. set	14.95

LAB ON WHEELS

Low 4

Low 6

Lab on Wheels. For school, lab, or industrial plant. They have 1 inch square steel tubing for rigidity, strength and durability. Zinc plated with a clear, irridite post plate treatment. Heavy duty, 5 inch wheels with heavy plate casters. Quiet, fast, easy swiveling Adjustable shelves. Provisions made for mounting Waber outlet boxes. NOTE: Low 3 & 4 each have 5 hardbound shelves. Equipment shown, not included.

Low-3 Single Cantilever. Size: 28x26x66"
60F2474 (less outlet box) NET .. **149.00**

Low-4 Double Cantilever. Size: 48x26x71"
60F2475 (less outlet box) **NET** ... **188.00**

Low-6 "Scope" Dolly. Size 29½x19¼x36⅛"
60F2476 (less outlet box) **NET** **89.00**

62F2477 ACO-1 Plug-in Shell **NET** **17.50**

15 AMP OUTLET BOXES EQUIPPED WITH TIMERS

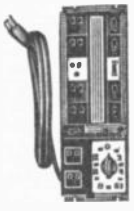


Fig. A

Fig. B

Series 13 and 14. Similar to Fig. B. Has 6 "U" ground outlets, timer-controlled up to 12 hours. Model 13 turns power "off" at end of time interval; Model 14 turns power "on". With 15' cord. 13⅛ x 2⅜ x 1⅝".

Stock No.	Type	NET
60F2557	13-15	16.00
60F2558	14-15	16.00

Model 19CB. Similar to Fig. B. Male plug-in base enables you to multiply your outlets. Plug-in male outlet and secure mounting ears. 6 heavy duty "U" ground outlets protected by a panel mounted circuit breaker.
60F2554. NET **7.75**

Model 26 & 27. Fig. A. Timer can be set up to 12 hours! Model 26 Series turns power "on" . . . Model 27 Series turns power "off" at the end of a pre-set time. 5 color coded "U" ground type outlets with individual switch control and master on-off switch. Center write-on strip. Models 26P and 27P have additional pilot light for each switch-outlet. All are prewired circuit breaker types with 15' high quality neoprene cord.

Stock No.	Model	NET
60F2550	26CB-15	28.00
60F2551	26PCB-15	30.00
60F2552	27CB-15	28.00
60F2553	27PCB-15	30.00

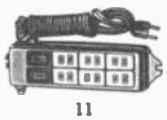
Series 42 and 43. Fig. B. 5 "U" ground outlets, neon pilot light. 15' neoprene line cord, push-to-reset circuit breaker and a reliable timer with settings up to 12 hours. Model 42 designed to turn power "off" at end of preset time, and Model 43 turns power "on". Size: 13⅛x2⅜x1⅝".

Stock No.	Type	NET
60F2555	42CB-15	19.00
60F2556	43CB-15	19.00

Compact 613 and 614 Series. Similar to Fig. B. Has 2 "U" ground outlets, push-to-reset circuit breaker, and 15' neoprene cord set . . . these plus timer control with settings up to 12 hours. Model 613 turns power "off" at end of interval; Model 614 turns power "on". 8⅝ x 2¼ x 1½".

Stock No.	Type	NET
60F2559	613CB-15	15.00
60F2560	614CB-15	15.00

COLOR CODED CONTROL CENTER



11

12

Built-in circuit breaker protection. 15 amps. 130v continuous duty rating. 10-ft. tough neoprene chrome plated steel case. U.L. listed. Four 2 wire outlets.

Model 11. On-Off Switch and Pilot Light
60F2494. NET **6.95**

Model 12. Separate On-Off Switch for each outlet
60F2495. NET **6.95**

Electrical Components

SPECIALIZED ELECTRICAL COMPONENTS

SCREW BASE ADAPTER

Type 5612. Converts Medium Screw Base socket to female Edison. Double T-slotted to accept polarized plugs. 660 watts, 125 volts.

Stk. No.	Net Ea.	Net Ea. Ctn.—10	Net Ea. Std. Pkg.—100
32F706	.71	.63	.55

FEMALE GROUNDING-TYPE MOTOR BASE OUTLET

Type 5256. Parallel-blade with U-ground. 15 a , 125 v.

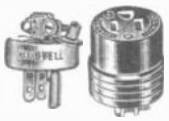
32F746	1.57	1.38	1.20

A. C. PILOT LIGHT SWITCH

Type 1277. Operates simultaneously with pilot light. Keeps you alert to equipment in operation. Single pole, 15 A 120 VAC pilot light "presswitch" with red handle. Brown front, yellow back. Size: 3 281 x 2 437 Shpg wt 4 oz.

32F720	2.18	1.92	1.66

3-WIRE GROUNDING TYPE SINGLE OUTLETS



Polarized for grounding exposed metal parts of portable electrical equipment. 5279 has flush housing with permanent type mounting plate (2.437 Dia.) Male recessed 5278 may be permanently attached 5207 (Dia 1 531) is "insulpdene" connector body 5280 (1.531 Dia.) grounding cap may be anchored permanently by thumb screw. All are 15A., 125 V.

Stk. No.	Type	Fig.	Description	Std. Pkg.	Ctn.	Net Ea.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F727	5278	.....	Male Base	50	10	1.13	1.00	.87
32F728	5279	.....	Female Base	50	10	2.18	1.92	1.66
32F729	5280	E	Male Cap.	50	10	1.50	1.32	1.14
32F730	5207	F	Fem. Con.	50	10	1.53	1.35	1.17

DUPLEX GROUNDING ADAPTER

Type 5291. Converts existing parallel or "t" slot duplex receptacles to 3 wire, 15A., 125V. grounding receptacles Captive mounting screw threads into existing receptacles Phosphor bronze prongs connect metal plate to ground circuit. 3.328' x1.750"x1.421". Shpg. wt., 6 oz.

32F731	5291	....	Brwn. Bak.	50	10	2.05	1.81	1.57

Type 5266. 3-Wire grounding type caps and bodies, polarized. 15 amps, 125 v. Fitted with "U" shaped blade for grounding.

32F707	5266		Rubber Cap	50	10	.89	.78	.68

3-WIRE GROUNDING TYPE ADAPTER

Type 5273-L. For grounding exposed metal parts of portable electrical equipment. Designed to adapt standard 2-wire convenience outlets for use with new 3-wire grounding caps. 15 amps. 125 volts Shpg. wt , 4 oz Std. pkg.—50; Carton—10.

38F517	5273-L		...	50	10	.94	.83	.72

RUBBER FINGER GRIP CAPS

Type 9972. 15 amps. 125V. Parallel Blades Without cord-grips. Cord hole dia .312" to .437".

38F520	9972	.....	Par. blades	100	25	.38	.34	.29

38F508. 9754. Standard rubber plug with cord-grip. For .296' to .625" diameter cord. Rated: 125 volts at 15 amps.

38F508	9754	.....	Rubber plug	50	10	.62	.55	.47

2-WIRE PLUG—ARMORED

Metal body, parallel-blade: rated 15A-125V AC/DC. Wt., 2 oz.

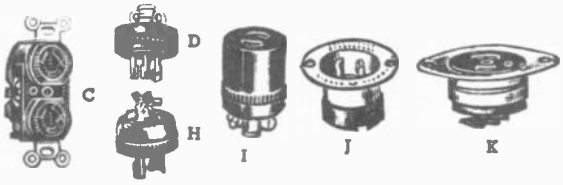
Stk. No.	Type	Description	Std. Pkg.	Ctn.	Net Ea.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F705	7057	Par. Blades	50	10	.64	.57	.49

You Can Depend on NEWARK

- **Same Day Shipment from On-the-Shelf Stocks**
- **Phone-Write-Wire for Price Quotations**

TWIST-LOCK CONNECTORS

Positive contact connectors that never disconnect accidentally. Simply "plug-in"—twist—and they're locked. Wherever motor-driven tool or portable electrical apparatus are used. Twist-Lock connecting devices provide maximum safety and efficiency. Conform to National Electrical Code. UL approved.



TWIST-LOCK PLUGS AND SOCKETS

3 wire grounding type, 15 amperes, 125 volts.

Stk. No.	Type	Fig.	Description	Std. Pkg.	Ctn.	Net Ea.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F721	4700	C	Receptacle	50	10	2.95	2.60	2.25
32F722	4713		Receptacle	50	10	1.96	1.73	1.50
32F723	4715		Receptacle	50	10	2.16	1.91	1.65
32F724	4716	J	Plug	50	10	1.67	1.47	1.28
32F725	4720	D	Plug	50	10	1.43	1.26	1.09
32F726	4726	D	Plug	50	10	1.18	1.04	.90

10 AMP 2-WIRE CONNECTORS MIDGET SIZE—UNPOLARIZED

Cord-grip connectors accommodate .312" to .500" diameter cords. Brown bakelite, with metal casings plated to resist corrosion. Female receptacles will accept either polarized or non-polarized caps. 250 volts at 10 amps; 125 volts at 15 amps.

38F500	7428	H	Male Plug	50	10	.44	.39	.34
38F501	7427	I	Fem. Con.	50	10	.81	.72	.62
38F502	7466	J	Male Base	50	10	.96	.85	.73
38F503	7468	K	Fem Base	50	10	1.16	1.02	.89
38F518	7479*	H	Male Cap	50	10	.52	.46	.40

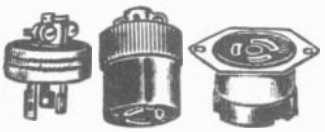
*Has one wide and one narrow blade to fit corresponding polarized slots of receptacles.

10 AMP 3-WIRE CONNECTORS MIDGET SIZE—POLARIZED

Cable connectors accommodate .281" to .421" diameter cords. Rated. 250 volts at 10 amps; 125 volts at 15 amps.

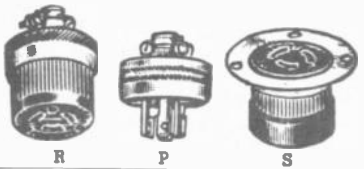
38F504	7485	H	Male Plug	50	10	1.05	.93	.80
38F505	7484	I	Fem. Con.	50	10	1.52	1.34	1.16
38F506	7486	J	Male Base	50	10	1.34	1.18	1.02
38F507	7487	K	Fem. Base	50	10	1.63	1.44	1.25

STANDARD SIZE—POLARIZED



10 amp -3 wire cable connectors accommodate .296" to .562" dia. cables. Type 7572 is armored cap. Casings and flanges are plated to resist corrosion. Bodies of black bakelite. Rated: 250 volts at 10 amps; 125 volts at 15 amps.

38F509	7572	L	Male Plug	50	10	1.25	1.10	.95
38F510	7555	M	Fem. Con.	50	10	1.97	1.74	1.50
38F511	7556	N	Male Base	50	10	1.63	1.44	1.25
38F512	7557	N	Fem. Base	50	10	1.81	1.59	1.38



Heavy duty plugs and receptacles. Rated: 600 volts at 10 amps.; 250 volts at 20 amps. Cable plug and connector take .437" to .750" cables. 20 amp.-3 wire connectors.

38F513	7311	P	Male Plug	30	10	1.70	1.50	1.30
38F514	7313	R	Fem. Con.	30	10	2.62	2.31	2.00
38F515	7327	S	Male Base	30	10	2.01	1.78	1.54
38F516	7328	S	Fem. Base	30	10	3.10	2.73	2.37

MIDGET TWIST LOCK

7500 series twist lock for 15 amp 115 volt Cylindrical hollow brass split ring for ground provision. Non-interchangeable unit with UL requirements.

Stk. No.	Type	Std. Pkg.	Ctn.	Net Ea.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F742	7593	50	10	1.76	1.55	1.34
32F743	7594	50	10	1.31	1.16	1.00

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

HARVEY HUBBELL

CONVENIENCE OUTLETS

Type 95995. Duplex convenience outlets. Side wired-double T-Slots. 15 amps, 125 volts. Breakoff feature for two-circuit installations. Washer ears.

Type 5252. 3-Wire grounding type convenience outlets. Polarized side wired only. Duplex flush mounting receptacle. For grounding exposed metal parts of portable electrical equipment. Unit is side wired with 2 grounding terminals and with parallel slots.

Stock No.	Type	Description	Std. Pkg.	Ctn.	Net Ea. Brkn. Ctn.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F700	9595	Brn. Bakelite	100	10	.55	.49	.42
32F701	5252	Brn. Bakelite	50	10	1.09	.96	.84

SAFETY GROUNDING RECEPTACLE

Type SG-62. Accepts all U-shaped or round-pin std. grounding caps. Shunts current harmlessly around objects inserted in slots by children. Grounds tools and appliances equipped with std. grounding caps. 15 amps, 125 v. silver plated contact springs. Shpg. wt., 4 oz.

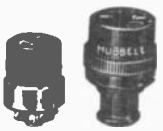
Stk. No.	Type	Descrip.	Std. Pkg.	Ctn.	Net Ea.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F717	SG-62	3-Wire	50	10	2.58	2.28	1.98

TYPE 'T' GROUNDING DEVICE

For use in conjunction with circuits up to 20 amps. Provides for grounding as well as polarized connection. Ideal for use with kitchen appliances and movable equipment.

Stk. No.	Type	Description	Std. pkg.	Ctn.	Net Ea. Brkn. Ctn.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F732	5361*	Sin. rect. slt. & U grd.	50	10	2.05	1.81	1.57
32F733	5362	Dux. rect. slt. & U grd.	50	10	2.91	2.57	2.23
32F734	5364	Am. cap	50	10	1.46	1.29	1.12
32F735	5374	Conn. body	50	10	2.47	2.18	1.89
32F736	5375	Insulprene Cap	50	10	1.68	1.48	1.28

CORD CONNECTORS



Type 7084. Cord connector bodies with double T-Slots—Blk. Bakelite. 15 amps, 125 v. With cord grip.

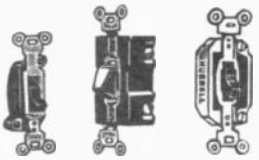
Type 9952. Rubber cord connector bodies with double T-Slots. 15 amps, 125 v. Cord diameter: .312" to .468".

Type 5269. 3-Wire cord connectors grounding type 15 amps, 125 v. With cord grip. Cord diameter: .296" to .625".

A B

Stock No.	Type	Fig.	Description	Std. Pkg.	Ctn.	Net Ea. Brkn. Ctn.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F702	7084	A	Body	50	10	1.10	.97	.84
32F703	9952	B	Body	50	10	.71	.63	.55
32F704	5269	A	Body	50	10	1.38	1.22	1.06

SWITCHES



Type 9711. Mercury silent switches. 10 amp, 125 v. 15 amp, 120 v. AC-5 amp, 250 v. Single pole indicating.

Type 1251. 15 amp, AC single pole 120-277 v. Presswitch with feed through terminal.

Type 8801. Flush toggle switches. T-rated—porcelain base—Bakelite handles. 125 v., 10 amp; 250 v., 5 amp.

C D E

Stock No.	Type	Fig.	Description	Std. Pkg.	Ctn.	Net Ea. Brkn. Ctn.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F708	9711	C	Brn. Handle	50	10	1.04	.92	.79
32F709	1251	D	Brn. Button	50	10	1.26	1.11	.97
32F710	8801	E	Single Pole	100	10	1.06	.94	.81

AC SWITCHES — 1121 SERIES

For use in shallow base 1¼" boxes. Conforms with MIL-Spec. W-S-896-A; Silver alloy contacts for long life and smooth operation. 20 amps, 120-277V.

Stk. No.	Type	Description	Std. Pkg.	Ctn.	Net Ea. Brkn. Ctn.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F738	1121	S.P.	100	10	1.38	1.22	1.06
32F739	1122	D.P.	10	2	1.63	1.44	1.25
32F740	1123	3-Way	50	10	1.63	1.44	1.25
32F741	1124	4-Way	10	2	4.17	3.68	3.19

CHROME-X (STAINLESS STEEL) PLATES

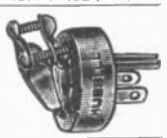
Type 97071. Toggle switch plates.

Type 97101. Convenience outlet plates.

F G

Stock No.	Type	Fig.	Description	Std. Pkg.	Ctn.	Net Ea. Brkn. Ctn.	Net Ea. Ctn.	Net Ea. Std. Pkg.
32F711	97071	F	1-Gang	100	10	.37	.32	.28
32F712	97101	G	1-Gang	100	10	.37	.32	.28

ANGLE CAP



4 position angle cap permit cord entrance from one of four different angles without bending or squeezing behind heavy equipment which often damages or severs the power cord.

Stock No.	Type	Net Each	Ctn. of 10 Net Each	Std. Pkg. 50 Net Each
32F737	5287	1.47	1.30	1.13

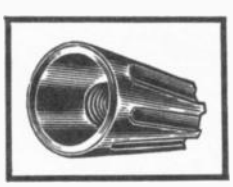
NEWARK

FLOURESCENT STARTER

Stk. No.	Type	Description	1-9	10-99	100-Up
32F713	FS-2	14, 15 & 20 Watt	.26	.23	.20
32F714	FS-4	13, 30 & 40 Watt	.26	.23	.20
32F715	FS-850	90, 100 Watt	1.08	.95	.83
32F716	FS-40	40 Watt	.71	.63	.55

WALDOM

WIRE CONNECTORS



Wire Nuts are made of reinforced phenolic, compact in design, with non-slip knurls for sure grip. WN-18 and WN-16A are all plastic; all others include a metal insert. A few turns of thehand will thread, twist and lock the wires securely into the connector. UL Approved. Rated 105°C.

KIT 169 WIRE CONNECTORS. Individually compartmented in a reusable plastic box. Includes 50 WN-18, 50 WN-16A, 25 WN-16, 20 WN-14, 15 WN-12, 9 WN-10.

32F831. NET. **2.74**

Stock No.	Type	Trade Equivalent	Wire Combinations Minimum	Wire Combinations Maximum	Rating	100-999	1000-4999 Per M	5000-Up Per M
32F833	WN-18*	A0	2#24	2#18	300V	.85	7.30	6.65
32F834	WN-16A	A1	2#18	1#16 & 2#18	300V	.85	7.30	6.65
32F835	WN-16	72B	2#18	3#16	300-600(a)	1.65	13.85	12.75
32F836	WN-14	73B	1#18 & 1#16	5#16	300-600(a)	1.70	14.40	13.50
32F837	WN-12	74B	1#14 & 1#18	2#12 & 1#18	300V	1.75	15.25	13.95
32F838	WN-10	76B	1#14 & 1#16	3#10	300V	3.20	27.70	25.35

*U.I.. does not give approval for devices to join wires smaller than #18. (a) 1000 volts when enclosed in fixtures.

SCOTCH

ELECTRICAL TAPE

Type 33. General purpose insulation that is strong and conformable. Dielectric strength: 10,000 volts. 1 s .007" thick and has black plastic backing.

COLOR CODED TAPE

Type 35. Vinyl plastic electrical tape for color coding and general purpose insulation. Strong and conformable.

ALL-WEATHER TAPE

Type 88. A super-tough flame-retardant black plastic backing provides excellent resistance to abrasion, oil, acids, etc. Extra pliability and conformability at temperatures down to 0 F. The thickness of Type 88 is .0085".

TINNED COPPER SHIELDING TAPE

Type 24. All metal 100% tinned copper shielding braid continues electrostatic shielding. Knitted from No. 36AWG wire. Highly conformable.

GLASS-CLOTH INSULATED TAPE

Type 27. For operating temperatures requiring high-heat insulated wires. Thermosetting pressure-sensitive adhesive assures a permanent bond at temperatures up to 300°F. High tensile strength.

SILICON RUBBER TAPE

Type 70. High temperature splicing tape composed of fully cured inorganic silicone backing with a silicone pressure sensitive adhesive. Excellent conformability, high temperature characteristics, electric strength, and ozone resistance. Self cleaning rubber backing.

Stk. No.	Type	Size	Color	1-9	10-99
36F898	33	¾ x66'	Blk.	1.39	1.15
36F899	33	¾ x20'	Blk.	.52	.43
36F897	33	⅜ x20'	Blk.	.32	.27
36F900	35	½ x20'	Red	.39	.33
36F901	35	½ x20'	Wh.	.39	.33
36F902	35	½ x20'	Yel.	.39	.33
36F903	35	½ x20'	Gray	.39	.33
36F886	88	¾ x66'	Blk.	1.62	1.33
36F887	88	¾ x20'	Blk.	.61	.50
36F904	24	1 x15'	Tin	2.18	1.92
36F905	27	½ x66'	Wh.	1.88	1.58
36F906	70	¾ x30'	Blk.	5.52	4.65

GENERAL ELECTRIC

VINYL PLASTIC TAPES

Type AW-1. Flexible, heavy-duty, all-weather electrical tape. Excellent holding at either elevated or below freezing from 0°F to 150°F. PVC backing. Resistant to water, acid, alkali, and oil. Excellent conformability. ¾"x66'

36F912. 1-9; ..... **1.52** 10-99; 1.26

GENERAL PURPOSE TAPE

Type GP-1. Can be used for all applications normally associated with standard grades of vinyl pressure-sensitive tapes. Excellent conformability allows for use in hundreds of applications. ¾"x66'.

36F913. 1-9; ..... **1.39** 10-99; 1.15

WOODHEAD PROTEX

SERVICE LIGHT

- **For hard to reach areas!**
- **Oil proof construction!**

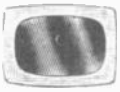
Type 611. For servicing hard to get at areas business machines, television equipment and other places where lighting aid becomes necessary. Made with an oil proof "Safety Yellow" Neotex handle. Comes equipped with a 10' oil proof cord, molded 2 prong AC plug, and an insulated 8" tubular guard. The service light is available with 10 Watt shock resistant lamps. Max. O.D. 1 5/32". Handle molded from high-impact, high-visibility yellow plastic. Wt. 13 oz.

58F825. NET **3.03**

No. 10C7. 10 watt lamp for Type 611 above
58F826. NET ..... .27

SYLVANIA

"PANELESCENT" NITE LITE



Plugs directly into wall socket to provide a glareless green radiance. No fixtures or wires need be connected to source. Consists of a 5½" sq. luminescent panel in ivory plastic frame. Consumes only 1/200 watt. 120V., 60 Hz AC.

25F310. NET .67 Lots of 12. **NET** ... .59

LUDLOW

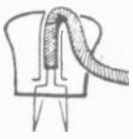
CABLE LACING CORD

Type N. Number 6 hard twist pure flax electric cable lacing cord. Waxed. The cord tests at 33 lbs. It is completely mildew-proof to meet military specifications number MIL-T-713A. Type N class III. Approximate weight, 1 lb.

36F885. NET **4.40**

EAGLE

JIFFY PLUG



Model 900B. Eagle push-pull Jiffy Plug gives better contact w/out stripping wires. Simple 3-step method anyone can do: 1) insert wire through side hole, 2) push wire down for contact, 3) pull wire taut.

36F1002. NET ..... .15

ELECTRICAL PLUGS

PLUGS FOR EVERY NEED

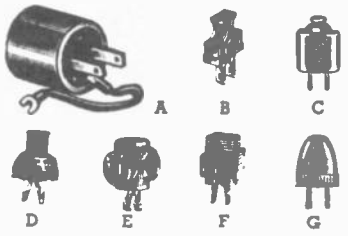


Fig. A. Parallel Ground Adapter. Adapts the 3-wire grounding cap for use with 2-wire outlets. Shpg. wt. 2 oz.
36F995. NET ..... .25

Fig. B. Bakelite Plug. Cap size, 1⅜x 1 1/16x 9/16". Brown. Wt., 4 oz.
36F863. NET ..... .10

Fig. C. Fused Plug. Small fuses for each side of line fit snugly in cylindrical receptacles. Blown fuse easily removed. Interchangeable with AC plug. Less 3AG fuses. Wt., 3 oz.
36F875. NET ..... .45

Fig. D. Rubber-handle Plug. Unbreakable soft rubber black plug. Screw terminals. U.L. Approved. Wt., 2 oz.
36F864. NET ..... .10

Fig. E. Cube Tap. 3 taps. Brown bakelite. Rated at 15 amps 125 volts; 10 amps 250 volts. U.L. approved 4 oz.
36F862. NET ..... .15

Fig. F. Rubber Cube Tap. New 3-way outlet of one-piece, unbreakable soft rubber. U.L. Approved. 4 ounces.
36F871. NET ..... .21

Fig. G. Molded Rubber Plug.
36F866. NET ..... .23

CORDS

Replacement Cord. 6-ft. rubber covered cord with molded plug. Wire ends tinned.
36F860. NET ..... .26

15-Ft. Extension Cord. No. 18 wire with premolded rubber plugs. Shpg. wt., 10 oz.
36F859. NET ..... .59

Vinyl Cube-Tap Extension Cord. Solderless, 3-way extension cord set. With 9-ft. cord and plug. Shpg. wt., 8 oz.
36F872. NET ..... .63

ICORE ELECTRO PLASTICS

Spirally cut polyethylene tubing, desirable for cabling loose wires into neat cables. Replaces cable lacing, prevents wire abrasion, replaces spaghetti, and will insulate tools. Allows individual wires to leave cable at any point, excellent insulator, low initial cost. Reusable. Shpg. wt., 1 lb./ft. *Elec. cable wrapping.

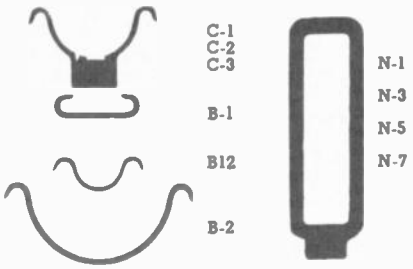
Stk. No.	Type	Min. OD	Color	Per Ft. 1-99	Per 100 Feet 100-999	Per 100 Feet 1000-up
36F267	SWP-¼	¼	Red	.08	6.00	5.55
36F269	SWP-¼	¼	Black	.08	6.00	5.55
36F270	SWP-⅜	⅜	White	.13	9.50	8.40
36F271	SWP-⅜	⅜	Red	.13	9.50	8.40
36F273	SWP-⅜	⅜	Black	.13	9.50	8.40
36F274	SWP-3/16	3/16	White	.07	5.30	4.95
36F275	SWP-¼*	¼	White	.08	6.00	5.55

WALSCO

● **Contains numerous varieties of labels, with spares and duplicates.** A complete line of decals, for easy application and labeling of electronic equipment. With decals any electronic equipment you build will look as neat and finished as factory made instruments. Insures top appearance, safety, and usefulness. The decal sets transfer to almost any surface. The line is researched to include the most frequently used designations, and each kit contains plenty of spares and duplicates totaling hundreds of labels. Shpg. wt. 4 oz.

Stk. No.	Type—Black	Stk. No.	Type—White	Description	Net
51F908	42-123	51F903	42-122	Instruments	.99
51F909	42-127	51F904	42-126	Dials & Marks	
51F910	42-109	51F905	42-108	Studio & Intercom	
51F917	42-137	51F928	42-136	Alphabet & Numerals	
51F923	42-117	51F929	42-116	Computer & Digital	
51F924	42-119	51F930	42-118	Transistor	
51F925	42-131	51F931	42-130	Stereo & Hi-Fi	
51F926	42-129	51F932	42-128	Repairman's Titles	
51F927	42-125	51F933	42-124	Oscilloscope & Video	

CRADLECLIP WIRING SYSTEMS



The Electrovert Cradleclip Wiring System consists of Binders and Endless Extensible Clips for unsupported wiring and Cradles and Endless Extensible Clips for supported wiring. Both the Binders and Cradles are molded from special nylon material and are virtually unbreakable. The Endless Extensible Clips are molded Neoprene which combines the right degree of toughness with the necessary flexibility to hold any type of cable securely and without damage. Temperature range of the system is approximately —76°F to +212°F. Wiring systems are in accordance with MIL-STD-202A. Methods of attaching Cradles to panels include: Conventional Bolt and Nut, Speed Drives, Drive-Rivets, and Special Cradle with Captive Nut.

RECOMMENDED COMBINATIONS

Diameter of Cable Form in inches	Use For Supported Wiring Cradle + Clip		Use For Unsupported Wiring Binder	Clip
1/8"—5/16"	C0	N0		
1/4"—5/8"	C1	N1	B1	N1
1/2"—1 1/16"	C1	N3	B1	N5
1 1/16"—1 5/16"	C2	N3	B12	N3
1 5/16"—1 1/16"	C2	N5	B12	N5
1"—1 1/4"	C3	N3	B2	N3
1 1/4"—1 1/2"	C3	N5	B2	N5
1 1/2"—2"	C3	N7	B2	N7

Stk. No.	Type	Desc.	Size (IN.)	1-99	Per 100	Per 1000
30F300	C1	Cradle	.937 x .562	.07	6.05	55.00
30F301	C2	Cradle	1.375 x .750	.07	6.82	62.00
30F302	C3	Cradle	1.875 x 1.000	.08	7.59	69.00
30F303	C1-M*	Cradle	.937 x .562	.10	9.35	85.00
30F304	C2-M*	Cradle	1.375 x .750	.11	10.45	95.00
30F305	C3 M*	Cradle	1.875 x 1.000	.12	11.55	105.00
30F306	B1	Binder	.875 x .187	.04	3.41	31.00
30F314	B12	Binder	.937 x .400	.05	4.73	43.00
30F307	B2	Binder	1.875 x .812	.07	6.49	59.00
30F308	N1	Clips	.500 x .937	.03	2.31	21.00
30F309	N3	Clips	1.000 x 1.000	.04	3.30	30.00
30F310	N5	Clips	1.750 x 1.000	.04	3.96	36.00
30F311	N7	Clips	2.562 x 1.000	.05	4.62	42.00
30F312	CO+NO	Min. cradle	.500 x .335	.09	8.14	74.00

*with captive nut.

ADJUSTABLE P-CLIPS

In 4 sizes to fit any loop diameter from 3/16" through 7/8". Light wt., chemical and abrasion resistant, of natural virgin nylon. Used with cables, components, piping and tubing, wherever a clamp strain or relief strap is required. High tensile strength and excellent dielectric properties.

Stk. No.	Size No.	Loop Diameter Min.	Loop Diameter Max.	Screw Clearance	1-99	1-249	Per 100	Per 250	Per 500	Per 1000
30F843	1	3/16"	1/4"	No. 4	.....	.05	.....	6.75	.....	24.00
30F844	2	1/4"	3/8"	No. 6	.....	.06	.....	7.50	.....	27.00
30F845	3	3/8"	9/16"	No. 6	.07	.....	4.00	.....	18.00	.....
30F846	4	9/16"	7/8"	No. 10	.08	.....	5.50	12.75	.....	.....

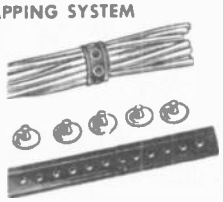
CRADLECLIP HOOKER

For attaching Clips to Cradles and Clips to Binders.
30F313 NET ..... **.15**
Free with orders of 500 pieces or more.

WIRE AND CABLE STRAPPING SYSTEM

- **Two simple components**
- **Lowest Cost**

High-grade PVC Strapping with holes conveniently spaced for easiest and fastest assembling. Nylon studs. Extremely strong, and applicable within a temperature range of —26° - +180°F.

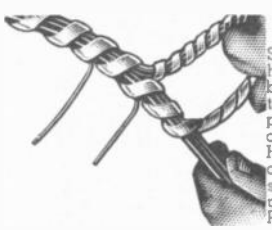


Type AV5. 5/16" wide, .035" thick.
30F830. 100 ft. coil in "feed-out" box **3.00**
30F850. 500 ft. reel **13.50**

Type AV8 1/2" wide, .050" thick.
30F831. 100 ft. coil in "feed-out" box **5.00**
30F851. 500 ft. reel **22.50**

Type AV5. Box of 1000 studs for above.
30F832. NET per box **5.00**

Type ISS. Strap saddle for above strapping.
30F829. Each ..... **.07** **Per 100** ..... **6.05** **Per 1000** **55.00**



SPIROBAND

Spiral wrapping for flexible electric harnesses and cables. Unusual flexibility and elasticity make it ideal for temporary and experimental as well as permanent applications. Permits lead-offs or additions of wire at any point. High dielectric strength provides excellent insulation. Moisture proof, non-staining, non-toxic, grease and oil proof at ordinary temp. Made of clear Polyethylene.

Stk. No.	Size	O.D.	Wall Thick.	Bundle	Coil Size	NET
30F839	1/8"	.125	.032	1/16 to 1/2"	100'	3.15
30F840	1/4"	.250	.045	3/16 to 2"	100'	5.60
30F841	1/2"	.500	.062	3/8 to 4"	25'	3.40

ELECTROVERT "Z" MARKERS

- **Saves to 50% in installation time.**
- **Instant wire recognition — Ready for installation in seconds!**

Cable Markers permanently identify every wire or group of wires for instant recognition. Can be installed in seconds. Feature flexible "accordion" type backs for easy installation and sturdy gripping on wires. Made of durable P.V.C. material. Comply with military, civil, and trade associations. (J.I.C., MIL-E-5400B (ASG), MIL-E-4158A (USAF), etc.).

Please specify Letter (A-Z) or Numeral (0-9) desired when ordering. Minimum order is one package of 50 of any Letter or Numeral.

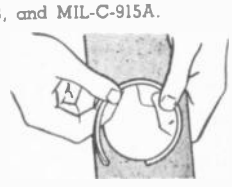
TYPE Z MARKERS—WHITE WITH BLACK MARKING

Stock No.	AWG Size	For Cable Diameter	Per Pkg. of 50
30F833	22	.045" - .065"	.69
30F834	20	.066" - .085"	.69
30F835	18	.086" - .115"	.69
30F820	16	.110" - .135"	.69
30F821	14	.130" - .160"	.69

POLYETHYLENE GROMMET STRIPS

Meet MIL-C-17D, MIL-W-76B, and MIL-C-915A.

Suitable for sizes from the smallest hole, up to 75 ft. around the peripheral of the opening, you have the advantage of one strip only application to round, square, rectangular, and oval holes. Comes in 5 sizes. for all gauges, from 20 gauge to 1/4" thick. Easily applied. No special tools required.



Stk. No.	Size	Application*	Pkg.	NET
30F315	GS2	20 gauge and smaller	100 ft. coil	4.00
30F316	GS3	18 to 12 gauge	100 ft. coil	4.65
30F317	GS4	11 to 8 gauge	100 ft. coil	5.35
30F318	GS5	8 gauge to 3/16"	100 ft. coil	9.35
30F319	GS6	3/16" to 1/4" thick	50 ft. coil	6.75

*U. S. standard sheet metal gauge.

Alpha Fit Shrinkable Products

alpha — Alpha Wire a division of Loral Corporation

THE INDUSTRY'S MOST COMPREHENSIVE LINE OF IRRADIATED HEAT SHRINKABLE TUBING

Packaged Assortments — (6" lengths) FIT-221. 6" tubing in various sizes and colors. Each length identified.

Type	Stock No.	Tubing Size	Lengths Per Box	Net
FIT-221-MS-1	37F1182	3/64x3/16	30	3.60
FIT-221-MS-2	37F1183	1/4x3/4	16	8.00
FIT-221-MS-3	37F1184	1 - 4	10	7.00

FIT-221 — POLYOLEFIN HEAT SHRINKABLE TUBING

FIT-221. This improved all purpose extruded tubing shrinks 50% (2:1 ratio) with only 5% longitudinal shrinkage. Fewer sizes cover more applications. When a temperature of approximately 275°F is applied for seven seconds, the tubing returns to predetermined size and forms permanent tight fitting mechanical bond, even over irregularly shaped materials. Tubing retains form stability throughout its temperature range of —67°F to +572°F. Shrinking done by Heat Gun, oven radiant heat, dipping in hot liquid, or hot iron. Clear tubing may be used where jacketed, printed components or cable data is visible and inspection of components is desired. Supplied in lengths of 4 feet and 6 inches. *6 inch package colors: black, white, red, yellow, blue, clear. Specify color. **4 foot lengths stocked in black and clear. Also supplied in packaged assortments.**

Type	Min. I.D. Before Shrink.	Recovered I.D. After Shrink.	Wall Thk. Recovered	Assorted Colors Stk. No.	Standard Pkg. 6" Lengths Tot. Ftg.	Standard Pkg. 6" Lengths No. Lgths.	Net	Clear or Blk. only Stk. No.	25 4-Ft. Lengths Per Box 1-4	5-9	10-49
FIT-221-3/64"	.046"	.023"	.016"	37F1165	20'	40	3.60 EA.	37F398	13.80	11.70	10.20
FIT-221-1/16"	.063"	.031"	.017"	37F1166	18'	36		37F399	14.60	12.30	10.70
FIT-221-3/32"	.093"	.046"	.020"	37F1168	16'	32		37F401	16.90	14.25	12.40
FIT-221-1/8"	.125"	.062"	.020"	37F1170	14'	28		37F403	17.90	15.20	13.25
FIT-221-3/16"	.187"	.093"	.020"	37F1171	12'	24		37F404	21.90	18.50	16.15
FIT-221-1/4"	.250"	.125"	.025"	37F1173	10'	20		37F406	27.60	23.20	20.25
FIT-221-3/8"	.375"	.187"	.025"	37F1174	8'	16		37F407	30.80	25.75	22.45
									5 4-Ft. Lengths Per Box 1-4	5-24	25-49
FIT-221-1/2"	.500"	.025"	.025"	37F1176	7'	14	3.60	37F409	6.90	5.85	5.10
FIT-221-3/4"	.750"	.375"	.030"	37F1178	6'	12	3.60	37F411	9.25	7.98	6.80
FIT-221-1"	1.000"	.500"	.035"	37F1180	4'	8	3.60	37F413	13.80	10.92	9.52
FIT-221-1 1/2"	1.500"	.750"	.040"	37F194	2.5'	5	3.60	37F397	19.60	16.38	14.28
FIT-221-2"	2.000"	1.000"	.045"	37F195	1.5'	3	3.60	37F395	27.00	22.62	19.72

FIT-105 POLYVINYLCHLORIDE TUBING

Highly flexible, ideal for cable jacketing! Conforms to MIL-I-631D, Grade C. Has 50% shrinkage ratio for insulation of components and cables with a wide variety of shape and diameter differences. FIT-105 shrinks to form a jacket like the finest extruded plastic jackets. Shrinkage temperature at 325°F. Tubing will not cold flow or melt but retains form stability within its temperature range. No radioactivity exists in or on the material, and will not emit radiation. Op. temp. cont.: 221°F. Minimum tensile strength: 1800 PSI. Supplied only in lengths shown. **Color: Black.**

Type No.	Size	I.D. Before Shrink.	I.D. After Shrink.	Nom. Wall Thick.	500 ft. Coil Stock No.	Ea.	2-9 Coils Ea.	10-19 Coils Ea.	100 ft. Coils Stock No.	NET	25 ft. Coils Stock No.	EACH
FIT-105-3/64"	3/64	.046"	.023"	.020"	37F249	31.75	26.75	25.25	37F249A	9.15	37F249B	2.95
FIT-105-1/16"	1/16	.062"	.031"	.020"	37F250	33.25	29.00	28.25	37F250A	9.50	37F250B	3.06

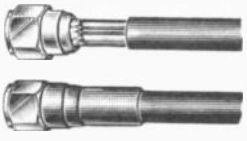
Type No.	Size	I.D. Before Shrink.	I.D. After Shrink.	Nom. Wall Thick.	200 ft. Coil Stock No.	1-2 Coils Ea.	3-4 Coils Ea.	5-24 Coils Ea.	100 ft. Coils Stock No.	Ea.	25 ft. Coils Stock No.	EACH
FIT-105-3/32"	3/32	.093"	.046"	.020"	37F251	20.30	15.40	13.00	37F251A	10.15	37F251B	3.48
FIT-105-1/8"	1/8	.125"	.062"	.020"	37F252	21.40	18.20	13.80	37F252A	10.70	37F252B	3.25
FIT-105-3/16"	3/16	.187"	.093"	.025"	37F253	25.60	22.50	16.80	37F253A	12.80	37F253B	3.90
FIT-105-1/4"	1/4	.250"	.125"	.025"	37F254	32.60	28.26	21.10	37F254A	16.30	37F254B	4.40
FIT-105-3/8"	3/8	.375"	.187"	.030"	37F255	35.50	31.28	23.40	37F255A	17.75	37F255B	4.75

Type No.	Size	I.D. Before Shrink.	I.D. After Shrink.	Nom. Wall Thick.	100 ft. Coil Stock No.	1-4 NET Ea.	5-9 NET Ea.	10-49 NET Ea.	25 ft. Coils Stock No.	EACH
FIT-105-1/2"	1/2	.500"	.250"	.030"	37F256	17.36	15.75	13.30	37F256A	5.50
FIT-105-3/4"	3/4	.775"	.375"	.035"	37F257	24.50	21.10	17.75	37F257A	6.90
FIT-105-1"	1	1.000"	.500"	.040"	37F258	35.60	30.40	25.60	37F258A	9.30

PACKAGED ASSORTMENT OF POLYVINYLCHLORIDE TUBING

Type No.	Stk. No.	Tubing Size Range	6" Lengths Per Box	Per Box
FIT-105-MS-1	37F245	3/64" thru 1/4" (6 sizes)	10 lengths/size (60 lengths)	4.00
FIT-105-MS-2	37F246	3/8" thru 1" (4 sizes)	10 lengths/size (40 lengths)	8.00
FIT-105-MS-3	37F247	1 1/2" and 2" (2 sizes)	7 lengths/size (14 lengths)	7.00

Type FIT-105-MS. Assorted sizes. Every 6" length identified as to size. Black only.



FIT-295 POLYOLEFIN SEMI-RIGID TUBING

Engineered to provide maximum mechanical strength at stress or connection points. Strong, heavy wall abrasion-resistant, extruded tubing slips easily over object to be covered. FIT-290 is clear—can be used so that jacketed printed component or cable data is clearly visible. Also allows inspection of insulated components, cable or terminations. Shrinkable temperature at 275°F or 135°C. Will not cold-flow or melt, but retains form stability throughout temperature range. Shrinkage ratio: 2:1 (50%). Tensile strength (min.) 2500 PSI. Non-corrosive. Shrinking method: hot air gun, oven heat, radiant heat. hot liquids or heating with soldering iron or flame.

Each Size of FIT-295 Sold only in the ONE color and Standard Packages as shown.

Type No.	Colors	ID Before Shrink. (Inches)	ID After Shrink. (Inches)	Nom. Wall Thick. (Inches)	Stock No.	Standard Package 6 inch Lengths Tot. Ftg.	Standard Package 6 inch Lengths No. Lgths.	NET	Stock No.	25 4-Ft. Lengths Per Box 1-4	5-9	10-49
FIT-295-3/64"	Yellow	.046	.023	.020	37F260	20'	40	4.00	37F280	14.10	11.70	10.20
FIT-295-1/16"	White	.063	.032	.020	37F261	18'	36		37F281	14.80	12.30	10.70
FIT-295-3/32"	Blue	.093	.045	.020	37F262	16'	32		37F282	17.15	14.25	12.40
FIT-295-1/8"	Red	.125	.063	.020	37F263	14'	28		37F283	18.35	15.20	13.25
FIT-295-3/16"	Green	.187	.093	.025	37F264	12'	24		37F284	22.35	18.50	16.15
FIT-295-1/4"	Slate	.250	.125	.025	37F265	10'	20		37F285	27.95	23.20	20.25
FIT-295-3/8"	Brown	.375	.187	.030	37F266	8'	16		37F286	31.00	25.75	22.45

FIT-295-MS1 37F1641 Assortment of above. 5 lengths per size. Tubing size: 3/64 thru 1/2"..... **4.00**

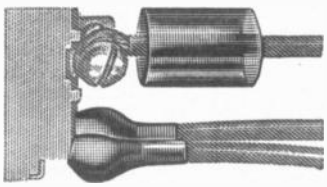
Sold Only In Standard Packages As Listed

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

alpha
Alpha Wire a division of Loral Corporation

FIT-350 IRRIDATED KYNAR TUBING

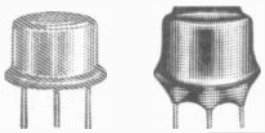
High Temperature Tubing



Tough thin wall tubing with outstanding cut-through and abrasion resistance. Shrinkage is 50% when a temperature of 347°F. (175°C) is applied. Forms a tough mechanical bond on shrinking. Longitudinal shrinkage is only 5%. Will never cold flow or melt and will not split when shrunk over sharp objects. Non-flammable. Will operate continuously at temperatures from —55°C to +175°C. Standard packages have either 6" or 4" lengths. Clear only. **Sold only in standard pkgs. as shown.**

Type	Min. I.D. Before Shrink.	Recvrd. I.D. After Shrink.	Stk. No. Clear Only	Standard Pkg. 6" Lengths Total Ftg.	No. Lgths.	Net	Stk. No. Clear Only	25 4-Ft. Lengths Per Box 1-4	5-9	10-49
FIT-350-1/64"	.046	.023	37F165	16'	32	4.00 Ea.	37F1555	14.70	12.05	10.40
FIT-350-1/16"	.063	.031	37F166	14'	28		37F1556	16.05	13.20	11.40
FIT-350-3/32"	.093	.046	37F167	12'	24		37F1557	19.30	15.85	13.65
FIT-350-1/8"	.125	.062	37F168	10'	20		37F1558	21.20	17.40	15.00
FIT-350-3/16"	.187	.093	37F169	8'	16		37F1559	32.85	26.95	23.25
FIT-350-1/4"	.250	.125	37F170	6'	12		37F1560	41.20	33.80	29.15
FIT-350-3/8"	.375	.187	37F171	4'	8		37F1561	58.90	48.35	41.70
								20 Ft. Net		
FIT-350-1/2"	.500	.250	37F172	2'	4	4.00 Ea.	37F1562	22.46		
FIT-350-3/4"	.750	.375	37F173	1'	2		37F1563	41.27		
FIT-350-1"	1.000	.500	37F174	5'	10		37F1564	75.88		

FIT-300 SELF ENCAPSULATING POLYOLEFIN TUBING



Easily-used encapsulation tubing product. When a temperature of 275°F (135°C) is applied, the outer wall shrinks while the inner wall melts and flows to eliminate voids and provide moisture proof encapsulation. Becomes a hard, tough, homogenous molding upon cooling. Good for use on electrical cable junctions and splices; as a mechanical shield for rough edges; and as a vibration shield. Fraction in Type No. shows size. **Sold only in standard pkgs. as shown.**

Type	Color	Min. I.D. Before Shrink.	Max I.D. After Shrink.	Stk. No.	Standard Pkg. Total Ftg.	No. Lghts.	Net	Stk. No.	25-4 Ft. Lengths Per Box 1-4	5-9	10-49
FIT-300-1/8"	Brown	.125	.023	37F175	7'	14	4.00	37F1565	28.80	24.00	20.80
FIT-300-3/16"	Gray	.187	.060	37F176	6'	12		37F1566	35.10	29.25	25.40
FIT-300-1/4"	White	.250	.080	37F177	5'	10		37F1567	43.80	36.50	31.70
FIT-300-3/8"	Red	.375	.135	37F178	4'	8		37F1568	48.85	40.70	35.35
FIT-300-3/16"	Blue	.300	.050	37F181	2'	4		37F1571	100.05	83.40	74.20
									5-4 Ft. Lengths Per Box 1-4	5-24	25-49
FIT-300-1/2"	Blue	.500	.195	37F179	3'	6	4.00	37F1569	13.82	11.51	9.59
FIT-300-3/4"	Yellow	.750	.313	37F180	2'	4	4.00	37F1570	21.35	17.77	14.81

● *NEW* IRRADIATED POLYOLEFIN FIT-CAPS

Sealed on one end, these short lengths of shrinkable tubing act as effective termination caps over wire, cable, and splices. Caps form a tight-fitting, moisture-resistant mechanical bond over terminations. Shrinkage (ratio: 2:1) takes place within seven seconds at 275°F to 300°F.

Stock No.	Type	Shrinkage Min I.D. Before	Shrinkage I.D. After	Nom. Wall Thick	Color	Pkg. of 100 Per Pkg.
37F1423	CAP-1	.063"	.025"	.016"	White	4.14
37F1424	CAP-2	.125"	.050"	.020"	Red	5.09
37F1425	CAP-3	.250"	.100"	.025"	Slate	6.19
37F1426	CAP-4	.350"	.175"	.035"	Brown	7.61
37F1427	CAP-5	.500"	.250"	.040"	Black	6.26

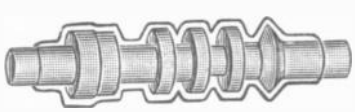
● *NEW* SELF-ENCAPSULATING FIT-CAPS

Caps produce permanent, abrasion resistant, moisture proof enclosures without molding, potting, or special tools. Made of molded, heat shrinkable, cross-linked polyolefin with 2 inserts. Insert at closed end melts and flows between the splice forming a moisture proof encapsulation. Shrinks and melts at 275°F.

Stock No.	Type	Shrinkage Min I.D. Before	Shrinkage I.D. After	Wall Thick. Inner	Wall Thick. Outer	Pkg. of 10 Per Box
37F1428	CAP-11	.160"	.080"	.013"	.040"	9.20
37F1429	CAP-12	.250"	.120"	.020"	.050"	10.50
37F1430	CAP-15	.360"	.180"	.030"	.060"	11.85

ALPHA PRODUCTS SOLD ONLY IN STANDARD PACKAGES AS SHOWN

FIT-500 HEAT-SHRINKABLE HIGH TEMPERATURE TEFLON TUBING



Offers all the outstanding physical, electrical and chemical advantages of Teflon in heat-shrinkable tubing. Continuous operating range —67°C to +250°C. Outstanding chemical and solvent resistance. Non-inflammable. High mechanical strength and lowest coefficient of friction. At 327°C the tubing shrinks to 65% of its supplied size returning to predetermined dia. Longitudinal shrinkage is less than 10%. **(Sold only in standard pkgs. as shown).**

Type	Stock No.	(Inches) Min. I.D. Before Shrinkage	(Inches) Recovered I.D. After Shrinkage	Nominal Recovered Wall Thickness	50-2 Ft. Lengths Each
FIT-500-30	37F1625	.030	.022	.009	19.45
FIT-500-28	37F1626	.035	.025	.009	20.30
FIT-500-26	37F1627	.040	.028	.010	22.05
FIT-500-24	37F1628	.050	.032	.010	27.40
FIT-500-22	37F1629	.055	.037	.010	29.40
FIT-500-20	37F1630	.060	.044	.012	36.75
FIT-500-18	37F1631	.076	.052	.012	40.40
FIT-500-16	37F1632	.093	.063	.012	46.60
FIT-500-14	37F1633	.121	.078	.012	52.40
					25-2 Ft. Lengths Each
FIT-500-12	37F1634	.153	.096	.012	38.28
FIT-500-10	37F1635	.191	.116	.012	44.15
FIT-500-8	37F1636	.240	.144	.015	65.98
					10-2 Ft. Lengths Each
FIT-500-6	37F1637	.302	.178	.015	31.61
FIT-500-4	37F1638	.370	.224	.015	38.24
FIT-500-2	37F1639	.430	.278	.015	46.76
	37F1640	.470	.347	.015	56.91

alpha
Alpha Wire a division of Loral Corporation

Wiring Accessories, Insulation, Heat Guns

PVC-105 PLASTIC ALL PURPOSE INSULATING TUBING

Conforms to MIL-I-631C, ASTM-D876, ASTM-D922. Dielectric strength 800V per MIL. 105°C temp. rating. Nonflammable. Tensile strength: 2500 psi. Insulation resistance: over 1,000,000 megs. Size No. 24 to 5/8" stocked in 100' coils, 3/4" & larger stocked in 50' coils. Longer continuous runs available special order. Min. order 100'. Wt., 2 lb. per 100 ft. **Specify Color.**

Stock Colors—Specify Color.

1—Clear	3—White	5—Red
2—Black	4—Yellow	6—Green

Colors—1 thru 6

Type	Stk. No.	Size	I.D.	Price Per 100' Coil 1-4	5-9	10-49	50-99
105-24	37F600	24	.022"	2.43	2.11	1.80	1.58
105-22	37F601	22	.027"	2.44	2.12	1.81	1.59
105-20	37F602	20	.034"	2.49	2.16	1.85	1.61
105-19	37F707	19	.038"	2.55	2.21	1.85	1.63
105-18	37F603	18	.042"	2.58	2.23	1.88	1.64
105-17	37F706	17	.047"	2.61	2.26	1.90	1.65
105-16	37F604	16	.053"	2.72	2.35	1.96	1.71
105-15	37F705	15	.059"	2.80	2.42	1.99	1.73
105-14	37F805	14	.066"	2.89	2.49	2.04	1.78
105-13	37F704	13	.076"	2.94	2.54	2.10	1.81
105-12	37F606	12	.085"	3.07	2.64	2.16	1.88
105-11	37F703	11	.095"	3.15	2.71	2.22	1.95
105-10	37F607	10	106"	3.27	2.81	2.35	2.05

Colors—1 thru 6

Type	Stk. No.	Size	I.D.	Price Per 100' Coil 1-4	5-9	10-49	50-99
105-9	37F702	9	.118"	4.27	3.64	2.96	2.58
105-8	37F608	8	.113"	4.57	3.89	3.16	2.73
105-7	37F701	7	148"	4.84	4.12	3.33	2.85
105-6	37F609	6	166"	5.19	4.41	3.52	3.01
105-5	37F700	5	.186"	5.58	4.73	3.73	3.18
105-4	37F610	4	.208"	6.00	5.08	3.97	3.34
105-3	37F1438	3	.234"	6.38	5.40	4.19	3.54
105-2	37F611	2	.263"	6.91	5.84	4.50	3.82

Colors—1 and 2

Type	Stk. No.	Size	I.D.	Price Per 100' Coil 1-4	5-9	10-49	50-99
105-1	37F1439	1	.294"	7.42	6.27	4.81	4.06
105-0	37F613	0	.330"	7.98	6.73	5.14	4.39
105-5/16"	37F612	5/16"	.312"	9.42	7.94	6.04	5.14
105-3/8"	37F614	3/8"	.375"	10.81	9.09	6.91	5.99
105-7/16"	37F1440	7/16"	.438"	11.58	9.65	7.25	6.20
105-1/2"	37F615	1/2"	.500	12.77	10.64	8.07	6.87
105-5/8"	37F616	5/8"	.625"	18.38	15.30	11.73	9.83
105-9/16"	37F1441	9/16"	.562"	17.00	14.17	10.77	9.07

Type	Stk. No.	Size	I.D.	Price Per 50' Coil 1-9	10-19	20-99	100-199
105-3/4"	37F617	3/4"	.750"	12.67	10.56	8.05	7.62
105-7/8"	37F618	7/8"	.875"	14.25	11.86	9.19	7.66
105-1"	37F619	1"	1.000"	15.92	13.27	10.26	8.50
105-1 1/8"	37F1572	1 1/8"	1.125"	20.88	17.40	13.26	10.99
105-1 1/4"	37F1573	1 1/4"	1.250"	22.07	18.39	14.29	11.95
105-1 3/8"	37F1574	1 3/8"	1.375"	23.59	19.66	15.15	12.67
105-1 1/2"	37F1575	1 1/2"	1.500"	28.60	23.84	18.39	15.56
105-1 3/4"	37F1576	1 3/4"	1.750"	35.66	29.72	23.06	19.64
105-2"	37F1577	2"	2.000"	49.00	40.84	31.31	26.56
105-2 1/4"	37F1578	2 1/4"	2 250"	58.26	48.55	36.94	31.41
105-2 1/2"	37F1579	2 1/2"	2.500"	69.07	57.56	43.65	37.03

MASTER APPLIANCE HEAT GUNS

A handy, quick, safe way to get instant heat in the laboratory or for plant production. Ideal for fitting heat shrinkable insulation and wire markers. The Master Heat Gun, Model 751, delivers up to 1000°F, without the dangers of open flames. Its many features include an adjustable air intake for controlling the air-blast temperature; a double jacketed heater housing; a sturdy die-cast aluminum housing and an 8 ft. neoprene-jacketed 3-wire cord and plug that is oil and grease resistant. Turbo type fan blade is efficient and quiet in operation. All models for 115V A.C. or D.C. operation. Equipped with adaptor for 2 prong receptacle. 230V models available on special order. Shipping wt. 5 lbs.

Model	Stk. No.	Voltage	Amp.	Temp. F.	Net Each	3 or More Net Ea.
HG301	37F1437	115	12	300/500	44.30	39.87
HG501	37F415	115	14	500/750	49.90	44.81
HG751	37F422	115	20	750/1000	59.95	53.96

Write or call for special quantity price

ACCESSORIES

Type 100. Air Flow Adaptor. Placed in nozzle to adapt for easy insertion of baffle plate below.
37F1197. Net 2.95

Type 145. Baffle Plate. Used with heat guns listed above to aid in concentration of heat flow. For tubing up to 3/4" O.D.
37F1199. Net 2.75

Type 150. Baffle Plate for tubing up to 1 1/4" O.D.
37F424. ..... 2.95

Type 27L. Replacement Element for HG 501 Gun.
37F1198. Net 3.75

Type 27A. Replacement Element for HG751 Gun.
37F423. ..... 3.75

ALPHA FIT KIT

Perfect engineering or prototype sampler. A variety of sizes and colors of all Fit Tubing types (with the exception of FIT-500, Teflon), FIT - Caps (irradiated polyolefin, molded, and self encapsulating) & FIT-Markers packaged in a handy compartmented plastic case. Especially designed for laboratory, prototype, or service work.

37F1436. NET **10.00**
3 or more. NET EA. **7.50**

FIT SHRINKABLE WIRE MARKERS ASSORTMENT

Preprinted lengths of abrasion-resistant irradiated polyolefin tubing designed for permanent wire and cable identification. Shrinkage ratio: 2:1. Shrinkage achieved by hot air gun, flame. Wall thk: .016". Marker length: 3/4". Pkgd. 100 per box.

FIT SHRINKABLE WIRE MARKER ASSORTMENT—
—Color: Black

Stk. No.	Type	Description	100 Net Ea.
37F239	MRK-A-NS	Numbers 1-50 (2 of ea. number)	3.00
37F240	MRK-B-NS	Numbers 1-50 (2 of ea. number)	
37F241	MRK-C-NS	Numbers 1-50 (2 of ea. number)	
37F242	MRK-A-LS	Letters A-Z (4 of ea. letter)	
37F243	MRK-B-LS	Letters A-Z (4 of ea. letter)	
37F244	MRK-C-LS	Letters A-Z (4 of ea. letter)	

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Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

Insulating, Tubing, Lacing Cords

alpha
Alpha Wire a division of Lorel Corporation

TEFLON EXTRUDED TUBING

TFT-200 THIN WALL TEFLON TUBING—NATURAL COLOR

Type No.	Stock No.	Size	Nom. ID	Wall Thk.	Per 100 Ft. Coil Ea.	2-4	5-9	10-49	50-99
TFT-200/30	37F488	30	.012"	.009"	9.00	6.62	5.95	5.34	4.89
TFT-200/28	37F489	28	.015"	.009"	8.00	5.70	5.28	4.39	4.20
TFT-200/26	37F490	26	.018"	.010"	7.70	5.60	5.03	3.99	3.80
TFT-200/24	37F491	24	.022"	.010"	7.70	5.60	5.03	4.32	4.13
TFT-200/22	37F492	22	.027"	.010"	9.50	7.12	6.08	4.84	4.65
TFT-200/20	37F493	20	.034"	.012"	12.00	9.33	7.78	6.15	5.98
TFT-200/18	37F494	18	.042"	.012"	12.98	10.73	9.04	7.24	6.97
TFT-200/16	37F485	16	.053"	.012"	14.53	12.67	10.53	8.64	8.12
TFT-200/14	37F496	14	.066"	.012"	16.04	13.76	11.55	9.35	8.97
TFT-200/12	37F481	12	.085"	.012"	18.48	16.63	13.65	11.35	10.79
TFT-200/10	37F482	10	.106"	.012"	22.04	19.36	15.48	13.54	13.00
TFT-200/8	37F483	8	.133"	.015"	27.52	25.75	23.15	21.03	20.18
TFT-200/6	37F484	6	.166"	.015"	31.82	30.28	27.50	25.05	24.28
TFT-200/4	37F485	4	.206"	.015"	38.10	36.78	33.73	30.86	29.92
TFT-200/2	37F486	2	.263"	.015"	48.13	45.56	41.85	38.23	37.07
TFT-200/0	37F487	0	.330"	.015"	59.14	56.31	51.82	47.12	45.78

TFT-250 STANDARD WALL TEFLON TUBING—NATURAL COLOR

TFT-250/24	37F1580	24	.022"	.012"	10.01	8.01	6.89	5.52	5.24
TFT-250/22	37F1581	22	.027"	.012"	11.23	8.98	7.62	6.09	5.79
TFT-250/20	37F1582	20	.034"	.016"	15.19	12.15	10.31	8.37	7.96
TFT-250/19	37F1583	19	.038"	.016"	16.31	13.05	11.21	9.09	8.64
TFT-250/18	37F1584	18	.042"	.016"	18.70	14.68	12.50	9.84	9.36
TFT-250/17	37F1585	17	.047"	.016"	20.39	15.93	13.61	10.72	10.20
TFT-250/16	37F1586	16	.053"	.016"	21.78	17.64	14.90	11.46	10.94
TFT-250/15	37F1587	15	.059"	.016"	22.26	18.32	15.22	11.72	11.18
TFT-250/14	37F1588	14	.066"	.016"	24.03	18.96	15.81	12.66	12.07
TFT-250/13	37F1589	13	.076"	.016"	25.33	20.40	16.63	14.07	13.43
TFT-250/12	37F1590	12	.085"	.016"	27.41	22.02	18.25	15.20	14.53
TFT-250/11	37F1591	11	.095"	.016"	30.43	24.48	19.89	16.87	16.11
TFT-250/10	37F1592	10	.106"	.016"	33.02	25.57	21.06	18.32	17.55
TFT-250/9	37F1593	9	.118"	.020"	45.86	34.00	28.77	26.18	25.14
TFT-250/8	37F1594	8	.133"	.020"	47.43	35.96	31.60	28.73	27.57
TFT-250/7	37F1595	7	.148"	.020"	49.56	38.68	34.04	30.94	29.73
TFT-250/6	37F1596	6	.166"	.020"	53.55	41.82	36.81	33.45	32.13
TFT-250/5	37F1597	5	.186"	.020"	58.99	46.07	40.55	36.85	35.36
TFT-250/4	37F1598	4	.208"	.020"	64.09	50.07	44.07	40.00	38.38
TFT-250/3	37F1599	3	.234"	.020"	70.89	55.34	48.75	44.29	42.97
TFT-250/2	37F1600	2	.263"	.020"	73.14	60.95	53.64	48.75	47.30
TFT-250/1	37F1601	1	.294"	.020"	81.26	67.66	59.50	54.15	52.53
TFT-250/0	37F1602	0	.330"	.020"	91.38	76.16	67.02	60.95	58.57

- **Will not Crack or Become Brittle During Aging!**
- **Will not Shrink During Soldering!**
- **Conforms to MIL-1-22129B**

Unmatched by any other type of tubing for use in electrical applications at high frequencies and temperatures; continuous operation at 250° C. retaining its flexibility throughout temperature range. At high frequencies, dielectric strength is many times that of other insulating materials; is chemically inert having a moisture absorption. Thin wall tubing, **TFT 200.** permits miniaturization and compactness. Application where high heat resistant, flexible, non-flammable, chemical solvent and erosion-resistant material is required. Electrical and chemical properties conform to MIL-1-22129B. **Natural only.** Standard wall tubing, **TFT-250** has characteristics similar to TFT-200, but for use in application where additional dielectric values and mechanical strength are necessary. Colors: **Natural only. Min. order 100 feet.**

ZIP31 ZIPPER TUBING AND SEALER

Type No.	Black No.	Clear No.	Dia.	100' Spools Per Spool 1-4	5-9	10-49
31-¾"	37F642	37F622	½"	34.00	31.00	29.00
31-⅞"	37F643	37F638	⅝"	34.50	31.50	29.50
31-1½"	37F644	37F623	¾"	35.00	32.00	30.00
31-⅝"	37F645	37F639	⅞"	36.00	32.50	30.50
31-1"	37F646	37F624	1"	36.00	33.00	31.00
31-1⅛"	37F647	37F640	1⅛"	37.50	34.00	32.00
31-1¼"	37F648	37F625	1¼"	38.00	34.50	32.50
31-1½"	37F649	37F626	1½"	39.50	36.00	34.00
31-1¾"	37F662	37F627	1¾"	41.00	37.00	35.00
31-2"	37F663	37F628	2"	42.00	38.00	36.00

Plastic tubing equipped with a longitudinal plastic zipper that eliminates costly work of lacing and tying of harness assemblies. It can be opened and closed any time, so the conductors are readily accessible. May also be permanently sealed to protect the conductors against moisture or abrasion.

20 MIL wall thickness. Vinyl **per specification MIL-I-631C. For** ease in closing use tubing size ¼" larger than O.D. of wires to be covered. **One metal slider supplied with every 25 feet.**

Sold only in standard sizes as shown. Stocked in the underflap construction. Specify Black or Clear. **100 ft. spools.**

SPECIAL SEALER TYPE PB-200

Type	Stock No.	Capacity	NET
PB-200	37F634	4 oz.	1.00

LACING CORD AND TAPES

Recommended for all harness work. Prevents "cold flow". *Dacron. 3/32" size. .014" thick. 50 lb. test.

MIL-T-713A NYLON FLAT BRAID TAPE

Type	Stock No.	Color	Finish	500-Yd. Spool 1-9	10-24	25-49
LC132	37F658	White	Resin	8.45	7.88	7.35
LC132	37F659	Black	Resin	9.14	8.61	7.98
LC134	37F666	White	Wax	5.41	5.04	4.75
LC134	37F667	Black	Wax	6.09	5.78	5.41
LC136	37F668	White	Wax	8.45	7.88	7.35
LC136	37F669	Black	Wax	9.14	8.61	7.98
LC140	37F670	White	Rubber	8.45	7.88	7.35
LC140	37F671	Black	Rubber	9.14	8.61	7.98
LC143	37F660	White	Resin	8.45	7.88	7.35
LC143	37F661	Black	Resin	9.14	8.61	7.98
LC158*	37F664	White	Resin	8.45	7.88	7.35
LC158*	37F665	Black	Resin	9.14	8.61	7.98
LC162*	37F678	White	Wax	8.45	7.88	7.35
LC162*	37F679	Black	Wax	9.14	8.61	7.98

MIL-T-713A ROUND TWISTED NYLON 8 OZ. SPOOLS

LC113	37F672	White	Wax	4.73	4.20	3.68
LC113	37F673	Black	Wax	5.51	4.99	4.31
LC114	37F674	White	Wax	4.73	4.20	3.68
LC114	37F675	Black	Wax	5.51	4.99	4.31
LC115	37F676	White	Wax	4.73	4.20	3.68
LC115	37F677	Black	Wax	5.51	4.99	4.31

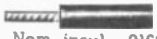
PLASTIC IMPREGNATED FIBERGLASS TUBING

Conforms to MIL-I-3190B—Grade B

Used widely where tubing is subject to bending, knotting, and high torque. Will not peel or crack or lose its dielectric values even under extreme conditions. Not affected by prolonged usage as high as 130°C. Supplied in 100' lengths. Black only.

Type	Stock No.	Size	Wall Thickness Max.	Min.	100' Spool Ea.
PIF-130/24	37F1603	24	.022	.016	4.79
PIF-130/22	37F1604	22	.022	.016	5.05
PIF-130/20	37F1605	20	.022	.016	5.12
PIF-130/18	37F1606	18	.022	.016	5.21
PIF-130/16	37F1607	16	.028	.020	5.43
PIF-130/14	37F1608	14	.028	.020	5.62
PIF-130/12	37F1609	12	.028	.020	6.11
PIF-130/10	37F1610	10	.028	.020	6.86
PIF-130/8	37F1611	8	.028	.020	7.51
PIF-130/6	37F1612	6	.028	.020	8.42
PIF-130/4	37F1613	4	.036	.026	10.24
PIF-130/2	37F1614	2	.036	.026	12.88
PIF-130/0	37F1615	0	.042	.030	16.50
PIF-130/3/8"	37F1616	3/8"	.042	.030	21.05
PIF-130/1/2"	37F1617	1/2"	.042	.030	36.39
PIF-130/3/4"	37F1618	3/4"	.042	.030	53.72
PIF-130/1"	37F1619	1"	.042	.030	79.37

MIL-W-76B TYPE MW



Hook-up wire with thermoplastic insulation impervious to oils, acids, moisture and flame. Nom. insul., .016". Voltage rating, 1000 V. 1 lb. per 100 ft. Temp. —40°C. to +80°C. **Available in colors 1-19. Specify Color.**

Alp. No.	Stock No.	MIL Type	Co. Sz.	Cond. Strand	Nom. O.D.	100 Feet	Net per 1000 ft. 1-9	10-up
1550	37F500	24 (7)U	24	7/32	.059"	1.43	9.45	7.88
1551	37F501	22 (7)U	22	7/30	064"	1.50	10.35	8.68
1553	37F502	20(10)U	20	10/30	.073"	1.80	13.20	11.00
1555	37F503	18(16)U	18	16/30	084"	2.33	18.90	15.75
ON TRACER COLORS ADD TO ABOVE.						.15	1.50	1.25
Available in colors 1-10. Specify Color.								
1557	37F504	16(26)U	16	26/30	.095"	3.30	28.35	23.63
1559	37F505	14(41)U	14	41/30	110"	4.58	41.25	34.38
1560	37F506	12(65)U	12	65/39	.125"	7.65	68.85	57.38
Available in colors 1-10. Specify Color.								
1561	37F507	22(1)U	22		.060"	1.28	8.10	6.75
1563	37F508	20(1)U	20		.066"	1.58	11.10	9.25
1565	37F509	18(1)U	18		.074"	2.03	15.90	13.25

TYPE MW—SHIELDED—NYLON JACKET

Temperature rating —40° to +90°C. Voltage rating 1000 volts. Resistant to acids, alkalis, oil, flame, moisture and fungus. **Available in White only.**

Alp. No.	Stk. No.	MIL Type	Co. Sz.	Cond. Strand	Nom. O.D.	100 Feet	Net per 1000 ft. 1-4	5-up
1371	37F685	C22(7)SJ	22	7/30	.092"	5.18	43.95	36.63
1372	37F686	C20(7)SJ	20	7/28	.100"	5.78	50.40	42.00
1373	37F687	C18(19)SJ	18	19/30	.119"	6.45	57.15	47.63
1374	37F688	C16(19)SJ	16	19/29	.120"	8.18	74.40	62.00

MIL-W-16878

TYPE "B" UNCOVERED PLASTIC HOOKUP WIRE

Stranded tinned copper conductor. 105°C PVC .010" insulation. Specification **MIL-W-16878D.** 600 V rating for miniature and sub-miniature high temperature hook-ups. Stranded spool, put-up; 100 ft., 1000 ft. **Specify color. Stock colors 1 through 19.**

Alp. No.	Stock No.	MIL Type	Cond. Size	Cond. Strand	Nom. O.D.	100 Feet	Per 1000 Ft. 1-9	10-Up
1850	37F593	B-32	32	7/40	028"	1.65	11.70	9.75
1851	37F544	B-30	30	7/38	032"	1.43	10.50	8.75
1852	37F545	B-28	28	7/36	035"	1.43	9.75	8.13
1853	37F546	B-26	26	7/34	038"	1.65	11.70	9.75
1854	37F547	B-24	24	7/32	.043"	1.43	9.90	8.25
1854/19	37F1326	B-24	24	19/36	.043"	1.65	11.85	9.88
1855	37F548	B-22	22	7/30	.049	1.58	11.10	9.25
1855/19	37F1327	B-22	22	19/34	050"	1.80	13.65	11.37
1858	37F549	B20	20	7/28	060"	1.65	12.30	10.25
1858/19	37F1328	B20	20	19/32	058"	2.03	15.45	12.88
1857	37F570	B18	18	7/26	068"	2.03	15.60	13.00
1857/19	37F1329	B18	18	19/30	068"	2.25	18.15	15.13
1858/19	37F571	B16	16	19929	077"	2.48	20.40	17.00
1859/19	37F1331	B14	14	19/27	091"	4.58	41.25	34.38
ON TRACER COLORS ADD TO ABOVE						.15	1.50	1.25

TYPE B PRE-BONDED UNCOVERED PLASTIC WIRE

Double tinned, then heated for easy stripping. Color coded. .010" polyvinylchloride insulation. Meets MIL-W-16878D requirements. Temperature rating—55°C to +105°C. 600 volt rating. **Stock colors—1 thru 10. Specify colors.**

Alp. No.	Stock No.	MIL Type	Co. Sz.	Cond. Strand	Nom. O.D.	100' NET	Per 1000 Ft. 1-9	10-up
3154	37F1332	B-24	24	7/32	.044	1.58	12.38	10.32
3155	37F1333	B-22	22	7/30	.051	1.95	15.60	13.00
3156	37F1334	B-20	20	7/28	.059	2.48	20.25	16.88
3157	37F1335	B-18	18	7/26	.070	3.30	28.50	23.75

TYPE B NYLON JACKET

Stranded tinned copper, color coded. Has .010" polyvinylchloride insulation. Rating —55°C to +115°C. Voltage rating 600 volts. Meets MIL-W-16878D specs. Nom. Jkt. Thk. .003", except 1869/19: .004". **Stock Colors—1 thru 10. Specify color.**

Alp. No.	Stock No.	MIL Type	Cond. Size	Cond. Strand	Nom. O.D.	100 Feet	Per 1000 Ft. 1-9	10-Up
1864/19	37F1321	B-24	24	19/36	049"	2.03	15.45	12.88
1865/19	37F1322	B-22	22	19/34	056'	2.25	17.70	14.75
1866/19	37F1323	B-20	20	19/32	064'	2.33	18.90	15.75
1867/19	37F1324	B-18	18	19/30	074	2.63	21.60	18.00
1868/19	37F580	B-16	16	19/29	.085"	3.08	26.25	21.88
1869/19	37F1325	B-14	14	19/27	099"	5.85	51.00	42.50

SAVE TIME! At Newark—fast, efficient service always!

MIL-W-16878 (Continued)

TYPE C—UNCOVERED PLASTIC

Stranded tinned copper, color coded .016" polyvinylchloride insulation. Temperature rating —55°C to +105°C. Voltage rating 1000 volts. MIL-W-16878D. **Available in colors. 1-10. *White only.**

Alp. No.	Stock No.	MIL Type	Co. Sz.	Cond. Strand	Nom. O.D.	100 Feet	Net per 1000 ft.
1830	37F550	C-24	24	7/32	058'	1.43	10.80
1831	37F581	C-22	22	7/30	.064"	1.65	12.45
1832	37F582	C-20	20	7/28	.972"	1.95	15.75
1833	37F583	C-18	18	7/26	082"	2.40	20.25
1834	37F551*	C-16	16	19/20	091	3.08	26.85
1835	37F552*	C-14	14	19/27	.135"	4.58	40.65
1836	37F553*	C-12	12	19/25	.124"	8.18	74.40

TYPE C — NYLON JACKET

Stranded tinned copper, color coded .016" polyvinylchloride insulation, MIL-W-16878D. Temp. rtg. —55°C to +115°C. Volt rtg. 1000v. Jacket thk. .003" exc. * .002". **Available in colors 1-10.**

Alp. No.	Stock No.	MIL Type	Co. Sz.	Cond. Strand	Nom. O.D.	100 Feet	Net per 1000 ft.
1840	37F554*	C-24	24	7/32	065"	2.10	17.10
1841	37F555	C-22	22	7/30	072"	2.25	18.75
1842	37F556	C-20	20	7/28	079"	2.48	21.30
1843	37F557	C-18	18	7/26	090"	2.83	25.50
Same as above—Available in white only. .004" jkt., exc. * .005".							
1844	37F558	C-16	16	19/29	099"	3.90	35.25
1845	37F559	C-14	14	19/27	.114"	5.78	53.70
1846	37F560*	C-12	12	19/25	135"	9.45	87.15

TYPE C—SHIELDED—NYLON JACKET

Stranded tinned copper, white .016" polyvinylchloride insulation, braided tinned copper shield. MIL-W-16878D Rating —55°C to +115°C. Voltage rating 1000 volts. .005" jkt. **White only.**

Alp. No.	Stock No.	Co. Sz.	Cond. Strand	Nom. O.D.	100 Feet	NET Per 1000 Ft. 1-4	5-9
1471	37F1030	22	7/30	.098"	7.05	62.70	52.25
1472	37F1031	20	7/28	.105"	7.73	69.60	58.00
1473	37F1032	18	19/30	115"	9.00	82.20	68.50

GENERAL STOCK COLORS—Check Specific Color Codes shown for wire types on this page and next page.

1—White	8—Orange	15—White/Blue
2—Black	9—Gray (slate)	16—White/Brown
3—Red	10—Violet (purple)	17—White/Orange
4—Green	11—White/Black	18—White/Gray
5—Yellow	12—White/Red	19—White/Violet
6—Light Blue	13—White/Green	
7—Brown	14—White/Yellow	

UL/CSA POPULAR PRICED HOOK-UP WIRE

Stranded tinned copper conductor, color coded polyvinylchloride insulation. Resistant to acids, alkalis, oil, flame, moisture, and fungus. **Stocked in colors 1 thru 10. Specify color.**

300 VOLT 80°C—STYLE 1007

Alp. No.	Stk. No.	Conductor Size	Conductor Strand	Nom. O.D.	100 Net	Net per 1000 1-9	10-Up
3050	37F1300	24	7/32	.057	1.28	8.55	7.13
3051	37F1301	22	7/30	.065	1.43	9.60	8.00
3053	37F1302	20	10/30	.071	1.50	11.25	9.88
3055	37F1303	18	16/30	.080	1.95	15.38	12.82
3057	37F1304	16	26/30	.095	2.78	24.15	20.13

UL STYLE 1015, CSA "TEW"

3071	37F1305	22	7/30	.095	1.73	13.65	11.38
3073	37F1306	20	10/30	.102	1.95	15.45	12.88
3075	37F1307	18	16/30	.112	2.33	19.20	16.00
3077	37F1308	16	26/30	.125	2.93	25.65	21.38
3079	37F1309	14	41/30	.142	4.50	41.10	34.25

U.L. SEMI-RIGID BUSINESS MACHINE WIRE

Stranded tinned copper. Color coded semi-rigid polyvinylchloride insulation. .009" thick wall. Temperature rating: —10°C to +80°C. 300 volt rating in business machine or electronic computers only.
Stocked in colors 1-10. Specify color.

300 Volt, 80°C—Style No. 1061

Alpha No.	Stk. No.	Conductor Size	Conductor Strand	100' Spool Each	1000' Spool Each
3250	37F1420	24	7x32	1.50	11.25
3251	37F1421	22	7x30	1.65	12.38
3252	37F1422	20	7x28	1.88	14.78

DUE TO THE UNSTABLE COPPER MARKET WIRE IS SOLD AT PRICES IN EFFECT AT TIME OF SHIPMENT.

Wire and Cable – Shielded and Teflon

alpha
Alpha Wire a division of Loral Corporation

AIRCRAFT HOOK-UP WIRE — MIL-W-5086A

All single conductor stranded tinned copper with white polyvinylchloride insulation. AN-22 thru AN-12 have clear nylon jacket overall. AN-10 thru AN-8 have white PVC, white glass braid, flame retardant nylon lacquered braid overall. *Type 11.

UNSHIELDED (MIL-W-5086A—Types I and II)

Alpha No.	Stock No.	MIL Type	Co. Sz.	Con. Strand	Nom. O.D.	100 Feet	Net per 1000 ft. 1-4	Net per 1000 ft. 5-up
1381	37F532	AN-22	22	19/34	.068"	3.08	23.55	19.62
1382	37F533	AN-20	20	19/32	.078"	3.45	27.45	22.87
1383	37F534	AN-18	18	19/30	.088"	4.13	33.90	28.25
1384	37F535	AN-16	16	19/29	.098"	4.50	37.20	31.00
1385	37F536	AN-14	14	19/27	.117"	5.93	51.75	43.12
1386	37F537	AN-12	12	19/25	.137"	8.33	75.75	63.12

Alpha No.	Stock No.	MIL Type	Co. Sz.	Con. Strand	Nom. O.D.	100 Feet	Net per 1000 ft. 1-2	Net per 1000 ft. 3-up
1387*	37F683	AN-10	10	49/27	.189"	15.00	142.50	118.75
1388*	37F684	AN- 8	8	133/29	.240"	28.50	270.00	225.00

MULTI-CONDUCTOR CABLE
TYPE B. PLASTIC SHIELDED, NYLON JACKET. MIL-W-16878D

Each conductor stranded tinned copper, .010" polyvinylchloride insulation. Color coded, clear nylon (polyamide) jacket, conductors cabled, braided tinned copper shield 90% coverage. White polyvinylchloride jacket overall. Temperature rating: —55°C to +105°C. Voltage rating: 600 volts. Resistant to acids, alkalies, oil, flame, moisture, fungus, and solvents. Nominal wall thickness: .010". Nominal nylon thickness: .003".
Color code: 1-white, 2-black, 3-red.

Alpha No.	Stock No.	No. of Cond.	Conductor Size	Conductor Strand	Nom. O.D."	100 Ft.	500 Ft.
3200	37F1500	1	26	7/34	.087	7.50	34.35
3201	37F1501	2	26	7/34	.138	10.35	48.83
3202	37F1502	3	26	7/34	.142	14.33	69.45
3203	37F1503	4	26	7/34	.162	16.35	78.83
3210	37F1260	1	24	19/36	.092	7.35	35.63
3211	37F1261	2	24	19/36	.152	11.18	54.23
3212	37F1262	3	24	19/36	.161	15.45	74.55
3213	37F1504	4	24	19/36	.162	17.25	83.10
3220	37F1263	1	22	19/34	.100	8.10	37.58
3221	37F1264	2	22	19/34	.168	12.23	58.05
3222	37F1265	3	22	19/34	.178	16.95	81.90
3223	37F1267	4	22	19/34	.174	18.53	89.70
3230	37F1266	1	20	19/32	.106	8.48	39.45
3231	37F1505	2	20	19/32	.186	13.43	64.13
3232	37F1268	3	20	19/32	.196	18.15	87.90
3233	37F1506	4	20	19/32	.193	19.80	95.93
3240	37F1269	1	18	19/30	.120	9.45	43.43
3241	37F1270	2	18	19/30	.210	15.68	75.75
3242	37F1271	3	18	19/30	.227	21.00	102.00
3243	37F1507	4	18	19/30	.218	23.78	115.73
3245	37F1508	1	16	19/29	.137	10.05	47.25
3246	37F1509	2	16	19/29	.236	16.65	80.55
3247	37F1510	3	16	19/29	.240	23.70	112.65
3248	37F1511	4	16	19/29	.274	29.93	146.93

GENERAL STOCK COLORS—Check Specific Color Codes shown for wire types on this page and next page.

1—White
2—Black
3—Red
4—Green
5—Yellow
6—Light Blue
7—Brown
8—Orange
9—Gray (slate)
10—Violet (purple)
11—White/Black
12—White/Red
13—White/Green
14—White/Yellow
15—White/Blue
16—White/Brown
17—White/Orange
18—White/Gray
19—White/Violet

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● NEW MIL-W-16878D TEFLON WIRE TYPE E 600 VOLTS

Stranded silver plated copper with .010 inch nominal wall thickness. Extruded TFE Teflon insulation from —65°C. to +200°C. Standard spool put-up of 100 ft., and 1000 ft. Nom. insul. thickness .010. **Available in colors 1-19. Specify color.**

Alpha No.	Stk. No.	Mil Type	Cond. AWG	Cond. Str.	100 ft.	Per 1000 Feet 1M-4999	5M-9999	10M-24999	25M-49999
5850	37F1670	E-32	32	7/40	5.18	48.00	40.80	32.00	15.88
5851	37F650	E-30	30	7/36	5.18	48.00	40.80	32.00	15.88
5852	37F651	E-28	28	7/34	5.55	51.75	43.99	34.50	17.28
5853	37F652	E-26	26	7/34	5.63	52.65	44.75	35.10	18.57
5854	37F653	E-24	24	19/36	6.00	56.10	47.69	37.40	24.96
5854/7	37F561	E-24	24	7/32	5.25	48.90	41.57	32.60	20.05
5855	37F654	E-22	22	19/34	6.60	62.25	52.91	41.50	28.23
5855/7	37F562	E-22	22	7/30	5.63	52.88	44.95	35.25	23.83
5856	37F655	E-20	20	7/28	7.43	70.20	59.71	46.80	36.38
5856/7	37F563	E-20	20	7/28	6.53	61.88	52.60	41.25	32.30
5857	37F656	E-18	18	19/30	10.65	99.15	84.28	66.10	47.78
5858	37F657	E-16	16	19/29	12.68	119.40	101.49	79.60	65.44
Available in Colors 1-6 and 11-19. Specify Color.									
5859	37F1671	E-14	14	19/27	18.28	172.66	146.25	114.71	95.25
Available in Colors 1 and 11-19. Specify Color.									
5859/12	37F1672	E-12	12	19/25	29.29	200.58	178.14	139.72	118.26
On Tracer Colors Add to Above					1.05	7.00	6.00	5.00	4.00

TYPE EE — EXTRUDED (1000 VOLTS)

Single conductor stranded silver plated copper, TFE extruded Teflon insulation. Temperature rating —65°C to +200°C. 1000 volts. Nom. wall thickness .014".
Available in Colors 1-19. Specify Color.

Alpha No.	Stk. No.	Mil Type	Cond. AWG	Cond. Str.	100 Feet	Per 1000 Feet 1M-4999	5M-9999	10M-24999	25M-49999
5874	37F564	EE-24	24	19/36	8.69	82.30	69.75	54.87	37.31
5875	37F565	EE-22	22	19/34	10.31	98.56	83.77	65.71	43.94
5876	37F566	EE-20	20	19/32	12.66	119.10	101.24	79.40	53.26
58874	37F567	EE-18	18	19/30	15.38	146.31	124.36	97.54	65.71
On Tracer Colors Add to Above					1.05	7.00	6.00	5.00	4.00

MIL-W-16878D TEFLON WRAP JACKET OVER SHIELD

Each conductor stranded silver plated copper. Type E extruded .010" TFE teflon insl. Color coded, cabled, braided silver plated copper shield. Sintered wrapped white teflon tape jacket overall. Temp. Rating: —65°C to +200°C, voltage rating: 600 V.

Alpha No.	Stock No.	No. Cond.	Co. Sz.	Con. Strand	Nom. O.D.	100 Feet
2824	37F1029A	1	22	19/34	.102"	47.25
2824/2	37F1042A	2	22	19/34	.154"	87.15
2826	37F1028A	1	16	19/29	.130"	93.75
2826/2	37F1027A	2	16	19/29	.230"	153.00
2827	37F1045A	1	20	19/32	.110"	55.95
2827/2	37F1046A	2	20	19/32	.170"	99.75
2829	37F1049A	1	18	19/30	.120"	66.75
2829/2	37F1050A	2	18	19/30	.190"	125.25

MIL-W-16878D TEFLON FEP EXTRUDED JACKET OVER SHIELD

Stranded silver plated copper type E extruded TFE insulation, color coded. Rated —65°C to +200°C. 600 v.

2831	37F1053A	1	24	19/36	.085"	38.53
2831/2	37F1054A	2	24	19/36	.130"	64.35
2831/3	37F1055A	3	24	19/36	.135"	94.65
2834	37F1056A	1	22	19/34	.091"	43.50
2834/2	37F1057A	2	22	19/34	.150"	78.75
2834/3	37F1058A	3	22	19/34	.158"	103.65
2837	37F1059A	1	20	19/32	.100"	50.25
2837/2	37F1060A	2	20	19/32	.160"	89.85
2837/3	37F1061A	3	20	19/32	.170"	123.15
2839	37F1062A	1	18	19/30	.110"	60.45
2839/2	37F1063A	2	18	19/30	.188"	121.20
2839/3	37F1064A	3	18	19/30	.207"	150.60
2836	37F1065A	1	16	19/29	.123"	87.75
2836/2	37F1066A	2	16	19/29	.220"	147.75

UNINSULATED TINNED COPPER WIRE Meet MIL-W-3861
Type S—QQ-W-343 Type S—ASTM-B-33

Pure electrolytic soft, drawn, solid, copper properly annealed and tinned. Used for coil winding, ground wire, etc.

Alpha No.	Stock No.	AWG	Cir. MIL	Nom. O.D.	100 Ft.	1000 Ft.
299/3	37F1131	30	100.5	.010"	.72	3.45
299/2	37F1132	28	159.8	.013"	.72	3.52
299/1	37F1133	26	254.1	.016"	.73	3.60
299	37F1134	24	404.0	.020"	.79	4.20
298	37F1135	22	642.4	.025"	.86	4.80
297	37F1136	20	1022.0	.033"	1.09	7.20
296	37F1137	18	1642.0	.040"	1.57	11.40
295	37F1138	16	2583.0	.051"	1.87	14.70
294	37F1139	14	4107.0	.065"	3.07	22.95
293	37F1140	12	6530.0	.082"	4.27	35.25

Cords, Braid & Test Lead Wire

SHIELDING AND BRAIDING

TUBULAR BRAID
Meet MIL QQ-B-575

Woven tinned copper braid. Completely round and self-supporting. Shielding coverage is 95% or more. Current capacity in amps is rated in free air at 65°F.

Alp. No.	Stock No.	I.D.	AWG Equiv.	Cir. MIL	Amp.	100 Ft.
2160	37F1156	1/32"	22	640	7	3.38
2162	37F1157	1/16"	19	1290	11	6.60
2164	37F1158	7/64"	16	1620	19	10.20
2166	37F1159	1/8"	15	3260	25	10.95
2168	37F1160	11/64"	14	4100	32	13.50
2170	37F1161	13/64"	11	7640	46	20.70
2172	37F1162	3/8"	10	10400	53	27.60
2174	37F1163	1/2"	9	13100	62	39.60
2176	37F1164	25/32"	7	20900	88	54.00

Flat Braid

A woven braid composed of tinned copper strands which is rolled flat at the time of manufacture to a specific width. High current carrying capacity. Extremely flexible.

Alp. No.	Stock No.	Flat Width	Thick	AWG Equiv.	Cir. MILS	A.	100 Ft.	1000 Ft.
1221	37F1144	.025	.015	26	200	4.0	4.35	36.15
1222	37F1145	1/32"	.020	24	400	6.0	4.65	38.70
1223	37F1146	3/64"	.020	22	600	7.0	4.87	41.25
1224	37F1147	5/32"	.020	19	1200	11.0	5.47	48.45
1229	37F1148	1/8"	.020	18	1800	16.0	6.15	54.15
1230	37F1149	3/16"	.020	15	3000	25.0	6.75	60.30
1231	37F1150	1/4"	.030	14	4200	32.0	9.15	84.15
							100'	500'
1232	37F1151	3/8"	.030	11	7200	46.0	14.62	70.87
1233/2	37F1152	1/2"	.030	10	9600	53.0	18.60	90.97
1233	37F1153	5/8"	.030	10	9600	53.0	19.65	96.00
1234	37F1154	3/4"	.040	7	20800	85.0	45.00	220.50
1235	37F1155	1"	.045	7	20800	85.0	48.15	236.25
1239	37F1547	1 3/8"	.050"	5	33700	100.0	54.60	268.50
							100'	.....
1240	37F1548	1 1/2"	.060"	3	53064	150.0	76.50	.....
1241	37F1549	1 3/4"	.080"	00	125424	280.0	153.00	.....
1242	37F1550	2"	.120"	000	154368	310.0	192.00	.....
							100'	
1242/1	37F1551	2 1/4"	.150"	000	168840	320.0	207.00	.....
1242/2	37F1552	2 1/2"	.170"	000	192000	340.0	271.50	.....
1243/3	37F1553	2 3/4"	.180"	0000	216000	370.0	297.00	.....
1242/4	37F1554	3"	.200"	0000	225000	390.0	370.50	.....

TEST LEAD WIRE

For apparatus requiring extra flexible insulated wire. Single conductor, stranded tinned copper, rubber insulation.

Heavy Duty Type

Alp. No.	Stock No.	Color	Cond. Size	Cond. Strand	Nom. O.D.	100 Ft.	1000 Ft.
1638	37F1403	Red	18	65/36	.230"	5.63	48.60
1638	37F1404	Black	18	65/36	.230"	5.63	48.60

Military Type Meet MIL-W-13160B

1639	37F1405	Red	18	65/36	.150"	4.35	35.85
1639	37F1406	Black	18	65/36	.150"	4.35	35.85

Standard Type

Alp. No.	Stock No.	Color	Cond. Size	Cond. Strand	Nom. O.D.	100 Ft.	1000 Ft.
1632	37F1397	Red	20	41/36	.125"	2.93	25.20
1632	37F1398	Black	20	41/36	.125"	2.93	25.20
1635	37F1399	Red	20	41/36	.140"	3.00	26.40
1635	37F1400	Black	20	41/36	.140"	3.00	26.40
1636	37F1401	Red	18	65/36	.140"	3.60	28.80
1636	37F1402	Black	18	65/36	.140"	3.60	28.80

SHIELDED TEFLON CABLES

Each conductor stranded silver plated copper, type E extruded TFE .010" insulation, braided silver plated copper shield over conductor(s). 90% coverage. Temperature rating —65° to +200°C. Voltage rating 600 volts. Resistant to acids, alkalis, oil, flame, moisture, solvents and fungus. NO OUTER COVERING OVER SHIELD.

Alpha No.	Stock No.	No. Cond.	Co. Sz.	Cond. Strand	Nom. O.D.	100 Feet
2812	37F1033A	1	22	19/34	.075"	21.75
2812/2	37F1034A	2	22	19/34	.124"	45.45
2812/3	37F1035A	3	22	19/34	.132"	65.25
2812/4	37F1036A	4	22	19/34	.146"	78.75
2815	37F1037A	1	20	19/32	.083"	25.50
2815/2	37F1038A	2	20	19/32	.142"	57.75
2815/3	37F1039A	3	20	19/32	.151"	77.25
2815/4	37F1040A	4	20	19/32	.168"	96.75
2818	37F1041A	1	18	19/30	.093"	30.45

DUE TO THE UNSTABLE COPPER MARKET WIRES WILL BE SOLD AT PRICES IN EFFECT AT TIME OF SHIPMENT

REPLACEMENT STRAIGHT CORD SETS

2 conductor black rubber cord with black molded plastic plug on one end, the other end has stripped conductors. They are U.L. and CSA approved. Can be used for business machines, small electrical tools, and home appliances. 300 volt rating.

#18—7 Amp 2 Conductor Cord Sets #16—10 Amp

Alp. No.	Stock No.	Co. Sz.	Cond. Strand	U.L. Type	Cord Lgth.	1-9	10-24	25-up
600	37F1107	18	41/34	SV	6	.84	.76	.71
602	37F1108	18	41/34	SV	9	.96	.86	.82
604	37F1109	18	41/34	SV	12	1.24	1.12	1.05
606	37F1110	18	16/30	SJ	8	1.00	.90	.85
608	37F1111	18	16/30	SJ	10	1.08	.97	.92
610	37F1112	16	26/30	SJ	8	1.12	1.01	.95
612	37F1113	16	26/30	SJ	10	1.26	1.13	1.07

#18—7 Amp 3 Conductor Cord Sets #16—10 Amp

615	37F1412	18	16/30	SJ	6	1.06	.95	.90
616	37F1413	18	16/30	SJ	9	1.38	1.24	1.17
618	37F1414	16	26/30	SJ	6	1.47	1.32	1.25
619	37F1415	16	26/30	SJ	9	1.57	1.41	1.33

FLAT RIBBON CABLE

MULTI-CONDUCTOR **PLASTIC INSULATION**
CONDUCTORS PER MIL-W-16878D **TYPE C**

Each conductor stranded copper, color coded .016" polyvinyl-chloride insulation. Conductors bonded together to form flat ribbon cable. Temp. ratings: —55°C to +105°C. Voltage rating: 1000 v. Conductors fully color coded and easily separated for neat terminations. All size #22 (7/30) stranding.

Alpha No.	Stock No.	No. of Cond.	Nom. O.D.	100' Spl. Each	1000' Spl. Each
3504	37F1255	4	.065 x .260"	14.48	137.10
3508	37F1256	8	.065 x .520"	23.63	228.90
3512	37F1257	12	.065 x .780"	38.55	337.70
3516	37F1258	16	.065 x 1.040"	53.40	519.00
3520	37F1259	20	.065 x 1.300"	65.85	643.05

UNINSULATED TINNED COPPER WIRE Meet MIL-W-3861

Type S—QQ-W-343 Type S—ASTM-B-33

Pure electrolytic soft, drawn, solid, copper properly annealed and tinned. Used for coil winding, ground wire, etc.

Alpha No.	Stock No.	AWG	Cir. MIL	Nom. O.D.	100 Ft.	1000 Ft.
299/3	37F1131	30	100.5	.010"	.72	3.45
299/2	37F1132	28	159 8	.013"	.72	3.52
299/1	37F1133	26	254.1	.016"	.73	3.60
299	37F1134	24	404 0	.020"	.79	4.20
298	37F1135	22	642.4	.025"	.86	4.80
297	37F1136	20	1022 0	.033"	1.09	7.20
296	37F1137	18	1642 0	.040"	1.57	11.40
295	37F1138	16	2583.0	.051"	1.87	14.70
286	37F1139	14	4107.0	.065"	3.07	22.95
289	37F1140	12	6530.0	.082"	4.27	35.25

AIR CONDITIONER EXTENSION CORDS

Flat gray plastic cord with molded 3-blade rt. angle plug on 1 end and 3 wire U ground connector molded on other. Rated, 15 A. 125 working volts. 3 conductor U.L. approved U.L. type: SPT-3. Nom. O.D. of cord: .175" x .475".

Alpha No.	Stock No.	Conductor Size	Conductor Strand	Cord L. (feet)	1-9	10-24	25-up
645	37F1445	14	41/30	3	1.77	1.59	1.50
646	37F1446	14	41/30	6	2.23	2.01	1.90
647	37F1447	14	41/30	9	2.68	2.41	2.28
648	37F1448	14	41/30	12	3.52	3.17	2.99
649	37F1449	14	41/30	15	4.27	3.84	3.63

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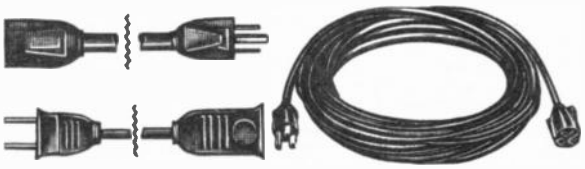
Power Cords, Audio Cable

alpha
Alpha Wire a division of Lorel Corporation

EXTENSION CORD SETS



2 or 3 conductor cords with black molded plastic male and female plug on either end. 3 conductor cords have 3 pronged plugs. 15 Amps, 125 Volts. Application: Small business machines, vacuum cleaners, lamps, movie projectors, or any other home appliance. 3 conductor cord used when 1 conductor requires grounding. UL and CSA approved. All SJ except 620 and 622-SV. All 7 Amp rating except *10 Amp.

2 CONDUCTOR CORDS

Alp. No.	Stock No.	Co. Sz.	Cond. Strand	Nom. O.D.	Cord Lgth.	1-9	10-24	25-up
620	37F1114	18	41/34	.245"	6	.93	.84	.79
622	37F1115	18	41/34	.245"	9	1.05	.95	.89
624	37F1116	18	16/30	.300"	19	1.23	1.11	1.05
626	37F1117	18	16/30	.300"	25	2.85	2.57	2.42
628*	37F1118	16	26/30	.325"	10	1.41	1.27	1.20
630*	37F1119	16	26/30	.325"	25	4.21	3.79	3.58
632*	37F1120	16	26/30	.325"	50	6.15	5.54	5.23
634*	37F1121	16	26/30	.325"	100	11.10	9.99	9.44

3 CONDUCTOR CORDS

636	37F1122	18	16/30	.365"	10	1.72	1.55	1.46
638	37F1123	18	16/30	.365"	25	3.36	3.02	2.86
639	37F1416	18	16/30	.330"	50	7.42	6.68	6.31
640	37F1417	16	26/30	.365"	10	3.15	2.84	2.68
642	37F1418	16	26/30	.365"	25	6.07	5.46	5.16
644	37F1419	16	26/30	.365"	50	9.45	8.51	8.03

NEOPRENE SERVICE AND POWER CORDS

For use wherever rough usage power line is required. Neoprene insulation for protection against oils, acids, etc. U/L approved. Conductors stranded bare copper. Outside jacket tough black neoprene.

Alpha No.	Stock No.	U/L Type	No. of Cond.	Cond. Size	Nom. O.D.	100 Ft.	250 Ft.
1931	37F1359	SVO	2	18	.250"	10.95	25.20
1932	37F1360	SJO	2	18	.310"	13.58	32.10
1932/3	37F1361	SJO	3	18	.330"	17.10	39.00
1933	37F1362	SJO	2	16	.325"	17.10	39.00
1933/3	37F1363	SJO	3	16	.365"	23.33	54.60
1934	37F1364	SO	2	18	.390"	22.13	51.66
1934/3	37F1365	SO	3	18	.405"	26.70	63.00
1935	37F1366	SO	2	16	.410"	24.30	57.00
1935/3	37F1367	SO	3	16	.430"	33.30	79.50
1936	37F1368	SO	2	14	.540"	39.00	93.75
1936/3	37F1369	SO	3	14	.560"	47.10	114.00
1937	37F1370	SO	2	12	.605"	48.30	117.00
1937/3	37F1371	SO	3	12	.635"	60.30	147.00
1937/4	37F1372	SO	4	12	.665"	73.50	180.00
1938	37F1373	SO	2	10	.640"	59.10	144.00
1938/3	37F1374	SO	3	10	.690"	79.50	187.50
1938/4	37F1375	SO	4	10	.745"	98.10	234.00

PLASTIC INTERCOM CABLE

For use in balanced intercom systems, annunciators, telephones, signal systems and alarm systems. Conductor tinned copper. Conductor size: #22 solid. Outer Jacket: gray polyvinylchloride.

Alpha No.	Stock No.	No. of Pairs	No. of Cond.	Nom. Jacket	Nom. O.D.	100 Ft.	500 Ft.
1300	37F1383	1	2	.020"	.130"	2.78	10.88
1302	37F1384	2	4	.020"	.195"	4.50	19.50
1304	37F1385	3	6	.020"	.220"	5.93	26.63
1307	37F1386	6	12	.020"	.275"	10.05	46.50
1307/7	37F1387	7	14	.020"	.285"	12.53	60.30
1307/9	73F1388	9	18	.020"	.310"	14.25	68.25
1308/11	37F1389	11	22	.020"	.340"	17.25	84.00
1309	37F1390	13	26	.025"	.380"	19.65	96.00
1309/15	37F1391	15	30	.025"	.400"	23.40	114.00
1310	37F1392	16	32	.025"	.420"	30.90	148.50
1313	37F1393	27	54	.035"	.510"	41.25	203.25
1313/31	37F1394	31	62	.035"	.555"	89.70	430.50
1313/41	37F1395	41	82	.035"	.630"	126.00	615.00
1314	37F1396	51	102	.045"	.735"	162.00	780.00

MULTI-CONDUCTOR AUDIO CABLE

Outer Plastic Jacket

For unbalanced intercom systems, low voltage relay control cable, PA systems and electronic computer cable. Suitable for outdoor installations. Each conductor stranded tinned copper with polyvinyl-chloride insulation, color coded for easy identification. .010 wall—All .020 jacket except (*) .025" (**) .035".

Alpha No.	Stock No.	No. of Cond.	Nom. O.D.	Cond. Size	Cond. Strand	100 Ft.	500 Ft.
1172	37F1336	2	.140"	22	7/30	3.30	13.65
1173	37F1337	3	.145"	22	7/30	4.05	17.25
1174	37F1338	4	.170"	22	7/30	5.10	22.50
1175	13F1339	5	.175"	22	7/30	6.23	28.13
1176	37F1340	6	.185"	22	7/30	8.25	38.40
1177	37F1341	7	.190"	22	7/30	9.60	45.15
1178	37F1342	8	.200"	22	7/30	10.43	49.13
1179	37F1343	9	.225"	22	7/30	11.63	55.05
1180	37F1344	10	.235"	22	7/30	12.60	60.00
1181	37F1345	12	.255"	22	7/30	13.65	65.25
1181/15	37F1346	15	.280"	22	7/30	32.25	148.50
1181/20	37F1347	20	.310"	22	7/30	44.25	203.25
1181/25	37F1348	25	.340"	22	7/30	56.25	262.50
1181-30	37F1349	30	.365"	22	7/30	70.50	322.50
1181/40*	37F1512	40	.425"	22	7/30	114.00	510.00
1181/50**	37F1513	50	.500"	22	7/30	138.00	622.50
1181/60	37F1514	60	.530"	22	7/30	163.50	750.00

UNSHIELDED RUBBER CABLE

Designed for heavy duty use. Each conductor stranded tinned copper with tough black rubber jacket. Size #20, strand 26/34. Nom. wall thickness .020", Nominal jacket .035":

Type	Stock No.	No. of Cond.	Nom. O.D.	100 Ft.	500 Ft.
1244	37F1350	2	.280"	12.53	59.70
1245	37F1351	3	.285"	13.73	66.38
1246	37F1352	4	.300"	15.45	75.15
1247	37F1353	5	.340"	20.70	97.50
1247/6	37F1354	6	.360"	25.20	120.00
1247/7	37F1355	7	.380"	27.68	132.38
1247/8	37F1356	8	.400"	31.20	150.00
1247/10	37F1357	10	.440"	51.00	237.00
1247/12	37F1358	12	.540"	69.00	330.00

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alpha Audio, Control & Instrumentation Cable

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UNSHIELDED AUDIO CABLE

Multi-conductor cable with plastic jacket. Each conductor tinned copper, color-coded polyvinylchloride insulation. Conductors twisted. Gray jacket. Suitable for outdoor installations, intercoms, remote control switches, telephones. Operating temperature: —20 C to +60 C. Nominal jacket: .020". Operating voltage 350V, except *200V.

SOLID

Alpha No.	Stock No.	No. of Cond.	Conductor Sz.	Conductor Strand	Nom. O.D.	100 Feet	500 Feet
*1793	37F1642	2	22	1	.130"	3.30	13.35
*1794	37F1643	3	22	1	.140"	4.50	19.58
*1794/4	37F1644	4	22	1	.160"	6.45	27.60
1795	37F1645	2	20	1	.170"	5.48	24.45
1796	37F1646	3	20	1	.180"	7.50	34.50
1796/4	37F1647	4	20	1	.200"	9.00	41.85
1797	37F1648	2	18	1	.190"	6.00	27.15
1798	37F1649	3	18	1	.200"	8.33	38.70
1798/4	37F1650	4	18	1	.220"	10.50	49.43
1799	37F1651	2	16	1	.215"	10.65	50.85
1799/3	37F1652	3	16	1	.230"	12.68	61.05
1799/4	37F1653	4	16	1	.250"	17.25	84.00

STRANDED

	37F1654	2	22	7/30	.135"	4.28	16.20
*1894	37F1655	3	22	7/30	.145"	5.25	23.33
*1894/4	37F1656	4	22	7/30	.170"	7.13	32.55
1895	37F1657	2	20	10/30	.180"	4.80	20.93
1896	36F1658	3	20	10/30	.190"	8.18	37.88
1896/4	37F1659	4	20	10/30	.215"	9.75	45.60
1897	37F1660	2	18	16/30	.200"	6.53	29.55
1898	37F1661	3	18	16/30	.210"	10.35	48.75
1898/4	37F1662	4	18	16/30	.240"	14.18	67.80
1899	37F1663	2	16	26/30	.225"	9.15	43.50
1899/3	37F1664	3	16	26/30	.245"	16.05	74.10
1899/4	37F1665	4	16	26/30	.270"	21.60	102.00
1891	37F1666	2	14	41/30	.260"	15.45	74.25
1891/3	37F1667	3	14	41/30	.280"	20.63	100.20
1892	37F1668	2	12	65/30	.300"	21.45	105.00
1892/3	37F1669	3	12	65/30	.320"	32.25	159.00

SHIELDED MICROPHONE CABLE

Single conductor stranded tinned copper, white polyethylene insulation. Braided or spiral wrapped shield, gray polyvinylchloride jacket overall. For lapel, ribbon, crystal mikes, and Hi-Fi connections. B-Braid, S-Spiral.

Type	Stock No.	Cond. Size	Cond. Strand	Nom. O.D.	Shield Type	100 Ft.	1000 Ft.
1702	37F1376	26	7/34	.110"	S	4.43	41.10
1703	37F1377	24	10/34	.145"	B	4.65	42.75
1704	37F1378	24	10/34	.190"	B	6.30	59.25
1705	37F1379	24	10/34	.110"	S	5.03	46.50
1706	37F1380	20	26/34	.175"	B	8.55	78.00

2 CONDUCTOR MIKE CABLE

1709	37F1381	24	10/34	.190"	S	10.28	95.10
1710	37F1382	22	16/34	.230"	B	8.93	81.60

LOW CAPACITANCE SHIELDED MICROPHONE CABLE PLASTIC JACKET CELLUAR FOAM POLYETHELENE INSULATION

Stranded tinned copper conductor (S), white foam low loss polyethelene insulation. Braided tinned copper shield, chrome gray polyvinylchloride jacket. All .030" jacket except 2310 which is .020". Foam polyethelene provides lower capacitance and loss for long runs of cable. All single Cond. except 2323 which is 2 conductor.

Alpha No.	Stock No.	Cond. Size	Cond. Strand	Capacity* Nom./Ft.	Nom. O.D.	100 Ft.	1000 Ft.
2310	37F1295	26	3/34** 4/34**	30 MMF	.115"	6.75	60.30
2311	37F1296	24	10/34	20 MMF	.180"	8.10	74.10
2312	37F1297	24	10/34	15 MMF	.225"	10.58	98.10
2323	37F1298	22	16/34	11 MMF	.300"	17.70	162.00

*Between one cond. and remaining cond. connected to shield
**3 strands of tinned copper and 4 strands of tinned copperweld

SHIELDED MICROPHONE CABLE
Neoprene Jacket—Heavy Duty

Each conductor stranded tinned copper, color coded rubber insulation, cotton wrap, braided tinned copper shield, cotton wrap, tough black neoprene jacket overall. Shielded microphone and electronic power cable. Control circuits. Video and Audio interconnecting cable. Oil and acid resistant. Will resist aging and rough usage. All .035" nom. jacket thickness.

Alpha No.	Stock No.	No. Cond.	Co. Sz.	Cond. Strand	Nom. O.D.	100 Feet	500 Feet
1449	37F689	1	18	41/34	.240"	18.15	87.75
1450	37F690	2	18	41/34	.295"	23.85	117.00
1451	37F691	3	18	41/34	.305"	44.10	202.50
1452	37F692	4	18	41/34	.330"	54.00	252.00
1450/16	37F470	2	16	65/34	.335"	45.90	211.50
1451/16	37F471	3	16	65/34	.355"	55.20	258.00
1452/16	37F472	4	16	65/34	.385"	62.85	296.25

CONTROL AND INSTRUMENTATION CABLE

MULTI-CONDUCTOR SHIELDED PLASTIC CABLE PER MIL-W-16878D

Each conductor stranded tinned copper. Color coded, polyvinylchloride insulation, cabled, mylar wrap. Braided tinned copper shield 90% coverage, chrome gray polyvinylchloride jacket overall. Temperature rating: —55°C to +105°C. Resistant to acids, alkalis, oils, flame, moisture, fungus, and solvents. May be used as interconnecting cables for electronic equipment, instrumentation and control cable, for telemetry data, or for remote control of sensitive recording instruments.

Miniature Shield Control Cable—600 Volt

All: Cond. Sz., B-28; Cond. Strand, 7/36; .010" insul. thick.

Alpha No.	Stock No.	Cond. No.	Nom. Jacket	Nom. O.D.	100 Feet	1000 Feet
3302	37F1272	2	.012"	.125"	11.10	103.80
3303	37F1273	3	.012"	.130"	14.63	138.60
3304	37F1274	4	.012"	.140"	17.70	169.20
3306	37F1275	6	.015"	.170"	22.35	216.30
3308	37F1276	8	.015"	.175"	25.35	246.30
3310	37F1277	10	.018"	.210"	32.03	312.75
3312	37F1278	12	.018"	.215"	36.90	354.00
3315	37F1279	15	.020"	.230"	44.40	430.20
3320	37F1280	20	.022"	.260"	55.20	537.00

Heavy Duty Shielded Control Cable—1000 Volt

All: Cond. Sz., B-28; Cond. Strand, 7/36; .010" insul. thick.

3405	37F1281	5	.025"	.300"	45.00	436.20
3410	37F1282	10	.035"	.405"	79.50	780.00
3415	37F1283	15	.040"	.470"	108.00	1065.00
3420	37F1284	20	.045"	.530"	145.50	1440.00
3430	37F1285	30	.050"	.650"	217.50	2130.00

SHIELDED PLASTIC JACKET CABLE SPIRAL WRAPPED COPPER SHIELD

Each conductor stranded or solid tinned copper, color coded polyvinylchloride insulation, conductors twisted, spiral wrapped copper shield, gray polyvinylchloride jacket overall. Provides close to 100% shielded coverage for audio and RF frequencies.

† 2256/1 formerly 2156, 2256/3 formerly 3256. .020 wall jacket.

Alpha No.	Stock No.	No. Cond.	Cond. Size	Cond. Strand	Nom. O.D.	100 Feet	500 Feet
2254	37F1086	2	22	7/30	.195"	5.55	26.55
2254/3	37F1087	3	22	7/30	.190"	7.80	35.93
2255	37F1088	2	22	Solid	.170"	4.80	22.88
2256/1†	37F1089	1	20	10/30	.130"	4.80	22.95
2256	37F1090	2	20	10/30	.195"	5.78	27.83
2256/3†	37F1091	3	20	10/30	.210"	8.10	37.58
2258	37F1092	2	18	16/30	.230"	7.28	33.45
2258/3	37F1093	3	18	16/30	.235"	9.60	44.85

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SHIELDED PLASTIC JACKETED CABLE
Braided Copper Shield

Each conductor tinned copper, color coded polyvinylchloride insulation, conductors twisted, braided copper shield—gray polyvinylchloride jacket overall. Suitable for outdoor installation. A conventional type of braided shield providing approximately 75% coverage is particularly desirable where flexibility is required. All have .016" wall except 1750 and 1751—.020". 350 V. suggested working voltage except (*) 450 V.

Stranded

Alp. No.	Stock No.	No. Cond.	Cond. Size	Cond. Strand	Nom. O.D.	100 Feet	500 Feet
1736	37F1075	2	22	7/30	.185"	7.20	32.85
1737	37F1076	3	22	7/30	.200"	9.53	44.48
1738	37F1299	4	22	7/30	.210"	12.15	57.90
1741	37F1077	2	20	10/30	.200"	9.08	42.45
1742	37F1078	3	20	10/30	.220"	11.40	54.00
1743	37F1407	4	20	10/3C	.230"	16.65	81.00
1746	37F1079	2	18	16/30	.240"	11.55	55.35
1747	37F1080	3	18	16/30	.245"	16.43	79.95
1748	37F1081	2	16	26/30	.250"	16.43	79.88
1749	37F1408	3	16	26/30	.255"	22.50	110.25
1750*	37F1082	2	14	41/30	.290"	22.05	108.00
1751*	37F1409	3	14	41/30	.295"	31.20	150.00

SHIELDED MULTI-CONDUCTOR CABLE

Plastic Jacket—Heavy Duty

Gray polyvinylchloride jacket overall. .035" jacket. .014" wall thickness. Suggested operating voltage 600V.

Alp. No.	Stock No.	No. Cond.	Co. Sz.	Cond. Strand	Nom. O.D.	100 Feet	500 Feet
1712	37F1515	2	20	26/34	.230'	11.40	53.85
1713	37F1410	3	20	26/34	.250'	11.40	54.08
1715	37F1411	4	20	26/34	.260"	13.20	62.93
1716	37F473	5	20	26/34	.275"	15.15	72.60
1717	37F474	6	20	26/34	.300"	30.00	147.75
1719	37F475	8	20	26/34	.330"	38.55	190.50
1721	37F476	10	20	26/34	.375'	48.00	237.00
1723	37F1516	12	20	26/34	.380'	75.00	372.00
1726	37F1517	15	20	26/34	.410"	118.50	577.50
1728	37F1518	20	20	26/34	.455"	153.00	750.00

SHIELDED PLASTIC JACKETED CABLE
MYLAR SUPPORTED ALUMINUM FOIL SHIELD

Each conductor tsranded tinned copper, color coded polyethylene insulation. Conductors cabled, wrapped mylar supported aluminum foil shield, 100% coverage, with drain wire laid parallel. Aluminum foil facing outward to provide maximum grounding contact. Chrome gray polyvinylchloride jacket overall. Temperature rating: —20°C to +60°C. Voltage rating: 400 V. Wall thickness: .016". Jacket thickness: .020".

Alpha No.	Stock No.	No. Cond.	Cond. Size	Cond. Strand	Nom. O.D.	100 Feet	500 Feet
2402	37F1286	2	22	7/30	.195	4.65	20.10
2403	37F1287	3	22	7/30	.210	5.63	25.05
2404	37F1288	4	22	7/30	.225	9.30	43.43
2412	37F1289	2	20	10/30	.210	5.55	24.60
2413	37F1290	3	20	10/30	.225	6.83	31.13
2414	37F1291	4	20	10/30	.240	11.18	52.80
2422	37F1292	2	18	16/30	.230	6.38	28.88
2423	37F1293	3	18	16/30	.245	8.40	39.08
2424	37F1294	4	18	16/30	.265	12.75	61.65
2432	37F1531	2	16	26/30	.255	11.93	57.38
2433	37F1532	3	16	26/30	.275	15.60	75.53
2442	37F1533	2	14	41/30	.290	16.35	79.50
2443	37F1534	3	14	41/30	.310	22.05	108.08

SHIELDED AUDIO & DATA CABLE
INDIVIDUALLY Shielded Multiple Pairs—Plastic Jacket

For audio, R.F. and pulse applications requiring superior circuit isolation. Each conductor tinned copper, color coded, high density polyethylene, .010 wall thickness conductors twisted into pairs, 22 gauge tinned copper drain wire. Mylar supported aluminum foil shield. Chrome grey PVC jacket overall.

No. 22 SOLID

Alp. No.	Stock No.	No. Cond.	Cond. Strand	Nom. Jkt. Thick. (In.)	Nom. O.D.(In.)	100 Feet	500 Feet
6000	37F1535	6	1	.025	.235	12.75	60.60
6002	37F1536	12	1	.030	.318	22.13	107.63
6004	37F1537	18	1	.030	.371	31.05	152.25
6006	37F1538	22	1	.035	.414	36.75	211.50
6008	37F1539	30	1	.040	.485	48.00	236.25

No. 22 STRANDED

Alp. No.	Stock No.	No. Cond.	Cond. Strand.	Nom. Jkt. Thick. (In.)	Nom. O.D.(In.)	100 Feet	500 Feet
6010	37F1540	6	7/30	.025	.252	13.65	62.25
6012	37F1541	12	7/30	.030	.342	25.05	122.25
6014	37F1542	18	7/30	.035	.410	36.75	181.50
6016	37F1543	22	7/30	.040	.457	42.75	212.25
6018	37F1544	30	7/30	.040	.523	56.55	250.50
6020	37F1545	38	7/30	.050	.570	77.85	387.75
6022	37F1546	54	7/30	.055	.687	114.00	564.00

RUBBER & NEOPRENE JACKETED CABLE

SHIELDED CONTROL CABLE
Rubber Insulated — Rubber Jacket

General purpose multi-conductor. For control circuits, video and audio interconnecting cable, broadcast and heavy duty studio use. Each conductor stranded tinned copper, color coded rubber insulation. Black rubber jacket over cotton wrap and braided tinned copper shield. Suggested operating temperature: —20°C to +60°C. Wall thickness: .020".

Alp. No.	Stock No.	No. Cond.	Cond. Size	Cond. Strand	Nom. O.D.	100 Ft.	500 Ft.
1250/18	37F1519	2	18	41/34	.295"	21.15	103.50
1250	37F1520	2	20	26/34	.270"	13.05	63.08
1251	37F1521	3	20	26/34	.285"	14.48	70.13
1252	37F1522	4	20	26/34	.305"	16.35	79.50
1253	37F1523	5-	20	26/34	.330"	21.15	103.50
1254	37F1524	6	20	26/34	.345"	26.10	124.50
1255	37F1525	7	20	26/34	.355"	28.80	139.50
1255/8	37F1526	8	20	26/34	.385"	32.25	156.75
1255/10	37F1527	10	20	26/34	.440"	66.00	315.00
1255/12	37F1528	12	20	26/34	.525"	91.50	442.50
1255/15	37F1529	15	20	26/34	.595"	118.50	577.50
1255/20	37F1530	20	20	26/34	.660"	147.00	720.00

SHIELD MULTI-CONDUCTOR CABLE
Neoprene Jacket—Heavy Duty

Designed for outdoor rough usage as interconnecting cables for electronic equipment, control cables for generator units, video and audio interconnecting cables, and for ground support equipment related to guided missile systems. .035 jacket.

Alp. No.	Stock No.	No. Cond.	Co. Sz.	Cond. Strand	Nom. O.D.	100 Feet	500 Feet
1454	37F693	6	18	41/34	.430"	74.70	355.50
1456	37F478	8	18	41/34	.465"	98.25	473.25
1458	37F479	10	18	41/34	.545"	120.30	583.50
1459	37F480	12	18	41/34	.625"	165.00	793.50

Make NEWARK Your One Dependable Source for Everything in Electronics
To Serve You Better — Eight Stocking Warehouses from Coast-to-Coast

Buy at Factory Competitive Prices at NEWARK

Coax Cable

ALPHA
POLYETHYLENE DIELECTRIC

A

B

C

E

F

Solid Polyethylene Dielectric RG Coaxial Cable. Conforms to Mil-C-17. In order to assure Newark customers of a product that will provide maximum reliability and unfailing performance, Alpha Wire maintains a fully equipped research laboratory. All cable is rigidly tested before shipment to insure it's physical and electrical performance. Min. order 100'.

C—Bare Copper
TC—Tinned Copper
SC—Silver Covered Copper
CW—Copper Covered Steel

Mfg. Type	Stock No.	RG Cable Type	Fig.	Inner Conductor Material	Inner Conductor O.D.	Dielectric O.D.	Jacket O.D.	OPR Volts RMS	Nom Imp Ohms	Cap. MMF/FT	100'	500'	1000-4999'	5000-9999'	10-000, 24.999'
9008	37F1451	8/U	A	C	.086	.295	.415	5,000	52	29.5	10.50	52.50	105.00	87.50	77.00
9009B	37F1453	9B/U	E	SC	.086	.285	.430	5,000	50	30	39.00	195.00	390.00	325.00	286.00
9010A	37F1454	10A/U	F	C	.086	.295	.415	5,000	52	29.5	15.00	82.50	165.00	137.50	121.00
9011	37F1455	11/U	A	TC	.048	.295	.415	5,000	75	20.5	9.08	45.30	90.60	75.00	66.44
9011A	37F1456	11A/U	A	TC	.048	.292	.412	5,000	75	20.5	10.50	52.50	105.00	87.50	77.00
9014A	37F1458	14A/U	E	C	.102	.383	.558	7,000	52	29.5	19.50	108.75	217.50	181.25	159.50
9017A	37F1459	17A/U	A	C	.188	.695	.885	11,000	52	29.5	40.50	217.50	435.00	362.50	319.00
9055B	37F1461	55B/U	E	SC	.032	.121	.206	1,900	53.5	28.5	10.80	54.00	108.00	90.00	79.20
9058	37F1462	58/U	A	C	.032	.121	.200	1,900	53.5	28.5	3.75	18.75	37.50	31.25	27.50
9058A	37F1463	58A/U	A	TC	.0375	.120	.199	1,900	50	29.5	4.35	21.75	43.50	36.25	31.90
9058C	37F1464	58C/U	A	TC	.0375	.120	.199	1,900	50	29.5	4.65	23.25	46.50	38.75	34.00
9059	37F1465	59/U	A	CW	.0253	.150	.250	2,300	73	21	3.75	41.25	41.93	34.94	30.75
9059B	37F1467	59B/U	A	CW	.023	.150	.246	2,300	75	20.5	4.95	24.75	49.50	41.25	36.30
9062	37F1468	62/U	B	CW	.025	.151	.250	750	93	13.5	4.75	22.88	45.75	38.13	33.55
9062A	37F1469	62A/U	B	CW	.025	.151	.249	750	93	13.5	5.70	28.50	57.00	47.50	41.80
9063B	37F1470	63B/U	B	CW	.0253	.295	.415	1,000	125	10	12.00	60.00	120.00	100.00	88.00
9071B	37F1471	71B/U	C	CW	.025	.151	.250	750	93	13.5	8.25	41.25	82.50	68.75	60.50
9174	37F1473	174/U	A	CW	.019	.060	.105	1,500	50	30	3.30	16.50	33.00	27.50	24.20
9212	37F1474	212/U	E	SC	.056	.189	.336	3,000	50	29.5	24.00	120.00	240.00	200.00	176.00
9213	37F1475	213/U	A	C	.090	.292	.412	5,000	50	30.5	9.90	51.00	180.00	90.00	79.20
9214	37F1476	214/U	E	SC	.090	.292	.432	5,000	50	30.5	39.00	195.00	399.00	325.00	286.00
9215	37F1477	215/U	F	C	.090	.292	.412	5,000	50	30.5	12.00	63.00	135.00	123.75	99.00
9218	37F1478	218/U	A	C	.195	.690	.880	11,000	50	30	37.50	195.00	420.00	350.00	308.00
9219	37F1479	219/U	F	C	.195	.690	.880	11,000	50	30	42.00	225.00	450.00	375.00	330.00
9223	37F1480	223/U	E	SC	.036	.120	.216	1,900	50	30	13.80	69.00	138.00	115.00	101.20

TEFLON DIELECTRIC RG CABLE

Single conductor, stranded silver plated copperweld coaxial cable with braided silver plated shield. Temperature range-65° to +200°C. Excellent dielectric characteristics, extremely low loss. Constant dissipitation factor over full frequency range. Jacket abrasion resistant. Manufactured to meet or exceed applicable military specs., including MIL-C-17C.

Mfg. Type	Stock No.	RG Type	Cond.	Nom. Wall Thick.	Nom. Jkt. Thick.	Jacket Type	Max. O.D.	Cap. Nom.	Imped. Ohms	Max. Oper. Voltage	100'	500'	1000-4999'	5000-9999'
9161	37F1489	161/U	7/.004*	.620	.006	Nylon**	.090	27.5	50±2	1200	18.38	78.45	153.90	112.86
9178B	37F1490	178B/U	7/.004	.012	.010	Extruded FEP	.075	27.9	50±2	1000	16.35	71.25	148.50	108.90
9179B	37F1491	179B/U	7/.004	.021	.010	Extruded FEP	.105	20.4	75±3	1200	26.10	118.50	231.00	169.40
9180B	37F1492	180B/U	7/.004	.045	.010	Extruded FEP	.145	15.3	93±2	850	36.00	168.00	330.00	242.00
9187A	37F1482	187A/U	7/.004	.024	.012	Fused TFE Tape	.110	19.5	75±3	1200	23.40	104.85	203.70	149.38
9188A	37F1484	188A/U	7/.0067	.020	.012	Fused TFE Tape	.110	27.5	50±2	1200	22.95	104.25	199.50	146.30
9195A	37F1486	195A/U	7/.004	.045	.014	Fused TFE Tape	.155	14.5	95±3	1500	40.20	189.00	372.00	272.80
9196A	37F1488	196A/U	7/.004	.011	.012	Fused TFE Tape	.080	28.5	50±2	1000	18.90	82.50	159.00	116.60
9316	37F1493	316/U	7/.0067	.020	.010	Extruded FEP	.102	27.5	50±2	1200	28.50	130.50	255.00	187.00

*Silver Cadmium Bronze
**Operating Temperature: —55°C, — +105°C.
Conductors Silver Plated Copperweld Except 161/U, as shown.

MICRODOT
COAXIAL CABLES

The variety of Microdot coaxial cables now being stocked at Newark offer design solution for your application. Features: light weight, small diameter, convenient bend radius and high operating temperatures. The dielectric material is "Teflon" for most types. 50-3804 is polyethylene. *At 400 mc. (db/ft). Av. Shipping wt., 2½lbs. per 100 ft.

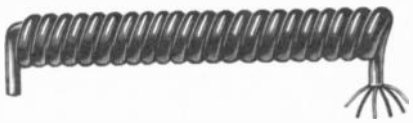
Constructed with an inner conductor surrounded by a dielectric which is enclosed by an outer conductor that also acts as a shield. A protective jacket covers the outer conductor and acts as insulation.

Cable is composed of two insulated single conductor cables or hookup wires twisted together, having a common shield and protective jacket.

Stock No.	Type No.	Ohms	Comparable to Mil C-17C	Attenuation*	MMF per foot	O.D. Max. (in.)	PER FOOT 1-99	PER FOOT 100-4999	PER FOOT 500-up
37F820	202-3927	125	Twinax	.27	11	.120	.46	.42	.39
37F814	202-3034	160	Twinax	.27	9	.168	.77	.71	.66
37F812	250-3902	50	.....	.25	17	.075	.15	.125	.116
37F817	250-4012	50	.....	.29	29	.075	.19	.169	.157
37F800	250-3804	54	Minninoise	.30	29	.088	.18	.165	.15
37F808	250-38008	50	Hi Temp Minninoise	.35	29	.085	.48	.45	.415
37F827	250-3957	50	RG-178 B/U	.29	29	.075	.20	.173	.161
37F802	250-3920	50	RG-196-U	17	16	.135	.25	.218	.202
37F833	250-3960	50	RG-196 A/U	29	29	.080	.25	.219	.204
37F829	275-3925	75	RG-179 B/U	.21	19	.105	.22	.193	.179
37F804	275-3920	75	RG-187/U	.21	19	.110	.29	.25	.232
37F819	293-3920	93	.....	.17	16	.135	.50	.46	.42
37F811	293-3913	100	Low Capitance	.25	12	.130	.15	.127	.118

Custom Cord and Cable Corp.

POWER RETRACTILE COILED CORDS



Long lasting power cords have stranded copper conductors with color coded rubber insulation and rugged weather and oil resistance jacket. Coil cord temp. range —20°C to 90°C. Power coil cords are used on electric tools, electrical appliances, and any where to prevent loose wires from tangling and twisting. Two & three cond. 18ga rated at 7 amps 300V, four cond. 18ga at 5.6 amps 300V, and two & three cond. 16ga at 10 amps 300V. Retracted lengths 1, 2, &4 ft. extend to 6, 12, & 25 ft.

Stk. No.	Type	Cond/Size/Length	1-24	25-99	100-249	250-499
36F1400	8218SV-12	2/18 ga 12" SVO	1.05	.95	.85	.75
36F1401	8318SJ-12	3/18 ga 12" SJO	1.59	1.44	1.29	1.14
36F1402	8316SJ-12	3/16 ga 12" SJO	1.62	1.46	1.30	1.14
36F1403	8218SV-24	2/18 ga 2' SVO	2.60	2.34	2.08	1.82
36F1404	8218SJ-24	2/18 ga 2' SJO	2.90	2.61	2.32	2.03
36F1405	8318SJ-24	3/18 ga 2' SJO	3.80	3.42	3.04	2.66
36F1406	8418SJ-24	4/18 ga 2' SJO	4.25	3.83	3.41	2.29
36F1407	8216SJ-24	2/16 ga 2' SJO	3.60	3.24	2.88	2.52
36F1408	8316SJ-24	3/16 ga 2' SJO	4.55	4.10	3.65	3.20
36F1409	8218SV-48	2/18 ga 4' SVO	5.05	4.55	4.05	3.55
36F1410	8218SJ-48	2/18 ga 4' SJO	5.75	5.18	4.61	4.04
36F1411	8318SJ-48	3/18 ga 4' SJO	7.55	6.80	6.05	5.30
36F1412	8418SJ-48	4/18 ga 4' SJO	8.50	7.65	6.80	5.95
36F1413	8216SJ-48	2/16 ga 4' SJO	7.15	6.44	5.73	5.02
36F1414	8316SJ-48	3/16 ga 4' SJO	9.10	8.19	7.28	6.37

COMMUNICATION COILED CORDS

SHIELDED

Cords have individual shields to eliminate external electrical interference. Each conductor is extra flexible #23 AWG-21/36 color coded, rated at 1 amp 120V, and have rubber outer jacket. Used in communication equipment, microphones, headsets, etc. where a shielded conductor is needed. Retracted lengths 1, 2, & 4 ft. extend to 6, 12, & 25 ft.

Stk. No.	Type	Cond/Size/Length	1-24	25-99	100-249	250-499
36F1415	2323R-11½	3/23 ga 1 sh 11½"	1.46	1.32	1.18	1.04
36F1416	2124R-7½	1/24 ga sh 7½"	.98	.89	.80	.71
36F1417	2423R-12	4/23 ga 2 ind sh 12"	1.73	1.56	1.39	1.22
36F1418	2124R-24	1/24 ga sh 2'	3.25	2.93	2.61	2.29
36F1419	2223R-24	2/1-23 1-24 sh 2'	4.50	4.05	3.60	3.15
36F1420	2323R-24	3/2-23 1-24 sh 2'	6.50	5.85	5.20	4.55
36F1421	2423R-24	4/2-23 2-24 ind sh 2'	7.55	6.80	6.05	5.30
36F1422	2124R-48	1/24 ga sh 4'	6.50	5.85	5.20	4.55
36F1423	2223R-48	2/1-23 1-24 sh 4'	9.00	8.10	7.20	6.30
36F1424	2323R-48	3/2-23 1-24 sh 4'	13.00	11.70	10.40	9.10
36F1425	2423R-48	4/2-23 2-24 ind sh 4'	15.10	13.59	12.08	10.57
TINSELLED						
36F1426	2428R-12 TIN	4/28 ga 12" 1 sh	1.60	1.45	1.30	1.15
36F1427	2528R-12 TIN	5/28 ga 12" 1 sh	1.80	1.62	1.44	1.26

UNSHIELDED

Cords are made of extra flexible #23 AWG-21/36, color coded conductors, rated at 1 amp 120V, and the jacket is a long life rubber compound for good flexibility. Used in microphones, communication equipment and to eliminate hazards and inconvenience caused by tangled straight cords. Retracted lengths 1, 2, & 4 ft. extend to 6, 12, & 25 ft.

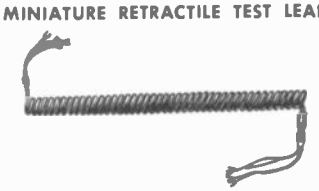
Stk. No.	Type	Cond/Size/Length	1-24	25-99	100-249	250-499
36F1428	1428R-12	4/28 ga 12"	1.05	.95	.85	.75
36F1429	1423R-11½	4/23 ga 11½"	1.41	1.27	1.13	.99
36F1430	1523R-11½	5/23 ga 11½"	1.50	1.35	1.20	1.05
36F1431	1223R-24	2/23 ga 2'	2.25	2.03	1.81	1.59
36F1432	1323R-24	3/23 ga 2'	2.75	2.48	2.21	1.94
36F1433	1423R-24	4/23 ga 2'	3.30	2.99	2.64	2.31
36F1434	1523R-24	5/23 ga 2'	4.35	3.92	3.49	3.06
36F1435	1223R-48	2/23 ga 4'	4.50	4.05	3.60	3.15
36F1436	1323R-48	3/23 ga 4'	5.50	4.95	4.40	3.85
36F1437	1423R-48	4/23 ga 4'	6.60	5.94	5.28	4.62
36F1438	1523R-48	5/23 ga 4'	8.70	7.83	6.96	6.09
TINSELED CONDUCTORS						
36F1439	1428R-12 TIN	4/28 ga 12"	1.41	1.27	1.13	.99
36F1440	1528R-12 TIN	5/28 ga 12"	1.50	1.35	1.20	1.05

SPECIAL SBR-200 COMPOUND

Compound has temp. range of —70°F to 150°F. Tensil strength of 1600 lbs/sq. in. Impervious to ozone, hand oils, sunlight, and meets MIL-specs.

36F1441	1423SB-12	4/23 ga 12" SBR	1.30	1.17	1.04	.91

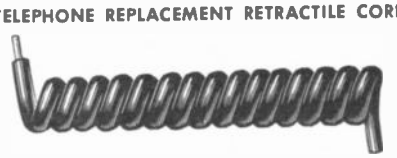
MINIATURE RETRACTILE TEST LEADS



Type 1120R-8. Single conductor rubber jacket. 12 inch retracted length, with 6 in straight lead end extend to 6 ft., available in red or black. Type **1228PV-24** and **1428PV-24** are manufactured of polyvinylchloride 2 ft. retracted length with 6 in straight lead ends extend to 10 ft.

Stk. No.	Type	Cond/Size/Length	1-24	25-99	100-249	250-499
36F1442	1120R-8	1/20 ga 8" Rubber	1.20	1.08	.96	.84
36F1443	1228PV-24	2/28 ga 2' PVC	2.00	1.80	1.60	1.40
36F1444	1428PV-24	4/28 ga 2' PVC	2.50	2.25	2.00	1.75

TELEPHONE REPLACEMENT RETRACTILE CORDS



For replacement of old cords or to extend your present headset coil cords up to 35'. Include all mounting hardware and installation instructions. Also available are line patio coil cords to extend or replace the wire connecting the telephone to the outlet on the wall. Available in colors. White, Beige, Black. Specify color.

Stk. No.	Type	Length (extended)	1-24	25-99
36F1445	0500- 4.5	4½'	1.20	1.08
36F1446	0500- 9	9'	2.25	2.03
36F1447	0500-15	15'	3.50	3.15
36F1448	0500-25	25'	5.50	4.95
36F1449	0500-35	35'	7.50	6.75

Many of these items are available to meet military specifications upon request.

BELDEN Mil Spec and U/L Hookup Wire

MW
VINYL

MW
VINYL NYLON

TYPE B

COLOR CODING

First color in stripe combination is body color and second color is tracer. **Specify color when ordering. All colors are not available in all types. See stock color columns.**

1. Brown
2. Red
3. Orange
4. Yellow
5. Green
6. Light Blue
7. Violet
8. Gray
9. White
10. Black
11. Tan
12. Pink
13. Dark Blue

Tracer colors Add .12/100 ft.

14. White/Black
15. White/Red
16. White/Green
17. White/Yellow
18. White/Blue
19. White/Brown
20. White/Orange
21. White/Gray
22. White/Violet

MIL-W-768 TYPE MW — VINYL AND VINYL-NYLON — 1000V

Tinned copper conductor with vinyl insulation rated at 80°C, except +nylon-jacketed vinyl, rated to 90°C. Flame and ozone resistant; inert to most chemicals, oil and solvents. Specify color and color No. when odrering—SEE CHART ABOVE. ***For Tracer colors add .12 per 100 ft.**

Type	Mil. No.	AWG	Nom. O.D."	100' Spools Stk. No.	100' Spools Net	500' Spools Stk. No.	500' Spools Net	1000' Spools Stk. No.	1000' Spools Net	Stock Colors*
8525	MW-C-24-7U	24(7x32)	.058	36F641A	1.23	36F641F	4.30	36F641	7.85	1-22
8530	MW-C-22-1U	22(solid)	.059	36F640A	1.14	36F640F	3.75	36F640	7.20	1-22
8524	MW-C-22-7U	22(7x30)	.064	36F660A	1.35	36F660F	5.05	36F660	9.30	1-22
8537+	MW-C-22-7J	22(7x30)	.069	36F633A	2.00	.....	.....	36F633	13.80	1-10 14-22
8529	MW-C-20-1U	20(solid)	.066	36F650A	1.35	36F650F	4.80	36F650	9.00	1-22
8523	MW-C-20-10U	20(10x30)	.070	36F670A	1.73	36F670F	6.45	36F670	12.30	1-22
8536+	MW-C-20-10J	20(10x30)	.076	36F634A	2.10	.....	.....	36F634	16.05	1-10
8528	MWC-18-1U	18(solid)	.074	36F642A	1.73	36F642F	6.45	36F642	12.30	1-13
8522	MW-C-18-16U	18(16x30)	.080	36F690A	1.95	36F690F	7.50	36F690	14.40	1-22
8535+	MW-C-18-16J	18(16x30)	.086	36F635A	2.94	.....	.....	36F635	21.00	1-10
8521	MW-C-16-26U	16(26x30)	.098	36F632A	2.60	36F632F	10.35	36F632	20.25	1-22
8520	MW-C-14-41U	14(41x30)	.111	36F643A	3.68	36F643F	16.65	36F643	31.20	1-22
8527	MW-C-12-65U	12(65x30)	.130	36F644A	5.20	36F644F	22.90	36F644	43.50	1-10

MIL-W-16878D TYPE 8 VINYL 600V-105C TIGHT NO-FRAY STRANDING

Tinned copper wire; stranded for greater flexibility. Wall thickness. 010. Vinyl insulation for high resistance to moisture, flame, ozone, solvents and most chemicals. SPECIFY COLOR AND COLOR NO. WHEN ORDERING. **Colors available only in sizes listed. See stock color columns. *For tracer colors add .12 per 100 ft.** Shpg. wt. 100' 1 lb; 1000' 6 lbs.

Mfr. Types	Mil. Types	AWG	O.D.	100' and 1000' Stock Colors	Stk. No.	100 Ft.	Stk. No.	500 Ft. Spools Colors 1-10 Only	Stk. No.	1000 Ft.
8505	B-26	26(7x34)	.039"	1-10, 14-22*	36F595A	1.29	36F595F	4.90	36F595	9.00
8509	B-24	24(19x36)	.045"	9, 14-22**	36F602A	1.59	.....	.....	36F602	10.00
8504	B-24	24(7x32)	.044"	1-10, 14-22*	36F594A	1.29	36F594F	4.45	36F594	8.40
8508	B-22	22(19x34)	.051"	9, 14-22*	36F603A	1.65	.....	.....	36F603	10.50
8503	B-22	22(7x30)	.050"	1-10, 14-22*	36F593A	1.40	36F593F	5.10	36F593	9.15
8507	B-20	20(19x32)	.059"	9, 14-22*	36F604A	1.77	.....	.....	36F604	12.75
8502	B-20	20(7x28)	.058"	1-10, 14-22*	36F592A	1.58	36F592F	5.55	36F592	10.30
8501	B-18	18(7x26)	.068"	1-10, 14-22*	36F591A	1.73	36F591F	6.75	36F591	12.90
8500	B-16	16(19x29)	.077"	1-10, 14-22*	36F590A	2.10	36F590F	8.70	36F590	16.20

MIL-W-16878D TYPE E — TFE TEFLON — 600V — 200°C

Silver coated copper conductor, concentrically stranded, with extruded TFE Teflon insulation rated to 600V and 200°C. 25' spools are one piece, exact length; larger spools may contain several pieces of min. length 25'. Specify color and color No. See chart above. **Plain colors only!.**

Mfr. Type	MIL. Type	AWG & (Stranding)	O.D."	Colors	Stock No.	100 Ft.	Stock No.	500' Spools
8300	E-30	30(7x38)	.033"	1-10	36F610A	5.55	36F610F	48.75
8301	E-28	28(7x36)	.036"	1-10	36F611A	5.70	36F611F	51.75
8302	E-26	26(7x34)	.041"	1-10	36F612A	5.85	36F612F	53.85
8303	E-24	24(19x36)	.046"	1-10	36F613A	7.20	36F613F	62.25
8304	E-24	24(7x32)	.045"	1-10	36F614A	6.45	36F614F	58.50
8305	E-22	22(7x30)	.051"	1-10	36F615A	7.80	36F615F	67.50
8306	E-22	22(19x34)	.052"	1-10	36F616A	8.10	36F616F	75.00
8307	E-20	20(19x32)	.060"	1-10	36F617A	9.60	36F617F	90.00
8308	E-20	20(7x28)	.059"	1-10	36F618A	9.45	36F618F	87.00
8309	E-18	18(19x30)	.071"	1-10	36F619A	11.55	36F619F	109.50
8310	E-16	16(19x29)	.080"	1-10	36F620A	14.10	36F620F	135.00

TYPE E

TYPE TEW

TYPE TRB

U/L TYPE HOOKUP AND LEAD WIRE — 600V

CSA Type TEW vinyl insulated; rated 600V to 105°. **Specify color & color No.—see chart above and stock order column.**

Type	AWG	O.D.	Stk. Colors	Stk. No.	100'	Stk. No.	500'	Stk. No.	1000'
8920	22(7x30)	.095"	1-5,9,10,13	36F580A	1.50	.....	.....	36F580	10.15
8919	20(10x30)	.102"	1-5,9,10,13	36F581A	1.75	.....	.....	36F581	12.75
8918	18(16x30)	.112"	1-5,9,10,13	36F582A	2.10	.....	.....	36F582	15.90
8917	16(26x30)	.126"	1-5,9,10,13	36F583A	2.85	36F583F	11.40	.....	.....
8916	14(41x30)	.141"	1-5,9,10,13	36F584A	3.75	36F584F	15.45	.....	.....

CSA type TRB, vinyl insulation, lacquered cotton braid jacket; rated 600V to 90°C.

8937	22(7x30)	.091"	1-5,9,10,13	36F585A	1.80	.....	.....	36F585	13.00
8936	20(10x30)	.098"	1-5,9,10,13	36F586A	2.00	.....	.....	36F586	15.45
8935	18(16x30)	.113"	1-5,9,10,13	36F587A	2.55	.....	.....	36F587	19.65
8934	16(26x30)	.126"	1-5,9,10,13	36F588A	3.15	36F588F	13.20	.....	.....
8933	14(41x30)	.177"	1-5,9,10,13	36F589A	4.80	36F589F	20.55	.....	.....

BELDEN WORKBENCH HOOKUP WIRE KITS

For R&D labs, engineers, servicemen, hobbyists. Belden hookup wire in an assortment of colors. Each kit contains a portable metal dispenser rack for work bench or wall mounting. The dispenser rack provides a complete, compact, and convenient wire department for every working area. See the chart at the top of this page for colors in each kit.

Type	Stk. No.	No. of Spools	Spool Lengths	Type of Wire	Colors in kit	NET
8822	36F179	10	25'	20 solid Type MW vinyl (8529-25)	1,2,3,4,5 6,7,8,9,10	6.00
8823	36F180	5	100'	20 solid Type MW vinyl (8529-100)	2,5,6,9,10	6.75
8824	36F181	8	25'	20 strd. Type MW vinyl 8523-25	1,2,3,4,5, 6,9,10	5.28
8825	36F182	5	100'	20 strd. Mil-W-16878D vinyl 8507-100	9,14,15, 16,17	9.33
8826	36F183	5	100'	22 strd. Mil-W-16878D vinyl 8508-100	9,14,15, 16,17	8.73
8816	36F1350	8	25'	18 stranded vinyl (8522-25)	1,2,3,4,5, 6,9,10	6.24

Microphone and Instrumentation Cable BELDEN

MICROPHONE AND INSTRUMENTATION CABLES—SHIELDED

General purpose shielded cables, for all stage, studio and instrumentation applications. Rubber types have rubber-insulated tinned copper conductors, tinned copper-braid shield, black rubber jacket overall, except black neoprene jacket. 8402 & 8408 have brown hypalon jacket. Vinyl types are similar, but have polyethylene-insulated conductors, chrome vinyle jacket. *Miniature cables having tinned cadmium-bronze conductors. Rubber cables have greater abrasion and impact resistance, are extra-flexible—will lie flat without kinking. Plastic cables have lower capacitance, greater ozone and oil resistance, lighter weight. Neoprene and rubber types are recommended for outsid use, cold weather applications. All types available only in spool sizes listed.

SINGLE CONDUCTOR — RUBBER

Type	A.W.G. and Cond.	O.D.	Work Volt.	Stk. No.	15 Ft.	Stk. No.	25 Ft.	Stk. No.	50 Ft.	Stk. No.	100 Ft.	Stk. No.	250 Ft.	Stk. No.	500 Ft.
8410	25-1	.245"	3000	.....	.....	36F010C	2.80	36F010B	4.90	36F010A	9.00	36F010E	21.00	36F010F	42.00

MULTIPLE CONDUCTOR — RUBBER HYPALON**

8413*	24-2	.190"	300	36F026D	1.86	36F026C	2.70	36F026B	5.05	36F026A	9.40	36F026E	21.75	36F026F	43.50
8406*	24-3	.223"	300	.....	.....	.....	.....	.....	.....	36F202A	11.85	36F202E	27.75	36F202F	55.50
8412	20-2	.268"	600	.....	.....	36F011C	2.85	36F011B	5.35	36F011A	9.90	36F011E	22.90	36F011F	45.80
8402**	20-1	.268"	600	.....	.....	.....	.....	.....	.....	36F1355A	11.25	36F1355F	26.25	36F11355F	52.50
8423	20-3	.277"	600	36F012D	2.35	.....	.....	36F012B	6.15	36F012A	11.55	36F012E	27.00	36F012F	54.00
8424	20-4	.295"	600	36F013D	2.85	.....	.....	36F013B	6.90	36F013A	13.05	36F013E	30.75	36F013F	61.50
8425	20-5	.323"	600	.....	.....	.....	.....	.....	.....	36F014A	15.40	36F014E	37.50	.....	.....
8426	20-6	.349"	600	.....	.....	.....	.....	.....	.....	36F015A	18.75	36F015E	46.50	.....	.....
8427	20-7	.360"	600	.....	.....	.....	.....	.....	.....	36F016A	20.25	36F016E	49.50	.....	.....
8418	20-8	.386"	600	.....	.....	.....	.....	.....	.....	36F018A	23.25	36F018E	56.25	.....	.....
8428†	18-2	.295"	600	.....	.....	.....	.....	.....	.....	36F017A	13.90	.....	.....	36F017F	63.00
8408**	16-1	.385"	600	.....	.....	.....	.....	.....	.....	36F1356A	19.30	36F1356E	45.00	36F1356F	90.00
8407†	16-4	.422"	600	.....	.....	.....	.....	.....	.....	36F132A	23.25	36F132E	56.25	.....	.....

SINGLE CONDUCTOR — VINYL PLASTIC

8401	25-1	.200"	5000	36F020D	1.17	36F020C	1.53	36F020B	2.70	36F020A	4.95	36F020E	10.50	36F020F	21.00
8411	25-1	.144"	3500	36F021D	.95	36F021C	1.31	36F021B	2.10	36F021A	3.90	36F021E	8.25	36F021F	16.50

MULTIPLE CONDUCTOR — VINYL PLASTIC

8420*	24-2	.185"	500	36F027D	1.65	36F027C	2.50	36F027B	3.70	36F027A	6.90	36F027E	17.85	36F027F	32.40
8422	22-2	.231"	1000	36F022D	1.50	36F022C	2.25	36F022B	4.15	36F022A	7.30	36F022E	16.15	36F022F	32.30
8403	20-3	.244"	600	36F023D	1.95	.....	.....	36F023B	5.20	36F023A	9.60	36F023E	21.55	36F023F	43.15
8404	20-4	.255"	600	36F024D	2.25	.....	.....	.....	.....	36F024A	10.60	36F024E	24.40	36F024F	48.80
8405	20-5	.275"	600	.....	.....	.....	.....	.....	.....	.....	.....	36F1358E	28.15	36F1358F	56.30

SHIELDED CABLE FOR AUDIO AND INSTRUMENTATION APPLICATIONS

Shielded cables for a variety of AF applications. Types with patented BELDFOIL aluminum-mylar shield provide 100% shielding, are recommended for the most critical audio and instrumentation applications; these types have tinned copper drain wire for shield connection. Spiral and braid shields are made of tinned copper for direct connection. Stocked in listed spool sizes only.

2 CONDUCTOR CABLES — TEFLON

Black and White Fep Insulated Cond, Cabled, Tinned Copper Braid Shield, White Fep Jkt. Oper. Temp. —70°C to +200°C.

Type	A.W.G.	Nom. O.D.	Work Volt.	Stk. No.	NET 100 ft.	Stk. No.	250 ft.	Stk. No.	500 ft.	Stk. No.	1000 ft.
8390	22 Strd.	.180"	1000	36F1326C	36.75	.....	.....	36F1326F	367.50	.....	.....
8393	20 Strd.	.245"	1000	36F1359C	39.00	.....	.....	36F1359F	390.00	.....	.....

2 CONDUCTOR CABLES—VINYL PLASTIC

Broadcast cable; black vinyl jacket, copper braid shield. *Miniature cable; has BELDFOIL shield.

Type	A.W.G.	Nom. O.D.	Work Volt.	Stk. No.	NET per 100	Stk. No.	250 Ft.	Stk. No.	500 Ft.	Stk. No.	1000 Ft.
8450*	22 Solid	.118"	200	36F028A	3.55	36F028E	7.20	36F028F	13.15	36F028	26.25
8451*	22 Strd.	.135"	200	36F029A	4.05	36F029E	8.70	36F029F	16.50	36F029	33.00
8437	22 Solid	.200"	200	.....	.....	.....	.....	36F093F	21.00	36F093	42.00
8441	22 Strd.	.210"	200	36F036A	5.40	.....	.....	36F036F	24.00	36F036	48.00

Chrome vinyl jacket; BELDFOIL shield and polyethylene insulation, except *spiral shield, vinyl insulated; †braided shield. rubber insulation.

8641	24 Strd.	.160"	350	36F157A	3.45	.....	.....	36F157F	13.90	36F157	27.80
8761	22 Strd.	.167"	350	.....	.....	.....	.....	36F165F	14.40	36F185	28.80
8762	20 Strd.	.196"	350	36F166A	4.45	36F166E	9.90	36F166F	18.40	36F166	36.80
8760	18 Strd.	.222"	450	.....	.....	36F164E	11.70	36F164F	22.15	36F164	44.30
8739*	22 Solid	.160"	350	36F081A	3.55	.....	.....	36F081F	15.00	36F081	30.00
8737*	22 Strd.	.170"	350	36F084A	3.75	36F084E	8.85	36F084F	16.50	36F084	33.00
8759*	20 Strd.	.195"	350	36F085A	4.65	.....	.....	36F085F	19.50	36F085	39.00
8780*	16 Strd.	.266"	450	36F106A	7.05	.....	.....	36F106F	31.90	36F106	63.80
8790*	18 Strd.	.231"	450	36F107A	5.80	36F107E	12.40	36F107F	24.75	36F107	49.50
8208†	18 Strd.	.255"	200	36F195A	7.30	.....	.....	36F195F	32.20	36F195	84.40

Braided shield, vinyl insulated, no outer jacket.

8738	22 Solid	.130"	350	.....	.....	.....	.....	.....	.....	36F080	30.00
8758	20 Strd.	.165"	350	36F086A	4.35	.....	.....	36F086F	17.65	36F086	35.30
8789	18 Strd	.204"	450	.....	.....	.....	.....	36F102F	25.90	36F102	51.75

Type 8759

Type 8450

Type 8208

Type 8758

3 CONDUCTOR CABLES — TEFLON

Blk, Red, & White Fep Insulated Cond, Cabled, Tinned Copper Braid Shield, White Fep Jkt. Oper. Temp. —70°C to +200°C.

Type	A.W G.	Nom. O.D.	Work Volt.	Stk. No.	NET 100 ft.	Stk. No.	250	Stk. No.	500 ft.	Stk. No.	1000 ft.
8391	22 Strd.	.190"	1000	36F1327A	45.00	.....	.....	36F1327F	450.00	.....	.....

3 CONDUCTOR CABLES—VINYL PLASTIC

Chrome vinyl jacket; polyethylene insulation with BELDFOIL shield, except *braided shield, vinyl insulated.

Type	A.W.G.	Nom. O.D."	Work Volt.	Stk. No.	100 Ft.	Stk. No.	250 Ft.	Stk. No.	500 Ft.	Stk. No.	1000 Ft.
8618	16 Strd.	.300"	600	.....	.....	.....	.....	36F1360F	40.50	36F1360	81.00
8735*	22 Strd.	.199"	350	36F083A	4.95	.....	.....	36F083F	21.40	36F083	42.80
8771	22 Strd.	.175"	350	.....	.....	36F168E	8.70	36F168F	16.95	36F168	33.90
8772	20 Strd.	.200"	350	.....	.....	.....	.....	36F169F	21.40	36F169	42.80
8770	18 Strd.	.236"	450	.....	.....	.....	.....	36F167F	26.65	36F167	53.30
8791	19 Strd.	.236"	450	36F135A	6.60	.....	.....	.....	.....	36F135	59.30
8643	30 Strd.	.086"	200	36F1361A	5.70	36F1361E	13.50	.....	.....	.....	.....

You Con Depend on NEWARK For Complete Stocks ond Lowest Prices

BELDEN Retractile Cords/Instrumentation Cables

RETRACTILE (COILED) MICROPHONE CABLES—SHIELDED AND UNSHIELDED

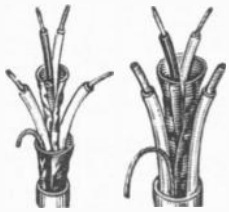
Cadmium bronze wire microphone cables with neoprene or vinyl jacket. Retracts when not in use. Neoprene cables are resistant to effects of sun, oil and ozone and are recommended for outside use.

Type	Stock No.	AWG (standing)	Retracted Length (in.)	Extended Length (ft.)	Nom. OD (in.)	Jacket Material	Conductors	NET
8409	36F1329	28 (7x36)	12"	6'	.165	Neoprene	4 unshielded	1.05
8415	36F038	23 (21x36)	11½'	6'	.250	Neoprene	4 unshielded	1.41
8497	36F207	23 (21x36)	11½"	6'	.250	Neoprene	3 cond-1 shield	1.46
8499	36F208	24 (45x40)	7½"	4'	.160	Neoprene	1 shielded	.98
8491	36F1330	23 (21x36)	12"	6'	.300	Neoprene	2 unshielded	1.73
8490	36F1331	23 (21x36)	11½"	6'	.265	Neoprene	5 unshielded	1.50

RETRACTILE NEOPRENE POWER CONTROL CABLES—UNSHIELDED

For telephone use. Cadmium bronze, black vinyl jacket. 8494 has one end stripped 7¾", spade terminals attached and hook strain relief clamped over jacket. Other end stripped 6¼" and spade terminals attached. 8495 is similar, but end with strain relief stripped 2¾", other end stripped 3 1/16".

8494	36F203	23 (21x36)	10"	4½	.245	Vinyl	4 Unshielded	1.65
8495	36F204	23 (21x36)	10"	4½	.220	Vinyl	3 Unshielded	1.31
8601	36F1342	18 (41x34)	12"	6'	.270	Neoprene	2 "SVO"	1.05
8602	36F1343	18 (41x34)	12"	6'	.360	Neoprene	3 "SJO"	1.59
8603	36F1344	16 (65x34)	12"	6'	.370	Neoprene	3 "SJO"	1.62
8604	36F1345	16 (65x34)	22"	12'	.370	Neoprene	3 "SJO"	2.52



SPECIAL PURPOSE SHIELDED CABLES

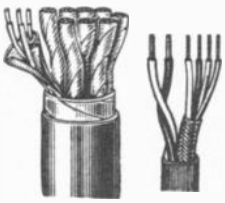
Multiple conductor cables having a variety of shielding arrangements for special applications. Types having BELDFOIL aluminum-mylar shield provide 100% shielding and are recommended for the most critical AF and instrumentation applications. Sold only in spool sizes listed.

Strain Gauge Cable. 8434 has chrome vinyl jacket; BELDFOIL shield overall; one pair of conductors has individual BELDFOIL shield. 8723 is similar, but has both pairs individually BELDFOIL shielded.

Type	AWG & No.	Nom. O.D.	Work. Volt.	Stk. No.	100'	Stk. No.	500'	Stk. No.	1000'
8434	25-4	.179"	400	36F1032A	5.65	36F1032F	25.50	36F1032	51.00
8723	22-4	.165"	400	36F1033A	5.40	36F1033F	24.00	36F1033	48.00
8728	22-4	.188"	400	.....	.....	36F1353F	35.25	36F1353	70.50

Shielded and Unshielded Conductor Cables. All have chrome vinyl jacket, polyethylene or vinyl insulated tinned copper stranded conductors, and BELDFOIL shields with drain wire for ground connection (except *copper braid shield, tinned for direct connection). †individually shielded. Rated 350 volts.

Type	Cond.: AWG & No. Shielded	Unshielded	Nom. O.D.	Stk. No.	100'	Stk. No.	500'	Stk. No.	1000'
8724	22-2	22-2	.165"	.....	.....	36F1346F	24.00	36F1346	48.00
8722	20-2	20-2	.260"	.....	.....	36F185F	28.50	36F185	57.00
8732	22-2*	22-2	.296"	36F173A	6.00	36F173F	25.50	36F173	51.00
8734	22-1*	22-2	.194"	36F186A	4.85	36F186F	19.50	36F186	39.00
8763	20-2	20-1	.210"	.....	.....	36F187F	22.50	36F187	45.00
8733	22-3†	.....	.205"	36F188A	6.00	36F188F	25.50	36F188	51.00



38- and 51-Pair Cables. Have 22 AWG solid copper conductors, 8751 vinyl insulated, 8752 polypropylene insulated. BELDFOIL shield overall, chrome vinyl jacket. Cut to length—min. order 25 ft.

Type	No. Cond.	Nom. O.D.	Lbs. per 100'	Stk. No.	Per 1000'	Price Per Ft.
8751	51 pr.	.725"	32	36F079	858.00	1.00
8752	38 pr.	.600"	25	36F074	825.00	.07

Note: All types are sold only in spool lengths shown EXCEPT types listed "per foot" are cut to order — min. order 25 feet.

Miniature Instrumentation Cables. Solid copper. BELDSOL enamel film (solderable—no stripping required) insulated paired conductors; each pair BELDFOIL shielded; white vinyl jacket.

Type	AWG & Cond.	Nom. O.D.	Work. Volt.	Stk. No.	100'	Stk. No.	250'	Stk. No.	500'	Stk. No.	1000'
8640	26-2	.089"	100	.....	.....	36F087E	6.45	36F087F	12.15	.....	.....
8642	26-6	.140"	100	.....	.....	36F088E	17.85	36F088F	33.15	.....	.....

Solid copper conductor, polypropylene insulation, copper braid shield in coaxial construction; black vinyl jacket. May be steam sterilized—ideal for medical research instrumentation.

Type	AWG & Cond.	Nom. O.D.	Work. Volt.	Stk. No.	25'	Stk. No.	50'	Stk. No.	100'	Stk. No.	250'
8700	28-1	.054"	100	36F082C	1.65	36F082B	2.70	36F082A	4.90	36F082E	11.25

Multiple-Pair Individually Shielded Audio Cable. All have #22 AWG solid tinned copper .013 vinyl insulated conductors, each pair with drain wire under a BELDFOIL aluminum-mylar shield. Chrome vinyl jacket. Recommended for superior circuit isolation.

Type	No. Pairs	Nom. O.D.	Stock No.	100'	Stock No.	250'	Stock No.	500'	Stock No.	1000'
8767	3	.270"	36F190A	9.00	36F190E	20.65	36F190F	41.25	36F190	82.50
8768	6	.394:	36F191A	17.70	36F191E	42.00	36F191F	84.00	36F191	168.00
8764	9	.440"	36F192A	24.75	36F192E	60.40	36F192F	120.80	36F192	241.50
8765	11	.485"	36F193A	29.25	36F193E	71.25	36F193F	142.50	36F193	285.00
8766	15	.540"	36F194A	39.75	36F194E	95.25	36F194F	190.50	36F194	381.00

Multiple Pair Individually Shielded Cables. Same as above, except .010 Polypropylene insulated. Recommended for audio, pulse, & radio frequency applications—operating temperature 105°C. 7x30 stranded conductors.

Type	No. Pairs	Nom. O.D.	Stock No.	100'	Stock No.	250'	Stock No.	500'	Stock No.	1000'
8777	3	.270"	36F1332A	10.35	36F1332C	25.15	36F1332F	49.15	36F1332	98.30
8778	6	.394"	36F1333A	19.50	36F1333C	50.25	36F1333F	100.00	36F1333	201.00
8774	9	.440"	36F1334A	30.00	36F1334C	71.25	36F1334F	142.50	36F1334	285.00
8775	11	.485"	36F1335A	35.25	36F1335C	84.75	36F1335F	169.50	36F1335	339.00
8776	15	.540"	36F1336A	46.80	36F1336C	113.25	36F1336F	226.50	36F1336	453.00
8769	19	.620"	36F1337A	63.00	36F1337C	150.00	36F1337F	300.00	36F1337	600.00
8773	27	.760"	36F1338A	Cut to Order—25' Min.—.90 Per Ft.					36F1338	909.00

4 CONDUCTOR CABLES — TEFLON

Blk, Red, White & Green Fep Insulated Cond, Cabled, Tinned Copper Braid Shield, White Fep Jkt. Oper. Temp. —70°C to +200°C.

Type	A.W.G.	Nom. O.D.	Work Volt.	Stk. No.	NET 100 ft.	Stk. No.	250 ft.	Stk. No.	500 ft.	Stk. No.	1000 ft.
8392	22 Strd.	.205"	1000	36F1328C	54.00	.....	.....	36F1328F	540.00	.....	.....

_TV Studio/Audio /Instrumentation Cable BELDEN

TV STUDIO CABLE

• Fits RG 59/U connectors

Type 8281. 75 ohm precision video cable. Single #20 AWG solid copper conductor, polyethylene insulated, double copper-braid shield, black polyethylene jacket. Nominal O.D., .304", nom. capacitance, 21mmf/ft. 100% sweep tested. Wt. 37 lbs. per 500 ft.
36F141F. 500 ft. spool. NET. **76.90**
36F141. 1000 ft. spool. NET. 153.80

Type 8299 Adapter. For use with 8281 cable only; increases OD to fit FL-259 connector.
36F143. Box of 25. NET. **3.75**

Type 8280. 28 conductor TV (monochrome) camera cable. Conductors arranged as follows: 4-#18 and three groups of 7-#22 AWG stranded tinned copper conductors, all color-coded and vinyl insulated; three color-coded coaxial cables of 51 ohm nom. impedance; tinned copper-braid shield and chrome vinyl jacket overall. Nom. O.D. is .750". Cut to order. Min. order 25 ft.
36F140. NET, per foot ..... **.85**

Type 8286. Miniature 75 ohm video cable similar to Type 8280 except BELDFOIL shield over the 4 #18 AWG conductors. BELDFOIL shield over one group of seven conductors. 3-75 ohm coaxial cables, jacket over shield is black hypalon. .730 O.D. Cut to order (25' min.).
36F1339. NET, per foot ..... **.88**

• For color or b&w TV transmission

Type 8283. 82 conductor TV (color) camera cable. Conductor arrangement: 4 #14 and 3 #16 AWG stranded tinned copper conductors, color-coded and vinyl insulated, all inside a BELDFOIL aluminum-mylar shield: 67-#22 AWG stranded tinned copper, color-coded and vinyl insulated, of which 7 are under a conductive textile shield, the rest unenclosed; 8 coxial cables, of 53.5 ohm nom. impedance, color coded; tinned copper braid shield and chrome vinyl jacket overall. Nom. O.D., 1.22". Cut to order. Min. order 25 ft.
36F1300. NET, per foot **3.08**

Type 8279. Similar to 8281 except with 23 AWG conductor, single tinned copper braid shield, and .220 O.D.
36F1340A. 100' NET. **9.00**
36F1340C. 250' NET. 21.00
36F1340F. 500' NET. 39.00

Type 8284. 24 conductor TV camera cable, 4 #16 GA color coded vinyl insulated conductors. Beldfoil shield over 3 of the 17 #22 GA color coded vinyl insulated conductors, 3-53.5 ohm coaxial cables tinned copper braid, heavy cotton braid, chrome vinyl jacket. .800 O.D.
36F1341. NET. per ft. **1.04**

SHIELDING & BONDING CABLE

Type	I.D.	Cir. Mil. Area	Stk. No.	10'	Stk. No.	50'	Stk. No.	250'
8676	1/32"	400	36F215G	.56	36F215B	1.02	36F215E	4.75
8674	3/64"	600	36F216G	.62	36F216B	1.49	36F215E	6.75
8660	5/32"	3800	36F220G	.68	36F220B	2.05	36F220E	9.30
8668	3/16"	4700	36F223G	.96	36F223B	2.80	36F223E	12.15
8663	5/16"	6700	36F225G	1.02	36F225B	3.45	36F225E	16.20
8661	1/2"	7600	36F221G	.95	36F221B	3.30	36F221E	15.30
8669	5/8"	13,300	36F224G	1.62	36F224B	6.90	36F224E	33.00
8672	5/8"	13,200	36F217G	1.80	36F217B	7.95	36F217E	36.00
8662	21/32"	22,900	36F222G	2.22	36F222B	9.75	36F222E	47.25
8670	3/4"	48,000	36F218G	3.30	36F218B	15.00	36F218E	72.00
8671	1"	21,600	36F219G	2.50	36F219B	11.25	36F219E	55.50

Tinned copper braid provides approx. 90% shield coverage when applied over recommended diameter.

HI-FI AND STEREO CABLES

Phono Pick-Up Cable. Type 8421, Hi-Fi connecting cable. 8431 is rubber insulated, shielded and brown cotton braid. 8419, 8429, 8430 Conductors are vinyl insulated. *No shield, no jacket. **Rubber insulated conductors. †Spiral wrapped shield, chrome vinyl jacket, cellular polyethylene insulated conductor.

Type	No. of Cond.	AWG and (stranding)	Nom. O.D.	Nom. mmf/ft.	Stock No.	10 Ft.	Stock No.	15 Ft.	Stock No.	25 Ft.	Stock No.	100 Ft.	Stock No.	250 Ft.	Stock No.	500 Ft.
8430*	2	32 (7x40)	.050"	21	36F158G	.57	.....	...	36F158C	.80	.....	...	36F158E	4.80	.....	...
8429	2	32 (7x40)	.057"	22	36F150G	.84	.....	...	36F150C	1.35	.....	...	36F150E	9.30	.....	...
8419	3	32 (7x40)	.067"	30	36F159G	.90	.....	...	36F159C	1.58	.....	...	36F159E	11.35	.....	...
8431**	1	24 (16x36)	.095"	96	36F152G	.75	36F152D	.98	36F152C	1.28	36F152A	4.05	.....	...	36F152F	18.30
8421†	1	25 (7x33)	.180"	18	.....	...	36F226D	1.20	36F226C	1.58	36F226A	4.65	36F266E	10.35	.....	...

Dual-Channel Audio Cable. Designed for stereo and language lab hookup applications. Tinned copper/copperweld conductors, with color-coded polyethylene insulation and individual spiral wrapped shields; chrome vinyl jacket. *per channel, †50 ft. Fig. A below.

8416	2	25 (7x33)	.213"	35*	36F128B	3.15	36F128D	1.35	36F126C	1.75	36F126A	5.50	36F126E	12.60	.....	.....

Miniature Audio Connecting Cable. Double BELDFOIL aluminum-mylar shields provide total shielding for critical audio and instrumentation applications. Copper-copperweld conductor. cellular polyethylene insulation, chrome vinyl jacket. Fig. B below.

8417	1	25 (7x33)	.140"	25	.....	.....	36F127D	.98	36F127C	1.31	36F127A	4.00	36F127E	8.65	.....	.....

Juke Box Control Cable. Tinned, stranded copper conductors, vinyl insulated, with chrome vinyl jacket. Type 8783 is unshielded; 8786 has 4-#24 under BELDFOIL shield, 2-#22 unshielded.

Fig. A

Mfr. No.	AWG & Cond.	Nom. O.D.	Work. Volt.	100'	NET	500'	NET
8783	20-1, 16-2	.250"	450	36F108A	5.85	36F108F	26.25
8786	24-4, 22-2	.256"	350	36F138A	7.00	36F138F	32.25

UNSHIELDED CABLE FOR AUDIO AND INSTRUMENTATION APPLICATIONS

High-quality unshielded cables for instrumentation and intercom hookup, speaker lines, signal circuits, etc. Available only in spool lengths listed.

Fig. B

TWO CONDUCTOR CABLES

Unjacketed. Twisted pair cable, vinyl insulated. Fig. C.

Mfr. No.	AWG	Nom. O.D.	Work. Volt.	Stk. No.	100'	Stk. No.	250 Ft.	Stk. No.	500'	Stk. No.	1000'
8481	22 (solid)	.112"	350	36F068A	1.80	.....	...	36F068F	5.80	36F068	11.55
8482	19 (solid)	.130"	350	36F1009A	2.25	.....	...	36F1009F	8.10	36F1009	16.20
8460	18 (strd.)	.175"	450	36F1010A	3.15	.....	...	36F1010F	12.30	36F1010	24.60
8470	16 (strd.)	.195"	600	.....	...	.....	...	36F1011F	16.50	36F1011	33.00

Fig. C

Jacketed. As above, but with chrome vinyl overall jacket. Fig. D.

8740	22 (solid)	.150"	200	36F060A	2.22	36F060E	4.50	36F068F	7.90	36F060	15.75
8442	22 (strd.)	.165"	350	.....	...	.....	...	36F039F	9.30	36F039	18.60
8205	20 (strd.)	.190"	350	36F197A	2.85	.....	...	36F197F	10.90	36F197	21.75
8461	18 (strd.)	.226"	450	36F1014A	4.05	.....	...	36F1014F	16.50	36F1014	33.00
8471	16 (strd.)	.256"	600	.....	...	.....	...	36F1015F	20.65	36F1015	41.30
8473	14 (strd.)	.332"	600	.....	...	.....	...	36F1021F	33.75	36F1021	67.50
8477	12 (strd.)	.384"	600	.....	...	.....	...	36F1354F	45.00	36F1354	90.00

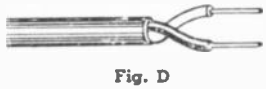


Fig. D

Shielded Grid and Hookup Wire. #20 (10x30) AWG stranded tinned copper conductor, rubber insulated, textile braid, tinned copper braid shield. Jacketless.

Type	Nom. O.D.	Work. Volt.	15'	NET	25'	NET	100'	NET	500'	NET
8885	.117"	300	36F151D	1.04	36F151C	1.40	36F151A	4.15	36F151F	19.50

BELDEN Unshielded Cable

ALL BELDEN HI FI CABLE, AUDIO, & INSTRUMENTATION CABLE COMES IN EXACT LENGTH ONE-PIECE SPOOLS

MULTIPLE CONDUCTOR CABLES — PAIRED

Solid. All types below have #22 AWG solid tinned copper conductors, vinyl insulated and cabled in pairs. Chrome vinyl jacket overall.

Mfr. No.	No. of Pairs	Nom. O.D.	Work. Volt.	Stk. No.	100'	Stk. No.	250'	Stk. No.	500'	Stk. No.	1000'
8741	2	.201"	200	36F061A	3.75	36F061E	8.25	36F061F	15.00	36F061	30.00
8742	3	.240"	200	36F062A	4.90	36F062E	10.95	36F062F	20.65	36F062	41.25
8757	4	.255"	200	.....	.....	.....	.....	36F069F	26.25	36F069	52.50
8743	6	.305"	200	36F063A	7.75	36F063E	18.75	36F063F	35.25	36F063	70.50
8744	9	.354"	200	36F064A	10.90	36F064E	26.65	36F064F	51.00	36F064	102.00
8753	11	.384"	200	36F067A	13.50	36F067E	33.00	36F067F	64.50	36F067	129.00
8745	15	.420"	200	36F065A	18.75	36F065E	44.25	36F065F	86.25	36F065	172.50

Stranded. As above, but Type 22 AWG stranded (7x30) conductors provide greater flexibility, can be run in intricate bands. See preceding pages ("S.P. Shielded Cable") for 38-pr. (8752) and 51-pr. (8751).

Type	No. of Pairs	Nom. O.D.	Work Volt	Stk. No.	100'	Stk. No.	250'	Stk. No.	500'	Stk. No.	1000'
8747	6	.340	200	36F075A	9.45	36F075E	22.80	36F075F	43.50	36F075	87.00
8748	9	.389"	200	36F076A	13.35	36F076E	31.90	36F076F	63.75	36F076	127.50
8749	15	.425"	200	36F077A	23.25	36F077E	55.15	36F077F	110.25	36F077	220.50
8750	27	.595"	200	Cut to order: 25' min. order. Price per 1000'						36F078	420.00

See preceding pages ("Special Purpose Shielded Cable") for 38-pr. (8752) and 51-pr. (8751).

MULTIPLE CONDUCTOR CABLES — NOT PAIRED

Fig. E

Fig. E. Stranded tinned copper conductors, color-coded, vinyl plastic insulated, with vinyl jacket overall. Ideal for a multitude of audio, instrumentation, and control applications. Voltage ratings: #22 AWG types, 200V; #18 types, 400V; #16 types, 600V. Available only in spool sizes listed.

Mfr. No.	AWG & No. of Cond.	Nom. O.D.	Lbs. 100'	Stk. No.	25'	Stk. No.	100'	Stk. No.	250'	Stk. No.	500'	Stk. No.	1000'
8443	22-3	.150"	2	36F040C	1.11	36F040A	2.85	36F040E	6.10	36F040F	11.25	36F040	22.50
8444	22-4	.168"	2¼	36F041C	1.28	36F041A	3.75	36F041E	8.10	36F041F	15.40	36F041	30.80
8445	22-5	.180"	2½	36F042C	1.43	36F042A	4.35	36F042E	9.60	36F042F	18.40	36F042	36.75

Mfr. No.	AWG & No. of Cond.	Nom. O.D.	Lbs. 100'	Stk. No.	15'	Stk. No.	100'	Stk. No.	250'	Stk. No.	500'	Stk. No.	1000'
8446	22-4, 18-2	.222	4	36F043D	1.43	36F043A	6.45	36F043E	14.70	36F043F	28.15	36F043	56.30
8447	22-5, 18-2	.246	4¾	.....	.....	36F044A	7.20	36F044E	16.50	36F044F	31.90	36F044	63.80
8448	22-6, 18 2	.250"	5	36F045D	1.58	36F045A	7.75	36F045E	18.00	36F045F	34.90	36F045	69.80
8449	22-7, 18-2	261"	5¼	36F046D	1.73	36F046A	8.40	36F046E	19.50	36F046F	38.35	36F046	76.50

Mfr. No.	AWG & No. of Cond.	Nom. O.D.	Lbs. 100'	Stk. No.	100'	Stk. No.	250'	Stock No.	500'	Stk. No.	1000'
8456	22-10	.260"	5	36F200A	8.50	.....	.....	36F200F	39.00	36F200	78.00
8457	22-12	.260"	5½	36F201A	9.15	.....	.....	36F201F	42.00	36F201	84.00
8458	22-15	.320"	8	36F198A	15.75	.....	.....	36F198F	70.50	36F198	141.00
8459	22-25	.370"	11½	36F199A	24.00	.....	.....	36F199F	111.00	36F199	222.00
8465	18-5	.286"	6	36F1017A	7.95	36F1017E	18.90	36F1017F	36.40	36F1017	72.80
8467	18-7	.324"	8½	36F1018A	10.65	36F1018E	24.40	36F1018F	48.75	36F1018	97.50
8469	18-9	.375"	10¼	36F1019A	14.25	36F1019E	33.40	36F1019F	66.80	36F1019	133.60
8466	18-12	.412"	113½	36F144A	19.90	36F144E	48.75	36F144F	97.50	36F144	195.00
8468	18-15	.490"	18	36F145A	27.00	.....	.....	36F145F	127.50	36F145	255.00
8619	18-19	.505"	20	.....	.....	.....	.....	36F1351F	142.50	36F1351	285.00
8620	16-4	.375"	8	36F146A	10.50	.....	.....	36F146F	48.75	36F146	97.50
8621	16-7	.455"	13	36F147A	17.25	.....	.....	36F147F	79.50	36F147	159.00
8622	16-12	.600"	21¼	36F148A	30.00	.....	.....	36F148F	138.75	36F148	277.50

PRIMARY, SPEAKER & PORTABLE POWER CABLES

2, 3, AND 4-CONDUCTOR PRIMARY WIRE

8677

Cables especially designed for primary circuits and other applications requiring heavily insulated high amperage cable. All types or color coded. Sold only in lengths listed.

Duplex. Two parallel conductors, stranded and tinned, with vinyl insulation and chrome vinyl jacket.

Mfr. No.	AWG & Cond.	Nom. Width	Insul. Thickness	Stk. No.	100 Ft.	Stk. No.	500 Ft.
8677	16-2	.164 x .276	.032"	36F170A	5.10	36F170F	24.15
8675	14-2	.189 x .326	.037"	36F171A	6.75	36F171F	31.65
8673	12-2	.213 x .384	.040"	36F172A	8.70	36F172F	42.60

8701

Three- and four-conductor. Bonded-parallel-conductor construction, jacketless. Stranded bare copper with vinyl insulation.

8475	16-3	.102 x .295	.023"	36F124A	6.00	36F124F	27.00
8476	16-4	.102 x .400	.023"	36F125A	8.95	36F125F	39.00

SPEAKER CABLE

8453

Parallel conductor cables especially designed for speaker lines, but also ideal for a variety of other audio and instrumentation applications. Chrome vinyl insulation. Solid, except *stranded.

Mfr. No.	AWG & Cond.	Cable Width	Work. Volt.	25'	NET	50'	NET	100'	NET	500'	NET	1000'	NET
8781	22-2	.120"	100	.....	.....	.....	.....	36F133A	1.65	36F133F	4.90	36F133	9.75
8782	24-2*	.115"	300	36F105C	.68	36F105B	1.01	36F105A	1.53	36F105F	5.10	36F105	10.20
8701	22-3	.190"	100	.....	.....	.....	.....	36F134A	2.25	36F134F	7.90	36F134	15.75

RUBBER-VINYL MULTICONDUCTOR PORTABLE CORDAGE — 300V-60°C

Types 8462 and 8888 are standard household "lamp cord"; other types have color-coded rubber insulation, black rubber jacket overall. All conductors stranded copper. *Vinyl insulated. †Available in brown, white, or gray. Vinyl insulated. *In white or brown.

Mfr. No.	U/L Type	AWG & Cond.	Nom. O.D.	Stk. No.	25'	Stk. No.	50'	Stk. No.	100'	Stk. No.	250'	Stk. No.	500'	Stk. No.	1000'
8462*	SP-1	18-2	.223"	36F047C	1.28	.....	.....	36F047A	3.85	36F047E	8.80	.....	.....	.....	.....
8888†	SPT-1	18-2	.207"	36F048C	1.20	.....	.....	36F048A	3.15	36F048E	6.75	.....	.....	.....	.....
8452	SV	18-2	.245"	36F030C	1.95	36F030B	3.30	36F030A	5.80	36F030E	13.20	36F030F	26.25	36F030	52.50
8453	SV	18-3	.265"	.....	.....	36F031B	4.05	36F031A	7.65	.....	.....	36F031F	37.50	.....	.....
8454	.....	18-4	.265"	.....	.....	36F032B	4.60	36F032A	8.65	.....	.....	36F032F	39.75	.....	.....
8472	SJ	16-2	.325"	36F049C	2.65	.....	.....	36F049A	9.15	36F049E	21.75	.....	.....	.....	.....
8474	.....	14-2	.360	.....	.....	.....	.....	36F050A	10.65	36F050E	25.50	.....	.....	.....	.....
8479	.....	14-3	.380"	.....	.....	.....	.....	36F1352A	12.00	36F1352E	29.10	.....	.....	.....	.....

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

TV/Coaxial/Hi Voltage/Test Lead BELDEN

TWIN LEAD AND ANTENNA ROTOR CABLE

Fig. 1

Fig. 3

Fig. 5

Fig. 2.

Fig. 4

Fig. 6

Type 8290. SHIELDED & JACKETED ENCAPSULATED TWIN LEAD. TV lead-in for best color and 82 channel reception. Low losses per 100 ft., eliminates interference caused by line pick up, can run thru gutters, conduits, and underground. No matching transformers. Terminals on both ends.

Fig. 2. Type 8285. PERMOHM All-Weather 300-ohm twinlead. 2 parallel Copperweld conductors, orange polyethylene insulation and web between conductors, encapsulated in cellular polythylene oval jacket. Delivers 3 to 136 times more power than ordinary flat lead-in for strong, clear signals on all channels despite industrial contamination, salt spray, wet weather, rain, ice, fringe area reception. An excellent color, UHF, VHF cable. See Antenna Hardware page for "E-Z" standoff insulators.

Fig. 3. Type 8275. CELLULINE. 2 parallel Copperweld conductors with inert-gas-filled unicellular polyethylene core. Lower losses because of lower dielectric constant. Uniform electrical characteristics, because moisture between conductors is eliminated. Thick polyethylene outer jacket and less wind-resistant round shape result in longer lasting, more efficient line for UHF, VHF and color. No end sealing required.

Fig. 4. Type 8230. WELDOHM. Copperweld conductors have 1½ times greater strength than plain copper for long-lasting installation.

Type 8225. 300-ohm flat twinlead with bare copper conductors, brown polyethylene insulation for best weathering.

Fig. 5. Type 8222. 72-ohm transmission line. 2 parallel copper conductors, brown polyethylene insulation.

Fig. 6. Type 8464. 4-conductor flat rotor cable. Bare copper conductors, one tinned for polarity. Chrome vinyl insulation. **Type 8488.** Eight-conductor round rotor cable. Bare copper conductors, color-coded insulation, chrome vinyl jacket.

Mfr. No.	AWG & Cond.	Imp. Ohms	O.D.	50'	NET	75'	NET	100'	NET
8290	22-2	300	.515"	36F2000B	5.80	36F2000H	7.80	36F2000A	9.90
8285	22-2	300	.468"	36F211B	2.85	36F211H	3.85	36F211A	4.90
8275	20-2	300	.400"	36F212B	2.63	36F212H	3.70	36F212A	4.50
8225	20-2	300	.400"	36F210B	1.17	36F210H	1.52	36F210A	1.91
8230	20-2	300	.400"	36F209B	1.29	36F209H	1.73	36F209A	2.16
8222	20-2	72	.128"	.....	.....	.....	.....	36F213A	1.65
8463	20-5	.....	.375"	36F232B	2.33	36F232H	3.23	36F2324	4.30
8464	20-4	.....	.390"	36F231B	1.98	36F231H	2.70	36F231A	3.45
8488	22-8	.....	.205"	.....	.....	.....	.....	36F056A	5.25
8221	22 Cop. Weld	75	.242"	.....	.....	.....	.....	36F1357A	6.00

RG/U TRANSMISSION LINE CABLE

Has low-loss flexible polyethylene inner jacket covered by copper shield, with either vinyl or polyethylene outer jacket overall. All are single conductor type. *MIL spec.

Type	RG No.	JAN Spec.	Nom. Imp.	AWG and stranding	Nom. O.D.	Stk. No.	100'	Stk. No.	250'	Stk. No.	500'	Stk. No.	1000'
8237	RG-8/U	C-17A	52.0	13 (7x21)	.405"	36F113A	13.15	36F113E	27.75	36F113F	52.50	36F113	105.00
8238	RG-11/U	C-17A	75.0	18 (7x26)	.405"	36F114A	11.25	36F114E	26.25	36F114F	45.30	36F114	90.60
8240	RG-58/U	C-17A	53.5	20 solid	.195"	36F111A	4.75	36F111E	10.20	36F111F	17.40	36F111	34.80
8259	RG-58A/U	C-17A	50.0	20 (19x.0071)	.195"	36F118A	5.55	.....	.....	36F118F	20.25	36F118	40.50
8262	RG-58C/U	C-17D*	50.0	20 (19x.0071)	.195"	.....	.....	.....	.....	36F057F	22.15	36F057	44.30
8241	RG-59/U	C-17A	73.0	22 Copperweld	.242"	36F110A	5.50	36F110E	12.30	36F110F	19.05	36F110	38.10
8254	RG-62/U	C-17A	93	22 Copperweld	.242"	36F1347A	6.15	.....	.....	36F1347F	22.90	36F1347	45.80
8216	RG-174/U	C-17D	50.0	26 (7x34)	.100"	36F058A	3.60	.....	.....	36F058F	13.05	36F058	26.10

SPECIAL PURPOSE RF WIRE AND GROUNDWIRE

Type 8014. Indoor Aerial Wire. 25# (13x36) tinned copper conductor with chrome vinyl insulation. Nom. OD: .044"; wt. 4 oz/25 ft.
36F153C. Type 8014. 25 ft. spool. **NET** ..... **.57**

Type 8018. Ground Wire. Soft-drawn #8 AWG solid aluminum wire, approved for all grounding applications in TV, FM, Amateur, and other antenna systems.
36F763. 50 ft. spool. **NET** **1.13**

Type 8817. Litz Wire. 5x44 Celenamel insulated strands with nylon wrap; .008" nom. O.D. Ideal for winding loop antennas, etc. 1¼ oz/100'.
36F154A. 100 ft. spool. **NET** ..... **.65**

ALL BELDEN PRODUCTS SOLD IN LISTED LENGTHS ONLY

● NEW HIGH VOLTAGE AND CATHODE RAY TUBE CABLE

Type 8866. Small diameter 40 KVDC tinned copper cable. Used in repair of cathode ray tube leads in color TV and oscilloscopes. Breakdown voltage greater than 80 KVDC.
36F1362C. 25'. **NET** ..... 1.80 **36F1362A.** 100'. **NET** 5.10
36F1362F. 500'. **NET** 21.75

HIGH VOLTAGE AND CATHODE RAY TUBE CABLE

Type 8868. CRT cable. #22(7x30) conductor, with conductive polyethylene, polyethylene insulation, and red vinyl jacket. 50KV breakdown voltage. Nom. O.D., .150".
36F070C. 25'. **NET** ..... 1.10 **36F070A.** 100'. **NET** 2.70
36F070F. 500'. **NET** 10.50

Type 8869. 22GA with conductive polyethylene, polyethylene insulated, black vinyl jacket, 35 KV, O.D. .120.
36F1325A. 25'. **NET** ..... .95 **36F1325C.** 100'. **NET** 2.25
36F1325F. 500'. **NET** 8.40

Type 8870. 80 KV DC high voltage cable. #22 AWG solid Copperweld conductor, polyethylene dielectric and jacket. Conduction polyethylene over inner conductor combined with copper braid equipotentional shield over dielectric. Breakdown: 160 KVDC. Nom. O.D., .400 inch.
36F059A. 100 ft. **NET** **32.25**

TEST PROD WIRE — STRAIGHT AND COILED

Stranded tinned copper conductors, separator wrapping, red or black rubber insulated. Workingvoltage s listed are AC RMS values **Straight types.** 8897 is manufactured per MIL-W-13169 specs: 8890 is miniature type. See following page for retractible types.

Type	Color	A.W.G.	Nom. OD	WV	10'	NET	25'	NET	100'	NET	500'	NET	1000'	NET
8898	Black	18-65x36	.230"	10000	36F001G	1.05	36F001C	1.95	36F001A	5.05	36F001F	21.00	.....	.....
8898	Red	18-65x36	.230"	10000	36F000G	1.05	36F000C	1.95	36F000A	5.05	36F000F	21.00	.....	.....
8899	Red	18-65x36	.144"	5000	36F005G	.75	36F005C	1.15	36F005A	3.60	36F005F	13.00	36F005	26.00
8899	Black	18-65x36	.144"	5000	36F006G	.75	36F006C	1.15	36F006A	3.60	36F006F	13.00	36F006	26.00
8897	Red	18-65x36	.144"	5000	.....	.....	.....	.....	.....	.....	36F128F	14.65	36F128	29.30
8897	Black	18-65x36	.144"	5000	.....	.....	.....	.....	.....	.....	36F129F	14.65	36F129	29.30
8890	Black	24-45x40	.066"	1000	.....	.....	36F007C	.90	36F007A	2.25	36F007F	9.45	.....	.....
8890	Red	24-45x40	.066"	1000	.....	.....	36F008C	.90	36F008A	2.25	36F008F	9.45	.....	.....

36F004J. Type 8892. 14 Ft. Spool, consists of 7 Ft. Red and 7 Ft. Black. Ready for use. **NET** ..... **.81**

BELDEN Bus Bar/Magnet Wire & Power Cords

BUS BAR WIRE

Made in accordance with Federal spec. QQ-W-343. Solid tinned copper; available in spools of 100' and 1000' only. Use where a high current conductor is needed.

Type	AWG	Stk. No.	100'	Stk. No.	1000'
8025	30	36F1022A	.66	36F1022	2.70
8024	28	36F1023A	.66	36F1023	3.00
8023	26	36F1024A	.68	36F1024	3.23
8022	24	36F1025A	.69	36F1025	3.60
8021	22	36F1026A	.71	36F1026	4.20
8020	20	36F1027A	.84	36F1027	5.80
8019	18	36F1028A	1.10	36F1028	8.20
8013	16	36F1029A	1.58	36F1029	13.15
8012	14	36F1030A	2.33	36F1030	19.50
8011	12	36F1031A	3.45	.....	.....

SINGLE BELDSOL-130° C

Dual film insulated magnet wire that combines excellent dielectric characteristics of polyurethane and the known toughness and solvent resistance of nylon. May be soldered without insulation removal at 750°F. ½ lb. spools sizes 14 thru 36. ¼ lb. spools sizes 38 and 40.

Mfr. No.	AWG	Feet	Stk. No.	NET
8047	14	40	36F1310	1.14
8048	16	63	36F1311	1.14
8049	18	100	36F1312	1.17
8050	20	160	36F1313	1.17
8051	22	254	36F1314	1.17
8052	24	404	36F1315	1.20
8053	26	645	36F1316	1.26
8054	28	1020	36F1317	1.34
8055	30	1615	36F1318	1.49
8056	32	2515	36F1319	1.67
8057	34	4060	36F1320	1.77
8058	36	6400	36F1321	2.07
8045	38	5070	36F1322	1.52
8046	40	8050	36F1323	2.03

HEAVY POLYTHERMALEZE HIGH TEMPERATURE MAGNET WIRE

Dual polyester film insulated magnet wire, rated for use to 155°C. Has exceptional ability to resist chemical solvents and abuse in intricate windings. One pound spools.

Mfr. No.	AWG	Feet	Stk. No.	NET
8073	14	80	36F767	1.97
8074	16	126	36F768	2.04
8075	18	199	36F769	2.16
8076	20	315	36F770	2.16
8077	22	501	36F771	2.16
8078	24	793	36F772	2.22
8079	26	1260	36F773	2.37
8080	28	1990	36F774	2.61
8081	30	3140	36F775	2.93
8082	32	4880	36F776	3.25
8083	34	7860	36F777	3.80
8084	36	12400	36F778	4.70
8085	38	19400	36F779	5.61
8086	40	32100	36F780	7.30

COILED (RETRACTILE) TEST PROD WIRE

Retracted length 8". Stretches to 5'. 8878 with prods. 8879 without prods. One black, one red lead.

Type	AWG (Stranding)	O.D.	WV	Stk. No.	PR.
8878	20(42x36)	.173"	5000	36F130	3.25
8879	20(42x36)	.173"	5000	36F131	1.38

TWO CONDUCTOR POWER SUPPLY CORDS

For small appliances and electronic equipment. U/L green flag label. All are rubber, except **vinyl, †neoprene. Molded plugs.

Mfr. No.	Stk. No.	Length, ft.	AWG (stranding)	U/L Type	Color	Fig.	1-24	25-up	Bulk Pkd.—50. or *100 Stk. No.	Each
17126S	36F854	6	18 (41x34)	SP-1	brown	B	.40	.36	36F854A*	.26
17129S	36F839	9	18 (41x34)	SP-1	brown	B	.50	.44	.....	.....
17205S	36F840	6	18 (41x34)	SVT**	black	A	.53	.47	36F840A	.36
17206S	36F851	6	18 (41x34)	SV	gray	A	.62	.56	36F851A	.41
17249S	36F841	1 ft.-6 ft.	18 (41x34)	SVO†	black	C	1.18	1.06	.....	.....

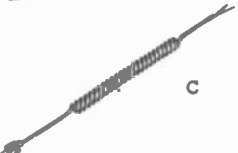
THREE CONDUCTOR POWER SUPPLY CORDS

For applications requiring grounding wire. Rubber, except †neoprene. All have molded vinyl plugs.

Mfr. No.	Stk. No.	Length ft.	AWG (standing)	U/L Type	Color	Fig.	1-24	25-up	Bulk Pkd.—50. or *100 Stk. No.	Each
17236S	36F1037	6	18 (41-34)	SV	black	B	.74	.66	36F1037A	.53
17238S	36F1038	8	18 (41-34)	SV	black	B	.83	.74	36F1038A	.61
17406S	36F842	6	18 (16x30)	SJ	black	B	.78	.70	36F842A	.56
17408S	36F857	8	18 (16x30)	SJ	black	B	.90	.80	36F857A	.66
17419S	36F843	9	16 (65x34)	SJ	black	B	1.18	1.05	36F843A	.90
17425S	36F849	15	16 (65x34)	SJ	black	B	1.79	1.60	.....	.....
17447S	36F844	1-6	18 (41x34)	SJO†	black	C	1.52	1.36	.....	.....
17448S	36F845	1-6	16 (65x34)	SJO†	black	C	1.81	1.62	.....	.....

TWO CONDUCTOR EXTENSION CORDS

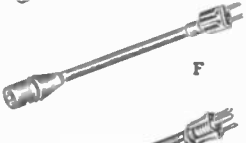
Standard cube-tap cords for general light-duty. Vinyl cord and plug with phenolic 3-way socket.



Mfr. No.	Stk. No.	Length ft.	AWG (standing)	U/L Type	Color	Fig.	1-24	25-up	Bulk Pkd.—50. or *100 Stk. No.	Each
17156S	36F1301	6	18 (41x34)	SPT-1	brn, ivory	D	.43	.39	.....	....
17159S	36F1302	9	18 (41x34)	SPT-1	brn, ivory	D	.50	.44	.....	....
17162S	36F1307	12	18 (41x34)	SPT-1	brn, ivory	D	.62	.56	.....	....
17165S	36F1308	15	18 (41x34)	SPT-1	brn, ivory	D	.70	.63	.....	....
Standard rubber extension cord with vinyl connectors.										
17259S	36F846	9	18 (41x34)	SV	gray	E	.85	.76	.....	....
All-rubber extension cord with round female connector.										
17370S	36F1034	10	16 (26x30)	SJ	black	F	1.17	1.04	.....	....

THREE CONDUCTOR EXTENSION CORDS

For equipment and appliances requiring grounding; have U/L Blue Flag Label. Rubber, except *vinyl, †neoprene. Molded vinyl connectors.



Mfr. No.	Stk. No.	Length, ft.	AWG (stranding)	U/L Type	Color	Fig.	1-24	25-up	Bulk Pkd.—50. or *100 Stk. No.	Each
17194S	36F847	25	16 (26x30)	SPT-2*	yellow	G	2.46	2.20	.....	....
17460S	36F1039	10	18 (16x30)	SJ	black	J	1.23	1.10	.....	....
17491S	36F848	25	18 (16x30)	SJT*	yellow	J	2.21	1.97	.....	....

SPECIAL PURPOSE AND APPLIANCE CORDS

Replacement appliance cord; rated 10 amps, 125V. Neoprene.

17806S	36F1036	6	18 (41x34)	HPN	black	B	.43	.39	36F1036A	.31

Neoprene cord has standard appliance plug with contacts on 11/16" centers for waffle irons, etc. Rated 10 amps, 125V.

17866S	36F873	6	17 (52x34)	HPN	black	H	.59	.53	36F873A	.43

Has asbestos insulation, glazed cotton braid, eyelets for #8 screw; recommended for irons. Rated 10A/125V.

17706S	36F867	6	18 (41x34)	HPD	blk/wht	I	.69	.61	36F867A	.53

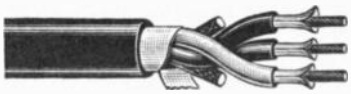
Air-conditioner extension cord, rated 15A/125V. Rubber.

17659S	36F1035	9	14 (41x30)	S	gray	J	2.66	2.37	.....	.....

3 conductor business machine cord for Friden, Victor, Marchant, & Hewlett Packard. Also for Revere & Kodak projectors—Dukane audio eq.

17258S	36F1324	8	18 (41x34)	SVT	Gray	E	1.01	.90	.....	.....

BELDEN



S-3

SO-2

SO-3

SJ-3

SJO-3

● *NEW* PORTABLE CORDAGE

Quality cordage designed for extra flexible service in many higher amperage applications. Cables available in various types of insulation and meet the highest standards of quality control.

Thoroughly tested. In spools of 250 feet. Covered with black rubber. Listed by Underwriters Laboratories.

S-3 CONDUCTOR-RUBBER JACKET 600V-60°C

Type	Stk. No.	Size AWG & Strand	Nom O.D. (Inches)	Lbs.	250' Coil NET	1000'-4999'	5000'-up
18109	36F1363	18 (41 x 34)	.401	22	34.92	32.50	30.07
18108	36F1364	16 (65 x 34)	.426	27	40.68	37.86	35.03
18107	36F1365	14 (41 x 30)	.558	45	63.60	59.18	54.76

SO-2 CONDUCTOR-NEOPRENE JACKET 600V-60°C

18204	36F1366	18 (41 x 34)	.386	46	33.48	31.16	28.83
18203	36F1367	16 (65 x 34)	.401	51	38.34	35.68	33.02
18202	36F1368	14 (41 x 30)	.528	39	60.91	56.68	52.45

SO-3 CONDUCTOR-NEOPRENE JACKET 600V-60°C

18209	36F1369	18 (41 x 34)	.401	23	45.99	42.80	39.60
18208	36F1370	16 (65 x 34)	.426	28	51.93	48.33	44.72
18207	36F1371	14 (41 x 30)	.558	48	83.74	77.92	72.11

SJ-3 CONDUCTOR-RUBBER JACKET 300V-60°C *Flex

Type	Stk. No.	Size AWG & Strand	Nom. O.D. (Inches)	Lbs.	250' Spool NET	1000'-4999'	5000'-up
18129	36F1372	18 (16 x 30)*	.328	35	20.43	19.01	17.59
18130	36F1373	16 (26 x 30)*	.353	42	29.00	26.99	24.97

SJO-3 CONDUCTOR NEOPRENE JACKET 300V-60°C *Flex

18229	36F1374	18 (16 x 30)*	.328	36	25.60	23.82	22.04
18230	36F1375	16 (26 x 30)*	.353	42	35.75	33.27	30.78

TV INTERLOCK CORD

Molded plastic 8890. TV power supply line cord. 6 ft. long. Mold-on, all-rubber female connector. U. L. approved. Shpg. wt., 8 oz.
36F880. NET ..... **.27**

Male Connector. Flush mounting type for use with cord above. Wt., 2 oz.
36F881. NET ..... 1-99, .09 100-Up, .045

BIRNBACH

● *NEW* BIRFLON TFE TEFLON EXTRUDED TUBING

Extruded from DuPont Tetrafluoroethylene Resin. Used in electronic and electrical equipment for connection of components. High temperature Class C insulation. Thin Wall can be processed into flexible and rigid printed circuits. Low power factor, low dielectric constant, high volume and surface resistivity, good dielectric strength (500 to 1000 V/MIL). U.I. approved. Color: Natural only. Other colors available on special order.

STANDARD WALL — MIL-I-22129C

Type	Stk. No.	B&S Gauge Size No.	Nom. I.D.	Per 100' Spool 1-9	10-49	50-up
T550-24	36F1500	24	.022	5.55	4.80	4.45
T550-22	36F1501	22	.027	6.15	5.35	4.90
T550-20	36F1502	20	.034	6.90	6.00	5.50
T550-18	36F1503	18	.042	8.55	7.40	6.85
T550-16	36F1504	16	.053	10.50	9.10	8.40
T550-14	36F1505	14	.066	12.75	11.05	10.20
T550-12	36F1506	12	.085	15.75	13.65	12.60
T550-10	36F1507	10	.106	19.50	16.90	15.60
T550- 8	36F1508	8	.133	24.00	20.80	19.20
T550- 6	36F1509	6	.166	30.00	26.00	24.00
T550- 4	36F1510	4	.234	36.75	31.80	29.40
T550- 2	36F1511	2	.263	45.75	39.60	36.60
B550- 0	36F1512	0	.330	57.00	49.40	45.60

THIN WALL MIL-I-22129C

T500-32	36F1513	32	.011	3.95	3.00	2.85
T500-30	36F1514	30	.012	3.45	2.95	2.75
T500-28	36F1515	28	.015	3.80	3.30	3.05
T500-26	36F1516	26	.018	4.20	3.65	3.35
T500-24	36F1517	24	.022	4.65	4.05	3.70
T500-22	36F1518	22	.027	5.10	4.40	4.10
T500-20	36F1519	20	.034	5.70	4.95	4.55
T500-18	36F1520	18	.042	7.20	6.25	5.75
T500-16	36F1521	16	.053	8.70	7.55	6.95
T500-14	36F1522	14	.066	10.65	9.25	8.55
T500-12	36F1523	12	.085	13.35	11.55	10.70
T500-10	36F1524	10	.106	16.10	13.95	12.90
T500- 8	36F1525	8	.133	20.55	17.80	16.45
T500- 6	36F1526	6	.166	24.45	21.20	19.55
T500- 4	36F1527	4	.208	29.55	25.60	23.65
T500- 2	36F1528	2	.263	39.45	34.20	31.55
T500- 0	36F1529	0	.330	52.00	45.10	41.65
T500- 3/8	36F1530	3/8	.390	76.50	66.35	61.25
T500- 7/16	36F1531	7/16	.453	84.00	72.75	67.25
T500- 1/2	36F1532	1/2	.515	96.00	83.20	76.75

● *NEW* BIRFLEX 1200 FLEXIBLE FIBERGLASS SLEEVING

High temperature fiberglass sleeving of tightly braided 100% fiberglass intended for temperatures as high as 1200°F. Maximum mechanical strength. 1/16" double wall provided upon request. Color, natural. Nema-VS-1.

B1200-24	36F1533	24	.022	2.45	2.08	1.90
B1200-22	36F1534	22	.027	2.45	2.08	1.90
B1200-20	36F1535	20	.034	2.70	2.18	2.10
B1200-18	36F1536	18	.042	2.80	2.33	2.15
B1200-16	36F1537	16	.053	2.90	2.38	2.20
B1200-14	36F1538	14	.066	3.05	2.53	2.35
B1200-12	36F1539	12	.085	3.25	2.63	2.45
B1200-10	36F1540	10	.106	3.55	3.03	2.75
B1200- 8	36F1541	8	.133	4.00	3.32	3.05
B1200- 6	36F1542	6	.166	4.75	3.96	3.65
B1200- 4	36F1543	4	.208	5.80	4.68	4.40
B1200- 2	36F1544	2	.263	7.30	6.05	5.60
B1200- 0	36F1545	0	.330	9.70	8.16	7.40
B1200- 3/8	36F1546	3/8	.387	12.40	10.15	9.50
B1200- 7/16	36F1547	7/16	.450	16.40	13.42	12.55
B1200- 1/2	36F1548	1/2	.512	21.35	17.42	16.30
B1200- 5/8	36F1549	5/8	.640	25.65	23.32	19.65
B1200- 3/4	36F1550	3/4	.768	31.55	28.55	24.10
B1200- 7/8	36F1551	7/8	.893	38.50	34.93	29.45
B1200- 1	36F1552	1	1.018	46.85	42.46	35.80

● *NEW* RUBBER KINKLESS TEST LEAD WIRE (SPECIFY COLOR, BLACK OR RED)

Extremely flexible and limp. Excellent dielectric properties. Of annealed tinned copper. Specify color: black or red. *Mil Type MIL-W-13169B. WS16/U Black, WS17/U Red.

Type	Size AWG	Strand	Nom. O.D.	Stk. No.	100'	Stk. No.	250'	Stk. No.	500'	Stk. No.	1000'
61	20	41/36	.137"	36F1553A	3.00	36F1553E	7.28	36F1553F	14.10	36F1553	26.40
66	18	65/36	.145"	36F1554A	3.60	36F1554E	8.28	36F1554F	15.15	36F1554	28.80
70*	18	65/36	.145"	36F1555A	3.96	36F1555E	9.10	36F1555F	16.67	36F1555	31.68

● *NEW* PLASTIC KINKLESS TEST LEAD WIRE (SPECIFY COLOR)

Vinyl compound insulation allows maximum flexibility. One conductor tinned copper stranded. Specify color: Black, red, yellow, green, white, blue. MIL-I-3930A Type UP (PVC).

Type	Size AWG	Strand	Nom. O.D.	Stk. No.	100'	Stk. No.	250'	Stk. No.	500'	Stk. No.	1000'
1922	22	26/36	.100"	36F1556A	4.53	36F1556E	10.08	36F1556F	19.64	36F1556	38.52
1920	20	26/34	.104"	36F1557A	5.62	36F1557E	12.80	36F1557F	24.89	36F1557	49.04
1918	18	65/36	.112"	36F1558A	6.27	36F1558E	14.38	36F1558F	28.03	36F1558	54.96
1916	16	65/34	.129"	36F1559A	9.37	36F1559E	22.28	36F1559F	43.24	36F1559	84.79

Amphenol Coaxial Cable

Fabricated in accordance with the rigid requirements set forth in the latest military specs. Polyethylene dielectric for general RF and HF applications. Teflon permits operation at temperatures from —73°C to +200°C. All cables meet the latest Navy, Air Force and Signal Corps specifications. Connector selection chart available upon request. Min. order 100 ft. except teflon 30 ft.

RG-/U COAXIAL CABLES—Polyethylene and Teflon Dielectrics

Stock No.	Amphenol Number	RG-/U No.	Jacket O.D.	Dielectric O.D.	Dielectric Type*	Center* Cond.	V.P. %	Cap. MMF/ Ft.	Max. Oper. VRMS	Nom. IMP Ohms	Uses Connector Series	100 Ft.	500 Ft.	1000 Ft.
36F240	21-004	8/U	.405	.285	P	7/21C	65.9	29.5	5000	52	N,C,HN,UHF	12.78	49.75	99.50
36F234	21-290	8A/U	.405	.285	P	7/21C	65.9	29.5	5000	52	N,C,HN,UHF	14.41	72.05	133.80
36F494	21-332	9B/U	.420	.280	P	7/21S	65.9	30	5000	50	N,C,HN,UHF	37.50	187.50	369.00
36F241	21-007	11/U	.405	.285	P	7/26T	65.9	20.5	5000	75	N,C,HN,UHF	12.08	46.25	92.50
36F487	21-298	17A/U	.870	.680	P	.188C	65.9	29.5	11000	52	N,C,HN,LC	63.50	317.50	610.00
36F1116	21-802	55B/U	.206	.116	P	20S	65.9	28.5	1900	53.5	TNC,BNC,BN,C,UHF	11.00	55/00	106.00
36F243	21-024	58/U	.195	.116	P	20C	65.9	28.5	1900	53.5	TNC,BNC,BN,C,UHF,N	4.50	18.00	33.80
36F245	21-199	58A/U	.195	.116	P	19/.0-071T	65.9	30	1900	50	TNC,BNC,BN,C,UHF,N	5.25	21.00	39.80
36F491	21-316	58C/U	.195	.116	P	19/.0-071T	65.9	30	1900	50	TNC,BNC,BN,C,UHF,N	5.40	24.50	43.50
36F244	21-025	59/U	.242	.146	P	22CW	65.9	21.5	2300	73	TNC,BNC,BN,C,UHF,N	5.36	20.25	38.60
36F1118	21-794	59B/U	.242	.146	P	.023CW	65.9	21	2300	75	TNC,BNC,BN,C,UHF,N	5.93	23.75	47.50
36F472	21-026	62/U	.242	.146	SSP	22CW	84	13.5	750	93	TNC,BNC,BN,C,UHF,N	5.88	23.25	44.75
36F1160	21-771	62B/U	.242	.146	SSP	7/32CW	84	13.5	750	93	TNC, BNC, BN, C, UHF, N, Plug-in	6.20	30.50	56.40
36F1120	21-804	71B/U	.250‡	.146	SSP	22CW	84	13.5	750	93	TNC,BNC,BN,C,UHF,N	10.10	43.50	82.50
36F1124	21-327	108A/U	.235	.079 ea.	P	Two 7/28T	68	23.5	1000	78	Twin	6.90	33.00	60.70
36F1159	21-779	213/U	.405	.285	P	7/.0296C	65.9	29.5	5000	50	UHF, N, C, HN	13.14	57.15	114.30
36F1145	21-780	214/U	.425	.285	P	7/.02-96S	65.9	29.5	5000	50	N,C,HN,UHF	40.70	202.87	403.05
36F1154	21-788	223/U	.216	.116	P	.035S	65.9	29.5	1900	50	TNC,BNC,BN,C,UHF,N	16.12	80.02	158.40
												1-99 Per Foot		100-Up Per Foot
36F1162	421-176	142B/U	.195	.116	TF	.039 SCW	69.5	28.5	1900	50	C, N	.65		.58
36F1156	421-135	225/U	.430	.285	TF	7/103-125	69.5	29.5	5000	50	N, C, HN, UHF	2.64		2.09

SUB. MIN. RG CABLES

Stk. No.	Amphenol Number	RG-/U No.	Jacket O.D.	Dielectric O.D.	Dielectric Type	Center Cond.	V.P. %	Cap. MMF/ Ft.	Max. Oper. VRMS	Nom. Imp. Ohms	Uses Connector Series	100 Ft.	500 Ft.	1000 Ft.
36F497	21-597	.....	.150	.100	P	7/.00-56CW	69.5	20	2500	75	Subminax	5.00	22.50	43.50
36F498	21-598	174/U	.100	.060	P	7/34CW	65.9	30	1500	50	Subminax	3.30	14.85	27.80

Stk. No.	Amphenol Number	RG-/U No.	Jacket O.D.	Dielectric O.D.	Dielectric Type	Center Cond.	V.P. %	Cap. MMF/ Ft.	Max. Oper. VRMS	Nom. Imp. Ohms	Uses Connector Series	1-99 Per Foot	100-Up Per Foot
36F434	421-106	187/U	.110	.060	TF	7/38SCW	69.5	19.5	1200	75	Subminax	.19	.175
36F435	421-109	196/U	.080	.034	TF	7/38SCW	69.5	28.5	1000	50	Subminax	.14	.13
36F1163	421-079	187A/U	.110	.060	TF	7/38SCW	69.5	19.5	1200	75	BNC, Subminax	.22	.19
36F1164	421-077	188A/U	.110	.060	TF	7/.0067SCW	69.5	29.0	1200	50	BNC, Subminax	.22	.20
36F1165	421-075	195A/U	.155	.102	TF	7/38SCW	69.5	15.0	1500	95	BNC, Subminax, TNC	.41	.375
36F1166	421-073	196/U	.080	.034	TF	7/38SCW	69.5	28.5	1000	50	Subminax	.14	.13

*S—Silvered Copper C—Copper T—Tinned Copper KW—Karma Wire CW—Copperweld P—Polyethylene
SSP—Semi-Solid Polyethylene TF—Teflon SST—Semi-Solid Teflon N—Nichrome SCW—Silver-coated Copperweld
TT—Teflon Tape ‡Maximum.

POLYFOAM COAXIAL CABLES

Cellular polyethylene dielectric material provides lower weight, cost, capacitance, and attenuation than standard RG types. Widely used in commercial transmitter applications such as community TV and in ham stations. The dielectric constant is 1.50 as compared to 2.25 for solid polyethylene. It has a specially compounded non-contaminating black polyethylene jacket providing improved weather and abrasion resistance. *Sweep tested—1000 ft. min. order.

Stock No.	Amphenol No.	R G Equiv.	Lbs./ 1000 ft.	Jacket O.D.	Jacket Type	Dielectric OD	Center Cond.	Cap. MMF/Ft.	Max. Oper. Volts	Nom. Imp. Ohms	Net Per Foot	Net Per 100 Ft.	Net Per 500 Ft.	Net Per 1000 Ft.
36F1208	621-111	8/U	104	.405	Black Vinyl	.285	7/19C	24.5	1,500	50	.16	14.73	73.65	141.00
36F1211	621-186	59/U	32	.242	Black Poly.	.146	20CW	17.3	1,000	75	.....	.....	.....	*41.25

AMPHENOL TWIN LEAD TRANSMISSION LINE

TWIN 300 LEAD

Twin lead recommended for UHF-VHF television and FM antenna installations. Use of brown virgin polyethylene dielectric assures minimum signal loss and a more constant impedance over its exceptionally long life. Resistant to sun, chemical fumes, salt laden and gas polluted air.

*Coils, unassembled.

AMPHENOL TWIN LEADS—300 Ohm Television Receiving Types

Description	Type	Lbs. 100 Ft.	25 Ft. Pre-Assembled Hank	NET	50 Ft. Pre-Assembled Hank	NET	75 Ft. Pre-Assembled Hank	NET	100 Ft. Pre-Assembled Hank	NET	500 Feet Stk. No.	500 Feet NET	1000 Feet Stk. No.	1000 Feet NET
Standard 7/28 Copper Conductors. Brown Poly. 60 Mil Web.	214-056	1⅔	36F249C	.76	36F249B	1.13	36F249H	1.52	36F249A	1.73	36F249F	7.85	36F249	15.60
Indoor 7/28 Copper Conductors. Clear Poly. 60 Mil Web.	214-318	1⅔	36F1200C	.84	36F249H	1.31	36F1200H	1.66	36F1200A	1.92	36F1200F	8.55	36F1200	16.55

Wire, Indicators, and Signal Devices

CONSOLIDATED WIRE

SOLID ENAMELED COPPER ANTENNA WIRE

Stk. No.	Mfg. No.	Description	NET
36F260A	3851	100-ft. Coil #14 Solid Enamel Copper Wire	2.25
36F260B	3851	200-ft. Coil #14 Solid Enamel Copper Wire	4.50
36F260	3851	1000-ft. Spool #14 Solid Enamel Copper Wire	22.50
36F261A	3861	100-ft. Coil #12 Solid Enamel Copper Wire	3.30
36F261B	3861	200-ft. Coil #12 Solid Enamel Copper Wire	6.60
36F261	3861	1000-ft. Spool #12 Solid Enamel Copper Wire	33.00
36F262A	3871	100-ft. Coil #10 Solid Enamel Copper Wire	6.00
36F262B	3871	200-ft. Coil #10 Solid Enamel Copper Wire	12.00
36F262	3871	1000-ft. Spool #10 Solid Enamel Copper Wire	53.63
36F263	3891	100-ft. Coil #8 Solid Enamel Copper Wire	7.50

TINNED COPPER BUS BAR WIRE

Solid soft drawn copper and brightly tinned for all types of soldering connections and other applications. 1000-ft. and 100-ft. spools only.

Type	Nom. Dia.	Size Solid	Circular Mil. Area	Stk. No.	1000 Ft. NET	Stk. No.	100 Ft. NET
3845	.129"	8	16510	36F298	80.25	36F296A	8.51
3841	.102"	10	10380	36F295	55.13	36F295A	5.93
3831	.082"	12	6530	36F294	32.18	36F294A	3.23
3821	.064"	14	4110	36F293	20.93	36F293A	2.10
3815	.051"	16	2583	36F292	12.75	36F292A	1.73
3816	.040"	18	1624	36F291	10.88	36F291A	1.43
3817	.032"	20	1022	36F290	6.90	36F290A	.90
3818	.025"	22	642	36F289	4.43	36F289A	.68
3819	.020"	24	404	36F285	3.75	36F285A	.65
3846	.016"	26	254.1	36F286	3.53	36F286A	.66
3847	.013"	28	159.8	36F287	4.73	36F287A	.63
3848	.010"	30	100.5	36F288	2.85	36F288A	.53

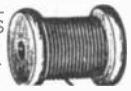
HEAVY FORMVAR MAGNET WIRE

For use in transformers, chokes, transmitters, and the repair and construction of motors. 1 lb. spools.

Stk. No.	Type	Size	NET
36F521	2000	#14	1.59
36F522	2000	#15	1.59
36F523	2000	#16	1.67
36F524	2000	#17	1.68
36F525	2000	#18	1.79
36F526	2000	#19	1.80
36F527	2000	#20	1.80
36F528	2000	#21	1.86
36F529	2000	#22	1.80
36F530	2000	#23	1.84
36F531	2000	#24	1.89
36F532	2000	#25	1.93
36F533	2000	#26	2.04
36F534	2000	#27	2.16
36F535	2000	#28	2.22
36F536	2000	#29	2.40
36F537	2000	#30	2.52
36F538	2000	#31	2.75
36F539	2000	#32	2.79
36F540	2000	#33	2.85
36F541	2000	#34	3.36
36F542	2000	#35	3.67
36F543	2000	#36	4.22
36F544	2000	#37	5.14
36F545	2000	#38	5.61
36F546	2000	#39	7.20
36F547	2000	#40	7.30

MAGNET WIRE ON SPOOLS

Insul. copper wire of highest quality. Standard B&S Ga. We can supply magnet wire in all sizes, types. Write for quantity prices.



PLAIN ENAMELED ½-LB. SPOOLS

Stk. No.	Size	Feet	NET
36F700	14	38	.78
36F701	16	63	.83
36F702	18	101	.86
36F703	20	159	.89
36F704	22	253	.92

PLAIN ENAMELED ½1LB. — Cont.

Stk. No.	Size	Feet	Wt.	NET
36F705	24	253	½ lb.	.95
36F706	26	640	½ lb.	1.01
36F707	28	1013	½ lb.	1.07
36F708	30	1602	½ lb.	1.14
36F709	32	2543	½ lb.	1.20
36F710	34	4042	½ lb.	.94
36F711	36	6410	½ lb.	1.09

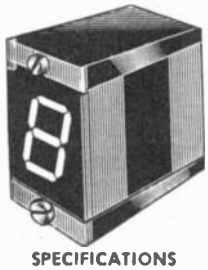
DOUBLE COTTON ½-LB. SPOOLS

36F720	14	40	½ lb.	1.02
36F721	16	60	½ lb.	1.05

DOUBLE COTTON SPOOLS (Continued)

Stk. No.	Size	Feet	Wt.	NET
36F722	18	95	½ lb.	1.14
36F723	20	150	½ lb.	1.23
36F724	22	225	½ lb.	1.23
36F725	24	350	½ lb.	1.50
36F726	26	525	½ lb.	1.64
36F727	28	825	½ lb.	1.74
36F728	30	1200	½ lb.	1.99
36F729	32	1750	½ lb.	2.57
36F730	34	2500	½ lb.	3.23
36F731	36	3725	½ lb.	3.63

ALCO MOSAIC READOUT INDICATORS



SPECIFICATIONS

Fig. Size: 2¼" high
Std. Volts: 6V and 14V
Bulb Life: 20,000 hours
Amp Drain: 6 3V 50 ma
Opening Size: .827"W x 1.34"H
Body Size: .827"W x 1.73"H x 1.69"D

Display of 0-9 numerals and some alphabetic indications by illuminating a combination of lamps is accomplished through a simple diode-matrix or encoding switch (not supplied). Decimal points, before and after figures can be used as a colon when 2 units are placed together. High illumination display is provided with low voltage, and low intensity lamps. Closely interlocked illuminated segments provide a bright, wide-viewing angle of approx. 150°. Indicator is compact and requires minimum space. Lightweight cast aluminum has excellent heat dissipation. Plug-in is accomplished through a standard 10-terminal printed circuit connector.

INDICATORS

Stk. No.	Type	Description	1-9	10-24	25-49	50-99
61F962	MS-6A	6.3 Volts	9.95	7.95	6.95	6.35
61F963	MS-14A	14 Volts	9.95	7.95	6.95	6.35

SOCKETS

Stk. No.	Type	1-9	10-24	25-49	50-99
61F964	MS-SKT	.80	.66	.58	.48

FILTERS

Stk. No.	Type	Description	1-9	10-24	25-49	50-99
61F965	MS-FLV	Violet	.40	.33	.29	.24
61F966	MS-FLR	Red				
61F967	MS-FLG	Green				

MALLORY "SOLID STATE" AUDIBLE SIGNAL DEVICE

Models SC-628 and SC-628H

Models SC-628A SC-110 and SC-628P

Respond to 3 milliamps of current with a sound output of 70 decibles. Ideal replacement for conventional high-power signaling devices—suitable for use as light indicator. Mounts in seconds! Has no mechanical linkage or contacts, is free from arching, creates no RF fields and provides reliable remote communication. Eliminates need for supervision of light indicators. Low power drain assures extended battery life.

Model SC-628. Occupies less than 2.9 cubic inches. 6 to 28 VDC. 2.5 KC.

Stock No.	Type	1-24	25-49	50-99	100-249	250-499
64F300	SC-628	4.95	4.70	4.45	4.15	3.80
Model SC-628H. Same as above, but 4.0 KC.						
64F301	SC-628H	4.95	4.70	4.45	4.15	3.80
Model SC-628A. Occupies 4.0 cubic inches. 6 to 28 VAC. 2.5 KC.						
64F302	SC-628A	7.35	7.00	6.60	6.20	5.65
Model SC-110. Same as above, but 110 VAC.						
64F303	SC-110	7.35	7.00	6.60	6.20	5.65
Model SC-628P. Occupies less than 4.0 cubic inches, 6 to 28 VDC. 2.5 KC. Pulsating: 3 to 5 Hz.						
64F304	SC-628P	7.35	7.00	6.60	6.20	5.65
Model 628S. Furnished with silicon transistors.						
64F305	SC6285	6.75	6.65	6.35	5.70	5.10

DIALCO® Datalites

ULTRA-MINIATURE INDICATOR LIGHTS

A

B

C

D

Ideal for data-processing equipment, computers and automation applications. All units fully insulated. Conform to applicable military specifications. Lamp Cartridges consist of unbased NE-2E Neon Lamps or T-1¾ wire-lead Incandescent Lamps, mounted in aluminum sleeves and caped with plastic lenses.

Connections are brought out as stainless steel pins mounted in nylon insulation and offset to provide polarization. Datalites with permanent NE-2 Series Neon Glow Lamps are designed for use where lamp replacement is not necessary. Legends can be hot-stamped on the flat front surfaces of the cylindrical lenses.

See following page for listing of Dialco Holders

(A—B) NEON GLOW

The NE-2E Neon Glow Lamp has formed tip and double length electrodes; 1/25 watt; starting voltage of 65 AC and 90 DC. Use 100K ohm resistor for 105 to 125 volts. Overall size of lamp cartridge, 1 19/64"x 2 1/64". Ave. Shpg. Wt., 1 oz.

(A) STOVEPIPE TRANSPARENT NEON CARTRIDGES

Stk. No.	Type	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
25F1100	507-3835-0931-600	Red	.88	.81	.74	.64	.58	.52
25F1101	507-3835-0933-600	Amber	.88	.81	.74	.64	.58	.52
25F1102	507-3835-0935-600	White	.88	.81	.74	.64	.58	.52
25F1103	507-3835-0936-600	Lt. Yel.	.88	.81	.74	.64	.58	.52
25F1104	507-3835-0937-600	Clear	.88	.81	.74	.64	.58	.52
As above, but with NE-2H High Brightness Lamp.								
25F1229	507-3836-0931-600	Red	.88	.81	.74	.64	.58	.52
25F1230	507-3836-0933-600	Amber	.88	.81	.74	.64	.58	.52
25F1231	507-3836-0935-600	White	.88	.81	.74	.64	.58	.52
25F1232	507-3836-0936-600	Lt. Yel.	.88	.81	.74	.64	.58	.52
25F1233	507-3836-0937-600	Clear	.88	.81	.74	.64	.58	.52

(B) LONG CYLINDRICAL NEON GLOW LAMP CARTRIDGES

25F1105	507-3835-1531-600	Red	.88	.81	.74	.64	.58	.52
25F1106	507-3835-1533-600	Amber	.88	.81	.74	.64	.58	.52
25F1107	507-3835-1535-600	White	.88	.81	.74	.64	.58	.52
25F1108	507-3835-1536-600	Lt. Yel.	.88	.81	.74	.64	.58	.52
25F1109	507-3835-1537-600	Clear	.88	.81	.74	.64	.58	.52
As above, but with NE-2H High Brightness Lamp.								
25F1234	507-3836-1531-600	Red	.88	.81	.74	.64	.58	.52
25F1235	507-3836-1533-600	Amber	.88	.81	.74	.64	.58	.52
25F1236	507-3836-1535-600	White	.88	.81	.74	.64	.58	.52
25F1237	507-3836-1536-600	Lt. Yel.	.88	.81	.74	.64	.58	.52
25F1238	507-3836-1537-600	Clear	.88	.81	.74	.64	.58	.52

(D) STOVEPIPE INCANDESCENT LAMP CARTRIDGES (TRANSLUCENT)

(6-Volt, 0.2-Amp.)

Stk. No.	Type	Lens Color	1-9	10-24	25-99	100-249	250-499	500-999
25F1110	507-3906-0971-600	Red	1.15	1.06	.97	.88	.81	.73
25F1111	507-3906-0972-600	Green	1.15	1.06	.97	.88	.81	.73
25F1112	507-3906-0973-600	Amber	1.15	1.06	.97	.88	.81	.73
25F1113	507-3906-0974-600	Blue	1.15	1.06	.97	.88	.81	.73
25F1114	507-3906-0975-600	White	1.15	1.06	.97	.88	.81	.73
25F1115	507-3906-0976-600	Lt. Yel.	1.15	1.06	.97	.88	.81	.73

(D) STOVEPIPE INCANDESCENT LAMP CARTRIDGES (TRANSLUCENT) (Continued)

(6.3-Volt, 0.2-Amp.)

Stk. No.	Type	Lens Color	1-9	10-24	25-99	100-249	250-499	500-499
25F1239	507-3909-0971-600	Red	1.21	1.12	1.02	.92	.85	.77
25F1240	507-3909-0972-600	Green	1.21	1.12	1.02	.92	.85	.77
25F1241	507-3909-0973-600	Amber	1.21	1.12	1.02	.92	.85	.77
25F1242	507-3909-0974-600	Blue	1.21	1.12	1.02	.92	.85	.77
25F1243	507-3909-0975-600	White	1.21	1.12	1.02	.92	.85	.77
25F1244	507-3909-0976-600	Lt. Yel.	1.21	1.12	1.02	.92	.85	.77

(14-Volt, 0.08-Amp.)

25F1116	507-3913-0971-600	Red	1.20	1.11	1.01	.92	.84	.76
25F1117	507-3913-0972-600	Green	1.20	1.11	1.01	.92	.84	.76
25F1118	507-3913-0973-600	Amber	1.20	1.11	1.01	.92	.84	.76
25F1119	507-3913-0974-600	Blue	1.20	1.11	1.01	.92	.84	.76
25F1120	507-3913-0975-600	White	1.20	1.11	1.01	.92	.84	.76
25F1121	507-3913-0976-600	Lt. Yel.	1.20	1.11	1.01	.92	.84	.76
As above, but with Long Life Bulb of approximately 50,000 hours.								
25F1245	507-3914-0971-600	Red	1.28	1.18	1.08	.98	.90	.81
25F1246	507-3914-0972-600	Green	1.28	1.18	1.08	.98	.90	.81
25F1247	507-3914-0973-600	Amber	1.28	1.18	1.08	.98	.90	.81
25F1248	507-3914-0974-600	Blue	1.28	1.18	1.08	.98	.90	.81
25F1249	507-3914-0975-600	White	1.28	1.18	1.08	.98	.90	.81
25F1250	507-3914-0976-600	Lt. Yel.	1.28	1.18	1.08	.98	.90	.81

(28-Volt, 0.04-Amp.)

25F1122	507-3917-0971-600	Red	1.10	1.02	.93	.84	.76	.68
25F1123	507-3917-0972-600	Green	1.10	1.02	.93	.84	.76	.68
25F1124	507-3917-0973-600	Amber	1.10	1.02	.93	.84	.76	.68
25F1125	507-3917-0974-600	Blue	1.10	1.02	.93	.84	.76	.68
25F1126	507-3917-0975-600	White	1.10	1.02	.93	.84	.76	.68
25F1127	507-3917-0976-600	Lt. Yel.	1.10	1.02	.93	.84	.76	.68

(A—C) LAMP CARTRIDGES

For Twin Lamp & Single Lamp Holder

NE-2E Neon Lamps or T-1¾ wire-lead incandescent Lamps, in alum. sleeves with plastic lenses. Connections — stainless steel pins in nylon insul. and offset to provide polarization.

(C) SHORT CYLINDRICAL INCANDESCENT LAMP CARTRIDGES (Continued)

Stk. No.	Type	Lens Color	1-9	10-24	99	100-249	250-499	500-999
25F1131	507-3906-1474-600	Blue	1.15	1.06	.97	.88	.81	.73
25F1132	507-3906-1475-600	White	1.15	1.06	.97	.88	.81	.73
25F1133	507-3906-1476-600	Lt. Yel.	1.15	1.06	.97	.88	.81	.73
(14-Volt, 0.08-Amp.)								
25F1134	507-3913-1471-600	Red	1.20	1.11	1.01	.92	.84	.76
25F1135	507-3913-1472-600	Green	1.20	1.11	1.01	.92	.84	.76
25F1136	507-3913-1473-600	Amber	1.20	1.11	1.01	.92	.84	.76
25F1137	507-3913-1474-600	Blue	1.20	1.11	1.01	.92	.84	.76
25F1138	507-3913-1475-600	White	1.20	1.11	1.01	.92	.84	.76
25F1139	507-3913-1476-600	Lt. Yel.	1.20	1.11	1.01	.92	.84	.76
(28-Volt, 0.04-Amp.)								
25F1140	507-3917-1471-600	Red	1.10	1.02	.93	.84	.76	.68
25F1141	507-3917-1472-600	Green	1.10	1.02	.93	.84	.76	.68
25F1142	507-3917-1473-600	Amber	1.10	1.02	.93	.84	.76	.68
25F1143	507-3917-1474-600	Blue	1.10	1.02	.93	.84	.76	.68
25F1144	507-3917-1475-600	White	1.10	1.02	.93	.84	.76	.68
25F1145	507-3917-1476-600	Lt. Yel.	1.10	1.02	.93	.84	.76	.68

NEON CARTRIDGES

Has BUILT-IN RESISTOR (1/10) watt). For the 507-4537, the resistance value is 56,000 ohms for use on 105-125 volts AC or DC. For the 507-4538 (High Brightness), the resistance value is 22,000 ohms for use on 110-125 volts AC.

Type 507-4537. With built-in 56K resistor for 105-125 ohms volts, AC or DC. *Colorless.

Fig. A. Stovepipe		Fig. B Long Cyl.		
Stock No.	Type 507-4537	Stock No.	Type 507-4537	Lens Color
25F1180	-0931-640	25F1185	-1531-640	Red
25F1181	-0933-640	25F1186	-1533-640	Amber
25F1182	-0935-640	25F1187	-1535-640	White
25F1183	-0936-640	25F1188	-1536-640	Lt. Yel.
25F1184	-0937-640	25F1189	-1537-640	Clear*

Type 507-4538. With built-in 22K resistor for 110-125 volts AC.

Fig. A. Stovepipe		Fig. B Long Cyl.		
Stock No.	Type 507-4538	Stock No.	Type 507-4537	Lens Color
25F1190	-0931-610	25F1195	-1531-610	Red
25F1191	-0933-610	25F1196	-1533-610	Amber
25F1192	-0935-610	25F1197	-1535-610	White
25F1193	-0936-610	25F1198	-1536-610	Lt. Yel.
25F1194	-0937-610	25F1199	-1537-610	Clear*

1-9	10-24	25-99	100-249	250-499	500-999
1.18	1.09	1.01	.92	.83	.75

You Can Depend on NEWARK for Everything In Industrial Electronics

- Same Day Shipment from On-the-Shelf Stock
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Sub-Miniature Lights DIALCO

DATALITES WITH PERMANENT NEON LAMPS

Lamps are built-in—not replaceable. Units mount in 3/8" clearance hole.

Built-in: a rugged, long-life NE-2E Neon Glow Lamp with formed tip and double length electrodes—1/25 watt, starting voltage of 65 AC and 90 DC. (*) With built in resistor of 100,000 ohms for 105-125 V. service. Resistors to Mil-R-11 spec.

Lightweight construction of aluminum, black anodized finish. Plastic lenses give wide angle visibility. 2 insulated terminals of low carbon steel, solder plating. With mounting hardware.

Conform to military specifications (Mil-L-3661)

Stovepipe: Without Built-In Resistor
(1 25/64"x1/2" Overall: 1 1/2 Oz. Shpg. Wt.)

Stock No.	Type 249—	Lens	1-9	10-24	25-99	100-249	250-499	500-999
25F1146	7840-0931-504	Red	1.13	1.06	1.00	.93	.86	.79
25F1147	7840-0933-504	Amber	1.13	1.06	1.00	.93	.86	.79
25F1148	7840-0935-504	White	1.13	1.06	1.00	.93	.86	.79
25F1149	7840-0936-504	Lt. Yellow	1.13	1.06	1.00	.93	.86	.79
25F1150	7840-0937-504	Clear	1.13	1.06	1.00	.93	.86	.79

(*) With Built-In 100-K Resistor
(1 53/64"x1/2" Overall; 2 Oz. Shpg. Wt.)

25F1151	7841-0931-574	Red	1.35	1.27	1.19	1.11	1.02	.94
25F1152	7841-0933-574	Amber	1.35	1.27	1.19	1.11	1.02	.94
25F1153	7841-0935-574	White	1.35	1.27	1.19	1.11	1.02	.94
25F1154	7841-0936-574	Lt. Yellow	1.35	1.27	1.19	1.11	1.02	.94
25F1155	7841-0937-574	Clear	1.35	1.27	1.19	1.11	1.02	.94

Short Cylindrical: Without Built-In Resistor
(1 25/64"x1/2" Overall; 1 1/2 Oz. Shpg. Wt.)

Stock No.	Type 249—	Lens	1-9	10-24	25-99	100-249	250-499	500-999
25F1156	7840-1431-504	Red	1.13	1.06	1.00	.93	.86	.79
25F1157	7840-1433-504	Amber	1.13	1.06	1.00	.93	.86	.79
25F1158	7840-1435-504	White	1.13	1.06	1.00	.93	.86	.79
25F1159	7840-1436-504	Lt. Yellow	1.13	1.06	1.00	.93	.86	.79
25F1160	7840-1437-504	Clear	1.13	1.06	1.00	.93	.86	.79

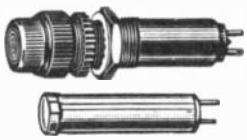
(*) With Built-In 100-K Resistor
(1 53/64"x1/2" Overall; 2 Oz. Shpg. Wt.)

25F1161	7841-1431-574	Red	1.35	1.27	1.19	1.11	1.02	.94
25F1162	7841-1433-574	Amber	1.35	1.27	1.19	1.11	1.02	.94
25F1163	7841-1435-574	White	1.35	1.27	1.19	1.11	1.02	.94
25F1164	7841-1436-574	Lt. Yellow	1.35	1.27	1.19	1.11	1.02	.94
25F1165	7841-1437-574	Clear	1.35	1.27	1.19	1.11	1.02	.94

GREEN or BLUE LENSES are not recommended for use with Neon lamps.

SERIES 250 INCANDESCENT DATALITE ASSEMBLY

Complete indicator assembly. Takes the lamp cartridge illustrated available in voltages from 6V to 120V Polycarbonate lens with matted back. Cartridge fits into assembly leaving slots to permit easy removal. Unit designed for insertion from the rear of the panel in a 3/8" clearance hole. Comes with screw-on "Data Cap" for high light transmission. Transparent lenses available in 6 colors. Terminals phosphor bronze, gold plated. Max. dim., 2.022" L. x .515" dia.



COMPLETE ASSEMBLIES

Stock No.	Solder Cup Terminals 250-7558	Cap Color	1-9	10-24	25-99	100-249	250-499	500-999
60F1216	3331-504	Red	1.68	1.54	1.42	1.30	1.19	1.10
60F1217	3332-504	Green	1.68	1.54	1.42	1.30	1.19	1.10
69F1218	3333-504	Amber	1.68	1.54	1.42	1.30	1.19	1.10
60F1219	3334-504	Blue	1.68	1.54	1.42	1.30	1.19	1.10
60F1220	3335-504	White	1.68	1.54	1.42	1.30	1.19	1.10
60F1221	3337-504	Clear	1.68	1.54	1.42	1.30	1.19	1.10

Stock No.	Turret Terminals 250-8758-	Cap Color	1-9	10-24	25-99	100-249	250-499	500-999
60F1222	3331-504	Red	1.68	1.54	1.42	1.30	1.19	1.10
60F1223	3332-504	Green	1.68	1.54	1.42	1.30	1.19	1.10
60F1224	3333-504	Amber	1.68	1.54	1.42	1.30	1.19	1.10
60F1225	3334-504	Blue	1.68	1.54	1.42	1.30	1.19	1.10
60F1226	3335-504	White	1.68	1.54	1.42	1.30	1.19	1.10
60F1227	3337-504	Clear	1.68	1.54	1.42	1.30	1.19	1.10

DATALAMP CARTRIDGE FOR ABOVE

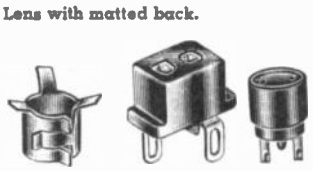
Stk. No.	Type 507	V	1-9	10-24	25-99	100-249	250-499	500-999
60F1228	5819-0747-600	6	1.72	1.62	1.53	1.43	1.35	1.26
60F1229	5820-0747-600	12	1.38	1.30	1.23	1.15	1.09	1.02
60F1230	5821-0747-600	28	1.38	1.30	1.23	1.15	1.09	1.02

Stk. No.	Type*	Volts	1-9	10-24	25-99	100-249	250 499	500-999
60F1231	507-5822†	48	1.46	1.38	1.30	1.22	1.15	1.08
60F1232	507-5823†	60	1.38	1.30	1.23	1.15	1.09	1.02
60F1233	507-5824†	120	1.38	1.30	1.23	1.15	1.09	1.02

***Lens color: Clear (Colorless) Lens with matted back.**

SPRING CLIP

Effective when conventional mounting is not practical. For all Dialco Plug-in Neon and Incandescent Lamp Cartridges. Self-retaining. Of tubular heat treated spring steel. For use with above cartridges.



515-0051 515-0050 515-0012

Stock No.	Type	1-9	10-24	25-99	100-249	250-499	500-999
25F1253	515-0051	.11	.10	.09	.08	.07	.06

CARTRIDGE CONNECTORS FOR ABOVE CARTRIDGES

Type 515-0050. Molded phenolic; solder lug terminals are of beryllium copper, cadmium plated, with elongated slots.

Stock No.	Type	1-9	10-24	25-99	100-249	250-499	500-999
25F1251	515-0050	.22	.20	.19	.18	.17	.16

Type 515-0012. Sleeve of aluminum with black anodized finish. Insulation of black molded phenolic. Solder cup terminals of phosphor bronze, gold plated.

Stk. No.	Type	1-9	10-24	25-99	100-249	250-499	500-999
25F1252	515-0012	.70	.61	.53	.46	.40	.35

DATALITE HOLDERS

TWIN LAMP ASSEMBLY

No. 253-6939-1437-504. Compact dual unit housing 2 Dialco lamp cartridges. Mounts in 3/4" clearance hole. Conform to mil specs. Permits independent operation of each lamp—indicates 4 possible conditions, or lamps can be parallel wired. Cartridges replace from front. Clear plastic lens. Less cartridge. 1 53/64x7/8". 3 ozs.

Stock No.	Type 253-6939	1-9	10-24	25-99	100-249	250-499	500-999
25F1166	1437-504	3.32	3.06	2.81	2.56	2.38	2.20

No. 253-6939-1435-504. Dual unit housing 2 Dialco Lamp Cartridges. Similar to 253-6939-1437, above. White lens. 1 53/64x7/8".

Stock No.	Type 253-6939	1-9	10-24	25-99	100-249	250-499	500-999
25F1254	1435-504	3.32	3.06	2.81	2.56	2.38	2.20

SINGLE LAMP HOLDER

Compact. Two terminals insulated, marked, and offset for correct polarity when replacing lamps in DC circuits. Shown, lamp holder less cartridge. 1 13/16x1/2" overall, less lamp. 1 5/8" long with lamp. Mounting hardware. 2 oz. *with turret terminals.

Stock No.	Type No.	1-9	10-24	25-99	100-249	250-499	500-999
25F1167	508-7538-504	1.22	1.12	1.02	.92	.82	.76
25F1291	508-8738-504*						

SINGLE LAMP HOLDER

Similar to 508-7538-504 but is 5/64" longer to accommodate the new Neon Cartridges 4537 & 4538. *with turret terminals.

Stock No.	Type No.	1-9	10-24	25-99	100-249	250-499	500-999
25F1209	508-7545-504	1.22	1.12	1.02	.92	.82	.76
25F1292	508-8745-504*						

DIALCO® Indicator Lights

DIALCO

81-1059-0431-102
Complete Assembly

81-1059-01-102
Base Assembly

Type 81
Faceted

Type 135
Cylindrical
(Translucent)

Type 52
Stove Pipe
(Internally Fluted
Translucent)

Type 95
Stove Pipe
(Smooth Face
Translucent)

BASE ASSEMBLY

Accommodates T-2 incandescent bulb with telephone slide base (PSB Type) in a range of voltages from 6 to 120 volts. (See Chicago Miniature listing below). Uses any of the 4 styles of high temperature Lexan in different colors listed. Phenolic housing, white nickel finish. Rated 75 watts, 125 volts. Solder terminals. Electrical contact can be made with AMP connector 42452-2. Mounting is 1 11/16" clearance hole. 1 27/32" long.

Stock No.	Type No.	1-9	10-24	25-99	100-249	250-499	500-999
60F1550	81-1059-01-102	.65	.61	.57	.54	.51	.48

LENSES FOR HOUSING ABOVE

Color	Translucent. Cyl. Stock No.	Translucent. Cyl. Type	Transpar. Fluted Stock No.	Transpar. Fluted Type	Translucent. Smooth Stock No.	Translucent. Smooth Type
Red	60F1551	135-3271	60F1558	52-3191	60F1565	95-3171
Green	60F1552	135-3272	60F1559	52-3192	60F1566	95-3172
Amber	60F1553	135-3273	60F1560	52-3193	60F1567	95-3173
Blue	60F1554	135-3274	60F1561	52-3194	60F1568	95-3174
White	60F1555	135-3275	60F1562	52-3195	60F1569	95-3175
Yellow	60F1556	135-3276	60F1563	52-3196	60F1570	95-3176
Clear			60F1564	52-3197		

PRICES	1-9	10-24	25-99	100-249	250-499	500-999
	.23	.21	.20	.19	.18	.17

SERIES 81—TRANSPARENT FACETED LENSES

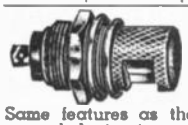
Color	Stock No.	Type	1-9	10-24	25-99	100-249	250-499	500-999
Red	60F1572	81-0431						
Green	60F1573	81-0432						
Amber	60F1574	81-0433	.28	.26	.24	.23	.22	.21
Blue	60F1575	81-0434						
White	60F1576	81-0435						
Yellow	60F1577	81-0436						
Clear	60F1578	81-0437						

SUB-SUB MINIATURE INDICATOR LIGHTS

MS25446. High reliability T-1 filament lamp in high impact plastic cap. Molded to mounting bushing. Dustproof, moistureproof. Antirotation construction. Flexible 6" Type E wire leads. .193" panel mounting hole clearance. Lens cap dia.: 7/32" long. Lamp rating: 5.0 volt at .06 amps 60,000 hr. of life. 6.3 volts, .07 amps, 6000 hrs. Sealed unit, non-replaceable lamp.

Lens	Stock No.	Type No.	Mil. Spec.
Blue	25F1293	252-9951-0974	25446-2
Green	25F1294	252-9951-0972	25446-3
Red	25F1295	252-9951-0971	25446-4
White	25F1296	252-9951-0975	25446-5
Amber	25F1297	252-9951-0973	25446-6
Clear	25F1298	252-9951-0937	25446-7

1-9	10-24	25-99	100-249	250-499	500-999
2.96	2.77	2.58	2.41	2.27	2.15



1 TERMINAL LIGHT SHIELD ASSEMBLY SUB-MINIATURE FOR DIALS, INSTRUMENTS, CONTROL PANELS

Mtg. hole 15/32" d. Opening is 1/4"x3/16". Same features as the 2-terminal assemblies except for use on grounded circuits and with either soldering or binding screw terminal. Molded phenolic insulation material of military specification grade. Meets MIL-SPEC. MIL-L-7806A. Uses T-1¾ lamp. Black nickel finish. Overall size, approx. 1¼"x1½". unscrews for bulb replacement. With lockwasher and nut. Less lamp. Shpg. wt., 1½ ozs. 201 suffix indicates black nickel. 301, chrome. *indicates solder terminal, **screw terminal.

Stk. No.	Mfg. No.	1-9	10-24	25-99	100-249	250-499	500-999
25F910A*	4-1930-2900-201	1.61	1.49	1.39	1.29	1.20	1.11
25F911A**	4-1830-2900-201	1.61	1.49	1.39	1.29	1.20	1.11
25F911B**	4-1830-2900-301	1.88	1.74	1.62	1.51	1.40	1.29
25F910B*	4-1930-2900-301	1.88	1.74	1.62	1.51	1.40	1.29

CHICAGO MINIATURE LAMP WORKS

Special Units for Use with DIALCO Housing Listed at Left.

- 5,000 Hour Life
- 1.075" Long—¼" Diameter

Stock No.	Type	Volts	Amps	End. Foot Candles	Each 1-9	Pkg. of 10 1-9	Pkg. of 10 10-19	Pkg. of 10 20 Up
27F075	6PSB	6	.140	800				
27F076	12PSB	12	.170	2500				
27F077	24PSB	24	.073	2200	.51	4.40	4.20	3.70
27F078	28PSB	28	.040	2000				
27F079	48PSB	48	.053	1500				
27F080	60PSB	60	.050	2600				
27F081	120PSB	120	.025	1500				

TELEPHONE SLIDE BASE LAMPS

- 5,000 Hour Life
- 1.688" Long — ½" Diameter
- Specifically designed for use in telephone switchboards.

Stock No.	Type	Amps	End. Foot Candles	Each 1-9	Pkg. of 10 1-9	Pkg. of 10 10 Up
27F082	12B	.032-.038	....			
27F083	24B	.035-.045	750			
27F084	24C	.06 -.085	875	.74	6.70	4.50
27F085	24E	.032-.038	600			
27F086	24F	.032-.038	1120			
27F087	24X	.032-.038	600			
27F088	30B	.09 -.11	1050			
27F089	48C	.032-.038	475			
27F090	48D	.017-.025	100	.77	6.90	4.60
27F091	55C	.045-.06	1025			

2-TERMINAL DIMMER TYPES—SUB-MIN. MECHANICAL OR POLAROID

Conforms to all applicable MIL specifications. Polaroid: produces some reduced intensity at all settings but gives full diameter opening. Mechanical: varies opening size to complete blackout or has permanent small opening as in "semi-blackout" type. Complete with lockwasher and nut; use T-1¾ lamp. Less lamps. Shpg. wt. 1½ ozs. All frosted on back except *Translucent unfrosted. Mounts in 15/32" dia. hole.

Semi-Blackout

Lens	Stock No.	Type 109-3830	1-9	10-24	25-99	249 100-	250-499	500-999
Red	25F582	0111-201						
Green	25F583	0112-201						
Amber	25F584	0113-201	2.15	2.02	1.89	1.77	1.66	1.55
Blue	25F585	0114-201						
White*	25F586	0135-201						
Yellow	25F587	0116-201						
Clear	25F588	0117-201						

Complete Blackout

Lens	Stock No.	Type 108-3830	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F575	0111-201						
Green	25F576	0112-201						
Amber	25F577	0113-201	2.15	2.02	1.89	1.77	1.66	1.55
Blue	25F578	0114-201						
White*	25F579	0135-201						
Yellow	25F580	0116-201						
Clear	25F581	0117-201						

Polaroid

Lens	Stock No.	Type 112-3830	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F589	0111-201						
Green	25F590	0112-201						
Amber	25F591	0113-201	2.09	1.97	1.85	1.74	1.63	1.52
Blue	25F592	0114-201						
White*	25F593	0135-201						
Yellow	25F594	0116-201						
Clear —	25F595	0117-201						

You Can Depend on NEWARK

for Complete Stocks — Lowest Prices—

Fastest Service — Your One Source for

Everything in Industrial Electronics

SUB-MINIATURE PILOT LIGHTS
TWO TERMINALS—FULLY INSULATED

A-1

B-1

C-1

Conform to all applicable Military Specs. Overall average length approx. 1¼". Use tiny T-1¾ bulbs; voltages from 1.35 to 28. Lamp replaceable from front of panel. For either front or back mounting. (Figs. A-1 & C-1) through a 15/32" clearance hole; or front panel mounting (Fig. B-1) through a 17/32" clearance hole. Units are ideal for every miniaturization use, civilian or military. Caps unscrew from face of panel, and replacement of lamp is easy and rapid. The stovepipe style (dome) lens is made from high heat plastic and affords 180° visibility of light. Positive insulation is assured—lamp, socket, and all connections are completely insulated from the bushing and panel. Phenolic material of military specification grade. Ruggedly made of brass with standard finish of black-nickel. Will withstand usual vibration and corrosion tests. Terminals are brass, hot-tinned with elongated slot. Size range, average, approx. ½x1¼". Comes with lockwasher and nut. Less lamp. Shpg. wt. 1½ oz.

Fig. A-1 FRONT MOUNTING, TYPE 101-5030

Lens	Stock No.	Transparent	Stock No.	Translucent
Red	25F1255	101-5030-0931-201	25F562	101-5030-0971-201
Green	25F1256	101-5030-0932-201	25F563	101-5030-0972-201
Amber	25F1257	101-5030-0933-201	25F564	101-5030-0973-201
Blue	25F1258	101-5030-0934-201	25F565	101-5030-0974-201
White	25F1259	101-5030-0935-201	25F566	101-5030-0975-201
Yellow	25F1260	101-5030-0936-201	25F567	101-5030-0976-201
Clear	25F1261	101-5030-0937-201	.....	.....

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	1.26	1.17	1.08	1.00	.92	.85

Fog. B-1 FRONT OR BACK MTG., TYPE 101-3830

Lens	Stock No.	Transparent	Stock No.	Translucent
Red	25F1262	101-3830-0931-201	25F556	101-3830-0971-201
Green	25F1263	1013830-0932-201	25F557	101-3800-0972-201
Amber	25F1264	101-3830-0933-201	25F558	101-3830-0973-201
Blue	25F1265	101-3830-0934-201	25F559	101-3830-0974-201
White	25F1266	101-3830-0935-201	25F560	101-3830-0975-201
Yellow	25F1267	101-3830-0936-201	25F561	101-3830-0976-201
Clear	25F1268	101-3830-0937-201	.....	.....

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	1.26	1.17	1.08	1.00	.92	.85

HOLDER FOR ABOVE BACK MOUNTING TYPES

Stock No.	Type	1-9	10-24	25-99	100-249	250-499	500-999
25F1238	101-3830-09-201	1.01	.94	.87	.81	.75	.69

LENS CAP FOR HOLDER 10-3830-09-201

Lens	TRANSLUCENT Stk. No.	TRANSLUCENT Mfg. No.	TRANSPARENT Stk. No.	TRANSPARENT Mfg. No.
Red	25F1269	101-0971	25F1588	101-0931
Gren	25F1270	101-0972	25F1589	101-0932
Amber	25F1271	101-0973	25F1590	101-0933
Blue	25F1272	101-0974	25F1591	101-0934
White	25F1273	101-0975	25F1592	101-0935
Yellow	25F1274	101-0976	25F1593	101-0936

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	.25	.23	.21	.19	.17	.16

Fig C-1—FROSTED BACK With Convex Lens
Complete with internal tooth lockwasher and nut. Less lamp. Shpg. wt., 1½ oz. Mounts in 13/32" hole. Non-dimming. *Translucent unfrosted.

Lens Color	Stk. No.	Mfg. No.
Red	25F568	111-3830-0111-201
Green	25F569	111-3830-0112-201
Amber	25F570	111-3830-0113-201
Blue	25F571	111-3830-0114-201
White*	25F572	111-3830-0135-201
Yellow	25F573	111-3830-0116-201
Clear	25F574	111-3830-0117-201

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	1.63	1.53	1.43	1.34	1.25	1.16

INCANDESCENT SUB-MINIATURES MS 25256

Similar to MS25257 except it uses T-1¾ incandescent lamps of 1.35 to 28 v. Overall unit size: 1 3/32 x 5/8". Shipping weight, 1½ oz. Less lamp.

Stock No.	Type No.	Mil. Std. Dwg. No.	Lens Color
25F1203	162-8430-0933-502	MS25256-2	Aviat. Yel.
25F1204	162-8430-0932-502	MS25256-4	Aviat. Green
25F1205	162-8430-0931-502	MS25256-6	Ident. Red
25F1206	162-8430-0937-502	MS25256-8	Aviat. White
25F1207	162-8430-0975-502	MS25256-10	Transl. White
25F1208	162-8430-0934-502	MS25256-12	Aviation Blue

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	1.21	1.13	1.05	.97	.90	.84

SERIES 140 INDICATOR LIGHTS

A

B

Subminiature indicator lights with high heat cylindrical plastic lens. Affords all-angle visibility. Two fully insulated solder terminals. Units conform to all applicable Military Specifications. Phenolic insulation. Use T-1¾ lamps. Less lamp.

(A) Series 140-5030: Mounts from front of panel in 17/32" clearance hole.

(B) Series 140-3830: Mounts from front or back of panel in 15/32" clearance hole.

FRONT MOUNTING, TYPE 140-5030

Lens	Stk. No.	Transparent	Stk. No.	Translucent
Red	25F1462	140-5030-1431-201	25F1450	140-5030-1471-201
Green	25F1463	140-5030-1432-201	25F1451	140-5030-1472-201
Amber	25F1464	140-5030-1433-201	25F1452	140-5030-1473-201
Blue	25F1465	140-5030-1434-201	25F1453	140-5030-1474-201
White	25F1466	140-5030-1435-201	25F1454	140-5030-1475-201
Yellow	25F1467	140-5030-1436-201	25F1455	140-5030-1476-201
Clear	25F1468	140-5030-1437-201	.....	.....

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	1.26	1.17	1.08	1.00	.92	.85

FRONT OR BACK MOUNTING, TYPE 140-3830

Red	25F1469	140-3830-1431-201	25F1456	140-3830-1471-201
Green	25F1470	140-3830-1432-201	25F1457	140-3830-1472-201
Amber	25F1471	140-3830-1433-201	25F1458	140-3830-1473-201
Blue	25F1472	140-3830-1434-201	25F1459	140-3830-1474-201
White	25F1473	140-3830-1435-201	25F1460	140-3830-1475-201
Yellow	25F1474	140-3830-1436-201	25F1461	140-3830-1476-201
Clear	25F1475	140-3830-1437-201	.....	.....

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	1.26	1.17	1.08	1.00	.92	.85

NEON SUB-MINIATURES MS25257

Uses T-2 Neon Glow Lamp (designated as NE-2D). Since Neon lamps require resistor to limit the lamp current, resistor is built-in. For use on 105-125 volts AC or DC with 62K resistor. Stovepipe lens is plastic with 180° lens spread. Shank of lens holder is crimped in 3 places to secure the lamp. Lens holder unscrews from front of panel for easy replacement of lamp. An anti-rotation notch on face of flange prevents rotation of unit while mounting nut is being tightened. Mounting bushing is aluminum with black anodize finish. Steel internal tooth lockwasher and hex mounting nut are cadmium plated and coated with iridite. Terminals are brass, hot-tinned, with elongated slots. Less lamp. Size 1½x5/8". Shpg. wt. 2 oz.

Stock No.	Type No.	Mil. Std. Dwg. No.	Lens Color
25F1200	137-8836-0933-552	MS25257-2	Aviat. Yel.
25F1201	137-8836-0931-552	MS25257-4	Ident. Red
25F1202	137-8836-0937-552	MS25257-6	Clear

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	2.02	1.88	1.74	1.61	1.48	1.36

SERIES 137-8864
For bright light when used with NE-2J on 110-125 VAC 22-K res.

Stock No.	Type No.	Color	1-9	10-24	25-99	100-249	250-499	500-999
25F1275	137-8864-0931-512	Red	2.02	1.88	1.74	1.61	1.48	1.36
25F1276	137-8864-0933-512	Amber						
25F1277	137-8864-0935-512	White						
25F1278	137-8864-0937-512	Clear						

SERIES 137-8864
Same as above, except 33k resistor, 25,000 hour lamp life, 110-125 VAC.

25F1279	137-8864-0931-532	Red	2.02	1.88	1.74	1.61	1.48	1.36
25F1280	137-8864-0933-532	Amber						
25F1281	137-8864-0935-532	White						
25F1282	137-8864-0937-532	Clear						

SERIES 181-8836
Same as 137-8836 Series, except with retained "O" ring seal, water-tight construction. With 62K. resistor.

Stock No.	Type No.	Color	1-9	10-24	25-99	100-249	250-499	500-999
25F1283	181-8836-0931-553	Red	2.46	2.30	2.14	2.00	1.86	1.73
25F1284	181-8836-0933-553	Amber						
25F1285	181-8836-0935-553	White						
25F1286	181-8836-0937-553	Clear						

SERIES 181-8864
Same as 137-8864 Series except with retained "O" ring seal, water-tight construction. With 22K. resistor.

25F1287	181-8864-0931-513	Red	2.46	2.30	2.14	2.00	1.86	1.73
25F1288	181-8864-0933-513	Amber						
25F1289	181-8864-0935-513	White						
25F1290	181-8864-0937-513	Clear						

NEON INDICATOR LIGHTS WITH BUILT-IN RESISTORS

Series 52-0408

Series 95-0408

Series 52-0408 differs from series 95-0408 only in the lens, which is an internally fluted stovepipe rather than a plain stovepipe. FOR NE-51 NEON LAMP 52-0408, 95-0408 (lugs), and 52-1308, 95-1308 (screws). 56K ohm, ½ watt built-in resistor. 105-125V. AC-DC. FOR NE-51H HIGH BRIGHTNESS NEON LAMP: 52-0463, 95-0463 (lugs) and 52-1363, 95-1363 (screws). 22K ohms resistor, built-in. 110-125 V. AC. Assemblies 2 1/16" L., mount in 1 1/16" clearance hole. Meet Mil-L-3661. Assemblies supplied less lamps.

FOR NE-51 LAMP
Fluted Stovepipe Lens

Lens	Stk. No.	Type (Lugs)	Stk. No.	Type (Screws)
Red	25F1476	52-0408-0991-241	25F1484	52-1308-0991-241
Amber	25F1477	52-0408-0993-241	25F1485	52-1308-0993-241
White	25F1478	52-0408-0995-241	25F1486	52-1308-0995-241
Clear	25F1479	52-0408-0997-241	25F1487	52-1308-0997-241

	Type	1-9	10-24	25-99	100-249	250-499	500-999
Prices	Lug	1.26	1.20	1.14	1.08	1.02	.96
	Screw	1.34	1.27	1.20	1.13	1.07	1.01

Plain Stovepipe Lens

Lens	Stk. No.	Type (Lugs)	Stk. No.	Type (Screws)
Red	25F1010	95-0408-0931-241	25F1014	95-1308-0931-241
Amber	25F1011	95-0408-0933-241	25F1015	95-1308-0933-241
White	25F1012	95-0408-0935-241	25F1016	95-1308-0935-241
Clear	25F1013	95-0408-0937-241	25F1017	95-1308-0937-241

	Type	1-9	10-24	25-99	100-249	250-499	500-999
Prices	Lug	1.26	1.20	1.14	1.08	1.02	.96
	Screw	1.34	1.27	1.20	1.13	1.07	1.01

FOR NE-51H HIGH BRIGHTNESS LAMP
Short Fluted Stovepipe Lens

Lens	Stk. No.	Type (Lugs)	Stk. No.	Type (Screws)
Red	25F1480	52-0463-0991-211	25F1488	52-1363-0991-211
Amber	25F1481	52-0463-0993-211	25F1489	52-1363-0993-211
White	25F1482	52-0463-0995-211	25F1490	52-1363-0995-211
Clear	25F1483	52-0463-0997-211	25F1491	52-1363-0997-211

	Type	1-9	10-24	25-99	100-249	250-499	500-999
Prices	Lug	1.26	1.20	1.14	1.08	1.02	.96
	Screw	1.34	1.27	1.20	1.13	1.07	1.01

Short Plain Stovepipe Lens

Lens	Stk. No.	Type (Lugs)	Stk. No.	Type (Screws)
Red	25F1085	95-0463-0931-211	25F1089	95-1363-0931-211
Amber	25F1086	95-0463-0933-211	25F1090	95-1363-0933-211
White	25F1087	95-0463-0935-211	25F1091	95-1363-0935-211
Clear	25F1088	95-0463-0937-211	25F1092	95-1363-0937-211

	Type	1-9	10-24	25-99	100-249	250-499	500-999
Prices	Lug	1.26	1.20	1.14	1.08	1.02	.96
	Screw	1.34	1.27	1.20	1.13	1.07	1.01

Enclosed neon pilot light assemblies now available in two types: (1) With built in 56,000 ohm resistor for NE-51 105-125V, AC or DC, or (2) With built-in resistor of 22K for use with NE-51H high brightness neon glow lamp 110 125V. AC. Green and blue lenses not recommended for use with neon lamps. Plastic lens phenolic body. 2 1/16" long, 1/16" mtg. hole. Less lamp. UL approved. Shpg. wt., 3 oz.

FOR NE-51 LAMP. INTEGRAL RESISTOR

Stk. No.	Type (Lugs)	Lens	1-9	10-24	25-99	100-249	250-499	500-999
25F1050	95-9108-0931-142	Red	.87	.82	.77	.72	.68	.64
25F1051	95-9108-0933-142	Amber	.87	.82	.77	.72	.68	.64
25F1052	95-9108-0935-142	White	.87	.82	.77	.72	.68	.64
25F1053	95-9108-0937-142	Clear	.87	.82	.77	.72	.68	.64

FOR NE-51H HIGH BRIGHTNESS LAMP. INTEGRAL RESISTOR.

25F1170	95-9163-0931-112	Red	.87	.82	.77	.72	.68	.64
25F1171	95-9163-0933-112	Amber	.87	.82	.77	.72	.68	.64
25F1172	95-9163-0935-112	White	.87	.82	.77	.72	.68	.64
25F1173	95-9163-0937-112	Clear	.87	.82	.77	.72	.68	.64

INTERIOR FLUTED STOVEPIPE LENS CAP FOR
Series 52-9408; 52-0408; 52-0463; 52-1308

Short fluted stovepipe type, except (*) long fluted stovepipe.

Lens	Stk. No.	Type No.	Stk. No.	Type No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F340	53-0991*	25F334	52-0991	.19	.18	.17	.16	.15	.14
Grn	25F341	53-0992*	25F335	52-0992	.19	.18	.17	.16	.15	.14
Amb	25F342	53-0993*	25F336	52-0993	.19	.18	.17	.16	.15	.14
Blue	25F343	53-0994*	25F337	52-0994	.19	.18	.17	.16	.15	.14
Clr	25F344	53-0997*	25F338	52-0997	.19	.18	.17	.16	.15	.14
Wht	25F345	53-0995*	25F339	52-0995	.19	.18	.17	.16	.15	.14

HALF-INCH ENCLOSED INDICATOR LIGHT

Meets Mil Specs

Series 81-0410. (With Soldering Lugs) . . . and Series 81-1310 (With Screw Terminals). Newly designed aviation type. Socket shell encased in moulded phenolic of Mil-M-14 grade. Ideal for use under severe conditions. Smooth faced jewels in ½" brass holder with black nickel finish. For T-3¼ lamp, removable from front of unit. 2½" long, mounts in 1 1/16" hole in panels up to ⅜" thick. Less lamp. Shpg. wt. 3 ozs.

Lens Color	Stk. No.	Type (Lug)	Stk. No.	Type (Screw)
Red	25F1035	81-0410-0111-201	25F1042	81-1310-0111-201
Green	25F1036	81-0410-0112-201	25F1043	81-1310-0112-201
Amber	25F1037	81-0410-0113-201	25F1044	81-1310-0113-201
Blue	25F1038	81-0410-0114-201	25F1045	81-1310-0114-201
White	25F1039	81-0410-0135-201	25F1046	81-1310-0135-201
Yellow	25F1040	81-0410-0116-201	25F1047	81-1310-0116-201
Clear	25F1041	81-0410-0117-201	25F1048	81-1310-0117-201

	Type	1-9	10-24	25-99	100-249	250-499	500-999
Prices	Lug	1.26	1.18	1.12	1.06	1.00	.94
	Screw	1.35	1.27	1.20	1.13	1.07	1.01

As above, but with plastic stovepipe lens.

Lens Color	Stock No.	Type (Lug)	Stock No.	Type (Screws)
Red	25F1020	95-0410-0931-201	25F1027	95-1310-0931-201
Green	25F1021	95-0410-0932-201	25F1028	95-1310-0932-201
Amber	25F1022	95-0410-0933-201	25F1029	95-1310-0933-201
Blue	25F1023	95-0410-0934-201	25F1030	95-1310-0934-201
White	25F1024	95-0410-0935-201	25F1031	95-1310-0935-201
Yellow	25F1025	95-0410-0936-201	25F1032	95-1310-0936-201
Clear	25F1026	95-0410-0937-201	25F1033	95-1310-0937-201

	Type	1-9	10-24	25-99	100-249	250-499	500-999
Prices	Lug	1.07	1.01	.96	.91	.86	.81
	Screw	1.16	1.10	1.04	.98	.93	.88

LOW VOLTAGE ENCLOSED SIGNAL ASSEMBLIES

Signal assemblies in ½" white nickel-plated brass holders. Use T-3¼ bayonet base lamp, replaceable from front. 2¼" long; requires 1 1/16" mtg. hole. For panels up to ⅜" thick. Less lamp.

SMOOTH LENS

Lens Color	Stk. No.	Type No. (Lugs)	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F1075	81-9110-0111-102						
Green	25F1076	81-9110-0112-102						
Amber	25F1077	81-9110-0113-102	.82	.77	.72	.68	.64	.60
White	25F1078	81-9110-0135-102						
Blue	25F1079	81-9110-0114-102						

FACETED LENS

Lens Color	Stk. No.	Type No. (Lugs)	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F1492	81-9110-0431-102						
Green	25F1493	81-9110-0432-102						
Amber	25F1494	81-9110-0433-102						
Blue	25F1495	81-9110-0434-102	.82	.77	.72	.68	.64	.60
White	25F1496	81-9110-0435-102						
Lt. Yel.	25F1497	81-9110-0436-102						
Clear	25F1498	81-9110-0437-102						

FOR T-3¼ LAMPS. WITHOUT INTEGRAL RESISTOR.

Like assembly shown on left out less resistor for applications in which low voltage, T-3¼ min. bayonet base lamps are needed.

Lens	Stk. No.	Type (Lugs)	1-9	10-24	25-99	100-249	250 499	500-999
Red	25F1060	95-9110-0931-102						
Green	25F1061	95-9110-0932-102						
Amber	25F1062	95-9110-0933-102						
Blue	25F1063	95-9110-0934-102	.73	.69	.65	.61	.57	.53
White	25F1064	95-9110-0935-102						
Yellow	25F1065	95-9110-0936-102						
Clear	25F1066	95-9110-0937-102						

PLAIN SHORT STOVEPIPE LENS CAPS FOR
Series 95-0408; 95-1308; 95-0463; 95-1363; 95-9108; 95-9163

Lens	Stk. No.	Type No.	1-9	10-24	25-99	100-249	250 499	500-999
Red	25F466	95-0931						
Green	25F465	95-0932						
Amber	25F467	95-0933	.19	.18	.17	.16	.15	.14
Blue	25F474	95-0934						
Clear	25F469	95-0937						

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

FOR LOW VOLTAGE T-3¼ MINIATURE BAYONET BASE LAMP

Fluted Stovepipe Lens			Frosted Back Stovepipe Lens	
Stock No.	Type No.	Color	Stock No.	Type No.
25F537	125-0410-1191-403	Red	25F544	125-0410-1111-403
25F538	125-0410-1192-403	Green	25F545	125-0410-1112-403
25F539	125-0410-1193-403	Amber	25F546	125-0410-1113-403
25F540	125-0410-1194-403	Blue	25F547	125-0410-1114-403
25F541	125-0410-1195-403	White*	25F548	125-0410-1135-403
25F542	125-0410-1196-403	Yellow	25F549	125-0410-1116-403
25F543	125-0410-1197-403	Clear	25F550	125-0410-1117-403

*Translucent unfrosted. Less lamp.

1-9	10-24	25-99	100-249	250-499	500-999
1.81	1.72	1.62	1.54	1.47	1.41

OIL-TIGHT PILOT LIGHTS FOR USE WITH NE 51

For 11/16" Mounting Hole

Fluted Stovepipe Lens			Plain Stovepipe Lens	
Stock No.	Type No.	Color	Stock No.	Type No.
25F528	125-0408-1191-443	Red	25F532	125-0408-1131-443
25F529	125-0408-1193-443	Amber	25F533	125-0408-1133-443
25F530	125-0408-1196-443	Yellow	25F534	125-0408-1136-443
25F531	125-0408-1197-443	Clear	25F535	125-0408-1137-443
		Clear*	25F536	125-0408-1117-443

* Back frosted. Less lamp.

1-9	10-24	25-99	100-249	250-499	500-999
1.98	1.88	1.77	1.69	1.61	1.54

OIL-TIGHT ASSEMBLIES

Enclosed assemblies for heavy duty industrial aplications. Gasketed lens. Glass lens gives 180° light spread. Takes 6S6 incandescent (bayonet or screw mt.) lamp. Supplied less lamp. 1⅜6x1⅞". Mounting Wt. 3 oz.

FOR 6S6 SCREW BASE LAMP

Torpedo Faceted Lens			Dome Lens (Frosted Back)	
Stk. No.	Type No.	Color	Stk. No.	Type No.
25F500	103-3101-1331-403	Red	25F507	103-3101-1211-403
25F501	103-3101-1332-403	Green	25F508	103-3101-1212-403
25F502	103-3101-1333-403	Amber	25F509	103-3101-1213-403
25F503	103-3101-1334-403	Blue	25F510	103-3101-1214-403
25F504	103-3101-1335-403	White	25F511	103-3101-1235-403
25F505	103-3101-1336-403	Yellow	25F512	103-3101-1216-403
25F506	103-3101-1337-403	Clear	25F513	103-3101-1217-403

1-9	10-24	25-99	100-249	250-499	500-999
2.64	2.40	2.20	2.00	1.84	1.70

SAME AS ABOVE, BUT FOR 6S6 BAYONET BASE LAMP

Torpedo Faceted Lens			Dome Lens (Frosted Back)	
25F514	103-3502-1331-403	Red	25F521	103-3502-1211-403
25F515	103-3502-1332-403	Green	25F522	103-3502-1212-403
25F516	103-3502-1333-403	Amber	25F523	103-3502-1213-403
25F517	103-3502-1334-403	Blue	25F524	103-3502-1214-403
25F518	103-3502-1335-403	White	25F525	103-3502-1235-403
25F519	103-3502-1336-403	Yellow	25F526	103-3502-1216-403
25F520	103-3502-1337-403	Clear	25F527	103-3502-1217-403

1-9	10-24	25-99	100-249	250-499	500-999
2.77	2.53	2.31	2.10	1.93	1.78

PILOT BULB REMOVER

Type 506-0045. Molded of rubber. Has two hollow ends which stretch over and engage lamps tightly. One end for T-3¼ type bulbs; the other for T-4½ type bulbs. Core of solid rubber provides needed rigidity for sure grip. Wt.. 4 oz.

Stock No.	Type No.	1-9	10-24	25-99	100-249	250-499	500-999
25F1544	506-0045	.26	.23	.20	.19	.18	.17

Type 506-0073. Molded rubber. One end for T-3¼ types. Other for S6 candelabra screw base bulbs.

Stock No.	Type No.	1-9	10-24	25-99	100-249	250-499	500-999
25F480	506-0073	.26	.23	.20	.19	.18	.17

ADAPTOR SET

Type 515-1316. For mounting any 1" Dialco assembly in 1⅜6" clearance hole. Reducer (A) is equipped with gasket (B) to fit the 1⅜6" clearance hole, and a washer (C) for under panel mounting. Retained oil-resistant gasket on the reducer assures the same oil-water-and-dust tightness that is obtained on standard Dialco assemblies. Wt., 1 oz.

Stk. No.	Type No.	1-9	10-24	25-99	100-249	250-499	500-999
25F912	515-1316	.68	.62	.56	.51	.47	.43

SERIES 270

For Plastic Plate Edge Lighting

For Mil-P-7788 plastic plate panels. Emits light through red filter into the plastic panel. Meets Mil-L-7806. Mounts in 15⁄32" clearance hole. Complete unit, hardware, supplied. Less T-1¾ lamp. Available with light emitting top in various colors. ½" x 1 1⁄16". Shpg. wt. 1½ oz.

EDGE LIGHTING ASSEMBLIES

*MS25010A11A †MS25010B11A ††MS25010B12A

SOLDER TERMINAL

Stk. No.	Type No.	Color	1-9	10-24	25-99	100-249	250-499	500-999
25F967	270-1930-0111-702	Red*	.75	.68	.62	56	.50	.45
25F969	270-1930-0121-702	Green	.90	.82	.74	.67	.60	.54
25F971	270-1930-0131-702	Amber	.90	.82	.74	.67	.60	.54
25F973	270-1930-0171-702	Clear††	.75	.68	.62	.56	.50	.45

SCREW TERMINAL

25F968	270-1830-0111-702	Red†	.90	.81	.72	.65	.59	.54
25F970	270-1830-0121-702	Green	1.05	.95	.84	.76	.69	.63
25F972	270-1830-0131-702	Amber	1.05	.95	.84	.76	.69	.63
25F974	270-1830-0171-702	Clear	.90	.81	.72	.65	.59	.54

WATER-TIGHT 2-TERMINAL SUB-MINIATURE LIGHTS

(Also see other Dialco pages for large oil-tight indicator lights)

With retained "O" ring seal. Front mounting in 15⁄32" clearance hole. Takes T-1¾ midget flange base incandescents (MS-25237). From 1.35 to 28 volts. Translucent stovepipe lens. Two terminals. Lugs of brass and hot-tinned. Lockwasher, hex-nut supplied. Overall size, ⅝"x1 3⁄16" long. Less lamp. Wt., 2 oz.

25F1212	177-8430-0971-503	Red	1.51	1.41	1.32	1.24	1.17	1.10
25F1213	177-8430-0972-503	Green	1.51	1.41	1.32	1.24	1.17	1.10
25F1214	177-8430-0973-503	Amber	1.51	1.41	1.32	1.24	1.17	1.10
25F1215	177-8430-0974-503	Blue	1.51	1.41	1.32	1.24	1.17	1.10
25F1216	177-8430-0975-503	White	1.51	1.41	1.32	1.24	1.17	1.10
25F1217	177-8430-0976-503	Yellow	1.51	1.41	1.32	1.24	1.17	1.10

LIGHT EMITTING TOP ASSEMBLIES

SOLDER TERMINAL *MS25010A13A

Stk. No.	Type No.	Filter	1-9	10-24	25-99	100-249	250-499	500-999
25F975	270-1930-3111-702	Red*	.75	.68	.62	.56	.50	.45
25F977	270-1930-3221-702	Green	.90	.82	.74	.67	.60	.54
25F979	270-1930-3331-702	Amber	.90	.82	.74	.67	.60	.54
25F981	270-1930-3771-702	Clear	.90	.82	.74	.67	.60	.54

SCREW TERMINALS †MS25010B13A

25F976	270-1830-3111-702	Red†	.90	.81	.72	.65	.59	.54
25F978	270-1830-3221-702	Green	1.05	.95	.84	.76	.69	.63
25F980	270-1830-3331-702	Amber	1.05	.95	.84	.76	.69	.63
25F982	270-1830-3771-702	Clear	1.05	.95	.84	.76	.69	.63

T-1 ¾ LAMPS

*MS25237—327. **MS25237—328.

Stk. No.	Lamp No.	Volts	Amps	Life hr.	NET EA.	10 For	100 For
25F125	331	1.35	.06	500	.89	5.32	47.88
25F126	338	2.7	.06	500	.89	5.32	47.88
25F123	328**	6.0	.2	1000	.55	3.29	29.61
25F124	330	14.0	.08	750	.79	4.67	42.03
25F122	327*	28.0	.04	1000	.71	4.20	37.80

TELEPHONE SLIDE BASE INDICATOR LIGHTS

Mount from back of panel in 9⁄16" clearance hole. Accommodates T-2 incandescent bulb with telephone slide base. Stovepipe lenses with smooth face and back. Lamp protrudes into lens cavity for easy replacement from front of panel without tools. Furnished with knurled ring, internal-tooth lockwasher, and hex mounting nut. Soldering terminals. Size: 1⅜6" x 2 15⁄16". Less lamps. Avg. shpg. wt., 3 oz.

Series 70-0428

Series 37-0428

Stk. No.	Type No.	Lens	1-9	10-24	25-99	100-249	250-499	500-999
25F1218	70-0428-1131-306	Red	1.76	1.67	1.58	1.49	1.40	1.32
25F1219	70-0428-1132-306	Green	1.76	1.67	1.58	1.49	1.40	1.32
25F1220	70-0428-1133-306	Amber	1.76	1.67	1.58	1.49	1.40	1.32
25F1221	70-0428-1134-306	Blue	1.76	1.67	1.58	1.49	1.40	1.32
25F1222	70-0428-1135-306	White	1.76	1.67	1.58	1.49	1.40	1.32

Same as above, but lens shape is convex. *Translucent.

25F1223	37-0428-0111-306	Red	1.57	1.48	1.40	1.32	1.25	1.18
25F1224	37-0428-0112-306	Green	1.57	1.48	1.40	1.32	1.25	1.18
25F1225	37-0428-0113-306	Amber	1.57	1.48	1.40	1.32	1.25	1.18
25F1226	37-0428-0114-306	Blue	1.57	1.48	1.40	1.32	1.25	1.18
25F1227	37-0428-0135-306	White*	1.57	1.48	1.40	1.32	1.25	1.18

DIALCO® Pilot Light Assemblies

U.L. APPROVED NEON PANEL ASSEMBLY

SERIES 32-0914. A line of assemblies for use with NE-45 neon glow lamps in 115 volt circuits. Candelabra socket; lamp removable from front. 2⅜" long. Require 1" hole for mounting. Available in four colors. Supplied less neon glow lamps. 4 oz.

Stock No.	Type 32-0914	Color	1-9	10-24	25-99	100-249	250-499	500-999
25F410	0111-302	Red	1.74	1.59	1.45	1.32	1.21	1.11
25F411	0113-302	Amber	1.74	1.59	1.45	1.32	1.21	1.11
25F413	0117-302	Clear	1.74	1.59	1.45	1.32	1.21	1.11
25F414	0135-302	White	1.74	1.59	1.45	1.32	1.21	1.11

1" ENCLOSED PILOT LIGHTS

SERIES 32-3101

U.L. approved types. 115 volt enclosed pilot light assemblies. Brass and phenolic. Faceted jewel chrome plated brass holder. Candelabra socket. S6 bulb removable from front. Requires 1" clearance hole for mounting. Less bulb. Weight, 5 oz.

Stock No.	Type 32-3101	Color	1-9	10-24	25-99	100-249	250-499	500-999
25F370	0431-302	Red	1.46	1.33	1.22	1.11	1.02	.94
25F371	0432-302	Green	1.46	1.33	1.22	1.11	1.02	.94
25F372	0433-302	Amber	1.46	1.33	1.22	1.11	1.02	.94
25F373	0437-302	Clear	1.46	1.33	1.22	1.11	1.02	.94

OIL-TIGHT ASSEMBLIES FOR 1" MOUNTING HOLE

Uses Neon Glow Lamps

For use with the NE-45 candelabra screw base lamp. Resistor built-in the lamp base. Overall size approx. 1⅜6x2⅞2". Comes with split lockwasher and hex nut. Less lamp. Shpg. wt., 3 ozs.

Dome Style Unfrosted Lens except † Frosted back.

Stock No.	Type 103-3114	Lens	1-9	10-24	25-99	100-249	250-499	500-999
25F551	1231-403	Red	2.64	2.40	2.20	2.00	1.84	1.70
25F552	1233-403	Amber	2.64	2.40	2.20	2.00	1.84	1.70
25F553	1236-403	Yellow	2.64	2.40	2.20	2.00	1.84	1.70
25F554	1237-403	Clear	2.64	2.40	2.20	2.00	1.84	1.70
25F555	1217-403	Clear†	2.64	2.40	2.20	2.00	1.84	1.70

SERIES 159-5437 PILOT LIGHT ASSEMBLIES

Use NE-79 Neon lamps, which have long lives, low wattage, and excellent resistance to shock. 3000 ohm resistors are built-in for bright light on 105-125 volts.

Stock No.	Type 159-5437	Color	1-9	10-24	25-99	100-249	250-499	500-999
25F1528	0931-403	Red	3.95	3.61	3.29	3.01	2.76	2.54
25F1529	0933-403	Amber	3.95	3.61	3.29	3.01	2.76	2.54
25F1530	0935-403	White	3.95	3.61	3.29	3.01	2.76	2.54
25F1531	0937-403	Clear	3.95	3.61	3.29	3.01	2.76	2.54

SERIES 125-0463

For use with NE-51H Neon lamp. 22K resistor for bright light on 110-125 VAC.

Fluted Lens

Stock No.	Type 125-0463	Lens	1-9	10-24	25-99	100-249	250-499	500-999
25F1532	1191-413	Red	1.98	1.88	1.77	1.69	1.61	1.54
25F1533	1193-413	Amber	1.98	1.88	1.77	1.69	1.61	1.54
25F1534	1197-413	Clear	1.98	1.88	1.77	1.69	1.61	1.54

Plain Lens

25F1535	1131-413	Red	1.98	1.88	1.77	1.69	1.61	1.54
25F1536	1133-413	Amber	1.98	1.88	1.77	1.69	1.61	1.54
25F1537	1137-413	Clear	1.98	1.88	1.77	1.69	1.61	1.54

PRESS-TO-TEST SERIES 820-2701

Conform to All Applicable Military Specifications

Press-to-test assemblies (without dimmer). Mounts in 1" clearance hole. Overall size approx. 1¼x3¼". Three rugged binding screw terminals: 2 for "normal" circuit; 1 for "test" circuit. Uses S6 bulbs with candelabra screw base. Supplied less lamp. Shpg. wt. 3 oz. *Translucent unfrosted.

Stock No.	Type 820-2701	Lens	1-9	10-24	25-99	100-249	250-499	500-999
25F999	0111-502	Red	6.01	5.62	5.24	4.86	4.50	4.16
25F1000	0112-502	Green	6.01	5.62	5.24	4.86	4.50	4.16
25F1001	0113-502	Amber	6.01	5.62	5.24	4.86	4.50	4.16
25F1002	0114-502	Blue	6.01	5.62	5.24	4.86	4.50	4.16
25F1003	0135-502	White*	6.01	5.62	5.24	4.86	4.50	4.16
25F1004	0116-502	Yellow	6.01	5.62	5.24	4.86	4.50	4.16
25F1005	0117-502	Clear	6.01	5.62	5.24	4.86	4.50	4.16

PRESS-TO-TEST INDICATOR LIGHTS

806-1710 804-1710 803-1710

813-1030 800-1030 812-1030

Built-in bulb-testing device. Units light when pressed if lamp is satisfactory. 3 solder lugs. 180° visible light beam for daylight, indirect "halo" light for night. Less lamps.

FOR T-3¼ LAMP

Formerly Series VM-911. Assemblies take T-3¼ lamp. Size approx. ⅞"x2¼". Shpg. wt., 1½ oz.

WITH MECHANICAL SHUTTER DIMMER—⅝" LENS

Stk. No.	Type 804-1710	Mil. Type No.	Lens Color
25F998	0337-504	MS25331-1	Clear
25F991	0331-504	MS25331-2	Red
25F992	0332-504	MS25331-3	Green
25F993	0333-504	MS25331-4	Amber
25F1507	0334-504	.. ..	Blue

WITHOUT DIMMER—½" LENS

Stk. No.	803-1710	Mil. Type No.	Lens Color
25F994	0337-504	MS25331-5	Clear
25F995	0331-504	MS25331-6	Red
25F996	0332-504	MS25331-7	Green
25F997	0333-504	MS25331-8	Amber
25F1508	0334-504	. . ..	Blue

WITHOUT DIMMER—1" LENS

Stk. No.	806-1710	Mil. Type No.	Lens Color
25F1509	0437-504	....	Clear
25F1510	0431-504	MS25331-9	Red
25F1511	0432-504	....	Green
25F1512	0433-504	....	Amber
25F1513	0434-504	. . ..	Blue

	1-9	10-24	25-99	100-249	250-499	500-999
⅝" Lens	2.67	2.50	2.35	2.19	2.03	1.89
½" Lens	2.44	2.28	2.13	1.98	1.83	1.69
1" Lens	2.81	2.62	2.45	2.28	2.11	1.95

FOR T-1-¾ LAMP

Formerly VM-911M Series. ⅝" x 1⅜". ⅜" lens. Mounts in 15⁄32" clearance hole.

WITH MECHANICAL SHUTTER DIMMER

Stk. No.	801-1030	Mil. Type No.	Lens Color
25F983	0337-504	MS25041-1	Clear
25F984	0331-504	MS25041-2	Red
25F985	0442-504	MS25041-3	Green
25F986	0333-504	MS25041-4	Amber
25F1514	0334-504	MS25041-10	Blue

WITHOUT DIMMER

Stk. No.	800-1030	Mil. Type No.	Lens Color
25F987	0337-504	MS25041-5	Clear
25F988	0331-504	MS25041-6	Red
25F989	0332-504	MS25041-7	Green
25F990	0333-504	MS25041-8	Amber
25F1515	0334-504	MS25041-11	Blue

	1-9	10-24	25-99	100-249	250-499	500-999
With Dimmer	2.26	2.12	1.99	1.86	1.73	1.62
Without Dimmer	1.95	1.82	1.70	1.58	1.46	1.35

SERIES 812 AND 813

Body for 813 and 812 series lens caps. Listed below.

Stk. No.	Type	1-24	25-49	50-99	100-249	250-499	500-999
25F1600	812-1030-09-506	1.46	1.36	1.27	1.18	1.09	1.01

Non-dimmer transparent ½" cylindrical lens caps.

Stk. No.	Type	Lens Color	1-24	25-49	50-99	249 100-	250-499	500-999
25F1601	813-1437	Clear	.68	.63	.59	.55	.51	.47
25F1602	813-1431	Red						
25F1603	813-1432	Green						
25F1604	813-1433	Amber						

Non-dimmer translucent ½" cylinderical lens caps.

25F1605	813-1475	White	.68	.63	.59	.55	.51	.47
25F1606	813-1471	Red						
25F1607	813-1472	Green						
25F1608	813-1473	Amber						

Non-dimmer translucent ½" stovepipe lens caps.

25F1609	812-0975	White	.68	.63	.59	.55	.51	.47
25F1610	812-0971	Red						
25F1611	812-0972	Green						
25F1612	812-0973	Amber						

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

Switches and Indicator Lights

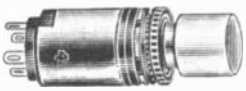
DIALCO

SELF-FLASHING INDICATOR LIGHT ASSEMBLIES

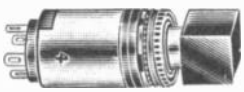
Series 928. Self-flashing units complete with replaceable aged, selected 521-8018 high brightness Neon lamp for 110-125 VAC. Mount from rear of panel in ½" MTG. Clearance hole up to 5/16 panel thickness. Solder eyelet terminals. Lens cap is cylindrical with refractive inner surface. Units flash at approx. 120 cycles per min. The two terminal unit will be a straight flasher operation.

Stock No.	Color	Mfg. No.	1-9	10-24	25-99	100-249	250-499	500-999
25F1595	Red	928-1422-1631-638	5.51	5.07	4.78	4.30	4.05	3.81
25F1596	Amber	928-1422-1633-638	5.51	5.07	4.78	4.30	4.05	3.81

SUB-MINIATURE PUSHBUTTON SWITCHES AND INDICATOR LIGHTS



Switch with Round Lens



Switch with Squore Lens

Indicotor light with fixed flonge

Indicotor light with Knurled Flonge

Round ond Squore Lens Cops

Fits a ½" mounting hole in panels up to 3/16" thick. Lenses are interchangeable from switches to indicators of the same grouping All are momentary contact. Aluminum base assembly. 125 VAC.

SWITCH BASE ASSEMBLIES FOR DRY CIRCUITS

Stock No.	Type 513-	Description	1-9	10-24	25-49	100-249	250-449	500-999
60F1003	0401-604	1 Cir. N.O.	3.45	3.24	3.04	2.84	2.66	2.48
60F1004	0501-604	1 Cir. N.C.	3.45	3.24	3.04	2.84	2.66	2.48
60F1005	0601-604	2 Cirs. N.O.N.C.	3.77	3.55	3.33	3.11	2.91	2.71

breakdown. Contact parts silver on series 513-0101-604, 513-0201-604, 513-0301-604. Gold on 513-0401-604, 513-0501-604, 513-0601-604. 3 amps, 125 VAC. 3 amps VDC (non-conductive). To relamp pushbutton, simply pull it out. Uses T 1¾ lamp.

PUSH BUTTON SWITCH BASE ASSEMBLIES

Stock No.	Type 513-	Description	1-9	10-24	25-99	100-249	250-499	500-999
60F1000	0101-604	1 Cir. N.O.	3.12	2.94	2.76	2.57	2.41	2.25
60F1001	0201-604	1 Cir. N.C.	3.12	2.94	2.76	2.57	2.41	2.25
60F1002	0301-604	2 Cirs. N.O.N.C.	3.45	3.24	3.04	2.84	2.66	2.48

MATCHING INDICATOR LIGHTS

Companion series designed to match pushbutton switches. Lens caps can be used as illuminated pushbutton on the switch or as a lens cap on the indicator light. Incorporates unique anti-rotation (locked) feature for secure locking of socket terminal assembly in the mounting bushing and of the center terminal to the insulating disc. Insulation 125 VAC breakdown.

Base with fixed flange for front mounting in 15/32" clearance hole.

Stock No.	Type 183-	1-9	10-24	25-99	100-249	250-499	500 999
60F1006	9730-14-602	1.01	.94	.87	.81	.75	.69

Base with movable knurled flange nut for front or rear mounting in ½" clearance hole.

60F1007	9830-14-604	1.01	.94	.87	.81	.75	.69

½" AND ¾" LENS CAPS FOR ABOVE SWITCH AND INDICATOR LIGHT BASES

Seven colors of round or square caps; rotatable and non-rotatable units. High strength plastic. Brass shank, white nickle plated. Rotatable lens allow alignment after installation; non-rotatable lens position is determined by base mount.

½" LENS CAPS WITH SOLID COLOR TRANSLUCENT FACE AND SIDES

Color	Round Caps: Stock No.	Rotatable	Stock No.	Non-Rotatable	Square Caps: Stock No.	Rotatable	Stock No.	Non-Rotatable	1-9	10-24	25-99	100-2.49	250-499	500-999
Red	60F1047	183-1471	60F1054	186-1471	60F1061	185-1871	60F1068	184-1871						
Green	60F1048	183-1472	60F1055	186-1472	60F1062	185-1872	60F1069	184-1872						
Amber	60F1049	183-1473	60F1056	186-1473	60F1063	185-1873	60F1070	184-1873	.59	.55	.51	.47	.43	.39
Blue	60F1050	183-1474	60F1057	186-1474	60F1064	185-1874	60F1071	184-1874						
White	60F1051	183-1475	60F1058	186-1475	60F1065	185-1875	60F1072	184 1875						
Lt. Yellow	60F1052	183-1476	60F1059	186-1476	60F1066	185-1876	60F1073	184-1876						
Ivory	60F1053	183-1478	60F1060	186-1478	60F1067	185-1878	60F1074	184-1878						

½" LENS CAPS WITH TRANSLUCENT COLORED FACE, BLACK OPAQUE SIDES

Red	60F1075	183-5071	60F1082	186-5071	60F1089	185-5071	60F1096	184-5071						
Green	60F1076	183-5072	60F1083	186-5072	60F1090	185-5072	60F1097	184-5072						
Amber	60F1077	183-5073	60F1084	186-5073	60F1091	185-5073	60F1098	184-5073	.59	.55	.51	.47	.43	.39
Blue	60F1078	183-5074	60F1085	186-5074	60F1092	185-5074	60F1099	184-5074						
White	60F1079	183-5075	60F1086	186-5075	60F1093	185-5075	60F1100	184-5075						
Lt. Yellow	60F1080	183-5076	60F1087	186-5076	60F1094	185-5076	60F1101	184-5076						
Ivory	60F1081	183-5078	60F1088	186-5078	60F1095	185-5078	60F1102	184-5078						

½" LENS CAPS WITH TRANSLUCENT COLORED FACE, GRAY OPAQUE SIDES

Red	60F1103	183-5171	60F1110	186-5171	60F1117	185-5171	60F1124	184-5171						
Green	60F1104	183-5172	60F1111	186-5172	60F1118	185-5172	60F1125	184-5172						
Amber	60F1105	183-5173	60F1112	186-5173	60F1119	185-5173	60F1126	184-5173	.59	.55	.51	.47	.43	.39
Blue	60F1106	183-5174	60F1113	186-5174	60F1120	185-5174	60F1127	184-5174						
White	60F1107	183-5175	60F1114	186-5175	60F1121	185-5175	60F1128	184-5175						
Lt. Yellow	60F1108	183-5176	60F1115	186-5176	60F1122	185-5176	60F1129	184-5176						
Ivory	60F1109	183-5178	60F1116	186-5178	60F1123	185-5178	60F1130	184-5178						

¾" LENS CAPS WITH SOLID COLOR TRANSLUCENT FACE AND SIDES

ROUND CAPS

Stock No.	Type	Color	1-9	10-24	25-99	100-249	250-499	500-999
60F1138	188-1471	Red						
60F1139	188-1472	Green						
60F1140	188-1473	Amber	.83	.78	.73	.68	.63	.58
60F1141	188-1474	Blue						
60F1142	188-1475	White						
60F1143	188-1476	Lt Yel.						
60F1144	188-1478	Ivory						

SQUARE CAPS

Stock No.	Type	Color	1-9	10-24	25-99	100-249	250-499	500-999
60F1152	187-1871	Red						
60F1153	187-1872	Green						
60F1154	187-1873	Amber	.83	.78	.73	.68	.63	.58
60F1155	187-1874	Blue						
60F1156	187-1875	White						
60F1157	187-1876	Lt. Yel.						
60F1158	187-1878	Ivory						

DEPEND ON NEWARK FOR EVERYTHING IN INDUSTRIAL ELECTRONICS

- **OEM Factory Prices.**
- **Same Day Shipment From On-the-Shelf Stocks**

To Serve You Better — Ten Stocking Warehouses from Coast-to-Coast

DIALCO® Switches & Indicator Lights

Series 913

Series 922

Series 915

ILLUMINATED PUSHBUTTON SWITCHES

Series 913. 0.1 amp. —125V AC; 0.1 amp. —30VDC (non-inductive). High brightness NE-2H Neon Lamp, non-replaceable. Min. 20,000 hours. For use in 110-125VAC circuits. Integral 33K resistor, gold plated contact parts. Mts. from back of panel in 3/8" clearance hole for 1/8" panel thickness.

SPST—N.O.

Lens Color	Type 913	Stk. No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	1156-1631-525	60F1235	2.56	2.41	2.26	2.11	1.97	1.77
Amber	1156-1633-525	60F1236						
White	1156-1635-525	60F1237						
Clear	1156-1637-525	60F1238						

SPST—N.C.

Red	1430-1631-525	60F1239	2.56	2.41	2.26	2.11	1.97	1.77
Amber	1430-1633-525	60F1240						
White	1430-1635-525	60F1241						
Clear	1430-1637-525	60F1242						

SPDT—TWO CIRCUITS—N.O.—N.C.

Red	1436-1631-525	60F1243	2.71	2.55	2.39	2.23	2.09	1.88
Amber	1436-1633-525	60F1244						
White	1436-1635-525	60F1245						
Clear	1436-1637-525	60F1246						

MOUNTING WRENCHES

No-Mar mounting wrenches for quick, secure fastening. Type 506-0375, for series 913, 922, and 915 mounting panel. Type 506-0500 for base assemblies 513 Series sub. — min. switches.

Stk. No.	Type	1-9	10-24	25-99	100-249	250-499
60F1046	506-0375	4.08	3.88	3.67	3.47	3.26
60F1215	506-0500	4.08	3.88	3.67	3.47	3.26

Series 922. SPST momentary cont. N.O.; 0.1 amp. 125 VAC; 0.1 amp, 30 VDC Non-inductive. Life of over 1,000,000 operations at rated values. Gold plated contact parts. Mtrs. from back of panel in 3/8" clear. hole for 1/8" panel thickness. Uses replaceable T-1¾ incand. 1 amp. Double turret (soldering) terminals. Long cylindrical lens cap. Single circuit, normally open. For dry circuits or with low currents at higher voltages. 6 colors available. Less lamp.

Color	Type 922-1141-	Stk. No.	1-9	10-24	25-99	100-249	250-499	500-999
Red	1631-523	60F1032	3.46	3.27	3.06	2.86	2.68	2.49
Green	1632-523	60F1033						
Amber	1633-523	60F1034						
Blue	1634-523	60F1035						
White	1635-523	60F1036						
Clear	1637-523	60F1037						

NEON INDICATOR LAMP†

Series 915. Neon Indicator Lights. *stovepipe lens cap; **long cylindrical lens cap. All have internal Fresnel diffusing rings. Integral 56K resistor. Mounts from back of panel in 3/8" hole for 1/8" panel thickness. 3 terminals provided; 2 are common to one side of the internal circuit. Insulation 1250 VAC breakdown. †Non- replaceable NE-2E lamp-min. 5000 Hr. life on 110-125 VAC.

Color	Type 915-1120-	Stock No.	1-9	10-24	25-99	100-299	250-499	500-999
Red	1631-523**	60F1042	1.79	1.69	1.58	1.48	1.39	1.29
Amber	1633-523**	60F1043						
White	1635-523**	60F1044						
Clear	1637-523**	60F1045						
Red	1731-523*	60F1038						
Amber	1733-523*	60F1039						
White	1735-523*	60F1040						
Clear	1737-523*	60F1041						

LENS CAP ASSEMBLIES FOR PILOT LIGHTS

SERIES 514-2512, 514-1012, 514-0512 ASSEMBLIES

Threaded shanks 3/8" long. Required 11/16", 7/16", and 9/32" mounting holes.

FIG. A SERIES 514-2512—5/8" DIA.

Lens	Stk. No.	Type 514-2512	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F430	0431-302	.50	.46	.42	.38	.34	.32
Green	25F431	0432-302						
Amber	25F432	0433-302						
Blue	25F433	0434-302						
White	25F434	0435-302						

FIG. B SERIES 514-1012

Lens	Stk. No.	Type 514-1012	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F435	2131-102	.18	.16	.14	.13	.12	.11
Green	25F436	2132-102						
Amber	25F437	2133-102						
Blue	25F438	2134-102						
White	25F439	2135-102						

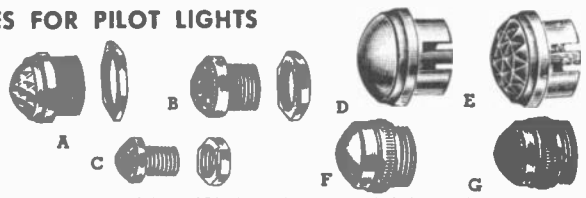
FIG. C SERIES 514-0512

Lens	Stk. No.	Type 514-0512	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F440	2131-102	.17	.15	.14	.12	.11	.10
Green	25F441	2132-102						
Amber	25F442	2133-102						
Blue	25F443	2134-102						
White	25F444	2135-102						

FIG. F SERIES 81 LENS ASSEMBLIES

Replacement lens cap assemblies for series 81-0410 and 81-1310 Black nickel finish to meet requirements of MIL-L-3661A. *Translucent White Unfrosted.

Lens	Stk. No.	Type 81-01-	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F1569	11-200	.38	.35	.33	.31	.29	.27
Green	25F1570	12-200						
Amber	25F1571	13-200						
Blue	25F1572	14-200						
White	25F1573	15-200						
Lt. Yel.	25F1574	16-200						
Clear	25F1575	17-200						



(F) & (G) SERIES 81 LENS HOLDERS

Replacement lens caps for 81-2210, 81-5910, 502-8140 and 502-8137-8136 Series. (White Nickel). *Translucent White Unfrosted.

Lens	Stk. No.	Type 81-	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F1555	0111-100	.28	.26	.24	.23	.22	.21
Green	25F1556	0112-100						
Amber	25F1557	0113-100						
Blue	25F1558	0114-100						
White	25F1559	0135-100*						
Lt. Yel.	25F1560	0116-100						
Clear	25F1561	0117-100						

Fig. G Faceted

Lens	Stk. No.	Type 81-21	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F1562	31-100	.19	.18	.17	.16	.15	.14
Green	25F1563	32-100						
Amber	25F1564	33-100						
Blue	25F1565	34-100						
White	25F1566	35-100						
Lt. Yel.	25F1567	36-100						
Clear	25F1568	37-100						

SERIES 32 LENS CAP ASSEMBLIES

Polished chrome finish. For use with 502-3228, 32-2901 and 502-3241 Series Pilot Lights.

	Convex Frosted Back. Fig. D		Faceted Fig. E						
Lens	Stk. No.	Type 32-01	Stk. No.	Type 32-04	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F1576	11-300	25F1582	31-300	.43	.40	.37	.34	.32	.30
Green	25F1577	12-300	25F1583	32-300						
Amber	25F1578	13-300	25F1584	33-300						
Blue	25F1579	14-300	25F1585	34-300						
Lt. Yel.	25F1580	16-300	25F1586	36-300						
Clear	25F1581	17-300	25F1587	37-300						

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

Indicator Lights, Sockets, and Accessories

DIALCO

HALF-INCH MINIATURE OPEN TYPE

Miniature screw and bayonet socket assemblies with faceted jewels. Mounts in 11/16" hole. Bulb removable from front. With tinned solder lugs. Uses T-3¼ Bulb. Less bulbs. Wt., 3 oz.

Lens	Stk. No.	Type	Stk. No.	Type
Red	25F400	502-8137-2131-102	25F405	502-8136-2131-102
Green	25F401	502-8137-2132-102	25F406	502-8136-2132-102
Amber	25F402	502-8137-2133-102	25F407	502-8136-2133-102
Blue	25F403	502-8137-2134-102	25F408	502-8136-2134-102
White	25F404	502-8137-2135-102	25F409	502-8136-2135-102

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	.50	.46	.43	.40	.37	.34

HALF-INCH OPEN BAYONET TYPE

Open type pilot light assembly. Has min. bay. socket. Half-inch jewel. 2" long. Requires 11/16" mtg. hole. Designed for mounting on panels up to ¼" thick. With mtg. washers. Uses T-3¼ lamp. Less lamp. Tinned lugs. 4 oz.

Lens	Faceted Stk. No.	Faceted Type	Convex-frosted Back Stk. No.	Convex-frosted Back Type
Red	25F470	502-8140-2131-100	25F1548	502-8140-0111-100
Green	25F471	502-8140-2132-100	25F1549	502-8140-0112-100
Amber	25F472	502-8140-2133-100	25F1550	502-8140-0113-100
Blue	25F473	502-8140-2134-100	25F1551	502-8140-0114-100
White	25F1545	502-8140-2135-100	25F1552	502-8140-0135-100
Yellow	25F1546	502-8140-2136-100	25F1553	502-8140-0116-100
Clear	25F1547	502-8140-2137-100	25F1554	502-8140-0117-100

Prices	1-9	10-24	25-99	100-249	250-499	500-999
	.63	.58	.53	.49	.45	.42

¾-INCH CANDELABRA SOCKET

115 volt pilot light assemblies with faceted jewels, chrome-plated brass holder. Candelabra socket for S6 Lamp requires 11/16" hole for mounting. Less lamp. 4 oz.

Lens	Stk. No.	Type 502-2511-	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F395	0431-302						
Green	25F396	0432-302						
Blue	25F397	0434-302	.70	.64	.58	.53	.48	.45
Amber	25F398	0433-302						
White	25F399	0435-302						

HALF-INCH OPEN TYPE

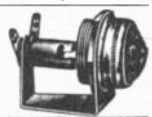
Complete with candelabra, bayonet or min. screw base sockets for standard pilot light bulbs. Faceted jewels in nickel plated brassholders. Lug terminals. Requires 7/16" hole for mtg. Uses T-3¼ Bulb. Less bulbs. Wt., 2 oz.

Lens	Min. Screw Stk. No.	Min. Screw Type 502-1015-	Min. Bayonet Stk. No.	Min. Bayonet Type 502-1024	Cond. Screw Stock No.	Cond. Screw Type 502-1010
Red	25F350	2131-102	25F355	2131-102	25F360	2131-102
Green	25F351	2132-102	25F356	2132-102	25F361	2132-102
White	25F352	2135-102	25F359	2135-102	25F364	2135-102
Amber	25F353	2133-102	25F357	2133-102	25F362	2133-102
Blue	25F354	2134-102	25F358	2134-102	25F363	2134-102

Prices		1-9	10-24	25-99	100-249	259-499	500-999
	Screw-Bayonet	.34	.31	.28	.26	.24	.22
	Cond. Screw	.41	.38	.35	.32	.29	.27

1-INCH OPEN PLATED TYPE ASSEMBLY

Polished chrome-plated brass jewel holders. *Uses T¾ bay. base. †Uses T¾ min. screw. #Uses 56 cand. screw. 1½"L. Reg. 1" mtg. holes. Less lamps. 3 oz.



Lens	Stk. No.	502-3241-	Stk. No.	502-3242-	Stk. No.	502-3214-
Red	25F380	0431-302*	25F385	0431-302†	25F390	0431-302#
Green	25F381	0432-302*	25F386	0432-302†	25F391	0432-302#
Amber	25F382	0433-302*	25F387	0433-302†	25F392	0433-302#
Blue	25F383	0434-302*	25F388	0434-302†	25F393	0434-302#
White	25F384	0435-302*	25F389	0435-302†	25F394	0435-302#

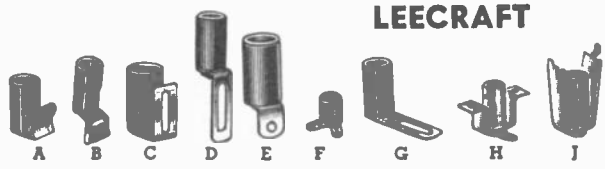
Prices		1-9	10-24	25-99	100-249	250-499	500-999
	3241 & 3242	.88	.81	.75	.68	.64	.59
	3214	.92	.84	.77	.71	.66	.61

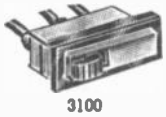
1" 115 VOLT CANDELABRA ASSEMBLIES

115 volt pilot light assemblies with faceted jewels in holder. Candelabra socket for S6 lamp. Require 1" hole. Less Lamp. Wt. 5 oz.

Lens	Stk. No.	Type 502-3228-	1-9	10-24	25-99	100-249	250-499	500-999
Red	25F374	0431-302						
Green	25F375	0432-302						
Amber	25F376	0433-302	.98	.91	.83	.76	.71	.66
Blue	25F377	0434-302						
White	25F378	0435-302						

LEECRAFT




3100

Series 200. Miniature bayonet sockets with insulating sleeves. Brackets made of .025/.032" steel cadmium plated. Wire leads, 22 gauge, 6" long.

Stk. No.	Type	Fig.	1-24	25-99	100-249	250-499	500-999
25F1300	2-01	A	.35	.25	.20	.135	.105
25F1301	2-04	B	.35	.25	.20	.135	.105
25F1302	2-06	D	.35	.25	.20	.135	.105
25F1303	2-13	G	.35	.25	.20	.135	.105
25F1304	2-15	J	.35	.25	.20	.135	.105

Series 300. Miniature bayonet sockets of molded bakelite. 300 type housing provides insulation where low voltage lamps are to be used. UL listed and CSA approved. Wire leads, 22 gauge, 6" long.

25F1305	3-01	A	.40	.30	.25	.195	.165
25F1306	3-02	B	.40	.30	.25	.195	.165
25F1307	3-05	C	.40	.30	.25	.195	.165
25F1308	3-06	D	.40	.30	.25	.195	.165
25F1309	3-13	G	.40	.30	.25	.195	.165
25F1310	3-15	J	.40	.30	.25	.195	.165
25F1311	3-20	H	.40	.30	.25	.195	.165

Series 400. Candelabra screw base in molded bakelite. #18 gauge wire leads in black and white, 6" long, ends stripped ½". UL listed, CSA App.

25F1312	4-01	A	.40	.30	.25	.197	.167
25F1313	4-04	B	.40	.30	.25	.197	.167
25F1314	4-05	C	.40	.30	.25	.197	.167
25F1315	4-06	D	.40	.30	.25	.197	.167
25F1316	4-08	E	.40	.30	.25	.197	.167
25F1317	4-15	J	.40	.30	.25	.197	.167

Series 500. Miniature screw sockets with soldering terminals. Terminals are tinned and brackets are cadmium plated.

Stk. No.	Type	Fig.	1-24	25-99	100-249	250-499	500-999
25F452	5-01	A	.25	.20	.15	.085	.075
25F453	5-04	B	.25	.20	.15	.085	.075
25F450	5-05	C	.25	.20	.15	.085	.075
25F454	5-06	D	.25	.20	.15	.085	.075
25F451	5-07	F	.25	.20	.15	.085	.075
25F447	5-08	E	.25	.20	.15	.085	.075
25F1318	5-13	G	.25	.20	.15	.085	.075
25F1319	5-15	J	.25	.20	.15	.085	.075

Series 600. Candelabra screw sockets with solder terms. Brackets are .025/.032".

25F463	6-01	A	.30	.20	.15	.09	.078
25F461	6-05	C	.30	.20	.15	.09	.078
25F446	6-06	D	.30	.20	.15	.09	.078
25F462	6-07	F	.30	.20	.15	.09	.078
25F448	6-08	E	.30	.20	.15	.09	.078
25F1321	6-13	G	.30	.20	.15	.08	.078

Series 700. Miniature bayonet sockets with soldering terminals, for low voltage incdse. lamps. *For printed circuits.

25F457	7-01	A	.30	.20	.15	.085	.075
25F458	7-04	B	.30	.20	.15	.085	.075
25F455	7-05	C	.30	.20	.15	.085	.075
25F459	7-06	D	.30	.20	.15	.085	.075
25F456	7-07	F	.30	.20	.15	.085	.075
25F449	7-08	E	.30	.20	.15	.085	.075
25F1323	7-11	H	.30	.20	.15	.085	.075
25F1324	7-13	G	.30	.20	.15	.085	.075
25F1325	7-15	J	.30	.20	.15	.085	.075
25F460	7-20	E	.30	.20	.15	.085	.075
25F1326	7-35	*	.50	.40	.30	.25	.17

RECTANGULAR 3100 AND 3100T

Rectangular pilot light. No replacement of lamp needed. Lens is made of plastic. Mounting hole size, 1.281 x .395". Housing depth, 21/32". Lens size, 115/32". Wt., 0.5 oz.

3100 SERIES—6" WIRE LEAD

Lens	Stk. No.	Type
Red	25F1391	31-2111
Amber	25F1392	31-2113
Clear	25F1393	31-2117
White	25F1394	31-2115
Trans.		

3100T SERIES—BRASS TAB TERM!

Red	25F1395	31-2111T
Amber	25F1396	31-2113T
Clear	25F1397	31-2117T
White	25F1398	31-2115T

Lens	1-24	25-99	100-249	250-499	500-999
3100	.80	.65	.43	.39	.36
3100T	.80	.65	.43	.39	.36

SIDELITE SIDE SWITCH LIGHT COMBINATION

Switch rating 3 amps. AC or 5 amps DC at 125V. 115V. lamp with 230V resistor. UL listed.

Lens	110-125 Volts Stk No.	110-125 Volts Type
Red	60F1400	51-2151T
Amber	60F1401	51-2153T
White	60F1402	51-2155T

1-24.....1.50 ....25-99.....1.05

SERIES 47 INDICATOR LIGHT

Fits into 3/8 x 5/8 panel opening. Built in lamps, resistor and solderterms.

Lens	110-125 Volts Stk. No.	110-125 Volts Type	210-250 Volts Stk. No.	210-250 Volts Type
Red	60F1416	47-3	60F1420	47H-3
Amber	60F1417	47-9	60F1421	47H-9
White	60F1418	47-2	60F1422	47H-2

1-24	25-99	100-249	250-499	500-999
1.00	.75	.50	.485	.382

LEECRAFT Indicator Lights & Sockets

SNAPLITE NEON PILOT LIGHTS

Long-life irreplacable lamp. One piece nylon housing snaps into standard ½" hole with the following tolerances: .510-.500" dia. Within housing is resistor chosen to suit applied current. Current carrying components affixed to a common base to eliminate possibility of short circuits. Body size: 1 1/16" behind panel x .495" dia. Retainer: 1/16" thick x 5/8" O.D. Lens: 27/64" O.D. Have #18 gauge, 6" wire leads, except "T" suffix indicates .187" tab terminals. All rated 110-125V except * 210-250V. UL and CSA approved.

Fig. A

Fig. B

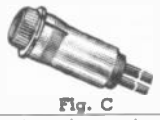


Fig. C

Fig. D

Lens Color	Square Lens—Fig. A Stk. No.	Type	1-24	25-99	100-249	250-499	500-999
Red	60F1290	32R2911	.80	.65	.43	.405	.37
Amber	60F1291	32R2913					
White	60F1292	32R2915					
Red	60F1293	32R2911T					
Amber	60F1294	32R2913T					
White	60F1295	32R2915T					

Lens Color	Cylindrical Lens-Fig. C Stk. No.	Type	1-24	25-99	100-249	250-499	500-999
Red	25F1375	32-2111	.75	.60	.40	.37	.335
Amber	25F1376	32-2113					
Clear	25F1377	32-2117					
White	25F1378	32-2115					
Red	25F1379	32-2111T					
Amber	25F1380	32-2113T					
Clear	25F1381	32-2117T					
White	25F1382	32-2115T					
Red*	60F1428	35-2111					
Red*	60F1429	35-2111T					

Lens Color	Stovepipe—Fig. B Stk No.	Type	1-24	25-99	100-249	250-499	500-999
Red	60F1274	32-2211	.75	.60	.40	.37	.335
Amber	60F1275	32-2213					
Clear	60F1276	32-2217					
White	60F1277	32-2215					
Red	60F1278	32-2211T					
Amber	60F1279	32-2213T					
Clear	60F1280	32-2217T					
White	60F1281	32-2215T					
Red*	60F1426	35-2211					
Red*	60F1427	35-2211T					

Lens Color	Flush Lens—Fig. D Stk. No.	Type	1-24	25-99	500-499	100-249	250-499
Red	60F1282	32-2311	.75	.60	.40	.37	.335
Amber	60F1283	32-2313					
Clear	60F1284	32-2317					
White	60F1285	32-2315					
Red	60F1286	32-2311T					
Amber	60F1287	32-2313T					
Clear	60F1288	32-2317T					
White	60F1289	32-2315T					
Red*	60F1424	35-2311					
Red*	60F1425	35-2311T					

INCANDESCENT SNAPLITES 6V/2A & 14V/.08A

All have chrome bezel to fit .500-513" hole. 18 AWG, 6" wire leads, except "T" suffix indicates .187 tab terminals.

SQUARE LENS CAP — FIG. A

Lens Color	6-Volt Types Stk. No.	Type	14-Volt Types Stk. No.	Type
Red	25F1362	32R-G1-2911	25F1367	32R-G3-2911
Green	25F1363	32R-G1-2912	25F1368	32R-G3-2912
Amber	25F1364	32R-G1-2913	25F1369	32R-G3-2913
Blue	25F1365	32R-G1-2914	25F1370	32R-G3-2914
White	25F1366	32R-G1-2915	25F1371	32R-G3-2915

STOVEPIPE LENS CAP — FIG. B

Red	60F1450	32R-G1-2211	60F1460	32R-G3-2211
Green	60F1451	32R-G1-2212	60F1461	32R-G3-2212
Amber	60F1452	32R-G1-2213	60F1462	32R-G3-2213
Blue	60F1453	32R-G1-2214	60F1463	32R-G3-2214
White	60F1454	32R-G1-2215	60F1464	32R-G3-2215
Red	60F1455	32R-G1-2211T	60F1465	32R-G3-2211T
Green	60F1456	32R-G1-2212T	60F1466	32R-G3-2212T
Amber	60F1457	32R-G1-2213T	60F1467	32R-G3-2213T
Blue	60F1458	32R-G1-2214T	60F1468	32R-G3-2214T
White	60F1459	32R-G1-2215T	60F1469	32R-G3-2215T

	Type	1-24	25-99	100-249	250-499	500-999
Prices	32R-G1	1.20	.95	.587	.565	.546
	32R-G3	1.15	1.00	.607	.593	.551

CYLINDRICAL LENS CAP — FIG. C

Lens Color	6-Volt Types Stk. No.	Type	14-Volt Types Stk. No.	Type
Red	60F1470	32R-G1-2111	60F1480	32R-G3-2111
Green	60F1471	32R-G1-2112	60F1481	32R-G3-2112
Amber	60F1472	32R-G1-2113	60F1482	32R-G3-2113
Blue	60F1473	32R-G1-2114	60F1483	32R-G3-2114
White	60F1474	32R-G1-2115	60F1484	32R-G3-2115
Red	60F1475	32R-G1-2111T	60F1485	32R-G3-2111T
Green	60F1476	32R-G1-2112T	60F1486	32R-G3-2112T
Amber	60F1477	32R-G1-2113T	60F1487	32R-G3-2113T
Blue	60F1478	32R-G1-2114T	60F1488	32R-G3-2114T
White	60F1479	32R-G1-2115T	60F1489	32R-G3-2115T

FLUSH LENS CAP — FIG. D

Red	60F1430	32R-G1-2311	60F1440	32R-G3-2311
Green	60F1431	32R-G1-2312	60F1441	32R-G3-2312
Amber	60F1432	32R-G1-2313	60F1442	32R-G3-2313
Blue	60F1433	32R-G1-2314	60F1443	32R-G3-2314
White	60F1434	32R-G1-2315	60F1444	32R-G3-2315
Red	60F1435	32R-G1-2311T	60F1445	32R-G3-2311T
Green	60F1436	32R-G1-2312T	60F1446	32R-G3-2312T
Amber	60F1437	32R-G1-2313T	60F1447	32R-G3-2313T
Blue	60F1438	32R-G1-2314T	60F1448	32R-G3-2314T
White	60F1439	32R-G1-2315T	60F1449	32R-G3-2315T

PRESS FIT MINIATURE NEON TINEON INDICATORS WITH ALUMINUM BEZELS

Long-life, high-brightness neon lamps. Press fits into 5/16" diameter hole. Bezel is aluminum anodized. Housing, white nylon. Has transparent plastic lens available in various colors. Wire leads are #18 gauge insulated plastic. Standard length: 6", ½" stripped. Speed nut furnished for maximum security.

Tineon 36EN Series. With built-in resistor for 110-125V.

Fig. E

Fig. F

Lens Color	Flush Lens — Fig. E Stk. No.	Type	High-hat Lens — Fig. F Stk. No.	Type
Red	60F1254	36EN2311-6	60F1250	36EN2111
Amber	60F1255	36EN2313-6	60F1251	36EN2113
Clear	60F1256	36EN2317-6	60F1252	36EN2117
White	60F1257	36EN2315-6	60F1253	36EN2115
Tineon 41EN Series. Less resistor, external resis required				
Red	60F1262	41EN2311	60F1258	41EN2111-6
Amber	60F1263	41EN2313	60F1259	41EN2113-6
Clear	60F1264	41EN2317	60F1260	41EN2117-6
White	60F1265	41EN2315	60F1261	41EN2115-6

	Type	1-24	25-99	100-249	250-499	500-999
Prices	36EN	.85	.70	.50	.445	.372
	41EN	.80	.65	.46	.42	.348

WITH INCANDESCENT LAMPS

6V-2A and 14V-.08A With .250 tab terminals.

Lens Color	6-Volt Types Stk. No.	Type	14-Volt Types Stk. No.	Type
Red	25F1410	31-G1-2111T	25F1415	31-G3-2111T
Green	25F1411	31-G1-2112T	25F1416	31-G3-2112T
Amber	25F1412	31-G1-2113T	25F1417	31-G3-2113T
Blue	25F1413	31-G1-2114T	25F1418	31-G3-2114T
White	25F1414	31-G1-2115T	25F1419	31-G3-2115T

	Type	1-24	25-99	100-249	250-499	500-999
Prices	31-G1	1.15	.95	.592	.57	.549
	31-G3	1.15	1.00	.612	.598	.569

WITH BEZEL — INCANDESCENT LAMPS

Similar to 41EN units above, but with incandescent lamps: 6V-.2A, and 14V-.08A. Plastic flush lens.

Lens Color	6-Volt Types Stk. No.	Type	14-Volt Types Stk. No.	Type
Red	25F1400	41EN-G1-2311	25F1405	41EN-G3-2311
Green	25F1401	41EN-G1-2312	25F1406	41EN-G3-2312
Amber	25F1402	41EN-G1-2313	25F1407	41EN-G3-2313
Blue	25F1403	41EN-G1-2314	25F1408	41EN-G3-2314
White	25F1404	41EN-G1-2315	25F1409	41EN-G3-2315

	Type	1-24	25-99	100-249	250-499	500-999
Prices	41EN-G1	1.25	.90	.602	.57	.558
	41EN-G3	1.20	.95	.622	.598	.578

WITHOUT BEZEL — FLUSH LENS CAP

3600 Series. With built-in resistor for 110-125V.

4100 Series. Less resistor; ext. resistance required. Both types are similar to Fig. E

Lens Color	With Resistor Stk. No.	Type	Less Resistor Stk. No.	Type
Red	60F1266	36N2311	60F1270	41N2311
Amber	60F1267	36N2313	60F1271	41N2313
Clear	60F1268	36N2317	60F1272	41N2317
White	60F1269	36N2315	60F1273	41N2315

	Type	1-24	25-99	100-249	250-499	500-999
Prices	36N	.70	.55	.40	.37	.335
	41N	.65	.50	.40	.345	.29

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

GENERAL ELECTRIC PILOT LAMPS

GE NEON GLOW LAMPS

For 105-125 volts except (*) 210-250 volts. Screw types have series resistor in base, others require external resistor as listed. S.C. stands for single contact: D.C. for double contact. Prices include Fed. Excise Taxes. Av. shpg. wt., 3 oz.

Stk. No.	Type	Watts	Ohms	Base	Starting V. AC	Starting V. DC	Bulb Style	NET	Box of 10
25F030	NE-2	1/17	150,000	Wire Term.	65	90	T-2	.10	.80
25F029	NE-2D	1/12	100,000	S. C. Midget Flange	65	90	T-2	.78	6.24
25F027	NE-2E	1/12	100,000	Wire Terms	65	90	T-2	.10	.80
25F026	NE-2H	1/4	30,000	Wire Term.	95	135	T-2	.11	.88
25F050	NE-2J	1/4	30,000	S. C. Midget Flange	95	135	T-2	.78	6.24
25F051	NE-2X	1/15	100,000	Wire Terms.	65	90	T-2	.10	.80
25F037	NE-16			D. C. Bay.		67	T-4½	.63	5.04
25F038	NE-17	1/4	30,000	D. C. Bay.	65	90	T-4½	.86	6.88
25F035	NE-21	1/4	30,000	S.C. Bay	65	90	T-4½	.90	7.20
25F041	NE-30	1	7,500	Med. Screw	65	90	S-11	1.14	9.12
25F042	NE-31	1	7,500	Sk. Cand. Screw	65	90	G-10	2.83	22.64
25F043	NE-32	1	7,500	D. C. Bay.	65	90	G-10	1.14	9.12
25F044	NE-34	2	3,500	Med. Screw	65	90	S-14	1.76	14.08
25F045	NE-36	2	3,500	Sk. D. C. Bay	65	90	S-14	2.28	18.24
25F046	NE-40	3	2,200	Med. Screw	60	85	S-14	2.56	20.48
25F047	NE-42	6	2,200	Sk. D. C. Bay	60	85	S-14	2.52	20.16
25F034	NE-45	1/4	30,000	Cand. Screw	65	90	T-4½	.81	6.48
25F033	NE-48	1/4	30,000	D. C. Bay.	65	90	T-4½	.67	5.36
25F031	NE-51	1/25	220,000	S. C. Bay. Min.	65	90	T-3¼	.20	1.60
25F028	NE-51H	1/7	47,000	S. C. Bay. Min.	95	135	T-3¼	.22	1.76
25F040	NE-56*	1	33,000	Med. Screw	65	90	S-11	1.19	9.52
25F032	NE-57	1/4	30,000	Cand. Screw	65	90	T-4½	.94	7.52
25F036	NE-58*	1/2	100,000	Cand. Screw	65	90	T-4½	.90	7.20
25F052	NE-79	1	7,500	D.C. Bay.	65	90	S-7	1.28	10.24

CIRCUIT COMPONENT NEON LAMPS

For use as voltage indicators, regulators, switching etc. T-2 bulbs. Parallel post electrodes. Temp. range: —0° - + 165°F. Wire terminal base.

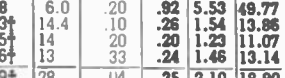
Stk. No.	Type	Starting DCV	Oper. DCV	DC Ma	NET	Box of 10
25F064	NE23	60-90	59	0.3	.16	1.28
25F065	NE83	60-100	61	10.0	.20	1.60
25F053	NE96	120-150	60-80	0.5	.20	1.60

PANEL & PILOT BULBS

†Miniature bayonet base. ‡Single-contact bayonet base. **Double-contact bayonet. ††Single-contact midget flanged. ‡‡Mid - groove. ***Min. 2-pin. *D.C. Pref. Others have min. screw base. Prices include F.E. Tax. Shpg. wt., 2 oz.; 10, 4 oz.; 100, 2½ lbs.

Stock No.	Lamp No.	Volt	Amp	EA.	10 for	100 for
25F067	10***	2.5	.50	.27	1.60	14.40
25F166	12***	6.3	.15	.25	1.51	13.59
25F068	39†	6.3	.37	.36	2.01	18.09
25F100	40	6.3	.15	.15	.86	7.74
25F101	41	2.5	.50	.22	1.35	12.15
25F116	42	3.2	.35	.28	1.68	15.12
25F102	43†	2.5	.50	.22	1.35	12.15
25F103	44†	6.3	.25	.15	.86	7.74
25F104	45†	3.2	.35	.18	1.13	10.17
25F105	46	6.3	.25	.15	.86	7.74
25F106	47†	6.3	.15	.15	.86	7.74
25F107	48	2.0	.06	.22	1.35	12.15
25F108	49†	2.0	.06	.18	1.13	10.17
25F109	50	7.5	1 c.p.	.16	.92	8.28
25F113	51†	7.5	1 c.p.	.14	.84	7.56
25F164	53†	14 4	1 c p.	.14	.84	7.56
25F110	55†	7.0	2 c.p.	.14	.84	7.56
25F129	57†	14	.24	.14	.84	7.56
25F121	81‡	6.5	6 c p	.22	1.33	11.97
25F120	82**	6.5	6 c p.	.22	1.33	11.97
25F056	88**	6.75	15 c.p.	.35	2.10	18.90
25F068	123	1.25	.30	.17	1.05	9.45
25F069	246	3.8	.22	.84	6.50	58.50
25F114	313†	28	.17	.30	1.80	16.20
25F153	334‡‡	28	.04	.77	4.03	36.27
25F165	345‡‡	6	.04	1.54	9.30	83.70
25F159	346‡‡	18	.04	1.34	7.99	71.91
25F072	382††	14	.08	1.34	7.99	71.91
25F073	755†	6.3	.15	.28	1.68	15.12
25F074	756†	14	.08	.36	2.01	18.09
25F075	757†	28	.08	.46	2.66	23.94
25F076	1021‡	4.5	1.25	1.17	6.99	62.91
25F057	1130**	6.4	21 c.p.	.40	2.39	21.51
25F117	1133‡	6.2	32 c.p.	.41	2.42	21.78
25F182	1446	12	.20	.26	1.54	13.86
25F111	1447	18.0	.15	.20	1.23	11.07
25F183	1487	14	.20	.26	1.54	13.86
25F112	1490†	3.2	.16	.18	1.13	10.17
25F181	1493**	6.5	2.75	1.08	6.45	58.05
25F161	1630*	6.5	2.75	1.44	8.60	77.40
25F058	1680‡	6.0	4 10	.87	5.22	46.98
25F149	1768	6.0	.20	.92	5.53	49.77
25F127	1813†	14.4	.10	.26	1.54	13.86
25F118	1815†	14	20	.20	1.23	11.07
25F119	1816†	13	33	.24	1.46	13.14
25F133	1819†	28	.04	.35	2.10	18.90
25F167	1820†	28	.10	.31	1.86	16.74
25F115	1829†	28	.07	.36	2.15	19.35
25F180	1835†	55	.05	.67	4.00	36.00
25F059	1847†	6.0	.15	.18	1.13	10.17
25F070	1891†	12	24	.17	1.02	9.18

TELEPHONE LAMPS—T-2 BULBS



Bulb slide bose lamps used for a variety of purposes in switchboards. In most instances the lamp functions in conjunction with other pieces of equipment and its design is controlled by the circuit characteristics.

Stk. No.	Type	Base	Volts	Amps	NET	10 for	100 for
25F178	NE-3	Tel. Slide	55	.035-.045	.63	5.04	.....
25F060	24B-1	Tel. Slide	24	.032-.038	.67	3.99	35.91
25F061	24E-1	Tel. Slide	24	.032-.038	.67	3.99	35.91
25F062	24X-1	Spec Tel. Slide	24	.032-.038	.67	3.99	35.91
25F063	48C-1	Tel. Slide	48	.032-.038	.73	4.31	38.79
25F071	55C-1	Tel. Slide	55	.045-.06	.73	4.31	38.79

HERZOG 120 V 4-WATT PILOT LAMP

Clear, candelabra base. 9/16" dia., 1 9/16" length Wt., 4 oz.

Stk. No.	Color	NET	10-up
25F174	Clear	.50	.45

FLASHLIGHT BULBS

High mechanical strength, long life, top efficiency, and overall operating performance. No. 224 has special base slightly smaller dia. than miniature base and with approx. one and one-half turns of thread. Nos. PR-2, 3, 4, 6, 7, 8, and 12 are S.C. min. flanged. Others have min. screw base for Radar Lamps. Shpg. wt., 3 oz.

Stock No.	Lamp No.	Cell	Volts	Amp	NET	Box of 10	100 for
25F142	PR-2	2D	2.38	0.50	.20	1.23	11.07
25F144	PR-3	3D	3.57	0.50	.20	1.23	11.07
25F138	PR-4	2C	2.33	0.27	.20	1.23	11.07
25F140	PR-6	2D	2.47	0.30	.20	1.23	11.07
25F150	PR-7	3D	3.70	0.30	.26	1.53	13.77
25F152	PR-12	5D	5.95	0.50	.20	1.23	11.07
25F143	13	3D	3.70	0.30	.17	1.05	9.45
25F132	14	2D	2.47	0.30	.17	1.05	9.45
25F145	31	5D	6.15	0.30	.22	1.34	12.06
25F130	112	1AA	1.20	0.22	.17	1.05	9.45
25F131	136	6A	1.25	0.69	.20	1.23	11.07
25F135	222	2AA	2.25	0.25	.17	1.05	9.45
25F136	223	2AA	2.25	0.25	.20	1.23	11.07
25F147	224	2AAA	2.15	0.22	.20	1.23	11.07
25F137	233	2C	2.33	0.27	.20	1.23	11.07
25F054	243	2C	2.33	0.27	.20	1.23	11.07
25F151	425	4F	5.00	0.50	.20	1.23	11.07
25F146	605	5D	6.15	0.50	.20	1.23	11.07
25F179	965	8D-8F	9.84	0.50	.26	1.54	13.86
						Box of 12	
25F055	4512	4F	4.70	0.50	2.75		20.16
25F148	4546	4F	4.70	0.50	2.55		18.48

S6 120 VOLT PILOT LAMP

Rated 1500 hours. Clear color. Candelabra base. 1⅞" long. Shipping weight, 4 oz. *230V.

Stk. No.	Type	Watts	NET	10 up, Ea.
25F170	6S6	6	.21	.17
25F173	3S6	3	.37	.30
25F176	10S6	10*	.50	.40

Type 7C7. As above, but conical shaped. 2⅛" long. 7 watts. Shpg. weight, 4 oz.

Stk. No.	Color	NET	10 up, Ea.
25F171	Clear	.21	.17
25F172	White	2/.49	.18

6S6/DC—120 V. double contact bayonet base bulb.

25F175	Clear	.31	.25

T-1¾ MIDGET FLANGED BULBS

Single contact, tiny incandescent bulbs. *Recommended for use with transparent lenses only. 1⅞" L. Shpg. wt., 4 oz.

Stock No.	Lamp No.	Volt	Amp	NET	10 for	100 for
25F122	327	28	.04	.71	4.20	37.80
25F123	328	6	.20	.55	3.29	29.61
25F124	330	14	.08	.79	4.67	42.03
25F125	331*	1.35	.06	.89	5.32	47.88
25F126	338*	2.7	.06	.89	5.32	47.88
25F160	344*	10	.015	1.54	8.95	80.55

SOCKETS FOR NEON LAMPS

A B C

Sockets for neon type lamps. Edison Medium bases are for standard bulbs. *Denotes hard rubber insert in metal shell. S.C. stands for single contact type; D.C. for double contact type. 3 oz.

No.	Base	Fig.	NET	10 for
25F300	Edison Med.	A	.21	1.79
25F303	Cand. Screw	A	.16	1.43
25F304	D.C. Bay. Cand.	C*	.45	3.95
25F305	D.C. Bay. Cand.	B	.49	4.40
25F306	S.C. Bay. Cand.	B	.46	4.10

Chicago Miniature Lamps

BASE STYLES

1 2 3 4 5 6 7 8 9 10 11

Lamps listed in this catalog are the more popular types available from Chicago Miniature. If your application requires a special lamp or a lamp not shown, send NEWARK a description of your needs. We will be pleased to submit our recommendation. AS types are aged & selected for critical applications.
*Not illustrated. W=wire terminals.

GENERAL SERVICE LAMPS

Stock No.	Type	Design V.	Design Amp.	Life Hours	Base	Bulb	Each 1-9	Pkg. of 10 1-9	Pkg. of 10 10-49
27F100	PR-2	2.38	.50	15	7	B-3½	.20	1.23	1.06
27F101	PR-3	3.57	.50	15	7	B-3½	.20	1.23	1.06
27F102	PR-4	2.33	.27	10	7	B-3½	.20	1.23	1.06
27F103	PR-6	2.47	.30	30	7	B-3½	.20	1.23	1.06
27F104	PR-7	3.70	.30	30	7	B-3½	.26	1.53	1.35
27F105	PR-12	5.95	.50	15	7	B-3½	.20	1.23	1.06
27F106	PR-13	4.75	.50	15	7	B-3½	.20	1.23	1.06
27F107	PR-16	12.5	.25	50	7	B-3½	.25	1.56	1.35
25F091	10	2.5	.5	3000	*	G-3½	.27	1.60	1.41
25F092	12	6.3	.15	L	*	G-3½	.25	1.51	1.33
27F111	13	3.7	.30	15	8	G-3½	.17	1.05	.90
27F112	14	2.47	.30	15	8	G-3½	.17	1.05	.90
27F113	27	4.9	.30	30	8	G-4½	.20	1.23	1.06
27F114	31	6.15	.30	15	8	G-4½	.22	1.34	1.18
27F115	40	6.3	.15	3000	8	T-3¼	.15	.86	.74
27F116	42	3.2	.35	3000	8	T-3¼	.28	1.68	1.49
27F117	43	2.5	.50	3000	9	T-3¼	.22	1.35	1.19
27F118	44	6.3	.25	3000	9	T-3¼	.15	.86	.74
27F119	45	3.2	.35	3000	9	T-3¼	.18	1.13	1.00
27F120	46	6.3	.25	3000	8	T-3¼	.15	.86	.74
27F121	47	6.3	.15	3000	9	T-3¼	.15	.86	.74
27F122	48	2.0	.06	1000	8	T-3¼	.22	1.35	1.19
27F123	49	2.0	.06	1000	9	T-3¼	.18	1.13	1.00
27F124	50	7.5	.22	1000	8	G-3½	.16	.92	.81
27F125	51	7.5	.22	1000	9	G-3½	.14	.84	.72
27F126	53	14.4	.12	1000	9	G-3½	.14	.84	.72
27F127	55	7.0	.41	500	9	G-4½	.14	.84	.72
27F128	57	14.0	.24	500	9	G-4½	.14	.84	.72
27F129	64	7.0	.63	1000	11	G-6	.25	1.55	1.32
27F130	67	13.5	.59	L	10	G-6	.18	1.07	.92
27F131	68	13.5	.59	L	11	G-6	.30	1.80	1.55
25F083	81	6.5	1.05	500	10	G-6	.22	1.33	1.15
27F133	82	6.5	1.05	500	11	G-6	.22	1.33	1.15
27F134	87	6.8	1.91	300	10	S-8	.35	2.10	1.81
27F135	88	6.8	1.90	300	11	S-8	.35	2.10	1.81
27F136	88L	6.8	2.0	750	11	S-8	1.02	6.36	5.64
27F137	90	13.0	.58	750	11	G-6	.22	1.34	1.13
27F138	93	12.8	1.04	500	10	S-8	.32	1.90	1.64
27F139	94	12.8	1.0	500	11	S-8	.35	2.10	1.81
25F094	112	1.2	.22	5	8	GTL-3	.17	1.05	.90
27F140	113	1.3	.22	15	8	GTL-3	.22	1.34	1.18
25F089	130	6.0	2.8	200	11	S-8	.18	1.13	1.00
27F143	131	1.3	.10	50	8	G-3½	.18	1.13	1.00
25F090	159	6.3	1.15	L	*	T-3¼	.22	1.34	1.18
27F147	222	2.25	.25	5	8	GTL-3	.17	1.05	.90
27F148	224	2.15	.22	5	*	GTL-2¾	.20	1.23	1.06
27F149	233	2.33	.27	10	8	G-3½	.20	1.23	1.06
25F095	239	6.3	.36	5000	9	T-3¼	.26	1.53	1.35
27F150	240	6.3	.36	L	9	T-3¼	.22	1.34	1.13
27F151	245	2.46	.50	15	8	G-3½	.22	1.34	1.13
27F152	252	2.5	.35	10000	4	GTL-1¾	2.66	16.16	14.34
27F153	253X	2.5	.35	10000	2	GTL-1¾	3.52	21.68	19.22
25F096	259	6.3	.25	3000	*	T-3¼	.20	1.23	1.08
27F154	261	2.5	.35	10000	2	GTL-1¾	7.67	46.34	41.09
27F156	304	28.0	.30	500	11	G-6	.41	2.46	2.12
27F158	307	28.0	.66	300	10	S-8	.51	3.03	2.61
27F159	309	28.0	.90	300	10	S-11	.72	4.31	3.76
27F160	313	28.0	.17	500	9	T-3¼	.30	1.80	1.55
26F500	323	3.0	.19	350	*	T-1¼	.92	5.48	4.72
27F161	323R	3.0	.19	350	*	T-1¼	1.08	6.46	5.57
26F537	324	3.0	.19	350	*	T-1¼	.62	3.66	3.23
26F538	325	3.0	.19	350	*	T-1¼	1.28	7.69	6.63
26F501	327	28.0	.04	1000	4	T-1¾	.70	4.15	3.57
26F502	327AS15	28.0	.04		4	T-1¾	2.09	12.47	10.75
26F503	327AS25	28.0	.04		4	T-1¾	1.26	7.90	7.00
26F913	327LSV	28.0	.06		4	T-1¾	1.40	8.50	7.84
26F504	328	6.0	.20	1000	4	T-1¾	.54	5.25	2.79
26F507	328L	6.0	.20	1000	4	T-1¾	1.53	9.50	8.50
26F541	330	14.0	.08	750	4	T-1¾	.78	4.61	3.97
26F542	331	1.35	.06	500	4	T-1¾	.89	5.32	4.69
26F544	334	28.0	.04	1000	2	T-1¾	.77	4.03	3.65
27F162	334LSV	28.0	.06	25000	2	T-1¾	1.80	11.00	9.60
26F508	335	28.0	.04	25000	3	T-1¾	1.54	9.30	8.20
26F509	335AS15	28.0	.08		3	T-1¾	2.71	16.70	14.80
26F547	336	14.0	.04	750	2	T-1¾	1.54	9.22	7.95
26F548	337	6.0	.20	1000	2	T-1¾	1.65	9.65	8.50
27F163	337L	6.3	.20	3000	2	T-1¾	2.56	16.00	14.20
26F552	338	2.7	.06	3000	4	T-1¾	.89	5.32	4.69

GENERAL SERVICE LAMPS CONT'D

Stock No.	Type	Design V.	Design Amp.	Life Hours	Base	Bulb	Each 1-9	Pkg. of 10 1-9	Pkg. of 10 10-49
26F511	342	6.0	.03	10000	3	T-1¾	1.54	9.30	8.00
26F554	344	10.0	.014	10000	4	T-1¾	1.54	8.95	7.69
26F555	345	6.0	.04	10000	4	T-1¾	1.54	9.30	8.20
26F914	346	18.0	.04	1000	2	T-1¾	1.34	7.99	7.03
27F164	363	14.0	.20	250	9	G-3½	.22	1.34	1.18
27F165	365	3.69	.50	15	8	G-3½	.22	1.34	1.18
26F915	367	10.0	.01	30000	4	T-1¾	1.65	9.65	8.50
27F166	370	18.0	.015	1000	4	T-1¾	1.34	7.99	7.03
27F167	375	3.0	.04	10000	4	T-1¾	1.44	8.60	7.85
26F916	380	6.3	.94	50000	4	T-1¾	1.85	11.27	9.94
26F917	381	6.3	.20	50000	4	T-1¾	1.17	6.99	6.16
26F918	382	14.0	.08	50000	4	T-1¾	1.34	7.99	7.03
27F168	386	14.0	.08	50000	2	T-1¾	1.34	7.99	7.03
26F919	387	28.0	.04	25000	4	T-1¾	.73	4.37	4.00
27F169	388	28.0	.04	25000	2	T-1¾	1.44	8.60	7.85
27F170	407	4.9	.30	50	8	G-4½	.21	1.29	1.12
27F171	425	5.0	.50	15	8	G-4½	.20	1.23	1.06
27F172	428	12.5	.25	250	8	G-4½	.17	1.05	.93
27F178	502	5.1	.15	100	8	G-4½	.17	1.05	.93
27F179	503	5.1	.15	100	9	G-4½	.22	1.34	1.18
27F180	509	24.0	.18	1000	5	G-6	.67	4.00	3.52
25F097	737	28.0	.05	10000	*	T-1¼	2.23	14.00	12.40
27F182	965	9.8	.50	15	8	T-4½	.26	1.54	1.36
27F183	1003	12.8	.94	100	10	B-6	.32	1.90	1.64
27F184	1004	12.8	.94	100	11	B-6	.32	1.90	1.64
27F186	1021	4.5	1.25	75	*	RP-11	1.17	6.99	6.16
27F187	1034	12.8	1.80	200L	*	S-8	.34	2.04	1.76
27F188	1047	26.0	2.70	25	*	RP-11	.72	4.31	3.72
27F189	1073	12.8	1.80	200	10	S-8	.32	1.90	1.64
27F190	1129	6.4	2.63	200	10	S-8	.32	1.90	1.64
27F192	1133	6.2	3.91	200	10	RP-11	.41	2.42	2.09
27F193	1141	12.8	1.44	500	10	S-8	.32	1.90	1.64
27F194	1142	12.8	1.44	500	11	S-8	.35	2.10	1.81
27F195	1143	12.5	2.00	400	10	RP-11	.53	3.13	2.70
27F196	1154	6.4	2.63	200	*	S-8	.40	2.39	2.06
27F197	1158	6.4	2.63	200	*	S-8	.40	2.39	2.06
27F198	1184	5.5	6.36	100	11	RP-11	.62	3.73	3.04
27F202	1251	28.0	.23	L	10	G-6	.41	2.48	2.14
27F203	1252	24.0	.23	L	11	G-6	.47	3.00	2.58
27F205	1446	12.0	.20	250	8	G-3½	.26	1.54	1.36
27F206	1447	18.0	.15	250	8	G-3½	.20	1.23	1.08
27F207	1449	14.0	.20	250	8	G-3½	.16	1.00	.88
27F208	1458	20.0	.25	250	9	G-5	.28	1.68	1.49
27F209	1471	12.0	.26	250	5	G-6	.62	3.66	3.23
27F210	1476	18.0	.17	250	8	T-3	.46	2.66	2.34
27F211	1477	24.0	.17	250	8	T-3	.55	3.32	2.93
27F212	1482	6.0	.45	100	8	G-4½	.28	1.68	1.48
27F213	1483	6.0	.04	250	8	G-4½	.28	1.68	1.48
27F214	1487	14.0	.21	3000	8	T-3¼	.26	1.54	1.36
27F215	1488	14.0	.15	200	9	T-3¼	.28	1.68	1.48
27F216	1489	6.5	2.75	125	10	T-5	2.88	17.74	15.71
27F217	1490	3.2	.16	3000	9	T-3¼	.81	1.13	1.00
27F218	1491	2.4	.80	75	11	G-8	.50	2.99	2.64
27F219	1492	2.5	1.50	15	11	S-8	1.51	9.00	7.93
27F220	1493	6.5	2.80	100	11	S-8	1.08	6.45	5.67
27F221	1503	5.9	6.53	200	*	RP-11	1.44	8.68	7.50
27F222	1606	6.4	2.69	200	6	S-8	.64	3.90	3.45
27F223	1630	6.5	2.75	100	*	S-8	1.44	8.60	7.56
25F098	1648	8.0	2.0	1500	11	S-8	.70	4.28	3.72
27F224	1651	5.0	.60	20	10	S-8	.67	4.00	3.52
26F556	1705	14.0	.08	750	W	T-1¾	.67	4.00	3.52
26F557	1728	1.35	.06	500	W		.46	2.66	2.34
26F558	1730	6.0	.04	10000	W	T-1¾	1.01	5.99	5.28
26F559	1738	2.7	.06	6000	W		.39	2.34	2.06
27F225	1763	6.1	4.10	125	*	T-1¾	1.28	8.08	7.17
26F561	1764	28.0	.04	1000	*	S-11	.50	2.99	2.64
26F562	1764 LSV	28.0	.06	25000	*	S-11 S-11	.85	5.19	4.78
26F512	1767	2.5	.20	500	3	T-1¾	.67	4.00	3.52
26F513	1768	6	.20	1000	3	T-1¾	.92	5.53	4.87
26F516	1768L	6.3	.20	3000	3	T-1	1.46	9.00	7.80
26F564	1775	6.3	.075	500	3	.....	.89	5.32	4.69
27F226	1783	2.5	.20	500	W	T-1	.55	3.32	2.93
27F227	1813	14.4	.10	1000	9	T-3¼	.26	1.54	1.36
27F228	1815	14	.20	3000	9	T-3¼	.20	1.23	1.08
27F229	1816	13	.33	1000	9	T-3¼	.24	1.46	1.26
27F230	1819	28	.04	1000	9	T-3¼	.35	2.10	1.81
27F231	1820	28	.10	1000	9	T-3¼	.31	1.86	1.60
27F232	1821	28	.17	500	8	T-3¼	.67	4.00	3.52
27F233	1822	36	.10	1000	9	T-3¼	.62	3.69	3.25
27F234	1828	37.5	.05	L	9	T-3¼	.67	4.00	3.52
27F235	1829	28	.075	1000	9	T-3¼	.36	2.15	1.89

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

BULB SHAPES

GENERAL SERVICE LAMPS (CONT'D)

Stock No.	Type	Design V.	Design Amps	Life Hours	Base	Bulb	Each 1-9	Pkg. of 10 1-9	Pkg. of 10 10-49
27F236	1847	6.3	.15	20000	9	T-3¼	.18	1.13	1.00
27F237	1850	5	.09	1500	9	T-3¼	.26	1.54	1.36
27F238	1855	6.3	.80	3000	9	T-4½	.36	2.01	1.77
26F570	1859	10.0	.014	.....	W	T-1¾	1.17	6.99	6.16
27F239	1866	6.3	.25	20000	9	T-3¼	.22	1.34	1.18
27F240	1869	10.0	.014	10000	W	T-1¾	1.17	6.99	6.16
27F241	1891	14.0	.233	500	9	T-3¼	.17	1.02	.90
27F242	1892	14.4	.12	1000	9	T-3¼	.26	1.55	1.37
27F243	1893	14.0	.33	L	9	T-3¼	.21	1.21	1.04
27F244	2102	18.0	.04	1000	W	T-1¾	.79	4.67	4.11
27F245	2107	10.0	.04	30000	W	T-1¾	1.34	7.99	7.03
25F089	2114	6.0	.06	3000	W	T-1¼	.73	4.38	3.82
27F247	2124	2.5	.35	10000	*	GTL-1¾	2.04	12.33	10.93
27F248	2136	2.5	.35	10000	*	GTL-1¾	3.73	22.84	20.22
25F185	2128	3.0	.0125	.....	W	T-1	5.04	29.97	26.40
27F250	2162	14.0	.088	10000	W	T-1¾	.62	7.69	3.37
25F186	2169	2.5	.350	10000	W	T-1¾	1.17	7.05	6.25
25F187	2182	14.0	.08	50000	W	T-1¾	.67	4.00	3.52
25F188	6832	5.0	.060	100000	W	T-1	3.43	30.00	23.30
25F189	6833	5.0	.060	100000	W	T-3¼	1.85	12.00	10.47
25F190	6838	28.0	.024	16000	W	T-1	2.69	17.90	15.46
25F191	6839	28.0	.024	16000	1	T-1	3.81	23.50	21.00
25F192	7152	5.0	.115	40000	W	T-1	3.43	30.00	23.30
25F193	7153	5.0	.115	40000	W	T-¾	1.85	12.00	10.47
25F194	8623	28.0	.04	1000	*	T-1¼	1.97	12.30	10.90
25F195	8627	28.0	.04	1000	W	T-1¼	1.19	7.41	6.57
25F196	8632	28.0	.04	1000	4	T-1¼	1.79	11.20	9.94
25F197	8635	28.0	.04	1000	*	T-1¼	1.97	12.30	10.90
25F198	8639	6.0	.20	500	*	T-1¼	1.98	12.30	10.93
25F199	8666	5.0	.08	3000	W	T-¾	1.92	12.00	10.70

NEON GLOW LAMPS

Stock No.	Type	V	Watts	Life Hours	Base	Bulb	Each 1-9	Pkg. of 10
27F251	NE2(A1A)	105-125	1/25	25000+	W	T-2	.10	.82
27F252	NE2D(C7A)	105-125	1/10	5000+	*	T-2	.78	6.00
27F253	NE2H(C2A)	105-125†	1/4	5000+	W	T-2	.11	.86
27F254	NE45(V7A)	110-125	1/4	7500	8	T-4½	.81	6.40
27F255	NE48(V9A)	110-125	1/4	7500	11	T-4½	.67	5.20
27F256	NE51(B1A)	110-125	1/25	15000+	6	T-3¼	.20	1.70
27F257	NE51H(B2A)	110-125†	1/4	5000+	6	T-3¼	.22	1.70
27F258	NE83(58H)	60-100	.....	.....	W	T-2	.20	1.70

†VDS.

INDICATOR LAMPS

Special units for Dialco series 81 indicator lights. T-2 incandescent bulb with slide base; ¼" diam., 5000 hr life.

Stock No.	Type	Volts	Amps	End. Foot Candles	Each 1-9	Pkg. of 10 1-9	Pkg. of 10 10-19	Pkg. of 10 20 Up
27F075	6PSB	6	.140	800				
27F076	12PSB	12	.170	2500				
27F077	24PSB	24	.073	2200				
27F078	28PSB	28	.040	2000	.51	4.40	4.20	3.70
27F079	48PSB	48	.053	1500				
27F080	60PSB	60	.050	2600				
27F081	120PSB	120	.025	1500				

TELEPHONE SLIDE BASE LAMPS

Incandescent lamps specifically designed for use in telephone switchboards. 5000 hour life, ½" diameter.

Stock No.	Type	Volts	Amps	End. Foot Candles	Each 1-9	Pkg. of 10 1-9	Pkg. of 10 10 Up
27F082	12B	12	.032-.038	—			
27F083	24B	24	.035-.045	750			
27F084	24C	24	.06 -.085	875			
27F085	24E	24	.032-.038	600	.74	6.70	4.50
27F086	24F	24	.032-.038	1120			
27F087	24X	24	.032-.038	600			
27F088	30B	30	.09 -.11	1050			
27F089	48C	48	.032-.038	475			
27F090	48D	48	.017-.025	100	.77	6.90	4.60
27F091	55C	55	.045-.06	1025			

Depend On Newark For All Your Industrial Electronic Needs

STANDARD VOLTAGE LAMPS

Stock No.	Type	Volts	Watts	Life Hours	Base	Bulb	Each 1-9	Pkg. of 10
27F259	3S6/5	120	3	3000	8	S-6	.37	3.00
27F260	6S6	115	6	1500	8	S-6	.21	1.70
27F261	6S6	145	6	1500	8	S-6	.43	3.40
27F262	6S6/DC	120V	6	1500	11	S-6	.31	2.50
27F263	6T4½/1	115-125	6	1500	8	T-4½	.67	5.40
27F264	7C7	115-125	7	3000	8	C-7	.21	1.70
27F265	10C7	115-125	10	.....	8	C-7	.26	2.10
27F266	10C7DC	115-125	10	.....	11	C-7	.28	2.20
27F267	10S6/10	230	10	1500	8	S-6	.50	4.00

CM7-SERIES BI-PIN LAMPS

Stock No.	Type	Design V.	Design Amps	Life Hours	Base	Bulb	Each 1-9	Pkg. of 10 1-9	Pkg. of 10 10-49
27F268	CM7-327	28.0	.04	1000	*	T-1¾	1.58	9.87	8.76
27F269	CM7-328	6.0	.20	1000	*	T-1¾	1.44	9.00	7.98
27F270	CM7-330	14.0	.08	750	*	T- ¾	1.71	10.70	9.49
27F271	CM7-338	2.7	.06	6000	*	T-1¾	2.23	14.00	12.40
27F272	CM7-799	3.0	.015	10000	*	T-1¾	3.02	19.10	16.90

CM8-SERIES MINIATURE & SUB-MINIATURE LAMPS

Stock No.	Type	Design V	Design Amps	Life Hours	Base	Bulb	Each 1-9	Pkg. of 10 1-9	Pkg. of 10 10-49
27F273	CM8-60	6.0	5.5	9000	10	RP-11	1.06	6.60	5.90
27F275	CM8-108	6.15	4.45	.....	*	T-8	7.78	48.60	43.10
27F276	CM8-109	6.0	1.0	1000	10	T-5	6.24	39.00	34.60
27F277	CM8-220	6.3	.33	50	6	TL-2¾	4.08	25.50	22.60
27F278	CM8-255	2.75	.32	50	5	T-2¾	4.58	28.70	25.50
27F279	CM8-282	3.8	.33	.....	*	SL-3¼	3.96	24.80	22.20
27F280	8299	2.5	.35	10000	3	TL-1¾	1.68	10.50	9.31
27F281	CM8-308	28.0	.72	300	11	S-8	1.32	8.25	7.33
27F282	CM8-363	28.0	.04	.....	*	TL-1½	.76	4.23	3.75
27F283	CM8-373	2.5	.35	10000	2	TL-1¾	2.50	15.20	13.50
27F284	CM8-388	28.0	.04	25000	3	TL-1¾	1.42	8.90	7.89
27F285	CM8-428	5.0	.18	3000	7	T-1¾	2.23	14.00	12.40
27F286	CM8-374	2.5	.35	10000	*	TL-1¾	2.10	12.60	11.17
27F287	CM8-428L	6.0	.22	3000	7	T-1¾	2.50	15.60	13.90
27F288	CM8-503	6.3	.35	1000	6	TL-3¾	4.61	28.80	25.60
27F290	CM8-506	6.3	1.29	100	11	G-6	2.42	15.20	13.45
27F291	CM8-508	6.3	.40	2000	*	G-6	5.28	33.00	29.25
27F292	CM8-610	6.3	.20	3000	*	T-1¼	.61	3.80	3.37
27F293	CM8-624	28.0	.04	1000	3	T-1¼	1.71	10.70	9.94
26F574	CM8-628	6.0	.20	500	7	T-1¼	1.55	9.72	8.62
26F577	CM8-631	1.35	.06	1000	7	T-1¾	1.32	8.25	7.32
26F581	CM8-634	6.0	.20	500	7	T-1¼	.57	3.54	3.14
26F588	CM8-637	3.0	.19	350	7	T-1¼	1.85	11.60	10.30
26F592	CM8-640	14.0	.08	1000	*	T-1¼	1.32	8.25	7.32
26F605	CM8-661	6.0	.04	.....			1.32	8.25	7.32
26F922	CM8-666	5.0	.08	3000	*	T- ¾	1.92	12.00	10.70
26F521	680	5.0	.06	200000	*	T-1	3.10	18.62	15.46
26F522	680AS15	5.0	.06	200000	*	T-1	3.59	22.00	17.90
26F523	682	5.0	.06	200000	1	T-1	3.88	23.17	19.30
26F524	682AS15	5.0	.06	200000	1	T-1	4.37	26.50	21.60
26F525	683	5.0	.06	100000	*	T-1	3.10	18.62	15.46
26F526	683AS15	5.0	.06	100000	*	T-1	3.59	22.00	17.90
26F527	685	5.0	.06	100000	1	T-1	3.88	23.17	19.30
26F528	685AS15	5.0	.06	100000	1	T-1	4.37	26.50	21.60
26F923	713	5.0	.075	16000	*	T-1	3.20	19.60	16.00
26F529	713AS15	5.0	.075	16000	*	T-1	3.59	22.00	17.90
26F924	714	5.0	.075	16000	1	T-1	4.00	24.40	19.90
26F539	714AS15	5.0	.075	16000	1	T-1	4.37	26.50	21.60
26F533	715	5.0	.115	40000	*	T-1	3.10	18.62	15.46
26F534	715AS15	5.0	.115	40000	*	T-1	3.59	22.00	17.90
27F294	CM8-715F1	5.0	.125	5000	*	T-1	3.19	20.70	17.00
26F535	718	5.0	.195	40000	1	T-1	3.88	23.17	19.30
26F536	718AS15	5.0	.115	40000	1	T-1	4.37	26.50	21.60
26F926	CM8-725	5.0	.115	16000	1	T- ¾	1.85	12.00	10.47
27F295	CM8-740	3.8	.38	500	1	SL-2½	3.92	26.90	22.70
27F296	CM8-750	6.3	.19	.....	1	TL-2¾	3.07	19.20	17.10
27F297	CM8-805	5.0	.06	200000	1	T-1¾	2.02	12.60	11.20
27F298	CM8-806	5.0	.06	100000	1	T-1¾	2.02	12.60	11.20
27F299	CM8-807	5.0	.115	40000	1	T-1¾	2.02	12.60	11.20
27F095	6833	5.0	.060	50000	1	T- ¾	1.85	12.00	10.47
27F096	6803	5.0	.060	75000	1	T- ¾	1.85	12.00	10.47
27F097	CM8-826	2.5	.40	30	*	T-1¼	3.91	24.50	21.70
27F099	CM8-967	120	.02	5000	6	T-2	.69	4.30	4.20

*Not Illustrated. W = wire terminals.

RAYTHEON Jacks & Hardware

TEST JACKS . . . Meets MS16108 (Rev. F) Specs

Meets all requirements of MS16108 (ships). Consists of a heavy nickel-plated brass bushing, protected by nylon sleeve. Contact assembly is silver plated with a gold wash for lowest contact resistance. Mounts in .261" dia. hole.

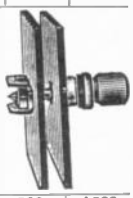
Stk. No.	Type	Mil. No.	Color	1-99	100-499	500-999	1000-4999
26F329	TJ101Y	MS16108-8A	Yellow	.29	.25	.23	.20
26F330	TJ102B	MS16108-4A	Brown				
26F331	TJ103R	MS16108-2A	Red				
26F333	TJ105BL	MS16108-3A	Black				
26F334	TJ106GN	MS16108-5A	Green				
26F335	TJ107MB	MS16108-7A	Blue				
26F336	TJ108W	MS16108-1A	White				

SUBMINIATURE FIXED-CONTACT JACK

Model MC122. Suitable for equipment of standard, miniature, or subminiature sizes. Beryllium-copper spring pin contact. No nuts or washers allows for fast and easy mounting. Accepts any standard test prods. Over all length .655" max. Insulator diameter .286. Insulator is made from DuPont Zytel (Nylon). Contact sleeve is brass, gold-plated. Mounting hole dia. .219. Range of acceptable panel thickness .031-.093. Weight is 1 lb. each.

Stock No.	Type	Color	1-49	50-249	250-499	500-999
26F939	TJ400N	Natural	.21	.18	.17	.16
26F940	TJ401Y	Yellow				
26F941	TJ402B	Brown				
26F942	TJ403R	Red				
26F943	TJ4040R	Orange				
26F944	TJ405BL	Black				
26F945	TJ406G	Green				
26F946	TJ407MB	Marine Blue				
26F947	TJ408W	White				

THUMBSCREWS . . . Meets MIL-16400 Specs



Raytheon captive hardware, a line of stainless steel fastening hardware meeting government specifications. A slotted head thumb screw, insert bushing, captivated floating nut, gasket, and gasket retainer make up the full assembly. Meets MIL-E-16400 (Ships) specifications.

Stock No.	Type	Thread Size	L	1-499	500-999	1000-2499
26F350	CS-130	1/4-20NC-2	7/8	.76	.65	.61
26F351	CS-131	1/4-20NC-2	1"	.76	.65	.61
26F362	CS-100	8-32NC-2	5/8	.55	.47	.44
26F364	CS-102	8-32NC-2	7/8	.55	.47	.44
26F368	CS-122	10-32NC-2	1"	.60	.52	.49

PANEL INSERT

Thread Size: 1/4-20NC-2

Stock No.	Type	Thread Size	For Panel	1-499	500-999	1000-2499
26F381	PIN-132	1/4-20NC-2	.119-.156	.28	.24	.22
26F383	PIN-134	1/4-20NC-2	.250	.28	.24	.22

Thread Size: 5/16-18NC-2

26F384	PIN-140	5/16-18NC-2	.048-.072	.39	.332	.312
26F387	PIN-143	5/16-18NC-2	.188	.39	.332	.312

Thread Size: 8-32NC-2

Stock No.	Cat. No.	Thread Size	For Panels	1-499	500-999	1000-2499
26F389	PIN-100	8-32NC-2	.048-.072	.22	.19	.18
26F390	PIN-101	8-32NC-2	.074-.109			
26F391	PIN-102	8-32NC-2	.119-.156			

Thread Size: 10-32NC-2

26F395	PIN-122	10-32NC-2	.119-.156	.25	.21	.20
26F397	PIN-124	10-32NC-2	.250			

NUT BRACKET

Stk. No.	Type	Thread Size	1-499	500-999	1000-2499
26F369	NB-100	8-32NC-2	.10	.09	.08
26F371	NB-102	10-32NC-2	.12	.11	.10
26F372	NB-103	1/4-10NC-2	.18	.16	.15

GASKETS

Stk. No.	Type	Screw Size	1-19 Per 50	20-Up Per 50
26F399	GS101	1/4-20	1.00	.85
26F401	GS103	8-32		

GASKET RETAINER

26F402	GSR-115	10-24 or 10-32	3.50	3.00
26F405	GSR-118	8-32		

RIGHT ANGLE PRINTED CIRCUIT TEST JACKS

Model MC123. Single .080" contact for use with closely spaced printed circuit boards. .3" mtg. centers. Rated: 5 amps. Oper. volts: 2000 RMS @ sea level. All metal surfaces are heavy gold over silver plating. Size: .231 x .48 x .449". Shpg. wt., 3 oz.

Stock No.	Type	Color	1-249	250-499	500-999	1000-2499
26F948	TJ201Y	Yellow	.19	.16	.15	.13
26F949	TJ202BR	Brown				
26F992	TJ203R	Red				
26F993	TJ2040R	Orange				
26F994	TJ205BL	Black				
26F995	TJ206GN	Green				
26F996	TJ207MB	Marine Bl.				
26F997	TJ208W	White				
26F998	TJ209GY	Gray				
26F999	TJ210V	Violet				
26F290	TJ251Y	Yellow				
26F291	TJ252BR	Brown				
26F292	TJ253R	Red				
26F293	TJ254OR	Orange				
26F294	TJ255BL	Black				
26F295	TJ256GN	Green				
26F296	TJ257MB	Blue				
26F297	TJ258W	White				
26F298	TJ259GY	Gray				
26F299	TJ260V	Violet				

PRINTED CIRCUIT TEST JACKS

Model MC121. For dip board application. Simple mounting on any circuit panel up to 1/4" thick. Accepts any standard test prod. Temperature cycling from —65°C to +85°C. Beryllium-Copper spring pin contact. 95% Relative humidity @ 40°C for 250 hrs. Gold plated contact sleeve. Maximum L .546. Maximum insulator dia. .228.

Stock No.	Type	Color	1-249	250-499	500-999	1000-2499
26F928	TJ300N	Natural	.19	.16	.15	.13
26F929	TJ301Y	Yellow				
26F930	TJ302B	Brown				
26F931	TJ303R	Red				
26F932	TJ304OR	Orange				
26F933	TJ305BL	Black				
26F934	TJ306GN	Green				
26F935	TJ307MB	Marine Blue				
26F936	TJ308W	White				

PANEL BRACKETS

Formed from .090" cold-rolled carbon steel, the bracket is available in four sizes to accommodate panels ranging in width from 1 3/8-3 7/16". A pair of brackets will mount either one or two panels. Meet the requirements of MIL-E-16400A (ships), MIL-E-5400, and MIL-P-11268B (Sig. C) Cadmium plated. Shpg. wt., 3 oz.

Stk. No.	Type	Wide Range	1-99	100-199	200-499	500 999
26F316	MB-125	1 3/8-1 15/16	.26	.22	.21	.20
26F317	MB-126	2-2 7/16	.27	.23	.22	.20
26F318	MB-127	2 1/2-2 15/16	.28	.24	.22	.21
26F319	MB-128	3-3 7/16	.30	.26	.24	.23

SHAFT LOCKS

Mounted on the control bushing in place of the nut and washer, the shaft lock fits snugly around the control shaft, providing a constant drag which resists rotation caused by accidental contact, vibrations, etc., but which permits smooth adjustment. Shpg. wt., 1 oz.

Stock No.	Type	Shaft	Thread NEF2	1-99	100-199	200-499	500-999
26F314	SL-100B	1/4"	3/8-32	.33	.28	.26	.24
26F937	SL-101R	1/4"	.....	.35	.30	.28	.26
26F315	SL-105B	1/8"	1/4-32	.25	.22	.20	.18
26F938	SL-110B	1/4"	...	.22	.19	.18	.16

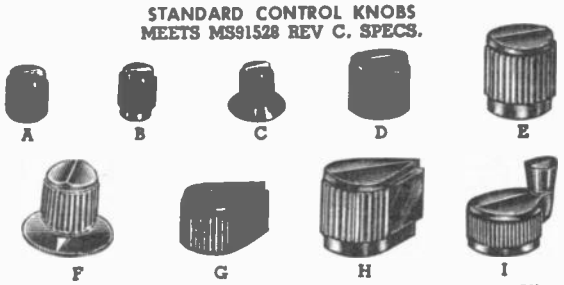
Make NEWARK

your one stop source

for all Jacks and Knobs

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

STANDARD CONTROL KNOBS MEETS MS91528 REV C. SPECS.



Molded plastic knobs fitted with an aluminum insert. Two Allen head set screws fasten to the control shaft. * after type number indicates mirror finish for commercial equipment. G after type number indicates a non-reflecting "matte" finish, which conforms to military specifications. Ave. shp. wt. 3 oz.

50 Series—.45" Dia. For 1/8" shafts

Stk. No.	Type	Description	Fig.	1-99	100-199	200-499
26F194	50-1-1*	Unskirted knob	A	.55	.47	.44
26F195	50-1-1G	Unskirted knob	A	.61	.52	.49
26F196	50-2-1*	Skirted knob	B	.64	.54	.51
26F197	50-2-1G	Skirted knob	B	.70	.60	.56
26F198	50-3-1*	Dil. Skt. Rd. w/pt.	C	.72	.61	.58
26F199	50-3-1G	Dil. Skt. Rd. w/pt.	C	.78	.66	.62

70 Series—.72" Dia. 1/8" Shaft Knobs

26F338	70-1-1*	Round	D	.76	.65	.61
26F340	70-2-1*	Skirted Round	E	.85	.72	.68
26F341	70-1-1G	Round	D	.82	.70	.66
26F342	70-2-1G	Skirted Round	E	.91	.77	.73
26F343	70-3-1G	Dil. Skt. Rd. w/pt.	F	1.00	.85	.80
26F344	70-5-1*	Skirted Pointer	H	.85	.72	.68
26F345	70-4-1G	Pointer	G	.82	.70	.66
26F346	70-5-1G	Skirted Pointer	H	.91	.77	.73

70 Series—.72" Dia. For 1/4" shafts

26F150	70-1-2*	Round	D	.70	.60	.56
26F151	70-1-2G	Round	D	.76	.65	.61
26F152	70-2-2*	Skirted Round	E	.79	.67	.63
26F153	70-2-2G	Skirted Round	E	.85	.72	.68
26F154	70-3-2*	Dil. Skt. Rd. w/pt	F	.88	.75	.70
26F155	70-3-2-G	Dil. Skt. Rd. w/pt.	F	.94	.80	.75
26F156	70-4-2*	Pointer	G	.70	.60	.56
26F157	70-4-2G	Pointer	G	.76	.65	.61
26F158	70-5-2*	Skirted Pointer	H	.79	.67	.63
26F159	70-5-2G	Skirted Pointer	H	.85	.72	.68

90 Series—.928" Dia. For 1/4" shafts

26F160	90-1-2*	Round	D	.74	.63	.59
26F161	90-1-2G	Round	D	.80	.68	.64
26F162	90-2-2*	Skirted Round	E	.83	.71	.66
26F163	90-2-2G	Skirted Round	E	.89	.76	.71
26F164	90-3-2*	Dil. Skt. Rd. w/pt.	F	.92	.78	.74
26F165	90-3-2G	Dil. Skt. Rd. w/pt.	F	.98	.83	.78
26F166	90-4-2*	Pointer	G	.79	.67	.63
26F167	90-4-2G	Pointer	G	.85	.72	.68
26F168	90-5-2*	Skirted Pointer	H	.88	.75	.70
26F169	90-5-2G	Skirted Pointer	H	.94	.80	.75

125 Series—1.269" Dia. For 1/4" shafts

26F170	125-1-2*	Round	D	.79	.67	.63
26F171	125-1-2G	Round	D	.85	.72	.68
26F172	125-2-2*	Skirted Round	E	.88	.75	.70
26F173	125-2-2G	Skirted Round	E	.94	.80	.75
26F174	125-3-2*	Dil. Skt. Rd. w/pt.	F	.96	.82	.77
26F175	125-3-2G	Dil. Skt. Rd. w/pt.	F	1.02	.87	.82
26F176	125-6-2*	Crank	I	2.32	1.97	1.86
26F177	125-6-2G	Crank	I	2.35	2.00	1.88

125 Series—2.516" Dia. For 1/4" shafts—No skirt

26F368	125-7-2G	Bar Pointer	....	1.32	1.12	1.06

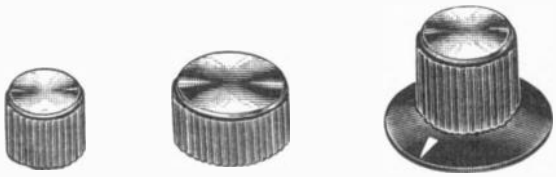
175 Series—1.772" Dia. For 1/4" shafts

26F178	175-1-2*	Round	D	1.12	.95	.90
26F181	175-2-2G	Skirted Round	E	1.27	1.08	1.02
26F182	175-3-2*	Dil. Skt. Rd. w/pt.	F	1.34	1.14	1.07
26F183	175-3-2G	Dil. Skt. Rd. w/pt.	F	1.41	1.20	1.13
26F184	175-6-2*	Crank	I	2.51	2.13	2.01
26F185	175-6-2G	Crank	I	2.58	2.19	2.06

225 Series—2.272" Dia. For 1/4" shafts

26F186	225-1-2*	Round	D	1.29	1.10	1.03
26F187	225-1-2G	Round	D	1.36	1.16	1.09
26F190	225-3-2*	Dil. Skt. Rd. w/pt.	F	1.49	1.27	1.20
26F191	225-3-2G	Dil. Skt. Rd. w/pt.	F	1.57	1.33	1.26
26F192	225-6-2*	Crank	I	2.61	2.22	2.09
26F193	225-6-2G	Crank	I	2.67	2.27	2.14

"DESIGNER" SERIES



Molded black plastic knobs with spun aluminum cap inserts. Knobs withstand 25 in/lbs. of torque. Temperature: —55°C to 125°C. Ave. shp. wt. 3 oz.

70 Series—.252 Shafts

Stk. No.	Type	Description	1-99	100-199	200-499
26F464	DS 70-1BD-2	Rd. No Skt. Dot	.88	.81	.77
26F465	DS 70-1BD-2G	Rd. No Skt. Dot	.90	.83	.78
26F466	DS 70-1-2	Rd. No Skt.	.78	.72	.68
26F467	DS 70-1-2G	Rd. No Skt.	.80	.74	.70
26F468	DS 70-2-2	Rd. Pln. Skt.	.91	.77	.73
26F469	DS 70-2-2G	Rd. Pln. Skt.	.95	.81	.76
26F470	DS 70-2BD-2	Rd. Pln. Skt. Dot	1.08	.92	.86
26F471	DS 70-2BD-2G	Rd. Pln. Skt. Dot	1.10	.94	.88
26F472	DS 70-3-2	Dl. Skt. Rd. w/pt.	.96	.88	.84
26F473	DS 70-3-2G	Dl. Skt. Rd. w/pt.	.98	.90	.85
26F474	DS 70-4-2	Pt. No Skt.	.78	.72	.68
26F475	DS 70-4-2G	Pt. No Skt.	.88	.75	.70
26F476	DS 70-5-2	Pt. Pln. Skt.	.95	.81	.76
26F477	DS 70-5-2G	Pt. Pln. Skt.	.99	.84	.79

70 Series—.190 Shafts

26F478	DS 70-1-3	Rd. No Skt.	.88	.81	.77
26F479	DS 70-1-3G	Rd. No Skt.	.90	.83	.78

90 Series—.252 Shafts

26F484	DS 90-1-2	Rd. No Skt.	.88	.81	.77
26F485	DS 90-1-2G	Rd. No Skt.	.90	.83	.78
26F486	DS 90-1BD-2	Rd. No Skt. Dot	1.05	.89	.84
26F487	DS 90-1BD-2G	Rd. No Skt. Dot	1.10	.94	.88
26F488	DS 90-2-2	Rd. Pln. Skt.	1.18	1.00	.94
26F489	DS 90-2-2G	Rd. Pln. Skt.	1.10	.94	.88
26F490	DS 90-2BD-2	Rd. Pln. Skt. Dot	1.10	.94	.88
26F491	DS 90-2BD-2G	Rd. Pln. Skt. Dot	1.20	1.02	.96
26F492	DS 90-3-2	Rd. Dl. Skt. w/pt.	1.05	.97	.91
26F493	DS 90-3-2G	Dl. Skt. Rd. w/pt.	1.07	.98	.93
26F494	DS 90-4-2	Pt. No Skt.	1.03	.88	.82
26F495	DS 90-4-2G	Pt. No Skt.	1.05	.87	.84
26F496	DS 90-5-2	Pt. Pln. Skt.	1.12	.95	.90
26F497	DS 90-5-2G	Pt. Pln. Skt.	1.15	.98	.92

90 Series—.190 Shafts

26F498	DS 90-1-3	Rd. No Skt.	1.08	.92	.86
26F499	DS 90-1-3G	Rd. No Skt.	1.10	.94	.88

125 Series—.252 Shafts

26F444	DS 125-1-2	Rd. No Skt.	1.08	.92	.86
26F445	DS 125-1-2G	Rd. No Skt.	1.08	.94	.88
26F446	DS 125-2-2	Rd. Pln. Skt.	1.18	1.00	.94
26F447	DS 125-2-2G	Rd. Pln. Skt.	1.21	1.05	.97
26F448	DS 125-3-2	Dl. Skt. Rd. w/pt.	1.25	1.06	1.00
26F449	DS 125-3-2G	Dl. Skt. Rd. w/pt.	1.28	1.09	1.02

SPECIAL POINTER KNOB

With knob lock listed below. Knob features pointer arm which curves over skirt of lock toward chassis to increase accuracy. For 1/4" shafts. Shpg. wt., 2 oz.

26F302	70-1LK-2	Mirror Finish	.93	.79	.....
26F303	70-1LK-2G	Matte Finish	.99	.84	.....
26F304	90-1LK-2	Mirror Finish	1.03	.88	.82
26F305	90-1LK-2G	Matte Finish	1.05	.89	.84
26F307	125-1LK-2G	Matte Finish	1.24	1.05	.99

KNOB LOCKS

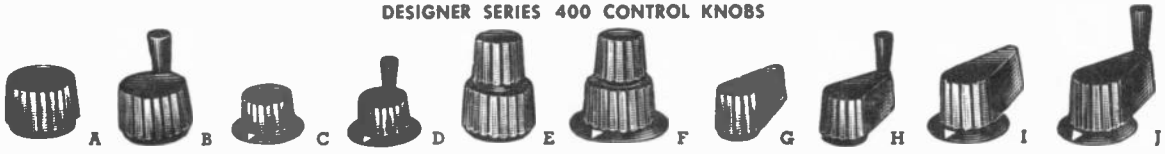
For standard control knobs. Holds precise or critical control settings under shock or vibration. Use with 70, 90, and 125 round standard control knobs. Mirror finish except * Matte. 3/8-32 thread. Shpg. wt., 2 oz.

Stk. No.	Type	Series & Dia.	1-99	100-199	200-499	500-999
26F308	KL701	Series: 70 1" dia.	.87	.74	.70	.61
26F309	KL701G*	Series: 70 1" dia.	.93	.79	.74	.65
26F310	KL901	Series: 90 1 5/16" dia.	1.02	.87	.82	.71
26F311	KL901G*	Series: 90 1 5/16" dia.	1.07	.91	.86	.75
26F312	KL1251	Series: 125 1 5/8" dia.	1.02	.87	.82	.71
26F313	KL1251G*	Series: 125 1 5/8" dia.	1.09	.93	.87	.76

Control Knobs

RAYTHEON

DESIGNER SERIES 400 CONTROL KNOBS



High impact acrylonitrile-styrene (ABS), with lustreless black finish. Supplied with metal bushings and two set screws.

407 SERIES—⅛" SHAFTS—.720 DIA.

Stk. No.	Type	Description	Fig.	1-99	100-199	200-499
26F671	407R1K1	Round	A	.42	.36	.24
26F672	407D1K1	Round dial skirted	C	.52	.44	.42

407 SERIES—¼" SHAFTS—.720 DIA.

26F675	407R2K1	Round	A	.39	.33	.31
26F676	407D2K1	Round dial skirted	C	.48	.41	.38
26F677	407P2K1	Bar pointer	G	.43	.37	.34
26F678	407PD2K1	Bar pointer dial skirted	J	.53	.45	.42

409 SERIES—⅛" SHAFTS—.875 DIA.

26F679	409R1K1	Round	A	.44	.37	.35

409 SERIES—¼" SHAFTS—.875 DIA.

26F682	409R2K1	Round	A	.41	.35	.33
26F683	409D2K1	Round dial skirted	C	.51	.43	.41
26F684	409RB2K1	Round—for assemblies	A	.45	.38	.36
26F685	409P2K1	Bar pointer	G	.48	.41	.38
26F686	409PC2K1	Bar pointer w/crank	H	.65	.55	.52
26F687	409PD2K1	Bar pointer dial skirted	J	.59	.49	.46
26F688	409PDC2K1	Bar pointer w/crank, dial skirted	J	.75	.64	.60
26F689	409DB2K1	Round dial skirted—for assemblies	C	.52	.44	.42

412 SERIES—¼" SHAFTS—1.25 DIA.

Stk. No.	Type	Description	Fig.	1-99	100-199	200-499
26F690	412R2K1	Round	A	.43	.37	.34
26F691	412RC2K1	Round w/crank	B	.60	.51	.48
26F692	412D2K1	Round dial skirted	C	.53	.45	.42
26F693	412DC2K1	Rnd. dial sktd. w/crank	D	.69	.59	.55
26F694	412RB2K1	Round—for assemblies	A	.45	.38	.36
26F695	412P2K1	Bar pointer	G	.54	.46	.43
26F696	412PC2K1	Bar pointer w/crank	H	.70	.60	.56
26F697	412PD2K1	Bar pointer dial skirted	J	.64	.54	.51
26F698	412PDC2K1	Bar pointer dial skirted w/crank	J	.80	.68	.64
26F699	412DB2K1	Rnd. dial sktd. for assem.	C	.54	.46	.43

CONCENTRIC ASSEMBLIES—FIG. E AND F.

Consists of two separate knobs which should be ORDERED SEPARATELY FROM SERIES 407, 409, AND 412 LISTED ON THIS PAGE. Easily assembled.

FIG. E.—ROUND/ROUND

Top Knob—⅛" Shaft	Bottom Knob—¼"Shaft
407R1K1 .720 dia.	409RB2K1 .875 dia.
409R1K1 .875 dia.	412RB2K1 1.25 dia.

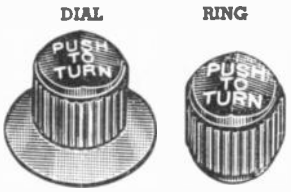
FIG. F.—ROUND/ROUND DIAL SKIRTED

407R1K1 .720 dia.	409DB2K1 .875 dia.
409R1K1 .875 dia.	412DB2K1 1.25 dia.

● *NEW* PUSH TO TURN KNOBS

Knobs are designed for those applications in which control settings must be maintained under conditions of shock and vibration. The control setting can not be changed accidently since the knob must be fully depressed before movement. Push-to-turn knobs are supplied with a special lockwasher and a special mounting nut to be used for installation of knobs. Complies with MIL-K-3926B and MS91528C. Knobs are made of polycarbonate plastic with an internal mechanism of stainless steel. Available in black and gray. "G" suffix on type no. indicates matte finish, others are mirror finish.

- **For shock and vibration conditions**
- **Dial and ring skirted**



Stk. No.	Type No.	Knob Dia.	Knob H	Shaft Dia.	Color	1-24	25-49	50-249
26F437	PT70-2-1	.730	.830	⅛"	B1	12.10	10.90	9.70
26F438	PT70-2-1G	.730	.830	⅛"	B1	12.00	10.80	9.60
26F439	PT70-2-2	.730	.830	¼"	B1	12.20	11.00	9.75
26F440	PT70-2-2G	.730	.830	¼"	B1	12.10	10.90	9.70
26F441	PT70-2-3	.730	.830	3/16"	B1	12.25	11.00	9.80
26F442	PT70-2-3G	.730	.830	3/16"	B1	12.15	10.95	9.75
26F443	PTG70-2-1	.730	.830	⅛"	G	12.20	11.00	9.75
26F091	PTG70-2-1G	.730	.830	⅛"	G	12.10	10.90	9.70
26F092	PTG70-2-2	.730	.830	¼"	G	12.30	11.10	9.85
26F093	PTG70-2-2G	.730	.830	¼"	G	12.20	11.00	9.75
26F094	PTG70-2-3	.730	.830	3/16"	G	12.35	11.10	9.90
26F095	PTG70-2-3G	.730	.830	3/16"	G	12.25	11.00	9.80
26F096	PT70-3NP-1	.730	.950	⅛"	B1	12.55	11.30	10.05
26F097	PT70-3NP-1G	.730	.950	⅛"	B1	12.45	11.20	9.95
26F098	PT70-3NP-2	.730	.950	¼"	B1	12.65	11.40	10.10
26F099	PT70-3NP-2G	.730	.950	¼"	B1	12.55	11.30	10.05
26F406	PT70-3NP-3	.730	.950	3/16"	B1	12.70	11.45	10.15
26F407	PT70-3NP-3G	.730	.950	3/16"	B1	12.60	11.35	10.10

Stk. No.	Type No.	Knob Dia.	Knob H	Shaft Dia.	Color	1-24	25-49	50-249
26F648	PT70-3-1	.730	.950	⅛"	B1	12.25	11.00	9.80
26F649	PT70-3-1G	.730	.950	⅛"	B1	12.15	10.95	9.70
26F666	PT70-3-2	.730	.950	¼"	B1	12.35	11.10	9.90
26F667	PT70-3-2G	.730	.950	¼"	B1	12.25	11.00	9.80
26F668	PT70-3-3	.730	.950	3/16"	B1	12.45	11.20	9.95
26F669	PT70-3-3G	.730	.950	3/16"	B1	12.35	11.10	9.90
26F670	PTG70-3NP-1	.730	.950	⅛"	G	12.20	11.00	9.75
26F743	PTG70-3NP-1G	.730	.950	⅛"	G	12.10	10.90	9.70
26F744	PTG70-3NP-2	.730	.950	¼"	G	12.30	11.05	9.85
26F795	PTG70-3NP-2G	.730	.950	¼"	G	12.20	11.00	9.75
26F796	PTG70-3NP-3	.730	.950	3/16"	G	12.40	11.15	9.90
26F797	PTG70-3NP-3G	.730	.950	3/16"	G	12.30	11.05	9.85
26F798	PTG70-3-1	.730	.950	⅛"	G	12.35	11.10	9.90
26F799	PTG70-3-1G	.730	.950	⅛"	G	12.25	11.00	9.80
26F896	PTG-70-3-2	.730	.950	¼"	G	12.40	11.15	9.95
26F897	PTG70-3-2G	.730	.950	¼"	G	12.35	11.10	9.90
26F898	PTG70-3-3	.730	.950	3/16"	G	12.55	11.30	10.05
26F899	PTG-70-3-3G	.730	.950	3/16"	G	12.45	11.20	9.95

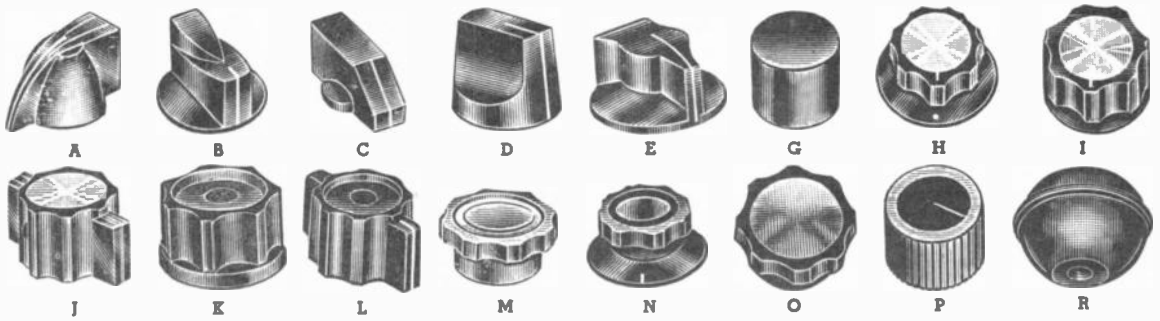
ALCO SWITCH

ALUMINUM KNOBS FOR ¼" SHAFTS
(*WITH ALUMINUM SKIRTS, †CLEAR PLASTIC SKIRTS)

Stk. No.	Type	Dia.	Color	1-99	100-249	250-499	500-999
61F917	K-500A	½"	Natural	.45	.39	.37	.35
61F918	K-500B	½"	Black	.45	.39	.37	.35

Stk. No.	Type	Dia.	Color	1-99	100-249	250-499	500-999
61F937	K-700A	¾"	Natural	.50	.44	.41	.38
61F938	K-700B	¾"	Black	.50	.44	.41	.38
61F939	K-900A	⅞"	Natural	.55	.49	.47	.45
61F940	K-900B	⅞"	Black	.55	.49	.47	.45
61F920	KS-500A	½"*	Natural	.60	.55	.51	.49
61F921	KS-500B	½"*	Black	.60	.55	.51	.49
61F941	KS-700A	¾"*	Natural	.65	.59	.56	.53
61F942	KS-700B	¾"*	Black	.65	.59	.56	.53
61F922	KSP-700A	¾"†	Natural	.60	.55	.51	.49
61F923	KSP-700B	¾"†	Black	.60	.55	.51	.49
61F943	KSP-900A	⅞"†	Natural	.65	.59	.56	.53
61F944	KSP-900B	⅞"†	Black	.65	.59	.56	.53

Kurz-Kasch Knobs



POINTERS AND BAR KNOBS

Stock No.	Part No.	Fig.	Size OD	Inches Height	1-99	100-499	500-999
35F1300	S-292-1L	A	1¼	5/8	.11	.08	.075
35F1301	S-292-3L	A	1¼	5/8	.16	.12	.11
35F1302	S-293-1L	A	2¼	5/8	.18	.14	.13
35F1303	S-293-3L	A	2¼	5/8	.27	.20	.19
35F1304	S-246-1L	A	1½	7/8	.21	.15	.14
35F1305	S-246-3L	A	1½	7/8	.28	.21	.20
35F1306	AN-3219-1	A	1¼	5/8	.23	.17	.16
35F1307	AN-3220-1	A	1½	7/8	.32	.24	.23
35F1308	AN-3220-3	A	1½	7/8	.23	.17	.16
35F1309	S-658-1L	B	1⅛	11/16	.12	.09	.085
35F1310	S-626-1L	C	1½	5/8	.19	.14	.13
35F1311	S-400-1L	D	15/16	¾	.39	.30	.28
35F1312	S-657-1L	E	1⅛	5/8	.23	.17	.16
35F1313	S-657-3L	E	1⅛	5/8	.29	.21	.20
35F1314	S-1657-1L	E	1⅛	5/8	.43	.32	.28
35F1315	S-1657-3L	E	1⅛	5/8	.50	.37	.32

PUSH BUTTONS

35F1316	S-328-30	G	½	15/32	.08	.07	.06
35F1317	S-330-30	G	7/16	15/32	.09	.07	.06
35F1318	S-343-30	G	7/16	15/32	.09	.07	.06

INSTRUMENT KNOBS SERIES 600 (Without Inlay)

Standard with white indicator line.

35F1319	S-645-1L	H	¾	7/16	.17	.13	.12
35F1320	S-645-3L	H	¾	7/16	.23	.17	.16
35F1321	S-645-5L	H	¾	7/16	.23	.17	.16
35F1322	S-645-21L	H	¾	7/16	.17	.13	.12
35F1323	S-647-1L	H	1	19/32	.17	.13	.12
33F1324	S-647-3L	H	1	19/32	.23	.17	.16
35F1325	S-648-1L	H	1¼	21/32	.18	.13	.12
35F1326	S-648-3L	H	1¼	21/32	.24	.18	.16
35F1327	S-653-1L	H	1½	¾	.19	.14	.13
35F1328	S-653-3L	H	1½	¾	.26	.20	.18
35F1329	S-649-1L	H	2	7/8	.46	.34	.30
35F1330	S-649-3L	H	2	7/8	.55	.41	.35

INSTRUMENT KNOBS SERIES 1600 (With Aluminum Inlay)

Supplied with standard white indicator line.

35E1331	S-1645-1L	H	¾	7/16	.17	.13	.12
35F1332	S-1645-3L	H	¾	7/16	.23	.17	.16
35F1333	S-1645-5L	H	¾	7/16	.23	.17	.16
35F1334	S-1645-21L	H	¾	7/16	.17	.13	.12
35F1335	S-1647-1L	H	1	19/32	.17	.13	.12
35F1336	S-1647-3L	H	1	19/32	.23	.17	.16
35F1337	S-1648-1L	H	1¼	21/32	.18	.13	.12
35F1338	S-1648-3L	H	1¼	21/32	.24	.18	.16
35F1339	S-1653-1L	H	1½	¾	.19	.14	.13
35F1340	S-1653-3L	H	1½	¾	.26	.20	.18
35F1341	S-1649-1L	H	2	7/8	.46	.34	.30
35F1342	S-1649-3L	H	2	7/8	.55	.41	.35

ALUMINUM KNOBS SERIES 1000

Supplied with standard white indicator line.

35F1343	S-1000-21L	P	7/16	5/8	.88	.66	.57
35F1344	S-1001-21L	P	¾	9/16	1.00	.75	.65
35F1345	S-1001-1L	P	¾	9/16	1.00	.75	.65
35F1346	S-1002-1L	P	1	11/16	1.13	.84	.73
35F1347	S-1003-1L	P	1¼	¾	1.50	1.13	.98
35F1348	S-1004-1L	P	1½	13/16	1.68	1.26	1.09

SUFFIX CODE

1—Molded hole for ¼" shaft.
3—Brass insert for ¼" shaft.
5—Brass insert for ⅛" shaft.
21—Molded hole for ⅛" shaft.
30—Flatted to .052 x 3/16".
70—Heavy duty brass insert for ¼" shaft.
BB—2 slotted head set screws available at extra cost:
Add to regular cost. 1-99 80.00 per 1000;
100-499 60.00 per 1000, 500-999 56.00 per 1000.
L—Painted indicator line

INTRUMENT KNOBS SERIES 700 (Without Inlay)

Supplied with standard white indicator line.

Stock No.	Part No.	Fig.	Size OD	Inches Height	1-9	100-499	500-999
35F1349	S-745-1L	I	5/8	7/16	.23	.17	.16
35F1350	S-745-3L	I	5/8	7/16	.30	.22	.21
35F1351	S-745-5L	I	5/8	7/16	.30	.22	.21
35F1352	S-745-21L	I	5/8	7/16	.23	.17	.16
35F1353	S-747-1L	I	13/16	19/32	.24	.18	.17
35F1354	S-747-3L	I	13/16	19/32	.30	.23	.21
35F1355	S-748-1L	I	1	21/32	.25	.19	.18
35F1356	S-748-3L	I	1	21/32	.31	.24	.22
35F1357	S-753-1L	I	1¼	¾	.27	.20	.19
35F1358	S-753-3L	I	1¼	¾	.35	.26	.24
35F1359	S-749-1L	I	1⅝	7/8	.55	.41	.36
35F1360	S-749-3L	I	1⅝	7/8	.64	.48	.42

INSTRUMENT KNOBS SERIES 1700 (With Aluminum Inlay)

Supplied with standard white indicator line.

35F1361	S-1745-1L	I	5/8	7/16	.40	.30	.28
35F1362	S-1745-3L	I	5/8	7/16	.47	.35	.30
35F1363	S-1745-5L	I	5/8	7/16	.47	.35	.30
35F1364	S-1745-21L	I	5/8	7/16	.40	.30	.28
35F1365	S-1747-1L	I	13/16	19/32	.40	.30	.28
35F1366	S-1747-3L	I	13/16	19/32	.47	.35	.31
35F1367	S-1748-1L	I	1	21/32	.43	.32	.28
35F1368	S-1748-3L	I	1	21/32	.50	.38	.33
35F1369	S-1753-1L	I	1¼	¾	.46	.34	.30
35F1370	S-1753-3L	I	1¼	¾	.54	.40	.35
35F1371	S-1749-1L	I	1⅝	7/8	.75	.56	.49
35F1372	S-1749-3L	I	1⅝	7/8	.85	.64	.55

WING KNOB SERIES

S-1750-3L-BB, S-1751-3L-BB with decorative aluminum inlay.

35F1373	S-750-3L-BB	J	1¼	¾	.60	.45	.39
35F1374	S-751-3L-BB	J	1½	¾	.63	.47	.41
35F1375	S-1750-3L-BB	J	1¼	¾	.83	.62	.54
35F1378	S-1751-3L-BB	J	1½	¾	.85	.64	.55

CONCENTRIC SERIES

†Use with S-645, 1645 as top knob. ††Use with 1745 as top knob.

35F1379	S-656-1L†	K	1	39/64	.31	.23	.22
35F1380	S-656-3L†	K	1	39/64	.39	.29	.27
35F1381	S-750-3L-BB††	L	1¼	¾	.72	.54	.47
35F1382	S-751-3LBB†	L	1½	¾	.74	.55	.48

HEAVY DUTY INSTRUMENT KNOBS

(°) With white inductor (†) With decoration aluminum inlay.

35F1383	S-319-3	M	1	5/8	.23	.17	.16
35F1384	S-308-3	M	1⅛	5/8	.23	.17	.16
35F1385	S-385-3	M	1⅜	11/16	.36	.27	.25
35F1386	S-309-3	M	1⅝	¾	.31	.23	.21
35F1387	S-310-3	M	2⅜	7/8	.47	.35	.30
35F1388	S-380-3L°	N	1⅛	13/16	.63	.46	.40
35F1389	S-381-70L°	N	1⅜	27/32	.76	.57	.49
45F1390	S-311-3L°	N	1⅝	7/8	.69	.52	.45
35F1391	S-312-70L°	N	2⅜	15/16	1.21	.91	.79
35F1392	S-1319-3†	O	1	5/8	.41	.31	.29
35F1393	S-1308-3†	O	1⅛	5/8	.42	.31	.29
35F1394	S-1385-3†	O	1⅜	11/16	.61	.46	.40
35F1395	S-1309-3†	O	1⅝	¾	.53	.39	.34
35F1396	S-1310-3†	O	2⅜	7/8	.72	.54	.47

GEAR AND CONTROL KNOBS

Supplied with molded threads.

Stock No.	Part No.	Fig.	OD	Size Height	Thread	1-99	100-499	500-999
35F1397	S-446-3	R	1¾	1¾	3/8-16	.36	.27	.26
35F1398	S-446-5	R	1¾	1¾	½-13	.36	.27	.26
35F1399	S-442-4	R	2	15/16	3/8-24	.27	.20	.19
35F1400	S-801-15C	R	1	1	5/16-18	.18	.12	.11
35F1401	S-801-15D	R	1	1	#10-32	.14	.10	.095
35F1402	S-801-15E	R	1	1	#10-24	.14	.10	.095
35F1403	S-801-15F	R	1	1	3/8-24	.16	.12	.11
35F1404	S-801-15G	R	1	1	#8-32	.14	.10	.095
35F1405	S-801-15Q	R	1	1	¼-28	.16	.12	.11
35F1406	S-801-15T	R	1	1	¼-20	.16	.12	.11
35F1407	S-801-15Z	R	1	1	5/16-24	.16	.12	.11
35F1408	S-801-15EE	R	1	1	3/8-16	.16	.12	.11

Knobs, Plates, Dials and Drives

HARRY DAVIES

POINTER KNOBS

Black bakelite knobs for volume and tone controls, test instruments, and almost all types of electronic equipment. All have white indicator lines. Will fit 1/4" shaft. All parts can be made available to JAN specifications at 10% extra. *Brass insert. †2 oz. ‡1 oz.

Stock No.	Type	Fig.	Size In.	1-24	25-99	100-499	500-999	1000-up
26F107	2150*	A†	1¼	.13	.10	.09	.078	.075
26F115	1550*	B†	1⅛	.12	.10	.086	.056	.070
26F116	1550C	B†	1⅛	.16	.14	.12	.112	.104
26F117	1500	C†	1⅛	.14	.11	.096	.084	.080
26F214	1510	C†	¾	.16	.14	.12	.111	.103

INSTRUMENT KNOBS

Black Bakelite finger grip knobs for use on 1/4" shafts Complete with brass insert and set screw. Can be supplied to Jan specs. at 10% extra, as well as in compliance with MS-91531. Can also be furnished with imprinted skirt. Shpg. Wt., 3 oz.

Stk. No.	Type	Fig.	Skirt Dia.	1-24	25-99	100-499	500-999	1000-up
26F041	4102	I	1⅝"	.28	.25	.213	.199	.185
26F016	4100	I	1⅛"	.24	.21	.18	.169	.156
26F018	4102Q	..	1⅝"	.40	.35	.30	.28	.26
26F020	4100Q	....	1⅛"	.37	.33	.279	.260	.242

KNOBS WITH SKIRTS

Stk. No.	Type	Fig.	Knob Size	1-24	25-99	100-499	500-999	1000-up
26F022	4108	J	2 1/16"	.56	.49	.423	.392	.364
26F024	4104	J	1½"	.46	.40	.342	.319	.296

FINGER GRIP KNOBS

Finger Grip Knobs. Are Black bakelite fluted knobs for use on 1/4" shafts. Set screw mounting. *Brass insert. Some are available with Spring Mount and CRL Knurl—(Write for prices). Can be furnished in compliance with government specifications—M-14E. Shpg. Wt., 1 oz.

Stock No.	Type	Fig.	Knob Size Dia.	Ht.	Hole Size	1-24	25-99	100-499	500-999	1000-up
26F126	1910*	G	¾"	½"	¼"	.16	.14	.117	.109	.101
26F127	1910-C	G	¾"	½"	¼"	.22	.19	.17	.154	.143
26F140	1914-C*	F	¾"	½"	¼"	.33	.29	.250	.234	.217
26F135	1919*	H	1¼"	5/8"	¼"	.22	.19	.17	.16	.144
26F136	1919-2*	H	1¼"	5/8"	¼"	.28	.25	.210	.20	.182

CONTROL KNOBS

Black Bakelite knobs for all control and indicating uses. For 1/4" shaft. Set screw furnished. Types 1470 and 1400 have molded pointers, 1600 and 1610 have paint filled indicator lines on skirt. Brass insert. Wt. 1 oz.

Stock No.	Type	Fig.	Bot. Dia.	Hole Depth	1-24	25-99	100-499	500-999	1000-up
26F110	1470	D	1"	3/16"	.14	.12	.108	.101	.094
26F109	1475	E	1"	7/16"	.13	.11	.093	.081	.075
26F123	1450	E	1 1/16"	1 1/32"	.09	.08	.071	.06	.053
26F122	1400	D	1 1/16"	1 1/32"	.09	.08	.071	.06	.053
26F120	1610	....	1 5/16"	7/16"	.14	.12	.107	.099	.092

LEVER KNOBS

Black bakelite lever knobs for any lever application. Available with metal pointer (Write for details.) Fit 1/4" shaft. Furnished with set screw. *Brass insert. Available to JAN specifications at 10% extra. Wt., 2 oz.

Stock No.	Type	Fig.	Size	1-24	25-99	100-499	500-999	1000-up
26F112	2100E*	K	2½"	.15	.13	.113	.105	.098
26F113	2110*	K	1 5/8"	.20	.18	.150	.140	.130
26F114	2110E*	K	1 5/8"	.14	.13	.108	.101	.094

INSTRUMENT CASES

Made of molded plastic they can be drilled out to take any type of instrument. Covers available for all cases. Wt. 1 lb.

Type 260: 6 13/16x5 9/32x2 3/32". Type 240: 3¾x6¼x1⅞". Type 220: 2 41/32x3 25/32x1 15/32".

Stk. No.	Type	1-24	25-49	50-99
26F124	260	.96	.72	.60
26F125	240	.72	.66	.48
26F145	220	.42	.37	.32
Covers for Cases				
26F670	261 for 260	.30	.27	.22
26F669	241 for 240			
26F149	221 for 220			

WALDOM PLATES

DIRECT-DRIVE DIALS

For transmitting and test equip 2¾" and 4" types have knob skirts 1⅛" have small knurled knob only instead of fluted type. 2¾" and 4" have micrometer for 1/10 of one division logging. Fit 1/4" control shafts and 0-100 scale except 302A has 0-360 scale. 12 oz.

Stk. No.	Type	Dia.	Rot.	NET
25F639	27084	1⅛"	180°	1.56
25F640	27085	1⅛"	270°	
25F641	27086	1⅛"	325°	
25F642	27087	1⅛"	360°	
25F630	27068	1¾"	180°	1.68
25F631	27069	1¾"	270°	
25F643	27080	1¾"	325°	
25F644	27081	1¾"	360°	
25F632	294	2¾"	180°	2.76
25F633	295	2¾"	270°	
25F645	27082	2¾"	325°	
25F646	303	2¾"	360°	
25F634	292	4"	180°	3.60
25F635	293	4"	270°	
25F647	27083	4"	325°	
25F648	302	4"	360°	
25F638	302A	4"	360°	

AZIMUTH DIALS

Outer numerals read 0 to 360 c.-c. w. Inner numerals read 0 to 360 c. w. Etched on heavy aluminum with black graduations. Shpg. wt., 2 oz. Shpg. wt., 2 oz.

Stk. No.	Type	Dia.	Shaft. Dia.	NET
25F691	27010	6"	3/8"	5.40
25F692	27011	6"	¼"	5.40
25F693	KD-12	4"	¼"	3.62

POLISHED ALUMINUM PLATES

Distinctive black lettering. All 2 3/16" high x 2⅝" wide. Wt., 3 oz.

No.	Type	Title	NET
25F720	410	Plain 0-10	.41
25F724	414	Record 0-10	
25F729	423	Arrow-Increase	
25F732	426	Volume 0-10	

INDUSTRIAL TYPE MODERN KNOBS

Desirable when smooth finishes and simplicity are required. 1/4" dia. hole—brass insert. Set screw.

Stk. No.	Type	Dia.	NET
25F769	6126	5/8"	.30
25F770	6129	7/8"	.48

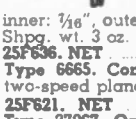
ETCHED ALUMINUM PLATES

A B C

Dial plates are calibrated *0-10 in 300°, **0-100 in 180°, †0-100 in 270°.. Dial center hole: 260-264 1/2" 272 15/32", 551 & 905 15/32". H 1 1/16"x1 11/16". †† 1/8" dia. 2 oz.

No.	Type	Fig.	Description	NET
25F700	260	A	3" dia.**	1.02
25F701	261	A	3" dia.†	1.02
25F702	262	A	1⅞" dia.**	.52
25F703	263	A	1⅞" dia.†	.52
25F704	264	A	2¼" dia.*	1.02
25F715	272	C	On-Off††	.20
25F718	278	B	On-Off††	.20
25F772	551	A	1⅞" Dia.†	.34
25F773	905	A	1¾" Dia.†	.54

PLANETARY DRIVES



Type 599. Two speed. For slow speed at 5:1 ratio, high speed at 1:1. Used as a single-speed drive by omitting knob on high-speed sleeve. Shaft sizes: inner: 7/16", outer: 1/4" dia. Size, 2 1/64x1 9/16". Shpg. wt. 3 oz.

25F636. NET **10.56**

Type 6665. Concentric pair of Knobs. For two-speed planetary unit above.

25F621. NET **1.20**

Type 27067. One speed. Same as 599 but with threaded sleeve for high speed knob. 1/4" dia. knob shaft and fits 1/4" dia. shaft.

25F628. NET **10.01**

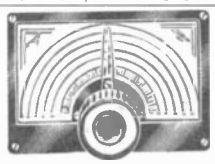
NEWARK — For Everything In Electronics

NATIONAL

DIAL ASSEMBLIES

Type N and AM. Features the original "velvet vernier" planetary drive. Knobs are black bakelite, with skirts of nickel-plated brass. Both have a 5-to-1 drive ratio and collars to fit ¼" shafts. Type N: 4" dia., 1⅜" depth, and flat skirt style, 12 oz. Type AM: 3" dia., 1 7/16" depth, beveled skirt. Wt. 8 oz.

Stk. No.	Type	Scale	Range	NET
26F053	N2	0-100	180°C	12.68
26F056	N5	200-0	360°C	12.68
26F054	N3	100-0	180°C	12.68
26F055	N4	150-0	270°C	12.68
26F075	AM2	0-100	180°C	5.25
26F077	AM4	150-0	150°C	5.25
26F078	AM5	200-0	360°C	5.25



Type MCN. Has three blank calibration rows and a 0-to-100, 180-degree logging scale. Holes in pointer make calibration marks. 5-to-1 "velvet vernier" drive. Fits ¼" shaft. Mounts on 3½" rack panel. Height: 2¾" (mechanism extends 9/32 inch below dial frame). Width 3⅞". Frame depth: 1/16". Shpg. wt. 10 oz.
26F052. NET **7.20**

COIL FORMS

Model XR-60. Purest unglazed ceramic material per JAN 1-10 and treated with Dow Corning Silicone. Cadmium plated bronze terminal lugs are mounted 90° apart on both top and bottom. There are four vertical rows of eight holes .038" dia. spaced .175" apart. Tuning core is iron with frequency range of 1.5 to 30 MC. Grooves per inch: 40. Slug, 1 13/16 long, ¾" dia. Shpg. wt. 4 oz. With hdwe.
40F479. NET **5.10**

TYPE HRS KNOBS

Plastic knobs with 1 1/16" diam. chrome flanges. Set screw types No. 3 marked "0-10" through 300° clockwise. No. 4 marked with single etched line, for use as center line index. No. 5 marked "O-10" through 180°C. Wt., 4 oz.

Stk. No.	Type	Color	NET
26F065	HRS-3	Black	.66
26F066	HRS-3	Gray	
26F087	HRS-4	Black	
26F088	HRS-4	Gray	
26F089	HRS-5	Black	
26F090	HRS-5	Gray	

Type HR Knobs. As above, less flange. Dial has white dot.

Stk. No.	Type	Color	NET
26F067	HR	Black	.39
26F068	HR	Gray	.39

TYPE HRT KNOBS

Plastic knob with chrome trim. Fits ¼" shaft. Set screw type. Diameter, 2⅛". Wt., 4 oz.
26F057. Black.
26F058. Gray. **NET EA.** **1.04**
Type HRT-M. Chrome inlay, 1½" dia.
26F059. Black. **NET**
26F060. Gray. **EACH** ..... **.58**

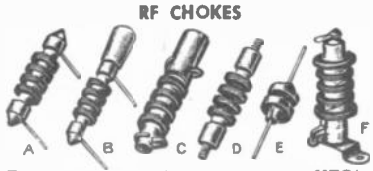
GRID CAPS FOR TRANSMITTING & RECEIVING TUBES

SPP types (fig. A) have ceramic insulation. All others (fig. B) released by slight pressure. Wt., 3 oz.

No.	Type	Description	NET
28F960	SPP-9	9/16 dia. for 866	.24
28F961	SPP-3	3/8" dia. for 807	.24
28F962	GG-8	¼" dia. for octals	.08
28F963	GG-24	3/8" dia. for regulars	.05
28F964	GG-12	9/16" dia. for 866	.08

Write for quantity prices up to 5000 on **28F960** and **28F961**, up to 10,000 on **28F962, 963** and **964.**

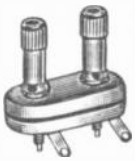
RF CHOKES



For use in transmitters, receivers, VFO's, etc. Wound on ceramic forms. *With small standoff insulators for vertical mounting. ‡Microhenries. Av. wt., 2 oz.

No.	Type	Fig.	mh	Ma	NET
40F322	R-51	E	2.5	125	.42
40F300	R-100	A	2.5	115	.57
40F301	R-100	A	5	70	.90
40F302	R-100	A	10	60	1.12
40F303	R-300	A	1	400	.57
40F304*	R-100U	B	2.5	115	.74
40F306*	R-100U	B	10	60	1.28
40F308*	R-100S	C	2.5	115	.99
40F311*	R-300S	C	1	400	1.00
40F315	R-300ST	D	2.5	375	.80
40F323	R-33	E	11‡	350	.36
40F317	R-33	E	50‡	225	.36
40F318	R-33	E	100‡	200	.36
40F320*	R-154U	F	1	600	2.01
40F321*	R-175A	F	145‡	800	4.46

PLUGS & JACKS



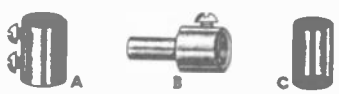
Type FWH. Figure A. Banana jack binding posts with wire holes terminal assembly. Posts will accept the FWT plug at the top and grip fires at the bottom. Shipping weight 3 oz.
28F610. NET. **1.10**

Type FWJ. Figure B. Twin banana jack assembly. When used with FWT plug there is no exposed metal. Shipping wt. 3 ounces.
28F612. NET. ..... **.87**

Type FWT. Figure C. Combination plug-socket that fits FWH and FWJ and is designed for the stacking of more FWT's. Provided with wire hole to accommodate up to 10 3 ounces.
28F613. NET. **1.56**

BIRNBACH

COUPLINGS AND EXTENSIONS



Couplings are for extending shafts, or for ganging. Extenders decrease or increase shaft diameter. 2 oz.

Stk. No.	Mater.	Each	10 for	100 for
Coupling. ¼" to ¼". Fig. A.				
26F250	Brass	.18	1.62	14.68
26F260	Insul.	.20	1.80	16.20
Coupling. ⅜" to ⅜". Fig. A.				
26F251	Brass	.18	1.62	14.68
26F261	Insul.	.20	1.80	16.20
Coupling. ¼" to ⅜". Fig. A.				
26F252	Brass	.18	1.62	14.68
26F262	Insul.	.20	1.80	16.20
Coupling. ¼" to ¼". Fig. B.				
26F253	Brass	.22	1.98	17.82
26F263	Insul.	.20	1.80	16.20
Coupling. ⅜" to ¼". Fig. B.				
26F254	Brass	.22	1.98	17.82
26F264	Insul.	.20	1.80	16.20
Coupling. ¼" to ⅜". Fig. B.				
26F255	Brass	.25	2.25	20.25
26F265	Insul.	.20	1.80	16.20

Fig. C. Split Bushing. Reduces diameter of hole from ⅜" to ¼". Shipping wt., 2 oz.
26F256. NET EACH ..... **.15**
10 for **1.40**
100 for **13.50**

ICORE

POLYSTYRENE RODS, TUBES AND SHEETS

Used for electronic application at ultra high frequencies because of its very low loss factor. Ideal for insulators, coil forms, shields, etc. Has excellent arc resistance, is non-tracking, has splendid insulating properties. Water absorption is practically zero.

TUBING IN 12" LENGTHS

Stk. No.	O.D.	I.D.	Per Qty.	Per Pkg. 1-9	Per Pkg. 10-up
37F310	¼"	⅛"	5	.70	.52
37F312	⅜"	¼"	3	.72	.54
37F313	½"	⅜"	2	.65	.49
37F314	⅝"	½"	2	.75	.58
37F315	¾"	⅝"	1	.45	.37
37F316	1"	⅞"	1	.60	.50

CLEAR POLYSTYRENE SHEETS

Stock No.	Overall Size	Thickness	Per Qty.	Per Pkg. 1-9	Per Pkg. 10-up
37F317	12x12"	1/16"	1	3.88	2.86
37F319	12x12"	⅛"	1	5.14	3.87
37F320	12x12"	3/16"	1	6.48	4.86
37F321	12x12"	¼"	1	7.96	5.97

ROD IN 12" LENGTHS

Stk. No.	Dia.	Per Qty.	Per Pkg. 1-9	Per Pkg. 10-up	Stk. No.	Dia.	Per Qty.	Per Pkg. 1-9	Per Pkg. 10-up
37F300	⅛"	10	.40	.30	37F301	3/16"	5	.45	33
37F302	¼"	3	.48	.36	37F303	5/16"	3	.65	.48
37F304	⅜"	2	.60	.45	37F305	⅜"	1	.55	.44
37F308	⅝"	1	.82	.62	37F307	½"	1	1.10	.88
37F308	⅞"	1	1.55	1.15	37F309	1"	1	2.10	1.68

Millen Knobs, Dials & Terminals

A061
10061

A062
10062

SHAFT LOCKS

Type A061. Clearance for ⅛" D: shaft. 2 oz.
26F276. NET ..... **.46**

Type A062. As above but has knurled face.
26F277. NET ..... **.61**

#10061 is combination mtg. nut and shaft lock; #10062 is similar, but with knurled control knob; and #10063 is chuck type lock w/lever control. ¼" shaft. Wt. 2 oz.
26F045. (A) Type 10061. **NET** ..... **.46**
26F046. (B) Type 10062. **NET** ..... **.66**

DIAL LOCK

Has captive head for front panel mounting. Wt. 2 oz.
26F048. Type 10050. **NET** ..... **.67**

Type A050. Miniature Dial Lock. Same as above, but for specialized miniaturized applications. Wt., 2 oz.
26F288. NET ..... **.66**

COUPLINGS

Molded Coupling. Small size, high flexibility. 4000 volt insul. High torque. 13/16" dia., 17/32" thick. For ¼" shafts. Wt., 2 oz.
26F206. 39016. **NET** ..... **.75**

Type 39017. Same as above except 15/16" dia. for 3/8" shaft.
26F278. NET ..... **.95**

A

B

FLEXIBLE COUPLINGS

Type 39001 is for angle drives up to 45°. Type 39006 is a slide action coupling for eccentric shafts. Wt., 2 oz.

Stk. No.	Type	Fig.	Insulation	NET
26F200	39001	A	Ceramic	.75
26F201	39002	B	Ceramic	
26F202	39005	A	All metal	
26F203	39006	B	Steatite	

Type 39003. Solid coupling with ¼" shaft ¾" long. Includes two 3/8" set screws made of hardened steel. Coupling is solid brass and is nickel plated. Wt. 2 oz.
26F275. NET ..... **.30**

Type M017. Flexible Coupling. Plastic insulated and miniaturized. Fits ⅛" diameter shafts. 17/32"L. x 15/16"D. Bronze yoke. Wt., 2 oz.
26F289. NET ..... **.94**

M003

M008

MINIATURE COUPLINGS

Model M003. Solid coupling for ⅛" dia. shaft, 3/8" long. N.P. brass. Wt., 2 oz.
26F272. NET ..... **.48**

Model M006. Universal joint style flexible coupling. Spring finger. Steatite insulation. ⅛" dia. shaft hole. Nickel plated brass. Wt., 2 oz.
26F273. NET **1.05**

Model M001. Insulated universal joint style flexible coupling for ⅛" dia., 1 1/16" long shafts. Wt., 2 oz.
26F285. NET ..... **.94**

Model M005. Universal joint flex. coupling for ⅛" dia. shafts, 1 1/16" long, uninsulated. Ext. hub for max. flexibility. Wt. 2 oz.
26F286. NET ..... **.94**

Model M004. Universal joint flex. coupling for ⅛" dia. shafts, uninsulated. Inverted hubs for short length. Wt., 2 oz.
26F287. NET ..... **.94**

Model M008. Illustrated above. Insulated coupling, with N.P. brass inserts for ⅛" dia. shafts. 19/32" long. 6000 v. Wt., 2 oz.
26F274. NET ..... **.69**

MILLEN AO12 RIGHT ANGLE DRIVE

Designed for use in Millen equipment. Right angle drive. ⅛" diam. shafts. Single hole mounting bushing ¼"-32 diam. Wt., 6 oz.
26F213. NET **7.18**

MILLEN RIGHT ANGLE DRIVES

Type 10012. Compact bevel gear drive with 1:1 ratio. Mounts by threaded bushing; tapped holes in frame or "stand off" rods. Size, 1½x2¾". Wt., 4 oz.
26F210. NET **10.00**

Type 10000A. Right angle worm drive assembly. May be panel or base mounted. Standard ratio, 16:1. Spring loaded split gears eliminate backlash. Cast aluminum frame. Wt. 4 oz.
26F211. NET **15.40**
26F212. As above, with 48:1 ratio 15.40

BAR KNOB DIAL

Type 10007. 1 5/8" dial with rectangular bar knob calibrated 10 to 0. 180° clockwise. ¼" shaft. Wt. 7 oz.
26F044. NET ..... **.93**
26F039. As above but 280° rotation. **NET** ..... **.93**

Type A014. 1" dial calibrated from 0 to 10. 180° clockwise rotation. ⅛" shaft. 3 oz.
26F270. NET ..... **.89**
26F271. Same as above but 280° rotation. **NET** ..... **.89**

MINIATURE KNOBS FOR ⅛" SHAFT

No. A018

No. A019

No. A007

No. A006

No. A018. Blk. plastic knob w. brass insert. Skt. diam. 3/8". Screwdriver slot on top. 5/8"Hx1¼"D. Avg. wt., 1 oz.
26F281. NET ..... **.49**

No. A019. Above without flange.
26F282. NET ..... **.46**

No. A007. A018 w. 5/8" diam. indexed dial.
26F283. NET ..... **.53**

No. A006. Like std. knobs. ½"Hx¾"D.
26F284. NET ..... **.61**

LIGHTED DIAL

Type 10035. Slide rule panel dial w. 2 pilot lights. 12:1 drive ratio knob. 4 blank, 1 0-100 log scale reads left to rt. 8½x6½". Wt. 2½ lbs.
26F040. NET **10.54**

MIDGET DIAL

Type 10039. Midget panel dial. 8:1 ratio. Self-contained mech. cuts interference. 0-100 log reads left to right. 5 blank scales. 4x3 9/32". Wt., 1¼ lbs.
26F041. NET **7.75**

KNOB DIALS

Nickel silver dials with fingergrip knobs. Bakelite hub insulates metal scale from shaft. Calibrated 0 - 100 clockwise 180°. ¼" shaft. Wt., 7 oz.
26F042. Type 10008, 3½" dia. **NET** 2.96
26F043. Type 10009, 2¾" dia. **NET** 2.06

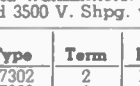
INSULATED SHAFT EXTENSION

Type 39023. Safety insulated shaft extension. ¼" shaft. Nickel-plated. 3/8-32 thr. Phenolic shell 5500 V. Length, 2". Shpg. wt., 2 oz.
26F205. NET **1.78**

Type 39024. Same as above but includes shaft lock. Wt., 2½ oz.
26F280. NET **2.11**

TERMINALS AND BINDING POSTS

A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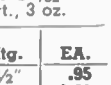
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D

E

F

BARRIER TERMINAL

Fig. A. Terminals are used for terminating high voltages in power supplies, receivers, and transmitters. Has 9/32 B.H. screws; rated 3500 V. Shpg. wt., 3 oz.

Stock No.	Type	Term	Mtg.	EA.
28F645	37302	2	1½"	.95
28F646	37303	3	2"	1.09
28F647	37304	4	2½"	1.37
28F648	37305	5	3"	1.62
28F649	37306	6	3½"	1.96

HV TERMINALS

Fig. B. Type 37001. Mount with insulated bushing extending thru chassis. Bakelite. Tapered plug and socket. Pin is swivel mounted in cap to prevent twisting of lead wire. 2 oz.

Stk. No.	Color	EACH
28F638	Red	.59
28F639	Black	.56

BINDING POSTS

Fig. C. Type 37222. Non-turning types with captive head. Banana jack tops. Mount on single or dual plates. Wt., 5 oz. Brass. Non-insulated.

Stk. No.	EACH
28F640	.37

SINGLE DISC

Fig. D. Type 37201. Bakelite. This single plate is used with binding post type 37222. 2 oz.

Stk. No.	Descrip.	EACH
28F641	Black	.27
28F657	Mica filled	.27

DOUBLE DISC BINDING POSTS

Fig. E. Type 37202. Dual plates. Bakelite. Have captive heads and keyed mountings. Meets most requirements. 5 oz.

Stk. No.	Color	EACH
28F642	Black	.43
28F658	Red	.43

DOUBLE BANANA PLUG

Fig. F. Type 37212. Bakelite. Fits 37222 posts on dual plates. Wt., 3 oz.

Stk. No.	Color	EACH
28F643	Black	.96
28F636	Red	.96

PHENOLIC BINDING POST

The posts have captive heads and keyed mounting. Insulated. Type 37223. 6 oz.

Stk. No.	Color	EACH
28F587	Red or Black	.37

BINDING POST PLATES

Type 37291. For 37222, 37223. Phenolic. For ½" dia. or keyed hole.

Stk. No.	Color	Bx. of 2 prs.
28F588	Black	.20
28F659	Red	.20

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

Millen Miniaturized Components

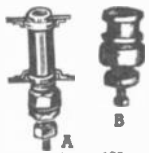
BINDING POSTS AND INSULATORS

Type E202 black plastic double binding post insulator is only 1 1/32" wide. Mounts in 3/16" dia. holes, 1/2" between centers. For use with Type E222 binding post. Shpg. wt. 2 oz.
28F938. Black or Red. **NET** **.48**

Type E201 binding post insulators are the same as above except—single insulator. Shpg. wt. 2 oz.
28F939. Black. **NET** **.30**
28F937. Red. **NET** **.30**

Type E222 miniature binding post for use with above. Has jack top for miniature banana plug. Max. height: 7/16. Shpg. wt. 2 oz.
28F940. Single Post. **NET EACH** **.37**

FORMS FOR RF COILS



Type A: Ceramic permeability tuned unshielded forms perfect for any application. Supplied with all mounting hardware.

Type B: Compact forms for UHF coils. Feature high "Q" at minimum capacity. *Have copper slugs; †have powdered iron cores. Wt., 4 ounces.

Stk. No.	Type	Winding Length	Freq. MHz	NET
40F439	69044*	3/16	.....	1.61
40F440	69051*	3/8	14-300	1.08
40F441	69052†	3/8	10-30	1.08
40F442	69057*	5/8	14-300	.97
40F443	69058†	5/8	10-30	.97
40F444	69061*	3/4	14-300	1.08
40F445	69062†	3/4	10-30	1.08
40F725	69041*	7/32	14-320	1.74
40F722	69042†	7/32	.18-35	1.74
40F727	69045*	1 1/8	.1-30	.89
40F728	69046†	1 1/8	.1-30	.89
40F723	69047*	3/8	35-100	1.68
40F724	69048†	3/8	35-100	1.68
40F726	69043†	3/8	12-25	1.08

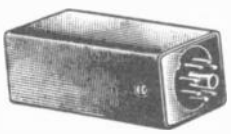
PERMEABILITY TUNED SHIELDED FORMS

Permeability tuned, shielded form, plugs into octal socket. Low-loss octal base. Polystyrene 1/2" dia. coil form with iron tuning slug for frequencies up to 35 MHz. Adjusting screw extends through socket hole. Heavy aluminum shield.
40F729. Type 74001 **NET** **2.63**
40F730. Type 74002 less slug. **NET** 2.15

MIDGET COIL FORMS

Low loss mica filled brown bakelite forms. For short-wave receivers and low-power transmitters. Size: 1" dia., 11 3/32" winding length; 2 3/16" overall. Shpg. wt., 2 oz.
40F732. Type 45004. 4 prongs. **NET** **.58**
40F731. Type 45000. Without prongs **.45**
40F733. Type 45005. Five prongs. **NET** .58

OCTAL BASE AND SHIELD



Model 74400. Low loss phenolic base with octal socket plug and aluminum shield can 1 1/16 x 1 7/8 x 3 1/16". **40F734. NET** **1.78**

MINIATURE IF TRANSFORMERS

Extremely high Q—approximately 200-variable coupling—(under, critical, and over) with all adjustments on top. Small size: 1 1/16 x 1 9/16 x 1 7/8". Molded terminal base. Air capacitor tuned. Coils completely enclosed in cup cores. Tapped primary and secondary. Rugged construction. High electrical stability. Shpg. wt. 4 oz.

Stk. No.	Type	Application	NET
40F416	61455	455 KHz Universal	10.25
40F417	61453	455 KHz BFO	8.55
40F418	61160	1600 KHz BFO	10.25
40F419	61163	1600 KHz Universal	8.55

MINIATURE POWDERED IRON CHOKES

Powdered iron core chokes are 3/8" long. Have current capacity of 100 ma. Hi-Q. Designed for application in radio components. Excellent for use where miniaturization is paramount. Shipping weight 1 oz.

Stk. No.	Type	UH	NET
40F386	J300-25	25	.73
40F387	J300-50	50	
40F388	J300-100	100	
40F389	J300-250	250	
40F390	J300-500	500	.83
40F391	J300-1000	1000	.83
40F392	J300-2500	2500	.95

SMALL RF PI WOUND CHOKES

Expertly made and designed to operate under extremely trying conditions; chokes are dependable and have a long life. 250 ma current. Lead lengths 1 1/2" wt., 1 oz.

Stk. No.	Type	UH	Ohms	NET
40F393	34300-25	25	3.1	.51
40F394	34300-50	50	5.2	
40F395	34300-100	100	7.1	
40F396	34300-250	250	12.1	
40F397	34300-500	500	22.3	
40F398	34300-750	750	30.4	
40F399	34300-1000	1000	21.7	

RF CHOKES

Pie-wound on steatite forms. *Supplied with standoff insulator; †have solid ends, ‡have 6-32 threaded ends. **One threaded end. Shipping weight 2 oz.

Stk. No.	Type	Mh.	Ma	NET
40F400	34100*	2.5	250	.83
40F401	34101**	2.5	250	.83
40F402	34103†	2.5	250	.64
40F403	34104‡	2.5	250	.74
40F404	34105*	1.0	300	.87
40F405	34106**	1.0	300	.87
40F406	34108†	1.0	300	.64

PLATE CAPS

Ceramic except 36011 and 36012 which are bakelite. Shpg. wt. 2 oz.

Stk. No.	Type	Size	EACH
28F950	36001	9/16" for 866's	.34
28F951	36002	3/8" for 807	.33
28F952	36004	1/4"	.39
28F953	36011	9/16"—snap lock	.90
28F959	36012	3/8"—snap lock	.90

TUBE CLAMPS

For holding down metal tubes to chassis. Fastens to socket mtg. plate. Wt., 2 oz.

Stk. No.	Type	For	Each
28F955	33087A	1.125" Base	.46
28F956	33087B	1.165" Base	
28F957	33087C	1.250" Base	
28F958	33087D	1.275" Base	
28F954	33087E	1.375" Base	
28F965	33087F	1.156" Base	
28F967	33087G	1.625" Base	

ALUMINUM SHIELD CANS

Effective RF shielding for coils and transformers. Square shape except 80006 which is round. Shpg. wh. 5 oz.

Stk. No.	Type	Size	EACH
28F985	80003	1 3/8x1 3/8x4"	.62
28F986	80004	1 7/8x1 7/8x4 1/2"	.69
28F987	80005	2 x2 x4 7/8"	.75
28F988	80006	2 1/8x4"	.58

CRYSTAL SOCKETS

Sockets for crystal holders. Steatite base for low-loss. Silver - plated phosphor - bronze contacts. Tinned solder lugs extend below chassis. *For CR-7 crystals. Shpg. wt., 2 ozs.

Stk. No.	Type	Space	Pins	NET
38F655	33002	3/4"	.125	.43
38F656	33102	.487"	.095	.43
38F657	33202	1/2"	.125	.43
38F658	33302*	.487"	.050	.30

STEATITE SOCKETS

Designed for use in transmitters and power supplies. Have higher body providing long "flashover" path to chassis. Mounting hole 1.172" Shipping weight, 3 ounces.

Stk. No.	Type	Contacts	Each
38F650	33004	4	.85
38F651	33005	5	
38F653	33008	8	

BAYONET SOCKET

Dual contact bayonet sockets for type 991 neon voltage - regulator tube. Metal construction with choice of black or low-loss mica-filled phenolic insulation. Mounting centers, 1 1/8". Av. wt., 3 oz.
25F322. 33991. Black. **NET** **.79**
25F323. 33992. Mica. **NET** .89

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PHONE, WRITE OR WIRE FOR PRICE QUOTATIONS ON ITEMS NOT LISTED

Inductors and Variable Capacitors

BUD CHOKES

BUD LATTICE WOUND RF CHOKES

Unshielded type on ceramic bobbin. All are 125 ma except *100, †90, ‡80. Mounts with 6-32 screw. Dia., 1 1/16". With soldering lugs. 4 oz.

No.	Type CH-	MH	Ohms	1-49	50-99	100-149
40F200	1212	2.5	28	.70	.65	.55
40F202	1214	5.5	46	.90	.80	.70
40F203	1215	8	60	.90	.80	.70
40F205	1217	16	84	.90	.80	.70
40F206	1218*	30	190	.95	.85	.70
40F207	1219†	60	279	1.10	1.00	.90
40F208	1220‡	80	332	1.20	1.10	.95

BUD SHIELDED IRON CORE CHOKES

Improves "Q" of choke by providing 40 to 50% less DC resistance over air core types with equivalent reactance. Have finely divided molded metallic cores. Windings are silk-covered enamel. Solder lugs. Mounted in small shield cans. 1½"h.x. 17/16"dia. All 125 ma except* 100 ma and † 90 ma ‡ †; Type SH. Shpg. wt., 4 oz.

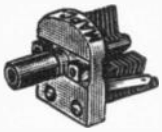
No.	Type CH-	MH	Ohms	1-49	50-99	100-149
40F215	1283	16	53	1.55	1.40	1.25
40F216	1284*	30	82	1.60	1.45	1.30
40F217	1285*	60	131	1.80	1.60	1.45
40F218	1286†	80	163	1.90	1.70	1.50
40F219	1287‡	125	221	2.15	1.95	1.70
40F220	294††	Shield can only		.40	.35	.30

HAMMARLUND APC MICROS

Air-dielectric condensers. Steatite base. Air gap .015". Will fit 1¼" diameter coil frames. Screwdriver adj. Wt., 4 oz.

No.	Type	Range-mmf	NET
41F326	APC-25	3.0-25	1.20
41F327	APC-50	3.9-50	1.35
41F328	APC-75	4.6-75	1.45
41F329	APC-100	5.5-100	1.60
41F330	APC-140	7.8-140	1.80

MAPC CAPACITORS



General purpose capacitors similar to APC series. Tested at 840 volts peak, 60 Hz. MAPC series is provided with a hex collar on a slotted shaft for adjustment of the rotor positions. The MAPC "B" is furnished with an extended shaft 7 1/16" long. Silicon treated steatite bases and all brass nickel plated metal parts. Shpg. Wt. 4 oz.

Stk. No.	Type	Range-mmf.	Net
41F343	MAPC-15	2.3-15	1.00
41F344	MAPC-25	2.6-25	1.05
41F345	MAPC-35	2.9-35	1.10
41F346	MAPC-50	3.2-50	1.15
41F347	MAPC-75	3.9-75	1.20
41F348	MAPC-100	4.5-100	1.30
41F353	MAPC-15B	2.3-15	1.00
41F354	MAPC-25B	2.6-25	1.05
41F355	MAPC-35B	2.9-35	1.10
51F358	MAPC-50B	3.2-50	1.15
41F357	MAPC-75B	3.9-75	1.20
41F358	MAPC-100B	4.5-100	1.30

B & W "MINIDUCTORS"

Low-loss coil lengths for the experimenter. Air-wound turns molded in polystyrene strips. ½", 5/8" and ¾" diameters are 2" long. The lengths for other diameters are noted in the tables below. All are easily cut to desired length. Shpg. wt., 5 oz.

Stock No.	Mfrs. Type	Dia.	Turns Per In.	NET EACH
40F930	3001	½"	4	.68
40F931	3002	½"	8	.86
40F932	3003	½"	16	1.01
40F933	3004	½"	32	1.26
40F934	3005	5/8"	4	.80
40F935	3006	5/8"	8	.95
40F936	3007	5/8"	16	1.10
40F937	3008	5/8"	32	1.32
LENGTH, 3 INCHES				
40F938	3009	¾"	4	.86
40F939	3010	¾"	8	1.02
40F940	3011	¾"	16	1.16
40F941	3012	¾"	32	1.35
40F942	3013	1"	4	.95
40F943	3014	1"	8	1.10
40F944	3015	1"	16	1.25
40F945	3016	1"	32	1.55
LENGTH, 4 INCHES				
40F860	3017	1¼"	4	1.13
40F861	3018	1¼"	8	1.32
40F862	3019	1¼"	16	1.68
40F863	3020	1¼"	32	2.10
40F864	3021	1¾"	4	1.19
40F865	3022	1¾"	8	1.40
40F866	3023	1¾"	16	1.76
40F867	3024	1¾"	32	2.18

Standard Inductors. 10" long. Wt., 5 oz.

40F949	3900	2"	8	2.52
40F946	3905-1	2½"	6	4.26
40F947	3906-1	2½"	8	3.54
40F948	3907-1	2"	10	2.67

HAMMARLUND

HF MICROS

For tuning or trimming critical HF circuits. Nickel plated. Steatite insulation. HFD are split stator. *Double space. 6 oz.

No.	Type	Range-mmf	NET
41F331	HF-15	2.8-17.5	1.30
41F332	HF-35	3.2-36	1.40
41F333	HF-50	3.7-52	1.60
41F334	HF-100	5.3-102	1.80
41F335	HF-140	6.3-142	1.95
41F336	*HF-15-X	3.6-15	1.30
41F337	*HF-30-X	5.2-30	1.70

Type MAC. VHF trimmer. Nickel plated. Steatite insulation. Screwdriver adjustment. Air gap: 00.017. Wt., 7 oz.

41F349	MAC-5	1.3-5.4	.90
41F350	MAC-10	1.5-9.6	.95
41F351	MAC-15	1.9-15.8	1.00
41F352	MAC-20	2.2-21.5	1.10

OHMITE

RF PLATE CHOKES

Small high frequency chokes wound on ‡steatite or ‡plastic cores. Insulated moisture-proof coating. Single layer winding avoids harmonic effects and prevents breakdown from high RF potentials. Z-7 has mounting brackets. *600 ma; all others 1000 ma rating. Wt., 3 oz.

No.	Type	μh	1-9	10-24	25-99
40F250	Z-460‡	0.20	.45	.38	.32
40F251	Z-235‡	0.84	.45	.38	.32
40F252	Z-144‡	1.8	.45	.38	.32
40F253	Z-50‡	7.0	.48	.41	.34
40F254	Z-28†*	21.0	.60	.51	.42
40F255	Z-14†*	44.0	.71	.60	.50
40F256	Z-7†	84.0	1.44	1.22	1.01

PARASITIC SUPPRESSOR

Type P-300. Prevents UHF parasitic oscillations in plate and grid leads of push-pull circuits. Non-inductive 50 ohm vitreous resistor with overwound .3 μh choke in parallel. Size, 1¾x2½" dia. 2 oz.

40F264	P-300		1.66	1.41	1.16

POWER LINE CHOKES

Prevent high frequency currents of transmitters and diathermy equipment from feeding into power lines. All 20 amps except *5, and †10. Use as filter with two .1 mfd capacitors. Wound on ceramic core with moisture-proof coating. Shipping weight, 2 oz. to 1½ lbs.

No.	Type	μh	Ohms	1-9	10-24	25-99
40F260	Z-20*	14	0.15	2.07	1.76	1.45
40F261	Z-21†	15	0.07	2.72	2.31	1.90
40F262	Z-22	18	0.045	6.26	5.32	4.38
40F263	Z-30	104	0.085	7.71	6.55	5.40

MC MIDGET CAPACITORS

Steatite - insulated condensers with plated brass plates. Double-bearing design. Wide bearing for perfect contact. Ideal for mobile units. ¼" shaft. Single-spaced types .0245", test at 1,000 volts AC; double-spaced types, .0715", test at 1,750 volts AC. Capacity increases clockwise. *Semi-circular plates, all others midline. Shpg. wt., 10 oz.

No.	Type	Range-mmf	NET
SINGLE-SPACED MIDGETS			
41F300	*MC-20-S	5.5-20	2.40
41F301	*MC-35-S	6.0-35	2.45
41F302	*MC-50-S	6.5-50	2.60
41F303	MC-50-M	6.3-50	2.55
41F304	*MC-75-S	8.0-80	2.85
41F305	MC-75-M	7.3-80	2.75
41F306	*MC-100-S	8.3-100	2.95
41F307	MC-100-M	7.7-100	2.90
41F308	MC-140-M	9.0-140	3.00
41F309	*MC-140-S	10.0-140	3.15
41F310	MC-200-M	10.3-200	3.40
41F311	MC-250-M	12.0-250	3.70
41F312	MC-325-M	13.5-320	4.20
DOUBLE-SPACED MIDGETS			
41F314	*MC-20-SX	6.8-20	2.60
41F315	*MC-35-SX	8.5-32	2.75
41F316	MC-35-MX	7.8-32	2.75
41F317	*MC-50-SX	11.5-53	3.00
41F318	MC-50-MX	10.5-53	3.00
41F319	*MC-100-SX	16.5-100	3.95
DUAL MIDGETS			
41F320	MCD-50-M	5.5-50	7.25
41F321	MCD-100-M	6.3-100	7.85
41F323	MCD-140-M	7.8-140	8.35
DOUBLE-SPACED DUAL MIDGETS			
41F324	MCD-35-MX	6.0-31	7.85
41F325	*MCD-35-SX	6.8-31	7.50

You Can Depend on NEWARK

For Everything in Industrial Electronics

FERRAMIC CUP CORE ASSEMBLIES

Temperature Compensated Cup Core Assemblies. Designed for filter applications requiring precision tuneable inductors having low loss characteristics over a wide temperature range. Used at frequencies from audio to 500 KC with Q value as high as 850. Specific inductance (L/1000 turns) is accomplished by inserting a precision ground air gap in center post of one or both cup cores in a matched pair. Size and tolerance of air gap controls inductance per 1000 turns. Adjustment beyond specific inductance of cup cores is provided by trimmer assembly. All cup cores have a positive linear temperature coefficient of effective permeability and inductance. Over a given temperature interval this is expressed as:

$$TC. = \frac{\Delta L\ (10^6)}{L\ (\Delta T)} PPM/°C$$

MINIMUM Q FACTOR

Part #	Q	Test Frequency (KC)	Test Coil
TC7-01	280	300	50T 20/44 LITZ
TC7-02	450	150	100T 20/44 LITZ
TC7-04	500	75	100T 60/44 LITZ
TC7-06	625	50	75T 100/44 LITZ

Stk. No.	Part #	W1000T (MH)	Core Size (MM)	Dimensions Ht.	Dimensions Dia.	(In.) Mt. Hole Spacing	T.C. PPM	1-24	25-49	50-99	100-249	250-499	500-999
59F1500	TC7-01	100	14x8	.467	.591	.748	45-150	3.35	2.50	2.15	1.43	1.18	.95
59F1501	TC7-02	250	18x11	.553	.749	.906	100-300	3.35	2.65	2.25	1.55	1.28	1.02
59F1502	TC7-04	400	26x16	.770	1.062	1.292	150-350	3.65	3.10	2.55	1.90	1.70	1.25
59F1503	TC7-06	1000	36x22	1.986	1.463	1.693	200-500	5.35	4.10	3.45	2.45	2.10	1.65

For quantity prices of 1000 or more on TC or CF series, call or write NEWARK.

FERRAMIC® TOROIDS

For applications in filter coils, pulse transformers, delay lines, IF transformers, RF coils, loading coils, converter and wide band and impedance matching transformers.

Stk. No.	Type	Mat'l.	O.D.	I.D.	Thick	1-24	25-49	50-99	100-249	250-499	500-999
59F1504	CF101	0-6	.230	.120	.060	1.10	.80	.60	.40	.20	.14
59F1505	CF101	H	.230	.120	.060						
59F1506	CF101	Q-1	.230	.120	.060						
59F1507	CF102	0-6	.375	.187	.125	1.20	.85	.65	.45	.25	.20
59F1508	CF102	H	.375	.187	.125						
59F1509	CF102	Q-1	.375	.187	.125						
59F1510	CF111	0-6	.870	.540	.250	2.05	1.55	1.35	1.15	.85	.55
59F1511	CF111	H	.870	.540	.250	2.05	1.55	1.35	1.15	.85	.55
59F1512	CF111	Q-1	.870	.540	.250	2.00	1.50	1.30	1.10	.80	.50
59F1513	CF117	0-5	1.875	1.375	.375	2.65	2.15	1.95	1.75	1.35	1.05
59F1514	CF117	H	1.875	1.375	.375	2.65	2.15	1.95	1.75	1.35	1.05
59F1515	CF117	Q-1	1.875	1.375	.375	2.30	1.80	1.60	1.40	1.10	.80
59F1516	CF123	0-5	2.400	1.400	.500	5.70	3.30	2.30	2.00	1.70	1.40
59F1517	CF123	H	2.400	1.400	.500	5.70	3.30	2.30	2.00	1.70	1.40
59F1518	CF123	Q-1	2.400	1.400	.500	5.50	3.10	2.10	1.80	1.50	1.20

FERRAMIC PROPERTIES

Material Properties	0-6	0-5	H	Q-1
Max. Freq.	400KC	400KC	1 MC	20 MC
Permeability	4700 @ 100KC	3000 @ 100KC	850 @ 1 MC	125 @ 1 MC
Sat'n Induc. —Gauss	4700	4700	3400	3300

FERRAMIC ANTENNA RODS

Stk. No.	Part	Material	Dia.	L.	1-24	25-49	50-99	100-249
59F1519	CF 501	Q-1	.250	7.500	1.25	.90	.60	.40
59F1520	CF 502	Q-1	.330	7.500	1.35	1.00	.70	.50
59F1521	CF 503	Q-1	.500	7.500	2.50	1.75	1.25	.90
59F1522	CF 504	Q-1	.620	7.500	4.00	3.00	2.50	2.00

INDOX I PERMANENT MAGNETS

Indox 1 is a non-oriented, barium ferrite permanent magnet material with an outstanding ability to withstand demagnetizing influences. The Coercive Force (H) 1825 oersted. The residual induction (B) 2200 gauss. A peak energy product (B H max.) 1.0×10^6.

Stk. No.	Type	Fig.	DIMENSIONS (INCHES) A	B	C	D	1-49	50-99	100-249	250-499
59F1523	F-1109	1	.937 x	.650 x	.210		1.00	.74	.524	.344
59F1524	F-1201	1	1.000 x	.750 x	.177 x	.187	1.05	.31	.253	.203
59F1525	F-1203*	1	1.000 x	1.000 x	.250 x	.218	1.15	.80	.568	.358
59F1526	F-1302	2	.519 x		.274		.95	.70	.493	.333
59F1527	F-1303	2	1.079 x		.250		1.00	.78	.548	.360
59F1528	F-1403	2	1.079 x	.597 x	.250		1.15	.84	.570	.348

* With counter bore hole to .312" x .062" deep. Note: All magnetized through thickness.

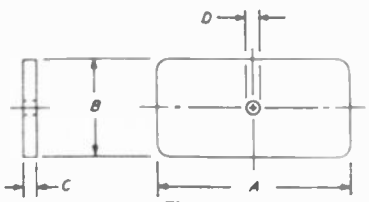


Figure 1

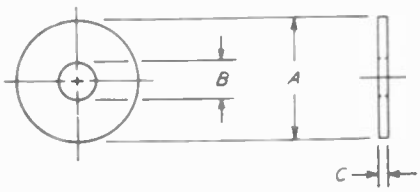
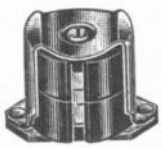


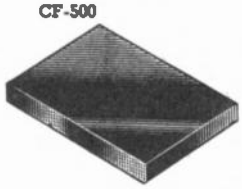
Figure 2



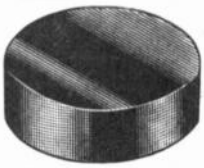
TC7 & Assembly Parts

CF100

CF-500


F-1201

F-1203


F-1303

To Serve You Better — Stocking Warehouses from Coast-to-Coast.

Use the Services of the Facility Nearest You—See Front Cover

NYTRONICS Fixed and Variable Inductors

● NEW DECI-DUCTOR

Subminiature inductor. Designed to meet all the environmental specifications of MIL-C-15305C, Grade 1, Class B. Inductance tolerance: ±10% over entire range. Dielectric strength: 700 volts RMS at sea level. Operating temp.: —55°C to +125°C. 10 hz to 2000 hz @ 15G ± 10% maximum for 12 loganthmic swings each of 20 minute duration repeated for each of three mutually perpendicular planes. Shock: 50G, 11 MS. Density characteristics: volume 0.002 cubic inches. Weight 0.35 grams. Dimensions: 0.100" diameter by 0.250" length. Inductance range: 0.10μH to 1000 μH. One hundred fit in one square inch space. Epoxy-molded reliability and uniformity.

PRICE LOCATOR

μH Range	1-24	25-49	50-99	100-249	250-499	500-1000
.10-15	.81	.64	.56	.51	.47	.44
1.2-27	.88	.70	.61	.56	.51	.48
33-100	.93	.74	.65	.59	.54	.51
120-1000	.97	.78	.67	.61	.57	.53

Stk. No.	Type DD-	μH	Q Min	MC	Stk. No.	Type DD-	μH	Q Min	MC
35F1845	0.10	.10	40	25	35F1870	12.0	12.0	45	2.5
35F1846	0.12	.12	40	25	35F1871	15.0	15.0	47	2.5
35F1847	0.15	.15	38	25	35F1872	18.0	18.0	50	2.5
35F1848	0.18	.18	38	25	35F1873	22.0	22.0	50	2.5
35F1849	0.22	.22	35	25	35F1874	27.0	27.0	50	2.5
35F1850	0.27	.27	35	25	35F1875	33.0	33.0	50	2.5
35F1851	0.33	33	32	25	35F1876	39.0	39.0	50	2.5
35F1852	0.39	.39	32	25	35F1877	47.0	47.0	50	2.5
35F1853	0.47	47	32	25	35F1878	56.0	56.0	50	2.5
35F1854	0.56	56	32	25	35F1879	68.0	68.0	52	2.5
35F1855	0.68	68	33	25	35F1880	82.0	82.0	52	2.5
35F1856	0.82	.82	30	25	35F1881	100	100	50	2.5
35F1857	1.00	1.00	30	25	35F1882	120	120	28	0.79
35F1858	1.20	1.20	30	7.9	35F1883	150	150	28	0.79
35F1859	1.50	1.50	32	7.9	35F1884	180	180	28	0.79
35F1860	1.80	1.80	35	7.9	35F1885	220	220	26	0.79
35F1861	2.20	2.20	35	7.9	35F1886	270	270	26	0.79
35F1862	2.70	2.70	37	7.9	35F1887	330	330	26	0.79
35F1863	3.30	3.30	45	7.9	35F1888	390	390	25	0.79
35F1864	3.90	3.90	45	7.9	35F1889	470	470	27	0.79
35F1865	4.70	4.70	45	7.9	35F1890	560	560	27	0.79
35F1866	5.60	5.60	52	7.9	35F1891	680	680	28	0.79
35F1867	6.80	6.80	52	7.9	35F1892	820	820	28	0.79
35F1868	8.20	8.20	60	7.9	35F1893	1000	1000	28	0.79
35F1869	10.0	10.0	60	7.9					

● NEW WEE WEE-DUCTOR

This shielded inductor has great inductance-to-size ratio and meets the stringent requirements of MIL-C-15305C, Grade 1, Class B. The smallest shielded inductor for high density circuits. μH range 0.10 to 10,000. Unique T lad construction used on all values from 1200μH to 10,000μH provides excellent reliability in ranges where fine wire sizes are usd. Dimnsions: 0.133" diameter x 0.335" length. Operating temperature —55 C to +125 C. Dielectric strength 700 volts RMS at sea level. Inductance tolerance: ±10%. Density characteristics, volume, 0.0041 cubic inches; weight, 0.50 grams max. To solve special problems in density circuit application.

PRICE LOCATOR

μH Range	1-24	25-49	50-99	100-249	250-499	500-999
.1-.82	1.50	1.20	1.10	1.00	.90	.80
1.0-12	1.60	1.30	1.20	1.10	1.00	.90
15-1000	1.85	1.50	1.35	1.25	1.10	1.00
1200-3300	2.35	1.88	1.63	1.49	1.37	1.28
3900-10000	2.94	2.35	2.04	1.86	1.72	1.60

Stk. No.	Type WEE-WEE	μH	Q MIN	MC	Stk. No.	Type WEE-WEE	μH	Q MIN	MC
35F1894	0.10	.10	42	25	35F1910	47	47	42	2.5
35F1895	0.15	.15	42	25	35F1911	68	68	46	2.5
35F1896	0.22	.22	42	25	35F1912	100	100	43	2.5
35F1897	0.33	.33	42	25	35F1913	150	150	49	0.79
35F1898	0.47	47	41	25	35F1914	220	220	53	0.79
35F1899	0.68	68	36	25	35F1915	330	330	57	0.79
35F1900	1.0	1.0	42	25	35F1916	470	470	50	0.79
35F1901	1.5	1.5	38	7.9	35F1917	680	680	56	0.79
35F1902	2.2	2.2	36	7.9	35F1918	1000	1000	49	0.79
35F1903	3.3	3.3	38	7.9	35F1919	1500	1500	55	0.25
35F1904	4.7	4.7	42	7.9	35F1920	2200	2200	55	0.25
35F1905	6.8	6.8	45	7.9	35F1921	3300	3300	55	0.25
35F1906	10	10	51	7.9	35F1922	4700	4700	55	0.25
35F1907	15	15	45	2.5	35F1923	6800	6800	50	0.25
35F1908	22	22	42	2.5	35F1924	10000	10000	50	0.25
35F1909	33	33	46	2.5					

● NEW SUPER WEE-DUCTOR

New ultra-reliable molded shielded miniature inductor. Unique T design eliminates fine wire considerations. The Super WEE-DUCTOR epoxy molded envelope and shielding offers the design engineer reliability, electrical performance, and minimum coupling in high density packaging. An R.F. inductor Specifically designed to meet the demanding requirements of MIL-C-15305C, Grade 1, Class B. Inductance range:0.1μH to 100,000μH. Inductance tolerance: ±10% over the entire inductance range. Dielectric strength: 700 volts at sea level. Operating temperature: —55°C to +125°C. Density characteristics: volume, 0.0076 cubic inches; weight, 0.75 grams maximum; Shielding: at 1000 Hz two units assembled side by side exhibit less that 3% coupling. Maximum current: based on temperature rise not to exceed 35°C at 90°C ambient. Q and Rp values: Measured on Q meter. Min. Rp values conservative.

SWD — INDUSTRIAL TYPES

μH Range	1-24	25-49	50-99	100-249	250-499	500-999
.1-15	1.20	.90	.80	.70	.65	.60
18-8200	1.40	1.00	.90	.80	.75	.70
10000-100000	1.50	1.30	1.20	1.15	1.05	1.00

Stk. No.	Type SWD-	μH	Q Min	MC	Stk. No.	Type SWD	μH	Q Min	MC
35F1925	0.10	.10	50	25	35F1961	100	100	52	2.5
35F1926	0.12	.12	51	25	35F1962	120	120	57	.79
35F1927	0.15	.15	51	25	35F1963	150	150	56	.79
35F1928	0.18	.18	50	25	35F1964	180	180	60	.79
35F1929	0.22	.22	49	25	35F1965	220	220	58	.79
35F1930	0.27	.27	47	25	35F1966	270	270	60	.79
35F1931	0.33	.33	46	25	35F1967	330	330	54	.79
35F1932	0.39	.39	44	25	35F1968	390	390	67	.79
35F1933	0.47	.47	44	25	35F1969	470	470	60	.79
35F1934	0.56	.56	43	25	35F1970	560	560	60	.79
35F1935	0.68	.68	42	25	35F1971	680	680	60	.79
35F1936	0.82	.82	40	25	35F1972	820	820	57	.79
35F1937	1.0	1.0	47	25	35F1973	1000	1000	65	.79
35F1938	1.2	1.2	46	7.9	35F1974	1200	1200	45	.25
35F1939	1.5	1.5	45	7.9	35F1975	1500	1500	49	.25
35F1940	1.8	1.8	43	7.9	35F1976	1800	1800	47	.25
35F1941	2.2	2.2	45	7.9	35F1977	2200	2200	50	.25
35F1942	2.7	2.7	46	7.9	35F1978	2700	2700	47	.25
35F1943	3.3	3.3	44	7.9	35F1979	3300	3300	43	.25
35F1944	3.9	3.9	44	7.9	35F1980	3900	3900	43	.25
35F1945	4.7	4.7	44	7.9	35F1981	4700	4700	44	.25
35F1946	5.6	5.6	47	7.9	35F1982	5600	5600	45	.25
35F1947	6.8	6.8	50	7.9	35F1983	6800	6800	43	.25
35F1948	8.2	8.2	50	7.9	35F1984	8200	8200	42	.25
35F1949	10	10	49	7.9	35F1985	10000	10000	39	.25
35F1950	12	12	55	2.5	35F1986	12000	12000	31	079
35F1951	15	15	44	2.5	35F1987	15000	15000	31	079
35F1952	18	18	45	2.5	35F1988	18000	18000	31	.079
35F1953	22	22	46	2.5	35F1989	22000	22000	27	.079
35F1954	27	27	49	2.5	35F1990	27000	27000	27	.079
35F1955	33	33	45	2.5	35F1991	33000	33000	27	.079
35F1956	39	39	53	2.5	35F1992	39000	39000	27	079
35F1957	47	47	52	2.5	35F1993	47000	47000	23	.079
35F1958	56	56	49	2.5	35F1994	56000	56000	23	079
35F1959	68	68	51	2.5	35F1995	68000	68000	23	079
35F1960	82	82	45	2.5	35F1996	82000	82000	21	.079
					35F1997	100000	100000	18	079

MS90537 — MILITARY TYPES

μH Range	1-24	25-49	50-99	100-249	250-499	500-999
.10-.82	1.23	.99	.86	.78	.72	.68
1.8-8200	1.46	1.17	1.02	.92	.85	.80
10000-100000	2.24	1.80	1.56	1.42	1.31	1.23

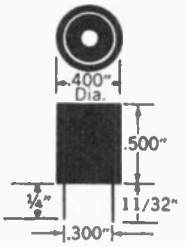
Stk. No.	Type 90537-	μH	Q Min	MC	Stk. No.	Type 90537-	μH	Q Min	MC
35F1998	1	0.10	50	25	35F2016	37	100	52	2.5
35F1999	3	0.15	51	25	35F2017	39	150	56	.79
35F2000	5	0.22	49	25	35F2018	41	220	58	.79
35F2001	7	0.33	46	25	35F2019	43	330	54	.79
35F2002	9	0.47	44	25	35F2020	45	470	60	.79
35F2003	11	0.68	42	25	35F2021	47	680	60	.79
35F2004	13	1.0	47	25	35F2022	49	1000	65	.79
35F2005	15	1.5	45	7.9	35F3023	51	1500	49	25
35F2006	17	2.2	45	7.9	35F2024	53	2200	50	25
35F2007	19	3.3	44	7.9	35F2025	55	3300	43	25
35F2008	21	4.7	44	7.9	35F2026	57	4700	44	25
35F2009	23	6.8	50	7.9	35F2027	59	6800	43	25
35F2010	25	10	49	7.9	35F2028	61	10000	39	.25
35F2011	27	15	44	2.5	35F2029	63	15000	31	079
35F2012	29	22	46	2.5	35F2030	65	22000	27	.079
35F2013	31	33	45	2.5	35F2031	67	33000	27	.079
35F2014	33	47	52	2.5	35F2032	69	47000	23	079
35F2015	35	68	51	2.5	25F3033	71	68000	23	079
					25F2034	73	100000	18	079

Note—Unlisted military values listed in the SWD industrial types above are available on special order.

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

Fixed and Variable Inductors — NYTRONICS

● NEW "VIV" MINIATURE VARIABLE INDUCTORS



This variable inductor offers reliability and stability over extreme temperature variations.. Vertical to facilitate mounting on printed circuit boards 0.40" dia. x 0.50" length. Range of 0.10 to 4700μH. Encapsulated in epoxy resin for reliability. Operating temperature: —55°C to +125°C. Turnable range: 0.33 to 4700μH, ±20%; 0.15 to 0.22μH, ±15%. 0 1, ±10%. The unit is designed to meet requirements of MIL-C-15305A.

PRICE LOCATOR

μH Range	1-24	25-49	50-99	100-249	250-499	500-999
.1-15	3.25	2.60	2.26	2.06	1.90	1.78
22-4700	3.48	2.78	2.42	2.20	2.04	1.90

Stk. No.	VIV-	μH	Q @ mhs		Stk. No.	VIV-	μH	Q @ mhs	
35F2035	0.10	.10	85	25	35F2050	33.0	33.0	54	2.5
35F2036	0.15	.15	100	25	35F2051	47.0	47.0	51	2.5
35F2037	0.22	.22	100	25	35F2052	68.0	68.0	55	2.5
35F2038	0.33	.33	100	25	35F2053	100	100	50	2.5
35F2039	0.47	.47	100	25	35F2054	150	150	50	.79
35F2040	0.68	.68	100	25	35F2055	220	220	50	.79
35F2041	1.00	1.00	90	25	35F2056	330	330	48	.79
35F2042	1.50	1.50	70	7.9	35F2057	470	470	45	.79
35F2043	2.20	2.20	73	7.9	35F2058	680	680	42	.79
35F2044	3.30	3.30	80	7.9	35F2059	1000	1000	40	.79
35F2045	4.70	4.70	75	7.9	35F2060	1500	1500	40	.25
35F2046	6.80	6.80	80	7.9	35F2061	2200	2200	44	.25
35F2047	10 0	10.0	82	7.9	35F2062	3300	3300	46	.25
35F2048	15.0	15 0	65	2.5	35F2063	4700	4700	48	.25
35F2849	22.0	22.0	55	2.5					

Type B-305. Aligning tool for VIV variable inductors.
35F2213. NET ..... .50

● NEW WEE V-L SUBMINIATURE VARIABLE SHIELDED INDUCTORS

Designed to accommodate close inductance adjustments in high density circuits that demand exceptional stability and high Q in the smallest size available. Magnetically shielded adjustable range: 0.1 to 100,000μH. Designed to MIL-C-15305C, Grade 1, Class B. Epoxy molded 0.300" dia. x 0.400" length. Oper. temp. —55°C to +125°C. Printed board mtg. is facilitated by 0.200 grid spacing.

PRICE LOCATOR

μH Range	1-24	25-49	50-99	100-249	250-499	500-999
0.10-1.0	5.70	4.56	3.96	3.60	3.33	3.10
1.2-10.000	4.75	3.80	3.30	3.00	2.77	2.58
12.000-100.000	6.78	5.43	4.71	4.29	3.96	3.69

Stk. No.	WEE V-L	μH	MC	Q nom	Stk. No.	WEE V-L	μH	MC	Q nom
35F2064	0.10	.10	25	70	35F2101	120	120	0.790	95
35F2065	0.12	.12	25	70	35F2102	150	150	0.790	90
35F2066	0.15	.15	25	70	35F2103	180	180	0.790	95
35F2067	0.18	.18	25	70	35F2104	220	220	0.790	95
35F2068	0.22	.22	25	70	35F2105	270	270	0.790	100
35F2069	0 27	.27	25	80	35F2106	330	330	0.790	100
35F2070	0.33	.33	25	80	35F2107	390	390	0.790	100
35F2071	0.39	.39	25	80	35F2108	470	470	0.790	100
35F2072	0.47	.47	25	80	35F2109	560	560	0.790	95
35F2073	0.56	.56	25	80	35F2110	680	680	0.790	100
35F2074	0.68	.68	25	80	35F2111	820	820	0.790	90
35F2075	0.82	.82	25	85	35F2112	1000	1000	0.790	90
35F2076	1.00	1.00	25	85	35F2113	1200	1200	0.250	95
35F2077	1.2	1.2	7.9	90	35F2114	1500	1500	0.250	90
35F2078	1.5	1.5	7.9	100	35F2115	1800	1800	0.250	100
35F2079	1.8	1.8	7.9	115	35F2116	2200	2200	0.250	100
35F2080	2.2	2.2	7.9	110	35F2117	2700	2700	0.250	95
35F2081	2.7	2.7	7.9	110	35F2118	3300	3300	0.250	90
35F2082	3.3	3.3	7.9	90	35F2119	3900	3900	0.250	85
35F2083	3.9	3.9	7.9	90	35F2120	4700	4700	0.250	85
35F2084	4.7	4.7	7.9	95	35F2121	5600	5600	0.250	85
35F2085	5.6	5.6	7.9	95	35F2122	6800	6800	0.250	75
35F2586	6.8	6.8	7.9	85	35F2123	8200	8200	0.250	80
35F2087	8.2	8.2	7.9	95	35F2124	10000	10000	0.250	70
35F2088	10	10	7.9	90	35F2125	12000	12000	0.079	70
35F2089	12	12	2.5	120	35F2126	15000	15000	0.079	70
35F2090	15	15	2.5	120	35F2127	18000	18000	0.079	70
35F2091	18	18	2.5	115	35F2128	22000	22000	0.079	70
35F2092	22	22	2.5	125	35F2129	27000	27000	0.079	70
35F2093	27	27	2.5	115	35F2130	33000	33000	0.079	70
35F2094	33	33	2.5	120	35F2131	39000	39000	0.079	70
35F2095	39	39	2.5	120	35F2132	47000	47000	0.079	70
35F2096	47	47	2.5	110	35F2133	56000	56000	0.079	70
35F2097	56	56	2.5	115	35F2134	68000	68000	0.079	60
35F2098	68	68	2.5	105	35F2135	82000	82000	0.079	60
35F2099	82	82	2.5	105	35F2136	100000	100000	0.079	60
35F2100	100	100	2.5	95					

Type B-469. Alignment tool for above WEE V-L.
35F2214. NET ..... .50

● NEW ADJUSTOROID

A miniature variable toroid with stepless adjustment developed for printed circuit and similar lightweight applications Hermetically sealed, and there is no physical contact between the adjusting screw and the toroidal winding. Available to 12 henries. Fully shielded. Adjustable inductance range: not less than ±5% from nominal. Very high Q. Designed to meet MIL-C-15305A. Weight: ATE-11, 0.83 oz; ATE-0, 2.0 oz; ATE-4, 4.0 oz.

PRICE LOCATOR

Hy Range	1-24	25-49	50-99	100-149	150-249	250-499	500-749
0.010-0.068	25.00	17.00	13.00	10.50	9.15	8.00	7.25
0.082-0.180	30.00	19.00	15.00	11.70	10.00	8.75	7.90
0.220-1.50	35.40	22.35	17.65	13.80	11.85	10.40	9.45
1.80-3.30	37.00	24.10	19.00	14.90	12.80	11.30	10.15
3.90-6.80	38.50	25.00	19.75	15.50	13.30	11.80	10.60
8.20-12.0	43.80	28.50	22.50	17.65	15.15	13.40	12.15

Stk. No.	Type ATE-	Hy	Q	Freq. KHz	Stk. No.	Type ATE-	Hy	Q	Freq. KHz
35F2156	11-0.010	.010	75	15	35F2137	0-0.390	.390	90	6
35F2157	11-0.012	.012	75	15	35F2138	0-04.70	.470	90	6
35F2158	11-0.015	.015	75	15	35F2139	0-0.560	.560	90	6
35F2159	11-0.018	.018	75	15	35F2140	0-0.680	.680	85	6
35F2160	11-0.022	.022	75	15	35F2141	0-0 820	.820	85	6
35F2161	11-0.027	.027	75	15	35F2142	0-1.00	1.00	85	5
35F2162	11-0.033	.033	70	15	35F2143	0-1.20	1.20	80	5
35F2163	11-0.039	.039	70	15	35F2144	0-1.50	1.50	80	5
35F2164	11-0.047	.047	70	15	35F2145	4-1.80	1.80	100	4
35F2165	11-0.056	.056	70	15	35F2146	4-2.20	2.20	90	3
35F2166	11-0.068	.068	65	10	35F2147	4-2.70	2.70	90	3
35F2167	11-0.082	.082	65	10	35F2148	4-3.30	3.30	90	3
35F2168	11-0.100	.100	60	10	35F2149	4-3.90	3.90	80	2
35F2169	11-0.120	.120	60	10	35F2150	4-4.70	4.70	80	2
35F2170	11-0 150	.150	55	10	35F2151	4-5.60	5.60	80	2
35F2171	11-0.180	.180	55	10	35F2152	4-6.80	6.80	60	1.5
35F2172	0-0.220	.220	95	7	35F2153	4-8.20	8.20	60	1.5
35F2173	0-0.270	.270	95	7	35F2154	4-10.0	10.0	40	1
35F2174	0-0 330	.330	95	7	35F2155	4-12.0	12.0	40	1

● NEW WEE-DUCTOR

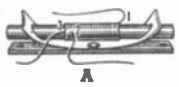
Subminiature shielded inductor with high inductance-to-size ratio. The WEE-DUCTOR is designed to meet the environmental requirements of MIL-C-15305C, Grade 1, Class B. Inductance tolerance: 0.1 to 22μH, ±10%; 27μH to 1000, ±5%; 1200μH to 56,000μH, ±10%; 68,000μH to 180,000μH, ±20%. Dielectric strength: 700 volts RMS. Operating temperature: —55°C to +125°C. This encapsulated non-flammable shielded unit in a 0.164" diameter by 0.450" long envelope offers the design engineer extremely high inductance for density packaging. Density characteristics: volume 0.0087 cubic inches; weight 0.75 gram maximum. Shielding: less than 3% coupling with 2 units measured at 1000 cycles.

PRICE LOCATOR

μH Range	1-24	25-49	50-99	100-249	250-499	500-999
.1-18	1.20	.90	.82	.75	.67	.62
22-1000	1.30	1.00	.92	.85	.77	.72
1200-8200	1.45	1.16	1.07	1.00	.90	.85
10000-56000	1.60	1.30	1.25	1.20	1.10	1.05
68000-180000	2.30	1.95	1.85	1.75	1.60	1.55

Stk. No.	Type WEE-	μH	Q min		Stk. No.	Type WEE-	μH	Q min	
				MC					MC
35F2175	0.10	0.10	63	25	35F2194	150	150	63	.79
35F2176	0.15	0 15	59	25	35F2195	220	220	57	.79
35F2177	0 22	0 22	56	25	35F2196	330	330	50	.79
35F2178	0.33	0.33	48	25	35F2197	470	470	66	.79
35F2179	0 47	0 47	48	25	35F2198	680	680	71	.79
35F2180	0 68	0 68	45	25	35F2199	1000	1000	62	.79
35F2181	1 0	1.0	42	7.9	35F2200	1500	1500	51	.250
35F2182	1 5	1.5	41	7.9	35F2201	2200	2200	50	.250
35F2183	2.2	2.2	42	7.9	35F2202	3300	3300	52	.250
35F2184	3.3	3.3	40	7 9	35F2203	4700	4700	48	.250
35F2185	4.7	4.7	40	7.9	35F2204	680ᵤ	680ᵤ	45	.250
35F2186	6.8	6.8	40	7.9	35F220⁵	10000	10000	36	.079
35F2187	10	10	46	2.5	35F2206	15000	15000	38	.079
35F2188	15	15	47	2.5	35F2207	22000	22000	32	.079
35F2189	22	22	47	2.5	35F2208	33000	33000	32	.079
35F2190	33	33	43	2.5	35F2209	47000	47000	25	.079
35F2191	47	47	46	2.5	35F2210	68000	68000	20	.079
35F2192	68	68	40	2.5	35F2211	100000	100000	20	.079
35F2193	100	100	63	.79	35F2212	150000	150000	20	.060

J. W. Miller Antennas - If's - Coils - Chokes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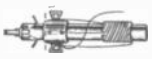

B

C

D

E

Ferrite Rod loop antennas designed to receive the standard broadcast band (540-1850Khz) when used with proper tuning capacitor. Figures C, D & E are supplied with a mounting board which can be easily removed if an alternate method of mounting is desired, others have mtg. bracket. They make excellent antenna for conventional vacuum tube and transistor receivers. Type 705-A has adjustable inductance to permit peaking antenna stage by sliding coil along ferrite rod. The 2000 series have a secondary which is over-coupled for maximum gain stability with a variation of output and are designed to match an input impedance of approximately 600 ohms. Type 6300 antenna coil replaces a loop antenna and is supplied with 18" of antenna wire. It is screw adjustable. Average Shpg wt.: 3 oz.

Stock No.	Type	Fig.	Size	Induct-ance	Max. Tun. Cap.	NET
40F194	705A	C	3¼x9½"	Adj.	400mmf	2.13
40F193	2000	D	¾x9"	240uh	365mmf	2.04
40F158	2001	A	¾x3¾"	240uh	365mmf	1.80
40F159	2002	B	½x2½"	40-300uh	450mmf	1.35
40F164	2003	A	¾x3¾"	700uh	130mmf	1.80
40F156	2004	E	¾x3¾"	240uh	365mmf	1.98
40F157	2005	E	¾x3¾"	700uh	130mmf	1.98
40F165	2007	B	½x2½"	150-1000uh	250mmf	1.77
40F128	6300	B	⅜x2¼"	Adj.	500mmf	1.17

MINIATURE TRANSISTOR I.F. TRANSFORMERS

Freq. 455 Khz

Miniature I.F. xformer having tuned primary and untuned secondary windings. Proper impedance match between primary and secondary insures optimum performance. Wt. 2 oz.

Stk. No.	Type	Imp.—Ohms	Use	NET
40F138	2031	10K600	Input	2.52
40F139	2032	10K1000	Output	
40F141	2042	25K1000	Output	
40F142	2051	100K-1000	Input	

SUB-MINIATURE I.F. Freq. 455 Khz.

Dimensions: ⅜" sq. x ⅝" high. Wt. 2 oz.

Stk. No.	Type	Imp.-Ohms	Use	NET
40F136	9-C1	25K-600	Input	2.40
40F137	9-C2	25K-1000	Output	2.40
59F377	2021	B.C. osc. (Tuning cap. 78 (mm f.)		2.10

MICRO MINIATURE Freq. 45 Khz

Dimensions: 9/32" sq. x 15/32" high. Wt. 2 oz.

Stk. No.	Type	Imp.-Ohms	Use	NET
59F378	2061	50k-800	Input	2.10
59F379	2062	30k-500	Instage	2.10
59F380	2063	20k-5k	Output	2.10

MINI MINIATURE Freq. 45 Khz

Dimensions 13/32" sq. x ½" high. Wt. 2 oz.

Stk. No.	Type	Imp.-Ohms	NET
59F385	2065	B.C. osc. (Tuning cap. 78 to 110 mmfd, max.)	2.10

MINIATURE IF TRANSFORMERS

Shell core permeability tuned type. Assembled in molded plastic frames, with built-in silver mica condensers. Tunes from top and bottom of aluminum can. Supplied with snap ring mtg. clip and adapter plate for use over a standard tube socket hole. Dimensions, ¾" square x 2" high. *With diode filter condensers. Wt. 4 oz.

262 Khz TRANSFORMERS

40F115. 12-H1 Input. NET 1.74
40F117. 12-H6* Output. NET 1.80

455 Khz TRANSFORMERS

40F022. 12-C1 Input. NET 1.62
40F023. 12-C2 Output. NET 1.62

1500 Khz IF TRANSFORMERS

40F020. Type 12W-1. Input. NET 1.98

10.7 Mhz FM TRANSFORMERS

40F024. Type 1463. Inp. or int. NET .. 1.95

4.5-Mhz MINIATURE IF'S

Shell core permeability tuned transformers with built-in silver-mica capacitors. Tuning from top and bottom of aluminum shield. Dimensions: ¾" square by 2" high. Supplied with a snap spring mounting clip and adapter plate for use over standard tube socket hole. Wt., 8 oz.

40F078. Type 6203. Inp. or int. NET 1.98

FM IF TRANSFORMERS

10.7 mc. In aluminum shields. Overcoupled to provide standard RTMA bandwidth. 1⅛" sq. x 2½" high. Spade bolt mtg. Shpg. wt., 5 oz.

Type 1451. Inter
40F018. NET 2.01

40F019. Type 1452. Discrim. NET 2.76
40F131. Type 1453. Ratio Det. NET 2.76

TV ANTENNA COUPLING TRANSFORMERS

For using 52 or 72 ohm coax cable on 300-ohm receiver inputs. Two transformers required.—one at antenna, other at receiver. Wt., 2 ozs.

92F111. Type 6162. 72 ohm. NET 1.95
92F110. Type 6161. 52 ohm. NET 1.95

TRANSISTOR OSCILLATOR COIL

For use with transistor to supply local oscillator energy to mixer stage. Used with a variable capacitor having a maximum capacity of 365 mmf. Intermediate frequency 455 Khz. Mounting clip fits into 5/16" dia. hole. Size: ⅜x1" high. Frequency: 540-1650 Khz. Wt. 1 oz.

40F135. Type 2020. NET 1.65
40F166. Type 2022. As above, but used with cut section variable. NET 1.65
40F167. Type 2023. (6-lug). For use when separate transistors are required for oscillator and mixer. Padder needed with 365-mmf variable. NET 1.65

UNSHIELDED RF COILS

High "Q" adjustable iron core coils for general replacement use. All 540-1600 Khz Type 70 Osc. has a primary and a tapped secondary. These may be adjusted to track with 100-500 Khz IF's. Shpg. wt., 4 oz.

40F125. Type 70-OSC. Osc. 1.14
40F123. Type 70-A. Antenna. 1.29

MIDGET OSCILLATOR COIL

Dowel type coils. For use with pentagrid converter tubes, antenna and RF coils or for general replacement. Cover the broadcast band from 540 to 1600 kc with a 365 mmf variable condenser. Unshielded. For use with 6SA7 and similar mixer tubes. §Requires .0004 mfd Padder. Size, 1" dia., 1" high. Wt., 5 oz.

Stk. No.	Type	Frequency	NET
40F013	5481-C*§	455 kc	1.29

UNIVERSAL ADJUSTABLE OSCILLATOR COIL

Operates properly in all broadcast band receivers. Has 2 taps, allowing 6 different feed back combinations. Mtg. Clip fits 5/16" hole. Wt. 4 oz.

40F127. Type 71-OSC. NET 1.65

VARIABLE CAPACITORS

Split outer plates permit accurate alignment. High frequency trimmers are on short side of capacitor. Mounting by tapped holes in frame. Counterclockwise rotation—capacity increase. Shaft diameter, ¼". Capacity Range: 10-365 mmf. except *Type 1461BS, 6.6-23, used for FM or band spread.

No.	Type	Sec.	Oz.	Size—Inches	NET
41F000	1461*	3	5	3⅜x1 13/16x1⅝	4.05
40F190	2111	1	3	1⅞x1 11/16x1⅝	2.10
40F191	2112	2	6	2⅜x1 13/16x1⅝	2.55
40F192	2113	3	9	3 3/16x1 13/16x1⅝	3.57
40F195	2110	2	2	1 15/16x1 13/16x1 15/16	2.10

FM STEREO MULTIPLEX INDUCTORS

Stk. No.	Type	Description	NET
59F387	1351	Low pass Filter	1.95
59F388	1352	Band Pass Filter Series	1.80
59F389	1353	Band Pass Filter Shunt	1.80
59F390	1354	Locked Oscillator 19 KC	2.55
59F391	1355	Output Xformer 38 kc.	2.40

SUB-MIN 3-GANG VARIABLE CAPACITOR

Type 1460. Min cap. 5.7 uuf/sect. Trim. range: 2.0 uuf. Shalt: .250" dia. x 15/16" L. Size: 1-1/16 x 1-3/16 x 2". L. Size: 1-1/16 x 1-3/16 x 2".
59F394. NET 3.96

F.M. TRANSISTOR I.F. TRANSFORMERS

Makes possible the construction of a self-contained battery F.M. receiver. ¾" sq. x 2" high. 10.7 Mhz Freq.

Stk. No.	Type	Use	NET
40F143	1601	1st IF Trans.	2.28
40F144	1602	2nd IF Trans.	2.37
40F145	1603	3rd IF Trans.	2.37
40F146	1604	Discrim. Trans.	2.55
40F147	1605	Ratio Det. w/Diod.	4.80
40F148	1606	Ratio Det. w/o Dio.	2.55

BAKELITE TERMINAL PLATES

Provides rigid mounting and means for assembling groups of resistors and capacitors. Lugs are on 1/16" thick bakelite sheet stock, terminal spacing 7/16". * indicates number lugs per side. Shipping wt., approx. ½ oz.

No.	Type	Lugs*	Size	NET
40F183	420	6	1x3"	.45
40F184	430	5	1¾x2½"	.51
40F185	440	14	1x5¾"	.66
40F186	450	8	1¾x3¾"	.81
40F187	460	11	1¾x5¼"	1.02
40F188	470	19	1¾x8⅜"	1.14

MILLER IRON CORE CHOKES

Single section duo-lateral wound types. Core is ⅜" dia. x ½" long. Solder lugs. Single-hole mounting. impregnated. All 125 mA except *100 mA Size, 1⅛" dia x ⅝" high. Wt., 4 oz.

Stk. No.	Type	Mh	Ohms	NET
40F032	953	2.5	19	.99
40F035	956	10.0	47	1.20
40F036	957*	25.0	83	1.32
40F037	958*	50.0	130	1.50
40F038	959*	75.0	170	1.65
40F039	960*	100.0	200	1.86
40F040	961*	150.0	260	1.98

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

J. W. Miller – Coils – Chokes

Versatile series of sub-miniature iron core R.F. chokes. Designed to meet industries' demand for high reliability miniature components. Ideally suited to network and filter design, delay lines and computer application. Rated at 50 mA Av. Shpg. wt. 2 oz.

Stock No.	Type	Induct. *	Min. Q @ F	1-24	25-49	50-99	100-249
59F212	70F106A1	1.0uH	41 @ 7.9 MHz				
59F213	70F126A1	1.2uH	44 @ 7.9 MHz				
59F214	70F156A1	1.5uH	38 @ 7.9 MHz				
59F215	70F186A1	1.8uH	39 @ 7.9 MHz				
59F216	70F226A1	2.2uH	48 @ 7.9 MHz				
59F217	70F276A1	2.7uH	39 @ 7.9 MHz	.60	.54	.51	.42
59F218	70F336A1	3.3uH	48 @ 7.9 MHz				
59F219	70F396A1	3.9uH	44 @ 7.9 MHz				
59F220	70F476A1	4.7uH	46 @ 7.9 MHz				
59F221	70F566A1	5.6uH	44 @ 7.9 MHz				
59F222	70F686A1	6.8uH	44 @ 7.9 MHz				
59F223	70F826A1	8.2uH	40 @ 7.9 MHz				
59F224	70F105A1	10 uH	48 @ 2.5 MHz				
59F225	70F125A1	12 uH	52 @ 2.5 MHz				
59F226	70F155A1	15 uH	52 @ 2.5 MHz				
59F227	70F185A1	18 uH	52 @ 2.5 MHz	.69	.62	.59	.48
59F228	70F225A1	22 uH	51 @ 2.5 MHz				
59F229	70F275A1	27 uH	49 @ 2.5 MHz				
59F230	70F335A1	33 uH	50 @ 2.5 MHz				
59F231	70F395A1	39 uH	48 @ 2.5 MHz				

*0.1 to 1.0 uH ±20%, 1.1 to 10uH ±10%, over 10 uH ±5%.

SUB-MINIATURE RF CHOKES

Stock No.	Type	Induct. *	Min. Q @ F	1-24	25-49	50-99	100-249
59F232	70F475A1	47 uH	48 @ 2.5 MHz				
59F233	70F565A1	56 uH	45 @ 2.5 MHz				
59F234	70F685A1	68 uH	45 @ 2.5 MHz				
59F235	70F825A1	82 uH	44 @ 2.5 MHz	.69	.62	.59	.48
59F236	70F104A1	100 uH	40 @ 790 Khz				
59F237	70F154A1	150 uH	44 @ 790 Khz				
59F238	70F224A1	220 uH	45 @ 790 Khz				
59F239	70F334A1	330 uH	47 @ 790 Khz				
59F240	70F474A1	470 uH	47 @ 790 Khz				
59F241	70F684A1	680 uH	44 @ 790 Khz				
59F242	70F824A1	820 uH	42 @ 790 Khz	.75	.68	.64	.53
59F243	70F103A1	1.0 mh	40 @ 790 Khz				
59F244	70F153A1	1.5 mh	40 @ 250 Khz				
59F245	70F223A1	2.2 mh	40 @ 250 Khz	.81	.73	.69	.57
59F246	70F333A1	3.3 mh	56 @ 250 Khz	.84	.76	.71	.59
59F247	70F473A1	4.7 mh	54 @ 250 Khz	.84	.76	.71	.59
59F248	70F683A1	6.8 mh	51 @ 250 Khz	.84	.76	.71	.59
59F249	70F823A1	8.2 mh	48 @ 250 Khz	.99	.89	.84	.69
59F250	70F102A1	10.0 mh	48 @ 250 Khz				

Small size low capacity chokes with solenoid or 3-pi universal windings. Wound on low-loss molded phenolic or powdered iron core forms. Impregnated with a moisture and fungus-resistant varnish. The type of powdered iron allows operation up to UHF region. Tol. ±5%. Dimensions: Phenolic form—3/16" dia., 3/4" L. Iron core form: 1/32" dia., 7/8" long. Av. Shpg. wt. 2 oz.

RF CHOKES WITH AXIAL LEADS

Phenolic Form—Single Layer Solenoid

Stock No.	Type	Induct. uH	Ohms Max.	mA	1-24	25-49	50-99	100-249
59F264	4580	0.1	.012	3000				
59F265	4582	0.15	.014	2900				
59F266	4584	0.22	.024	2800				
59F267	4586	0.33	.023	2600				
59F268	4588	0.47	.026	2500				
59F269	4590	0.68	.036	2400	.51	.46	.43	.36
59F270	4592	0.75	.039	2200				
59F271	4594	0.82	.042	2100				
59F272	4602	1.0	.060	2000				
59F273	4604	1.5	.096	1800				
59F274	4606	2.4	.192	1500				
59F275	4608	3.9	.600	1000				
59F276	4609	5.5	.828	850				
59F277	4610	6.2	.900	700				
59F278	4611	8.2	1.34	600	.54	.49	.46	.38
59F279	4612	10.0	1.80	500				

Iron Core Form—Single Layer Solenoid

Stock No.	Type	Induct.	Ohms Max.	mA	1-24	25-49	50-99	100-249
59F282	4622	10uH	.072	1500	.60	.54	.51	.42
59F283	4624	15uH	.170	1000	.60	.54	.51	.42
59F284	4626	24uH	.336	800	.63	.57	.54	.44
59F285	4628	39uH	.780	600	.63	.57	.54	.44
59F286	4629	55uH	1.10	500				
59F287	4630	62uH	1.20	475				
59F288	4631	82uH	1.92	450	.66	.59	.56	.46
59F289	4632	100uH	2.40	400				

Iron Core Form—3 Section Pi Windings

Stock No.	Type	Induct. mH	Ohms Max.	mA	1-24	25-49	50-99	100-249
59F302	4662	1.0	8.4	125	.75	.68	.64	.53
59F303	4664	1.5	10.8	125	.78	.70	.66	.52
59F304	4666	2.4	14.4	125	.84	.76	.72	.59
59F305	4668	3.9	20.4	125	.93	.84	.79	.65
59F306	4669	5.5	26.4	125	1.05	.95	.89	.74
59F307	4670	6.2	39.6	100	1.05	.95	.89	.74
59F308	4671	8.2	54.0	100	1.11	1.00	.94	.78
59F309	4672	10.0	56.4	50	1.29	1.16	1.10	.90

Phenolic Form—3 Section Pi Winding

Stock No.	Type	Induct.	Ohms Max.	mA	1-24	25-49	50-99	100-249
59F292	4642	0.1 mH	4.92	125				
59F293	4644	0.15mH	6.84	125	.66	.59	.56	.46
59F294	4646	0.24mH	8.16	125				
59F295	4648	0.39mH	12.0	125				
59F296	4649	0.55mH	13.2	125				
59F297	4650	0.62mH	15.1	125	.72	.65	.61	.50
59F298	4651	0.75mH	16.4	125				
59F299	4652	1.00mH	19.8	125				

Ferrite Core RF Chokes

High permeability ferrite cores. Combine high inductance with low DC resistance and small physical size. 3-pi universal windings insure low distributed capacity. Dimensions of core: 1/4" dia., 7/8" long. 1/2" long axial leads.

59F312	6302	2.5mH	9.36	200	.93	.84	.79	.65
59F313	6304	5.0mH	14.9	200	1.08	.98	.92	.76
59F314	6306	10.0mH	36.0	125	1.20	1.08	1.02	.84
59F315	6308	25.0mH	83.4	75	1.26	1.13	1.07	.88
59F316	6310	50.0mH	133	75	1.44	1.30	1.22	1.01

ADJUSTABLE CERAMIC FORMS AND RF COILS

Permeability tuned coils wound on silicone impregnated ceramic forms. Forms alone supplied with freq. range of 1-30 Mhz for other ranges add suffix to type number (Y) 50-1000 Khz (W) 30-300 Mhz.

Standard RF Coils and Forms (3/4" Dia., 1-1/16" Long)

Stk. No.	Type	Ind. uH	1-24	25-49	50-99	100-249
59F337	4400-2	Form only	1.32	1.19	1.12	.82
59F338	4403	.9-1.6	1.74	1.58	1.48	1.22
59F339	4404	1.5-3.2	1.77	1.61	1.50	1.24
59F340	4405	3.1-6.8	1.80	1.64	1.53	1.26
59F341	4406	6.7-15	1.86	1.69	1.58	1.30
59F342	4407	14.8-31	1.92	1.75	1.63	1.34
59F343	4408	30-69	1.98	1.80	1.68	1.39
59F344	4409	68-130	2.04	1.86	1.73	1.43
59F345	4410	126-250	2.07	1.88	1.76	1.45
59F346	4411	245-475	2.10	1.91	1.78	1.47
59F347	4412	450-800	2.13	1.94	1.81	1.49
59F348	4413	750-1400	2.16	1.97	1.84	1.51
59F349	4414	1300-2100	2.16	1.97	1.84	1.51

Miniature Adjustable RF Coils (1/4" Dia., 7/8" Long)

Stk. No.	Type	Ind. uH	1-24	25-49	50-99	100-249
59F352	4500-2	Form only	1.17	1.05	.99	.82
59F354	4502	1.0-1.6	1.59	1.45	1.35	1.11
59F355	4503	1.6-2.8	1.59	1.45	1.35	1.11
59F356	4504	2.8-5	1.59	1.45	1.35	1.11
59F357	4505	5-9	1.65	1.49	1.40	1.16
59F358	4506	9-16	1.71	1.54	1.45	1.20
59F359	4507	16-24	1.77	1.59	1.50	1.24
59F360	4508	24-35	1.80	1.62	1.53	1.26
59F361	4509	35-60	1.83	1.65	1.56	1.28
59F362	4511	60-120	1.86	1.67	1.58	1.30
59F363	4512	110-200	1.89	1.70	1.60	1.32
59F364	4513	190-330	1.92	1.73	1.63	1.34
59F365	4514	320-500	1.95	1.77	1.65	1.35

Subminiature Adjustable RF Coils (3/16" Dia., 5/8" Long)

59F319	4300-2	Form only	1.08	.97	.92	.76
59F320	4301	0.17-0.27	1.50	1.35	1.28	1.05
59F321	4302	0.27-0.41	1.50	1.35	1.28	1.05
59F322	4303	0.40-0.65	1.56	1.40	1.33	1.09
59F323	4304	0.64-0.95	1.59	1.43	1.35	1.11
59F324	4305	0.94-1.55	1.65	1.49	1.40	1.16
59F325	4306	1.5-2.57	1.71	1.54	1.45	1.20
59F326	4307	2.5-4.40	1.77	1.59	1.50	1.24
59F327	4308	4.3-7.15	1.80	1.62	1.53	1.26
59F328	4309	7.1-12.5	1.83	1.65	1.56	1.28
59F329	4310	12.4-20.3	1.86	1.67	1.58	1.30
59F330	4311	20.1-32.8	1.89	1.70	1.61	1.31
59F331	4312	32.5-51.5	1.92	1.73	1.63	1.34
59F332	4313	51-102				
59F333	4314	101-180	1.95	1.76	1.66	1.37
59F334	4315	178-300				

J. W. Miller Chokes & Coils

MIL-SPEC MOLDED R.F. CHOKES

Small, hermetically sealed, R.F. chokes wound on †iron or ‡phenolic cores. Conform to MIL-C-15305 Class 7. Designed for use in transmitters, receivers, VFO's and all other electronic devices which require high quality, dependable performance and small sized chokes. Average shipping weight: 2 oz.

Series 9310

Conform to MS-16225 & MS-18130. Size: .155" dia. x .375" long. Leads: #22 TCW; 1.437" long. Power rating: ¼ watt at 90°C.

Stk. No.	Type	uh	% Tol.	mA	1-24	25-49	50-99	100-249
59F100	9310-10‡	.82	10	900	.60	.53	.48	.40
59F101	9310-12‡	1.00	10	830	.60	.53	.48	.40
59F102	9310-42†	18.0	10	280	.66	.59	.53	.44
59F103	9310-44†	22.0	10	265	.66	.59	.53	.44
59F104	9310-46†	24.0	5	265	.75	.66	.59	.50

Series 9320

Conform to MS-16224 & MS-75008. Size: .185" dia. x .437" long. Leads #22 TCW; 1.437" long. Power rating: ⅓ watt max. at 90°C.

Stk. No.	Type	uh	% Tol.	mA	1-24	25-49	50-99	100-249
59F106	9320-12‡	1.5	10	700	.60	.53	.48	.40
59F107	9320-16‡	2.7	10	460	.60	.53	.48	.40
59F108	9320-18†	3.3	10	1350	.66	.59	.53	.44
59F109	9320-20†	3.9	10	1250	.66	.59	.53	.44
59F110	9320-22†	4.7	10	1100	.66	.59	.53	.44

Series 9330

Series conforms to MS-16222. Size: .215" dia. x .560" long. Leads: #22 TCW; 1.437 long. Power rating: ½ watt max. at 90°C.

Stk. No.	Type	uh	% Tol.	mA	1-24	25-49	50-99	100-249
59F112	9330-18†	5.6	10	1340	.75	.66	.59	.50
59F113	9330-20†	6.8	10	1080				
59F114	9330-22†	8.2	10	1030				
59F115	9330-24†	10.0	10	950				
59F116	9330-30†	18.0	10	580				

Series 9340

Conform to MS-16221 & MS-91189. Size: .280" dia. x .900" long. Leads: #22 TCW 1.437" long. Power rating: 1 watt max. at 90°C.

Stk. No.	Type	uh	% Tol.	mA	1-24	25-49	50-99	100-249
59F118	9340-04‡	2.2	10	1600	.78	.68	.61	.52
59F119	9340-06‡	2.7	10	1350				
59F120	9340-08‡	3.3	10	1150				
59F121	9340-10‡	3.9	10	955				
59F122	9340-12‡	4.7	10	860				

Series 9350

Conform to MS-16223 & MS-75052. Size: .250" dia. x .560" long. Leads #22 TCW; 1.437 long. Power rating: ¾ watt at 90°C.

Stk. No.	Type	uh	% Tol.	mA	1-24	25-49	50-99	100-249
59F124	9350-00‡	47	10	195	1.02	.90	.81	.68
59F125	9350-02‡	56	10	185	1.02	.90	.81	.68
59F126	9350-04†	68	10	255	1.08	.95	.86	.72
59F127	9350-06†	82	10	245	1.08	.95	.86	.72
59F128	9350-08†	100	10	235	1.08	.95	.86	.72

INDUSTRIAL TYPE ADJUSTABLE R.F. COILS

Wound on ceramic forms. Feature terminal rings machined from the ceramic form material. They have high Q and good stability. The adjusting core is held rigidly at any setting through the use of a tension device on the bushing.

Sub-Miniature Coils

1/32" dia. x 19/32" L.

Stock No.	Type	uh max.	uh min.	1-24	25-49	50-99	100-249
59F131	40A107CBI	.125	.091	1.98	1.78	1.65	1.32
59F132	40A157CBI	.188	.124				
59F133	40A227CBI	.220	.184				
59F134	40A337CBI	.413	.265				
59F135	40A477CBI	.587	.327	2.01	1.81	1.68	1.34
59F136	40A687CBI	.850	.482	2.01	1.81	1.68	1.34
59F137	40A827CBI	1.02	.630	2.10	1.89	1.75	1.40
59F138	40A106CBI	1.25	.730	2.10	1.89	1.75	1.40
59F139	40A156CBI	1.88	1.06	2.10	1.89	1.75	1.40
59F140	40A226CBI	2.75	1.50	2.13	1.91	1.78	1.42
59F141	40A336CBI	4.13	2.15	2.13	1.91	1.78	1.42
59F142	40A476CBI	5.87	3.00	2.22	1.99	1.85	1.48
59F143	40A686CBI	8.50	4.40	2.22	1.99	1.85	1.48
59F144	40A826CBI	10.2	5.25	2.22	1.99	1.85	1.48
59F145	40A105CBI	12.5	8.06	2.28	2.05	1.90	1.52
59F146	40A155CBI	18.8	11.9	2.28	2.05	1.90	1.52
59F147	40A225CBI	27.5	17.1	2.34	2.10	1.95	1.56
59F148	40A335CBI	41.3	26.6	2.34	2.10	1.95	1.56
59F149	40A475CBI	58.7	39.0	2.43	2.18	2.03	1.62
59F150	40A685CBI	85.0	58.0	2.43	2.18	2.03	1.62
59F151	40A825CBI	102	69.0	2.61	2.35	2.18	1.74
59F152	40A104CBI	125	84.0	2.61	2.35	2.18	1.74
59F130	40A000CBI	Coil Form w/hdw. and Core		1.44	1.29	1.20	.96

Miniature Coils

¼" dia. x 13/16" L.

Stock No.	Type	uh max.	uh min.	1-24	25-49	50-99	100-249
59F156	41A106CBI	1.25	.69	2.10	1.89	1.75	1.40
59F157	41A156CBI	1.87	1.20				
59F158	41A226CBI	2.75	1.42				
59F159	41A336CBI	4.10	2.00	2.13	1.91	1.78	1.42
59F160	41A476CBI	5.80	2.80				
59F161	41A686CBI	8.50	4.00				
59F162	41A826CBI	10.0	4.50	2.16	1.95	1.80	1.44
59F163	41A105CBI	12.5	6.50				
59F164	41A155CBI	18.7	10.8				
59F165	41A225CBI	27.5	15.2				
59F166	41A335CBI	41.0	26.0	2.22	1.99	1.85	1.48
59F167	41A475CBI	58.0	32.5	2.22	1.99	1.85	1.48
59F168	41A685CBI	85.0	48.5	2.28	2.05	1.90	1.52
59F169	41A825CBI	100	61.0	2.28	2.05	1.90	1.52
59F170	41A104CBI	125	65.0	2.34	2.10	1.95	1.56
59F171	41A154CBI	187	110	2.34	2.10	1.95	1.56
59F172	41A224CBI	275	160	2.43	2.18	2.03	1.62
59F173	41A334CBI	410	253	2.43	2.18	2.03	1.62
59F174	41A474CBI	580	390	2.55	2.30	2.12	1.70
59F175	41A684CBI	850	560	2.61	2.35	2.18	1.74
59F176	41A824CBI	1000	670	2.67	2.40	2.22	1.78
59F177	41A103CBI	1250	700	2.76	2.48	2.30	1.84
59F155	41A000CBI	Coil Form w/ hdw. and core		1.50	1.34	1.25	1.00

Standard Coils

3/8" dia. x 1" L.

Stock No.	Type	uh max.	uh min.	1-24	25-49	50-99	100-249
59F181	42A106CBI	1.25	.68	2.10	1.89	1.75	1.40
59F182	42A156CBI	1.87	1.00	2.10	1.89	1.75	1.40
59F183	42A226CBI	2.75	1.35	2.10	1.89	1.75	1.40
59F184	42A336CBI	4.10	2.12	2.13	1.91	1.78	1.42
59F185	42A476CBI	5.80	2.40	2.13	1.91	1.78	1.42
59F186	42A686CBI	8.50	3.60	2.16	1.95	1.80	1.44
59F187	42A826CBI	10.0	4.45	2.16	1.95	1.80	1.44
59F188	42A105CBI	12.5	6.05	2.28	2.05	1.90	1.52
59F189	42A155CBI	18.7	9.40	2.28	2.05	1.90	1.52
59F190	42A225CBI	27.5	12.9	2.31	2.08	1.92	1.54
59F191	42A335CBI	41.0	18.8	2.31	2.08	1.92	1.54
59F192	42A475CBI	58.0	27.5	2.46	2.20	2.05	1.64
59F193	42A685CBI	85.0	37.5	2.49	2.23	2.07	1.66
59F194	42A825CBI	100	45.0	2.55	2.30	2.12	1.70
59F195	42A104CBI	125	54.0	2.64	2.37	2.20	1.76
59F196	42A154CBI	187	92.0	2.64	2.37	2.20	1.76
59F197	42A224CBI	275	123	2.64	2.37	2.20	1.76
59F198	42A334CBI	410	200	2.67	2.40	2.22	1.78
59F180	42A000CBI	Coil Form w/hdw. and Core		1.56	1.40	1.30	1.04

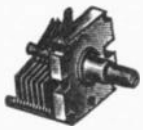
FREQUENCY SELECTIVE R.F. CHOKES

Designed for maximum efficiency and highest impedance at specific operating frequencies. Eliminates the designer's task of attempting to choose the best coil for a particular application from miscellaneous and often insufficient design data. Designed to cover the major amateur, industrial and citizens bands and will also operate efficiently at frequencies approximating the recommended frequencies.

Stk. No.	Type	uh	Freq. Mhz.	1-24	25-49	50-99	100-249
59F253	RFC-3.5	266	1.8-5	1.26	1.13	1.07	.88
59F254	RFC-7	208	3-13	1.26	1.13	1.07	.88
59F255	RFC-14	84	7-20	1.11	.99	.94	.78
59F256	RFC-21	38.5	15-30	.87	.78	.74	.61
59F257	RFC-28	24	25-40	.99	.89	.79	.69
59F258	RFC-50	8.2	30-90	.84	.76	.69	.59
59F259	RFC-144	1.72	75-180	.60	.54	.51	.42
59F260	RFC-220	.82	160-340	.60	.54	.51	.42
59F261	RFC-420	.22	350-500	.72	.65	.61	.50

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

E. F. JOHNSON Capacitors



TYPE "L" CAPACITORS

The rotor bearing and stator support rods are soldered directly to the Steatite end frames, making the unit virtually vibration-proof. Threaded ⅜-32, mounting nut provided. Plate spacing .030". Heavy brass soldered plates and large diameter tie rods provide great rigidity. Plating is heavy nickel. Mounting posts soldered to end frame are available on special order. Removable chassis mounting brackets can be used to mount auxiliary equipment. Shaft diameter: .250 shaft length: 25/32". Size: 1¾w.x1¾h. A special slit sleeve tension bearing and silver plated beryllium copper contact provide constant torque and smooth, silent capacity variation. Av. shpg. wt. 6 oz.

Single Section—Single End Plate

Stk. No.	Cat. No.	Type	MMFD	Lgth.	1-9	10-49	50-99
41F176	167-1	10L15	2.2-10	¾"	1.90	1.75	1.59
41F177	167-2	25L15	2.9-25	61/64"	2.05	1.88	1.72
41F178	167-3	50L15	4.0-50	1¼"	2.30	2.12	1.93
41F179	167-4	75L15	5.2-75	1 9/16"	2.50	2.30	2.09

Single Section—Double End Plate

41F180	167-11	100L15	6.8-99	2 1/32"	4.10	3.77	3.43
41F181	167-12	200L15	11.6-202	2 21/64"	5.25	4.83	4.40

Butterfly

41F182	167-21	10LB15	2.3-10	55/64"	2.35	2.15	1.96
41F183	167-22	25LB15	3.7-25	1 1/32"	2.75	2.53	2.30
41F184	167-23	50LB15	5.9-50	1¾"	3.35	3.08	2.81

Differential

41F186	167-32	25LA15	3.5-27	61/64"	2.65	2.43	2.21
41F187	167-33	50LA15	4.6-51	1¼"	3.05	2.79	2.54

Dual Section

41F188	167-51	25LD15	4.2-27	1 5/8"	4.15	3.82	3.48
41F189	167-52	50LD15	5.4-51	2 15/64"	4.65	4.28	3.90
41F190	167-53	100LD15	7.8-99	3 1/16"	5.80	5.33	4.86

TYPE "M" JOHNSON MINIATURES

With .188" dia. x ½" slotted shaft. ¼" mounting bushing. Steatite end frames. ¾"Hx⅝"W. Shpg. wt. 4 oz.

SINGLE TYPE

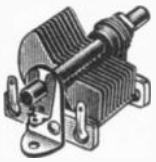
Stk. No.	Cat. No.	Type	MMFD	Depth	1-9	10-49	50-99
41F200	160-102	5M11	1.5- 5.0	45/64"	.90	.83	.76
41F201	160-104	9M11	1.8- 8.7	13/16"	.95	.88	.80
41F202	160-107	15M11	2.3-14.2	1"	1.00	.92	.85
41F203	160-110	20M11	2.7-19.6	1 1/64"	1.10	1.00	.92

DIFFERENTIAL TYPE

41F204	160-303	6MA11	1.5- 5.0	45/64"	1.25	1.16	1.06
41F206	160-308	15MA11	2.3-14.2	1"	1.65	1.52	1.39
41F207	160-311	19MA11	2.7-19.6	1 1/64"	1.85	1.72	1.58

BUTTERFLY TYPE

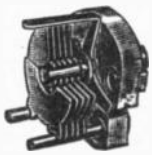
41F208	160-203	3MB11	1.5- 3.1	45/64"	1.20	1.11	1.02
41F209	160-205	5MB11	1.8- 5.1	13/16"	1.30	1.20	1.10
41F210	160-208	8MB11	2.2- 8.0	1"	1.45	1.33	1.22
41F211	160-211	11MB11	2.7-10.8	1 1/64"	1.60	1.47	1.35



TYPE "R" CAPACITORS

Featuring extra heavy steatite support insulators and .023" thick brass plates. All metal parts are heavy nickel plated for corrosion resistance. Plate spacing .024". bearing threaded ⅜"-32. Heavy brass end frames provide superior rigidity. Double bearing construction and silver plated beryllium copper wiring contacts provide smooth, reliable performance. Av. shp. 6 oz.

Stk. No.	Cat. No.	Type	MMFD	Lgth.	1-9	10-49	50-99
41F191	149-1	20R12	5-20	1 7/32"	2.75	2.53	2.30
41F192	149-2	35R12	6-35	1 7/32"	2.85	2.62	2.38
41F193	149-3	50R12	5.9-50	1 7/32"	2.95	2.71	2.47
41F195	149-5	100R12	7.1-102	1 13/32"	3.25	2.98	2.72
41F196	149-6	140R12	8.0-140	1 19/32"	3.50	3.22	2.93



TYPE "K" CAPACITORS

Features DC200 impregnated steatite end frames, notched stator terminals and extra rigid soldered plate construction. Square mounting studs tapped 4-40 on 21/32" centers. Plates are brass, nickel plated. Range is in mmf per section. Plate spacing is .015". Peak voltage rating 1,000 volts. Size: 15/16w.x1 7/32h. Av. shpg. 4 oz.

Stk. No.	Cat. No.	Type	MMFD	Lgth.	1-9	10-49	50-99
41F168	158-1	10K10	2.3-10	⅞"	1.20	1.10	1.00
41F169	158-2	25K10	2.7-26	1"	1.25	1.15	1.05
41F170	158-3	50K10	3.4-55	1 3/16"	1.35	1.24	1.16
41F171	158-4	75K10	4.0-78	1 3/8"	1.45	1.33	1.21
41F172	158-5	100K10	4.7-107	1 5/8"	1.60	1.47	1.34

TYPE "E" CAPACITORS

Aluminum plates .032" thick with rounded edges — stainless steel shafts — heavy phosphor bronze contact springs—center contact on duals—large ¼" tie rods. Panel or chassis mounting. Shaft dia. ¼". Shaft length: 5/8"; Size: 2 19/32x 2⅝". Av. shpg. wt. 1 lb.

SINGLE SECTION

Spacing .075" except * .045" and † .125"

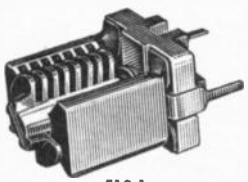
Stk. No.	Cat. No.	Type	MMFD	Pk.V	Lgth.	1-9	10-49
41F129	154-1	*250E20	12-244	2000	3 1/32"	6.90	6.10
41F130	154-2	*350E20	15-353	2000	3 5/32"	7.65	6.80
41F134	154-7	100E30	11-100	3000	3"	6.10	5.45
41F136	154-9	250E30	20-251	3000	5 3/32"	8.65	7.65
41F137	154-11	†35E45	9-38	4500	2 3/4"	5.55	4.90
41F138	154-12	†50E45	11-53	4500	3 13/32"	5.95	5.30
41F139	154-13	†70E45	13-74	4500	4 1/32"	6.45	5.75
41F140	154-14	†100E45	16-101	4500	4 31/32"	7.05	6.25
41F141	154-15	†150E45	20-145	4500	6 1/32"	8.30	7.35
41F142	154-16	†250E45	32-241	4500	10"	10.90	9.70

DUAL SECTION

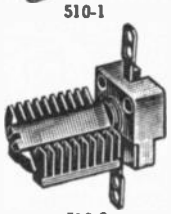
Spacing .125"

41F150	154-510	100ED45	15-100	4500	9 23/32"	12.20	10.85

TYPE "U" AIR VARIABLE CAPACITORS — SINGLE SECTION



510-1



510-2

Sub-miniature Type "U" air variable capacitors cut costs, improve performance, and save valuable space in compact electronic equipment. Units offer high "Q" (greater than 1500 at 1 MHz), high torque (2½ to 10 ounce inches), exceptionally low temperature coefficient (plus 45 ±15 PPM/°C), and absolute freedom from moisture entrapment found in trimmer capacitors of the enclosed or solid dielectric type. All metal parts silver-plated-ceramic is steatite, grade L-423 or better. Exceptionally uniform delta C and voltage characteristics. No special tools required for installation-slotted end accommodates large screwdriver for quick adjustment. Air gap .010 — Peak voltage breakdown on units listed — 650V. Lengths shown are ±1/32".

PRINTED CIRCUIT MOUNTING

Stk. No.	Cat. No.	Pf.	Plates	Lgth.	1-49	50-99	100-499
41F215	189-501-5	1.2- 4.2	4	27/64"	.56	.51	.45
41F216	189-502-5	1.3- 6.7	6	15/32"	.58	.52	.46
41F217	189-503-5	1.4- 9.2	8	33/64"	.56	.51	.45
41F218	189-504-5	1.5-11.6	10	9/16"	.58	.52	.46
41F219	189-505-5	1.7-14.1	12	39/64"	.60	.54	.48
41F220	189-506-5	1.8-16.7	14	43/64"	.62	.56	.49

TWO-HOLE MOUNTING

Stk. No.	Cat. No.	Pf.	Plates	Lgth.	1-49	50-99	100-499
41F221	189-501-4	1.2- 4.2	4	27/64"	.60	.54	.48
41F222	189-502-4	1.3- 6.7	6	15/32"	.62	.56	.49
41F223	189-503-4	1.4- 9.2	8	33/64"	.60	.54	.48
41F224	189-504-4	1.5-11.6	10	9/16"	.62	.56	.49
41F225	189-505-4	1.7-14.1	12	39/64"	.64	.58	.51
41F226	189-506-4	1.8-16.7	14	43/64"	.66	.60	.53

PRESS-IN FASTENER

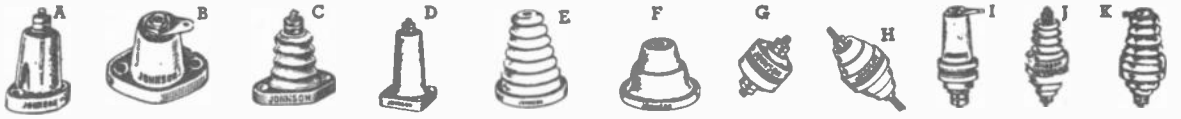
510-3

New acetal fastener for chassis mounting of two-hole Type "U" capacitors permits rapid, low-cost mounting. Supplied with two-hole mtg. type listed.

NEWARK—YOUR DEPENDABLE SOURCE FOR ALL YOUR ELECTRONIC NEEDS

Insulators and Circuit Boards

E. F. JOHNSON INSULATORS



STAND-OFF INSULATORS

135 Series. Highly glazed and smooth molded RF insulators. Nickel plated brass hardware. Types 65, 66 and 67 have drawn aluminum bases. All are threaded except * which have type 74 jack, and † which have type 76 jack. Hardware supplied. Average shpg. wt., 1 pound. Qty. prices on request.

Stock No.	Type	Fig.	Body Hgt.	Net
37F050	135-20	A	1 9/16"	.36
37F051	135-20-2*	B	1 9/16"	.40
37F052	135-22	A	1"	.22
37F053	135-22-2*	B	1"	.30
37F054	135-24	A	5/8"	.18
37F055	135-60	C	4 1/2"	1.20
37F056	135-62	C	2 3/4"	.68
37F057	135-65	C	1 3/8"	.35
37F058	135-65-2*	C	1 3/8"	.40
37F059	135-66	D	2 3/4"	.85
37F060	135-66-2†	D	2 3/4"	1.03
37F061	135-67	D	4 1/2"	1.20
37F062	135-67-2†	D	4 1/2"	1.45

LEAD-IN BUSHINGS

Ideal for use as power supply and high voltage leads. Have many applications in transmitter and antenna installations. All are steatite except * white glaze porcelain. 50, 51, 52, 55 have nickeled brass rod and nuts. Average shipping weight, 8 ounces.

Stock No.	Type	Fig.	Top Hgt.	Panel Hole	Net
37F071	135-50	H	1/2"	1/2"	.40
37F072	135-51	H	13/16"	7/8"	.62
37F073	135-52	H	1 1/8"	1 1/4"	.89
37F074	135-53*	F	1 3/4"	1 7/8"	.41
37F075	135-54*	E	4"	2 3/4"	1.30
37F076	135-55	G	1/4"	1/2"	.33

Threaded Brass Rods. For use with types 53 and 54 bushings above. Complete with 4 washers and 4 nuts with 1/4"-20 thread. Average shipping weight, 2 ounces.

Stock No.	Type	Description	1-49	50-99	100-499 Per 100
37F095	115-240	8" threaded rod	.62	.57	52.00
37F098	115-241	10" threaded rod	.74	.68	62.00
37F099	135-91	Flange for type 54	.95	.88	80.00

FEED THRU-PANEL INSULATORS

135 Series. Have high mechanical strength with long leakage paths. White glaze porcelain except † steatite. All are threaded, except * which have type 74 jacks. All hardware supplied. Shipping weight, 12 ounces. Quantity prices on request.

Stock No.	Type	Fig.	Top Hgt.	Panel Hole	Net
37F081	135-40†	I	1 1/4"	1/2"	.48
37F082	135-40-2†*	I	1 1/4"	1/2"	.62
37F083	135-42†	I	7/8"	7/16"	.44
37F084	135-42-2†*	I	7/8"	7/16"	.54
37F085	135-44†	I	5/8"	5/16"	.33
37F086	135-45	J	1 3/8"	1/2"	.62
37F087	135-45-2*	K	1 3/8"	1/2"	.76
37F088	135-46	J	2 3/4"	3/4"	1.40
37F090	135-47	J	4 1/2"	1"	2.75

STEATITE CONE INSULATORS

135 Series. Recommended for use at high frequencies. Low moisture absorption. Threads tapped directly into steatite. Complete with screws, brass washers and cushion washer. Average shpg. wt., 5 oz.

Stock No.	Type	Size	Thread	1-49	50-99	100-499 Per 100
37F063	135-500	5/8"	6-32	.23	.21	19.25
37F064	135-501	1"	8-32	.34	.31	28.60
37F065	135-502	1 1/2"	8-32	.54	.50	45.50
37F066	135-503	2"	10-32	.80	.74	67.30
37F067	135-504	3"	10-32	1.40	1.29	117.00

ANTENNA INSULATORS

All are wet-process porcelain, with white glazing and 800 lbs. breaking strength except * dry process, 400 lbs. breaking.

Stock No.	Type	Size	Wt.	1-49	50-99	100-499 Per 100
37F068	136-104*	4x5 3/8" sq.	4 oz.	.30	.28	25.50
37F069	136-107	7x1" dia.	10 oz.	1.35	1.19	113.00
37F070	136-112	12x1" dia.	1 1/4 lbs.	1.95	1.80	164.00

FEEDER SPREADERS

Unglazed porcelain bars, 3/16x1/2", treated with Silicone to resist moisture. With No. 14 ga. wire, 2" size will provide a characteristic line impedance of approximately 500 ohms, 4" approx. 575 ohms, and 6" approx. 625 ohms. With No. 12 ga. wire, 2" approx. 475 ohms, 4" approx. 550 ohms, and 6" approx. 600 ohms. Shipping weight, 3 ounces.

Stock No.	Type	Length	1-49	50-99	100-499 Per 100
37F077	136-122	2"	.18	.17	15.20
37F078	136-124	4"	.28	.26	
37F079	136-126	6"	.45	.42	

TRIAD UNIVERSAL CIRCUIT CARDS

Type 13510. Land pattern is compatible with standard .1 grid design. Hole size, .052 Base material is 1/16" paper base epoxy. Gold-plated finish. 421 holes per card. Electro-Solder plat or roll solder finish is available on special order, 4x4 1/2".

Type 13511. Similar to 13510 but with more than 300 mounting pads, more than 650 holes per card. Card size, 4x7".

Type 13500. Similar to 13510 but with 223 mounting pads, 444 holes per card. 22 fingers fits card to any standard plug-in with .156 spacing. Hole size .052. 4x4 1/2".

Type 13540. Two-sided card of 1/16", 3.00x3.187". TO-5 pads have .032" hole size. Interconnection pads have .040" hole size. Mates with the Winchester PC25D62D24-1, a 25 contact double-side readout connector.

Type 13541. Two-sided card of 1/16", 2.97x3.273". Connector strips and TO-5 pads have .032" hole size. Interconnection pads have .040" hole size. Mates with Winchester 8B36D, an 18-contact double-side readout connector.

Type 13542. Circuit board for in-line packages. Overall dimensions: 2.976" x 3.273". Bifurcated contacts on .156W centers.

Type 13543. Circuit board for dual in-line packages. Overall dimensions: 3.000" x 3.187". Molding material is flame resistant per MIL-M-14.

Stk. No.	Type	1-9	10-24	25-49	50-99
2F969	13510-1	6.60	5.95	5.35	4.95
2F970	13511	14.25	12.85	11.55	10.75
2F971	13500-1	6.60	5.95	5.35	4.95
2F976	13540	6.60	5.95	5.35	4.95
2F977	13541	6.60	5.95	5.35	4.95
2F985	13542	6.60	5.95	5.35	4.95
2F986	13543	6.60	5.95	5.35	4.95

PLATED CIRCUIT CARDS WITH WINCHESTER CONNECTORS

Stk. No.	Type	Connector	1-9	10-24	25-49	50-99
2F982	CO-13500-1	8B44S	9.30	8.10	7.15	6.55
2F980	CO-13540	PC25D62D24-1	13.60	12.25	11.00	10.25
2F981	CO-13541	8B36S	9.00	8.10	7.30	6.80
2F983	CO13542		9.00	8.10	7.30	6.80
2F984	CO13543		13.60	12.25	11.00	10.25

LEAD BENDING GAUGES

A set of 4 MK lead bending gauges; MK-1 (.375 to 1.50 ctrs.) for 1/4-watt resistors, MK-2 (.50 to 1.50 ctrs.) for 1/2-watt resistors, MK-3 (.75 to 2.50 ctrs.) for 1-watt resistors, MK-4 (.875 to 2.50 ctrs.) for 2-watt resistors. MK gauges may also be used on other similar components. With 40 numbered positions.

Stk. No.	Type	1-9	10-24	25-49	50-99
2F972	MK-1	3.58	3.22	2.90	2.70
2F973	MK-2	3.58	3.22	2.90	2.70
2F974	MK-3	4.42	3.98	3.58	3.33
2F975	MK-4	4.42	3.98	3.58	3.33

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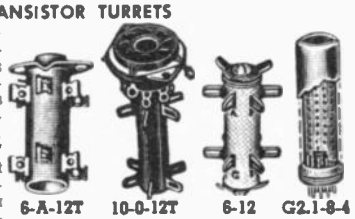
NEWARK Saves You Time and Money—

One Purchase Order—To One Source for All Electronic Components.

TRANSISTOR TURRETS

Sockets will fit either 3-in-line or "top-hat" transistor pins. Saddle has 2 ground lugs and tapped 4/40 mounting holes spaced ¾". Socket requires 13/32" dia. hole. Those without saddle** have 4/40 nut. Turret post is grade XXXP phenolic. Casting is mica filled phenolic. Terminals are brass with fused tin finish. Wt., 2 oz.



6-A-12T 10-0-12T 6-12 G2.1-8-4

Stk. No.	Type	Size	1-49	50-199	200-499	500-999
38F437	6-A-12T	⅞x1 3/32x1½"	1.17	1.14	.89	.78
38F438	8-A-12T	1 3/8x7/32x2"	1.18	1.07	.84	.79
38F439	7-A-12T-440**	⅞x1 5/32x1¾"	1.14	1.03	.80	.77

TUBE SOCKET-TURRETS

Phenolic cylinders bonded to sockets. Mica-filled. Components mount on form Coils can be wound on turret and iron cores inserted. Turrets are ½" dia. Octals mount in 1¼ hole; novals, ¾" hole, min., ⅝" hole. Wt., 3 oz. For octal sockets. Have 9 or 12 terminals in 2 rings 1⅜" apart.

2½" Turrets. 9 or 12 terminals in 2 rings 1⅜" apart.

Stk. No.	Type	Socket	1-49	50-199	200-499	500-999
38F600	10-O-9T	Octal	.69	.62	.48	.46
38F429	10-O-12T	Octal	.73	.66	.51	.49
38F435	10-MB-12T	7-pin	.89	.80	.62	.60
38F436	10-NB-12T	9-pin	.89	.80	.62	.60

2" Turrets. 9 or 12 terminals in 2 rings 1" apart.

38F601	8-O-9T	Octal	.65	.59	.46	.44
38F602	8-M-9T	7-pin miniature	.76	.68	.53	.51
38F603	8-N-9T	9-pin-noval	.76	.68	.53	.51
38F430	8-M-12T	7-pin	.79	.71	.55	.53
38F431	8-N-12T	9-pin	.79	.71	.55	.53

1½" Turrets. Have 6 terminals in 1 ring.

Stk. No.	Type	Socket	1-49	50-199	200-499	500-999
38F604	6-O-6T	Octal	.59	.53	.41	.40
38F605	6-M-6T	7-pin miniature	.69	.62	.48	.46
38F606	6-N-6T	9-pin noval	.69	.62	.48	.46

Terminal Turrets. Bolt to chassis.

38F432	6-12	tubular terminal	.55	.50	.39	.37
38F433	8-12	tubular terminal	.58	.53	.41	.37
38F434	10-12	tubular terminal	.62	.55	.43	.42

SOLDERLESS TUBE AND TRANSISTOR SOCKETS

Provide quick solderless connection of up to 6 leads to any one tube or transistor lead through SPRING-CLIP Terminals surrounding socket contacts. Tube unit mounts with screws; transistor unit has 4 leads on .2 circle and press-fits into .093 holes center-spaced .265.

570B

567-1C

Stk. No.	Type	Description	1-49	50-199	200-499	500-999
38F1000	567-1C	Octal Socket	1.50	1.35	1.05	1.01
38F1001	568-1C	9 Pin Miniature	1.65	1.49	1.16	1.11
38F1002	569-1C	9 Pin Miniature	1.35	1.22	.95	.90
38F1046	570B	4 Lead Transistor	1.20	1.08	.84	.80

TRANSISTOR PLUG-IN UNITS

Round-case plug-ins. Available in 3 diameters: 1.25" for octal-type plugs; ¾" for noval plugs and ⅝" for 7 pin miniature plug. —4 in Type No. indicates vertical terminal board inside case mounted to plug. Shpg. wt., 1 oz.

Stk. No.	Type	Dia. x L.	1-49	50-199	200-499	500-999
38F453	G2-10	1.25x2½"	1.16	1.05	.81	.77
38F454	G2.1-8	¾x2"	1.45	1.31	1.01	.97
38F456	G2.2-8	⅝x2"	1.40	1.25	.98	.94
38F476	G2-10-4	1.25x2½"	2.24	2.02	1.57	1.51
38F477	G2.1-8-4	¾x2"	2.09	1.88	1.46	1.40
38F478	G2.2-8-4	⅝x2"	2.07	1.86	1.45	1.39

CURRENT TEST ADAPTERS

Permit making current measurements in operating tube circuits without cutting leads from tube side of chassis. Special dual sided test probe. Also allows voltage and waveform checks when probe leads joined and connected to meter. Fits inside shield bases and tube clamps. Weight: 2 oz.; Kit-10 ozs.

Stk. No.	Type	1-19	20-99	100-199	200-999
38F1041	T-7-M-C 7-Pin Min.	2.53	2.28	2.12	1.63
38F1042	T-9-N-C 9-Pin Min.	2.70	2.43	2.27	1.80
38F1043	T-8-O-C Octal	3.19	2.87	2.68	2.13
38F1044	P-2 Probe—Required with above	.79	.79	.79	.79
38F1084	T9RC Novar	3.65	3.29	3.07	2.45
38F1085	T12C Compactron	3.85	3.47	3.23	2.58
38F1045	T789C Kit of 3 with probe in case	9.74	8.75	8.17	6.52

TUBE SOCKET TEST ADAPTER KIT

T-7-M T-8-O T-9-N PI TX-8-0

Tube Socket Test Adapters are inserted between the socket and the tube and provide test tab elements for making voltage, resistance, and wave form measurements from tube side of chassis. Connections are wired straight through from plug to socket. Beryllium copper socket contacts for long-life—molded tan phenolic bodies. Shpg. wt., 3 oz. *Shpg. wt., ½ lb.

Stock No.	Type	Socket	1-19	20-99	100-199	200-999
38F617	T-7-M	7 Pin Miniature	1.65	1.49	1.39	1.11
38F616	T-8-O	8 Pin Octal	1.75	1.58	1.47	1.17
38F615	T-9-N	9 Pin Octal	1.85	1.67	1.55	1.24
38F466	PI Probe	Probe for above	.52	.47	.44	.35
38F618	T-789	Set of above in case*	5.90	5.31	4.96	3.95

ADAPTERS AND EXTENDERS

Basic plug and socket structure used in standard test adapters. Circuits can readily be opened for current measurements, or cross-connected in many ways for experimental purposes. Models 1262, 1263, and 1264 are socket extenders. These shift wear from the socket itself to the extender. Sockets have highest grade beryllium copper contacts. Av. shipping wt., 2 oz.

ADAPTERS

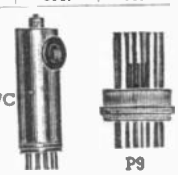
Stk. No.	Type	Socket	1-19	20-99	100-199	200-999
38F400	TX-8-0	8 pin octal	1.43	1.29	1.20	.96
38F401	TX-9N	9 pin noval	.94	.85	.78	.63
38F402	TX-7M	7 pin min.	.88	.79	.74	.59

EXTENDERS

38F404	1262	8 pin octal	1.75	1.58	1.47	1.17
38F405	1263	9 pin noval	1.75	1.58	1.47	1.17
38F406	1264	7 pin min.	1.75	1.58	1.47	1.17

TUBE BASE AND CABLE CONNECTOR PLUGS

Tube base plugs are designed to fit 7-pin min. and 9-pin noval sockets. Castings are mica-filled phenolic. Pins are of phosphor bronze and cadmium plated. Aluminum shell. Weight, 1 oz.



P7C P9

TUBE BASE

Stk. No.	Type	For Socket	1-49	50-199	200-499	500-999
38F407	P7	7-pin min.	.47	.42	.33	.31
38F408	P7A	7-pin min.	.47	.42	.33	.31
38F411	P9	9-pin noval	.52	.47	.36	.35
38F412	P9A	9-pin noval	.52	.47	.36	.35

CABLE CONNECTOR PLUGS

Cable connector plugs are for connections with miniature and noval tube sockets. Wt., 1 oz.

Stk. No.	Type	Outlet	Pins	1-19	20-99	100-199	200-999
38F409	P7C	Side	7	1.24	1.12	1.05	.84
38F410	P7D	End	7	1.74	1.56	1.46	1.17
38F413	P9C	Side	9	1.39	1.24	1.17	.92
38F414	P9D	End	9	1.84	1.65	1.54	1.23

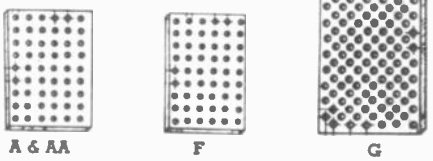
MODULAR PLUG-IN CASES

Consist of tube socket, tubular terminal post, octal plug and shield can. Can be made into a variety of plug-in circuits with short leads for instant replacement. Tube shield base with bayonet lock included. *7-pin miniature. †9-pin noval. §Has two 9-pin noval sockets. C10MM, C10NN, and C12NN are 2-tube types. Wt., 6 oz.

Stk. No.	Type	Size	1-49	50-199	200-499	500-999
38F440	B-8	1⅜x2x1⅜"	1.46	1.32	1.02	.98
38F441	B-10	1⅜x2½x1⅜"	1.30	1.17	.91	.87
38F609	*B-10-M	1⅜x2½x1⅜"	2.28	2.05	1.60	1.53
38F610	†B-10-N	1⅜x2½x1⅜"	2.46	2.22	1.73	1.65
38F443	B-10-T	1⅜x2½x1⅜"	1.90	1.72	1.33	1.28
38F445	C-10	2x2½x2½"	1.50	1.35	1.05	1.01
38F613	*C-10-M	2x2½x2"	2.43	2.19	1.71	1.63
38F611	†C-10-N	2x2½x2"	2.46	2.22	1.73	1.65
38F612	§C-10-NN	2x2½x2"	3.39	3.05	2.38	2.27
38F446	C-10-T	2x2½x2"	2.04	1.84	1.43	1.36
38F447	C-12	2x3x2"	1.44	1.30	1.01	.97
38F449	*C-12-M	2x3x2"	2.46	2.22	1.73	1.65
38F450	†C-12-N	2x3x2"	2.50	2.25	1.75	1.67
38F452	§C-12-NN	2x3x2"	3.42	3.08	2.40	2.29
38F448	C-12-T	2x3x2"	2.11	1.90	1.47	1.42

Vector Structures For Circuitry

VECTORBORD AND MICRO VECTORBORD



A & AA F G

Vectorbord and new Micro Vectorbord pre-punched terminal boards provide overall grids of holes especially useful in bread-boarding as well as production. New Micro Vectorbord patterns accept flat pack leads spaced multiples of .05" and is useful for cordwood packaging. Fig. A and AA have 0.093" holes on .265" centers. Fig. F; 0.062" holes on 0.2" centers. Fig. G; 0.062" holes on alternate intersections of 0.1" grid. Pattern H (not shown) has 0.062" holes on 0.1" centers. "B" has 0.062" holes on 3/16" centers. Pattern M has .025" holes on .05" centers. "P" has .042" holes on 0.1" centers. #4 self-tap screws can be engaged in the .093" holes or #2 in the .062" holes. Boards may be broken off along the hole lines as desired. Pattern G is especially useful for subminiature circuitry. The holes on alternate intersections of a standard 0.1" grid make it possible to mount most "top-hat" transistors base down by passing the leads directly through the holes. *2 oz. copper, 1 side. **2 oz. copper, 2 sides.

Epoxy Paper

Stock No.	Type	Pattern	Size	1-19	20-99	100-199	200-999
38F423	64AA18EP	AA	3/32x4 13/16x17"	2.73	2.46	2.29	1.83
38F425	32AA18EP	AA	3/32x4 13/16x8 1/2"	1.40	1.26	1.18	.94
38F426	85F24EP	F	1/16x4 13/16x17"	2.06	1.85	1.73	1.38
38F1047	85F42EP	F	1/16x8.5x17"	3.17	2.85	2.66	2.12
38F427	85G24EP	G	1/16x4 13/16x17"	2.06	1.85	1.73	1.38
38F459	85G42EP	G	1/16x17x8 1/2"	3.17	2.85	2.66	2.12
			XXXP Phenolic				
38F422	64AA18	AA	3/32x4 13/16x17"	1.60	1.44	1.34	1.07
38F424	32AA18	AA	3/32x4 13/16x8 1/2"	.84	.76	.71	.56
38F420	32AA9	AA	3/32x7 1/16x8 1/2"	.60	.54	.50	.40
38F421	64A18	A	1/16x4 13/16x17"	1.25	1.13	1.05	.84
38F460	64AA32	AA	3/32x17x8 1/2"	2.45	2.21	2.06	1.64
38F1048	45B30	B	1/16x5.69x8.51"	.84	.76	.71	.56
38F1049	90B30	B	1/16x5.69x16.97"	1.62	1.46	1.36	1.09
38F393	42F22C1*	F	8 1/2x4 1/2x1/16"	1.00	.90	.84	.67
38F392	42F22C2**	F	8 1/2x4 1/2x1/16"	1.32	1.19	1.11	.88
			Epoxy Glass				
38F463	64A18WE	A	1/16x4 13/16x17"	3.72	3.35	3.12	2.49
38F391	42G22WEC1*	G	8 1/2x4 1/2x1/16"	2.55	2.30	2.14	1.71
38F390	42G22WEC2**	G	8 1/2x4 1/2x1/16"	2.60	2.34	2.18	1.74
38F1050	42G24WE	G	1/16x4.8x8.5"	1.89	1.70	1.59	1.27
38F464	85G24WE	G	1/16x4 13/16x17"	3.81	3.43	3.20	2.55
38F1051	85G42WE	G	1/16x8.5x17"	5.42	4.88	4.55	3.63
38F1052	166M76/032	M	1/32x8.5x4"	7.25	6.53	6.09	4.86
38F1053	169P59/032	P	1/32x17x6"	4.82	4.34	4.05	3.23
38F1019	170H48WE/032	H	17x4 1/16x1/32"	3.57	3.21	3.00	2.39
38F1070	170H48WE	G	17x4 13/16x1/16"	4.07	3.66	3.42	2.73

● NEW MICROVECTORBORD TERMINALS

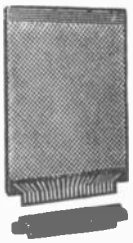
"Inbord" Terminal Pins press fit in Microvectorbord. Pins phosphor bronze nickel plated and gold flashed. Knurled body flange in middle of pin cuts into insulating board and lightly holds pin. Pins protrude from both sides of board and serve as terminal post, test point, or male connector pin. Retainer eyelets or soldering will hold pins permanently inboard.

Type	Descrip.	Dia.	Lgth.	Stk. No.	Bag of 50	Stk. No.	Bag of 1000
K27A	Pin	.025"	3/8"	38F1071	.83	38F1086	10.73
K24A	Pin	.040"	5/8"	38F1072	1.38	38F1087	19.80
T103	Retainer	.025"	.....	38F1073	1.25	38F1088	9.00
T102	Retainer	.040"	.....	38F1074	.75	38F1089	4.00

Installing Tools for above

Stk. No.	Type	For	Each
38F1075	P132	K27A Holder	1.75
38F1076	P134	K24A Holder	1.75
38F1077	P131	T103 Holder	1.75
38F1078	P133	T102 Holder	1.75

PLUGBORDS AND RECEPTACLES



Plug-In Test Circuits. Prototype of To-Be-Printed Circuit Cards. Modular Plug-In Cards — Standard Plugboards made from 1/16" thick Epoxy Paper material or Epoxy Glass (WE) with all-over grid of .062" holes on alternate .1" centers. Locate Vector T-28 Push-In Miniclip Terminals and eyelets where required and lay out components to exactly duplicate printed card, if desired. For making manually wired prototypes which can later be made as etched or welded circuits. For short production runs, hand-wired boards (soldered or welded) can be made faster than etched boards. For general use epoxy paper boards may be punched, sawed or drilled if desired; —1 GN series has nickel plated gold flashed contacts and equally spaced notches in connector mounting: Elco Varicon contacts come attached to board or etched connector supplied on 838A and 838. Different sizes, hole patterns and materials readily available to order.

PLUGBORDS

Stock No.	Type	Size	Contact	1-19	20-99	100-199	200-999
38F471	837	3 x4 1/2"	12 Varicon	2.24	2.02	1.88	1.50
38F472	812	4 1/2x6 1/2"	16 Varicon	2.87	2.58	2.41	1.92
38F482	837WE	3 x4 1/2"	12 Varicon	2.48	2.23	2.08	1.66
38F483	812WE	4 1/2x6 1/2"	16 Varicon	3.39	3.05	2.85	2.27
38F484	838A	4 1/2x6 1/2"	22 Etched	2.70	2.43	2.27	1.81
38F485	838	4 1/2x6 1/2"	43 Etched	3.74	3.37	3.14	2.51
38F395	848WE	4 1/2x6 1/2"	35 Varicon	5.86	5.27	4.92	3.93
38F1079	838AWE	4 1/2x6 1/2	22 etched	3.05	2.75	2.56	2.04
38F1080	838WE	4 1/2x6 1/2	43 etched	3.71	3.34	3.12	2.49
38F1081	838AWE-1GN	4 1/2x6 1/2	22 etched	4.52	4.07	3.80	3.03
38F1082	838WE-1GN	4 1/2x6 1/2	43 etched	5.59	5.03	4.70	3.75

Receptacles for Varicon plugboards above.

Stk. No.	Type	Size	Cnts.	1-99	100-249	250-999
38F397	R612-1	2.880	12	1.80	1.32	1.12
38F396	R616-1	2.680	16	2.24	1.74	1.49
38F394	R635	3.934	35	4.91	3.27	2.73

RECEPTACLES FOR ALL ETCHED PLUGBOARDS

Stk. No.	Type	Size	Cnts.	1-24	25-49
38F487	R644	3.584	44	2.62	2.10

PUSH-IN AND SOLDERLESS U-CLIP TERMINALS

T-32 Series

T-28 Series

T9.4

Use with .093" or .062" holes in 1/16" or 3/32" VECTORBORD and hold without staking (may be staked for maximum holding). Each terminal has serrated slots to grip inserted wires. Large slot holds most resistor and capacitor wires, small slot holds transistor leads. T9.6 also has a special slot for diodes. Both types have thru-shank construction. All fit .093" holes except .062".

Fused tin plated push-in type. T9.4 Brass, T9.6 Heat treated Beryllium Copper.

Type	Stk. No.	Bags of 100 1-19	20-99	100-199	200-999
T9.4	38F457	1.38	1.24	1.16	.92
T9.6	38F458	2.31	2.08	1.84	1.55
T28	38F465	1.55	1.40	1.30	1.04

Type	Stk. No.	Bags of 1000 1-4	5-24	25-49
T9.4	38F1059	9.79	8.22	7.83
T9.6	38F1060	15.08	13.55	12.65
T28	38F1061	11.00	9.90	9.24

SOLDERLESS T32 SERIES U-CLIP TERMINALS

Reliable solderless terminal for experimenting life, or burn-in testing. "U" shaped slot opens instantly at a push of a finger and holds up to six leads in a low resistance (less than .002 ohms) connection. Nickel-plated brass with steel nickel spring. May be re-used over and over. T-32-1 version fits .062" holes; all others .093" holes. T30N-2 is nickel plated. T30-2 is silver plated and has a flanged washer on top of spring lead (held in body slot).

Type	Stock No.	Bags of 10 NET	Stock No.	Bags of 100 NET	Stock No.	Bags of 1000 1-4	5-9
T30-2	38F468	.99	38F1062	7.40	38F1063	52.86	47.57
T30N-2	38F388	.95	38F1064	6.95	38F1065	48.50	43.65
						1-4	5-24
T32A	38F1066	1.35	38F1040	9.90	38F1039	75.00	67.50

Insertion Tool.

Stk. No.	Type	Use	1-19	20-99	100-199	200-999
38F469	P-91	For T28	.50	.45	.35	.34
38F470	P-92A	For T30	.50	.45	.35	.34
38F1027	P-122	For 9.4, 9.6	1.00	.....	.....	.....

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

Circuit and Grid Board Sets

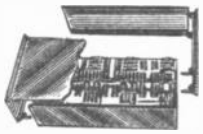
ETCHED CIRCUIT KIT

Model 27XA. Make etched circuits quickly and inexpensively. Kit contains: 1 XXXP Phenolic Vectorboard clad on 1 side with 2 oz. copper. Pre-punched grid of .062" holes on .2" centers. 1 XXXP Phenolic, unpunched 2 oz. copper clad 1 side. 1 Vectoresist, sheet 10"x15". 1 box with 2 polyethylene bags and etchant. 12 clips. 3 sheets grid layout paper. Complete etching and Vectoresist instructions. Shpg. wt., 24 oz.

Stk. No.	Type	1-49	50-199	200-499	500-999
38F1028	27XA	6.50	5.85	4.55	4.36

CHASSIS AND CASE SIDES

Extruded 2" w. Frame-Loc aluminum rails have .100 grooves spaced .0875 for 1/16 and 3/32 thick. Vectorboards or metal panels. Covers push together and lock with furnished screws, brackets. Sold in pairs for board dimension listed.



Stock No.	Type	Description	1-49	50-199	200-499	500-999
38F1029	SR2-3/093	Rails for 3" Lgth panel	1.02	.92	.72	.68
38F1030	SR2-4.8/093	Rails for 4.8" Lgth panel	1.14	1.03	.80	.77
38F1083	SR2-6.6/093	Rails for 6.6" Lgth panel	1.26	1.14	.89	.84
38F1032	SR2-8.5/093	Rails for 8½" Lgth panel	1.38	1.25	.97	.92
38F1033	SR2-10/093	Rails for 10" Lgth panel	1.50	1.36	1.06	1.01
38F1035	SR2-17/093	Rails for 17" Lgth panel	2.10	1.90	1.48	1.40
38F1036	PL-4.8/8.5	4.8x8½ Alum. panel	.76	.68	.53	.52
38F1037	PL-4.8/17	4.8x8½ Alum. panel	1.28	1.15	.90	.86
38F1038	PL-8.5/17	8.5x17 Alum. panel	1.96	1.76	1.37	1.31

"RUB-ON" VECTORESIST

Type R322. To prepare circuit boards for etching. Place sheet on copper-clad board or VECTORBORD, rub; resist pattern transfers. Eliminates resist tapes and pens. Sheet contains lines, contact pads, etc.
38F1015. NET. per sheet..... **2.00**

Type 2594 Etchant. 2 plastic bags of dry etchant and activator ready for addition of water.

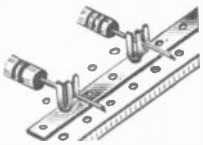
Stk. No.	Type	1-49	50-199	200-499	500-999
38F1016	2594	1.38	1.24	.97	.92

CHASSIS KITS

Provide quick set up of electronic circuitry with simple hand tools. Models 20X and 21X are intended mainly for mock-ups. Wiring deck made of XXXP Phenolic 3/32" thick. Holes .093" in dia. and spaced 0.265" on centers. 22X is supplied with transistor sockets. Push-in terminals. Shpg. wt., 24 oz. Kit 25X is a solderless circuit Set-up System for rapid testing on all electronic circuits. Contact resistance less than .002 ohms. Deck made of XXXP Phenolic 3/32" thick with holes .093" in dia. and spaced 0.265" on centers. Mounted on wooden frame. Shpg. wt., 2 lbs.

Stk. No.	Type	Size	1-49	50-199	200-499	500-999
38F417	20X	4¾x8½x3/32"	6.75	6.08	4.73	4.52
38F418	21X	4¾x17x3/32"	16.75	15.08	11.73	11.22
38F419	22X	8½x4¾x3/32"	11.50	10.35	8.05	7.71
38F475	25X	8½x17x3/32"	21.45	19.31	15.05	14.38

BUS STRIP



Punched brass tin plated strip punched with .093" holes spaced .265 or .062" holes spaced .2 to match VECTORBOARD A, C, F and G patterns. Fasten to board with Zip Push-In Terminals to speed wiring.

Stk. No.	Type	Description	Hole Size	1-49	50-199	200-499	500-999
38F1007	T-57	Pkg. X 10 pc. 8"L.x.020"W	.093"	1.21	1.02	.85	.81
38F1008	T-58	Pkg. X 10 pc. 16"L.x.020"W	.093"	.77	.69	.54	.52
38F1067	T104	Pkg. X 10 pc. 17"L.x.125"W	.062"	1.21	1.09	.85	.81

VECTORBORDS

Type 3070-1XXXP. Tan phenolic Vectorbord. 2 oz. copper clad. One side overall punched grid of .062" holes on .2" centers. 4½" x 6½" x 1/16".

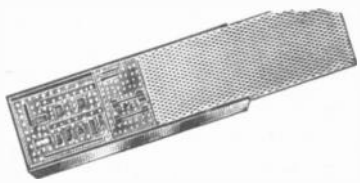
Stk. No.	Type	1-19	20-99	100-199	200-999
38F1017	3070-1XXXP	.84	.76	.71	.56

Type CU65/45-1XXXP. Phenolic 4½" x 6½" x 1/16". Copper clad. One side unpunched.

Stk No.	Type	1-19	20-99	100-199	200-999
38F1018	CU65/45-1XXXP	.60	.54	.50	.40

28X HIGH FREQUENCY CIRCUIT PACKING KIT

New inexpensive method for constructing and packaging circuits in the UHF and VHF ranges on up to where "plumbing" is generally used. Allows quick, easy circuit and component changes. 3 x 8.6 x 2" case provides RF tight, completely shielded enclosure with 2 slide-out shield sides for ready accessibility to the enclosed copper clad circuit board. Included in the 28X kit parts are 3 tetrode transistor sockets, 2 power transistor sockets, wrench socket holder, roll #24 copper vinyl covered wire and a roll tinned copper wire. Shpg. wt. 2 lbs.



Stk. No.	1-49	50-199	200-499	500-999
38F1014	27.50	24.75	19.25	18.43

TUBE BASE SHIELDS

TUBE BASE SHIELDS are intended to be mounted above the socket as a base for convenient bayonet type tube shields.

Stk. No.	Type	Description	1-499
38F607	S7	7 Pin Steel Cad. Plated	.07
38F608	S9	9 Pin Steel Cad. Plated	.06

POT AND SWITCH BRACKET

Mounts easily on the Vectorboards listed above.

Type B-20. Handy aluminum brackets for mounting pots and switches on breadboards. Two slots accommodate 3/8" or 1/2" diameter shaft bushing. Furnished with two 1/8" base mounting holes spaced .265" for easy mounting on any A or AA pattern Vectorboard.

38F1006. Bracket Pkg. (4) **NET** ..... **.48**

PATCHBOARDS

Panels of black phenolic with beryllium copper gold flased contacts spaced .265 Front and back have white alpha numeric legend Aluminum frame. May be stacked or ganged, brackets incl. Max. current 5 amps. Contact resist. less than .001Ω. Max. voltage: 1 KVAC, 1.5 KVDC.

Stock No.	Type	Description and Size	1-49	50-199	200-499	500-999
38F1054	PB210-2	20 cont., 2.98x .865	4.25	3.83	2.98	2.85
38F1055	PB510-2	50 cont., 2.98x1.66	6.45	5.81	4.52	4.32
38F1056	PB1010-2	100 cont., 2.98x2.98	10.85	9.77	7.60	7.27
38F1057	PB1020-2	200 cont., 5.63x2.98	21.60	19.44	15.05	14.47
38F1058	PB1520-2	300 cont., 5.63x4.31	32.35	29.12	22.65	21.67

BUNDLE OF 25 PATCH CORDS FOR ABOVE

Stock No.	Type	Size	Color	Per Bundle
38F479	K2.06	6"	Black	2.60
38F480	K2.09	9"	Yellow	2.68
38F481	K2.15	15"	Blue	3.08

PIGGY BACK PATCH CORDS FOR MULTIPLE CONNECTIONS

Stk. No.	Type	Size	Color	1-999	1000-4999
38F1024	K9.06	6"	Black	.93	.84
38F1025	K9.09	9"	Yellow		
38F1026	K9.15	15"	Blue		

NEWARK — Fast, Dependable Service

Kepro P. C. Kits & Materials

KEPRO PRINTED CIRCUIT KITS AND MATERIALS

Provide industrials with every means for establishing printed circuit facilities to answer the demands of bread-boarding, prototype productions and full quantity production. Kepro kits supply the materials, equipment and know-how to assure successful professional results from the initial stages of your program. Write for Quantity Prices.

STANDARD KIT

Type S-101A. An etching kit designed to custom fabricate your own circuit board. A liquid or tape resistant is manually applied to the XXXP Phenolic copper clad sheet in the desired pattern, then etched. A perforated copper clad panel is supplied with this kit to speed component mounting. Contents: 2 sheets 3x6x1/16" copper clad phenolic, unsensitized. 1 sheet 3x6x1/16" perforated copper clad phenolic, unsensitized. 1-Resist. Marking Pen. 1-Package assorted Tapes and Dots. 2-Bottles Etching Solution. 1-Plastic Etching Tray. 1-Cleaning Pad and instructions. Shpg. wt.. 2 lbs.

19F2000. NET **3.95**

Type S-101A-G. Identical to S-101A Kit except, base material is G-10 Glass Epoxy. Copper Clad.

19F2001. NET 5.25

PROFESSIONAL KIT

Type P-101A. An etching kit designed to custom fabricate your own circuit board utilizing a photo engraving process. A sensitized sheet of XXXP Phenolic copper clad is exposed through your prepared negative, then developed and etched. Contents: 2 sheets 3x6x1/16" photosensitized copper clad phenolic, 1 sheet 3x3x1/16" photosensitized copper clad phenolic. 3 sheets Mech. Neg. 1-Print Frame Glass. 2-Print Frame Clamps. 1-Bottle Developer. 2-Bottles Etching Solution. 1-Aluminum Developing Tray. 1-Plastic Etching Tray. 1-Cleaning Pad. With complete instructions. Shpg. wt., 3 lbs.

19F2002. NET **5.85**

Type P-101A-G. As above except base is G-10 Glass Epoxy. Copper Clad.

19F2003. NET 7.40

ETCHED CIRCUIT LAB

Type L-505A. A complete lab which contains all materials required for circuit board development. Uses high quality photo processing. Contains: 1-8½x12 Developing Tray. 1-8½x12 Etching Tray. 1-Safelight 1-Printing Frame. 1-Photo Flood Lamp. 1-KEPRO Photo Layout Kit (PL-2A). 1-40x10 Mech. Neg. 1-Etching Solution (1 Pint). 1-Developing Solution (1 Pint). Resist. marking pen. 1-3⅛x7⅛x1½" Plastic Tray and Lid. 1-Aluminum Tray. 1-Etching Solution (4 oz.) 1-Developing Solution (4 oz.). 1-Eyelet Assortment. 1-Cleaning Pad. 1-Set of Instructions. Shpg. wt., 19 lbs.

19F2004. NET **34.75**

Type L-505A-G. Identical to L505A, except, base material is G-10 Glass Epoxy, Copper Clad. Shipping weight 20 pounds.

19F2005. NET 42.95

PHOTO REVERSING KIT

Type FK-701. Simple two-step process prepares line negatives and positives from taped or inked artwork or reverses existing negatives or positives. No darkroom needed. Includes two pieces 10" x 24" reversing film, chemicals and instructions. Shpg. wt., 2 lbs.

19F2010. NET **7.20**

PHOTO LAYOUT KIT

Type PL-2A. For preparing camera-ready artwork without inking and lettering. Reduced layout time by use of pressure-sensitive tapes, dots, letters and numerals. Contents: 96-¼" Tape Dot Terminations. 108"-⅛" Tape Conductor Strips. 216"-1/16" Tape Conductor Strips. 1-translucent-type (letters and numerals, assorted sizes) sheet. 1-Acetate Sheet (8"x10"). 1-Mech. Neg. (8"x10"). 2-Sheets of Graph paper, 1/10" grid, 8x10". 1-Instruction sheet. Wt., 1 lb.

19F2006. NET **3.95**

MASTER PHOTO LAYOUT KIT

Type PL-200A. This package includes all necessary materials to make Master artwork on stable base drafting films. Utilizes the same time saving methods as the PL-2A. Contents: 2 pcs. 18"x24" Matte Surface Mylar. 2 pcs.—18"x24" Mech. Neg. mylar 1 pc 1/10" grid mylar sheet 18"x24" base. 4 pcs.—17"x21" Graph paper, 1/10" grid. 432-⅛" tape dot termination. 576-¼" tape dot termination. 252-½" dot terminations. 18 yds.-1/16" tape conductor strips. 21 yds.-⅛" tape conductor strips. 18 yds. ¼" tape conductor strips. 1 sheet—8½" x 11" translucent (letters and numerals, assorted sizes) sheet. 1 btl. — Opagquing fluid. 1-Brush. 1-Bow Compass (with knife cutters). 1-Center Dot Cutter. 1-Tweezers. 1-Cutting Knife Set. 1-Peeling Stylus. 1-Instruction and Data Sheet. Shpg. wt., 4 lbs.

19F2007. NET **38.70**

NAMEPLATE & PANEL KIT

Type NP-303A. Kit permits you to prepare name-plates by a simple photographic process. Plates are exposed to light source through artwork made from supplied materials. Panels art then dev., no fixing nec. Finished plates are aluminum and contrasting dk. blue. Contents: 2-8"x 10" Aluminum Sheet. 1-8"x10" Acetate Sheet. ¼-Sheet translucent-type, 1-8"x10" Print Glass. 1-1 oz. Bottle diveloper. 2-2x 2x¾" Appls. (sponges). 2-(8x10") pressure sensitive adhesive. Shpg. wt. 1 lb. 1 oz.

19F2008. NET **7.25**

ETCHED ANODIZED NAMEPLATE & PANEL KIT

Type NP-404. Produces etched nameplates and panels using anodized aluminum stock. Processed by exposing, developing, and etching plates. Finished plates are black anodized aluminum and natural color aluminum finish. Contents: 3-3x6" Aluminum Panels. 3-3x6" Acetate Sheets. ¼-Sheet translucent type. 1-Print Glass. 2-3" Clamps. 1-4 oz. Bottle Developer. 1-2 oz Package Etchant. 1-Dev. Tray. 1-Etch Tray. 3-(3x6") pressure sensitive adhesive. 1½ lbs.

19F2009. NET **6.55**

SILK SCREEN KIT

Type SC-601A. Professional materials and equipment for producing lacquer resistant film type photo stencils with print area up to 7"x9" and to use these stencils to screen-print 1000 or more impressions per day. No dark room needed. Kit includes screen printing frame with one stretched silk in place plus silk and emulsion for two additional patterns, mounting hinges, squeegee, black and white inks, film printing frame, safe-light, photo-flood lamp, trays and all necessary chemicals and solutions. Shpg. wt., 13 lbs.

19F2011. NET **35.00**

ETCHED CIRCUIT COPPER CLAD MATERIALS

A quality selection of laminated 1 oz. (.00135) copper clad materials, one or two sides, both in 1/16" XXXP paper base phenolic and 1/16" G-10 glass epoxy. All copper clad materials meet standard NEMA grade tolerances. Materials supplied unsensitized (unsen.) for screen processed parts and photosensitized (sen.) for photo processed boards. Photosensitized materials are ready for exposure with no other sensitizing required. Materials 1/32", 1/16", 3/32" and ⅛", 1 oz. or 2 oz. foil weight, 1 or 2 sides cut and photosensitized to specification quoted upon request. Materials are individually packed or in packages of 5.

XXXP PAPER BASE PHENOLIC
Individually Packaged

Stk. No.	Type	Description	Size	Wt. (oz.)	EACH
19F3200	P1-33	Unsen. 1 side	3x3	1¾	.40
19F2012	P1-36	Unsen. 1 side	3x6"	2⅛	.54
19F2013	P1-1212	Unsen. 1 side	12x12"	9¾	2.48
19F2014	P1-36PB	Unsen. 1 side	3x6"	2½	.62
19F2015	P2-1212	Unsen. 2 side	12x12"	10½	3.26
19F2016	S1-36	Sen. 1 side	3x6"	2⅛	.86
19F3201	S1-66	Sen. 1 side	6x6	3½	1.47
19F2017	S1-710	Sen. 1 side	7x10"	5¾	2.63
19F2018	S1-1212	Sen. 1 side	12x12"	9¾	5.08
19F2019	S2-36	Sen. 2 side	3x6"	2⅛	1.18
19F2020	S2-66	Sen. 2 side	6x6"	3½	2.11
19F2021	S2-1212	Sen. 2 side	12x12"	10	7.43

XXXP PAPER BASE PHENOLIC
5 Pieces Per Package

Stk. No.	Type	Description	Size	Wt.	1-4	5-10	11-15	16-20
19F3202	P1-365	Unsen. 1 side	3x6	11 oz.	2.00	1.80	1.70	1.60
19F3203	P1-12125	Unsen. 1 side	12x12	3 lb.	10.50	9.40	8.85	8.30
19F3204	P2-365	Unsen. 2 sides	3x6	11 oz.	2.55	2.30	2.20	2.05
19F3205	P2-12125	Unsen. 2 sides	12x12	3.3 lb.	14.20	12.30	11.55	9.85
19F3206	S1-365	Sen. 1 side	3x6	11 oz.	3.55	3.15	3.00	2.80
19F3207	S1-665	Sen. 1 side	6x6	1.4 lb.	6.30	5.65	5.30	4.95
19F3208	SI-7105	Sen. 1 side	7x10	1.9 lb	11.45	10.25	9.65	9.05
19F3209	S1-12125	Sen. 1 side	12x12	3 lb.	22.60	17.25	15.95	.....
19F3210	S2-365	Sen. 2 sides	3x6	11 oz.	5.05	4.55	4.25	4.00
19F3211	S2-665	Sen. 2 sides	6x6	1 lb.	9.30	8.35	7.85	7.35
19F3212	S2-12125	Sen. 2 sides	12x12	3.3 lb.	31.65	24.65	23.50	.....

KEPRO

● *NEW* KEPRO MODEL S-5 HAND EYELETER

S-5 Hand eyeleter is a helical screw hand operated press which features a simple hand-operated lever at the top of the machine to set the eyelet. Sturdily constructed, an adjustable and removable set cap holder is included for simple alignment of setting tools. Reach of 5 3/16". Adjustable stop limits the travel of the setting tool to obtain setting desired . . . 10 3/8 inches long and only 3 5/16 inches wide. Mounting to a work bench is achieved by bolting through three holes in the base of the unit. Provides excellent mobility. Includes S-5 eyeleter, with 4 pairs of setting tools and electronic eyelet selection kit of more than 15,000 eyelets in 21 standard sizes. Shipping weight: 14 lbs.

35F1500. Model S-5E. **NET** **98.00**

● *NEW* KEPRO ELECTRONIC EYELETS

Eyelets provide miniaturization and reliability in both single and double sided circuit boards. Eyelets are offered in brass ("B" Suffix in type No.) and oxygen-free high conductive copper ("C" Suffix in tyt No.). Both materials meet applicable Mil Standards. Eyelet heads supplied with either Flat or Funnel Flange for single or double clad circuit boards.

*Indicates eyelets designed for single clad board.

†Indicates eyelets used for double clad boards.

Flat flange eyelets may be used on either single or double clad materials. All eyelets listed are designed for 1/16" board thickness. 90

Type	Head Type	Pkg. of 1000 Stock No.	Each	Pkg. of 5000 Stock No.	Each	Pkg. of 10000 Stock No.	Each
S-6125-B	*Flat	35F1502	3.08	35F1503	11.65	35F1504	21.00
S-6125-C	*Flat	35F1505	3.08	35F1506	11.65	35F1507	21.00
S-6025-B	*Funnel	35F1508	3.08	35F1509	11.65	35F1510	21.00
S-6025-C	*Funnel	35F1511	3.08	35F1512	11.65	35F1513	21.00
S-6064-B	†Funnel	35F1514	3.08	35F1515	11.65	35F1516	21.00
S-6064-C	†Funnel	35F1517	3.08	35F1518	11.65	35F1519	21.00

Miniature Electronic eyelet Barrel OD .059, Barrel ID .045, Flange size .095

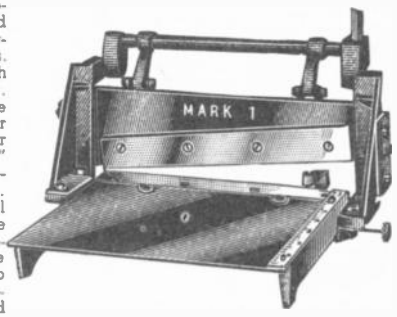
Type	Head Type	Pkg. of 1000 Stock No.	Each	Pkg. of 5000 Stock No.	Each	Pkg. of 10000 Stock No.	Each
S-6145-B	*Flat	35F1520	3.08	35F1521	11.65	35F1522	21.00
S-6145-C	*Flat	35F1523	3.08	35F1524	11.65	35F1525	21.00
S-6045-B	*Funnel	35F1526	3.08	35F1527	11.65	35F1528	21.00
S-6045-C	*Funnel	35F1529	3.08	35F1530	11.65	35F1531	21.00
S-6084-B	†Funnel	35F1532	3.08	35F1533	11.65	35F1534	21.00
S-6084-C	†Funnel	35F1535	3.08	35F1536	11.65	35F1537	21.00

POLYESTER LAMINATE CIRCUIT BOARDS

Polyester laminate boards, one-ounce copper clad on one or both sides. Overall thickness is 1/16 inch. Electrical characteristics of this material exceed G-10 glass epoxy boards; mechanical characteristics approach those of G-10 laminates. Material is available unsensitized for silk-screen processing, etc., or photosensitized for photoprocessing. Sensitized materials are ready for exposure; no other processing is required. One board per package.

Stk. No.	Type	Description	Size	Wt.. oz.	EACH
19F3226	P1-36M	Unsen. 1 side	3x6"	3 1/8	.44
19F3227	P1-1212M	Unsen. 1 side	12x12"	10 3/4	2.73
19F3228	P2-36M	Unsen. 2 sides	3x6"	3 1/8	.73
19F3229	P2-1212M	Unsen. 2 sides	12x12"	11 1/2	3.59
19F3230	S1-36M	Sen. 1 side	3x6"	3 1/8	.95
19F3231	S1-66M	Sen. 1 side	6x6"	4 1/2	1.62
19F3232	S1-1212M	Sen. 1 side	12x12"	10 3/4	5.59
19F3233	S2-36M	Sen. 2 sides	3x6"	3 1/8	1.30
19F3234	S2-1212M	Sen. 2 sides	12x12"	11 1/2	8.17

● *NEW* KEPRO MARK 1 12" SHEAR



Used in shearing and trimming copper clad and unclad plastic laminate circuit board materials. Easily cuts through G-10 glass epoxy, XXXP paper base phenolic, FR3 paper epoxy and polyester laminates up to 3/32" thick. Also cuts metals up to 1/16" thick. Shear will cut a full 12" width. Blade clearance adjustable and shear blade may be reversed to provide a new cutting edge. Equipped with a fixed side squaring gauge, and an adjustable length gauge up to 5 1/4" long. Shipping weight: 18 lbs.

35F1501. Model MIS-12. **NET** **94.00**

COPPER CLAD GLASS EPOXY BOARDS

G-10 glass epoxy circuit boards, 1 oz. copper clad. 1/16" thick. Meet standard NEMA grade tolerances. Supplied unsensitized (Unsen.) for screen processed parts, or photosensitized (Sen.) for photo processed boards. Photosensitized materials are ready for exposure with no other sensitizing required.

G-10 GLASS EPOXY—INDIVIDUALLY PACKAGED

Stk. No.	Type	Description	Size	Wt. (oz.)	EACH
19F2022	P1-36G	Unsen. 1 side	3x6"	3 1/8	1.08
19F2023	P1-1212G	Unsen. 1 side	12x12"	10 3/4	6.74
19F3213	P2-36G	Unsen. 2 sides	3x6"	3 1/8	1.14
19F2024	P2-1212G	Unsen. 2 sides	12x12"	11 1/2	7.14
19F2025	S1-36G	Sen. 1 side	3x6"	3 1/8	1.52
19F3214	S1-66G	Sen. 1 side	6x6"	4 1/2	2.78
19F2026	S1-710G	Sen. 1 side	7x10"	6 3/4	5.18
19F2027	S1-1212G	Sen. 1 side	12x12"	10 3/4	10.24
19F2028	S2-36G	Sen. 2 sides	3x6"	3 1/8	1.84
19F3215	S2-66G	Sen. 2 sides	6x6"	4 1/2	3.48
19F2029	S2-1212G	Sen. 2 sides	12x12"	11 1/2	12.84

G-10 GLASS EPOXY—PACKAGES OF FIVE

Stk. No.	Type	Description	Inches	1-4	5-10	11-15	16-20
19F3216	P1-365G	Unsen. 1 side	3x6	4.60	4.10	3.85	3.60
19F3217	P1-12125G	Unsen. 1 side	12x12	29.90	22.40	21.25	.....
19F3218	P2-365G	Unsen. 2 sides	3x6	4.85	4.35	4.10	3.85
19F3219	P2-12125G	Unsen. 2 sides	12x12	31.60	23.70	22.50	.....
19F3220	S1-365G	Sen. 1 side	3x6	6.65	5.95	5.60	5.25
19F3221	S1-665G	Sen. 1 side	6x6	12.40	11.15	10.25	9.55
19F3222	S1-12125G	Sen. 1 side	12x12	40.80	31.15	30.00	.....
19F3223	S2-365G	Sen. 2 sides	3x6	8.15	7.35	6.90	6.45
19F3224	S2-665G	Sen. 2 sides	6x6	15.75	13.45	11.60	10.75
19F3225	S2-12125G	Sen. 2 sides	12x12	56.55	50.90	.....	.....

ETCHED CIRCUIT PROCESSING CHEMICALS

Stk. No.	Type	Description	Weight	EACH
19F2030	R-2	2 oz. Paint Etch Resist	6 oz.	.60
19F2031	T-2	2 oz. Paint Resist Thinner	6 oz.	.50
19F2032	D-1PT	1 pt. Developing Solution	2 3/4 lb.	1.15
19F2033	D-1G	1 gal. Developing Solution	16 lb.	5.00
19F2034	E-1PT	1 pt. Etching Solution	2 1/2 lb.	.85
19F2035	E-1G	1 gal. Etching Solution	16 lb.	3.00

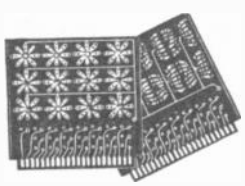
.004" COPPER CLAD MYLAR BOARDS

Mylar, copper clad, for flexible circuitry. Overall thickness .004" with one side one-ounce copper clad. Available with copper clad side unsensitized or photosensitized. Photosensitized material is ready for exposure; no other sensitizing required.

Stk. No.	Type	Description	Size	Lbs.	EACH
19F3235	P1-621F	Unsen. 1 side	6x21"	1	2.52
19F3236	S1-621F	Photosen. 1 side	6x21"	1	4.95

ERIE

INTEGRATED CIRCUIT CARDS



Unit constructed of G-10 glass epoxy. 1/16" thick and standard board is 4" x4". Gold plated contacts with solder plated circuitry. Utilizes the standard twenty-two position double readout edge tabs which can be used in multiples. Basic applications are considered for counters, shift registers, adders, subtractors, and other digital and linear systems.

Stk. No.	Type	Description	I.C. Modules	1-49	50-99
19F3441	4206-201	14 pin dual in-line (power on)	8	10.00	9.00
19F3442	4206-202	8 pin T. O. 5 (power on)	12	10.00	9.00
19F3443	4206-205	14 pin dual in-line (power off)	8	10.00	9.00
19F3444	4206-206	8 pin T. O. 5 (power off)	12	10.00	9.00
19F3445	4206-207	10 pin T. O. 5 (power off)	12	10.00	9.00

Terminal Boards & Accessories

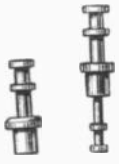
KEYSTONE

● NEW PROTOTYPE KIT

This complete assortment of basic materials and staking tools provides the buyer with an essential "Do It Yourself" building block for experimental or production runs. Excellent for construction of 1/16" and 3/32" thick terminal boards. Money-saving kit consists of 1/16" and 3/32" bakelite, blank and pre-punched boards. Assortment of hardware such as eyelets, terminals, brackets, bushings and push-in terminals. A complete terminal staking tool kit and instructions are also included in this prototype kit.

35F1657. Type 1723 ..... **17.00**

● NEW STANDARDIZED TURRET TERMINAL BOARDS



Terminals are securely staked and hot tinned for easy soldering. QQ-B626, comp. 22, 1/4 hard. Hot dip solder finish. Mil-F-14072 Type 221. Materials: PBE indicates Paper base electrical, Mil-P-3115C, Temp. 250°F max. Type XXXP, GEE indicates Glass Epoxy, Mil-P-18177, 300°F max. Type G-10. All are 3/32" thick and double row of terminals (50 total) on 3/8" centers except (*) which has a single row with 25 terminals. All are 13 1/8" long.

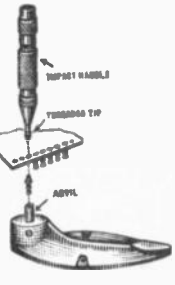
Double Turret—One Side

Stk. No.	Type	Width	Spacing Btw Row	Mat'l.	1-19	20-99	100-up
35F1640	15031*	1/2"		PBE	.98	.86	.75
35F1641	15036	1 1/2"	1 3/16"	PBE	1.95	1.85	1.75
35F1642	15236	2"	1 3/16"	GEE	2.65	2.50	2.40
35F1643	15033	2"	1 1/2"	PBE	2.05	1.95	1.80
35F1644	15233	2 1/2"	1 1/2"	GEE	3.10	2.90	2.80
35F1645	15034	2 1/2"	2"	PBE	2.20	1.98	1.85
35F1646	15234	2 1/2"	2"	GEE	3.30	3.15	3.00
35F1647	15035	3"	2 1/2"	PBE	2.25	2.10	1.95

Feed Thru Double Turret—Both Sides

35F1648	15046	1 1/2"	1 3/16"	PBE	3.90	3.60	3.50
35F1649	15043	2"	1 1/2"	PBE	4.00	3.80	3.70
35F1650	15044	2 1/2"	2"	PBE	4.15	3.95	3.80
35F1651	15045	3"	2 1/2"	PBE	4.30	4.10	3.95

● NEW "IMPACT" STAKING KIT



Produces a light or heavy blow which is adjustable by turning of the spring tension cap. Uniform striking action attained by pressing down handle. Interchangeable tools supplied permit assembly of terminal boards, printed circuits and small components. Simple construction, automatic single hand operation. Kit includes: 1 No. 1301 Anvil Tool Holder, 1 impact handle (No. 1302), and the following tools: 1310, 1311, 1312, 1313, 1315, 1316, 1321, 1716, 1717, 1722, 1726. Instructions are also included. Stakes all dia. to 3/32" max.

35F1658. Type 1707 ..... **23.50**

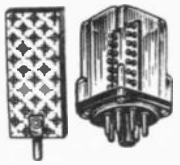
● NEW PLUG IN HOUSINGS

Durable housings are ideally suited for packaging relays, logic packages, networks and miniature circuitry. Headers are molded of G.P. black phenolic. Pins are brass, nickel plated. Guide hole tapped 8-32 for terminal board mntg. stud. Materials: Polystyrene: use up to 170°F conditions. Butyrate: High impact strength, use at 210°F Nylon at 300°F. Complete with Octal Header and Screws.

Stk. No.	Type	Size	Mat'l	Color	1-19	20-99	100-up
35F1667	660	Mini	Butyrate	Clear	.59	.49	.47
35F1668	661	Mini	Nylon	White	.64	.54	.52
35F1669	662	Mini	Polyst.	Clear	.55	.45	.43
35F1670	641	Mini	Polyst.	Opaq. Bl.	.55	.50	.43
35F1671	663	Small	Butyrate	Clear	.59	.49	.47
35F1672	664	Small	Nylon	White	.64	.54	.52
35F1673	665	Small	Polyst.	Clear	.55	.45	.43
35F1674	643	Small	Polyst.	Opaq. Bl.	.55	.50	.43
35F1675	650	Large	Butyrate	Clear	1.10	.95	.90
35F1676	668	Large	Polyst.	Clear	.74	.70	.65
35F1677	677	Large	Polyst.	Opaq. Bl.	.74	.70	.65
35F1678	639	X-L'ge	Polyst.	Clear	1.09	.95	.85
35F1679	669	Small	Steel	El. Tin Pl.	.64	.54	.52

● NEW TERMINAL BOARDS

(For Use With Above Housing)



Terminal boards are made of glass epoxy material. Spacing of holes is .100 and .200 alternates. An 8-32 threaded stud is firmly eyeletted to the board and is easily assembled into the tapped hole of the headers. Board thickness is 1/16". Diameter holes are .062. GEE MIL-P-18177.

Stk. No.	Type	Size—Board with Stud.	For Covers	1-19	20-99	100-up
35F1652	696	1x1 5/16"	Mini	.22	.17	.14
35F1653	697	1 1/8x1 3/4"	Small	.22	.17	.14
35F1654	698	1 1/2x2 3/4"	Large	.25	.20	.17
35F1655	699	1 1/8x1 1/16"	Metal	.22	.17	.14
35F1656	638	1 5/16x2 3/8"	X-L'ge	.26	.24	.20

● NEW ALL PURPOSE HAND PUNCH

Equipped with adjustable gauge, this hand punch may be used as a nibbler. Also shears eyelets, punches holes for sheet material or tubing. 1 1/4" throat depth. Penetrates 1/16" thick untempered metal 3/32" phenolic, 1/4" masonite. Interchangeable die sets from 1/16" dia. in increments of 1/32" with largest die set at 1/4" dia. Punches tubing to 3/4".

35F1680. Type 1330 **NET** **10.50**

INDIVIDUAL DIE SETS—Consists of Top and Bottom Tool

Stk. No.	Type	DIE SET For Hole	1-19
35F1659	1331	1/16	1.85
35F1660	1332	.072	
35F1661	1333	3/32	
35F1662	1334	1/8	
35F1663	1335	5/32	
35F1664	1336	3/16	
35F1665	1337	7/32	
35F1666	1338	1/4	

AMP

Terminal Crimping Tool. Also cuts and strips wire, shears bolts. Has B & S wire gauge. May be used with terminals listed above. Length, 7 3/8"; wt., 1 lb.

30F999. Type 49835. **NET** **4.95**

VACO TERMINAL KIT

Type 2195. With crimping tool & terminals. Tool cuts and strips wire and crimps terminal on stripped portion of wire. One compact unit needed for making clean, fast, trouble-free electrical connections. The kit consists of 11 bin plastic box with crimping tool and over 182 terminals in 10 sizes. Case 8 3/4x6x1 3/4". Wt., 2 lbs.

30F900. NET **8.72**

EXTRA TERMINALS

Stock No.	Mfr's. Type	Fig.	Wire Size	Stud Size	Pkg. Quan.
30F901	11205	A	22-18	5-6	36
30F902	11206	A	22-18	5-6	36
30F903	11210	A	22-18	10	36
30F904	11214	A	22-18	12-1/4	28
30F905	11238	A	22-18	3/8	28
30F906	11305	A	16-14	5-6	36
30F907	11306	A	16-14	5-6	36
30F908	11310	A	16-14	10	36
30F910	11314	A	16-14	12-1/4	28
30F911	11338	A	16-14	3/8	28
30F912	11410	A	12-10	10	28
30F913	11414	A	12-10	12-1/4	21
30F914	11438	A	12-10	3/8	21
30F909	14206	B	22-18	4-6	40
30F915	13306	B	16-14	4-6	36
30F916	13310	B	16-14	10	36
30F917	13410	B	12-10	10	28
30F918	16210	C	22-18	8-10	36
30F919	16310	C	16-14	8-10	36
30F920	16410	C	12-10	8-10	28
30F921	17202	D	22-18	...	36
30F922	17302	D	16-14	...	36
30F923	17402	D	12-10	...	28
30F926	19301	E	16-14	Std.	46
30F927	19303	E	16-14	Large	44
30F924	19302	F	-	Std.	18
30F925	19304	F	-	Large	15

NET per Pkg. ..... **.98**

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

● NEW NICKEL PLATED STEEL BATTERY HOLDERS

STANDARDIZED ALL STEEL BATTERY HOLDERS

Holders secure batteries under spring tension at a constant pressure assuring low resistance contact. Ideal for Nickel-Cadmium Alkaline, mercury, and carbon zinc cells. Made of SAE 1065 Carbon Steel to MIL Spec. 17919, heat treated to spring temper and nickel plated .0002 thick. Stainless steel eyelet, moisture proof vulcoid washers, and a coated copper solder lug compose the contact assembly. 2 mounting holes**. Side by side* clips mounted on phenolic 1/16" thick MIL Spec 3115B. End to end† insulating tubes furnished. **All batteries listed within boxes are in the same size group.**

PENCELL HOLDERS—ALL CONTACTS INSULATED

Stock No.	Type	Cells	Burgess	Eveready	1-19	20-99	100 up
35F1550	2139	1	Z, HG9	E9, E12	.30	.26	.24
35F1551	2140*	2**	CD6, 9R	E91, E133	.45	.43	.36
35F1552	2171*	3**	HG12R	E502, N46	.70	.65	.55
35F1553	2182*	4**	H133	515, 915	.80	.75	.65
35F1554	2189†	2	HG502R	1015	.40	.38	.34
35F1555	2191†	3	920	BA58	.45	.40	.38
35F1556	2194†	4	930	.....	.55	.51	.47

"C" CELL HOLDERS

35F1557	2173	1	1	E93, 226	.35	.33	.29
35F1558	2174*	2**	P6	E233	.60	.59	.54
35F1559	2187*	3**	120	635	.80	.75	.70
35F1560	2188*	4**	130	935	1.05	.95	.85
35F1561	2185†	2	H233	1035	.50	.49	.44
35F1562	2195†	3	302599	BA42	.55	.51	.47
35F1563	2198†	4	.....	.....	.60	.57	.53

"D" CELL HOLDERS

35F1564	2175	1		BA30	.35	.33	.29
35F1565	2176*	2**	2	E42, N56	.60	.59	.53
35F1566	2190*	3**	2R	E95	.85	.80	.75
35F1567	2192*	4**	CD7	D99	1.05	.95	.85
35F1568	2186†	2	210	A100	.50	.49	.44
35F1569	2199†	3	230	950	.60	.56	.51
35F1570	2162†	4		1050	.65	.62	.55

SPACE SAVER BATTERY CLIPS

Corrosion resistant nickel plated clips with stainless steel contacts. Available with insulated contact sort dimple non-insulated. Clips Carbon Steel, SAE 1065 per mil-S-17919 #4. Contact eyelets stainless steel.

Stock No.	Type	A Dia. Min.-Max.	Steel Thick.	For Cells	1-19	20-99	100-240
35F1572	86	.875 to 1.125	.020	C	.09	.08	.075
35F1573	87	.875 to 1.125	.020	C	.12	.11	.10
35F1574	88	1.187 to 1.350	.020	D	.13	.12	.105
35F1575	89	1.187 to 1.350	.020	D	.10	.09	.08
35F1576	99	.531 to .650	.015	AA	.05	.04	.036
35F1577	100	.531 to .650	.015	AA	.08	.07	.06

BATTERY AND COMPONENT HOLDERS

Clips for secure mounting of round or square battery cells or electric components. Aluminum clips # per QQ-A-362. Steel‡ like above.

35F1578	79	.650 to 1.280	.015 †	2u6	.07	.06	.05
35F1579	91	.531 to .656	.020 #	AA	.07	.05	.04
35F1571	93	.875 to 1.125	.025 #	C	.07	.06	.05
35F1594	94	1.187 to 1.375	.032 #	D	.08	.07	.06

BATTERY RETAINER CLIPS

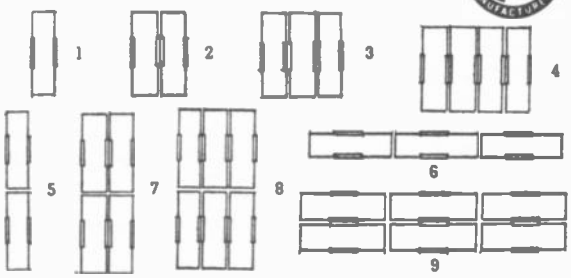
Prevent battery loosening in battery holder. Slips into ears of the clip. Made of hi-carbon steel, spring and nickel plated. M means mercury cells, P pen.

Stock No.	Type	For cells	1-19	20-99	100-up/C
35F1580	61	M or Pencells	.05	.04	3.75
35F1581	62	"C" to 1 1/32" dia.	.05	.04	3.90
35F1582	63	"D" to 1 11/32" dia.	.06	.05	4.05
35F1583	66	M with dia. of .650"	.05	.04	3.75

TYPE 58 POLARITY INDICATING LABELS

Pressure sensitive adhesive back clings to surfaces without gluing or wetting.

35F1584. 100/pack — 100-900 ..... .90/pack
35F1584A. 1000/pack ..... 1M-4M — 5.50 ..... 5M-up — 5.00



ALUMINUM BATTERY HOLDERS

Features excellent electrical contact, low leakage current and snapfit clips. Brass eyelets are nickel plated. Copper lugs are cadmium plated. Fibre insulators moisture proofed. Frame and clip made of 2024-ST4 Aluminum. Custom built holders provided to the customer upon special order. Buyer must call Keystone engineering service directly. All batteries listed within boxes are in the same size group.

MINIATURE CELL HOLDERS

Stock No.	Type	Cells	Fig.	Burgess	Eveready	1-19	20-99	100-up
35F1585	137	1	1			.23	.21	.18
35F1586	138	2	2			.38	.34	.30
35F1587	169	3	3	7	912	.49	.44	.36
35F1588	170	4	4			.64	.57	.51

PENCELL HOLDERS

35F1589	139	1	1	CD6	E9, E12	.23	.21	.18
35F1590	140	2	2	9R, Z	E91	.38	.34	.30
35F1591	171	3	3	HG9	E133, 333	.49	.44	.36
35F1592	182	4	4	HG12R	E502	.64	.57	.51
35F1593	189	2	5	H133	515	.45	.36	.33
35F1595	192	4	7	HG502R	915, 1015	.64	.54	.51
35F1596	193	6	8	920, 930	N46	.93	.81	.75

"C" CELL HOLDERS

35F1597	173	1	1	1	226	.30	.26	.24
35F1598	174	2	2	P6	E233	.38	.34	.30
35F1599	187	3	3	120	635	.45	.36	.33
35F1600	185	2	5	130	935	.45	.36	.33
35F1601	195	3	6	H233	1035	.49	.44	.39
35F1602	196	4	7	302599	E93	.64	.54	.51
35F1603	197	6	8			.93	.81	.75

"D" CELL HOLDERS

35F1604	175	1	1		E42	.30	.26	.24
35F1605	176	2	2	2	N56	.38	.34	.30
35F1606	190	3	3	2R	E95	.49	.44	.39
35F1607	186	2	5	CD7	D99	.46	.37	.34
35F1609	200	4	7	210	A100	.65	.55	.52
35F1610	201	6	8	230	950	.95	.85	.78
35F1611	205	6	9		1050	.95	.85	.78

1 1/2 VOLT CELL HOLDERS

35F1612	154	1	1		E340	.21	.20	.16
35F1613	155	2	2	N	904	.35	.32	.30

4 1/2 VOLT CELL HOLDERS

35F1617	139	1	1		333	.23	.21	.18

9 VOLT CELL HOLDERS

35F1618	139A	1	1		206	.26	.24	.21
35F1619	203P	1		2U6	216	.44	.36	.30

15 VOLT CELL HOLDERS

35F1622	161	1	1	U10	411	.30	.26	.24
35F1623	166	1	1			.30	.26	.24
35F1624	167	2	2			.38	.34	.30
35F1625	225	1	1	Y10	504	.21	.20	.18
35F1626	226	2	2			.35	.32	.30

22 1/2 VOLT CELL HOLDERS

35E1628	168	1	1		420	.30	.26	.24
35F1629	177	1	1	U15	412	.30	.26	.24
35F1630	178	2	2			.38	.34	.30
35F1631	139A	1	1	Y15	505	.26	.24	.21

30 VOLT CELL HOLDERS

35F1637	183	1	1	U20	413	.30	.26	.24
35F1638	184	2	2			.38	.34	.30

ECONOMY BATTERY HOLDERS

Stk. No.	Type	For these batteries	1-19	20-90	100-240
35F1635	212	AA, E9, E12, 505, 915	.16	.14	.13
35F1636	213	"C", 935	.18	.16	.14
35F1639	214	"D", 950	.20	.17	.15

SPRING TEMPER STEEL AND NICKEL PLATED CLIPS

Stock No.	Type	Mtg. Hole	For Cells	1-9	20-99	100-up
35F1627	206	.128	AA	.04	.03	2.10/C
35F1632	207	.128	C	.04	.03	2.50/C
35F1633	208	.128	D	.05	.04	3.00/C
35F1634	67	.156	D	.05	.04	3.00/C

BURGESS • EVEREADY Radio and Industrial Batteries

BURGESS AND EVEREADY RADIO BATTERIES

Your choice of equivalent Burgess and Eveready batteries for portable radios, tape recorders and hearing aids; NEDA numbers are included in tables for your convenience. These well-known brands are used in government and industrial research labs. and are noted for high quality, dependable performance, and long life.

COMBINATION "A" AND "B" PACKS

BURGESS							EVEREADY			
Stk. No.	Type	Std. Pack	Each	Neda #	Volts	Max Dimensions	Stk. No.	Type	Std. Pack	Each
49F203	6TA60	1	6.96	410	1½A, 90B	$9^{31}/_{32}$x$2^{1}/_{4}$x$4^{23}/_{32}$"				
49F206	T5Z50	1	6.22	403	6, 7½A, 75B	$8^{9}/_{16}$x$3^{3}/_{4}$x$2^{7}/_{16}$	48F786	755	1	5.08
49F208	F6A60	1	6.22	401	7½, 9A, 90B	$9^{1}/_{16}$x$2^{1}/_{32}$x$4^{1}/_{16}$	48F784	753	1	5.43
49F209	T6Z60	1	6.35	405	7½, 9A, 90B	$8^{13}/_{16}$x$2^{1}/_{8}$x$3^{15}/_{16}$	48F787	756	1	4.87
49F213	T6Z60P	1	6.35	428	9A, 90B	$8^{15}/_{16}$x$2^{1}/_{8}$x$3^{15}/_{16}$	.....	.....	.....	.....
49F210	F6A60P	1	6.35	406	9A, 90B	$9^{1}/_{16}$x$2^{3}/_{4}$x$4^{11}/_{32}$	.....	.....	.....	5.57
49F211	G6B60	1	6.35	400	9A, 90B	$14^{1}/_{16}$x$2^{13}/_{16}$x$4^{21}/_{32}$	48F718	752	1	5.78
49F214	T5Z50P	1	6.22	431	7½A, 75B	$8^{1}/_{2}$x$3^{5}/_{8}$x$2^{3}/_{8}$	.....	.....	.....	.....
49F146	4TZ60	1	5.33	425	1½A, 90B	$7^{13}/_{16}$x$2^{1}/_{32}$x$3^{27}/_{32}$	.....	729	.....	4.38
.....	MGD60	1	7.95	413	1½A, 90B	$15^{11}/_{16}$x$4^{1}/_{8}$x$7^{1}/_{16}$	48F788	759	1	7.95

PORTABLE "B" BATTERIES

49F180	U30	1	1.75	213	45	$1^{3}/_{32}$x$^{5}/_{8}$x$3^{11}/_{16}$	49F351	415	1	1.75
49F160	XX45	1	2.70	200	67½	$2^{13}/_{16}$x$1^{3}/_{8}$x$3^{43}/_{64}$	49F353	467	1	2.70
49F171	P45	1	2.70	211	67½	$1^{29}/_{32}$x1x$5^{7}/_{16}$	49F354	477	1	2.70
49F161	K45	1	2.97	203	67½	$2^{13}/_{16}$x$1^{3}/_{8}$x$2^{1}/_{2}$	48F708	457	1	2.70
48F179	XX50	1	3.15	212	75	$1^{15}/_{16}$x$1^{15}/_{32}$x$6^{15}/_{32}$	48F706	437	1	3.15
49F163	V60	1	3.15	204	90	$3^{23}/_{32}$x$1^{3}/_{8}$x$3^{45}/_{64}$	48F709	490	1	3.15
49F173	U15	1	1.05	215	22½	$1^{1}/_{32}$x$^{5}/_{8}$x2	49F350	412	1	1.05
49F183	P60	1	2.97	214	90	$1^{31}/_{32}$x$1^{11}/_{32}$x$7^{15}/_{32}$	49F355	479	1	2.97
49F195	UX45	1	2.07	217	67½	$1^{21}/_{64}$x$^{63}/_{64}$x$3^{1}/_{2}$	49F352	416	1	2.07
49F196	N60X	1	3.47	216	90	$1^{15}/_{16}$x$1^{15}/_{32}$x$7^{1}/_{8}$	.....	495	.....	3.47
49F148	V45	6	2.77	200C	67½	$2^{3}/_{4}$x$1^{11}/_{32}$x$3^{43}/_{64}$	.....	468	.....	2.77

PORTABLE "A" BATTERIES

49F261	1	24	.16	14F	1½	$1^{1}/_{32}$Dx$1^{15}/_{16}$	49F381	935	24	.16
49F127	2F	1	1.22	11	1½	$2^{19}/_{32}$x$1^{3}/_{8}$x$4^{1}/_{4}$	48F722	W353	1	1.22
49F144	21R	1	.42	20	1½	$1^{11}/_{32}$Dx$4^{3}/_{16}$	49F358	964	1	.42
49F100	2D	1	1.15	18	1½	$2^{25}/_{32}$x$1^{13}/_{32}$x$3^{1}/_{32}$	.....	720	.....	1.15
49F101	2R	48	.1625	813	1½	$1^{11}/_{32}$Dx$2^{15}/_{32}$	49F380	950	48	.16
49F143	D3	1	2.03	19	4½	$4^{3}/_{32}$x$1^{7}/_{16}$x$2^{15}/_{16}$	.....	726	.....	1.23
49F107	Z4	1	.87	2	6	$1^{7}/_{32}$x$1^{7}/_{32}$x$2^{7}/_{16}$	48F711	724	1	.87
49F108	B5	1	2.27	8	7½	$3^{29}/_{32}$x$^{7}/_{8}$x$2^{27}/_{32}$	48F710	713	1	2.27
49F109	C5	6	1.23	9	7½	$2^{7}/_{32}$x$1^{15}/_{16}$x$3^{1}/_{32}$	48F357	717	6	1.23
49F104	F3	1	1.23	3	4½	4x$1^{7}/_{16}$x$4^{1}/_{8}$	48F712	736	1	1.23
49F106	F4P1	1	1.15	6	6	$2^{21}/_{32}$x$2^{21}/_{32}$x$4^{1}/_{8}$	48F713	744	1	1.15
49F215	4D	1	1.35	.....	1½	$2^{5}/_{8}$x$2^{5}/_{8}$x$2^{13}/_{16}$	.....	.....	.....	.....

TRANSISTOR RADIO AND HEARING AID BATTERIES

BURGESS							EVEREADY			
Stk. No.	Type	Std. Pack	Each	Neda #	Volts	Max Dimensions	Stk. No.	Type	Std. Pack	Each
49F292	NE	6	.08	910	1½	.445Dx1.18	49F385	904	6	.08
49F189	D6P1	1	1.92	1601	3, 6, 9	$2^{13}/_{16}$x$1^{19}/_{16}$x8	48F719	2506	1	1.92
49F186	2N6	1	1.30	1602	9	$1^{13}/_{32}$x$1^{11}/_{32}$x$2^{3}/_{4}$	49F371	246	1	1.30
49F187	D6	1	1.36	1603	9	$2^{9}/_{16}$x$2^{1}/_{32}$x$3^{5}/_{32}$	49F373	276	1	1.36
49F184	XX9	1	1.77	1900	9, 13½	$1^{21}/_{64}$x$1^{1}/_{32}$x$2^{11}/_{16}$	49F370	239	1	1.30
49F188	2U6	12	.48	1604	9	$1^{1}/_{32}$x$1^{1}/_{16}$x$1^{29}/_{32}$	49F368	216	12	.48
49F191	P6	6	.62	1600	9	1D.x$1^{15}/_{16}$	49F369	226	6	.68
49F199	230	12	.19	13	1½	$1^{11}/_{32}$D.x$2^{13}/_{32}$	49F366	1050	48	.19
49F194	2Z3	1	1.36	1610	4½	$1^{13}/_{32}$x$1^{13}/_{32}$x$2^{3}/_{4}$	48F752	243	1	1.30
49F326	A4	1	.78		6	$1^{9}/_{32}$x$1^{9}/_{32}$x$2^{11}/_{32}$	.....	.....	.....	.....
49F327	D5	1	1.15	26	7½	$2^{9}/_{16}$x$2^{1}/_{32}$x$2^{13}/_{16}$	49F356	707	1	1.15
49F331	C6X	1	1.64	1612	9	$2^{5}/_{16}$x$1^{5}/_{32}$x$6^{1}/_{4}$	48F758	2356N	1	1.64
49F198	130	12	.19	14	1½	$1^{1}/_{32}$Dx$1^{15}/_{16}$	49F384	1035	12	.19
49F197	930	12	.16	15	1½	$^{9}/_{16}$Dx$1^{31}/_{32}$	49F386	1015	24	.16
49F190	M6	1	1.36	1605	9	$1^{13}/_{16}$x$1^{13}/_{16}$x$2^{7}/_{16}$	49F372	266	1	1.36
49F330	D6S	1	2.45	1608	9	$2^{9}/_{32}$x$1^{1}/_{4}$x$^{7}/_{32}$	48F749	2761N	1	2.45
49F124	8R	1	.87	23	1½	$1^{11}/_{32}$Dx$4^{1}/_{16}$	.....	960P	.....	.87
49F172	XX15	1	1.56	.....	22½	$1^{23}/_{64}$x$1^{1}/_{32}$x$3^{15}/_{16}$	48F733	425P	1	1.56
49F332	Y6 (YL6)	12	.83	1606	9	$^{3}/_{8}$x$^{3}/_{8}$x$1^{9}/_{10}$	.....	E177	.....	1.29
49F334	L6	6	.62	1611	9	$^{3}/_{4}$Dx2	49F367	206	6	.62
.....	.....	.....	.....	.....	12	1D.x$2^{1}/_{16}$	48F751	333	6	.68
49F340	PM8	1	1.05	1810	12	$^{43}/_{64}$Dx$1^{31}/_{32}$	49F383	228	1	1.05
.....	.....	.....	.....	.....	9	$1^{13}/_{32}$x$4^{7}/_{64}$x$4^{11}/_{16}$	49F392	2709N	1	1.05

PREMIUM GRADE TRANSISTOR RADIO BATTERIES

49F336	2MN6	12	.65	1604D	9	$1^{1}/_{32}$x$2^{1}/_{32}$x$1^{29}/_{36}$	48F894	222	12	.65
49F335	PM6	6	.80	1600D	9	1Dx$1^{15}/_{16}$	.....	.....	.....	.....

TAPE RECORDER BATTERIES

49F238	2VT8	1	2.00	1700	12	$1^{5}/_{16}$x$1^{5}/_{16}$x$3^{19}/_{32}$	.....	.....	.....	.....
49F237	2X62X	1	3.20	.....	1½, 9	$2^{1}/_{2}$x$1^{25}/_{32}$x$2^{11}/_{32}$	.....	.....	.....	.....
49F298	2X7	1	1.82	.....	10½	$2^{1}/_{2}$x$1^{25}/_{32}$x$2^{11}/_{32}$	.....	.....	.....	.....

Industrial Type Batteries BURGESS • EVEREADY

BURGESS AND EVEREADY INDUSTRIAL-TYPE BATTERIES

All the batteries listed below are guaranteed fresh when they leave our stock and carry additional manufacturers' guarantees. Made to high standards and fully inspected, these batteries are of the highest quality. All types listed below have binding post terminals, except where U or K in the type number indicate flat terminals. Similarly, PI denotes plug-in, SC screw type terminals.
Equivalent NEDA numbers are included in tables for your convenience.

INDUSTRIAL AND ELECTRONIC "A" BATTERIES

BURGESS Stk. No.	Type	Std. Pkg.	Each	Neda #	Volts	Max Dimension	EVEREADY Stk. No.	Type	Std. Pkg.	Each
49F261	1	24	.17	814	1½	1 1/32 x 1 15/16	48F381	935	24	.16
49F112	2FBP	5	.79	700	1½	2 21/32 x 1 3/16 x 4 3/8	48F723	711	1	.79
49F102	4F	1	1.15	4	1½	2 9/32 x 2 9/16 x 4 3/32	48F782	742	1	1.15
49F103	6F	1	2.69	5	1½	4 9/32 x 2 3/4 x 4 1/16	48F757	743	1	2.69
49F113	2F2BP	1	5.35	.....	3	5 5/16 x 1 5/16 x 4 5/32	.....	.....	.....	.....
49F114	2F2H	5	1.75	703	3	2 5/8 x 2 5/8 x 4 13/16	48F724	W356	1	1.92
49F115	B2BP	1	2.42	.....	3	1 5/8 x 1 5/16 x 2 11/16	.....	.....	.....	.....
49F116	F2BP	5	1.33	701	3	2 21/32 x 1 3/8 x 4 9/16	48F721	W352	1	1.33
49F117	422	1	.79	704	3	1 11/32 x 2 9/32 x 2 5/16	48F742	750	1	.79
49F118	432	1	.87	705	4½	2 x 1 1/16 x 2 21/32	48F743	751	1	.87
49F119	532	1	1.36	706	4½	2 15/32 x 2 7/32 x 3 1/16	48F740	703	1	1.36
49F142	2F4	1	2.87	1	6	4 x 2 13/16 x 5 1/16	.....	.....	.....	.....
49F120	F4BP	1	.92	915	6	2 5/8 x 2 5/8 x 4 3/8	48F754	510S	1	.92
49F131	5R	12	.48	.....	1½	49/64 Dx 2 15/64	.....	.....	.....	.....
49F133	8F	1	2.76	17	1½	3 29/32 x 2 23/32 x 5 1/2	.....	.....	.....	.....

INDUSTRIAL AND ELECTRONIC "B"

49F178	U10	1	.81	208	15	1 1/32 x 5/8 x 1 29/64	48F704	411	1	.81
49F293	Y10	1	.81	220	15	5/8 x 1 9/32 x 1 3/8	48F775	504	1	.81
49F173	U15	1	1.05	215	22½	1 1/32 x 5/8 x 2	49F350	412	1	1.05
49F294	Y15	1	1.05	221	22½	5/8 x 1 9/32 x 1 63/64	48F776	505	1	1.05
49F166	4156	1	1.61	710	22½	3 17/32 x 2 1/8 x 2 15/16	48F744	763	1	1.61
49F167	5156PI	1	4.16	721	22½	4 7/64 x 2 3/8 x 2 55/64	.....	.....	.....	.....
49F168	5156SC	5	4.16	708	22½	4 1/8 x 2 11/32 x 3 1/16	48F747	778	1	4.16
49F175	U20	1	1.23	210	30	1 1/32 x 5/8 x 2 9/16	48F705	413	1	1.23
49F295	Y20	1	1.30	223	30	1 13/64 x 5/8 x 1 27/64	48F769	506	1	1.30
49F129	K10	1	1.28	224	15	1 5/16 x 31/32 x 1 9/16	48F714	417	1	1.23
49F130	K15	1	1.44	225	22½	1 5/16 x 31/32 x 2 9/32	48F715	420	1	1.37
49F174	K20	1	1.72	226	30	1 5/16 x 1 x 2 13/16	.....	.....	.....	.....
49F177	XX30PI	1	2.27	.....	45	2 21/32 x 1 1/8 x 4 1/32	48F734	455P	1	2.27
49F170	Z30NX	5	2.69	711	22½,45	3 1/32 x 1 7/8 x 4 31/32	48F720	W350	1	2.69
49F169	5308	1	3.05	709	22½,45	4 3/32 x 2 9/16 x 5 7/16	48F767	762S	1	3.05

INDUSTRIAL AND ELECTRONIC "B" BATTERIES

BURGESS Stk. No.	Type	Std. Pkg.	Each	Neda #	Volts	Max Dimension	EVEREADY Stk. No.	Type	Std. Pkg.	Each
49F155	2308SC	1	7.10	723	45	8 3/32 x 2 31/32 x 7 5/8	48F731	W365F	1	7.66
49F156	10308PI	1	7.66	726	45	8 1/32 x 4 1/16 x 7 5/8	48F727	W363F	1	7.66
49F157	10308SC	1	7.30	716	45	8 1/32 x 4 1/16 x 7 5/8	48F728	W363P	1	7.66
49F158	21308PI	1	7.66	727	45	8 1/8 x 4 15/32 x 7 11/16	48F729	W364F	1	8.37
49F159	21308SC	1	7.50	715	45	8 1/8 x 4 15/32 x 7 11/16	48F730	.....	.....	.....
49F165	U-200	1	8.37	722	300	2 3/4 x 2 9/32 x 3 29/32	48F738	493	1	8.37
49F150	A30	2	2.82	206	45	3 9/16 x 2 1/4 x 4 1/2	48F726	W359	1	3.46
49F151	B30	2	3.47	207	45	4 1/16 x 2 17/32 x 5 5/16	48F716	484	1	3.47
49F152	M30	1	2.97	202	45	3 19/32 x 1 3/4 x 5 1/2	48F770	482	1	2.97
49F153	XX30	1	2.27	201	45	2 21/32 x 1 x 3 11/16	48F707	455	1	2.27
49F154	Z30	1	2.76	205	45	3 x 2 1/16 x 4 1/8	48F768	738	1	2.76
49F162	A60	1	14.50	.....	90	4 7/16 x 3 3/8 x 4 1/2	.....	.....	.....	.....
49F164	XX69	1	4.86	227	103½	1 11/32 x 1 11/32 x 1 23/32	.....	.....	.....	.....
49F296	Y20S	1	1.30	222	30	5/8 x 1 9/32 x 2 9/16	48F717	507	1	1.30
49F176	XX22	1	2.27	.....	33	2 31/32 x 1 1/4 x 3 1/8	.....	.....	.....	.....
49F136	Z30T	1	2.62	.....	45	3 x 2 1/16 x 4 1/8	.....	.....	.....	.....
49F138	Z60BP	1	17.50	.....	90	3 3/4 x 2 11/32 x 5 15/16	.....	.....	.....	.....

INDUSTRIAL "C" CELL SIZE

49F230	A3BPX	1	4.60	.....	4½	1 31/32 x 2 3/32 x 2 1/4	.....	.....	.....	.....
49F231	2370PI	1	2.14	718	4½	4 1/16 x 1 27/64 x 3 1/16	.....	.....	.....	.....
49F232	2370ST	5	2.10	712	4½	4 1/16 x 1 5/32 x 3 1/32	.....	.....	.....	.....
49F233	5360	1	1.23	714	4½	2 13/32 x 55/64 x 3	48F748	781	1	1.23
49F234	W5BP	6	2.05	.....	7½	2 31/32 x 2 3/32 x 1 3/4	.....	.....	.....	.....
49F235	5540	5	1.80	713	7½	4 x 7/8 x 3 1/8	48F746	773	1	1.75
49F236	A8BP	1	10.20	.....	12	2 21/32 x 1 27/64 x 2 15/32	.....	.....	.....	.....
49F239	A9BP	1	8.75	.....	13½	2 3/32 x 2 3/32 x 2 13/32	.....	.....	.....	.....

INDUSTRIAL "D" CELL SIZE

49F265	210	48	.17	13C	1½	1 11/32 Dx 2 13/32	49F364	1150	48	.17

IGNITION AND TELEPHONE BATTERIES

49F250	4FH	12	.84	900	1½	2 5/8 x 2 5/8 x 4 3/8	48F741	735	1	.84
49F251	4F2H	1	1.92	901	3	3 29/32 x 2 11/16 x 5 13/16	48F725	W357	1	1.92
49F252	4F4H	1	3.70	902	6	8 5/16 x 2 13/16 x 5 7/8	48F755	706	1	4.01
49F253	4F5H	1	4.86	903	7½	7 1/4 x 4 1/16 x 5 7/8	48F756	715	1	4.86
49F254	4F6H	1	5.53	904	9	8 37/64 x 4 1/16 x 5 7/8	48F773	716	1	5.53
49F140	6 Ign.	12	.91	905	1½	2 5/8 Dx 6 5/8	49F390	6 Ign.	1	.91
49F266	6 Ind.	12	.90	911	1½	2 5/8 Dx 6 5/8	.....	.....	.....	.....
49F141	S461	4	3.70	907	6	10 1/2 x 2 23/32 x 7 19/32	48F774	1461	1	3.85
.....	.....	.....	.....	906	1½	2 5/8 Dx 6 5/8	49F363	6GL	1	.91

Burgess & Eveready Batteries and Accessories

FLASHLIGHT AND LANTERN BATTERIES

BURGESS Stk. No.	Type	Std. Pkg.	Each	Neda #	Volts	Max. Dimension	EVEREADY Stk. No.	Type	Std. Pkg.	Each
49F260	2	48	.1625	13F	1½	1 11/32Dx2 13/32D	49F380	950	48	.18
49F265	210	48	.1625	13C	1½	1 11/32Dx2 13/32D	49F364	1150	48	.19
.....	.....	....	.....	813	1½	1 11/32Dx2 13/32D	49F399	D99	48	.19
49F261	1	24	.1625	19F	1½	1 11/32Dx1 15/16C	49F381	935	24	.16
49F262	Z	12	.11	15E	1½	9/16x1 31/32AA	49F382	915	24	.13
49F263	7	12	.13	24F	1½	1 3/32Dx1 3/4AAA	49F359	912	12	.13
49F292	NE	6	.08	910	1½	0.445x5Dx1.18	49F385	904	6	.08
49F264	F4M	12	.92	908	6	2 5/8x2 5/8x4 13/32	48F771	509	1	.86
49F316	TW1	1	1.96	918	6	5 3/8x2 7/8x4 15/16	49F361	731	1	1.96
49F305	TW2	1	1.96	926	12	5 3/8x2 7/8x4 15/16	48F789	732	1	1.96
49F323	TW1-X	1	2.40	....	6	5 3/8x2 7/8x4 15/16	.....	....	....	.....
49F346	4FM	12	.84	922	12	10 1/2x7 13/32	48F750	1463	....	4.01
.....	.....	....	.....	900	1½	2 5/8x2 5/8x4	.....	735	....	.....
.....	.....	....	.....	920	6	2 21/32x2 21/32x4 1/8	48F759	2744N	....	.85
.....	.....	....	.....	925	6	2 31/32x2 31/32x3/8	48F761	2746N	....	.85
.....	.....	....	.....	923	12	5 11/32x2 27/32x3 3/32	48F762	2780N	....	2.37
.....	.....	....	.....	930	6	5 13/32x4 21/32x2 21/32	48F895	520	....	3.31

PHOTO FLASH BATTERIES

49F342	120	24	.19	14P	1½	1 15/16Dx1 1/32C	49F388	835	24	.19
49F343	220	12	.19	13P	1½	1 11/32Dx2 13/32D	49F389	850	12	.19
49F344	720	24	.13	24P	1½	1 31/32Dx3 5/64	.....	812	...	.....
49F345	920	24	.13	15P	1½	9/16Dx1 31/32AA	49F387	815	24	.16
49F173	U15	1	1.05	215	22½	1 1/32x9/32x2	49F350	412	1	1.05
49F277	XX150	1	7.20	.....	225	4 11/32x2 11/16x4 3/16	48F735	489	1	6.96
49F278	N150	1	7.65	.....	225	3 9/16x2 29/32x4 29/32	48F737	492	1	7.65
49F279	U160	1	7.20	.....	240	2 19/32x1 5/16x4 1/2	48F736	491	1	5.56
49F275	U320	1	13.10	202	45	3x1 19/32x3 5/8	48F739	482	1	11.16
.....	.....	...	.....	.....	1½	1 3/32Dx1 3/4AAA	48F783	812	12	.13
49F152	M30	1	2.97	.....	510	3 19/32x1 3/4x5 1/2	48F770	497	1	2.97

ALKALINE RECHARGEABLE BATTERIES

Unique rechargeable power source. Uses a new electrochemical system, are maintenance free, hermetically sealed, and will operate in any position. Specifically designed for electronic applications where low initial and low operating cost are of paramount importance. Particularly suited for portable battery operated televisions and portable phonographs.

Stk. No.	Type	Volts	Size	Unit Pkg.	EACH
48F793	560	7.5	2 21/32x1 7/32x7 5/32"	1	4.33
48F794	561	15	8 1/16x2 13/16x7 5/8"	1	10.62
48F795	563	4.5	12 3/64x2 13/16x5 5/8"	3	2.76
48F796	564	13.5	8 5/16x2 13/16x5 5/8"	1	9.94

BATTERY APPLICATIONS AND ENGR. DATA BOOK

Contains the basic data on All "Eveready" batteries currently in production. Complete line specifications, discharge curves and cross reference information is included.

48F898. NET 4.00

SILVER OXIDE BATTERIES

Provide a higher voltage and greater milliwatt-hour ratings than existing batteries of similar size. Silver oxide batteries have good low temperature characteristics compared to existing batteries and their impedance is low and uniform. Silver oxide batteries are well suited, for example, for use in hearing aids, electric watches and as reference voltage sources.

Stk. No.	Type	Volts	Size	Unit Pkg.	Each
49F397	S41	1.5	.455Dx.x.165	6	.27
49F398	S76	1.5	.445Dx.20	6	.30

RECHARGEABLE NICKEL CADMIUM CELLS AND BATTERIES

Very low operating cost. Outstanding service over a wide temperature range.

May be recharged many times, have relatively constant potential during discharge, and have excellent charge retention properties.

1.25 VOLTS

Burgess Max Dimension	Stk. No.	Type	Each	Eveready Stk. No.	Type	Each
.460Dx.225	49F650	CD1	1.05	48F797	B20	1.05
.610Dx.236	49F651	CD2	.74	48F798	B50	.70
.988Dx.232	49F652	CD8	.85	48F799	B100	.77
.988Dx.257	49F653	CD8L	.95	48F800	B100T	.90
.988Dx.275	48F654	CD3	.87	48F801	B150	.80
.988Dx.300	49F655	CD3L	.97	48F802	B150T	.93
.988Dx.350	49F656	CD4	.88	48F803	B225	.83
.988Dx.375	49F657	CD4L	1.03	48F804	B225T	.97
.988Dx.347	.....	.....	.....	48F805	BH225	.97
.988Dx.347	.....	.....	.....	48F806	BH225T	1.10
1.700Dx.300	49F658	CD5	1.47	48F807	B450	1.47
1.700Dx.325	49F659	CD5L	1.60	48F808	B450T	1.60
1.355Dx.38	.....	.....	.....	48F809	BH500	1.75
1.355Dx.38	.....	.....	.....	48F810	BH500T	1.88
1.984Dx.394	.....	.....	.....	48F811	B1	2.66
1.984Dx.394	.....	.....	.....	48F812	BH1	2.79
1.984Dx.394	.....	.....	.....	48F813	BH1T	2.92
1.984Dx.719	.....	.....	.....	48F814	B2	4.69
1.984Dx.719	.....	.....	.....	48F815	B2T	4.82
1.984Dx.988	.....	.....	.....	48F816	B3	5.70
1.984Dx.988	.....	.....	.....	48F817	B3T	5.83
.560Dx1.950	49F661	CD6(AA)	1.92	48F818	C450T	2.10
.560Dx2.275	49F660	CD6L(AA)	1.82	48F819	C450	1.93
.560Dx3.680	49F662	CD9	3.01	48F820	C900	3.17
1.310Dx2.425	49F669	CD12	2.51	48F821	CH750	2.08
1.310Dx2.775	49F696	CD12L	2.57	.....	CH750T	2.21
1.031Dx1.969	.....	.....	.....	48F822	CH1.5	4.06
1.344Dx1.508	49F670	CD13	4.03	.....	.....	.....
1.344Dx1.508	49F697	CD13L	4.16	.....	.....	.....
1.01Dx1.945	49F695	CD14	3.40	.....	.....	.....
1.344Dx2.425	49F663	CD7(D)	4.03	48F823	C2	4.06
1.344Dx2.775	49F664	CL7L(D)	4.09	.....	C2T	4.19
1.300Dx2.425	49F667	CD11(D)	4.53	.....	.....	.....
1.344Dx2.425	49F665	CD10(D)	5.71	48F824	CH4	5.69
1.344Dx2.775	49F666	CD10L(D)	5.84	.....	CH4T	5.82
1.36x.75x3.36	49F683	CD100	6.43	.....	.....	.....

1.25 VOLTS

Burgess Max Dimension	Stk. No.	Type	Each	Eveready Stk. No.	Type	Each
1.39x1.39x2.53	49F684	CD101	6.05	48F828	R2	5.97
1.39x1.39x3.50	49F685	CD102	7.12	48F829	R3.5	7.12
1.57x.92x4.01	49F686	CD103S	12.40	.....	.....	.....
2.02x1.72x3.22	49F687	CD104	9.35	48F830	R4.5	9.35
2.02x1.72x3.75	49F688	CD105	10.19	48F831	R6	10.21
1.57x1.48x4.01	49F689	CD106S	13.43	.....	.....	.....
2.02x1.93x4.28	49F690	CD107	11.17	48F832	R7.5	11.17
1.02x1.56x4.03	.....	.....	.....	48F833	RH7	11.96
3.61x1.08x4.97	49F691	CD108	13.83	48F834	R11	13.79
3.61x1.34x4.97	49F692	CD109	16.56	48F835	R15	16.78
3.05x1.23x4.97	.....	.....	.....	48F836	RH15	21.57
3.61x1.72x4.97	49F693	CD110	19.87	48F837	R19	19.90
3.61x2.03x4.97	49F694	CD111	22.92	48F838	R23	22.94

6 VOLTS

1.065Dx1.525	49F671	CD21	5.32	.....	.....	.....
1.065Dx2.650	49F672	CD22	5.32	48F825	N66	4.65
1.800Dx1.725	49F673	CD23	9.48	.....	.....	.....

6 VOLTS

Burgess Max Dimension	Stk. No.	Type	Each	Eveready Stk. No.	Type	Each
1.52Dx4.20	49F681	CD30	19.96	48F826	N67	18.38
3.875x1.562x4.03	49F682	CD31	25.65	48F827	N70	29.62

9.6 VOLTS

1.065Dx3.200	49F674	CD24	9.22	.....	.....	.....
1.065Dx1.975	49F675	CD25	9.16	.....	.....	.....
1.065Dx3.200	49F676	CD25L	9.09	.....	.....	.....
1.800Dx2.575	49F677	CD26	15.52	.....	.....	.....

12 VOLTS

1.065Dx2.925	49F678	CD27	11.04	.....	.....	.....
1.065Dx3.600	49F679	CD28	11.82	.....	.....	.....
1.800Dx3.100	49F680	CD29	17.86	.....	.....	.....

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

MERCURY BATTERY COMPARISON

		MALLORY				EVEREADY				BURGESS			
Volts	Dimension	Stk. No.	Type	Std. Pkg.	Each	Stk. No.	Type	Unit Pkg.	Each	Stk. No.	Type	Std. Pkg.	Each
1.4	5/8Dx21/32	49F563	RM1	4	.57	48F843	E1	4	.57	49F750	Hg-1	4	.57
1.35	5/8Dx21/32	49F500	RM1R	4	.64	48F844	E1N	4	.64	49F751	Hg-1R	4	.64
1.35	5/8Dx21/32	49F564	RM1RT	4	.69	.....	.....	....	.....	.....	.....	....	.....
1.35	5/8Dx21/32	49F565	RM1RT2	4	.74	.....	.....	....	.....	.....	.....	....	.....
1.35	1Dx21/32	49F501	RM3R	4	1.05	48F845	E3	4	1.05	49F752	Hg-3R	4	1.05
1.35	1.2Dx21/32	49F502	RM4R	4	1.31	48F846	E4	4	1.31	49F753	Hg-4R	4	1.31
1.35	1.2Dx21/32	49F503	RM4RT	4	1.36	.....	.....	....	.....	.....	.....	....	.....
1.4	1.2Dx1/2	49F504	RM4Z	4	1.00	.....	.....	....	.....	.....	.....	....	.....
1.4	17/32Dx31/32	49F530	ZM9	24	.64	48F847	E9	4	.64	49F754	Hg-9	12	.64
1.35	5/8Dx2	49F532	RM12	2	.92	48F849	E12	2	.92	49F755	Hg-12	2	.92
1.35	5/8Dx2	49F505	RM12R	2	1.05	48F850	E12N	2	1.05	49F756	Hg-12R	2	1.05
1.35	5/8Dx2	49F566	RM12RT	2	1.10	.....	.....	....	.....	.....	.....	....	.....
1.35	5/8Dx2	49F567	RM12RT2	2	1.15	.....	.....	....	.....	.....	.....	....	.....
1.4	25/64Dx3/4	49F428	RM24	12	.53	.....	.....	....	.....	.....	.....	....	.....
1.4	1.2Dx23/8	49F423	RM42	1	2.85	48F851	E42	1	2.85	.....	.....	....	.....
1.35	1.2Dx23/8	49F506	RM42R	1	3.15	48F852	E42N	1	2.85	49F757	Hg-42R	1	3.15
1.35	1.2Dx23/8	49F507	RM42RT	1	3.20	.....	.....	....	.....	.....	.....	....	.....
1.35	1.2Dx23/8	49F568	RM42RT2	1	3.25	.....	.....	....	.....	.....	.....	....	.....
4.05	21/32Dx53/64	49F533	TR113R	2	1.72	48F853	E113	1	1.72	49F758	H-113R	2	1.72
5.4	21/32Dx1 1/16	49F534	TR114R	2	1.85	48F854	E114	1	1.85	49F759	H-114R	2	1.85
6.75	21/32Dx1 5/16	49F535	TR115R	2	2.06	48F856	E115N	1	2.06	49F760	H-115R	2	2.06
11.2	21/32Dx21/32	49F450	TR118	10	2.80	.....	.....	....	.....	.....	.....	....	.....
8.4	3/4Dx2	49F570	TR126	12	1.32	48F857	E126	1	1.31	49F761	H-126	12	1.32
2.8	21/32Dx15/16	49F431	TR132	2	1.05	48F858	E132	2	1.05	.....	.....	....	.....
2.7	21/32Dx15/16	49F508	TR132R	2	1.17	48F859	E132N	2	1.17	49F762	H-132R	2	1.17
4.2	21/32Dx2	49F536	TR133	12	1.32	48F860	E133	12	1.32	49F763	H-133	12	1.32
4.05	21/32Dx2	49F571	TR133R	2	1.35	48F861	E133N	2	1.35	49F764	H-133R	2	1.33
5.4	21/32Dx29/16	49F510	TR134R	2	1.72	48F862	E134N	2	1.72	49F765	H-134R	2	1.72
6.75	21/32D3 1/4	49F537	TR135R	2	2.00	48F863	E135N	1	2.06	49F766	H-135R	2	2.00
8.1	21/32Dx3 29/32	49F538	TR136R	2	2.40	48F864	E136N	1	2.40	49F767	H-136R	2	2.40
9.45	21/32Dx4 19/32	49F435	TR137R	12	2.76	.....	E137N	1	2.80	49F768	H-137R	1	2.76
7.0	21/32Dx1 5/16	49F572	TR145	2	1.72	48F865	E145	1	1.98	49F769	H-145	2	1.90
8.4	1x19/32x1 15/16	49F511	TR146X	6	1.32	48F866	E146X	6	1.31	49F770	H-146	6	1.31
2.7	15/32Dx1 1/8	49F539	TR152R	2	1.05	48F867	E152N	1	1.05	49F771	H-152R	2	1.05
4.05	15/32Dx1 11/16	49F540	TR153R	2	1.35	48F868	E153N	1	1.39	49F772	H-153R	2	1.35
2.7	21/32Dx7/8	49F541	TR162R	2	1.05	48F869	E162	1	1.05	49F773	H-162R	2	1.05
4.2	21/32Dx15/16	49F542	TR163	2	1.31	48F870	E163	2	1.32	49F774	H-163	2	1.32
4.05	21/32Dx15/16	49F437	TR163R	2	1.35	.....	.....	2	1.31	49F775	H-163R	2	1.57
5.6	21/32Dx1 3/4	49F544	TR164	12	1.32	48F871	E164	12	1.31	49F776	H-164	12	1.32
5.4	21/32Dx1 3/4	49F439	TR164R	2	1.57	.....	.....	2	1.57	49F777	H-164R	2	1.57
7.0	21/32Dx2 3/16	49F546	TR165	2	1.70	48F872	E165	2	1.70	49F778	H-165	2	1.70
6.75	21/32Dx2 3/16	49F438	TR165R	2	1.90	.....	.....	2	1.90	49F779	H-165R	2	1.90
12.6	21/32Dx3 61/64	49F426	TR169	10	3.50	48F873	E169	1	3.50	49F800	H-169	1	3.50
7.0	31/64Dx13/32	49F548	TR175	10	1.05	48F874	E175	10	1.05	.....	.....	....	.....
9.8	35/64Dx1 29/32	49F549	TR177	12	1.32	48F701	E177	1	1.29	49F780	H-177	12	1.32
4.2	1 1/16Dx1 31/32	49F512	TR233	10	2.34	48F875	E233	1	2.34	49F781	H-233	1	2.34
4.05	1 1/16Dx1 31/32	49F440	TR233R	10	2.62	.....	.....	....	.....	.....	.....	....	.....
5.6	1Dx21/32	49F441	TR234	1	2.76	.....	.....	....	.....	.....	.....	....	.....
5.4	1Dx21/32	49F424	TR234R	1	3.15	48F876	E234N	1	3.15	.....	.....	....	.....
6.75	1Dx3 1/4	49F527	TR235R	1	3.67	48F877	E235N	1	3.64	.....	.....	....	.....
8.1	1Dx3 1/4	49F442	TR236R	5	4.15	.....	.....	....	.....	.....	.....	....	.....
8.4	1Dx1 15/16	49F573	TR286	6	1.35	48F878	E286	6	1.35	.....	.....	....	.....
12.6	1Dx2 25/64	49F574	TR289	6	2.70	48F879	E289	6	2.70	.....	.....	....	.....
1.4	19/64Dx9/64	49F425	RM312	6	.24	48F880	E312	6	.24	49F782	Hg-312	6	.24
1.4	29/64Dx9/64	49F443	RM400	6	.24	.....	.....	....	.....	49F783	Hg-400	6	.24
1.35	29/64Dx9/64	49F513	RM400R	6	.35	48F881	E400N	6	.35	49F784	Hg-400R	6	.35
1.35	29/64Dx9/64	49F445	RM400RT2	6	.45	.....	.....	....	.....	.....	.....	....	.....
1.4	29/64Dx1 1/8	49F514	RM401	3	.50	48F882	E401	3	.50	49F785	Hg-401	3	.51
1.35	29/64Dx1 1/8	49F444	RM401R	2	.60	.....	.....	....	.....	49F786	Hg-401R	2	.60
14.0	1x17/32x1 3/32	49F550	RM411	2	2.00	.....	.....	....	.....	.....	.....	....	.....
22.4	1x17/32x1 5/16	49F551	RM412	2	2.76	.....	.....	....	.....	.....	.....	....	.....
28 0	1x17/32x2 1/2	49F451	RM413	2	3.46	.....	.....	....	.....	.....	.....	....	.....
42.0	1x17/32x3 1/2	49F553	RM415	2	5.10	.....	.....	....	.....	.....	.....	....	.....
10.7	1 1/16x3 5/16	49F452	TR431	1	2.70	.....	.....	....	.....	.....	.....	....	.....
1.35	29/64Dx9/16	49F554	RM450R	4	.53	48F883	E450	4	.53	49F787	Hg-450R	4	.53
1.35	1/2Dx1 3/32	49F427	RM502R	2	.87	48F884	E502	1	.87	49F788	Hg-502R	2	.87
1.4	1/2Dx17/64	49F519	RM520	6	.17	48F885	E520	6	.21	49F789	Hg-520	6	.20
1.4	1/2Dx1/8	49F446	RM575	6	.24	.....	.....	....	.....	.....	.....	6	.....
1.35	5/8Dx15/32	49F555	RM601R	2	.83	48F886	E601	1	.83	49F790	Hg-601R	2	.83
1.4	5/8Dx1/4	49F447	RM625	4	.42	.....	E625	4	.42	49F791	Hg-625	4	.42
1.35	5/8Dx1/4	49F556	RM625R	4	.53	48F887	E625N	4	.53	49F792	Hg-625R	4	.53
1.35	5/8Dx1/4	49F520	RM625RT	4	.58	.....	.....	....	.....	.....	.....	....	.....
1.35	5/8Dx1/4	49F575	RM625RT2	4	.63	.....	.....	....	.....	.....	.....	....	.....
1.4	5/8Dx1/4	49F557	RM630	4	.42	48F888	E630	4	.42	49F793	Hg-630	4	.42
1 4	5/8Dx1/4	49F448	RM630R	4	.53	.....	.....	....	.....	49F794	Hg-630R	4	.53
1.35	5/8Dx5/16	49F559	RM640	4	.42	48F889	E640	4	.42	49F795	Hg-640	4	.42
1.4	29/64Dx13/64	49F561	RM675	6	.32	48F890	E675	6	.32	49F797	Hg-675	6	.32
5.6	17/32Dx1 31/32	.....	.....	....	.....	48F839	EPX-4	1	1.57	49F798	HPX-4	1	1.57
8.4	17/32Dx4.415	.....	.....	....	.....	48F840	EPX-6	1	2.75	49F799	HPX-6	1	2.75
1.35	.610Dx.233	.....	.....	....	.....	48F841	EPX-13	4	.50	.....	.....	....	.....
2.7	.655Dx.614	.....	.....	....	.....	48F842	EPX-14	1	1.05	.....	.....	....	.....
1.5	.90Dx.220	49F552	PX825	4	.50	.....	.....	....	.....	.....	.....	....	.....

ALKALINE BATTERIES

1.5"N"	29/64Dx1 1/8	49F586	MN9100	2	.27	48F700	E90	2	.27	49F723	AL-N	3	.27
1.5"AA"	17/32Dx1 31/32	49F583	MN1500	12	.33	49F376	E91	24	.33	49F720	AL-9	12	.33
1.5"AAA"	13/32Dx1 3/4	49F585	MN2400	12	.33	48F790	E92	12	.33	49F722	AL-7	12	.33
1.5"C"	33/64Dx1 15/16	49F582	MN1400	6	.39	49F374	E93	12	.39	49F721	AL-1	6	.39
1.5"½D"	1 11/32Dx17/32	.....	.....	....	.....	49F377	E94	12	.39	.....	.....	....	.....
1.5"D"	1 21/24Dx2 13/32	49F580	MN1300	12	.50	49F378	E95	12	.49	49F719	AL-2	24	.49
1.5	1 11/32Dx57/32	.....	.....	....	.....	49F379	E97S	12	.73	.....	.....	....	.....
4.5XSTR	.662D	49F581	MN1306	12	.84	48F702	523	1	.82	49F524	AL-133	12	.84
4.5	.662D	.....	.....	....	.....	48F792	531	1	.82	.....	.....	.....	.....

Batteries, Lanterns and Accessories

BURGESS

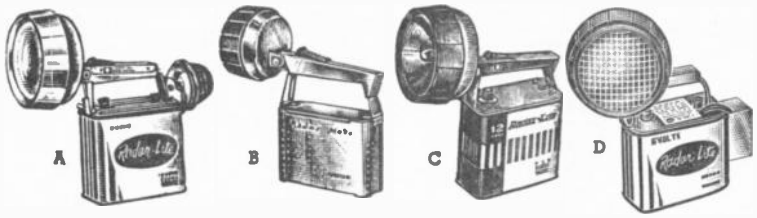


Fig. A—HANDY RADARLITE

Model TW3. Safety lantern for emergency use. 40,000 CP sealed beam headlight unit penetrates a half mile. Automatic red flasher is visible a mile down the highway. Complete with battery. Size: 5⅜x2⅞x4 13/16". Shpg. wt. 5¼ lbs.
49F314. NET **8.96**

Model TW4. Not shown. As above, but less red flasher.
49F315. NET 7.06
49F316. TW1 battery for above. **NET** 1.96
25F148. Replacement lamp. **NET** 2.50
49F329. TW1-G battery in grey finish. **NET** 1.96
49F323. TW1X extended life battery. **NET** 2.40

Fig. B—BURGESS RADAR MATE

Model JR1. The Radarlite concept applied to a smaller portable light. Features: separate head and battery container. Light beam from sealed head, weatherproof switch and corrosion-proof construction. Uses 3 Burgess No. 2 (D) flashlight batteries. Less batteries. Shpg. wt., 1½ lbs.
49F319. NET **3.32**

SAFARI LIGHT

Safe, bright, economical fluorescent lantern for tents, boats, patios. Battery or AC powered. Requires 2 no. 246 batteries. Operates for only a few cents per hour. Size: 4"x 7¾"x12¾". Shpg. wt., 4½ lbs. (Less Battery)
49F801. ..... **12.45**
49F802. Pkg. of 2 batteries 5.86

Fig. C—12-VOLT PORTABLE LIGHT

Model TW-12. 12 volt Radar-Lite offers the brightest light possible in a portable light. Combines heavy-duty 12 volt Burgess battery with powerful reflector type lamp. Reflector is made from multi-faceted, vacuum aluminized material to provide a more powerful evenly distributed light. Complete with battery.
49F322. NET **6.88**

Model TW-2. Replacement battery.
49F305. NET 1.96

Fig. D—POWER FAILURE EMERGENCY LANTERN

Automatic relay turns lamp on the instant AC-power fails. Plug and 6-ft. extension cord connect to any 110 volt, 60 cycle outlet. 40,000 Candlepower, sealed beam. Shpg. wt., 6 lbs.

Stk. No.	Type	Description	1-6	7-48
49F320	TW6E	Flood beam (Lamp No. 4512)	14.98	13.61
49F321	TW4E	Spot beam (Lamp No. 4546)	14.98	13.61
49F316	TW1	Replacement battery for above	1.96	.....
49F323	TW1X	Extended life battery	2.40	.....

357

563

263

No. 357.—Enamel finish; chrome trim. Locking on-off switch. Requires two No. 2 cells. Shpg. wt., 8 oz. Less battery.
49F300. NET **1.43**

No. 257.—Baby-sized version of No. 357. Requires two No. 1 cells. 5 oz. Less battery.
49F301. NET **1.43**

No. 361. Same as 357 except all-chrome finish. Requires two No. 2 cells. Shpg. wt., 8 oz. Less battery.
49F192. NET **1.43**

In Std. Pkg. of 6 ..... .64

No. 457. Prefocused 4 cell flashlight for extra strong beam.
49F324. NET **2.25**

No. 563. Penlight. Smart chrome pocket-size pen-type case with new push button switch. Requires two No. 7 cells. Shipping weight, 2 ounces. Less battery.
49F241. EACH ..... **.90**

No. 663. Heavy duty penlight. Handsome chrome penlite case with push button switch. Requires two No. 2 cells. Shipping weight, 3 ounces. Less battery.
49F242. EACH ..... **.90**

No. 263. Same as #363, but with permanent Alnico magnet of 15 lb. gripping force. Shpg. wt., 10 oz. Less battery.
49F349. ..... **1.46**

763

161

163

No. 763. Snap lite. Slim-line pocket lite with push-button control. Uses 2 No. 7 cells and No. 224 lamp. Less battery. 2 oz.
49F240. NET EACH ..... **.90**
In Std. Pkg. of 12 EACH ..... .82

Type 163. Tuffy flashlight. Non-breakable case, full-size reflector, positive-action switch. Comes in variety of colors. Uses two No. 2 cells. Less battery.
49F338. EACH ..... **.76**

Type 161. Magnet light which adheres to all metal surfaces. Non-breakable brite-glo head, positive action switch, aluminized reflector, and alnico magnet. Less battery. Shpg. wt., 8 oz.

Stock No.	Type No.	NET Each	Pkg. of 6 Each
49F299	161	1.46	1.33

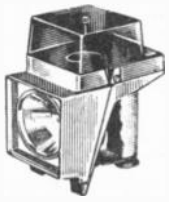
Type K30P-K. Battery and bulb kit includes a 45 volt metal jacketed battery (type K30P), designed especially for winklight operation and type 428 bulb.
49F337. NET EACH **1.67**

No. 363. Industrial flashlight with steel reinforced reflector. Flexible vinyl head. Replaceable switch. Uses 2 No. 2 cells and PR2 lamp. Less battery. Shpg. wt., 8 ounces.
49F313. EACH **1.25**

DOLPHIN LANTERN

Model 164. Features an air pocket in head which makes the lantern float when in water. Uses a Burgess Number F4M battery. Comes without batteries. All plastic—weatherproof Rurstproof.
49F341. NET **1.97**

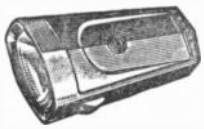
DEPEND ON NEWARK FOR THE LATEST TOP-QUALITY BATTERIES—LANTERNS—FLASHLIGHTS



ROTATING BEACON GUARDSMAN LANTERN

Model 999. Portable lantern. 3-position beam & red beacon. Suction cup anchor. With 3 mang. batt. 3 lbs.
49F599. NET **9.75**

Model 899. Bypass cord for above. Shpg. wt., 8 oz.
49F529. NET 2.40



MALLORY POWER BEAM COMPACT FLASHLIGHT

Model 807B. Throws 250-ft. beam. Unique flat shape won't roll. With 2 Mallory MN-1500 Mang. batteries for over 5 hrs. cont., 8 hrs. on-off lighting. Shpg. wt., 5 oz.
49F598. NET **1.40**

MALLORY

SPECIAL APPLICATION POWER-PAK BATTERIES

Stk. No.	Type	Application	Volts	Each
49F526	302642	Fire Alarm	7.	5.20
49F524	302351	Fire Alarm	5.4	6.30
49F521	302478	Recorder	9.8	6.90
49F528	303314	Forestry	16.8	10.80
49F588	302250	Radiation Equipt.	9.45	3.15
49F589	302358	Radiation Equipt.	10.8	4.10
49F590	302435	Radiation Equipt.	6.75	3.46
49F593	302465	Geophysical	47.25	22.50
49F594	302702	Geophysical	2.8	3.80
49F595	302651	Electronic	1.35	4.80
49F596	302904	Meter	5.4	6.75
49F597	302905	Test Equipt.	6.75	8.05
49F578	303145	Test Equipt.	8.4	6.75

BIG BEAM

AUTO SAFETY KIT

Consists of Model C-12 Flasher and Model 166 Hand Lantern. Flasher plugs into 12 volt cigarette lighter (10' cord). Rubber suction cups mount on any flat surface. Lantern head adj. over 90° vert. plane. Less battery.

FLASHER

HAND LANTERN

Stock No.	Type	1-5	6-Up
49F862	166/C12	6.74	5.99

6 Volt Bttery Selection for Above—any 1

49F264	Burgess F4M	.92 Net
49F380	Eveready 509	.92 Net

WALL MOUNTING BRACKET

Model 22. For all Model 2A6 Big Beam emergency lights. Large shelf like construction lets you mount Big Beam lights in any desirable location. Size: 16½ x 8½ x 9½".

49F859. NET **5.63**

AUXILIARY EMERGENCY LIGHT

Outstanding value offers maximum efficiency plus the economy of minimum maintenance . . .

Model 2-75. Emergency Lighting System. Constructed of 20-gauge steel with acid-resistant enamel finish and full length piano-type hinged top. Built-in wall mounting brackets, two snap catches for cover, and two wire, SJ type cord and plug. Equipped with heavy duty relay, voltmeter, neon indicator. Each lighting head illuminates 2,500 sq. ft. 5 hours continuously. U.L. Listed. Size: 7⅜ x 11¾ x 4⁷⁄₁₆". Overall ht.: 14⅜". **Less battery—See below.**

Stock No.	Model	1-5	6-Up
49F860	2-75	26.96	23.96

AUTOMATIC FAST CHARGE LIGHT
Uses Lead Acid Battery

2-relay feature—1 instantly connects lights to battery when power fails—the other puts battery on fast charge the moment power returns and switch battery over to trickle charge when it has been brought back to full capacity. Cont. lighting: 2A6L30/P1—4½ hrs.; 2A6L80/P1—11 hrs. Slide-out chassis. Pilot light, ammeter, milli-ammeter, cut-off and test switches, glass fuses. **Less battery—see listing at left.** 11¼ x 16 x 8½". Overall ht.: 18-1/5". U.L. Listed.

Stock No.	Model	Amp/hrs.	1-2	3-Up
49F851	2A6L30/P1	30	75.60	71.38
49F853	2A6L80/P1	80	76.50	72.18

AUTOMATIC FAST CHARGE LIGHT
Uses Nickel Cadmium Battery

See-thru window for checking water level of nickel cadmium battery. Operational features construction and specifications similar to above. Voltmeter, ammeter and trickle charge indicator. Continuous lighting: 2A6N20/P1—2½ hrs.; 2A6N40/P1—5 hrs. **Less battery—see left.** U.L. Listed. 11¼ x 16 x 8½". Overall ht.: 18-1/5".

Stock No.	Model	Amp/hrs.	1-2	3-Up
49F855	2A6N20/P1	20	83.25	78.62
49F857	2A6N40/P1	40	82.35	77.78

ECONOMY TRICKLE CHARGE LIGHT
Uses Lead Acid Battery

Model 2T30. Trickle charger restores battery to full capacity after each outage. Built-in wall mounting bracket. Observation ports for inspection of hydrometer indicating discs and water level in cells. Unit uses 2 SJ type cord and plug. 2 silicon full wave rectifier, heavy duty relay and transformer. 2 glass fuses, pilot light indicates "ready for service," and cut off switch. Uses 6 volt plastic jar lead acid battery of 30 amp. hr. capacity. **Less battery—See below.** UL Listed. 9¼ x 12 x 6". Overall ht.: 15½".

Stock No.	Model	1-2	3-Up
49F850	2T30	46.35	43.78

BATTERIES FOR BIG BEAM EMERGENCY LIGHTS

Stock No.	Type	Description	For Model		Each
49F756	751	Eveready 7½ v.	2-75		4.86
49F253	4F5H	Burgess 7½ v.	2-75		4.86
				1-2	3-Up
49F852	330	Lead Acid—30 amp. hrs.	2T30 & 2A6L30/P1	33.75	31.88
49F854	380	Lead Acid—80 amp. hrs.	2A6L80/P1	36.45	34.43
49F856	20N	Nickel Cad.—20 amp. hrs.	2A6N20/P1	105.30	99.45
49F858	40N	Nickel Cad.—40 amp. hrs.	2A6N40/P1	132.30	124.95

EVEREADY LIGHTS

RECHARGEABLE LANTERN

Type 3400. 1 amp sealed beam provides a bright light of 13,000 candlepower. Lantern comes with its own cord, and can be operated in home, car, or boat. Powered by "EVEREADY" NICKEL CADMIUM BATTERIES. Can be recharged from any standard AC household outlet. Guaranteed—listed by Underwriters Laboratories. Shpg. wt.: pkg. of 2—11 lbs.

49F900. NET **23.97**

RECHARGEABLE FLASHLIGHTS

Type 3300. Over 1 hour of dependable light per charge. Batteries: nickel cadmium. Bulb: PR-3. Recharges from any standard AC household outlet. Light equals a standard 3 cell flashlight. A 4 volt power pack. Guaranteed: listed by Underwriters' Laboratories.

49F897. NET **8.97**

Type 3200. Compact rechargeable. Black. Bulb: 222. Battery: nick. cad.

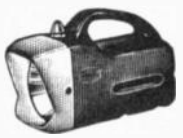
49F904. NET **5.97**

Type 6300. Contains nickel cadmium batteries. Holds charge though stored for year. Bulb: PR2. Finish: Diablo red/Oyster white. Ready for immediate application. Over hour continuous light/charge.

49F905. NET **7.77**

Type 6200. Compact adaption of 6300. Finish: Frost blue/Oyster white. Bulb: PR-2.

49F906. NET **4.77**



ALL-AMERICAN LANTERNS

Type 108A. Waterproof switches and wiring. "Cord-ahide" construction — lightweight. Resists oils, greases, most chemicals, temp. extremes. Easy-to-hold large handle. In colors of red.

49F896. NET **2.65**

Type 112. Lantern features a unique "Power Cartridge" using 5 size "D" batteries. Powerful long distance beam. Rugged Cordahide polyethylene construction. Unbreakable lens. Non-tarnishing reflector. Resists oils. Quite capable of withstanding temperature extremes of all kinds. Uses PR-12 buib.

49F907. NET **1.99**

EVEREADY UTILITY LIGHT

Type 330. Resists oils, most chemicals and withstands temperature extremes. Has insulated case, non-breakable lens and built-in bulb protector. Shpg. wt. 1 lb.

49F764. Type 330. NET ..... **.70**

49F778. Type 337. As above, w/magnet.

NET ..... **.94**

FLASH LIGHTS FOR INDUSTRY

TYPE 1251

Impervious to water, gasoline, alcohol, temperature extremes; Bureau of Mines and U.L. listed. Shpg. wt. ⅔ lb.

49F901. NET **1.93**

TYPE 1259

As above, but approved by Bureau of Mines and U.L. listed for use in hazardous locations. Shpg. wt. ⅔ lb.

49F902. NET **2.74**

TYPE 308 CT

Combination spotlight-continuity tested, High quality tool for professionals. Shpg. wt. ⅔ lb.

49F903. NET **4.00**

GENERAL ELECTRIC

● *NEW* SEALED RECHARGEABLE NICKEL CADMIUM BATTERIES

Typical C4 Cylindrical Cell

Typical Oval Cell

Typical Button Cell Battery

General Electric now incorporates its own thin sintered plate construction into its nickel-cadmium batteries to produce a cell ideal for instruments, appliances, photo-flash and all portable devices. Sporting a 1.2 average voltage, these batteries can perform 5000 cycles at discharge depths not exceeding 25% of rated capacity. Will operate in temperatures ranging from —40°C to +60°C, with an optimum range of —20°C to +40°C. May be stored indefinitely at a range of —60°C to +60°C.

Button Cell

Cylindrical Cells

Button Cells. Compact size permits easy stacking to form multiple cell battery configurations with resulting optimum space utilization and power-volume ratio. Particularly suited for low-drain, high capacity applications.

Cylindrical Cells. Provides maximum discharge rates and capacity. Suited for cordless consumer and electronic products.

Rectangular Cells. Special-purpose sealed, pressure-relieved and vented rectangular cells provide higher discharge capability and permit faster charging rates than the button and cylindrical configurations. For communications equipment, tools.

● *NEW* BUTTON CELLS & BATTERIES

A-H Capacity: 1 hr. rate is .080, 10 hr. rate is .100, 8 MA charge

Stock No.	Type	Replaces Gulton	Nom. Volt.	LxD	Wt. Oz.	1-9	10-49	50-99
49F962	GB10	*	1.25	.21x .90	.23	.78	.70	.62
49F600	2GB10	V0-080	2.50	.54x .94	.80	2.00	1.80	1.60
49F601	3GB10	3V0-080	3.75	.76x .94	1.20	3.00	2.70	2.40
49F602	4GB10	4V0-080	5.00	.97x .94	1.40	4.00	3.60	3.20
49F603	5GB10	5V0-080	6.25	1.19x .94	1.60	5.00	4.50	4.00
49F604	6GB10	6V0-080	7.50	1.40x .94	1.88	5.98	5.38	4.78
49F605	7GB10	7V0-080	8.75	1.62x .94	2.16	6.98	6.28	5.58
49F606	8GB10	8V0-080	10.00	1.84x .94	2.44	7.98	7.18	6.38
49F607	9GB10	9V0-080	11.25	2.05x .94	2.72	8.98	8.08	7.18
49F608	10GB10	10V0-080	12.50	2.27x .94	3.00	9.96	8.96	7.97

A-H Capacity: 1 hr. rate is .180, 10 hr. is .230; 18 MA charge

49F963	GB18	*	1.25	.30x .98	.39	1.00	.90	.80
49F612	2GB18	2V-180	2.50	.72x1.02	1.30	2.48	2.24	1.98
49F613	3GB18	3V0-180	3.75	1.03x1.02	1.70	3.72	3.35	2.97
49F614	4GB18	4V0-180	5.00	1.33x1.02	2.20	4.96	4.46	3.97
49F615	5GB18	5V0-180*	6.25	1.64x1.02	2.50	6.20	5.58	4.96
49F616	6GB18	6V0-180	7.50	1.94x1.02	2.94	7.45	6.71	5.96
49F617	7GB18	7V0-180	8.75	2.25x1.02	3.38	8.68	7.81	6.94
49F618	8GB18	8V0-180	10.00	2.56x1.02	3.82	9.91	8.92	7.93
49F619	9GB18	9V0-180	11.25	2.86x1.02	4.26	11.16	10.04	8.93
49F620	10GB18	10V0-180	12.50	3.17x1.02	4.70	12.40	11.16	9.92

A-H Capacity: 1 hr. rate is 1.75, 10 hr. is 2.00; 175 MA

49F964	GB200	*	1.25	.61x2.00	3.5	4.56	4.10	3.65
49F910	3GB200	3V0-1.75	3.75	1.34x2.04	14.3	16.68	15.01	13.34
49F912	5GB200	5V0-1.75	6.25	3.16x2.04	22.1	27.81	25.03	22.25
49F915	8GB200	8V0-1.75	10.00	4.99x2.04	33.7	44.52	40.07	35.62
49F917	10GB200	10V0-1.75	12.50	6.21x2.04	41.5	55.64	50.08	44.51

(*) New G.E. model replaces **EVEREADY** types. GB10 replaces B20, B50, B100, B150. GB18 replaces B150, B225, and BH225. 5GB18 replaces the N66. GB50 replaces the B450 and BH500. GB100 replaces B1 and GB200 the B2.

A-H Capacity: 1 hr. rate is .250, 10 hr. is .300; 25 MA charge

Stock No.	Type	Replaces Gulton	Nom. Volt.	Size Inches	Wt. Oz.	1-9	10-49	50-99
49F965	GB25	.....	1.25	.21x1.35	.58	1.12	1.01	.90
49F966	2GB25	.....	2.50	.54x1.40	2.00	3.00	2.70	2.25
49F624	3GB25	3V0-250	3.75	.76x1.40	2.50	4.50	4.05	3.60
49F625	4GB25	4V0-250	5.00	.97x1.40	3.20	6.00	5.40	4.80
49F626	5GB25	5V0-250	6.25	1.19x1.40	3.80	7.50	6.75	6.00
49F627	6GB25	6V0-250	7.50	1.40x1.40	4.40	9.00	8.10	7.20
49F628	7GB25	7V0-250	8.75	1.62x1.40	5.00	10.50	9.45	8.40
49F629	8GB25	8V0-250	10.00	1.84x1.40	5.60	12.00	10.80	9.60
49F967	9GB25	9V0-250	11.25	2.05x1.40	6.20	13.49	12.14	10.79
49F630	10GB25	10V0-250	12.50	2.27x1.40	6.80	14.98	13.49	11.99

A-H Capacity: 1 hr. rate is .500, 10 hr. is .600; 50 MA charge

49F968	GB50	*	1.25	.38x1.35	1.0	1.57	1.41	1.26
49F969	2GB50	.....	2.50	.88x1.40	2.9	3.83	3.45	3.06
49F632	3GB50	3V0-500	3.75	1.27x1.40	3.9	5.75	5.18	4.60
49F633	4GB50	4V0-500	5.00	1.66x1.40	5.0	7.66	6.8	6.13
49F634	5GB50	5V0-500	6.25	2.04x1.40	5.9	9.58	8.6	7.66
49F635	6GB50	6V0-500	7.50	2.43x1.40	6.9	11.50	10.35	9.20
49F636	7GB50	7V0-500	8.75	2.82x1.40	8.0	13.41	12.07	10.73
49F637	8GB50	8V0-500	10.00	3.10x1.40	9.1	15.33	13.80	12.26
49F638	9GB50	9V0-500	11.25	3.59x1.40	10.1	17.24	15.52	13.79
49F639	10GB50	10V0-500	12.50	3.98x1.40	11.2	19.16	17.24	15.83

A-H Capacity: 1 hr. rate is .750, 10 hr. is 1:00; 80 MR charge

49F970	GB100	*	1.25	.34x2.00	2.25	2.62	2.36	2.10
49F971	2GB100	.....	2.50	.80x2.04	7.10	6.48	5.83	5.18
49F900	3GB100	3V0-750	3.75	1.14x2.04	9.40	9.73	8.76	7.78
49F901	4GB100	4V0-750	5.00	1.49x2.04	11.6	12.96	11.66	10.37
49F902	5GB100	5V0-750	6.25	1.83x2.04	13.9	16.21	14.59	12.97
49F905	8GB100	8V0-750	10.00	2.85x2.04	20.6	19.46	17.51	15.57
49F907	10GB100	10V0-750	12.50	3.54x2.04	25.0	22.69	20.42	18.15

● *NEW* CYLINDRICAL CELLS — 1.25 VOLTS

Stock No.	Type	Replace EveReady	Replace Gulton	A-H Capacity 1 hr. rate	A-H Capacity 10 hr	Size	D x H Inches	Wt. Oz.	1-9	10-49	50-99	100-up
49F972	GC5T	CH50, CH500	.....	.500	.550	AA	.58x1.975	1	1.50	1.35	1 20	1.12
49F955	GC6	.....	R-060	.600	.660	A	.63x1.94	1	2.15	1.93	1.72	1.60
49F958	GC10	CA-750T-1.2T	R-125	1.00	1.20	Sub C	.88x1.62	1.5	1.85	1.66	1.48	1.39
49F952	GC15	CH1.5T	R-190	1.50	1.80	C	1.03x1.84	2.5	3.30	2.97	2.64	2.47
49F973	GC15T	CH1.5	.....	1.50	1.80	C	1.03x1.96	2.5	3.30	2.97	2.64	2.47
49F974	GC15R	.....	.....	1.00	1.20	C	1.03x1.96	2.0	2.00	1.80	1.60	1.50
49F951	GC20	CH2.3T	R-200	2.00	2.30	½D	1.33x1.42	2.8	3.70	3.33	2.96	2.77
49F950	GC35	CH4T	R-400	3.50	4.00	D	1.33x2.32	5.0	5.00	4.50	4.00	3.75
49F975	GC35T	CH4	.....	3.50	4.00	D	1.33x2.43	5.0	5.00	4.50	4.00	3.75
49F957	GC35R	.....	DR-120	1.00	1.20	D	1.33x2.38	2.0	2.00	1.80	1.60	1.50
49F976	GC40	.....	.....	4.00	4.40	Oval	.....	6.4	6.15	5.53	4.91	4.60
49F961	GC60	CH6T	R-560	5.50	6.50	F	1.33x3.46	13.4	8.30	7.47	6.64	6.23

T indicates top hat terminal. R indicates reduced capacity.

● *NEW* RECTANGULAR CELLS

Stock No.	Type	Nom Volts	A-H Capacity 10 hr rate	Size Inches LxWxH	Wt. Lbs.	1.9	10-49	50-99
49F977	5GR4	6.25	4.4	3.6x2.6x3.0	2.3	36.00	32.40	28.80
49F978	10GR4	12.50	4.4	6.9x2.6x3.0	4.5	69.00	62.10	55.20

GULTON

ASTRO-RAY LANTERN

Provides a 7,000 candlepower beam on its built in permanent type nickel cadmium batteries. Can also be used with a 110 V or 12 V cord, which is included. Thus, the Astro-Ray can be used for prolonged periods as a spotlight without reducing the charge in its batteries. Weights a light 2 lbs. Size: 5½x7½x6".

49F988. Model RAY **24.95**

12 VOLT D.C. ADAPTER UNIT

For cars and boats.

49F999 ..... **4.95**

BATTERY CHARGER MODEL B-100

Recharges Gulton "D" type nickel-cadmium, five year guarantee cells. The recharger brings the batteries back to full power over and over, saving money on the powering of tape-recorders, phonographs, flashlights, and portable radios. A red light shines while the batteries are on charge, and the charger is so constructed that it will not overcharge. U.L. listed. Operates on 115V. AC hous current.

49F920. EACH **9.95**

Battery Chargers and Capacitors

ELECTRONIC COMPONENTS BATTERY CHARGERS

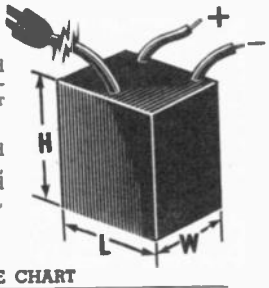
CHARGERS FOR NICKEL CADMIUM BATTERIES

STANDARD CHARGERS
NUMBER OF CELLS @ 1.25V DC PER CELL

Nominal Charge Rate With 115 V AC 60 Cycle Input

	1	2	3	4	5	6	7	8	9	10	11	12
25 MA.	1-025 *	2-025	3-025	4-025	5-025	6-025	7-025	8-025	9-025	10-025	11-025	12-025
50 MA.	1-050 *	2-050	3-050	4-050	5-050	6-050	7-050	8-050	9-050	10-050	11-100	12-050
100 MA.	1-100	2-100 *	3-100 *	4-100 *	5-100 *	6-100	7-100	8-100	9-100	10-100 *	11-050	12-100
150 MA.	1-150	2-150	3-150	4-150	5-150	6-150	7-150	8-150	9-150	10-150	11-150	12-150
200 MA.	1-200	2-200	3-200	4-200	5-200	6-200	7-200	8-200	9-200	10-200 *	11-200	12-200
250 MA.	1-250	2-250	3-250	4-250	5-250	6-250	7-250	8-250	9-250	10-250 *	11-250	12-250
300 MA.	1-300	2-300	3-300	4-300	5-300	6-300	7-300	8-300	9-300	10-300 *	11-300	12-300
400 MA.	1-400	2-400 *	3-400 *	4-400 *	5-400 *	6-400	7-400	8-400	9-400	10-400 *	11-400	12-400
500 MA.	1-500	2-500	3-500	4-500	5-500	6-500	7-500	8-500	9-500	10-500 *	11-500	12-500

* "Off the shelf delivery." All others 1 week.



INPUT: UL approved line cord; 48" minimum free length, color cream white.

OUTPUT: UL approved lead wire. 10" long, ends stripped and tinned, red positive, black negative.

SIZE CHART

	L	W	H
"A"	1⅜"	x1 1/16"	x2 1/16"
"B"	1¾"	x1¾	x2¼"
"C"	2⅜"	x2⅜"	x2¾"

HOW TO USE CHART

To determine the recommended ECC battery charger to be used 2 things must be known. (1) number of cells, and (2) amp hour capacity of cell. For example: a 4 cell battery with an amp hour rating of 1.0 ampere hours on each cell—charger to be used from chart would be No. 4 which denotes number of cells. Charge rate would be 1/10 of an amp hour rating or 100MA. Top to bottom (left side of chart) where number of cells and MA ratings cross is recommended ECC charger is used.

STANDARD CHARGER PRICE LIST

Group	Ecc Part Number	1-9	10-24	25-49	50-99	100-499
1	1-025, 2-025, 3-025	4.50	3.60	2.88	2.30	1.84
2	1-050, 2-050, 3-050, 4-025, 5-025, 6-025	4.90	3.92	3.14	2.51	2.01
3	1-100, 2-100*, 3-100*, 4-050, 5-050, 6-050, 7-025, 8-025, 9-025	5.30	4.24	3.40	2.72	2.18
4	1-150, 2-150, 3-150, 4-100*, 5-100*, 6-100, 7-050, 8-050, 9-050, 10-025*, 11-025, 12-025	5.70	4.56	3.66	2.93	2.34
5	1-200, 2-200, 3-200, 4-150, 5-150, 6-150, 7-100, 8-100, 9-100, 10-050*, 11-050, 12-050	6.10	4.88	3.92	3.14	2.51
6	1-250, 2-250, 3-250, 4-200, 5-200, 6-200, 7-150, 8-150, 9-150, 10-100*, 11-100, 12-100	6.50	5.20	4.18	3.34	2.67
7	1-300, 2-300, 3-300, 4-250, 5-250, 6-250, 7-200, 8-200, 9-200, 10-150, 11-150, 12-150	6.90	5.52	4.44	3.55	2.84
8	1-400, 2-400*, 3-400*, 4-300, 5-300, 6-300, 7-250, 8-250, 9-250, 10-200*, 11-200, 12-200	7.30	5.84	4.70	3.76	3.01
9	1-500, 2-500, 3-500, 4-400*, 5-400*, 6-400, 7-300, 8-300, 9-300, 10-250, 11-250, 12-250	7.70	6.16	4.96	3.97	3.18
10	4-500, 5-500, 6-500, 7-400, 8-400, 9-400, 10-300*, 11-300, 12-300	8.10	6.48	5.22	4.18	3.34
11	7-500, 8-500, 9-500, 10-400*, 11-400, 12-400	8.50	6.80	5.48	4.38	3.50
12	10-500*, 11-500, 12-500	8.90	7.12	5.74	4.58	3.66

BATTERY CHARGERS FOR NICKEL CADMIUM BATTERIES

Charger design provides complete isolation from line voltage and hence maximum safety to user. By means of an isolation transformer tested at 2000 volts RMS as well as complete potting, all possibility of shock and hazard due to accidental immersion in water or other liquid is eliminated. This unit consists of transformer, rectifier, and current limiting resistance which produces half wave rectification with constant current. UL and CSA approved.

• CHARGERS

Stk. No.	Type	MA	Cells	1-9	10-24	25-49	50-99	100-499
66F350	2-100	100	2	5.30	4.24	3.40	2.72	2.18
66F351	3-100	100	3	5.30	4.24	3.40	2.72	2.18
66F352	4-100	100	4	5.70	4.56	3.66	2.93	2.34
66F353	5-100	100	5	5.70	4.56	3.66	2.93	2.34
66F354	10-025	25	10	5.70	4.56	3.66	2.93	2.34
66F355	10-050	50	10	6.10	4.88	3.92	3.14	2.51
66F356	10-100	100	10	6.50	5.20	4.18	3.34	2.67
66F357	2-400	400	2	7.30	5.84	4.70	3.76	3.01
66F358	3-400	400	3	7.30	5.84	4.70	3.76	3.01
66F359	10-200	200	10	7.30	5.84	4.70	3.76	3.01
66F360	4-400	400	4	7.70	6.16	4.96	3.97	3.18
66F361	5-400	400	5	7.70	6.16	4.96	3.97	3.18
66F362	10-300	300	10	8.10	6.48	5.22	4.18	3.34
66F363	10-400	400	10	8.50	6.80	5.48	4.38	3.50
66F364	10-500	500	10	8.90	7.12	5.74	4.58	3.66

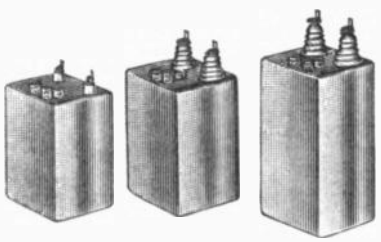
• See listing of charges, in stock, available. "Off the shelf" delivery.

PLASTIC CAPACITORS, INC.

HIGH VOLTAGE D.C. POWER PACKS

Hermetically sealed, oil filled, hot-tinned or lead coated plate steel container with enamel coating. 118 volt, 60 cycle input. Output operation from zero to rated voltage by adjusting input. All units have positive or negative polarity. Long life selenium rectifiers requiring no warm-up for rectifier filaments. May be mounted in any position. Max. ambient 85°C. Supplied with footed brackets.

Stk. No.	Type	KV	MA	Size	Wt. Lbs.	NET
19F1285	HV 20-502M	0- 2	5	3¾x2¼x3⅜	2½	51.10
19F1286	HV 50-502M	0- 5	5	3¾x2¼x3¾	3½	64.50
19F1287	HV100-502M	0-10	5	3¾x4 9/16x5⅞	8½	99.00
19F1288	HV150-502M	0-15	5	3¾x4 9/16x6⅛	9½	125.50
19F1289	HV200-502M	0-20	5	3¾x4 9/16x8	12⅛	144.00



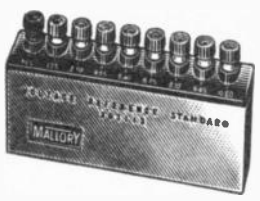
HV100 HV200 HV150

SENCORE

BATTERY ELIMINATOR

Type BE124. Regulated power supply replaces batteries during repair of transistor radios. 1½ volt intervals from 0 to 12 VDC are available on front panel. Meter can be used to calibrate voltages or as current drain monitor (0 to 50 ma) for troubleshooting. Output is accurate and well-filtered. Can also be used to charge nickel-cadmium batteries. Shp. wt. 2 lbs.
62F429. NET **24.95**

MALLORY VOLTAGE REFERENCE STANDARD



Stability is ±½% of rated EMF. Withstands both electrical and physical abuse. Voltages from 1.35 v to 10.8 volts in increments of 1.35 volts. Voltages calibrated to .001 of a volt. Applicable in calibration of sensitive scope, VOM's. VTVM's. temp. measuring bridges. Has internal res. of ½ to 1 ohm. Voltage regulation less than ½% for 3 years or more of normal temp.
49F531. NET **29.50**
6½x1x2½".

Battery Charger & Power Supplies

SCHAUER BATTERY CHARGERS

● NEW SCHAUER AUTOMATIC MODEL BR-312 CHARGER

12 volt, 6 ampere charger charges battery, automatically shuts itself off, and then introduces a safe maintaining charge rate which keeps the battery in a fully charged condition until the charger is turned off. For batteries of boats, cars and other unattended equipment. Has accurate numeral dial ammeter. 9⅜" x 6 x 6½. Weight: 8½ lbs.
66F283. BR-312. NET **17.48**

MODEL H612C

1¼ amp. charger. A combination 6 and 12 volt charger. Ideal for car, motorcycle, boat and lawn mower batteries. Selenium rectifier, automatic circuit breaker, 6 or 12 volt selector switch. Rugged steel case with handsome red finish. Dimensions are 4¼ x 4⅜ x 4¾".
66F159. NET **5.78**

MODEL K412

An economical charger for 12-volt batteries. A small, efficient, and low-priced unit for charging 12 volt batteries at a three ampere rate.
66F160. NET **6.98**

Model A-8410. Charge battery through cigar lighter. For 6 volts. Shpg. wt., 3 oz.
66F164. NET **1.22**

Model A-8412. Same as Model A-8410, but for 12-volt batteries.
66F165. NET **1.22**

MODEL A-6612

4-amp charger for 6 and 12v batteries. Battery recharges in 5 to 15 hrs. Automatic circuit breaker, selector switch, numeral dial ammeter. Case: steel, gold colored finish. Brushed aluminum and maroon front panel trim. Size: 7¼x4½x5". Wt., 5¼ lbs.
66F282. NET **9.48**

MODEL B-6612

6-amp charger. Charges 6 and 12v batteries. Recharges average battery in 3 to 7 hrs. Equipped with an automatic circuit breaker, selector switch, and an accurate, numeral dial ammeter. Case is of rugged, steel with gold colored finish and two-tone brushed aluminum and maroon front panel trim. Size: 9⅜"x6"x6½". Wt., 8 lbs.
66F281. NET **12.98**

MODEL C-6612

10-amp. charger. Recharges aver. 6 or 12v. battery in 2 to 6 hrs. Has automatic circuit breaker, selector switch, numeral dial ammeter Case same as B6612. Size: 9⅜"x6"x6½". Wt., 11 lbs.
66F280. NET **16.98**

VINCO VARIAMP UNIVERSAL BATTERY CHARGER

For home, small business or laboratory. Adaptable to all rechargeable batteries. 1-5 cell capacity. Adj. charge rate. Transistorized. Dual amp. scale (0-500 MA & 0-2 amps). Volt. markings on milliamp scale. Voltmeter. On/off switch. With banana plugs and inst.
60F1547. NET **21.00**

LECTROTECH

METERGARD

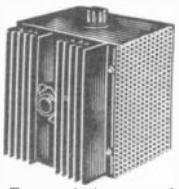
● Protects Agoinst Overload

Protects meter movement against accidental overloads. Elinimates bent pointers, damaged pivots, overheated springs, and burned out coils. Protects as much as 10,000% overlead.
60F1650. NET **2.95**

LECTROCELL-MINIATURIZED REGULATED POWER SUPPLY

Eliminates the use of battery in VTVM. Unit is actually a miniaturized regulated power supply that furnishes the 1½ volt of DC necessary to measure resistance. Exact size and shape of battery it replaces. Installs in minutes . . . simply connect 3 wires. Size: 1½x2⅜".
60F1651. NET **3.95**

SOLID STATE MODULE TYPE REGULATED DC POWER SUPPLIES



Electro-statically shielded transformers with line and load regulation of .005 volts maximum. Glass epoxy board, hand soldered. Ripple and noise less than 500 mv. Input line voltage: universal 105-125-210-250 volts. Input line freq. 48 to 440 cycles. 100% overload protection against any degree of overload. Output current. 1 amp. Remote programming and load sensing. External heat sink uncessary. Max. operating ambient: 50°C. Storage temperature range: —20°C to +85°C. 5x5x5¼". Shpg. wt., 4 lbs.

Stk. No.	Type	DC Voltage Range	1-5	6 up
60F1652	1015	10-15 volts	95.00	89.00
60F1653	1520	15-20 volts		
60F1654	2025	20-25 volts		
60F1656	2530	25-30 volts		
60F1655	3035	30-35 volts		

CARTER MOTORS — GEARMOTORS — CONVERTERS

FHP Motors. Universal AC/DC type. Precision ball bearings, no lubrication required. Large Line-O-Life brushes. Available from 12V. to 220V, up to ½ hp. Gear reductions from 2 to 750 rpm. DC shunt, AC and synchronous models available.

DC to AC Converters. Dependable rotary power for heavy duty industrial service. Ball bearings. 20 to 2000 watt output. For marine, 2-way service.

Ecliptic motors. Line of very small motors. Universal, gear motors, Tachometer-Generators, PM and Governor controlled models.

NEWARK Can Supply the Entire Line of Carter Motors,

Converters, Frequency Changers and Alternators.

Write for Complete Information and Prices.

Inverters and Voltage Adjusters

terado

TRANSISTORIZED MOBILE POWER INVERTERS WITH AUTOMATIC FREQUENCY CONTROL

DUAL CONTINENTAL

Model 50-202. Converts 12 VDC to 110 VAC, 60 cycles. Output: 550 watts continuous and 600 watts intermittent. Features a variable AC outlet. Frequency stable within ½ cycle with changing input and load. Filtered for use with tape recorders. Complete with remote control and battery cables. Heavy copper clad case with ventilating fan. Size: 10¾"x13"x7¼". Shipping wt., 60 lbs.
66F300. NET **307.77**

CONTINENTAL

Model 50-191. Similar to 50-202 except output: 275 watts continuous and 300 intermittent. Heavy copper clad case with ventilating fan. With remote control and battery cables. Filtered for use with tape recorders. Size: 10¾"x6"x6". Shipping wt., 30 lbs.
66F301. NET **153.13**

ATLAS

Model 50-200. Similar to Model 50-202 except output of 175 watts continuous to 200 watts intermittent. Size: 10¾"x6"x6". Shipping wt., 21 lbs.
66F302. NET **114.53**

WITHOUT AUTOMATIC FREQUENCY CONTROL

GEMINI

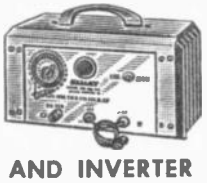
Model 50-128. Converts 12 VDC to 110 VAC 60 cycle Designed for equipment not sensitive to frequency change. Perfect for lights, electric blankets, TV, and AC-DC electric motors. Capacity of 450 watts continuous and 500 intermittent. Complete with 12 ft battery cables. (Not recommended for refrigerators with compressor.) Size: 12½"x6"x6". Shpg. wt., 20 lbs.
66F303. NET EACH . **97.17**

FALCON

Model 50-129. Similar to Model 50-128 except features a capacity of 275 watts continuous and 300 intermittent. Size: 12½"x 6"x6". Shpg. wt., 20 lbs.
66F304. NET EACH **74.25**

Model 50-130. Remote control for Gemini and Falcon Units. 5 lbs.
66F314. NET **11.50**

GALAXY



Model 50-205. Similar to Falcon. Converts 12 VDC to 110 VDC. Capacity of 140 watts continuous and 175 intermittent. Adjustable voltage and frequency. Heavy copper clad steel case. Size: 10¾"x6"x6". Shpg. wt., 9½ lbs.
66F305. NET EACH **36.76**

● NEW BATTERY CHARGER AND INVERTER

MARK I

- **Portable—supplies 117 VAC**
- **Solid State Circuitry**

Model 50-131. Converts 12 VDC from a storage battery to 117 VAC. Also can be used to charge battery at 20 amps, 10 amps or a low trickle. Designed for cars trailers, mobile homes, boats, or buses. Can be used to operate any appliance, light, tool, or any equipment that requires a 117 VAC power supply. Capacity is 450 to 500 watts,. Size 12½x6x6". Shipping weight 21 lbs. Battery cables included.
66F315 Model 50-131. **NET** **104.50**

MARK II

Model 50-132. Same specifications as 50-131 above except capacity is 275 to 300 watts.
66F316 Model 50-132. **NET** **89.50**

VIBRATOR TYPES WITH AUTOMATIC FREQUENCY CONTROL

SUPREME

Model 50-153. Converts 12 VDC to 115 VAC. 60 cycle. Output: 175 watts continuous and 200 watts intermittent. Remote control has variable AC output switch and signal light indicating proper AC output voltage. Filtered for tape recorders. Complete with battery cables. Copper clad ventilated steel case. Size: 12½" x6"x6". Shpg. wt., 25 lbs.
66F306. NET **84.07**

SUPER

Model 50-127. Converts 12 VDC to 110 VAC. Output: 75 watts continuous and 100 watts intermittent. Easy installation into cigarette lighter of car. AC plug-in receptacle in front of case. Sealed brown baked enamel steel case. Size: 3½"x6½"x4". Shpg. wt., 8 lbs.
66F307. NET **38.47**

SENIOR

Model 50-116. Converts 12 VDC to 110 VAC, 60 cycle. Output: 40 watts continuous and 50 watts intermittent. Simple to install into cigarette lighter. Seal brown baked enamel aluminum case. Size: 2½" x 4½" x 2¼". Shpg. wt., 3 lbs.
66F308. NET **18.47**

AUTO SHAVER

Model 50-103. Operates all electric shavers from a 12 VDC battery. AC output: 15-20 watts. Poly-ethylene non-breakable case. Simply plug into cigarette lighter. Size: 3⅝"x2¼"x4¼". Shpg. wt., 2 lbs.
66F309. NET EACH .. **9.31**

PORTABLE POWER SUPPLY

"TRAV-ELECTRIC"

Model 50-160. Operates anything using 117 VAC, 60 cps from 25 amps. Rechargeable wet storage battery enclosed Capacity of 125 watts continuous and 175 intermittent. Frequency stable within ½ cps with load change. Plugs into AC outlet or car cigarette lighter to recharge the battery. Charger has automatic overcharge protection. Meter shows charge rate and hours of anticipated output. Package silent electric power with self-contained power supply. Charger operates on AC, tapers from 6 to 0 amps. Copper clad steel case. Size: 12"x5½"x8".
66F310. NET EACH **60.63**

VOLTAGE ADJUSTERS

POLARIS

Model 50-204. For television, hi-fi, and AC motorized equipment. Changes high or low voltages over range of 95-135 V to normal. Capacity, 300 Watts cont., 500 Watts inter. Restores high fidelity to sound. Wt. 3 lbs. Size: 5½".
66F111. NET **9.20**

SATURN

Model 50-172. Same as Polaris above, except equipped with accurate AC voltmeter for visible voltage correction. Weight: 3 lbs. Size: 5½".
66F112. NET **14.65**

APOLLO

Model 50-141. Increases line voltage in two steps—10v and 15v. Especially designed to give peak efficiency to office duplicator copy machines when low voltage is encountered. Makes better copies faster. Capacity: 1200 watts continuous and 1500 watts intermittent. Size: 3½"x6½"x 4". Shipping wt., 8 lbs.
66F113. NET EACH **22.75**

CDE Cornell Dubilier Filters

FEED-THROUGH SUPPRESSION CAPACITORS

Type NFT. 15 amp ratings +125 C maximum operating temperature. Full rated voltage at 125° C. Can be used in place of 5 amp and 10 amp, +85 C or +125 C NFT units, and 10 amp CZ units with no sacrifice in case size. Recommended for prototype purposes as well as production runs. NFT units are commonly used in buffers, DC motors, drills, fans, ignition systems, relays, thermostats, etc. Tolerance: ±10%.

Stock No.	Type	Curr. Amps.	VDC	Cap. Mfd.	Line Freq. HZ	Case Dia.	Case Lngt.	1-24	25-49	50-99	100-499	500 UP
66F400	NFT3H1P1L	15	100	.1	—	.400	2 9/32	2.75	1.60	1.24	1.10	1.01
66F401	NFT3H1P22L	15	100	.22	—	.400	1 11/32	2.90	1.69	1.30	1.16	1.06
66F402	NFT3H1P33L	15	100	.33	—	.562	1 5/32	3.09	1.90	1.39	1.24	1.13
66F403	NFT3H1P47L	15	100	.47	—	.562	1 13/32	3.24	1.89	1.46	1.30	1.19
66F404	NFT3H1W1L	15	100	.1	—	.670	2 9/32	3.73	2.18	1.68	1.49	1.37
66F405	NFT3H6P1L	15	*600	.1	0-400	.562	1 13/32	3.14	1.83	1.41	1.25	1.15
66F406	NFT3H6P22L	15	*600	.22	0-400	.670	2 9/32	3.63	2.12	1.63	1.45	1.33
66F407	NFT3H6P47L	15	*600	.47	0-400	.750	2 13/32	3.92	2.29	1.76	1.56	1.43

***also rated at 250 VAC.**

TYPE NFR TUBULAR PI FILTERS

Designed for high attenuation of RF interference over the ranges of 150KC to 10GC(#) and 14KC to 10GC(+). Can be used for applications involving a wide variety of EMC specifications such as air conditioners, airborne aircraft, circuit breakers, commutator circuits, dynamotors, heating equipment, etc. Three terminal design for bulkhead or chassis shielded mounting.

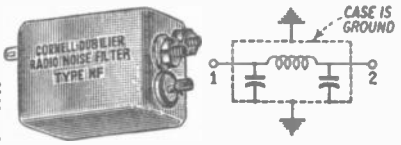
Stock No.	Type	Curr. Amps.	Volts AC	Volts DC	Line Freq. HZ	Case Size L. x W. x H.	1-24	25-49	50-99	100-499	500 UP
66F408	NFR100-24	15+	120	300	0-60	5 15/16 x 1 1/4	21.75	12.69	9.78	8.70	7.98
66F409	NFR124-1	1.0#	250	600	0-400	2 5/8 x 1	14.64	8.54	6.59	5.86	5.37
66F410	NFR100-6	1.0#	—	100	—	2 11/16 x 1	10.14	6.65	5.13	4.56	4.18
66F411	NFR110-10	5.0+	120	300	0-60	6 3/16 x 1 1/2	29.64	17.29	13.34	11.86	10.87
66F412	NFR126-1	5.0#	250	600	0-400	3 x 1 1/4	18.60	10.85	8.37	7.44	6.82
66F413	NFR101-8	5.0#	—	100	—	3 7/16 x 1 1/4	14.49	8.45	6.52	5.80	5.31
66F414	NFR102-19	10.0+	120	200	0-60	6 7/8 x 1 3/4	35.88	20.93	16.15	14.35	13.16
66F415	NFR127-1	10.0#	250	600	0-400	3 11/16 x 1 3/8	24.09	14.05	10.84	9.63	8.83
66F416	NFR136-1	10.0#	—	100	—	3 1/16 x 1 3/8	20.49	11.95	9.22	8.20	7.51

Type NFR 127-1

TYPE NF RECTANGULAR PI FILTERS

Designed for high attenuation over the range of 150KHZ to 1MHZ. **Chassis shielded, flange mount. †Bulkhead shielded mount.

Stock No.	Type	Curr. Amps.	Volts AC	Volts DC	Line Freq. HZ	Case Size L. x W. x H.	1-24	25-49	50-99	100-499	500 UP
66F417	NF10457-7	1**	250	600	0-400	1 3/4 x 1 1/4 x 1 1/2	13.14	7.68	5.91	5.26	4.82
66F418	NF10738	1†	250	600	0-400	1 3/4 x 1 1/4 x 1 1/2	15.60	9.10	7.02	6.24	5.72
66F419	NF10459-5	5**	250	600	0-400	2 1/16 x 1 1/4 x 1 1/4	13.35	7.78	6.00	5.34	4.90
66F420	NF10744	5†	250	600	0-400	2 x 1 1/4 x 1 1/4	21.90	12.78	9.86	8.76	8.03
66F421	NF10561-5	10**	250	600	0-400	2 x 2 x 1 1/2	16.86	9.84	7.59	6.74	6.18
66F422	NF10654-2	10†	250	600	0-400	2 x 2 x 1 1/2	24.42	14.25	10.99	9.77	8.95



Type NF

NF QUIETONE FILTERS

Offer a practical solution for the suppresion of interference from many types of household, industrial and heavy duty electrical equipment such as fluorescent fixtures, calculators and other office equipment. Fig. A—Flxible wire leads (NF10431-1 with mtg. brkt., direct replacement for GE89G365). Fig. B—Solder lug terminals.

Stock No.	Type	Curr. Amps.	Volts AC	Fig.	L. x W. x H.	1-24	25-49	50-99	100-499	500-UP
66F423	NF10431	2x3.5	280	A	2 1/2 x 2 x 1 3/16	3.30	2.85	2.35	2.18	2.01
66F424	NF10431-1	2x3.5	280	A	2 1/2 x 2 x 1 7/32	4.39	3.63	3.30	2.78	2.58
66F425	NF10431-9	2x1	280	B	1 3/4 x 1 1/4 x 1 1/8	10.05	5.86	4.52	4.02	3.69
66F426	NF10431-12	2x3.5	280	A	2 1/2 x 2 x 1 3/16	10.50	6.13	4.73	4.20	3.85
66F427	NF10280-1	2x2.5	125	B	2 x 2 x 1 1/8	7.87	6.82	5.52	4.67	4.32

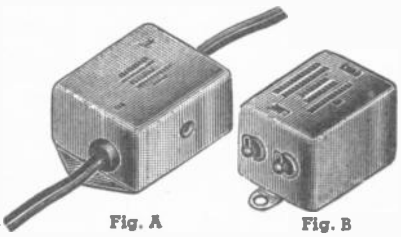


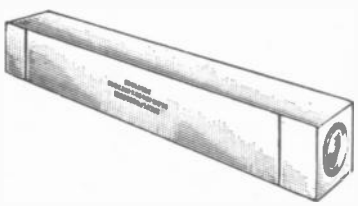
Fig. A **Fig. B**

POWER LINE AND SCREEN ROOM FILTERS

Type CDF. Provide a minimum attenuation of 100 db over the range of 14KC to 10GC. Designed to eliminate radio interference on power lines for shield rooms, missile hard sites and other locations and equipment requiring noise free operation. Available in current rating from 25 to 200 amperes. Meet the requirements of MIL-F-15733 where applicable, and provide an insertion loss of 100db minimum over the indicated frequency range of 14KC to 10GC when measured in accordance with MIL-STD-220A.

Provide for versatile mounting either with threaded fitting lead termination for insertion through shield room enclosures, or with universal conduit mounting (Knockouts Both Ends) for shield room and other applications. Shpg. wt. 35 lbs.

- **100 db minimum attenuation**
- **Current ratings from 25 to 200 amperes**



- **Unmatched for Screen Room or Power Line Application**
- **Provides 100 db minimum attenuation**

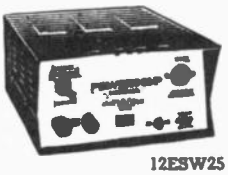
THREADED LEAD TERMINATION

Stock No.	Type	Curr. Amps.	Volts AC	Line Freq. HZ	Case L. x W. x H.	1-9	10-24	25-49
66F428	CDF25FA6-C	25A	250V	0-60	23 x 4 x 4	93.90	83.80	77.10
66F429	CDF25FA4-C	25A	250V	0-400	23 x 4 x 4	102.15	91.20	83.90
66F430	CDF50FA6-C	50A	250V	0-60	23 x 4 x 4	105.40	94.15	86.60
66F431	CDF50FA4-C	50A	250V	0-400	23 x 4 x 4	105.40	94.15	86.60
66F432	CDF100FA6-C	100A	250V	0-60	29 x 4 1/2 x 4 1/2	172.90	154.40	142.00
66F433	CDF100FA4-C	100A	250V	0-400	29 x 4 1/2 x 4 1/2	172.90	154.40	142.00
66F434	CDF150FA6-C	150A	250V	0-60	31 x 6 x 5 15/32	228.50	202.50	186.10
66F435	CDF200FA6-C	200A	250V	0-60	31 x 8 x 5 15/32	285.15	236.75	217.80

KNOCKOUTS BOTH ENDS

66F436	CDF25FA6	25A	250V	0-60	26 x 4 x 4	93.90	83.80	77.10
66F437	CDF25FA4	25A	250V	0-400	26 x 4 x 4	102.15	91.20	83.90
66F438	CDF50FA6	50A	250V	0-60	26 x 4 x 4	105.40	94.15	86.60
66F439	CDF50FA4	50A	250V	0-400	26 x 4 x 4	105.40	94.15	86.60
66F440	CDF100FA6	100A	250V	0-60	32 x 4 1/2 x 4 1/2	172.90	154.40	142.00
66F441	CDF100FA4	100A	250V	0-400	32 x 4 1/2 x 4 1/2	172.90	154.40	142.00
66F442	CDF150FA6	150A	250V	0-60	34 x 6 x 5 15/32	228.50	202.50	186.10
66F443	CDF200FA6	200A	250V	0-60	34 x 8 x 5 15/32	285.15	236.75	217.80

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

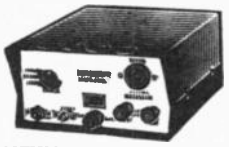


12ESW25

CORNELL DUBILIER

AC BATTERY DRIVEN INVERTER POWER SUPPLIES

- **Wide power ranges available**
- **No load limitations within nameplate rating**
- **Ideal for emergency power**



12TV12

Electro-mechanical inverters change DC to 115 volts AC at 60 Hz. Operates electrical appliances. Take 20% overload on ¼-duty cycle. Features remote control jack, voltage selector, on/off switch and replaceable fuse for overload protection. Two-tone gray wrinkle baked enamel finish and integral finger holes provided, except * one color, less finger holes, supplied with cigarette lighter cord. Frequency tolerance of ±½ cps on items rated 100 watts and up ±2 cps on lower power units. Accessory kits available (see below) for units rated 80 watts and higher. CAUTION: Avoid applications such as compressors, pumps, refrigerators, air-conditioners, etc., which have heavy starting load characteristics.

POWERCON INVERTERS—SQUARE WAVE OUTPUT

Good solution for economy AC power at nominal ratings. Use with power factor of 70% and up. Linear voltage regulation (1%:1%). Heavy duty vibrator in units rated at 100 VA and higher.

Stock No.	Mfr's Type	Typical Applications	Input VDC	Watts Cont.	Watts Int.	Size, inches	Wt. Lbs.	1-4	5-9	10-24	25-Up
66F207	12SP2A*	Shaver only, intermittent duty	12	.....	20	3⅞x2⅞x2¾	2	8.54			
66F224	12A4*	dictation machines, small phonos	12	40	60	6¼x4⅛x3⅜	6	19.03	16.94	14.84	13.70
66F209	12B8	radio, port. tape recorders	12	80	100	8¾x7⅝x3⅞	12	37.88	33.71	29.55	27.27
66F208	12B10	amplifiers, office machines	12	100	125	8¾x7⅝x3⅞	14	36.29	32.30	28.30	26.13
66F220	12TV12	spl. design/portable TV	12	120	140	8¾x7⅝x3⅞	16	39.95	35.56	31.16	28.76
66F210	12D15	tools, business machines	12	150	175	10⅜x9⅞x5½	26	63.77	56.58	49.58	45.77
66F211	12D22	camping trailer, truck	12	220	250	10⅜x9⅞x5½	31	72.66	64.67	56.67	52.32
66F213	110B15	For small vessels, apartment	110	150	175	8¾x7⅝x3⅞	13	42.50	37.83	33.15	30.60
66F214	110D25	houses, emergency power	110	250	300	10⅜x9⅞x5½	26	58.50	52.96	46.41	42.84

POWERCON INVERTERS—SINE WAVE OUTPUT

For all voltage and/or wave-form sensitive loads like TV radio, phono, hi-fi, recording, counting, testing and warning devices. Features automatic load regulation; 15% input change alters output only 5%. Operates loads with any power factor of 25% or more. Maintains output voltage of 110-120 VAC. Ideal for small motor-driven appliances (less than 1/10 hp), flouresecent lights; only inverter widely approvde by TV set manufacturers for operation of portable sets. Filtered for quiet output. Heavy duty vibrators only.

Stock No.	Mfr's Type	Typical Applications	Input VDC	Watts Cont.	Watts Int.	Size, inches	Wt. Lbs.	1-4	5-9	10-24	25-Up
66F219	12DSW10	Portable TV, small appliances	12	100	125	10⅜x9⅞x5½	22	64.95	57.81	50.66	46.76
66F222	12ESW25	Any B&W TV, entertainment appl.	12	250	300	12¼x9⅞x5½	26	1010.95	90.74	79.52	73.40

REPLACEMENT VIBRATORS FOR ABOVE

Stk. No.	Type	Repl. For	1-24	25-49	50-Up
48F077	6565	6L6, 12D6, 12L8	7.27	5.18	4.18
48F087	6567	6H10, 6SH15	7.27	5.18	4.18
48F088	12VB6H	12S10	13.00	9.10	7.48

Stk. No.	Mfg. No.	Repl. For	1-24	25-49	50-Up
48F089	12VD6H	12H15, 12SH20	21.20	14.84	12.19
48F084	110VB6H	110S15, 22F025, 110H25	13.20	9.24	7.58
48F085	110VC6H	110SH40, 110H35	24.50	17.25	14.09

ACCESSORY KITS FOR POWERCON INVERTERS

MK Mounting Kits: Complete with instructions; wt., 2½ lbs.
RK Remote Control Kit: Dashboard or post mount. Switch, dual AC socket, 12' control cord to Powercon, pilot light. Wt. 1 lb.

Stk. No.	Type	For Powercon Types	1-4	5-9	10-24	25-Up
66F225	MK3544-4	12B8, 12B10, 12TV12	3.57	3.21	2.81	2.58
66F226	MK3544-5	All other 12-volt	3.86	3.48	3.05	2.79
66F227	RK112	Except 12A4, 12SP2A, 110v	7.07	6.35	5.88	5.11

AEROVOX INTERFERENCE FILTERS

Type IN-27. Inexpensive filter to be placed between set and outlet when interference is slight. Also used on appliances causing low intensity interference. Eliminates noise on house wiring and power lines. Size, 1⅜x1½". Shpg. Wt., 5 oz.
48F031. NET ..... **.90**

Type IN-28. Use where ground is at distance from point of application. Size, 1⅜x2". Shpg. wt., 8 oz.
48F032. NET **1.20**

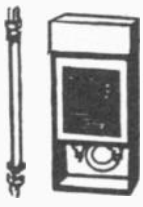
Type IN-30. Provides additional filtering action and inductance. Effective in heavier interference. Plug between set and receptacle or preferably between noisy appliance and receptacle. Size, 1⅜x3". Shpg. wt., 7 oz.
48F033. NET **1.50**

Type IN-42. Overcomes serious causes of interference. Plugs into electric outlet. Interfering device plugs into receptacle of filter. Size, 2½x3¾". Rated at 6 amps for 110-220 volts AC. Shipping wt., 1 lb.
48F034. NET **4.50**

IN-23 IN-27 IN-28 IN-30 IN-105

Type IN-105. Low-impedance delta connected capacitor for fluorescent light fixture in bathtub case, Size 1¾"x1"x1¾".
48F008. NET **1.35**

Type IN-106. Best filter for fluorescents. Balanced network. Especially suited for radio and TV salesrooms. One unit per fixture in series where power leads enter. Metal container with 4 stranded wire leads. Rating: 125V AC or DC; 2.6 amps. Size: 1⅞x3x1⅜".
48F009. NET **3.30**



SCREEN ROOM FILTERS

All screen room filters have attenuation equal to or exceeding that of the screen room. Easy mounting arrangements. Hermetically sealed and terminals at both ends are shielded using knock-outs for ¾" and 1" conduit. 1¼" diameter mounting hole on all cases is countersunk to permit flush mounting of the filter on the screen room. Comply with rigid specifications set up by the designers of the most advanced type screen rooms.

Stk. No.	Type	Amp.	Cir-cuits	Max. CPS	Start Freq.	Size (Inches)	NET
48F018	S-1076-1	50	1	60	14kc	20x3⅝x3⅝	95.00
48F019	S-1076-2	50	2	60	14kc	20x7 1/16x3⅝	180.00
48F021	S-1142-1	30	1	400	150kc	10⅛x2⅞x2 1/16	36.50
48F022	S-1142-2	30	2	400	150kc	10⅛x4¾x2 1/16	48.50

YOU CAN DEPEND ON NEWARK

FOR EVERYTHING

IN INDUSTRIAL ELECTRONICS

TEN STOCKING WAREHOUSES

FROM COAST-TO-COAST

Power Supplies, Vibrators

ELECTRO PRODUCTS LABORATORIES

Fig. A

Fig. B

Fig. D

Fig. E

Fig. F

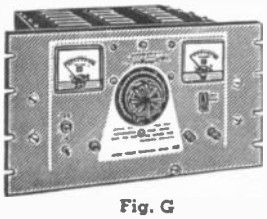


Fig. G

Fig. H

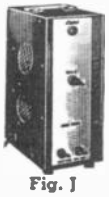


Fig. J

DC POWER SUPPLIES

Electro's power supplies offer DC output up to 1000 watts. Adequate filtering for all requirements whether they be critical transistor circuits or applications permitting up to 5% ripple. Used in design and development, testing and servicing (auto, aircraft, marinecraft. radio, and electronic equipment), production line applications, industrial and lab work. Models GFL, GFLR and GL used for designing and testing DC appliances, telephone circuits, relays and solenoids. Model D-612T, H, and EC-2; ideal for servicing transistor auto and portable radios; Model EC-1 for school labs and industrial research; Model NFB in research and development. The Models PS-30 and PS-50 for thermo-electric cooling power source. Features: attractive enamel finish of steel; adjustable output voltage range; easy to read meters (voltage & current); clearly marked controls. Models EC-1 and EC-2 may be used vertically or horizontally to save bench space. Instructions included. Output terminals isolated from the cabinet. One year warranty. Input—Regulated Models: 105-125 VAC 60 cps. Industrial and General Purpose Models: 117 VAC 50/60 cps.

REGULATED

Stock No.	Model	Voltage Output	Amps. Output.	Fig.	Load Reg.* (V/A)†	Max. Ripple %	Meters‡	DC Imped., Ohms*	Size (HxWxD) inches	Weight lbs.	NET
66F149	PS-3A	0-25	0-200MA	A	.002%	.002	0-25V/200MA	.05	6¼x5x7	5	110.00
66F269	PSR-500-32	2-32	0-15A	B	Less than 1% (line or load)	Less than 1%	0-50V, 0-25A	.02	9¾x14¼x14¼	89	375.00
66F270	PSR-500-55	2-55	0-10A	B	Less than 1% (line or load)	Less than 1%	0-75V 0-15A	.06	9¾x14¼x14¼	88	375.00
66F271	PSR-500-125	2-125	0-5A	B	Less than 1% (line or load)	Less than 1%	0-150V 0-5A	.25	9¾x14¼x14¼	93	395.00

INDUSTRIAL

66F272	EF	0-28	0-5	D	0.9(1-5A)	1	0-50V, 0-6A	0.9(1-5A)			
		0-14	0-5		0.6(1-5A)	1		0.6(1-5A)	7x12x8½	25	120.00
66F145	EFB	0-32	0-4	D	1.25	0.1	0-40/20V,	1.25			
		0-16	0-8		1.0	0.1	0-10A	1.0	7x12x8½	36	160.00
66F146	EFBR**	0-32	0-4	G	1.25	0.1	0-40/20V,	1.25			
		0-16	0-8		1.0	0.1	0-10A	1.0	8¾x19x8½	47	180.00
66F264	GFL	0-125	0-5	E	1.5	0.5	0-150V, 0-5A	1.5	9¾x14¼x14¼	88	317.50
66F273	GFLR**	0-125	0-5	G	1.5	0.5	0-150V, 0-5A	1.5	10½x19x14¼	100	337.50
66F274	GL	0-125	0-5	E	1.5	5.0	0-150V, 0-5A	1.5	9¾x14¼x14¼	80	297.50
66F118	NFB	0-32	0-15	E	0.4	0.75	0-50V, 0-25A	0.4	9¾x14¼x14¼	84	295.00
66F275	NFBR**	0-32	0-15	G	0.4	0.75	0-50V, 0-25A	0.4	10½x19x14¼	97	310.00
66F260	PS-5	0-55	0-10	E	0.8	0.5	0-75V, 0-15A	0.8	9¾x14¼x14¼	70	310.00
66F276	PS-5R	0-55	0-10	G	0.8	0.5	0-75V, 0-15A	0.8	10½x19x14¼	89	330.00
66F277	PS-1000 32	0-32	0-30	F	0.2	0.75	0-50V, 0-50A	0.2	9¾x14¼x19¼	103	398.00
66F278	PS-1000-55	0-55	0-20	F	0.5	0.5	0-75V, 0-25A	0.5	9¾x14¼x19¼	113	398.00

GENERAL PURPOSE

66F119	D-612T	0-16	0-10	D	0.44(3-10A)	0.5@5A	0-20V, 0-10A	0.44(3-10A)			
		0-8	0-10		0.3(3-10A)	2@10A		0.3(3-10A)	7x12x8½	22	79.50
66F120	H	12(adjust.)	0-10	D	0.23(3-10A)	5	0-20V, 0-30A	0.23(3-10A)			
		6(adj.)	0-20		0.15(3-20A)	5		0.15(3-20A)	7x12x8½	30	99.50
66F262	EC-1	12(adj.)	0-5	J	1.4	0.5	None	1.4	10¾x4⅜x6½	12	37.50
66F261	EC-2	0-16	0-5	H	1.8	0.5	0-20V/10A	1.8	10¾x4⅜x6½	11	51.25
66F147	PS-30	12(adj.)	0-30	E	0.12(6-30A)	1	0-20V, 0-50A	0.27	9¾x14¼x14¼	68	198.00
66F279	PS-50	12(adj.)	0-50	E	0.17	1	0-20V, 0-50A	0.17	9¾x14¼x14¼	87	298.00

* no-load to full load
† output volts change for each amp. of output current change
‡ All 2% accuracy, except 5% for GENERAL PURPOSE UNITS
** 19" rack-mounting version

MALLORY

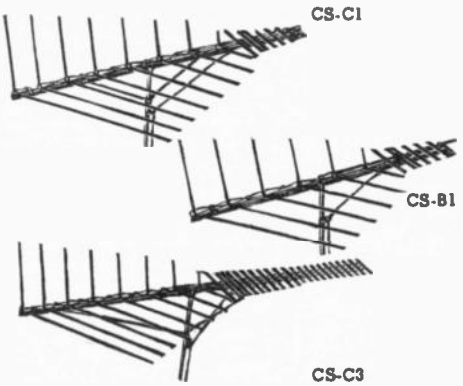
REPLACEMENT VIBRATORS

The vibrators listed below will cover almost 100% of your replacement needs. Springs are of high grade clock-spring steel, held in permanent alignment by rugged frame. 105 strand lead wire resists vibration—connections stay intact. Has sponge rubber silencer. Mechanical hum and shake are reduced practically to zero by a unique "floating" design that isolates the virbration of the reed element from the case. Hum is squelched to a level never before possible. Wt. 8 oz.

Stk. No.	Type	Volts	Size	NET
48F535	1601	6	1½x2⅝"	2.82
48F449	4-4	6	1½x2⅝	1.60
48F451	12-3	12	1½x2⅝	1.65
48F450	12-4	12	1½x2 9/16	1.65
48F560	1501	6	1½x2⅝"	3.81
48F575	1610	6	1½x2 5/16"	3.30
48F569	G1801	12	1½x3"	4.11
48F571	1513	6/12	1½x2⅞"	4.14
48F572	1514	6	1½x2⅞"	4.14
48F573	G1601	12	1½x2⅝"	2.82
48F574*	1701A	6/12	1½x3"	5.76

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

• NEW FINCO COLOR SPECTRUM SERIES 300 OHM ANTENNA



MODEL CS-C3 FOR WEAK VHF SIGNAL AREAS — VERY WEAK UHF SIGNAL AREAS

Full length boom antenna. Thirty element UHF — VHF — FM. Eight VHF — FM elements, seven driven and one parasitic. Twenty-two UHF elements, ten driven and 12 parasitic. Boom length is 166½". Turning radius is 95". Complete with behind the set line splitter. 11 lbs.

92FA755. NET **35.97**

MODEL CS-C1 FOR WEAK VHF SIGNAL AREAS — STRONG UHF SIGNAL AREAS

Full length boom antenna. Sixteen element UHF — VHF — FM. Eight VHF — FM elements, seven driven and one parasitic. Eight UHF elements, five driven and three parasitic. Boom length is 123½". Turning radius is 66". Complete with behind the set line splitter. 9 lbs.

92FA756. NET **26.37**

MODEL CS-B1 FOR MODERATE VHF SIGNAL AREAS — STRONG UHF SIGNAL AREAS

Full length boom antenna. Thirteen element UHF — VHF — FM. Six VHF — FM elements, five driven and one parasitic. Seven UHF elements, five driven and two parasitic. Boom length is 93". Turning radius is 48". Complete with behind the set line splitter. 7 lbs.

92FA757. NET **17.97**

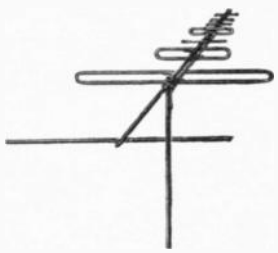
TRI-CRAFT VHF & UHF OUTDOOR TV ANTENNAS

MODELS S-2080A UHF-VHF TV ANTENNA

Gold Anodized-aluminum. Excellent for color and black and white. High gain sharp sensitivity and high front to back ratio. Completely pre-assembled, all elements attached to boom utilizing Hi-Lo's patented "Allsnap" method of assembly. Has 35 mile range. All VHF elements are wood doweled. Designed for one lead installation.

92F119. NET **9.95**

114-010


S-2080A

FM DOUBLE DIPOLE

Model 114-010. Two folded dipoles provide excellent reception, from any direction, over the entire FM band from 88 to 108 mc. Has impedance of 300 ohms. Sturdy, lightweight aluminum construction withstands wind, icing and snow. With 75 feet of Amphenol twin-lead, stand-off insulators, base mount, hardware and 5 ft. mast. Shipping weight, 7 pounds.

92F101. 1-5 ..... **10.95**
6-11 ..... **9.13** **12 Up** **8.21**

COLOR COUPLER

An improved television set coupler designed for color and/or black and white. Resistor networks prevent interference, assure minimum signal loss and have excellent impedance match. Available in gray and brown.

Model 114-097. 2 set coupler.
92F232. 1-8 ..... **1.97**
9 Up **1.59**
92F230. Model 114-098. 3 set. **1-11** ..... **2.37** **12 Up** **2.13**
92F231. Model 114-099. 4 set. **1-11** ..... **2.97** **12 Up** **2.67**

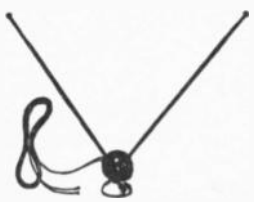
TRI-CRAFT
TELECOUPLERS

For highly efficicent operation of from 2 to 4 separate TV sets using only one antenna. Operates extremely well on either UHF or VHF with no appreciable loss of signal strength. Streamlined dove grey case can be mounted on wall, back of set, etc. With mounting screws.

92F227. Type 114-088. For coupling 2 TV sets off same antenna.
1-11 ..... **2.25**
12 Up **2.02**

92F228. Type 114-090. For coupling 4 TV sets off same antenna.
1-11 ..... **3.45**
12 Up **3.10**

NEWARK
INDOOR ANTENNA



Fully adjustable for all channels. Mahogany bakelite sphere-base locking knob holds arms at any angle. With 5 ft. of 300 ohm lead-in. Shpg. wt., 2 lbs.

92F030. NET **2.49**

HI-LO
INDOOR ANTENNA

A high-gain indoor antenna for all channels, 2 to 83. Factory tuned; requires no adjustment. Anodized in gleaming gold. Has bakelite base, aluminum bars. 10¼" high, 32" wide. Shipping weight, 2 pounds.

92F036. NET **5.85**

RCA TV ISOTAP

Model WP-25A. May be used as high-medium-low isolation transformer for testing receivers at various settings of line voltage. Supplies outputs of 130, 115, and 105 volts at full maximum load and is tapped to match line voltages from 105 to 130 volts in six steps. Power rating: "Direct". Pos.: 50 VA. "Isolated" Pos.: 275 VA. Frequency: 50-60 hz. Finish is dark cobalt and grey lacquer. Compact steel case. Size: 5¾"H x 5"W x 4⅜"D. Shpg. wt. 14 lbs.

62F047. NET **22.00**

PERMA-POWER TV TUBE BRIGHTENER

Model C-202. Can be used on any black and white TV set. Designed to give a full 50% heater power boost for all heater voltages and current ratings. Slide switches selects parallel or series wiring. Easy to install. Comes complete with duodecal 12 pin socket.

90F330. NET **2.25**

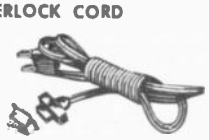
Model C-222. 110° Shell base. Sylvania, Dumont type. Any heater rating.

90F031. NET **2.25**

Model C-212. 110° Button base. RCA type. Any heater rating.

90F032. NET **2.25**

RPG INTERLOCK CORD



TV power supply line cord. 6 ft. long. Molded-on, all-rubber female connector. U. L. approved. Shpg. wt., 8 oz.

36F880. NET **29c**

Male Connector. Flush mounting type for use with cord above. Wt., 2 oz.

36F881. NET **12c**

You Can Depend on
NEWARK
For Everything in
Industrial Electronics

PERMA-POWER TV VOLTAGE REGULATOR

Corrects low line voltage to restore full height and weight of TV picture. Rated 300 watts, 90-135 volts. Shpg. wt., 2½ lbs.

90F033. Model D-200. NET **5.97**

Model D-101. Manual version.
90F034. NET **4.17**

ALLIANCE TENNA-ROTORS

T-45 HEAVY DUTY ROTOR

"Tenna-Teller" needle pointer on face automatically follows antenna direction. Antenna may be turned through 360° cycle with slight pressure on control bar. Input 115 v. AC. Clockwise and counterclockwise revolution. Instantly reversible motor. Corrosion resistant components throughout, cadmium plated parts. Less 5-conductor cable. Shpg. wt., 12 lbs.
92F744. NET **24.03**

CABLES FOR ALLIANCE ROTATORS

Conductor Flat Cable. For use with U-100. Wt., per 100', 3 lbs.
Belden. Type 8464 Cable. 100 ft. Coil
36F231A. NET 3.30
Belden. Type 8464 Cable. 75 ft. Coil
36F231H. NET 2.55
Belden. Type 8464 Cable. 1000 ft. Coil
36F231. NET 29.00
5-Conductor Cable. For C-225 and T-45. Wt., per 100', 3 lbs.
Belden Type 8463 Cable. 100 ft. Coil
36F232A. NET 4.00
Belden. Type 8463 Cable. 50 ft. Coil
36F232B. NET 2.18
Belden. Type 8463 Cable. 500 ft. Coil
36F232F. NET 18.60

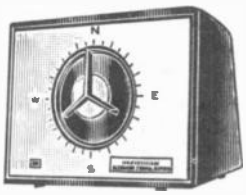
MODEL MG-1 SECRETONE

Connect to speaker in your TV, CB, or Hi-Fi set. Pick up sound on any regular AM radio. Enables you to take the sound anywhere you want by use of a portable radio. May be plugged directly into earphone jacks or wired across speaker connection. Operated on 9V. transistor battery or can be wired permanently to 6V. or 12V. source. Complete with battery, antenna, adaptor, jack, plug and cable. 3¼" x 4½" x 1⅞". Wt. 11 oz.
92F793. NET **10.57**

MODEL TBB-2 THRUST BEARING BRACKET

Minimize strain on rotator by use of TBB-2 when installing heavier type antennas. Not necessary for normal installations. Shpg. wt., 3 lbs.
92F743. NET **2.97**

C-225 TRANSISTORIZED AUTOMATIC ROTATOR SYSTEM



Type C-225. Fully automatic Tenna-Rotor reduces interference, provides instant rotation, brings more stations and brighter, clearer pictures. Automatically positions antenna toward television or FM station. For color and black and white TV sets. Pulls in more signals with clearer picture. Phase-sensing circuit for fine tuning. Positive 360° rotation. Reversible motor for instant position reversal. Die cast, corrosion proof rotor—stainless steel and zinc plated parts. Less 5-conductor cable. U.L. Approved. For 110-120 V., 60 hz AC. Shpg. wt., 12 lbs.
92F740. NET **35.97**

U-100 AUTOMATIC SYSTEM

Maintains perfect sychronization. Eliminates drifting and swinging. Reduces interference, gets brighter pictures, brings in more distant stations. Automatically turns antenna toward station of your choice for the best picture. To turn the antenna simply set the indicator knob at the direction desired; the U-100 does the rest. 115 volts, 60 hz AC. Clockwise or counterclockwise rotation. Instantly reversible motor. Magnetic brake eliminates over-travel. Rotates through 360° of arc at speed of one r.p.m. Factory lubricated for life. Moisture sealed. Corrosion resistant components throughout. Less 4-conductor cable. Shpg. wt., 12 lbs.
92F741. NET **28.78**

K-22 ALLIANCE TENNA-ROTOR

- **Die-Cast Aluminum**
- **Weather Proof Housing**

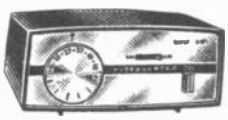
Provides instant fingertip control of antenna rotation. Reduces interference, helps eliminate "ghosts." Ideal for CB reception and transmission. Use Model TBB-2. Thrust Bearing Bracket for heavier type antennas. U-Bolts supplied. Cadmium headware.
92F742. NET **19.37**

BLONDER TONGUE

VHF/FM 4-OUTPUT AMP HOMER

Model HVP-38. A single silicon transistor, 75 ohm VHF/FM amp for channels 2-13. Designed to provide quality reception in coaxial systems with up to 4 TV/FM sets. Walnut grained panel. Five BTF-591 connectors included. Size: 4⅛ x 1⅞ x 1⅞". Wt., 2 lbs.
94F010. Model HVB-3P. **NET** .. **16.50**

MODEL BTX-99B CONVERTER



UHF converter for channels 14-83. All transistor circuit. For operation from 110-120 VAC; 50/60 hz. UL approved. Size: 6⅜ x 3 x 3¾". Shpg. wt. 2 lbs.
94F000. Model BTX-99B. **NET** **19.85**

MODEL BTX-11A CONVERTER AMPLIFIER

Combination for weak signal and fringe areas. Most powerful and stable UHF converter ever engineered for the home. Amplifier triples TV signal. Same size as Model BTX-99B. 110-120 VAC, UL approved. Shpg. wt. 2 lbs.
94F001. NET **31.20**

NEWARK—
For Dependable Service

● NEW A-102 COUPLER

U/V deluxe 300-ohm 2-way UHF/VHF/FM coupler. Connects 2 sets to 1 twin-lead cable, or couple 2 antennas. Offers high isolation between sets. Backmatched to increase picture sharpness.
94F011. NET **2.25**

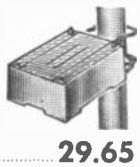
● NEW A-104 COUPLER

U/V 300-ohm UHF/VHF/FM coupler. Similar to A-102 U/V, but for connecting four sets to a single twin-lead cable.
94F012. NET **3.50**

UHF "GOLDEN ARROW" INDOOR ANT.

For channels: 14 to 83. Complete with lead-in. Wt., 1 lb.
94F004. NET **3.95**

ABLE-U2 MAST MOUNTED AMPLIFIER

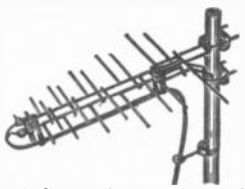


UHF amplifier. Two transistor circuit provides dramatic, improved TV signal for both color and black and white. For 110-120 VAC. Shpg. wt., 1 lb.
94F005. NET **29.65**

MODEL U/VAMP-2 AMPLIFIER

Mast-mounted, all-weather two-transistor, UHF-VHF amplifier provides power to turn fuzzy pictures into sharp, clear reception. Built-in FM filter. Wt. 2 lbs.
94F007. NET **35.25**

UHF "GOLDEN-DART" OUTDOOR ANT.



UHF periodic outdoor antenna. May be added to existing VHF mast or mounted separately. Pre-assembled. Welded for ruggedness. Shpg. wt. 2 lbs.
94F003. NET **4.15**

BTD-44 UHF CONVERTER

Cordless, UHF all-channel converter. Uses solid state components. Recommended for prime signal target areas. Operates on ordinary flashlight battery. Size: 6⅜ x 3 x 3¾". Shpg. wt. 1½ lbs.
94F006. NET **13.20**

MODEL V/U ALL-2

Indoor version of Model U/VAMP-2. Handles two sets Shpg. wt. 1¼ lbs.
94F008. NET **29.15**

VAMP-2 BOOSTER

Same as the ABLE-U2 (see U2 listing), for VHF and FM signals. Remote power supply at set sends 15 VDC to booster. Shpg. wt. 2 lbs.
94F009. NET **27.40**

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

Fig. A—CHIMNEY MOUNTS

Type 8005. A chimney mount that can be installed in a few minutes by a novice. Extra heavy gauge steel. Brackets will support masts up to 1¾". With straps and hardware. Wt., 4 lbs.
92F550. NET **2.26**

Type 9025. Exactly the same as the 8005 above, but supplied with stainless steel straps.
92F551. NET **3.13**

SNAP-IN CHIMNEY MOUNTS

Type 8930. Snap the mast in place and tighten the bolts. No loose pieces. Masts up to 1¾". Clearance: 4". With stainless steel straps and mounting hardware. Shpg. wt., 4 lbs.
92F556. NET **3.68**

CHIMNEY STRAP REPAIR KIT

A complete set of stainless steel strapping 24 ft. long, and necessary hardware for replacements on chimney mountings. Shpg. wt., 2 lbs.
92F577. Type 8932. NET **2.49**

Fig. B—SNAP-IN WALL MOUNTS

DeLuxe Models. Connect to the wall at 5 points, rather than the standard 4. Eliminates side sway of antenna. Extra heavy gauge steel. For masts up to 1¾". 4 lbs.
92F552. Type 8312. 12" clearance. **NET** **3.13**
92F553. Type 8318. 18" clearance. **NET** **4.15**

Fig. C—WALL MOUNTS

Standard Model snap-in wall mounts with 4 point contact. Will hold masts up to 1¾". Extra heavy gauge steel. Easy to use. Shpg. wt., 6 lbs.
92F557. Type 8306. 6" clear. **NET** ... **1.84**

Fig. D—CLOSE WALL MOUNTS

Close wall mounting brackets. Ideal where large clearance is not needed. Doubly protected against rust. Will hold masts up to 1¾". Complete with all hardware. Shpg. wt., 2 lbs.
92F558. Type 8302. 2¼" clearance. **NET** **1.13**
92F560. Type 8304. 4" clearance. **NET** 1.45

LEAD-IN TUBE

A universal style insulated lead-in for feeding all types of lead-in through the wall. Fits ¾" hole. 14" wall max. Shpg. wt., 5 oz.
92F428. Type 8958-1. Ivory. **NET** **1.92**

2 PIECE MAST COUPLER

Sturdy 2-piece mast coupler for TV/FM masts. Will couple masts from 1" to 1¾". With all hardware. 8 oz.
NET **1.07**

U-BOLTS

To fit masts ¾" to 1⅜" dia. Inside Max. Size 1⅛" wide x 3" long. For mounting and extending antenna poles and masts. Supplied with nuts. Shpg. wt. 2 oz.
92F424. Type 8123. NET ..... **.11**

GROUND ROD

Copper-plated steel rod for direct-to-earth ground. 4-ft. long, ⅜" dia. Shpg. weight, 2½ lbs.
92F399. Type 8929. NET **1.02**

GROUND PIPE CLAMP

Clamps on pipes from ⅝" to 1⅝" O.D. Wt., 4 oz.
92F581. Type 58
EACH ..... **.20**
10 for 1.40

GUY WIRE CLAMPS

Fastens to mast to allow the use of guy wires. Has 2 hook eyes for easy fastening of guy wires. For masts from ¾" to 1¼". 6 oz.
92F564. Type 8372. NET ..... **.31**

Fig. E—VENT MOUNTS

Type 8802. A vent mount that will clamp on any size pipe or vent. Only two pieces to clamp on with bolts. Extra heavy gauge steel. 2"-4", 3 lbs.
92F561. NET **2.26**

Fig. F—PEAK MOUNTS

Type 8625. Simply fasten brackets to peak and job is done. Extra heavy gauge angle iron. Will hold masts up to 1¾". Protected against rust. With all hdwe. Shpg. wt., 4 lbs.
92F566. 30" lower support. **NET** **3.81**

Fig. G—RIDGE MOUNTS

Type 9060. Mounts over the ridge of a roof. No guy wire needed. For masts up to 10 ft. high and 1½" dia. with hardware. Shpg. wt., 5 lbs.
92F568. NET **4.47**

Fig. H—ROOF MOUNTS

Type 8800. A mount that will hold a mast up to 1¾" securely at any angle. Rust Resistant. Shpg. wt., 1 lb.
92F573. NET ..... **.55**

FIG. I ANTENNA BASE

Model 9063. 2' tri-pod tower antenna base. Super sturdy tower for supporting mast installations up to 10' without the use of guy wires. Provides extra support for higher masts where guying is necessary. Accept 1¼" D masts.

Stk. No.	Type	Des.	Each
91F950	9063	2' tower	5.49

FIG. J & K TRI-POD

Models 9143&9144. 3' and 5' tri-pod towers. Designed to afford maximum mast support. Towers fold and unfold like umbrellas. Made of hot galvanized dipped. Adjustable for any roof pitch. All-weather finish for extra long life. Shipped fully assembled and ready to install.

Stk. No.	Type	Des.	Each
91F951	9144	3' tower	7.15
91F952	9143	5' tower	12.08

MAST CLAMP ASSEMBLY

Complete clamp assembly to fasten a crossbar to mast. Edges serrated so will not turn on mast. Rustproofed. Shpg. wt., 2 oz.
92F425. Type 8718. NET ..... **.37**

Type 8153. Bridle Rings. Handy bridle rings for tying guy wires. Will not rust.
92F426. NET EACH. Type 8153 ..... **.07**

NAIL-IN STANDOFFS

Type 8343. Speed type nail-in insulators save time and labor. Universal for all lead-ins. Shpg. wt., per 10, 8 oz.
92F422. NET Each ..... **.07**
Per 100 ..... 5.88

L

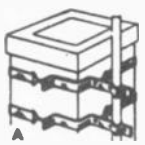
M

UNIVERSAL STANDOFFS

Standoffs that will hold securely any UHF, VHF, or other transmission line. Sturdily made, they will not rust. *Less mast strap.

Stk.No.	Fig.	Screw	Length	Each	10 for
92F400	L	wood	3½"	.04	.35
92F401	L	wood	5½"	.07	.60
92F402	L	wood	7½"	.08	.70
92F403	L	machine*	3½"	.05	.40
92F404	L	machine*	7½"	.05	.40
92F405	M	wood	7½"	.17	1.60
92F406	M	machine*	7½"	.17	1.60

Mast Straps only. For fastening standard Telco machine screw standoffs to mast. For masts up to 2¾" dia.
92F423. #8251. NET ..... **.08**
Per 100 ..... 7.67



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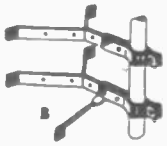

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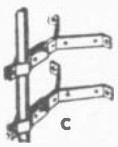

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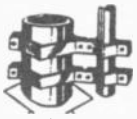

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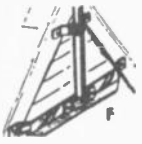

F

G

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K

MAST STANDOFFS

Type 8257. Mast stand-off with extruded threads. Made of heavy steel, galvanized 9" strap. Shpg. wt., 4 oz.

Stk. No.	Length	Each	10 for
92F410	7½"	.16	1.34

SNAP-ON STANDOFF

New, improved snap-on standoff that is easy to put on and really stays on. For UHF and VHF. No tools required. For 1¼" masts.
92F412. #8798. NET ..... **.10**
Per 100 ..... 8.66

"E-Z" STANDOFFS

Universal standoffs with E-Z locking. Merely put the lead-in in place and swing the stand-off shut. Locks surely and easily; with wood screw except *(machine). No tools needed. Shpg. wt./10, 9 oz.

Stk. No.	Type	Lgth.	Ea.	10 for
92F413	EZ-8027	3½"	.10	.90
92F414	EZ-8029	7½"	.12.	1.10
92F415	EZ-8031	3½"	.09	.80

"E-Z" SNAP-ON STAN-OFF 1¼° MAST

Stk. No.	Type	Lgth.	Each	10 for
92F418	EZ-8798	3½"	.18	1.72

HOT NAIL STANDOFF

Type 8762. Formed and hardened standoff for driving in masonry, hard woods, etc. Wt., per 10, 8 oz.
92F421. NET ..... **.12**
Per 100 ..... 11.16

BUSSMANN Fuses and Accessories

TYPE AGX FAST-ACTING FUSES

Provides high speed action necessary to protect sensitive instruments or delicate apparatus. 1/16 to 2 ampere sizes have straight through element/U.L. approved. Size: 1/4x1". Shpg. wt. .76 lbs. per 100.

Stk. No.	Amps.	Volts	Boxes of 5 1-19	20-99	100-199
27F973	1/500	250	5.15	4.30	3.44
27F974	1/200	250	2.15	1.80	1.40
27F975	1/100	250	1.90	1.60	1.28
27F976	1/32	250	1.70	1.40	1.12
27F977	1/16	250	1.05	.88	.70
27F978	1/10	250	.75	.63	.50
27F979	1/8	250	.75	.63	.50
27F980	3/16	250	.75	.63	.50
27F981	1/4	250	.50	.43	.34
27F982	2/10	250	.75	.63	.50
27F983	3/8	250	.50	.43	.34
27F984	4/10	250	.50	.43	.34
27F985	1/2	250	.50	.43	.34
27F986	3/4	125	.50	.43	.34
27F987	1	125	.30	.25	.20
27F988	1 1/2	125	.30	.25	.20
27F989	2	125	.30	.25	.20
28F049	5	125	.20	.17	.13

TYPE AGC FUSES

Formerly called 3AG. Test specifications - carry 110% open at 135% within 1 hour. Approved by Underwriter's Laboratories. Size 1/4x1 1/4". Shpg. wt., .91 lbs. per 100.

Stk. No.	Amps	Volts	Boxes of 5 1-19	20-99	100-199
28F050	1/32	250	1.70	1.40	1.12
28F051	1/16	250			
28F052	1/8	250			
28F053	1/4	250	.50	.43	.34
28F054	3/8	250			
28F055	1/2	250			
28F056	3/4	250			
28F057	1	250			
28F058	1 1/2	250			
28F059	2	250			
27F880	3	250	.30	.24	.19
27F881	4	32	.30	.24	.19
27F882	5	32	.20	.17	.13
27F883	6	32			
27F884	7 1/2	32			
27F885	10	32			
27F886	15	32			
28F048	20	32	.18	.15	.12
27F887	25	32	.22	.19	.15
27F888	30	32	.45	3.80	3.00

TYPE MTH FUSES

Formerly called 3AG. Test Specifications carry 110%, open at 135% within 1 hour. Listed as approved by Underwriters Laboratories. Size: 1 1/4"x1/4". Shpg. wt., .91 lbs. per 100.

Stk. No.	Amperes	Volts	Boxes of 5 1-19	20-99
27F877	4	250	.39	.325
27F878	5	250		
27F879	6	250		

BUSS GLR FUSES

Fuse and knob are in one piece. When fuse opens entire fuse-knob is replaced. Knob is insulated to guard against shock. GLR fuses are quick blowing type - carry 110%, open at 135% within 1 hour.

Stk. No.	Amps	Volts	Boxes of 5 1-19	20-99
28F300	1/2	300	.95	.80
28F301	1	300	.50	.42
28F302	1 1/2	300		
28F303	1 6/10	300		
28F304	2	300		
28F305	2 1/2	300		
28F306	3	300		
28F307	4	300		
28F308	5	300		

"MDL" FUSETRON DUAL-ELEMENT FUSES

Fuses with a long time lag. Avoid needless blows from starting currents or surges. At 200% load the approximate blowing time is 25 seconds. Size: 1/4x1 1/4. Wt., 1 lb. per 100.

Stk. No.	Amps.	Volts	Boxes of 5 1-19	20-99	100-199
27F822	1/100	250	1.45	1.20	.96
27F823	1/32	250			
27F824	1/16	250	1.05	.90	.70
27F825	1/10	250			
28F045	1/8	250			
27F826	15/100	250			
27F827	2/10	250			
28F046	1/4	250			
27F828	3/10	250			
27F829	4/10	250			
27F830	1/2	250			
27F831	6/10	250			
27F832	8/10	250			
27F833	1	250			
27F834	1 1/4	125	1.00	.85	.66
27F835	1-6/10	125			
27F836	2	125			
27F837	2-1/2	125	.75	.65	.50
27F838	2-8/10	125			
27F839	3-2/10	125			
27F840	4	32			
27F841	5	32			
27F842	6-1/4	32			
27F843	8	32			
27F844	10	32			
28F047	15	32			
27F845	20	32			
27F846	25	32			
27F847	30	32			

TYPE MDX FUSES

These fuses have the same specifications as Type MDL. The only main difference being that at a load of 200% the fuse blows in approximately 12 sec. .93 lbs./100 Size: 1/4x1 1/4.

Stk. No.	Amps.	Volts	Boxes of 5 1-19	20-99	100-199
27F890	1-1/4	250	1.15	1.00	.80
27F891	1-1/2	250			
27F892	1-6/10	250			
27F893	2	250			
27F894	3	125	.75	.65	.47
27F895	3-2/10	125			
27F896	4	125			
27F897	5	125			
27F898	6-1/4	125	.90	.75	.60
27F899	7	125			

TYPE GLD INDICATING FUSES

Fiber tube; silver plated indicating pin extends from end of fuse when fuse is blown. If desired, indicating pin can be used to activate a signal light by using fuses in an HKA fuseholder. Carry 110% of rated current, open at 135% in 1 hour. Size, 1/4x1 1/4"; shpg. wgt., .86 lbs. per 100.

Stk. No.	Amps.	Volts	Boxes of 5 1-19	20-99	100-199
27F964	3/4	125	1.70	1.40	1.12
27F965	1	125			
27F966	2	125			
27F967	3	125			
27F968	5	125			

BUSS GBA VISUAL INDICATING FUSES

Physically and electrically identical to type GLD fuses listed above, except indicating pin is red-tipped for direct visual indication of opened element. Use with BUSS HLD fuseholder. Size: 1/4x1 1/4.

Stk. No.	Voltage	Amp.	Boxes of 5 1-19	20-99	100-199
28F309	125	3/4	1.75	1.50	1.20
28F310	125	1			
28F311	125	1 1/2			
28F312	125	2			
28F313	125	3			
28F314	125	5			

TYPE ABC CERAMIC BODY FUSES

Can take 25,000 amps. @ 125 v. without exploding. Carry 110%, open at 135% of rating. Size: 1/4x1 1/4".

Stk. No.	Amps.	Volts	Boxes of 5 1-19	20-99	100-999
27F952	2	250	.65	.55	.50
27F953	3	250			
27F954	5	250	.65	.55	.50
27F955	6	250			
27F956	8	250			
27F957	10	250			
27F958	12	250	.65	.55	.50
27F959	15	250			
27F960	20	250			
27F961	25	125	.80	.70	.65
27F962	30	125			

"FNM" SLOW-BLOWING FUSES

Dual element, fibre tube, slow blowing fuses avoid needless blows from starting currents or surges. Fuse link operates only on very high overloads, or short circuits. A thermal cutout functions on low overloads, and cannot operate quickly at any load, hence long time lag is obtained. Yet, complete protection is provided against shorts. 13/32"x1 1/2". Shpg. wt., 1.5 lbs. per 100.

Stk. No.	Amps.	Volts	Boxes of 5 1-19	20-99
27F863	1/2	250	1.50	1.25
27F864	1	250		
27F865	1-6/10	250		
27F866	2	250		
27F867	3-2/10	250		
27F868	4	250		
27F869	5	250		
27F870	10	250		
27F872	2 1/2	250		
27F873	6-1/4	250		
27F874	8	250		
27F875	12	125		
27F876	15	125		

FNA SIGNAL FUSES

DUAL-ELEMENT - SLOW BLOWING. Avoids needless blows from starting currents or surges. Has silver indicating pin which extends from fuse when fuse opens. Can be used in BUSS HPC-C indicating fuseholder or pin can be used to actuate a signal by using fuses in BUSS signal fuse block. Carry 110%, open at 135% in 1 hr. Size: 13/32x1 1/2".

Stk. No.	Amps.	Volts	Boxes of 5 1-19	20-99
28F327	1/10	250	2.75	2.40
28F328	15/100	250		
28F329	2/10	250		
28F330	3/10	250		
28F331	4/10	250		
28F332	1/2	250		
28F333	6/10	250		
28F334	8/10	250		
28F335	1	125		
28F336	1 1/8	125		
28F337	1 1/4	125		
28F338	1-4/10	125		
28F339	1-6/10	125		
28F340	1-8/10	125		
28F341	2	125		
28F342	2 1/4	125		
28F343	2 1/2	125		
28F344	2-8/10	125		
28F345	3	125		
28F346	3-2/10	125		
28F347	3 1/2	125		
28F348	4	125		
28F349	4 1/2	125		
28F350	5	125		
28F351	5-6/10	125		
28F352	6	125		
28F353	6 1/4	125		
28F354	7	125		
28F355	8	125		
28F356	10	125		

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

Fuses and Accessories BUSSMANN

HIGH INTERRUPTING CAPACITY FUSES

Type KTK. 13/32"x1½". Glass fibre melamine tube with sand filler surrounding silver fuse element. For use on circuits capable of delivering currents as high as 100,000 amps at voltages of 600 or less. Test spec.—carry 110%, open at 135% in 1 hour or less. U.L. listed.

Stk. No.	Amps	Voltage	1-9	10-99	100 for
28F190	1/10	600 or less			
28F191	1/8	600 or less			
28F192	2/10	600 or less			
28F193	¼	600 or less			
28F194	3/10	600 or less			
28F195	½	600 or less			
28F196	¾	600 or less			
28F197	1	600 or less			
28F198	1¼	600 or less			
28F199	2	600 or less	1.42	1.02	85.00
28F200	3	600 or less			
28F201	4	600 or less			
28F202	5	600 or less			
28F203	6	600 or less			
28F204	8	600 or less			
28F205	10	600 or less			
28F206	15	600 or less			
28F207	20	600 or less			
28F208	25	600 or less			
28F209	30	600 or less			

TRON RECTIFIER FUSES

Especially designed for protection of semiconductor rectifiers. Test specs. — carry 100% rating; open within 1 sec. of 250 rating.

KAA & KAW—13/32 x 1½"; KAB—9/16x2".

Stock No.	Symbol & Amps	Volts	Net Each
28F210	KAA 1	130	
28F211	KAA 2	130	
28F212	KAA 3	130	
28F213	KAA 4	130	
28F214	KAA 5	130	
28F215	KAA 6	130	
28F216	KAA 7	130	
28F217	KAA 8	130	
28F218	KAA 9	130	.80
28F219	KAA 10	130	
28F220	KAA 12	130	
28F221	KAA 15	130	
28F222	KAA 20	130	
28F223	KAA 25	130	
28F224	KAA 30	130	
28F225	KAB 1	250	
28F226	KAB 2	250	
28F227	KAB 3	250	
28F228	KAB 4	250	
28F229	KAB 5	250	
28F230	KAB 6	250	
28F231	KAB 7	250	
28F232	KAB 8	250	
28F233	KAB 9	250	.90
28F234	KAB 10	250	
28F235	KAB 12	250	
28F236	KAB 15	250	
28F237	KAB 17½	250	
28F238	KAB 20	250	
28F239	KAB 25	250	
28F240	KAB 30	250	

Stock No.	Symbol & Amp	Volts	Net Each	100 for
28F241	KAW 1	130		
28F242	KAW 2	130		
28F243	KAW 3	130		
28F244	KAW 5	130		
28F245	KAW 7	130	.89	80.00
28F246	KAW 10	130		
28F247	KAW 15	130		
28F248	KAW 20	130		
28F249	KAW 30	130		

BUSS FUSE BLOCK

Molded Bakelite. One mounting hole. Countersunk for No. 6 flat head screws.

Stk. No.	Type	Size	Net
28F040	4520	¼x1"	.16
28F041	4405	¼x1¼"	.16
28F042	4421	13/32x1½"	.40
28F043	3520	13/16x2"	2.34

FUSETRON DUAL-ELEMENT FUSES

Type FRN. Long time-lag prevents opening on starting currents or other harmless overloads — yet protects against shorts. Will guard motors against burnouts from overloads or single phasing. U/L listed for motor protection up to 250 volts.

Stk. No.	Amps.	Sizes	Each	100 for
28F250	1	¼x2"		
28F251	1¼	¼x2"		
28F252	1-6/10	¼x2"		
28F253	2	¼x2"		
28F254	2½	¼x2"		
28F255	3-2/10	¼x2"		
28F256	4	¼x2"		
28F257	5	¼x2"	.36	30.00
28F258	6¼	¼x2"		
28F259	8	¼x2"		
28F260	10	¼x2"		
28F261	12	¼x2"		
28F262	15	¼x2"		
28F263	17½	¼x2"		
28F264	20	¼x2"		
28F265	25	¼x2"		
28F266	30	¼x2"		
28F267	35	¾x3"		
28F268	40	¾x3"		
28F269	45	¾x3"	.69	58.00
28F270	50	¾x3"		
28F271	60	¾x3"		
28F272	70	1x5⅞"		
28F273	80	1x5⅞"		
28F274	90	1x5⅞"	1.61	134.00
28F275	100	1x5⅞"		

INDUSTRIAL FUSE BLOCKS

Takes all 13/32 x 1½" fuses. Ruggedly built for efficient service. Side barriers prevent arc-over. One piece molded base. Silver plated clips to avoid corrosion. Ideal for protection of motors, transformers, diodes, solenoids, etc. Can be panel mounted or used on equipment.

Stk. No.	Type	No. Poles	Base Size	NET EACH
28F357	2807	1	55/64 x 3"	.74
28F358	2808	2	1⅝ x 3"	1.48
28F359	2809	3	2⅜ x 3"	2.06

BUSS ADD-ON BLOCKS

Any number of single-pole fuseblocks and separate end-barrier lock together into single unit. Marking strips for circuit identification available. Will take any 13/32 x½" fuse.

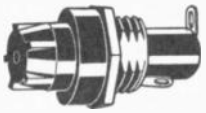
Stock No.	Type Description	Net Each	100 for
28F288	3742 End-Barrier Only	.11	9.00
28F289	3743 One-Pole Block Only	.75	63.00
28F290	Markina Strip in 50" lgt.	.37	31.00

BUSS GMT FUSES

Permits multiple mounting of fuses in limited space. Colored indicator spring when released makes contact with alarm terminal which can activate signal circuit. Size: ¼x1 13/32".

Stk. No.	Amps	Color of Indicator	1-99 Each	100-499 per 100	500-999 per 100
28F315	18/100	Yellow			
28F316	¼	Violet			
28F317	½	Red			
28F318	65/100	Black			
28F319	¾	Brown			
28F320	1	Gray	.40	33.00	26.00
28F321	1½	White			
28F322	2	Orange			
28F323	3	Blue			
28F324	5	Green			
28F325	7½	Blk.-White			
28F326	10	Red-White			

SPACE SAVER PANEL MOUNTED FUSE HOLDER



1⅝ inch long, extends 29/32" behind front of panel. Takes ¼x1¼" fuses. Converts to take 9/32x1¼" fuses. Flat part of molded phenolic body locks fuse against rotation when used on punched hole. Requires ⅝" mounting hole, except *Requires ½" mounting hole.

Stock No.	Type	Fuse Size	Net Ea.	100-499 per 100	500-999 per 100
28F291	HLF*	¼x1¼"	.37	31.00	24.80
28F292	HCL*	9/32x1¼"	.37	31.00	24.80
27F810	HMB	¼x1¼"	.37	31.00	24.80
27F811	HMM	¼x1¼"	.37	31.00	24.80

PANEL MOUNTED HOLDERS

Removable bayonet type knob. Will not shake loose. Use on panels up to 5/16" thick. Wire hole .115". Carrying cap.: HJM and HKP, 15 amps; HCM, 18 amps; HKP, 15 amps; HJM, 5 amps.

Stk. No.	Type	For Fuses	1-99 Each	100-499 Per 100	500-999 Per 100
27F819	HJM	¼x1"	.37	31.00	24.80
27F820	HKP	¼x1¼"	.37	31.00	24.80
27F821	HCM	9/32x1¼ 1/4x1¼"	.52	44.00	34.80

Transparent knob available without holder to convert existing installations of HKP holders to visual indicating type. To order, specify: Transparent knob No. 5487.

VISUAL INDICATING FUSEHOLDER

Has bayonet type transparent knob to permit indicating pin on open GBA fuse to be easily seen. Solder terminals. Locking keys obtainable without charge—1/16" long for panels up to ⅛" thick or ⅛" long for panel ⅛ to 5/16" thick. Body is molded phenolic. Takes all GBA fuses.

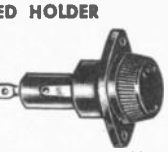
Stk. No.	Type	1-99 EA.	100-499 per 100	500--999 per 100
28F293	HLD	.41	35.00	27.60

LAMP INDICATING FUSEHOLDERS

Body of molded phenolic. Strong coil spring for constant pressure. Transparent knob permits indicating light to be seen. For ¼x1¼" fuses. HKL-X and HKL—Clear. HKR—Amber. Shpg. wt.. 2 oz.

Stk. No.	Type	Volts	1-99 Each	100-499 Per 100	500-999 Per 100
27F813	HKL	90 to 250	1.52	127.00	102.00
27F814	HKL-X	90 to 250	1.52	127.00	102.00
27F812	HKR	22 to 33	2.50	208.00	166.00

PANEL MOUNTED HOLDER



Type HPC. Screw type knob. For 13/32 x 1½" fuse. Strong coil spring insures contact pressure on ends of fuse. Sturdy—withstands severe service. Mounts on panels with flange outside. U.L. listed for 30 amp. 600V.

Stock No.	1-99 Each	100-499 per 100	500-999 per 100
27F818	.56	47.00	37.60

LITTELFUSE Fuses and Accessories

3AG SLO-BLO FUSES

For circuits with high inductive surge.

Stk. No.	Type	Amps	Per Pkg. of 5 1-19	20-99	100-199
27F680	313.010	.01	1.45	1.20	.95
27F681	313.032	.032			
27F682	313.062	.062			
27F683	313.100	.1			
27F915	313.125	.125			
27F684	313.150	.150			
27F666	313.175	.175			
27F916	313.187	.187			
27F685	313.200	.200			
27F686	313.250	.250			
27F687	313.300	.300			
27F917	313.375	.375	1.05	.90	.70
27F688	313.400	.400			
27F689	313.500	.500			
27F690	313.600	.600			
27F699	313.700	.700			
27F918	313.750	.750			
27F691	313.800	.800			
27F692	313001	1.00			
27F693	3131.25	1.25			
27F705	31301.5	1.50	1.00	.85	.65
27F919	31301.6	1.60			
27F694	313002	2.00			
27F695	31302.5	2.50			
27F920	313003	3.00			
27F706	31303.2	3.20	.75	.65	.50
27F696	313004	4.00			
27F697	313005	5.00			

3AG LITTELFUSES—32 VOLT OR LESS

Straight type fuse element positioned to center of fuse. Wt., pkg. of 100 14 oz.

27F724	311005.	5	.20	.15	.10
27F725	311007.5	7½			
27F726	311010.	10			
27F728	311015.	15			
27F730	311025.	25	.25	.20	.15
27F731	311030.	30			

3AG 32 VOLT SLO-BLO LITTELFUSES

Withstands 110% rated load indefinitely. 135% up to 1 hour. 200% for 5 to 60 sec.

27F650	312.062	1/16	.75	.65	.50
27F700	3136.25	6¼			
27F701	313008.	8			
27F702	313010.	10			
27F703	313015.	15			
27F704	313020.	20			

3AG AND 3AB U.L. APPROVED

Type 3AG. For low time-lag use. Max. volt 250 volt except *125 volt. 1¼x¼".

Stk. No.	Type	A	Per Pkg. of 5 1-19	20-99	100-199
27F651	312.125	1/8	.75	.65	.50
27F663	312.175	.175			
27F664	312.187	3/16			
27F652	312.250	¼	.50	.45	.35
27F667	312.300	.3			
27F653	312.375	3/8			
27F654	312.500	½			
27F655	312.750	¾			
27F656	312001.	1	.30	.25	.20
27F657	31201.5	1½			
27F658	312002.	2			
27F659	312003.	3			
27F660	312004.	4	.40	.35	.25
27F661	312005.	5			
27F662	312006.	6			
27F665	312008	8*	.60	.50	.40

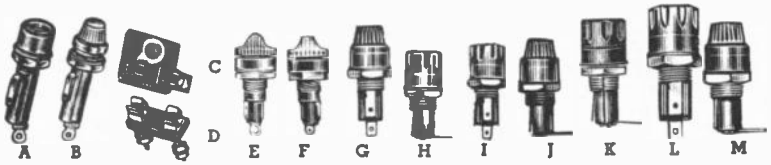
Type 3AB. Medium time lag.

27F670	314008.	8	.65	.55	.45
27F671	314010	10			
27F672	314012.	12			
27F673	314015.	15			
27F674	314020	20			

SFE ¼" AUTOMOBILE FUSES

¼" D. Wt.; pkg. of 100, 14 oz.

Stk. No	Type 307-	A.	Lgth. inch	1-99 Ea.	100-499 Ea.	500-999 Ea.
27F710	004	4	5/8	.25	.20	.15
27F711	006	6	¾	.25	.20	.15
27F716	07.5	7.5	⅞	.20	.15	.10
27F712	009	9	⅞	.20	.15	.10
27F713	014	14	1 1/16	.20	.15	.10
27F714	020	20	1¼	.20	.15	.10
27F715	030	30	1 1/16	.25	.20	.15



8AG FUSE MOUNTINGS

Stk. No.	Type	Fig.	Description	Base Dimensions	1-99	100-499	500-999
27F759	383002	C	Meter-back mtg.	1⅛"L x 1"W x 1 1/16"T	.32	.27	.22
27F761	383001	D	Panel mtg.	1⅛"L x ½"W x 3/16"T	.48	.40	.32
27F751	371001	A	Pnl. Mtg.*	2 1/32"L x .709/.722 Max. Dia.	.50	.42	.34
27F781	372001	B	Finger-Knob	2 1/32"L x .709/.722 Max. Dia.	.50	.42	.34
27F755	387001	D	Sgl. fuse†	½"L x 1 5/8"W x 3/16"T	.16	.14	.11
27F757	387002	....	Dbl. fuse mtg.	1⅛"L x 1 5/8"W x 3/16"T	.32	.27	.22

STANDARD FUSE POST FOR 3AG

27F720	342012	G	miniature	2 3/32" L. x .690/.680" Max. Dia.	.37	.31	.25
27F780	342005	H	dustproof		.50	.42	.34
27F779	342004	H	miniature	1 43/64" L x .690/.680" Max Dia.	.42	.35	.28
27F668	342014	I	miniature	2 1/64" L x .690/.680" Max. Dia.	.37	.31	.25
27F669	342022	J	miniature	1 23/32" L x .690/.680" Max. Dia.	.42	.35	.28
28F150	342028	K	Quick-connect	1 43/64" L x.690/.680" Max. Dia.	.49	.41	.32
28F151	342038	L	Quick-connect	1 31/32" L x .690/.680" Max. Dia.	.49	.41	.32
28F152	342048	M	Quick-connect	1 25/32" L x .690/.680" Max. Dia.	.49	.41	.32
28F153	342058	....	Quick-connect	2 3/64" L x .690/.680" Max. Dia.	.49	.41	.32

MIL-F-19207A FUSE POST

Stk. No.	Type	MIL. #	Description	1-99	100-499	500-999
27F643	FHN-20G	342025	3AG Min.	1.28	1.07	.86
27F644	FHN-20G	342056A	3AG Min. RF Shield	4.20	3.50	2.80
27F645	FHN-26G	342024	3AG Min.	1.24	1.04	.83
27F646	FHN-31G	372003	8AG Min.	2.50	2.09	1.67
27F647	FHN-19W	442008	4AG Waterproof	4.10	3.42	2.74
27F648	FHN-26W	342021	3AG Waterproof	4.10	3.42	2.74

INDICATING FUSE POST FOR 3AG

Indication Fuse Posts. Lgt., 2¾". Front of panel: 13/16". Mtg. hole ⅝" D. Wt., 3 oz.

Stk. No.	Type	Fig.	Voltage Range	Knob Color	Design Lamp Current	1-99 Each	100-499 Each	500-999 Each
27F790	344006A	E	2.5-7V	Amber	.20 Amp	2.50	2.08	1.66
27F791	344012A	E	7-16V	Amber	.08 Amp	2.50	2.08	1.66
27F783	344024A	E	16-32V	Amber	04 Amp	2.50	2.08	1.66
27F784	344125A	F	100-125V	Clear	002 Amp	1.52	1.27	1.02
27F785	344250A	F	200-250V	Clear	.002 Amp	1.52	1.27	1.02

MIL VERSION OF SERIES 344 (Mil-F-19207A)

Stk. No.	Type	MIL.#	Voltage Range	Knob Color	1-99	100-499	500-999
28F154	FHL-17G	349250	90-300V	Clear	1.99	1.66	1.32
28F155	FHL-18G-1	349012	12-22V	Amber	3.07	2.56	2.05
28F156	FHL-18G-2	349023	23-33V	Amber	3.00	2.50	2.00
28F157	FHL-18G-3	349034	34-45V	Amber	3.00	2.50	2.00
28F158	FHL-18G-4	349046	46-60V	Amber	3.00	2.50	2.00
28F159	FHL-18G-5	349061	61-80V	Amber	3.00	2.50	2.00
28F160	FHL-18G-6	349081	81-90V	Amber	3.00	2.50	2.00

FUSE POSTS AND MOUNTS FOR 3AG, 3AB

(*) Screw Slot (†) Lug terminal (**) Covered

Stk. No	Type	Fig.	Description	1-99 Ea.	100-499 Ea.	500-999 Ea.
27F760	353001	E	Pnl. Mtg.	.48	.40	.32
27F765	351009	F	Dul.**	1.18	.99	.79
27F750	341001	....	Pnl. mtg.*	.50	.42	.34
27F752	342001	A	Finger Knob	.50	.42	.34
27F754	357001	B	Pnl. mtg.†	.16	.14	.11
27F756	356001	C	Single fuse*	.34	.29	.24
27F758	357002	D	Dbl. mtg.	.32	.27	.22
27F769	356002	....	Fuse Mount	.66	.55	.44

LITTELFUSE CLIPS

Fits SFE, 3AG, 8AG and 3AB fuses. Phosphor bronze except * Beryllium copper. Shpg. wt., per 100, 5 lbs. † per 100.

Stock No.	Type	Fig.	For	1-99 Ea.	100-499†	500-999†
27F772	101001	A	3AG	.02	1.90	1.50
27F773	101002	B	3AG	.02	1.90	1.50
27F774	105002	B	5AG	.05	4.00	3.00
27F775	123002*	B	4AG	.08	7.00	6.00

IN-LINE FUSE RETAINER

Furnished with SFE 9, 14, or 20 amp fuse. Also for 3AG or 3AB fuses.

Stk. No.	Type	1-99 Ea.	100-499 per 100	500-999 per 100
27F792	155009A	.37	31.00	25.00
27F793	155014A			
27F766	155020A			

3AG PIGTAIL LITTLEFUSES

1½" pigtails, No. 20 tinned copper wire.

125 VOLT SLC-BLO

Stk. No.	Type	Amps	Per Pkg. of 5 1-19	20-99	100-199
27F928	315.100	.1	1.30	1.10	.85
27F734	315.250	.25			
27F735	315.300	.3			
27F737	315.500	.5			
27F930	315.600	.6			
27F932	315001.	1.0			
27F934	31501.5	1.5	1.25	1.05	.50
27F935	31501 6	1.6			
27F936	315002	2.0			
27F937	315003	3.0	1.05	.90	.70
27F940	315004	4.0			
27F941	315005	5.0			

250 VOLTS

27F739	318.125	.125	1.00	.85	.70
27F943	318001	1.0	.60	.50	.40
27F945	318002	2.0			
27F946	318003	3.0			
27F948	318005	5.0			
27F740	318.250	.25	.75	.65	.50
27F741	318.375	.375			
27F742	318.500	.500			
27F743	318.750	.750			

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

LITTELFUSE

SUBMINIATURE MICROFUSES

Only .250" dia. x .348" long exclusive of leads. Ideal for printed circuits. Features low resistance and high reliability in ultra-fast blowing characteristics. Series 279000 has 1 inch leads for wiring into circuit. Short circuit interrupting capacity 125 volts 10,000 amps DC.
Series 273000 has .170 inch leads for plugging into subminiature fuse holder (illustrated below). Blowing specifications: 110% life; 200% 0-10 seconds. Transparent glass cap. Rated at 125 V.

273000 Plug-in Type Stk. No.	Type	279000 Pigtail Type Stk. No.	Type	Amps.	Per Package of 5 1-19	20-99	100-999
28F060	273.002	28F083	279.002	1/500			
28F061	273.005	28F084	279.005	1/200			
28F062	273.010	28F085	279.010	1/100	5.15	4.30	3.40
28F063	273.015	28F086	279.015	1/64			
28F064	273.031	28F087	279.031	1/32			
28F065	273.050	28F088	279.050	1/20			
28F066	273.062	28F089	279.062	1/16			
28F067	273.100	28F090	279.100	1/10			
28F068	273.125	28F091	279.125	1/8			
28F069	273.200	28F092	279.200	2/10			
28F070	273.250	28F093	279.250	1/4			
28F071	273.300	28F094	279.300	3/10			
28F072	273.400	28F095	279.400	4/10			
28F073	273.500	28F096	279.500	1/2	4.30	3.60	2.75
28F074	273.600	28F097	279.600	6/10			
28F075	273.700	28F098	279.700	7/10			
28F125	273.750	28F126	279.750	3/4			
28F076	273.800	28F099	279.800	8/10			
28F077	273.001	28F100	279001	1			
28F078	27301.5	28F101	27901.5	1½			
28F079	273002	28F102	279002	2			
28F080	273003	28F103	279003	3			
28F081	273004	28F104	279004	4			
28F082	273005	28F105	279005	5			

MICROFUSE HOLDER

Type 281002. Front panel mount microfuse holder. Molded from high strength, high dielectric material. Knurled cap for easy grip. Rugged 'eye' type plated brass terminals separated by molded barrier to provide complete insulation. With positive 'O' ring seal.
28F111. NET EA. 1-99—.58 100-499—.49 500-999—.39

INDICATING MICROFUSE HOLDER

Type 284000. Indicator lamp glows when the fuse is blown. Knob molded from transparent material. Positive 'O' ring seal. High dielectric material.

Stk. No.	Type	Desc.	1-99 Ea.	100-499 Ea.	500-999 Ea.
28F107	284004	6 volt range	2.21	1.84	1.47
28F108	284005	12 volt range	2.21	1.84	1.47
28F109	284006	24 volt range	2.21	1.84	1.47
28F110	284003	125 volt range	1.55	1.29	1.03

SUBMINIATURE MICROFUSE HOLDER

Type 281001. Subminiature holder ideal for use in printed circuit board mounting. Mounts in .090" hole; solid terminals; ⅜" behind panel. W. Spring nut. Avg. Shpg. wt., 3 oz.
28F106. NET EA. 1-99—.26 100-499—.22 500-999—.17

334(000) SERIES PIN INDICATING FUSE

Medium acting fuses with silverplated visual indicating pin extending from end of fuse when fuse is blown. Tip can also be used to actuate an audible alarm circuit. Rated ¾ thru 5 amp. 125V, 6 thru 20 amp. 32V. *1¼ in length, ¼" in diameter.

Stk. No.	Type	Amp. Rating	Per Package of 5 1-99	100-499	500-999
28F112	.750	¾	2.15	1.80	1.45
28F113	001	1			
28F114	01.5	1½			
28F115	002	2	1.70	1.40	1.10
28F116	003	3			
28F117	004	4			
28F118	005	5			
28F119	006*	6			
28F120	008	8			
28F121	010*	10	2.35	1.95	1.55
28F122	012*	12			
28F123	015*	15			
28F124	020*	20			

SUB-MINIATURE PICOFUSES

- **Incredibly Small — Less Than ¼" Long!**
- **Ceramic Body for High Overload Capacity.**
- **High Accuracy in Blowing Time.**

Series 275. For circuits of 125 volts or less where short-circuit currents as high as 300 amperes occurs. A unique concept in fusing for computers, microelectronic and aero-space circuitry. High accuracy in blowing time at 300% or higher is ideal for sequential switching, or in circuits requiring redundancy. Blow time 4 hours min. at 100% of rating; 5 sec. max. at 200%. Ceramic body 7/32" x 5/64" dia.; tin-coated copper leads .025 dia. Picofuses can be encapsulated. 275 series has axial leads 19/16" long for diode clip or in-circuit mounting.

Stk. No.	Type	Amps.	Per Package of 5 1-19	20-99	100-999
28F128	275.125	⅛			
28F129	275.250	¼	2.15	1.80	1.45
28F130	275.375	⅜			
28F131	275.500	½			
28F132	275.750	¾			
28F133	275001	1			
28F134	27501.5	1.5			
28F135	275002	2	1.85	1.55	1.25
28F136	275003	3			
28F137	275004	4			
28F138	275005	5			

BAG INSTRUMENT LITTELFUSES

361000 Series. Protects delicate voltmeters, microammeters, milliammeters, etc. 1 x ¼". 100, 10 oz. Max. voltage 250. Except 125 V.

Stk. No	Type 361-	Amps	For O/V VM	Per Package of 5 1-19	20-99	100-999
27F614	.002	1/500	250	5.15	4.30	3.54
27F600	.005	1/200	1000 Up	2.10	1.80	1.45
27F601	.010	1/100	1000	1.90	1.60	1.30
27F602	.031	1/32	500-1000	1.70	1.40	1.15
27F603	.062	1/16	100-500	1.05	.90	.70
27F604	.125	1/8	20-100	.75	.65	.50
27F605	.250	1/4	10-20			
27F606	.375	3/8	5-10			
27F607	.500	1/2	3-5	.50	.45	.35
27F608	.75	3/4	.....			
27F609	1.00	1	.....			
27F610	1.50	1-1/2	.....			
27F611	2.00	2	.....			
27F612	3.00	3	.....	.35	.30	.20
27F615	4.00	4	.....			
27F613	5.00	5	.....			

INDUSTRIAL FUSE CADDY

Type 094037. Specifically designed and stocked for almost universal use. Has any number of industrial or laboratory applications. Contains 3AG, Reg., Slo Blow, and 8AG Fuses and an emergency kit with assorted radio fuses. Has 14 boxes of fuses, 5 fuses per box. Case is clear plastic for quick and accurate fuse selection. Has three spare compartments. Size: 1⅞" x 3 x 4¼". Shpg. wt. 2 lbs.
27F677. NET 8.28

SYLVANIA

AUTOMATIC RESET "MITE-T-BREAKERS"

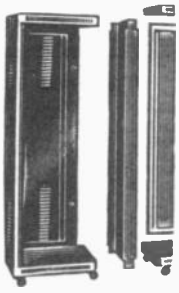
Type MB. Automatic reset units wire into your equipment to efficiently replace fusing. For use with transformers, motors, and appliances. Handle rated hold current @ 125 volts; min trip currents of 200% rated current. Sample: 1 ampere breaker holds at 1 amp; trips at 2 amps. Heremetically sealed. 1.26" x .39" dia. Has 1" copper leads. Shpg. wt. 1 oz.

Stock No.	Type	Amps	1-99	100-249	250-499	500-999
59F1640	MB-315	1				
59F1641	MB-316	2	.30	.26	.23	.20
59F1642	MB-317	3				
59F1643	MB-318	4				

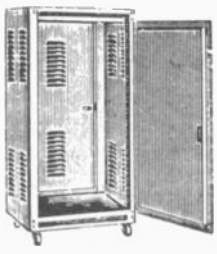
For Prompt, Efficient Service, Contact the NEWARK Facility Nearest You — Ten Convenient Locations Across the Country

Cabinet Racks

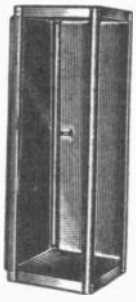
Enclosed Relay Rack



Add-A-Rack



Two Door Rack



Prestige Racks

BUD ENCLOSED RELAY RACKS

Made of 16 gauge steel with 7/64" panel mounting supports which are recessed so that panel will be flush with face of rack. All standard panels fit these racks. Red-lined Chrome trim. Bottom supports use RC 7756 casters. Stk. No. 91F082.

Black	Grey	Ham. Grey	Type	H x W x D	Panel Space	Lbs.	1-9	10-14	15-19
91F050	91F056	91F062	CR-1772	66 9/16"x22"x17 1/8"	61 1/4"x19"	116	77.40	69.65	61.90
91F051	91F057	91F063	CR-1773	82 5/16"x22"x17 1/8"	77" x19"	135	92.70	83.45	74.15
91F058	91F061	91F078	CR-1771	47 5/16"x22"x17 1/8"	42" x19"	92	61.80	55.15	49.45
91F059	91F060	91F077	CR-1774	42 1/16"x22"x17 1/8"	36 3/4"x19"	82	54.65	49.20	43.70
93F134	93F142	93F150	CR-2471	47 5/16"x27"x17 1/8"	42" x24"	108	75.10	67.60	60.10
93F135	93F143	93F151	CR-2472	66 9/16"x27"x17 1/8"	61 1/4"x24"	135	95.15	85.65	76.10
93F136	93F144	93F152	CR-2473	82 1/16"x27"x17 1/8"	77" x24"	158	112.70	101.45	90.15
93F137	93F145	93F153	CR-2474	42 1/16"x27"x17 1/8"	36 3/4"x24"	96	66.55	59.90	53.25
93F138	93F146	93F154	CR-2481	47 5/16"x27"x22 1/8"	42" x24"	119	105.00	94.50	84.00
93F139	93F147	93F155	CR-2482	66 9/16"x27"x22 1/8"	61 1/4"x24"	160	131.70	118.55	105.35
93F140	93F148	93F156	CR-2483	82 1/16"x27"x22 1/8"	77" x24"	186	157.10	141.40	125.70
93F141	93F149	93F157	CR-2484	42 1/16"x27"x22 1/8"	36 3/4"x24"	115	93.55	84.20	74.80

ADD-A-RACK SERIES FOR ENCLOSED RACKS

Add panel space to present rack equipment without buying a new rack cabinet. Requires only four parts: door, top, bottom, and an Add-a-Rack coupling unit. Remove side of present rack and replace with coupling unit.

Black	Grey	Ham. Grey	Type	Add-A-Rack to Type	W x D x H	Lbs.	1-9	10-14	15-19
93F158	91F467	91F471	AR-1776	CR-1772	22x17 1/8x66 9/16"	100	73.75	66.40	59.00
93F159	91F468	91F472	AR-1777	CR-1773	22x17 1/8x82 5/16"	113	90.65	81.60	72.50
93F160	91F466	91F470	AR-1775	CR-1771	22x17 1/8x47 5/16"	74	59.30	53.40	47.45
93F161	91F465	91F469	AR-1778	CR-1774	22x17 1/8x42 1/16"	70	53.65	48.30	42.90
93F162	93F170	93F178	AR-4271	CR-2471	27x17 1/8x47 5/16"	87	65.10	58.60	52.10
93F163	93F171	93F179	AR-4272	CR-2472	27x17 1/8x66 9/16"	117	81.65	73.50	65.30
93F164	93F172	93F180	AR-4273	CR-2473	27x17 1/8x82 5/16"	132	97.90	88.10	78.30
93F165	93F173	93F181	AR-4274	CR-2474	27x17 1/8x42 1/16"	82	57.75	52.00	46.20
93F166	93F174	93F182	AR-3275	CR-2481	27x22 1/8x47 5/16"	119	91.35	82.20	73.10
93F167	93F175	93F183	AR-3276	CR-2482	27x22 1/8x66 9/16"	129	114.45	103.00	91.55
93F168	93F176	93F184	AR-3277	CR-2483	27x22 1/8x82 5/16"	152	137.55	123.80	110.05
93F169	93F177	93F185	AR-3278	CR-2484	27x22 1/8x42 1/16"	100	81.90	73.70	65.50

ENCLOSED RELAY RACK—GREY HAMMERTONE FINISH

These relay racks are made of 16 gauge steel with 7/64" panel mounting supports. Four sturdy supports in bottom for fastening casters for ready mobility.

Stk. No.	Type	Ht.	PS	Dep.	Lbs.	1-9	10-14	15-19
91F095	CR-2071	47 5/16"	42"x19"	22"	102	78.70	70.85	62.95
91F096	CR-2072	66 9/16"	61 1/4"x19"	22"	137	98.50	89.65	78.80
91F097	CR-2073	82 5/16"	77"x19"	22"	159	117.00	105.50	93.60
91F098	CR-2074	42 1/16"	36 3/4"x19"	22"	98	69.55	62.60	55.65

BUD ADD-A-RACK SERIES FOR ENCLOSED RELAY RACKS

For adding panel space to present rack equipment. Made of sturdy steel in a grey hammertone finish. Add to CR-2072, CR-2073 and CR-2074.

Stk. No.	Type	Add to	Ht.	PS	Dep.	Lbs.	1-9	10-14	15-19
91F474	AR-2276	CR-2072	66 9/16"	61 1/4" x 19"	22"	110	89.40	80.45	71.50
91F475	AR-2277	CR-2073	82 5/16"	77" x 19"	22"	130	108.95	98.05	87.15
91F476	AR-2278	CR-2074	42 1/16"	36 3/4" x 19"	22"	102	63.15	56.85	50.50

SUPER DELUXE TWO DOOR RACKS

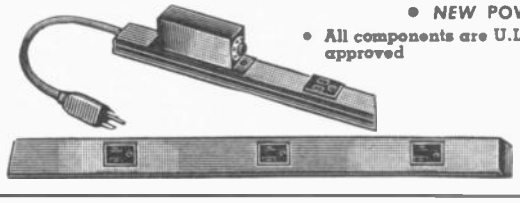
Has panel mounting supports that are adjustable from front and back to enable panels to be used to any degree necessary. Clearance behind panels may be 15" to 9" in increments of 1". A solid front door is provided. The rear door and the sides are louvered to provide ventilation.

Black	Grey	Ham. Grey	Type	H x W x D	Panel Space	Lbs.	1-9	10-14	15-19
93F110	93F114	93F118	CR-2174	42 1/16"x22"x17 1/8"	36 3/4"x19"	102	70.70	63.65	56.55
93F111	93F115	93F119	CR-2171	47 5/16"x22"x17 1/8"	42" x19"	104	80.10	72.10	64.10
93F112	93F116	93F120	CR-2172	66 9/16"x22"x17 1/8"	61 1/4"x19"	138	103.35	93.00	82.70
93F113	93F117	93F121	CR-2173	82 5/16"x22"x17 1/8"	77" x19"	163	124.10	111.70	99.30
93F122	93F126	93F130	CR-2491	47 5/16"x27"x17 1/8"	42" x24"	122	107.40	96.65	85.90
93F123	93F127	93F131	CR-2492	66 9/16"x27"x17 1/8"	61 1/4"x24"	160	139.75	125.80	111.80
93F124	93F128	93F132	CR-2493	82 5/16"x27"x17 1/8"	77" x24"	190	167.50	150.75	134.00
93F125	93F129	93F133	CR-2494	42 1/16"x27"x17 1/8"	36 3/4"x24"	119	95.85	86.25	76.70

PRESTIGE RELAY CABINET RACKS

Has drilled, tapped panel mounting rails on all four vertical members of the frame. Rails will support 200 lbs. Base is slotted to accept ball cornered side panels on all sides of rack. Finished in Grey Hammertone only.

Stk. No.	Type	Panel	HxWxD	Lbs.	1-9	10-14	15-19
91F087	CR-2280	61 1/4"x19"	66 9/16x22x22"	179	125.15	112.65	100.10
91F088	CR-2281	66 1/2"x19"	71 13/16x22x22"	186	133.45	120.10	106.75
91F089	CR-2282	77"x19"	82 5/16"x22"x22"	213	149.90	134.90	119.90



• NEW POWER OUTLET STRIPS

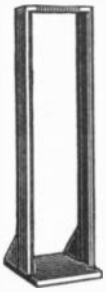
• All components are U.L. approved

For use in racks or cabinets which require a number of power outlets. Double wipe contact receptacle and grounding terminal. 3/4" x 1 9/32" cross section. 6 foot cord. Light gray enamel finish with 15 amp overload breaker & pushbutton reset.

Stk. No.	Type	Outlets	Lgth.	Lbs.	1-5	6-11	12-17
90F396	POS-4	4	17 1/2"	2	19.45	17.50	15.55
90F397	POS-7	7	48"	4	19.80	18.75	15.85
90F398	POS-9	9	60"	4 1/4	21.15	19.05	16.90
90F399	POS-11	11	72"	5	21.65	19.50	17.30

Racks, Panels and Lights

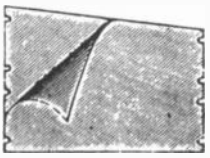
A



B

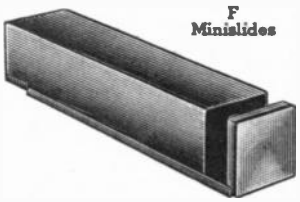
C

D
Desk Racks



E
Surface Shields
Rack Panels

Pan-L-Lite



F
Minislides

OPEN TYPE RELAY RACKS

For mounting equipment where a complete enclosure is not necessary or advisable. Racks A and B may add casters for mobility. Fig. B has louvered "U" member which allows for ventilation.

Black	Type	Fig.	H x W x D	Panel Sp.	lbs.	1-9	10-14	15-19
91F052	RR1263B	A	35½xx20x22"	31½x19"	38	25.10	22.60	20.10
91F053	RR1264B	A	70½x20x22"	66½x19"	53	28.65	25.80	22.90
91F054	RR1265B	C	72¼x20⅜x13"	66½x19"	68	66.15	59.55	52.90
93F634	RR1363B	A	41x20x22"	36¾x19"	37	24.20	21.80	19.35
93F635	RR1364B	A	76x20x22"	71¾x19"	48	27.70	24.95	22.15
93F636	RR1366B	A	81⅛x20x22"	77 x19"	50	33.00	29.70	26.40
93F637	RR1464B	A	70½x25x22"	66½x24"	53	35.30	31.75	28.25
93F638	RR1463B	A	39½x25x22"	31½x24"	40	30.85	27.75	24.70
93F639	RR2463B	A	41x25x22"	36¾x24"	43	33.50	30.15	26.80
93F640	RR2464B	A	76x25x22"	71¾x24"	55	35.30	31.75	28.25
93F641	RR2466B	A	81⅛x25x22"	77 x24"	58	45.05	40.55	36.05
93F642	RR1367B	B	64⅝x20⅞x26"	61¼x19"	89	42.85	38.55	34.30
93F643	RR1368B	B	73⅜x20⅞x26"	70 x19"	97	43.80	39.40	35.05
93F644	RR1369B	B	80⅜x20⅞x26"	77 x19"	105	51.90	46.70	41.50
93F645	RR2467B	B	64⅝x25⅞x26"	61¼x24"	102	52.00	46.80	41.60
93F646	RR2468B	B	73⅜x25⅞x26"	70 x24"	112	53.15	47.85	42.50
93F647	RR2469B	B	80⅜x25⅞x26"	77 x24"	121	62.95	56.65	50.35

DESK TYPE OPEN RELAY RACKS

Chassis type base for mounting heavy components. Supporting angles assure steady support. Panel mounting rails are recessed so that any standard 19" panel will fit flush with the front. Available in Black Wrinkle or Light Gray Hammertone.

Black	Type	Hamm. Gray	Type	Fig.	Hgt.	Space	lbs.	1-14	15-24	25-34
91F030	RR-1248B	91F677	RR-1248HG	D	24"	21"	15	11.05	9.95	8.85
91F031	RR-1249B	91F678	RR-1249HG	D	31"	28"	18	13.50	12.15	10.80

Fig. E—"SURFACE SHIELD" RACK PANELS

Each panel is covered on both sides with sturdy pressure sensitive white paper which provides an excellent surface for indicating size and position of drilling or milling while protecting against any surface damage soiling. Panels have standard notching. Made of aluminum alloy.

⅛" Panels 19" Wide

Stk. No.	Type	Height	Lbs.	1-49	50-99	100-149
91F265	SFA-1831	1¾"	¼	1.15	1.05	.90
91F266	SFA-1832	3½"	¾	1.65	1.50	1.30
91F267	SFA-1833	5¼"	1	2.15	1.95	1.70
91F268	SFA-1834	7"	1¾	2.70	2.45	2.15
91F269	SFA-1835	8¾"	2	3.20	2.90	2.55
91F270	SFA-1836	10½"	2½	4.05	3.65	3.25
91F271	SFA-1837	12¼"	2¾	4.60	4.15	3.70
91F272	SFA-1838	14"	3	5.35	4.80	4.30
91F273	SFA-1839	15¾"	3½	6.00	5.40	4.80
91F274	SFA-1840	17½"	4	6.60	5.95	5.30
91F275	SFA-1841	19¼"	4¼	7.25	6.55	5.80
91F276	SFA-1842	21"	5	7.90	7.10	6.30

3/16" Panels 19" Wide

Stk. No.	Type	Height	Lbs.	1-49	50-99	100-149
91F277	SFA-3161	1¾"	¾	2.05	1.85	1.65
91F278	SFA-3162	3½"	1¾	2.75	2.50	2.20
91F279	SFA-3163	5¼"	1¾	3.70	3.35	2.95
91F280	SFA-3164	7"	2½	4.50	4.05	3.60
91F281	SFA-3165	8¾"	3	5.40	4.85	4.30
91F282	SFA-3166	10½"	3¾	6.85	6.15	5.40
91F283	SFA-3167	12¼"	4½	7.90	7.10	6.30
91F284	SFA-3168	14"	5	9.10	8.20	7.30
91F285	SFA-3169	15¾"	5¾	10.15	9.15	8.10
91F286	SFA-3170	17½"	6¼	11.20	10.10	8.95
91F287	SFA-3171	19¼"	7	12.25	11.05	9.80
91F288	SFA-3172	21"	7¼	13.30	12.00	10.65

⅛" Panels 24" Wide

Stk. No.	Type	Height	Lbs.	1-49	50-99	100-149
93F700	SFA-2451	1¾"	½	2.80	1.80	1.60
93F701	SFA-2452	3½"	1	2.65	2.40	2.10
93F702	SFA-2453	5¼"	1½	3.45	3.10	2.75
93F703	SFA-2454	7"	2¼	4.40	3.95	3.50
93F704	SFA-2455	8¾"	2½	5.15	4.65	4.10
93F705	SFA-2456	10½"	3	6.50	5.85	5.20
93F706	SFA-2457	12¼"	3¼	7.35	6.60	5.90
93F707	SFA-2458	14"	3½	8.60	7.75	6.90
93F708	SFA-2459	15¾"	4	9.65	8.70	7.70
93F709	SFA-2460	17½"	4¾	10.50	9.45	8.40
93F710	SFA-2461	19¼"	5¼	11.55	10.40	9.25
93F711	SFA-2462	21"	5½	12.66	11.40	10.15

3/16" Aluminum Panels 24" Wide

Stk. No.	Type	Height	Lbs.	1-49	50-99	100-149
93F712	SFA-3401	1¾"	1	4.10	3.70	3.30
93F713	SFA-3402	3½"	1½	5.40	4.85	4.30
93F714	SFA-3403	5¼"	2	7.30	6.55	5.85
93F715	SFA-3404	7"	2¾	9.00	8.10	7.20
93F716	SFA-3405	8¾"	3½	10.75	9.70	8.60
93F717	SFA-3406	10½"	4	13.50	12.15	10.80
93F718	SFA-3407	12¼"	4¾	15.60	14.05	12.50
93F719	SFA-3408	14"	5½	18.00	16.20	14.40
93F720	SFA-3409	15¾"	6	20.10	18.10	16.10
93F721	SFA-3410	17½"	6¾	22.15	19.95	17.70
93F722	SFA-3411	19¼"	7½	24.25	21.85	19.40
93F723	SFA-3412	21"	7¾	26.35	23.70	21.10

Fig. F—MINISLIDES

Used where access to internally mounted parts is necessary. .050 aluminum. Available in grey hammertone only.

Stk. No.	Type	L x W x H	Lbs.	1-49	50-99	100-149
91F862	MS-2150	13x3⅛x2⅝"	1	4.15	3.75	3.30
91F863	MS-2151	13x5⅛x2⅝"	1½	4.75	4.30	3.80
91F864	MS-2152	17x3⅛x2⅝"	1¼	4.55	4.10	3.65

"PAN-L-LITE" LIGHT

Type PL-5. Bright, glare-free lighting for areas requiring concentrated source of light. Mounted on standard Bud 1¾" x 19" steel rack panel with gray hammertone finish. Bronzetone aluminum frame. Translucent plastic light diffuser. Push button starter switch; convenience outlet. 6 ft. cord with plug. Less tube but uses 15 watt fluorescent tube.

Stk. No.	Type	Size	1-9	10-14	15-19
91F746	PL-5	5"x18"x1¼"	9.30	8.37	7.44

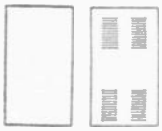
NEWARK Can Supply All Bud Products at OEM Prices—
Phone - Wire - Write for Items Not Listed in this Catalog.

Series "60" Cabinet Racks

INCLINED

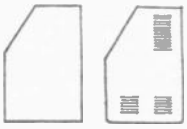
Basic frame welded in a solid unit composed of 14-gauge cold-rolled steel channels. Sides have "U" braces with perforated channels for fastening vertical mounting rails. Rails also support other types of equipment such as brackets, shelves, slides, etc. Eliminates need of drilling holes in the rack. Sides and rear door made of 16 gauge steel. Vertical Channel, 6" wide, welded to door to prevent vibration or whip. Two pairs of panel mounting rails are supplied; fully adjustable. Panels may be mounted in front and rear at the same time. Front rails drilled and tapped 10-32 W.E. spacing. Rear rails are drilled according to universal spacing.

All Series Sixty enclosures may be quickly combined with each other to create units of any width as shown in the Add-A-Rack series. In addition, such accessories as desk tops, turrets, drawers, slides, sloping panel supports and front door are easily installed. Standard finishes are smooth baked enamel over a primer, available in two-toned blue or two-toned grey. Standard Bud relay rack panels are available for the Series Sixty racks in light gray and light blue. Available in Louvered door and Louvered side, Louvered door-plain sides, Louvered sides-plain door on special order.



Plain Louvered

UPRIGHT



Plain Louvered

INCLINED

UPRIGHT CABINET RACKS

Completely assembled with sides, rear door, and top. Standard units have plain sides and door and a solid top. For greater ventilation, order the units with louvered sides and/or rear door. Both have solid tops. Width of all units: 24 1/16". Inside depth: 20 1/4" clear on units with 22" outside depth. 23 3/4" on all others. Top opening: 18 1/2" wide by 17 d. on units with 22" depth. Outside depth on all others: 18 1/2" w x 20 1/2" d.

Stock No. Grey	Stock No. Blue	With Plain Sides & Door—OD 22"—Net Each, Lots of Type	1-3	4-6	7-9	Ht.	Panel Space	Wt., Lbs.
92F900	92F914	2300	106.30	95.67	85.05	29 5/8"	21"	118
92F901	92F915	2301	131.45	118.30	105.15	40 1/8"	31 1/2"	156
92F902	92F916	2302	146.05	131.45	116.85	50 5/8"	42"	173
92F903	92F917	2303	166.25	149.60	133.00	61 1/8"	52 1/2"	197
92F904	92F918	2304	180.25	162.20	144.20	69 7/8"	61 1/4"	220
92F905	92F919	2305	200.00	180.00	160.00	78 3/8"	70"	235
92F906	92F920	2306	218.65	196.80	174.90	87 3/8"	78 3/4"	265

Stock No. Grey	Stock No. Blue	With Plain Sides & Door—OD 25 1/2"—Net Each, Lots of Type	1-3	4-6	7-9	Ht.	Panel Space	Wt., Lbs.
92F907	92F921	2307	125.50	112.95	100.40	29 5/8"	21"	156
92F908	92F922	2308	151.20	136.10	120.95	40 1/8"	31 1/2"	176
92F909	92F923	2309	168.00	151.20	134.40	50 5/8"	42"	185
92F910	92F924	2310	186.50	167.85	149.20	61 1/8"	52 1/2"	211
92F911	92F925	2311	207.30	186.55	165.85	69 7/8"	61 1/4"	240
92F912	92F926	2312	230.30	207.25	184.25	78 5/8"	70"	256
92F913	92F927	2313	251.35	226.20	201.10	87 3/4"	78 3/4"	267

INCLINED PANEL CABINET RACKS

Completely assembled with sides, rear door and solid top. Available in four combinations of plain or louvered sides and rear door. Size, 50 5/8"h.x24 1/16"w. x22"d.. outside; 20 1/4"d. clear inside. Weight 135 lbs.

Stk. No. Grey	Stk. No. Blue	With Plain Sides and Door Type	Net Each, Lots of 1-3	4-6	7-9	Incline Panel Hgt.	Vert. Panel Hgt.	Top Opening W. x D.
93F023	93F020	2330	165.25	148.70	132.20	10 1/2"	29 3/4"	18 1/2"x11 3/4"
93F024	93F021	2331	175.15	157.65	140.10	15 3/4"	24 1/2"	18 1/2"x10"
93F025	93F022	2332	175.15	157.65	140.10	17 1/2"	22 3/4"	18 1/2"x9 3/8"

ADD-A-RACK SERIES

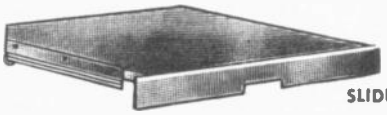
Each assembly consists of frame, top, bottom, rear door and cowlings; used as an add-on unit to join any of the Series Sixty enclosures into a bank of two or more. One standard rack plus several Add-A-Racks make any desired number of racks combined for optimum width. Colors same as above Racks.

Stock No. Grey	Stock No. Blue	Plain Doors Type	For Add-on to Rack No. 60-	Net Each, Lots of 1-3	4-6	7-9	Wt., Lbs.
93F077	93F060	2500	2300, 2600	86.10	77.50	68.90	92
93F078	93F061	2501	2301, 2601	104.75	94.30	83.80	113
93F079	93F062	2502	2302, 2602	114.70	103.25	91.75	115
93F080	93F063	2503	2303, 2603	125.30	112.75	100.25	145
93F081	93F064	2504	2304, 2604	140.00	126.00	112.00	148
93F082	93F065	2505	2305, 2605	156.00	140.40	124.80	152
93F083	93F066	2506	2306, 2606	167.35	150.60	133.90	158
93F084	93F067	2507	2307, 2607	100.00	90.00	80.00	120
93F085	93F068	2508	2308, 2608	117.25	105.55	93.80	132

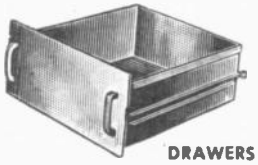
Stock No. Grey	Stock No. Blue	Plain Doors Type	For Add-on to Rack No. 60-	Net Each, Lots of 1-3	4-6	7-9	Wt., Lbs.
93F086	93F069	2509	2309, 2609	128.00	115.20	102.40	138
93F087	93F070	2510	2310, 2610	139.60	125.65	111.70	142
93F088	93F071	2511	2311, 2611	156.10	140.50	124.90	164
93F089	93F072	2512	2312, 2612	174.00	156.60	139.20	168
93F090	93F073	2513	2313, 2613	192.50	173.25	154.00	172
93F091	93F074	2530	2330, 2630	132.90	119.60	106.30	119
93F092	93F075	2531	2331, 2631	142.10	127.90	113.70	119
93F093	93F076	2532	2332, 2632	142.10	127.90	113.70	125

RACK ACCESSORIES

DESK TOPS



SLIDES



DRAWERS

SERIES "60" DESK TOPS

Desk tops designed for installation on Series Sixty Cabinet Racks. Writing surface or shelf for service operations on small assemblies. Two pre-drilled full length supporting channels are quickly bolted to panel mounting rails. Surface is light gray, wood-grained Formica. 24 1/16" wide, 19 1/2" deep, 3 1/16" high. Supports 200 lbs. Gray or blue enamel finish.

Stk. No. Blue	Stk. No. Grey	Type	Fits "60" Series	Sup. Channel	Lbs.	1-3	4-6	7-9
93F017	93F016	60-2360	W/22"d.	21 9/32"	22	36.05	32.45	28.85
93F038	93F039	60-2362	W/25 1/2"d.	24 3/4"	23	36.75	33.05	29.40

DRAWERS

Fit cabinet or cabinet rack with 19" panel space. Front panel drawer is 8 3/4" x 19" Slide easily on nylon rollers. D-1721 has slide bracket which is adjustable from 16 3/8" to 22 7/8". Choice of Black, Grey Wrinkle or Grey Hammertone Finish. 60-2368 has slide bracket same size as drawer. Choice of Smooth Blue or Smooth Grey Finish.

Stk. No.	Clr.	Stk. No.	Clr.	Stk. No.	Clr.	Type	Ins. Size	Lbs.	1-3	4-6	7-9
91F921	Blk.	91F922	Gr. WR.	91F923	G.H.	D-1721	16 3/8x6 3/8x16 1/4"	19 1/2	45.00	40.50	36.00
		93F019	Sm. Bl.	93F018	Sm. Gr.	60-2368	16 5/8x6 3/8x19 1/4"	28	32.05	28.85	25.65

SERIES SIXTY SLIDING DESK TOP

Surface light gray Formica. Usable area 11"x16 7/8". Supports 75 lbs. of distributed weight. Occupies 1 3/4" panel space (height). Fits flush with front of unit when not in use. Mounts directly to uprights in Series 60 Cabinet Racks.

Stk. No.	Type	Clr.	WxD	Panel Size	1-3	4-6	7-9
93F648	60-2361	Sm. Gr.	16 7/8x15 1/8"	19x1 3/4"	16.65	15.00	13.35

SERIES 60 DESK TOP DRAWER

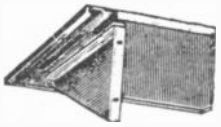
Spacious drawer for small tools and components, circuit designs and manuals. Front panel is 3 1/2" x 19". Hinged desk top is Formica bonded to aluminum and has piano-type hinge. Latch on front panel locks and releases drawer as well as releasing top. In smooth blue or smooth grey enamel. Hardware.

Stk No. Blue	Stk. No. Grey	Type	Size Inside	1-3	4-6	7-9
93F049	93F050	60-2363	16 5/8x3 1/4x15"	55.00	49.50	44.00

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

Cabinet Accessories

SHELF ASSEMBLY



Shelf assembly does not require a panel for support. 16 gauge steel. Overall height 7 inches. Colors are Black wrinkle, Gray wrinkle and Light Gray Hammertone. Fits any standard relay rack.

Black	Gray	HG	Type	Size	Lbs.	1-14	15-24	25-34
91F878	91F880	91F882	SA-1719	16 x 22"	14	12.00	10.80	9.60
91F879	91F881	91F883	SA-1720	20 x 22"	15	12.15	10.95	9.70

CHASSIS SUPPORTING ANGLES

Afford ample support for standard 17" width chassis or shelves. ⅛" steel. Black. Supplied in pairs.

Stk. No.	Type	Length	Width	Lbs.	1-24	25-49	50-99
91F090	SA-1349	14½"	3"	4	2.45	2.20	1.95
91F091	SA-1350	12"	3"	3	2.40	2.15	1.90

CHASSIS MOUNTING BRACKETS

Insure proper support of chassis in rack. Formed of heavy gauge steel, cut away at bottom to provide clearance for flush mounting of chassis. Black enamel finish. *For chassis height of 4". Supplied in pairs.

Stk. No.	Type	Dimensions	Lbs.	1-49	50-99	100-149
91F070	MB-458	6½x 8"	1¼	1.50	1.35	1.20
91F071	MB-448	6½x10"	1¾	1.50	1.35	1.20
91F072	MB-459	6½x11"	2	1.65	1.50	1.30
91F073	MB-449	6½x12"	2	1.95	1.75	1.55
91F074	MB-460	6½x13"	2½	1.85	1.65	1.50
91F075	MB-450*	8½x10"	2¼	2.15	1.95	1.70
91F076	MB-451*	8½x13"	3	2.30	2.05	1.85

TRIANGULAR TYPE CHASSIS MOUNTING BRACKETS

These brackets will insure proper support of chassis in rack. Constructed of heavy 16 gauge steel with ¾" flange. Finished in black enamel. Made in a triangular shape for added convenience. Sold in pairs only.

Stk. No.	Type	Ht.	Dep.	Wt. Lbs.	1-49 Pair	50-99 Pair	100-149 Pair
91F484	MB1266	5"	5"	1	1.15	1.05	.90
91F485	MB1267	7"	7"	1	1.35	1.20	1.10
91F486	MB1268	9"	9"	1½	1.65	1.50	1.30

STEEL CHASSIS

Chassis is made from one piece of metal. Corners are reinforced and spot welded. Four sides are folded in at the bottom for additional strength. Zinc plated.
*22 gauge †20 gauge ‡18 gauge

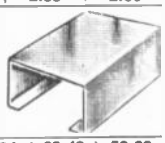
Stock No.	Type	Dimen.	Wt. Lbs.	1-24	25-49	50-99
90F780	CB-101	5½"x5½"x1"	¾*	1.60	1.45	1.30
90F781	CB-102	4½"x8"x1½"	1*	1.75	1.60	1.40
90F782	CB-103	5"x9"x1½"	1*	1.55	1.40	1.25
90F783	CB-104	6"x8"x2"	1½†	1.75	1.60	1.40
90F784	CB-105	5"x13"x3"	1¾†	2.55	2.30	2.00
90F785	CB-106	12"x12"x3"	2†	3.65	3.30	2.90
90F855	CB-629	5"x7"x2"	1*	1.60	1.45	1.30
90F786	CB-645	5"x9½"x2½"	1¼*	2.05	1.85	1.65
90F787	CB-776	5"x9½"x1½"	1*	2.05	1.85	1.65
90F831	CB-605	5"x10"x3"	1¼*	2.25	2.05	1.80
90F788	CB-756	6"x14"x3"	1¾†	2.50	2.25	2.00
90F832	CB-1191	7"x7"x2"	1½†	1.80	1.60	1.45
90F833	CB-1192	7"x9"x2"	1½†	1.95	1.75	1.55
90F834	CB-1193	7"x11"x2"	1½†	2.05	1.85	1.65
90F789	CB-793	7"x12"x3"	1¾†	2.55	2.30	2.05
90F835	CB-1194	7"x13"x2"	2†	2.30	2.05	1.85
90F790	CB-1198	5"x13½"x2½"	1¾†	2.65	2.40	2.10
90F791	CB-1189	7"x15"x3"	2†	2.90	2.60	2.30
90F792	CB-666	8½"x15"x3"	2½†	3.30	2.95	2.65
90F837	CB-1066	4"x17"x3"	2¼†	2.60	2.35	2.10
90F793	CB-1199	7"x17"x2½"	2½†	2.85	2.55	2.30
90F853	CB-758	7"x17"x3"	1¾†	3.15	2.85	2.50
90F794	CB-702	8"x10"x2½"	2†	2.40	2.15	1.90
90F795	CB-704	8"x12"x2½"	2½†	2.70	2.45	2.15
90F854	CB-760	8"x12"x3"	1¾†	2.85	2.55	2.30
90F838	CB774	8"x17"x2"	2½†	2.85	2.55	2.30
90F839	CB-775	8"x17"x3"	3¼†	3.20	2.90	2.55
90F840	CB-1195	10"x12"x3"	3†	2.75	2.50	2.20
90F841	CB-779	10"x14"x3"	4†	2.95	2.65	2.35
90F842	CB-769	10"x17"x2"	3¼†	2.90	2.60	2.30
90F796	CB-637	10"x17"x3"	4†	3.45	3.10	2.75
90F843	CB-1196	10"x17"x3"	5‡	3.70	3.35	2.95
90F797	CB-1197	10"x23"x3"	5½‡	4.15	3.75	3.30
90F846	CB-770	11"x17"x2"	4½‡	3.40	3.05	2.70
90F847	CB-771	11"x17"x3"	4½‡	4.25	3.85	3.40
90F848	CB-661	12"x17"x2"	4½‡	3.75	3.40	3.00
90F849	CB-662	12"x17"x3"	5¼‡	4.45	4.00	3.55
90F850	CB-772	13"x17"x2"	5‡	4.50	4.05	3.60
90F851	CB-773	13"x17"x3"	5½‡	4.95	4.45	3.95
90F844	CB-641	10"x17"x4"	6½‡	4.30	3.85	3.45
90F852	CB-643	13"x17"x4"	7½‡	5.65	5.10	4.50
90F798	CB-624	10"x17"x5"	7½‡	6.50	5.85	5.20
90F799	CB-626	13"x17"x5"	8‡	7.20	6.50	5.75

RACK SHELVES

Heavy gauge steel shelves. Slide in from rear of cabinet. Require chassis support angles. Black enamel finish.

Stk. No.	Type	Size	Lbs.	1-24	25-49	50-99
91F092	CB-1976	19x1x15"	6½	3.80	3.40	3.05
91F093	CB-1977	19x1x12"	5½	2.90	2.60	2.30

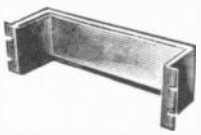
OPEN END CHASSIS BASES



Precision-made of aluminum alloy 5005 H-14 with ¼" base flanges for attaching bottom plate or fastening down of chassis. Natural aluminum finish. Extremely useful for a wide variety of applications.

Stk.No.	Type	DxWxH	Lbs.	1-24	25-49	50-99
91F727	CB1623	2⅝x 2¾x1¼"	¼	.45	.40	.35
91F728	CB1624	1¾x 3⅛x1"	¼	.50	.45	.40
91F729	CB1625	3¼x 4½x2"	¼	.60	.55	.50
91F731	CB1627	3¾x 4⅛x1½"	¼	.55	.50	.45
91F732	CB1628	3 x 6⅛x1¼"	¼	.65	.60	.50
91F733	CB1629	5¾x 4⅞x1½"	¼	.70	.65	.55
91F734	CB1617	4 x 3⅛x1"	½	.50	.45	.40
91F735	CB1618	4 x 4⅛x1"	½	.60	.55	.50
91F736	CB1619	4 x 5⅛x1"	½	.65	.60	.50
91F737	CB1620	4 x 6⅛x1"	½	.70	.65	.55
91F696	CB1626	2¾x 4⅛x1"	¼	.55	.50	.45
91F1368	CB30	5 x 7 x1½"	¾	1.05	.95	.85
91F1369	CB38	7 x 6 x2"	1	1.10	1.00	.90
91F1370	CB39	7 x 8 x2"	¾	1.30	1.15	1.05
91F1371	CB40	7 x10 x2"	1¼	1.50	1.35	1.20
91F1372	CB996	5½x 9 x1½"	1	1.30	1.15	1.05
91F1373	CB997	7 x11 x1½"	1¼	1.60	1.45	1.30
91F1374	CB998	7 x13 x1½"	1½	1.95	1.75	1.55

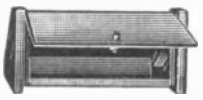
VERTICAL PANEL CHASSIS



Panel mounting chassis for vertical installation where depth is limited or front service is desired. Made of .062" aluminum alloy 5005 H-14 in natural finish. Front flange has standard notching. Fits standard 19" panel space

Stk. No.	Type	Ht.	Wt. Lbs.	1-24	25-49	50-99
91F493	CB1370	1¾"	¾	2.80	2.50	2.25
91F494	CB1371	3½"	1¼	3.15	2.85	2.50
91F495	CB1372	5¼"	1½	3.40	3.05	2.70
91F496	CB1373	7"	2	3.95	3.55	3.15
91F497	CB1374	8¾"	2¼	4.55	4.10	3.65
91F498	CB1375	10½"	2¾	5.35	4.80	4.30
91F499	CB1376	12¼"	3	5.85	5.25	4.70
91F479	CB1377	14"	3¼	6.45	5.80	5.15

● NEW MARK-T



Unique triangular 16 gauge steel welded cabinet. Features include: Front and rear removable panels (rear spring operated); recessed carrying handles; 4 rubber feet; charcoal gray body, light gray enam. panel and door. All models 6 17/32" H.

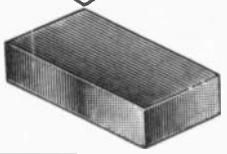
Stk. No.	Type	W	Panel	Weight	1-14	15-24	25-34
90F384	MT-214	16"	5¾x14"	9	26.75	24.10	21.40
90F385	MT-219	21"	5¾x19"	12	29.25	26.35	23.40
90F386	MT-224	26"	5¾x24"	14½	34.45	31.00	27.55

ZINC PLATED STEEL BOTTOM PLATE

Stk. No.	Type	Dem.	Wt.	1-49	50-99
90F876	BP-706	5x 7"	½	.75	.70
90F878	BP-538	5x10"	¾	.90	.80
90F879	BP-668	7x 7"	1	1.05	.95
90F880	BP-669	7x 9"	1	1.10	1.00
90F881	BP-670	7x11"	1	1.20	1.10
90F875	BP-710	8x12"	1½	1.45	1.30
90F882	BP-671	7x13"	1¼	1.30	1.15
90F884	BP-1067	4x17"	1½	1.30	1.15
90F898	BP-673	7x17"	1½	1.50	1.35
90F885	BP-674	8x17"	1¾	1.70	1.55
90F887	BP-675	10x12"	1½	1.75	1.60
90F888	BP-514	10x14"	1½	1.65	1.50
90F889	BP-676	10x17"	1¾	1.75	1.60
90F893	BP-677	11x17"	1½	1.75	1.60
90F895	BP-678	12x17"	2	2.05	1.85
90F897	BP-679	13x17"	2¼	2.45	2.20

NEWARK — Your One Point Source For All Your Electronic Needs

Chassis & Panels

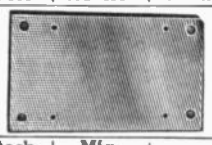


ALUMINUM CHASSIS

- **Now in 63 sizes**
- **Heavy duty construction**

Unsurpassed range of standard sizes. Made of one piece of 5005-H-14 aluminum alloy. Reinforced, welded corners to insure utmost strength and long lasting qualities. Folded over on bottom for extra strength.

Stock No.	Mfg. No.	Dimen.	Wt. Lbs.	1-24	25-49	50-99
91F1319	AC-1401	2½"x 4½"x1"	¼	1.15	1.05	.90
91F1320	AC-1402	3½"x 4½"x1"	¼	1.20	1.10	.95
91F1321	AC-1403	3½"x 5½"x1"	⅓	1.20	1.10	.95
91F1322	AC-1404	4" x 5" x2"	½	1.40	1.25	1.10
91F1323	AC-1405	4" x 6" x1½"	½	1.30	1.20	1.05
90F940	AC-430	4" x 6" x3"	½	1.60	1.45	1.30
90F941	AC-431	4" x 6" x2"	½	1.40	1.25	1.10
91F1324	AC-1406	4" x 8" x2"	¾	1.70	1.55	1.35
90F942	AC-432	4" x17" x3"	1	2.85	2.55	2.30
91F1325	AC-1407	4½"x 8" x1½"	¾	1.30	1.20	1.05
90F943	AC-402	5" x 7" x2"	½	1.45	1.30	1.15
90F944	AC-429	5" x 7" x3"	½	1.75	1.55	1.40
91F1326	AC-1408	5" x 9" x1½"	½	1.40	1.25	1.10
91F1327	AC-1409	5" x 9½"x1½"	½	1.40	1.25	1.10
90F945	AC-403	5" x 9½"x2"	½	1.55	1.40	1.25
90F939	AC-401	5" x 9½"x2½"	¾	1.80	1.60	1.45
90F946	AC-421	5" x 9½"x3"	¾	2.00	1.80	1.60
90F947	AC-404	5" x10" x3"	¾	2.00	1.80	1.60
90F948	AC-422	5" x13" x3"	¾	2.30	2.05	1.85
91F1328	AC-1410	5" x13½"x2½"	¾	1.85	1.65	1.50
91F1329	AC-1411	5½"x 5½"x1"	½	1.30	1.20	1.05
91F1330	AC-1412	5½"x 9½"x1½"	1	1.40	1.25	1.10
91F1331	AC-1413	6" x 8" x2"	1½	1.70	1.55	1.35
91F1332	AC-1414	6" x14" x3"	1¼	2.80	2.50	2.25
90F949	AC-433	6" x17" x3"	1¼	3.30	2.95	2.65
90F950	AC-405	7" x 7" x2"	½	1.65	1.50	1.30
90F951	AC-406	7" x 9" x2"	½	1.75	1.60	1.40
90F952	AC-407	7" x11" x2"	¾	2.00	1.80	1.60
90F953	AC-408	7" x12" x3"	1	2.40	2.15	1.90
90F954	AC-409	7" x13" x2"	¾	2.10	1.90	1.70
91F1333	AC-1415	7" x15" x2"	1¼	2.65	2.40	2.10
90F955	AC-411	7" x15" x3"	1½	3.30	2.95	2.60
91F1334	AC-1416	7" x17" x2"	1¾	2.90	2.60	2.30
91F1335	AC-1417	7" x17" x2½"	1¾	3.00	2.70	2.40
90F956	AC-423	7" x17" x3"	1¾	3.35	3.00	2.70
91F1336	AC-1418	8" x10" x2½"	2	2.50	2.25	2.00
91F1337	AC-1419	8" x12" x2½"	1½	2.80	2.50	2.25
90F957	AC-424	8" x12" x3"	1¾	2.95	2.65	2.35
90F958	AC-425	8" x17" x2"	2½	3.10	2.80	2.50
90F959	AC-412	8" x17" x3"	1¾	3.45	3.10	2.75
91F1338	AC-1420	8½"x15" x3"	1½	2.90	2.60	2.30
91F1339	AC-1421	9" x15" x3"	1¾	3.50	3.15	2.80
90F960	AC-413	10" x12" x3"	1½	3.30	2.95	2.65
90F961	AC-414	10" x14" x3"	1¾	3.45	3.10	2.75
90F962	AC-415	10" x17" x2"	2¼	3.30	2.95	2.65
90F963	AC-416	10" x17" x3"	2	3.85	3.45	3.10
90F969	AC-427	10" x17" x4"	3½	5.50	4.95	4.40
91F1340	AC-1422	10" x17" x5"	3¾	7.90	7.10	6.30
91F1341	AC-1423	10" x23" x3"	4	5.40	4.85	4.30
90F964	AC-426	11" x17" x2"	2¼	4.20	3.80	3.35
90F965	AC-417	11" x17" x3"	2¾	4.85	4.35	3.90
91F1342	AC-1424	12" x12" x3"	1¾	3.30	2.95	2.65
91F1343	AC-1425	12" x17" x2"	2¾	4.40	3.95	3.50
90F966	AC-418	12" x17" x3"	2¾	4.95	4.45	3.95
90F967	AC-419	13" x17" x2"	2½	4.30	3.85	3.45
90F968	AC-420	13" x17" x3"	2¾	5.15	4.65	4.10
90F970	AC-428	13" x17" x4"	3¾	6.40	5.75	5.10
91F1344	AC-1426	13" x17" x5"	4	8.75	7.90	7.00
91F1345	AC-1427	14" x17" x3"	3¼	6.15	5.55	4.90
91F1346	AC-1428	15" x17" x4"	4¼	8.75	7.90	7.00
91F1347	AC-1429	15" x17" x6"	5	11.90	10.70	9.50
91F1348	AC-1430	17" x17" x3"	5¼	7.05	6.35	5.65
91F1349	AC-1431	17" x17" x4"	5½	10.25	9.30	8.30



ALUMINUM BOTTOM PLATES

- **Now in 42 sizes**
- **Protects wiring**

Widest variety of standard sizes. Fit all BUD chassis. Made of 5005-H-14 aluminum alloy. Natural finish. Plates have four embossed feet to prevent damage to surface. Fit snugly on bottom of chassis.

Stock No.	Mfg. No.	Dimen.	Wt. Lbs.	1-24	25-49	50-99
91F1406	BPA-1501	2½"x 4½"	1/12	.60	.55	.50
91F1407	BPA-1502	3½"x 4½"	1/11	.65	.60	.50
91F1408	BPA-1503	3½"x 5½"	1/10	.70	.65	.55
91F1409	BPA-1504	4" x 5"	1/10	.70	.65	.55
91F1410	BPA-1505	4" x 6"	1/9	.75	.70	.60
91F1411	BPA-1506	4" x 8"	3/16	.90	.80	.70
91F1413	BPA-1532	4" x17"	1/3	.90	.80	.70
91F1412	BPA-1507	4½"x 8"	1/8	1.00	.90	.80
90F860	BPA-1589	5" x 7"	1/8	.80	.70	.65
91F1414	BPA-1508	5" x 9"	1/4	.85	.75	.65
90F861	BPA-1590	5" x 9½"	1/4	.85	.75	.70
90F862	BPA-1591	5" x10"	1/4	.85	.75	.70
91F1415	BPA-1509	5" x13"	1/3	1.25	1.15	1.00
91F1416	BPA-1510	5" x13½"	1/3	1.30	1.15	1.05
91F1417	BPA-1511	5½"x 5½"	1/4	.80	.70	.65
91F1418	BPA-1512	5½"x 9½"	1/4	.90	.80	.70
91F1419	BPA-1513	6" x 8"	1/3	1.00	.90	.80
91F1420	BPA-1514	6" x14"	1/2	1.25	1.15	1.00
91F1421	BPA-1515	6" x17"	5/8	1.55	1.40	1.25
90F863	BPA-1592	7" x 7"	1/3	.85	.75	.70
90F864	BPA-1593	7" x 9"	1/3	.90	.80	.70
90F865	BPA-1594	7" x11"	1/3	1.00	.90	.80
90F866	BPA-1595	7" x12"	1/2	1.05	.95	.85
90F867	BPA-1596	7" x13"	1/2	1.25	1.15	1.00
91F1422	BPA-1516	7" x15"	5/8	1.45	1.30	1.15
91F1423	BPA-1517	7" x17"	5/8	1.45	1.30	1.15
91F1424	BPA-1518	8" x10"	1/2	1.30	1.15	1.05
91F1425	BPA-1519	8" x12"	1/2	1.65	1.50	1.30
91F1426	BPA-1520	8" x17"	5/8	1.70	1.55	1.35
91F1427	BPA-1521	8½"x15"	5/8	1.95	1.75	1.55
91F1428	BPA-1522	9" x15"	5/8	2.00	1.80	1.60
91F1429	BPA-1523	10" x12"	1/2	1.65	1.50	1.30
91F1430	BPA-1524	10" x14"	5/8	1.65	1.50	1.30
90F868	BPA-1597	10" x17"	3/4	1.65	1.50	1.30
91F1431	BPA-1525	10" x23"	1	2.40	2.15	1.90
91F1432	BPA-1526	11" x17"	3/4	1.85	1.65	1.50
91F1433	BPA-1527	12" x12"	2/3	1.85	1.65	1.50
91F1434	BPA-1528	12" x17"	3/4	2.20	2.00	1.75
90F869	BPA-1598	13" x17"	3/4	2.30	2.05	1.85
91F1435	BPA-1529	14" x17"	3/4	2.30	2.05	1.85
91F1436	BPA-1530	15" x17"	1	3.15	2.85	2.50
91F1437	BPA-1531	17" x17"	1-1/4	3.20	2.90	2.55

FLANGED PANELS

An exact replacement for original equipment used in racks devoted to commercial sound application. Panels made of 16 gauge steel with ½" flange all around. Elongated hole is .250" x .500". Spacing of holes conforms to W.E. spacing on panel mtg. rails. Std. 19" panels. Finishes: gray wrinkle **(G)**, black wrinkle **(B)**, gray hammertone **(HG)**, smooth light gray **(SG)**, smooth light blue **(SB)**, charcoal gray **(CG)**, and sand **(S)**.

B Stk. No.	G Stk. No.	HG Stk. No.	SG Stk. No.	SB Stk. No.	S Stk. No.	CG Stk. No.	Type	Height	Lbs.	1-49	50-99	100-149
91F1480	91F1492	91F1504	91F1516	91F1528	91F1540	91F1552	FPS-1230	1¾"	1¼	1.15	1.05	.92
91F1481	91F1493	91F1505	91F1517	91F1529	91F1541	91F1553	FPS-1231	3½"	2¼	1.20	1.10	.96
91F1482	91F1494	91F1506	91F1518	91F1530	91F1542	91F1554	FPS-1232	5¼"	3¼	1.40	1.25	1.12
91F1483	91F1495	91F1507	91F1519	91F1531	91F1543	91F1555	FPS-1233	7"	4½	1.60	1.45	1.30
91F1484	91F1496	91F1508	91F1520	91F1532	91F1544	91F1556	FPS-1234	8¾"	6	2.00	1.80	1.60
91F1485	91F1497	91F1509	91F1521	91F1533	91F1545	91F1557	FPS-1235	10½"	7	2.40	2.15	1.90
91F1486	91F1498	91F1510	91F1522	91F1534	91F1546	91F1558	FPS-1236	12¼"	8¼	2.80	2.50	2.25
91F1487	91F1499	91F1511	91F1523	91F1535	91F1547	91F1559	FPS-1237	14"	9½	3.20	2.90	2.55
91F1488	91F1500	91F1512	91F1524	91F1536	91F1548	91F1560	FPS-1238	15¾"	10¾	3.65	3.30	2.90
91F1489	91F1501	91F1513	91F1525	91F1537	91F1549	91F1561	FPS-1239	17½"	11¾	4.10	3.70	3.30
91F1490	91F1502	91F1514	91F1526	91F1538	91F1550	91F1562	FPS-1240	19¼"	13	4.50	4.05	3.60
91F1491	91F1503	91F1515	91F1527	91F1539	91F1551	91F1563	FPS-1241	21"	14¼	4.90	4.40	3.90

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

STEEL RACK PANELS

Heavy duty panels made of 1/8" steel. 19" widths. All panels have standard notched edges which are able to fit the normal mounting screw spacing of all standard relay racks and telephone type relay racks. All wrinkle rack panels are available in a choice of five colors: black, grey, wrinkle hammertone grey, smooth blue, and smooth grey.

1/8" PANELS, 19" PANEL WIDTHS

Stock No. Black	Stock No. Grey	Stock No. Ham. Grey	Stock No. Smooth Blue	Stock No. Smooth Grey	Type	Lbs.	Height	1-49	50-99	100-149
91F300	91F320	91F435	91F400	91F412	PS-1250	1¼	1¾"	1.00	.90	.80
91F301	91F321	91F436	91F401	91F413	PS-1251	2¼	3½"	1.20	1.10	.95
91F302	91F322	91F437	91F402	91F414	PS-1252	3¼	5¼"	1.55	1.40	1.25
91F303	91F323	91F438	91F403	91F415	PS-1253	4½	7"	1.70	1.50	1.35
91F304	91F324	91F439	91F404	91F416	PS-1254	6	8¾"	2.15	1.95	1.70
91F305	91F325	91F440	91F405	91F417	PS-1255	7	10½"	2.55	2.30	2.05
91F306	91F326	91F441	91F406	91F418	PS-1256	8¼	12¼"	2.90	2.60	2.30
91F307	91F327	91F442	91F407	91F419	PS-1257	9½	14"	3.40	3.05	2.70
91F308	91F328	91F443	91F408	91F420	PS-1258	10¾	15¾"	3.75	3.40	3.00
91F309	91F329	91F444	91F409	91F421	PS-1259	11¾	17½"	4.25	3.85	3.40
91F310	91F330	91F445	91F410	91F422	PS-1260	13	19¼"	4.60	4.15	3.70
91F311	91F331	91F446	91F411	91F423	PS-1261	14¼	21"	5.15	4.65	4.10

ALUMINUM RACK PANELS

Available in 1/8" or 3/16" aluminum. Standard 19" width. All panels have notched edges which are made to fit the mounting screw spacing of all standard racks. Types PA-1131 to 3112 are made from a 2024 T-3 aluminum. Types PA-3121 to 3132 are of a 2024 T-3 "Hard Aluminum" panels. All wrinkle rack panels are available in a choice of five colors: black, grey, wrinkle hammertone grey, smooth blue, and smooth grey.

1/8" PANELS 19" WIDTHS

Stock No. Black*	Stock No. Grey*	Stock No. Ham. Grey	Stock No. Smooth Blue	Stock No. Smooth Grey	Type	Lbs.	Height	1-49	50-99	100-149
91F340	91F360	91F388	91F240	91F252	PA-1101	¼	1¾"	1.25	1.15	1.00
91F341	91F361	91F389	91F241	91F253	PA-1102	¾	3½"	1.65	1.50	1.30
91F342	91F362	91F390	91F242	91F254	PA-1103	1	5¼"	2.20	2.00	1.75
91F343	91F363	91F391	91F243	91F255	PA-1104	1¾	7"	2.80	2.50	2.25
91F344	91F364	91F392	91F244	91F256	PA-1105	2	8¾"	3.25	2.95	2.60
91F345	91F365	91F393	91F245	91F257	PA-1106	2½	10½"	4.15	3.75	3.30
91F346	91F366	91F394	91F246	91F258	PA-1107	2¾	12¼"	4.75	4.30	3.80
91F347	91F367	91F395	91F247	91F259	PA-1108	3	14"	5.50	4.95	4.40
91F348	91F368	91F396	91F248	91F260	PA-1109	3½	15¾"	6.15	5.55	4.90
91F349	91F369	91F397	91F249	91F261	PA-1110	4	17½"	6.75	6.10	5.40
91F350	91F370	91F398	91F250	91F262	PA-1111	4¼	19¼"	7.35	6.65	5.90
91F351	91F371	91F399	91F251	91F263	PA-1112	5	21"	8.10	7.30	6.50
90F260	90F272	90F284	90F296	90F308	PA-1131	¼	1¾"	1.70	1.55	1.35
90F261	90F273	90F285	90F297	90F309	PA-1132	¾	3½"	2.10	1.90	1.70
90F262	90F274	90F286	90F298	90F310	PA-1133	1	5¼"	2.65	2.40	2.10
90F263	90F275	90F287	90F299	90F311	PA-1134	1¾	7"	3.40	3.05	2.70
90F264	90F276	90F288	90F300	90F312	PA-1135	2	8¾"	4.00	3.60	3.20
90F265	90F277	90F289	90F301	90F313	PA-1136	2½	10½"	4.95	4.45	3.95
90F266	90F278	90F290	90F302	90F314	PA-1137	2¾	12¼"	5.70	5.15	4.55
90F267	90F279	90F291	90F303	90F315	PA-1138	3	14"	6.60	5.95	5.30
90F268	90F280	90F292	90F304	90F316	PA-1139	3½	15¾"	7.20	6.50	5.75
90F269	90F281	90F293	90F305	90F317	PA-1140	4	17½"	7.75	7.00	6.20
90F270	90F282	90F294	90F306	90F318	PA-1141	4¼	19¼"	8.40	7.55	6.70
90F271	90F283	90F295	90F307	90F319	PA-1142	5	21"	9.55	8.60	7.65

3/16" PANELS, 19" WIDTHS

90F200	90F212	90F224	90F236	90F248	PA-3101	¾	1¾"	2.00	1.80	1.60
90F201	90F213	90F225	90F237	90F249	PA-3102	1¼	3½"	2.65	2.40	2.10
90F202	90F214	90F226	90F238	90F250	PA-3103	1¾	5¼"	3.55	3.20	2.85
90F203	90F215	90F227	90F239	90F251	PA-3104	2½	7"	4.45	4.00	3.55
90F204	90F216	90F228	90F240	90F252	PA-3105	3	8¾"	5.25	4.75	4.20
90F205	90F217	90F229	90F241	90F253	PA-3106	3¾	10½"	6.60	5.95	5.30
90F206	90F218	90F230	90F242	90F254	PA-3107	4½	12¼"	7.55	6.80	6.05
90F207	90F219	90F231	90F243	90F255	PA-3108	5	14"	8.80	7.90	7.05
90F208	90F220	90F232	90F244	90F256	PA-3109	5¾	15¾"	9.85	8.85	7.90
90F209	90F221	90F233	90F245	90F257	PA-3110	6¼	17½"	10.80	9.70	8.65
90F210	90F222	90F234	90F246	90F258	PA-3111	7	19¼"	11.85	10.65	9.50
90F211	90F223	90F235	90F247	90F259	PA-3112	7¼	21"	12.95	11.65	10.35

3/16" PANELS, 19" WIDTHS (2024T-3 HARD ALUMINUM PANELS)

90F320	90F332	90F344	90F356	90F368	PA-3121	¾	1¾"	2.80	2.50	2.25
90F321	90F333	90F345	90F357	90F369	PA-3122	1½	3½"	3.45	3.10	2.75
90F322	90F334	90F346	90F358	90F370	PA-3123	1¾	5¼"	4.40	3.95	3.50
90F323	90F335	90F347	90F359	90F371	PA-3124	2½	7"	5.70	5.15	4.55
90F324	90F336	90F348	90F360	90F372	PA-3125	3	8¾"	6.70	6.05	5.35
90F325	90F337	90F349	90F361	90F373	PA-3126	3¾	10½"	8.20	7.40	6.55
90F326	90F338	90F350	90F362	90F374	PA-3127	4½	12½"	9.60	8.64	7.70
90F327	90F339	90F351	90F363	90F375	PA-3128	5	14"	11.05	9.95	8.85
90F328	90F340	90F352	90F364	90F376	PA-3129	5¾	15¾"	12.00	10.80	9.60
90F329	90F341	90F353	90F365	90F377	PA-3130	6¼	17½"	13.05	11.75	10.45
90F330	90F342	90F354	90F366	90F378	PA-3131	7¼	19¼"	14.00	12.60	11.20
90F331	90F343	90F355	90F367	90F379	PA-3132	7	21"	16.00	14.40	12.80

SLOPING PANEL SUPPORT

Designed for oblique view of instrument panel. Engineered so that the entire assembly occupies no more space than the size of the supported panel. Panel support cover can be removed for easy servicing or installation of instruments. Made of heavy gauge steel with attractive contoured edges.

Stk. No. Black	Stk. No. Grey	Stk. No. HG	Supports Panel	Type	Lbs.	1-24	25-49	50-99
91F690	91F691	91F692	7"x19"	1P-1120	3½	5.00	4.50	4.00
91F693	91F694	91F695	10½"x19"	1P-1121	6¾	7.05	6.35	5.65

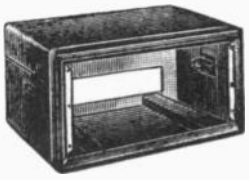
RUBBER FEET

Type F-7264A. 15/16x11/32" thick black rubber. With hardware.
91F084. NET Each ..... .08 **Per 100** 7.10

Type F-8038. 1/8" thick x ¾" dia. Rubber protection pad. 3 oz.
91F085. NET Each ..... .02 **Per 100** 1.95

NEWARK STOCKS THE WORLD'S MOST COMPLETE INVENTORY OF INDUSTRIAL ELECTRONIC COMPONENTS

Cabinets and Cases



Prestige Cabinets

"PRESTIGE" CABINETS

Stock cabinets of 16 gauge steel for housing quality instruments, etc. Hinged covers . . . solid or perforated. Grommeted finger holes for easy cover lifting. Cover closes by pressure fasteners. Chassis supporting channels and embossed feet. Width 21⅝, Depth 14¾. Finished in gray hammertone.

Stock No.	Type No.	Cover	Overall Height	Panel Space	Lbs.	1-14	15-24	25-34
91F064	C-1440	Solid	9 9/16	7"	26	31.45	28.30	25.15
91F065	C-1441	Solid	11 5/16	8¾"	27	33.15	29.85	26.50
91F066	C-1442	Solid	13 1/16	10½"	29	36.15	32.55	28.90
91F067	C-1550	Perf.	9 9/16	7"	26	33.70	30.35	26.95
91F068	C-1551	Perf.	11 3/16	8¾"	27	36.05	32.45	26.85
91F069	C-1552	Perf.	13 1/16	10½"	29	39.20	35.30	31.35

Sloping Panel Prestige Cabinet

PRESTIGE VERSA CABINETS

Has sturdy framework with ball cornered sides. Unit also has solid bottom plate and two supporting channels. All of these parts are removable. Unit uses standard 19" panels. Cabinets are made to be stacked, or may be fastened side by side. Grey Hammertone finish.

Stk. No.	Type	Overall Height	Panel Space	Rear Panel	Net Each, Lots of 1-14	15-24	25-34
91F906	PC-1700	8¾"	5¼"	3½"	30.05	27.05	24.05
91F907	PC-1701	10½"	7"	5¼"	31.85	28.65	25.50
91F908	PC-1702	12¼"	8¾"	7"	33.90	30.50	27.10
91F909	PC-1703	14"	10½"	8¾"	36.95	33.25	29.55
91F910	PC-1704	15¾"	12¼"	10½"	38.85	34.95	31.10

Transicase

SLOPING PANEL PRESTIGE CABINETS

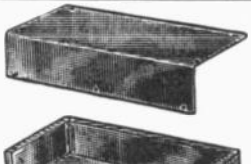
Cabinet has ventilated top, full top opening, recessed handle, shielded handles in sides. Top panel swept back for easy viewing, rear opening for easy cable or control access. Panel trim bar removable. Provides for installation or removal of panels. Grey hammertone finish. Rear opening is 2½"x18", panel offset: 1¼", overall width: 22", pnl. ht. vert.: 3½".

Stock No.	Type	Ht. x Depth	Pan. Ht. Slope	Shpg. Wt.	1-14	15-24	25-34
91F743	C-1555	11⅞x14⅜"	7"	22 lbs.	39.70	35.75	31.75
91F744	C-1556	13¼x15⅛"	8¾"	25 lbs.	42.65	38.40	34.10
91F745	C-1557	14¾x16⅛"	10½"	28 lbs.	45.70	41.15	36.55

TRANSICASE

A handsome new and portable instrument case. This contoured case is made of .040 aluminum and it has a flush fitting panel. Transicase has two slide off bright nickel plated hinges for easy removal of top and has two bright nickel toggle catches. Also, bright nickel handle. Two types of finishes are available: smooth blue or smooth grey. Rubber feet on base and back.

Stk. No. BLUE	Stk. No. GREY	Type	W x D x H	Panel Size	Clear Int. Space Below Panel	Clear Int. Space Above Panel	Internal Aperture	Lbs.	1-49	50-99	100-149
91F911	91F916	TC-300	10 1/16x7x6"	8 15/16x5 15/16"	4 13/32"	1 15/32"	8x5 31/32"	3¾	26.20	23.60	20.95
91F912	91F917	TC-301	11½x8¼x6"	10 3/8x7¼"	4 13/32"	1 15/32"	9 1/16x7 9/32"	4½	26.80	24.10	21.45
91F913	91F918	TC-302	13x9x7½"	11 7/8x7 15/16"	5 29/32"	1 15/32"	10 15/16x7 31/32"	6	27.30	24.60	21.85
91F914	91F919	TC-303	16½x9x7½"	15 3/8x7 15/16"	5 29/32"	1 15/32"	14 1/16x7 31/32"	8	27.85	25.05	22.30
91F915	91F920	TC-304	20⅛x8x9"	19x7"	7 1/32"	1 1/32"	18 1/16x7 1/32"	10	29.30	26.35	23.45



CONVERTA-BOX

This new box enclosure consisting of a welded base and a two sided cover. Box may be easily mounted to any type of surface. Converta-Box is made of 20 gauge steel. Hardware furnished: 6 self-tapping screws. The box has a cadmium-plated finish.

Stk. No.	Type	HxWxD	Lbs.	1-24	25-49	50-99
91F554	CU-341	1½x4x3"	½	2.10	1.90	1.70
91F555	CU-452	2x5x4"	1	2.20	2.00	1.75
91F556	CU-482	2x8x4"	1¼	2.30	2.05	1.85
91F557	CU-592	2½x9½x5"	1¾	2.50	2.25	2.00
91F558	CU-622	2½x12x6"	2¾	2.75	2.50	2.20
91F559	CU-712	2½x15x7"	3½	3.65	3.30	2.90

MIDGET SPEAKER CASES

All metal cases, 4x4x4¼", that fit 2* and 3"** speakers. Black wrinkle finish. 2 lbs.* Type CS-1685. Hole dia. 2 5/16". **Type CS-1686. Hole diameter 2 13/16".

Stk. No.	1-24	25-49	50-99
91F606*	1.95	1.75	1.55
91F607**	1.95	1.75	1.55

UNIVERSAL METER CASES

Can accommodate either a 2" or 3" meter. Center hole is punched for 2" meter and has an easily removed knock-out ring which increases size of hole to fit 3" meter. One piece, detachable back and sides fastened to the body of case with four self tapping screws. Two ⅜" knock-out holes in top for installation of feed through insulators if required. May also be used for switches, etc. Available in steel or aluminum grey hammertone. 4¼"H.x4"W.x4"D. *CMA-1930. 4¼x6x4".

Stk. No.	Type	Wt.	1-49	50-99	100-149
91F598	CM-1935 Steel	1 lb.	1.50	1.35	1.20
91F599	CMA-1936 Alum.	¾ lb.	1.75	1.60	1.40
91F597	*CMA-1930 Alum.	¾ lb.	2.90	2.60	2.30

CARRYING CASES

Portable cases for transceivers, test units and other types of compact equipment. Front and back panels are fastened by self-tapping screws. Have easy grip handle. Black wrinkle finish.

Stk. No.	Type	HxWxD	Lbs.	1-24	25-49	50-99
91F608	CC-1095	9x6x5"	3¼	3.65	3.30	2.90
91F609	CC-1092	7x12x6"	4	5.05	4.55	4.05
91F610	CC-1100	10x10x8"	5	5.85	5.25	4.70
91F611	CC-1091	6x9x5"	3¼	3.65	3.30	2.90
91F612	CC-1096	12x7x6"	4	5.05	4.55	4.05
91F613	CC-1097	15x7¾x7"	5	5.65	5.10	4.50
91F614	CC-1093	9x15x7"	5	7.10	6.40	5.70

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Cabinets and Accessories

BUD — THE MARK OF PERFECTION

• NEW TILT-A-VIEW

Designed to present selective angles of vision to the viewer who may be observing the action of meters or the position of dials and recorders. Detachable legs change the position of the cabinet. Two piece construction permits immediate access to interior for installation and service. Cabinet fasteners are all positioned on the lower portion of the cabinet so that no fasteners appear on the front or rear panels. Color is charcoal gray with light sand front and rear panels. All models 18 gauge steel.

Stock No.	Type	H	W	D	1-14	15-24	25-34
90F393	TV2155	4½"	15"	10"	6.85	6.15	5.50
90F394	TV2156	6½"	16"	12"	8.00	7.20	6.40
90F395	TV2157	8½"	17"	14"	11.60	10.45	9.30

CLASSIC CABINETS

.050 patterned aluminum panels (192) on 4 sides, with two heavy duty anodized aluminum handles. 6063-T5 extrusions. Also includes 2 chassis supports and 4 rubber feet. Finish is vinyl texture. Choice of Charcoal gray or sand. Accepts standard 19 panels.

Sand Stk. No.	CG Stk. No.	Type AGC	Height	Panel Space	Lbs. Wt.	1-4	5-9	10-14
91F1376	91F1391	266	45 7/64"	3½"	17	80.90	72.80	64.70
91F1377	91F1392	267	64 1/64"	5¼"	18½	83.00	74.70	66.40
91F1378	91F1393	268	82 3/64"	7"	20	87.50	78.75	70.00
91F1379	91F1394	269	10 9/64"	8¾"	21½	89.60	80.65	71.70
91F1380	91F1395	270	115/64"	10½"	23	92.70	83.45	74.15
91F1381	91F1396	271	134/64"	12¼"	24½	96.35	86.70	77.10
91F1382	91F1397	272	15 33/64"	14"	26	99.35	89.40	79.50
91F1383	91F1398	273	17 9/64"	15¾"	27½	103.00	92.70	82.40
91F1384	91F1399	274	18 51/64"	17½"	29	106.00	95.40	84.80
91F1385	91F1400	275	20 41/64"	19¼"	30½	108.50	97.65	86.80
91F1386	91F1401	276	22 23/64"	21"	32	112.00	101.00	89.60
91F1387	91F1402	277	24 9/64"	22¾"	33½	115.00	103.50	92.00
91F1388	91F1403	278	25 57/64"	24½"	35	118.00	106.20	94.40
91F1389	91F1404	279	27 41/64"	26¼"	36½	121.00	108.90	96.80
91F1390	91F1405	280	29 25/64"	28"	38	123.75	111.40	99.00

CLASSIC DOORS

For use with Classic Cabinets, racks with 19" panel space. ⅛" 5005-H36 aluminum alloy.

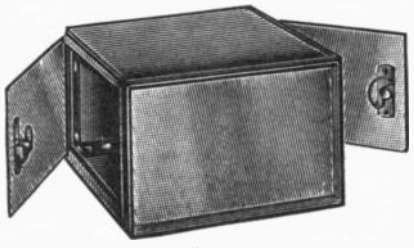
Sand Stk. No.	CG Stk. No.	Type	Height	Lbs.	1-4	5-9	10-14
91F1450	91F1465	AGD-366	3½"	1	6.00	5.40	4.80
91F1451	91F1466	AGD-367	5¼"	2	7.30	6.55	5.85
91F1452	91F1467	AGD-368	7"	2	8.50	7.65	6.80
91F1453	91F1468	AGD-369	8¾"	3	9.50	8.55	7.60
91F1454	91F1469	AGD-370	10½"	3	10.40	9.35	8.30
91F1455	91F1470	AGD-371	12¼"	4	11.40	10.25	9.10
91F1456	91F1471	AGD-372	14"	4	12.20	11.00	9.75
91F1457	91F1472	AGD-373	15¾"	5	13.00	11.70	10.40
91F1458	91F1473	AGD-374	17½"	5	14.00	12.60	11.20
91F1459	91F1474	AGD-375	19¼"	6	14.90	13.40	11.90
91F1460	91F1475	AGD-376	21"	7	15.90	14.30	12.70
91F1461	91F1476	AGD-377	22¾"	8	16.70	15.00	13.35
91F1462	91F1477	AGD-378	24½"	8	17.50	15.75	14.00
91F1463	91F1478	AGD-379	26¼"	9	18.70	16.85	14.95
91F1464	91F1479	AGD-380	28"	9	19.90	17.90	15.90

SWIVEL TRUCK CASTERS

Type RC-7756. Heavy-duty casters for use on relay racks. Four casters will carry a load of 400 pounds. Wheels are high grade hard rubber composition. Ball-bearing mounted. With screws. 10 oz.
Type RC-7757. Same as above, but with light duty casters for lighter loads. Shpg. wt., 8 oz.
Type RC-7758. Truck Casters.

Stock No.	Type	Height	Weight	1-49	50-99	100-149
91F882	RC-7756	2⅜"	1¾	1.10	1.00	.90
91F883	RC-7757	2"	1	.50	.45	.40
91F894	RC-7758	3¼"	6	2.65	2.40	2.10

• NEW TUDOR CABINETS



Deviation from usual cabinet construction affords access from either side through hinged doors. Thus inspection and servicing of contents is greatly simplified. Features include: Bud Imlok 901 aluminum extrusions and corner connections, recessed front panel, piano type hinge on doors, and scratch resistant finish body and panel. Choice of charcoal gray (CG) or sand (S).

Stk. No. CG	Stk. No. S	Type	H	W	D	1-9	10-14	15-19
90F387	90F390	S-609	6"	9½"	8"	49.25	44.35	39.40
90F388	90F391	S-612	8"	12"	10"	54.20	48.80	43.35
90F389	90F392	S-614	10"	14"	12"	58.80	52.90	47.05

UNIVERSAL SLOPING PANEL CABINETS

One piece, detachable back and sides fastened to body with four self tapping screws permits easy access for mounting and servicing components. Available in steel or aluminum.

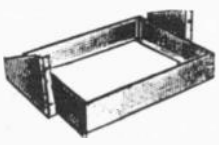
Alum.	Type	HxWxD	Lbs.	1-24	25-49	50-99
91F834	AC-1610	4x4x4¼"	½	2.05	1.85	1.65
91F835	AC1611	4x5x4¼"	½	2.15	1.95	1.70
91F836	AC1612	4x6x4¼"	¾	2.30	2.05	1.85
91F837	AC1613	4x7x4¼"	¾	2.55	2.30	2.05
Steel						
91F830	C-1606	4x4x4¼"	¾	1.75	1.60	1.40
91F831	C-1607	4x5x4¼"	¾	1.85	1.65	1.50
91F832	C-1608	4x6x4¼"	1⅛	2.00	1.80	1.60
91F833	C-1609	45x7x4¼"	1⅛	2.30	2.05	1.85

STEEL HANDY BOXES

Two-piece steel cases. Provides the maximum degree of accessibility, adequate shielding as well as complete protection from mechanical injury and dust particles. Formed of 22 gauge-steel. Finished in black wrinkle.

Stk. No.	Type	WxHxL	Wt.	1-49	50-99	100-149
91F541	HB-1621	1½x2¼x4¼"	½	1.40	1.25	1.10
91F542	HB-1622	2¾x2x4"	½	1.45	1.30	1.15

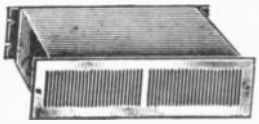
SLIDING DRAWER ASSEMBLY



Used in mounting record players, portable typewriters, instruments, drawer space and many other purposes. Chassis and slide are light gray hammertone. Brackets and channel are etched aluminum. Will support 50 lbs. Fits standard relay rack. Size: 16¾x14x3".

Stk. No.	Type	Description	Lb.	1-14	15-24	25-34
91F826	SD-1717	Assembly	5	13.20	11.20	10.55
91F827	TP-1718	Drawer Plate	1½	2.95	2.65	2.35

TRANS-AIRE BLOWER FOR RACK MTG.



Used where excessive heat is generated by equip. in an enclosed rack. 2-speed motors have oilite bearings with oil impregnated wicks. Air Displacement: B-23, 100-200 cfm—B-25, 250-500 cfm—B-27, 350-700 cfm at 0 static pressure. Oil impregnated Fiberglass filter included. 110-120V., 60 hz AC.

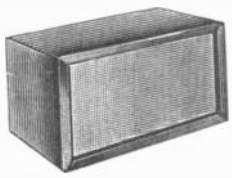
Stk. No.	Type	Motor	HxWxD	Lbs	1-9	10-14	15-19
91F902	B-23	1/20 h.p.	3½x19x12"	17¼	57.75	52.00	46.20
91F637	B-25	1/6 h.p.	5¼x19x14½"	33	66.00	59.40	52.80
91F903	B-27	1/4 h.p.	7x19x14½"	35¼	74.25	66.85	59.40

FILTERS

Stk. No.	Type	Description of Filters	1-24	25-49	50-99
91F904	BF-24	Filter for B-23 above	1.50	1.35	1.20
91F638	BF-26	Filter for B-25 above	1.65	1.50	1.30
91F905	BF-28	Filter for B-27 above	1.80	1.65	1.45

Cabinets & Cases

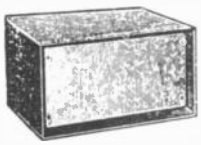
"FUTURA" CABINETS



Versatile housing for small equipment. Made of 20-gauge steel except for front panel, which is 18-ga. Top and sides are one piece, easily removable to expose interior. Front panel is held by flanges (no screws to mar appearance); is vertical, except † rises vertically 2", then has 15° incline. Chassis may be attached to base, rear, or front panels. Has four rubber feet. Dark blue body with light blue panel, or light gray hammertone body, smooth panel.

Gray Stk.No.	Blue Stk.No.	Type	HxWxD	Fits Chas.	Lbs.	1-24	25-49	50-99
91F1350	91F1356	MD-1960	7x13x8"	CB-40	6¾	8.25	7.45	6.60
91F1351	91F1357	MD-1961	8x14x9"	CF-997	7¾	8.80	7.90	7.05
91F1352	91F1358	MD-1962	8x16x9"	CB-998	8½	9.15	8.25	7.30
91F1353	91F1359	MD1963†	7x13x8"	CB-40	7	9.65	8.70	7.70
91F1354	91F1360	MD-1964†	8x14x9"	CB-997	8	10.30	9.25	8.25
91F1355	91F1361	MD-1965†	8x16x9"	CB-998	8¾	11.00	9.90	8.80

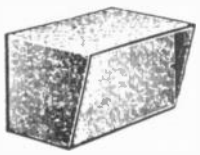
SHADOW CABINET



Extremely versatile housing since front rear and bottom may be removed for installation or servicing. One inch recessed front panel prevents accidental movement of controls, knobs, and switches attached to it. Body made of 18 gauge steel and panels of 16 gauge steel. Four rubber feet attached to base eliminates scratching. Finished in light gray hammertone.

Stk. No.	Type	W x H x D	Lbs.	1-24	25-49	50-99
91F892	SB-2140	14¼x8x10"	11½	7.55	6.80	6.05
91F893	SB-2141	13¼x7½x9"	9¾	5.80	5.20	4.65
91F894	SB-2142	17x9½x11"	15¼	10.25	9.25	8.20
91F895	SB-2143	15½x6x9"	9½	5.60	5.05	4.50

COWL TYPE MINIBOX



Has projecting cover which reduces glare on panel from overhead lighting and provides protection for controls and dials. Cover has two hex braces to which bottom is attached with sheet metal screws. When assembled this type of construction results in a sturdy, rigid housing. Fabricated of .040 aluminum. Overall dimensions and wt.: SC-2130 and SC-3030. 6x10x7". 2 lbs.; SC-2131 and SC-3031, 7x12x8", 2½ lbs.; SC-2132 and SC-3032, 3x8x5", 1 lb.; SC-2133 and SC-3033, 5x5x5", 1 lb.

Stk.No. G-H	Type	1-49	50-99	100-149	Stk.No. Nt'ral	Type	1-49	50-99	100-149
91F884	SC-2130	6.55	5.90	5.25	91F888	SC-3030	4.75	4.30	3.80
91F885	SC-2131	7.15	6.45	5.70	91F889	SC-3031	5.15	4.65	4.10
91F886	SC-2132	3.80	3.40	3.05	91F890	SC-3032	2.70	2.45	2.15
91F887	SC-2133	3.95	3.55	3.15	91F891	SC-3033	2.85	2.55	2.30

INSTRUMENT AND RECEIVER CABINETS

For table mounting of test instruments and receivers. Each cabinet has an evenly recessed hinged cover with convenient finger lift. The panel on front of cabinet is readily attached with self-tapping screws. Louvers provide ample ventilation. Available in black wrinkle finish only. Require open-end chassis bases.

Stk. No.	Type	HxWxD	Lbs.	1-24	25-49	50-99
91F630	C-973	7x8x8"	5	5.05	4.55	4.05
91F631	C-993	7x10x8"	5½	5.85	5.25	4.70
91F632	C-994	7x12x8"	5¾	6.05	5.45	4.85
91F633	C-995	7x14x8"	6	6.40	5.75	5.10
91F634	C-1190	8x16x8"	7	9.20	8.30	7.35
91F635	C-975	9x15x11"	8	11.10	10.00	8.90
91F636	C-993	12x18x12"	15	12.00	10.80	9.60

STREAMLINED CABINETS

Ideal cabinets for electronic devices not requiring excessive depth. They have recessed hinged cover with convenient finger lift. Grey hammertone finish or black wrinkle. Overall ht. is 8" and overall depth is 8¼". Inside of cabinet easily accessible. Complete with panel.

Stk.No. Black	Stk.No. Ham. Grey	Type	Wid.	Panel	Top Opening	Lbs.	1-24	25-49	50-99
91F680	91F775	CD-1480	10½"	8x8"	5⅝x 7⅝"	5¾	6.85	6.15	5.50
91F681	91F776	CD-1481	12½"	8x10"	5⅝x 9⅛"	6	6.95	6.25	5.55
91F682	91F777	CD-1482	14½"	8x12"	5⅝x11⅛"	6½	7.30	6.55	5.85
91F683	91F778	CD-1483	16½"	8x14"	5⅝x13⅛"	7	7.80	7.00	6.25
91F684	91F779	CD-1484	18½"	8x16"	5⅝x15⅞"	7¾	8.50	7.65	6.80
91F685	91F780	CD-1485*	20⅜"	12x18"	10½x15½"	15	17.25	15.55	13.80

*Has ½" vert. chrome strip fastened to corners. 12" overall depth.

"GRAND PRIX" CABINETS

New concept in styling; ideal for audio equipment, medical electronics, or wherever appearance is of importance. Handles are brushed aluminum extrusions that slide over end flanges of the upper and lower body segments and are secured by setscrews; when removed, the upper body segment comes off to permit servicing contents. Made entirely of 20-gauge steel. With four rubber feet to prevent damage to desk tops, etc. Choice of light gray hammertone body with matching panels or smooth dark gray body with smooth light gray panels.

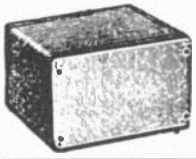
Dk.gray Stk.No.	L.gray Stk.No.	Type	HxWxD	Lbs.	1-24	25-49	50-99
91F1362	91F1365	MD-1	4 3/16x19⅛x10½"	7¼	14.45	13.00	11.55
91F1363	91F1366	MD-2	7 3/16x19⅜x10½"	7¾	15.00	13.50	12.00
91F1364	91F1367	MD-3	4 3/16x12 1/8x8¾"	7	11.55	10.40	9.25

PORTACAB

Desirable as housings for instrumentation requiring high stylized appearance. Body is one piece aluminum with contoured corners. Panel is also aluminum. Flexible recessed handle permits easy portability as well as vertical stacking. Louvers point inward permitting side-to-side placement without loss of space. Welded back has opening. Front panel recessed ½". Four detachable rubber feet are provided. Gray hammertone finish.

Stk. No.	Type	Dimensions Depth	Width	Height	1-24	25-49	50-99
91F615	WA-1540	8"	6⅛"	8"	10.60	9.55	8.50
91F616	WA-1541	12"	8⅛"	9"	13.85	12.45	11.10
91F617	WA-1542	8"	10⅛"	8"	12.30	11.05	9.85
91F618	WA-1543	18"	11⅛"	11"	15.60	14.05	12.50
91F619	WA-1544	18"	14⅛"	12"	17.95	16.15	14.35

CONTOUR UTILITY CABINETS



Housing and flanged panels have rounded corners. Solid front and louvered rear panels are removable. Four rubber feet attached to base prevent scratching. Smooth dark gray enameled body and light gray enameled panel. All parts are 20 gauge steel.

Stk. No.	Type	Overall Size	Lbs.	1-24	25-49	50-99
91F896	CU-463	4 1/32x 6 7/32x3¾"	1¾	6.05	5.45	4.85
91F897	CU-465	4 1/32x 6 7/32x5¾"	2¼	7.00	6.30	5.60
91F898	CU-585	5 1/32x 8 7/32x5¾"	3	9.20	8.30	7.35
91F899	CU-587	5 1/32x 8 7/32x7¾"	3¾	10.00	9.00	8.00
91F900	CU-7125	7 1/32x12 7/32x5¾"	5	10.20	9.20	8.15
91F901	CU-7127	7 1/32x12 7/32x7¾"	6	10.85	9.75	8.70

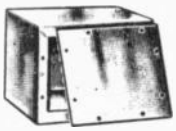
ATTENTION INDUSTRIAL BUYERS

NEWARK carries complete lines of the top quality electronic equipment. Newark can supply all your needs, whether or not they are listed in this catalog.

Cabinets & Miniboxes

STEEL UTILITY CABINETS

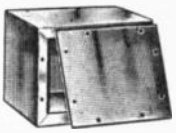
Stk. No. Black	Type	Stk. No. Ham. Grey	Type	HxWxD	Lbs.	1-49	50-99	100-149
91F620	CU-883	91F640	CU-883HG	4x4x2"	¾	1.30	1.15	1.05
91F621	CU-728	91F641	CU-728HG	4x5x3"	⅞	1.50	1.35	1.20
91F622	CU-729	91F642	CU-729HG	6x5x4"	1½	1.70	1.55	1.35
91F623	CU-1098	91F643	CU-1098HG	6x6x6"	2½	2.55	2.30	2.05
91F624	CU-1099	91F644	CU-1099HG	9x6x5"	3	2.85	2.55	2.30
91F625	CU-880	91F645	CU-880HG	10x10x8"	5½	4.85	4.35	3.90
91F626	CU-882	91F646	CU-882HG	15x9x7"	7½	5.45	4.90	4.35
91F627	CU-879	91F647	CU-879HG	10x8x7"	5	4.05	3.65	3.25
91F628	CU-881	91F648	CU-881HG	12x11x8"	6	5.30	4.75	4.25
91F629	CU-1124	91F649	CU-1124HG	12x7x6"	4	3.95	3.55	3.15



Steel utility cabinets for electronic equipment, monitors, frequency meters, etc. Ideal for the amateur, experimenter. Accurately formed of sheet steel for rugged use. Have two removable sides. Black wrinkle and light grey hammertone finish.

ALUMINUM UTILITY CABINETS

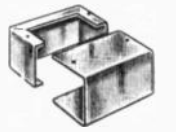
Stk. No.	Type	HxWxD	Lbs.	1-49	50-99	100-149
91F543	AU-1028	4x5x3"	¼	1.65	1.50	1.30
91F544	AU-1029	6x5x4"	½	1.80	1.60	1.45
91F545	AU-1039	6x6x6"	¾	2.65	2.40	2.10
91F546	AU-1040	9x6x5"	1	3.05	2.75	2.45
91F547	AU-1083	4x4x2"	¼	1.55	1.40	1.25
91F716	AU1083HG	4x4x2"	¼	1.80	1.60	1.45
91F717	AU1028HG	4x5x3"	¼	2.05	1.85	1.65
91F718	AU1029HG	6x5x4"	½	2.20	2.00	1.75
91F719	AU1039HG	6x6x6"	¾	2.90	2.60	2.30
91F720	AU1040HG	9x6x5"	1	3.40	3.05	2.70



Ideal for mounting amplifiers, meters, test instruments, etc. Removable front and back may be fastened to cabinet with self-tapping screws provided. Available in natural or light gray hammertone finish (HG). Rugged and attractive. Aluminum alloy 500S H14.

MINIBOXES

Grey Hammertone						Natural Aluminum					
Stk. No.	Type	1-49	50-99	100-149	WxHxL	Wt. Lbs.	Stk. No.	Type	1-49	50-99	100-149
91F700	CU-2100A	.80	.70	.65	1⅝x2⅛x2¾"	¼	91F572	CU-3000A	.70	.65	.55
91F701	CU-2101A	.85	.75	.70	1⅝x2⅛x3¼"	¼	91F573	CU-3001A	.70	.65	.55
91F702	CU-2102A	.90	.80	.70	1⅝x2⅛x4"	¼	91F574	CU-3002A	.75	.70	.60
91F703	CU-2103A	1.00	.90	.80	2⅛x2⅛x4"	¼	91F575	CU-3003A	.90	.80	.70
91F704	CU-2104A	1.05	.95	.85	2⅛x2⅛x5"	¼	91F576	CU-3004A	.95	.85	.75
91F705	CU-2105A	1.40	1.25	1.10	3x4x5"	½	91F577	CU-3005A	1.15	1.05	.90
91F706	CU-2106A	1.10	1.00	.90	2⅛x3x5¼"	¼	91F578	CU-3006A	1.00	.90	.80
91F707	CU-2107A	1.75	1.60	1.40	4x5x6"	¾	91F579	CU-3007A	1.25	1.15	1.00
91F708	CU-2108A	2.00	1.80	1.60	3x5x7"	¾	91F580	CU-3008A	1.60	1.45	1.30
91F709	CU-2109A	2.55	2.30	2.05	3½x6x8"	1	91F581	CU-3009A	2.05	1.85	1.65
91F697	CU-2110A	2.85	2.55	2.30	3½x6x10"	1¼	91F582	CU-3010A	2.25	2.05	1.80
91F698	CU-2111A	3.85	3.45	3.10	4x7x12"	1¾	91F583	CU-3011A	3.10	2.80	2.50
91F535	CU-2112A	3.85	3.45	3.10	4x5x17"	2¼	91F584	CU-3012A	3.10	2.80	2.50
91F536	CU-2113A	1.45	1.30	1.15	1⅝x2x10"	½	91F585	CU-3013A	1.15	1.05	.90
91F537	CU-2114A	1.85	1.65	1.50	2¼x2½x12"	¾	91F586	CU-3014A	1.50	1.35	1.20
91F538	CU-2115A	1.00	.90	.80	2¾x2x4"	¼	91F587	CU-3015A	.90	.80	.70
91F539	CU-2116A	1.00	.90	.80	1½x2¼x4¼"	¼	91F588	CU-3016A	.90	.80	.70
91F540	CU-2117A	.90	.80	.70	1⅛x2⅛x3¼"	¼	91F589	CU-3017A	.75	.70	.60



Two-piece aluminum design insures maximum degree of accessibility, adequate shielding as well as complete protection from mechanical injury and dust particles. Formed of .040 gauge aluminum. Comb. snap lock and screw type fastening. Excellent for constructing amplifiers, shielded oscillators, etc.

DELUXE METAL CABINET RACKS COMPLETE WITH PANELS

Finished with red lined, chrome strips on top and bottom of front. Will accommodate standard 19" panels. Five larger sizes only have hinged rear door. All sizes have top door for easy servicing or inspection. "No scratch" metal feet are embossed on bottom to minimize marring. Available in black wrinkle (B), gray wrinkle (G), or light gray hammertone (HG) finish. Specify when ordering.

Black	Grey	Type	HG Fin.	Type	DxWxH	Panel	Wt. Lbs.	1-14	15-24	25-34
91F687	91F688	CR-1726	91F689	CR-1726HG	14¾x22x8 25/32"	7"	24	16.85	15.15	13.50
91F650	91F656	CR-1741	91F671	CR-1741HG	14¾x22x10 9/16"	8¾"	28	18.45	16.60	14.75
91F662	91F664	CR-1740	91F668	CR-1740HG	14¾x22x12 5/16"	10½"	30	21.10	19.00	16.90
91F651	91F657	CR-1742	91F672	CR-1742HG	14¾x22x14 1/16"	12¼"	32	22.20	20.00	17.75
91F652	91F658	CR-1739	91F673	CR-1739HG	14¾x22x15 13/16"	14"	34	29.45	26.50	23.55
91F653	91F659	CR-1743	91F669	CR-1743HG	14¾x22x19 9/16"	17½"	38	28.95	26.05	23.15
91F654	91F660	CR-1744	91F670	CR-1744HG	14¾x22x28 1/16"	26¼"	47½	33.25	29.90	26.60
91F666	91F667	CR-1728	91F674	CR-1728HG	14¾x22x33 9/16"	31½"	52	35.30	31.75	28.25
91F655	91F661	CR-1745	91F675	CR-1745HG	14¾x22x36 13/16"	35"	60	37.10	33.40	29.70
91F663	91F665	CR-1727	91F676	CR-1727HG	14¾x22x22 13/16"	21"	39½	30.90	27.80	24.70

SLOPING PANEL CABINETS

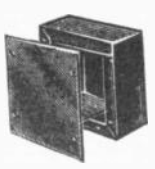
Stk. No. Black	Type	Stk. No. HG Fin.	Type	HxWxD	Lbs.	1-24	25-49	50-99
91F782	C-1584	91F791	C-1584HG	6½x7 1/16x7 5/16"	2½	3.80	3.40	3.05
91F783	C-1587	91F792	C-1587HG	8x8 1/16x8"	2¾	5.25	4.75	4.20
91F784	C-1585	91F793	C-1585HG	6½x9 1/16x7 5/16"	3	4.35	3.90	3.50
91F785	C-1588	91F794	C-1588HG	8x10 1/16x8"	3¼	5.80	5.20	4.65
91F786	C-1586	91F795	C-1586HG	6½x11 1/16x7 5/16"	3½	5.00	4.50	4.00
91F787	C-1894	91F796	C-1894HG	8x14 1/16x8"	4	6.15	5.55	4.90
91F788	C-1892	91F797	C-1892HG	8x13 1/16x8½"	5¼	6.90	6.20	5.50
91F789	C-1896	91F798	C-1896HG	9x18 1/16x8 7/8"	7	8.85	7.95	7.10
91F790	C-1893	91F799	C-1893HG	10x18 1/16x10½"	8½	9.10	8.20	7.30

The entire front panel of this cabinet is removable if so desired. This cabinet is also provided with a hinged top for easy accessibility to tubes and other parts that are mounted on the chassis, without necessitating removal of the front panel. These cabinets are finished in black wrinkle or light grey hammertone enamel.

BUILT-IN CHASSIS CABINETS

Stk. No.	Type	HxWxD	Wt. Lbs.	1-49	50-99	100-1.49
91F487	C1793	4x4x2"	1	1.60	1.45	1.30
91F488	C1794	4x5x3"	1¼	1.80	1.60	1.45
91F489	C1795	5x4x3"	1¼	2.00	1.80	1.60
91F490	C1796	6x5x4"	2	2.05	1.85	1.65
91F491	C1797	5x6x4"	2	2.30	2.05	1.85
91F492	C1798	6x6x6"	3	2.65	2.40	2.10

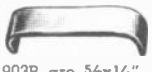
The ideal cabinet for units requiring shielded and enclosed mounting. Perfect for minor radio-television assemblies. Chassis is welded to front panel, making it a time-saving, convenient unit. Front and rear panels are attached by means of self-tapping screws. Made of heavy-duty, long lasting 20 gauge steel. Finished in black wrinkle finish.



Rack and Cabinet Handles

UTILITY HANDLES

Handles are fabricated from steel, brass or cast aluminum. Durable, attractive finish will provide long wear. The material and finish specifications for each handle is described below. They have unlimited applications in the electronic, electrical, and many other fields. Necessary Mounting hardware is furnished. Designed for rugged applications.



Type H-9100B. All models of this type have 1" hand clearance. All are made from solid brass and are Chrome plated. H-9100B and H-9101B are 1"x¼". H-9102B and H-1903B are ⅝x¼". Hardware is supplied on all models: two 6-32 by ½" screws.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F700	H-9100-B	4x½"	2.05	1.85	1.65
90F701	H-9101-B	8x½"	3.20	2.90	2.55
90F702	H-9102-B	4"	1.75	1.60	1.40
90F703	H-9103-B	6"	1.75	1.65	1.50

Type UH-70A. Useful for attaching to any small housing or speaker enclosure to achieve portability. Handle is made from aluminum and given an etched finish. Overall length is 5⅛". Mounting centers are 4⅝". Aver. Shpg. wt., 3 oz.

Stk. No.	Type	1-49	50-99	100-149
91F079	UH-70A	.45	.40	.35

Type H-9151B. Made from die cast aluminum. Silver anodized. 1⅜" hand clearance. Hardware: four 10-32x½" screws. **Type H-9152.** Similar to H-9151B. Has 1⅛" hand clearance. Also silver anodized. Hardware: two 10-32x½" screws. Aver. Shpg. Wt., 3 oz.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F711	H-9151-B	5¼x⅝"	2.55	2.30	2.05
90F712	H-9152-B	3⅞"	2.15	1.95	1.70

Type H-1950B. Made of die cast aluminum and finished in silver anodize. Has 1¼" hand clearance. Hardware: four 10-32x⅜" screws. Aver. shpg. wt. 3 oz.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F710	H-9150-B	4x⅝"	1.55	1.40	1.25

Type H-9131B. Made of die cast aluminum. Finish is silver anodize. Size: 4x2⅞". Hardware: two ¼-28x¾" raised countersunk screws and nuts. Useful as cabinet handle replacement. Average shpg. wt. 3 oz.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F713	H-9131-B	2¼"	1.95	1.75	1.55

Type H-9130B. Made of die cast aluminum. This handle is finished in silver anodize. Ideal for use as a cabinet handle. Design permits almost flush fastening to a drawer. Size: 4¹⁵⁄₁₆x3". Hardware provided: two 10-32x⅜" screws. Shpg. wt., 4 oz.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F708	H-9130-B	3"	2.75	2.50	2.20

Type H-9140B. This handle is made of die cast aluminum with a silver anodized finish. Has a hand clearance of ¾". This solid design handle provides a modern look to your cabinets or racks. Hardware provided for this model is two 10-32½" screws. Shpg. wt. 6 oz.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F709	H-9140-B	3½"	1.20	1.10	.95

Type H-9120-B. Handle made of die cast aluminum and finish is silver anodize. Has hand clearance of 1". Hardware: four 6-32x½" screws. Shpg. wt., 5 oz.
Type H-9121-B. Similar to H-9120 except made of die cast alloy and is chrome plated.
Type H-9123-B. Similar to H-9120 except hardware: two 10-32x½" screws.

Stk. No.	Type	Mtg. Ctrs. Ins.	Outs.	Net Each 1-99	100-199	200-499
90F705	H-9120-B	4⅜"	5⅜"	1.75	1.60	1.40
90F706	H-9121-B	4⅜"	5⅜"	2.25	2.30	2.05
90F707	H-9123-B	4½"		1.25	1.15	1.00

Type H-912B. Handle made of die cast aluminum with a silver anodized finish. This handle has a hand clearance of 1½" and is hinged on ¼" diameter pins with two hinge blocks. Hardware provided: four 10-32x⅜" screws. Shpg. wt., 5 oz.

Stk. No.	Type	Mtg. Ctrs. Ins.	Outs.	Net Each 1-99	100-199	200-499
90F704	H-9122-B	6½"	7¼"	3.10	2.80	2.50

Types H-9115B and H-9116. These handles made of ⅜" steel rod, chrome plate finish. Have hand clearance of 1⁵⁄₁₆". Ideal for use where a thin, durable handle is necessary or desirable. Hardware provided: two ¼-28 nuts. Av. shpg. wt. 3 oz.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F746	H-9115-B	4"	1.05	.95	.85
90F732	H-9116-B	6"	1.25	1.15	1.00

Types H-0160B, H-9161B, H-9162B, H-9163B, H-9164B, H-9165B. All have chrome plated finish and are made of ⅜" diameter steel. All have 1¹¹⁄₁₆" hand clearance. All are provided with two ¼-28 hex nuts as hardware. Types differ in mounting centers only which are listed below.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F733	H-9160-B	3½"	1.10	1.00	.90
90F734	H-9161-B	5¼"	1.30	1.15	1.05
90F735	H-9162-B	7"	1.35	1.20	1.10
90F736	H-9163-B	8¾"	1.45	1.30	1.15
90F737	H-9164-B	10½"	1.50	1.35	1.20
90F738	H-9165-B	12¼"	1.65	1.50	1.30

Types H-9166B and H-9168B. Both are made of ¼" diameter brass and both have a chrome plated finish. These handles each have a 1" hand clearance and are provided with the same hardware: two 6—32x½" screws. They differ only in mounting centers which are listed below.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F739	H-9166-B	1²⁹⁄₃₂"	.60	.55	.50
90F740	H-9168-B	3"	.65	.60	.50

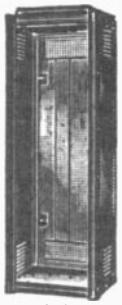
All are made of ⅜" dia. steel chrome-plated except H-9114 ½" Dia. All provided with two 10-32x½" screws except H-9114 two ¼-28x½" screws. Hand clearance 1" except * 1¼" and ** 1½". Shpg. Wt. 3 oz.

Stk. No.	Type	Mtg. Ctrs.	Net Each 1-99	100-199	200-499
90F741	H-9110-B*	6"	1.15	1.05	.90
90F742	H-91111-B	4"	.65	.60	.50
90F743	H-9112-B	6"	.80	.70	.65
90F744	H-9113-B	8"	.90	.80	.70
90F745	H-9114-B**	8"	1.45	1.30	1.15

Par Metal Relay Racks & Accessories

ENCLOSED AND CHANNEL TYPE RELAY RACKS

Models ER-223 and ER-227 are Deluxe type same as Figure A, Model ER-215 is standard model with rounded front corners. All racks are tapped for 10-32 screws. Shipped knocked down.



(A) Type ER

(B) Type RX

BLUE GREY WRINKLE DELUXE ENCLOSED TYPE RACKS

Stk. No.	Type	Fig.	H x W x D	Pan. Sp.	Lbs.	NET
91F000	ER-223A	A	43¼x22 x18"	36¾x19"	90	57.40
91F002	ER-227A	A	83½x22 x18"	77 x19"	140	85.50
91F004	ER-215A	A	66½x22 x18"	61¼x19"	110	60.40

BLACK WRINKLE OPEN TYPE RACKS

Stk. No.	Type	Fig.	H x W x D	Pan. Sp.	Lbs.	NET
90F998	RX-193	B	39⅞x21 x20⅞"	36¾x19"	45	22.95
90F999	RX-195	B	74⅞x21 x20⅞"	71¾x19"	55	30.40

All Above Chicago Stock and F.O.B. Chicago

DESK TYPE OPEN RELAY RACKS

For mounting transmitters, PA systems, and other heavy components. Panels set in recess so that no edges are exposed. Black ripple finish. Depth 12". Shipped knocked-down. With hardware.

Stk. No.	Type	Hgt.	Panel Space	Lbs.	NET EACH
91F032	TR-2520	24"	21"hx19"w	17	9.75
91F033	TR-3220	31"	28"hx19"w	20	11.85

19" STEEL RACK PANELS

All are ⅛" thick. Uniformly slotted for racks with 1¼-½" spacings. Available in black or Blue Grey baked wrinkle finish.

Height	Black	Mfr. No.	Grey	Mfr. No.	Lbs.	NET
1¾"	91F100	6600	91F120	G-6600	2	.89
3½"	91F101	6601	91F121	G-6601	3	1.12
5¼"	91F102	6602	91F122	G-6602	4	1.42
7"	91F103	6603	91F123	G-6603	5	1.72
8¾"	91F104	6604	91F124	G-6604	7	2.10
10½"	91F105	6605	91F125	G-6605	8	2.31
12¼"	91F106	6606	91F126	G-6606	9	2.87
14"	91F107	6607	91F127	G-6607	10	3.18
15¾"	91F108	6608	91F128	G-6608	12	3.56
17½"	91F109	6609	91F129	G-6609	13	3.96
19¼"	91F110	6610	91F130	G-6610	14	4.60
21"	91F111	6611	91F131	G-6611	15	4.86

19" ALUMINUM RACK PANELS

Lightweight relay rack panels made of ⅛" thick half hard aluminum. Uniformly slotted for racks with 1¼-½" spacings. Available in black or Blue Grey baked wrinkle finish.

Height	Black	Mfr. No.	Grey	Mfr. No.	Lbs.	NET
1¾"	91F140	6675	91F160	G-6675	1	1.06
3½"	91F141	6676	91F161	G-6676	1	1.50
5¼"	91F142	6677	91F162	G-6677	2	2.05
7"	91F143	6678	91F163	G-6678	2	2.60
8¾"	91F144	6679	91F164	G-6679	3	3.15
10½"	91F145	6680	91F165	G-6680	3	3.80
12¼"	91F146	6681	91F166	G-6681	4	4.25
14"	91F147	6682	91F167	G-6682	4	5.00
15¾"	91F148	6683	91F168	G-6683	5	5.65
17½"	91F149	6684	91F169	G-6684	5	6.15
19¼"	91F150	6685	91F170	G-6685	6	6.70
21"	91F151	6686	91F171	G-6686	7	7.30

STREAMLINED METAL CABINET RACKS

Vertical front corners, rounded. Polished chrome trim. Made of ⅛" steel, all joints welded. Sides and back louvred. Holes tapped for 10-32 screws. For standard 19" panels. Black and Blue Grey ripple finish.

Black	Grey	Type	HxWxD	Panel	Door	Lbs.	NET
91F015	91F021	DL-128	10½x21½x15"	8¾"	top	28	20.30
91F016	91F022	DL-1225	14 x21½x15"	12¼"	top	30	23.20
91F017	91F023	DL-1413	15¾x21½x15"	14"	top	32	26.25
91F018	91F024	DL-1713	19¼x21½x15"	17½"	top/rear	38	29.10
91F019	91F025	DL-2613	28 x21½x15"	26¼"	top/rear	48	33.90
91F020	91F026	DL-3513	36¾x21½x15"	35"	top/rear	58	39.75

PAR METAL DELUXE DESK CONSOLES

Newark can supply these standardized units which are adaptable to individual requirements on special order only. The vast flexibility of these units enables you to design the console of your choice without costly, custom-built construction. Can be put together quickly and easily. Write for a complete catalog and price list.

STANDARD TYPE ROLLER TRUCKS

All have rounded corners at front and chrome finish. Blue Grey ripple finish. 2" wider than racks for better distribution of weight. Ball-bearing swivel-type casters with 2" rubber composition wheels.

91F040. Type RT-410. Inside clearance, 21¾"x15½". Will fit the following racks: Types DL-1713, DL-2613, DL-3513. Wt. 22 lbs. **NET** 11.50

91F042. Type RT-412. Inside clearance 23⅞x19½". Will fit types ER223A and ER215A, ER227A racks. Wt., 22 lbs. **NET** 14.25

CHASSIS BRACKETS

For use with steel chassis. Rack panels should be at least 7" high. Provide excellent chassis support Made of heavy gauge steel. Supplied in pairs. Black enamel finish. With mounting holes drilled.

Stk. No.	Type	Dimensions	Lbs.	Pair
91F046	SB-78	For 8" base	2	1.35
91F047	SB-710	For 10" base	2	1.55
91F048	SB-711	For 11" base	3	1.65
91F049	SB-713	For 13" base	3	1.85

CABINET SHELVES

Expressly designed to fit into enclosed racks of standard 19" width type. All shelves are 1" high. Shpg. wt., 10 pounds.

R-2128. For DL-1713, DL-2613, DL-3513 racks or others 15" deep, requiring shelf, 12"dx21⅜"w.
91F037. Black ripple. **NET** 3.30

ER-2212. For ER 223A and ER227A racks, or others with a depth of 16¾", requiring shelf, size 15"dx21 11/16"w.
91F038. Black ripple. **NET** 4.20

SLOPING FRONT AMPLIFIER CHASSIS

This sturdy, use-tested sloping front unit incorporates the most modern up-to-date styling. Its streamlined design utilizes round corners, and polished chrome molding and handy side handles. Separately removable grille cover and front panel. Panel extends 3 inches from face to cover. Covers are 6½ inches high. Bottom plate included. Blue Grey wrinkle finish.

Stk. No.	Type	Chassis Size	Lbs.	NET
91F521	F-10120	10x12x3"	11	12.15
91F522	F-10170	10x17x3"	13	14.70
91F523	F-13170	13x17x3"	15	15.90

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Cabinets & Chassis

PAR METAL PRODUCTS

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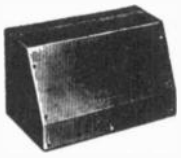

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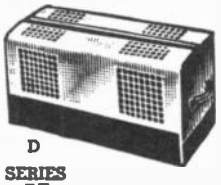

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DELUXE TYPE DESK CABINETS

Fig. A. Attractive steel cabinets for Amateur and commercial equipment. Hinged and formed top; removable front panel and full width opening at rear for and formed leads. Louvered ends for ventilation. Slate gray ripple finish. Chrome trim.

Stk. No.	Type	HxWxD	Panel Size	For Chassis	Lbs.	NET
91F500	CA-300	9x12 3/16x 8"	8½x10"	7x 9x2"	6	7.95
91F501	CA-301	9x16 1/8x 8"	8½x14"	7x13x2"	7	9.00
91F502	CA-302	10x17 1/8x11"	9½x15"	10x14x3"	8	12.15
91F503	CA-303	10x20 1/8x 9"	9½x18"	8x17x3"	11	12.15
91F504	CA-304	13x20 1/8x12"	12½x18"	10x17x3"	15	13.85

SLOPING FRONT CABINETS

Fig. B. Latest-style utility cabinets. Full-sized removable sloping panel makes controls and meters readily accessible. Ventilated sides and rear. Opening at rear for cables. Slate gray ripple finish. Chrome trim.

Stk. No.	Type	HxWxD	For Chassis	Lbs.	NET
91F505	SF-500	8x 8x 8"	7x 7x2"	6	5.70
91F506	SF-501	8x10x 8"	7x 9x2"	7	6.30
91F507	SF-502	8x14x 8"	7x13x2"	8	6.75
91F508	SF-503	9x18x 8"	7x17x3"	10	8.40
91F509	SF-504	12x18x12"	10x17x3"	14	10.20

ROUNDED CORNER TYPE CABINETS

Fig. C. Rounded-corners for that custom-built look. Top door has full length piano hinge. Removable front panel. Louvres on sides and opening at rear for cables. Slate gray ripple finish.

Stock No.	Type No.	HxWxD	Panel Size	For Chassis	Wt. Lbs.	NET
91F510	CA-200	8½x10 3/16x 8"	8½x 8"	7x 7x2"	6	5.85
91F511	CA-201	8½x12 3/16x 8"	8½x10"	7x 9x2"	7	6.30
91F512	CA-202	8½x16 3/16x 8"	8½x14"	7x13x2"	8	7.65
91F513	CA-203	9½x17 3/16x11"	9½x15"	10x14x3"	11	10.05
91F514	CA-204	12½x20 3/16x12"	12½x18"	10x17x3"	15	11.85

AMPLIFIER FOUNDATION CHASSIS

Fig. D. Red-striped chrome finished molding on top. Two chrome side handles. Slate gray ripple removable screen cover is 6" high. Black ripple chassis is drilled for bottom plates.

Stk. No.	Type	Chassis Size	Lbs.	NET
91F528	DF-510	5x10x3"	7	5.94
91F529	DF-615	6x14x3"	8	6.60
91F530	DF-717	7x17x3"	9	7.65
91F531	DF-1012	10x12x3"	9	7.65
91F532	DF-1017	10x17x3"	10	8.55
91F533	DF-1317	13x17x3"	12	10.20

LOS ANGELES • CINCINNATI • GRAND RAPIDS • DENVER

DALLAS • DETROIT • NEW YORK • NEW ORLEANS • CHICAGO • HOUSTON

TEN GREAT NEWARK STOCKING WAREHOUSEES SERVING AMERICA'S ELECTRONICS NEEDS

LMB CABINETS

CB-L. 2

HA-1

CM-1

CO-1, 2

CO-3

LMB cabinets combine strong aesthetic appeal with clean, functional design to make your equipment more attractive than previously possible with stock hardware.

In addition to their obvious appeal to electronics equipment manufacturers, these original LMB designs will be of interest to researchers, hobbyists and others who believe good engineering involves more than circuitry.

MODEL C-B-1

Rectangular cabinet with chassis. Recessed front panel; ventilating slots in top. Size 8x10x4½. Aluminum. Shipping wt. 3 lbs.

91F1305. Gray. **NET** **5.35**
91F1306. Plain. **NET** **4.47**

MODEL C-B-2

Same as C-B-1, but size is 6x8x4½". Shipping wt. 2 lbs.

91F1307. Gray. **NET** **4.97**
91F1308. Plain. **NET** **4.27**

MODELS CO-1 AND CO-2

Smoothly contoured and perforated. The top is removable. Gray with ivory trim, recess front panel dark gray. Made of aluminum. Shipping weight: 3½ lbs.

Stock No.	Type	Size	Color	NET
91F1192	CO-1	14½x13x6½"	Gray	19.95
91F1193	CO-1	14½x13x6½"	Plain	17.95
91F1194	CO-2	12 x10x6½"	Gray	17.95
91F1195	CO-2	12 x10x6½"	Plain	15.75

MODEL HA-1

For portable equipment. Front panel is hooded, removable. Hinged door at back for easy access to interior. Chrome carrying handle. Size 11½x10½x5. Aluminum. Shipping wt. 3 lbs.

91F1309. Gray. **NET** **9.75**
91F1310. Plain. **NET** **8.85**

MODEL CM-1

Completely shielded cabinet is actually two cases in one. Two recessed solid front panels. Aluminum. Size, 6x8x3⅞"; shipping weight 2 lbs.

91F1313. Gray. **NET** **5.72**
91F1314. Plain. **NET** **4.50**

MODEL CO-3

Contoured aluminum cabinet with built-in chassis for smaller equipment. Three perforated sides provide excellent ventilation. Gray body, recessed front panel dark gray. Size, 7¼x5½x3⅛"; shipping weight 3 lbs.

91F1196. Gray. **NET** **5.40**
91F1197. Plain. **NET** **4.48**

MODEL SQ-1

Aluminum cabinet with recessed, bevelled front panel. Ventilation slots on bottom and sides; chassis attached to removable back panel. Size 4½x4½x8½, wt. 2 lbs.

91F1198. Gray. **NET** **5.35**
91F1199. Plain. **NET** **4.65**

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

UTILITY ENCLOSURES

Suitable as instrument, amp or transmitter case. Bottom plate of chassis and hood removes with release of 4 screws, allows quick entry to parts without removing front or back panels. Heavy gauge aluminum. Plain or grey hammertone. *Takes 11x17x3" chassis.

Type	Size	Lbs.	Stk. No. Plain	NET	Stk. No. GH	NET
W-1A	7x5x4½"	1½	91F1174	3.97	91F1083	4.84
W-1C	8½x6½x5"	2	91F1176	4.43	91F1085	5.33
W-1D*	18x9x11"	5	91F1177	9.75	91F1086	13.13

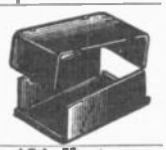
FLANGLOCK BOX CHASSIS

Dust proof in endlock construction. Water and rain proof if properly treated. Sturdy construction and 100% shielded. Aluminum. Unfinished or Gray Hammertone

Type	Size	Lbs.	Stk. Pl.	NET	Stk. GH	NET
221EL	2¾x3⅛x1⅝"	¼	91F1154	1.13	91F1063	1.13
321EL	3½x2⅛x1⅝"	¼	91F1155	1.13	91F1064	1.13
421EL	4x2⅛x1⅝"	¼	91F1156	1.13	91F1065	1.13
422EL	4x2¼x2¼"	¼	91F1157	1.29	91F1066	1.29
424EL	4x2x4"	⅜	91F1158	1.98	91F1067	1.98
435EL	4x3x5"	½	91F1159	2.19	91F1068	2.19
444EL	4x4x4"	½	91F1160	1.89	91F1069	1.89
531EL	5¼x3x1½"	⅜	91F1161	1.29	91F1070	1.29
532EL	5¼x3x2⅛"	⅜	91F1162	1.47	91F1071	1.47
534EL	5⅝x3x4"	⅝	91F1163	2.06	91F1072	2.06
543EL	5x4x3"	½	91F1164	1.87	91F1073	1.87
546EL	5x4x6"	¾	91F1165	2.74	91F1074	2.74
645EL	6x4x5"	¾	91F1166	2.60	91F1075	2.60
666EL	6x6x6"	1⅛	91F1167	3.39	91F1076	3.39
695EL	6x9x5"	1 5/16	91F1168	3.84	91F1077	3.84
753EL	7x5x3"	¾	91F1169	2.60	91F1078	2.60
754EL	7x5x4"	⅞	91F1170	2.76	91F1079	2.76
1063EL	10x6x3½"	1¼	91F1171	3.57	91F1080	3.57
1085EL	10x8x5"	2½	91F1172	4.42	91F1081	4.42
1221EL	12x2x1¾"	½	91F1173	1.87	91F1082	1.87

INTERLOCKING CHASSIS

Protects under-chassis wiring and components. Easily fabricated into amp, junction boxes, oscillators. Interlocking type. Simple and speedy to assemble—only 2 set screws to put in place. Gray Hammertone or Plain Aluminum finish.



Type	Size	Lbs.	Stk. No. Plain	NET	Stk. No. GH	NET
M00	2¼x1½x1⅜"	1/16	91F1105	.57	91F1000	.57
00Z	2 5/16x2⅛x1¾"	1/16	91F1106	.64	91F1001	.64
000	3¼x2⅛x1⅝"	¼	91F1107	.68	91F1002	.68
00	4x2⅛x1⅝"	¼	91F1108	.71	91F710	.71
100	2¾x2⅛x2⅝"	¼	91F1109	.89	91F1003	.89
101	4¼x2¼x1¼"	¼	91F1110	.87	91F1004	.87
102	4x2x2¾"	⅜	91F1111	1.02	91F1005	1.02
107	4x2¼x2¼"	¼	91F1112	.96	91F1006	.96
108	5x2¼x2¼"	⅜	91F1113	1.03	91F711	1.03
135	3¾x3x2⅛"	⅜	91F1114	.97	91F1007	.97
136	5¼x3x2⅛"	⅜	91F1115	1.08	91F712	1.08
650	6½x2⅛x1⅝"	¼	.....	.....	91F1015	1.05
137	8x3x2¾"	⅝	91F1116	1.61	91F1008	1.61
850	8½x2⅛x1⅝"	⅜	.....	.....	91F1016	1.35
138	6¼x3½x2⅛"	½	91F1117	1.32	91F1009	1.32
139	5½x3x1¼"	⅜	91F1118	1.01	91F1010	1.01
140	3x4x5"	½	91F1119	1.29	91F713	1.61
141	6x4x3"	⅝	91F1120	1.44	91F1011	1.72
142	6x4x5"	¾	91F1121	1.68	91F714	2.11
143	4x4x2"	⅜	91F1122	1.33	91F1012	1.33
144	10x4x2½"	⅝	91F1123	2.19	91F715	2.19
145	7x5x3"	¾	91F1124	2.11	91F1013	2.11
146	8x6x4½"	1⅜	91F1125	2.99	91F1014	2.99
15	12x2x1¾"	½	.....	.....	91F1017	1.61

MINIATURE BOX CHASSIS

With mounting ears. Cadmium plated, all steel construction. Ideal for subminiature assemblies. May be mounted in any position. With covers. *Not supplied with mtg. ears.

Stk. No.	Type	Size	Lbs.	NET
91F1100	*MO-12	2x1¼x1"	⅜	.42
91F1101	MO-17	2x1¾x1"	¼	.42
91F1102	MO-18	2x2x1¼"	¼	.42

SLIDE COVER BOXES

These boxes lend themselves to many uses including communication equipment, terminal block boxes, or custom equip. Aluminum. Finished in Gray Hammertone.

Stk. No.	Type	Size	Lbs.	NET
91F1191	16	13x3⅛x2⅝"	1⅛	2.52
91F1018	17	13x4⅛x2⅝"	1⅛	3.95
91F1019	18	13x5¼x2⅝"	1¼	4.30
91F1020	19	17x3⅛x2⅝"	1¼	4.15

"GLAMOR CABINETS"

Suitable for meter, transistor construction, and instrument cases. Outstanding appearance. Made of die folded aluminum. Plain Aluminum or Gray Hammertone.

Type	Size D W H	Lbs.	Stk. No. Plain	NET	Stk. No. GH	NET
W-2AP	3½x4x3"	¼				
	2¼" meter hole		91F1179	1.88	91F1088	2.18
W-2AP	3½x4x3"	¼				
	3¼" meter hole		91F1180	1.88	91F1089	2.18
W-2A	3½x4x3½"	¼	91F1178	1.98	91F1087	2.28
W-2B	3x7x3½"	¾				
	2¼" meter hole		.....	.....	91F1090	2.67
W-2B	3x7x3½"	¾				
	3¼" meter hole		91F1182	2.25	91F1091	2.67
W-2C	3⅜x7x3½"	¾	91F1183	2.93	91F1092	3.36

"DELUXE GLAMOR CABINETS"

Same as above but with built in chassis.

Type	Size D W H	Lbs.	St. No. Plain	NET	Stk. No. GH	NET
W-2F	7½x4½x5"	1¼	91F1187	4.40	91F1096	5.18
W-2G	13x10x5¾"	3	91F1188	9.36	91F1097	11.06
W-2H	7x11x6¼"	2⅜	91F1189	7.38	91F1098	8.63
W-2J	8x11½x7½"	3	91F1190	8.10	91F1099	9.35

TITE-FIT BOX CHASSIS

An orthodox construction that is engineered to insure greatest satisfaction for both industry and private users. Aluminum construction. Unfinished (Pl.) or Gray Hammertone (GH).

Type	Size	Lbs.	Stk. Pl.	NET	Stk. GH	NET
T-F770	2¾x2⅛x1⅝"	¼	91F1126	.62	91F1032	.81
T-F771	2¾x2⅛x2¾"	¼	91F1127	.68	91F1033	.95
T-F772	3¼x2⅛x1⅛"	¼	91F1128	.62	91F1034	.84
T-F773	3½x2⅛x1⅝"	¼	91F1129	.62	91F1035	.84
T-F774	4x2⅛x1⅝"	¼	91F1130	.62	91F1036	.95
T-F775	4x2¼x2¼"	¼	91F1131	.75	91F1037	.97
T-F776	4x2x2¾"	¼	91F1132	.75	91F1038	1.00
T-F777	4¼x2¼x1½"	¼	91F1133	.72	91F1039	1.00
T-F778	5x2¼x2¼"	¼	91F1134	.78	91F1040	1.03
T-F779	5x4x3"	½	91F1135	.94	91F1041	1.32
T-F780	5¼x3x2⅛"	¼	91F1136	.82	91F1042	1.12
T-F781	6x5x4"	¾	91F1137	1.47	91F1043	1.83
T-F782	7x5x3"	¾	91F1138	1.40	91F1044	1.86
T-F783	8x6x3½"	1	91F1139	1.72	91F1045	2.25

JIFFY BOX CHASSIS

Does not use screws. Closed by snap clamps. Opened by slight finger pressure. Ideal for use where box must be used quickly and often. Aluminum. Unfinished or Gray Hammertone.

Type	Size	Lbs.	Stk. Pl.	NET	Stk. GH	NET
J-870	2¾x2⅛x1⅝"	¼	91F1140	.62	91F1046	.81
J-871	2¾x2⅛x2¾"	¼	91F1141	.68	91F1047	.95
J-872	3¼x2⅛x1⅛"	¼	91F1142	.62	91F1048	.84
J-873	3½x2⅛x1⅝"	¼	91F1143	.62	91F1049	.84
J-874	4x2⅛x1⅝"	¼	91F1144	.62	91F1050	.95
J-875	4x2¼x2¼"	¼	91F1145	.75	91F1051	.97
J-876	4x2x2¾"	¼	91F1146	.75	91F1052	1.00
J-877	4¼x2¼x1½"	¼	91F1147	.72	91F1053	1.00
J-878	5x2¼x2¼"	¼	91F1148	.78	91F1054	1.03
J-879	5x4x3"	½	91F1149	.94	91F1055	1.32
J-880	5¼x3x2⅛"	¼	91F1150	.82	91F1056	1.12
J-881	6x5x4"	¾	91F1151	1.47	91F1057	1.83
J-882	7x5x3"	¾	91F1152	1.40	91F1058	1.86
J-883	8x6x3½"	1	91F1153	1.72	91F1059	2.25

UTILITY BOXES

No mounting flanges, affording more space for building. Aluminum construction. Gray Hammertone finish.

Stock No.	Type	Size	Lbs.	Aluminum Gauge	NET
91F1024	U-C 970	4x4x2"	¼	.040	1.82
91F1025	U-C 971	5x4x3"	½	.040	1.98
91F1026	U-C 972	6x5x4"	⅝	.040	2.52
91F1027	U-C 973	6x6x6"	1	.040	3.02
91F1028	U-C 974	7x5x3"	¾	.040	3.48
91F1029	U-C 975	9x6x5"	1½	.051	3.89

SHIELDED CHASSIS

For laboratory, industrial production, experimentation and wherever large shielded chassis is required. Aircraft aluminum construction. Plain finish.

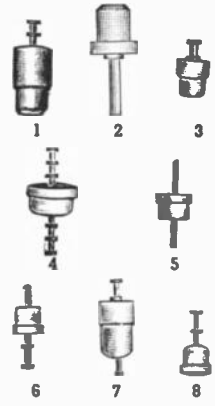
Stock No.	Type	Size	Lbs.	NET
91F1021	20	7½x7x2"	¾	1.67
91F1022	21	13x10x3"	2	4.34

Chemelec Components

CHEMELEC STAND-OFF INSULATORS

Applied as insulated tie-points in circuit wiring, offering low-loss, high-frequency service in radar TV, and other electronic equipment. They are unaffected by humidity, mechanical shock and vibration, and are designed for ambient temp. from —110°F to +500°F; pressure altitudes from 0 to 80,000 feet. Turrets are machined from brass rod, hot tin dipped. Bases are hex brass cadmium plated per QQP-416 Type 2, Class C and iridite dipped in compliance with military specifications. Formerly Metal Base Style (*) TE400. (†) TE401. (**) TE402. Average shpg. wt. 3 oz.

Has a hollow-threaded metal body which fits through bed plate and is secured by a hex nut. Terminal passing through hollow body is spaced by a force-fitted plug. Terminal is brass, hit tin dipped. Formerly Metal Body Style CF405. Average wt., 3 oz.



CHEMELEC STAND-OFF INSULATORS

SINGLE TURRET—HOLE BASE

Stk. No.	Type	Flash-over Pt. V	MMF	Ht.	Mtg. Hole	Thrd.	1-49	50-99	100-249	250-499	500-999	1000-4999
42F591	69002-0001*	7000	.12	31/64	1/8	4-40	.38	.29	.24	.197	.179	.174
42F603	69002-0101†	6300	.24	19/32	1/8	4-40	.39	.31	.252	.212	.193	.189
42F606	69002-0104†	6300	.24	19/32	.145	6-32	.39	.30	.250	.212	.193	.179
42F618	69002-0201**	15500	.14	111/64	1/8	4-40	.45	.37	.330	.288	.268	.254

DOUBLE TURRET—HOLE BASE

42F592	69002-0002*	7000	.12	35/64	1/8	4-40	.38	.30	.24	.20	.181	.177
42F604	69002-0102†	6300	.24	23/32	1/8	4-40	.39	.31	.245	.210	.191	.186
42F607	69002-0105†	6300	.24	23/32	.145	6-32	.39	.31	.245	.21	.191	.186
42F622	69002-0205**	15500	.14	119/64	.145	6-32	.45	.37	.328	.285	.266	.252

SINGLE TURRET—STUD BASE

42F594	69002-0007*	7000	.12	43/64	1/8	4-40	.39	.31	.252	.212	.193	.189
42F597	69002-0010*	7000	.12	43/64	.145	6-32	.39	.30	.252	.212	.193	.179
42F612	69002-0110†	6300	.24	49/64	.145	6-32	.39	.31	.256	.217	.197	.184

DOUBLE TURRET—STUD BASE

42F595	69002-0008*	7000	.12	3/4	1/8	4-40	.39	.31	.25	.214	.196	.191
42F598	69002-0011*	7000	.12	3/4	.145	6-32	.39	.30	.252	.212	.193	.179
42F610	69002-0108†	6300	.24	57/64	1/8	4-40	.39	.30	.254	.214	.195	.181
42F613	69002-0111†	6300	.24	57/64	.145	6-32	.39	.30	.254	.214	.195	.185
42F628	69002-0211**	15500	.14	115/32	.145	6-32	.45	.38	.332	.290	.271	.257

CHEMELEC FEED-THRU INSULATORS

Stk. No.	Type	Flash-over Pt. V	MMF	Ht.	Mtg. Hole	1-49	50-99	100-249	250-499	500-999	1000-4999
42F554	69001-0500‡	3500	2.0	.690	12-28	.53	.45	.420	.378	.360	.355
42F555	69001-0501‡	3500	2.0	.690	12-40	.67	.59	.57	.53	.50	.49
42F556	69001-0600	4500	1.5	.876	1/4-32	.60	.58	.465	.424	.405	.40
42F557	69001-0700	6300	1.95	1.316	3/8-32	1.16	1.07	.95	.91	.90	.89

‡Terminal has one turret only; part is supplied without washer.

CHEMELEC COMPRESSION INSULATORS

Chemelec Stand Off and Feed Thru compression insulators can be compressed into mounting holes and are self fastening. Insulators are shock and vibration proof; they can be soldered without damage because of high heat resistance. Electrical characteristics make them adaptable to miniaturization and high frequency, high voltage circuits. Insulator body is TFE. Solder terminal is brass except (*) electro tin plated terminal (†) Silver plated terminal. Finish is hot tin dip except where noted. All flashover point readings are short time tested at sea level. Capacitance values are based on a frequency of 1000 KHz with units mounted on 1/16" aluminum panel. Shipping weight, 3 oz.

STAND-OFF INSULATORS, COMPRESSION MOUNTED (FORM. STYLE TE405-TE413)

Stock No.	Type	Flash-over pt. VRMS	Cap. uuf	Fig.	L.	Mtg. Dia.	Out-side Dia.	1-49	50-99	100-249	250-499	500-999	1000-4999
42F642	69002-1235	7000	.25	9	21/32	.187	.250	.39	.32	.261	.218	.200	.195
42F651	69002-5311	3500	.5	2	.365	.148	.172	.14	.13	.12	.11	.108	.105
42F657	69002-5344	3500	.5	3	.240	.148	.172	.32	.24	.172	.129	.110	.0965
42F666	69002-6355	5000	.40	3	.443	.171	3/16	.40	.32	.261	.218	.199	.185
42F656	69002-5342	3500	.5	1	.365	.148	.172	.32	.24	.177	.134	.115	.101
42F634	69002-0600	5000	.32	1	.421	.165	3/16	.14	.13	.125	.115	.105	.10
42F664	69002-6351*	5000	.40	1	9/16	.171	3/16	.44	.36	.30	.258	.239	.225
42F637	69002-0900	10000	.10	1	.696	.165	3/16	.32	.30	.25	.187	.168	.147
42F633	69002-0500	3500	.5	2	.365	.148	.172	.10	.094	.092	.085	.08	.075

FEED-THRU INSULATORS—COMPRESSION MOUNTED (FORM. STYLE CF408-CF418)

Stock No.	Type	Flash-over pt. VRMS	Cap. uuf	Fig.	L.	Mtg. Dia.	Out-side Dia.	1-49	50-99	100-249	250-499	500-999	1000-4999
42F663	69002-6341	4000	.65	3	.351	.148(A)	.172	.34	.26	.200	.158	.139	.125
42F583	69001-8357	1500	.70	5	.443	.148	.172	.34	.27	.202	.160	.141	.127
42F558	69001-0800	3500	.72	6	.515	.148	.172	.10	.094	.092	.085	.080	.075
42F568	69001-8010	3900	.50	6	.515	.179	.200	.32	.24	.169	.127	.108	.104
42F569	69001-8020	4000	.45	6	.515	.218	.250	.33	.25	.183	.141	.122	.1175
42F573	69001-8314	3500	.72	6	.515	.148	.172	.30	.22	.151	.108	.090	.085
42F575	69001-8317	3500	.72	6	.407	.148	.172	.30	.22	.151	.108	.090	.085
42F579	69001-8339	3500	.65	6	1.000	.148	.172	.31	.27	.207	.165	.146	.141
42F585	69001-8364	3500	.65	6	.535	.148	.172	.16	.15	.14	.11	.105	.093
42F559	69001-0900	5000	.90	8	.740	.171	3/16	.22	.19	.17	.15	.14	.135
42F576	69001-8320†	3500	.50	7	.421	.148(B)	.172	.30	.25	.19	.15	.142	.12
42F578	69001-8337	3500	.72	7	.500	.148	.172	.16	.15	.14	.135	.130	.125
42F581	69001-8348	5000	.80	7	.828	.171	3/16	.36	.28	.216	.174	.155	.151

A. .062D thru hole in terminal. B. Hole .042 in dia. by .109 in. deep in terminal; no middle turret on terminal.

CONNECTORS

Single pin, compression mounted, TFE insulated connectors. Terminals are brass, nickel plated and gold flashed. Flashover (short time, sea level) 3500 VRMS. Cap. (freq. 1000KHz) .6 to .9 uuf depending on deck. Plug is .691" long, socket is .510". Their mounting diameter is .100". Shpg. wt. 3 oz.

PLUGS

Stk. No.	Type	Dia.	1-49	50-99	100-249	250-499	500-999	1000-4999
42F746	69003-1240	.040	.40	.33	.29	.26	.24	.23
42F747	69003-1250	.050						
42F748	69003-1264	.064						

SOCKETS

Stk. No.	Type	Dia.	1-49	50-99	100-249	250-499	500-999	1000-4999
42F749	69003-1340	.040	.45	.38	.33	.28	.26	.25
42F750	69003-1350	.050						
42F751	69003-1364	.064						

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

TEST POINTS

STANDARD TEST POINTS

Insulator Material — TFE. Mounting Hole—.173±.002 dia. Flashover — 3000 VR MS. Cap. (Freq. 1000KHZ) 1.5 MMFD (1/16" deck) 1.55 MMFD (3/16" deck). Torque—7 in. oz. (1/16" deck) 14 in. oz. (3/16" deck). Pull—25 lbs.

Insulator Material—TFE. Mounting Hole—.173 ±.002 dia. Flashover—5000 VRMS. Capacitance (Freq. 1000KHZ—1.5 MMFD (1/16" deck) 1.55 MMFD (3/16" deck). Torque—7 in. oz. (1/16" deck) 14 in. oz. (3/16" deck). Pull—25 lbs.

Insulator Material—TFE. Mounting Hole—.163 ±.002 dia. Flashover—3000 VRMS. Capacitance—.5 MMFD (1/16" deck) .9 MMFD (3/16" deck). Torque—7 in. oz. (1/16" deck) 14 in. oz. (3/16" deck). Pull 25 lbs. (12 lbs. from 1/16" deck).

Bracket material—Brass, nickel plated and gold flashed. Contact material—Beryllium copper, nickel plated and gold flashed. Flashover—3000 VRMS. Capacitance 25 MMFD.

Stk. No.	Type	Contact Material	1-49	50-99	100-249	250-499	500-999	1000-4999
42F680	69003-1184	Brass, Nickel plated and gold flashed	.45	.37	.322	.28	.261	.247
42F679	69003-1183	Beryllium copper nickel plated & gold flashed	.32	.29	.26	.258	.242	.216

NOTE: Available in various colors. Refer to color chart below.

HIGH VOLTAGE TEST POINTS

Stk. No.	Type	Contact Material	1-49	50-99	100-249	250-499	500-999	1000-4999
42F681	69003-1185	Brass, Nickel plated and gold flashed	.45	.37	.322	.280	.261	.247

NOTE: Available in various colors. Refer to color chart below.

MINIATURE TEST POINTS

Stk. No.	Type	Contact Material	1-49	50-99	100-249	250-499	500-999	1000-4999
42F682	69003-1186	Beryllium copper, electro tin plate	.53	.46	.419	.376	.358	.344

NOTE: Available in various colors. Refer to color chart below.

COLOR CHART

When ordering specify the color of insulator by adding the color code number after the stock number. The colors and their numbers are:

Add to Stock No.	Color	Mfr. Color Type	Add to Stock No.	Color	Mfr. Color Type
1	White	69003	6	Yellow	69029
2	Red	69026	8	Brown	69023
3	Green	69028	10	Black	69022
4	Blue	69021			

CHEMELEC MIL SPEC. SHIELD BASE MIN. SOCKETS

Contacts are beryllium copper and silver plated. Contacts exceed Mil specifications for tube retention, tab flexing and contact resistance. Plating meets Mil specifications. Brass nickel plated except (*) brass cadium plated.

7-PIN SOCKETS

Stock No.	Type	1-49	50-99	100-249	250-499	500-999	1000-4999
42F706	69005-7717	.99	.90	.786	.744	.725	.72

9-PIN SOCKETS

Stock No.	Type	1-49	50-99	100-249	250-499	500-999	1000-4999
42F710	69005-7917	1.12	1.03	.916	.874	.855	.85

CHEMELEC TEFLON CRYSTAL SOCKETS

Insulated with DuPont Teflon TFE, this crystal socket is designed for application where low loss, frequency stability, mech. vibration and shock are problems. Mtg. hole is 1/8"D., 1/8" deep. Lug centers spaced .486", ins. thickness is 3/8" max., 1/2" min. Length, 7/8", width, 3/8". For .05" pin dia. Contacts are silver plated beryllium copper. Weight, 2 oz.

Stock No.	Type	1-49	50-99	100-249	250-499	500-999	1000-4999
42F716	69007-4410	.78	.64	.558	.492	.472	.458

CHEMELEC TEFLON SUB-MIN. TUBE LEAD INSULATOR

Molded from Teflon TFE for heat res. up to 500° F., zero moisture absorption and loss factor less than .0005. 8 .024" holes spaced 40° on .234" dia. circle. Total dia., .392", .062" thick. Wt., 1 oz.

Stock No.	Type	1-49	50-99	100-249	250-499	500-999	1000-4999
42F733	69011-1053	.27	.19	.121	.079	.067	.062

CHEMELEC TRANSISTOR LEAD INSULATORS

Series 69011. Made from low-loss, heat-resistant TFE-1055 is circular (.392")D.) with 4 .024" holes spaced 90° on .2" circle, .062" thick. 1058 and 1060 have diameter of .312 and .400 respectively. Others are oblong, 1/8" wide times lengths listed below. Hole dia. .024". Shpg. wt. 1 oz.

Stock No.	Type	Holes	Length (in.)	1-49	50-99	100-249	250-499	500-999	1000-4999
42F734	1055	4	.....	.27	.19	.096	.070	.061	.058
42F752	1058		.....	.17	.17	.166	.162	.157	.153
42F730	0425	5	.325	.37	.28	.167	.125	.106	.092
42F731	0427	7	422	.39	.30	.188	.146	.127	.113
42F732	0435	5	.375	.31	.24	.166	.123	.105	.091
42F753	1060		...	.18	.16	.064	.061	.058	.056

CHEMELEC TFE SUB-MIN. TUBE & INTEGRATED CIRCUIT SOCKETS

Designed to receive .018 D. leads. 69012-0428 has 8 pins on .234 D. -2526 and -2528 have 6 and 8 pins on .2 D. -2009 has 12 pins on square .300 on a sidt. -2015 has 10 pins on .230 D. -2019 has 12 pins on .270 D. .7 mmf., 5 mmf pin to chassis. Wt. 2 oz.

Stock No.	Type	Contacts	1-49	50-99	100-249	250-499	500-999	1000-4999
42F738	69012-2428	8	1.83	1.74	1.63	1.59	1.57	1.55
42F754	69012-2526	6	1.81	1.73	1.66	1.58	1.49	1.27
42F755	69012-2528	8	1.89	1.81	1.73	1.64	1.56	1.32
42F756	69012-2009	12	7.09	6.54	6.05	5.48	5.29	4.99
42F757	69012-2015	10	2.13	2.04	1.96	1.87	1.78	1.53

CHEMELEC SUB-MIN. TUBE & INTEGRATED CIRCUIT SOCKETS

Series 69012. Molded of Teflon TFE, with nickel-plated gold-flashed brass contacts. Withstands 50 lbs. min. pull in 1/16" panel. Mts. in .36"D. hole, contacts are spaced 90° on .2" circle except *.1" circle. Insulator thickness is .268", total length is 7/16". .4 mmf except † .8 mmf., .5 mmf pin-to-chassis cap. Shpg. wt. 2 oz.

Stock No.	Type	Pins	1-49	50-99	100-249	250-499	500-999	1000-4999
42F735	0414	†*4	.79	.70	.589	.546	.528	.514
42F736	0423	3	.74	.65	.542	.50	.481	.467
42F737	0424	4	.66	.60	.577	.54	.52	.51

TFE-insulated. Beryllium copper contact, nickel-plated and gold flashed. Types 2533, 2534 have cap. of .75 MMF from pin to pin. Types 2523, 2524 have cap. of .4 MMF from pin to pin.

Stock No.	Type	Pins	1-49	50-99	100-249	250-499	500-999	1000-4999
42F758	69012-2533	3	.81	.78	.74	.70	.67	.57
42F759	69012-2534	4	.97	.92	.88	.84	.80	.68
42F760	69012-2523	3	.74	.71	.68	.65	.61	.52
42F761	69012-2524	4	.67	.83	.79	.75	.72	.61
42F762	69012-2623	3	.89	.86	.83	.79	.76	.67

NUVISTOR SOCKET

Type 69012-0021. Designed to receive 5 pin RCA Nuvistor. TFE insulaiton.

Stk. No.	Type	1-49	50-99	100-249	250-499	500-999	1000-4999
42F763	69012-0021	2.25	2.05	2.00	1.95	1.91	1.86

MINIATURE CRYSTAL SOCKET

Type 69007-4413. Designed to receive 2 pin crystal. .040 dia., .192 center to center distance. TFE insulation.

42F764	69007-4413	.49	.48	.47	.462	.453	.445

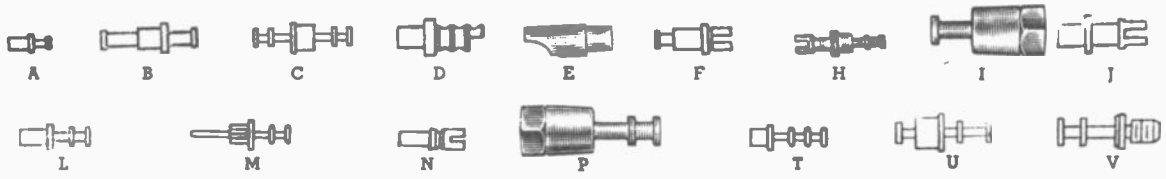
TRANSISTOR SOCKET FOR JEDEC MT-31 AND TO-60

Type 69012-0022. TFE insulated for RF amplification in mobile communications equipment requiring low loss material.

42F765	69012-0022	.92	.84	.80	.76	.72	.68

CAMBION® Solder Terminals and Chokes

SOLDER TERMINALS



BOARD THICKNESS CHART

Dash No. Suffix	Board Thickness	Dash No. Suffix	Board Thickness	Dash No. Suffix	Board Thickness
—1	1/32"	—3	3/32"	—5	3/16"
—2	1/16"	—4	1/8"		

Most types available "special order" for all board uses. Order from Board Thickness Chart, adding proper dash no. suffix to part no. to indicate length for board thickness desired.

Stk. No.	Type	Fig.	1-999	1M-4999	5M-999	10M-2499	25M-49999
40F1261	1010-3	J	6.37C	49.90M	45.80M	40.60M	40.30M
40F1267	1019-2	N	2.45C	19.10M	17.60M	16.00M	15.50M
40F1360	1026-1	L	1.74C	13.60M	12.40M	11.30M	11.00M
40F1361	1026-2	L	1.74C	13.60M	12.40M	11.30M	11.00M
40F1365	1030-2	CC	4.61C	36.60M	32.80M	29.60M	28.40M
40F1317	1031-2	CC	3.56C	27.90M	25.60M	23.30M	22.60M
40F1323	1032-2	CC	2.24C	17.60M	16.10M	14.50M	14.10M
40F1327	1035-2	C	3.04C	23.80M	21.80M	19.90M	19.10M
40F1160	1081-4	C	5.86C	46.50M	42.80M	38.40M	37.00M
40F1014	1245-2	A	2.41C	18.90M	17.50M	15.80M	15.40M
40F1016	1245-4	A	2.41C	18.90M	17.50M	15.80M	15.40M
40F1009	1457-1	A	1.52C	11.80M	10.90M	9.80M	9.50M
40F1010	1457-2	A	1.52C	11.80M	10.90M	9.80M	9.50M
40F1011	1457-3	A	1.52C	11.80M	10.90M	9.80M	9.50M
40F1012	1457-4	A	1.52C	11.80M	10.90M	9.80M	9.50M
40F1141	1463-1	DD	2.17C	16.80M	15.50M	14.10M	13.60M
40F1142	1463-2	DD	2.17C	16.80M	15.50M	14.10M	13.60M
40F1144	1463-4	DD	2.17C	16.80M	15.50M	14.10M	13.60M
40F1019	1558-1	L	1.47C	11.70M	10.70M	9.70M	9.50M
40F1020	1558-2	L	1.47C	11.70M	10.70M	9.70M	9.50M
40F1021	1558-3	L	1.47C	11.70M	10.70M	9.70M	9.50M
40F1022	1558-4	L	1.47C	11.70M	10.70M	9.70M	9.50M
40F1134	1578-3	N	4.29C	33.60M	30.70M	27.90M	27.10M
40F1135	1578-4	N	4.29C	33.60M	30.70M	27.90M	27.10M
40F1156	1579-3	U	4.77C	37.00M	34.30M	31.20M	30.10M
40F1157	1579-4	U	4.77C	37.00M	34.30M	31.20M	30.10M
40F1210	1582-1	V	4.77C	37.00M	34.30M	31.20M	30.10M
40F1025	1597-1	L	1.72C	13.50M	12.30M	11.20M	10.90M
40F1026	1597-2	L	1.72C	13.50M	12.30M	11.20M	10.90M
40F1027	1597-3	L	1.72C	13.50M	12.30M	11.20M	10.90M
40F1028	1597-4	L	1.72C	13.50M	12.30M	11.20M	10.90M
40F1029	1597-5	L	1.72C	13.50M	12.30M	11.20M	10.90M
40F1007	1604-2	A	1.74C	13.60M	12.40M	11.30M	11.00M
40F1008	1604-3	A	1.74C	13.60M	12.40M	11.30M	11.00M
40F1037	1724-1	L	2.43C	14.10M	17.50M	16.00M	15.40M
40F1038	1724-2	L	2.43C	14.10M	17.50M	16.00M	15.40M
40F1039	1724-3	L	2.43C	14.10M	17.50M	16.00M	15.40M
40F1040	1724-4	L	2.43C	14.10M	17.60M	16.00M	15.40M
40F1068	1797-2	A	2.38C	18.60M	16.90M	15.50M	15.10M
40F1069	1797-3	A	2.38C	18.60M	16.90M	15.50M	15.10M
40F1070	1797-4	A	2.38C	18.60M	16.90M	15.50M	15.10M
40F1077	1798-2	L	3.60C	28.20M	25.70M	23.40M	22.80M
40F1082	1979-2	D	3.64C	28.50M	26.20M	23.80M	23.00M
40F1083	1979-3	D	3.64C	28.50M	26.20M	23.80M	23.00M
40F1084	1979-4	D	3.64C	28.50M	26.20M	23.80M	23.00M
40F1146	2000-1	U	2.35C	10.50M	16.80M	15.40M	14.70M
40F1147	2000-2	U	2.35C	10.50M	16.80M	15.40M	14.70M
40F1148	2000-3	U	2.35C	10.50M	16.80M	15.40M	14.70M
40F1149	2000-4	U	2.35C	10.50M	16.80M	15.40M	14.70M
40F1151	2004-2	C	2.31C	18.00M	16.50M	15.20M	14.50M
40F1152	2004-3	C	2.31C	18.00M	16.50M	15.20M	14.50M
40F1153	2004-4	C	2.31C	18.00M	16.50M	15.20M	14.50M
40F1063	2027-1	A	2.05C	16.10M	14.70M	13.20M	12.80M
40F1064	2027-2	A	2.05C	16.10M	14.70M	13.20M	12.80M
40F1065	2027-3	A	2.05C	16.10M	14.70M	13.20M	12.80M
40F1066	2027-4	A	2.05C	16.10M	14.70M	13.20M	12.80M
40F1032	2034-2	L	2.43C	19.00M	17.50M	15.70M	15.20M
40F1033	2034-3	L	2.43C	19.00M	17.50M	15.70M	15.20M
40F1034	2034-4	L	2.43C	19.00M	17.50M	15.70M	15.20M
40F1035	2034-5	L	2.43C	19.00M	17.50M	15.70M	15.20M
40F1204	2040-1	C	2.51C	19.50M	17.90M	16.20M	15.70M
40F1205	2040-2	C	2.51C	19.50M	17.90M	16.20M	15.70M
40F1206	2040-3	C	2.51C	19.50M	17.90M	16.20M	15.70M
40F1180	2041-1	A	1.55C	12.20M	11.20M	10.00M	9.80M
40F1181	2041-2	A	1.55C	12.20M	11.20M	10.00M	9.80M
40F1186	2042-1	B	1.64C	13.20M	12.20M	11.20M	10.80M
40F1187	2042-2	B	1.64C	13.20M	12.20M	11.20M	10.80M
40F1192	2043-1	L	1.62C	12.80M	11.70M	10.70M	10.20M
40F1193	2043-2	L	1.62C	12.80M	11.70M	10.70M	10.20M
40F1194	2043-3	L	1.62C	12.80M	11.70M	10.70M	10.20M
40F1195	2043-4	L	1.62C	12.80M	11.70M	10.70M	10.20M
40F1198	2044-1	U	1.79C	14.00M	12.90M	11.60M	11.20M
40F1199	2044-2	U	1.79C	14.00M	12.90M	11.60M	11.20M
40F1200	2044-3	U	1.79C	14.00M	12.90M	11.60M	11.20M
40F1201	2044-4	U	1.79C	14.00M	12.90M	11.60M	11.20M
40F1212	2051-1	V	5.29C	41.50M	39.00M	38.50M	33.30M
40F1213	2051-2	V	5.29C	41.50M	39.00M	38.50M	33.30M
40F1048	2080-1	T	2.18C	17.20M	15.70M	14.20M	13.90M
40F1049	2080-2	T	2.18C	17.20M	15.70M	14.20M	13.90M
40F1050	2080-3	T	2.18C	17.20M	15.70M	14.20M	13.90M
40F1051	2080-4	T	2.18C	17.20M	15.70M	14.20M	13.90M
40F1139	2081-3	M	3.27C	25.60M	23.50M	26.30M	20.60M
40F1054	2084-2	T	4.19C	32.90M	30.30M	27.20M	26.20M
40F1055	2084-3	T	4.19C	32.90M	30.30M	27.20M	26.20M
40F1056	2084-4	T	4.19C	32.90M	30.30M	27.20M	26.20M
40F1001	2085-1	A	1.30C	10.20M	9.40M	8.50M	8.10M
40F1002	2085-2	A	1.30C	10.20M	9.40M	8.50M	8.10M
40F1003	2085-3	B	1.30C	10.20M	9.40M	8.50M	8.10M
40F1060	2100-1	A	2.07C	16.30M	14.90M	13.50M	13.10M
40F1061	2100-2	A	2.07C	16.30M	14.90M	13.50M	13.10M
40F1177	2141-2	B	4.32C	34.10M	31.40M	28.40M	27.50M
40F1088	2187-1	X	2.29C	17.90M	16.40M	15.00M	14.40M
40F1247	2380-1	I	8.23C	64.70M	59.20M	53.90M	52.10M
40F1248	2381-1	P	8.11C	63.60M	58.40M	52.90M	51.20M
40F1407	2750-2	K	1.93C	15.20M	14.00M	12.60M	12.30M
40F1409	2750-4	K	1.93C	15.20M	14.00M	12.60M	12.30M
40F1427	2755-2	....	1.93C	15.20M	14.00M	12.60M	12.30M
40F5135	3653-2	....	1.68C	13.20M	12.20M	11.10M	10.80M

Write for Free Cambion Catalog For Technical Data No. 40F000.

Note: Silver finish normally std. others available upon request. **Write for free Cambion catalog. 40F000.**

HAND SWAGER

Designed for quick, uniform swaging of solder terminals on terminal boards. Adjustable to a wide range of terminal board thicknesses. Swaging in place as far as 1⅞" from board edge. Less tooling.

40F1500. Type 3802-1. 2½" Throat
NET **45.00**

40F1570. Type 3803-1. 5" Throat.
NET **78.00**

40F1599. Type 6098-1. Adapter for converting to hand set use.
NET **6.00**

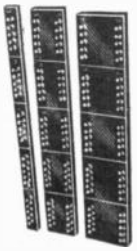
ANVILS		PUNCHES		
Stk. No.	Type	Stk. No.	Type	Net
40F1575	6401	40F1585	6601	
40F1530	6402	40F1586	6604	
40F1576	6404	40F1591	6606	
40F1577	6512	40F1587	6611	
40F1573	6418	40F1589	6617	**6.00**
40F1574	6419	40F1594	6618	
40F1582	6420	40F1532	6619	
40F1578	6430	40F1533	6629	
40F1531	6447	40F1558	6654	
		40F1534	6657	

Newark-Dallas Electronic Corp., 707 Easy St., Garland, Texas 75040

Insulated Terminal Handles and Boards

CAMBION

TERMINAL BOARDS



Standard All-Set terminal boards are scribed into 5 sections. Each section is drilled for 14 terminals, w/10 mounted except ½" and 5/16" widths which are drilled for 7, w/5 mounted. Materials used: cotton-fabric phenolic, Mil. Type FBE, Mil. Spec. MIL-P-15035B; epoxy glass-cloth, GEE, MIL-P18177B; nylon-fabric phenolic, NPG, MIL-P-15047B.

Stk. No.	Type	Mat'l.	thck x wd'th	1-9	10-49	50-99	100-249
40F5135	1330-35	GEE	1 1/16x1/8"	2.80	2.50	2.45	2.30
40F2000	1401-15	FBE	3/32x1/2"	1.14	1.06	.93	.89
40F5136	1401-25	GEE	3/32x1/2"	1.75	1.62	1.43	1.35
40F2006	1402-15	FBE	3/32x2"	2.50	2.35	2.05	2.00
40F5137	1402-25	GEE	3/32x2"	4.10	3.80	3.40	3.10
40F5138	1402-35	NPG	3/32x2"	3.00	2.80	2.45	2.35
40F2007	1402-45	FBE	1/8x2"	2.50	2.35	2.05	2.00
40F5139	1402-55	GEE	1/8x2"	5.00	4.70	4.10	3.90
40F2011	1402-65	NPG	1/8x2"	3.00	2.80	2.45	2.35
40F2012	1403-15	FBE	3/32x2 1/2"	2.60	2.45	2.15	2.05
40F2013	1403-45	FBE	3/32x2 1/2"	2.60	2.45	2.15	2.05
40F2018	1404-15	FBE	3/32x3"	2.75	2.50	2.25	2.15
40F2019	1404-45	FBE	1/8x3"	2.75	2.50	2.25	2.15
40F5140	1405-15	FBE	3/32x1/16"	2.30	2.15	1.90	1.80
40F2024	1405-45	FBE	3/32x1/16"	2.30	2.15	1.90	1.80
40F5141	1405-55	GEE	1/8x1/16"	4.20	3.90	3.50	3.30
40F2028	1406-15	FBE	3/32x1 1/2"	2.40	2.25	2.00	1.91
40F2029	1406-45	FBE	1/8x1 1/2"	2.40	2.25	2.00	1.91

HANDLES

A—Oval B—Round C—Folding

Brass, nickel except; * alum. w/black anodize; † alum. semi-frost; †† Brass, black oxide finish. ** Fig. B mounting center is adjustable from 4.5" to 6.58". # stainless steel.

Stk. No.	Type	Mtg. Cent.	Ht.	Fig.	1-9	10-49	50-99	100-249	250-499
40F2204	1075-1	4.562	1"	A	1.46	1.27	1.03	.95	.91
40F2311	1220-1	1.25	1"	A	1.38	1.20	.97	.90	.87
40F2312	1221-1	2.0	1"	A	1.46	1.27	1.03	.95	.91
40F2313	1222-1	3.0	1"	A	1.52	1.32	1.07	.99	.95
40F2529	1250-1	2.0	1.312	A	1.25	1.08	.88	.81	.78
40F2206	1252-1	3.0	1.312	A	1.28	1.12	.90	.84	.81
40F2314	1264-1	3.0	1.312	A	1.28	1.12	.90	.83	.81
40F2201	1270-1	4.0	1.875	A*	1.50	1.31	1.05	.99	.95
40F2181	1282-1	4.0	1.50	A	1.52	1.32	1.07	.99	.95
40F2187	1291-1	3.0	1.50	A*	.97	.83	.67	.63	.61
40F2188	1291-2	3.0	1.5	A†	.97	.83	.67	.63	.61
40F2315	1292-1	4.0	1.5	A*	1.11	.99	.80	.74	.70
40F2527	1900-1-02	4.0	1.85	C	3.60	3.15	2.50	2.30	2.20
40F2202	1965-1	6.437	1.75	A	1.50	1.31	1.05	.99	.95
40F2220	2062-1-02	4.0	1.85	C	3.40	3.00	2.40	2.20	2.15
40F2222	2066-1	**	1.6	B	3.90	3.40	2.80	2.50	2.40
40F2208	2111-1-02	3.0	1.281	A	2.04	1.77	1.42	1.32	1.27
40F2211	2111-2-02	4.562	1.50	A	2.30	2.00	1.63	1.52	1.46
40F2316	2111-3-02	6.438	1.75	A	2.60	2.25	1.84	1.68	1.62
40F2217	2111-4-02	9.0	1.75	A	2.90	2.50	2.00	1.88	1.81
40F2210	2385-1-14	3.0	1.281	A*	1.55	1.34	1.08	1.00	.96
40F2213	2385-2-14	4.562	1.50	A*	1.65	1.44	1.16	1.10	1.06
40F2216	2385-3-14	6.438	1.75	A*	1.81	1.58	1.26	1.19	1.14
40F5142	2720-1	4.000	1.459	C#	4.90	4.40	3.60	3.10	3.00

FERRULES

Stk. No.	Type	Stk. No.	Type	Handle Series	1-9	10-49	50-99	100-249	250-499	500-999
40F2300	1211-1	40F2301	1211-2	1280*	.15	.14	.12	.105	.095	.085
40F2302	1212-1	40F2303	1212-2	1290#	.22	.21	.20	.19	.18	.16
40F2304	1952-1	40F2305	1952-2	1220*	.15	.14	.12	.105	.095	.085
40F2306	1953-1	40F2307	1953-2	1230#	.22	.21	.20	.19	.18	.16
40F2308	1954-1	40F2309	1954-2	†*	.15	.14	.12	.105	.095	.085
40F2224	1988-1	40F2225	1988-2	†*	.17	.16	.15	.14	.13	.12
40F2226	1989-1	40F2310	1989-2	1270, 71#	.22	.21	.20	.19	.18	.16

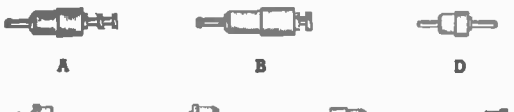
† For handles, 1075, 1252, 1965, 1250, 1264
* Brass ferrule; Suffix -1 is nickel finish, -2 is black oxide
# Alum. ferrule; -1 is black anodize, -2 is semi-frost anodize.

SPRING LOADED DIODE CLIPS

Stk. No.	Type	Dia.	1-49	50-99	100-249	250-499
40F2268	2146-1	.....				
40F2270	2247-2	.094	.29	.25	.24	.23
40F2271	2247-3	.125				
40F2272	2247-4	.156				
40F2274	2329-3	.....				
40F2276	2330-1	.062	.37	.33	.38	.27

40F000—Write for free Cambion Catalog.

*TEFLON PRESS MOUNT INSULATED TERMINALS



A B D E F G K

Recommended for panels up to .062" thickness only.

Stock No.	Type	Dia.	Fig.	1-99	100-249	250-499	500-999	1000-2499
40F1847	4025-1	.100	G	.12	.105	.095	.09	.087
40F1870	4028-4	.250	G	.13	.12	.105	.101	.099
40F5148	4028-1	.100	F	.10	.09	.09	.085	.08
40F1885	4033-3	.165	K	.13	.12	.105	.101	.099
40F1890	4034-4	.250	K	.13	.12	.105	.101	.099
40F5149	4115-1	.....	.....	.16	.15	.14	.134	.128
40F5150	4176-1	.100	.....	.13	.12	.105	.101	.099
40F1411	4176-2	.125	.....	.13	.12	.105	.101	.099
40F1939	4176-3	.165	D	.13	.12	.105	.101	.099
40F1944	4179-1	.230	E	.14	.13	.12	.112	.107
40F1946	4182-1	.100	A	.13	.12	.105	.101	.099
40F1947	4182-2	.125	A	.13	.12	.105	.101	.099
40F1951	4183-3	.165	A	.13	.12	.105	.101	.099
40F1953	4186-2	.125	A	.13	.12	.105	.101	.099
40F1954	4186-3	.165	A	.13	.12	.105	.101	.099
40F5151	4188-1	.100	D	.11	.10	.095	.089	.084
40F5152	4197-1	.230	A	.13	.12	.105	.101	.099
40F1958	4231-1	.212	B	.21	.19	.18	.169	.163
40F1961	4234-1	.212	B	.15	.14	.13	.124	.119
40F1812	4263-1	.....	.....	.21	.19	.18	.169	.163

*Prices are for standard electro solder finish and white insulator color. Other finishes and colors available upon special order.

INSULATED TERMINALS

Terminals are available in various insulating materials to meet a wide variety of applications. Material Insulation Key: * Teflon, † Paper Phenolic, and # Ceramic.

Stk. No.	Type	Fig.	Dia.	1-99	100-249	250-499	500-999	1000-2499	2500-4999
40F5147	1502-1*	BB	.....	.34	.30	.26	.25	.24	.23
49F1311	1510-1*	AA	.....	.20	.19	.18	.16	.15	.14
40F1821	1581-1†	G	.250	.20	.19	.18	.16	.15	.14
40F1831	1795-B†	BB	.500	.38	.35	.32	.29	.26	.25
40F1773	1942-1#	G	.250	.23	.22	.20	.19	.18	.16
40F1774	1942-2#	G	.375	.23	.22	.20	.19	.18	.16
40F1834	1945-1*	G	.250	.30	.29	.26	.24	.23	.22
40F1835	1945-2*	G	.365	.30	.29	.26	.24	.23	.22
40F1841	1947-1*	AA	.....	.33	.30	.27	.25	.24	.23
40F1842	1947-2*	AA	.....	.33	.30	.27	.25	.24	.23
40F1737	1980XA156#	G	.156	.23	.21	.20	.19	.18	.16
40F1734	1980XA250#	G	.250	.23	.21	.20	.19	.18	.16
40F1805	1990-1#	BB	.....	.47	.42	.37	.36	.34	.32
40F1794	1995-C#	.....	.250	.23	.21	.20	.19	.18	.16
40F1755	2045-1#	.....	.250	.23	.22	.20	.19	.18	.16
40F1700	2255-1#	S	.125	.23	.22	.20	.19	.18	.16
40F1701	2255-2#	S	.188	.23	.22	.20	.19	.18	.16
40F1702	2255-3#	S	.250	.23	.22	.20	.19	.18	.16
40F1784	2382-2#	.....	.375	.33	.29	.26	.24	.23	.22
40F1764	2430-1#	.....	.250	.29	.26	.24	.22	.21	.20
40F1771	2432-1#	.....	.....	.32	.27	.26	.24	.22	.21
40F1804	3485-1#	.....	.....	.30	.26	.24	.22	.21	.20
40F1781	3648-1#	AA	.....	.23	.22	.20	.19	.18	.16
40F1782	3648-2#	AA	.....	.23	.22	.20	.19	.18	.16
40F1762	3650-1#	AA	.....	.23	.22	.20	.19	.18	.16
40F1763	3650-2#	AA	.....	.23	.22	.20	.19	.18	.16

BATTERY HOLDERS

2880-2

For mercury ("C" size) and zinc nickel plated ("D" size) batteries; snap-in holders with locking strap to hold mercury batteries under extreme vibration and shock. Body material Phosphor Bronze.

2233-2

*For "D" size only with steel body.

Stk. No.	Type	Battery Size	1-9	10-49	50-99	100-249
40F2128	2233-2	Mercury .620 Dx .650 L	.41	.37	.34	.32
40F2129	2234-2	Mercury .655 Dx 1.305 L	.53	.47	.43	.41
40F2130	2475-2	Mercury .655 Dx 1.960 L	.88	.81	.72	.69
40F2131	2477-2	Mercury .655 Dx 2.605 L	1.00	.91	.83	.80
40F2133	2870-2	Mercury 1.190 Dx 2.375 L	1.26	1.13	1.06	1.04
40F2135	2890-2	Zinc Carb 1.344Dx2.406	1.26	1.13	1.06	1.04
40F2136	2895-2*	Zinc Carb 1.244Dx2.406L	.89	.80	.75	.72

CAMBION Coils, Coil Forms & Components

VARIABLE COILS

CAMBION tunable coils are available on either ceramic or phenolic forms, or in unitized housings offering both electromagnetic and electrostatic shielding. Tunable ranges provide overlapping inductances. Listing covers more popular ratings—if inductance range you want is not listed, order by Part No. and specify range desired.

Stk. No.	Type	Ind. Range Min-uh-Max	Fig.	1-9	10-49	50-99	100-249	250-499
40F5043	LSM-1MC	725-1250	N	1.35	1.18	1.07	.92	.89
40F5045	LSM-5MC	45-75	N	1.27	1.10	1.01	.87	.82
40F5046	LSM-10MC	2-4	N	1.27	1.10	1.01	.87	.82
40F5047	LSM-30MC	.28-.35	N	1.18	1.02	.89	.80	.78
40F5052	LS3-10MC	5-10	M	1.27	1.10	1.01	.87	.82
40F5053	LS3-30MC	.45-.7	M	1.18	1.02	.89	.80	.78
40F4978	1505-1	.55-1.0	P	2.80	2.40	2.20	1.95	1.87
40F4981	1505-4	3.2-8.3	P	2.80	2.40	2.20	1.95	1.87
40F4982	1505-5	7.8-16.0	P	3.00	2.65	2.40	2.10	2.00
40F4983	1505-6	14 5-33 0	P	3.00	2.65	2.40	2.10	2.00
40F4984	1505-7	30.0-73.0	P	2.65	2.35	2.15	1.87	1.82
40F4988	1506-1	1.0-2.2	P	3.15	2.80	2.45	2.15	2.05
40F4991	1506-4	9.0-22 0	P	3.35	3.00	2.65	2.30	2.20
40F4995	1507-3	27-.55	P	2.65	2.40	2.15	1.88	1.82
40F4996	1507-4	.5-1 1	P	2.65	2.40	2.15	1.88	1.82
40F4997	1507-5	9-2 0	P	2.65	2.40	2.15	1.88	1.82
40F4998	1507-6	1.6-3.7	P	2.65	2.40	2.15	1.88	1.82
40F5055	2060-1	0-23.7	L	1.28	1.07	.99	.85	.81
40F5056	2060-2	3.5-7.0	L	1.28	1.07	.99	.85	.81
40F5057	2060-3	6 5-10 6	L	1.41	1.20	1.06	.93	.89
40F5058	2060-4	10-18	L	1.41	1.20	1.06	.93	.89
40F5059	2060-5	16-30	L	1.49	1.28	1.14	.99	.95
40F5060	2060-6	28-63	L	1.61	1.39	1.23	1.07	1.03
40F5061	2060-7	61-122	L	1.72	1.47	1.31	1.16	1.07
40F5062	2060-8	120-243	L	1.84	1.59	1.41	1.24	1.18
40F5063	2060-9	23-450	L	1.96	1.68	1.49	1.31	1.25
40F5064	2060-10	440-800	L	1.96	1.68	1.49	1.31	1.25
40F5121	3338-1	.10-1.2	L	1.95	1.65	1.48	1.29	1.24
40F5122	3338-2	1 2-.27	L	2.10	1.74	1.59	1.38	1.31
40F5123	3338-5	27-1 90	L	1.95	1.65	1.48	1.29	1.24
40F5124	3338-28	1.90-5 30	L	2.30	1.95	1.75	1.54	1.48
40F5125	3642-1	.090-.110	L	1.84	1.54	1.46	1.28	1.23
40F5126	3642-2	.108-.132	L	1.94	1.65	1.53	1.34	1.29
40F5127	3643-3	.130-.170	L	1.84	1.54	1.46	1.28	1.23
40F5128	3642-4	.156-.205	L	1.94	1.65	1.53	1.34	1.29
40F5129	3642-5	.173-38 5	L	1.72	1.46	1.38	1.20	1.14

TUNING TOOLS

Stk. No.	Type	Tip Material	NET
40F3893	1971-1	Brass	.85
40F3894	2033-1	Brass	
40F3895	2230-1	Nylon	1.10
40F3896	2375-1	Brass	.85

MOUNTING STAND OFFS

1246

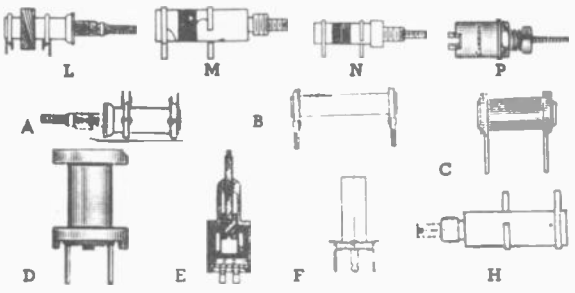
1300

1246 series—round; 6/32 tapped
1247 series—round; through hole
1299 series—hex; threaded stud
1300 series—round; 4/40 tapped
2188 series—round; 2/56 tapped

Stock No.	Type	Above Board Hgth.	For Board Thknss.	1-99	100-249	250-499	500-999	1M-2499
40F2569	1246-9	.125"	1/16"	.12	.105	.095	.09	.085
40F2570	1246-10	.188"	1/16"					
40F2571	1246-11	.250"	1/16"					
40F2573	1246-13	.500"	1/16"					
40F2575	1246-15	.750"	1/16"					
40F2577	1246-17	.175"	3/32"					
40F2579	1246-19	.250"	3/32"					
40F2588	1246-20							
40F2600	1247-9	.125"	1/16"	.12	.105	.095	.09	.085
40F2601	1247-10	.188"	1/16"					
40F2602	1247-11	.250"	1/16"					
40F2471	1299-1	.375"		.105	.095	.085	.075	.070
40F2472	1299-2	.500"						
40F2484	1300-9	.125"	1/16"	.12	.105	.095	.09	.085
40F2485	1300-10	.188"	1/16"					
40F2486	1300-11	.250"	1/16"					
40F2487	1300-12	.375"	1/16"					
40F2488	1300-13	.500"	1/16"					
40F2592	1300-17	.125"	3/32"					
40F2611	2188-1	.125"	1/32"	.12	.105	.095	.09	.085
40F2619	2188-9	.125"	1/16"					
40F2620	2188-10	.188"	1/16"					
40F2621	2188-11	.250"	1/16"					
40F2622	2188-12	.375"	1/16"					
40F2623	2188-13	.500"	1/16"					

VARIABLE CAPACITORS

Stk. No.	Type	Description	Capac. uuFDS	1-9	10-49	50-99	100-249
40F5102	CS6-6	Ceramic	1.0-8.0	1.14	1.01	.89	.82
40F5100	CST-6	Ceramic	.5-4.5	1.07	.95	.83	.79
40F5103	PCST-6	Ceramic	.5-4.5	1.07	.95	.83	.79
40F5120	1869-1	Glass	.85-7.0	1.77	1.58	1.45	1.33



COILS FORMS ORDERING INSTRUCTION CHART

Example. 1150-4-1 for 1150 form with 50-200 slug and terminal board with 2 terminals 1532-2-1 for 1532 with 1-20 slug and 2 ring terminals etc.

SUFFIX NO. 1			SUFFIX NO. 2	
Dash	Clr.	Freq. Range	Dash	Terminal-Collar Locations
-1	Yel.	.2-1.5 MC	-1	2 Ring Terminals—2 Bd.
-2	Red	1-20 MC	-2	2 Collars-2 Term. Ea.—3 Bd.
-3	Gr.	20-50 MC	-3	2 Collars-1 Term. Ea.—4 Bd.
-4	Wh.	50-200 MC	-4	1 Top Collar-2 Term.—5 Bd.
-5	Bl.	100 MC and up	-5	1 Bot. Collar-2 Term.—6 Bd.
-6	Pur.	2-50 MC		
-7	Bl.	40-300 MC		

SHIELDED ASSEMBLY

Stk. No.	Type	Fig.	1-49	50-249	250-499	500-999	1000-2499
40F3512	1150-4-1	E	1.22	1.06	.99	.85	
40F3513	1150-2-1	E					
40F3515	1150-3-1	E					
40F3521	1150-2-3	E					
40F3523	1150-3-3	E					
40F3525	1155-2-1	E	1.28	1.11	1.03	.89	
40F3532	1155-4-3	E					
40F3533	1155-2-3	E					
40F3536	1160-4-1	E	1.10	.95	.88	.77	
40F3537	1160-2-1	E					
40F3544	1160-4-3	E					
40F3547	1160-3-3	E					

CERAMIC C.F.

40F3101	1532-4-1	A	.62	.50	.44	.41	.38
40F3102	1532-2-1	A					
40F3103	1532-1-1	A					
40F3208	1532-2-3	A	.78	.64	.56	.53	.50
40F3143	1534-4-1	A	.74	.62	.55	.49	.46
40F3144	1534-2-1	A					
40F3370	1534-2-2	A	.96	.80	.73	.67	.64
40F3372	1534-3-2	A					
40F3125	1536-4-1	A	.68	.54	.46	.43	.41
40F3126	1536-2-1	A					
40F3128	1536-3-1	A					
40F3303	1436-4-3	A	.86	.68	.60	.57	.53
40F3297	1536-4-2	A					
40F3298	1536-2-2	A					
40F3300	1536-3-2	A					

PHEN. P.C.

40F3618	2173-2-1	F	.32	.24	.21	.20	
40F3619	2173-2-2	F					
40F3620	2173-2-3	F					
40F3623	2173-3-3	F					
40F3626	2173-1-3	F					
40F3629	2173-4-3	F					

CERAMIC P.C.

40F3584	2175-2-3	G	.34	.25	.23	.22	
40F3587	2175-3-3	G					
40F3591	2175-1-1	G					
40F3593	2175-4-3	G	.38	.29	.26	.25	

CER. STUD

40F3572	2270-1	B	.79	.61	.47	.45	
40F3574	2270-3	B					
40F3575	2270-4	B					
40F3578	2271-2	B	.85	.66	.57	.54	

MOLDED DIALLYL.

40F3180	3104-1	C	1.00	.78	.67	.65	
40F3181	3104-2	C					
40F3182	3104-3	C					
40F3183	3104-4	C					

MOLDED POLYPROP.

40F3184	3623-1	D	1.95	.74	.64	.62	
40F3185	3623-2	D					
40F3186	3623-3	D					
40F3187	3623-4	D					
40F3188	3624-1	D	1.05	.79	.66	.63	
40F3189	3624-2	D					
40F3190	3624-3	D					
40F3191	3624-4	D					

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

CABLE BINDING SYSTEMS

CABLE BINDING SYSTEM

Designed for fast, economical fabrication of wire and harnesses. Utilizes one tool, one tape size, and one closure size — handle all wire bundling from 1/16". Holds 25' of tape and 20 enclosures. Extra tape loads easily. Super-strong pre-tensioned nylon tape and molded enclosures. Compact and easy to use: loop tape around bundle; tighten to desired tension; squeeze trigger. Makes strong, vibration-proof ties every time.

58F986. 4-2001. Cable Binding Tool w/shoulder strap and loading. Shpg. wt. 2¾ lbs. **NET** **79.95**

58F988. 4-2900. Shoulder strap. Wt. 6 Oz. **NET** **3.00**

58F990. 4-2901. Loading Fork. Wt. 6 oz. **NET** **5.75**

CABLE BINDING TAPE

Tape is .315" wide x .016" thick and made of self-extinguishing nylon material. Withstands temperatures up to 100°C continuously (110°C short term). Extremely resistant to corrosive conditions, including sea water.

Stk. No.	Type	Color	Ft./Roll	Std. Pkg.	1-9	10-24	25-up
58F991	4-2190—tape	Black	25'	10 rolls/ctn	13.50	12.00	11.00
58F987	4-2199—tape	Nat.	25'	10 rolls/ctn	11.95	10.95	9.95

STANDARD CLOSURES

Closures are made of self-extinguishing nylon material. Withstands temperatures up to 100°C. continuously (110°C. short term). Extremely resistant to corrosive conditions, including sea water.

Stk. No.	Type	Color	Clo/Rack	Std. Pkg.	1-9	10.24	25-up
58F992	4-2100—Clo.	Black	100	10 rack/ctn	13.15	12.05	10.95
58F988	4-2109—Clo.	Nat.	100	10 rack/ctn	11.95	10.95	9.95

NYLON CABLE BINDING ACCESSORIES
MOUNTING CLOSURES

#8 Size Screw Hole

Plain Rivet

Headed Rivet

Combines advantages of std. closures with mounting tab to facilitate fastening of wire and cable harnesses onto panels and walls etc. Also can be used in place of special clamps to mount small parts or components.

Stk. No.	Type	Description	Pkg. Qty.	1-9	10-24	25-up
58F989	4-2119	#8 Size Screw Hole	100	3.95	3.65	3.35
58F993	4-2129	Plain Rivet	100	4.35	4.05	3.70
58F994	4-2139	Headed Rivet	100	4.35	4.05	3.70

MOUNTING SADDLES

#8 Size Screw Hole

Plain Rivet

Headed Rivet

Designed as a fastening device which can be premounted when equipment is most accessible. Wire or cable bundles to be mounted are bound to it by passing tape around botth saddle and bundle, and then securing with std. closure.

Stk. No.	Type	Description	Pkg. Qty.	1-9	10-24	25-up
58F995	4-2149	#8 Size Screw Hole	100	2.45	2.30	2.10
58F996	4-2159	Plain Rivet	100	2.85	2.65	2.45
58F997	4-2169	Headed Rivet	100	2.85	2.65	2.45

PLASTIC CABLE CLAMPS

POLYPROPYLENE

Low-cost clamp with good all around characteristics for general purpose applications.

W x Dia Inches	Stk. No.	Type	Pkg. of 100	Stk. No.	Type	Pkg. of 1000 1-3	Pkg. of 1000 4-9	10M-49M
3/8x1/8	58F1000	4-1101	1.40	58F1050	4-1301	9.80	7.90	7.40
3/8x5/32	58F1001	4-1102	1.40	58F1051	4-1302	10.05	8.05	7.55
3/8x3/16	58F1002	4-1103	1.41	58F1052	4-1303	10.20	8.20	7.70
3/8x1/4	58F1003	4-1104	1.50	58F1053	4-1304	10.80	8.70	8.15
3/8x5/16	58F1004	4-1105	1.61	58F1054	4-1305	11.80	9.45	8.90
3/8x3/8	58F1005	4-1106	1.71	58F1055	4-1306	12.25	9.85	9.25
3/8x7/16	58F1006	4-1107	1.90	58F1056	4-1307	13.30	10.70	10.00
3/8x1/2	58F1007	4-1108	1.91	58F1057	4-1308	13.90	11.20	10.50
1/2x1/8	58F1008	4-1109	1.70	58F1058	4-1309	10.55	8.45	7.95
1/2x3/16	58F1009	4-1110	1.71	58F1059	4-1310	10.95	8.75	8.20
1/2x1/4	58F1010	4-1111	1.61	58F1060	4-1311	11.70	9.40	8.75
1/2x5/16	58F1011	4-1112	1.81	58F1061	4-1312	12.95	10.40	9.70
1/2x3/8	58F1012	4-1113	1.90	58F1062	4-1313	13.60	10.85	10.20
1/2x7/16	58F1013	4-1114	2.10	58F1063	4-1314	14.75	11.85	11.15
1/2x1/2	58F1014	4-1115	2.21	58F1064	4-1315	15.80	12.65	11.85
1/2x9/16	58F1015	4-1116	2.71	58F1065	4-1316	19.45	15.60	14.65
1/2x5/8	58F1016	4-1117	2.81	58F1066	4-1317	20.20	16.20	15.15
1/2x1 1/16	58F1017	4-1118	3.11	58F1067	4-1318	22.35	17.95	16.75
1/2x3/4	58F1018	4-1119	3.30	58F1068	4-1319	23.40	18.80	17.65
1/2x1 3/16	58F1019	4-1120	3.51	58F1069	4-1320	24.85	19.95	18.70
1/2x7/8	58F1020	4-1121	3.71	58F1070	4-1321	26.35	21.10	19.80
1/2x1	58F1021	4-1122	4.01	58F1071	4-1322	28.55	22.90	21.45
1/2x1 1/3	58F1022	4-1123	4.30	58F1072	4-1323	30.35	24.30	22.75
1/2x1 1/4	58F1023	4-1124	4.51	58F1073	4-1324	32.00	25.65	24.10
5/8x1 1/2	58F1024	4-1125	5.01	58F1074	4-1325	35.75	28.65	26.85

NYLON

Excellent resistance to heat, weathering, and corrosive conditions. Extremly high tensile strengthh.

W x Dia. Inches	Stock No.	Type	Pkg. of 100	Stk. No.	Type	Pkg. of 100 1-3	Pkg. of 100 4-9	Pkg. of 100 10-up
3/8x1/8	58F1025	4-1126	2.20	58F1075	4-1326	15.45	12.40	11.65
3/8x5/32	58F1026	4-1127	2.21	58F1075	4-1327	15.95	12.80	12.00
3/8x3/16	58F1027	4-1128	2.31	58F1077	4-1328	16.45	13.20	12.40
3/8x1/4	58F1028	4-1129	2.51	58F1078	4-1329	17.95	14.40	13.50
3/8x5/16	58F1029	4-1130	2.80	58F1079	4-1330	19.65	15.80	14.80
3/8x3/8	58F1030	4-1131	2.91	58F1080	4-1331	20.95	16.80	15.75
3/8x7/16	58F1031	4-1132	21.01	58F1081	4-1332	21.95	17.60	16.50
3/8x1/2	58F1032	4-1133	3.30	58F1082	4-1333	23.40	18.80	17.65
1/2x1/8	58F1033	4-1134	3.21	58F1083	4-1334	22.90	18.40	17.25
1/2x3/16	58F1034	4-1135	3.60	58F1084	4-1335	25.45	20.40	19.15
1/2x1/4	58F1035	4-1136	3.91	58F1085	4-1336	27.70	22.20	20.80
1/2x5/16	58F1036	4-1137	4.20	58F1086	4-1337	29.65	23.80	22.30
1/2x3/8	58F1037	4-1138	4.70	58F1087	4-1338	32.90	26.40	24.75
1/2x7/16	58F1038	4-1139	4.90	58F1088	4-1339	33.40	26.80	25.15
1/2x1/2	58F1039	4-1140	4.91	58F1089	4-1340	34.90	28.00	26.25
1/2x9/16	58F1040	4-1141	5.00	58F1090	4-1341	35.10	28.15	26.40
1/2x5/8	58F1041	4-1142	5.21	58F1091	4-1342	36.90	29.60	27.75
1/2x1 1/16	58F1042	4-1143	5.70	58F1092	4-1343	39.90	32.00	30.00
1/2x3/4	58F1043	4-1144	6.20	58F1093	4-1344	43.60	35.00	32.80
1/2x1 3/16	58F1044	4-1145	6.42	58F1094	4-1345	45.35	36.40	34.15
1/2x7/8	58F1045	4-1146	6.72	58F1095	4-1346	47.35	38.00	35.65
1/2x1	58F1046	4-1147	7.72	58F1096	4-1347	54.55	43.80	41.05
1/2x1 1/8	58F1047	4-1148	8.50	58F1097	4-1348	59.80	48.00	45.00
1/2x1 1/4	58F1048	4-1149	9.20	58F1098	4-1349	64.80	52.00	48.75
5/8x1 1/2	58F1049	4-1150	1.02	58F1099	4-1350	71.80	57.60	54.00

PERFORATED PLASTIC CABLE STRAPPING

Nylon Strapping

PVC Strapping

4-726 Nylon Stud

Nylon Cradle

4-2750 PVC Stud

4-2740 PVC Stud

Versatile, low-cost strapping system handles variety of wire and cable bundling jobs. Conveniently spaced holes enable fast, easy assembly with small locking studs which secure bundle. No special tools required.

NYLON STRAPPING AND STUDS

Stk. No.	Type	Description	Qty.	1-24	25-99	100-Up
58F1100	4-2709	5/16" Strapping	100' roll	7.25	6.45	5.90
58F1101	4-2719	1/2" Strapping	100' roll	10.00	9.00	8.10
				1-4	5-24	25-Up
58F1102	4-2769	Stud for 5/16" & 1/2"		5.00	4.50	4.05

PVC STRAPPING STUDS

Stk. No.	Type	Description	Qty.	1-24	25-99	100-Up
58F1103	4-2720	5/16" Srtapping	100' Roll	3.00	2.70	2.45
58F1104	4-2730	1/2" Strapping	100' Roll	5.00	4.50	4.05
				1-4	5-24	25-Up
58F1105	4-2740	Stud for 5/16"	1000/box	3.50	3.15	2.85
58F1106	4-2750	Stud for 1/2"	1000/box	3.50	3.15	2.85

NYLON CRADELES FOR ABOVE

Stk. No.	Type	Description	Qty.	1-9	10-49	50-Up
58F1107	4-2789	5/16" Width	100/box	3.95	3.55	3.21
58F1108	4-2799	1/2" Width	100/box	5.95	5.36	4.84

Cable Clamps, Strap and Adapters

Fig. A

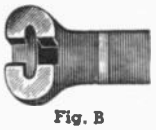


Fig. B

Fig. C

Fig. D

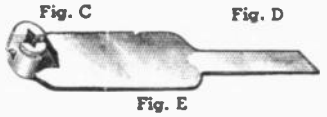


Fig. E

Fig. F

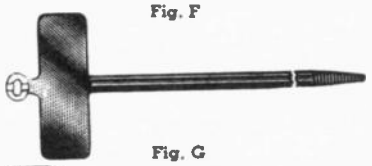


Fig. G

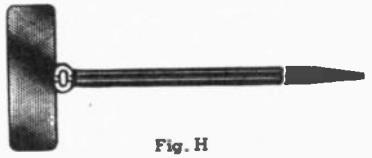


Fig. H

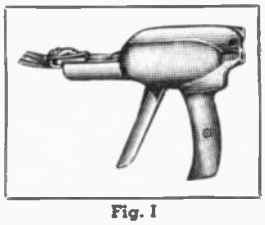


Fig. I

Fig. J

Fig. K

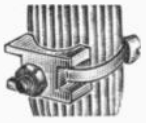


Fig. L

Fig. M Fig. N

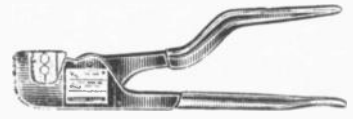
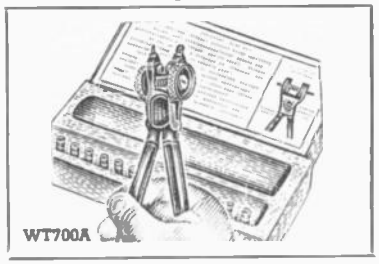


Fig. O



TY-RAP CABLE TIES AND STRAP

Ideal for harnessing wire bundles up to 3¾" dia. Prevents concentration of pressures on one point. Does a complete job of tying, clamping and Type TY-542 has identification plate built in. Replaces all string and tape harnesses. Temp. Range. —65°F to +350°F. Standard color: Natural white nylon. Available on special order: (Minimum order—100) black, brown, red, orange, yellow, green, blue, purple and gray. Av. wt. 4 lb. per 1000. All are tool applied except * Self clinching.

Stock No.	Type	Fig.	Dia. Range	NET PER 100		
				100	500	1000
31F269	TY525M(TY25M)*	A	1/16"x1¾"	6.72	5.25	4.20
31F271	TY503(TY3)	B	1/16"x 5/8"	3.84	3.00	2.40
31F272	TY505(TY5)	B	1/16"x1¾"	5.60	4.40	3.50
31F273	TY507(TY7)	B	3/16"x3¾"	19.20	15.00	12.00
31F275	TY535M(TY35M)*	C	1/16"x1¾"	7.68	6.00	4.80
31F276	TY513(TY13)	D	1/16"x 5/8"	4.80	3.75	3.00
31F277	TY515(TY15)	D	1/16"x1¾"	6.40	5.00	4.00
31F2500	TY523M(TY23M)	...	1/16"x 5/8"	4.80	3.75	3.00
31F2523	TY524(TY4)	B	1/16"x1⅛"	5.12	4.00	3.20
31F2524	TY524(TY24M)	A	1/16"x1⅛"	5.40	4.25	3.40
31F2525	TY526(TY6)	B	1/16"x3"	9.40	7.40	5.90
31F2501	TY527M(TY27M)	...	3/16"x3¾"	30.40	23.75	19.00
31F2502	TY528M(TY28M)	...	1/16"x4"	15.20	11.88	9.50
31F2526	TY533M(TY33M)	C	1/16"x 5/8"	6.10	4.90	3.90
31F2527	TY534M(TY34M)	C	1/16"x1⅛"	6.80	5.40	4.30
31F2528	TY535M(TY35M)	H	1/16"x1¾"	7.68	6.00	4.80
31F2503	TY537M(TY37M)	.....	3/16"x3¾"	34.56	27.00	21.60
31F2504	TY546M(TY46M)	E	3/8"x1¾"	15.36	12.00	9.60
31F2505	TY546MD(TY46MD)	E	3/8"x1¾"	33.60	26.23	21.00
31F2506	TY546MX(TY46MX)	E	3/8"x1¾"	16.96	13.25	10.00
31F2530	TY551M(TY51M)	G	5/16"x 5/8"	7.68	6.00	4.80

TY-RAP INSTALLING TOOLS

Stock No.	Type	Fig.	For Use With TY-RAPS	NET
31F281	WT-183F	J	TY505, 515	24.00
31F282	WT-185F	J	TY503, 515	24.00
31F283	WT-186F	J	TY507	24.00
31F2531	WT-199	I	TY-23M, 24, 25, 28, 33, 35, 46	30.00
31F2532	WT-293	I	TY3, TY13	60.00
31F2533	WT-294	I	TY4, TY6, TY14	60.00
31F2534	WT-295	I	TY5, TY8, TY15, TY42	60.00

● NEW TY-RAP ROUTING CLAMPS

Premountable plastic clamps feature high strength, versatility and ease of installation.

Stk. No.	Type	Fig.	Clamp Size	NET PER 100		
				100	500	1000
31F2535	TC88	K	½"	10.00	8.47	7.70
31F2536	TC95	K	1"	11.00	9.79	8.90
31F2537	TC158	K	1½"	20.00	18.15	16.50
31F2538	TC164	K	2"	30.00	27.17	24.70
31F2539	TC91	K	½"	10.00	8.47	7.70
31F2540	TC98	K	1"	11.00	9.79	8.90
31F2541	TC155	K	1½"	20.00	18.15	16.50
31F2542	TC161	K	2"	30.00	27.17	24.70

TY-RAP MOUNTING PLATE — CLAMP MOUNT

Stock No.	Type	Fig.	Description	NET PER 100		
				100	500	1000
31F280	TC501	L	Fits all ties except Types TY507 and TY517	4.80	3.75	3.00
31F389	TC503	L	For TY507 and TY517	19.20	15.00	12.00
31F2508	TC502	L	Same as TC-501	4.16	3.25	2.60
31F2509	TC504	L	For TY-503 & TY-523M	3.20	2.50	2.00

TY-RAP MARKING PEN

Stock No.	Cat. No.	Fig.	Color Ink	Std. Pkg.	Wt. Each	Net Cost Each
31F2507	WT-163-1	M	Black	1	.2	3.50

FIG. N — ADAPTER AND OUTERSLEEVE

Adapter for Coaxial Cable WE#724 and Belden 8281. For #UHF Type #PL259 Connector. Silver plated brass. Outersleeve is silver plated bronze.

Adapter			NET PER 100			Outersleeve			NET PER 100		
Stk. No.	Type	ID	100	500	1000	Stk. No.	Type	ID	100	500	1000
31F2520	GSA2590	.263	37.50	33.00	28.00	31F2522	GSC3275	.327	12.00	10.60	9.00
31F2579	GSA2592	.179	50.00	43.00	37.50	31F2581	GSC2195	.219	7.00	6.00	5.30
31F2580	GSA2593	.215	44.00	37.50	33.00	31F2582	GSC2615	.261	7.00	6.00	5.30

FIG. O — CRIMPING HAND TOOLS FOR ABOVE

Stk. No.	Type	Description	Shpg. Wt.	NET EA.
31F2521	WT-236	For GSA2590	1 lb. 13 oz.	60.00
31F2583	WT-408	For GSA2592	1 lb. 13 oz.	55.00
31F2584	WT-411	For GSA2593	1 lb. 13 oz.	55.00

● NEW WT-700-A SHIELD STRIPPING TOOL KIT

Packaged in hand-rubbed wooden case with dies to cover the O.D. range of shielding from .055 to .248. Includes all the dies listed below.

31F2585. NET **230.00**

Model WT-700. Similar type stripping tool, less dies. See listing below for dies.

31F2586. NET 36.50

Stk. No.	Type Die	O.D. of Shielding	NET
31F2587	WT-701	.055-.063	16.00
31F2588	WT-702	.063-.077	16.00
31F2589	WT-703	.077-.092	16.00
31F2590	WT-704	.092-.107	16.00
31F2591	WT-705	.107-.119	16.00
31F2592	WT-706	.119-.131	16.00

Stk. No.	Type Die	O.D. of Shielding	NET
31F2593	WT-707	.131-.145	16.00
31F2594	WT-708	.145-.157	16.00
31F2595	WT-709	.157-.167	16.00
31F2596	WT-710	.167-.184	16.00
31F2597	WT-711	.184-.209	16.00
31F2598	WT-712	.209-.233	16.00
31F2599	WT-713	.233-.248	16.00

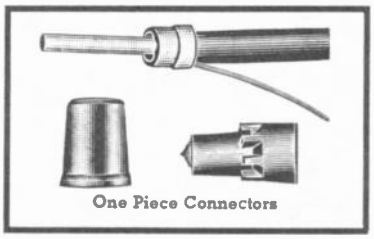
Connectors, Adapters And Terminal Blocks

T&B ENGINEERED

● NEW ONE PIECE CONNECTOR FOR SHIELDED AND COAXIAL CABLE

"Two piece" reliability in ONE connector. "Wobble-action" of the hard inner sleeve allows it to move when shielded cable is inserted; soft outer sleeve provides an excellent compression material. Quick easy insertion.

Stk. No.	Type	Max. Dia. Inner Dielectric	Color	Coaxial Cable (RG)	Use Die No.	NET PER 100	
						100	1000
31F2558	GSW- 90	.053	Red	178A/U 178B/U 196/U	4451	1.80	9.00
31F2559	GSW-100	.058	Yellow	161/U	4452	1.82	9.10
31F2560	GSW-110	.075	Blue	174/U 179A/U 179B/U 187/U 188/U	4453	1.88	9.40
31F2561	GSW-120	.096	Green	122/U	4454	1.60	8.00
31F2562	GSW-130	.120	Black	58/U 58A/U 58B/U 58C/U 141/U 141A/U 180/U 180A/U 195/U	4455	1.68	8.20
31F2563	GSW-150	.130	Green	55/U 55A/U 55B/U 142/U 142A/U 223/U	4456	1.70	8.50
31F2564	GSW-160	.151	Red	59/U 59A/U 59B/U 62/U 62A/U 62B/U 124/U 140/U 210/U	4457	1.76	8.80
31F2565	GSW-180	.170	Blue	71/U 71A/U 71B/U 108/U	4458	2.22	11.10
31F2566	GSW-200	.202	Yellow	54A/U 126/U 134/U 143A/U	4459	2.56	12.80



One Piece Connectors

TWO PIECE CONNECTOR FOR SHIELDED AND COAXIAL CABLE

Permanent compression method for reliable grounding, termination and insulation of shielded and coaxial cable. Lowers production costs. Noise free; neat, simple, solderless, and dielectric preserved. See installation tool WT-440.

INNER SLEEVES

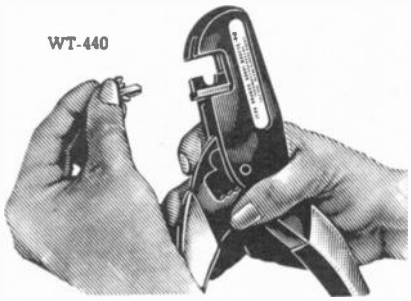
Stk. No.	Type	I.D.	O.D.	Color Code	MS Number	NET PER 100		
						100	1000	5000
31F2543	GSB-134	.134	.156	Orange	MS21981-134	3.72	2.66	2.00
31F2544	GSB-156	.156	.193	Red	MS21981-156	3.72	2.66	2.00

GSB

GSC

OUTER SLEEVES

Stk. No.	Type	I.D.	O.D.	Color Code	MS Number	Die	NET PER 100		
							100	1000	5000
31F2545	GSC-225	.225	.256	Purple	MS21980-225	WT-4409	3.72	2.66	2.00
31F2546	GSC-261	.261	.267	Yellow	MS21980-261	WT-4411	3.72	2.66	2.00



WT-440

Featuring Interchangeable Dies

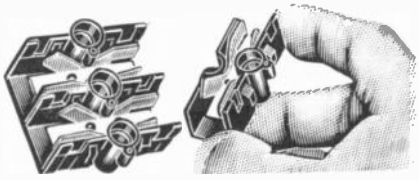
● NEW INSTALLATION TOOL FOR ABOVE CONNECTORS

Model WT-440. Lightweight aluminum hand tool with comfortable cushion-grip handles

31F2567. NET **52.00**

31F2568	Model 4451	31F2572	Model 4455	31F2576	Model 4459
31F2569	Model 4452	31F2573	Model 4456	31F2577	Model 4409
31F2570	Model 4453	31F2574	Model 4457	31F2578	Model 4411
31F2571	Model 4454	31F2575	Model 4458		

All dies. NET **36.00**



Sectional Terminal Blocks

● NEW SECTIONAL TERMINAL BLOCKS AND MARKERS

Modular terminal blocks accommodate .240 x .032 types of snap on terminals.

Stk. No.	Type	Description	NET PER 100		
			NET EACH	PER 100	PER 1000
31F2547	MTB-1	Individual blocks	.30	20.00	15.60

Stk. No.	Type	Description	NET EACH
31F2548	MTB-1M	Ten, 20 Sect. marker strips	4.00

VINYL SELF-INSULATED DISCONNECTS

Stock No.	Type	Fig.	Tab Size	Wire Range	Max. Ins.	Wgt. Per 100	100	500	1000
31F2510	18RA-250F			22-18	.150	3	8.00	6.25	5.00
31F2511	14RB-250F	K	.250x 032	16-14	.170	3	8.00	6.25	5.00
31F2512	10RC-250F			12-10	.210	4	10.00	7.81	6.25

Fig. A

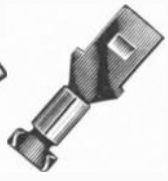


Fig. B

Fig. C

NON-INSULATED DISCONNECTS

31F2513	A18-250			22-18		.3	5.44	4.25	3.40
31F2514	B14-250	A	.250x 032	16-14		.3	5.44	4.25	3.40
35F2515	C10-250F	A		12-10		.4	9.68	7.56	6.05
31F2516	A18-110F	A		22-18	.086	.3	8.40	6.56	5.25
31F2517	B14-110F		.110x.032	16-14	.117	.3	8.40	6.56	5.25
31F2600	B14-250A (B252G)	C	.250x.032	20-14	.187	.4	6.32	4.94	3.95
31F2601	B14-250F (250-G)	A	.250x.032	20-14	.187	.4	5.68	4.44	3.55
31F2602	B14-250T (B251G)	B	.250x.032	20-14	.170	.3	5.68	4.44	3.55
31F2603	B14-D (B-23)	D		20-14	.187	.4	7.04	5.50	4.40

Note: Flat Tabs ¼" Straight Female

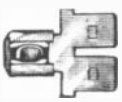


Fig. E

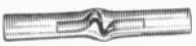


Fig. F

INSULATED COUPLER & DISCONNECT ADAPTER

Stock No.	Type	Fig.	Tab Size	Wgt. Per 1000	Net Per 100		
					100	500	1000
31F2518	RB14-250	F	.250x.032	7	7.04	5.50	4.40
31F2519	F250-TA	E	.250x.032	3	7.04	5.50	4.40

STA-KON INSTALLING TOOLS

Stock No.	Type	Fig.	For Use With STA-KON Type	NET
31F177	WT100M	G	A, B, C, AB, RA, AB, RC	5.50
31F265	WT111M	....	A, B C	4.75
31F179	WT-161	I	A, B C, RA, RB, RC	7.00

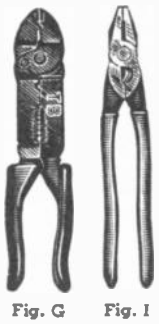


Fig. G

Fig. I

Fig. J

INSULATED STA-KON KITS

Stock No.	Type	Kit Contents	NET
31F264	PK4	WT152 tool plus 450 asst'd insul. terms	38.00
31F263	#20	WT-111M tool plus 100 Ea. A18-10, B14-10; 30 Ea. C10-10	11.50

T&B ENGINEERED Thomas & Betts Terminals

● *NEW* **FIG. A LOCK-ON FORK TERMINALS WITH RELIABILITY OF A RING TONGUE TERMINAL**

Combine a design configuration and a ney alloy; combines best advantages of all types of terminals.

Stk. No.	Type	Screw Size	Wire Size	Std. Pkg.	Unit Qty.	Net per 100 Less Than Unit	Net per 100 Unit Qty.	Net per 100 Std. Pkg.
31F2550	RA2217	6	#22-18	1000	100			
31F2551	RA2227	6	#22-18	1000	100			
31F2552	RA2247	8	#22-18	1000	100			
31F2553	RA2257	10	#22-18	1000	100	6.22	4.66	3.89
31F2554	RB2207	6	#16-14	1000	100			
31F2555	RB2217	6	#16-14	1000	100			
31F2556	RB2237	8	#16-14	1000	100			
31F2557	RB2257	10	#16-14	1000	100			
FIG. F—NYLON INSULATED FORK TONGUE TERMINALS								
31F236	RA18-6F	22-16	6	2000	100			
31F237	RA18-8F	22-16	8	500	100	8.88	6.94	5.55
31F238	RA18-10F	22-16	10	500	100			
31F125	RA18-14F	22-16	1/4	500	100	10.16	7.94	6.35
31F231	RB14-6F	16-14	6	2000	100			
31F232	RB14-8F	16-14	8	500	100	8.88	6.94	5.55
31F233	RB14-10F	16-14	10	2000	100			
31F126	RB14-14F	16-14	1/4	500	100	10.16	7.94	6.35
31F127	RC10-6F	12-10	6	500	50	11.12	8.69	6.95
31F234	RC10-10F	12-10	10	2000	50	11.12	8.69	6.95
31F235	RC10-14F	12-10	1/4	500	50	12.16	9.50	7.60
FIG. G—VINYL FORK TONGUE TERMINALS								
31F129	18RA-6F*	22-18	6	500	100	6.48	5.06	4.05
31F130	18RA-8F*	22-18	8	500	100	6.48	5.06	4.05
31F131	18RA-10F*	22-18	10	500	100	6.48	5.06	4.05
31F132	14RB-6F*	16-14	6	500	100	6.48	5.06	4.05
31F133	14RB-8F*	16-14	8	500	100	6.48	5.06	4.05
31F134	14RB-10F*	16-14	10	1000	100	6.48	5.06	4.05
31F136	10RC-10F*	12-10	10	1000	50	8.16	6.38	5.10
FIG. H—NON-INSULATED FORK TONGUE TERMINALS								
31F214	A18-6F	22-18	6	1000	100			
31F138	A18-8F	22-18	8	1000	100	3.84	3.00	2.40
31F215	A18-10F	22-18	10	1000	100			
31F139	A18-14F	22-18	1/4	500	100	5.20	4.06	3.25
31F216	B14-6F	20-16	6	2000	100			
31F140	B14-8F	20-16	8	2000	100	3.84	3.00	2.40
31F217	B14-10F	20-16	10	5000	100			
31F141	B14-14F	20-16	1/4	500	100	5.20	4.06	3.25
31F142	C10-6F	16-10	6	500	50			
31F143	C10-8F	16-10	8	500	50	5.60	4.38	3.50
31F218	C10-10F	16-10	10	5000	50			
31F144	C10-14F	16-10	1/4	500	50	6.24	4.88	3.90
31F158	B14-6FS†	20-14	6	500	100	4.48	3.50	2.80

SPLICES

Stock No.	Type	Fig.	Wire Range	Std. Pkg.	Unit Quan.	Net per 100 Less Than Unit	Net per 100 Unit Quan.	Net per 100 Std. Pkg.
31F250	2RA18*	K	22-18	500	100	7.76	6.06	4.85
31F251	2RB14*	K	16-14	1000	100	7.76	6.06	4.85
31F252	2RC10*	K	12-10	500	50	11.28	8.81	7.05
31F247	2A18	L	22-18	2000	100	4.80	3.75	3.00
31F248	2B14	L	20-14	2000	100	4.80	3.75	3.00
31F249	2C10	L	16-10	2000	50	6.64	5.19	4.15
31F260	2A20	M	22-20	500	100	6.40	5.00	4.00
31F261	2B16	M	18-16	500	100	6.40	5.00	4.00
31F163	2A22-20	N	22-20	500	100	3.84	3.00	2.40
31F164	2B18-16	N	18-16	500	100	4.24	3.31	2.65
31F165	2C14-12	N	14-12	500	50	5.52	4.31	3.45
31F239	RB44	O	2#20-2#16	2000	100	3.68	2.88	2.30
31F240	RC55	O	3#16-3#14	2000	50	6.08	4.75	3.80
31F171	PT66M	S	3#12	1000	100	4.80	3.75	3.00
31F172	PT70	P	3#12	2000	200	2.08	1.63	1.30
31F173	PT70M	P	4#12	2000	200	2.08	1.63	1.30
31F174	PT80	P	4#10	500	50	4.72	3.69	2.95
31F258	B14-250A	V	20-14	500	50	6.32	4.94	3.95

(*) Avail. with exp. insul. † Fig. J

FIG. B—NYLON INSULATED RING TONGUE TERMINALS

Stock No.	Type	Wire Size	Stud Size	Std. Pkg.	Unit Quan.	Net per 100 Less Than Unit	Net per 100 Unit Quan.	Net per 100 Std. Pkg.
31F100	RZ22-2	26-22	2	500	100			
31F101	RZ22-4	26-22	4	500	100			
31F104	RZ22-10	26-22	10	500	100	8.88	6.94	5.55
31F105	RA18-4	22-16	4	500	100			
31F219	RA18-6	22-16	6	500	100			
31F220	RA18-8	22-16	8	500	100			
31F221	RA18-10	22-16	10	2000	100			
31F222	RA18-14	22-16	1/4	500	100	10.16	7.94	6.35
31F223	RB14-6*	16-14	6	500	100	8.88	6.94	5.55
31F224	RB14-8*	16-14	8	2000	100	8.88	6.94	5.55
31F225	RB14-10*	16-14	10	2000	100	8.88	6.94	5.55
31F226	RB14-14*	16-14	1/4	500	100	10.16	7.94	6.35
31F228	RC10-8*	12-10	8	500	50	11.12	8.69	6.95
31F229	RC10-10*	12-10	10	2000	50	11.12	8.69	6.95
31F230	RC10-14*	12-10	1/4	500	50	12.16	9.50	7.60
FIG. C—VINYL INSULATED RING TONGUE TERMINALS								
31F107	18RA-4*	22-18	4	500	100	6.48	5.06	4.05
31F108	18RA-6*	22-18	6	500	100	6.48	5.06	4.05
31F109	18RA-8*	22-18	8	500	100	6.48	5.06	4.05
31F113	14RB-6*	16-14	6	500	100	6.48	5.06	4.05
31F114	14RB-8*	16-14	8	500	100	6.48	5.06	4.05
31F115	14RB-10*	16-14	10	1000	100	6.48	5.06	4.05
31F116	14RB-14*	16-14	1/4	500	100	7.60	5.94	4.75
31F117	10RC-6*	12-10	6	500	50	8.16	6.38	5.10
31F119	10RC-10*	12-10	10	1000	50	8.16	6.38	5.10
31F120	10RC-14*	12-10	1/4	500	50	9.92	7.75	6.20
FIG. D—NON-INSULATED RING TONGUE TERMINALS								
31F121	A18-4	22-18	4	500	100			
31F200	A18-6	22-18	6	1000	100			
31F201	A18-8	22-18	8	1000	100			
31F202	A18-10	22-18	10	5000	100	3.84	3.00	2.40
31F122	B14-4	20-14	4	500	100			
31F204	B14-6	20-14	6	2000	100			
31F205	B14-8	20-14	8	2000	100			
31F206	B14-10	20-14	10	5000	100			
31F207	B14-14	20-14	1/4	500	100	5.20	4.06	3.25
31F208	C10-6	16-10	6	500	50			
31F209	C10-8	16-10	8	1000	50	5.60	4.38	3.50
31F210	C10-10	16-10	10	5000	50			
31F211	C10-14	16-10	1/4	1000	50	6.24	4.88	3.90
FIG. E—NON-INSULATED RING TONGUE TERMINALS								
31F212	B14-6G	20-14	6	500	100			
31F123	B14-8G	20-14	8	500	100	5.20	4.06	3.25
31F213	B14-10G	20-14	10	500	100			
FIG. I—NON-INSULATED RING TONGUE TERMINALS								
31F145	B14-6FG	20-14	6	500	100	5.20	4.06	3.25
31F146	B14-8FG	20-14	8	500	100	5.20	4.06	3.25
31F148	B14-14FG	20-14	1/4	500	100	6.24	4.88	3.90
FIG. W—NYLON INSULATED FLANGED TONGUE TERMINALS								
31F150	RA18-8FS	22-16	8	500	100	8.88	6.94	5.55
FIG. J—NYLON INSULATED FLANGED TONGUE TERMINALS								
31F153	RB14-8FS	16-14	8	500	100	8.88	6.94	5.55
FIG. K—NON-INSULATED FLAG TONGUE TERMINALS								
31F241	AB14-6A	20-14	6	500	100	5.20	4.06	3.25
31F243	AB14-10A	20-14	10	500	100	5.20	4.06	3.25
31F245	C10-8A	16-10	8	500	50	6.72	5.25	4.20

(*) Self insulated terminals, available with expanded insulation. Write for complete ordering information.

Installation Tools for Terminals and Splices on Facing Page

You Can Depend on NEWARK for Everything

Same Day Shipment from On-the-Shelf Stocks

Tapewriters and Accessories DYMO

● NEW MARK VI LABELMAKER

Model 1002. Embosses both ⅜" & ¼" vinyl tapes. Dual track for quick change of tape widths. Letter spacing changes from reg. to wide by moving spacing button. Interchangeable embossing wheels; allow you to vary character size. Prints vertically, or uses special characters, symbols, or numbers. Handy tape cut off lever. Letter size, .150". Characters: A-Z, 0-9, $ c % & ' - /. Cycolalc plastic body. Shpg. wt. 5½ oz.

58F720. NET. **6.88**

● NEW TOOL 'N' TAPE KIT

Model 7051. Complete identification kit. Contains: 1 Mark VI Labelmaker wit Reg. size letter and 1 giant letter embossing wheel; 3 rolls of ⅜" and 2 rolls ¼" tapes.

58F721. NET. **9.95**

● NEW TAPEWRITERS

Models 1200 and 1250. Accommodate both ½" or ⅜" x 200" Guide-Pak economy rolls. Both feature "Executive" letter spacing. Model 1200: comes with "Universal" embossing wheel for upper & lower case leters and regular & sub-script numbers. Embossing wheels #3000-02 with .310" vert. Embossing wheel and 3000-03 .350" Horizontal wheel are interchangeable. New "Designer" extended-letter typies used in the new model 1250. Aluminum bodies and baked enamel finish. Shpg. wt. (1200) 26 oz. Shpg. wt. (1250) 21 oz.

58F722. Model 1200. **NET** **69.95**

58F723. Model 1250. **NET** **54.95**

● NEW TOOL 'N' TAPE KIT

Model 1200-01. Tool and Tape kit in carrying case. Contains: 1 1200 tapewriter; 10 Guide-Pak tape rolls; "Giant," Universal," and "Vertical" letter embossing wheels.

58F724. NET. **89.95**

Model 1250-01 Tool and Tape kit in carrying case. Contains: 1 1250 tapewriter; 10 Guide-Pak tape rolls; "Standard" and "Optimum" letter embossing wheels.

59F725. NET. **74.95**

● NEW 2300 TAPEWRITER

Model 1075. Embosses letters a full ½" high on ¾" vinyl tape. Prints 52 characters vertically and 52 characters horizontally, all with the same wheel. Features a "Pull-Tab" backing remover. Tapewriter is portable, durable, and easy to operate. Cast aluminum body and baked enamel finish. Shpg. wt. 15 lbs.

58F728. NET. **112.46**

● NEW 2300-01 TOOL 'N' TAPE KIT

Model 7701. Portable lid kit. Contains: 1 M-75 Tapewriter; 8 magazines of ¾" x 36' vinyl tape; and 1 carrying case.

58F727. NET. **157.46**

Tapes for 1075 only

Stk. No.	Type	Color	Each	Stk. No.	Type	Color	Each
58F777	5134-2	Red	6.95	58F779	5134-6	Blue	6.95
58F778	5134-5	Green	6.95	58F780	5134-9	Black	6.95

DYMO VINYL TAPES

Manufactured from thermo-plastic bonded to a pressure-sensitive adhesive backing. Hi-gloss finish. All guidepak tape may be substituted for series 158 or 5201 if cartridge is removed first. Used with models 1200, 1250, 1203 and 1207.

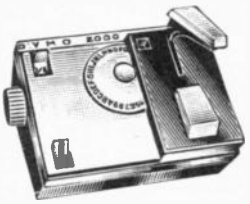
Guide-Pak Economy Length ½" x 200"

Stk. No.	Type	Color	Each	Stk. No.	Type	Color	Each
58F728	5163-1	Clear	1.75	58F734	5163-8	Brown	1.75
58F729	5163-2	Red		58F735	5163-9	Black	
58F730	5163-4	Oran.		58F736	5163-12	Grey	
58F731	5163-5	Green		58F737	5163-13	Gold	
58F732	5163-6	Blue		58F738	5163-15	Purp.	
58F733	5163-7	Yell.		58F739	5163-60	Wood	

Guide-Pak Economy Length ⅜" x 200"

Stk. No.	Type	Color	Each	Stk. No.	Type	Color	Each
58F740	5209-1	Clear	1.35	58F746	5209-8	Brown	1.35
58F741	5209-2	Red		58F747	5209-9	Black	
58F742	5209-4	Oran.		58F748	5209-12	Grey	
58F743	5209-5	Green		58F749	5209-13	Gold	
58F744	5209-6	Blue		58F750	5209-15	Purp.	
58F745	520917	Yell.		58F751	5209-60	Wood	

● NEW DESK TAPEWRITER



Model 2000-00. Dual-track embossing machine. Selector knob speeds letter dialing by 25%. Eliminates operator fatigue. Dual track embosses ⅜" or ¼" tape. Non-marking rubber feet protect furniture and hold machine steady. Variable letter spacing. Takes six interchangeable embossing wheels. Automatic "Pull-Tab" cutoff. View window allows user to see embossed letters before they emerge. Includes 1 magazine ⅜" tape. Fiber-filled plastic base and satin finished chrome top. "Optimum" letter embossing wheel. Shpg. wt. 2 lb.

58F752. NET. **29.95**

Model 2000-01. Kit contains: 1 Desk Tapewriter; 2 rolls ⅜" and 2 rolls ¼" tape. Standard letter and vertical letter embossing wheels plus Optimum wheel incl. with machine.

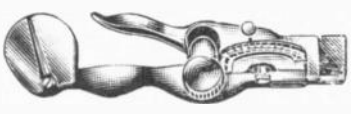
58F753. NET. **39.95**

● NEW 36' ECONOMY TAPE MAGAZINE

For use in desk model only. Exclusive pressure-sensitive adhesive backing.

⅜" x 36'				¼"x36'			
Stk. No.	Type	Color	Each	Stock No.	Type	Color	Each
58F754	5219-02	Red	2.95	58F763	5220-02	Red	2.25
58F755	5219-04	Oran.		587644	5220-04	Oran.	
58F756	5219-05	Green		58F765	5220-05	Green	
58F757	5219-06	Blue		58F766	5220-06	Blue	
58F758	5219-07	Yellow		58F767	5220-07	Yellow	
58F759	5219-08	Brown		58F768	5220-08	Brown	
58F760	5219-09	Black		58F769	5220-09	Black	
58F761	5219-12	Grey		58F770	5220-12	Grey	
58F762	5219-60	Wood		58F771	5220-60	Wood	

TAPEWRITERS



Models 1203, 1207, 1101. Emboss ½" vinyl tape. Accommodate ½" x 200" Guide-Pak tape rolls. 1203 has straight cut-off. 1207 has round cut-off. 1101 (M-11) is mainly for use with ½" metal embossing tapes. Equipped with hardened steel embossing wheel. Has a built in hole punching device; allows user to punch a 3/32" hole in the end of lables. Shpg. wt. (1203 & 1207) 21 oz. shpg. wt. (1011) 22 oz.

58F772. Model 1203. **NET** **34.95**

58F773. Model 1207. **NET** **34.95**

58F642. Model 1011. **NET** **31.46**

MODEL 1203/1207 TOOL 'N' TAPE KIT

Perfect system for rugged factory and industrial work. Kit contains: choice of either model tapewriter; 2 extra embossing wheels (vertical and special character); 10½" x 200" Guide-Pak tape rolls of assorted colors; and carrying case.

58F774. Model 1203-01 **NET** **49.95**

58F775 Model 1207-01 **NET** **49.95**

● NEW TOOL 'N' TAPE KIT

Model 7593. Kit makes permanent raised letter labels to meet most specialized requirements. Kit includes: 1 M-11 tapewriter; 1 steel vertical embossing; 1 plastic horizontal embossing wheel; 5 rolls contrast aluminum tape with adhesive backing; 5 rolls of vinyl tape in assorted colors; and black texon carrying case.

58F776. NET **51.46**

METAL TAPES

Available in a variety of metals and metal alloys. Use when labelling job calls for exposure to extreme heat, chemical and atmospheric corrosion, or rough use. **For M-11 only.**

Aluminum

Stk. No.	Adhesive Type	Size	Net	Stk. No.	Non-Adhesive Type	Size	NET
58F636	358	½"x12'	1.85	58F631	310	½"x16'	.85

Copper

58F632	313	½"x12'	2.40	58F634	348	½"x21'	1.85

Stainless Steel

				58F633	325	½"x21'	1.25

Zinc

				58F637	361	½"x15'	1.10

Monel

				58F635	355	½"x21'	2.25

Ungar® Soldering Equipment

7800 HOT-VAC PRINTED CIRCUIT DE-SOLDERING AND CLEANING TOOL

Provides fast, safe 3-fingered de-soldering. Utilizes special coating that prevents solder from adhering to tip and from clogging orifice. May also be used on heat-shrinkable tubing.

Stock No.	Type	1-5	6-11	12-Up
32F974	7800	10.95	8.75	8.20

Type 7805. "Solder-off" desoldering bulb with TFE tip for PC boards.

Stock No.	Type	1-9	10-49	50-Up
32F975	7805	1.10	1.00	.95

TYPE 777 CLEAN ROOM SOLDERING HANDLE

Clean room Grip. Comfortable, lightweight, fatigue-free design of popular 776 handle. Heat-resistant plastic handle comes in eye-soothing blue pastel shade. The complete line of soldering tips, heating units, thread-in and thread-on soldering tips widely used with UNGAR's 776 red handle, also fit this blue pastel handle.

Stock No.	Type	1-9	10-49	50-Up
33F030	777	1.66	1.39	1.28

776 UNGAR SOLDER PENCIL

Type 776 Handle. Many advantages! Spring socket holds tip firmly. Thermal and electrical insulation. Stainless steel heat deflector. Octagon guard washer. Larger "soft touch" grip. Thermo-stabilized phenolic. Polyvinyl insulated cord. Can be used with the Thread-on heating units and the inexpensive Elk-alloy tiplets, or with standard tips alone. Length 7". U.L. approved. Shipping weight, 5 ounces.

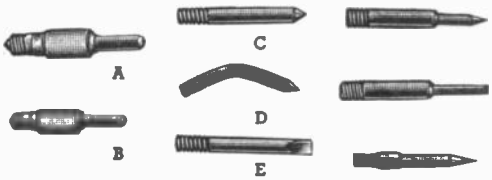
33F071	Type	Watts	1-9	10-49	50-Up
Stk. No.	776	47½	1.43	1.19	1.07

TYPE 7625 COIL-A-CORD

Eliminates tangled and twisted cords . . . keeps cord automatically coiled out of the way of the operator. For either standard or Imperial line of soldering irons. 600°F-650°F. Shpg. wt. 6 oz.

Stock No.	Type	1-9	10-49	50-Up
33F074	7625	1.07	.90	.84

THREAD-IN AND TIPLETS — ⅛" TAP



Type 535 thread-in is 23¼ W, 600°F-650°F. **Type 1235** is 37½ W., 700°F-750°F. All tiplets are iron clad, cadmium copper, silver plated, except (*) unplated; and are interchangeable.

Stk. No.	Type	Fig.	Description	1-9 Each	10-49 Each	50-Up Each
33F081	535	A	Thread-in	1.35	1.11	1.01
33F085	1235	B	Thread-in	1.70	1.42	1.28
33F082	331*	C	Pencil	.21	.17	.15
33F083	332*	D	Offset Pencil			
33F084	332*	E	Chisel			
33F685	PL340	.....	Micro Needle	.54	.44	.40
33F686	PL338	.....	Needle			
33F689	7154	F	Pencil			
33F690	7155	G	Chisel			
33F037	7012	H	Copper Point			
33F038	7062	H	Iron Clad Point	1.04	.84	.78

Type PL—Special hi-heat tiplets.

STANDARD LINE IRON HOLDER

Type £000. Cradles iron safely and securely in one place. Shpg. wt. 1 lb.

33F687, 1-9, Ea. 1.85
10-49, Ea. ..... 1.49 50-Up 1.37

DE-SOLDERING KIT REPAIRS PRINTED CIRCUITS

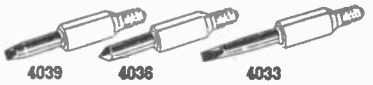
Type 270. De-Soldering Kit. 3 circular desoldering tiplets of 1", ¾", ⅝" dia. and 9-, 7-, and 5-pin tube sockets. Slotted 1x3/16" tiplet: Slot opening, 0.040". Super Hi-Heat Unit, 47½ W, delivers 600 to 850 F. Handle has extra-flexible vinyl-insulated cord. Shipping weight, 1 lb.

Stk. No.	Type	1-5	6-11	12-up
33F097	270	7.26	6.72	6.22

DESOLDERING TIPS

Use with 4045 heating unit only. Fast and neat.

Stk. No.	Type	Style	1-9	10-49	50-Up
33F632	862	Offset slotted	.76	.64	.57
33F098	857	Slotted			
33F633	863	Cube			
33F634	856	Cup ⅝"			
33F635	855	Cup ¾"			
33F636	854	Cup 1"			
33F637	861	Triangle			
33F638	858	Bar			



SUPER HI-HEAT TIPS & HEATING UNITS

Tips are tellurium copper, Iron clad, silver plated. 47½ w.

Stk. No.	Type	Heat	Desc.	1-9	10-49	50-Up
33F086	4033	900°F	Long chisel	2.83	2.33	2.15
33F087	4036	1000°F	Pyramid			
33F088	4039	1000°F	Chisel			
33F089	4035	800-850°F	Thread-in heating unit for use with 300 Ser. Tiplets ⅛" Tap, 6-32 Thr.			
33F029	4045	800-850°F	Heating Unit 3/16" tap-800 ser.			

4025 HOT KNIFE

Cuts through epoxy and film coatings on P.C. boards; Cuts and seals synthetic fabrics, vinyl films styrofoams, nylon, dacron, and other plastic materials. Also trims flash from rubber and plastic molded products. Heat from the knife seals the fibers to prevent unraveling. Extreme pressure is not needed when using this tool; It is designed to cut with heat, not pressure. Includes 47½ w heating unit with collet closure. Has a replaceable blade. Can be used with X-Acto blade Nos. 10, 11, 12, 14, 16 and 17. Blade temperature is 500° F.

Stock No.	Type	1-9	10-49	50-Up
32F881	4025	3.16	2.91	2.61

EXTRA-LONG 3/16" TIPS

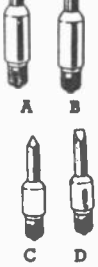
800 Series Thread in tiplets 3/16" O.D. Iron-clad tiplets last 10 times longer because they resist destructive action of solder, require less maintenance and are easier to tin. All can be used with #4045 heating unit.. Iron clad, silver plated. Except (*) Tellurium copper.

Stk. No.	Type	Lght.	Desc.	1-9 Each	10-49 Each	50-Up Each
33F099	PL834	1¾"	Tip	.90	.72	.67
33F641	PL833	1¾"	Long Chisel	.90	.72	.67
33F642	PL823	1"	Pyramid	.60	.48	.45
33F643	823*	1"	Pyramid	.22	.18	.16
33F644	PL824	1"	Long Chisel	.60	.48	.45
33F645	824*	1"	Long Chisel	.22	.18	.16

HI-HEAT REPLACEMENT TIPS

Heavy-duty 37½-watt element for high-speed production soldering. Consists of element and tip as in standard series. For 777 or 776 handles. 750°F-800°F.

Stk. No.	Type	Fig.	Description	1-9 Each	10-49 Each	50-Up Each
33F078	1236	A	Pyramid	1.70	1.42	1.28
33F079	1239	B	Chisel			
33F646	1233	....	Long chisel			



REPLACEMENT TIPS

Standard Tips. Get up to full 600 degrees in 90 seconds. Rated at 23½ watts.. Complete heating element and tip for 776 and 777 handles. 650°F-700°F.

33F072	536	C	Pyramid	1.35	1.11	1.01
33F076	539	D	Chisel			
33F647	533	....	Long chisel			

IMPERIAL® LINE

IMPERIAL SOLDERING IRONS

Meets every demand for a cool, light-weight easy-handling iron. Precise tip temperatures, complete versatility and superior handling ease. Built to take years of shop punishment. All components are interchangeable with Ungar imperial line. They are NOT interchangeable with the Standard line. 115 volts AC-DC.

CORD SETS 2-WIRE

Stk. No.	Type	Color	1-9	10-99	100-Up
32F903	6102-1	Turquoise	1.97	1.66	1.50
32F904	6102-2	Beige			
32F905	6102-3	Ivory			

CORD SETS 3-WIRE NEMA PLUG

32F906	6103-1	Turquoise	2.94	2.47	2.24
32F907	6103-2	Beige			
32F908	6103-3	Ivory			

IMPERIAL® HANDLES

Slim, functionally-designed PERMA-COOL IMPERIAL handle. Features double cushion of air, combined with five heat transition surfaces, evenly dissipates heat, keeping the handle cool and comfortable. Built to take years of shop punishment. Handles are available in three select pastel colors: beige, ivory and turquoise. Handle high strength polycarbonate resin with die cast aluminum heat sink. Diameter at grip—0.8". Length 4.7" (including heat sink). Weight 1 oz. Rated at 115 volts AC-DC. Less cord set.

Stock No.	Type	Color	1-9	10-99	100-up
32F900	6100-1	Turquoise	1.38	1.15	1.03
32F901	6100-2	Beige			
32F902	6100-3	Ivory			

IMPERIAL HEAT CARTRIDGES

Imperial heat cartridges are made of a temperature resistant stainless steel body and copper alloy heat collector. Threaded end of the collector is designed and engineered to provide maximum heat transfer. Thread section is ungarized to reduce corrosion and tip seizure. All cartridges fit the IMPERIAL PERMA-COOL handle and can be changed at the bench with easy slip-in, twist-lock action. Use on tight, high-density circuitry requiring precision tip temperatures and extreme care in soldering. Ideal for heavy-duty plant service maintenance but light enough for fatigue-free production line use.

Stock No.	Type	Watt	Heat Range	Dia.	Weight	1-9	10-99	100-up
32F914	6202	25	600-800F	0.363"	1.1 oz.	3.74	3.14	2.82
32F913	6201	30	650-850F	0.363"	1.1 oz.	3.74	3.14	2.82
32F912	6200	40	750-950F	0.363"	1.1 oz.	3.74	3.14	2.82
32F966	6203	60	850-1150F	0.363"	1.1 oz.	4.29	3.66	3.28

TIPS FOR 25, 30, 40, 60 WATT CARTRIDGE

6304

6316

6318

Imperial Mini-Tip thread-on soldering tips. Designed for multi-leads, joints and microminiature connections. Material: —Iron Clad, Gold Plated (24 kt.); except (*)—Tellurium Copper. Av. shpg. wt., 3 oz.

Stock No.	Type	Shape	Size	1-9	10-99	100-Up
32F915	6304	Mic-chisel	3/64x 1/2"	.96	.80	.70
32F916	6305	Micro-spade	3/64x 1/2"	.96	.80	.70
32F917	*6312	Pencil	1/8x 3/4"	.43	.36	.32
32F918	6313	Pencil	1/8x 3/4"	.96	.80	.70
32F920	6316	Pencil Offset	1/8x 3/4"	.96	.80	.70
32F921	*6318	Long Taper Chisel	1/8x 3/4"	.43	.36	.32
32F922	6319	Long Taper Chisel	1/8x 3/4"	.96	.80	.70
32F923	*6324	Long Taper Pyr.	1/8x 3/4"	.43	.36	.32
32F924	6325	Long Taper Pyr.	1/8x 3/4"	.96	.80	.70
32F926	6331	Screwdriver	1/8x 3/4"	.96	.80	.70
32F927	6333	X-long Screwdriver	1/8x 3/4"	.96	.80	.70
32F929	6336	Spade	1/8x 3/4"	.96	.80	.70
32F931	6366	Long Taper Chisel	3/16x 3/4"	1.11	.93	.83
32F935	6372	Screwdriver	3/16x 3/4"	1.11	.96	.83
32F942	6390	Screwdriver	3/16x1 1/2"	1.14	.97	.87
32F948	6424	Long Taper Pyramid	1/8x 3/4"	1.14	.97	.87
32F952	6474	Long Taper Chisel	3/8x 3/4"	1.42	1.15	1.00
32F959	6481	Tap. Screwdriver	3/4x3/32"	.96	.80	.70
32F960	6482	Micro-Spade Stepped	3/32x1 1/16"	.96	.80	.70
33F042	*6368	Long Taper Pyr.	3/4x.187	.51	.44	.38
33F043	6373	Slotted	3/4x.187	.96	.80	.70
33F044	*6473	Long Taper Chisel	3/4x.375	.51	.44	.38

40-WATT ALL-PURPOSE SOLDERING IRON

Model 6010. Features the most popular IMPERIAL components used in production, development and service. Consist of one type 6100 handle, one type 6102 two-wire cord, one type 6200 40-watt heat cartridge. Delivers 750°F to 950°F tip temperature. Comes with three multi-purpose MINI-TIP thread-on soldering tips.

Stk. No.	Type	1-5	6-11	12-Up
32F971	6010	6.61	6.40	6.05

MODEL 6601 SOLDER IRON

Complete iron. Consists of 6100-5 black handle; 6102-5 black 2 wire cord; 6207-100 with heat cartridge; 6520 heavy duty soldering tip. Heat cartridge rated 115v. AC-DC. UL approved.

Stk. No.	Type	1-9	10-99	100-Up
32F978	6601	10.68	8.51	7.97

IMPERIAL® "SAFETY-GUARD" HOLDER

Type 6800. Specially designed for the IMPERIAL . . . avoids handle damage while protecting operators against hot tip burns. Attaches quickly to the top or underside of the work bench. Black with special gold cage guard.

Stk. No.	Type	1-9	10-99	100-Up
32F957	6800	1.85	1.49	1.37

SANDARD LINE HI-SPEED HEATING UNITS

Threaded heating units achieve four times heat transfer efficiency because of greater heat path and better compatibility. Thread-end design prevents solder from running back into threads and reduces thread oxidation. Fast reliable connections are assured. Meets top requirements for faster repeat production line soldering.

Stk. No.	Type	Description	1-9 Each	10-49 Each	50-Up Each
33F677	4037	47½W, Thread-on	2.83	2.33	2.15
33F678	1237	37½W, Thread-on	1.86	1.53	1.42
32F977	537	23½W, Thread-on	1.53	1.28	1.15

15-WATT CARTRIDGE AND TIPS

Cartridge: 614-743°F. .312" dia. 6⅞" length. Wt.: .89 oz. Tips: Tellurium copper, iron clad, 24 kt. gold plated.

Stk. No.	Type	Descrip.	Dimensions	1-9	10-99	100-Up
32F981	6206	Cartridge	L. — 6⅞"	3.74	3.14	2.82
32F962	6550	Screwdriver	.040 x .40	1.10	.92	.83
32F963	6551	Spade	.050 x .40			
32F964	6553	Chisel	.050 x .40			
32F965	6554	Pencil	.050 x .40			

100 WATT CARTRIDGE AND TIPS

Type 6500. Iron Clad, Gold Plated; fits only the 100 Watt Heat Cartridge.

Type 6520. A Heavy-Duty thread-on soldering tip in a multi-use chisel. For type 6207 Heavy-Duty Cartridge only. Provides maximum area and heat transfer for large connections.

Stk. No.	Type	Descrip.	Dimensions	1-9	10-99	100-Up
33F040	6500	Cartridge	L. — 8½"	2.25	1.88	1.69
32F968	6207	Chisel	1½" x ½"	6.22	5.00	4.68
32F969	6520	Chisel	½" x 1½"	1.14	.97	.87

STANDARD LINE THREAD ON SOLDERING TIPS

For use with 4037 and 1237 heating —units. Tests show 750-800 degree and 850-900 degree temperatures are maintained, with 100% increase in recovery rate. *Iron clad, silver plated.

Stk. No.	Type	Description	L. x O.D.	1-9	10-49	50-Up
33F679	PL111*	Pencil	3/4x1/8"	.70	.58	.53
33F680	111	Pencil	3/4x1/8"	.34	.27	.25
33F681	PL113*	Chisel	3/4x1/8"	.70	.58	.53
33F682	113	Chisel	3/4x1/8"	.34	.27	.25
33F691	116	Pyramid	3/4x1/8"	.34	.27	.25
33F692	PL114*	Micro Spade	3/4x1/8"	.70	.58	.53
33F693	PL116*	Pyramid	3/4x1/8"	.70	.58	.53

PRECISION POINT TIPS

For matrix soldering and micromodule assembly. Precision ground and honed to ultra-fine dim. Type 6391, Tellurium Copper; Type 6392, Tellurium Copper, Iron Clad, Gold Plated (24 kt.).

Stk. No.	Type	Dimensions	1-9	10-99	100-Up
33F045	6391	.770x.125	.69	.58	.53
33F046	6392	.770x.135	1.42	1.15	1.00

IMPERIAL DE-SOLDERING ATTACHMENT WITH TIP

Type 6825. This Attachment fits the 60, 40, 30 and 25-Watt Imperial Heat Cartridges.

Stk. No.	Type	1-5	6-11	12 & up
33F041	6825	8.58	7.07	6.61

Soldering Equipment

UNGAR "PRINCESS" SOLDERING EQUIPMENT

HANDLES

Model 6902. Handle with Two-Wire Cord. Cord has polyvinyl chloride insulation. Handle with midget thread-in socket 120 volts. AC/DC. Size: 5" L x ½" Dia. Shp. wt. 3 oz.
Model 6903. Handle With Three-Wire Cord. Similar to above except cord is 22-gauge flexible stranded with molded NEMA plug. Capsule is grounded. Ship wt. 3 oz.

Stk.No.	Type	Handles	1-9	10-49	50-Up
32F899	6902	2-Wire	2.69	2.40	2.15
32F898	6903	3-Wire	3.65	3.27	2.92

HEAT CAPSULES

For 120 Volts AC/DC operation. Heating section threaded to accept new series of ⅛" "Princess" Soldering Nibs. Length: 2¾". Ship wt. 2 oz. Will also accept complete line of ⅛" "Standard" Tiplets.

Stk. No.	Type	Watts	Temp.	1-9	10-49	50-Up
32F895	6906	6	400- 450°F	3.31	2.98	2.66
32F896	6910	10	550- 650°F			
32F897	6915	15	700- 800°F			
32F894	6918	18	900-1000°F			

SOLDERING NIBS

6950 6951 6952 6953
6960 6961 6962 6963

Stk. No.	Type	Shape	Size	Plated	1-9	10-49	50-up
32F893	6950	Pencil	.08x⅛"	Copper	.33	.30	.27
32F892	6951	Screw dr.	.68x⅛"	Copper	.33	.30	.27
32F891	6952	Spade	.61x⅛"	Copper	.33	.30	.27
32F890	6953	Point	.61x⅛"	Copper	.59	.52	.47
32F889	6960	Pencil	.62x⅛"	Gold	.59	.52	.47
32F888	6961	Screw dr.	.62x⅛"	Gold	.59	.52	.47
32F887	6962	Spade	.62x⅛"	Gold	.59	.52	.47
32F886	6963	Point	.61x⅛"	Gold	1.15	1.03	.92

Ship. wt. 3 oz.

KLEEN-TIP SPONGE, TRAY, AND REFILL

Specially processed Kleen-Tip sponge for removing oxidation and excess solder from tips. Assures proper heat flow and solder wetting may be retarded or prevented. Other materials used for this purpose cause contamination or destroy plating.

Stock No.	Type	Description	1-9 Ea.	10-49, Ea.	50-up, Ea.
33F683	400	Sponge and tray	1.00	.81	.75
33F684	455	Refill sponge	.40	.33	.30

ANTI-SEIZE LUBRICANT

Type 8001. A special lubricant designed for use on metals operating at high temperatures. Repeated use on tiplet threads helps to reduce seizure and resultant breakage of tips and heating units. Guards against tip freezing and protects against corrosion. Therefore, heat transfer is greatly improved. Wt. 4 oz.

Stk. No.	Type	1-9	10-49	50-Up
33F688	8001	.58	.48	.44

● *NEW* UNGAR LOW VOLTAGE PRINCESS SOLDERING PEN

Model 6970. Soldering pen features tip temp. range of 370-380°F @ 120V. Especially suited for precision microelectronic assembly. Complete package contains: control box, handle with cord (male plug fits control box with special 4-prong connector, 1 low voltage heat capsule, 3 popular soldering nibs — 2 copper and 1 iron plated). Note: The only interchangeable components between regular 120V Princess line and NEW 6970 Princess station are the NIBS and TIPLETS.

Stk. No.	Type	Description	1-6	6-Up
33F047	6970	Complete Station	29.95	26.95
33F049	6973	Replacement Handle	3.33	2.98
33F048	6971	Replacement Capsule	3.99	3.49

ASSEMBLED "PRINCESS" SOLDERING IRON

Consists of the following: Type 6902 handle; Type 6910, 10 watt heat capsule, Type 6950 pencil nib, Type 6951 screwdriver nib, and Type 6952 spade nib. Ship. wt. 14 oz.

Stk. No.	Type	Description	1-9	10-49	50-Up
32F885	6975	Assembled "Princess"	6.66	5.95	5.33

"PRINCESS" SOLDERING IRON

Consists of the following: Type 6902 handle Type 6910 10 watt heat capsule; Type 6951 screwdriver nib; Type 6990 "Princess" soldering iron holder equipped with Type 6991 re-fill sponge; Type 6950 pencil nib; Type 6952 spade nib. Shipping weight, 1 lb.

Stk. No.	Type	Description	1-9	10-49	50-Up
32F884	6900	"Princess" Station	9.50	8.50	7.59

● *NEW* TYPE 698S "PRINCESS DE-SOLDERETTE"

Tool for de-soldering of integrated circuits, chips and microminiature modules. Consists of the following: 18-w #6918 heat capsule with tip temp. in 600°F range; replaceable tip (#7812°) with .033 aperture; type 6902 handle. Vacuum at tip is rated at 5.5 oz. per sq. in. Shpg. wt. 4 oz.

Stk. No.	Type	Description	1-9	10-49	50-Up
32F880	6985	De-solderette	12.95	11.95	10.33
33F034	7812°	Tip .033"	.70	.58	.52

"PRINCESS" SOLDERING IRON HOLDER

Type 6990. Plastic case with metal cage and equipped with specially processed slit sponge. Ship. wt. 3 oz.

Stk. No.	Type	Description	1-9	10-49	50-Up
32F883	6990	"Princess" Holder	2.89	2.62	2.33

"PRINCESS" HOLDER SPONGE

For use with "Princess" holder Type 6990. Ship. wt. ¼ oz.

Stk. No.	Type	Description	1-9	10-49	50-Up
32F882	6991	"Princess" Sponge	.45	.40	.36

"ANTEX-PRECISION" SOLDERING IRONS

MINIATURE SOLDERING IRON

Model C. No visual obstruction of work. Safety handle will not burn or char on contact with other irons. Tips from 3/64" dia. Tip stays hot under production speed operation. Sealed element assures constant temperature. Rapid heat-up time — just 45 seconds. Tip fits over the element — no heat wasted. Cools off in 3 minutes. Ultra-flexible three-wire cord with high temperature plastic insulation allows for grounding the instrument.

33F242. Model C. Less Tips.
1-5 ..... **4.85 EA.** 6 or more ..... **4.35 EA.**

34F197. Model C. With 2-wire plug.
1-5 ..... **5.80 EA.** 6-up ..... **5.30 EA.**

34F198. Model C. With 3-wire U-ground plug.
1-5 ..... **6.10 EA.** 6-up ..... **5.60 EA.**

33F243. Replacement heating element for above.
NET EACH **2.20**

INTERCHANGEABLE TIPS FOR C IRON

Stk. No.	Size	Plated	Shape	1-49	50-Up
33F272	3/64	Nickel	Spade	.55	.50
33F244	1/32	Nickel	Spade		
33F267	1/32	Nickel	Chisel		
34F190	1/32	Nickel	Pyramid		
34F191	1/32	Nickel	Pyramid (offset)		
32F245	5/32	Nickel	Spade		
33F268	5/32	Nickel	Chisel		
33F249	3/16	Nickel	Spade		
33F269	3/16	Nickel	Chisel		
34F192	3/16	Nickel	Spade (Heavy Wall)		
34F193	3/64	Gold	Spade	1.00	.90
34F194	1/32	Gold	Chisel	1.00	.90
34F195	.....	Gold	Needle Point	1.45	1.30
33F263	3/64	Iron	Spade	1.20	1.10
33F246	1/32	Iron	Spade		
33F264	1/32	Iron	Chisel		
33F247	5/32	Iron	Spade		
33F265	5/32	Iron	Chisel		
33F248	3/16	Iron	Spade		
33F266	3/16	Iron	Chisel		
34F196	.....	Iron	Needle Point	1.65	1.50

Model ST-1. Iron stand with blue enamel finish, 8¼" high, also holds 1 lb. solder reel.
34F199 NET **2.95**

Soldering Irons and Accessories

HEXACON

HEXACON HORNET IRONS

Furnished in 115 V. Available in 230 V. Equipped with 2-conductor cord and plug. 3-conductor cord, plug available. Smallest industrial soldering irons for micro-electric soldering. Smallest tip 1/32" shortest working distance, 1 15/16" from work. Stainless steel reflector keeps handle cool. Durotherm non-freeze long-life tip. Overall length 5 7/8", 115Ac/Dc operation. Kit H10K comes with tips: HT866D (1/32" round) and HT869D (1/16" chisel) for 12 watt operation. Kit H11K, same as above but for 17 watt operation. Kit H14K comes with tips: HT654X (1/8" semi-chisel) and HT655X (1/8" chisel) for 20 watt operation. 3-wire models come equipped with safety 3-wire cord and NEMA plug.

2-WIRE HORNET IRON KITS

*contain 2-tips and cleaning sponge.

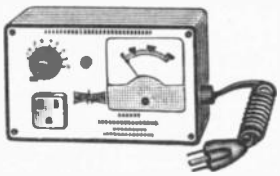
Stk. No.	Model	Wattage	Net
33F942	H10K*	12	7.49
33F955	H11K*	17	
33F956	H14K*	20	
2-WIRE HORNET IRONS (Less Tip)			
33F957	H10	12	5.81
33F958	H14	17	
33F959	H11	20	
3-WIRE HORNET IRON KITS			
33F943	H10K*	12	9.77
33F960	H11K*	17	
33F961	H14K*	20	

PIN POINT IRONS

For printed circuits, etc. Weighs but 3 oz. Same construction as Super Pencil, except for the handle and longer reach 4 1/2". Wt., 1/2 lb. Less tip.

Stk. No.	Model	Wattage	Uses Tip Size	NET
33F897	P2525	25	1/8	5.22
33F845	P2535	35	1/8	5.22
33F898	P2630	30	3/16	5.25
33F848	P2650	50	3/16	5.25
33F849	P2450	50	1/4	5.67
33F850	P2460	60	1/4	5.67
32F814	P3060	60	1/4	6.30
33F852	P3075	75	1/4	6.37

SOLDERING IRON VOLTAGE CONTROL



Provides monitored and controlled AC input from 0 to 95% of line voltage. Voltmeter provides visual indication of voltage input. Capacity full 300 watts on 115 volts. Solid state. Idling temp. may be readily controlled. Thermal working zones varied by adjusting input control. Calibrate control settings. Safety assured by 3 wire grounded design and power light indicator. Compact (2"x6 1/4"). Shpg. wt. 18 oz.

33F826 Model 871. NET **$29.95**

TIP CLEANING SPONGE

Insures reliability of soldered joints and extends tip life. Eliminates contamination and safety hazards caused by wiping rags.

32F821. Model 810. Sponge, tray. **NET 1.19**

32F822. Model 8101. Sponge only. **NET .46**

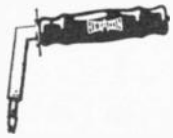
PRODUCTION LINE IRONS

For fastest soldering on Radio-TV conveyors, etc. Short, well balanced, with cool, comfortable handles. Rugged, high heat alloy elements. Approx. shpg. wt., 1 1/2 lbs. Less tip.

Plug Tip Irons

Stk. No.	Model	Wattage	Uses Tip Size	NET
33F892	P100	100	3/8	8.44
33F893	P150	150	3/8	9.28
32F815	P153	175	3/8	9.63
32F816	P151	175	1/2	9.66
33F894	P200	200	5/8	9.94
33F891	P250	250	5/8	11.48
33F965	P300	300	7/8	12.01
33F966	P550	550	1 1/8	14.95

BANTAM HATCHET IRONS



For printed circuits, etc. Weighs but 3 oz. Smallest hatchet. Same construction as super pencil, except for handle. Shpg. Wt., 1/2 lb. Less tip.

Stk. No.	Model	Voltage	Uses Tip Size	NET
33F838	25H35	35	1/8	6.34
33F843	24H60	60	1/4	6.37

SUPER PENCIL IRONS

For printed circuits, etc. Weight only 2 oz. Short reach 3". Cool handle. All the advantages of a soldering pencil, but a compact, rugged industrial soldering iron, with precision nickel-chromium, mica wound element. Shpg. wt., 8 oz. Less tips.

Stk. No.	Model	Wattage	Uses Tip Size	NET
33F829	25S25	25	1/8	5.22
33F831	25S35	35	1/8	5.22
33F832	25S50	50	1/8	5.92
33F828	26S30	30	3/16	5.22
33F833	26S35	35	3/16	5.22
33F835	26S50	50	3/16	5.95
33F836	24S40	40	1/4	5.95
33F827	24S50	50	1/4	5.95
33F837	24S60	60	1/4	5.95

You Can Depend on NEWARK For Everything In Industrial Electronics

DUROTHERM NON-FREEZING TIPS

Iron coated and immunized. Anti-scaling and anti-corrosion design absolutely prevents tips from sticking. Note: also available, XTRADUR Iron-Coated Pre-Tinned Tips: Multi-coating immunizes shank of tip from solder, preventing creeping and spilling of solder. Use type numbers shown, but substitute X for D. Do not use Newark's stock numbers. Cost approx. 10% less than DUROTHERM. For HEXCLAD Iron Coated Pre-Tinned Tips, use type-numbers, but omit D. Cost approx. 30% less than DUROTHERM.

1/8" Diameter (Fits 25S, P25, and 25H)

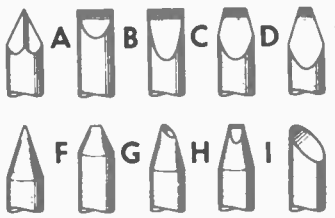
Stk. No.	Type	WxT	Lgth.	Style	NET
32F750	HT248D	1/32x1/32	2 1/4	A	1.61
32F751	HT249D	1/8x1/32	2 1/4	B	1.61
32F752	HT376D	1/8x1/32	2 1/4	C	1.61
32F753	HT560D	1/16x1/32	2 1/4	D	1.61
32F754	HT222D	1/16	2 1/4	G	1.61
32F755	HT361D	1/16x1/64	2 1/8	B	2.00
32F756	HT331D	1/32	2 1/4	F	1.61

1/4" Diameter (Fits 24S, P24, and 24H)

32F766	HT325D	1/32x1/32	2 1/4	A	1.93
32F767	HT553D	1/4x1/16	2 1/4	B	1.93
32F768	HT417D	1/8x1/32	2 1/4	E	1.93
32F769	HT313D	1/16x1/32	2 1/4	D	1.93
32F772	HT451D	1/8x1/32	2 1/4	C	2.00
32F773	HT513D	1/32	2 1/4	P	2.00
32F774	HT324D	1/8x1/32	2 1/4	B	2.00
32F776	HT691D	1/64x1/64	2 1/4	C	2.00

1/4" Diameter (Fits P30 and 30H)

32F777	HT252D	1/32x1/32	2 3/4	A	1.93
32F778	HT253D	1/4x1/16	2 3/4	B	1.93
32F779	HT202D	3/16x1/32	2 3/4	D	1.93
32F780	HT299D	1/8x1/32	3	D	1.93
32F781	HT426D	1/8x1/32	2 3/4	E	1.93
32F782	HT328D	1/16x1/32	3	E	2.00
32F783	HT131D	1/32	2 3/4	F	1.93
32F785	HT452D	1/32	2 3/4	F	2.00
32F786	HT356D	1/16x1/32	3 3/4	E	2.00
32F788	HT519D	1/8x1/32	3	C	2.00



MINIATURE TIPS FOR HORNET H10, H11

Stk. No.	Type	WxH	Style	NET
32F799	HT866D	1/32	J	.84
32F800	HT867D	1/32	ball point	.84
32F801	HT868D	1/16	J	.84
32F802	HT869D	1/16x1/64	C	.84
32F803	HT870X	1/16x1/32	D	.63
32F804	HT864X	1/8	J	.63
32F805	HT873X	1/32	F	.63

MINIATURE TIPS FOR HORNET H14

33F970	HT654X	1/16x1/32	E	.84
33F971	HT655X	1/8x1/32	C	.84
33F973	HT657X	1/8x1/32	C	.63
33F974	HT658X	1/32	F	.84
33F975	HT659X	1/64"	F	.84

3/16" Diameter (Fits 26S, P26, and 26H)

Stk. No.	Type	Point	Lgth.	Style	NET
32F758	HT251D	1/32x1/32	2 1/4	A	1.68
32F759	HT294D	3/16x1/32	2 1/4	B	1.68
32F760	HT195D	3/16x1/32	2 1/4	C	1.68
32F761	HT207D	3/32x1/32	2 1/4	E	1.68
32F762	HT190D	1/8x1/16	2 1/4	D	1.68
32F764	HT290D	1/8x1/32	2 1/4	C	1.79
32F765	HT281D	1/32	2 1/4	F	1.68

3/8" Dia. (Fits P100, P150, P238, 100H, 150H)

32F791	HT140D	3/16x1/16	4	D	2.07
32F793	HT177D	3/16x1/32	4 9/16	D	2.42
32F794	HT231D	3/16x1/16	4 9/16	D	2.07
32F795	HT255D	1/8x1/16	4 9/16	A	2.07
32F797	HT475D	3/32x1/32	4 9/16	E	2.42
32F798	HT918D	5/32x1/16	4	E	2.07

TELLURIUM COPPER TIPS—Style A

Stk. No.	Dia.	Fits Irons	NET
33F944	1/8	25S, 25H, P25	.22
33F945	5/16	26S, 26H, P26	.27
33F946	1/4	24S, 24H, P24, P30, 30H	.35
33F941	1/4tt*1/8	24S, 244, P2Y, P30, 30H	.98
33F947	3/8	100H, 150H	.56
33F949	3/8tt*1/4	P100, P150, P238, 100H, 150H	.98
33F948	5/8	P200, P250	1.33

*Turned Tips.

Selected Special Purpose Tools

TORQUE CONTROLS INC.

TS-30
TS-100

TORQUE SCREWDRIVERS

TT-1

Model TS-30°. Micrometer adjustable lb/in. torque screwdriver with range of 1-30 lb/in. and lock-in settings of 1 lb/in. increments. Torques in both directions, cannot be influenced by operator and can be recalibrated in the field. Tolerance: ±5% of reading. Drive: ¼" female hex. Length: 6½". Wt., 8 oz.
64F150. EACH. NET **32.81**

Model TS-100°. Micrometer adjustable oz/in. torque screwdriver with range of 2-100 oz/in. Lock in settings of 2 oz/in. increments. otherwise same as TS-30 except tolerance ±3% of reading. Drive is ¼" female hex. Length: 6½". Wt., 8 oz.
64F151. EACH. NET **32.81**
°Meets and exceeds all requirements of MIL-H-26497.

MODEL TT-1 JEWELER'S TORQUE SCREWDRIVER

Adjustable torque screwdriver; range of 1-20 oz/in. with settings of ¼ oz/in. Torques in both directions. Tolerance is ±5% plus ¼ oz/in. of reading. Length: 3⅝". Wt., 1 oz.
64F152. EACH. NET **41.95**

LABORATORY OR RESEARCH KITS

Kit #1. Contains TS-100 Torque Screwdriver with selected Bits: 5 Hex Key Allen, 4 Nut runner sockets, 4 screwdriver blades, 2 Phillips blades and 2 adapters. Black leather carrying case with handle included. 1⅞x8½x3¹¹⁄₁₆". Weight: 1 lb., 4 oz.
64F153. NET **59.10**

Kit #2. Contains TS-30 Torque Screwdriver with selected bits: 7 Hex Key Allen, 5 Nut runner sockets, 5 screwdriver blades, 3 Phillips blades and 2 adapters. Black leather carrying case with handle included. 1⅞x8½x3¹¹⁄₁₆". Weight: 1 lb., 5 oz.
64F154. NET **59.10**

Kit #3. Contains TS-100 and TS-30 Torque Screwdrivers and 12 Hex Key Allen bits, 9 Nut runner sockets, 9 screwdriver blades, 5 phillips blades, and 4 adapters. Black leather carrying case. 10½x12x1¾". Weight: 2 lbs., 14 oz.
64F155. NET **107.25**

Kit #4. Contains TT-1 Jewelers Torque Screwdriver with selected bits: 4 screwdriver blades, 5 Nut runner sockets. 2 Phillips blades, and 4 hex allen key. Black plastic carrying case with handle included. 1⅝x3¾x4⅞". Weight, 4 oz.
64F156. NET **64.10**

BITS FOR TS-30 AND TS-100 TORQUE SCREWDRIVERS

°°Must be used with HW-18 Adapter.

Stock No.	Type	Style	Size	EA. Net
64F157	HW-1	Hex Key	.050	1.00
64F158	HW-2	Hex Key	1⁄16	1.00
64F159	HW-3	Hex Key	5⁄64	1.00
64F160	HW-4	Hex Key	3⁄32	1.00
64F161	HW-5	Hex Key	7⁄64	1.00
64F162	HW-6	Hex Key	1⁄8	1.00
64F163	W-7°°	Socket	1⁄8	1.60
64F164	W-8°°	Socket	5⁄16	1.26
64F165	W-9°°	Socket	1⁄4	1.26
64F166	W-10°°	Socket	5⁄16	1.26
64F167	W-11°°	Socket	11⁄32	1.26
64F168	W-12°°	Socket	3⁄8	1.26
64F169	W-13°°	Socket	7⁄16	1.26
64F170	HW-11	Screwdriver	.125 dia.	.76
64F171	HW-12	Screwdriver	.185 dia.	.76
64F172	HW-13	Screwdriver	.215 dia.	.76
64F173	HW-14	Screwdriver	.250 dia.	.56
64F174	HW-15	Phillips	0	.50
64F175	HW-16	Phillips	1	.50
64F176	HW-17	Phillips	2	.50

BITS FOR TT-1 JEWELERS TORQUE SCREWDRIVER

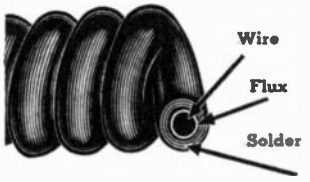
°May be used with TS-100 but requires HW-19 Adapter.

Stock No.	Type	Style	Size	EA. NET
64F177	TW-1	Screwdriver	.055 dia	.60
64F178	TW-2	Screwdriver	.070 dia	.60
64F179	TW-3°	Screwdriver	.080 dia	.60
64F180	TW-4°	Screwdriver	.100 dia	.60
64F181	TW-5	Socket	5⁄64	1.20
64F182	TW-6°	Socket	3⁄32	1.20
64F183	TW-7°	Socket	7⁄64	1.20
64F184	TW-8	Socket	1⁄8	1.20
64F185	TW-9	Socket	5⁄32	1.20
64F186	TW-10	Phillips	00	1.00
64F187	TW-11	Phillips	0	1.00
64F188	TW-12°	Hex Key	.028	1.60
64F189	TW-13°	Hex Key	.035	1.60
64F190	TW-14	Hex Key	.050	1.00
64F191	TW-15	Hex Key	1⁄16	1.00

ADAPTERS

64F192	HW-18	¼" hex to ¼" square	.....	1.00
64F193	HW-19	¼" hex to Universal	.....	1.20

SPRAGUE "KWIKETTE" SOLDERING AIDS



New. Different. Revolutionary Kwikette connectors practcially let you do "in - circuit" component testing. Quick & easy; ideal for printed circuit work; simplifies "rat nest" replacement and R&D breasbiarding. Not just another spring wire connector — copper weld wire inner core, an intermediate layer of flux, and an outer jacket of solder. Just heat and your connection is made.
18F2831. KW-100. Pkg. of 100 Kwikette Aids **2.79**
18F2832. KW-1000 Pkg. of 1000 Kwikette Aids **22.00**
18F2833. KW-5000 Pkg. of 5000 Kwikette Aids **90.00**

ALNICO POWER MAGNETS

Extremely high magnetic pull for uses in labs, schools, workshops, etc. Lifts, sorts, or retreives steel and iron parts. Hole in top permits screw or rod. Red lacquer finish, and nickel plated keeper.
34F440. Type 370-2. 2 oz. **Net** **1.08**
34F441. Type 370-4. 4 oz. **Net** **1.98**
34F442. Type 370-6. 6 oz. **Net** **2.64**

MO-RE CO., INC.

COIL WINDING MACHINE

Hand operated coil-master. Produces self supporting, universal and honeycomb coils, also solenoid single layer. Included with each machine are: 3 cams, ⅛", 5⁄16", and ¼" throw, and 4 gears. The arm that carries the wire guide is adjustable for PI spacing, and different diameter coil forms. Accurate suitable for both practical and experimental work. Capable of producing many types of coils. Shipping weight 4 lbs.
34F701. NET **6.67**

NEWARK Saves You Time and Money—
One Purchase Order—To One Source
for All Electronic Components.

AMERICAN BEAUTY

TEMPERATURE CONTROLLED 40-WATT SOLDERING IRON

- **Exact Temperature**
- **Easy to Operate**
- **Dependable**

Model V-3000. Simply dial the soldering tip temperature you need . . . and you're ready to go to work! Easy to operate . . . dependable . . . assures you of exact temperature settings for every soldering job! Power control dial range from 350° to 750°. Iron completely isolated from line voltage. Constant-Sensor sleeve continuously regulates power . . . eliminates gap between load demand and power supply. Fast heat tip recovery. Includes power unit, soldering iron and 618 tip (Uses any of 600 Series Paragon tips). Power unit: 4 x 5 x 5". Iron size: 6⅝" long.

Stock No.	Type	Description	NET
35F1290	V-3000	Soldering System	49.00
35F1291	V-3001	Replacement Element	8.87
35F1292	871	Cord Set	3.05

"LITTLE DANDY" 25-WATT IRON

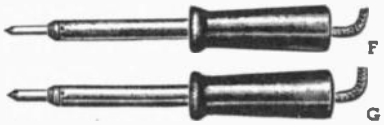
Model 3110. Light weight, easy handling iron for production use. 18 interchangeable plug tips. Tenite finger grip, Lexan handle wipes "white room" clean. 25 watts. Every part is replaceable. 3/16" nickel plated screwdriver tip supplied.

32F987. NET **4.45**

"PARAGON" TIPS FOR ABOVE

Stk. No.	Pt. No.	Tips (Chad)	Price
32F988	602	3/16 Chisel	
32F989	603	Trnd. Blunt Chisel	
32F990	604	1/16 Trnd. Chisel	
32F991	605	1/8 Trnd. Long Chis.	
32F992	607	1/8 Trnd. Screwdvr.	
32F993	608	1/8 Trnd. Diamond	1.33
32F994	610	3/16 Diamond	
32F995	613	3/32 Trnd. Screwdvr.	
32F996	615	1/16 Trnd. Screwdvr.	
32F997	617	3/32 Screwdriver	
32F999	619	1/8 Shrt. Screwdvr.	

LIGHTWEIGHT AMERICAN BEAUTY BANTAM SOLDERING IRONS



F

G

Small, light, quick heating, with removable tip for TV, radio, etc. Stainless steel case insures against heat loss, keeps handle cool. Compression wound, mica-insulated nickel-chromed heating element. Non-kink, flexible cord. 110v, 30-watt. 9 1/4" length. With stand.

(Fig. F.) 33F022. Type 3118 with 1/8" dia. tip. **NET** **5.95**

(Fig. G.) 33F023. Type 3120 with 5/16" dia. tip. **NET** 5.85

33F024. Type 3718. 1/8" diamond point replacement tip. **NET** ..... .22

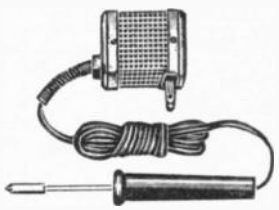
33F025. Type 3720. 5/16" diamond point replacement tip. **NET** ..... .25

33F059. "Paragon" Type P109D 5/16" iron plated diamond point tip 1.33

33F026. Type 9281. Replacement Element for 3118 Iron. **NET** 3.40

33F027. Type 9280. Replacement Element for 3120 Iron. **NET** 3.40

TRANSFORMER TYPE—30 WATT



H

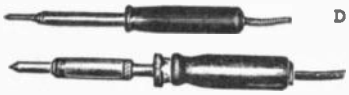
With its small diameter tip element and minimum bulk and weight, the T-30 series serves the purpose of larger and more cumbersome soldering equipment. Transformer is 110-120 volt (AC only). 12 volt output. 30 watt maximum capacity. The unit includes a seven foot rubber cord. The handle is made of cool, thick hi-impact thermo-setting plastic. Diamond point tip is standard. Shpg. wt., 2 lbs.

Stk. No.	Mfg. No.	Tip Dia.	Wt.	NET
33F150	T-30	1/8"	2 lbs.	16.40
33F151	T-30	1/4"	2 lbs.	16.40

REPLACEMENT TIP ELEMENTS

Stk. No.	Mfg. No.	Tip Dia.	Wt.	NET
33F152	T-3018	1/8"	3/4 oz.	2.84
33F153	T-3025	1/4"	3/4 oz.	2.84

LIGHT DUTY 60-WATT IRON



D

E

(Fig. D.) Model 3128. Compact iron for light work. Uses 1/4" tip for working in hard-to-get-at spots. With tip, cord and stand. For 110-120 v., AC-DC. 1 lb.
33F000. NET **6.70**

33F005. 1/4" diamond point tip. Wt., 2 oz. **NET** ..... .39

Model 9272. Replacement element. **33F009. NET** **3.75**

"Paragon" Type P67D. 1/4" iron plated diamond point tip for Model 3128. **33F060. NET** **1.40**

HEAVY DUTY 60-WATT IRON

A

(Fig. A). Model 3125. A production type iron. It is light in weight and has perfect balance. Safety-flare on handle protects operator. 1/4" tip. 12 1/4" long, 9/16" diameter. For 110-120v AC or DC. Wt., 1 lb.
32F980. NET **7.45**

Model 9271. Replacement element. **33F021. NET** 3.50

"Paragon" Type P67D. 1/4" iron plated diamond point tip for Model 3125. **33F060. NET** 1.40

200-WATT IRON

B

(Fig. B.) Model 3158. For medium-heavy factory and production work. 13 5/8" long. With cord stand and 5/8" tip. 110-120 volts, AC-DC. Shpg. wt., 3 lbs.
32F002. NET **11.90**

33F007. 5/8" diamond point tip. Wt., 7 oz. **NET** 1.33

"Paragon" Type P44D. 5/8" iron plated diamond point tip for Model 3158. **33F062. NET** 2.65

Model 9275. Replacement element. **33F011. NET** **5.90**

TEMPERATURE REGULATING STANDS

Model 475. Thermostatically controlled to eliminate overheating. Size 6 1/2 x 5 5/8 x 3 3/8". Adjustment, on bottom for very low, warm, or full working temperature. Handles any iron from 100-660 watts at any AC voltage to 125. Less iron. Shipping weight, 2 1/2 lbs.
33F014. NET **9.70**

Model 476. Same as above except size 7 3/4x5 5/8x3 5/8" and input, 30-85 w. **33F154. NET** **9.70**

Model 475-SG. Same as Model 475, but equipped with safety guard. Size: 9x5 5/8x 5". Shpg. wt. 3 lbs.
32F981. NET **11.20**

MEDIUM DUTY IRONS

(Fig. E.) Model 3138. For work on radio chassis, switchboards, and other electrical uses. 12 7/8" long. 3/8" diamond point tip. Nickel-plated metal parts. With stand, 6-ft. cord and tip. For 110-120 v., AC-DC. Wt., 2 1/4 lbs.

Stk. No.	Type	Watts	Each
33F001	3138	100	9.65
32F986	3138	150	9.65

33F006. 3/8" diamond point tip. Wt., 5 oz. **NET** ..... .56

Model 9273. 100 watt Replacement element.
33F010. NET **3.85**

"Paragon" Type P43D. 3/8" iron plated diamond point tip for Model 3138. **33F061. NET** **1.75**

HEAVY DUTY 300-WATT IRON

C

(Fig. C.) Model 3178. For use on still heavier work; for light commutators, service and production work. 14 3/4" long. 7/8" tip. 110-120 v., AC-DC. Wt., 4 lbs.
33F004. NET **15.65**

33F008. 7/8" chisel tip. Wt., 1 lb. **NET** 2.52

Model 9277. Replacement element. **33F013. NET** **7.85**

"Paragon" Type P-45C. 7/8" iron plated chisel tip for Model 3178. **33F063. NET** **4.55**

EXTRA-HEAVY 550-WATT IRON

(Fig. C.) Model 3198. With heavy-duty 1 1/8" tip. Lgth., 15". Wt., 5 3/4 lbs.
33F015. NET **19.35**

"Paragon" Type P-46C. 1 1/8" iron plated chisel tip for Model 3198. **33F064. NET** **7.00**

Models 3125, 3128, 3138, 3178 and 3198 are available for 220-240 volt service on special order at no additional charge. Available also with 3-conductor cord, one wire grounded, on special order at 65 extra. All types available with chisel type points on special order.

● NEW GENERAL PURPOSE SOLDER POTS

5 1/2" high. Crucibles of cast iron, chemically stable to keep solder pure. Center tapped for dross skimmer or extra fixturing. Wide lipped for extra fixture mounting. Shallow; 1 1/2" deep. Heat solder to 400° in 15 minutes—750° in 25 minutes. Adjustable, direct reading thermostat. Cords are 2-wire SJO.
*With dross skimmer.

Stock No.	Type	Solder Capacity	Top OD	Shpg. Wt.	NET
35F1285	300	1 lb.	4 3/4"	6 1/2 lbs.	28.40
35F1286	301	1 lb.	4 3/4"	6 1/2 lbs.	31.20
35F1287	600	2 1/2 lbs.	6"	9 lbs	29.80
35F1288	601	2 1/2 lbs.	6"	9 lbs.	32.65

Weller Shop Tools

Fig. A

Fig. B

Fig. C

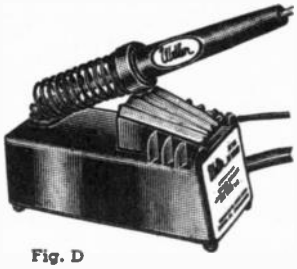
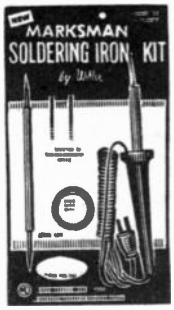


Fig. D

Fig. E



● *NEW* BATTERY OPERATED IRON

Fig. A. Model TCP-12. Most modern concepts of soldering technology with TIP TEMPERATURE CONTROL. Operates from any 12 volt battery or 12-14 volt AC/DC power supply source. Minimal battery source power drain, extended tip and long tool life: minimized "freezing". Complete with 700°F. 3/16" screwdriver tip, 12 ft. power cord and battery clips. Cool impact resistant handle. Replacement tips available in various configurations and temperatures. Any "PT" series of Weller tips (for TCP-1) will fit these tools. Wt. 1¼ oz.

33F369 NET 10.95

6-23 ..... 9.74 ..... 24-up 8.76

WELLER PENCIL IRON

Fig. B. Model W-PS. Light weight soldering iron with 1/8" tip and cord set. 3 screwdriver-shape tip sizes with premium plating; plastic handle. 25 watts at 115 V; 7 7/8" long, 7/16" D. Max. temp. 860°F. Wt., 1¾ oz.

33F175. Model W-PS. NET 1-11 ..... 3.90

12-49 ..... 3.45; 50-up 3.15

ACCESSORIES FOR ABOVE

Stock No.	Part No.	Description	1-11	12-49	50-Up
33F176	ST-1	1/16" tip only	.75	.67	.60
33F177	ST-2	3/32" tip only	.75	.67	.60
33F178	ST-3	1/8" tip only	.75	.67	.60
33F179	HE-1	Heating element	1.85	1.73	1.56
33F180	CS-2	Cord set (2-wire)	.65	.....	.....
33F181	KN-3	Knurled tip nut	.15	.....	.....

CONTROLLED HEAT SOLDER PENCIL

Fig. D-Model W-TCP. For production and research lab. Temperature controlled at tip. Cool handle of impact resistant plastic. Low voltage (24 volts) for component protection and operator safety. Soldering stand attached to power unit. 60 watts, 120 volts. 60-50 Hz. Unit is isolated for elimination of leakage current. With 3/16", 700° F tip, and power unit. Length with tip: 7½". 4 lbs.

Model TCP1. Soldering pencil only. 3/16", 700° F tip.

Model PU-1. Power unit only, with stand.

Stk. No.	Type	1-5	6-23	24-Up
33F355	W-TCP	19.50	17.30	15.60
33F356	TCP-1	10.95	9.75	8.75
33F357	PU-1	8.55	7.55	6.85

ADDITIONAL SCREWDRIVER TIPS

Interchangeable tips; fit TC models (above) only. Same shank dia.

Screwdriver Tip—600° F

Stk. No.	Type	Size	1-5	6-23	24-up
33F358	PT-A6	1/16"	.95	.85	.75
33F359	PT-B6	3/32"			
33F360	PT-C6	1/8"			
33F353	PT-D6	5/16"			
33F351	PT-K6	3/4"			

Screwdriver Tip — 700°F

33F361	PT-A7	1/16"	.95	.85	.75
33F362	PT-B7	3/32"			
33F363	PT-C7	1/8"			
33F354	PT-D7	5/16"			
33F352	PT-K7	3/4"			

CORDS FOR CONTROLLED HEAT IRONS

CS40. Two wire cord set. For use with TC552, TC602.

33F383. NET Ea. ..... .65

CS50. Three wire cord set. For use with TC552, TC602.

33F384. NET Ea. 1.35

CS60. Two-wire cord set for TC1202.

33F365. NET Ea. ..... .65

CS70. Three-wire cord set for TC1202.

33F366. NET Ea. 1.35

SCREWDRIVER TIPS FOR W60-TO552-SP40

Stk. No.	Type	Size	1-11	12-49	50-Up
33F368	5-B1N7	3/32"	.95	.85	.75
33F387	5-C1N7	1/8"			
33F386	5-D1N7	5/16"			

SCREWDRIVER TIPS FOR W100 TC-602-SP80

33F388	6-E1N7	1/4"	1.50	1.35	1.20
33F367	6-D1N7	5/16"			

CHISEL TIP FOR W200-TC1202-SP120

33F391	12G4N7	7/16"	2.25	2.00	1.80

CONTROLLED HEAT IRONS—FIG. C

Irons have built-in temperature controls which automatically maintain the correct soldering temperature. Supplied with 2 wire cord. Pencil grip, 120V. Stainless steel. Balanced. See listings on this page for spare tips. Model W60-7½" long. 60W. With 5-C1N tip. 2½ oz. Model W100. 8¼" long. 100W. With 6-E1N tip. 3½ oz. Model W200. 9¼" long. 200W. With 12G4N tip. 10 oz.

Stk. No.	Type	1-11	12-48	49-Up
33F348	W60	9.00	8.00	7.20
33F349	W100	11.25	10.00	9.00
33F350	W200	15.00	13.35	12.00

"MARKSMAN" SOLDERING IRON

Model SP-23K. Includes soldering iron, three different pre-tinned nickel-plated copper tips, soldering-aid tool, 5 ft. 60/40 rosin core solder, and instructions for soldering. Pencil type, feather weight, soldering iron with removable tip. Plastic handle remains cool. Develops up to 750° F. Long reach stainless steel barrel.

Stock No.	Type	Description	1-11	12-49	50-Up
33F183	SP-23K	Kit	3.35	2.95	2.80
33F801	SP-23	Iron Only	2.25	2.00	1.85

TIPS FOR SP-23 SOLDERING IRON

Stock No.	Type	Description	1-11	12-49	50-Up
33F993	MT-1	Cone Shaped	.53	.47	.42
33F994	MT-2	Screwdriver			
33F995	MT-3	Chisel			
33F996	MT-4	Spade			

SOLDERING IRONS

SP-40. 40 W. pencil type soldering iron. Wt. 4 oz. ¼" dia. plated copper tip.

Stock No.	Type	Description	1-11	12-49	50-Up
33F802	SP-40	40 Watt Iron	2.99	2.66	2.39
33F997	MT-10	¼" Chisel Tip	.90	.80	.72

SP-80. 80 W. heavy duty pencil type soldering iron. Wt. 4 oz. ⅜" dia. Plated copper tip.

Stock No.	Type	Description	1-11	12-49	50-Up
33F803	SP-80	80 Watt Iron	3.74	3.32	2.99
33F998	MT-20	⅜" Chisel Tip	.90	.80	.72

SP-120. 120W. medium duty solder iron. Wt. 10 oz. ½" dia. Copper tip.

Stock No.	Type	Description	1-11	12-49	50-Up
33F804	SP-120	120 Watt Iron	6.72	5.97	5.37
33F999	MT-30	½" Chisel Tip	1.50	1.34	1.20

GUN REPLACEMENT TIPS AND PARTS

Stk. No.	Type	Description	Net
33F149	8125	Plated Tip for 8200, 8100B	.35
33F139	8125N	One 8125 tip and two tip nuts	
33F124	7135	Copper tip for D-440, 8100, 8100B, 8200, WS-100, WD-135, and S-400 (Package of 2)	
33F140	7135N	One 7135 tip and 2 tip nuts	
33F125*	7250	Copper tip for D-550, 825A, WS-200, WR-250, S-500	.35
33F141	7250N	One 7250 tip and 2 tip nuts	
33F135	6110	Cutting tip for D-440, 8100, 8200, 8100B, WS-100, WD-135, S-400 (with tip nuts)	
33F136	6130	Smoothing tip for D-440, 8100, 8200, 8100B, WS-100, WD-135, S-400 (with tip nuts)	
33F137	6130	Cutting tip for D-550, 8250A, WS-200, WD-250, S-500 (with tip nuts)	
33F138	6140	Smoothing tips for D-550, 8250A, WS-200, WD-250, S-500 (with tip nuts)	
33F127	7300	Copper tip for S-107, D-207 (Package of 2)	
33F162	7323	Switch for single-heat models	.70
33F163	7324	Switch for all dual-heat models	
33F392	7409	Cord set (all models)	
33F394	725R8100B	Right housing for 8100B	
33F395	726L8100B	Left housing for 8100B	
33F396	725R8200	Right housing for 8200	
33F397	726L8200	Left housing for 8200	
33F398	725R8250A	Right housing for 8250A	
33F399	726L8250A	Left housing for 8250A	
33F166	725R440	Right housing for D-440	
33F167	726L440	Left housing for D-440	
33F168	725R550	Right housing for D-550	
33F169	726L550	Left housing for D-550	
33F172	725R8100	Right housing for 8100	
33F173	726L8100	Left housing for 8100	

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

Power Tools and Soldering Equipment

WELLER POWER TOOLS

HEAVY DUTY SOLDERING KIT

Fig. A. Model D-550PK. Equipped with heavy duty, dual heat 240/325 watt gun. Kit contains: soldering tip, smoothing tip, cutting tip, tip changing wrench. Ample supply of all purpose solder. Shpg. wt., 5 lbs.
33F132. NET **9.75**
In lots of three, Each **8.65**
In lots of 12, Each **8.15**

MEDIUM DUTY SOLDERING KITS

Model 8200PK. Kit includes 3 Weller long life soldering tips, tip changing wrench, flux brush, soldering aid, and all purpose solder. Contains 100/140 watt soldering gun. Shpg. wt., 3 lbs.
33F158. NET **6.70**

In lots of three, **Each** **5.95**
In lots of 12, **Each** **5.65**

HEAVY DUTY SOLDERING GUNS

Guns give instant heat with no waste. Dual switch from high to low. Exclusive tip-grip. Eliminates resistance. Dual spotlights on both models. Good for dark or tight places. High impact housing. Perfect balance. Replaceable tips.
Type D-550. Heavy Duty Model. Dual Heat. 240/325 watts. 3½ lbs.
33F129. NET **8.08**
In lots of 3 **Each** **7.30**
In lots of 12 **Each** **6.90**
Type D-440. Standard model. Dual Heat. 145/210 watts. 3¾ lbs.
33F131. NET **7.30**
In lots of 3 **Each** **6.65**
In lots of 12 **Each** **6.25**

DUAL HEAT SOLDERING GUNS

Model 8200. Instant switching to 140 W. or 100 W.
33F148. 1-2 Each **5.20**
3-11 Each **4.65**
12-Up Each **4.35**

BERNZ-O-MATIC SOLDERING EQUIPMENT

TX25

TX610

MODEL TX65 PUSH BUTTON

- **Lights Instantly**
- **Push Button Control of Flame Size**

Model TX-65. Here's the torch kit with a Push-Button burner. Now, you can push a button and control the size of the flame, from an economical pilot light to a real man-size, extra large flame, big enough to sweat large copper fittings. Lights instantly, requires no pumping or priming. It is hot enough for brazing. Shpg. wt., 4 lbs.
33F823. NET **8.00**

TX65

TX10

CARRY-ALL TORCH KIT

Model TX-25. The handiest item for the traveling tool shop. Powerful flame can be adjusted to any size by using the included heads. Can be used for sweating copper tubing, paint removing, soldering, tile setting, lighting charcoal fires, etc. Heads are quickly interchanged. Kit includes cylinder, pencil burner unit, utility burner head, soldering tip, flame spreader, flint sparklighter, and a metal carrying case. 5 lbs.
33F824. NET, EACH **7.90**
33F821. Replacement cylinder for all standard torches. 2 lbs. **NET** **1.33**

HANDI-HAND® TORCH TX610

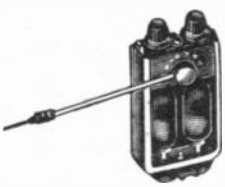
- **Pistol Grip**
- **Highly maneuverable**

Handy lightweight torch with 4 foot hose. Greater freedom of action — allows user to keep both hands free. Cylinder has clip attached, thus allowing user to fasten to belt. Ideal for those hard-to-get places. Used extensively for soldering, sheet metal work, thawing ice-filled gutters, removing paint, laying asphalt tile, automobile use, and the like. Complete with pencil burner head and cylinder. Shipping weight, 4½ lbs.
33F819. NET **9.50**

TORCH KIT

Model TX10. All brass pencil flame burner for all-around heavy-duty work. The ideal tool for quick overall heating coverage for consistent torch users. Cylinders are equipped with safety relief valve. Exclusive patented pressure control valve gives constant steady flame while burning in any position. Among its many uses are tinning, melting lead or babbitt, freeing frozen nuts and bolts, and wherever heat is required. Shpg. wt. 3 lbs.
33F825. NET, EACH **5.15**

MICROFLAME GAS WELDING TORCH



Flame temperature exceeds 5000°F. Pin point accuracy. Operating time: with large tip, (#20 gauge)-10-minutes, with medium tip-(#22 gauge)-20 minutes. Cylinders are not refillable, howtver can be shut off for a long period of time without damage by aging. For welding, brazing or cutting most metals, depending on heat conductivity, size and melting point. Solder sticks are a gold/silver alloy enabling soldering of any metal with a melting point of 1100°F. or higher to any similar or different metal. Welding and brazing rod size should be 1/32" dia. or less. 90 day warranty given with each set. Contains the torch, 3 flame tips, torch tube, gaskets, LP gas and oxygen cylinders, instruction. Packaged in a plastic tray box container, handy for storage. Overall size including controls and clamping screws 5¼" long by 2" wide by 1¼" thick at swivel joint. Hand size: 3" long x 2" x ⅝" thick. Shpg. wt. 16 oz. for kit.
60F1525, NET **19.95**

● *NEW* 2000 INDUSTRIAL TORCH

Complete Model #1000 Minature Torch Set, plus industrial capacity oxygen and propane gas tanks, valves, hoses, adapters, handle/bracket, and instructions. Accessories are for longer term industrial uses. Shpg. wt. 10 lbs.
60F1532. NET. **64.75**

MINIATURE-TO-INDUSTRIAL ADAPTER KIT

Convert Model #1000 Miniature Torch Set to use as an Industrial Torch Set. Contains 2022 Hose Set, 2003 Handle/Bracket, 2004 Oxygen Valve, 2005 Propane Valvt. Order propane and oxygen tanks seperately. Shpg. wt. 2 lbs.
60F1533. NET. **26.75**

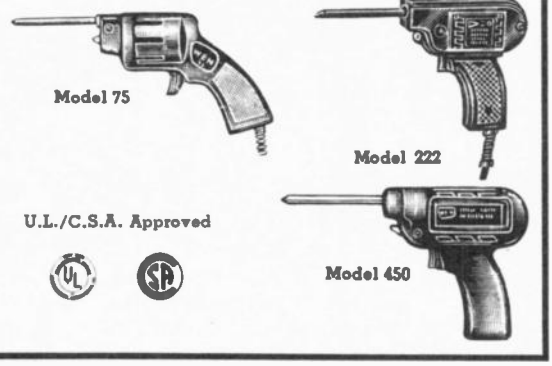
ACCESSORIES

60F1526. Type 1001. Oxygen Cylinder. Net ..... **.75**
60F1527. Type 1002. Butane Cylinder. Net ..... **.50**
60F1528. Set of 3 Flame Tips. Net ..... **.75**
60F1529. Set of 6 Cylinder Gaskets. Net ..... **.50**
60F1530. Gold-Silver Alloy Sticks. Pkg. of 4. Net **2.50**
60F1531. Soldering Tool and Heat Sink Adapter. Net. **3.95**
60F1534. Type 2006. Oxygen Cylinder. Shpg. wt. 5 lbs. Net **14.00**
60F1535. Type 2007. Propane Cylinder. Shpg. wt. 1½ lbs. Net **14.00**

Soldering Guns And Hand Stamp

WEN

SINGLE POST SOLDERING GUNS



ONE HEAT RANGE—MODEL 75

Model 75. First commercial use of space research metal that tolerates extremely high temperatures. Soldering pistol 50 w and a normal draw of 30 w. Draws only enough to maintain maximum temperature in the tip. No current waste. Surge brings tip to working temperature in seconds, yet tip will not overheat and need retinning. Unit heats instantly, cools quickly. Has on off trigger switch, long reach, spotlight focus and single screw set for tip replacement. UL and CSA approved. .45 amp., 120V AC. Shipping wt., 20 oz. Model 75 with 7SA7 tip assembly.

33F925. NET **3.71**
3 or more, EACH 3.30

TWO HEAT RANGES—TYPE 222

Type 222. Automatic thermal regulation. Light weight compact, balanced. Due to new space age materials, this gun delivers the heat found in a regular 200 watt soldering device with a current draw of 110 watts surge and 55 watts working. New tips have been designed for this gun, capable of delivering an efficient range of heat power. Heat power automatically adjusted to the right level for the job. Convenient trigger on-off switch. Built-in light illuminates work. Two screws adjust for fast tip replacement. Heat capacity from 25 to 200 watts, automatically adjusted. Operates at once, .67 amp working current. With regular tip. Shipping weight, 3 lbs.

33F991. Type 222. NET **5.95**
3 or more. EACH 5.30

THREE HEAT RANGES—MODEL 450

Model 450. Wen "All" gun does all kinds of soldering from delicate kit work to work formerly requiring industrial type soldering iron. Can be used with fine, medium, or heavy tips which can be easily changed. Automatic Thermal Regulation gives an efficient range of heat from 25 to 450 watts and automatically delivers the best heat range for each used and each job done. Gun has rigid copper tip, prefocused spotlight trigger, on/off switch, and perfect balance to eliminate operator fatigue and increase precision. 2 amp. surge . . . 1.2 amp., working current: 120 V., UL and CSA approved. Size: 9¼x5⅝x2½". Comes with heavy duty tip. Shpg. wt., 3 lbs.

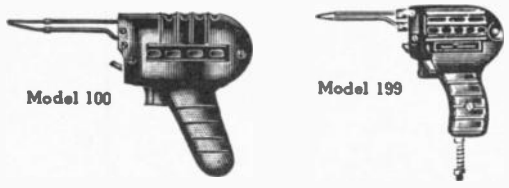
33F920. Model 450. **NET** **10.46**
3 or more. EACH 9.30

EXTRA TIPS FOR SINGLE POST SOLDERING GUN

Stk. No.	Type	For Model	Description	Each
33F921	45F7	450-222	Light Duty Tip	.91
33F922	45M7	450-222	Regular Duty Tip	.91
33F923	45A7	450	Heavy Duty Soldering Tip	.91
33F924	45S7	450-222	Plastic Cutting Accessory*	.42
33F926	45P57	450-222	Flat Iron Accessory*	.42
33F928	7SA7	75	Stnd. Soldering Tip Assembly	.70
33F929	7SB7	75	Fine Pt. Tip Assembly	.70

*Used with regular duty tip only

DUAL POST SOLDERING GUNS



MODEL 100. SOLDERING GUN

Gun only with replaceable general purpose long steel nosed tip. Built-in spotlight. High luster black case. Shpg. wt. 1 lb., 3 oz.

33F930. Model 100. Single unit. **NET** **4.76**
3 or more, EACH 4.46

MODEL 100K. SOLDERING GUN KIT

100 Watt electronic soldering gun. Gets full working heat in just 2½ sec. Extra long, replaceable long life tip, built-in spotlight Accessories: plastic tile cutting tip also designed for softening hardened putty, 5" of rosin core solder. Shpg. wt. 2 lbs., 3 oz.

33F935. Model 100K. Single Kit, **NET** **5.95**
3 or more, EACH 5.30

MODEL 199. SOLDER GUN

Low priced, general purpose electronic soldering gun. Light. small. Long-nosed tip. Melts solder in 2½ sec. Solders wires, connections, light metals, etc. Built-in automatic spotlight. 120 volts, 60 cycle, AC at 1:1 amp. max. Heat and shock resistant. Wt. 2½ lbs.

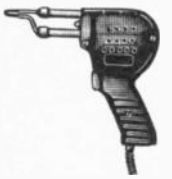
33F900. Single Unit. **NET** **5.95**
NET EACH, 3 or more 5.30

MODEL 199K. UTILITY SOLDER GUN

Lightweight soldering gun kit for home or professional use. Gun gives 130 watts of heat in just 2½ secs. Has steel nosed tip and built-in spotlight, 6' cord. Kit comes in durable red carrying case and includes a tile-cutting tip, dent removing tip, and rosn core solder. Shpg. wt. 3¾ lbs.

39F901. Model 199K. Single Kit. **NET** **7.48**
3 or more, EACH 6.64

MODEL 250



Heavy-Duty 250 Watt Gun. Bigger heat volume enables gun to solder relatively heavy materials. Handles production jobs as well as intermittent soldering. Molded plastic handle and case. Longer life under constant usage. 120 VAC, 60 cycles. Built-in spotlight. Shpg. wt. 3¾ lbs.

33F903. Model 250. Single Unit. **NET** **9.71**
3 or more, EACH 8.64

EXTRA TIPS

- **Individually packed**
- **For 120 V, 50/60 hz**

Stk. No.	Type	For Model	Description	Each
33F904	19-B-4	100 &-199	Heavy Duty Tip	.35
33F905	19-C-1	100 &-199	Plastic Tile Cutting Tip	.42
33F954	U-4	100 &-199	Heavy Duty Tip	.49
33F910	25-A-4	250	Uni. Desoldering Tip	.17
33F911	25-X-20	250	"Feraloy" Long Life Soldering Tip	.35
335912	25-C-1	250	Plastic Tile Cutting Tip	.35
33F954	U-4	250	Uni. Desoldering Tip	.49

TAKON — VERSATILE, PRECISION HAND STAMP

Compact hand stamp having continuous rubber band containing characters: A-Z, 1-0. ° " % = + (pi) μ γ (phi) Δ Ω - / . ( ) . Ideal for identification, and marking of electronic designations; also for stamping in areas where space is limited. Easy to clean, handle, align. Can be used individually for single character marking, or any number of units may be quickly ganged for multiple character stamping. 5½" high, ⅛" thick, 1" wide, tapering to ⅜" at stamping edge. Intermix alphabet, numerals, and electronic symbols. Metal construction. Use with stamping ink or paste. Shpg. wt. 1½ oz.

Use Individually

or Ganged

60F1675. Model 118. ⅛" Gothic. **NET** 4.90
60F1676. D-1118 Replacement Band. ⅛" Gothic 1.80
60F1677. Model 332. 3/32" Gothic. **NET** 4.90
60F1678. D-1332 Replacement Band. 3/32" Gothic 1.80

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

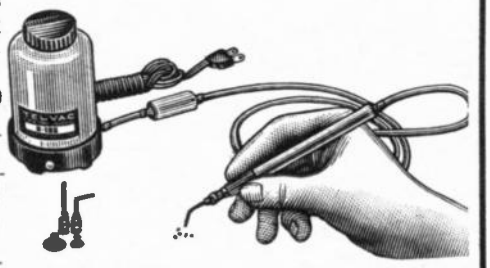
Soldering Irons & Accessories

TELVAC INSTRUMENT COMPANY

● NEW — VACUUM TWEEZER SYSTEM

Type K150. This new parts handling system positively and precisely lifts parts varying in size from microscopic to those weighing several ounces. Parts are handled without damage or contamination. Defects caused by pinching, scratching, or marring are eliminated. Critical surfaces are protected. Vacuum is turned on and off with the forefinger. For 115 VAC 60 Hz. complete system ready to plug in.

35F1230. NET **34.50**



COMPONENT PARTS OF SYSTEM

Stock No.	Type No.	Description	NET	Stock No.	Type No.	Description	NET
35F1231	1505	Vacuum generator	22.50	35F1236	1565	Tip, .047" i.d.	.75
35F1232	1575	Probe	5.95	35F1237	1580	Cup, .5" dia.	.75
35F1233	1550	Tip, .006" i.d.	.75	35F1238	1585	Cup, .25" dia.	.75
35F1234	1555	Tip, .0095" i.d.	.75	35F1239	1510	Tubing 4'	1.00
35F1235	1560	Tip, .0155" i.d.	.75	35F1240	1590	Filter	.90

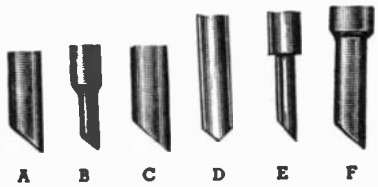
LOW VOLTAGE MINIATURE PRODUCTION EQUIPMENT

Small, lightweight instruments for close-quarter precision soldering of printed circuits, miniature component parts, semiconductors, and fine assemblies. Feather weights of ¼ to 1 ounce virtually eliminate hand fatigue. All Oryx soldering irons utilize a unique element-in-the-tip design principle. Use of this principle enables these irons to provide high efficiency, quick heat recovery, and cool handles. In addition all irons are polarzied, making it possible to directly ground the shaft, tip, and one side of the heating element for maximum safety.

Stk. No.	Type	V	W	Temp. °F	L in.	Wt. oz.	With Tip	Tip dia.	Transformer Type	Net ea.	12-up
33F329	5S	4.5	4.5	575	4¾	1/5	S	1/16"	54204-T	5.95	5.45
33F328	5A	6	5	600	5½	¼	P	1/16"		5.95	5.45
33F275	6	6	6	625	6	¼	Fixed	1/16"		5.95	5.45
33F276	6A	6	6	690	6	¼	B	3/32"	54203-6V	5.95	5.45
33F277	9-6	6	8.3	750	6	¼	A	5/32"	or	5.95	5.45
33F280	11-6	6	10	835	6	¼	D	5/32"	54204-T	7.45	6.95
33F281	12-6	6	12	700	6¼	½	C	3/16"		5.95	5.45
33F293	18-6	6	18	800	7¼	¾	F	5/16"		7.95	7.50
33F278	9-12	12	8.3	750	6	¼	A	5/32"		5.95	5.45
33F282	12-12	12	12	700	6¼	½	C	3/16"	5420-12V	5.95	5.45
33F296	25-12	12	25	1000	7¼	1	G	5/16"		8.45	8.00

REPLACEMENT TIPS

From copper alloy. Outstanding heat conduction. Nickel plating reduces scaling. Iron-plated and solid nickel tips give much longer life with slightly reduced heat transfer. Gold tips for micro-circuits.



Nickel plated except (*) solid nickel end.

Stock No.	Fig.	Dia.	Use With	Net Ea.
33F285	A	5/32"	9-6	.54
33F286	B	3/32"	9-6, 6A	.54
33F287	C	3/16"	12-6	.54
33F288*	D	5/32"	11-6	1.80
33F289*	E	3/32"	11-6	1.80
33F294	F	3/16"	18-6	1.25
33F295*	G	5/16"	25-12	1.85
33F298	H	¼"	25-12	2.35
33F417*	M	3/32"	18-6	1.85
35F1242	P	1/16"	5A, 6A	.60
35F1243	S	1/16"	5-S	.60

MICROMINIATURE SOLDERING TWEEZERS

Have heating elements in each arm. Speeds soldering time by heating both sides of joint. Low voltage operation assures safety to circuitry. Complete with 4½' cord. 3 oz.

Model TW-6. Precision model for semiconductors, etc. Solid nickel 3/32" tip.

Model TW-12. For heavy duty production line etc. Furnished with ⅛" replacement tip.

Stk. No.	Type	Nom. Temp.	P. Comp.	Each
33F292	TW-6	550°	6v - 18w	14.95
33F300	TW-12	625°	12v - 25w	16.50
33F301	N	Spare tip for TW-12		1.25

● NEW TAPPED TRANSFORMER

Output 4½ to 6 volts in ½ volt steps. For exact temperature control on all Oryx 6-volt tools. Operates on 115 VAC—ready to plug in. **Model 54204T.**

33F304. NET **6.50**

MINIATURE THERMAL WIRE STRIPPERS

Type ST-6. Usable with wide variety of insulating materials and wire sizes. Separate steel stripping heads have an operating temperature of 400° 6 volts AC or DC, 12 watts. Tweezers allow for variable pressures and control without damage to conductors.

33F299. NET **15.95**

TRANSFORMERS

Type 54203-6V Transformer. Special transformer for all 6 volt Oryx soldering irons. Output is 6 volts at 3 amps (18 watts). With cord. Wt., 1½ lbs.

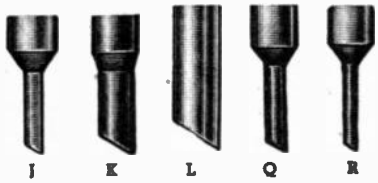
33F290. NET **5.50**

Model 5420-12V. 12 volt transformer. With clip-holder. 25 W., 2 amps. 110V AC. Shpg. wt., 1½ lbs.

33F297. NET **6.45**

115 VAC SOLDERING PENCILS

Designed for continuous production and precision soldering. Immediate plug in. No transformer required. Tips are nickel plated, chrome copper alloy. Complete with tip and 4½' UL approved ultra-flexible cord. Compact design for light production, laboratory, and service use. Small and easy to handle. Helps speed any precision soldering operation. Polarized to directly ground the shaft, tip and side of heating element. Wt. 1 oz.



Model 115-10J. Heats to 672° in 70 seconds. Type J tip supplied also takes type K.

33F412. NET **7.50**

Lots of 12, each **6.95**

Model 115-15K. Heats to 717°F in 50 seconds. Type K tip supplied, also takes types L and Q.

33F413. NET **7.75**

Lots of 12, each **6.95**

Nickel plated except (*) solid nickel end.

Stock No.	Fig.	Dia.	Use With	Net Ea.
33F414	J	3/32"	115-10	1.55
33F415	K	5/16"	115-10, 115-15	1.70
33F416	L	¼"	115-15	2.25
33F418*	Q	3/32"	115-15	1.85
33F419*	R	1/16"	115-15	1.85

MINIATURE SOLDER POTS

Used for tinning wires and leads plus heating waxes, shellacs and potting compounds. Operates directly from 115 volts AC or DC. Oper. temp. 550-600°F. reached in 4 mins. Capacity 2½cc.

Stk. No.	Type	Description	Each
33F302	SP-115-3	3 wire grd.	12.95
33F303	SP-115	2 wire	12.95

Ten Stocking Warehouses from Coast-to-Coast. Call, Wire or Write for Items Not Listed in This Catalog. Use the Services of the Facility Nearest You.

Soldering Irons and Accessories

THERMOCO FOR RESISTANCE SOLDERING

PENCIL HAND UNITS

Model 3003. May be used with either Model 2001 or 2002 power supplies. Uses 3/16" dia. carbon tip and is made for heavier work than units below. Well designed to radiate heat away from handle. Supplied with 5 ft. extra flexible cable and 5 ft. continuity cable. Shpg. wt. 8 lbs.
34F705. NET **8.40**

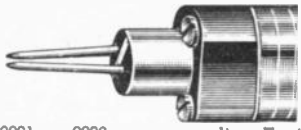
Model 3002. A lighter version of Model 3003 above. Uses 1/8" dia. carbon tip. Used with Model 2001 power supply or Model 2002 power supply using the lower taps for more critical heat adjustment such as P.C. board work.
34F706. NET 8.40

Model 3001. Similar to Model 3002 except 1/16" metal tip.
34F707. NET 8.40

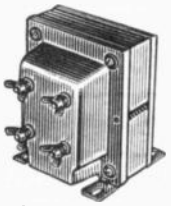
REPLACEMENT ELECTRODES

Stk. No.	Type	Used with	Description	Per Pack of 6	
				1-24	25-99
34F708	5001	3004	Metal 1/16"Dx2 1/4"L	.50	.45
34F709	5002	3001	Metal 1/16"Dx3 1/2"L	.50	.45
34F710	5003	3002	Carbon 1/8"Dx3"L	1.50	1.35
34F711	5004	3003	Carbon 3/16"Dx3"L	1.50	1.35

ADJUSTABLE DUAL TIP HAND UNIT



Model 3004. As tips are extended, gap narrows for thinner or lighter work. When tips are recessed, gap is widened for heavier work. Tips 1/16" dia. May be used with Model 2001 or 2002 power supplies. Equipped with 5 ft. extra flexible cord with attached lugs.
34F712. NET **10.50**



POWER SUPPLIES

Model 2001. 100 watt power supply. Supplies 5 different heats. Operates on 115V 50-60 cycle, but can be supplied for 230V 50-60 cycle operation. Equipped with 4 wing nut binding posts and 4 ft. line cord and plug. Shpg. wt. 5 lbs.
34F713. NET **17.50**

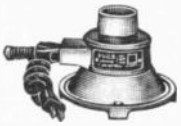
Model 2002. 250 watt power supply. Same as Model 2001 except it supplies 11 different heats, including one for printed circuit board work. Designed with high temperature insulation to withstand heavy overloads. Equipped with 4 ft. cord. Shpg. wt. 9 lbs.
34F714. NET **24.50**

FOOT SWITCH WITH SERIES PLUG

Model 4001. Designed to be used in primary circuit of power supply. Shuts off power while soldering pencil is holding connection in place until solder sets. Shpg. wt. 1 lb.
34F715. NET **6.80**

ESICO SOLDERING POTS

MODEL 12—200 WATTS



Ideal for dipping small parts. Inside dimensions: 1 9/16" diameter, 1 1/2" depth. Maximum temperature: 750 degrees. Solder capacity 3/4 lb. Wt. 4 lbs.
33F321. NET **9.80**

Model 12T. With thermostat. 250 watts—650 degrees maximum. Shpg. wt., 6 1/4 lbs.
33F322. NET 21.80

MODEL 20—250 WATTS ADJUSTABLE

Pot incorporates thermal delay type control for manual adjustment of wattage with automatic correction for voltage variations. At 25% setting, pot idles at approx. 500° F; at 75% setting, pot idles at approx. 1200° F; control corrects for voltage variations. On hi, pot temperature will vary with voltage fluctuations.
35F1280. NET **36.80**

MODEL 36—250 WATTS

Dip soldering of bundles of lead wire, etc. Inside dimensions: 2 1/2" diameter, 1 3/4" depth. Maximum temperature: 750 degrees. Solder capacity 2 1/4 lbs. Wt. 4 lbs.
33F323. NET **10.90**

Model 36T. With thermostat. 650 degrees maximum. Shpg. wt., 6 1/2 lbs.
33F324. NET 22.80

MODEL 37—600 WATTS

Large capacity pot. Inside dimensions: 3 1/2" diameter, with a depth of 1 3/4" for greater capacity. Maximum temperature: 800 degrees. Solder capacity 5 lbs. Wt. 7 1/4 lbs.
33F325. NET **14.90**

Model 37T. With thermostat. 650 watts—650 degrees maximum. Shpg. wt., 9 1/8 lbs.
33F326. NET 26.80

MODEL 75T—650 WATTS

Dipping small panels, etc., which cannot be accommodated in small round pots. Thermostat control. Inside dimensions: 4 3/4 x 4 3/4 inches, 1 3/4" in depth. Maximum temperature 650 degrees. Solder capacity 11 3/4 lbs. Wt. 9 1/8 lbs.
33F320. NET **28.80**

MODEL 80T—1200 WATTS

Printed circuit panels, etc. Thermostat controlled. Inside dimensions: 6"x12". 1 7/8" in depth. Maximum soldering temperature 650 degrees. Solder capacity in pot 45 lbs. Wt. 28 lbs.
33F327. NET **85.00**

Replacement Elements for Esico Soldering Pots

Stk. No.	Watts	For Pot #	Price
35F1275	200W	12	2.40
35F1276	250W	12T-36-36T	2.30
35F1277	600W	37	4.40
35F1278	650W	37T-75T	4.40
35F1279	1200W	80T	16.00

WAAGE SOLDERING POTS

ROUND SOLDER MELTING POTS

Round solder melting pots for melting solder, tin, lead-type metal and babbitt with temperatures up to 1000°F. Melting crucible of heavy cast iron. Replaceable heating elements are clamped to bottom of crucibles for even heat distribution. Fiber glass and air insulation reduces heat loss to a minimum. Furnished with 6', 115 VAC 3-conductor, grounded cordset.

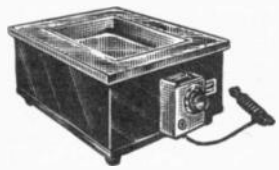
550 DEGREES FAHRENHEIT

Stock No.	Type	Cap. Lbs.	Watts	Inside Dia.	Inside Depth	Control	Shpg. Wt.	NET EACH
60F1500	MP1	1	150	1 1/2	1 1/2	1 heat	5	14.50
60F1501	MP1A	1	200	1 1/2	1 1/2	Auto.	5	20.00
60F1502	MP4A	4	300	3	1 1/2	Auto.	6	24.00
60F1503	MP10A	10	500	3 1/2	2 1/2	Auto.	11	35.00

1000 DEGREES FAHRENHEIT

60F1504	MP1X	1	400	1 1/2	1 1/2	1 heat	5	24.00
60F1505	MP4X	4	800	3	1 1/2	1 heat	6	28.00
60F1506	MP1AX	1	500	1 1/2	1 1/2	Auto.	8	50.00
60F1507	MP4AX	4	900	3	1 1/2	Auto.	9	55.00

RECTANGULAR SOLDER MELTING POTS



Specially designed for printed circuit fabrication. Wide open top area with shallow depth offers maximum dipping efficiency of either flat or edge dipped circuit boards. Circuit boards can be dipped manually or the standard Waage Tanks can be easily integrated into a completely automatic assembly system. Wide flat flanges provide easy mounting of assembly jigs for accurate production dipping. Specifications similar to round units.

550 DEGREES FAHRENHEIT

Stock No.	Type	Cap. Lbs.	Watts	Inside Dimens.	Control	Shpg. Wt.	NET EACH
60F1508	RSP1	10	600	4x4x2"	Auto.	15	38.50
60F1509	RSP2	20	1200	4x8x2'	Auto.	23	55.00

700 DEGREES FAHRENHEIT

60F1510	RSP3	30	1500	4x12x2"	Auto.	35	75.00
60F1511	RSP7	70	1600	9x12x2"	Auto.	52	120.00

GENERAL ELECTRIC SOLDERING EQUIPMENT

PENLINE-120 INDUSTRIAL SOLDERING PENCILS

A.

B.

C.

D.

E.

Features Calrod heater in tip for fast heating and tip temp. recovery speed. Heat concentrated at tip to reduce chances of damaging insulation. Calorizing eliminates oxide build-up on tip body and threads and prevents tip freezing on holder. One iron can handle many jobs by changing tip or tip heater assembly.

HANDLE AND CORD SETS

Stk. No.	Type	Fig.	Description	1-11	12-up
32F851	6D400	A	Two Conductor	3.15	2.89
32F852	6D400G2	A	3 Conductor with NEMA standard Plug.	4.25	3.80

INTEGRAL TIP AND HEATER ASSEMBLIES—IRONCLAD

Stk. No.	Type	Fig.	Watts	Description	1-11	12-up
32F853	6D410	B	30	3/16" Chisel Tip	5.00	4.50
32F854	6D411	C	30	9/32" Chisel Tip	5.10	4.59
32F855	6D412	D	45	3/8" Chisel Tip	5.20	4.68

HEATER ASSEMBLY FOR USE WITH SCREW-ON TIPS

Stk. No.	Type	Fig.	Watts	Description	1-11	12-up
32F856	6D413	E	40	Heater Assembly	4.25	3.80

SCREW-ON TIPS—IRONCLAD

Stk. No.	Type	Diam. & Shape	1-11	12-up
32F858	6D4P2	3/32" Spade	1.50	1.35
32F860	6D4P6	3/32" Chisel	1.50	1.35
32F862	6D4P4	5/32" Spade	1.50	1.35
32F864	6D4P8	5/32" Chisel	1.50	1.35
32F866	6D4P16	1/64" Pyramid	1.50	1.35

Stk. No.	Type	Diam. & Shape	1-11	12-up
32F868	6D4P20	1/64" Cone	1.50	1.35
32F870	6D4P10	7/32" Chisel	1.50	1.35
32F872	6D4P14	7/32" Long Chis.	1.60	1.45
32F874	6D4P12	3/16" Chisel	1.50	1.35
32F876	6D4P18	3/8" Pyramid	1.50	1.35

"MIDGET" 6-VOLT SOLDERING IRONS

6A203

6A211

6A213

6A215

6A217

Small, light wt. irons. The heater inserted farther into the tip improves initial heat-up and provides faster recuperation from joint to joint. Iron clad tips provide long life with minimum maintenance costs. Screw-in feature of tip and heater assembly assures positive contact and serves to hold the tip and heater firmly in the handle. Tip and heater replacement takes only a few seconds. Longer life and greater safety due to low voltage supplied by transformers. Transformers available in two types as listed on the right. All Irons 6 volt 25 watts. UL approved. Shpg. wt., 3 oz.

HANDLE AND CORD ASSEMBLY

Stk. No.	Type	Description	1-11	12-up
33F445	6A203	Handle & Cord	3.90	3.60

TIP AND HEATER ASSEMBLIES

33F404	6A211	1/4" Chisel	4.30	3.88
33F405	6A213	1/8" Cone		
33F406	6A215	3/16" Pyramid		
33F407	6A217	3/16" Chisel		
33F439	6A221	Htr. Ass'y.*		

*25 watt heater assembly for use with 6D series screw-on tips listed above.

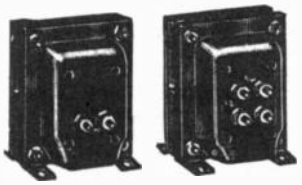
Note: For complete iron, order 6A203 Handle plus Tip and Heater Assembly of your choice.

6D200 SERIES REPLACEMENT TIP AND HEATER ASSEMBLIES

Replacement tip and heater assemblies for use only with Model 6D200 cord and handle, which is no longer available.

No.	Type	Tip Dia.	1-11	12-up
33F441	6D211	1/4" chisel	4.30	3.88
33F442	6D213	1/8" cone		
33F443	6D215	3/16" pyramid		
33F444	6D217	3/16" chisel		

115-V TRANSFORMERS FOR "MIDGET" SOLDERING IRONS



Specially designed, 115-volt transformers available in two types. Single-tap transformer is for use where only one soldering heat is required. Four-tap transformer gives wide range of heats (from 26 to 35 watts) for close temperature control of tips.

Model 6A362G2. Single tap transformer.
33F408. 1-5 Net Each..... **7.35**
6 or more Net Each.....6.21

Model 6A364G2. Four tap transformer.
33F409. 1-5 Net Each..... **9.75**
6 or more Net Each.....9.55

UNITED SHOE MACHINERY

POP RIVET TOOL KIT

Type K-110. Eliminates the need for sheet metal screws, nuts and bolts, soldering, etc., in many common household projects. Two interchangeable nose pieces are included, one for 1/8" steel or aluminum and one for the 5/16" aluminum Pop rivets. The extra nosepiece screws right into the head of the tool for storage. A sliding button latches the handle when closed. Epoxy finish makes it resistant to chemicals, corrosion, and abrasion. Shipping wt., 1 lb.
35F1150. NET..... **4.95**

Stk. No.	Rivet Type	Rivet Material	Rivet Lt.	Rivet Dia.	No. Per Box	Net Per Box
35F1151	S-42	Steel	1/8"	1/8"	100	.99
35F1152	A-42	Alum.	1/8"	1/8"	100	.99
35F1153	S-44	Steel	1/4"	1/8"	100	1.32
35F1154	A-44	Alum.	1/4"	1/8"	100	1.32
35F1195	S-48	Steel	1/2"	1/8"	100	1.65
35F1156	A-64	Alum.	1/4"	5/16"	50	.85
35F1157	A-68	Alum.	1/2"	5/16"	50	1.12
35F1158	A-610	Alum.	5/8"	5/16"	50	1.30

● NEW K-106 DELUXE KIT

Use rivets in place of screws, nuts, bolts, adhesives, etc. Kit includes "POP" RiveTool #412 for 1/8" and 5/16" rivets, extra large supply of rivets and back-up plates, plus threaded rivets in handsome satin-finish metal box.
35F1181. NET..... **7.50**

THERMOGRIP

TYPE 210 THERMOGRIP GLUE STICKS

Type 201.

- **60 second bonding**
- **No clamping**
- **No cleanup**

Easy to use gun which bonds wood, pottery, leather, metal, plastics, fabrics and most materials. Glue bonds in 60 seconds and is waterproof. Phenolic handle etc. Ship. wt. 13 oz.
35F1176..... **5.95**

TYPE 210 THERMOGRIP GLUE STICKS

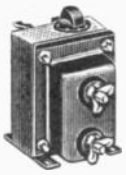
These sticks are waterproof, flexible and easy to use. Perfect for glueing furniture and other objects where a certain amount of "give" is needed. Sold 7 on a card etc. Shpg. wt. 1¼ oz.
35F1177..... **.49**
35F1179 (Box of 60).....1.98

THERMOGRIP SEALER STICKS

Type 211. Thermogrip sealer is a flexible, waterproof, hot-melt caulk for bathtubs and tiles, boats and other applications where a white seam filler is needed. Compatible with the Thermogrip glue. 7 sticks/card. Ship. wt. 1½ oz.
35F1178. NET. Per Card..... **.49**
35F1180 (Box of 60)..... 1.98

Soldering Equipment & Wire Strippers

THERMO-TIP® RESISTANCE SOLDERING TOOLS



12-124

12-125

12-163

POWER UNITS

125 Watts

12-124. For light production and intermittent work. Selector switch for choice of three heats (3V, 4.5V, or 6.3V). Complete with power cord and clip for holding pencil style attachments. 115V, 60 Hz. Shpg. wt., 4 lbs.
58F573. NET **20.00**

250 Watts

12-123. For heavier production work. Faster. Handles larger components than 12-124 above. Choice of two heats through "high" (6.1V) and "low" (4V) secondary connections. Complete with power cord. 115V, 60 Hz. Shpg. wt., 8 lbs.
58F574. NET **29.50**

500 Watts

12-163. For continuous production work. Widest selection of heats —nine choices (1.7V to 6.4V) through 3 position selection switch plus "high", "medium" and "low" secondary terminals. With cord and pilot light. 115V, 60 Hz. Shpg. wt., 13 lbs.
58F575. NET **48.50**

12-167

12-169

RESISTANCE SOLDERING ATTACHMENTS

For small parts. No heat damage or cold flow joints. Have pencil grip handles that feature perforated aluminum sleeve which dissipates heat and provides exceptionally cool operation. Versatile and light, gets into tight places. Lighter than soldering iron or gun, can be used by women all day without fatigue. Have feed through type electrodes that can be adjusted for length. Complete with 5 ft. cord with lug terminal.

12-167. Pencil grip handles with double metal electrode style style attachment. Shpg. wt., 4 ozs.
attachment. Stpg. wt., 4 ozs. **12.00**

12-169. Pencil grip handles with single metal electrode style attachment. Collet chuck hold feeds through electrode. For smallest work. Complete with ground clamp and lead assembly for jig soldering. Shpg. wt., 9 ozs.
58F577. NET **12.00**

REPLACEMENT ELECTRODES

L5241. For above. 1/16" dia., 3½" long. Shpg. wt., 2 ozs.
58F578. NET. pkg. of 6 ..... **.60**

FOOT SWITCH

Model 12-146. Foot Switch. Eliminates arcing at electrodes on contact. Permits using electrodes to hold work in position after turning off heat. 3⅝" dia. x 1⅛" high. Rated 5 amps. 115 v. Wired normally open. Shpg. wt., 12 oz.
58F579. NET **8.80**

WIRE STRIPPERS

DUAL BLADE STRIPMASTER®

Designed for close tolerance stripping to meet rigid military requirements for reliability. Strips consistently, with no nicks, no scrapes, no damage to conductor or insulation. Precision matched stationary blades assure clean, 90° strip—no ragged, uneven ends. Insulation slug slips off conductor by moving gripper w/o scraping or burnishing wire strands. Able to handle MIL-W-5086 Type II fiberglass, MIL-W-16878 Types E and EE Teflon, and wire of comparable diameter. Shpg. wt. 1 lb.

Stk. No.	Type	Gauge	NET
58F899	45-500	No. 16 to 22 wire	43.50
58F898	45-501	No. 10 to 14 wire	43.50
58F886	45-502	No. 16 to 22 wire	43.50
58F887	45-503	No. 24 to 30 wire	43.50
58F888	45-504	No. 16 to 22 wire	43.50
58F889	45-505	No. 24 to 30 wire	43.50

CUSTOM STRIPMASTER®

A hand stripper for Type E (600V) Teflon®. Unique blade construction and extreme holding power. Strips without nicking or scraping wire. Just insert wire between blades to desired length squeeze handle and release. Includes stop latch and wire-stop. Shpg. wt. 14 ounces.

Stk. No.	Mfg. No.	AWG Gauge	NET
58F550	45-186	No. 16 to 14 Wire	20.50
58F551	45-187	No. 16..to..26 Wire	20.50
58F552	45-188	No. 26 to 30 Wire	20.50

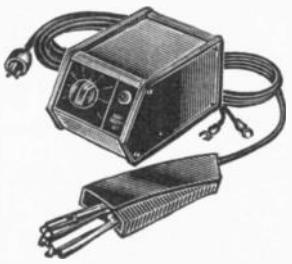
SAFE-T-GRIP® WIRE STRIPPERS

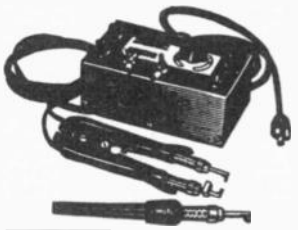
For quick easy, clean stripping of wires used in electronic appliances. Sturdy, compact, constructed of hardened steel for rugged duty and long service. Plastic grips for sure handling and safety.
58F586. 45-120 (for #10-18 wire)
58F587. 45-121 (for #16-26 wire)
NET EACH **1.95**

STRIPMASTER®

Hand stripper with automatic single-squeeze feature. Strips wire up to a full ⅞". Automatically holds jaws open for removing wire without crushing end. Reduces nicking, cutting, or fraying. For stripping lighter gauge wires. No. of holes: 6 except 14 to 22, 4. Wt., 14 ozs.

No.	Mfg. No.	AWG Gauge	NET
58F553	45-093	No. 14 to 22 Wire	5.95
58F554	45-097	No. 16 to 26 Wire	5.95
58F555	45-098	No. 20 to 30 Wire	5.95





E-Z® AUTOMATIC CABLE STRIPPERS

With Adjustable Blade

A hand stripper for solid and stranded wire. Automatic stop locks jaws open after stripping until wire is removed. Eliminates crushed wire ends. Eccentric adjustment on blades limits cutting depth of stripping blades to compensate for variations in insulation or conductor diameter. Shpg. wt., 14 oz.

No.	Mfg. No.	AWG Gauge	NET
58F556	45-220	No. 16 to 26 Wire	6.95
58F557	45-222	No. 10to 22 Wire	6.95
58F558	45-224	300 Ohm TV Wire	6.98

SWING-GRIP® THERMAL WIRE STRIPPER

Thermal type wire stripper for stripping applications of the most critical nature, where no damage to conductor or insulation is permissible. Suitable for thermoplastic insulations, including Teflon®. Unique one squeeze operation eliminates "ringing" of insulation. Stripping is accomplished by melting instead of cutting or tearing. Gripper removes slug without disturbing the lay of stranded wire. Designed for smaller gauge wires. Shpg. Wt. 6¼ lb.

Stk. No.	Type	Description	NET
58F897	45-135	Power Unit, 115V, 60 Hz	36.75
58F896	45-136	NPower Unit, 230V, 50-60 Hz	45.75
58F895	45-143	Swing-Grip Tool	21.75

THERMO-STRIP® WIRE STRIPPER

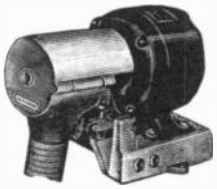
A hand model hot wire stripper for thermo plastic insulated wire. Thermo-strip melts insulation instead of cutting or tearing it. There is no chance of nicking or cutting conductor strands. Heavy duty power unit may be operated continuously. No foot switch required—no waiting for elements to warm up. Stepless, infinitely variable heat control permits setting to exactly the right temperature. Unit has pilot light. Automatic thermal overload protection and is case-grounded through three-conductor cord.

Stk. No.	Type	Description	Wt.	NET
58F560	45-130	45-133 Power Unit & 45-140 Pincer Attach.	9 lbs.	70.50
58F561	45-131	45-133 Power Unit & 45-141 Single Loop Attach.	8¾ lbs.	58.75
58F562	45-140	Pincer Attach. for 45-133 Power Unit	1 lb.	22.75
58F563	45-141	Single Loop Attch. for 45-133 Power Unit	12 ozs.	11.00

Stk. No.	Type	Description	Wt.	6 Pr./Pkg.
58F566	L-5599	Medium Duty Element 45-141 Single Loop Attach.	2 ozs.	1.20
58F564	L-5589	Medium Duty Element 45-140 Pincer Attach.	2 ozs.	2.40
58F565	L-5597	Heavy Duty Element 45-140 Pincer Attach.	2 ozs.	2.40

IDEAL PRODUCTS

ROTARY TYPE STRIPPER

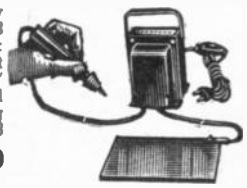


Model 45-009. Features 45° carbide stripping blade, one ⅛" bushing, and 2 1/16" guide bushings. For production stripping of single conductors, solid or stranded, up to ⅜" diameter. Reversible motor (¼ hp drive) to fit natural twist of wire. Strips, twists, and polishes wire Wt. 45 lbs.

Stk. No.	Type	Description	NET EACH
58F891	45-009	115 Volts 50/60 hz	195.00
58F892	L-2440	*45° High Speed Steel	5.65
58F890	L-3844	Twisting Blades (pair)	6.20

*Extra Stripping Blade (Pair)

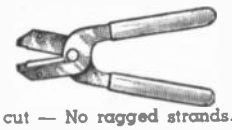
LIGHT DUTY ETCHER



Model 11-009. Std. model. Specially suited for lighter applications. 3 heats: 140, 205, & 375 watts. Includes: 4 oz. etching tool with heat resistant handle & special alloy point. 4x7" work plate, 3-heat power unit, and primary cord with heat changing switch. Size: 4x4x8". Shpg. wt. 13 lbs.

58F582 NET **41.70**

WIRE CUTTER



Model 45-123. Handy wire cutter slices through copper or aluminum wire. Handles solid wire up to No. 10 AWG and fine stranded cable up to ½" O.D. Made of hardened steel. Has ground cutting surfaces. 6" long. Shear-type blades for square, clean cut — No ragged strands. Plastic grips. Shpg. wt. 12 oz.

58F885. NET **1.95**

PRECISION ROTARY WIRE STRIPPER

Model 45-150. Compact unit is completely assembled and requires no installation. Unique blade-spring design eliminates pivots and other wear points allowing it to maintain high precision nick-free accuracy. Equipped with transparent safety shields over the stripping head. Insulation slugs are automatically ejected into a slug collecting compartment. 115 Volt, 60 Hz, AC. 060 diameter Wire Guide, calibrated adjustment tool and 9½ ft. power cord with grounded plug. Wt. 11 lbs. 4 oz. Size: 5" x 5" x 10".

58F894. NET **225.00**

L-6634. Consists of the double edge carbide blade, spring, and blade guide, ready for installation. The long lasting carbide blade is reversible for double-edged economy.

58F893. NET **18.00**

● NEW ELECTRIC MARKER

Model 11-111. Marker construction reduces "bouncing." Coil provides stronger stroke (7200 spm). Adjusting wheel varies impact force & length of stroke. On/off switch & hd. cord. Interchangeable points. Shpg. wt. 13 oz.

58F583. NET **9.95**

Model L-7843. Carbide tipped replacement point only.

58F584. NET **1.65**

Model L-7844. Diamond replacement point only.

58F585. NET **5.65**

SAFE-T-GRIP FUSE PULLER

Model 34-002. Laminated fuse puller features notched handles for a sure grip. Item eliminates the danger of pulling cartridge fuses by hand or bending fuse clips through improper removal. Also used for adjusting loose cut-out clips, handling live electrical parts, etc. 7½" long. Shpg. wt. 4 oz.

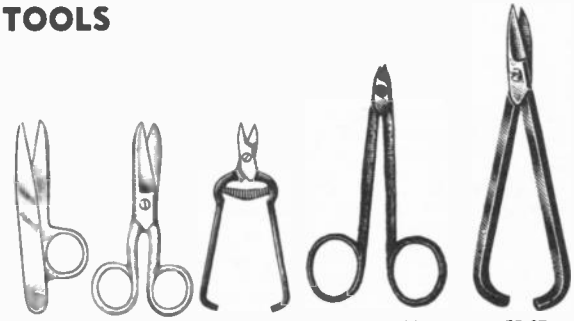
58F559. NET **1.00**

CLAUSS TOOLS

SCISSORS AND SNIPS

Scissors have small tough points for fine cutting. Snips have comfortable handles, high leverage.

Stk. No.	Type	Description	Size	Wt.	Each
34F780	925	Electricians' scissors	5"	3 oz.	2.17
34F781	76½	Filament snip	6½"	5 oz.	2.83
34F782	TC4½	Thread snip for light cutting	4½"	3 oz.	2.50
34F767	564½	Special jaw for flush cutting	4½"	⅔ oz.	3.67
34F768	565½	Same as above	5½"	1⅓ oz.	3.83
34F769	57	Curved jeweler's snip	7"	4 oz.	2.17
34F770	67	Straight jeweler's snip	7"	4 oz.	2.00
34F771	384	General cutting tool, slender blades.	4"	⅔ oz.	2.43
34F772	564D	For limited clearance wire cutting	4"	⅔ oz.	3.50



DOMESTIC TWEEZERS

Non-magnetic Satin-finish stainless steel. Delicate feel and balance. With smooth inside points except (*) serrated.

Stk. No.	Type	Description	Size	Wt.	Each
34F773	7SS	Curved tweezers	4½"	⅓ oz.	2.17
34F774	5S	Long, V-shaped	4¼"	⅓ oz.	1.00
34F775	S	Long, slender	4¼"	⅓ oz.	1.17
34F776	231*	Serrated inside points	4¾"	⅔ oz.	1.50
34F777	AA	Tapered points (not non-magnetic)	4⅞"	⅔ oz.	1.17

HEAT SINK TOOLS

Copper beryllium alloy provides max. thermal conductivity. Satin chrome finish resists solder. Box joint prevents side-slip. For holding parts during soldering. Wt. 1 oz.

34F778. Type HS5. **NET** **2.50**

34F779. Type B50. **NET** ..... 2.50 **34F788.** Type B47 ..... 2.50

ANTI-WICKING TOOLS

Stock No.	Type	Gauge	NET
34F783	AW20	20	5.86
34F796	AW22	22	
34F797	AW24	23	
34F784	AWG20	20	4.83
34F798	AWG22	22	
34F799	AWG24	24	

Depend on Newark for Everything in Industrial Electronics

• **OEM Prices** • **Complete Stocks** • **Fast Service**

Soldering Equipment

KESTER SOLDERS

PLASTIC ROSIN CORE SOLDER

Standard Size. 3/32" diameter. For all radio and electrical applications. Non-corrosive. Plastic rosin filled. Alloy 40% tin, and 60% lead.

33F201. 1 lb. spool. **NET** 1.54
33F202. 5 lb. spool. **NET** 7.50

Extra Thin. 1/16" diameter. Where small amount is required. Non-corrosive. Plastic rosin filled. 40% tin, 60% lead.

33F203. 1 lb. spool. **NET** 1.58
33F204. 5 lb. spool. **NET** 7.65

KESTER CORE SOLDER

Noncorrosive and electrically non-conductive. Flux residue is immune to fungus growth, resistant to oxidation or organic decomposition. Core 66 (3.85% flux content). Meets all applicable MIL and Federal specs, latest amendments.

Alloys		NET PRICES								
		Stk.	3/32" dia.		Stk.	1/16" Dia.		Stk.	1/32" Dia.	
Tin	Lead	No.	1 lb.	5 lbs.	No.	1 lb.	5 lbs.	No.	1 lb.	5 lbs.
40%	60%	33F205	1.54	.....	33F213	1.58	.....	33F335	2.27	.....
40%	60%	33F219	.....	7.50	33F214	.....	7.85	33F336	.....	8.85
50%	50%	33F207	1.84	.....	33F215	1.90	.....	33F337	2.55	.....
50%	50%	33F220	.....	9.00	33F216	.....	9.25	33F338	.....	10.05
60%	40%	33F221	2.10	.....	33F217	2.14	.....	33F223	2.82	.....
60%	40%	33F222	.....	10.30	33F218	.....	10.45	33F224	.....	11.35

33F200. T.V.-Radio Solder, 3 oz. coil, 1/16" dia. **NET** ..... .32

SOLDERING ACCESSORIES

Soldering Paste. Even distribution of fluxing ingredients. Handy for general repair work. 2 oz. can.

33F211. NET ..... .13

Tinning Block. Cleans and tins soldering iron. Replaces sal ammoniac. 1 lb. unit.

33F212. NET ..... .65

NOTE: Special alloys are available for industrial use.

BAR SOLDER

Made of finest quality tin and lead alloy.

Stk. No.	Alloy	Size	NET
33F598	50/50	1 lb.	1.59
33F599	60/40	1 lb.	1.83

SOLDER SIPPER

Removes molten solder from electrical connections or any place where the solder is concentrated in a small mass. Small, compact, light weight, manually operated. The Teflon tube possesses long life qualities under normal use. Not recommended for use above 500°F. Shpg. wt., 5 oz.

33F487. NET **1.29**

Epoxy Products Co., Chemicals & Plastics Div., Allied Products Corporation

SILVER FILLED ELECTRICALLY CONDUCTIVE COATING

E-Kote 40. Silver conductive paint in spray-on aerosol can. Quickly, electrically shields circuit modules and compounds. Will adhere to plastic, glass, ceramic and most other materials. Tack-free in 3-5 minutes, completely dry in 16 hours. Fully conductive within minutes after application. Volume resistivity of dried film is .001 OHM-CM. Cure schedule: 30 min. at 175°C., 16 hrs. at 25°C. 8 oz.

32F556 ..... 12.00

HIGH TEMPERATURE SILICON COATING

- **Extra High Bond Strength**
- **No Flux Contamination**

Silicone E-Kote 3027. For electric shielding and soldering applications which require continuous operating temperatures of 600°F. Tensile-shear strength is 600 psi over entire temperature range. Conductivity over entire temperature range: 0.001 OHM-CM. Cure schedule: 232°C—30 min.; 149°C—24 hours. 3 oz.

32F555 ..... 12.00

Conductive silver epoxy combines the adhesive characteristics of epoxy with the electrical conductivity of silver. Epoxy "solder" can be used at room temperature for components which are heat sensitive; it can be used to bond dissimilar materials and it has no flux or residue to contaminate sensitive electronic components. When used with dissimilar materials, epoxy "solder" provides a strong bond where soldering or brazing is often impossible.

EPOXY SILVER E-SOLDER

Stk. No.	Type	Description	Ohm-Cm Resist.	Max. Oper. Temp. °C.	Typical Cure Schedules	Jar Size	NET Per Jar
32F550	3021	2 Part Paste Pure Silver	.001	125-150	27C—24 Hours 65C— 3 Hours	2 oz.	12.00
32F551	3022	2 Part Paste Pure Silver	.01	125-150	27C—24 Hours 65C— 3 Hours	2 oz.	
32F554	3026	2 Part Paste Pure Silver	.01	125-150	27C—24 Hours 60C— 4 Hours	2 oz.	
32F557	3028	Silicon Grease	.1	200	.....	2 oz.	
32F552	3030	Pure Silver Paint	.001	125-175	Air Dry	3 oz.	

ERSIN MULTICORE SOLDER

Made with non-corrosive extra-active flux. 5-core design guarantees continuity of flux stream, faster melting, and same % of flux-to-solder as with single core types. SWG wire gauge sizes: 16=.064", 18=.048", 20=.036". Shpg. wt., 1 lb. carton 1¾ lbs.; 7-lb. reel, 9¼ lbs.

ALLOY 60/40 ½ LB. CARTONS

Stk. No.	Gauge	Net
33F344	24(.022")	2.96
33F345	28(.014")	3.90
33F346	32(.0108")	5.09
33F347	34(.009")	6.18

ALLOY 67/37 ½ LB. CARTONS

33F339	20(.036")	1.90
33F340	24(.022")	3.09
33F341	28(.014")	3.96
33F342	32(.0108")	5.14

7 POUND REELS

Stk. No.	Alloy	Gauge	1-3	4-up
33F227	40/60	16	18.41	15.40
33F233	50/50	16	20.79	17.43
33F234	60/40	16	23.10	19.39
33F235	60/40	18	23.52	19.74

Savbit copper-loaded Industrial Solder Alloy that lengthens the life of copper tips. Melting pt., tensile and shear strength same as tin-lead alloys. 1 lb. spools. 1¾ lbs.

Stk. No.	Gauge	1-27	28-up
33F239	14(.080")	3.20	2.68
33F240	16(.064")	3.22	2.71
33F241	18(.048")	3.34	2.81
33F238	20(.036")	3.63	3.05

1 POUND CARTONS

Stk. No.	Alloy	Gauge	1-27	28-up
33F226	40/60	16	2.67	2.24
33F229	50/50	16	3.01	2.53
33F228	60/40	16	3.34	2.81
33F230	60/40	18	3.40	2.86
33F231	60/40	20	3.67	3.09

EASY DISPENSER PAK

14 ft. of Ersin Multicore Solder in 60/40 alloy, 18 ga., in aluminum dispenser. Ideal for repairing printed circuitry as well as for all general purpose soldering requirements.

33F236. NET ..... .69

Special Alloy Industrial Solders. Low-melting pt. type (L.M.P.) is 62% tin, 36% lead, 2% silver. High melting point (H.M.P.) type is 5% tin, 93.5% lead, 1.5% silver. Eutectic 63/37 alloy, melts at 361°F. Shpg. wt., 1-lb. spool, 1¾ lbs.; 28-lb. carton, 32 lbs. SWG size 22=.028".

Stk. No.	Type	Gauge	1-27	28-Up
33F310	L.M.P.	16	5.06	4.26
33F311	L.M.P.	18	5.86	4.92
33F312	L.M.P.	22	7.25	6.09
33F313	H.M.P.	16	4.27	3.58
33F314	H.M.P.	18	4.33	3.63
33F315	Eutectic	16	3.54	2.97
33F316	Eutectic	18	3.60	3.02
33F317	Eutectic	20	3.74	3.14

● *NEW* LIQUID FLUX

Pure rosin liquid flux removes surface oxides and prevents their formation during soldering operations.

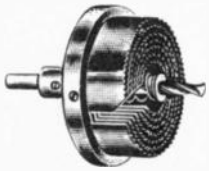
Flux	Pint	Quart	Gal.	Size	NET
5380	33F1690	33F1691	33F1692	Pt.	2.50
4370	33F1693	33F1694	33F1695	Qt.	3.40
0360	33F1696	33F1697	33F1698	Gal.	7.95

5380 — Conforms to MIL-F-14256-W—Non-Activated. **4370**—None. **0360**—Conforms to MIL-F-14256C-A Activated.

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

ARCO TOOLS

ARCO HOLE-SAWS



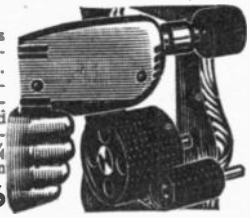
No. 650. Cuts 1", 1¼", 1½", 1¾", 2", 2¼", and 2½" holes through any ¾" stock. Rugged alloy tool head. 7 finest quality shatterproof blades. Automatic "slug-ejector" and ¼" drill bit. Shipping weight: 1¼ lbs.
33F470. NET **6.37**

Model 600. Has automatic slug ejector. Cuts 1", 1½", 2", & 2½" holes. Extra grooves in tool head accommodate 1¼", 1¾", and 2¼", blades and ¼" drill bit. Fits any drill, lathe, or motor. Shpg. wt. 1½ lbs.
33F460. NET **4.77**

SET OF 4 ADJUSTABLE SCREW DRILLS

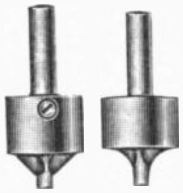
Type 1140. Drills and countersinks in one operation. Prevents wood from splitting, thread from stripping. ¼" shank. Adj. for any screw length. Set, for no. 6, 8, 10, 12 woodscrews. Shpg. wt. 2 oz.
33F459. NET **3.18**

5500 SHOP KING ROTARY RASP



¼" shank fit any electric drill. Cuts wood, plastic, plaster, brass, wallboard, rubber, plywood and copper. Ideal for beveling, planing, paint removal. Never clogs or needs sharpening. Constructed of hardened and tempered steel for years of use. Consists of: 3 rotary rasp drums, ¾, 1¼ and 1⅞" diameters. Length of drum 1½". Shpg. wt., 7 oz.
33F483. NET **2.96**

NO. 15 ARCO 4-PIECE RADIUS & BEVEL CUTTER SET



For corner beveling and rounding with any electric drill. Adjustable bevel cutter, cuts 45° bevels from 1/32" to 5/16" wide and three different size radius-cutters for ⅛", 3/16", ¼". Dual guides for accurate cutting. on wood, plastic and soft metals. Rugged construction assures long life and durable service. Shpg. wtt. 4 oz.
33F486. NET **4.61**

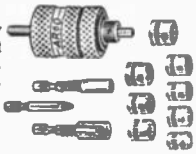
SCREWDRIVER ATTACHMENT

Model 710. Has industrial type clutch. Special bit holder prevents bit from slipping from screw slot. Bit idles until pressure is applied, clutch disengages when screw is driven home. Includes two ¼" hex bits for #2 phillips head & for #6 to #14 slotted screws. Wt. 1 lb.
33F458. NET **3.98**

● NEW 780 REVERSIBLE SPEED REDUCER AND SCREW DRIVER

Fits any electric drill or drill press. Changes instantly from forward to reverse. Reduces drill speed 11 to 1 in forward, 4 to 1 in reverse. Special bit holder prevents bit from slipping off screwheads. Includes flat bit with bit holder for #6-14 slotted screws, #2 phillips bit and socket wrench holder with ball lock. Wt. 14 oz.
33F448. NET. **7.98**

ARCO SCREW AND NUT DRIVER



Type 750. 15-Pc. set of industrial-quality tools. Fits all electric drills. Incl. 2 flat bits with holders for #4-14 slotted screws, Phillips bit, 6 hex sockets (¼, 5/16, 11/32, 3/8, 7/16, ½ in.), 2 square sockets (¼, 5/16 in.) and socket wrench holder with ball lock. Wt. 1 lb.
33F449. NET **5.57**

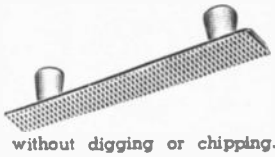
2-SPEED ANGLE DRIVE

Model 350. Right angle gear drive for half or double drill speed. Fits ¼" electric drills. Slow speed for buffing. Fast speed for smooth sanding. Swivel angle-drive for hard-to-get-at places. Includes 3 adapters to mount Angle-Drive in chuck or on drill-spindle. With instructions and guarantee. Wt., 1½ lbs.
33F471. NET **3.97**

5700 ROTARY FILE SET

Complete range of 5 shapes for cutting steel, brass, aluminum and other metals, and all non-metal hard surfaces. Ideal for shaping, finishing, pattern making and model making. Milled from solid tool steel, hardened and tempered. Consists of 5 various sizes. Wt., 7 oz.
33F484. NET **3.36**

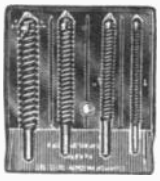
1270 ARCO PLANE & FILE



Ideal for planing, filing, beveling, removing paint, trimming, rounding corners, sanding. Perfect for model makers and the general household jobs like sticky doors and draws. Never clogs or needs resharpening. Cuts wallboard, plastic, wood, rubber and soft metals without digging or chipping. Shpg. wt. 6 oz.
33F485. NET **1.54**

CHAMPION HIGH SPEED DRILL SETS

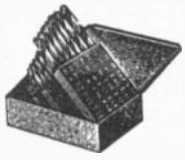
¼" Shank Set



Masonry Set

113C

121C



129C

High quality precision made AMERICAN tools, made to perform speedily and accurately under the most exacting conditions. Champion drills are held to the standards demanded by today's industry and meet all commercial and government specifications. Made in AMERICA by AMERICAN workmen. Ground and heat treated and pointed by the latest and most accurate methods to insure perfect performance.

TYPE 270S-P4 FOUR PIECE DRILL SET WITH ¼" SHANK

Will drill hole sizes 5/16" to ½" without larger chuck. Size, 5/16", 3/8", 7/16", ½" with ¼" diameter shank. Complete with 4 drills and plastic pouch. Wt., 1 lb.
33F603. NET **6.90**

TYPE CM7-4 MASONRY DRILL SET

4 piece Carbide tipped masonry drill set. Contains 4 sizes, ¼", 5/16", 3/8" and ½". For use with any ¼" drill. Complete with plastic pouch. Shpg. wt., 1 lb.
33F604. NET **3.59**

HIGH SPEED TWIST DRILL SETS

Type. 113C. 13 piece high speed drill set in metal Huot case. Has drills from 1/16" to ¼" in 1/64" steps. Shpg. wt., 1 lb.
33F625. NET **4.94**

Type 121C. 21 piece high speed drill set in metal Huot case. Has drills from 1/16" to 3/8" in 1/64" steps. Shpg. wt., 3 lbs.
33F628. NET **13.83**

Type 129C. 29 piece high speed drill set in metal Huot case. Has drills from 1/16" to ½" in 1/64" steps. Shpg. wt., 4 lbs.
33F627. NET **28.74**

Type 160C. 60 piece high speed wire gauge drill set. Drill sizes 1 to 60. Metal Huot case incl. Shpg. wt., 3 lbs.
33F628. NET **20.34**

INDIVIDUAL DRILLS

High speed twist drills made to meet high standards of quality, and to provide maximum life with minimum wear.

STANDARD SHANK

Stock No.	Drill Size	1-11	12-Up
33F611	⅛"	.32	.26
33F612	5/32"	.35	.29
33F613	3/16"	.45	.38
33F614	7/32"	.56	.46
33F615	¼"	.67	.58

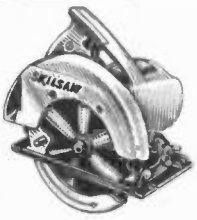
Featuring ¼" shank to fit all power or hand drills with ¼" capacity. State size wanted. Av. Shpg. wt., 4 oz.

¼" SHANK

Stock No.	Drill Size	1-11	12-Up
33F617	5/16"	1.24	1.02
33F618	11/32"	1.21	.99
33F619	3/8"	1.68	1.38
33F621	7/16"	2.32	1.91
33F623	½"	2.96	2.43

SKIL Power Tools

75



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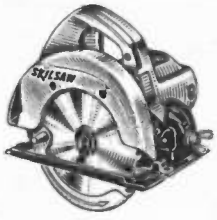

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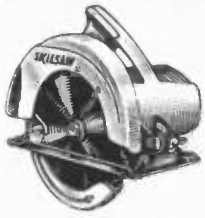

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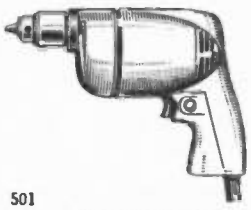
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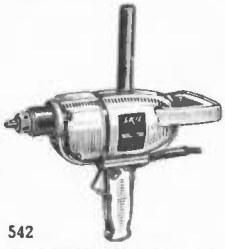
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● *NEW* 1/4" DRILL

Model 503. Drill accurate holes in concrete, metal, brickwork, plaster, wood, or wallboard. Extra power for sanding, grinding, and polishing jobs. Lightweight design for easy handling. 2.5 amp motor, no load speed, 2000 rpm. AC-DC. Drilling cap.: 1/4" steel and 1/2" wood. 9" long. Shpg. wt. 4 lbs.
64F400. NET **14.88**

● *NEW* 1/4" TSC DRILL

Model 501. Operator squeezes trigger for any forward speed from 0 to 2000 rpm. Trigger speed control feature provides greater versatility over standard drills when using general accessories. Drill or drive screws in wood, metal, plastics, masonry, and even glass without center punching. Drill into curved or irregular surfaces without bit skidding. 2.5 amp motor and helical gears. Shpg. wt. 4 lbs.
64F401. NET **19.88**

● *NEW* 1/4" HEAVY DUTY DRILL

Model 75. Optional speeds: 500; 750; 1000; 2500; 3500; and 5000 rpm. Lightweight, but provides greater power for constant use on production and installation jobs. Built with precision gears, 4 heavy duty ball bearings, and 2 needle-roller bearings. Has easily removed inspection cover, trigger switch, and pin for locking in "on" position. Available with standard speed (1800 rpm) or choice of 6 optional speeds. Keyless chuck available at extra cost. 2.5 amp motor at 115V. 9" long. Shpg. wt. 4 lbs.
64F402. NET **57.00**

● *NEW* 3/8" STANDARD DUTY DRILL

• **Power, Performance, and Lightweight**
Model 76. 900 rpm, 2.8 amp, 115V. motor. Convenient side handle for extra control when using large bits, wood augers, and hole saws; quickly removeable for close quarter drilling. Trigger switch pin for locknig in "on" position. Ball bearing construction. 3/8" drill cap. 9 5/8" long. Shpg. wt. 8 1/2 lbs.
64F421. NET **47.00**

● *NEW* 1/2" DELUXE DRILL

Model 542. For drilling heavy lumber and metal. Bores 1" hardwoods, drives hole saws and all self-feeding bits. Rear spade handle and removable top handle. Heavy duty strain relief on cord. No load speed. 500 rpm. 3.5 amp motor, delivers 20% more power and torque. 12 1/2" long. Shpg. wt. 8 1/2 lbs.
64F403. NET **47.88**

● *NEW* HEAVY DUTY INDUSTRIAL REVERSING DRIVER

Model 288. Specifically designed for driving self-drilling fasteners. Die-cast aluminum construction coupled with Super Burnout Protected Motor. 8 1/2" length of tool allows operator to get super close to the work. Insert type bit retention prevents wobble and eliminates service problems. Driver is compact and super powerful. Heavy duty reversing switch is out of the way under the handle near the cord. Easy depth adjustment with locking collar. 1/4" cap. 4 amp motor comes equipped with three wire cord and plug. Shpg. wt. 4 3/4 lbs.
64F404. NET **89.50**

● *NEW* REVERSIBLE DRIVE-R-DRILLS

Control speed 2 ways: pre-set maximum speed by turning adjusting knob. Increase or decrease operating speed by pressure on trigger. Feature invaluable for driving and removing screws; drilling in ceramic tile; or any application where control and accuracy are of primary importance. Can also lock the drill in "on" position.
Model 596-5. 1/4" drill. 2.5 amp motor. 0-2000 rpm forward/reverse. Shpg. wt. 6 lbs.
64F405. NET **29.88**

Model 597-5. 3/8" drill. 3 amp. motor. 0-1000 rpm. forward/reverse. Shpg. wt. 6 lbs.
64F406. NET **36.88**

Model 598-5. 1/2" drill. 3 amp motor. 0-750 rpm forward/reverse. Shpg. wt. 6 lbs.
64F407. NET **39.88**

● *NEW* HEAVY DUTY ELECTRIC SCREW-DRIVER

Model 316. For precision assembly in metal and other materials of uniform density. Double-slip clutch. Compact, lightweight pistol grip design. Trigger switch, locking pin, ball and needle construction. Shpg. wt. 6 lbs.
64F408. NET **145.00**

● *NEW* ELECTRIC DIE GRINDER

Model 146. Specifically designed motor for continuous hi-speed use. Construction minimizes vibration. 1/8" chuck collet and 20,000 rpm. Provision for pin engagement of spindle. Shpg. wt. 2 1/4 lbs.
64F409. NET **65.00**

● *NEW* ORBITAL/LINE SANDER

Model 592. Handle orbital and straight line sanding at the flick of a switch. Orbital sanding for fast stock removal. Straight line sanding for super finish sanding without swirl marks. Has powerful heavy duty motor, 4 1/2 x 9" sanding pad, contour top grip handle, and trigger switch with locking pin. Shpg. wt. 9 lbs.
64F410. NET **34.88**

● *NEW* 6 1/2" HOMEOWNERS SAW POWER SAW

Model 534. Cuts 2" dressed lumber; makes 45° bevel cuts. Sawdust ejection system. Vari-torque clutch. Safety stop brushes and lower blade guard. 9 amp motor, 5500 rpm. Helical gearing. Shpg. wt. 11 3/4 lbs.
64F411. NET **27.88**

● *NEW* 6 1/2" HEAVY DUTY

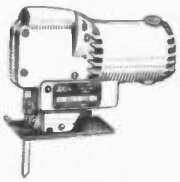
Model 552. 3 heavy duty ball bearings and 1 roller bearing. 10 amp motor develops over 1 1/2 horsepower; stands up under the toughest cutting conditions. Has cutting depth of 2 3/16" at 90°. Cuts 2" dressed lumber at 45° bevel. Super tough helical gears deliver full cutting torque to blade. 10 amp motor, 5800 rpm. Shpg. wt. 14 1/2 lbs.
64F412. NET **64.50**

● *NEW* 7 1/4" POWER SAW

Model 574. Cut wood, plastic, composition, wallboard, metal, and masonry. Helical gears insure power to spare. Anti-friction bearings throughout. Vari-torque clutch. Depth and bevel controls. Sawdust ejection system. Lower blade guard. 1 1/2 HP Super Burnout Protected Motor. 10 amp, 5200 rpm. Safety stop brushes. Shpg. wt. 12 1/2 lbs.
64F413. NET **29.88**

SKIL POWER TOOLS

553.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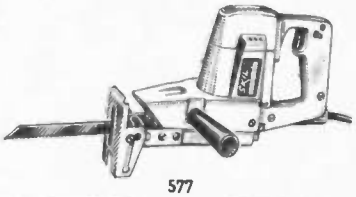

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● *NEW* 7¼" HEAVY DUTY SAW

Model 553. Has ball and roller bearings and helical gears. Telescoping lower blade guard designed for prevention of jamming on miter cuts. Push button blade lock. Sawdust ejection system and bevel and depth-setting controls. Blade cuts to 3⅛" at 90°. 12 amp motor, 5200 rpm, and over 2 hp. ⅝" round arbor. Shpg. wt. 16¼ lbs.
64F414. NET **74.50**

● *NEW* ALL-SPEED SUPER-DUTY RECIPROCAL SAW

Model 703. Remarkable saw lets you select the optimum speed for fastest cutting of virtually any material. Perfect saw for anyone who must cut a variety of materials. Cuts anywhere—into walls, in corners, flush to floors. Has fully adjustable foot, and off-center blade. Shpg. wt., 4 lbs.
64F422. NET **110.00**

Model 703-01 Kit. Includes Model 703 saw, 4 blades, hex wrench, and steel carrying case. Shpg. wt., 10 lbs.
64F423. NET **118.00**

● *NEW* RECIPRO SAW

Model 577. Has 2 speeds: Hi (2000 strokes per minute) for fastest cutting of wood, plastic, and composition; lo (1600 spm) for cutting steel, aluminum, and brass. Ideal for pocket cuts, roughing in, scroll work, and ripping. Adjustable 4 position blade; 3 position foot; double reduction gears; and canted blade. Anti-friction bearings. Trigger switch, AC only. 3 amp, 115V motor. Includes: 3 blades and 3 wire cord plug. Shpg. wt. 3 lbs.
64F415. NET **41.88**

● *NEW* ROTO-HAMMER DRILL

Model 726. Heavy duty construction. For making 5/32" to 1¼" diameter holes. Swing away tool retainer for fast accessory changes. Light weight for over head work. 3-way action. High velocity air filter system. Externally adjustable clutch. Automatic oiling. Depth gauge. Oversized bearings and heat treated steel and gears. Aluminum piston and hardened alloy steel striker. 5.5 amp motor. Shpg. wt. 37 lbs.
64F416. NET **255.00**

● *NEW* JIG SAW

Model 514. Single speed. Rips, crosscuts scrolls, and notches. Makes own starting hole. Orbital blade action. Contour grip housing. Specially designed stationary foot eliminates need of splinter free attachment. 2.3 amp motor, 4000 spm. *Assortment of 3 blades included. Shpg. wt. 4¾ lbs.
64F417. NET **22.88**

● *NEW* DELUXE 2-SPEED JIG SAW

Model 524. 2.3 amp motor delivers 4000 spm for wood, plastic, and composition; 3000 spm for metal. Orbital action cuts on up stroke, clears on down stroke. Automatic blower. Bevel gears, ball thrust, and mounted anti-friction bearings. Trigger switch. AC only. Includes: Splinter free cutting attachment, 3 blades, 3-wire cord and plug. Shpg. wt. 5½ lbs.
64F418. NET **31.88**

● *NEW* 6" BENCH GRINDER

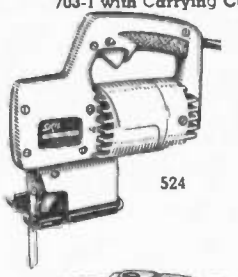
Model 287. Has ⅓ hp for grinding, wire-brushing, cleaning, and buffing. Dynamically balanced permanent split capacitor motor. Lubricated for life ball bearings give vibration free operation. Motor housing permits grinding of long work across entire front of grinder. Removeable end bell covers, spark arrestors, and tool rests. Cast iron construction for stability. Grey crackle finish. 3-phase 220 VAC. 4 amp motor, 3600 rpm. 1 fine and 1 medium grit wheel. Shpg. wt. 44 lbs.
64F419. NET **69.50**

● *NEW* HAMMER-DRILL KIT

• 2 Tools in One

Model 627. Hammer-drill for drilling holes in masonry for a heavy duty drill. Delivers over 21,500 blows per min. Depth gauge for drilling to uniform depth. Super powerful 1200 rpm motor delivers necessary torque to drive large hole saws and self-feeding bits. All ball and needle roller bearings. Drill is compact enough to work between studs and joists. Removeable side handle mounts on top or either side. Kit includes: ¼", 3/8", and ½". Percussion Carbide Tipped bits and steel carrying case. Shpg. wt. 14¾ lbs.
64F420. NET **114.50**

703-1 with Carrying Case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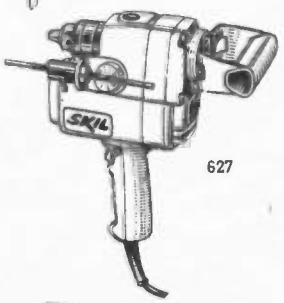

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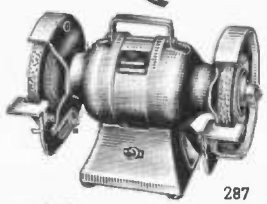
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THOR POWER TOOLS

BENCH GRINDER

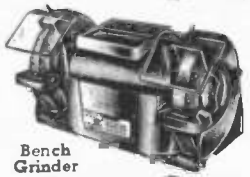
Model 956. 4½" Wheel Bench Grinder. two wheels 4½" x ½" x ½" hole — one 40 and one 70 grit. Aluminum diloy housing Shaded pole motor. Feature cast in parts tray, rubber feet, and base drilled for mounting. Protected slide switch, removeable end guards, and adjustable tool rest. Silicone finish, oversize eye shields, and flat front design. Shpg. wt. 8 lbs.
33F343. NET **16.73**

BRONZE BEARING GRINDER

Model 928. ¼ hp 6" grinder. 2 wheels, 6" x ¾" x ½". Aluminum alloy housing. Shaded-pole motor, 3450 rpm. Cast in tool parts tray, eye shields, oilless and self-aligning bearings, removeable end guards, base drilled for mtg., heavy duty toggle switch, silicone finish, and flat front. Shpg. wt. 24 lbs.
33F307. NET **27.93**

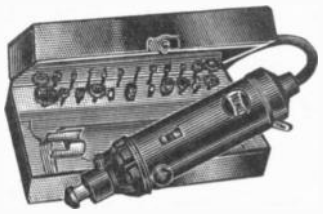
¼" ELECTRIC DRILL

Type E-110. Powerful, compact ¼" drill for industrial applications. Diminutive size (less than 6½") and light weight (27 oz.) bear no relation to this unit's efficiency or power. Full-wave diode circuit is employed to combine the inherent advantages of DC motors—high efficiency, trouble-free permanent-magnet stators—with the convenience of AC operation: just plug into an ordinary 110/120 VAC outlet! Other features include heat-proofed armature with welded commutator leads and high-temperature insulation, shock-proof gearing, and splined armature shaft. Spindle offset is 19/32". Shpg. wt., 3 lbs.
33F330. NET **34.95**


Bench Grinder 956

E-110. ¼" Electric Drill

DREMEL POWER TOOLS



INDUSTRIAL MOTO-TOOL KIT MODEL 3

Kit contains Model 3 moto-tool. Tool has a 27,000 rpm, heavy duty. 0.9 amp., Universal Motor; also a 3-wire ground cord. Kit includes: 1/8", 3/32", and 1/16" collets; 4 emery wheels; dressing wheel; 8 steel cutters; steel brush; shoulder mandrel with disc sanders; screw mandrel with felt wheel; and drum sander. All packed in steel case.

33F664. Type 233. **NET** **29.46**

No. 3 Moto-Tool Only

Includes 1/8" & 3/32" collets, 3-wire ground cord with 2 prong adapter.

33F672. Type 232. **NET** 22.46

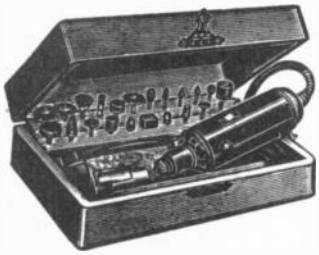
ELECTRIC SCROLL SAW

Model 501. Featuring a high speed reciprocating motor producing 7,200 strokes per minute. Has convenient finger control trigger switch. 4-way blade holder permits cutting in any direction. No limit to cutting length. Deep throat 9½" permits cutting to center of a 19" circle. Has sturdy shatterproof nylon housing and chrome plated tubular saw frame. Ideal for cutting and scroll work on wood and soft metals. Simple operation, even a child can do a professional job. Cutting asphalt, rubber and plastic tile are simplified with the use of this universal power tool. 115V AC operation. 10¾" long, 8½" high. Shipping weight, 3 lbs. Complete with 6' long 3-wire safety cord, 2-prong adapter, and 7 saw blades.

33F673. Type 501. **NET** **9.71**

Replacement blades for Model 501.

33F657. NET (Pack of 10) 45c



DELUXE MOTO-TOOL KIT MODEL 2

Kit contains 1 Model 2 moto-tool. Tool has 27,000 rpm, 0.5 amp. Universal Motor. Operates on 110-120V., 60 hz., AC or DC. Fingertip control and vibrationless operation. Kit includes: 1/8", 3/32", and 1/16" collets; 1 fingergrip attachment; 8 steel cutters; 1 steel saw; 1 shoulder mandrel with sanding disc; 1 screw mandrel with felt wheel; and 1 drum sander. All contained in a steel case.

33F662. Type 222. **NET** **24.55**

No. 2 Moto-Tool Only

Tool comes with chuck, 1/8" collet, and emery wheel pt. Wt. 13 oz.

33F654. Type 221. **NET** 17.10

All Moto-Tools and accessories available from Newark stock.

DELUXE MOTO-SHOP

Model 572. Basic unit is a 15" Jig Saw with built-in ball bearing rotary motor and power take off. Accessories include disc sander attachment, cloth buffing wheel, wire wheel brush, grinding wheel, wheel guard, flexible shaft, polishing compound stick, 12 piece accessory set, 1 adapter, 3 sanding discs and 4 saw blades. Jig Saw has large capacity 15" throat, saw to center of 30" circle. Table raises and lowers, and tilts. 18 lbs. For 110-120 volts AC.

33F663. NET **37.46**

33F657. Type 8029. Ext. Blades. Pack of ten 45

UNIVERSAL STAND

Type 223. For No. 2 or No. 3 Moto-Tool. Adjustable ball and socket assembly. Holds Moto-Tool at any angle. Quick action clamp for receiving and releasing.

33F550. NET. **6.35**

SHAPING TABLE

Type 224. Mounted vertically on No. 2 or No. 3 Mototool when used with universal stand. When inverted provides control for routing and depth grinding.

33F551. NET. **3.35**

DRILL PRESS

Type 225. Used with No. 2 or No. 3 Moto-tool. For drilling and routing. 12" high with a 6¾" x 4". Table can be raised or lowered; lock in any position for depth adjustment. Shpg. wt. 4 lbs.

33F552. NET. **11.20**

ELECTRIC ENGRAVER

Model 290. Heavy duty. Marks all types of materials from hardened steel to glass. Easy as writing with a pencil. Calibrated stroke adjustment regulates depth of engraving. High speed—7200 strokes a min. High impact nylon housing and powerful motor. Complete with solid carbide engraving point and storage case. Shpg. wt., 1½ lbs.

33F674. NET **9.97**

Type 9924. Replacement solid carbide pt.

33F648. NET 1.67

Type 9929. Diamond engraving pt.

33F649. NET 5.00

ULSTER

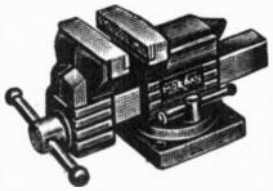
ELECTRICIAN'S KNIFE

Type K29. Two blades, spear and screwdriver wire scraper. Center safety-lock, brass linings, steel bolsters and shackle. Spear blade full mirror polished. Mahogany colored plastic handle. 3¾ inches long. Shpg. wt.: 4 oz.

34F122. NET, 1-11, Each **1.65**

Dozen lot, Net each 1.45

MORGAN VISES



High quality vises for home workshop or service shop. Sturdily made of close grained gray cast iron, with extra large steel sliding bar. Features removable hardened steel jaw faces, and swivel base.

Type 4. Jaws are 4" wide and open to 4". Shpg. wt., 23 lbs.

33F581. NET **16.40**

Type 5. Jaws are 5" wide and open to 5". Shpg. wt., 30 lbs.

33F582. NET **19.14**

HOMECRAFT VISE

Built to same standards as Utility Line except that it has a 3/4"x3/4" steel slide bar and built-in pipe jaws.

Type 25. Jaws are 3½" wide and open to 3½". Shpg. wt., 11 lbs.

33F579. NET **7.07**

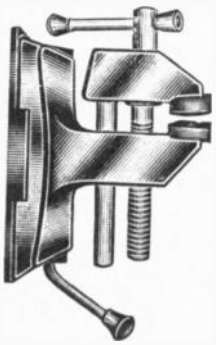
VACU-VISE

Super Vacuum Power Holds Vise to any smooth, non-porous surface: Formica, Linoleum, Metal, Porcelain, Glass — Completely portable! No screws . . . no clamps needed! Yet, holds firmly to any smooth surface — in any position! Simply apply light pressure to Vacu Vise top and push down Vacu lever. Attaches quickly with "super vacuum-super strong" power! When finished — lift release lever and Vacu Vise detaches itself instantly. Just right for the do-it-yourselfer, mechanic, electrician, serviceman — functions on-the-job wherever needed. Of rugged constructed casting. 2½" V-groove steel jaws open to a full 2". Base size: 5" wide, 4" deep, and 4" high.

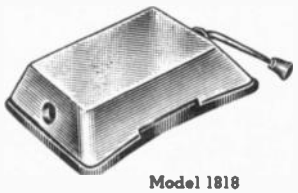
Model 1800. Vacu Vise, Hammertone Finish.
35F1295. NET **6.95**

Model 1810. Vacu Vise, Chrome Plated Finish.
35F1296. NET **10.00**

Model RJ1816. Rubber Slip-On Jaws. Ideal for working with fragile or delicate materials.
35F1297. NET ..... **1.00 Pair**



Vacu-Vise



Model 1818

Model 1819

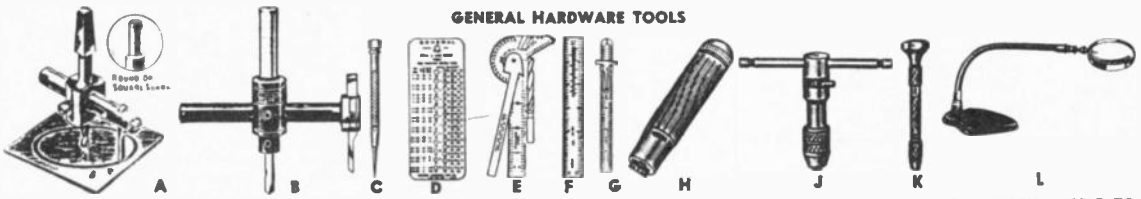
MULTI-PURPOSE VACU BASE
Holds Fast n' Firm to do 1001 Jobs — Anywhere!

Just flick the Vacu lever and base fastens securely to any smooth working surface by super strong vacuum power! Lift lever — and base is released! No clamps or screws necessary. Small, conveniently portable, always handy. Constructed of die cast Zamak 3 alloy with heavy, long lasting rubber holding pads. Gives complete portability to any fixture, instrument or appliance attached to it! Extra material provided for hole and threaded mounting on top and sides.

Model 1818 Vacu Base Top. Size: ⅜ x 2¾ x 2¼".
35F1299. NET **3.00**

Model 1819 Large Vacu Base. Same as #1818 listed above but larger top. Size: 1 5/16 x 3⅝ x 2¾".
35F1298. NET **5.00**

GENERAL HARDWARE TOOLS



QUALITY CIRCLE CUTTERS

Fig. A. Cut round holes in metal, wood, bakelite, etc. Used in slow speed drill press, hand drill or brace. Fully adjustable. Drill acts as pilot. Wt., 8 oz.

No.	Type	Shank	Size	NET
34F570	JR-00	Comb. ¼"	⅝" to 2½"	1.25
34F571	4	Comb. ¼"	⅞" to 4"	1.82
34F572	S-A	Square	1" to 5½"	2.48
34F573	S-B	Round 5/16"	1" to 5½"	2.48

34F574. Extra blade. Types 4, S-A or S-B circle cutters above. 4 oz. **NET** ..... .59

Fig. B. Type 55. Cuts holes from 1¾" to 8" dia. Made of tool steel with Jessup cutting bits. ¼-20 hollow set screws give position adjustment. Has ½" shank to fit ½" chuck. Set screw wrench included. Shipping wt., 8 oz.
34F575. NET **4.79**
34F576. Extra blade for above. **NET** ..... .99

CHASSIS LAYOUT TOOLS

Model 83. Fig. C. Pocket Scribe. Hex head, steel case, locking chuck. 2¼" tapered point may be reversed. Size, 4¾".
34F560. NET ..... **.66**

Model 15. Fig. D. Drill and Wire Gauge. Decimal equivalents for sizes 1 to 60. Lists taps and body drill sizes ¼-28 to 2-56.
34F561. NET **1.58**

Model 16. Fig. E. Multi-Use Rule & Gauge. A 4" rule in 32nds and 64ths, drill point gauge, square, bevel protractor, center finder, circle divider, tap drill table. In vinyl plastic case. Wt., 4 oz.
34F562. NET **1.58**

Model 310. Fig. F. 6" Steel Rule and Wire Gauge. Gives 32nd and 64th graduations, B and S wire gauge and decimal equiv.
34F563. NET ..... **.50**

Model 301. Fig. G. 6" Pocket Rule and Depth Gauge. Only ¼" wide. Gives readings in 64ths. With handy pocket clip.
34F564. NET ..... **.14**

JEWELERS' SCREWDRIVER SET

Type S-600. Set of six. Sizes: 0, 1, 2, 3, 4, 5. Swivel head with removable blade. 3" long. ½ lb.
34F577. NET **3.47**

ADJUSTABLE FILE AND TOOL HOLDER

Fig. H. Model 890. Holds files, blades, reamers, scriber points, etc., in a vise-like grip. Knurled knob assures easy and positive locking. Wt., 8 oz.
34F578. NET ..... **.80**

RATCHET TAP WRENCH

Fig. J. Model 160R. Made of hardened and tempered tool steel. Self-equalizing jaws, positive ratchet, sliding-T-handle. Opening capacity: 3/32 to 7/32". Wt., 8 oz.
34F579. NET **3.80**

HAND DRILL AND PIN VISE

Fig. K. Model 92. A precision tool with two reversible collets for holding drills, taps, wire, etc. from the smallest size .0 to .125". Has large free-wheeling swivel head. Size: 4" long, 5/16" body dia., ¾" head. Wt., 5 oz.
34F580. NET **1.32**

INSPECTION MAGNIFIER

Fig. L. 4" powerful ground and polished lens. 12" chrome plated adjustable Gooseneck Arm. Ball joint swivel permits easy adjusting. Sturdy cast-iron base for bench or table use. Wt., 4 lbs.
34F620. NET **7.43**

AUTOMATIC CENTER PUNCH—TYPE 79

Constructed of **shock-resistant alloy steel.** Pressure adjustable. Ideal for rapid center on stock. Tips replaceable. 5x½" dia. 5 oz.
34F565. NET **3.30**
34F566. Type 79P. Extra point. **NET** ..... .42

MACHINISTS HAND VISE

Model 815. Ideal for jobs where portability and flexibility are desired. Hard steel knurled jaw faces grip any object securely and safely. Has spring tension wing nut adjustment. Wt., 1 lb.
34F444. NET **2.64**

INSPECTION MIRROR

Type 558. 2"x1" oval inspection mirror. Adjustable 6" knurled chrome plated handle.
34F443. NET **1.32**

MG TOOL COMPANY

MICROMETERS

Type 102. Precision American made micrometers ideal for general usage. 0-1" with full finish frame cut with decimal equivalents. Satin finish throughout with easy to read black graduation. Friction thimble for more sensitive pressure. Fully adjustable for wear. Packed with instructions.
35F1410. NET **5.40**

Type 101. 0-1" range. As above but has black enameled frame with black graduations against satin finish thimble and barrel.
35F1411. NET **4.40**

Set No. 4. Consists of No. 052, 0-½"; No. 102; No. 202, 1-2"; and No. 302 with 2-3" range. Complete with standards and instructions in compartmented carrying case.
35F1412. NET **26.40**

PRECISION DIAL TEST INDICATORS

Quality American-made universal dial test indicators. Rugged, reliable, and low in cost. Indicates to .001 inch. Special offset construction permits tight measurements. Supplied with complete set of accessories and three interchangeable points, making tool completely versatile. One inch adjustable dial has knurled ring for zero setting, black graduations on white background, and flat glass faceplate to minimize reflections. Readings in clockwise direction only. Comes packed in a fitted case. Accuracy guaranteed.

Type 0100-3. Dial reads continuously from 0 to 0.100" by .001" graduations.
35F1413. NET **14.50**

Type 050-03. Balanced dial reads 0 to 0.050" to 0 by .001" graduations.
35F1414. NET **14.50**

SK234

K-48

K13

1963

35F1266

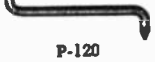
ML7

TT-31

WS150

Type 22

1550



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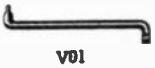


V01

P6

P01

● NEW SELF ADJUSTING NUT DRIVER

Type SA-711. Versatile, cost saving tool does the work of four nut drivers. Place the driver over the nut or screw and automatically select the right hex size ¼"-5/16"-⅜" or 7/16". Eliminates time consuming selection of different tools for each different size. Feature tempered steel sockets, trouble-free adjusting mechanism, chrome plated barrel, and exclusive break proof, shock proof, Comfordome handle. Extremely useful in blind applications where it is impossible to see the screw. Simply turn the driver until it engages screw without benefit of adjustment. Perfect for factory assemblyline work, servicemen and hobbyist alike. The self adjusting tool can ideally be used anywhere. No fumbling or switching. Just press and turn.
35F1274. NET **3.00**

3-PIECE SCREW LAUNCHER KIT

Type SK-234. Includes ⅛x3", 3/16x4" and ¼x6" with self-closing pouch. For tvery serviceman, repairman, mechanic and homeowner in almost any kind of job from repairing a radio to just putting a picture on the wall. Drivers come with easy-to-carry red and white self-closing plastic pouch. Weight: 8 oz.
35F1262. Net **4.10**

PHILLIPS SCREW LAUNCHER

Ideal for holding, starting or retrieving any cross slot screw. One tip fits all sizes of screws. Choice of lengths.

Stock No.	Type	Length	1-5	6-Up
35F1258	K13	3"	1.75	1.40
35F1259	K15	5"	2.05	1.65
35F1260	K16	7"	2.15	1.70
35F1261	K19	9"	2.20	1.75

CRIMPING TOOL WITH BOLT SLICE

Type 1963. Cuts, strips, crimps! Removes insulation from wire 22-10 gauge. Slices 6 sizes of bolts: (4-40, 5-40, 6-32, 8-32, 10-32, and 10-24). Comfort grip—plastic handles.
35F1267. ..... **4.95**

MAGNETIC LEVEL, PROTRACTOR, RULE AND SQUARE COMBINATION TOOL

Type ML-7. Protractor level accurate to 1°. Plastic level vial . . . vial head swivels in either direction for reading any angle to 90°. Scale measures rise or fall in in./ft. 1/16" graduate rule on 3 sides.
35F1268. NET **2.60**

SNAP RING PLIERS

Black spring steel with induction hardened straight tips. Secure grip . . . easy release after application or removal. Sturdy construction.

Type 21. Internal type.
35F1263. ..... **1.85**

Type 22. External type.
35F1264. ..... **1.85**

OFFSET SCREWDRIVERS

Double-ended—one bit parallel to shank, other at right angles. Made of chrome vanadium steel. Av. shpg. wt., 4 oz.

PHILLIPS OFFSET SCREWDRIVERS

Stk. No.	Type	Screws	Length	EACH
34F400	P-120	1 & 2	4¾"	.58
34F401	P-230	2 & 3	5½"	.96
34F402	P-340	3 & 4	6"	1.12

MILLED BIT OFFSET SCREWDRIVERS

34F403	VO-1	2 to 6	3"	.42
34F404	VO-2	6 to 10	4"	.67
34F405	VO-3	8 to 12	5"	.76

● NEW REVERSIBLE SCREW DRIVERS

The reversable screwdriver will please any serviceman, technician, hobbyist, or repairman. Square blade on one end and phillips bit on the other. Special clutch secures blade in break-proof handle. Saves space, time and money.

Type DUC-2. 3/16" Regular x #1 Phillips. Overall length 6".
35F1271. NET **1.25**

Type DUC-4. ¼" Regular x #2 Phillips. Overall length 6¾".
35F1272. NET **1.50**

Type DU-1. ⅛" Regular x #1 Phillips. Overall length 5".
35F1273. NET **1.00**

SURE GRIP SCREW LAUNCHER

Superb gripping power and non-slip driving action makes for ideal use in assembly work, production work, repair and maintenance, and home workshop. 3 blade diameters to fill every need.

Stk. No.	Type	Size	1-5	6-Up
35F1250	K23	⅛ x 3"	1.25	1.00
35F1251	K28	⅛ x 8"	1.50	1.20
35F1252	K34	3/16 x 4"	1.85	1.48
35F1253	K36	3/16 x 6"	1.90	1.52
35F1254	K38	3/16 x 8"	1.95	1.55
35F1255	K44	¼ x 4"	1.95	1.55
35F1256	K46	¼ x 6"	2.00	1.60
35F1257	K48	¼ x 8"	2.05	1.65

INSULATED TERMINAL ASST. NO. 4900/63 "CASH REGISTER"

Handy deluxe assortment provides the right terminal for every use. Heavy duty, compartmented metal box has identification chart in cover, contains crimping tool with bolt slicer. Plastic insulation is color coded for size.
35F1266. ..... **32.50**

3-IN-1 TAPPING TOOL

Typt TT-31. Taps 3 sizes of holes to 6-32 8-32, or 10-32 thread. An invaluable aid for building or repairing electronic components. Exclusive comfordome handle.

35F1270. NET **2.08**

DELUXE WIRE STRIPPER

Type WS-150. Spring loaded stripping and cutting tool has adjusting dial for precision stripping of wire 12-24 gauge. Ideal for any use; factory, home or service.

35F1269. NET **1.20**

SNAP RING KIT

Type 1550. Contains compartmented metal box with hinged cover, identifcation label and an assortment of internal and external snap rings. Has two pliers, 1 for each type ring. For lab, maintenance dept., shop or serviceman. Wt. 8 lbs.
35F1265. ..... **12.40**

PHILLIPS SCREW DRIVERS

STANDARD TYPES

Phillips cross slot screws are now in such wide use that you need these precision steel screwdrivers for all Phillips screws. Shpg. Wt., 4 oz.

Stk. No.	Type	Point	Length	Screw	NET
34F355	P01	0	5¼"	0-1	.64
34F356	P1	1	6¼"	2-4	.86
34F357	P2	2	7⅝"	5-10	1.08
34F358	P3	3	10"	12-16	1.48
34F359	P4	4	12½"	18 up	1.75

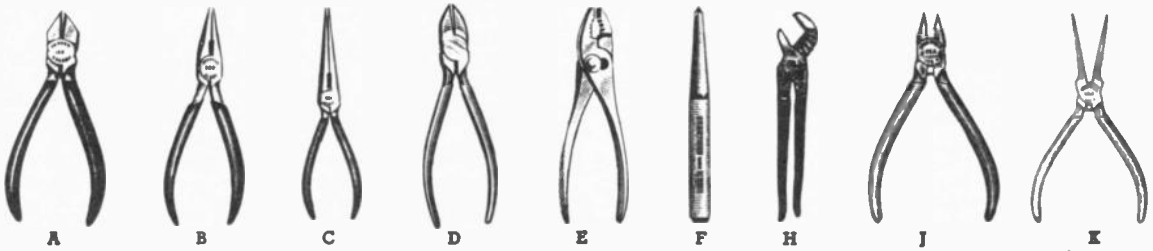
STUBBY TYPE

Stk. No.	Type	Point	Length	Screw	NET
34F361	P6	1	2-4	3"	.86
34F360	P5	2	5-10	3⅝"	.94

POCKET CLIP TYPE

34F362	P12	0	5"	0-1	.64

KRAEUTER



Each Kraeuter tool is heat-treated to exacting specifications. Industrial Pliers rugged serviceable line with full polished heads; individually fitted, tempered and adjusted. Professional Pliers; fine needle point pliers for electronic work, jewelers, hobby crafters. Professional Needle Point Pliers; extra fine needle points for exacting professional and production line use. Vinyle Cushion Grip handles will not crack or peel. Resists water, oil, and chemicals. *Not cushion grip. (†) indicates pliers furnished with cross coil spring and cushion grips. Av. shpg. wt., 1 lb.

Stk. No.	Type	Fig.	Description	1-5	6-Up
34F076	37014	A	4½" Needle-pt. diag. cutters	2.94	2.67
34F077	37015	A	5" Needle-pt. diag. cutters	3.17	2.87
34F078	37016	A	6" Needle-pt. diag. cutters	3.67	3.33
34F082	20160†	C	7" Long nose Ndle-pt. w/o cttr.	3.02	2.73
34F130	27306	E	6" Comb. Plier. Satin Finish	.80	.72
34F166	35014	D	4½" Diag. "Oblique" Cutters	2.43	2.20
34F059	35015	D	5" Diag. "Oblique" Cutters	2.58	2.33
34F060	35016	D	6" Diag. "Oblique" Cutters	2.94	2.67
34F064	36616	B	6" Long Chain Ndle-nose w/cttr.	2.94	2.67
34F065	36716	B	Same as 36616 but less cutters	2.31	2.07
34F069	26912	F	⅜ x 4½" Steel Center Punch*	.70	.65

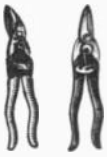
Stk. No.	Type	Fig.	Description	1-5	6-Up
34F149	27507	H	6½" Tongue-n-groove Pliers	2.21	2.00
34F118	27510	H	10" Tongue-n-groove Pliers	2.58	2.33
34F145	20121†	K	5" Slim Nose Milled Jaws	3.23	2.93
34F156	20101†	J	4½" Needle pt. Diag. Cutters No Cutter	3.67	3.33
34F146	20140†	K	6" Tapered Long Nose 1/32" tip with spring	3.31	3.00
34F167	27206	E	6" Chrome combination Pliers	1.18	1.07
34F168	36415	B	5" Short Chain Nose Cutters	2.65	2.33
34F169	37817	C	7" Long Chain Nose Cutters	3.53	3.20

● *NEW* ANGLE CUTTING AND CURVED NEEDLE NOSE PLIERS

Type 20106. Angle-tip cutting invaluable in such fields as watch-making, hobby-crafts, model building and all phases of electronics. Precision crafted in every detail, with polished heads and Cushion Grip handles. Length: 4½". Std. pkg. Wt., 2.5 lbs.
34F174 1-5. ..... 3.10 6-up 2.80

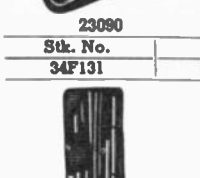
Type 26315. Forged from fine grain tool steel, individually fitted, tempered, adjusted and tested. Jaws taper to 1/16" at points. 5½" long. Std. pkg. is 2. Wt. 0.8 lb.
24F173 1-5. ..... 3.10 6-up 2.80

AVIATION SNIPS



Steel drop forged blades for fast, easy cutting of circles, squares and irregular patterns. Color coded, cushion-grip handles for instant identification.

Stk. No.	Type	Description	1-5	6-up
34F170	27801	Cuts left	3.82	3.47
34F171	27802	Cuts right		
34F172	27803	Cuts Straight		


23090

23090 PLIER SET

Five jeweler's pliers in Black Zipper Case. Size 5¾x9¼" when closed. One each Nos. 20181, 20182, 20183, 20184 and 20185. Shpg. wt., 1 lb.
34F132. NET 14.70
6 up. NET 13.33

23089 PLIER SET

Three jeweler's pliers in Black Zipper Case. 5¾x6¼" when closed. One each Nos. 20181, 20183 and 20184. Shpg. wt., 12 oz.

Stk. No.	Type	1-5	6-up
34F131	23089	9.55	8.67

● *NEW* G-C OSCILLOSCOPE KIT

Type 12-035. Fourteen popular alignment instruments packaged in a rugged, space-saving plastic carrying pouch. Included are a variety of ceramic, piston, slug and piston, and hex wrench alignment tools.
34F682. NET **11.50**

GC HEX AND SPLINE WRENCH KIT

Type 5028. Complete set of twelve wrenches for box hex and spline type screws used in the electrical field. Constructed to fit #2 to ⅜" screw. In convenient, space saving leatherette case. Shipping weight 6 ounces.
34F520. NET **1.35**

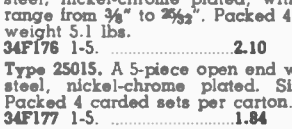
JEWELER'S PLIERS

20181 20182 20183 20184 20185

These pliers are drop forged from selected fine grain tool steel, accurately machined and heat treated to exacting specifications. Expressly designed for accurate and exacting work in such fields as watchmaking, hobbycrafts, model building, and all phases of electronics. Precision crafted in every detail, with polished heads, Cushion Grip handles. Wt., 5 oz.

No.	Type	Description	1-5	6-up
34F070	20181	4½" Diagonal Cutters	2.65	2.40
34F071	20182	4½" End Cutting Nippers	3.12	2.83
34F072	20183	4½" Chain Nose Pliers	2.50	2.27
34F073	20184	4½" Flat Nose Pliers	2.50	2.27
34F074	20185	4½" Rd. Nose/Jaw Pliers	2.50	2.27

● *NEW* CLUSTER WRENCH SETS



- **Forged steel**
- **Chrome plated**

Type 20815. A 5-piece combination box-open end wrench set. Forged from quality steel, nickel-chrome plated. Packed 4 carded sets per carton. Sizes in the set range from ⅜" to ⅝". Carton wt. 1.8 lbs.
34F175. 1-5. ..... 2.50 6-up 2.25

Type 25415. A 4-piece box end wrench set. Forged from quality steel, nickel-chrome plated, with polished boxes. Sizes in set range from ⅜" to 25/32". Packed 4 carded sets per carton. Carton weight 5.1 lbs.
34F176 1-5. ..... 2.10 6-up. 2.25

Type 25015. A 5-piece open end wrench set. Forged from quality steel, nickel-chrome plated. Sizes range from 5/16" to ¾". Packed 4 carded sets per carton. Carton weight 2.0 lbs.
34F177 1-5. ..... 1.84 6-up. 1.67

AMALITE TOOLS

12-Pc. Needle File Set

12-PC. NEEDLE FILE SET

Complete assortment contains 12 sizes and shapes. Heat treated carbon steel blades. Complete with plastic case. Length of single file 5½". Plastic case size: 2¾"x6¼"x 1". Shpg. wt., ¼ lbs.
34F512. NET 1.62

5-PIECE WRENCH SET

5 piece forged steel open end wrench set with opening from 5/16" to ¾". Hardened and tempered tool steel. Plated for long life operations without dulling. Shpg. wt., ½ lbs.
34F551. NET ..... .68

MILLERS FALLS TOOLS

RATCHET BRACE

Type 1710. Equipped with Barber chuck and alligator jaws, semi-boxed steel ratchet. Knurled shifter ring controls the ratchet mechanism steel-clad ball bearing head. All exposed parts nickel plated to resist rust. Mahogany lacquered hardwood handles. 10" sweep. Wt.. 5¾ lbs.

33F570. NET **6.00**

STEEL PIPE REAMER

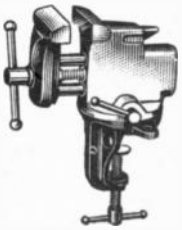
Model 173. Time saving tool quickly removes burrs from the ends of pipes and conduits, countersinks or enlarges holes in sheet metal. Straight-fluted with bit brace shanks. Made of hardened and tempered steel for long life. Fits ¼-2" pipe. Shpg. wt., 1⅜ lbs.

33F578. NET **4.15**

CARPENTER'S COMBINATION SQUARE

Type 1270. Comes complete with level and scriber. Blade has stamped graduations. One side graded in 8ths and 16ths. Other in 16ths and 32nds. Blade: 12" long, 1" wide. Shpg. wt., ¾ lb.

33F577. NET **1.44**



SWIVEL VISE

Model 18. Swivel base allows jaws to swing to any desired angle. 2½" wide jaws are milled parallel after assembly. Max. opening 2¼"; clamps to bench up to 2" thick. Small anvil on body. Shpg. wt., 5½ lbs.

33F574. NET **6.70**

"NEST OF SAWS"

Model 725. Saw handle of the Rotatable Keyhole type with one each No. 109, No. 249 and No. 279 interchangeable blades. Pistol grip handle permits locking in any one of 8 positions. Shpg. wt., 1⅝ lbs.

33F572. NET **3.10**

BENCH DRILL VISE

Model 217. Vise for bench, bench drill, or drill press. Removable swivel jaw provided. Capacity with swivel jaw inserted, 2¾"; with swivel jaw removed, 3⅛"; width of jaws, 2⅜". Wt., 5 lbs.

33F573. NET **10.75**

KLEIN TOOLS

● *NEW* POWER RETURN TAPE RULE

Tape rule is positive locking and smooth running. Control knob for easy operation. Rule has belt or pocket clip on back of case. Mylar clad, replaceable blade; resists abrasion, most oils, and acids. Black numerals on yellow blade for maximum visibility.

Stk. No.	Type	Length	Wid h	1-5	6-up
34F187	922-10	10 ft.	¾ in.	2.88	2.40
34F188	922-12	12 ft.	¾ in.	3.36	2.80

ALL PURPOSE 6 in 1 ELECTRICIAN'S TOOL

"Comfort-grip" handles.

Type 1000. Strips six wire sizes 10-22 gauge; stripping holes provide wire gauge. Has wire cutter and stud gauge #4—⅜" stamped on face of tool. Crimps insulated terminals. Lgth. 7½". Shpg. wt., 8 oz.

30F998. NET 1-2 ..... **4.95**
3-Up 3.97

Type 5207M

ELECTRICIANS WAIST BELT

Lightweight. Made of harness leather with tool loops and tape thong.

34F041. Type 5207M. 32-40" **4.00**
34F042. Type 5207L. 38-46" 4.00

ELECTRICIAN'S SCISSORS

Type 2100-5. 5" scissor. Will stand rugged service. High-grade steel, tempered. Nickel plate finish. Wt. 6 oz.

34F023. NET **2.34**

Type 5111

HIP POCKET TOOL CASE

Type 5111. Safe way for carrying sharp or pointed tools; keeps tools handy. Harness leather. Size: 5x7". Wt., 6 oz.

34F048. NET **2.75**

Type 1550-2

ELECTRICIAN'S KNIFE

Type 1550-2. Knife and screwdriver blades of carefully tempered, high-grade cutlery steel. Locking feature on screwdriver. Handle of durable plastic. Shipping wt., 5 oz.

34F022. NET 1-5 ..... **2.34**
6-Up 1.87

HACK SAW

Hack saw cuts flush with vertical or horizontal surfaces. Adjustment tension easily applied and held until released. Fingers protected by closed handle. Storage chamber provided for six extra blades inside of tube. Frame is die cast aluminum and has strong comfort grip handle. Saw provides front end grip for two hand operation. Length of blade 12 in.

34F180. Type 701-12. **NET.** **3.34**

HACK SAW BLADES
Carbon Steel

Stk. No.	Type	Length	Teeth	1-99	Box of 100
34F181	1218C	12 in.	18T	.17	11.33
34F182	1224C	12 in.	24T	.17	11.33
34F183	1232C	12 in.	32T	.17	11.33
High-Speed Steel					
34F184	1218HS	12 in.	18T	.63	52.00
34F185	1224HS	12 in.	24T	.63	52.00
34F186	1232HS	12 in.	32T	.63	52.00

"CUSTOM" CUSHION GRIP SCREWDRIVERS

Made of alloy tool steel, heat treated. Chrome-plated finish prevents rust. Amber plastic shock-proof bolstered handle is nonflammable and secured to steel shaft. *Has heavy duty blade. 50% greater torque.

Stk. No.	Type	Description	Blade Size	1-5	6-up
34F100	600-4	Square Shank*	4x¼"	1.24	1.04
34F101	600-6	Square Shank*	6x5/16"	1.60	1.34
34F102	600-8	Square Shank*	8x⅜"	2.00	1.87
34F103	602-3	Round Shank*	3x5/16"	1.12	.94
34F104	602-4	Round Shank*	4x¼"	1.12	.94
34F105	602-6	Round Shank*	6x5/16"	1.36	1.14
34F106	602-8	Round Shank*	8x⅜"	1.76	1.44
34F107	601-3	Round Shank	3x5/16"	.92	.77
34F108	601-6	Round Shank	6x5/16"	.96	.77
34F109	601-8	Round Shank	8x5/16"	1.04	.80
34F110	601-10	Round Shank	10x5/16"	1.16	.87
34F111	603-3 #1 pt.	Super Hard Phillips	3x5/16"	.92	.97
34F112	603-4 #2 pt.	Super Hard Phillips	4x¼"	1.12	.94
34F085	604-3	Plastic Handle Without Cushion Grip	3x5/16"	.64	.94

TUBULAR STEEL HAMMER

Type 806-18. Long neck, narrow striking face of 1" diameter. Head is straight claw pattern of drop forged steel. Tubular steel handle with cushion grip. Weight of head—18 oz. 14" long. Shpg. wt., 2 lbs.

34F045. NET **4.34**

TOOLS FOR THE ELECTRONIC INDUSTRY

All have dipped plastic handles. All pliers are forged from a high- grade alloy steel. Plier heads are highly polised and handles are tempered blue. Tools are available in types and sizes to fit all applications. Average shpg. wt., 9 oz.

PLIERS AND CUTTERS WITH COIL SPRINGS

Come with plated coil spring to hold the jaws in open position. The sturdy spring is guaranteed for the life of the plier or cutter. Inside and outside are left free of any obstruction due to the spring. Plier heads are polished and handles are tempered blue.

NON-COIL SPRING PLIERS

Stk. No.	Type	Fig.	Handle Color	Description	1-5	6-Up
34F018	D302-6	D	Yellow	6¼" curved nose plier	3.40	2.84
34F114	D314-8	B	Yellow	8" long nose plier	3.72	3.11
34F225	D326-5	....	Yellow	5 5/16" spring adj. plier. Inside jaws polished	3.84	3.21

COIL SPRING PLIERS

Stk. No.	Type	Fig.	Handle Color	Description	1-5	6-Up
34F008	D301-5C	A	Yellow	5 5/16" long nose plier	2.88	2.41
34F009	D301-6C	A	Yellow	6 5/8" long nose plier	2.96	2.47
34F010	D301-7C	A	Yellow	7½" long nose plier	3.08	2.57
34F025	D307-5½C	....	Yellow	5 13/16" slim long nose plier	2.96	2.47
34F032	D301-6PC	....	Yellow	6 5/8" long nose plier. Knife at point	4.24	3.55
34F095	D321-4½C	C	Yellow	4¾" long nose plier	2.64	2.21
34F113	D322-4½C	C	Blue	4¾" long nose plier	2.80	2.34
34F226	D323-4½C	....	Yellow	4¾" flat nose plier. Jaws Polished	2.64	2.21
34F123	D318-5½C	....	Yellow	5 13/32" long needle nose plier	3.16	2.64
34F128	D310-6C	....	Yellow	6 5/8" slim long nose plier	3.04	2.54
34F227	D211-6C	....	Green	6½" flush end cutting trimmer plier	4.16	3.48
34F228	D317-5C	....	Yellow	5¼" chain nose plier	2.92	2.44
34F229	D327-5½C	....	Blue	5 13/32" slim nose plier	3.20	2.68
34F230	D338-5½C	....	Blue	5½" curved needle nose plier. No knurl	4.32	3.60
34F236	D306-5½C	....	Yellow	5 15/16" duck bill plier	3.23	2.88
34F237	D230-4C	....	Red	4 3/16" hi-hardness plier	4.95	4.42
34F239	D221-5½C	....	Yellow	5 13/16" long needle nose side cutting plier	3.38	3.01

COIL SPRING CUTTERS

Stk. No.	Type	Fig.	Handle Color	Description	1-5	6-Up
34F011	D203-5C	....	Yellow	5 5/16" long nose side cutters	3.24	2.71
34F012	D203-6C	....	Yellow	6 5/8" long nose side cutters	3.32	2.78
34F013	D203-7C	....	Yellow	7⅛" long nose side cutters	3.80	3.18
34F018	D202-5C	G	Red	5½" narrow nose oblique cutter	3.40	2.84
34F019	D202-6C	G	Red	6 1/16" narrow nose oblique cutter	3.44	2.88
34F020	D210-6C	H	Red	6 1/16" flush oblique cutter	3.60	3.01
34F021	D210-5C	H	Red	5½ flush oblique cutter	3.64	3.04
34F027	D052-C	....	Red	5⅛" oblique cutter for printed circuits	3.60	3.01
34F044	D208-6C	....	Red	6 5/8" slim long nose cutting shear	4.08	3.41
34F028	D209-5C	G	Red	5" pointed nose, flush cutting, oblique cutter	3.80	3.17
34F231	D209-4C	G	Red	4 3/16" ptd. nose, flush cutting, oblique cutter	4.16	3.48
34F087	D207-5C	....	Red	5½" oblique cutting shear	3.28	2.74
34F091	D224-4½C	H	Green	4⅝" semi-flush transverse end cutter	3.28	2.74
34F093	D257-4C	I	Red	4 3/16" semi-flush cutting oblique cutter	2.92	2.44
34F232	D258-4C	....	Red	4" semi-flush cutting short nose cutter	3.04	2.54
34F233	D204-6C	....	Green	6¼" semi-flush cutting end cutter	3.76	3.15
34F234	D219-5C	....	Red	4 3/16" flush oblique cutter	3.96	3.30
34F126	D229-5C	....	Red	5" flush cutng., wire gripping oblique cutter	6.24	5.22

NON-COIL SPRING CUTTERS

Stk. No.	Type	Fig.	Handle Color	Description	1-5	6-Up
34F001	D201-8NE	E	Blue	8½" streamlined cutter	4.59	3.81
34F117	D228-8	F	Red	8" hi-lever oblique cutter	3.52	2.94

TYPE 502 — PUMP PLIERS

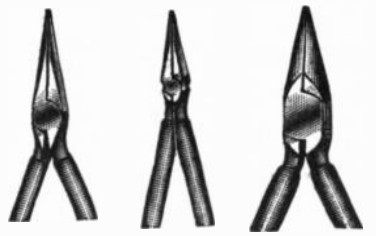
Jaws are positioned and locked into place for desired size opening by engaging a tongue in proper groove. With yellow plastic handles. Av. shpg. wt. 2 lbs.

Stk. No.	Type	Length	Max. Cap.	1-5	6-Up
34F235	D502-6	6 in.	1 in.	2.16	1.80
34F097	D502-10	10 in.	1½ in.	3.08	2.56
34F098	D502-12	12 in.	2⅛ in.	3.60	3.01
34F099	D502-16	16 in.	4¼ in.	4.96	4.15

ADJUSTABLE WRENCHES

Typt 500. Adjustable wrenches. Drop forged, chrome plated with yellow plastic handles.

Stk. No.	Type	Description	1-5	6-Up
34F129	D500-4	½" capacity x 4"	2.80	2.34
34F037	D500-6	¾" capacity x 6"	2.84	2.37
34F038	D500-8	1 5/16" capacity x 8"	3.20	2.67
34F039	D500-10	1⅛" capacity x 10"	4.00	3.34
34F040	D500-12	1 5/16" capacity x 12"	5.92	4.97



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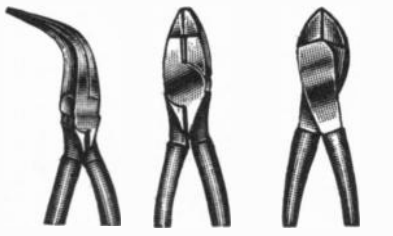

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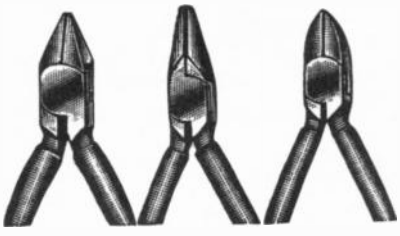

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COMBINATION TOOL POUCH

Type 5127. Has gusseted utility pocket, three plier pockets, two screw driver pockets and knife snap. May be used with 5207 waist belt. 7"x10". Wt. 12 oz.

34F086. NET 4.85

Type 5127

POCKET TOOL ROLL

Type 1305-33A. 1 pr. side cutting pliers, nose and oblique cutting pliers, electrician's tweezers. Also file, screwdriver, electrician's knife. Size rolled: 8x2½". Wt., 2 lbs.

34F047. NET 16.51

Type 1305-33A

NEWARK — Your Dependable Source For All Your Electronic Needs

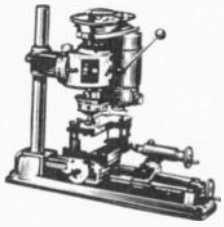
4 PIECE PLIER KIT

Model No. 1305-4. All-purpose kit containing 4 top quality drop forged, high grade alloy tool steel pliers. Each individually fitted, tempered, adjusted and tested for maximum performance. Kit includes: 1 No. D-257-4 Oblique Cutting Pliers, 1 No. D224-4½ End Cutting Pliers, 1 No. D321-4½ Long Nose Pliers, 1 No. D-323-4½ Duck Bill Pliers. Top grade leatherette case. Shpg. wt., ¾ lb.

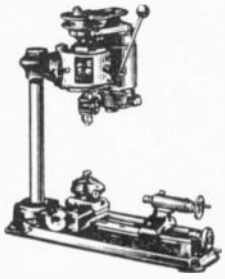
34F127. NET 10.25

UNIMAT

5-IN-1 METAL MACHINING WORK SHOP

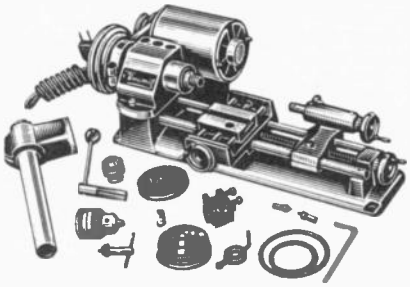


Converts to Vertical Miller



Converts to Drill Press

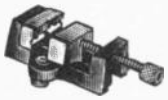
Converts to Surface Grinder



Complete metal working lathe! Converts to Vertical Mill or Drill Press in seconds! Turn, mill, bore, saw, polish, grind—steel, aluminum, brass, plastic, wood! Ideal machine for making small precision parts. Includes: Ball-Bearing idler assembly, vertical steel column. Jacobs' Type drill chuck, grinding wheel arbor, face plate, lathe dog, 2 centers, drive belts, wrenches, tool bit, wood storage chest, and 40 page illustrated instructions. 11 speed ranges, 900-7200 rpm. Headstock rotation, full 360°. Swing 3". Distance between centers, 7". Handwheel microcalibrations, .002". Tool takes up to ¼" square bits. Spindle bore takes ¼". Drill to center of circle, 6⅛"; spindle nose to table 6¼". Ideal for all instrument makers, professional craftsmen, technicians and hobbyists. Beginners easily become experts. Accurate to ½ thousandths. Wt. 33 lbs. Size 17" x 4" x 5".

35F1200 NET **139.50**

UNIMAT ACCESSORIES



Type 1010 Machine Vise. Opens 1⅛". V milled; holds round stock.

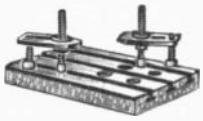
35F1203. NET **9.50**

Lathe Chucks. Holds cams for off center work. **Type 1001,** 3 jaw independent chuck:

35F1207. NET ... **25.15**

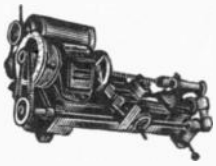
Type 1002, 4 jaw independent chuck:

35F1205. NET **23.90**



Type 1210. Milling Table. Permits clamping of odd shapes for milling, drilling, grinding.

35F1202. NET **12.50**



Type 1290. Power Feed. Drives carriage at .0008" spindle rev. Better finish and accuracy.

35F1201.

. NET 19.95

Type 1100 Set of 6 Tool Bits. Ready to use lathe tools, roughing, left and right finishing, threading, cut-off tool, boring bar.

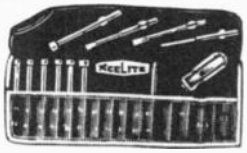
35F1206. NET **10.90**

Type 1221 Live Center. Anti-friction double row ball bearing tail for high speed turning or finishing.

35F1204. NET **5.90**

XCELITE

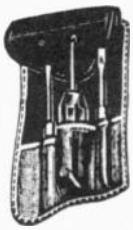
NUT & SCREWDRIVER KIT



Type 99-JR. Seven nut-drivers, plus two slotted and two Phillips screwdrivers. Bright chrome-plated blades interchangeable into sturdy plastic handle.

34F389. NET **8.28**

SCREWDRIVER SET



Type CK-3. Consists of 3 dual-purpose screwdriver blades in plastic roll. Includes RB-1 shaft with 5/16" regular and No. 1 Phillips blades, RB-2 shaft with ¼" regular and No. 2 Phillips blades, RB-3 shaft with 5/16" regular and No. 3 Phillips blades, plastic handle. Wt., ½ lb.

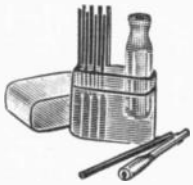
34F394. NET ... **3.69**

SCREWDRIVER KIT

SK-20 SB1, SB2 blades and No. 26 Handle in snap type case. Wt., ¼ lb.

34F372. NET **2.49**

ALLEN HEX TYPE SCREWDRIVER SET



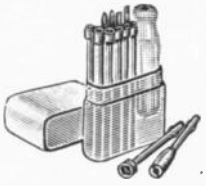
Type 99PS-40. Contains 99-20, 21, 22, 23, 764, 24, 964, 25, and 26 Allen Hex Type Screwdriver Blades; 99-X5 Extension Blades; and 99-1 Regular Handle, in see-thru, clear Plastic Case. Hexagonal head sockets are precision-formed, cold-drawn, case hardened steel.

34F339. NET **6.75**

COMPACT SET OF BRISTOL MULTIPLE-SPLINE SOCKET SCREWDRIVERS

Type 99PS-60. Contains 99-61, 62, 63, 64, 65, 66, 67, 68 and 69 Bristol Multiple-Spline Socket Screwdriver Blades; 99-X5 Extension Blade; and 99-1 Regular Handle, in see-thru Plastic Case.

34F340. NET **6.75**

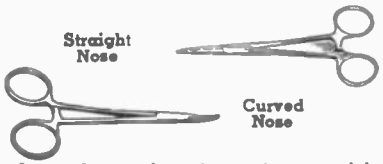


COMPACT SET OF SCREW AND NUT-DRIVERS

Type 99PS-50. Contains 99-6, 7, 8, 9, 10, 11 and 12 Nut-drivers; 99-811 and 812 Slotted Screwdrivers; 99-821 and 822 Phillips Screwdrivers; 99-X5 Extension Blade; and 99-1 Regular Handle, in see-thru Plastic Case.

34F341. NET **8.55**

STAINLESS STEEL "SEIZERS"



5" and 6" straight and curved nose models. Holds wires for soldering and retrieves small parts from hard to reach places. Smooth jaws won't mar delicate materials. 5" models are slimmer. Shpg. wt., 6 oz.

34F370. 42H 6" Straight Nose. **NET** **3.93**
34F371. 43H 6" Curved Nose. **NET** **4.07**
34F373. 32H 5" Straight Nose. **NET** **3.93**
34F374. 33H 5" Curved Nose. **NET** **4.07**

NEWARK
Your One Point Source

Top-Quality Drivers and Tools

XCELITE

SHOCK-PROOF SCREWDRIVERS

Tips ground to rectangle shape. Handles are amber plastic. *Have ½" dia. handles. †Have ¾" dia. handles. ‡Stubby types. 8 oz.

SQUARE BLADES

Stk. No.	Type	Blade Size	NET
34F275	S-141‡	1/4x1 1/4"	.51
34F275	S-3161‡	5/16x1 1/4"	.48
34F203	S-3163	3/16x3"	.66
34F204	S-3164	3/16x4"	.72
34F205	S-3166	3/16x6"	.84
34F206	S-3168	3/16x8"	.96
34F207	S-31610	5/16x10"	1.14
34F208	S-142	1/4x2"	.75
34F209	S-144	1/4x4"	.90
34F210	S-146	1/4x6"	.99
34F211	S-148	1/4x8"	1.11
34F212	S-5162	5/16x2"	.91
34F213	S-5166	5/16x6"	1.14
34F214	S-5168	5/16x8"	1.26
34F217	S-388	3/8x8"	1.50
34F218	S-3812†	3/8x12"	2.40
34F219	S-3818†	3/8x18"	2.70

ROUND BLADES

34F250	R-3322*	3/32x2"	.30
34F251	R-3323*	3/32x3"	.33
34F252	R-3324*	3/32x4"	.33
34F254	R-182†	1/8x2"	.33
34F253	R-183*	1/8x3"	.33
34F255	R-184†	1/8x4"	.42
34F256	R-186†	1/8x6"	.48
34F257	R-188†	1/8x8"	.57
34F258	R-1810†	1/8x10"	.69
34F259	R-5323†	5/32x3"	.45
34F260	R-5324†	5/32x4"	.45
34F261	R-5325†	5/32x5"	.48
34F262	R-5328†	5/32x8"	.63
34F263	R-3163	3/16x3"	.60
34F264	R-3164	3/16x4"	.69
34F265	R-3166	3/16x6"	.75
34F266	R-3168	3/16x8"	.87
34F267	R-31610	3/16x10"	.99
34F269	R-144	1/4x4"	.87
34F270	R-146	1/4x6"	.96
34F271	R-148	1/4x8"	1.02
34F272	R-1410	1/4x10"	1.08
34F273	R-5166	5/16x6"	1.08
34F274	R-5168	5/16x8"	1.17
34F277	R-181	1/8x2"	.30

PHILLIPS SCREWDRIVERS

Screwdrivers for Phillips-head screws, of special alloy steel. Av. wt., 5 oz.

Stk. No.	Type	Size	Blade	NET
34F290	X-101	1	3"	.75
34F291	X-102	2	4"	.93
34F292	X-103	3	6"	1.26
34F293	X-104	4	8"	1.59
34F294	X-108	1	6"	.84
34F295	X-1010	1	10"	1.14
34F296	X-1020	2	10"	1.29
34F287	SX-101	1	1 7/16	.69
34F288	SX-102	2	1 9/16	.78
34F289	P-12S	0	2"	.39

DUAL PURPOSE SCREWDRIVERS

Handy screwdrivers with reversible blades. Type CR1 is for 3/16" and No. 1 Phillips screws, type CR2, 1/4" and No. 2 Phillips screws. CR3 for 5/16 and No. 3 Phillips screws. Overall length 7 1/4".

34F298. Type CR1.
34F299. Type CR2. **NET**
34F297. Type CR3. **EACH** **1.47**

BERYLLIUM-COPPER SCREWDRIVERS

Non-sparking, non-magnetic screwdrivers for TV focalizer adjustments, etc.

Stk. No.	Type	Blade	Length	NET
34F379	BR-186	1/8x6"	8 5/8"	.84
34F380	BR-1810	1/8x10"	12 5/8"	.96
34F381	BR-3168	3/16x8"	11 5/8"	1.44

THE SERVICEMAN'S COMPLETE KIT

Type 99SM. Versatile 23 piece kit contains; 6" long nose plier, 5" diagonal cushion grip plier, 6" adjustable wrench, regular and stubby handles, 9 regular drivers size 3/16" to 1/2", 3 stubby nut drivers sizes, 1/4", 5/16", and 3/8". Also #1 type phillips screwdriver, 2 slotted screwdrivers, 2 reamers, 7" extension blade and durable canvas case.
34F388. NET **24.87**

MULTI-PURPOSE KIT

Type 99 PR. Consists of 9-nut-driver shafts, 1-double-ended screwdriver shaft, 1-type 99-82 reversible Phillips screwdriver blade, and 1-combination plastic handle for all units. Nut-driver sizes: 5/16", 7/32", 1/4", 9/32", 5/16", 11/32", 3/8", 7/16", and 1/2". Screwdriver sizes: 3/16" and 9/32"; Phillips Nos. 1 and 2. Wt., 3 lbs.
34F395. NET **9.42**

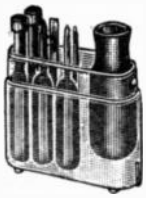
MULTI-PURPOSE ACCESSORIES

34F396. Type 99-82. Reversible Phillips blade for Nos. 1 and 2 screws. 1/2 lb.
NET EACH **1.02**
34F397. Type 99-83. Reversible Reed and Prince blade for Nos. 1 and 2 screws.
NET EACH **1.02**
34F398. 99-1 Hndl. only for 99 PR set ..... **.69**

10 PC. NUTDRIVER SET

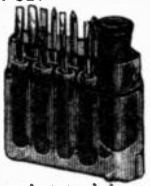
Model HS6-18. Contains ten hollow shaft sizes: 5/16" to 9/16" in 1/32" steps. Plastic carrying case. Polished and plated blades. Color coded. Plastic handles. Shpg. wt: 3 lbs.
34F376. NET **11.10**

PS7 SCREWDRIVER AND NUTDRIVER SET



Contains two 3 1/2" long, color coded nutdrivers with hex opening of 1/4" and 5/16" plus four 3 1/2" long, color coded screwdrivers, blade sizes: 3/16, 3/32" #0 and #1 Phillips head. Supplied with amplifier handle. 2 lbs.
34F335. NET **3.60**

SCREWDRIVER SET



Model PS88. 5 slot tip screwdrivers—3/32", 1/8", 5/32", 3/16", and 1/4"; 3 Phillips—all 3 1/2" pocket size; 1"x3" hollow handle and case. Compact and convertible, does more jobs with fewer tools, saves bench space. "Torque amplifier" handle slips over pocket tool handles to give better grip. Shpg. wt., 3 lbs.
34F375. Net **3.93**

SK20 SCREWDRIVER KIT

Consisting of SB1, SB2 blades and No. 26 Handle in snap case. Shpg. wt., 1/4 lb.
34F372. NET **2.49**

HOLLOW SHAFT NUT-DRIVERS

Ideal for use where nuts must be installed or removed over protruding bolts. Finely-tempered and finished steel. *Volume control wrench. Shpg. wt. 6 oz.

Stk. No.	Type	Nut Size	Handle	NET
34F319	HS-8	1/4"	red	.93
34F320	HS-10	5/16"	amber	
34F321	HS-11	11/32"	green	
34F322	HS-12	3/8"	blue	
34F323	HS-14	7/16"	brown	1.05
34F324	HS-16	1/2"	red	1.08
34F325	HS-18*	9/16"	orange	1.14
34F326	HS-20*	5/8"	amber	1.26

NUT-DRIVERS

Most popular sizes. 6" long over all. Made of hardened and polished tool steel. Color-coded plastic handles. 4-oz.

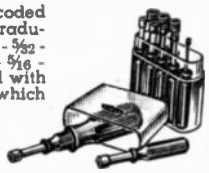
Stk. No.	Type	Nut Size	Handle	NET
34F300	6	3/16"	black	.78
34F301	7	7/32"	brown	
34F302	8	1/4"	red	
34F303	9	9/32"	orange	
34F304	10	5/16"	amber	
34F305	11	11/32"	green	
34F306	12	3/8"	blue	
34F307	14	7/16"	brown	.99
34F308	16	1/2"	red	

POCKET STYLE NUTDRIVERS

All handles are color coded. Pocket Clip.

Stk. No.	Type	Size	Handle	NET
34F330	P4	1/8"	Red	.51
34F331	P5	5/32"	Amber	
34F332	P8	1/4"	Red	
34F333	P10	5/16"	Amber	
34F334	P12	3/8"	Blue	

PS120 NUTDRIVER SET



Contains color coded nutdrivers in 10 graduated sizes: 3/32 - 1/8 - 5/32 - 3/16 - 7/32 - 1/4 - 9/32 - 5/16 - 11/32 - 3/8". Supplied with amplifier handle which increases torque, and clear plastic carrying case. 2 lbs.
34F336. NET **5.55**

"TRAY BIEN" NUTDRIVER SET

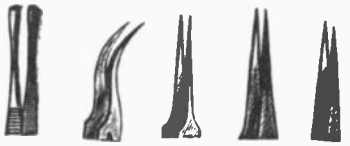
Nutdrivers have carbon steel shafts. Case-hardened sockets. Plastic (UL) handles color coded. Features lightweight plastic case. Wall mounting holes. Compact. Easily stacked.

Model 127TB. Solid shaft nutdriver set. Blade length: 3", overall length 6". Handle dimensions: 1x3". Hex openings range from 5/16 to 7/8" in 1/32" steps. Features a wide variety of colors.
34F366. NET **6.60**

Model 137TB. Solid and hollow shaft nutdriver set. Features hex openings from 5/16 to 9/16". Similar to 127TB except 2 nutdrivers have overall lengths of 7 1/4", handle dim. of 1 1/16 x 4 1/8", and 3 1/8" blade lengths.
34F367. Net **7.35**

Model 147TB. Hollow shaft nutdriver set. Features hex openings of 1/4 to 1/2". First 5 nutdrivers have 7" lengths, 1" x 3 7/8" handle dim. 4 3/8" D. of clearance holes. Last 2 have 6" depths, 7 1/4" lengths, 1 1/16 x 4 1/8" dim.
34F368. NET **8.70**

Special Purpose Tools



SEMI-CONDUCTOR TWEEZERS

Fig. A. 4¾". Smooth large surface for positive grip without danger of breakage. Fig. B 4¼". Fine thin point.

Stk. No.	Type	Material	NET
34F415	C-35	Carbon Steel	2.85
34F735	CC-13C	Stainless Steel	2.14
34F736	CC-MMM	Carbon Steel	.99

STAINLESS STEEL TWEEZERS

Heat and acid-resistant, non-magnetic.

Stock No.	Type	Points	Fig.	NET
34F416	B-3CS	Fine	E	4.25
34F417	B-2SA	Medium	D	4.69
34F418	B-3SA	Fine	E	4.69
34F419	B-3CSA	Fine	E	4.69
34F420	B-5S	Ex-Fine	C	4.79
34F421	B-7S	Fine	B	5.55
34F422	B-7BS	Serrated	B	5.55

ANTI-WICKING TWEEZERS

Type C-88. Protects plastic insulation on wire while soldering. Holes are drilled to .001 inch. Size: 2⅝" overall.

Stk. No.	Type	AWG	Hole Dia.	NET
34F423	C-88/AWG16	16	.055-.056	5.25
34F424	C-88/AWG18	18	.046-.047	5.25
34F425	C-88/AWG20	20	.035-.036	5.25
34F426	C-88/AWG22	22	.028-.029	5.25
34F427	C-88/AWG24	24	.022-.023	5.25
34F428	C-88/AWG26	26	.017-.018	5.25
34F429	C-88/AWG28	28	.012-.014	5.25
34F457	C-88/AWG30	30	.010-.011	5.25

SOLDERING AIDS

Stainless steel blades won't hold solder. Length, 7"; except *, 6". Shpg. wt., 10 oz.

Stk. No.	Type	Blades	NET
34F724	51	Fork & Hook	.94
34F725	51A	Fork & Brush	.94
34F726	51B	Knife & Brush	.94
34F727	51C	Fork & Reamer	.94
34F728	51C1*	Fork & Hook	.94
34F729	51C2*	Fork & Reamer	.94

HEX DRIVERS

Screwdriver type wrenches for speedy drive socket screws. Tenite handles.

Stock No.	Type	Size	Overall	NET
34F431	5	.05"	4¾"	.60
34F432	5A	1/16"	5⅛"	.63
34F433	5B	3/64"	6"	.66
34F434	5C	1/32"	6⅜"	.69
34F733	5C1	7/64"	6¾"	.72
34F435	5D	1/8"	6¾"	.72
34F734	5D1	9/64"	7"	.72
34F436	5E	5/32"	7⅛"	.72
34F437	5F	3/16"	8"	.79
34F438	5G	1/32"	8⅜"	.88
34F439	5H	1/4"	9"	1.06
34F445	5I	5/16"	10"	1.25

SCREW HOLDING SCREWDRIVERS

Holds screws tight when inserting or removing. Shock-proof plastic handle. Chrome-finished blade. Shpg. wt., 3 oz.

Stk. No.	Type	Screw #	Length	NET
34F760	10E-3	00 to 2	2½"	2.00
34F458	10E-4	00 to 2	4"	2.36
45F459	10E-7	00 to 2	7"	2.43
34F761	10M-5	3 to 6	5¼"	2.31
34F460	10M-8	3 to 6	8¼"	2.55
34F461	10M-12	3 to 6	11¼"	2.79
34F430	10C	7 to 10	7½"	2.48

SMOOTH JAW WIRING PLIERS

Type A11. Long, narrow chain nose pliers, 4¾" long. Radius edges don't mar finest wire. Tips are 1⅛". **34F754. NET** 3.55

Type A14-4½. Extra long needle nose pliers, 4½" long. Radius edges don't mar wire. Tips are 1 9/16". For light work. **34F755. NET** 4.37

Type A14-6. As above but 6" long. Tips are 2½". **34F756. NET** 4.47

FULL FLUSH CUTTERS

Type A90E. Special full flush cutting instrument that will cut flat, nickel ribbon wire. Fitted with alignment pins. Cuts at tip with perfect angle. Size: 4⅜". **34F462. NET** 10.79

Type A90EL. Same as above, but with leaf spring. **34F463. NET** 11.10

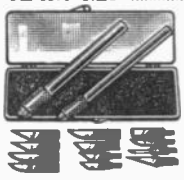
ERMADIUM CUTTING EDGES

For cutting newer hardened wires containing nickel, iron, etc. Heat treated, hardened, will cut flat nickel wire. High polish heads, vinyl coated grips. Type A86EL. 4¾". Cuts at tip. Tapered tip shape. Full flush cut with leaf spring. **34F464. NET** 6.23

Type A85EL. 4". Same as above. **34F465. NET** 5.63

Type A99EL. 4". Standard diagonal shape. Full flush cut with leaf spring. **45F466. NET** 5.31

Type A97EL. 4". Same as above, but semi-flush. **34F467. NET** 4.76



KNIFE SET

Type E65B. Two knives and 10 assorted blades for light to heavy work. Comes in plastic box. Shpg. wt., 3 lbs. **34F723. NET** 2.32

NICKEL PLATED SCISSORS

For electronic use in cutting very light work. Sharp matched points.

Stk. No.	Type	Length	NET
34F744	F297	3½"	2.95
34F745	F299	5"	2.79

STAINLESS STEEL SCISSOR-CLAMPS

Design for solder clamping. Tempered blades, precision box joint, 5" long. Wt. 2 lbs.

Stk. No.	Type	Blade	NET
34F746	F35	Straight end	4.69
34F747	F36	Curved end	4.69

SELF POWERED CONTINUITY TESTER

Type 54C. For testing continuity on circuits with power off. With penlight batteries. Shpg. wt., 5 lb. **34F721. NET** 1.79

CIRCUIT TRACER SET

Model 54. Will visually test dead circuits or circuits with up to 500 volts AC or DC Shpg. wt., .2 lb. **34F748. NET** 4.30

HEAT SINKS

Dissipate heat when soldering small wires. **Heavy Duty Model 51E.** Built for heavy or open work. Has copper jaws and will dissipate a terrific amount of heat. 2" long. **34F491. NET** ..... .66

Model 51G. For small, delicate work. Extremely small—light weight with tweezer like nose. 1¼" long. **34F492. NET** ..... .58

Model 51F. Has a precision tweezer-like nose that enables it to reach into confined areas. 2" long. **34F493. NET** ..... .58

WORK POSITIONERS

62—62A

62P

62H

62U

Type 62A. Pana-Positioner. Pivots 360° on any tangent to a hemisphere. Achieves any compound angle. For use with fixtures below. Shpg. wt., 3 lbs. **34F449. NET** 9.30

Type 62. Pana Vise. Bench type vise on Type 62A. 2½" capacity, jaws 2½" wide. Shpg. wt., 3.5 lbs. **34F786. NET** 15.60

Type 62P. 4" flat vise jig for use with 62A Shpg. wt., 1.8 lbs. **34F784. NET** 10.31

Type 62U. U shaped rotator jig for use with 62A. Jig only 16"—Arm to arm 8"—Cap. of turns 5". Shpg. wt. 1.8 lbs. **34F785. NET** 15.16

Type 62H. 10" wide. Printed circuit holder for use with Type 62A. Turns work 360° in any position. Circuit board easily inserted and removed. Shpg. wt., 1.8 lbs. **34F448. NET** 13.50

POCKET HEX SETS

Easy to use, hard to lose hex sets. Blades cold drawn from 8650 alloy steel. Shpg. wt., 10 oz.

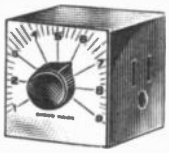
Stk. No.	Type	Hex sizes (in.)	NET
34F541	IP5	3/32, 1/8, 5/32, 3/16, 7/32	1.25
34F540	IP6	.050, 1/16, 5/64, 3/32, 1/8, 5/32	1.22
34F763	IP8	5/32, 7/64, 1/8, 9/64, 5/32	1.80

HUNTER TOOLS

NUT DRIVERS WITH HEX HEADS

handles-shockproof, non-burning. wt. 48 oz.
handles-shockproof, non-burning. wt 10 oz.

Stock No.	Type	Hex. Size	Fits	Net
34F900	19W	5/32"	0 & 1	.91
34F901	20	3/16"	2 & 3	.91
34F902	20A	7/32"	2 & 3	.91
34F903	20B	1/4"	4	.91
34F904	20C	9/32"	4	.91
34F905	20D	5/16"	5 & 6	.91
34F906	20E	11/32"	8	.91
34F907	20F	3/8"	10	.91
34F908	20G	7/16"	12 & 1/4"	1.04
34F909	20H	1/2"	5/16"	1.04
34F910	20H1	9/16"	3/8"	1.18
34F911	20I	1/4"	4	.91
34F912	20J	5/16"	5 & 6	.91
34F913	20K	3/8"	10	.91



4060

VOLTAGE CONTROL REGULATOR

Type 4060. Controls any soldering iron being used. Most compact unit (1¾" cube). Converts standard pencil iron into high soldering unit. Capacity 500 Watts. 4 oz.

34F914. NET **23.01**

55C

WIRE STRIPPER AND TERMINAL TOOL

Type 55C. Solderless terminal tool that cuts, strips and crimps all standard solderless terminals. Makes firm crimp that holds terminal securely. Wt. 4 oz.

34F916. NET **2.18**

80G

THERMAL WIRE STRIPPERS

Type 80G. Silver Electrodes eliminate oxidation. Nichrome wire, silver leads give ideal current connection and conduction. Rheostat wound 80+ for any degree of heat at tips. Alignment is adjustable. Most exposed parts are silver plated or stainless. Plier is 8" long, ½" wide at tips, 2½" wide at handle. ⅞" thick with 36" cord. Plier stripper weighs only 8 oz. Total unit only 3 lbs.

34F915. NET **78.00**

ADEL

HAND NIBBLING TOOL

Now you can make any size or shape hole over 7/16" dia. in any type of sheet metal! Bites right through 18-gauge steel or 1/16" aluminum, copper or plastic. Takes sharp angles and tight curves with ease. Metal edges stay flat and smooth after cut. Shipping weight 8 oz.

33F670. Net. 1-11 ..... **Each 4.15**

12-71 ..... **Each 3.80** 72 up ..... **Each 3.60**

Replacement Punch for above
33F671. NET 2.12

KEDMAN

SCREW-HOLDING SCREWDRIVER

Type 1253 **Type 1834**

The Quick-Wedge driver with powerful wedgetype action of a double blade grips the screw with a weldlike grasp until the screw is driven into place and released. Blade will not slip from or mar the screw slot.

Stk. No.	Type	Bld. Size	Bit	Oz.	NET
33F500	1253	1/8 x 3"	.020"	1	1.25
33F501	1734	5/32 x 4"	.031"	1½	1.35
33F505	1736	3/16 x 6"	.031"	2	1.40
33F506	1738	3/16 x 8"	.031"	2½	1.45
33F502	1834	3/16 x 4"	.037"	2	1.85
33F507	1836	3/16 x 6"	.037"	3½	1.90
33F508	1838	3/16 x 8"	.037"	4	1.95
33F503	2354	1/4 x 4"	.042"	4	1.95
33F509	2356	1/4 x 6"	.042"	4	2.00
33F504	2358	1/4 x 8"	.042"	5	2.05

ARROW STAPLE GUNS

WIRE STAPLE GUN

Type T-25. Fast-action wire staple gun for low-voltage wiring. Shoots round crown staples in 1/1,000 second . . . reaches tight places inaccessible to a hammer. Wt. 3 lbs.

34F635. NET **14.99**

7/16" staples. Box of 5000.
34F636. NET **3.33**

⅜" staples. Box of 5000.
34F623. NET **3.33**

9/16" staples. Box of 5000.
34F624. NET **3.74**

COMPACT STAPLE GUN TACKER

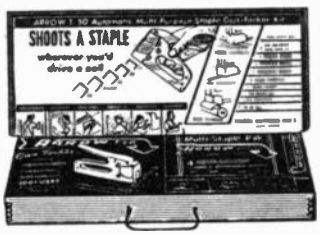
Type T-32. Fast, stapling tool for tacking down twin-lead, signs, etc. Hold tacker against surface and squeeze—staple is immediately driven in. Shoots a staple wherever a tack can be driven. Operates at trigger rate speed. Chrome-plated steel. Pocket size. Shpg. wt., 2 lbs.

34F630. NET **8.74**

Staples. For gun tacker described above. Easy to insert. Length, 5/16". Contains 5,000 staples. Wt., 1 lb.

34F631. NET **2.08**

T-50 MP AUTOMATIC MULTI-PURPOSE STAPLE GUN-TACKER SET



Model T-50MP. Speed up hundreds of operations. Permits up to 5 times faster operation than conventional hammer-and-nail production. Use for carpentry, installing insulation, ceiling tile, wire-fence maintenance or installation, upholstering, woodworking, etc. Kit includes one T-50 Automatic Stapling Gun, 2000 1/4" staples, 1000 ⅜" staples, 1000 ½" staples, 1000 9/16" "Ceiltile" staples, and SL-50 staple lifter. Features new wire, shade and screen attachments. Shp. wt. 5 lbs.

34F628. List 17.50 NET **14.96**

STAPLE GUN TACKER

Type T-50. All-purpose heavy duty staple gun which is also ideal for do-it-yourselfers. Rugged steel const. permits almost any heavy-duty nailing job. High powered spring action. All chrome finish. Loads (8S) T-50 staples. Double leverage permits squeeze pressure to penetrate hardwood board. Shpg. wt. 3 lbs.

34F633. NET **10.79**

STAPLES

Stock No.	Size	Box of 5000
34F627	1/4"	2.08
34F628	⅜"	2.29
34F629	1½"	2.71
34F634	9/16"	2.92

INTERMEDIATE TACKER

Type T55. Smart, modern streamlined design with attractive, durable baked enamel finish. Shock-absorber bumper. Removable frame and channel for easy field cleaning. Patented jam-proof mechanism. High carbon, hardened steel working parts. Non-pinch, easy-grip handle. All steel construction. This lightweight model serves as a junior substitute for the heavy duty T-50. A capable and economical tool for the "do-it-yourself" homeowner. Uses same staple size as T-50.

34F622. NET **8.29**

JUNIOR TACKER

Type JT-21. Ideal gift item for any home owner or apartment dweller. Takes two staple sizes for numerous household uses like screening, upholstery, shelfing, lining, etc. Easy to operate, fits hand comfortably. Tacker locks to fit in pocket, and prevent accidental firing. Built-in staple extractor in rear of base. Attractive colors. Loads 1000 JT-1/4" or 5/16" staples. Shpg. wt 1¼ lbs.

34F638. NET 4.96

34F639. 1/4" staples for JT21. Box of 5000. **NET** 2.25

34F640. 5/16" staples for JT21. Box of 5000. **NET** 2.25

To Serve You Better — Ten Stocking Warehouses from Coast-to-Coast
Use the Services of the Facility Nearest You — See Front Cover

Industrial Tools

JONARD INDUSTRIAL TOOLS

● NEW MASTER 15 PIECE SET

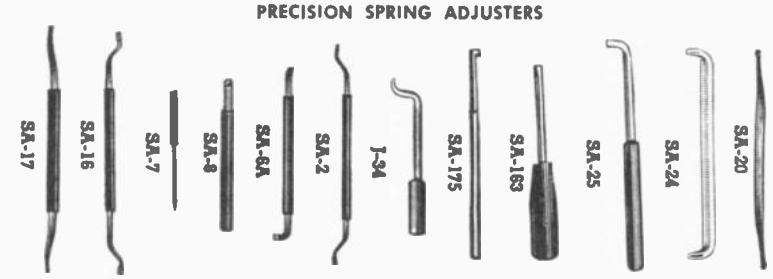
Type K-55. Precision made and professionally desinged group of new tools for adjusting and maintaining relays, contactors, switches, controls, and other components for the telecommunications and electronic industries. Tools made of the highest quality carbon steel with heavy chrome plating. The kit contains two spring adjusters, tension and thickness gauges, duck bill plier, screw driver, tweezer, mirror, four-way tool, brush, armature, stop benders, contact spray, and contact burnisher. Most tools feature heavy plastic insulation permitting repair and adjustment on live equipment. Tool kit is supplied with thick vinyl fold up case for excellent protection of each tool.
35F1127. NET 34.00

● NEW COMPACT ADJUSTING KIT

Type KR-6. Precision made tools for adjusting, calibrating, and servicing relays, contacts, and most electromechanical equipment. Kit contains spring adjuster, armature bender, arm bender, relay spring, duck bill plier, burnisher, and tension gauge — 0-50 gram. All tools are highly polished and made of high quality carbon steel. Dielectric, heavily insulated, tools permit adjustment and repair on high voltage live equipment without power shutdown. Adjusting kit is supplied with super durable leather zippered leather case for tool protection.
35F1128. NET 19.90

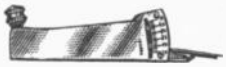
PENFILE POCKET CLEANER-BRUSH

Cleans all types of contacts. Non-residual, Hardened steel, blades do not leave any grit or dust on contact. Length and rigidity adjustment of flexible blade possible by varying depth in chuck. Plastic dielectric cap permits working on live and dangerous contacts. 5½" length x ⅜" diameter.
Type P-4 Penfile. ¼"Wx 1¼"Lx.007"T. 12 blades.
35F1108. NET 3.90
Type P-6 Penfile. 3/16"Wx 1¾"Wx.007"T. 12 blades.
35F1108. NET 3.90
Type RB-4. Replacement blades for P-4
35F1109. NET ..... Pkg. of 25 3.75
Type RB-6. Replacement blades for P-6.
35F1110. NET ..... Pkg. of 25 3.75



Alj. all foreign & domestic relays. Carbon steel, chrome plated. Dielectric handle.
SA-2. Chisel edge. Curved both ends. Adj. horiz. rlays. .023" slots. 7" length.
35F1114. NET 2.48
SA-6A. For vertical and horizontal relays. .029: slots. 5½" length.
35F1115. NET 2.45
SA-7. Straight. For rotary switches & flat relays. .015" slot. 4½" length.
35F1116. NET 1.35
SA-16. Dbl. ended lengthwise slots. .031" slots. 8" length.
35F1117. NET 2.40
SA-17. Offset flat type. Relay contact springs. .023" slot. 8" length.
35F1118. NET 2.95
SA-20. Upward & downward slots. Closely-set springs. .024" slots. 7" length.
35F1119. NET 3.50
SA-8. Rnd. head. Adj. rotary interupters & heavy springs. .058" slot. 4" length.
35FF20. NET 2.48
SA-24. Rnd. For horiz. relay springs. .040" & .028" cross. slots. 5½" length.
35F1129. NET 2.88
SA-25. Angled saw slots. Adj. rotary relays. .032" slots. 6½" long.
35F1130. NET 2.48
SA-163. Straight, driver-shaped crosswose slot. .038" slot. 5½" length.
35F1131. NET 2.19
SA-175. Saw slot. Adj. close-set relay springs. Insul. handle. .031" slot. 5¼" Length.
35F1132. NET 2.92
Type J-34. For Adjusting Polarized Relays. ¼" x 1⅛" length, 3" diameter.
35F1133. NET 1.68

SPRING TENSION GAUGES



Model GP-50. Preset. Cal. 0-50 gm., both sides at 5 gm. intervals. Preset in seconds. 5¼" length.
35F1112. NET **7.48**
Model G-50. Precision readings. Engraved scale front and back, for horiz. and vert. reading. Scale is 0-50 gm., at 5 gm. intervals. 5" length.
35F1111. NET 6.48
35F1134. G-10. 0 to 10 gm. **NET** 6.48
35F1135. G-30. 0 to 30 gm. **NET** 6.48
35F1136. G-150. 0 to 150 gm. **NET** 6.48

NICKLE SILVER WIRE BRUSH

Type WB-65. Clean contacts and delicate components. Hand-wired. Single row crimped wire filament, .005" thick, brush face 3", trim ¾", length 9".
35F1123. NET **1.95**

ADJUSTMENT OFFSET WRENCHES

For adjusting relay locknut positioned horiz. or vert. Knurled barrel. 1 end bent 90°. Tapered.

Stk. No.	Type	Length	Opening	NET
35F1104	DW-16	8"	3/16"	2.48
35F1105	DW-32	8"	1/32"	2.48
35F1106	DW-4	8"	1/4"	2.48

STRAIGHT THICKNESS GAUGE

Type T-720W. Contains 26 interchangeable blades.
35F1125. NET **3.90**

STOP BENDER

Nickel-Plated

Type SB-22. For adjusting armature back stops. Carbon steel, nickle chrome plated. Slot .033"W, 5" length.
35F1122. NET **1.48**

"DIAMFILE" DIAMOND CLEANER-BRUSH

Consists of abrasive diamond particles for cleaning of relay contacts with minimum pressure. Nominal removal material will not alter normal contact gap. Uniformity of particles assures perfectly polished contact face. Flexible dielectric plastic shaft.

3 Types of Spatula For Every Application

35F1100. Type K-234. Kit of 3. **NET** **19.90**
35F1101. Type D-200. Coarse, Green, 2 diamond faces. **NET** 4.95
35F1102. Type D-300. Medium, Red. 2 diamond faces. **NET** ... 4.95
35F1103. Type D-400. Fine, Blue, 1 diamond face. **NET** ... 4.95

BEAUCHAINE TOOLS

SOLDERING AIDS

Use for probing, scraping, cleaning. Standard and printed circuit sizes. Solder-shedding chrome-plated tips.

Stk. No.	Type	Tip Description	1-199	200-Up
34F596	SH20A	Standard straight	.98	.88
34F597	SH20B	Standard angle	.98	.88
34F613	SH20K	Std. brush & scraper	.98	.88
34F598	SH20C	Printed-circuit straight	.85	.77
34F599	SH20D	Printed-circuit angle	.85	.77
34F612	SH20G	P-C brush & scraper	.92	.83

Type SH-120. Kit of all six aids described above, in a handy plastic case.
34F614. NET EACH **5.35**
Probing Tweezers. Polystyrene—no shock hazard in tightly wired chassis.
34F549. Type SH24A. NET. 1-99 ..... .50 200-Up ..... .45

TUBE SERVICE ACCESSORIES

Test Adapters. Plug in socket, plug tube in adapter; contacts are available top-of-chassis for in-service measurements.

Stock No.	Type	Description	Ea.
34F567	SH27	For 7 pin min.	1.65
34F568	SH28	For 8 pin oct.	1.82
34F569	SH29	For 9 pin min.	1.90

Tube Puller. Neoprene suction type. Fits 9-pin miniature tubes.
34F584. Type SH23B. NET EACH ..... **.95**
Tube Lifter. Loosens octal and loctal types for easy removal.
34F586. Type SH21. NET EACH ..... **.77**

. Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

Selected Top-Quality Tools

MOODY SUBMINIATURE AND PRECISION HAND TOOLS

MOODY MASTER KIT

Model MMk-6. The tiny tools contained in these six tool kits are ideal for miniature sub-assembly work and all types of industrial and mechanical operations. Kit is popular with sportsmen, hobbyists, do-it-yourselfers, radio, TV, or Hi-Fi enthusiasts. The six kits are these: SC-5 (with 5 screwdrivers), the PA-5 (which includes cross recessed drivers and Allen type wrenches,) the SW-5 (a socket Wrench Set), the OE-5 (an offset open end wrench set), the #70 (A companion to the TS-5 Tiny Tap Set), and the TS-5 Tiny Tap Set. Compact — 8½ x 3½ x 1½".

33F494. Type MMk-6. ..... **16.06**

UTIL. SCREWDRIVER SET # 52

Six interchangeable blades for precision work. .025", .040", .055", .070", .080", .100", Handle knurled for positive grip. Each blade polished, heat treated steel. Manufactured in accordance with Federal spec. GGG-S-121-D.

33F696. NET **1.75**

Socket Wrench Set. 5 interchangeable tiny hex socket wrenches. All fit the same handle. Enables inserting or removing tiny nuts from hard-to-get-at places. Wrench sizes: 5/64", 3/32", 7/64", 1/8". and 5/32".

Type BW-5. With Magnetic handle.
33F473. NET **2.77**
Lots of 12. Each 2.37

Type SW-5. Non-Magnetic handle.
33F472. NET **2.45**
Lots of 12. Each 2.10

Type OE-5. Offset Open End Wrench Set. a tiny offset open end wrenches. Made of tough heat treated steel. Wrenches are completely interchangeable in the chuck-type handle. Ideal for all types of tiny nuts found in electrical and other small devices. Wrench Sizes: 5/64", 3/32", 7/64", 1/8" and 5/32". Shpg. wt. 8 oz.
33F474. NET **1.75**
Lots of 12. Each 1.50

Type SH-2. Screw-Holding Screwdrivers. Swivel-top handle takes 2½" or 1¾" blade, plus screw-holding clip. Holds tiny screws better than fingers. Shipping weight. 8 oz.
33F477. NET **1.23**
Lots of 12, Each 1.05

Type TS-5 Utility Tiny Tap Set. The newest addition to the Moody Kit sets. Tough, heat treated steel tap tool set is ideal for cutting tiny inside threads on any number of small items. Top sizes are 0-80, 1-72, 2-56, 3-48, 4-40. The knurled chuck type handle has a torque hole for steady firm leverage. Shpg. wt., 8 oz.
33F478. NET **4.87**
Lots of 12. Each 4.17

Type PA-5. Miniature Phillips and Allen 6 Piece Set. Contains two smallest-size Phillips screwdrivers, plus three tiny Allen-type wrenches . . . all interchangeable in swivel-top universal handle. You get: Phillips #0 and #1, plus Allen Nos. 4, 6 and 8. Shpg. wt., 7 oz.
33F476. NET **1.75**
Lots of 12. Each 1.50

Type SC-5. Jewelers' Screwdriver 6 Piece Set. Perfect for dismantling small assemblies. Five interchangeable rust-resistant blades fit universal swivel-top handle. Sizes include .055", .070", .080" and .100". Complete with awl with colorful plastic stand and cover. 7 oz.
33F475. NET **1.23**
Lots of 12, Each 1.05

ELECTRICIAN'S INSULATED POCKET SCREWDRIVER NO. 50

Especially made for safe carrying in the pocket; blade is stored in the handle to eliminate danger of stabbing. The hollow nylon tube insulates against electric shock. Solid-locking chuck-nose holds blade securely.
33F695. NET **1.05**

MACHINIST SCRIBER

MS-2. meets MIL-Spec. GGG-S-131. Approximately 8½" overall with a hook point and a straight point, both properly tapered, heat treated and hardened, these are swaged into a knurled aluminum finger grip handle. Ideal for use with all metal or other hard surfaces.
34F559. NET ..... **.45**
Lots of 12. Each ..... .40

JEWELER'S SCREWDRIVER SET

Model JS-6, meets Mil. Spec. GGG-S-121d. The chuck noses are grooved keying the blade size to the user's touch. May also be obtained with all screw drivers having the same size blades or a combination of various sizes as the user may require. One set of six complete screwdrivers with properly heat-treated blades. Blades sizes .025", .040", .055", .070", .080" and .100".
33F479. NET **2.94**
Lots of 12, Each 2.52

NO. 70 TINY TAP DRILL SET

Five frequently-used drill sizes are provided. They fit into a compact plastic stand-up holder which protects the cutting surfaces by keeping the drills separated. The handle features a solid-locking chuck-nose and a swivel top. Drill sizes are #43, #47, #50, #53, and 3/64".
33694. NET **2.45**

POCKET MAGNET AND SCRIBER WITH CLIP, NO. 42

On one end, powerful magnet for prodding into this and that for lost bolts, etc. Other end stores a scribing point which fits into a chuck for use. Pocket clip.
33F697. NET ..... **.88**

SWIVELTOP PIN VISES

Designed for ease of handling, these pin vises have nickel plated knurled steel handles and solid locking chucks that insure a firm grip when drilling or holding stock. The PV-1 will take drills, sizes #80 to #68, (.0135" to .031"). The PV-2 will take drill sizes #67 to #52. (.032" to .0635").
33F480. PV-1. NET ..... **.88**
33F481. PV-2 ..... .88
Lots of 12, Each ..... .75

HANSON-ACE QUALITY TOOLS

ADJUSTABLE DIES

Type 614V 39 tools, each in its own easy-to-reach compartment. Sturdy, unbreakable plastic case. Contains one each of the following: No. 25 die stock, No. 88 tap and reamer wrench, No. 1E T tap wrench, No. 514 screw pitch gauge, screw driver and one each tap and adjustable die in the following sizes: 4x36, 6x32, 8x 32, 10x24, 10x32, 12x24 machine screw standard. 1/4x20, 5/16x18, 3/8x16, 7/16x14, and 1/2x13NC (U.S. Standard), 1/4x28, 5/16x24, 3/8x24, 7/16x20, and 1/2x20NF (SAE Standard)‡, plus 1/8" pipe. Type of die, 1" O.D.
33F651. NET **28.04**

SCREW EXTRACTOR SET

Type 35P. Designed to remove broken screws, bolts, studs and pipes that cannot be taken out any other way. Drill hole in broken piece, wedge extractor in hole by turning counterclockwise — screw is removed on its own threads. Comes with 5 extractors — No. 1 for screws 3/32 to 5/32". No. 2 for 5/32 to 1/32". No. 3 for 7/32 to 9/32". No. 4 for 9/32 to 3/8". No. 5 for 3/8 to 5/8 dia. screws, and 1/8 and 1/4" pipe. Made of extra tough heat treated alloy steel in handy plastic snap fastened pouch. Shpg. wt. 1 lb.
33F650 NET **2.09**

TAP AND DIE SETS

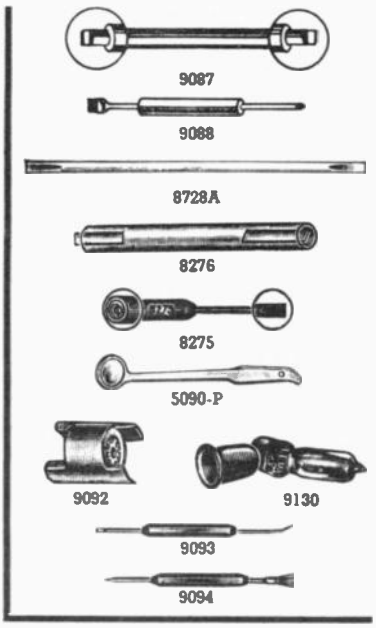
Ideal for mechanics, technicians, or homeowners. Made of highest quality precision-ground steel, these sets are packed in o sturdy wooden carrying case. Each set contains a die stock, tap wrench, and 1 each plug tap and 1" OD solid die in the size listed. Shpg. wt., 3 lbs.
Set S21. Sizes 6x32, 8x32, 12x24, 10x24, 1/4x20.
33F653. NET. **8.39**

TAPERED REAMER—Type R120

This high quality tapered reamer was primarily designed for enlarging holes in wood, bakelite, or metal up to 1/2" in diam. Shank has "T" handle. Length, 5¾". Tapered point has diameter of 1/8". Shipping weight, 3 oz.
34F550. NET **1.44**

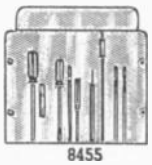
Tuning and Aligning Tools

GC ELECTRONICS



DELUXE TOOL KIT

Type 8283. Now you can make TV repairs easily and quickly. Deluxe tool kit contains 25 tools in a superior leatherette roll type case. Includes such necessary tools as alignment screwdriver, TV alignment tool, K-Tran tool, TV channel tuning tool, FM tuning tool, TV core aligner, long reach aligner, TV Duplex aligner, "Shorty" TV alignment screwdriver, and many other needed TV tools. Saves you time and money! 1 lb.
35F650. NET **15.83**



8280 8455

TV ALIGNMENT KIT

Type 8455. Popular low-priced alignment kit has latest essential tools specially engineered for TV sets. Includes K-Tran tool, TV channel tool, TV Short tool for RF and IF, oscillator tool, long reach aligner, flexible tuning wand, and others. 9 tools in roll-up case. 6 oz.
35F651. NET **6.26**

16 TOOLS IN LEATHERETTE CASE

Type 8280. Contains all tools needed to align most TV sets. Knurled plastic handles. Leatherette case. Wt., 8 oz.
35F801. NET **10.30**

INDIVIDUAL ALIGNMENT TOOLS

Type 8282. Molded delrin plastic IF alignment tool. 5 7/16" long. Wt., 2 oz.
35F812. NET ..... **.37**

Type 8607. Alignment tool with replaceable molded nylon tip. 12" long. Shpg. wt., 4 oz.
35F810. NET **1.60**

SLUG TUNER ADJUSTMENT TOOL

Type 9087. A special slug tuning tool especially made for adjusting standard tuners, etc. as used in TV receivers. Other end has a longer blade for other applications. Completely insulated. 7½" long, ¼" shaft dia. Shaft ends .170 dia. Wt., 3 oz.
35F813. NET ..... **.75**

SOLDERING AID TOOL

Type 9088. One end has a stiff wire brush for cleaning wire and terminal strip before soldering, and the other end is machined to hold wire while soldering. Solder will not stick to the soldering probe end of the tool. Made of special stainless steel with hardened probe. 8". Wt., 4 oz.
35F814. NET **1.00**

DOUBLE ALIGNMENT TOOL

Type 8728A. Of low loss delrin. Has narrow shaft, 7" long, ⅛" diameter. Shipping wt., 4 oz.
35F618. NET ..... **.43**

TELEVISION DUPLEX ALIGNER

Type 8276. An all purpose TV aligner for trimmers and I.F. transformers. Made of plastic material with extra thin spring steel tips, specially made for Television. One end has a projected tip, the other end has a recessed tip. High quality tool that will last a long time. A necessity in adjusting TV sets. 6x1/32". 3 oz.
35F618. NET ..... **.52**

8277 8728 8196

16" EASY REACH ALIGN. TOOL

Type 9294. Has ⅛" blade for alignment where magnetic fields are important. Offers protection from high voltage in hard-to-reach places. Fibreglass. 3 oz.
35F817. NET ..... **.72**

TV SHORTY ALIGNER

Type 8277. Specially made for trimmer and I.F. transformers where space is limited. Made of plastic. Size: 2⅝" long x 7/32" Shaft Dia. Wt., 3 oz.
35F818. NET ..... **.52**

INSPECTION MIRROR

Type 5090. Indispensable for inspecting coils, resistors, connections, etc., in tightly wired radio chassis. Length 7⅞". Shpg. wt., 5 oz.
34F557. NET **42c**

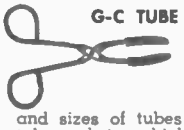
G-C MINIATURE TUBE PULLER

"Amo" tube puller for miniature tubes. Easy to use. Tube is released by pressing button. 4 oz.
34F558. 7-pin. 5093. NET
34F556. 9-pin. 8106. EACH **1.30**

G-C MINIATURE PIN STRAIGHTENER

Steel die for straightening pins on miniature tubes. Carry in tool box or fasten to bench. 6 oz.
Type 8105
35F554. 9-pin. EACH **75c**

G-C TUBE EXTRACTOR



Type 5092. Zinc plated iridated spring steel. Molded neoprene cushion over claws. Removes all makes and sizes of tubes and will not damage tube socket or shield. Permits quick manipulation from any angle. 6 oz.
34F752. NET **98c**

GENERAL CEMENT "NE-O-LITE"

Designed for easy use. Neon glow-type tester for voltages ranging from 60 volts AC-DC to 550 volts AC/DC. Neon bulb in insulated holder. 5" insulated leads with phone tips. Wt. 3 oz.
34F680. Type 5100. **NET** **50c**

TV ZENITH UNIVERSAL ALIGNER

Type 8275. Designed for Zenith and other sets. Made of white delrin and plastic handle has thin delrin screwdriver and recessed thin spring steel tip. 3 oz.
35F821. NET ..... **.52**

INSPECTION MIRROR

Type 5090-P. Plastic insulated inspection mirror that you can use to inspect coils, resistors, sockets, etc., while the chassis is hot. No danger of shorting. Wt., 5 oz.
35F655. NET ..... **.38**

TUBE PIN STRAIGHTENERS

Dual **Type 9092.** For 7 and 9-pin miniature tubes. Shpg. wt., 6 oz.
35F656. NET **1.27**

4-IN-1 TUBE GADGET

Type 9130. It's a 7-pin tube straightener, a 9-pin tube straightener, a tube puller, and a tube tapper. Four tools in one. Pure rubber, will not break. 3 oz.
35F657. NET ..... **.92**

SOLDER AID PROBE

Type 9093. For printed circuits. Handy, fine point probe designed to aid in probing and soldering printed circuits. Size: 8". Wt., 4 oz.
35F653. NET **1.00**

BRUSH AND SCRAPER

Type 9094. For printed circuits. Fine stainless steel brush and hardened steel scraper. Size: 8". Shpg. wt., 4 oz.
35F654. NET ..... **.98**

FIBRE TV ALIGNER

Type 8728. Made of durable fibreglass. A 12" double-bodied aligning tool with a ⅛" narrow shaft. Size: ⅛" dia. x 7" long. Shpg. wt., 3 oz.
35F622. NET ..... **.53**

DEEP NIB ALIGNER

Type 8196. For shielded coils and trimmers. Steel nib is insulated. 2½x1/32" diam. Wt., 3 oz.
35F605. NET ..... **.42**

G-C SERVICE TWEEZERS

7946 7947 7948

Type 7946. Self-closing, with crossover action, 6½" long, serrated, blunt points. Shpg. wt., 2 oz.
34F521. NET ..... **.99**

Type 7947. Heavy-duty, with slide-lock feature. 6½" long, serrated, blunt points.
34F522. NET **1.10**

Type 7948. Precision tweezer with narrow pointed ends. Over-all length, 4½".
34F523. NET ..... **.75**

Tweezer Kit. In leatherette case. One each of above tweezers. 8 oz.
34F524. Type 7950. NET **2.84**

DELRIN HEX WRENCH

Alignment tool for Zenith, Admiral and other sets. One end under cut so it will reach bottom slugs in iron coils.
35F623. Type 8606. 5". NET ..... .48
35F624. Type 8606L. 11". NET ..... .63

END IRON CORE TOOL

All Delrin hex tool for cores with .125 hex opening. One end under cut to reach bottom slug in coils w/o turning top slug.
35F625. Type 9091. 5". NET ..... .48
35F626. Type 9091L. 11". NET ..... .70

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

Greenlee Chassis Punches & Tools

TYPE 731R SOCKET PUNCH FOR P&B KHP RELAY

Makes clean, accurate, finished holes for Potter & Brumfield KHP relay sockets. Takes one minute or less. Completely eliminates old-fashioned "sawing and filing" methods. Makes holes in up to 16-gauge metal quickly anywhere. Simply insert the drive screw in a 9/16" drilled hole, give the drive nut a few turns with a hand wrench, and the job is done. All holes are identical — every job has a neat, professional appearance, and relay sockets fit every time. Hole dimensions, 1.018 x .861". Weight of complete punch, 10 oz.

33F797. NET **14.30**

TYPE 737 & 73S CONDUIT KNOCKOUT SETS

Permits enlarging of knockouts and cutting of holes for conduit in metal. Consists of four punches for cutting 7/8", 1 5/32", 1 11/32", and 1 11/16" holes for 1/2", 3/4", 1", 1 1/4" conduit. The 7/8" punch will also cut a hole for 1/2" conduit where no knockout is provided when a 1 3/32" or 7/16" hole is drilled. In leather case. Wt., 2 3/4 lbs.

33F750. NET **11.75**

Type 737 Conduit Knockout Set. Similar to No. 735 set, but consists of only two punches to cut holes for 1 1/2" and 2" conduit. Hole sizes are 1 15/16" and 2 3/8". Weight, 3 1/2 lbs.

33F753. NET **12.90**

TYPE 731 SQUARE CHASSIS PUNCHES

For cutting square and oblong holes in radio chassis. Turns with ordinary wrench. Punch has 4 cutting edges. Drive screw fits into 1/2" pilot hole. Av. wt., 10 oz.

33F779. For 1/2" holes. **NET** 6.45
33F780. For 5/8" holes. **NET** 6.35
33F781. For 3/4" holes. **NET** 7.10
33F788. For 7/8" holes. **NET** 8.30
33F782. For 1" holes. **NET** 8.60

REPLACEMENT SCREWS AND NUTS

1-3038. Drive screw for 5/8" sq. punch.
33F783. NET 1.65
1-3031. Drive screw for 3/4" sq. punch.
33F784. NET 1.90
1-3043. Drive screw for 1" sq. punch.
33F785. NET 2.55
AV-2929. Universal drive nut.
33F786. NET ..... .40

Newark can supply all replacement parts for Greenlee punches on special order.

BALL-BEARING DRIVES

Makes knockout enlarging simple as A-B-C . . . far less effort for faster conduit installation. For all sizes of Greenlee Knockout Punches and No. 730 Round Radio Chassis Punches 1 11/16" and larger. Use an ordinary wrench . . . ball bearings eliminate need for "muscle power."

For Knockout Punches: No. 737 for 1 1/2 and 2-inch conduit, and No. 730 for 1 7/8", 2", 2 1/4" and 2 1/2" openings and for No. 730M for 2 25/32" opening.

No.	Type	Descrip.	Wt.	NET
33F725	AV304-BB	Complete 3/4"x4" oa.	11 oz.	2.90

For the following Knockout Punches: No. 735 for 3/4", 1" and 1 1/4" conduit, and No. 730 Radio Chassis Punches for 1 5/8" and 1 3/4" openings and No. 730S for 1 7/32" opening.

33F728	AV249-BB	Complete 3/4"x3 1/4" oa.	9 oz.	2.75

For Knockout Punch No. 735 for 1/2" conduit and No. 730 Radio Chassis Punches for 1 1/16", 3/4", 1 3/16", and 7/8" openings.

33F731	AV322-BB	Complete 3/8"x2 1/2" oa.	2 oz.	1.10

Same type drive as No. AV322-BB above for 1" to 1 1/2" sizes Greenlee No. 730 Radio Chassis Punch.

33F734	AV112-BB	Complete 3/8"x2 13/16" oa.	2 1/2 oz.	1.20

TYPE 732 CHASSIS "KEY" PUNCHES

Keyed round punches for cutting holes for tube sockets and plugs with keys, such as the Amphenol "S", Millen, and other types. Operates by wrench power. Keyed prong prevents rotation after mounting. Eliminates need for mounting plate. Available in five sizes: 15/32", 15/16", 11 11/64", 11 7/64", and 12 1/64". Average shpg. wt., 10 oz.

33F789. For 15/32" holes. **NET** 6.00
33F790. For 15/16" holes. **NET** 6.10
33F791. For 11 11/64" holes. **NET** 6.80
33F792. For 11 7/64" holes. **NET** 7.60
33F793. For 12 1/64" holes. **NET** 8.50

TYPE 738 & 739 KNOCKOUT PUNCHES

Operate with ordinary wrench for drive power. Just insert in knockout or drilled hole and turn drive nut. Type 738 cuts 2 7/8" dia. holes for 2 1/2" conduit; type 739 cuts 3 1/2" dia. holes for 3" conduit.

Type 738 Punch. Wt., 5 3/4 lbs.
33F751. NET **16.75**

Type 739 Punch. Wt., 7 1/4 lbs.
33F752. NET 21.60

TYPE 730 ROUND PUNCHES

Makes round openings with maximum ease in minimum time . . . Clean, accurate holes for sockets, meters, etc Use an ordinary wrench for drive power. Will cut metal bakelite, or hard rubber. Shipping weight, 3/4 lbs.

No.	Size	Net	No.	Size	NET
33F760	1/2"	2.70	33F769	1 1/4"	3.00
33F754	9/16"	2.70	33F755	1 5/16"	3.60
33F761	5/8"	2.70	33F770	1 3/8"	3.60
33F775	1 1/16"	2.70	33F771	1 1/2"	4.10
33F762	3/4"	2.70	33F756	1 5/8"	4.90
33F776	13/16"	2.70	33F757	1 3/4"	5.60
33F763	7/8"	2.70	33F758	1 7/8"	7.00
33F764	1"	3.00	33F759	2"	7.50
33F765	1 1/16"	3.15	33F772	2 1/4"	8.10
33F766	1 1/8"	3.15	730M		
33F767	1 5/32"	3.15			
33F768	1 3/16"	3.15	33F777	2 25/32"	12.60

33F778. Type 730-S. 1 7/32" punch for oil tight control units. **NET** 5.50
33F794. Type 730-T. 3 1/8" punch for instrument panels. **NET** 28.00
33F773. Type AV-1675. 1/4" screw for 1/2"-5/8" punches. **NET** 30c
33F787. Type AV-322. 3/8"x1 1/2" screw for 1 1/16"-7/8" punches. **NET** 30c
33F774. Type AV-112. 3/8" screw for 1" to 1 1/2" punches. **Type 1804. NET** 35c

FAST RADIO CHASSIS PUNCH DRIVER

Type 1804. Ratchet Knockout Punch Driver. Knockout Driver Assembly, and ratchet and leverage handles. 3 adapter screws. Can be used with all standard Greenlee Knockout Punches from 1/2" to 3" and all No. 730 Round Chassis Punches 1 1/16" and larger. Without punches. Shpg. wt., 13 lb.

33F799. NET **57.00**

EXPANSIVE BITS

Has quick-adjusting locking feature, cutter cannot creep. Eight-pitch square thread on cutter and adjusting screw permits rapid setting to size. Polished steel. Sq. shank.

33F532. No. 5. 5/8" to 1 3/4". **NET** 3.13
33F533. No. 6. 7/8" to 3". **NET** 3.73

TYPE 733 CHASSIS "D" PUNCH

For cutting "D" type holes such as those required for miniature sockets. Easy to operate—driven by wrench action. Cutting edge makes "D" shaped hole easily, accurately. Eliminates need for mounting plate. Wt., 6 oz.

33F795. For 1/2" holes. **NET** **4.65**
33F796. For 5/8" holes. **NET** 4.95

G-C SPEEDEX WIRE STRIPPERS

SPEED-O-MATIC MODELS

Type 766. Latest Speedex model featuring the "Fully Automatic Delayed Return Action" to prevent crushing fine wires. Combines the features of all Speedex Wire Strippers. Has narrow, easy grip handles and interchangeable blades. Models avail. for various wire sizes.

34F608. Type 766. For 12 to 20 wire.
34F609. Type 766A. 14 to 30 wire.
NET EACH **5.93**

AUTOMATIC MODELS

Type 744. Especially suited for stripping fine and stranded wires. "Trig-O-Matic" Stay-Open feature keeps wires from being crushed. Can be used either automatic or standard model.

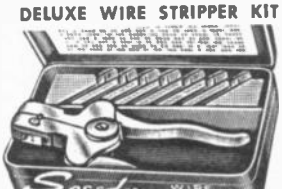
34F600. Type 744H. For 300-ohm twin line.
34F601. Type 744. For 12 to 20 wire.
34F602. Type 744A. 14 to 30 wire.
NET EACH **5.93**

STANDARD MODELS

Type 733. Popular inexpensive model will work on 90% of all stripping jobs.

34F603. Type 733H. For 300-ohm line.
34F604. Type 733. For 12 to 20 wire.
34F605. Type 733A. For 14 to 30.
NET EACH **4.77**

DELUXE WIRE STRIPPER KIT



Type 744K. Includes "Trig-O-matic" stay-open wire stripper, plus interchangeable blade sets for any size wire from No. 30 to No. 8. Also handles 300- ohm ribbon lead-in wire. 2 1/4 lbs.

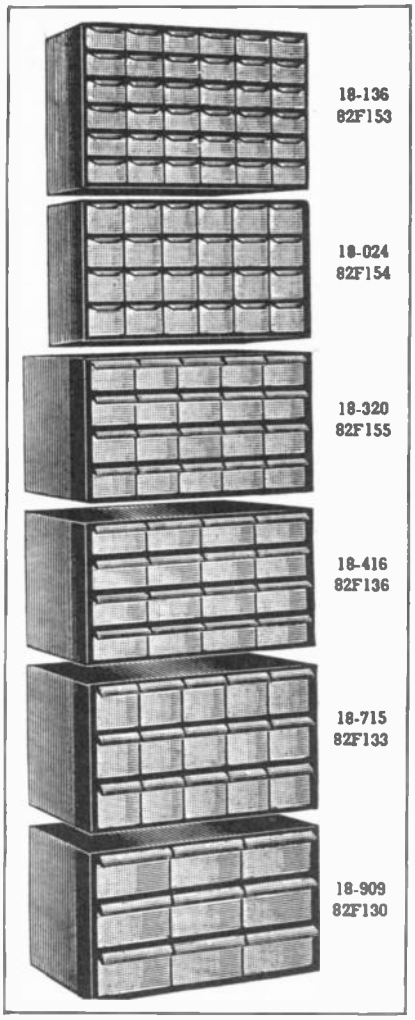
34F606. Type 212. **NET** **13.16**

STRIP-ER-CLIPS

A precision tool with an exclusive safeguard that prevents accidental nicking or cutting while wires are being stripped. Features a seven stop gauge which adjusts instantly to the correct wire size. Setting of gauge to protect against damaging wire conductors or strands is easily done with the thumb. Strips and clips all wires ranging from 14 to 26 gauge. With heavily insulated grips and streamlined jaws. Shipping weight, 2 lbs.

33F583. No. 760. **NET** **1.38**

A-M Akro-Mils Drawer Cabinets



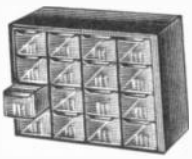
- ORGANIZE YOUR SMALL ITEMS
- FIND THINGS FAST — SAVE TIME! SAVE SPACE!

MODULAR HEAVY DUTY CABINETS

Heavy duty welded steel frames eliminate swaying or chance of becoming lopsided. Akro-Mils' cabinets are constructed so that one unit stacks on another. No limit to the height of any stack. Storage room may be created at any time by adding cabinets. Cabinets may be used singly. Akro-Mils cabinets are adaptable to any space; they stand, stack, hang on the wall, or fit into existing shelves. Gray hammer-tone finish resists chipping or rubbing off. Plastic drawers are made out of tough styrene. They won't bend, warp or twist out of shape. Drawers are transparent or granite-gray color. They are flexible and divide into various size compartments. Molded, one piece construction; ribbed for strength, drawers are smooth sliding and silent operating. With dividers and index labels. Cabinet width: 17⅞"

Opaque Stk. No.	Type	Trans. Stk. No.	Type	Drws.	Drwr. Size H"	W"	D"	Cabinet Size H"	D"	Each
82F153	18-136	82F139	17-136	36	1 7/16	2¾	5⅞	11⅝	6	12.48
82F154	18-024	82F140	17-024	24	2	2¾	5¾	10¼	6	12.48
82F155	18-320	82F156	17-320	20	2	3	11	10¼	11	19.98
82F136	18-416	82F108	17-416	16	2	4	11	10¼	11	17.98
82F133	18-715	82F157	17-715	15	3 1/32	3⅛	11	10¼	11	17.98
82F130	18-909	82F158	17-909	9	3 1/32	5¼	11	10¼	11	17.98

ECONOMY DRAWER CABINETS


11-216A

11-024A

11-781

11-413A

Model 11-781—6 Drawers. Perfect for resistors and capacitors and other miniature parts. Welded steel frame with chip-proof enamel finish. Contains 6 drawers, 2 labels, and 9 removable dividers per drawer. Size: 6 x 10 x 9". Shpg. wt. 5 lbs.

Model 11-216A—16 Drawers. Has deep, compact drawers for storage of articles up to 2" in height. Compartment sizes are completely adjustable with moveable dividers that lock into place. Supplied with divider and index per drawer. Size: 5¾ x 2¾ x 2". Shpg. wt. 6½ lbs.

Model 11-024A—24 Drawers. For storing small parts. Welded plastic steel front and dividers. Safety tab prevents accidental spilling. With index labels and 1 divider. Sizt: 2¾ x 1¼ x 5¾". Shpg. wt. 6½ lbs.

Stk. No.	Type	No. of Drawers	Cabinet Size	Each
82F127	11-781	6	6x10x9"H	5.06
82F117	11-216A	16	6x13x9"H	5.63
82F115	11-024A	24	6x13x9"H	5.63
82F116	11-413A	18	6½x9x10"H	5.63

DIVIDERS FOR AKRO-MILS CABINETS

Stk. No.	Type	Description	For Drwrs. in cabinet	Dividers Per Pkg.	Price
82F083	42-124	Long	17-136 18-136	10	1.25
82F084	42-107	Cross	17-136 18-136	50	1.25
82F119	40-505	Cross	11-024A	25	.65
82F121	40-226	Long	11-781	30	.40
82F122	40-405	Cross	17-024 18-024 11-216A	25	1.00
82F131	43-305	Cross	17-909 18-909	25	1.50
82F132	43-332	Long	17-715 18-715 17-909 18-909	10	1.35
82F134	43-105	Cross	17-715 18-715	25	1.35
82F137	42-405	Cross	17-416 18-416	25	1.00
82F138	42-432	Long	17-416 18-416	10	1.00

Two sizes available for each drawer; make any size compartment, cross-wise or length-wise. Dividers fit so snugly that drawers will not spread; items cannot slip under them. Easy to put in drawers. Dividers are dove-tailed and lock tight to prevent drawers from spreading. They move easily to new positions if desired. Rust-proof, chemical resistant, non-corrosive, and smooth sliding. Stop tab prevents spilling. Label and label slots provide easy indexing.

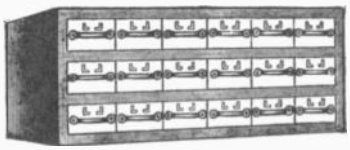
Rugged Hinge-Top storage boxes molded of clear polystyrene. Contains from 1 to 18 compartments suitable for storing hardware small parts, fuses, capacitors, resistors, and other odds and ends. Boxes are scratch resistant, easy to clean, light, rigid, and durable. Individually wrapped in sealed cellophane bags for added protection. Exclusive cover and hinge design, assures easy movement, snug fit, and long hinge life.

PLASTIC STORAGE BOXES

Stk. No.	Type	Number of Compartments	Compartment Dimensions	Overall Dimensions	Shpg. Wt.	NET
82F141	05-201	1	4¾"x2⅝"x1"	4¾"x2⅝"x1"	2 oz.	.22
82F142	05-204	4 equal	2 3/32"x1 9/32"x1"	4¾"x2⅝"x1"	2 oz.	.22
82F143	05-301	1	6⅞"x3⅜"x1⅛"	6⅞"x3⅜"x1⅛"	4 oz.	.42
82F144	05-306	6 equal	1⅛"x3⅜"x1⅛"	6⅞"x3⅜"x1⅛"	4 oz.	.42
82F145	05-309	9	1 5/16"x1⅝"x1⅛" 1 7/16"x3⅜"x1⅛"	6⅞"x3⅜"x1⅛"	4 oz.	.42
82F146	05-401	1	8 3/32"x4⅛"x1¼"	8 3/32"x4⅛"x1¼"	9 oz.	.49
82F147	05-406	6 equal	1 5/16"x4⅛"x1¼"	8 3/32"x4⅛"x1¼"	9 oz.	.49
82F148	05-412	12	1 9/32"x1 5/16"x1¼" 1 5/16"x4⅛"x1¼" 1 5/16"x2"x1¼"	8 3/32"x4⅛"x1¼"	9 oz.	.49
82F149	05-418	18 equal	1 3/16"x1 23/64"x1¼"	8 3/32"x4⅛"x1¼"	9 oz.	.49
82F150	05-506	6 equal	1 11/16"x5 15/16"x2"	10 7/16"x5 15/16"x2"	22 oz.	1.27
82F151	05-512	12	1 13/16"x1 11/16"x2" 3 13/16"x1 11/16"x2"	10 7/16"x5 15/16"x2"	22 oz.	1.27
82F152	05-518	18 equal	1 13/16"x1 11/16"x2"	10 7/16"x5 15/16"x2"	22 oz.	1.27

EQUIPTO CABINETS

STOCK AND STACK SPACE SAVER CABINET DRAWERS



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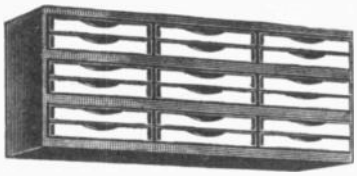

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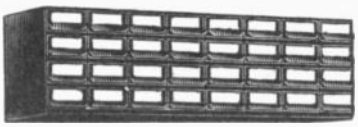


32

Items can be placed in individual drawers, best suited for your stock. The units can be placed in any type of arrangement you require. The drawers and dividers are easily identifiable by using the large label holders on the fronts of each drawer and divider. All drawers are removable and interchangeable. With each different operation the drawers or the units can be moved. Dividers are adjustable on 1" centers.

PARTS CABINETS

Model 11. Designed for storing resistors, condensers, nuts, bolts, screws, electrical supplies and other small parts. Comes with 18 drawers and each drawer is equipped with two adjustable and removable cross dividers making three compartments per drawer. Makes a total of 54 compartments. 13¾" high ,12" deep. The 18 drawers are 11" deep x 5⅝" wide x 3⅛" high. Comes with two dividers per drawer. Olive green finish. Shipped completely set up. Shpg. wt. 61 lbs.
82F000. NET **32.00**

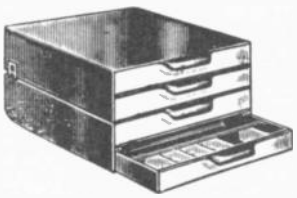
82F002. Type 8720. Extra straight dividers. **Each** ..... .15

LITTLE GEM MULTI-DRAWER CABINETS

Model 15. 13¾" high, 12" deep. Contains 18 type A Little Gem drawers 11" wide x 11" deep x 1¼" high. There are 8 dividers per drawer which makes 216 adjustable compartments per unit. Shpg. wt. 90 lbs.
82F209. NET **79.95**

82F007. Type 8730. Extra straight dividers. **NET** ..... .10

"LITTLE GEM" TINY PARTS CABINET



1½" deep drawers in a one-piece frame. Each drawer furnished with 8 dividers, providing for 24 adjustable compartments. Extra dividers listed below may be used to increase total to 28 compartments per drawer. Cabinets can be used individually, stacked or as shelving inserts. Drawer stops prevent spilling. Units lock together when stacked. Compartments have sloping fronts for easy picking of small parts. 1⅜" label holder on front of drawer; ⅝" label on top of each compartment within the drawer. Smooth slides on bottom for easy pull. Finished in olive green baked enamel.

Stk. No.	Type	Drawers	Size	Wt.	Net
82F004	No. 1	Two	3¼x11x11"	8 lbs.	6.95
82F005	No. 2	Four	6½x11x11"	15 lbs.	13.90
82F006	No. 3	Six	9¾x11x11"	22 lbs.	20.85
82F007	8730	Extra dividers		4 ozs.	.10

"CABINETS WITH 2" HIGH DRAWERS

Model 32. Drawers slide in and out smoothly even with maximum load. 10¾" high and 12" deep. Consists of welded steel frame complete with 32 drawers each 4½" wide x 2" high x 11" deep. Comes with scoop dividers. 2 dividers making 96 compartments. Shpg. Wt. 58 lbs.
82F200. NET **49.50**

Model 34. Same as model 32 except, 24 drawers, 5⅝" wide x 2" high x 11" deep. 72 total compartments. Shpg. Wt. 56 lbs.
82F201. NET **38.95**

Stk. No.	Type	Description	Size	NET
82F202	8732	Straight divider	4¼"	.10
82F203	8733	Scoop divider	4¼"	.10
82F204	8734	Straight divider	5⅝"	.15
82F205	8735	Scoop divider	5⅝"	.15
82F206	8736	Scoop front insert	4¼"	.10
82F207	8737	Scoop front insert	5⅝"	.10

BASES FOR DRAWER UNITS

Model 6812. The bases are designed to keep the bottom row at a more convenient height, as well as to keep the drawers clear from brooms and mops. Size: 34" x 4" x 12". Shpg. wt. 1½ lbs.
82F208. NET **3.75**

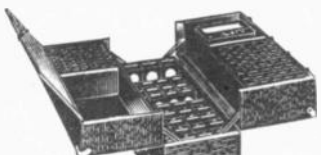
TWO TRAY STOCK CARTS

Sturdy steel construction. Trays are strong with round bedded edges. The carts come with 2 trays, each 4" deep. Top tray may be inverted for flat surface use. 5" tired wheels in front, swivel wheel in rear provide easy portability. Can handle up to 600 lbs. with ample factor of safety. Green baked enamel finish. Designed for use between narrow aisles.
Model 145. 30"x16"x30". Sh. wt. 44 lbs.
82F017. NET **31.95**

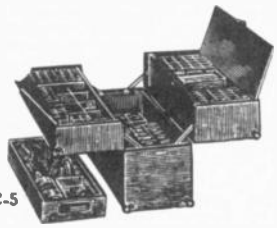
Model 150. 36"x24"x36". Sh. wt. 62 lbs.
82F018. NET **40.95**

WRITE NEWARK FOR A FREE EQUIPTO CATALOG

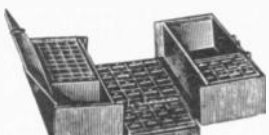
ARGOS TUBE CADDIES



TC-4



TC-5



TC-201

MODEL TC-4

Model TC-4 CARRY-ALL Tube Caddy. A must item for all electronic servicemen. A complete tube and tool kit. Brown Vinyl Holds up to 262 tubes or less with space for tools, meter, etc. Size 21x15x8". 12 lbs.
86F747. NET **16.12**

MODEL TC-5

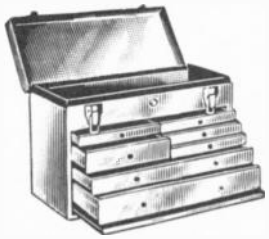
Model TC-5. SUPER Tube Caddy. The largest tube caddy ever built. Carries 340 tubes or less with space for test equipment, and square/replacement part in television servicing tools. Size: 24x16½x8½". Wt., 19 lbs.
86F746. NET **22.39**

MODEL TC-100 & 201

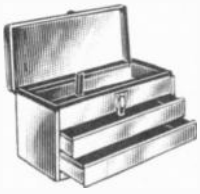
Model TC-100. Pacemaker Tube Caddy. Holds up to 262 tubes. Popular breakaway design gives quick access to all sections. Convenient storage case for tubes. Holds enough to complete the job on the spot. Durable Brown Vinyl covering. Size: 21"x 15"x8"D. Wt. 11 lbs.
86F743. NET **14.45**

Model TC-201. Pacemaker Jr. Tube Caddy. Holds up to 143 tubes with space for tools, meters, etc. Compact folding design. Durable Brown Vinyl covering Overall size: 15¾x12½x8". Shipping wt., 8 lbs.
86F774. NET **10.24**

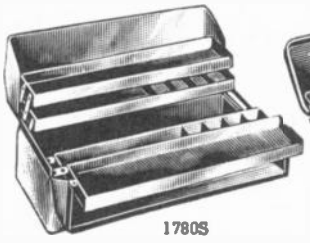
SIMMONDS TOOL BOXES



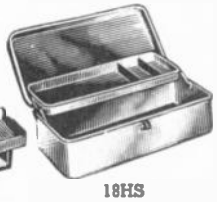
P23NS



1000S

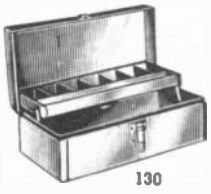


1780S



18HS

16CS



130

● *NEW* TEN DRAWER HEAVY-DUTY MACHINISTS CHEST

Model 1000S. Durable heavy-gauge steel chest with electrically welded seams and continuous piano hinge, in a black wrinkle finish. Ten non-sagging drawer slides with safety stops for a complete view of contents. Form fitted steel handles. Chests are spill-proof and completely locked by a sturdy assembly controlled with a single key. 20" x 8½" x 17½". Shpg. wt. 40 lbs.

82F250. Model 1000's. **NET** **31.78**

● *NEW* 3 DRAWER MACHINISTS CHEST

Model P23NS. Heavy gauge 3 drawer steel cabinet with a one piece electrically welded piano hinge. Drawers lock when lid is closed. Form-fitting steel handle with center draw bolt—padlock arrangement. Nickel plated hardware and finished in charcoal gray Kortex hammer enamel. 20" x 8½" x 10½". Wt. 18 lbs.
82F251. NET **11.95**

● *NEW* FOUR TRAY CANTILEVER

All purpose heavy gauge steel chest in hip roof type with four cantilever trays. One-piece electrically welded continuous piano hinge with form-fitting steel handle. Nickel plated hardware with padlock arrangement. Finished in gray Kortex hammer enamel.
Type 1780S. 17' x 8½" x 10" with 4 small trays. Shpg. wt., 13 lbs.
82F252. NET **8.62**
Type 2180S. 21' x 8½" x 10" with 4 large trays. Shpg. wt., 15 lbs.
82F253. NET **9.75**

● *NEW* SINGLE TRAY HIP ROOF

Model 18HS. Heavy duty tool box—hip roof design. Includes lift out tray. All hdwe. nickel plated with 2 draw bolts—padlock arrangement. Charcoal gray Kortex hammer enamel finish. 20" x 8" x 9". Shpg. wt. 11 lbs.
82F254. NET **5.95**

● *NEW* SINGLE TRAY ALL-PURPOSE

Model 16CS. Cantilever tray tool box for all servicemen. Heavy gauge steel; piano hinge and form fitted handle. Center draw bolt padlock set. Charcoal gray Kortex hammer finish. 16" x 8" x 6". Shpg. wt. 10 lbs.
82F255. NET **4.50**

● *NEW* MODEL 130 & 131

All purpose utility boxes. Finished in gray Kortex hammer enamel finish.
Model 130. No tray. 13½" x 4½" x 6½". 3 lbs. **82F256. NET** 1.60
Model 131. With tray. 13½" x 4½" x 6½". 3 lbs. **82F257. NET** 1.90

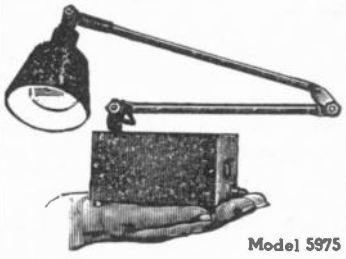
UNION STEEL

MODEL 410 UNION UTILITY CABINET

Heavy gauge steel chest for storing small parts. Consists of a cabinet with four sliding drawers all 2x9x11½". Each drawer has removable dividers which make from 2 to 12 compartments. Drawers have label holders for identifying the contents. Safety drawer stop feature prevents contents of drawer from spilling. Handsome durable charcoal gray Dentone finish. Over all dimensions: 10 x 10 x 11½". Shipping weight, 10 lbs.
82F020. NET **6.71**

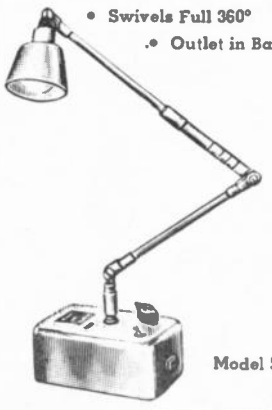
ROXTER CORPORATION

- Electrical Outlet in Base
- Swivels 160°



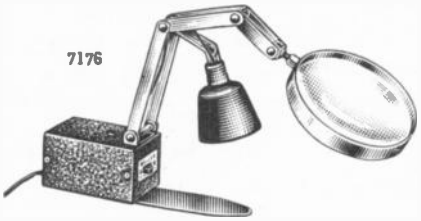
Model 5975

- Adjustable Light Intensities
- Swivels Full 360°
- Outlet in Base



Model 5900

Licensed By Tensor Corp.



7176

7500

Model 5975. Fold-A-Way Utility Lamp. Reflector swivels 160°. O.D. 2½". Cork insulated. Intensity is 150 foot candles at a distance of 12". Base has Teflon plastic feet to prevent scratching of table or desk tops. Base contains an electrical outlet (115 volts at 1 amp) from which other electrical apparatus may be operated. Uses standard G.E. 1133 bayonet type bulb. With bulbs. Beige wrinkle finish. In folded position: 10" long, 2½" wide, 4" high.

Stk. No.	1-5	6-11	12-23	24-Up
65F036	18.95	17.06	14.21	12.63

Model 5900. Precision Work Lamp. Reflector swivels 360°, O.D. 2½" control. Arms are 5/16" brass tubing with three friction joints. Base has four Teflon plastic feet to prevent scratching of table or desk tops. Base is weighted to prevent tipping. Electrical outlet is located on the base (115 volts at 1 amp) for other electrical apparatus. A five position switch provides intensities from 12.2 to 202 foot candles. Uses standard G.E. 1133 bayonet bulbs. With three bulbs and 7½' extension cord. Available in Medium Beige. 5 lbs.

Stk. No.	1-5	6-11	12-23	24-Up
65F035	49.95	44.96	37.46	31.00

Model 7176. All purpose high intensity lamp with 2X precision ground 4½" optical magnifier. Versatile enough to operate in an infinite number of positions with arm extending to 12". Lens tilts back when use as a lamp only is desired. Hi-Lo intensity switch. Use wherever close work is required. The perfect lamp for engineers, assemblers, hobbyists, etc. Compact, lightweight, functional. Plugs into any outlet. All-metal construction, 3 bulbs incl.

Stk. No.	1-5	6-11	12-23	24-Up
65F037	29.95	26.96	20.21	19.96

Model 7500. Engineer's Lamp. Versatile high-intensity lamp engineered for industrial and office use. Specifically designed to overcome limitations of conventional lamps. Features a 24" long arm, with a 4¼" diameter reflector, to illuminate a much wider area. Can be used on desk or mounted on wall. Hi-Lo intensity switch. Adjustable friction lock for accurate positioning. 5 friction joints provide for unlimited reflector positioning. All metal construction.

Stk. No.	1-5	6-11	12-23	24-Up
65F038	24.95	22.46	18.71	16.63

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

Adjustable Lamps and Brackets

LUX-O-LAMPS AND BRACKETS COMPLETE WITH BULBS AND TUBES

LFM-1 ILLUMINATED MAGNIFIERS

Large magnification, cool fluorescent light, and maneuverable. Lamps can be raised or lowered, tilted or turned to any direction. Sweep and movement same as All Angle Lamp L-1 listed below. 3 Diopter 5" ground grass lens. Dove gray finish. Brackets listed below. Shpg. wt. 9 lbs.

Stock No.	Type	Description	Each	Lots of Three
99F1100	LFM-1	Illuminated Magnifier	35.02	31.84
99F1101	LFM-9	As above but on 18" extended arm	32.40	29.45

ACCESSORIES FOR LFM MAGNIFIERS

Stock No.	Description	Each	Lots of Three
99F1102	Lens attachment for #1 increase to 7 diopters	6.56	5.90
99F1103	Lens attachment for #2 increase to 11 diopters	7.46	6.71

FC 8T 9CW. Replacement circline tube. 25F169. Each 3.34. Carton of 24 . 42.07

HMF-ST HAND MAGNIFIER WITH AUXILIARY STAND

General specifications for shade and lenses identical to LFM-1. Adjustable stand.
99F1104. Each 28.39 Lots of 3; each 25.81

LUXO LOW VOLTAGE LAMP

Type LVT-1-12V. Plugs into 110-120V supply. Has built in 12V Vfmr. Type 1383 inner reflector bulb included. Less brackets. Shpg. wt. 6 lbs.
99F1105. Each 27.22 Lots of 3; each 24.77
Replacement circline tube. 25F184. Each 2.70 Cartons of 10 16.50

LC-1 COMBO LAMP

Combines 60 W incandescent with 22 W fluorescent for balance of light, close to daylight quality. 500 ft. candles at 12 in.; 2 arms make 45" extension. Famous Luxo spring balance. Styled in dove gray. Less brackets. Shpg. wt. 7 lbs.
99F1106. Each 25.76 Lots of 3; each 23.42

LB-1 MACHINE TOOL LAMP

Designed for use in shops where work area must be well lit to provide safe and efficient operation. The lamp arm will not change position due to machinery vibration because of spring-balanced construction. Disposable inner reflector, 4½" dia.; 2 extension arms for 45" reach. With bulb, less bracket. Shpg. wt. 4½ lbs.
99F1111. Each 16.74 Lots of 3; each 15.22

FL-1 FLUORESCENT LAMP

All angle/all purpose lamp with "feather touch" positioning. Unique spring loaded extension arm and 360° sweep. 19" x 4½' shade for excellent reflection control. U.L. approved. With fluourescent tubes, less brackets. Shpg. st. 9 lbs.
99F1107. Each 25.54 Lots of 3; each 23.22
F15T8/W replacement bulb. 25F168. Each 1.05. Carton of 24 20.16

ES-1 FLAIR STYLED LAMP

60 watt incandescent lamp for 200 ft-candles of light and "feather touch" control 2 18" extension arms and 360° sweep for adjustments. Less brackets. On/off switch.
99F1108. Each 17.49 Lots of 3; each 15.40

L-1 ALL ANGLE LAMP

Tubular steel fixture raises, lowers, tilts, traverses, and turns in 45" radius, 360° sweep. 60 watt incandescent bulb, shade for greater light output and cool operation. With bulb, less brackets. Shipping weight 5 lbs.

Stock No.	Type		Each	Lots of Three
99F1109	L-1	All Angle Lamp	16.95	15.14
99F1110	L-9	As above but with one 18" arm	12.09	11.81

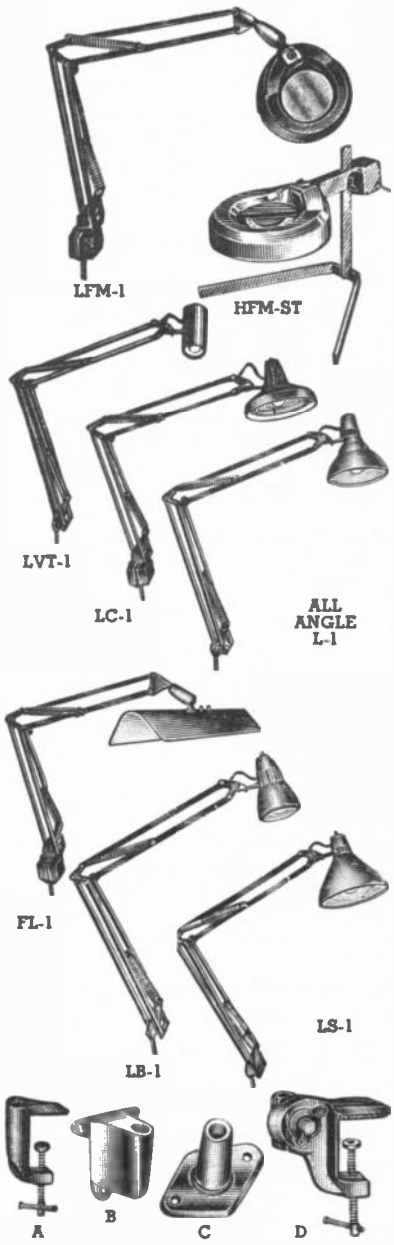
INTERCHANGEABLE BRACKETS

Type A. Clamps to level surface. 2¼" maximum. Shipping weight, ½ lb.
99F1112. Net 1.68

Type B. Screws to verticle surface. 1⅞" maximum. Shipping weight, ½ lb.
99F1113. Net 1.68

Type C. Screws to level surface. 2¼" maximum. Shipping weight, ½ lb.
99F1114. Net 1.68

Type F. Clamps to slanted surface. 2¼" maximum. Shipping weight, 1 lb.
99F115. Net 2.62

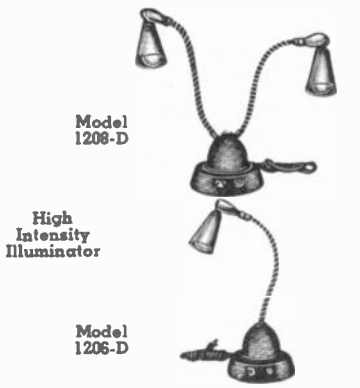


SCIENTIFIC INSTRUMENTS, INC.

DYNALUBE Model No. 1208-D Professional Illuminator. Twin anodized brushed aluminum lamp heads, HI/LO/OFF Intensity selector switch, neon indicator, combination WIDE and NARROW illumination field. Desk or bench housing heavy gage steel finished with baked dark beige Velvet Coating. Housing diameter 5¾". Length of flex arm including swivel 13". Complete with two each, WIDE and NARROW field long life lamp bulbs. 6 foot two wore cord and plug for operation on 115VAC 50-60 hz. Shpg. wt. 6 lbs.
99F1151. 1-3, Net 49.00
4 up, Net 44.10

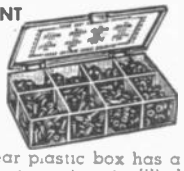
DYNA-LUME Model 1206-D. Professional Illuminator. Single anodized Brushed aluminum lamp head, HI/LO/OFF intensity selector, neon indicator, combination WIDE and NARROW illumination field. Complete with one each, WIDE and NARROW field long life lamp bulbs, 6' two wire cord and plug for operation on 115 VAC 50-60 hz. Shpg. wt. 6 lbs.
99F1151. 1-3, Net 34.50
4 up, Net 31.05

DYNA-LUME Model No. 901 Infra-Red Heat Shield. Optical Pyrex glass reflects 50% of infra-red heat while transmitting only 8%, remainder is absorbed and dissipated. For close work and protection from sample overheating. Complete with chrome plated mounting clips for use interchangeably on either of above models. One heat shield required per lam head. Shpg. wt. 8 oz.
99F1152. 1-9, Net 8.50
10 up, Net 7.65



WALDOM & GC HARDWARE

SKRU BOX ASSORTMENT



Complete selection of popular hardware in one always-handy kit. Popular Skru Box is a must for every professional and home technician. Each sturdy clear plastic box has a positive clasp and 8 compartments filled with the types of plated screws and nuts most widely used on electronic equipment. All lugs and screws are cadmium plated. Hardware selections available below.

BOX OF HEX WASHER HEADS SHEET METAL SCREWS

Model HD-4011. Steel, slotted hex head Type A sheet metal screws with washer attached.

Quant.	Description	Quant.	Description
15	#6x1/4"	15	#8x1/4"
15	#6x3/8"	15	#8x3/8"
15	#6x1/2"	15	#8x1/2"
15	#6x3/4"	15	#8x5/8"

32F050. NET 1.59

BOX OF ROUND HEAD SCREWS & NUTS

Model HD-4013. Contains steel machine screws, *hex nuts, and †sheet metal screws. Black label for clear identification. Shpg. wt., 9 oz.

Quant.	Description	Quant.	Description
40	4-40x1/2"	25†	#6x1/2"
40	6-32x1/4"	40*	4-40x1/4"
20	6-32x3/4"	40*	6-32x1/4"
20	8-32x1/2"	40*	8-32x1/4"

32F051. NET 1.59

BOX OF BINDER HEAD SCREWS & NUTS

Model HD-4018. Contains steel machine screws, *hex nuts, and †sheet metal screws. Orange label. Shpg. wt., 9 oz.

Quant.	Description	Quant.	Description
40	4-40x1/2"	25†	#6x1/2"
40	6-32x1/4"	40*	4-40x1/4"
20	6-32x3/4"	40*	6-32x1/4"
20	8-32x1/2"	40*	8-32x1/4"

32F052. NET 1.59

BOX OF ASSORTED SHEET METAL SCREWS

Model HD-4014. Steel, slotted hex head sheet metal screws, Type A. Maroon label. Shpg. wt., 7 oz. *Item std. for auto radio.

Quant.	Description	Quant.	Description
25	#4x3/8"	35*	#8x1/4"
25	#6x1/4"	25	#8x3/8"
25	#6x1/2"	10	#8x1/2"
10	#6x3/4"	10	#8x5/8"

32F053. NET 1.59

BOX OF WOOD SCREWS

Model HD-4019. Contains both round head and *flat head steel wood screws. Turquoise label. Shpg. wt., 10 oz.

Quant.	Description	Quant.	Description
40	#4x1/2"	12	#8x1"
25	#6x3/4"	10	#8x1 1/4"
15	#6x1"	10*	#8x1 1/4"
15	#8x3/4"	12*	#8x1"

32F054. NET 1.59

ANGLE BRACKETS

Angle brackets made of heavy steel Cad. Plated. Sizes indicate length of each side. All 3/8" wide. Wt. per 12, 3 oz.; per 100, 9 lbs.

Stock No.	Type	Size	Size	100-999 Per 100	1000-4999 Per 1000	5000-9999 Per 1000
31F2152	6261-C	1/4"	3/16"	1.35	10.80	9.72
31F2153	6262-C	3/8"	1/4"	1.69	13.46	12.11
31F2154	6263-C	1/2"	7/16"	1.90	15.19	13.67

METAL SPACERS

For screws up to number 8. Average weight, per 10, 4 oz.; per 100, 2 lbs. Steel nickel plated.

Stock No.	Ht.	10 for	100 for
31F930	1/4"	.39	2.94
31F931	1/2"	.48	3.57
31F932	3/4"	.53	3.99
31F933	1"	.59	4.41

ASSORTED HARDWARE

A B C D

Hot-tin dipped brass, non-locking type lugs. Shpg. wt., 4 oz. 1 gross, 1 lb./1000.

No.	Fig.	Hole	Per 100	Per 1000
31F900	A	No. 6	.68	5.85
31F902	B	No. 8	.60	5.18
31F903	C	No. 10	.69	5.93
31F904	D	No. 8	.68	5.85

TINNED STEEL SOLDERING LUGS

Stock No.	C-Type	Hole Size No.	Fig.	100-999 per 100	1000-4999 Per 1000	5000-9999 Per 1000
31F2074	5704	8	B	2.04	16.26	15.63
31F2075	5705	10	B	2.04	16.26	15.63
31F2076	5706	4	E	2.03	16.26	15.63
31F2269	7441	6	A	1.20	9.60	8.61
31F2270	7442	8	A	1.35	10.80	9.72
31F2271	7445	8	C	1.46	11.60	10.44
31F2276	7458*	4	D	2.23	17.85	16.07
31F2277	7460*	8	D	2.27	18.13	16.32
31F2278	7461*	10	D	2.27	18.13	16.32
31F2293	8466	6	F	1.90	15.19	13.67
31F2294	8467	6	F	3.42	27.32	24.58
31F2295	8468	8	F	3.22	25.72	23.15
31F2296	8473	10	C	1.42	11.33	10.20

*Locking type.

THREADED BRASS BUSHING

No.	Lgt	Thd.	O.D.	10 For	100 For
31F971	1/4"	6-32	1/4	.70	5.25
31F972	1/2"	6-32	1/4	.91	6.83
31F973	3/4"	6-32	1/4	1.19	8.93
31F974	1"	6-32	1/4	1.33	9.98
31F978	1"	8-32	5/16	1.33	9.98

STRAIN RELIEFS FOR POSJ CORD

Stock No.	Type	100/999 NET/100	1000-4999 NET/1000	5000-9999 NET/1000
31F2186	6675-C	6.38	51.05	45.95

FELT PADS

31F2005	1071-C	.37	2.93	2.64

HAIR PIN COTTERS

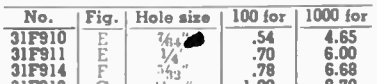
Stock No.	Type	Length	100-999 NET/100	1000-4999 NET/1000	5000-9999 NET/1000
31F2263	7378-C	1/2"	.58	4.66	4.19
31F2264	7379-C	21/32"	.60	4.80	4.32

NYLON AND BUTYRATE CABLE CLAMPS

Combine lightweight and chemical resistance with excellent shock resisting properties in a temperature range of from 185°F. to —40°F. in the Butyrate and 275°F. to —60°F. in the Nylon. Butyrate made to MSL-P-349A, Type III—Class MH, Nylon to MIL-P-17091A.
Nylon cable clamps all are 3/8" wide x .040" thick except * 1/2" wide x .060" thick.

Stock No.	Type	Cable Diameter	Length Inches	100-999/C	1000-4999/M	5000-up per M
31F979	CCN-31	.115"	.310	3.14	26.75	21.15
31F980	CCN-32	.172"	.373	3.30	28.30	22.40
31F981	CCN-33	.234"	.407	3.63	30.95	24.50
31F982	CCN-34	.297"	.448	4.03	34.15	27.05
31F983	CCN-35	.359"	.479	4.46	35.90	28.45
31F984	CCN-36	.422"	.510	4.64	38.00	30.05
31F985	CCN-37	.484"	.542	4.90	40.45	32.00
31F986	CCN-38*	.547"	.623	7.48	49.90	39.50
31F987	CCN-39*	.609"	.654	7.92	58.50	46.30
30F768	CCN-40*	.672"	.752	8.90	63.45	50.25
30F769	CCN-41*	.734"	.783	9.50	69.40	54.95
30F770	CCN-42*	.859"	.845	10.10	75.20	59.50
30F771	CCN-43*	.984"	.908	12.11	84.70	67.05
Butyrate Plastic Clamp material thickness .060". All 1/2" wide.						
31F951	CCB-1	.115"	.360	2.06	17.65	13.95
31F952	CCB-2	.172"	.423	2.08	17.75	14.05
31F953	CCB-3	.234"	.457	2.29	19.55	15.50
31F954	CCB-4	.297"	.498	2.66	21.60	17.10
31F955	CCB-5	.359"	.529	2.78	23.85	18.00
31F956	CCB-6	.422"	.560	3.00	24.80	19.65
31F957	CCB-7	.484"	.592	3.40	26.40	20.90
31F958	CCB-8	.547"	.623	4.50	30.90	24.45
31F959	CCB-9	.609"	.654	5.16	35.00	28.10
31F960	CCB-10	.672"	.752	6.25	38.05	30.10
31F961	CCB-11	.734"	.783	6.45	39.90	31.55
31F962	CCB-12	.859"	.845	6.80	43.30	34.25
31F963	CCB-13	.984'	.908	8.20	45.95	36.40
31F964	CCB-14	1.102	.970	8.20	46.10	38.85
31F965	CCB-15	1.227"	1.062	14.00	51.85	41.05

TINNED SOLDER LUGS



E F G

No.	Fig.	Hole size	100 for	1000 for
31F910	E	7/64"	.54	4.65
31F911	E	1/4"	.70	6.00
31F914	F	21/64"	.78	6.68
31F913	G	11/64"	1.02	8.70
31F915	G	1/4"	2.28	19.50

WALSCO HARDWARE ASSORTMENT

An exceptionally useful assortment of screws, nuts, washers, springs, clamps, terminals, etc. Up to 1000 pieces of standard hardware, all in popular sizes. Wt., 2 1/2 lbs.
31F970. NET 1.17

Solderless Terminals and Connectors waldom

Terminals are made from the finest materials. Annealed Electrolytic copper and Electro-Tin plated. One-piece design, internally serrated, strength gussets, and chamfered edge.
KRIMPTITE®—Non-Insulated terminals make positive connections and save labor—the most uniformly reliable connection.
INSULKRIMP®—Has all the advantages of the KRIMPTITE® terminals, plus rigid vinyl plastic insulating sleeve.

SPADE TONGUE TERMINALS—FIG. A

BASIC DIMENSIONS				KRIMPTITE						INSULKRIMP					
Wire Range	Stud Size	Width	Stud Clearance	Length	Stock No.	Mfrs. Type	100-999 Per C	1000-4999 Per M	5000-Up Per M	Length	Stock No.	Mfrs. Type	100-999 Per C	1000-4999 Per M	5000-Up Per M
22-18	3-4	1/4	7/32	5/8	31F518	S-1116	2.16	15.55	12.15	13/16	31F532	T-2116	4.47	33.05	25.85
22-18	5-6	19/64	7/32	5/8	31F519	S-1014	2.16	15.55	12.15	13/16	31F533	T-2014	4.47	33.05	25.85
22-18	8	19/64	7/32	5/8	31F520	S-1030	2.16	15.55	12.15	13/16	31F534	T-2030	4.47	33.05	25.85
22-18	10	5/16	5/16	3/4	31F521	S-1032	2.16	15.55	12.15	13/16	31F535	T-2032	4.47	33.05	25.85
16-14	5-6	19/64	7/32	5/8	31F522	S-1015*	2.26	16.25	12.70	13/16	31F536	T-2015+	4.47	33.05	25.85
16-14	8	19/64	7/32	5/8	31F523	S-1033	2.26	16.25	12.70	13/16	31F537	T-2033	4.47	33.05	25.85
16-14	10	23/64	9/32	3/4	31F524	S-1016*	2.26	16.25	12.70	13/16	31F538	T-2016+	4.47	33.05	25.85
12-10	10	3/8	5/16	25/32	31F525	S-1017	3.14	22.55	17.65	1 3/32	31F539	T-2017	5.79	42.80	33.45

HOOK TONGUE TERMINALS—FIG. B

22-18	5-6	5/16	5/16	23/32	30F626	S-1018*	2.16	15.55	12.15	29/32	30F627	T-2018	4.47	33.05	25.85

FLANGED SPADE TERMINALS—FIG. C

22-18	5-6	19/64	7/32	5/8	31F526	S-1080*	2.16	15.55	12.15	13/16	31F540	T-2080+	4.47	33.05	25.85
22-18	8	19/64	7/32	5/8	31F527	S-1081	2.16	15.55	12.15	13/16	31F541	T-2081	4.47	33.05	25.85
22-18	10	3/8	1/4	23/32	31F528	S-1582	2.16	15.55	12.15	29/32	31F542	T-2582	4.47	33.05	25.85
16-14	5-6	19/64	7/32	5/8	31F529	S-1083	2.26	16.25	12.70	13/16	31F543	T-2083	4.47	33.05	25.85
16-14	8	19/64	7/32	5/8	31F530	S-1084	2.26	16.25	12.70	13/16	31F544	T-2084	4.47	33.05	25.85
16-14	10	3/8	1/4	23/32	31F531	S-1585	2.26	16.25	12.70	29/32	31F545	T-2585	4.47	33.05	25.85

RING TONGUE TERMINALS—FIG. D

22-18	1-2	7/32	5/32	35/64	31F546	S-1099	2.16	15.55	12.15	45/64	31F569	T-2099	4.47	33.05	25.85
22-18	3-4	7/32	5/32	35/64	31F547	S-1047	2.16	15.55	12.15	45/64	31F570	T-2047	4.47	33.05	25.85
22-18	5-6	9/32	1/4	41/64	31F548	S-1002*	2.16	15.55	12.15	53/64	31F571	T-2002+	4.47	33.05	25.85
22-18	8	5/16	5/16	23/32	31F549	S-1021	2.16	15.55	12.15	29/32	31F572	T-2021	4.47	33.05	25.85
22-18	10	5/16	5/16	23/32	31F550	S-1003*	2.16	15.55	12.15	29/32	31F573	T-2003+	4.47	33.05	25.85
22-18	1/4	15/32	.400	57/64	31F551	S-1004	2.96	21.30	16.65	1 3/4	31F574	T-2004	5.79	42.80	33.45
16-14	5-6	1/4	7/32	19/32	31F555	S-1006*	2.26	16.25	12.70	2 3/32	31F578	T-2006+	4.47	33.05	25.85
16-14	8	5/16	9/32	45/64	31F556	S-1024	2.26	16.25	12.70	57/64	31F579	T-2024	4.47	33.05	25.85
16-14	10	5/16	9/32	45/64	31F557	S-1008*	2.26	16.25	12.70	57/64	31F580	T-2008+	4.47	33.05	25.85
16-14	1/4	15/32	.400	57/64	31F558	S-1009	2.96	21.30	16.65	1 9/64	31F581	T-2009	5.79	42.80	33.45
12-10	10	3/8	5/16	3/4	31F562	S-1011*	3.14	22.55	17.65	1 1/16	31F585	T-2011+	5.79	42.80	33.45
12-10	1/4	17/32	13/32	59/64	31F563	S-1100	4.14	29.80	23.25	1 13/64	31F586	T-2100	6.13	45.35	35.40
12-10	5/16	17/32	13/32	59/64	31F564	S-1101	4.14	29.80	23.25	1 13/64	31F587	T-2101	6.13	45.35	35.40
12-10	3/8	19/32	31/64	1 1/32	31F565	S-1013	4.55	32.80	25.60	1 11/32	31F588	T-2013	6.81	50.40	39.35

BUTT CONNECTORS—FIG. E

22-18				9/16	31F566	S-1019*	2.38	17.10	13.35	15/16	31F589	T-2019+	5.28	39.05	30.55
16-14				9/16	31F567	S-1020	2.38	17.10	13.35	15/16	31F590	T-2020	5.28	39.05	30.55
12-10				9/16	31F568	S-1046	4.22	30.40	23.75	1 1/16	31F591	T-2046	7.21	53.35	41.65

QUICK DISCONNECT PUSH-ON TYPE—FIG. F

18-14			1/4 Male	21/32	31F592	S-1089*	2.48	17.85	13.95	27/32	31F594	T-2089+	4.80	35.50	27.75
18-14			1/4 Female	41/64	31F593	SS-1090*	2.48	17.85	13.95	27/32	31F595	ST-2090+	4.80	35.50	27.75
18-14			5/16 Female	17/32	30F070	SS-1187	2.48	17.85	13.95	47/64	30F072	ST-2187	4.80	35.50	27.75
18-14			1/8 Female	29/64	30F071	SS-1186	2.48	17.85	13.95	21/32	30F073	ST-2186	4.80	35.50	27.75

LARGE WIDE RANGE TERMINALS — FIG. D

VERSAKRIMP®—(Prefix "B")—Non-insulated. Barrel seam brazed with special silver alloy. Won't split open under any conditions.
INSULKRIMP®—(Prefix "T")—Rigid vinyl insulating sleeve. In these large wire ranges Insulkrimp parts have brazed barrels also as described above.

				VERSAKRIMP					INSULKRIMP				
Wire Range	Stud Size	Width	Stud Clearance	Length	Stock No.	Type	1-99	100-999	Length	Stock No.	Type	1-99	100-999
8	10	15/32	11/32	61/64	30F937	B-3202	.10	.08	1 17/64	30F890	T-2202	.14	.11
8	1/4	15/32	11/32	61/64	30F938	B-3203	.10	.08	1 17/64	30F891	T-2203	.14	.11
8	3/8	19/32	13/32	1 9/64	30F939	B-3208	.13	.11	1 25/64	30F892	T-2208	.17	.14
6	10	5/8	1/2	1 1/4	30F940	B-3228	.15	.12	1 5/8	30F893	T-2228	.20	.16
6	1/4	5/8	1/2	1 1/4	30F941	B-3229	.15	.12	1 5/8	30F894	T-2229	.20	.16
6	3/8	5/8	1/2	1 1/4	30F942	B-3231	.15	.12	1 5/8	30F895	T-2231	.20	.16
4	10	21/32	1/2	1 5/16	30F943	B-3251	.22	.18	1 3/4	30F896	T-2251	.34	.22
4	1/4	21/32	1/2	1 5/16	30F944	B-3252	.22	.18	1 3/4	30F897	T-2252	.34	.22
4	3/8	21/32	1/2	1 5/16	30F945	B-3254	.22	.18	1 3/4	30F898	T-2254	.34	.22
2	1/4	3/8	43/64	1 17/32	30F946	B-3281	.29	.23	2 1/32	30F899	T-2281	.45	.29
1/0	1/4	13/16	5/8	1 59/64	30F947	B-3307	.36	.29					
2/0	1/4	29/32	5/8	1 15/16	30F948	B-3322	.46	.37					

NYLON INSULATED CLOSED-END CONNECTORS—FIG. G

Wire Range	O.D.	Lgth.	Stk. No.	Mfrs. Type	-/C 100-999	-/M 1000-4999	5000-Up Per M	Circular Mil Area
22-14	5/16	39/64	30F610	CE-2214+	3.70	26.60	20.80	600-5,180
16-10	7/16	23/32	30F611	CE-1610	5.41	38.95	30.45	2,400-13,000

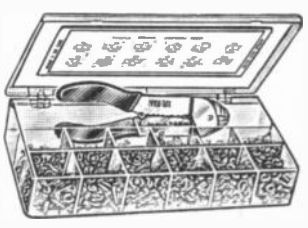
UNIVERSAL CRIMPING TOOL

Type CT-4050—Crimps both insulated and non-insulated types 22 thru 10, strips wire. Constructed of tool steel. Wt. 1 lb.
30F631. Net Each **4.35**

SOLDERLESS TERMINALS & CONNECTOR ASSORTMENTS

Type K-170. Contains 215 KRIMPTITE® (non-insulated) terminals. Contains types indicated above by (*) and Universal Crimping Tool.
30F755. NET **9.85**

Type K-180. Contains 138 INSULKRIMP® (insulated) terminals. Contains types indicated above by (+) and Universal Crimping Tool.
30F756. NET **12.05**



Whatever Your Electronic Needs — NEWARK Will Fill Your Order

Waldom & G. C. Hardware

ROUND HEAD MACHINE SCREWS
Steel-Nickel Plated

Stk. No.	Description	100-999 NET/C	1000-4999 NET/M	5000-Up NET/M
31F2188	2-56 x 1/4	.57	4.53	4.08
31F2189	2-56 x 1/2	.60	4.80	4.32
31F2190	2-56 x 3/4	.72	5.73	5.16
31F2187	3-48 x 3/4	.72	5.73	5.16
31F2085	4-36 x 1/4	.60	4.80	4.32
31F2191	4-36 x 3/8	.65	5.20	4.68
31F2089	4-36 x 1/2	.67	5.33	4.80
31F2033	4-36 x 5/8	.70	5.60	5.01
31F2090	4-36 x 3/4	.85	6.80	6.12
31F2086	4-40 x 1/4	.60	4.80	4.32
30F082	4-40 x 3/8	.57	4.45	3.40
31F2087	4-40 x 1/2	.67	5.33	4.80
31F2034	4-40 x 5/8	.70	5.60	5.04
31F2088	4-40 x 3/4	.79	6.26	5.63
31F2091	6-32 x 1/4	.65	5.20	4.68
30F083	6-32 x 3/8	.63	4.95	3.75
31F2092	6-32 x 1/2	.75	6.00	5.40
31F2035	6-32 x 5/8	.83	6.66	5.99
31F2093	6-32 x 3/4	.88	7.06	6.35
31F2094	6-32 x 1	1.02	8.13	7.32
31F2182	6-32 x 1 1/4	1.24	9.86	8.87
31F2195	6-32 x 2	1.84	14.66	13.19
31F2096	8-32 x 3/8	.95	7.60	6.84
31F2097	8-32 x 1/2	1.02	8.13	7.32
31F2098	8-32 x 3/4	1.13	9.06	8.65
31F2099	8-32 x 1	1.30	10.40	9.36
31F2193	8-32 x 1 1/4	1.50	12.00	10.80
31F2100	10-32 x 1/2	1.15	9.20	8.28
31F2037	10-32 x 5/8	1.27	10.13	9.12
30F084	10-32 x 3/4	1.23	9.90	7.55
31F2101	10-32 x 1	1.52	12.13	10.92
31F2194	10-32 x 1 1/2	2.02	16.13	14.52
30F085	1/4-20 x 1	2.59	21.20	16.15

Bross-Nickel Plated

31F2038	2-56 x 1/4	.77	6.05	4.60
31F2039	2-56 x 1/2	.88	7.10	5.40
31F2041	2-56 x 3/4	1.02	8.40	6.40
31F2042	3-48 x 3/4	1.16	9.45	7.25
31F2043	4-36 x 1/4	.88	7.10	5.40
31F2047	4-40 x 1/4	.88	7.10	5.40
31F2048	4-40 x 1/2	1.12	8.90	6.80
31F2050	4-40 x 3/4	1.40	10.80	8.25
31F2297	6-32 x 1/4	1.19	9.50	7.25
31F2051	6-32 x 3/8	1.27	10.15	7.75
31F2298	6-32 x 1/2	1.43	11.40	8.70
31F2052	6-32 x 5/8	1.66	12.60	9.65
31F2299	6-32 x 3/4	1.74	14.05	10.65
30F086	6-32 x 1	2.07	16.50	12.60
31F2053	6-32 x 1 1/4	2.40	19.60	14.50
31F2054	6-32 x 2	4.05	33.35	24.65
30F087	8-32 x 3/8	1.85	14.75	11.30
31F2302	8-32 x 1/2	2.11	16.90	12.90
31F2303	8-32 x 3/4	2.59	20.65	15.75
31F2304	8-32 x 1	3.08	24.60	18.75
31F2057	8-32 x 1 1/4	3.61	28.90	22.05
31F2058	10-32 x 1/2	2.67	21.45	16.35
31F2059	10-32 x 5/8	2.97	23.85	18.20
30F088	10-32 x 3/4	3.25	25.90	19.75
31F2061	10-32 x 1	3.87	30.90	23.55

HEX HEAD SHEET METAL SCREWS
Type A—Slotted Self-Tapping
Nickel Plated

30F092	4 x 3/8	.85	6.90	5.25
31F2124	4 x 1/2	1.02	8.13	7.32
31F2125	6 x 1/4	1.07	8.53	7.58
31F2126	6 x 3/8	1.09	8.66	7.79
31F2127	6 x 1/2	1.15	9.20	8.28
31F2069	6 x 5/8	1.05	8.60	6.55
31F2128	6 x 3/4	1.24	9.86	8.87
31F2291	8 x 1/4	1.24	9.86	8.87
31F2129	8 x 3/8	1.28	10.26	9.23
31F2130	8 x 1/2	1.32	10.53	9.48
31F2070	8 x 5/8	1.33	10.66	9.59
31F2132	10 x 1/2	1.57	12.53	11.28
31F2133	10 x 3/4	1.70	13.59	12.23

PAN HEAD SHEET METAL SCREWS
Type A—Steel-Nickel Plated

30F685	4 x 1/2	.85	6.90	5.25
30F686	6 x 1/4	.90	7.40	5.85
30F687	6 x 3/8	.92	7.60	5.80
30F688	6 x 1/2	.98	8.05	6.15
30F689	6 x 3/4	1.07	8.65	6.60
30F690	8 x 1/4	1.07	8.65	6.60
30F691	8 x 3/8	1.12	9.10	6.90
30F692	8 x 1/2	1.16	9.20	7.00
30F693	8 x 1	1.47	12.10	9.20

ROUND HEAD WOOD SCREWS
Steel-Nickel Plated

Stk. No.	Description	100-999 NET/C	1000-4999 NET/M	5000-Up NET/M
31F2134	4 x 1/2	.95	7.60	6.84
31F2136	6 x 1	1.47	11.73	10.52
31F2137	8 x 3/4	1.42	11.33	10.20
31F2287	8 x 1 1/4	2.42	19.33	17.40

OVAL HEAD RACK AND CABINET SCREWS
Steel-Nickel Plated

31F2066	8-32 x 5/8	1.15	9.20	8.28
31F2067	10-32 x 5/8	1.25	10.00	9.00
31F2176	6-32 x 1/2	.75	6.00	5.40
31F2177	6-32 x 3/4	.88	7.06	6.35
31F2178	8-32 x 3/4	1.13	9.23	8.31
31F2313	10-32 x 1/2	1.15	9.20	8.28
31F2179	10-32 x 3/4	1.35	10.80	9.72

BINDING HEAD MACHINE SCREWS
Steel-Nickel Plated

30F694	2-56 x 1/8	.70	5.15	3.95
30F695	2-56 x 1/4	.52	3.90	2.95
30F696	2-56 x 1/2	.55	4.25	3.25
30F698	4-40 x 1/4	.55	4.25	3.25
30F699	4-40 x 1/2	.59	4.60	3.50
30F700	4-40 x 3/4	.70	5.50	4.20
31F2196	6-32 x 3/16	.68	5.46	4.91
31F2197	6-32 x 1/4	.65	5.20	4.68
31F2198	6-32 x 3/8	.70	5.60	5.04
30F701	6-32 x 1/2	.68	5.40	4.15
30F702	6-32 x 5/8	.75	5.95	4.55
30F703	6-32 x 3/4	.79	6.45	4.95
30F704	8-32 x 1/4	.77	6.10	4.65
31F2201	8-32 x 5/16	.95	7.60	6.84
30F705	8-32 x 3/8	.86	6.75	5.15
30F706	8-32 x 1/2	.90	7.20	5.50
30F707	8-32 x 3/4	1.02	8.10	6.20
30F708	10-32 x 1/2	1.05	8.30	6.35
30F709	10-32 x 3/4	1.23	9.90	7.55

Bross-Nickel Plated

30F089	4-40 x 1/4	.88	7.10	5.40
30F090	4-40 x 1/2	1.12	8.90	6.80
30F091	4-40 x 3/4	1.40	10.80	8.25
30F710	6-32 x 1/4	1.19	9.50	7.25
30F711	6-32 x 3/8	1.27	10.15	7.75
30F712	6-32 x 1/2	1.43	11.40	8.70
30F713	6-32 x 3/4	1.74	13.95	10.65
30F715	8-32 x 3/8	1.85	14.75	11.30
30F716	8-32 x 1/2	2.11	16.90	12.90
30F717	8-32 x 3/4	2.59	20.65	15.75

FLAT BRASS WASHERS
Nickel Plated

Stk. No.	For Screw Size	100-999 NET/C	1000-4999 NET/M	5000-Up NET/M
30F350	#2	.50	4.05	3.10
30F351	#4	.52	4.25	3.25
30F352	#6	.68	5.40	4.15
30F353	#8	.68	5.40	4.15
30F354	#10	.74	5.85	4.50

SPLIT TYPE LOCK WASHERS
Zinc Plated

31F2160	#4	.63	4.95	3.80
31F2161	#6	.52	4.25	3.25
31F2162	#8	.51	4.15	3.15
31F2163	#10	.58	4.70	3.55

FLAT FIBRE WASHERS

30F355	#4	.48	3.95	3.05
31F2165	#6	.60	4.80	4.32
31F2166	#8	.60	4.80	4.32
31F2167	#10	.60	4.80	4.32
30F356	1/4	.57	4.45	3.40
31F2169	3/8	.94	7.46	6.71

EXTRUDED FIBRE WASHERS

30F357	#4	.96	7.60	5.80
31F2171	#6	1.07	8.53	7.68
31F2172	#8	1.07	8.53	7.68
31F2173	#10	1.15	9.20	8.28
31F2174	1/4	1.15	9.20	8.28
31F2175	3/8	1.20	9.60	8.64

CUP FINISHING WASHERS
Nickel Plated

Stk. No.	For Screw Size	100-999 NET/C	1000-4999 NET/M	5000-Up NET/M
31F2142	#6	.57	4.53	4.08
31F2143	#8	.60	4.80	4.32
31F2144	#10	.68	5.46	4.91

FLAT STEEL WASHERS
Nickel Plated

30F093	#2	.47	3.90	3.00
31F2138	#4	.55	4.40	3.96
31F2139	#6	.55	4.40	3.96
31F2140	#8	.60	4.80	4.32
31F2241	#10	.57	4.53	4.08
30F094	1/4	.74	5.85	4.50

SHAKE-PROOF PRODUCTS
INTERNAL LOCK WASHERS

Stk. No.	Type	For Screw Size	100-999 NET/C	1000-4999 NET/M	5000-Up NET/M
30F632	1202	#2	.80	4.95	3.45
30F634	1204	#4	.48	3.15	2.20
30F636	1206	#6	.48	3.15	2.20
30F637	1208	#8	.53	3.30	2.30
30F638	1210	#10	.53	3.30	2.30
30F640	1214	1/4	.69	4.45	3.10
30F642	1220	3/8	1.03	7.80	5.40

SHAKERPROOF® EXTERNAL LOCK WASHERS

30F644	1104	#4	.48	3.15	2.20
30F646	1106	#6	.48	3.15	2.20
30F648	1108	#8	.53	3.30	2.30
30F448	1110	#10	.53	3.30	2.30
30F650	1114	1/4	.69	4.45	3.10
30F652	1120	3/8	1.03	7.80	5.40

SHAKE-PROOF EXT. LOCKWASHER KEPS®
Steel-Cadmium Plated

Stk. No.	Size	100-999 NET/C	1000-4999 NET/M	5000-Up NET/M
30F680	4-40x1/4x3/32	2.73	20.15	16.35
30F681	6-32x5/16x1/64	2.16	15.95	12.90
30F682	8-32x11/32x1/8	2.22	16.35	13.35
30F683	10-32x3/8x1/8	2.33	17.15	14.00
30F684	1/4-20x7/16x3/16	2.94	21.60	17.60

SHAKERPROOF® PLAIN-TYPE TERMINALS

Stk. No.	Lgt.	100-199 NET/C	1M-4999 NET/M	5M-Up NET/M
30F672	21/32	.76	5.60	4.55
30F674	21/32	.76	5.60	4.55
30F675	7/8	.81	5.95	4.85
30F676	7/8	.81	5.95	4.85
30F677	57/64	.81	5.95	4.85
30F678	5/8	.81	5.95	4.85
30F679	5/8	.81	5.95	4.85
30F367	5/8	.81	5.95	4.85

SHAKE-PROOF® LOCKING TERMINALS—
.018 Bronze Hot Tin Dipped (*) bent 30°

Stk. No.	Hole Size	Fig.	Lt.	100-999	1000-4999	5000-Up
30F653	4	A	7/8	1.28	8.85	7.15
30F654	6	A	7/8	1.28	8.85	7.15
30F655	8	A	7/8	1.28	8.85	7.15
30F364	10	A	57/64	1.30	8.95	7.25
30F656	4	B*	13/16	1.28	8.85	7.15
30F657	6	B*	13/16	1.28	8.85	7.15
30F658	8	B*	13/16	1.28	8.85	7.15
30F365	10	B*	53/64	1.43	9.40	7.60
30F659	4	C	5/8	1.20	8.70	7.05
30F660	6	C	5/8	1.20	8.70	7.05
30F661	8	C	5/8	1.20	8.70	7.05
30F662	4	D	23/32	1.20	8.70	7.05
30F663	6	D	23/32	1.20	8.70	7.05
30F664	8	D	23/32	1.20	8.70	7.05
30F665	4	E*	5/8	1.20	8.70	7.05
30F666	6	E*	5/8	1.20	8.70	7.05
30F667	8	E*	5/8	1.20	8.70	7.05
30F366	10	E*	41/64	1.30	8.95	7.25
30F669	6	F	23/32	1.41	9.35	7.60
30F671	10	F	51/64	1.47	9.55	7.75

Newark Electronics Co., Inc., 4747 W. Century Blvd., Inglewood, Calif. 90301

VINYL GROMMETS
Exceptional Aging Qualities

Stk. No.	I.D.	Chassis Hole	100-999 Net/1000	1000-4999 Net/1000	5000-up Net/1000
30F743	1/8	1/4	.99	8.15	6.20
30F744	5/16	5/16	1.09	9.10	6.90
30F745	1/4	3/8	1.45	10.45	8.00
30F746	5/16	7/16	1.58	11.20	8.55
30F747	3/8	1/2	1.58	11.20	8.55
30F748	1/2	5/8	2.56	19.50	14.85
30F749	5/8	7/8	5.16	33.45	25.85

RUBBER GROMMETS

Stock No.	Mtg. Hole D.	I.D.	100-999 NET/100	1000-4999 NET/1000	5000/9999 NET/1000
31F2000	1/4"	1/8"	1.35	10.80	9.72
31F2001	5/16"	3/16"	1.54	12.26	11.03
31F2002	3/8"	1/4"	2.02	16.13	14.52
31F2003	5/8"	1/2"	3.48	27.86	25.07
31F2004	1/2"	3/8"	2.30	18.39	16.55
31F2080	3/4"	9/16"	4.27	34.12	30.71
31F2081	9/16"	7/16"	6.23	49.85	44.87
31F2082	15/32"	5/16"	8.23	65.84	59.26
31F2083	7/8	5/8	6.93	55.45	49.91
31F2084	1"	11/16"	13.96	111.69	100.05
31F2282	3/8"	1/4"	2.97	23.72	21.35
31F2283	7/8"	3/8"	6.96	55.71	50.14

RUBBER BUTTON BUMPERS

Stk. No.	O.D.	Hole Size	100-999 Net/100	1000-4999 Net/1000	5000-up Net/1000
31F2284	3/8	3/16	1.57	12.05	9.65
31F2285	1/2	1/4	2.31	18.55	14.15
31F2286	5/8	3/8	3.72	29.80	22.75

HEXAGON NUTS—Brass-Nickel Plated

Stk. No.	Size	100-999 Net/100	1000-4999 Net/1000	5000-up Net/1000
31F2214	2-56x3/16x1/16	1.08	8.65	6.60
31F2215	3-48x3/16x1/16	.98	7.90	6.05
31F2216	4-36x1/4x3/32	1.30	10.40	7.95
31F2217	4-40x1/4x3/32	1.29	10.30	7.85
31F2218	6-32x1/4x3/32	1.28	10.25	7.85
31F2071	6-32x5/16x7/64	1.54	12.40	9.45
31F2072	8-32x1/4x3/32	1.28	10.25	7.85
31F2219	8-32x5/16x7/64	1.54	12.40	9.45
31F2220	10-32x3/8x1/8	1.68	13.55	10.35

HEXAGON NUTS—Steel-Nickel Plated

31F2207	2-56x3/16x1/16	.83	6.66	5.95
31F2208	3-48x3/16x1/16	.83	6.66	5.95
31F2105	4-36x1/4x3/32	.83	6.66	5.95
31F2106	4-40x1/4x3/32	.83	6.66	5.95
31F2107	6-32x1/4x3/32	.83	6.66	5.95
31F2209	6-32x5/16x7/64	.90	7.20	6.48
31F2108	8-32x1/4x3/32	.83	6.66	5.95
31F2210	8-32x5/16x7/64	.80	6.40	4.90
31F2111	10-32x3/8x1/8	1.07	8.53	7.68

CONTROL AND SWITCH MTG NUTS

31F2112	3/8-32x1/2x3/32	1.62	13.25	10.10
31F2113	15/32x9/16x7/64	1.98	16.25	12.40
31F2114	*.475x19/32x1/16	3.74	29.95	22.85
31F2211	1/4-20x11/16x3/16	1.54	10.75	8.20

*Knurled Ring Nut.

WING NUTS—Nickel Plated

31F2183	6-32	3.22	25.72	23.15
31F2184	8-32	3.22	25.72	23.15
31F2185	10-32	3.22	25.72	23.15

TINNERMAN SPEED NUTS

Stock No.	No.	100-999 Net/100	1000-4999 Net/1000	5000-9999 Net/1000
31F2116	No. 6	.95	7.60	6.84

BRASS ACORN NUTS—NICKEL PLATED

Stock No.	Thread	100-999 Net/100	1000-4999 Net/1000	500-9999 Net/1000
31F2102	6-32	3.35	26.79	24.11
31F2103	8-32	3.55	28.39	25.55
31F087	10-32	3.87	31.75	24.20

KNURLED THUMB NUTS
Brass Nickel Plated

31F2180	6-32	2.75	21.19	19.79
31F2181	8-32	2.75	21.19	19.79

STEEL SPADE BOLTS
Nickel Plated

Stk. No.	Screw Length	Thread	100-999 NET/100	1000-4999 NET/1000	5000-up Net/1000
31F2122	7/8"	6-32x1/4 (1/16 Hole)	3.45	27.59	24.83
31F2121	5/8"	6-32x11/16	3.45	27.59	24.83
31F2123	3/8"	8-32x15/32	7.99	63.84	57.46

C-WASHERS AND RETAINING RINGS

Stock No.	Description	100-999 Net/100	1000-4999 Net/1000	5000-9999 Net/1000
31F2145	For 3/16" dia. shaft	1.15	9.20	8.28

INTERNAL LOCK WASHERS—CADMIUM PLATED

Stock No.	For Screw Size	O.D.	100-999 Net/100	1000-4999 Net/1000	5000-9999 Net/1000
31F2243	No. 2	.....	.87	6.93	6.24
31F2244	No. 3	.....	.75	6.00	5.40
31F2245	No. 4	.....	.55	4.40	3.96
31F2246	No. 6	9/32"	.53	4.26	3.83
31F2247	No. 8	21/64"	.58	4.66	4.19
31F2248	No. 10	3/8"	.58	4.66	4.19
31F2249	No. 1/4"	15/32"	.77	6.13	5.52
31F2250	No. 5/16"	19/32"	.98	7.86	7.07
31F2251	No. 3/8"	11/16"	1.15	9.20	8.28
31F2252	No. 3/8"	9/16"	1.52	12.13	10.92
31F2253	No. 15/32"	19/32"	1.90	15.19	13.67

BRASS EYELETS

Stock No.	Shank Diam.	Length	100-999 Net/100	1000-4999 Net/1000	5000-9999 Net/1000
31F2221	.087"	1/8"	.35	2.80	2.52
31F2222	.087"	5/32"	.47	3.73	3.36
31F2223	.087"	7/32"	.58	4.66	4.19
31F2224	.087"	11/32"	1.35	10.80	9.72
31F2225	.123"	5/32"	.65	5.20	4.68
31F2226	.123"	7/32"	.52	4.13	3.72
31F2227	.123"	1/4"	.68	5.46	4.91
31F2228	.123"	9/32"	.68	5.46	4.91
31F2231	.182"	.145"	.40	3.20	2.88

RUBBER FEET

Stock No.	O.D.	High	100-999 Net/100	1000-4999 Net/1000	5000-9999 Net/1000
31F2006	3/8"	3/16"	1.60	12.79	11.51
31F2007	1/2"	1/4"	2.12	16.93	15.24
31F2008	5/8"	5/16"	2.98	23.86	21.47

SNAP BUTTON HOLE PLUGS
Nickel Plated

Stock No.	O.D.	100-999 Net/100	1000-4999 Net/1000	5000-9999 Net/1000
31F085	1/4"	2.42	19.85	15.15
31F2015	3/8"	3.07	24.52	22.07
31F2016	1/2"	3.72	29.72	26.75
31F2018	3/4"	4.03	32.25	29.03
31F086	1"	5.20	39.70	30.25

SOLDER LUGS
Hot Tin Dipped

Stk. No.	Material	Fig.	Hole Size	Length	100-999 Net/100	1000-4999 Net/1000	5000-up Net/1000
30F368	Brass	A	#6	21/32	.97	7.95	6.05
30F369	Brass	A	#8	21/32	.97	7.95	6.05
30F370	Brass	A	#10	47/64	1.24	10.05	7.65
30F371	Copper	B	#4	9/16	1.03	8.50	6.45
30F372	Copper	B	#6	1/2	1.03	8.50	6.45
30F373	Brass	B	#8	21/32	1.03	8.50	6.45
30F374	Brass	B	#10	21/32	1.03	8.50	6.45

METAL CABLE HOLDER CLAMPS
Cadmium Plated

Stk. No.	To Fit Cable	Mtg. Hole	100-999 Net/100	1000-4999 Net/1000	5000-up Net/1000
30F358	1/8-3/16	.144"	1.12	9.20	7.00
30F359	3/16-1/4	.144"	1.29	10.55	8.05
30F360	1/4-5/16	.144"	1.43	11.70	8.95

SPRING CLIPS—BRASS, NICKEL PLATED

Stk. No.	Ht.	Width	Mtg. Hole	100-999 Net/100	1000-4999 Net/1000	5000-up Net/1000
30F361	45/64	7/32	.130	1.51	11.95	9.10
30F362	25/64	5/16	.144	2.00	15.80	12.05
30F363	1	3/8	.144	2.94	24.45	18.65

CLEAN, BRUSHLESS SPRA-KOAT PRODUCTS

K-27 PRINT-KOTE

TV silicone resin used by many manufacturers on all printed circuit sets. A wonder-performing chemical that insulates, protects and prevents shorts . . . insures a truly satisfactory job. Air-dries . . . requires no baking. 6 oz. can.
32F357. 14-6. **NET** **2.42**

RUF KOTE SPRA-KOAT

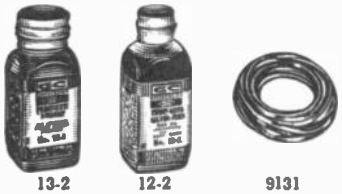
The only finish that will air dry and give a professional wrinkle job without baking. Employed by many manufacturers on PA equipment, chassis, panels, and racks. Easy, simple to use. 16 oz. can.
32F325. 60-12. Black. **NET** **2.25**
32F326. 60-13. Gray. **NET** 2.25

HAMMER-KOAT

Achieves a professional air-drying hammer finish that's perfectly adapted for use on panels, racks, instruments, chassis, etc. Extremely easy to use . . . dries in a matter of minutes. 16 oz. can.
32F327. 83-12. Brown. **NET** **2.30**
32F328. 84-12. Blue. **NET** 2.30
32F329. 85-12. Silver. **NET** 2.30

TELEPHONE SPRA-KOAT

A high grade satin finish lacquer that covers evenly, dries quickly. Available in a rich ebony black for telephone devices panels, or gray that is excellent for panel work, instrument finishes, etc. Easy to use . . . just spray on. 16 oz. can.
32F330. 62-12. Black. **NET** **2.30**
32F331. 62-13. Gray. **NET** 2.30



13-2 12-2 9131

PRINT-KOTE SOLVENT

No. 13-2. Solvent for No. 14-2. Print-Kote Silicone Resin. Dissolves and removes silicone resin from printed circuit. Shipping wt., 2 oz.
32F360. NET ..... **.42**

PRINT-KOTE SOLDERING FLUX

No. 12-2. Especially made for printed circuits. Non-corrosive liquid flux for easy soldering and repair jobs. Paves the way for quality work in less time. 2 oz.
32F362. NET ..... **.60**

PRINT-KOTE SOLDER

No. 9131. For printed circuits. Special Non-corrosive flux and low-melting solder combined with pure silver. Weight, 2 oz. 11 ft. coil.
32F361. NET ..... **.52**

LIQUID TAPE

Excellent for high voltage insulation. Applies as a paste but dries as a hard strong chip and crack proof insulation. Prevents corona and electrolysis leaks and prevents moisture, dirt or grime from eroding on contacts.
32F380. 176-2 2 oz. bottle 1.05
32F345. 176-16 16 oz. bottle 6.40

NO. 20-2 COPPER PRINT

For repairing printed circuit. High conductive, fast drying compound. Complete with brush-top cap.
32F346 2 oz. bottle. **1.95**

RELAY CLEAN

Type 8682. Dry contact cleaner. Excellent for cleaning relays and contacts in switchboards, automatic pinball or bowling games, rocket and satellite circuitry. Cleans without leaving any oily residual deposit. Also an excellent degreaser and general solvent for gummy deposits. Non-flammable. Shpg. Wt. 6 oz.
32F349. NET **1.89**
Type 8682-16. As above, 16 Oz. can.
32F184. NET **3.49**

ZERO-MIST SPRA-KOAT NO. 8667

Revolutionary idea from GC! Now, locate intermittents without frustrating hours of checking! Zero-Mist spots instantly any component defective due to temperature change. Just spray on the questionable condenser, resistor, transistor, etc. Zero-Mist cools it immediately, isolating the trouble. 16 oz.
34F610. NET **2.42**

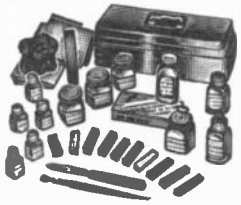
SPRA-KLEEN

Type 8666. Electrical cleaner and lubricant. Eliminates noise due to dust, dirt and corrosion on electrical contacts. Lubricates in 1 operation.
32F343. 6 oz. can. 8666. **NET** ..... **.99**

JIF CONTROL AND CONTACT CLEANER

Excellent cleaner and lubricant while not containing any harsh solvents. Because of this, cleaner will in no way harm any plastic material on which it will be used. Used for electronic/electrical contacts, switches, and controls. Cleaner is siliconized in order to give the greatest possible protection for the longest period of time.
32F367. 8670-3. 3-oz. Spray can. **NET** ..... **.99**
32F368. 8670-6. 6-oz. spray can. **NET** 1.79

MASTER DELUXE CABINET REPAIR KIT



Type 900. All essentials to fix wood and plastic cabinets, knobs, refrigerators, appliances, etc.: Spirit stains, varnishes, enamels. Make quick repair without spoiling adjoining finish.
Shpg. wt., 5 lbs.
32F353. NET **9.65**

● *NEW* SILICONE HEAT SINK COMPOUND

Type 8109. Highly heat-conductive metallic oxide suspended in silicone dissipates "hot spots" and seals between semiconductors and chassis or heat sink. Will not dry out or harden. 1 oz. tube.
32F185. NET **2.39**

TRANSISTOR Z5 SILICONE COMPOUND

Type 8101-S maintains efficient transfer of heat from transistor to chassis.
32F365. 1 oz. tube **NET** **2.17**

SILVER PRINT

No. 21-1. "Pure silver" compound used by manufacturers in printed circuit design. Tops for repair work or touching up a circuit. Wt., ½ Troy ounce.
32F355. NET **3.30**

PRINT-KOTE SILICONE RESIN

No. 14-2. Silicone resin used by manufacturers to protect their printed circuits. Fast drying. With brush. 2 oz.
32F359. NET **1.40**

DIAL CORD

Dial cord in popular sizes. The following service spools cover 90% of all replacement needs. Nylon cord with a fiberglass core. Treated to prevent stretching and slipping. Wt., 4 oz.

Type 75-A. Extra thin cord. .025" dia., 30 lbs. brk. stgh.
25F800. 10-ft. length. **NET** ..... .39
25F801. 25-ft. spool. **NET** ..... .75
25F802. 100-ft. spool. **NET** 2.37

Type 75. Standard cord, .028" diameter. 30 lbs. breaking strength.
25F803. 10-ft. length. **NET** ..... .39
25F804. 25-ft. spool. **NET** ..... .75
25F805. 100-ft. spool. **NET** 2.37

Type 74. Medium cord, .040" dameter. 35 lbs. breaking strength.
25F806. 10-ft. length. **NET** ..... .39
25F807. 25-ft. spool. **NET** ..... .75
25F808. 100-ft. spool. **NET** 2.37

● *NEW* REACH-ALL PEN OILER

Type 984. Highest quality non-gumming instrument oil; meets MIL-L-6085A specs. Tube extends and retracts; dispenses a drop or a fraction of a drop. When not in use, tube is capped and oiler may be carried in pocket for convenience. Excellent for lubricating instruments gears, timers, clocks, guns, fishing reels, etc.
32F186. NET ..... **.99**

ELECTRONIC OIL ASSORTMENT KIT

Type 9400. Oil Assortment Kit contains all oils commonly used in electronic work. Included is recorder, penetrating, phono, radio-TV, and dripless oil. The other tube is liquid graphite. Shpg. wt., 1 lb.
32F364. NET **2.10**

SPRAY ADHESIVE

Type 8687. Spray is clear and odorless. Offers immediate tack. Useful in bonding nearly all types of materials. 16 oz can.
32F375. NET **1.95**

You Can Depend on NEWARK For Complete Stocks — Lowest Prices —Fastest Service—and the Latest in Industrial Electronics.

CLEANERS

Carbon - tetrachloride. For mechanical and electrical parts. Removes oils, grease, etc. Will not burn.
32F261. 16-oz. bottle. 211-16. **NET** 1.55

G-C Kleer Lens. Specially prepared for cleaning TV lens and tubes. Eliminates finger marks and spots, etc. 6 oz. "Spray Squeeze" bottle.
32F381. 9081. **NET** ..... .75

"G-C 60". Glass Treatment Compound. Makes all glass and plastics cleaner and brighter, degreases, removes static, waterproofs, and keeps surfaces cleaner longer. Easy to use, just spray on and wipe off. Comes with handy spray applicator for easier application.
32F201. 6 oz. bottle. 175-6 ..... 1.15

Injector Needle. Made on the hypodermic principle to inject cleaners and oils into shafts, controls and tight places. Applicator supplied. 2-oz. bottle.
32F202. 8383. **NET** ..... .48

Chloro-Kleen Cleaner. A solvent for all purpose cleaning of any electronic component, switch, chassis, etc. Dissolves grease, dirt, oils, tar and waxes. Safe indoors . . . no sickening fumes. Completely non toxic. Similar to carbon tetrachloride.
32F378. 16-oz. bottle. 216-16. **NET** 1.55

MAG-NETIK RECORDING HEAD CLEANER cleans gently, thoroughly . . . dissolves oxide scum accumulation on tape and wire recorders. Easy and safe to use. Does the job fully in minutes.

32F259. 53-2. 2-oz. bottle. **NET** 1.03

Red Electricronic Contact Cleaner. For switch or relay contacts, volume controls, etc. with brush.
32F250. 2-oz. bottle. 210-2. **NET** ..... .60
32F252. 8-oz. bottle. 210-8. **NET** 1.65

Phono-Motor and Gear Lubricant. Specially made lubricant that clings to the surface of the parts. Insures long life. 2-oz. tube. 1223S.
32F244. NET ..... .55

NO NOISE

VOLUME CONTROL AND CONTACT RESTORER

Cleans, lubricates, restores all tuners including water type. Non-toxic, non-inflammable. Ideal for volume control and Contact restorer. Complete with a 5" plastic extender for getting into close areas in both Television and radio sets. Prevents gumming and eliminates binding in automatic turn tables. May also be used for noisy tube sockets and other components and will not change capacity.
32F269. 6 oz. spray can. **NET** 2.25

GC ELECTRONICS

SOLVENTS

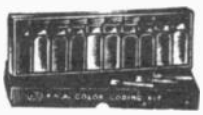
Radio Service Cement Solvent. For loosening cement on speaker cones, frames, etc. Will cut most speaker cements.
32F233. 8-oz. bottle. 31-8. **NET** ..... .95

Cement Thinner. Will thin radio and plastic cement without changing characteristics.
32F336. 2-oz. bottle. 28-2. **NET** ..... .52

Q-Dope Thinner. Solvent for polystyrene Q-Dope and other polystyrene coil dopes, cements, rods, sheets, etc.
32F241. 4-oz. bottle. 41-4. **NET** ..... .82

"Strip-Ex". Strips enamel from magnet wire, enabling it to be soldered immediately.
32F255. 2-oz. bottle. 26-2. **NET** ..... .78

COLORING KITS



Color - Code Kit. E.I.A. colors: Black, brown, red, orange, yellow, green, blue, purple, gray and white. Includes brushes and E.I.A. coloring chart. Shpg. wt., 1 lb.
32F350. 677. **NET** 1.47

DOPE AND VARNISHES

High Voltage and Corona Dope. Prevents corona shorts on high voltage circuits. High insulating qualities.
32F206. 2-oz. bottle. 47-2. **NET** ..... .78
32F207. 8-oz. bottle. 47-8. **NET** 2.15

Q-Dope. Pure polystyrene dissolved in Q-Dope Thinner. Will not change RF circuit values. Fully moisture-repellent. 2-oz. bottle.
32F208. 37-2. **NET** ..... .55
32F209. 4-oz. bottle. 37-4. **NET** ..... .83

RED INSULATING VARNISH

Most common of all protective insulating coatings, used on all solder connections, high voltage points, etc. 2-oz. bottle.
32F332. Type 90-2. **NET** ..... .63

LIQUID NON-SLIP

Penetrating dressing. Shrinks fibres; prolongs life, prevents slipping of dial cord, etc.
32F229. ½-oz. bottle. 1211. **NET** ..... .38
32F230. 2-oz. bottle. 1215. **NET** ..... .55

CEMENT

Type 345. Cement Sampler Lab Kit. 14 bottles contain cement and adhesive for every application. Cements of all types are included with instructions. Tops for lab's and engineer's use and handy for the shop or factory. 2-oz. bottles.
32F257. NET 5.97

Pliobond Cement. Cold setting thermoplastic liquid. Dries quickly, waterproof. For steel, glass, iron.
32F256. 2-oz. bottle. 43.2. **NET** ..... .60

Radio Service Cement. Mends speaker cones, tube bases, grid caps, etc. Can also be used for bakelite cement. Vibration-proof, water-proof and fast drying.
32F214. 2-oz. bottle. 30-2. **NET** ..... .55
32F216. 8-oz. bottle. 30-8. **NET** 1.45

Radio and TV Cement. For television work; seals nuts, bolts, etc., on antennas, rotators, etc. Also used for repair of parts and cabinets. Waterproof.
32F215. 2-oz. tube. 34-2. **NET** ..... .55

Plastic Cement. Excellent for cementing broken plastic cabinets, dial and glass crystal assemblies, knots in dial cord, etc. Very fast drying, water-proof.
32F217. 2-oz. bottle. 32-2A. **NET** ..... .55

Bakelite Cement. Made for cementing bakelite to bakelite, and bakelite to other materials. Also for repairing broken molded pieces, knobs, panels, etc.
32F220. 2-oz. bottle. 32-2. **NET** ..... .87

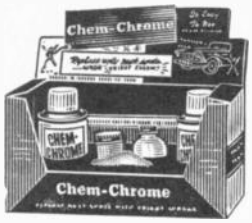
Vinylite Cement. For metals, plastics, paper, leather, etc. Can also be used as a thermoplastic cement for non-porous materials.
32F221. 2-oz. bottle. 58-2. **NET** ..... .55

Household and Model Cement. Fast-drying cement, suitable for many uses. Will cement wood, paper, plastics, metal, ceramics, etc. Fast-drying, water-proof.
32F222. 2-oz. bottle. 45-2. **NET** ..... .55

Rubber to Metal Cement. For cementing rubber dial drives to metal shafts, rubber mounting to chassis, or for any rubber material to metal, wood, etc. Waterproof.
32F225. 2-oz. bottle. 35-2. **NET** ..... .60

Acrylic Cement. Specially prepared for cementing Lucite, plexiglass and other acrylic materials. Fast-drying; welds the materials together.
32F228. 2-oz. bottle. 40-2. **NET** ..... .60

CHEM-CHROME FINISHER SET



No. 10104. Chem-Chrome Kit. Refinishes rusted, peeled, worn-off or pitted chrome. High-luster, heat-proof, weather-proof finish has same reflective qualities as chrome electroplating. Can be applied to metal, wood, glass, or plastic. Adheres perfectly, will not peel. Do-it-yourself quickly and easily—kit contains all necessary materials to do a complete chrome plating job. Replace ugly rust spots with bright chrome. One kit contains enough to cover approximately 2300 square inches. Shpg. wt., 1½ lbs.
32F149. NET 3.39

DURICON

• Seals • Insulates • Prevents Corrosion • Eliminates Fungus

Type 3100. Leaves permanent thin, clear insulation coating to repel moisture, salt air, oil, acids, alkali, prevents corrosion and fungus. Will resist temperatures ranging from —100°F to +500°F. Single spray application on non-ferrous metal instantly seals surface. Normal expansion, contraction or bending will not lift, peel, crack, or chip film. Acts as superior primer and bonder.

Stk. No.	Type	10 oz. can	Carton-12 cans
32F549	3100	4.00	45.00

PROPERTIES
Viscosity: 1.34 centistokes
Dielectric Strength: 900 volts/mil at 3/10 mil
Dielectric Constant: 2.75 at 100 Kc
Thermal Stability: Infinite to 300°F
Salt Spray: Exceeds 1,000 hours 20% salt solution
Coverage: Approximately 125 sq. ft. per spray can.
Dry Time: 3 to 5 minutes

KRYLON Spray Paints & Chemicals

KRYLON SPRAY PAINT

- Reoches Hord-to-reoch Areos—Quick, eosy to use, does the job in minutes,
- Time and Lobor Sovers
- Excellent Adhesion . . . Uniform Coverage
- Professional finishes ot low cost!

For coating all metal, wood, etc. Sprays will seal any surface against oil, grease, moisture and chemicals. Colors meet Fed. Spec. TT-L-0048(GSA-FSS). Many colors carry individual numbers to Fed. Std. No. 595. 1 pt. dispenser. Shpg. wt. 1½ lbs.

Stock No.	Mfg. No.	Color	Fed. Std. No. 595	NET EACH
32F290	1401	Bright Silver	17178	1.19
32F513	1403	Dull Aluminum	.....	1.19
32F292	1501	Gloss White	.....	1.19
32F150	1502	Flat White	37875	1.19
32F151	1503	Antique Ivory	17778	1.19
32F500	1504	Oyster White	17875	1.19
32F293	1601	Glossy Black	17038	1.19
32F282	1602	Flat Black	37038	1.19
32F283	1603	Machine Grey	.....	1.19
32F284	1604	Light Grey	16099	1.19
32F276	1605	Dove Grey	.....	1.19
32F501	1607	Puritan Grey	16307	1.19
32F285	1701	Bright Gold	.....	1.19
32F286	1801	Chrome Yellow	.....	1.19
32F152	1802	Pastel Yellow	.....	1.19
32F502	1805	Sunflower Yel.	13538	1.19
32F506	1809	Schl Bus Yel	13432	1.19
32F287	1901	Regal Blue	. .	1.19
32F176	1903	Champ. Blue		1.19
32F1100	1910	True Blue		1.19
32F288	2001	Hunter Green	14062	1.19
32F1101	2005	Erin Green	14110	1.19
32F1102	2008	Aqua Turq.	.	1.19
32F289	2101	Cherry Red	11136	1.19
32F505	2105	Fire Red	11105	1.19
32F296	2201	Bright Copper	.	1.19
32F177	2202	Brass		1.19
32F277	2301	O. D Khaki	14064	1.19
32F278	2401	Int'l Orange		1.19
32F514	2404	Indus Orange	12215	1.19
32F178	2501	Leath Brown		1.19
32F507	2504	Desert Beige		1.19

Carton of 12 ..... 12.89

KRYLON METAL PRIMER

The quick, easy to prepare surfaces for painting. The green and yellow are rust inhibitive zinc chromate primers specially for metal and are manufactured in accordance with Spec. MIL-P-8585-A Type 1. Grey is an all purpose primer for wood, metal, plastic, etc. In 1 pt. spray cans Shpg. wt . 1½ lbs.

Stk. No.	Type	Color	Each	12 For
32F160	1318	Grey	1.19	12.89
32F161	1319	Yellow	1.30	14.04
32F297	1320	Green	1.30	14.04

KRYLON RUST MAGIC

Type 1317. A quick drying anti-rust metal primer. Space age Phenolic Resin G1-358 gives Krylon Rust Magic Metal Primer piercing power through heavy rust. Seals out moisture, air, and neutralizes porous rust. Dry to the touch in 20 minutes, apply finish coat in 2 hours. Compatible with Krylon Spray Paints. 1 pt. spray can. Shpg. wt., 1½ lbs.

32F172. NET **1.19**
Carton of 12 cans 12.89

ANTI-RUST WAX SPRAY

Type 1321. Leaves a dry, waxy film coating that protects any stored metal parts, bearings, gauges, tools, etc. Shpg wt 1½ lbs.

32F511. 1 pt can. **NET** **1.30**
Carton of 12 cans 14.04

SILICONE MOLD RELEASE

Type 1328. Spray releases parts faster, cuts rejects in blow and injection molding of plastic, rubber, ceramic, and glass. Contents: 20 oz. by weight.

32F512. 1 pt. can. **NET** **1.30**
Carton of 12 cans 14.04

KRYON LET-GO PENETRATING OIL SPRAY

Type 1332. Super penetrant lubricates as it penetrates into rusty threads, etc. Spray reaches all areas. Shpg. wt. 1½ lbs.

32F509. 1 pt. can. **EACH** **1.13**
Carton of 12 cans 12.17

GLOWING FLUORESCENT SPRAY PAINT

For sure, quick attention and dazzling color effects. Attracts attention at great distances. Makes any surface with white base up to 4 times brighter. Colors stand out sharply from their surroundings. For use in daylight or artificial light. Gives neon effect in black light. For maximum brightness, white base is necessary. For use in industry, aviation, military, business, and the home where strong visual impact is necessary. For outdoor use, spray Krylon Crystal Clear protective coating on dry glowing fluorescent film. *Made to meet MIL-P-21600. 1 pt. cans. Shpg. wt. 1½ lbs.

No.	Type	Description	NET
32F165	3101	Red Orange-633*	1.86
32F166	3102	Yellow Orange-634*	1.86
32F167	3103	Sunset-Gold	1.86
32F168	3104	Lemon-Yellow	1.86
32F169	3105	Cerise	1.86
32F170	3106	Green	1.86
32F171	3107	Blue	1.86

Carton of 12 cans 20.09

RED INSULATING VARNISH

Type 7004. Will penetrate through multiple layers of taped coils, increasing dielectric strength, leaving a tough flexible oil-proof film with high adhesion characteristics, exceptional arc-resistance, and non-tracking properties. Maximum oil-proofness and chemical resistance. Excellent sealer on pitted windings. Shpg. wt 1½ lbs

32F510. 1 pt can. **NET** **1.30**
Carton of 12 cans 14.04

ELECTRIC MOTOR CLEANER

Type 1327. Cleans grease, oil, and tar from inside electric motors without harming insulation, paint, or lacquer. Evaporates completely. Contains no carbon tet. Shpg. wt. 1½ lbs.

32F508. 1 pt. can. **EACH** **1.13**
Carton of 12 cans 12.17

CRYSTAL-CLEAR ACRYLIC SPRAY COATING

Type 1302. Protects and preserves metal, wood, paper, and leather surfaces. Dries in minutes, goes on clear, and stays clear. Prevents tarnish, rust corrosion. Resists fungus, chemicals, dilute acids, dirt, and grease. Gives lasting protection against electrical failures, less down time. Acrylic film with its high dielectric strength is made for electronics specialty applications. Will not affect resistance values or conduct current. Prevents moisture breakdown. Also, electrolysis between various metals. Meets TT-L-0048 (GSA-FFS). 1 pt. can. Shpg. wt., 1½ lbs.

32F291. NET **1.30**
Carton of 12 cans 14.04

KRYLON CONTACT CLEANER

Type 1333. 1 pt. Non-flammable, greaseless contact cleaner in spray can. Does not attack plastic. Cleans volume controls, switches, and tuners. Removes dirt and gummy deposits from electrical contacts and provides a non-drying film which lubricates the contact surfaces. Long lasting protection from corrosion and oxidation. Comes with 5" plastic hose.

32F154. Each ... 1.99 **Carton of 12** ... 21.46
Type 1333A. 8 ozs.
32F155. Each ... 1.32 **Carton of 12** ... 14.26

CLEANER LUBRICANT

Type 1326. 1 pt. Non-flammable, balanced blend of grease and oil solvent and lubricant. Protects against corrosion and keeps surfaces self-cleaning. Minimizes surface friction, dissipates generated heat. For use on arcing as well as non-arcing contacts. Low electrical resistance. (For plastics use Type 1333). 5" hose included.

32F521 Each **1.30** Carton of 14.04
Type 1326A. 7 ozs.
32F522 Each **.65** Carton of 12 ..... 7.08

HIGH HEAT ALUMINIUM SPRAY

Type 1402. Special formula Krylon aluminum spray for high heat problems. Withstands 500°F for long periods and 1000°F intermittently. Fast drying.
Shpg. wt., 1½ lbs.

32F180. 1 pt. can. **EACH** **1.66**
Carton of 12 cans 17.93

HEAT RESISTANT SPRAY PAINT

Special formulation Krylon spray paint for high heat conditions on pipes, radiators, boilers, motors, engines. 1 pint can. Shipping weight 1½ lbs.

Stk. No.	Type	Color	NET
32F515	1611	Gray	1.19
32F516	1612	Black	1.19
32F517	1909	Blue	1.19
32F518	2007	Green	1.19
32F519	2106	Red	1.19
32F520	2405	Orange	1.19

Carton of 12 cans 12.89

HEAVY DUTY SILICONE SPRAY

Type 1329. Silicon spray for electrical and mechanical uses. Dielectric strength 350V. mil. Excellent lubricant for many electronic devices. Shpg. wt., 1½ lbs.

32F181. 1 pt. can. **EACH** **1.30**
Carton of 12 cans 14.04

KRYLON DULLING SPRAY

Type 1310. Eliminates glare from reflecting surfaces. Spray dries in seconds. It is harmless to high polish—removes easily.

32F273. 1 pt. can. **EACH** **1.30**
Carton of 12 cans 13.04

DEPEND ON NEWARK FOR EVERYTHING IN INDUSTRIAL ELECTRONICS

- **Same Day Shipment from On-the-Shelf Stocks**
- **OEM Factory Prices**

NEWARK EXCLUSIVE! MOISTURE-FUNGUS RESISTANT VARNISH

MEETS MIL SPEC. MIL-V-173-A

No. 277. Distributed only by Newark in U.S. Conforms to MIL-V-173-A. Always ready for instant use, simply press the trigger and get professional finishes at low cost. Does the job in minutes. It is inherently fluorescent and a treated chassis may be checked with an ultra - violet light keyed for 3500 A. U.'s Viscosity 0.85 poises. 16 oz. cans.

Stk. No.	Type	1-11	12-23	24-47	48-96
32F427	277	1.30	1.20	1.10	1.00

SPRA-CON CONTACT CLEANERS/LUBRICANTS

Combines Genesolv D® aerospace degreaser, with special lubricant. Non-dying film cleans and lubricates contact surfaces in one operation. For electrical contacts, switches, controls, tuners, all percision mechanisms. Deep penetration. Harmless to materials of construction. Non-conductive, non-flammable. No. 286 SPRA-CON Contact Cleaner with lubricant. 15-ounce can.

32F1015 NET. ..... **1.87** **12-Up.** **1.66**

No. 292 SPRA-CON Contact Cltaner with silicone. Gives additional protection and lubrication; a "drier" product. 15-ounce can.

32F1016 NET. ..... **1.87** **12-Up.** **1.66**

EASY WAY HOT PAINT VERY HIGH TEMPERATURE

For auto engine heads and blocks, manifolds and exhaust systems. On barbecue broilers, grates and grills. Use it safely on boilers, heaters, furnaces for protection. When applied properly will air-dry in minutes. Sustains temperatures up to 1000°F. Comes in four colors. Has a color-coded cap to identify contents, a plastic inner seal to resist tampering.

Stock No.	Type	Color	1-5	6-11	12 up
32F451	HP-1	Black	2.98	2.65	2.39
32F452	HP-2	White	2.98	2.65	2.39
32F453	HP-3	Red	2.98	2.65	2.39
32F454	HP-4	Aluminum	2.98	2.65	2.39

● *NEW* PLASTI-KOTE LUBRICATING OIL

Lubricant is especially formulated for chain drive equipment. Reduce friction between moving parts. May be used both as a lubricant and a rust preventive on maintenance equipment. 16 oz. can. Wt.: 1 lb.

Stock No.	Type	NET	12-cans
32F1001	W-11	1.07	11.45

● *NEW* SPRAY CAN HANDLE

Handle snaps onto all makes and sizes of aerosol spray cans. Eliminates hand fatigue, gives better control for an even, accurate application. Keeps hands clean. Unlimited uses — employ on insecticide, window cleaners, paint and spray starch cans. Quickly detached for use on next can. Shpg. wt.: ¼ lb.

Stock No.	Type	NET
32F1000	SC-500	.59

RUST KILLER SPRAY PAINTS

Specially formulated paint guaranteed to check rust as effectively as any spray paint made. Ideal for lawn furniture, barbecue grills, garden tools. Protective caps match color of contents for instant identification. For all surfaces. 1 lbs.

SELF SPRAY LACQUER

No.	Type	Color	NET
32F439	270	Clear	1.17
32F430	247	Flat Black	
32F440	271	Black	
32F441	272	White	

PAINTS AND ENAMELS

32F442	249	Green Zinc Chromate	1.17
32F443	244	Flat White	1.17

SPRAY HAMMER FINISHES

Stk. No.	Type	Description	NET
32F431	212	Silver Hammer	1.17
32F432	213	Gray Hammer	
32F433	214	Green Hammer	
32F434	215	Blue Hammer	
32F435	216	Copper Hammer	

PLASTIC SPRAY

No. 274. Plasti-Kote Clear Acrylic Plastic Spray. Durable, flexible coat against dirt, water, weather. High dielectric strength. Seals connections, protects aerials. Shpg. wt. 1 lb.

32F400. NET **1.20**

● *NEW* ENGINE DECREASER & MOTOR CLEANER

Plasti-Kote engine cleaner, once sprayed on, washes off grease, grime, oil, and dirt. Ideal for motors, machines, fans, grilles, and floors. Comes in a 16 oz. can.

Stock No.	Type	NET	12-cans
32F1002	26	.99	10.73

● *NEW* PLASTI-KOTE DRY GRAPHITE LUBRICANT

Lubricant forms a protective film which adheres with a minimum of pretreatment. Dries rapidly at room temperature. Recommended for the assembly & run-in of internal combustion engines, this lubricant coats gaskets, non-conductors, assembled rubber components, printed circuits, and cathode tube grids. 16 oz.

Stock No.	Type	NET	12-cans
32F1003	W-8	1.39	14.76

● *NEW* SPRA-CON WITH SILICONE

Combined cleaner and lubricator dissolves built-up dirt and grease chemically. Gives additional protection and lubrication to contact surfaces. Reduces noise, improves performance. Excellent for contacts, switches, controls, tuners. No harmful solvents. Comes with Snorkel Tube. 15 ozs.

Stock No.	Type	NET	12-cans
32F1004	292	1.66	17.93

PAINTS AND ENAMELS (Cont'd)

No.	Type	Color	NET
32F344	248	Yellow Zinc Chromate	1.17
32F401	250	Black Enamel	
32F402	251	White Enamel	
32F403	252	Ivory Enamel	
32F404	253	Glade Green Enamel	
32F405	254	Chevron Blue Enamel	
32F406	255	Royal Blue Enamel	
32F407	256	Swift Red Enamel	
32F408	257	Yellow Enamel	
32F409	258	Shamrock Green Enamel	
32F410	259	Chrome Aluminum	
32F423	260	Bright Gold Enamel	
32F424	264	Clear Varnish	
32F414	265	Baby Blue Enamel	
32F415	266	Machinery Gray Enamel	
32F416	267	Copper Enamel	
32F417	268	Gray Metal Primer	
32F418	269	Antique Flat Black	

HEAT RESISTANT SPRAY PAINT

Stk. No.	Type	Description	NET
32F445	202	Universal Gray	1.17
32F446	203	Universal Black	1.17
32F447	206	Red	1.17
32F448	207	Aluminum	1.17

12 AND UP. — EACH **1.05**

RUST SOLVENT

No. 276. Quick-drying non-inflammable, non-oily, non-conductive spray rust-solvent and penetrant Loosens "rust-frozen" parts easily. Shpg. wt. 1½ lbs.

32F428. NET **1.27**

● *NEW* PLASTI-KOTE ARMOR PLATE EPOXY SPRAY PAINT

Spray paint provides a tile-hard, porcelain-like finish to both inside and outside equipment. Will not chip, peel, or crack. Ideal for refrigerators, washers, dryers, bowls, sinks, tubs and tile, as well as window sills and iron railings. Also applicable to lawn and garden fixtures. Comes in 13 oz. cans.

Stk. No.	Type	Color	1-5	6-11	12-up
32F1005	191	Appliance White	1.87	1.66	1.49
32F1006	192	Antique White			
32F1007	193	Black			
32F1008	194	Copper			
32F1009	195	Mint Gr.			
32F1010	196	Brown			
32F1011	197	Pale Bl.			

● *NEW* STRIPPABLE VINYL COATING

Protective vinyl coating prevents corrosion, scratches and rust during shipment or storage. Additional coats increase film thickness. Simply peels off, leaving surface smooth and clean. 16 oz. can.

Stock No.	Type	NET	12-cans
32F1012	W-9	1.49	15.84

● *NEW* PLASTI-KOTE SPRA-KOOL

The freezing mist of this circuit cooler pinpoints bad capacitors, transistors, etc., by cooling components. Instant action. Non-toxic, non-flammable. Comes in 15 oz. cans.

Stock No.	Type	NET	12-cans
32F1013	284	1.46	15.77

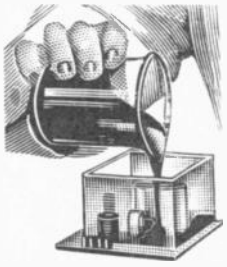
ILLINOIS BRONZE PRODUCTS

Ideal for both indoor and outdoor use. Gives any surface a factory rich, distinctive, textured metallic finish without expensive equipment or processing.

Stk. No.	Type	Color	NET
60F980	331	Smoke Silver	1.49
60F981	336	French Grey	
60F982	337	Jet Black	

Emerson & Cuming Plastics

STYCAST CASTING RESINS



MILITARY GRADE EPOXY RESIN 2651

- **High Mechanical Strength**
- **Meets Mil. Spe. MIL-I-16923 B, C & D**

Medium viscosity rigid epoxy. Choice of two catalysts allows cure at room or oven temperatures. Excellent general purpose encapsulant and adhesive. High mechanical strength and thermal shock capability combined with exceptional electrical insulation capacity. Service temperatures: —70°F to +350°F. Wt. 2 lbs.

32F372. NET **5.98**

HIGH THERMAL CONDUCTIVITY RESIN 2850FT

- **Cryogenic**
- **High Thermal Conductivity—Low Shrinkage**

Has a coefficient of thermal expansion matched to copper. Low shrinkage makes it possible to encase glass diodes without fear of breakage. High thermal conductivity and excellent electrical insulation make it ideal for transformer potting. Used to as low as 1.2°K. Shows no appreciable outgassing in high vacuum up to 10-12 mm. Hg service temperature to 390°F. Wt. 2 lbs.

32F455. NET **5.98**

LOW VISCOSITY RESIN STYCAST 2651MM

Module encapsulant, free machining rigid opaque epoxy. For easy handling in potting tightly packed components. Choice of two catalysts allows room or oven temperature cure. Service temperature: —70°F to +350°F. Wt. 2 lbs

32F373. NET **5.98**

CLEAR STYCAST 1266

- **Transparent**
- **Low Viscosity—High Impact**

High impact low viscosity epoxy. For electrical encapsulation where component visability is desired. It can also be used for display embedments or bonding sheets of glass for good visibility. Cures in a few hours at room temperature or minutes at 150°F. Service temperature: —70°F to +200°F. Wt. 2 lbs.

32F456. NET **5.98**

CLEAR URETHANE RESIN CPC-16

- **Flexible Casting Resin**
- **Transparent and Repairable**

Low viscosity, room temperature cured flexible casting resin. Use to pot fragile components without fear of fracturing at cold temperatures. Transparent and repairable; components can be seen, dugout, and resealed with a drop of resin. Flexible temp. —60 F to +300°F. Wt. 2 lbs.

32F457. NET **7.98**

ECCOBOND EPOXY ADHESIVES

ECCOBOND 45

A two part epoxy adhesive with controlled flexibility. Available in either black or clear. Designed to be used where shock and peel resistance are desired. Has excellent adhesion to metal, glass, ceramics and most hard to bond plastics. Cures in a few hours at room temperature, or in minutes at 150°F. Temperature range for use —70°F to +300°F. Weight: 2 lbs.

- **Available in clear or black.**
- **Has controllable flexibility.**

32F458. Black. **NET** **5.98**

32F459. Clear. **NET** **5.98**

TWO TUBE EPOXY PATCH KIT

ECCOBOND 26. Handy two tube kit for all adhesive and patch jobs requiring small amounts of material. Half and half mix requires no weighing. Designed to be used where shock and peel resistance are desired. It has excellent adhesion to metal, glass, ceramics, and most hard to bond plastics. Cures in four hours at room temp., in minutes at 150°F. Becomes a permanent part of the repaired item. Wt. 5 oz.

32F371. NET **1.98**

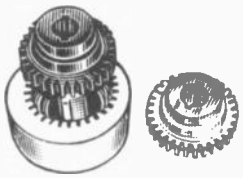
NON-FLOWING EPOXY ADHESIVE

ECCOBOND 285. A truly thixotropic two part epoxy adhesive which can be easily applied to vertical or overhead surfaces without flow or sag. Will stand like whipped cream on any surface at any temperature and cures to a hard opaque resin. Three different catalysts are supplied to offer a choice of pot life and temperature. Service temp. range: —70° to +350°F. Wt. 2 lbs.

32F460. NET **5.98**

ECCOCOAT SURFACE COATINGS

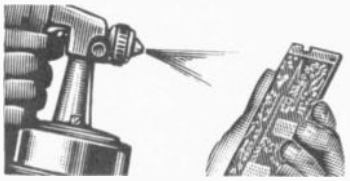
RTV SILICONE RUBBER ECCOSIL 4851



- **Ideal for Making Flexible Molds**
- **Used for Potting and Encapsulation**

Ecosil 4851 is a pourable resin which cures to a 60 durometer flexible silicone rubber. Used for potting and encapsulation, as a caulk and sealer, and widely used in the making of flexible molds. Its flexibility, self releasing property, and good dimensional stability, make it an ideal prototype mold material. It can be subjected to temperatures up to 500°F for prolonged periods. Wt. per can: 2 lbs.

32F461. NET **9.98**



CLEAR EPOXY SURFACE COAT—ECCOCOAT EC200

A two part brush or spray coating that cures to a transparent, tough, moisture impervious film. Chemical and corrosion resistance and high electrical insulation make this an ideal circuit board and general purpose protective coating. Service Temp.: —70°F to +275°F. 2 lbs.

32F483. NET **5.98**

ECCOFOAM FPH

Rigid foam-in-place polyurethane foam. Eccofoam FPH is used in many aerospace applications. Fast room temperature cure. Density is approximately 6 lbs. per cubic foot. Service temperature is 275 degrees Fahrenheit. To be used in well ventilated area. Weight: 2 lbs.

32F470 NET **8.98**

MOLD RELEASE 122S—PASTE OR SPRAY

A silicone type release agent used to prevent adhesion of epoxies to molds. Apply paste with a rag or brush, or use handy aerosol spray can. Wt. ¼ lb.

32F395. Paste. **NET** **3.98**

32F464. Spray Can. **NET** **4.98**

ECCOSTRIP 57—EPOXY SOLVENT

Will dissolve cured epoxy resins. Items must be submerged in solvent for several hours during which the epoxy slowly softens. Excellent for use in clean-up of uncured epoxy. Wt. 1 lb.

32F396. NET **1.48**

NEWARK—Your One Reliable Source for Everything in Industrial Electronics

GENERAL ELECTRIC SILICONES

SILICONE RUBBER ADHESIVE/SEALANTS

One-package silicone rubber adhesive/sealants for an unlimited number of industrial applications. Packaged in collapsible aluminum squeeze tubes. Cures to resilient rubber at room temperature. Will withstand temperatures up to 300°F. for extended periods and up to 500°F. for shorter time periods. Resists moisture weathering, and aging effects. Remains flexible at —75°F. Ideal for industrial applications ranging from assembly line production work to fast, effective electrcial maintenance and repair. Physical properties, using standard ASTM test procedures: hardness, Shore A:30. Tear resistance 45 lb./in.

PRODUCT SELECTION

Product	Color	Typical Application
RTV-102	White	Shock mounting
RTV-103	Black	Rubber repair
RTV-108	Trans	See thru Insulation
RTV-109	Alum	Metal bonding
RTV-106	Red	Critical "high temp"
RTV-112	White	Brushing or spraying
RTV-116	Red	High temp—Pourable
RTV-118	Trans.	Brushing or spraying pourable

Type	Color	3 Oz. Tube Stk. No.	1-5	6-11	12-up	12 oz. Tube Stk. No.	Each	2-11	12-47	48-up
RTV-102	White	57F039	1.75	1.50	1.27	57F031	5.55	5.40	5.10	4.90
RTV-103	Black	57F040	1.75	1.50	1.27	57F032	5.55	5.40	5.10	4.90
RTV-108	Trans.	57F041	1.75	1.50	1.27	57F033	5.55	5.40	5.10	4.90
RTV-109	Alum.	57F042	1.75	1.50	1.27	57F034	5.55	5.40	5.10	4.90
RTV-106	Red	57F043	2.10	1.85	1.52	57F035	7.10	6.90	6.55	6.20
RTV-112	White	57F044	2.10	1.85	1.52	57F036	7.10	6.90	6.55	6.20
RTV-116	Red	57F029	2.10	1.85	1.52	57F037	7.10	6.90	6.55	6.20
RTV-118	Trans.	57F030	2.10	1.85	1.52	57F038	7.10	6.90	6.55	6.20

RTV-615 CLEAR POTTING COMPOUND

The RTV-615 is a low viscosity silicone liquid that cures at room temperature. RTV-615 offers improved physical properties as well as as a faster cure system The curing agent is always added to base polymer in a straight 1 to 10 ratio RTV-615 maintains its physical properties from —65°C to 200°C. Has a viscosity of 3500 centipoises Well suited for production line use, this material can be cured within .15-30 minutes at 150°C or at a longer time at room temperature. The RTV-615 will cure in deep sections and in completely enclosed assemblies without exotherm and without damaging stresses on potted assemblies. Includes curing catalyst.

Stk. No.	Description	1-11	12-up
57F049	RTV-615 Clear Silicone (1 lb.)	9.50	8.00

12 oz. Caulking Cartridge

As above, packed in high-pressure caulking cartridge rather than squeeze tube. Can be used with any standard or auto caulking gun.

Stock No.	Type	Color	1-5	6-11	12-up
57F045	RTV-102	White	3.49	3.09	2.69
57F046	RTV-108	Trans.	3.49	3.09	2.69

RTV SILICON RUBBER PROPERTIES

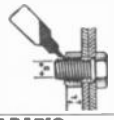
RTV types / Thixotropic—Pourable—Potting	-102 -103 -106 -108 -109	-112 -116 -118	-615
Shelf Life, Months	12	12	6
Specific Gravity	1.07	1.05	1.02
Tensile Strength, psi	350	300	925
Elongation, %	400	350	150
Brittle Point, °F	-90	-90	-90
Dielectric Strength, Volts/mil	500	500	500
Dielectric Constant, 60 hz	2.8	2.8	3.0
Volume Resistivity, Ohm-cm (x10^{15})	3	2	1

LOCTITE® SEALANT

Meets Military Specifications Mil-T-212000C, Mil-S-22473, Mil-E-5400E, Mil-E-16400D, Mil-P-11268D.

GUIDE FOR SELECTION OF PROPER GRADE

Measure engaged length of screw (L in diagram), and diameter of screw (D in diagram). Divide L by D to get engagement ratio. Select proper grade letter from table below. Use A on snug fits; D or V grades on loose fits Grade D has same strength as A but higher viscosity. Suffix V indicates higher viscosity of grade.



APPLICATION	ENGAGEMENT RATIO 0.5	1.0	1.5	2.5	5.0
Nuts on steel screws	A or D	A or D	C	....	....
Steel screws in tapped holes	A or D	A or D	C	C	E
Steel studs	.....	A or D	A or D	C	E
Steel adjustment screws	A or D	C	E	H	H
Adjustment nuts on steel screws	A or D	C	E	....	....
Nuts on aluminum or brass screws	A or D	C	E	....	....
Aluminum or brass screws	A or D	C	E	E	H
Aluminum or brass adjustment screws	C	E	E	H	....
Adjustment nuts on aluminum or brass screws	C	E	E	....	....

2 CC

Stock No.	Grade	Color Code	Rel. Torq.	Visc. (cent.)	Strength psi	EACH
57F000	C (4-1)	Blue	4	10-15	300-400	.59

10 CC

57F001	C (4-1)	Blue	4	10-15	300-400	1.90
57F002	AA (15-1)	Green	15	10-15	1150-1500	2.10
57F003	A (10-1)	Red	10	10-15	750-1000	1.90
57F005	AV (10-10)	Red	10	100-150	750-1000	1.90
57F006	B (7-2)	Yellow	7	20-30	525-700	2.10
57F007	CV (4-10)	Blue	4	100-150	300-400	1.65
57F008	E (2-1)	Purple	2	10-15	150-200	1.65
57F009	EV (2-10)	Purple	2	100-150	150-200	1.45
57F010	H (1-1)	Brown	1	10-15	75-100	1.65
57F011	HV (1-10)	Brown	1	100-150	75-100	1.45

50 CC

57F012	C (4-1)	Blue	4	10-15	300-400	6.75
57F014	A (10 1)	Red	10	10-15	750-1000	6.75
57F019	E (2-1)	Purple	2	10-15	150-200	5.50
57F021	H (1-4)	Brown	1	10-15	75-100	5.50

250 CC

57F023	C (4-1)	Blue	4	10-15	300-400	21.80

SEALANT

Thin liquid plastic screw retaining compound, designed for thread-locking with standard nut and bolts. Hardens between closely fitting metal parts. Forms tough heat and oil resistant bond. Provides complete resistance to loosening under shock or vibration. Can be removed with a screw driver. Has several times the holding power of locknuts or lockscrews. Comes in different strengths. Easy to apply, it fits all sizes. 10cc bottle has applicator nozzle and is best suited for treating assembled fasteners individually. Weighs 8 oz. 50cc bottle may be used for either method; applicator nozzle included.

MAINTENANCE KIT

Type 1-50. Contains one 50cc plastic bottle of Loctite Sealant general purpose grade B, applicator nozzle and new aerosol spray can of Locquic primer for use on oily or plated parts. Parts will not loosen from vibration.

57F026. Type 1-50. NET **9.45**

LOCQUIC PRIMER

Priming rinse which speeds hardening of the sealant and effectively cleans oily parts. 6 ounce "ready to use" aerosol can. Grade Q.

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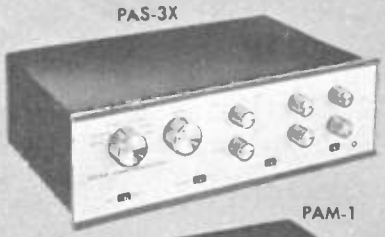

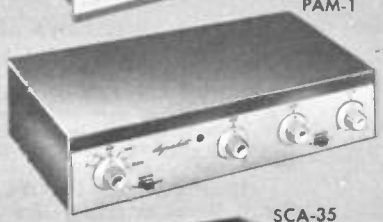

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96F434. NET **74.95**

SUPER-FIDELITY OUTPUT TRANSFORMERS

Stock No.	Type	Undistorted pwr. 30 cps. to 15KC.	Undistorted pwr. 20 cps. to 20KC.	Min. Freq. resp.	Impedance Ratio	Application	Wt. Lbs.	NET
7F050	A-410	30 w.	15 w.	±1 db. 6 cps. to 60 kc.	8,000 ohms ct to 8, 16 sec.	6V6's, EL-84's 6AQ5's	5	15.95
7F051	A-420	60 w.	30 w.	±1 db. 6 cps. to 60 kc.	6,600 ohms ct to 8, 16 sec.	KT66's, 5881's EL34's or 6CA7's	7	20.95
7F053	A-431	120 w.	60 w.	±1 db 6 cps. to 60 kc.	4,300 ohms ct to 4, 8, 16 sec.	par KT-66 #pp. par. 6550's,	14	34.95
7F055	A-451	240 w.	120 w.	±1 db. 4 cps. to 60 kc.	2,200 ohms ct to 8, 16 sec.	EL-34's or KT-88's	23	49.95
7F057	PC-706	400 ma power transformer for 120 watt amplifier circuit.					14	24.00
7F059	P-782	200 ma power transformer for Dynakit Mark III.					10	14.00
7F058	C-492	400 ma choke for 120 watt amplifier circuit.					3	4.80
7F060	C-354	200 ma choke for Dynakit Mark III, Mark IV, Stereo 70.					2	1.80

Units in steel cans with 12" color coded leads. mtg. studs & hardware. A-451 transformer used in circuits with 4 output tubes in par.

Monarch

Fig. A

Fig. B

Fig. F

Fig. I

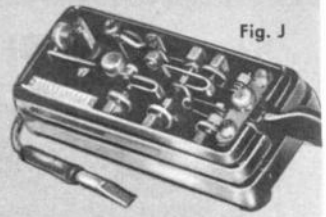


Fig. J

Fig. C

Fig. D

Fig. E

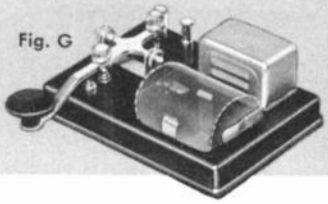


Fig. G

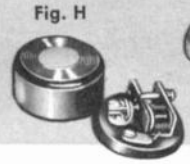


Fig. H

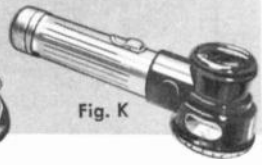


Fig. K

SUCTION CUP PICK-UP COIL

Fig. A. Attaches near the magnetic field of a telephone. No permanent connection required. Shpg. wt., 12 oz.
46F044. NET. ..... .83

TELEPHONE PICK-UP COIL

Fig. B. Record or amplify both sides of a phone conversation. No wired connection to phone. 4½"x1½"x½". 12 oz.
46F039. NET. 1.19

MODEL TEL-1

Fig. C. Ivory plastic phone plug w/ flanges.
46F048. NET. ..... .64

MODEL TEL-2

Fig. D. Surface mtg. phone jack w/ screws.
46F049. NET. ..... .72

MODEL TEL-3

Wall plate and jack of plastic for surface of built in installation.
46F050. NET. 1.15

Model Tel-4

Fig. E. Heavy plastic covered, color coded cord with attached plug and matching jack.
46F051. NET. 2.95

BALL BEARING SPEED KEY

Fig. F. Standard precision built telegraph key. Perfect for code practice and transmitting, has smooth action. Base is drilled for mounting screws. Semi-automatic keys may be plugged in. Wt., 12 oz.
46F021. NET. 2.73

"STUDENT" SPEED KEY

Perfect for code practice for beginner. Imported. Wt., 6 oz.
46F022. NET. ..... .89

CODE PRACTICE KEY

Fig. G. Budget priced key for amateur and code practice groups. Adjustable to touch. Buzzer is locking type and adjustable for freq. Requires one 1½V standard battery. Takes headsets. Less battery. 6¾"x2¾"x1⅜". Shpg. wt., 1 lb.
46F019. NET. 2.40

HIGH FREQUENCY PRACTICE BUZZER

Fig. H. Can be used with any key as an accesory buzzer. Requires 1½V battery.
46F002. NET. ..... .71

PROFESSIONAL SPEED MASTER KEY

Fig. I. Professional key, Semi-automatic, adjusts from 10WPM up. 8 tension and speed adjustments. Precision tooled with steel springs, cord, and tension wedge. 3½ lbs.
46F020. NET. 12.45

GENERATOR NOISE FILTER

Fig. J. Model GNF-1. Reduces generator noise for better S/N ratio. Increases range of receiver. Frequency range: 3-30 MHz. High "Q" parallel circuit Must be shunted for 5-7 MHz or 3-5 MHz. Moisture sealed. Mounts on generator. Max. gen. current: 25 amp. Made in Japan. Shpg. wt., 12 oz.
46F082. NET. **2.13**

7X ILLUMINATED MAGNIFIER

Fig. K. Ideal for the technician serviceman, student, engineer and hobbyist. Fitted with two magnifying lens which look down into a calibrated measuring field. Heavy black plastic head with plated body which holds two standard "C" flashlight batteries. Supplied less batteries. Shpg. wt., 2 lb.
46F084. NET. 1.44

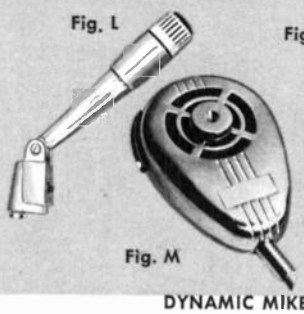


Fig. L

Fig. M

Fig. N

Fig. O

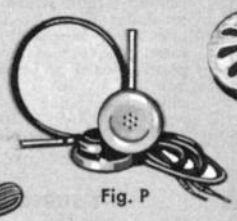


Fig. P

Fig. Q

Fig. R

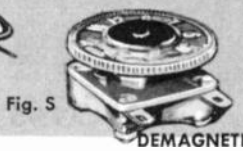


Fig. S

Fig. T

DYNAMIC MIKE

Fig. L. Type TM-18. Fine for voice or music. High impedance, 50,000 ohms. Low impedance, 600 ohms. Response from 40 to 15,000 Hz. Has its own on-off switch. Highly directional, minimizes the pick-up of unwanted sound from the side or rear, due to the fine pear-shaped pickup pattern. 20' cable.
46F089. NET. **11.40**

Fig. M. Type MC1X. For CB owners and ham operators. Output is: —54 db. Designed for voice transmission. A push-to-talk switch in convenient position. Heavy die cast. Brushed chrome metal to resist corrosion. Supplied with mounting bracket and curly cord. High impedance ceramic mike.
46F085. NET. **5.85**

PRECISION VERNIER DIALS

Fig. N. 8:1 ratio vernier dials with bakelite base and nickel-silver dial plates with etched scales. Molded knob calibrated 0 to 100 in 180° rotation. For panel mtg.
46F070. 1½" Dia. **1.01**
46F071. 2" Dia. **NET.** 1.38

IMPORTED EARSETS, HEADPHONES

Fig. O. Magnetic type, plastic covered earhook. Long cord, standard RCA-type min. plug.
8 ohm impedance, ear hook type. 2 oz.
46F007. NET. ..... .60
15 ohm impedance, ear hook type. 2 oz.
46F008. NET. ..... .60
Crystal pillow receiver. Large xtal element for high input. Case 2¼x1½".
46F005. NET. 1.46
Magnetic Pillow Speaker with cord, plug, and jack. Flat plastic with contact plate to conduct sound to inner ear by by-passing ear channel. Only user hears.
46F037. NET. **2.33**

2000 OHM HEADSET

Fig. P. A lightweight headset, perfect for code practice sets, short wave listening, etc. Black plastic with white earcaps on spring band. Complete with long cord with standard phone tips. Shpg. wt., 10 oz.
46F004. NET. 1.58

SUNBURST CRYSTAL LAPEL MIKE

Fig. Q. Complete with spring lapel clip on back and plastic covered coaxial cord. Gold and black case. Shpg. wt., 1 lb.
46F080. NET. ..... **.68**

DEMAGNETIZER

Fig. R. Remove accumulated tape head magnetization quickly and easily. For true hi-fidelity, tape heads must be demagnetized often. Will decrease second harmonic distortion and reduce noise level several db after each use. May be used on all tape heads, monaural, stereo or four track. Cord, plug, included. 1½" x 4½" x 1½". Wt., 1 lb.
46F001. NET. 2.63

VARIABLE CONDENSERS

Fig. S. 365 mfd. 1 gang polyvarican condenser with 1¼" clear plastic dial For RF transistor use. 1" x 1" x ½".
46F003. NET. ..... .54
Miniature 2 gang variable condenser. Completely enclosed in polyethylene plastic. Max. Cap.: ANT 148.1 uuF, OSC 65.2 uuF. Trim Cap.: Effective variable cap. more than 6 uuF. ¾"x¾"x7/16". Shpg. wt., 3 oz.
46F069. NET. **1.20**

SET OF 2 TAPE REEL HOLDERS

Fig. T. Black rubber reel holder to fit standard hub. Fluted knob and grooved gripper. Large rubber flange.
46F040. NET ..... **.50**

FIELD-STRENGTH METER

- **No Antenna Connection Necessary**
- **Compact . . . Easy to Use**

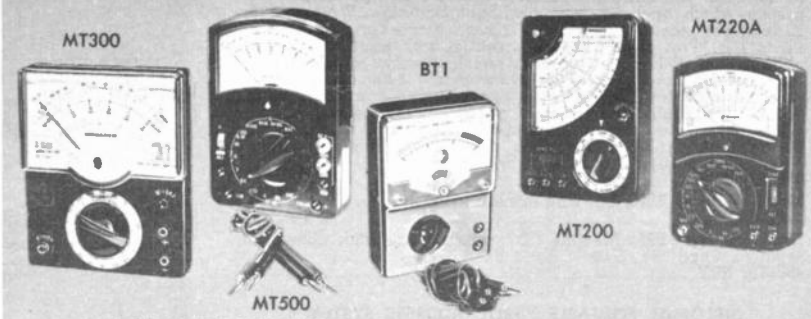
Model FS1-2. For measuring signal strength of transmitter in the vicinity of antenna. Needs no antenna connection. Broad tuning covers 1.6 to 150 mc in four bands. Accuracy: 10% Size 2 9/16 x 3 9/16 x 1 9/16". Complete with instructions.
46F072. NET **7.95**

S.W.R. BRIDGE AND FIELD STRENGTH METER

- **Ideal for Fixed Station or Mobile Use**

Model FS1-3. An excellent combination unit for either home station or mobile use. 52 ohm impedance. Will take a full kilowatt. Remains in line. Grey metal case, 5 1/4"Hx1 1/4"Wx2 1/4"D with standard fittings, 1 5/8" Bright-Vue meter. Complete with instructions and schematic.
46F088. NET **10.95**

MONARCH



MODEL MT-500 MULTITESTER

Contains a sensing device to prevent overloading! Ranges: 20,000 ohm/v DC, 10,000 ohm/v AC. DCV: 0-2.5-10-50-250-500-5000. ACV: 0-10-50-250-500-1000. DC current: 0-0.05-5-50-500 mA. Resistance: 0-12K-120K-1.2 Meg-12 Meg. 5"x6 1/4"x1". With battery, leads.
46F091. NET **19.80**

MODEL MT-300 MULTITESTER

Compact, rugged. 30,000 ohm/v DC, 15,000 ohm/v AC. Ranges: DCV, 0-0.6-3-15-60-300-600-1200-3000. ACV, 0-6-30-120-600-1200. DC current: 0-0.03-6-60-600 mA. Resist: 0-10K-1M-10M-100M. Decibels: —20 to +46 db. Size: 5 7/8x3 7/8x1 3/4".
46F093. NET **16.80**

POCKET BATTERY TESTER

Model BT-1. Tests these voltages: 1.5, 3, 4.5, 6, 7.5. 9, 15, 22.5, 45, 67.5, 90, 240. Int. loaded. 3 5/8x5 1/4x1 5/8".
46F094. NET 8.48

COMPACT PRECISION VOM'S

20,000 ohms DC, 10,000 ohms AC. 1% prec. resistors Dec.: —20 to +62 db.

Type MT-200. Ranges DC Volts. 0-5-25-50-250-500-2500 volts at 20K ohms/volts. AC Volts: 0-50-100-500-1000 volts at 10K ohms/volt. DC: 0-50 ua 0-2.5 ma. 0-250 ma. 3 1/4x4 1/2x1".
46F066. NET **8.93**

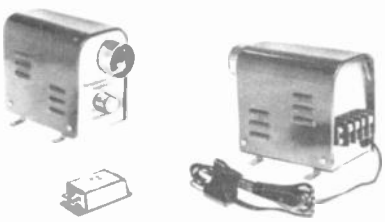
46F067. Case for MT-200 above..... 1.73

Type MT-220A. Single range selector dial. Ranges: DC Volts: 0-2.5-10-50-250-500-5000 volts at 20K ohms/volt. AC Volts: 0-10-50-250-500-1000 volts at 10K ohms/volt. DC 0-.05-5-50-500 ma. Resis.: 0-12K-120K-1.2 Meg. —12 Meg. 5 1/2 x 3 1/2 x 1 1/2".
46F086. NET **13.13**

46F087. Case for MT-200 above.... 1.92

PHOTOELECTRIC-EYE UNITS WITH BUZZER

A compact electric eye for home, office, shop, factory or warehouse. It has a multitude of applications: announces entry or departure of unseen persons, protects remote areas from intrusion, guards against theft and pilferage. Can be used in counting and sorting operations, etc. Almost universal in possible uses around the home or office. Complete unit consists of transmitter, receiver, buzzer, 20 feet of 4-conductor cable, and a comprehensive instruction manual, as well as all mounting brackets. Shpg. wt., 4 1/2 lbs.
46F045. DC-400. NET **29.95**

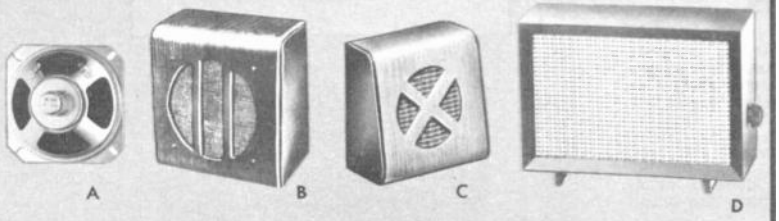


DC POWER SUPPLY

Switched Outputs

4.5V	6V
9V	12

Type MPS-6. Has isolated transformer with bridge rectifier, pilot light, filter and 5-way output binding post. Comes with a 6 ft. AC cord. Shpg. wt. 3/4 lbs.
46F046. NET **7.95**



POWERFUL 4" SPEAKER IN ATTRACTIVE 2-TONE WOOD BAFFLE

Fig. C. Ideal for intercom use. 2-tone wood cabinet with enclosed back, sloping front and flat base makes it practical for wall or desk mounting. The baffle contains a fine 4" speaker with a heavy ticonal magnet. Voice coil imp., 8 ohms. Wt., 3 lbs.
46F036. NET **2.99**

4 INCH REPLACEMENT SPEAKER

Wide range circular speaker for replacement or extension applications. Flat response from 200-8,000 cycles. Voice coil imptdance: 4 ohms. 1.35 oz. magnet.
46F095. Type SP-4. **NET** ..... **.93**

4x6" PM SPEAKER IN FINISHED CABINET

Fig. D. Imported remote speaker unit consisting of a quality 4"x6" PM speaker in a piano finished cabinet; in rich walnut with an attractive contrasting grille cloth covering. Volume control. Size: 9 1/2"x6 1/2"x3 1/2". Shpg. wt., 3 lbs.
46F038. NET **6.68**

8" SPEAKER IN WOOD BAFFLE

Fig. B. Sturdy, powerful, wide range speaker in attractive walnut baffle. Ideal for all extension uses. 8" speaker has heavy magnet structure and will deliver smooth sound from 75 to 9000 cps. 8 ohms. Wt.. 6 lbs.
46F043. NET **5.55**

VENTILATION FAN

Whisper Quiet

Keeps your audio components-amplifiers, tuners, and Ham gear etc.—cooled off; thus extending their life and improving their performance. Has 3" blade, oilite bearings, universal mounting bracket, and cord. Uses very current and runs very quietly. You'll find a multitude of uses for it around the home. Wt. 1 lb.
46F047. VF-1. NET **3.23**

PERMA-POWER P.A. EQUIPMENT

ROVING ROSTRUM PORTABLE PUBLIC ADDRESS SYSTEM

Model S120. Self-contained portable transistorized public address system which operates from flashlight batteries. Weighs only 22 lbs., yet provides 25 watts of power, ample for audiences of up to 1000. Part of unit becomes rostrum with built in amplifier and speaker. Other part becomes remote speaker which may or may not be used. Inputs for phonograph, radio, microphone or tape recorder. Comes with cardioid dynamic microphone with 10 foot cable, lavalier cord, gooseneck mike stand, 40 foot cable for remote speaker. Each speaker is 6" x 9" with a 10 oz. ceramic magnet. Luggage style case of scuff-proof Royalite. Size: 8⅞"H x 16¾'W x 17½"D. Wt. 26 lbs
92F083. NET **189.95**

Model S110. As S110, but with omnidirectional mike.
92F095. ..... **149.95**

Eveready type E95. Alkaline "D" cells for use with above, 10 required. Shpg. wt., 5 oz.
49F378. NET ..... **.49**

DIPLOMAT PORTABLE PUBLIC ADDRESS SYSTEM

Model S200. Transistorized 25 watt public address unit completely contained in attache case. Easily carried from place to place, weighs only 16½ lbs. No need to plug in, operates from self-contained flashlight batteries. Supplied with low impedance omnidirectional dynamic microphone, 10 foot microphone cable and lavalier cord. Microphone may be used with several hundred feet of cable if desired. Speaker is a 6" x 9" unit with 40 feet of cable for operation away from amplifier if desired. Anti-feedback housing permits microphone to be used near speaker. Inputs for phonograph, radio and microphone; outputs for auxiliary speaker and tape recorder. Size: 12"H x 19"W x 4¼" D. Shpg. wt., 25 lbs.
92F093. NET **119.95**

Model S1030. Microphone kit for audience participation. Use two mikes simultaneously. Kit includes: additional omnidirectional microphone with 10 foot cord, mixer and 25 foot extension cord.
92F094. NET **39.95**

Eveready type E95. Alkaline "D" cells for use with above, 10 required. Shpg. wt., 5 oz.
49F378. NET EACH ..... **.49**

HOLMIN

MODEL A-12S TRANSISTORIZED VOICE GUN

A self-contained public address system consisting of microphone, transistor amplifier, speaker and power supply in one unit. Its sharp, clear voice cuts through din and confusion without wait for "warm-up" acting the moment you push the button in the pistol grip. The Voice Gun uses transistors for longer life and efficiency. It has a waterproofed magnetic microphone and thermistor for temperature compensation. Amplifier circuit is printed on miniature chassis. Uses ordinary pen-light batteries. Dimensions: Diameter of bell—7¼"; length—9½"; overall height—10½". 2 stage push-pull class B printed circuit amplifier. 3 transistors, 1 driver. 2 output. Industrial "paging type" speaker with an 8 ohm impedance. Molded Cycolac battery clip with silver plated contacts. Dual spring, "push-to-talk" type switch for ease of use and positive action. Complete with batteries and carrying strap. Net wt. 3¼ lbs. Shpg. wt. 5¼ lbs.
88F205. NET **89.96**

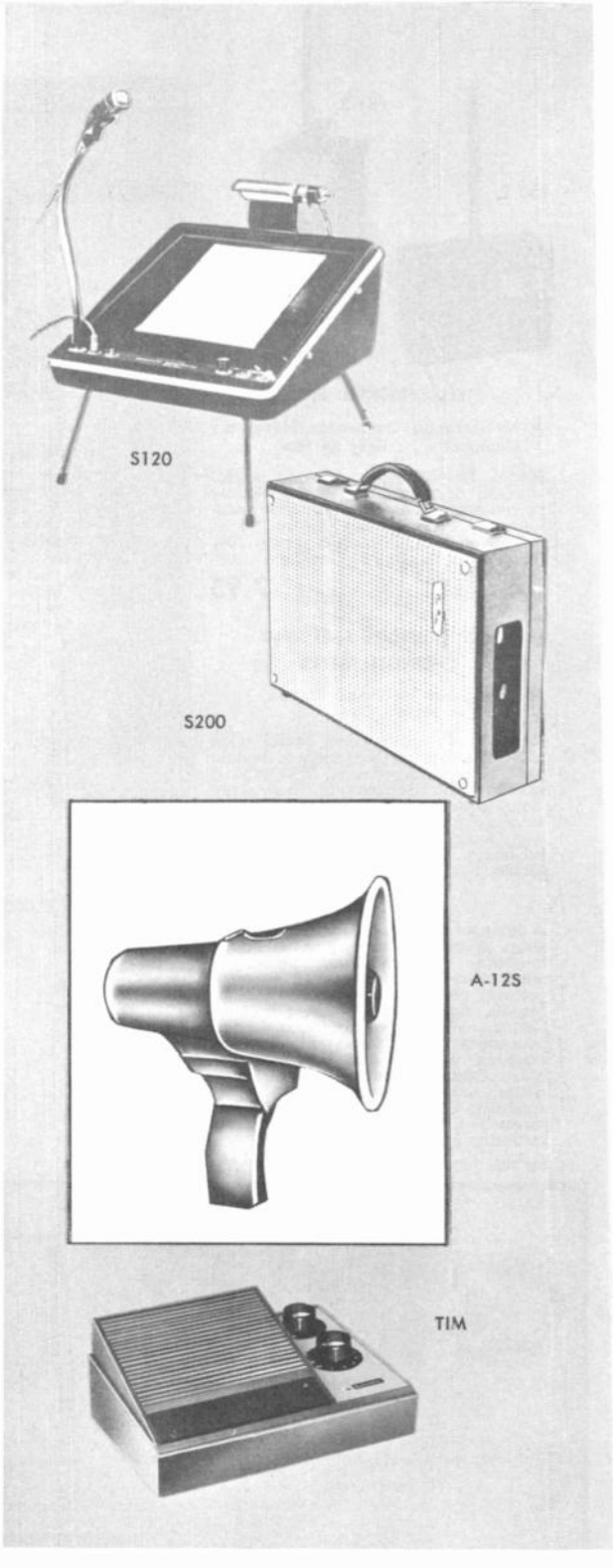
BOGEN INTERCOMS

Series "T" Intercoms offer unlimited flexibility in compact, powerful and virtually maintenance-free equipment. 6 or 12 station systems are available with fully transistorized circuitry. Can select (1) all master systems using all TIA-6 or TIA-12; (2) single master to remote (TIA-6 or TIA-12) and RIA-1 remotes; (3) or a "single master-multiple remote" system. Bogen's Series "T" Intercoms designed for installation so remote can have either private operation (for inter-office situations) or non-private operation (for stockroom or other areas where a remote must reply without operating any controls). Unique low-profile styling, economical, and time tested circuitry.

Model TIM-12. MASTER STATION: For intermix systems combining up to 12 masters and remotes in any combination. Volume control, extra-wide talk-listen bar, 12 position selector switch including "mute" position. From 117 volts AC; 7 watt power consumption. 8 ohm speaker impedance. Dimensions: 7¾" w. x 4" h. x 7" d. Shipping wt., 4 lbs.
96F783. NET **47.95**

Model RIM-6. SELECTIVE REMOTE STATION: Similar to TIM-12 with extra-wide talk-listen bar, high efficiency Alnico V matching loudspeaker. 6-position selector switch. Dimensions: Same as TIM-12. Shipping wt., 3 lbs.
96F784. NET **23.90**

Model RIA-1. REMOTE STATION: Can reply when called by any TIM-12 master; may initiate call to any preselected TIM-12 master. Dimensions: Same as TIM-12. Shipping wt., 3 lbs.
96F785. NET **10.85**



CABLE REQUIREMENTS FOR SERIES "T"

All Master System: Total number of unshielded conductors common to all stations one more conductor than number of stations in system 6 master system requires 7 conductor cable.

Single Master to Remote: Use 3 conductor unshielded cable from master to eac remote.

All Transistorized Home Intercom-Radio Systems TALK-A-PHONE

This compact home intercom-radio system brings to the home owner the safety and convenience of complete intercommunication in all rooms, as well as the enjoyment of built in radio (optional) all through your house. Master stations, staff stations, and outdoor substations can be combined in any desired arrangement, up to a total of 8 stations. Both masters and staffs can "call" and "converse" with any other station or stations in the system. Outdoor "subs" can be called by, and answer any master or staff station. Outdoor "subs" are non-private. All master and staffs have their own volume control. Optional built-in radio incorporates the most advanced superheterodyne circuit. Has a tuned RF stage and two IF stages for sensitivity and selectivity, full A.V.C., three audio stages with push-pull output. Any 9-volt dry battery will operate this system.

CHART "A"—Rooms Originating Calls							
Location	To Kitchen	To Bedroom	To Den	To Baby	To Laundry	To F. Door	To R. Door
Kitchen		X	X	X	X	X	X
Bedroom	X			X	X	X	X
Den	X			X		X	X
Baby							
Laundry	X			X		X	
F. Door							
R. Door							

CHART "B"—Rooms Receiving Calls							Then Use
From Kitchen	From Bedroom	From Den	From Baby	From Laundry	From F. Door	From R. Door	
	X	X		X			HI-9 or HI-9R
X		X		X			HI-8
X	X			X			HI-8
X	X	X		X			HI-4
							HI-4
X	X	X		X			HI-1
X	X	X		X			HI-1

CENTRAL MASTER STATION AND POWER SUPPLY UNIT

Only one Central Master Station (with or without radio) is used per system. Can call and talk to any other station. Listens to any sub-station or staff without adding noise to latter even during other calls. Has all transistor amplifier and operates from any 9-volt dry battery or HI-PS Power Supply Unit. Front panel: 15¼"x5¼". Plaster Ring Approx.: 14$\frac{15}{16}$"W x 4⅜"H x 3½"D.

8 STATION MASTER

No. HI-9R. 8 Station Master With Built-in Radio. All transistor (7 triodes and two diodes). Has optional built-in radio which incorporates the most advanced Super Heterodyne circuit. Has a tuned RF stage and two IF stages for sensitivity and selectivity, full A.V.C., three audio stages with push pull output. Master station has 8 station capacity. Does not plug into electrical outlet. With plaster ring and full instructions. Less battery. Shpg. wt., 6½ lbs. For flush wall mtg.
95F687. NET **92.00**

No. HI-9. 8 Station Master. All-transistor (3 audio stages with push-pull output). For flush wall mounting. 8-station capacity. Does not plug into electrical outlet. With plaster ring and complete instructions. Less battery. Without built in radio. For flush wall mounting.
95F686. NET **59.00**

SUB-STATION

No. HI-1. Outdoor Sub-Station. For front and rear doors. Complete with pushbutton bell to connect to regular house chime or buzzer, and illuminated nameplate. When caller rings, you may answer from any Master or Staff Station. For flush wall mounting; needs 2-inch square opening, 2 inches deep. With weather-resistant speaker, mounting gasket, and full instructions. Front panel: 3⅝"W x 5⅝"H. Shipping weight: 1 lb.
95F690. NET **16.70**

T-LR-2R. Alternate Outdoor Sub-station without push button or name plate.
95F442. NET **14.40**

T-SM. Surface mounting accessory for T-LR-2R.
95F443. NET **4.35**

O-SM. Surface mounting accessory for HI-1.
NET. **3.35**

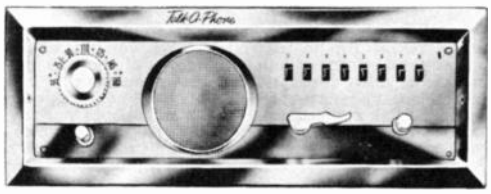
STAFF STATION

No. HI-8. Staff Station. Any staff can call and converse with any other station, or stations in the system. Can be mounted on wall, cabinets, etc., or can stand on tables, shelves, etc. Does not plug into electrical outlet. Has private or non-private position as desired. For flush wall mounting. With plaster ring and full instructions. Front panel: 15¼" x 5¼". Plaster ring approx.: 14$\frac{15}{16}$"W x 3⅜"H x 3½"D. Shpg. wt., 5 lbs.
95F689. NET **32.50**

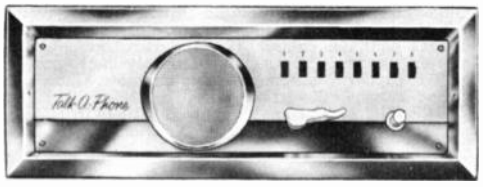
No. HI-4. Four Station Staff Station. Same as above except can call only 3 stations. Front panel: 4$\frac{13}{16}$x7$\frac{15}{16}$". With plaster ring. Plaster ring approx.: 4⅛x6½x2". Shipping Weight, 3¾ pounds. For flush wall mounting.
95F688. NET **18.80**

T-SM-L. Surface mounting assembly for HI-4 staff station. Gray finish. With instructions, knobs, brackets. Shpg. Wt., 2 lbs.
95F685. NET **4.95**

No. HI-PS. Power Supply Unit. Only one necessary per system. Plugs into ordinary home electrical outlet of 110-120 volts, A.C., and can be placed out-of-the-way in basement, attic, closet, etc. When power supply unit is used, entire system actually consumes less electricity than even one electric clock. (Optional—not required when battery is used). Shipping weight: 2 lbs.
95F695. NET **16.70**



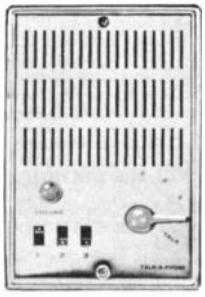
HI-9 or HI-8



HI-9R

Model HI-1

Model HI-4



ACCESSORIES

No. HI-SM. Housing Assembly. Encloses any 8-station master or staff station to enable mounting on wall cabinets, etc. Has adjustable brackets. Gray finish. Chrome mounting knobs and brackets. With instructions. Shpg. wt.: 2½ lbs.
95F692. NET **11.70**

No. HI-JB8. Optional Junction Box for connecting Masters and Staffs, up to a total of 8 stations.
95F693. NET **4.95**

Type 4F6H. Burgess 9 volt battery. To be used when HI-PS Power supply is not employed.
49F254. NET **5.53**

No. 6226. Cable (13-pair) for connecting all Master and 8-station Staff.
36F439. NET, per ft. ..... **.44**

No. 6202 Cable (1-pair) for connecting outdoor Sub-Stations, Battery or Power Supply Unit.
36F448. NET, per ft. ..... **.048**

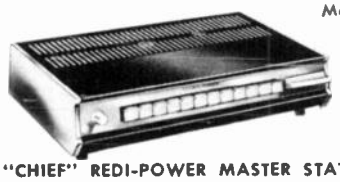
No. 6214. Cable (7 pair) for connecting HI-4 to master station or nearest 8-station Staff.
36F437. NET, per ft. ..... **.23**

TALK-A-PHONE Intercommunications Systems

T-C-42
T-C-42M

T-C-41
T-C-41M

Master Station



"CHIEF" REDI-POWER MASTER STATIONS

"Chief" Redi-Power Master Stations have built-in extra power. This added power (up to 20 watts), gives you the additional volume required when calling a number of stations at one time or calling noisy locations. Satisfies need for power boost without eliminating return speech. Volume is self-compensating whether 2, 6 or 12 stations are called simultaneously. Each station receives its pre-determined volume with no division of output when more stations are called at one time. One or more Redi-Power Masters can be combined with regular Chief Masters and staff stations in same system. Other features include: (1) Incoming call chime. (2) Monitoring signal. (3) Dynasonic selector that permits intermixing of Master and Staff Stations and variation of performance. (4) Volume Control. (5) Noise-free voice range power. (6) Multi-magic station selector which enables selection of up to 30 stations with only 12 push buttons. (7) Uni-trans dictation control. (8) Operation on 110-120V. (9) External relay control for use in extremely high noise level areas. (10) In modern, custom-designed cabinets. Charcoal gray and brushed chrome. Size: 13x8¾x3⅛".

Model T-CRP-5912. Master for 12 stations. Wt., 18 lbs.
95F432. NET PER STATION **158.00**

ALL TRANSISTOR INTERCOMS

"CHIEF" MASTER STATIONS

Can be used in any combination—with all Masters—one Master and Staff Stations—or a number of Masters combined with Staff Stations. 6, 12, and 20 Station Masters, together with Staff Stations can be intermixed in same system. Masters can talk with any other Master, as well as with Staffs. Staff Stations can answer all Masters and can orginate calls to one or two Masters, depending upon Staff's capacity. Staff Stations are not connected to electrical outlet.

Exclusive Features: (1) Dynasonic Design enables stations to perform "privately" (so no one can listen in) or "non privately" (for reply without use of controls). The same station can be "private" to one or more Masters and "non private" to others, and retain full communication facilities. (2) Monitoring signal visually indicates to a "non private" station that it is being monitored. (3) Busy signal visibly indicates when station you call is "busy". All units have facility to override "busy signal" for important calls. (4) Multi-magic station selector enables selection of up to 30 stations with only 12 push butons. (5) Unitrans dictation control. (6) External relay control enables Master to activate external relays for operating siren, gong, light, etc. (7) Reciprocal Power supply—Each Master operates on 100-120 volts AC only and should be plugged in. Where no electrical outlet is available up to 30% of the Masters in the system can operate without being plugged in. (8) Noise free voice range power. The exclusive patented circuit enables perfromance without noise, hum or distortion, when used with talk-a-phone cable. (9) Hi power staff stations and horns. T-HP-3 provides more than twice the volume of universal Staff. T-C-20 provides about 4 times greater valume . . . more with Redi Power Master. (10) Wall switch combines with Talg-a-phone Horn or Hi Power staff to add origination of call feature. (11) Incoming call chime. All "Chief" and "Chief Redi-Power" Master Stations come complete with junction box and built in power supply attached by 6' flexible cable. Master size: 14" width, 3⅛" height, 8¾" depth. For 110-120 volts AC only. U.L. approved.

Model T-C-4906. Master for 6 Stations. Shpg. wt., 13 lbs.
95F425. NET PER STATION **93.00**

Model T-C-4912. Master for 12 Stations. Shpg. wt., 14 lbs.
95F426. NET PER STATION **104.50**

Model T-C-4920. Master for 20 Stations. Shpg. wt., 17 lbs.
95F427. NET PER STATION **124.00**

CHIEF STAFF STATIONS ACCESSORIES

For use with any "Chief" Master, Staff Stations may be connected "privately" or "non-privately". Connected "non-privately", Master can be answered at a distance from the Staff without operation of any controls. "Non-private" Staff may reply to all Masters in the system (whether connected directly to them or not) and can originate calls to one or two, depending upon its capacity. Connected "privately" no one can "listen-in", but any Master can call. Private Staff can originate calls and reply to 1 or 2 Masters depending on its capacity. Staff Stations do not need electrical outlets.

Model T-C-41. Staff Originates calls to 1 Master. Gray leatherette and brushed chrome. Size: 7½x8¾x3⅛". 8 lbs.
95F428. NET PER STATION **24.50**

Model T-C-41-M. Same as T-C-41 but with painted finish. 8 lbs.
95F429. NET PER STATION **19.95**

T-C-41R. Same as T-C-41, but for flush wall mounting. Stainless steel front panel. 4 lbs.
95F433. NET PER STATION **19.95**

CABLE FOR CHIEF SERIES

36F447. Type 6206. 3-pair cable for connecting T-C-20, T-C-41, T-C-42, and T-HP-3 with call origination. **NET per foot** ..... **.11**

36F437. Type 6214. 7-pair cable for interconnecting T-C-4906 Masters. **NET per foot** ..... **.23**

36F439. Type 6226 13-pair cable for interconnecting T-C-4912, T-C-4920, and T-C-RP5912 Masters. **NET per foot** ..... **.44**

36F446. Type 6902. Cable 2 cond. for connecting T-C-20, and T-HP-3 without origination of call. **NET per foot** ..... **.028**

Model T-C-42. Staff originates calls to 2 Masters. Gray leatherette and brushed chrome. 7½x8¾x3⅛". 8 lbs.
95F430. NET PER STATION **30.50**

Model T-C-42-M. Same as T-C-42 but with painted finish. 8 lbs.
95F431. NET PER STATION **26.25**

Model T-C-42R. Same as T-C-42 but for flush wall mtg.
95F445. NET PER STATION **26.25**

Model T-HP-3. Hi-Power Staff Station for wall mounting. Charcoal gray metal case. Size: 12x8x12". 5 watt capacity. Shpg. wt., 8 lbs.
95F415. NET PER STATION **19.40**

Model T-HP-3V. As above, but with built-in volume control, adjustable to full output.
95F444. NET PER STATION **24.60**

Model T-C-20. Nine-inch Weatherproof Re-Entrant Horn. 15 watt capacity. With mounting bracket. Charcoal gray. Size: 12x8x12". Shpg. wt., 5 lbs.
95F416. NET PER STATION **29.25**

Model T-C-20V. As above, but with built-in weather resistant volume control, adjustable to full output.
95F446. NET PER STATION **38.80**

Model T-S-101. Wall Switch for originating calls to one Master through T-C-20, or T-HP-3 in Chief Systems. Gray. Wt., 1 lb.
95F434. NET **8.20**

T-S-102. Same as T-S-101, but for call origination to 2 Masters.
95F435. NET **13.50**

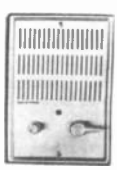
T-S-111. Wall Mounted Cradle Phone. For use with T-HP-3(V) or T-C-20(V).
95F447. NET **44.00**

Model T-W-1. Wall mounting brackets for T-C-41, T-C-41M, T-C-42, and T-C-42M.
95F436. NET per pair ..... **.60**

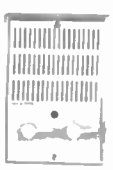
T-S-111

HOW TO DETERMINE CABLE REQUIREMENTS

To inter-connect Master Stations, measure from first Master to second Master only, from 2nd to 3rd Master only, etc., until last unit in system is reached and total. For T-C-4920 use two lengths of 6226 Cable To connect T-C-41, T-C-20, or T-HP-3 Staff Stations, measure from Staff Station to one Master to which Staff Station originates calls. To connect T-C-42 Staff Stations measure separate length of cable from Staff Station to each Master Station to which staff originates calls.



T-C-41R



T-C-42R

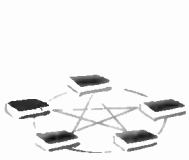
Deluxe Intercom Systems

TALK-A-PHONE

SUPER-SELECTIVE ALL MASTER SYSTEMS

Versatile intercom system consisting entirely of Masters. Permits several separate conversations to be carried on without interfering with each other. Provides absolute privacy. Stations may be located even 1000 feet apart. Operates on 110-120 volts, AC-DC. Complete with tubes and instructions. Charcoal gray and brushed chrome. Cabinet size, 10½"x8¾"x3⅛". Shpg. wt. 8 lbs.

95F406. Model T-LS-5. For 5 stations. **NET** **41.00**
95F407. Model T-LS-10. For 10 stations. **NET** **50.40**



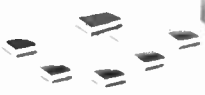
Model T-LS-5

Model T-LS-5

HI-VOLUME MASTERS

Operate the same as the above masters with the added feature of 10 times volume output. For 110-120 volts, AC only. Masters T-AC-510 and T-AC-505 may not be intermixed with any other Master.

95F437. Model T-AC-505. Hi-Volume, 5 station. **NET** **50.40**
95F438. Model T-AC-510. Hi-Volume, 10 stations. **NET** **61.20**
36F441. 5506 (6-conductor) cable. For interconnecting T-LS-5 or T-AC-505. **NET** per foot ..... **.11**
36F442. 9911 (11-conductor) cable. For interconnecting T-LS-10 or T-AC-510. **NET** per foot ..... **.21**



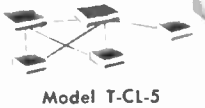
T-LM-5

Model T-LC-2

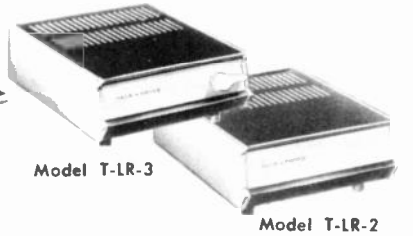
COMBINATION SYSTEMS

For the more flexible type of system requiring the operation of more than one Master, along with Sub-Stations which need not originate calls. Masters may talk to each other and to each Sub in the system selectively; or, one or more Subs can be exclusive to only one Master. Masters can switch themselves "private", so that other Masters cannot listen in to them, or "non-private" at will. Model T-CL-5 has 5 station cap. Model T-CL-10 has 10 station cap. Masters in charcoal gray and brushed chrome cabinets. 10½"x8¾"x3⅛", Sub-Stations; 7½"x8¾"x2⅞". With tubes and instructions. Masters operate on 110-120 volts AC-DC. Electric curr. not needed for Sub-Stations. Shpg. Wt. 8 lbs.

95F408. T-CL-5. Master for 5 stations. **NET** **49.40**
95F409. T-CL-10. Master for 10 stations. **NET** **59.30**
95F410. T-LR-2. Sub-Station (in same deluxe finish as Masters) for use with either of above Masters. Shpg. wt. 6 lbs. **NET** .. **18.50**
95F411. T-LR-2M. Sub-Station (as above, but in grained, baked enamel finish) for use with either Master. Wt. 6 lbs. **NET** **14.40**
95F442. T-LR-2R. Sub-station for flush, wall mounting **14.40**
95F443. T-SM. Surface mtg. accessory for T-LR-2R **4.35**



Model T-CL-5



Model T-LR-3

Model T-LR-2

HI-VOLUME MASTERS

Operate the same as the above masters with the added feature of 10 times volume output. For 110-120 volts, AC only. Masters T-AC-610 and T-AC-605 may not be intermixed with any other Master.

95F439. Model T-AC-605. Hi-Volume, 5 stations. **NET** **59.30**
95F440. Model T-AC-610. Hi-Volume, 10 stations. **NET** **68.60**
36F438. 6210. 5 pair cable for interconnecting T-CL-5 or T-AC-605. **NET per foot** ..... **.20**
36F439. 6226. 13 pair cable for interconnecting T-CL-10 or T-AC-610. **NET per foot** ..... **.44**
36F446. 6902. 2 conductor cable for connecting Sub-Station to nearest master. **NET per foot** ..... **.028**

WIRELESS 6 AND 12-STATION SELECTIVE SYSTEM

Incorporates the exclusive "Sonic Gate" together with the "Squelch" circuit to effectively suppress line noises and hum. Simple to install. Requires no wiring, no cable. Use where any 110V AC or DC electrical outlets are available. Each Master Station equipped with a Six or 12-channel Selector. Any Master can transmit on any of its channels, and receive calls on the channel it elects to use. Each Master with tubes and instructions. Size 14x8¾x3⅛". Wt. 12½ lbs.

95F418. T-LCM-8906. 6 Channel Master **93.00**
95F441. T-LCM-8912. 12 Channel Master **104.50**

Where some Wireless locations need not originate calls, but must reply when called. Staff Stations are available. Size: 10½x8¾x3⅛". Shipping weight, 6 lbs.

95F419. T-LCS-901. For Channel 1 only. **NET** .. **53.50**
Note: Staff stations for channels 2 to 6 available on special order.

2-STATION WIRELESS SYSTEM

A quality intercom system for Office, Factory, and Farm. No installation. Plug into 110V AC or DC electrical outlet. Uni-Trans gives you dictation and supervisory control. Provides continuous transmission when set for Uni-Trans. Cabinets are charcoal gray and brushed chrome. 10½x8¾x3⅛". Two Master stations. With tubes and instructions. 16 lbs.

95F413. Model T-LC-33. Two station system. **NET** **93.00**
95F414. Model T-LC-17. Additional single station. 8 lbs. **NET** **46.50**

MASTER SELECTIVE INTERCOMMUNICATION SYSTEMS

A system consisting of one Master Station and one to ten Sub-Stations. Only the Master Station plugs into an electrical outlet. System has optional feature whereby Sub-Stations can be connected "privately," or "non-privately" and still originate calls to the Master under either application. Cabinets are charcoal gray and brushed chrome, 10½"x8¾"x3⅛". Subs measure 7½"x8¾"x2⅞". With tubes and instructions. For 110-120 volts, AC-DC. UL approved. HIGH VOLUME OUTPUT MASTERS T-AC-5406 and T-AC-5411 operate as above with the added feature of 10 times volume output, for large areas or noisy locations. Operate on 110-120 volts, AC only. Note: Only one master station can be used in each Master Selective System. Weight: Masters—8 lbs., Sub-Stations—6 lbs.

95F400. T-LM-5 Master. For up to 5 Subs. **NET** **41.00**
95F401. T-LM-10 Master. For up to 10 Subs. **NET** **50.40**
95F404. T-AC-5406. High Vol. Master. 5 Sub. capacity. **NET** **50.40**
95F405. T-AC-5411. High Vol. Master. 10 Sub. capacity. **NET** **61.20**

95F402. T-LR-3. Sub-Station (in same deluxe finish as Masters) for use with any of above Masters. **NET** **18.50**

95F403. T-LR-3M. Sub-Station (as above, but in grained, baked enamel finish) for use with any of above Masters. **NET** **14.40**

36F440. 5303. Three-conductor indoor cable for connecting Sub-stations to Master. **NET per ft.** ..... **.04**

36F449. 6303. Three conductor shielded cable for connecting Sub-stations to Master. **NET per ft.** ..... **.065**

2-STATION INTERCOMMUNICATION SYSTEM

Provides voice communication between any two points. "Elsie" is a packaged item complete with a Master Station, a Sub-Station and 50 ft. cable. For 110-120 volts, AC-DC. U.L. approved. Master size: 10½x8¾x3⅛". Sub size: 7½x8¾x2⅞". Shpg. wt. 13 lbs.

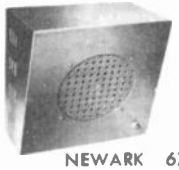
Model T-LC-2. 2-Station system complete with tubes. **42.50**
95F412. NET
36F440. Type 5303. Extra 3-cond. cable. **NET per ft.** **.04**
36F449. 6303. 3-cond. shielded cable. **NET per ft.** **.065**

TC-20V

ADDITIONAL ACCESSORIES FOR COMBINATION & MASTER SELECTIVE SYSTEMS

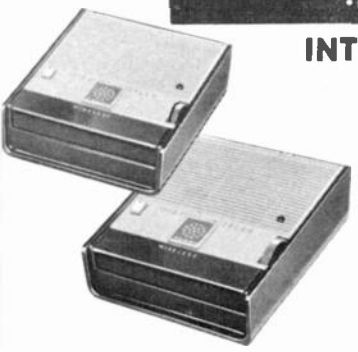
95F415. T-HP-3. Hi-Power Staff Station for wall mounting. Charcoal gray metal case. Wt., 8 lbs. **NET** **19.40**
95F444. T-HP-3V. Same as above, but with built-in volume control, adjustable to full output. Wt., 9 lbs. **NET** **24.60**
95F416. T-C-20. Nine inch weatherboard Re-entrant Horn. Charcoal gray color. Wt., 5 lbs. **NET** **29.25**
95F446. T-C-20V. Same as above, but with built-in weather resistant volume control, adjustable to full output. Wt., 5 lbs. **NET** **38.80**
95F417. T-S-100. Wall switch for origination of call through T-C-20 or T-HP-3 with Master Selective Systems. **NET** **4.10**

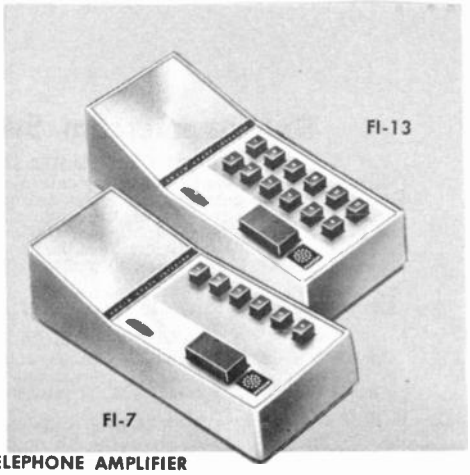
T-HP-3V



FANON

INTERCOMS





TRANSISTORIZED TELEPHONE AMPLIFIER

Model FTA-4. Permits use of telephone with hands free to type, check orders, take notes, etc. Ideal for home, office, shop, or any place where it is often necessary to walk away from phone. Powerful four-transistor amplifier operates from standard 9V battery for 500 hours or more. Easy to use: when phone rings, place its handset in cradle of FTA-4; unit switches on automatically. No installation or hookup necessary. 2" speaker in 3½x3¾x2" baffle; main unit is 10½x4½x3¼". Shpg. wt., 4 lbs.

95F621. NET **14.95**

WIRELESS INTERCOM

Model 1640. Two-station wireless intercom uses 117VAC line as hookup; only a standard household power socket is required to operate. Built-in power supply; no batteries. Each master has on-off volume control, talk-listen switch (may be locked in "talk" position). Smartly finished in beige with chrome trim. 4⅜x5⅛x1½". Wt., 3½ lbs.

95F615. NET **29.95**

Model 1641. Single remote station for above.

95F616. NET 15.95

Type 1600. Two station ultra-sensitive intercom system. Three transistor circuit and push-pull amplifier for quality sound. Comes in high impact styrene cabinets. Built-in 117 VAC power supply. Talk-Listen switch with talk-lock position for hands-free operation. Beeptone signalling circuit works even if the system is off. Color: Beige. Size: 4⅜"x5⅛"x1½". With 50 ft. of cable. Wt., 2½ lbs.

95F617. NET **19.95**

Type 1605. Single five-station master of same design and circuitry as type 1600 above. Use with up to four type 161 and 162 remote units. Each remote may be spoken to individually. Uses 2-cond. cable, not supplied. See bottom of Column 3.

95F618. NET **15.95**

Type 161. Outdoor remote for above.

96F619. NET 5.25

Type 162. Indoor remote for above.

95F620. NET 5.25

SEVEN- AND THIRTEEN-STATION TRANSISTORIZED INTERCOMS

Model FI-7. Seven-station intercom master for use in 7-unit all-master system (each station can call any other station) or master-to-6-remotes system. One of the six positions may be used to page a noisy area using PR-15 paging relay (at right) and a paging amplifier. For quiet areas, intercom power output will be sufficient and an ordinary remote unit (see Model FIR) may be used. All-master systems can carry three simultaneous conversations. All-master system requires one conducstor plus one additional conductor per unit; master-to-remotes system requires 3-cond. cable to each remote; units supplied less cable. Controls: on-off/volume, talk/listen switch with talk-lock position, station selector buttons. 9½x4x2½". Wt., 4 lbs.

95F624. Single Master Unit. **NET** **30.95**

Model FI-13. Master unit identical to FI-7 above, except for use in system of 13 masters or master-to-12-remotes (using FIR remotes, below). Up to six simultaneous conversations on an all-master system. Operates from 115 VAC.

96F625. Single Master Unit. NET **42.95**

Type FIR. Remote unit for use with FI-7, FI-13 above. Same styling. Has privacy switch to cut out other stations, talk/listen switch. Wt., 3 lbs.

95F626. Remote Unit. NET **9.95**

Type PR-15. Paging relay. Wt., 4 lbs.

95F627. NET 19.95

TWO-CHANNEL WIRELESS TWO-STATION INTERCOM

Model FIW-2. Wireless intercom system may be expanded with up to two additional single-station units (Model FIW-1, below). Two communication channels are provided so system can carry two simultaneous conversations. No installation or hookup is required: simply plug stations into 115 VAC outlets on the same power line. Channel A is on 225 kc and channel B is on 160 kc (will not interfere with AM radio reception); exclusive lock-out filters prevent inter-channel crosstalk. Each unit has on-off/volume control, talk/listen switch (may be locked in "talk" position), and channel selector buttons. Handsome long-line styling for desk or wall use mounting; two-tone beige finish. 9½x4x2½". Wt., 7 lbs.

95F622. NET .....

Model FIW-1. Additional single station to add to above system. Wt., 4 lbs.

95F623. NET **30.75**

TWO-STATION DELUXE INTERCOM SYSTEM

Model FIC-3. Two-station system consists of one master and one indoor remote. One additional remote can be used if desired (Model FIC-below). Master has on-off/volume control, standby and talk/listen switches, and station selector buttons. Remote has privacy switch (cuts out other stations) and call button. Operates from 117VAC, UL approved. Durable plastic construction, gray with charcoal buttons and base. Requires 3-cond. cable. Employs 13-ohm, 3½" speaker. Size 9½x4x2½". Wt., 6 lbs.

95F628. NET **35.50**

Model FIC. Additional remote unit for above system. Wt., 3 lbs.

96F629. NET **10.75**

2WP. 50' 2-cond. cable—plug terminations, for models 1600 and 1605.

95F630. NET **2.00**

2WP-100. 100' 2 cond. cable—plug terminations, for models 1600 and 1605.

95F631. NET **3.40**

Newark-Denver Electronics Supply Corp., 2170 So. Grape St., Denver, Colo. 80222

GARAGE DOOR OPENER

All transistor garage door opener with solid state electronic and electrical circuitry for extreme reliability and ¼ hp. 117V capacitor-start type motor. Radio signal opens door, turns on light then closes and locks door and turns off light. Easily handles any track guided, single or double door up to 20x8 feet weighing up to 200 lbs. with only 2 inches of headroom space needed. New pulse tone modulation coding system gives complete signal privacy and freedom from any interference. Special safety features include automatic door stop if any obstacle is encountered and a sensitive safety clutch which permits just enough force to make travel gentle and door easy to stop—permanently lubricated. Works from any standard electrical outlet. Small, portable all transistor car transmitter opens door from 100 feet. Requires no installation, can be carried in pocket, purse or glove compartment or clipped to sun-viser. Attractive 2¾"x3¾"x1" plastic case. Complete with 9 volt transistor battery. Wall mounted push button operates door from inside garage or any convenient place. Key operated switch is also available for outside locations.

Model G-6101. Has Velvet-Glide electronic clutch system. Automatic garage light control, turns light on as door opens. Stop control and pulse tone modulation. U.L. approved.
92F085. NET **149.50**

Model G6303. Electro-Lift, has automatic light control. Solid state and variable speed motor. U.L. approved.
92F070. NET **119.95**

Model 374. Additional portable transistorized transmitter for second car. Wt. 1 lb.
92F086. NET **19.50**

Model G1011. Key switch. Operates system manually. Shpg. wt., ¼ lb.
92F087. NET **4.20**

Model G6106. Complete system with installed transistorized transmitter. 12 v. car battery operation only. Operates from 200 feet. Shpg. wt. 70 lbs.
92F088. NET **149.50**

Model G375. Extra installed transistorized transmitter for second car. Shpg. wt., 7 lbs.
92F089. NET **19.50**

Model G470. Remote radio control system for use with existing electrically opened garage doors which are not radio controlled, and other radio control applications. Consists of G270 receiver and G370 transmitter (listed on opposite page). 7 lbs.
92F091. NET **56.00**

RADIO REMOTE CONTROL SYSTEM

Model RT400. Designed for maximum flexibility for short range remote control applications. Consists of portable pocket sized transmitter with self-contained battery, antenna and receiver with load switching relays. Operates over distances of up to 500 feet outdoors in unobstructed areas. Indoors operating distance is 50 to several hundred feet depending upon presence of metal in building structure. Receiver has range adjustment control to limit range when desirable. Receiver designed to operate from 115 VAC, either permanently connected or plugged in. It is mounted in a metal enclosure with flanges for wall mounting. Shpg. wt., 10 lbs.
92F092. NET **109.95**

FULLY TRANSISTORIZED RADIO CONTROLLED SWITCH SYSTEMS

Designed to fulfill the requirements of a highly reliable, low cost radio remote control. Eliminates the use of wires, phone lines or cables. A complete system includes transmitter, receiver, antenna and mtg. hdw. It may be used to control entrance gates, lighting, signalling, warnings, burglar alarms, machinery, signs, etc.

STANDARD SERIES

Lowest cost, highly reliable control systems for non-commercial and residential door control, gate operators, lighting controls, etc. Up to 200 ft. operation.

Type S Receivers

Single conversion, superheterodyne circuit. Crystal controlled. Complete with 8 ft. wire antenna and leads for input and output connections. Metal dust cover case. Sensitivity: 50 uv. Selectivity: 17 kc at 3 db; 50 kc at 60 db. Image 10 transistors + 1 diode. Relay Contacts: Rated at .6 amp., 24 VAC, normally open. Size: 9x8x3½". For 117 VAC (3.5 watts). Shpg. wt., 3 lbs.
92F683, Model G270. NET **36.50**

Type S Portable Transmitter

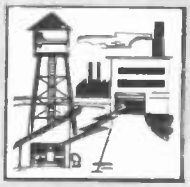
Model G370. Completely self-contained in attractive plastic case. Crystal controlled RF; pulse tone modulation. Built in ferrite rod antenna. Up to 200 ft. operation distance with type S receiver. Complete with 9-volt battery. Output 45 mw. Uses four transistors. Size: 2¾x3¾x1". Wt., 10 oz.
92F086. NET **19.50**

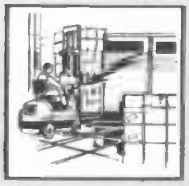
Type S Mobile Transmitter

Model G375. For permanent, wired-in installation, requiring security against loss or damage. Gives up to 300 ft. operation. For use only in vehicles with 12-volt, negative ground battery. Draws power only when button is pushed. Crystal controlled RF; pulse tone modulation. For use with car radio antenna, snap on mounting plate and metal dust cover case. Output 45 mw. 4 transistors. Size 4⅛x3⅛x2½". Wt., 1½ lbs.
92F089. NET **19.50**

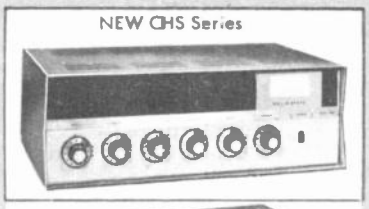
Buy at Factory Competitive Prices at NEWARK

Radio Remote Control System.





BOGEN AMPLIFIERS



CHB 10A

CHB 14A

CHB-20A

CHB 35A-50-100

MX6AT

BT 20-A

● NEW CHS 20

Challenger 20 W solid state public address amplifier. Freq Res: 50-15000 Hz ±2 db. Peak power 40 W. Controls: 1 mic, 1 1 vol (fader) for Aux. 1 & 2, master volume, bass, treble, power switch, and remote control or mic precedence (all inputs). Hum and noise: mic, —66db; aux, —70db. 8 silicon and 2 germ. semiconductors. 5½ x 10½ x 15¼". Shipping weight, 15 lbs.

96F500. NET. **92.25**

● NEW CHS 35

Challenger 35 watt solid state PA amplifier with 70 watts peak power. Response, 60-15,000 Hz ±2db. Output impedance; 4, 8 and 16 ohms, 25 and 70V. Controls: 2 indiv. mic., 1 vol. (tader) for Aux. 1 & 2, master volume, bass treble, power switch, and provision for remote control. Hum & Noise: Mic.: —64db, Aux.: —67db. Size: 5½" x 10½" x 15¼". Shpg. wt., 17 lbs.

96F501. NET. **104.95**

● NEW CHS 50

Challenger 50 watt solid-state (all silicon) PA amplifier. 100 watts peak. Response, 40-20,000 Hz ±2db. Output impedance: 4, 8, and 16 ohms, 25 and 70V. Controls & size are the same as the CHS 35. Hum and noise is well below rated output with Mic.: —67 db, Aux. —70db. Wt. 21 lbs.

96F502. NET. **127.45**

● NEW CHS 100

Challenger 100 watt solid state public address amplifiers. Designed for continuous operation at full output from —20°C (—4°F) to +65°C (+149°F.) Features high or low impedance microphone inputs (no transformers required). Separate master volume, bass treble controls; high input sensitivity; low noise and hum. Peak power: 200 W. Frequency response: 40-20,000 Hz ±2db. Output impedance. 2, 8, and 16 ohms. Hum and noise—Mic: 65db; Aux: 70 db. Power consumption: 105-125 V, 50/60 Hz. Semiconductors: Total 14 all silicon. 2 mic inputs with 2 aux inputs on fader. 5½ x 10½ x 15¼". Shipping wt., 24 lbs.

96F503. NET. **157.15**

● NEW MX6A-T

Solid-state mixer preamplifier. Features inputs for 4 high or low impedance microphones with individual volume controls. Excellent for electric guitars. The output (6v. @ 2%, 4v @ 1%, and 2v @ .05% dist.) is adequate to drive any packaged amplifier through its aux. input. Frequency response, 50-20 Khz ±2db. Hum/noise 68db below 5v. Size 9¼" x 6" x 2⅝". 5 lbs.

96F700. NET **44.90**

MODEL BT20A

Fully transistorized amplifier for 12 v. mobile operation. 25 watts at a frequency response of 250-12,000 Hz. ±3db. Microphone gain of 110db and Aux. gain of 90db Hum-noise 90db. Sensitivity: mic, 11 mV; aux, 0.4V. Output impedance 4, 8 and 16 ohms. Controls microphone and aux/power. 4½"W x 4"D x 6½"H. 5 lbs.

96F560. NET. **59.95**

MODEL BT35A

40-watt transistorized amplifier with less than 10% distortion. Ideal for mobile use on 12 volts direct current. Frequency response 150-15,000 Hz. at ±3db. Hum/noise —90db. Gain: mike. 110db, Aux. 90db. Sensitivity: Mike 1mv, Aux. 0.4v. Output 4, 8, 16 ohms Input for siren-foghorn. Controls: Mike, aux. volume, 4-position selector. 8"W x 6"D x 3"H. Shpg. wt , 8 llbs.

96F561. NET. **80.90**

MIKE CONNECTORS

Broadcast Type. (Cannon XL Series). For the Bogen M, MX, MU Amplifier.

39F480. NET. **1.42**

Screw Type Connector. For Challenger Line Amplifiers.

39F000. NET. . . . . . **.64**

MODEL CHB10A—10 WATT

Economy 10-watt amplifier. Frequency response 40-12,000 hz. ± 2db. Sensitivity: mike: 6mv.; phonograph: 0.2 volts. Tubes: 1-12AX7/ECC83, 1-7868, and silicon rectifier. Power consumption: 50 watts, 105-125 VAC, 50-60 Hz. Gain: mike: 110 db; phonograph: 90db. Tone control action: treble (10kc) —24db. Output impedance: 4, 8 and 16 ohms 25 volt line (62 ohm) 70v (500 Ω) 1 speaker socket and screw terminals. Controls: mike vol., phono vol., treble, power switch. Size: 5¾"Hx11¼"Wx8¼"L. Complete with enclosure. Shpg. wt. 12 lbs.

96F550. NET. **40.35**

CHB 14A

Power out of 14 watts at 5% distortion. Frequency response 20-20,000 hz ±2 db. 1 mike input and 2 aux. inputs. Mike gain 120db aux. 95db. Sensitivity 4Mv Hum/noise 55db below rated output. Controls: Mic. vol., Aux. fader Bass, treble and power. Tubes: 6AU6, 2-ECL86. 2-silicon rectifiers. Output 4, 8, 16 ohms with 25 and 70 volt lines. Power consumption 70 watts at 115 VAC, 50-60 hz. Size 6¾x15¾x10". Shpg. wt., 17 lbs.

96F551. NET. **49.95**

MODEL CHB20A

20-watt power amplifier with less than 5% distortion. Frequency response 20 to 20,000 hz. ±2db. Featuring high impedance microphone input and 2 aux. inputs. Hum/noise level —80db Gain: Mike. 125db, Aux. 100db Sensitivity Mike. 3 mv, Aux .5 v. Output 4, 8, 16 ohms and 25 & 70 volt line. Tone control: treble +10db-16db; Bass +14db-10db. Controls: Mike, aux., Master volume bass, treble, power on. 105-125V AC, 50-60 hz. Power consumption 90 watts. 15¾" wide, 10" deep. 6¾" high. 6¾ lbs. Wt. 17 lbs.

96F557. NET. **63.75**

MODEL CHB35A—35 WATT

35-watt power output @ 5% distortion amplifier. Freq. Resp.: 20-20,000 hz ±2db. Inputs: 2 microphones (high impedance), 1 magnetic phono cartridge, 2 auxiliary (high impedance, high level). Sensitivity: mike—4mv.; aux.—0.2 volts; mag. phone cartridge—12mv. Power consumption: 125 watts 105-125 VAC 50-60 Hz. Tubes: (s) 1-6EU7, 2-7868, 1-12AX7, plus 3 silicon rectifier; 1-6C4. Controls: mike #1 vol., mike #2 vol., fader for 2 aux. units, master volume, bass, treble, power switch, magnetic phono switch, provisions for remote control of 2 microphones or magnetic phono. Size: 6¾"H x 15¾"W x 10"D. Complete with enclosure. Shipping wt. 21 lbs.

96F554. NET. **77.25**

MODEL CHB50—50 WATT

Similar to CHB35A, but 50 W. output. Sensitivity: mike—5 mv.; aux.—0.3 volts; mag. phono cartridge—15 mv. Gain—mike: 120db; auxiliary: 95db; magnetic phono cartridge: 110db Power consumption: 150 watts, 105-125 VAC, 50-60 Hz Tubes: (5) tubes and silicon rectifiers 1-6EU7, 1-12AX7, 2-6L6GC,1-6C4. Tone control action: treble: (10kc) +10db to —15db; bass: (50 cps) +11db to —10db. Size: 6¾"H x 15¾"W x 10"D. Complete with enclosure. Shipping weight 21 lbs.

96F555, NET. **91.45**

MODEL CHB100—100 WATT

100 W amplifier that provides rugged dependability in all low-power applications. Frequency res: ±2 db, 20 to 200,000 Hz. Hum and Noise Mic, —70db; Aux, —80 db. Sensitivity: mic, 5 mV; Aux, .3V. Gain: mic, 125 db; aux 100 db; magnetic phono; 115 db. Tone control action: Treble (10kc) +12 db to —15 db. Bass (50 Hz.) 14 db to —9 db. 7 tubes and silicon rectifier: 1-6EU7, 1-12AX7, 4-7868, 1-6C4. 6¾ x 15¾ x 10". Shpg. wt: 25 lbs.

96F556. NET. **122.95**

BOGEN AMPLIFIERS

BOOSTER AMPLIFIERS

Ideal for sound systems in industrial plants, airports, stadia, etc.; wherever undistorted power is needed. Any number may be paralleled to multiply power output. All have exceptionally wide frequency response. Inputs: Hi-Z, 0.5 megohms. Sensitivity: Hi-Z better than 2v. 8" x 13" x 6¾".

ALL-SILICON TRANSISTOR BOOSTER

Model MT100. 100w. at only 1% distortion. Can be connected in series or parallel with other boosters to achieve any reasonable voltage or power. Sensitivity: Hi-Z .75v, Lo-Z .2v with TL600 transformer. Hum: 80 db. Max. ambient temp. for cont. op.: 50°C (122°F), 12-16v. D.C. or 117v. A.C. 8" x 13" x 6". Shpg. wt. 30 lbs.

96F824. NET **220.45**

MBT-60

MBT-60. Features a power output of 60 W RMS less than 3% with full power of 40-10,000 cps ±2 db at less than 5% distortion. Peak power: 110 Watts. Frequency response: 12-20,000 ±1 db. Output Imped: 2.6, 8, 16 ohms (balanced; 25 V CT. (10.4 ohms) and 70 V balanced. Gain 110 db.
96F822. NET **112.40**

Model MO100A. 100 watt amplifier outputs are balanced 16Ω, and balanced 25v, 70v, and 115v. Freq. Resp.: 8-50,000 cps ±1 db. Power consumption: 250 watts. Shpg. wt. 29 lbs.
96F823. NET **142.40**

Model MO30A. 30 watt amplifier. Power Consumption: 105 watts. Shpg. wt. 23 lbs.
96F821. NET **89.95**

DE LUXE 30 & 60 WATT AMPLIFIERS

Feature master gain control, built-in remote gain-control circuit, five microphone channels (one converts to Mag Phono/Tape), plus auxiliary, exclusive variable level markers. Black and grey styling with leather carrying handle. Controls: Gain, Mike-phono Switch, Speech Filters, On-Off/Treble, Bass Master gain. Response: 10-38,000 cps. ±1½ db. Distortion less than 2%. Hum: -70db.

MX60A. 60 watt amplifier. Output Impedance: 4, 8, 16, and 83 ohms, balanced 25V line, 70V line, 8 tubes plus 5 silicon rectifiers. 16½" x 12" x 4¾". 33 lbs.

96F595. NET **202.45**

MX30A. Same as MX60A above except 30 watt amplifier. 29 lbs.
96F570. NET **164.95**

MODEL M60A AMPLIFIER

60 watt amplifier at less than 3% distortion. Ideal for PA systems. Peak power: 100 watts. Response: 20-20,000 cycles; ±2 db. 7 inputs: 3 microphone, 2 auxiliary, 2 magnetic phone. Gain: mike, 120 db.; auxiliary 95 db.; magnetic, 105 db. Output Impedances. 4, 8, 16 ohms. 25-70 volts. Controls: Bass, Treble, Power, Master gain, Auxiliary (fader control), Input controls. 5 tubes, 2 silicon diodes and one bias silicon diode. Power consumption: 160 watts- 117 volts. 5¾"x9⅞"x14⅞". Wt. 28 lbs.
96F805. NET **149.95**

M330A PA AMPLIFIER

30 watts at 2% distortion. 3 microphone channels (2 convert to magnetic cartridge); 2 auxiliary inputs; separate master gain, bass, treble controls; built-in remote gain control circuit; sockets for low impedance transformers; 70 v. and 25 v. output taps. Peak power: 50 watts. Power consumption: 120 watts (105-125 VAC, 50-60 cps.). Response: 20-20,000 cps. ±2 db. Output Imp.: 4, 8, 16 ohms; 25 v. balanced (16 ohms), 70 v. (163 ohms). 14⅞" x 9⅞" x 5¾". Wt. 20 lbs.
96F806. NET **119.95**

TRANSISTORIZED P.A. AMPLIFIER

Model MTA-30. Power out: 30 watts. Frequency Response: 30-20,000 cps ±1 db. Delivers full power: 40-12,000 cps ±2 db. Impedance output: 4, 8, 16, Ω, 25V, 70V, and 163 ohms (70 V) Inputs: 3 (unbalanced 200 ohms) and 200 ohms balanced with T 525U transformer.
96F825. NET **119.90**

Model MTA-60. Same as MTA-30 except: Full power: 40-10,000 cps. Frequency response: 7-20,000 cps ±1 db. Output Imped: 2.6, 8, 16, 10.4 (25 volt center tapped), and 82 ohms (70 volt balanced) Gain (same as MTA-30): Mic—125 db, & auxiliary—110 db.
96F826. NET **149.95**

M120 AMPLIFIER

General purpose PA amp provides 120 watts at 3% distortion, 200 watt peak. Has 7 inputs; 3 for microphones, 2 for phono or tape, and 2 auxiliary inputs for ceramic phono or other high level sources. Freq. Resp.; 20-20,000 cps ±1 db. Gain: mike, 125 db.; aux. 99 db.; magnetic, 118 db. Controls: Power, Master gain, Aux., Bass, Treble, Input controls. 16½" x 12" x 4¾". 42 lbs.
96F800. NET **194.90**

MXM-A MIXER-PREAMPLIFIER

Model MXM-A. A broadcast quality, self-powered mixer-preamp for theatres, radio stations, and PA applications. Each unit accepts 7 signals simultaneously; 5 of which may be from high or low impedance mikes. However three MXM-A units may be paralleled to provide 21 inputs. Output level may be monitored in two ways: visually with the built-in VU meter or aurally by use of a plug-in headphone. Controls include separate speech filters, bass and treble controls to adjust freq. resp. of the mixer from 18 to 38,000 cps ±1 db. 16½"x12"x4¾". Shpg. wt. 20 lbs.
96F820. NET **164.95**

TRANSISTOR PREAMPLIFIER

RTP-I. All silicon transistor preamp for applications requiring a remote or local unit of true broadcast quality. Will drive any number of booster amplifiers over a 500/600 ohm line which may be several miles in length. Transistor design guarantees minimum maintenance. Inputs: 2 Mic. (high or low impedance), 2 Aux. on fader Control, 1 bridging. Operates on 117 VAC, or 12 VDC with internal batteries (8 Eveready size AA) or external DC supply. Freq. Resp. 20-20,000 cps ±1 db. Power: 5w at 117 VAC; 00.3 amps at 12VDC. 9" x 9¼" x 3½". Shpg. wt. 6½ lbs.
96F801. NET **114.95**

PLUG-IN TRANSFORMERS

Microphone and line transformers designed for plug-in use with Bogen amplifiers.

96F544*	**Model T50** 50 ohms (mic.)	12.40
96F545*	**Model T200** 200 ohms (mis.)	12.40
96F546*	**Model T500** 500 ohms (mic.)	13.50

Model TL600 500/600 ohm (line)
96F543† 12.75

*Use with M60A, M330A, M120, MX30A, MX60A, MXM-A, RTP-1.
†Use with MXM-A, MT100. MO100A.

Model T525U. Use with the MTA30, the MTA60, and the MTM if a balanced, low-impedance mike line is required.
96F828. NET **12.75**

MT100

MO100A

MTA-30
MTA-60

MXM-A

MX30A
MX60A

RTP-1

M60A

M120
M330A

VP25A

VP18

B-62 on PB7 bose

TQ Phone

TSL Phone

VP25A TRANSCRIPTION PLAYER

Portable transistorized transcription player and PA system. Lighter and more powerful than conventional tube models. Ideal for school and professional use. Record player is a model B51 precision-built transcription player with speed variable 29-86 rpm. Instant speed selection of 16, 33⅓, 45, 78 rpm. Amplifier provides 30 watts peak power with high fidelity performance. Speaker, record player, and amplifier are housed in a single, attractive portable case. 25 ft. intcon. cable provided. 34 lbs.

73F624. NET **191.05**

VP18 TRANSCRIPTION PLAYER

New light weight solid state transcription player. Its high reliability, low heat, minimum weight make this unit ideal for schoolroom, discotheque, square dances, and many other applications. Turntable is the superb Bogen B51 with variable speed control from 29 to 86 RPM. It also has preset click-stops at 16, 33⅓, 45, and 78 RPM. The amplifier is a fully transistorized 10 watt unit. Has 15 watt peak. 12" speaker is housed in the removable cover of the VP18. Has a 10 oz. ceramic magnet and comes with 25 ft. of cable capped with an input jack. Controls: Mic. Vol., Phono Vol., Bass, Treble, Music-Speech Switch, Power Switch, plus B51 controls. Phono cartridge is wide-range ceramic. Freq. Resp.: 45-18,000 Hz ±1½ db. 15¾"x16½"x10¾". Wt. 30 lbs.

73F622. NET **140.90**

VARIABLE-SPEED TRANSCRIPTION TURNTABLE

Model B62. Turntable with continuously variable speed—29 to 86 rmp. and "click-in" positions for 16, 33⅓, 45, and 78 rpm. Heavy duty 4 pole motor. Lever lowers tone arm to record. Tone arm has lateral and vertical suspensions independently ball-bearing mounted for maximum compliance in both planes. Provision for adjusting stylus pressure. Lock-type 4 pin stereo/mono plug-in head for interchanging cartridges. Wow and Flutter less than 0.2% at 33 rpm; rumble 51 db below average recording level. 12", 7¾ lb. machined, zinc alloy cast, turntable with heavy rubber mat. Tone arm: modified Bogen-Presto PA1 (aluminum). 15¼x13¼", 2½" above deck, 2¼" below. 115 VAC, 60 cps, 15 watts. Shpg. wt., 28 lbs.

73F632. NET **67.95**
73F630 PB7 base **5.90**
73F631 H4 head **4.00**

SERIES TSL PHONES

An extremely flexible system for inter-office or intra-plant service. Provides multiple, simultaneous conversations without a central exchange. 100% trunkage allows all phones to be simultaneously in use in either separate or conference calls; single calls do not tie up system. Designed for wall or desk mounting and each supplied with a junction box. Use wire with at least 3 more conductors than the total number of phones in system.

Type TSL-16. 16 station system. Has 1 ring button and 15 station selector buttons. 9½"x3¼"x3½". Shpg. wt., 4 lbs.
96F779. NET **47.00**

Type TSL-8. Same as above except 8 phone system. One ring button and 7 station buttons.
96F780. NET **39.50**

Type PRS-16. One required for each telephone system. Plug into any standard electrical outlet. Uses 3 conductor cable to connect into any convenient junction box. 6"x2"x3½". Shpg. wt., 5 lbs.
96F781. NET **41.55**

Type TRC. Phone page adapter allows paging for Series TSL phones. 4"x4"x2". Shpg. wt., 2 lbs.
96F782. NET **31.65**

CABLES FOR TSL AND TQ SYSTEMS

No. of Cond.	100' Spool		500' Spool	
	Stk. No.	Each	Stk. No.	Each
3	36F040A	2.70	36F040F	10.75
6	36F043A	6.15	36F043F	26.65
10	36F200A	8.10	36F200F	37.15
15	36F198A	15.00	36F198F	66.75
25	36F199A	23.25	36F199F	105.00

TQ PHONES

Simple, push-button inter-communication—ideal for office, plant, store or home. To make a call, simply lift receiver and press the button(s) of the station(s) you wish to reach. A buzzer sounds at the station called. When the receiver is lifted you are in communication—by-passing the switchboard. Feature selective ringing with a common talk line. The total number of unshielded conductors common to all TQ Phones is 3 more than the total number of phones in the system. Phones may be operated as much as 500 ft. from the power supply. Handsomely styled in grey plastic, and may be used on desk, counter, or wall-mounted. Handset with base is 9½x3¼x3¼".

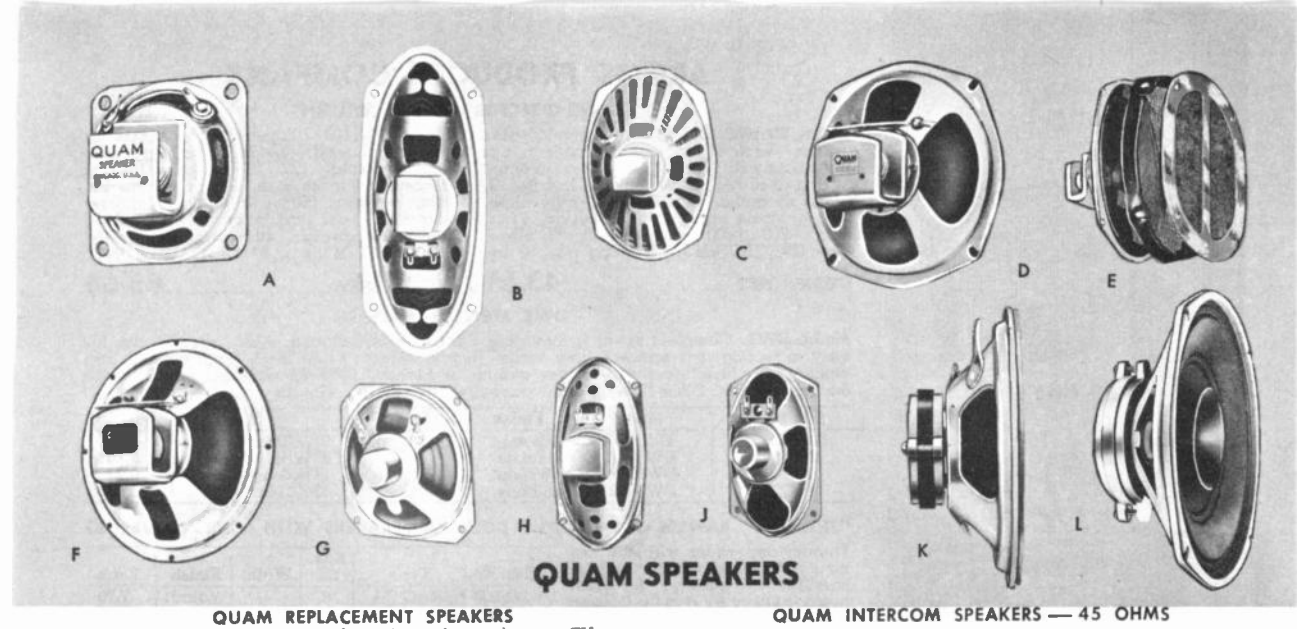
TQ6-A. Phones for up to 7 sta.
96F775. NET Each **27.80**

TQ12-A. Phones for up to 13 sta.
96F776. NET Each **31.35**

Type TRA. Phone Page Adapter. Allows paging from series TQ phones. Simply add the TRA Adapter (see diagram) between any phone and your PA system. It is then wired to the system as if it were another TQ phone. Does not need a separate power supply. 4"x4"x2". Shpg. wt., 2 lbs.
96F787. NET **31.65**

Type PRS-1A. Power supply for TQ phones. One required for each system. Use 3 conductor cable—6"x2"x3½"/ For operation from 110-120 v. 50-60 cycles A.C. Shpg. wt. 4 lbs.
96F777. NET **23.65**

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010



QUAM SPEAKERS

QUAM REPLACEMENT SPEAKERS

Ideal replacements for speakers in radios, phonos, TV, etc. All have Alnico V magnets, with weight specified in oz. All voice coils below are 3.2 ohms. Std. EIA mtgs. *Multi-ohm 10-20 & 40. **Outdoor speaker

Stk. No.	Type	Fig.	Size	Magnet	Watts	Wt.	Net
56F136	25A07	G	2½"	.65	1.5	¼	2.14
56F171	26A07	J	2x6"	.65	2.0	½	2.30
56F169	30A05	G	3"	.55	2.0	½	1.69
56F144	3A05	G	3½"	.55	2.0	½	1.69
56F115	3A07	G	3½"	.65	2.5	½	2.14
56F182	3A070T**	G	3½"	.65	2.5	½	2.18
56F167	35A05	J	3x5"	.55	2.0	¼	2.24
56F145	4A05	G	4"	.55	2.5	¼	1.58
56F183	4A050T**	G	4"	.55	2.5	¼	1.77
56F117	4A07	G	4"	.65	3.0	½	2.30
56F119	4A15	A	4"	1.47	3.0	¾	2.69
56F142	46A07	....	4x6"	.65	3.5	¾	2.54
56F146	48A2	H	4x8"	1.4	4.5	1	4.25
56F112	410A2	B	4x10"	1.4	6.0	1¼	4.78
56F172	410A2MT*	B	4x10"	1.4	6.0	1¼	5.85
56F137	5A1	D	5"	1.00	3.5	1	2.59
56F123	5A15	D	5"	1.47	3.5	1	2.80
56F125	52A1	D	5¼"	1.00	4.0	1	2.65
56F138	57A1	C	5x7"	1.00	5.0	1	2.94
56F173	57A2MT*	C	5x7"	1.4	5.0	1	3.82
56F126	6A1	D	6½"	1.00	5.0	1	2.83
56F128	6A31	D	6½"	3.16	6.0	1¾	4.06
56F129	69A2	C	6x9"	1.4	8.0	1½	4.01
56F174	69A2MT*	C	6x9"	1.4	8.0	1¼	4.94
56F131	69A3	C	6x9"	3.2	10.0	2	4.92
56F143	8A21	D	8"	2.15	7.0	1½	4.15
56F130	8A31	D	8"	3.16	9.0	2	4.81

QUAM EXTENDED RANGE SPEAKERS

Quam speakers meet the requirements of the most critical listener. Freq. response: flat to 12,000 hz. All 12 oz., Ceramic magnets. Voice coil impedance, 8 ohms. V.C. dia. 1¼". 4 lbs.

Model 8C12X. 8". 15 watt. Depth 3⅛".

84F200. Net 11.76

Model 12C12X. 12". 18 watt. Depth 4½".

84F201. Net 15.29

QUAM INTERCOM SPEAKERS — 45 OHMS

*Mylar plastic cone speaker for outdoor use.

Stk. No.	Type	Fig.	Size	Magnet	Watts	Wt.	NET
56F116	3A07Z45	G	3½"	.65	2.5	½	2.50
56F184	3A07Z450T*	G	3½"	.65	2.5	½	2.74
56F140	4A1Z45	G	4"	1.00	3.0	¾	2.85
56F141	5A1Z45	D	5"	1.00	3.5	1	3.00

MINIATURE PM SPEAKERS

Designed for replacement use in transistor radios and other equipment where there is limited space. Magnet wt., .45 oz.

Stock No.	Model No.	Size	Power Hndlg. Watts	Shpg. Wt. Lbs.	NET
56F164	22A06Z8	2¼"	.25	¼	2.79
56F165	22A06Z100	2¼"	.25	¼	3.09
56F166	27A06Z12	2¾"	.25	¼	2.76

Impedance of speakers, in ohms, indicated by digits following "Z" in model number.

QUAM REAR SEAT AUTO SPEAKERS

Includes speaker, flocked screen, grey metal grille, cable, fader control, and plate for under-dash mounting.

Fig. E. Deluxe Model AS-2. Full-toned 6x9" speaker with 2.15 oz. magnet and sponge rubber baffle plate gasket. 3½ lbs.

84F208. NET 7.46

84F207. Model AS-1. Has 6½" speaker. 2 lbs. **NET 5.32**

QUAM PUBLIC ADDRESS SPEAKERS

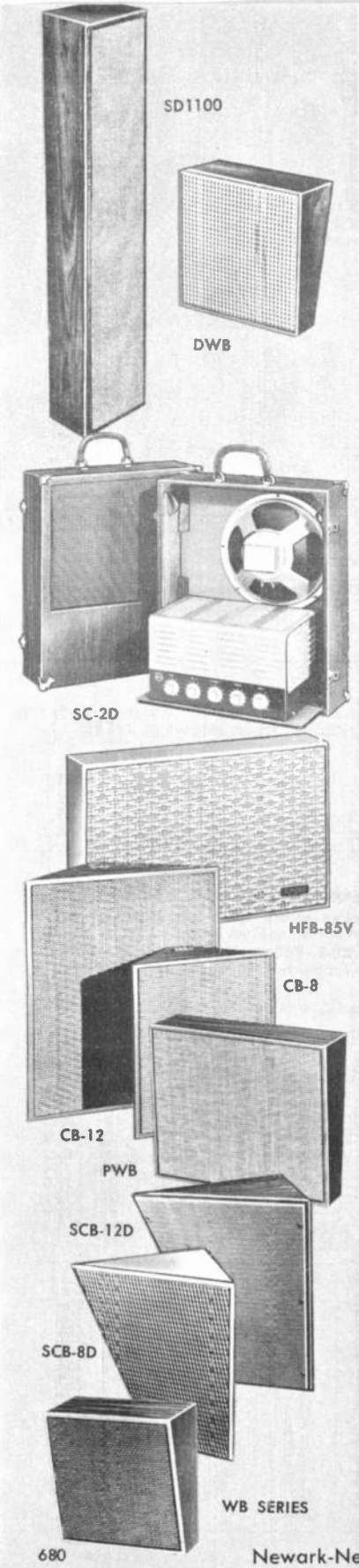
Fig. F. Sturdy PM units for voice reinforcement and music. Built to take plenty of abuse! Will handle rated power continuously. All have 8 ohm voice coils. *Has ceramic magnet. Fig. K. **Has ceramic magnet. Extended Range, 50-20,000 hz. Fig. L.

Stk. No.	Type	Size	Magnet	Watts	Wt.	NET
56F175	8A31PA	8"	3.16	10	2¼	5.59
56F176	8A4PA	8"	4.64	12	2¾	6.47
56F181	8A6PA	8"	6.8	12	3¼	7.64
56F114	8C10PA*	8"	10.	12	3	7.03
56F170	8C10PAX**	8"	10.	15	3	7.61
56F180	12A4PA	12"	4.64	15	4	8.38

NEWARK PM REPLACEMENT SPEAKERS

Excellent quality permanent magnet speakers at low prices. Ideal for auto, radio, phono, TV or PA use. Standard mounting dimension allow quick, effortless installation in your new or existing equipment. Engineered to achieve clean, sharp, tonal reproduction. All 3.2 ohm voice coil except (*) 8 ohms. (†) 12 ohm voice coil for transistor radios. Built to EIA standards. Rugged construction, trouble-free operation, and excellent frequency response.

Stock No.	Size In.	Shape	Magnet Oz.	Rating Watts	Shpg. Wt.	1-5	6-up
56F250†	2¾	Round	.68	.25	½	1.85	1.66
56F251	3	Square	.68	2.0	½	1.38	1.24
56F252	4	Square	.68	3.0	½	1.39	1.25
56F254	4x6	Oval	1.47	4.0	¾	1.94	1.75
56F255	5	Round	.68	3.0	¾	1.50	1.35
56F257	5x7	Oval	1.47	5.0	1	1.99	1.79
56F258	5	Pin Cushion	68	5.0	1	1.85	1.66
56F259	6	Pin Cushion	3.16	5.0	1	2.77	2.49
56F261	6x9	Oval	2.15	6.0	1½	2.86	2.57
56F262	8	Round	1.47	5.0	1½	2.48	2.23
56F263	8	Round	2.15	6.0	1½	3.18	2.86
56F264*	8	Round	6.8	9.0	2.0	4.44	4.00
56F266	10	Round	2.15	6.0	2½	3.83	3.45
56F267*	10	Round	6.8	10.0	2½	5.47	4.92
56F269*	12	Round	4.64	10.0	3	5.36	4.82
56F270*	12	Round	6.8	12.0	3	5.85	5.26



ARGOS PRODUCTS COMPANY

"SOUND DIRECTOR" SOUND COLUMNS

Model SD-1060. Highly directional speaker system. Vertical angle of dispersion approximately 30°, horizontal projection angle in excess of 120°. Six speakers, handles 30 watts of audio. Plastic cane grille cloth, walnut grain vinyl baffle covering. Freq resp.: 200-10,000 cps; imped.: 16 ohms Size: 30¼"Hx7"Wx3⅛"D. Shpg. wt., 10 lbs.

86F593. NET **43.61**

Model SD-1100. 10 speakers, for rooms up to 200' in length. Vertical dispersion angle, 15°; horizontal, 120°. Easily converted to 8 speaker system with 22° vertical dispersion for short rooms with highly sloping seating. Power capability: 10 speaker 50 watts; 8 speaker, 40 watts. Size: 49½" High x 7" Wide x 6" Deep. Shpg. wt., 26½ lbs.

86F594. NET **65.66**

DWB SERIES BAFFLES

Model DWB. Complete speaker mounting hardware is included. Also "speed" clip for easy mounting and removal from walls Heavy, select, white birch hand rubbed and waxed to a furniture finish—either walnut or blonde. DWB-8A—Internal capacity 400 cu. in. 2¾ lbs. DWB-12A—Internal capacity 1180 cu. in. 4½ lbs.

Stk. No.	Model	Finish	Dia.	Size	NET
86F735	DWB-8A	Walnut	8"	9¾x10½x6½"	5.88
86F736	DWB-8A	Blonde	8"	9¾x10½x6½"	5.88
86F737	DWB-12A	Walnut	12"	13⅝x14x9⅛"	8.23
86F738	DWB-12A	Blonde	12"	13⅝x14x9⅛"	8.23

"THINLINE" BAFFLES WITH HEAVY DUTY PA SPEAKERS WITH VINYL COVERING

Thinner and wider with the new modern look. ⅓ thinner with no sacrifice in quality! All have heavy-duty ceramic magnet speaker and are hvy. duty P.A. types except WB-108CS which has Alnico V magnet speaker and is ideal for background music. *Have built-in L pad. All are 8 ohm types. Sizes: 8"; 12x9½x4⅜". Wt. 5¾ lbs. 12"; 16¼x14x6¼". Wt. 9¾ lbs.

Stk. No.	Type	Spk. Sz.	Watts	Finish	Each
86F600	WB-108CS	8"	6	Walnut	7.79
86F601	WB-108CS	8"	6	Blonde	7.79
86F723	WB-408CS	8"	10	Walnut	9.55
86F724	WB-408CS	8'	10	Blonde	9.55
86F725	WB-408CSL*	8"	10	Walnut	11.71
86F726	WB-408CSL*	8"	10	Blonde	11.71
86F606	WB-212CS	12"	18	Walnut	15.43
86F607	WB-212CS	12'	18	Blonde	15.43
86F608	WB-212CSL*	12"	18	Walnut	17.59
86F609	WB-212CSL*	12"	18	Blonde	17.59

SPACE SAVER SPEAKERS AND BAFFLE

Type HFB-8SV. Only 3¾" thin. Hi-Fi sounding response. Superior to regular PA wall baffles. 8" woofer and 3½" tweeter speakers with volume control. Size: 18"x12"x3¾". Shp. wt. 6½ lbs

Skt. No.	Type	Finish	Each
86F778	HFB-8SV	Walnut	17.59
86F779	HFB-8SV	Blonde	17.59

SOUND CADDY

Type SC-2D. Simple function design using Argos Vinyl covering. Highly portable. Has room for two 12" PA 18 watt speakers. Space below for most amplifiers. Heavy plywood construction, steel corner angles. SC-2D less speakers. Shpg. wt. 20 lbs.

86F599. NET **26.41**

CB SERIES CORNER BAFFLES

Bass reflex design with effective air mass increased by a corner location. Terminals are located on top of the baffle; no mounting hardware visible to mar appearance. Textured vinyl surface closely resembles wood and is less prone to scratching and easier to clean.

Model CB-8D. For 8" speakers (max. speaker depth—4½"). 12¼x14x6½". Shiping wt: 4½ lbs.

Model CB-12D. For 12" speakers (max. speaker deptn 6¼"). 17x20x9". Shipping wt: 8½ lbs.

Stk. No.	Type	Finish	Each
86F712	CB-8D	Walnut	7.50
86F715	CB-8D	Blonde	7.50

Stk. No.	Type	Finish	Each
86F713	CB-12D	Walnut	11.61
86F716	CB-12D	Blonde	11.61

PROFESSIONAL CUSTOM INSTALLATION BAFFLES

Model PWB-8C. For those installations where a large baffle is desired for an 8" speaker Similar to Model WB-8D described above, but with 2½ times the air volume to give greatly improved tone quality at nominal additional cost. Durable, handsome woodgrain vinyl surface; virtually non-resonant rigid construction. Max. speaker depth, 4½". Size 16¼x14x6¼. Shipping wt., 6 lbs.

86F739. Walnut finish. **NET.** **6.37**

86F740. Blonde finish. **NET.** **6.37**

TILTED BAFFLES

Avoids off-angle distortion. 22% more air volume. Bass reflex.

Type SCB-8D. For 8" speakers (max. D. 5½") 17¾"x15"x9". Shpg. wt: 6 lbs.

Type SCB-12D. For 12" speakers (max. D. 6"). 20¾"x20"x10½". Wt: 8 lbs.

Stk. No.	Type	Finish	Each
86F731	SCB-8D	Walnut	8.97
86F732	SCB-8D	Blonde	8.97

Stk. No.	Type	Finish	Each
86F733	SCB-12D	Walnut	12.69
86F734	SCB-12D	Blonde	12.69

WALL SPEAKER BAFFLES

Sturdily constructed of plywood. Handsome contrasting cane grille cloth. Specially designed vinyl fabric in walnut or blonde finish. 8", 10", and 12" models have knock out plug under covering for volume control.

Stk. No.	Type	Dia.	Finish	W x H x D	NET
86F754	WB-4/5D	4-5"	Walnut	6½x6⅜x4"	3.17
86F759	WB-4/5D	4-5"	Blonde	6½x6⅜x4"	3.17
86F753	WB-6D	6"	Walnut	8⅛x8¾x5"	3.82
86F760	WB-6D	6"	Blonde	8⅛x8¾x5"	3.82
86F750	WB-8D	8"	Walnut	10x10¾x6½"	4.56
86F761	WB-8D	8"	Blonde	10x10¾x6½"	4.56
86F751	WB-10D	10"	Walnut	12⅛x12⅝x7⅞"	5.44
86F762	WB-10D	10"	Blonde	12⅛x12⅝x7⅞"	5.44
86F752	WB-12D	12"	Walnut	13⅞x14¼x9⅛"	6.25
86F763	WB-12D	12"	Blonde	13⅞x14¼x9⅛"	6.25

ARGOS SPEAKER SYSTEMS

PATIO OUTDOOR SPEAKER

Type PAT-10. Redwood and cane, moisture-resistant, durable speaker for the outdoors. Sealant applied to ¾" redwood provides all sorts of decorative options. Let it weather, stain it, or paint it. Speaker is full range 8" size with 10 watt power capacity. Dual-cone input: 8 ohms. Marine grade plywood is used for the baffleboard. Handy volume control is located at the bottom of the enclosure and saves running indoors for audio level adjustments. This speaker will provide years of enjoyment. Size: 14x10½x3½". Shpg. wt. 5½ lbs.
86F588. PAT-10. **NET** **14.65**

"THE TROUBADOR" TSW-8S SPEAKER SYSTEM

Strikingly different "art frame" design compliments any interior decor. Remarkable big-system sound made possible by new Argos heavy-duty, dual-cone, full-range 8-in. speaker, 15 Watts. Exquisite Dusk Walnut or Antique Birch finish, decorator-type Belgian linen grill cloth. May be mounted horizontally or in "diamond" position. Perfect as a pair for stereo reproduction. 8 ohms. Size: 13¼"x13¼"x4". Shipping Wt.: 5¼ lbs.
86F727. Walnut finish. **NET.** **13.67**
86F728. Birch finish. **NET.** 13.67

"THE HALLMARK" TCB-8S CORRIDOR SPEAKER SYSTEM

Versatile and economical new PA speaker and enclosure that mounts on ceiling or wall and speaks in both directions simultaneously. High-quality, 8-in. dual-cone speaker with 4.8 oz. magnet, 10 watts for effortless sound reproduction. Choice of finishes—Dusk Walnut or Antique Birch. Simplified installation without removal of heavy-duty mounting bracket. 8 ohms. Size: 10¾"x10¾"x3½". Shipping Wt.: 6 lbs.
86F729. Walnut finish. **NET.** **14.65**
86F730. Birch finish. **NET.** 14.65

SPEECH DIRECTOR

Model LSD-6040. New portable, self-powered lectern P.A. system. Compact single-case system provides perfect sound coverage for small groups or audiences of 500 or more. Includes: Argos Sound Column speaker system, 20 watt transistor amplifier, unidirectional cardioid microphone with built-in volume control. Amplifer operates from two 12 v. dry cells or regular household current. Battery operating life is in excess of 400 hours. Size: 21" x 16" x 7⅝".
86F578. NET. **225.35**

NEWARK SPECIALS

Fig. A—COAXIAL SPEAKERS

Blue cone woofers and tweeters with Alnico V magnets. Crossover networks housed in dust covers of speakers. 6-8 ohm Z. 8". Response 50-15,000 hz. 8" woofer and 3" tweeter. (.53 oz.) Shpg. wt., 3½ lbs.
83F950. NET **6.65**

12". Response 40-15,000 hz. 12" woofer and 3" tweeter.
83F951. NET **9.95**

15". Response as low as 35 hz. 15 watts. 15" woofer and 5" tweeter (1 oz.) Shpg. wt., 11 lbs.
83F952. NET **13.95**

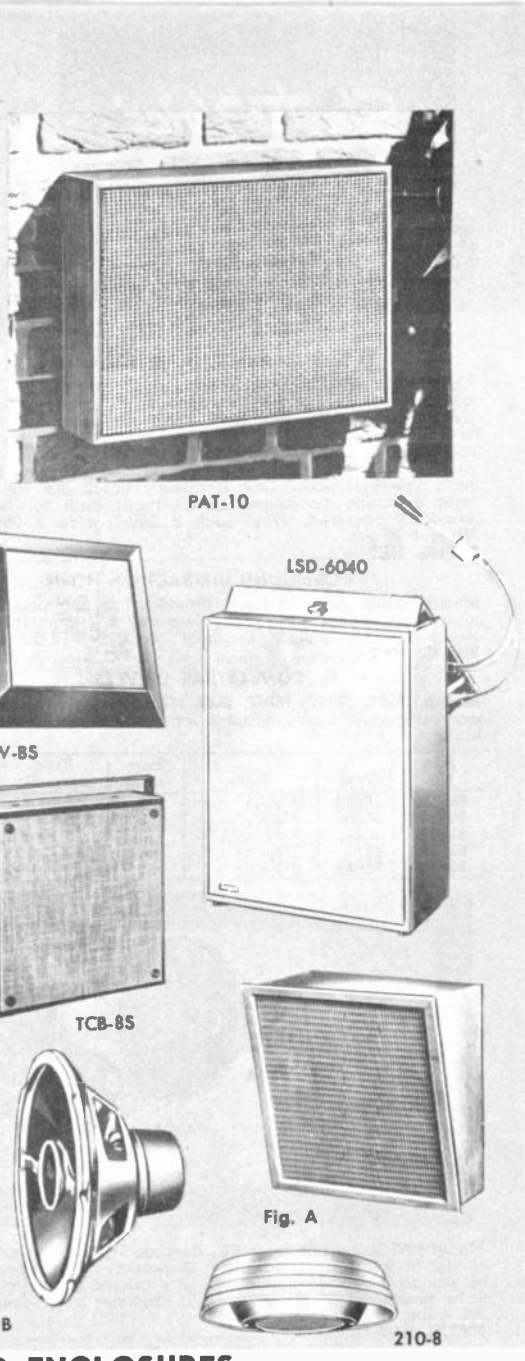
Fig. B—COAXIAL COMBINATIONS (Order as Shown)

8" coax speaker listed above with walnut Argos baffle, WB8D. Wt., 6 lbs.
83F950.
86F750. NET **10.95**

8" coax speaker as above wth blonde baffle. Wt. 6 lbs.
83F950.
86F761. NET **10.95**

12" coax speaker listed above with walnut Argos baffle, WB12D.
83F951.
86F752. NET **15.95**

12" coax speaker as above with blonde baffle.
83F951.
86F763. NET **15.95**



SOUNDOLIER BAFFLES AND ENCLOSURES

RECESSED TRIM RING BAFFLES

Type 51-8. Steel with a hard baked white finish. For 8" speakers. Mtg. hdw. supplied. Size: 12¾" Dia. Wt. 5 lbs./pkg.
86F628. Sold in pkgs. of 5 only. **NET per pkg.** 8.95

Type 61-8. Similar to above except brushed steel finish.
86F629. 1-4 ..... 2.95 ea. **5-19** ..... 2.59 ea

60 Series. Aluminum trim ring with a satin brushed finish. Simple lines blend well with the modern architecture.

Type 60-8. For 8" speaker. 12¾" dia.
86F620. 1-4 ..... 3.16 ea. **5-19** ..... 2.78 ea.

Type 60-12. For 12" speaker. 17" dia.
86F621. 1-4 ..... 4.33 ea. **5-19** ..... 3.80 ea.

PROTECTIVE ENCLOSURES

95 Series. Cylindrical protective enclosures designed for new or existing construction installations. Heavy gauge steel, undercoated with packed jute lining to eliminate resonance.

Type 95-8. Used with 8" baffles. 9⅞" dia., 4¼" high. Wt. 2 lbs.
86F622. 1-4 ..... 4.86 ea. **5-19** ..... 4.27 ea.

Type 95-12. Used with 12" baffles. 14⅝" dia., 7" high. Wt. 2 lbs.
86F623. 1-4 ..... 7.01 ea. **5-19** ..... 6.15 ea.

WIDE ANGLE SURFACE CEILING BAFFLES

210 Series. Includes acoustical horn to radiate sound energy from the rear of loudspeaker. Horn throat provides phase inverter for extended bass resp. Outer enclosure is finished in flat polar white; inner in brushed satin aluminum. Size: 210-8; 14⅛" dia. x 4¼" H. 210-12: 18¼" dia. x 6½" H. Can be mtd. to std. 4" junction box or directly to ceiling. 2 lbs.

86F625. Type 210-8. For 8" speakers. 1-4, 12.54 ea.....5-19, 11.00 ea.
86F626. Type 210-12. For 12" speakers. 1-4, 15.39 ea. 5-19, 13.50 ea.

LOUVERED RECESSED CEILING BAFFLES

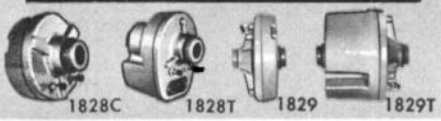
Type 67-8. Similar in style to air diffuser. Designed from heavy gauge steel and completely welded. Aluminum painted finish. Accommodates an 8" speaker. 12" dia. Wt. 1 lb.
86F627. 1-4 ..... 4.53 ea. **5-19** ..... 3.98 ea.

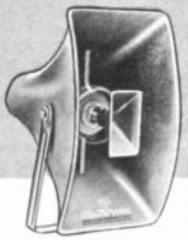
LOW CEILING RECESSED BAFFLES

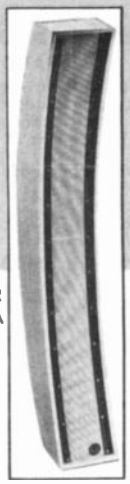
Type 68-8. For use with 8" speakers. Satin brushed aluminum finish. Difractor eliminates beaming when used in low ceiling applications. 12¾" dia. x 1⁵⁄₁₆". Less speaker. Shpg. wt., 1 lb.
86F624. 1-4 ..... 6.92 ea. **5-10** ..... 6.08 ea.

Electro-Voice®

SOUND PROJECTORS







● *NEW* MULTICELLULAR HORN—M253

Completely weatherproofed horn (less driver), for indoor or outdoor use. Dispersion characteristics are independent of frequency, making this horn ideal for sound reinforcement where precise dispersion and wide, smooth frequency response are required. Utilizes 2 rows of 5 identical cells, jig assembled and covered with damping compound. Use with any E-V driver with 1⅜-18 threads. Low frequency cutoff 300 Hz. Supplied with mounting hardware. Driver-throat built in. No special assembly required. 17½" high x 30½" wide x 36½" deep. Weight: 26 lbs.

88F193. NET **180.00**

COMPOUND DIFFRACTION HORN

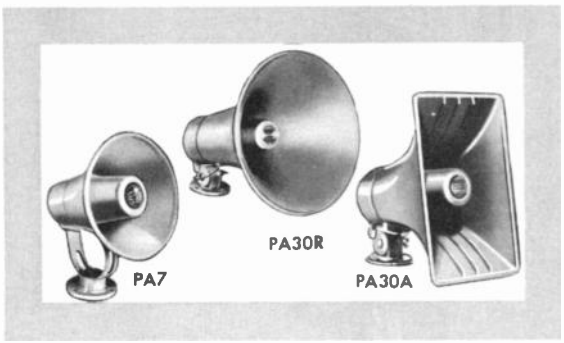
Model FC100. Projector Horn. Provides two diffraction horns for uniform wide-angle coverage. Uses any E-V convertible driver. Mouth size 10½" x 20½", depth 20". Shpg. wt. 13 lbs.

88F180. NET **32.10**

CONVERTIBLE DRIVERS

Models 1828R, 1828C, 1828T, 1829, 1829T. Peak free response with max. efficiency. Easily adapted for use with all Re-entrant-type horns.

Stk. No.	Type	Dim.	Imp ohms	Freq. resp. Hz.	NET
88F195	1828R	4"x2¾"	8	150-10,000	19.50
88F184	1828C	4"x3¼"	8	150-10,000	20.10
88F185	1828T	5"x4"x5¼"	8	150-10,000	27.90
88F191	1829	5 15/16"x4 1/16"	16	140-11,000	34.50
88F192	1829T	5 15/16"x6⅜"	16	140-11,000	41.10



Model PA7 Reentrant Projector. Handles 7½ watts over a range of 400 to 13000 Hz. Wide 120° dispersion angle provides excellent coverage. Mounting brackets allows non-resonant horn to be positioned at any angle. 6¾" diameter by 6" deep. Shpg. wt. 4 lbs.

88F176. NET **17.85**

Model TR7-2. 7½-Watt 25-Volt Line Transformer. For use with Model PA7. 2 lbs.

98F177. NET **6.60**

Model TR7-7. 70.7 Volt Transformer. For use with PA7.

88F178. NET **6.60**

Model PA30AT. This 30 watt paging projector features easily selected line power taps at 30, 15, 8, 4, and 2 watts. Rectangular horn designed for wide dispersion. Frequency response: 250-14,000 Hz. Dispersion: 120° by 90°. EIA sensitivity: 60 db. Sound pressure level: 127 db. 11" x 6½" x 8½". 6¾ lbs.

88F173. NET **21.90**

Model PA30A. Same as above, without line matching transformer.

88F190. NET **28.50**

Model PA30R. The PA30R is very similar to the PA30A, except that this model features a round span aluminum bell, instead of the rectangular horn of the PA30A. Shipping wt: ½ lbs.

88F194. NET **23.70**

Model TR3-2. 30-Watt 25-Volt Line Transformer. For use with Model PA30A. Shpg. wt., 2 lbs.

88F174. NET **9.00**

Model TR3-7. 70.7 Volt Transformer. For use with Model PA30A. Shpg. wt. 2 lbs.

88F175. NET **9.00**

LINE RADIATOR COLUMNAR SPEAKERS

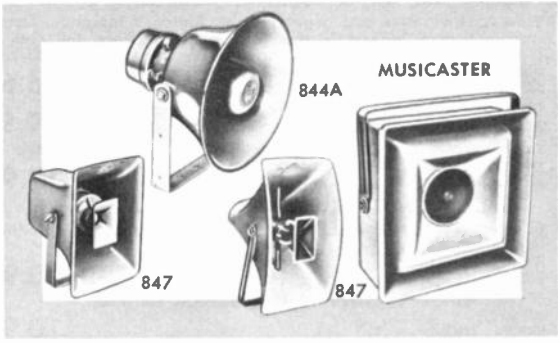
Line radiator columnar speakers feature wide angle speaker design which permits wide horizontal dispersion while virtually eliminating sound output both above and below the speaker.

Model LR4A. Line Radiator Columnar Speaker. Curved design overcomes unwanted high-frequency dispersion at ends, eliminating echo and feedback. Controls Feedback. Excellent in stacked multiple speaker applications. Contains nine 3"x5" and three 3½" cone speakers. 160° horizontal dispersion end 60° vertical dispersion. Frequency response: 200-15000 Hz. Power handling capacity: 25 watts program, 50 watts peak. Nominal impedance; 8 ohms. Size: 49" high; 7" wide; and 13" diameter. Universal mounting brackets. Mesa tan wooden finished enclosure. Shipping weight 30 lbs.

86F330. NET **120.00**

Model LR4SA. Line Radiator Columnar Speaker. Electrical filter removes end speakers from circuit as frequencies increase, eliminating high-frequency lobes at ends. Dispersion: 160° horizontal; 30° vertical. Frequency response: 200-15000 Hz. Power handling capacity: 25 watts program, 50 watts ptak. Normal impedance: 8 ohms. Weatherproof extruded aluminum enclosure with faun metallic finish. Size: 52" high; 7 9/16" wide; 4⅝" dia. Wt., 32 lbs.

86F329. NET **90.00**



Model 848A. Combines FC100 compound diffraction horn plus 1828C compound driver for fine wide angle sound, low distortion, and highest quality of any projector. Freq. response 150-10,000 Hz.; Imp., 8 ohms; Dispersion, 90°x120°. Power Cap. 30 watts. Size, 10½"x20½"x20". Shpg. Wt. 14¼ lbs.

88F152. NET **53.40**

Model 847. Wide Angle Speaker. Provides higher articulation without annoying "peaked" response over a uniform 120° x 90° area. Low distortion results from the use of two diffraction horns. 25-watt power handling capacity. Frequency response, 250-10,000 Hz. Sound pressure level, 114 db. Impedance, 16 ohms. 11¾"x7¾"x10 1/32". Shpg. wt. 10 lbs.

88F150. NET **35.40**

Model 844A. 30 Watt paging system. Rugged die-cast horn. Frequency response: 250-13,000 Hz. Impedance, 8 ohms. Dispersion, 90°. Sound pressure level, 123 db. Dimensions, 9⅞". Shpg. wt. 8½ lbs.

88F156. NET **24.90**

MUSICASTER OUTDOOR HI-FI SPEAKER SYSTEM

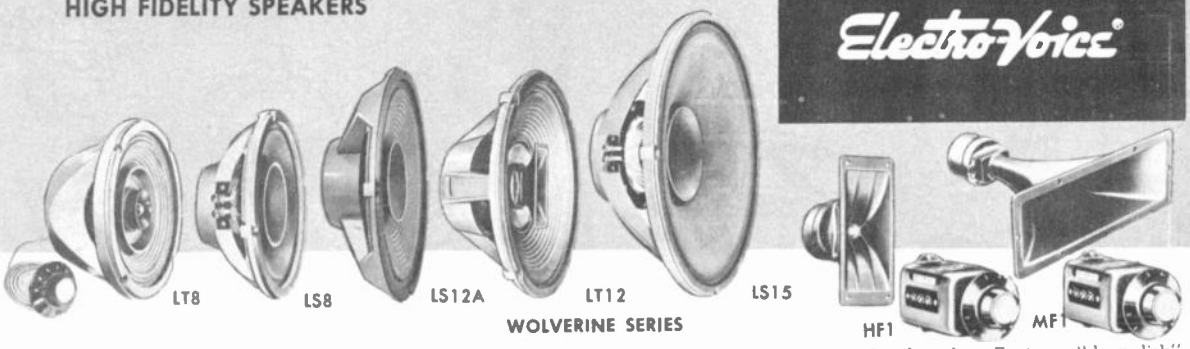
One-piece aluminum die casting protects weatherproofed 8" Radax speaker and provides dual horn loading. Can be mounted anywhere or used as portable speaker. Response, 60-13000 Hz. Impedance, 8 ohms. Power handling capacity 30 watts. Dispersion, 120°. Size: 21½"x21½"x8½". Shpg. wt. 34 lbs.

88F153. NET **72.00**

Model MB-1. Bracket, Surface mounting bracket allows mounting of any Musicaster flat against wall for unobtrusive installation. Shpg. wt. 1 lb.

88F171. NET **3.60**

Electro-Voice®



WOLVERINE SERIES

MODEL LT8. 8-Inch 3-Way Loudspeaker. Features three separate radiating elements. 8-inch woofer cone, 4-inch midrange cone and new VHF driver. Response: 45-18,000 Hz. Nominal resonance, 65 Hz. Crossovers: 2000 Hz mechanical, 5000 Hz electrical. 40 watts peak, 8 ohms impedance. EIA sens. rtg. 45 db. Shipping wt. 7 lbs.
86F337. NET **29.70**

Model LS8. 8-Inch Loudspeaker. Response, 45-14000 Hz. Nom. resonance 75 Hz. Crossover, 4500 Hz. 40 watts peak power. 8 ohms impedance. EIA sensitivity rating, 43 decibels. 8⅜" diameter, 7⅛" baffle opening. 3½" depth behind panel. Features heavy die cast frame with low silhouette for shallow mounting in tight spots. Shpg. wt. 4 lbs.
86F333. NET. **18.00**

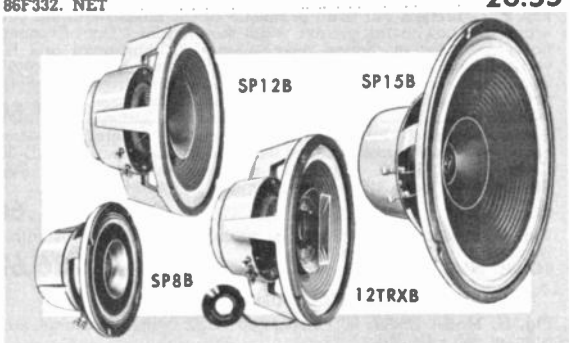
Model LS15. 15-Inch Loudspeaker. Response, 35-14000 Hz. Nom. resonance, 50 Hz. Crossover 4500 Hz 40 watts peak. 8 ohms impedance. EIA sensitivity rating, 47 decibels. 15⅛" diameter, 14" baffle opening. 6½" depth behind panel. Features high efficiency long throw voice coils on rigid fiberglass forms for true concentricity. Shpg. wt. 10 lbs.
86F332. NET **26.55**

Model LT12. 12-Inch 3-Way Loudspeaker. Features "deep-dish" cone and HF1 tweeter. Response: 40-18,000 Hz. Nom. resonance, 60 Hz. Crossovers: 2000 Hz. mechanical, 4000 Hz. electrical. 40 watts peak. 8 ohms impedance. EIA sens. rtg., 45 decibels. 12⅛" diameter, 11" baffle opening, 5¼" depth behind panel. Shpg. wt. 9 lbs.
86F331. NET **35.10**

Model LS12A. 12-Inch Loudspeaker. Response, 40-14,000 Hz. Nom. resonance 60 Hz. Crossover, 4500 Hz. 40 wattss peak. 8 ohms impedance. EIA sensitivity rating, 46 decibels. 12¼" diameter, 11" baffle opening. 3½" depth behind panel. Coaxial design. Heavy die-cast frame. Shpg. wt., 8 lbs.
86F334. NET **19.80**

Model HF1. High-Frequency Step-Up Kit. Consists of TW35 VHF driver, CR35 crossover-level control. TW35 size: horn 5¼" x 2", pot diam. 2¼", depth 2¾". Fits $1\frac{11}{16}$" x $4\frac{7}{32}$". Shipping weight 3 lbs.
86F335. NET **25.20**

Model MF1. Mid-Range Step-Up Kit. Consists of MR10 treble driver, CR10 crossover-level control. MR10 Size: horn 4" x 10½", pot dia. 2⅜", depth 9⅜". Fits 9½" x 2⅞". Wt. 4 lbs.
86F336. NET **26.55**



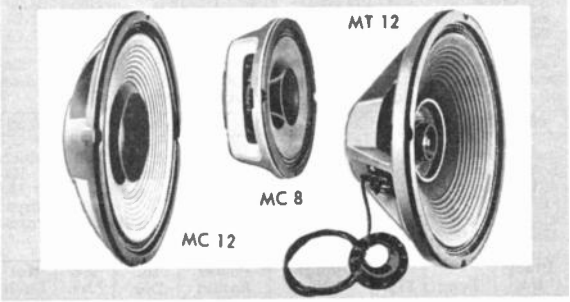
STANDARD E-V RADAX DESIGN SPEAKERS

Model SP8B. Radax Super-Eight. 8" speaker. Response, 35-15000 Hz. Nom. resonance, 60 Hz. Crossover, 4500 Hz. 40 watts peak. 16 ohms impedance. EIA sens. rtg., 47 db. 8⅜" diam., 7⅛" baffle opening. 4¾" depth behind panel. Shpg. wt. 8 lbs.
96F025. NET **29.25**

Model SP12B. Radax Twelve. 12" speaker. Response, 35-15000 Hz. Nom. resonance, 50 Hz. Crossover, 4500 Hz. 60 watts peak. 16 ohms impedance. EIA sens. rtg., 49 db. Shpg. wt. 12 lbs.
86F024. NET **35.10**

Model 12TRXB. Integrated 3-Way Speaker. Combines an SP12B, T35-type VHF driver, and integral 6 db/octave high-pass filter with level control. Response 35-20000 Hz. Nom. resonance, 50 Hz. 60 watts peak. 16 ohms impedance. Shpg. wt. 15 lbs.
86F027. NET **62.10**

Model SP15B. Radax Fifteen. 15" speaker. Response, 30-15000 Hz. Nom. resonance, 30 Hz. Crossover, 3500 Hz. 60 watts peak. 16 ohms impedance. EIA sens. rtg., 51 db. 15⅛" diam., 13½" baffle opening. 9" depth behind panel. Shpg. wt. 13 lbs.
86F071. NET **44.10**



MICHIGAN SERIES

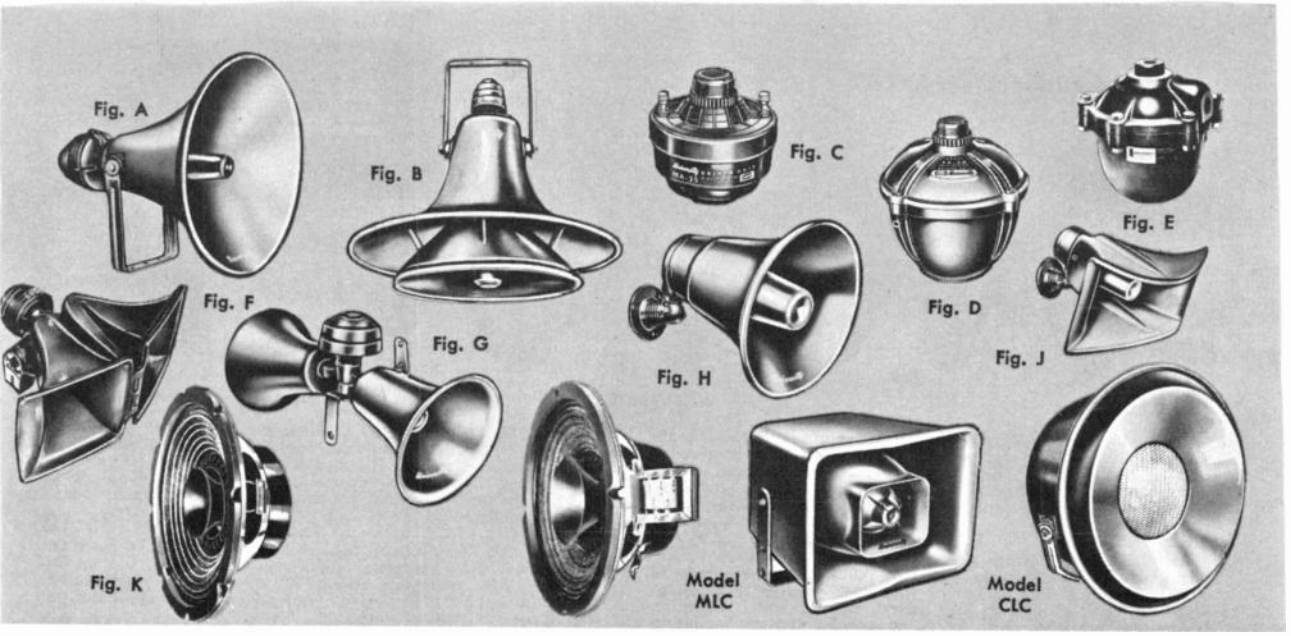
Model MC8. 8 Inch Loudspeaker. Radax design provides extended highs and wider dispersion. Response 50-13,000 Hz. Nom. resonance 75 Hz. Crossover 6000 Hz. 24 watts peak, 8 ohms impedance. EIA sensitivity rating, 46 decibels. 8¼" diameter. 7" baffle opening. $3\frac{31}{32}$" behind panel. Features high-efficiency long-throw voice coils on rigid fiberglass forms.
86F338. NET **12.60**

Model MC12. 12-Inch Loudspeaker. Disperses crisp clear highs and powerful bass, yet is shallow enough for wall mounting. Response 40-14,000 Hz. Nom. resonance 60 Hz. 40 watts peak. 8 ohms impedance. EIA sens. rating 46 decibels. 12¼" diameter. 11" baffle opening. 3½" behind panel. Features heavy die cast frame. Net weight 5 lbs.
86F339. NET **15.75**

Model MT12. 12-Inch Three-way Loudspeaker. Combines superb dual-cone speaker with unique ring radiator tweeter. Brilliance control to adjust highs. Response: 40-18,000 Hz. Nom. resonance 60 Hz. Crossover 4,000 Hz. 40 watts peak. 8 ohms impedance. EIA sensitivity rating 46 decibels. 12⅛" diameter. 11" baffle opening. 5½" behind panel. Shpg. wt. 8 lbs.
86F340. NET **26.55**

OUTDOOR HIGH FIDELITY SPEAKER SYSTEM

Sonocaster I. New auxiliary high fidelity loudspeaker system. For extension or portable use anywhere. Wide range response. Ideal for use as extension to existing stereo system. May be used to improve performance of any portable radio, record player or tape recorder. Steel-gray molded housing cannot chip, fade, or peel. Includes convenient carrying handle molded in and accessory hang-up bracket for permanent mounting indoors or outdoors. Frequency response: 70-13000 Hz. Impedance: 8 ohms. Power handling capacity: 30 watts peak. Special Radax 8" reproducer specifically designed for this system. Lightweight, rugged and weatherproof. 16¾" h. x 17" w. x 5⅞" d. Shipping wt. 8 lbs.
86F170. NET **22.50**



UNIVERSITY TRUMPETS, DRIVERS, ACCESSORIES

Fig. A. Reflex Trumpets. Weatherproof. Use with driver units below. Models PH, SMH are directional types (Fig. A). Models SH is high power, compact unit.

Stk. No.	Type	Low Cutoff	Bell Dia.	Horn Length	Wt. Lbs.	Net Each
88F102	PH	150 Hz	20⅜"	15¾"	11¾	24.90
88F103	SMH	200 Hz	16¼"	12"	8	21.60
88F075	SH	350 Hz	8¾"	7"	3¼	21.60

Fig. B. Radial Reflex Projectors. Uniform 360° horizontal dispersion. Excellent for industrial applications and reproduction of chime and liturgical music in church towers.

88F112	RLH	120 Hz	28⅛"	18½"	25	40.50

units have 16 ohm imp. except 1D-30T, 1D-60T & 1D-40T which have multi-impedance line matching transformers built-in. 1D-40T matches 45/122/250/500/1000/2000 ohms. 1D-60T with 16/80/165/250/500/1000/2000 ohms. Each with 70 V power taps: 1D-40T: 40/20/10/5/2.5 watts. 1D-60T: 50/30/20/10/5/2.5 watts. 1D-30T: 30/15/10/5/2.5/1.25.

Stock No.	Type	Fig.	Range Hz	Power Rating	In. Dia.	Wt. Lbs.	Net Each
88F141	ID-20	....	120-6500	20 watts	3½	2½	16.50
88F142	ID-30	C	85-7500	30 watts	4⅛	3	19.50
88F136	ID-30T	..	85-7500	30 watts	4⅛	4	27.90
88F143	ID-40	....	80-12000	40 watts	4½	4¼	24.90
88F144	ID-40T	....	80-12000	40 watts	5	5¼	33.60
88F145	ID-60	....	70-12000	60 watts	4 1/16	5¾	34.50
88F146	ID-60T	D	70-12000	60 watts	6¾	6½	41.70
88F138	ID-75	D	150-7000	75 watts	4¼	5	44.70

Fig. E. Explosion—Proof Drivers. Designed to be used with a variety of horn configurations and where flammable materials are stored or natural gas is present. Suited for Aerospace applications of launch sites and missile sites as Hydrogen and other gases will not harm driver. Sealed housing protects from implosion and explosion, insuring weather-proofing. All rated at 65 watts. Can be usel with any horn listed in Fig. A. above.

Stk. No.	Type	U.L. Approved Class	Net
84F100	7101X	Class I, Groups C, D.	64.80
84F101	7102X	Class I, Groups C, D; Class II, Groups E, F, G.	76.50
84F102	7105X	Class I, Groups B, C, D; Class II, Groups E, F, G.	130.80
84F103	5436B	Transformer and bracket assembly for any above	15.42

Model 5433 Transformer. 30 watt line matching transformer. Wide selection of impedances and constant voltage power taps.
88F128. NET **5.46**

Model 5434 Transformer. 15 watt line matching. ¾ lb.
88F129. NET **4.35**

Model CTR. Weatherproof transformer/junction housing for use with 5433 or 5434.
88F126. NET **6.27**

Model 2YC Connector. Permits use of 2 drivers on a single trumpet or radial projector for double power output.
88F107. NET **8.97**

Model MLC Outdoor Speaker. Dual range, 2000 Hz with electrical crossover. 15w without distortion, 150-15,000 Hz, 8 ohms VC, 120° dispersion. 12¾x9⅛x10⅝". Wt. 10¾ lbs.
88F135. NET **38.70**

Fig. F. Cobreflex. For fixed or mobile applications requiring coverage of areas having greater width than height. "Dual Exponential Flare" design. Sound distribution—120° horizontal and 60° vertical. Air column length—2½'. Bell mouth size—18½x9¼". Depth (less driver)—10¼". Takes any University driver unit. Shipping wt., 10¼ lbs. Complete with "U" mtg. bracket.
84F112. NET **27.60**

Fig. G. Model 2WP. Bi-Directional Paging Projector. Low-cost coverage of two opposite areas with one driver, e.g., ID-20 ID-30, ID-40, ID-40T, ID-60. Adjustable mtg. bracket. Each horn: 8½" diam., 20½" long, 120° dispersion, 350 Hz cut-off. 4½ lbs.
88F139. NET **21.60**

Fig. G. Model 2WP-20. Same as projector above except with a 20 watt driver. Shpg. wt.: 7½ lbs.
84F104. NET **36.60**

INDUSTRIAL PAGING SPEAKERS

Fig. H. Model 1B-A8. 90° dispersion angle with adjustable wall bracket. Wt., 4½ lbs.
Fig. H. Model Mil-A8. Reflex type for low-power use. High efficiency at speech frequencies. Dispersion angle, 120°. 3¼ lb.
Fig. J. Model CIB-A8. Wide angle mid-range unit for 3-way systems, paging, & intercom use. Dispersion 120" horiz., 60" vert.

All Type Nos. Ending in "T" with Transformer

Stk. No.	Type	Range Hz	Ohms	Power	Size	Net
88F110	IB-A8	250-12,000	8	30W.	10½x9"	21.90
88F079	IB-T	250-13,000	8	30W.	10¼x13"	27.90
88F111	MIL-A8	350-13,000	8	10W.	7 13/16x6⅞"	17.85
88F080	MIL-T	350-13,000	8	10W.	7 13/16x9⅞"	24.60
84F135	CIB-A8	250-13,000	8	30W.	7⅜x14x12"	27.60
84F136	CIB-T	250-13,000	8	30W.	7⅜x14x16"	33.60

PB-1. Transformer Housing. Weatherproof. For MIL-A. CMIL-A, IB-A, and CIB-A paging speakers. Takes any transfomers with up to 2" mtg. ctrs. Shpg. wt. ½ lb.
88F127. NET **2.88**

Fig. K. Model 8M2C. Slim profile all-purpose 8" high fidelity 3-way speaker. Diaphragm construction with 3 elements that form an annular horn. Response: 50-20,000 hz. Mechanical crossovers at 2000 & 5000 hz. Shpg. wt. 4 lbs.
88F130. NET **12.60**

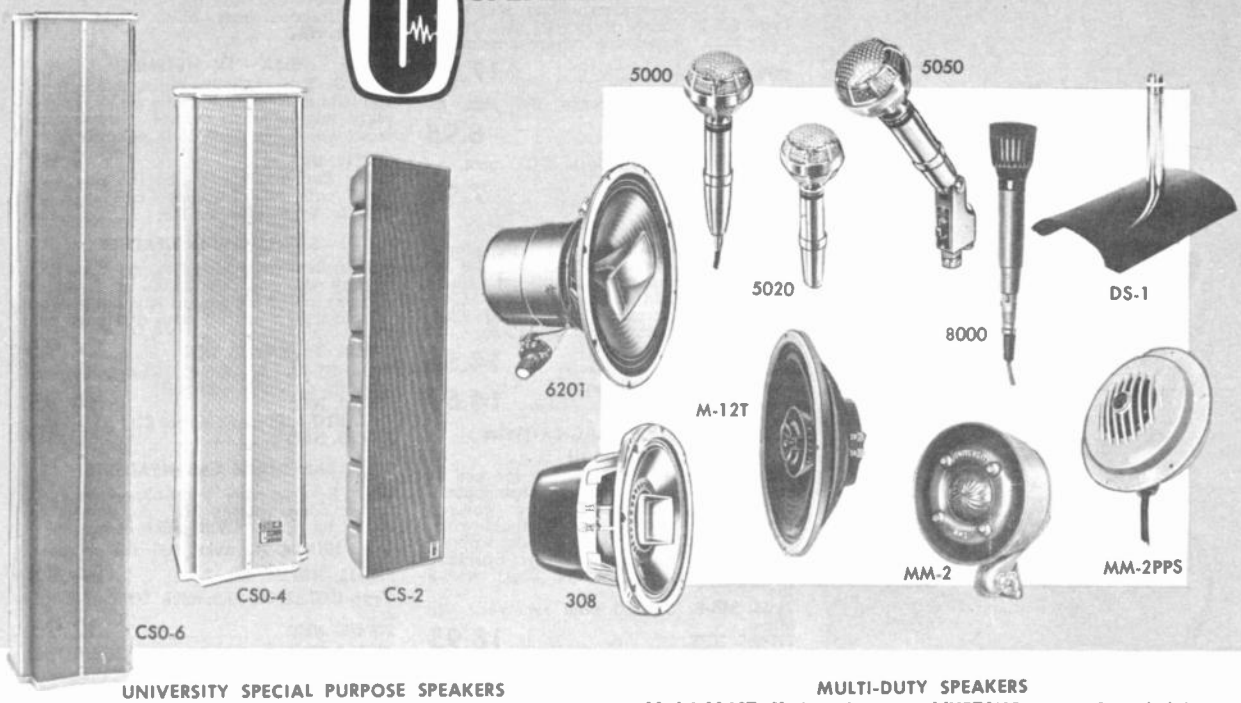
Fig. L. Model 8M2CT. Same as 8M2C but with mounted line-matching transformer for 25 or 70 volt systems. Tapped for 10/5/2.5/1.25/.65 watts. Ideal for wired music systems or paging/talk-back applications.
88F131. NET **14.97**

MODEL CLC SPEAKER

Weatherproof, full range 55 to 14,000 Hz. Power rated at 30 watts at 8 ohms impedence. Dispersion area of 120° with a db. level of 108.3 DB. Ideal for natural music reproduction in outdoor areas where weather is a factor. Diameter of bell 22¾", depth 12 1/16". Featuring 14 oz. Alnico magnet. 180° variation—adjustable, serrated "U" bracket. Shp. wt., 20 lbs.
88F149. NET **59.70**

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036

SPEAKERS AND MICROPHONES



UNIVERSITY SPECIAL PURPOSE SPEAKERS

Model CSO-6 Sound Column. For indoor, outdoor commercial installations. Full Range for music and speech. Frequency range 65-14,000 Hz. The 6 extended range 8" speakers will handle up to 120 watts; Dispersion 16° in vertical plane. 120° in horizontal angle. 60¼" high., 11⅞" wide. 7¾" deep. 16 ohm impedance. Shpg. wt. 63 lbs.
88F116. Type CSO-6. **NET** **207.00**

Model CSO-4 Sound Column. Full range, for music and speech. For indoor or outdoor installations. Has 4 extended range 8" speakers. Frequency response 70-17,000 Hz. Will handle up to 75 watts of amplified sound. Dispersion 18° vertical angle, 120° in horizontal angle. 8 ohm impedance. 41⅜" height x 11⅞" width x 7¾" D. Shpg. wt. 40 lbs.
88F117. Type CSO-4. **NET** **149.40**

Model CS-2. High-power UNILINE SOUND COLUMN for indoor-outdoor applications. Has weather-proof construction. Omni-position brackets for hanging on wall, column, or post. Multi-adjustment for precise focusing of sound. 6 5" wide range speakers. Freq. range 175-12,000 hz. 30 watts IPM. Imp. 8 ohms. Dim. 31" x 5" x 5½". Acoustic tapering. Neutral gray hi-impact housing. Shpg. wt. 14 lbs
88F118. NET **59.70**

Model 6201. Series '200'. 12" Coaxial. True coaxial construction. With separate drivers for heavy woofer and superb compression type tweeter. Built-in 2500 Hz electrical crossover network complete with adjustable "brilliance" control on 3 ft. cable. Frequency response 28-18,500 Hz. 35 watts rating. 13" dia., 6⅝" deep. Shpg. wt. 10¼ lbs.
84F105. NET **69.50**

Model 308. Series '200'. 3-way 8" Diffaxial. Features true-axial construction with "reciprocating-flare" compression tweeter projected through center of woofer. Exceptionally rigid woofer cone has 2 high-compliance cloth suspensions — inner and outer. Crosses over electrically at 5000 Hz. Mid-range is reproduced by deluxe multi-element Diffusicone sections with 1000 Hz crossover. Woofer has extra large voice coil for enhanced bass. Heavy all Alnico 5 Gold Dot magnet. Response 30 to 17,000 Hz. 35 watts power capacity. 8-16 ohms. 5½" deep. 7½ lbs.
84F123. NET **47.50**

Diffusicone-12 2-way 12" Speaker. Dual horn-loading at apex of cone extends mid-range and high frequency response. Mechanical crossover at 1000 Hz offers smooth, wide-angle dispersion. Frequency response 25-15,000 Hz. 35 watts rating. 13" dia., 6⅝" deep. Shpg. wt. 9 lbs.
84F106. NET **42.50**

DS-1 DESK STAND

Made of extruded aluminum, designed to be "non-tippable," cannot be knocked over. Has standard ⅝"-27 thread on 5" upright. Base measures 4½"x6". Shpg. wt. 1 lb.
61F206. NET. **2.85**

MULTI-DUTY SPEAKERS

Model M-12T. High-performance MUSTANG series. Intended for multi-speaker installations in walls, ceilings, and limited space enclosures. Response: 35-40,000 Hz. Imp. 8 ohms. 30 watts IPM. Dim. 12 15/16" x 3⅞". Has heavy-duty die cast aluminum basket. Metal parts are electroplated and finished in acrylic paint. Shpg. wt. 9 lbs.
84F127. NET **39.50**

Model MM-2. Supremely rugged speaker for commercial, industrial, military applications requiring a virtually indestructible unit. Immune to salt spray, gases, live steam, fungus and harmful dusts. 350-10,000 Hz, 25 watts, 16 ohm impedance, 150° dispersion. 6" o.d., 5" deep. Shpg. wt., 5¼ lbs.
88F108. Model MM-2. **NET** **33.90**

Model MM-2F. Flush mounting version of MM-2. 7¼" o.d., 3¾" deep.
88F109. NET **35.70**

Model MM-2PPS. All-plastic underwater speaker for all pool installations, using new plastic materials impervious to chemicals ordinarily used in purifying systems. 5¼" dia., ½" flange.
88F137. Model MM-2PPS. Shpg. wt. 5¼ lbs. **NET** **46.50**

UNIVERSITY MICROPHONES

Model 8000. High-performance dynamic Cardioid. Response: 70-13,000 Hz. Sensitivity: 154 db (EIA). Output level: 55db/1 MW/10 microbar 250 to 20,000 ohms. Complete with 18 ft. cable, Cannon plug, and receptacle and desk stand adaptor. Shock mounted—Guaranteed for 5 yrs. Shpg. wt. 1¾ lbs.
61F200. Type 8000. **NET** **34.95**
61F201. Type 8100. Same as above with switch. **NET** **37.85**

Model 5000. Cardioid dynamic microphone. Response: 25-20,000 hz. Imp: Var. 250 & 20,000 ohms. Output level—54 db. Sensitivity rating—147 db. Comes with wired-in cable and SA-10 stand adaptor. 7 1/16 long. 2 3/16" dia. Shpg. wt. 2 lbs.
61F207. NET **51.60**

Model 5020. Same as model 5000, but with Amphenol connector and SA-10 stand adapter. 8 9/16" long. 2 3/16" dia. Shpg. wt. 2½ lbs.
61F208. NET **56.95**

Model 5050. Same as model 5020, but includes on/off switch. 9 5/8" long. 2 3/16" dia. Shpg. wt 3 lbs.
61F209. NET **59.95**

Depend on NEWARK for Everything

NEWARK Industrial Service Saves You Valuable Time

TELEX HEADSETS

Fig. A

Fig. B

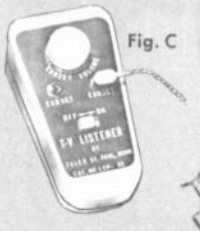


Fig. C

Fig. D

Fig. E

Fig. F

Fig. G

Fig. H

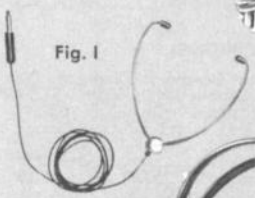


Fig. I

Fig. J

Fig. K

SERIES 600 MAGNETIC HEADSETS

Fig. A. With removable ear cushions. Rugged magnetic elements—high impact plastic construction with standard ¼" molded phone plugs. Shpg. wt.: 12 oz.

Type 605-2. Single muff 2000 ohm phone with high impedance ceramic mike.

27F425. NET **17.50**

Type 610-1. Dual phones, 600 ohm, no mike.

27F426. NET **6.95**

Type 610-2. Dual phones, 2,000 ohm, no mike.

27F427. NET **7.95**

TELEX TWINSET

Fig. E. FAA approved for light planes and airlines. Either ear tip may be removed for monitoring. Tough grey tenite with nickel plated metal parts. Cord supplied with standard phone plug. FAA-T50-C57 approved. Shpg. wt., 12 oz.

Type HTW-2. 500 ohms.

27F404. NET **14.50**

Type HTX-2. 2000 ohms.

27F406. NET **14.50**

MUFF STYLE MAGNA-TWIN MARK III

Fig. F. Rugged construction for use in electronic teaching and general communications. Adjustable plastic covered stainless steel headbands. Washable vinyl earmuffs. 5 foot cord with standard phone plugs. Freq. range 50-10000 hz. Specially designed magnetic drivers. Shpg. wt., 3 lbs.

Type MR-6. 500/600 ohm receivers. No Mike.

27F396. NET **18.95**

Type MR-4. 10,000 ohm receivers. No Mike.

27F368. NET **18.95**

Type MRB-46. With 50 ohm noise-cancelling carbon mike and 500/600 ohm receivers. 2 plugs.

27F418. NET **30.95**

Type MRB-62. With 300 ohm dynamic mike and 10,000 ohm receivers. 2 plugs.

27F419. NET **31.50**

Type MRB-75. With 50 ohm carbon mike and single 500/600 ohm receiver. 2 plugs.

27F371. NET **24.95**

Type MRB-61. With 300 ohm noise cancelling dynamic mike and 500/600 ohm receivers. 2 plugs.

27F409. NET **31.50**

Type MRB-30. With high Z ceramic mike and 10,000 ohm receivers. 2 plugs.

27F417. NET **32.95**

TELEX TELE-FI

Fig. G. Unique 3-D design to give 30% better undersanding. Replaceable foam plastic ear cushions. Freq. response 60-6000 Hz. Listening level, 1 mw; max level, 25 mw. With 5 foot cord and phone plug. Shpg. wt., 5 oz.

Stk. No.	Type	Ohms	NET
27F390	HFR-91	15	5.95
27F437	HFV-91	125	
27F375	HFW-91	500	
27F376	HFX-91	1000	
27F391	HFY-91	2000	

DYNAMIC PILLOW SPEAKERS

Fig. H. Flat construction makes these speakers less bulky under a pillow. With cord and standard ¼" plug.

Stk. No.	Type	Ohms	Each
27F420	SDN-2A	3.2	6.95
27F411	SDM-7A	10,000 w/vol. cont.	11.95

● *NEW* MODEL 799 MONOSET

Featherweight under-the-chin headset Complete with 5' cord with ¼" phone plug. Features adjustable tonearms and removable eartips. 5 oz.

Stk. No.	Type	Ohms	NET
27F430	799-1	15	7.95
27F431	799-2	125	
27F432	799-3	500	
27F433	799-4	1000	
27F434	799-5	2000	

TELEX STEREO HEADSET THE ADJUSTATONE

Fig. B. 3½" speakers. Foam cushions. Freq. Res: 10-15,000 Hz. 4-16 ohms. 8 ft cord. Charcoal gray. 16 oz.

27F428. NET **15.95**

TELEX "TV LISTENER"

Fig. C. Type LCP-90. Light, comfortable individual listening to radio or TV. Earset plugs into jacks on control. Volume control for ear sets. With 15 ft. of cord. 12 oz.

27F424. NET **9.95**

Extra Earset. Exactly like the one supplied with "TV Listener" above. 6 oz.

27F435. Type ELV-98. **Net** **2.95**

STEREO TWIN HEADSET

Fig. D. Sensitivity 95db SPL at 1 mw. Frequency response 16 to 15,000 hz. Dynamic element with 3 to 16 ohms impedance. Tan color complete with 8' cord and plug. wt. 12 oz.

27F372. Type ST-10. NET **24.95**

Type ST-20. As above, with individual controls on each ear-muff.

27F407. NET **34.95**

Type STC-1. Stereo Control Kit.

27F408. NET **10.50**

LANGUAGE LAB HEADSETS

Fig. J. Dynamic microphone cancels noise. Boom rotates 310°. Response: 20-20,000 hz. Sens: 107db SPL. 14 oz.

Type 1210-04. No mike, 600 ohm headset.

27F412. NET **24.95**

Type 1200-42. 300 ohm mike, 600 ohm headset.

27F413. NET **32.95**

REPLACEMENT CORDS AND CUSHIONS

Type DSC-1G. Cord with 1 plug for 1210-02.

27F414. NET **3.35**

Type DSC-2G. Cord with 2 plugs for 1200-22.

27F415. NET **4.75**

Type ACV-3. Cushions for 1200 series.

27F416. NET per pair **1.50**

TELESET

Fig. K. General purpose headset. High effective sensitivity due to close ear coupling. Response 50-10,000 hz with 115 db SPL for 1 mw input. 180° cup rotation. Stainless steel and high impact plastic. Wt.: 8 oz.

Type HM-100. 2,000 ohm impedance.

27F402. NET **14.50**

Type HM-500. 500 ohm imped.

27F403. NET **14.50**

CUSHIONS AND CORDS

Type ACV-1. Cushions for MRB series.

27F384. NET, per pair **1.50**

Type ACT-2. Cushions for HM series.

27F385. NET, per pair **1.00**

Type CCT-2. Coiled cord for 799 HF, EM series.

27F386. NET **2.95**

Type CCM-2. Coiled cord for twinsets.

27F387. NET **2.95**

Type CMT-2. Standard cord for 799, HF, EM series.

27F400. NET **2.25**

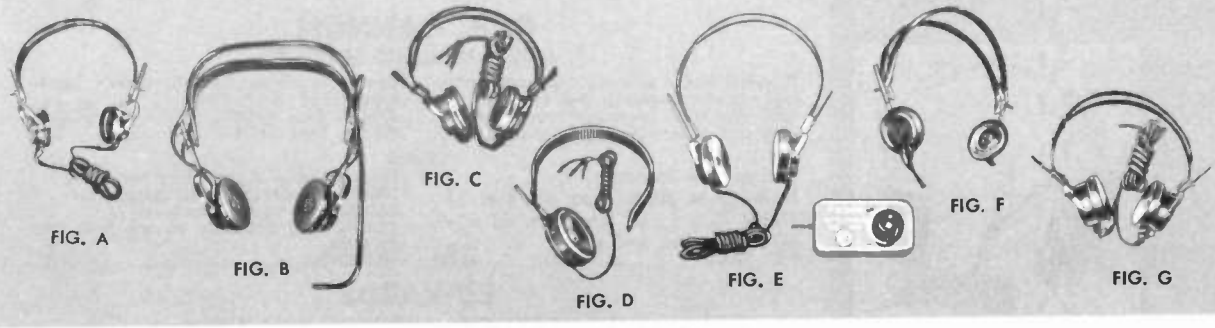
Type CMM-2. Standard cord for twinsets.

27F410. NET **2.95**

EARSETS

Complete with metal earloop, 5 ft. cord and std. phone plug. 4 oz.

Stk. No.	Type	Ohms	NET
27F379	EMR-2	15	4.55
27F380	EMV-2	125	
27F381	EMW-2	500	
27F382	EMX-2	1000	
27F383	EMY-2	2000	



TRIMM HEADSETS

TYPE "L" HEADSETS

Fig. A. Lightweight high quality headsets. Particularly suited for systems requiring extended frequency range such as broadcast station, Hi-Fi, Stereo and military communication application. Employs new floating diaphragm which provides response unaffected after prolonged exposure to elevated temperature and humidity. FREQUENCY RESPONSE up to 9000 cps. Extremely ruggedized construction with capsuled sound generating unit within an outer shell. More durable than crystal type phones. Nylon braided 6' cord.

27F351. Type 50-08. 8 ohm. NET **13.80**
27F352. Type 50-2M. 2K ohm. NET 13.80
27F353. Type 50-12M. 12K ohm. NET 14.40

STANDARD MONAURAL HEADSETS

Fig. B—Series 56. Monaural headsets with vinyl covered adjustable headband and new yoke adjustment device. Electro-magnetic design with "floating" diaphragm. Frequency range to 9,000 cps. Neoprene 5 foot single cord for "over-the-head" use, cord is integral part of headband Shpg. wt., 1 lb.

Type 56-2M. 2000 ohm impedance.
27F345. NET **16.59**

Type 56-5M. 5000 ohm impedance.
27F346. NET 16.59

Type 56-12M. 12,000 ohm impedance.
27F347. NET 17.19

ACME HEADSETS

Fig. C. Model 24-2K. Double headset. Ideal for Crystal sets, code training classes, centralized radio systems and scores of applications requiring a low cost set. Res. 2000Ω. Bakelite molded shell and cap, shell ribbed to increase strength. 4½ ft. braided tinsel cord. Phone tip terminals.

27F584. NET **2.46**
27F586. Type 24-03. 3.2 ohm. NET 2.37

Fig. D. Model 27-1K. Single Headset. Lightweight single headphone with headband, Imped. 1000 ohms. 4½' long flexible vinyl cord. Shpg. Wt. 4 oz.

27F585. NET **1.35**

TRIMM TV HEADSET KIT

Fig. E. Type 632. TV accessory for private hearing of TV sound. Consists of outlet box with 15 feet of three-conductor cable, one low impedance headset with 4½-foot cord and plug. Outlet box contains two phone jacks, permitting multiple headset installation, remote on-off switch, and volume control. 3¾x2⅛x1¼". 2 lbs.

27F579. NET **7.14**

"FEATHERWEIGHT"

Fig. F. Type 106. Compact headphones weighing only 4 oz. Have forged bakelite shells and caps, and adjustable headband. 24,000 ohms for picking up weak signals. 6 ft. moistureproof cord. Wt. 9 oz.

27F580. 24000 ohms. NET **6.60**
27F560. Type 104-2K. 2000 ohms. NET 6.90

"EAR CUSHIONS"

For comfort and elimination of disturbing outside noises. No. 654 fits Acme, Featherweight and "L" Type phones. No. 660 fits Dependable and Brush phones; Molded of soft sponge rubber. No. 655 fits "L", Mil ANB-H-1 and Permoflux units; Molded of solid rubber. No. 656 fits the same types as No. 655 but recommended as better choice; Sponge rubber face, rubber back.

27F557. No. 654. NET per pair .96
27F555. No. 655. NET per pair 1.80
27F556. No. 656. NET per pair 2.52
27F557. No. 660. NET per pair 1.50

"DEPENDABLE"

Fig. G. Type 70-2K. Bakelite shells and caps, plastic covered headband. 5' braided cord. wt. 1 lb.

27F581. 2000 ohms. NET **3.30**
27F582. Type 70-3K. 3000 ohms. NET 3.51
27F583. Type 70-4K. 4000 ohms. NET 3.69
27F587. Type 70-03. 3.2 ohm. NET 3.15

STEREO HEADSET

Type 56-14-08. 8 ohm stereo headset designed for broadcast and Hi-Fi use. Frequency response to 9000 cps. Vinyl covered double headband with new yoke adjustment device. Unaffected by heat and humidity. Conductor cord with three-circuit plug. Shpg. wt., 1 lb.

27F349. NET **18.99**

CLEVITE-BRUSH

COMBINATION HEADPHONE-MICROPHONE

Model ED-400. High performance microphone with the ED-300 headphone listed below. Convenient locking swivel adjustment places microphone at correct recording position for any user; 180° boom allows full audio and visual response. Roller pin earphone adjustment with a stainless steel headband with washable polyvinyl chloride cover. Supplied with Custom Ear Cushions. Microphone lightweight with high sensitivity and a frequency response that meets all educational standards. Headphones are suntan color. Microphone is white.

27F364. NET **44.50**

EDUCATIONAL HEADPHONES

ED-300. Frequency response 50-10,000 CPS ±3 db from 80-18,000 CPS. Impedance 50K ohms at 1Kc. Constructed of rugged telephone material with attractive design. The headband is stainless steel covered with wasable pholyvinylchloride. Custom Ear Cushions (260649) supplied. Phones can be easily removed by pressing out roll pin. The acoutic bronze filter facilitates perfect dependability. Stands rigorous long lab. usage. Suntan color. Wt. 9 oz. 8" x 8½" x 3¼".

27F358. NET **28.00**

Type 260649. Custom Ear Cushions, supplied as standard equipment with ED-300 and ED-400.

27F367. NET, per pair **1.50**

SINGLE PHONE SET

Model BA-201. As above, but consists of a single phone complete with 5-ft. cord and spring steel headband with end-cushion. Shpg. wt., 1 lb.

27F571. NET **18.70**

BINAURAL MODELS

With binaural cords. The impedance of the binaural model is double that of regular model. Double headphones.

27F362. BA-206B (100K ohms) **41.50**
27F363. BA-200B (90K ohms) 24.40

MODEL BA-206-1

Ideal for both stereophonic or monophonic phonograph records, tape recordings or FM broadcasts. The BA-206 headphones have an exceptionally flat response out to 10,000 CPS and create outstanding fidelity of reception. High impedance and negligible power requirements allow monitoring without any effect on associated equipment. Metalseal crystal elements provide protection against excessive humidity. Wt. 8 oz. With attached plug.

27F366. NET **39.00**

27F361. Type BA-206-2. As above, but with eyelet terminals. NET 39.00

CRYSTAL HEADPHONES

Model BA-200-1. High impedance crystal headphones. Extremely lightweight (6 oz.) and very sensitive. For schools, laboratories, etc. Response: 100-5,000 cps. Cone-type diaphragm. Molded plastic case. Require small DC blocking condenser for DC circuits. With 5-ft. cord and headband. 2 lbs. With attached plug.

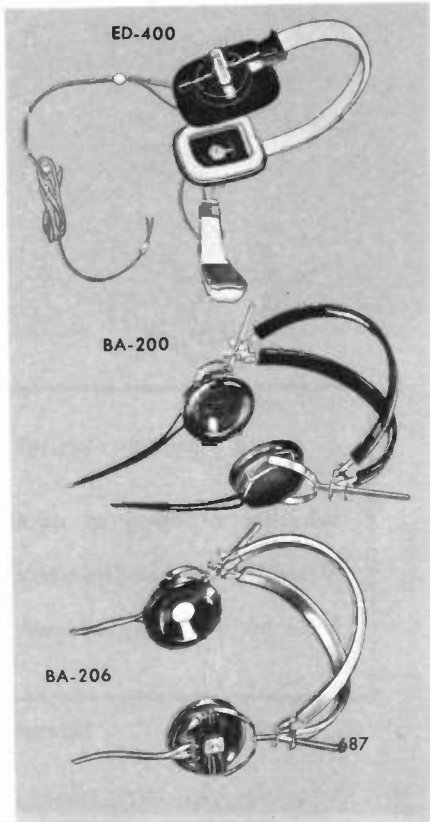
27F365. NET **22.00**

27F570. Type BA-200-2. As above, but with eyelet terminals. NET 22.00

CUSTOM CUSHION

Type 262720. Grey Custom Cushions for BA-200 & BA-206.

27F574. NET per pair **1.50**



Whatever Your Electronic Needs — NEWARK Will Fill Your Order

C. F. CANNON

ALNICO MAGNETIC HEADSETS

Powerful Alnico permanent magnets assure high fidelity response and excellent volume over wide frequency range. Bakelite case and caps with 4½ ft. flexible tinsel cord with phone tips. Adjustable headband. Shpg. Wt., 14 oz.

27F448. Type AM15-2. 2000 ohms... **2.58**
27F449. Type AM15-3. 3000 ohms..... **2.73**

CORDS

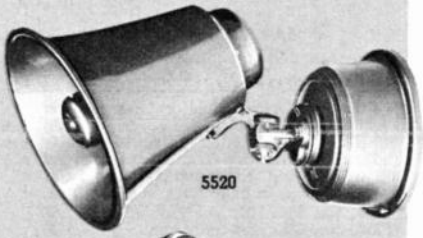
Copper tinsel conductor.

Single Cords. 4½ ft. Shpg. wt., 2 oz.
27F552. Tips 1 end, ring term. on other.
27F553. Tips on both ends.
NET EACH **38c**

Double Cords. 4½ ft. Shpg. wt., 2 oz.
27F554. Spade-lugs 1 end; tips on other.
27F555. Tips on both ends.
27F556. Ring terminals on one end; tips on other.
NET EACH **53c**

EDWARDS

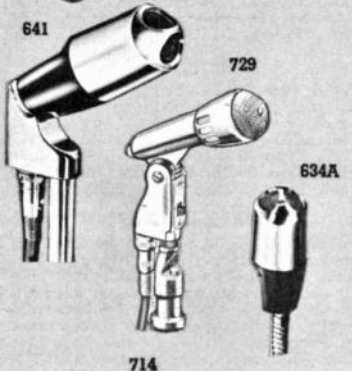
● *NEW* SERIES 5520 DUOTRONIC HORN/SIRENS



This all solid state system combines horn & siren in a single unit. Especially suited for schools, factories, lumber yards, and commercial installations. Siren is excellent for timing or scheduling and general warning applications where standard horns or bells are not satisfactory. Not adaptable for coding. Particularly suited to areas of high noise level. The horn is used for timing scheduling, paging, alarms or coded signals. Unit features a high decibel output, low current drain, adaptable mounting, either coding or continuous alarm horn and a continuous alarm siren. Also incorporates a directional megaphone and a tamperproof switch. Easy installation: mounts directly on a wall; or any single gang opening; octagon or square boxes; or equivalent fitting. Both FM and UL approved. Designed to operate at least 100 hours, 1 minute on, 1 minute off. Horn produces a 110 decibel signal at 10 feet; siren 108 db at 10 feet. Gray finish.

Stk. No.	Type	Volts	VA	Mounting	Lbs.	Each	3-up
96F200	5520*	24 AC/DC	12/8.5	Universal Adaptaplate mounts directly on surface or any 1 gang opening;	10	71.00	59.00
96F201	5520	120 AC	18	3¼", 3½", 4" octagon, 4" square	10	71.00	59.00
96F202	5520**	240 AC	21.5	box or equal surface fitting.	10	76.00	64.00

*Standard 24V unit operates on AC or DC.
**Uses 24V model and separately mounted 9984 transformer included.



ELECTRO-VOICE MICROPHONES

LOW COST CARDIOIDES

Model 641. Modern two-tone design dynamic microphone. High output level, response: 70-10,000 cps. For PA, recording, communications, electronic teaching aids. Output —57 db. 16' cable. Case is chrome plated die-cast zinc and gray high impact plastic. HI-Z. Wt. 1 lb.
61F584. NET **23.70**

Model 641. As above with LO-Z.
61F585. NET **23.70**

Model 634A. Similar to Model 641 except without on-off switch. For gooseneck mounting.
61F586. HI-Z NET **18.00**

61F587. LO-Z. **NET**..... **18.00**

Model 729 Hi-Z. Ceramic Cardioid. Random noise, reverberation, and feedback reduced by 67%. Front pick-up range nearly double that of pressure microphones. Tailored for single side band. Output is —60 db. Response is 60 to 8,000 hz. High impedance only; 8½' cable, desk stand, and floor stand adapter supplied. Size: 1½"W x 8¼"H x 1⅜"D. Shpg. wt., 9 oz.
61F565. ..... **14.70**

Model 729SR. As above, but with Relay Control switch.
61F566. ..... **15.90**

Model 619. "Press to Talk" Dynamic. Press-to-talk switch at base may be moved to upper part of stand for grip-to-talk operation. Switch shorts microphone in "off" position for relay operation. Response; 70-10,000 cps. Output —57 db. Hi-Z or balanced Lo-Z must be specified. 16' cable. Sz: 4⅜"x9"x4¾". Wt.2 lb. 2 oz.

61F512. Hi-Z. **NET**..... **28.50**
61F513. Lo-Z. **NET**..... **28.50**

Model 714. High Output, Communications Microphone. High impedance output —55 db over range of 100-7000 cps. DPDT switch shorts microphone in "off" position and closes relay circuit "on" pos. 3 conductor coiled cord 10' retracted. 10 oz.

61F572. NET **9.90**

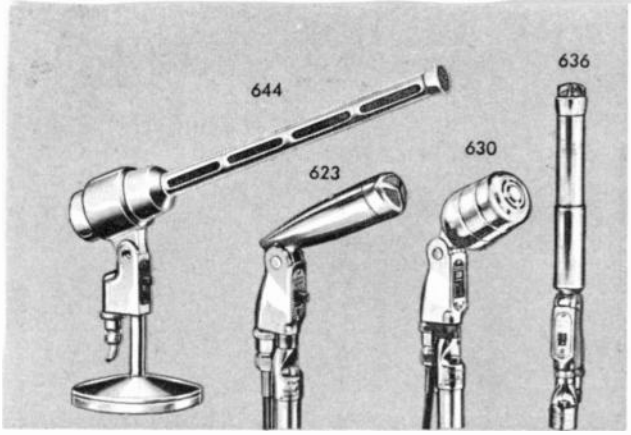
Model 717. Similar to Model 714 except close talking cardioid pickup pattern. Shpg. wt., 10 oz.
61F573. NET..... **11.70**

Model 805. Contact Mike. For playing guitars etc. Employs Hi-Z sealed crystal element. 15' cable. Shpg. wt., 8 oz.
61F521. NET..... **12.00**

Model 719. "Press to talk" Ceramic. Versatile low cost base-station microphone for any communications or paging work. Die-cast stand and head. Switch may be used in base or moved to upper part of stand. Hi-Z. Output: —56 db. Response: 70-7,000 cps. 16' cable. 4⅜"wx9"h. Net weight: 2 lbs. 2 oz.
61F514. NET..... **16.50**

MAKE NEWARK YOUR DEPENDABLE SOURCE FOR ALL ELECTRONIC COMPONENTS

Whether ordering in quantity for production or in small lots for specialized use, make Newark your headquarters for every electronic component.—Get the exact part you need from an inventory of over 70,000 units! Top Quality, Lowest Prices, Fastest Service.



Electro-Voice

UNDIRECTIONAL LINE MICROPHONE

Model 644. Sound Spot.® A combination cardioid and distributed front opening instrument. Working distance increased 2½ times over pressure microphones with no change in response. Distributed front opening extends the frontal pick-up on the microphone axis. Above 700 hz., cancellation of sound at rear and sides providing rejection of random noise, reverbration, and feedback. Narrow angle of acceptance (45° on each side of axis) permits isolation of individual performers. Low response to wind noise and shock. Response: 40 to 10,000 Hz. Output — 53 db. high Z. Lo Z attained by moving one wire in cable wired connector. Has pressure cast zinc case, satin chrome finish. Has on/off switch. Amphenol MC4M connector. ⅝" stand coupler. 16"L, 2 9/16"D. With 15' cable. Net wt. 4 lbs.

61F567. NET **66.00**

Magnetic Switch On model 631. On/off switch with removeable actuator button.

OMNIDIRECTIONAL MICROPHONES

Model 623. Slim Dynamic. For PA recording. Response: 80 to 12,000 hz. Output—58 db. Wired Hi-Z. Lo-Z by changing 1 wire in connector. Tiltable Head. On/off switch. Accoustalloy diaphragm. Built in MC-4 connector. 7½x1 5/16". With 16' cable. Net wt. 1½ lbs.

61F544. NET **34.20**

Model 630. General purpose mike. Response, 60-11,000 Hz. Output level —55 db. High Z. Built-in cable connector. On-off slide switch. 16' cable. Satin chrome finish. Shpg. Wt., 3 lbs.

61F507. NET **31.50**

Model 630. As above—but with Low Z.

61F583. NET **31.50**

Model 636. Slimair. Response: 60 to 13,000 Hz. wired Hi-Z. Lo-Z by changing 1 wire in connector. Output—58 db. Pop-proof, tiltable head. On-off switch. 10¼x1⅛". With 15' cable. Net wt. 2 lbs.

61F501. NET **43.50**

Model 635A. Broadcast mike. Finish provides magnetic shielding. Accoustalloy diaphragm. Pop filter eliminates need for wind screen. Response: 80-13,000 hz. Lo-Z. Output: —55 db. With 2-cond. 18' cable, Cannon XL-3 plug, & 310 clamp. 6x1⅜". Net wt. 6 oz.

61F504. NET **49.20**

● NEW "HAND & STAND" DYNAMIC

Model 631. Omnidirectional entertainer's microphone. Lightweight, rugged, and shockproof. 4-stage filter allows close-up use without blasting, pops, or distortion. Silent, magnetic on/off switch with removeable actuator button. Response: 80-13,000 hz. Output- 55 db. With cable and 310 stand clamp. Size: 6" l. x 1⅜" head dia., ¾" shank dia. Net wt. 6 oz.

61F593. High Z. **36.00**

61F594. Low Z. **36.00**

CERAMIC/CRYSTAL MICROPHONES

Model 911. Crystal. Output, —50 db.; response: 50-10,000 Hz. Metal Seal Crystal. MC-1 connector. Hi-Z.

61F508. NET **22.50**

Model 727 SR. Hi-Z. Slim ceramic general purpose mike with desk & floor stand adapter. 60-8000 Hz. Output: —55 db. 8½' cable. With relay control switch.

61F564. NET **14.10**

Type 715. Use in any position. Ceramic element. Response: 60-7000 Hz. Output: —55 db. Hi-Z. Omnidirectional.

61F530. NET **8.85**

Model 924. Lavalier Crystal. Supplied with neck cord, support clip and 18' cable. Output: —60 db. Response: 60-8000 Hz.

61F542. NET **14.10**

DYNAMIC LAVALIERS

Model 649B. Miniature lavalier microphone which weighs only 31 grams without cable. Ideal for programming where concealed placement is desirable. Response: 70-10,000 Hz. Output: —61 db. 2¼" long, ¾" dia. Complete with neck cord, belt clip and stand mounting clamp. Matches all low impedance inputs. Shpg. wt. 1 lb.

61F553. Model 649B. **NET** **63.00**

Model 647A. Smallest high quality mike in PA field. Rugged construction assures long life. Frequency response: 70-10,000 Hz. Accoustalloy diaphragm. Output level —60 db. Satin chrome finish. Tiltable head. 18' cable. Wt., 1 lb.

61F535. HI-Z. NET **49.50**

61F536. LO-Z. 150 ohms. **NET** **49.50**

E-V MICROPHONE STAND & ACCESSORIES

Model 300. Detachable microphone clamp. Fits 1" to 1⅛" microphones providing positive mounting to ⅝"-27 stand. ½ lb.

83F012. NET **4.50**

83F019. Model 310. As above, for ¾" diameter **3.60**

Model 418. Desk Stand. For use with Models 611, 623, 630, 641, 636, 674, 911 and 951. Gray finish. Shpg. wt., 3 lbs.

83F016. NET **7.80**

83F014. Model 419. For 644, 664, 665 ..... **7.80**

Model 420. Cast iron desk stand in TV gray For 1" dia. microphones. Models 666, 655C, 654A, 652, 652A and 676.

63F010. NET **12.00**

Model 423A. Desk Stand. Satin chrome stand on 5⅛" dia. base. With rubber base buttons and 5" matching stem riser. Wt. 1 lb.

83F003. NET **3.60**

Model 428. Touch-to-talk stand has DPDT switch with locking latch and fast-operating release. Takes ⅝"-27 thread. 7" high with base. Shpg. wt. 2 lbs.

83F004. NET **18.00**

Model 335A. Windscreen. Acoustifoam windscreen for Models 630, 634, 641. Net wt. ½ oz.

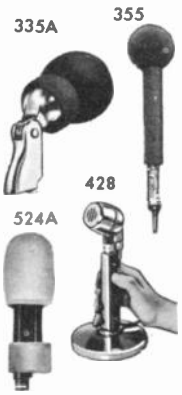
83F009. NET **7.50**

Model 355. Windscreen. Also protects against mechanical shock damage and pickup of dust and magnetic particles. For use with models 655C, 654A, 636, 623. Gray. Net wt. ½ oz.

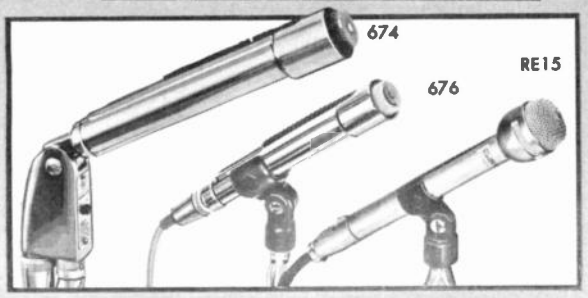
83F008. NET **6.60**

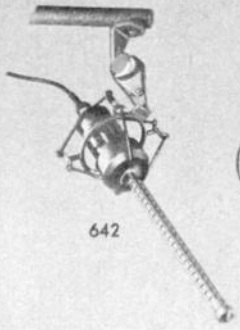
Model 524A. Windscreen. Designed for use with Model 666. Made of Acousifoam, minimizes wind effect on boom operation. Net wt. ½ oz.

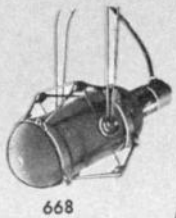
83F017. NET **7.20**

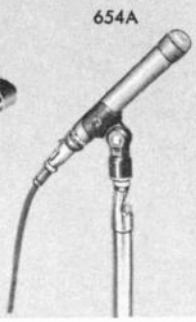


Electro-Voice®









● NEW CARDIOID MICROPHONE

Model 674. Continuously Variable-D® microphone which assures uniform symmetrical cordioid pattern at all frequencies. Frequency response 60 to 15,000 hz. Highest discrimination against feedback and unwanted sound. Three position switch offers controlled low frequency attenuation to overcome rumble and feedback when microphone is used at a distance. Stud-mount for use on floor or desk stand. Incorporates on/off switch. High pressure die-cast construction. Acoustalloy® diaphragm. Wired for Hi-Z. Low impedance available by moving one wire in new Q-C—4M cable connector. Output —57 db. 15' cable. Size: 7⅜" l. x 1¼" dia.

61F515. NET **60.00**

MODEL 676

Similar to Model 674, except less mounting stud and on/off switch. 60 to 15,000 Hz with low frequency attenuation switch. Slim design permits full view of person speaking. May be held in hand or mounted with model 300 clamp supplied. Wired for high Z. Low impedance available by moving one wire in cable connector. Output level—57 db. Satin chrome finish; 15' cable. Size: 7⅜" by 1¼" dia. Shpg. wt., 12 oz.

61F582. NET **60.00**

● NEW SUPER CARDIOID

Model RE15. Super-cardioid directional pattern provides maximum rejection at 150° off axis, maintains essential cardioid pattern at other positions. Response virtually identical at any position around microphone, eliminating off-axis coloration. With "bass tilt" switch. Non-reflecting matte satin nickle finish. Rugged case and inner construction. Response: 60 to 15,000 hz. Impedence: Lo-Z. Output —55 db. 18' 2-conductor shielded broadcast cable with Cannon XLR3-11 connector. Size: 6⁷⁄₁₆" L, 1⅜" dia. (¾ shank dia.). With metal case and 310 clamp. Net wt. 8 oz.

61F596. NET **153.00**

MODEL 642

Highly directional microphone combining the characteristics of cardioid and distributed front opening designs. Unidirectional up to 500 cps - highly directional over balance of range. Working distance 2 to 3 times that of conventional types. Excel-

and 250 ohms externally adjustable. Output level: —48 db. Has aluminum gray finished case. Length: 17⅞", max. dia., 3³⁄₁₆". Shpg. wt. approx. 3½ lbs.

61F568. Model 642. **NET** **234.00**

Model 324. Shock and suspension mount for Model 642. Will accept 326 windscreen.

61F576. Model 324. **NET** **39.00**

MODEL 668

Cardioid is designed specifically for boom use. Integral wind screen. Built in equalizer provides choice of 4 response curves in both high and low frequency ranges. Response. 40 to 10,000 hz. Output —51 db. Internal impedence selector permits 50, 150, or 250 ohm connection. 2' mechanical isolation cable and 20' 3-conductor shielded broadcast cable included. Supplied with shock insulating boom mount. Acoustalloy® diaphragm. Length: 9⅝" dia.: 3 ¼. Shpg. wt. 2 lbs.

61F575. Model 668. **NET** **297.00**

Model 667A. Same as above, but has selection of 3 low frequency and 2 hi-freq. response curves.

61F592. Model 667A **NET** **207.00**

MODEL 654A

Versatile Dynamic. Slim, versatile broadcast microphone can be used on stand, in hand or as lavalier. Provides maximum usefulness with high quality Omnidirectional. Frequency response, 50-15 000 Hz, substantially flat. Acoustalloy® diaphragm. Output —57 db. Matches all low impedances. Supplied with accessory neck cord and stand mount clamp. 18 cable and Cannon XLR-3 connector. Aluminum case finished in TV gray. Size: 7"x1⅛" dia. Shpg. wt., 1½ lbs.

61F522. NET **60.00**

SINGLE-D

Model 627. Single-D entertainer's microphone emphasizes low freq. when used close up. Built-in pop and dust filter. Peak free response shaped for presence. Has on/off switch. Response: 80-11,000 hz. Output —58 db. Hi-Z or Lo-Z. Includes cable and 310 stand clamp. Size: 6⁷⁄₁₆" l. x 1⅝" head dia., ¾" shank dia. Net wt., 6 oz.

61F516. High Z **36.00**

61F517. Low Z **36.00**

VARIABLE D®

Model 664. Most wanted cardioid dynamic for quality tape recording and P.A. Cardioid pattern at all freq. Blast-filter. On-off switch. 60-15,000 Hz. Output: —58 db. Wired for Hi-Z. Low Z available by moving one wire in new QCtm —4M cable connector. Chrome finish. 7¼" L, 1⅞" dia. With 15' cable.

61F546. NET **51.00**

Model 666. High discrimination against sounds from back. Response: 40-15,000 Hz. Output: —58 db. Wired for 150 ohms; taps at 50 and 250 ohms. Has model 300 stand clamp and 20' cable. 7¾" L, 1¾" dia. (Shank 1" dia.) Gray finish.

61F540. NET **153.00**

Model 665. Similar to 666, but for less exacting applications. 70-13,000 Hz. Switch in stud provides 50 or 250 ohm Z. 18' cable. 7³⁄₁₆" L, 1⅞" dia. Fits ⅝"-27 stand.

61F597. NET **90.00**

NOISE CANCELLING DYNAMIC

Model 602F. Hand-held microphone. Rejects sounds originating more than ¼" away. Elimination of ambient background noise. Press-to-talk switch energizes battery circuit and closes relay circuit. Hi-Z or balanced Lo-Z. High-impact rugged Cycolac case. Response: 200 to 5,000 hz. Output —55 db. Coiled cord extends to 5 ft. Size: 2½" W x 4" H x 1¾" D. Net wt. 10 oz.

61F537. High Z **34.50**

61F538. Low Z **34.50**

Model 600E. Dynamic Mobile Mike. Portable. High output level —55 db. Handy press to talk switch. 2½"x1½"x4". Shielded coiled cord, 1' retracted, 6' extended. Res. 100-7000 Hz. Hi-Z. 1 lb.

61F562. NET **23.40**

Model 210E. Carbon. Single button carbon mike. Substantially flat response. Matches 150 ohm input. Output —50 db. Press-to-talk switch. Res. 100-7000 Hz 6' coiled cord. Wt., 1 lb.

61F527. NET **21.00**

Model 205STCKK. Noise Cancelling carbon. For aircraft and emergency uses. FAA approved. Blastproof, waterproof and shock resistant. Output at ¼": —50 db. Black phenolic case. Press-to-talk switch closes microphone and relay circuit. Lo-Z. Coiled cord extends to 5'.

61F529. NET **30.00**

TURNER MICROPHONES & ACCESSORIES

BROADCAST & PROFESSIONAL

Model S-500. New cardioid dynamic microphone with newly designed Dynaflex diaphragm. Directional type. Designed for use in broadcast and Public address systems or other applications where unwanted background noise could create a problem. Slender shape for easy handling. Response, 40-15,000 Hz; hi or 150 ohm impedance selected at cable connector; output level, —55 db. Comes with 20' cable, on-off switch. Shpg. wt., 3 lbs.

61F745. NET **51.45**

Model 500-06. Matched pair of TURNER 500's with switches. Specifications as above. Rugged, reliable and economical. Shpg. wt., 3 lbs.

61F748. NET **102.90**

Model 700. Single, pop top ball cardioid mike eliminates feedback. Response, 40-15,000 Hz. Dual impedance; 150 ohms and High Z. Rugged satin chrome case, on-off switch, stand adapter, and 20' cable. Size: 2" x 6" x ½". Shpg. wt. 3 lbs.

61F767. NET **54.10**

Model 701. High impedance version of above. Similar specifications. 12 foot cable with plug is included. Size and weight as above.

61F768. NET **36.46**

HAM & CB MIKES

Model +2. Transistorized microphone with variable output level that will increase the signal strength and range of your transceiver. With a two transistor preamp with volume control to give you up to 50 times your output level. Responses; 300 to 3500 Hz. 27db. Light blue hammertone baked enamel with touch bar and bright chrome front.

61F703. NET **29.11**

Model M+2U. New! Mobile companion to the +2. 10 position volume control allows setting of the right number for your equipment. Self-contained power supply. Complete with 5' cord, instructions, and dash bracket. Light blue to match +2.

61F769. NET **23.23**

Model 350C. Hand-held ceramic microphone ideal for citizen's band, and amateur use. Plastic case with momentary on-off switch. Frequency Response: 80-7,000 cps. Output Level —54 db. Complete with standard dash bracket and hanger button. With 5' plastic jacketed cord. Shpg. wt., 1 lb.

61F760. NET **7.35**

Model J350C. Specifications as above. Wired for E. F. Johnson.

61F770. NET **7.35**

Model 254C. Ceramic mike. 80-7,000 Hz. —54db. 7' cable. Wt. 2 lbs.

61F751. NET **15.58**

Model 254X. As above, but crystal mike.

61F763. NET **15.58**

Model 454X. Crystal mike ideal for single side band. 300-3000 Hz. —48 db. With 5' cord, press to talk bar. 1 lb. 8 oz.

61F764. NET **15.58**

Model 505. Uses the superior cardioid features of the model 500 and the acoustical advantages of an adjustable bass response dynamic microphone to create excellent performance. Designed specifically for auditorium work, rostrums, announcing, and recording work of all types. Adjustable bass response. Freq. response: 40-15000 Hz when switch is in normal position. Switching positions modifies response to 100-15000 c.p.s. —55 db. Shpg. wt., 3 lbs.

61F702. NET **64.68**

Model 600. Heavy duty directional cardioid dynamic microphone which rejects background noise. No feedback "howl." Wide range of response: 50-15000 Hz output level is —55db. Comes complete with on-off switch and stand adaptor. 12' cable, hi impedance. Die cast chrome finished case. Shpg. wt., 2 lbs.

61F700. NET **34.99**

Model 602. Low impedance version of above.

61F701. NET **34.99**

Stand Model C-7. Attractive modern tear-drop design. Heavy die cast alloy finished in satin chrome. 5⅝"L x 4" max. width. Shpg. wt. 2 lbs.

83F097. NET **5.59**

PUBLIC ADDRESS & GENERAL PURPOSE

Model 250. Dynamic mike with exclusive three way switching action. Touch bar on front of mike for touch-to-talk; Hidden switch in base that is on automatically whenever the mike is picked up; on-off-lock-flip type switch on the base can be used to lock all switches in "on" position. Complete with 20' three conductor, one shielded cable. Output level —51 db., response 60-10,000 Hz. Hi-impedance. Shpg. wt., 3 lbs.

61F752. NET **32.34**

Model 251. The same as Model 250 except 150 ohms impedance.

61F750. NET **32.34**

Model +50. New transistorized mike for P.A. and background music installations. Features 10 position volume control and dual output impedance. Choose 150 or 600 ohms with one switch. Frequency response, 60-10,000 Hz. Self-contained 9 v. battery included. Die cast satin chrome case. 7' cable. Dynaflex interior. Attractive and durable.

61F771. NET **44.10**

Model SR585D. New dynamic microphone fixed mounted on 16" goose neck with mounting plate. DPDT switch is line shorting, to actuate a relay. Die cast satin chrome housing. Response: 70-12,000 cps; output, —58 db; impedance, 150 ohms. Shpg. wt., 3 lbs.

61F743. NET **25.58**

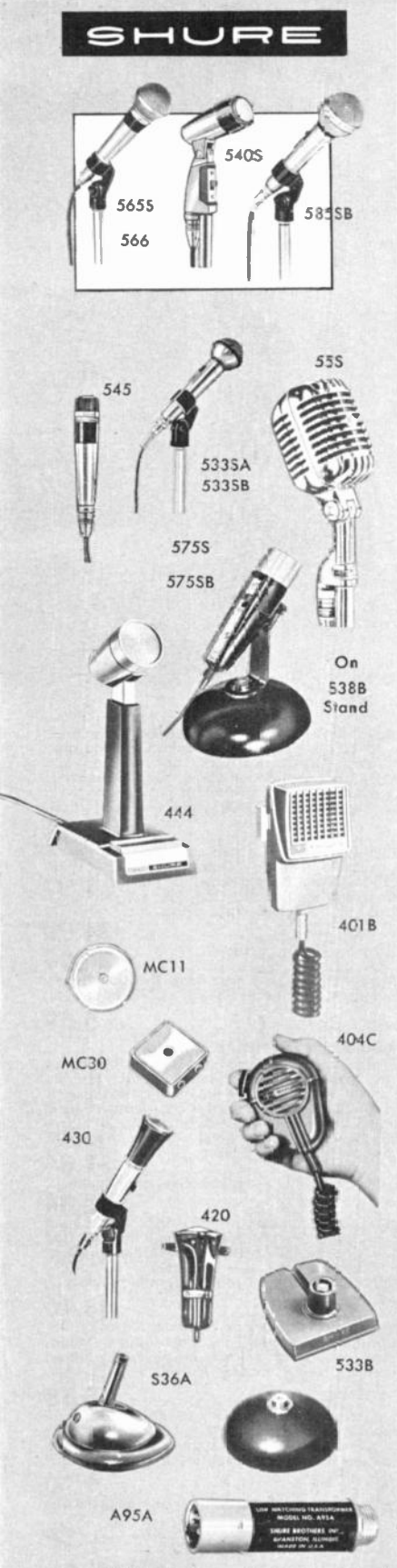
Model 304X. Crystal Microphone. High-output, high impedance crystal element; response 60-8,500 Hz. Use as a lavalier mike with cord and plastic clip supplied, base-mount it on the matching black base, or use the floor-stand adapter supplied. Output level: —50 db. Shpg. wt., 1¼ lbs.

61F757. NET **9.70**

Model 304C. As above, but ceramic element; output level —60 db; response 60-10,000 Hz. Wt. 3 lbs.

61F756. NET **9.70**

SHURE MICROPHONES



● *NEW* UNISPHERE "A"

Models 585SA & 585SB. Unidirectional dynamic microphones. Wire-mesh screen with filter eliminates loudspeaker squeak and echoing. Can be used closer to loudspeakers. Contains: shock mtg. cartridge; on/off switch, detachable cable; and swivel adapter. Response: 50-12,000 hz. Impedance and output: 585SA; High, —56.5 db. 585SB; Low, —57 db. 15 ft. cable. Wt., 2¼ lbs.

61F165. Model 585SA. Hi-Z **38.22**
61F166. Model 585SB. Lo-Z **34.10**

New Model 585SAV Unisphere A. Same as 585SA above but with built-in volume control.

61F167. Model 585SAV **42.63**

UNIDINE III MICROPHONES

Models 545 & 545S. Unidirectional, dynamic type, with resp. of 50-15,000 Hz. Dual impedance. Output level low imp., —57 db; hi-imp., —55 db. Swivel adapter with 15 ft. 3-cond. shielded cable. 5 13/16"L. x 1¼"D. Wt., 2 lbs.

61F139. Model 545 (less switch) **49.99**
61F168. Model 545S (on-off switch) **52.89**

UNIDYNE II MICROPHONES

Models 55S & 55SW. Unidirectional, eliminate feed-back problems. Select low, med., or high imp. Mounted on life-time swivel. Response: 50-15,000 hz. Output: L—55.5 db; M—56.5 db; H—55.5 db. Wt., 3⅛ lbs.

61F141. Model 55S (less switch) ... **48.80**
61F169. Model 55SW (on-off switch) . **49.98**

VERSADYNE DYNAMIC MICROPHONES

Model 575S. For PA amplifiers. 40-15,000 Hz. Impedance: High (100,000 ohms recommended). Polar pattern: omni-directional. Output level —56 db. Shpg. wt., 1 lb. 1 oz.

61F148. NET **14.11**

Model 575SB. Same as above but low imp. For long cable lengths.

61F149. NET **12.35**

Model 275S. "Versaplex". Ceramic version. Response: 40-12,000 Hz. Impedance: high (1-5 meg.) Output level: —59.5 db. Complete with switch, stand adapter, lavalier assembly. Polar pattern: omni-directional. Shpg. wt., 1 lb.

61F147. NET **8.82**

CONTROLLED MAGNETIC HAM MICROPHONE

Model 444. Telescoping height adjustment. Controlled magnetic element. Push-to-talk switch bar. Response: 300-300 Hz. Polar pattern: semi directional. High impedance. Output: —53 db. Wt., 2¼ lbs.

61F145. NET **24.99**

New Model 444T. Same as above but with built-in 2-transistor preamp with volume control for max. modulation. Response: 200-6000 HZ. Imp.: less than 1000 ohms. Output level: adjustable from 2-45 mv for 1 microbar input.

61F170. NET **29.11**

CONTROLLED MAGNETIC DISPATCHER MICROPHONE

Model 450. Same as Model 444 but response of 100-10,000 Hz. Dual impedance. Hi-Z —54 db. Lo-Z —53 db.

61F172. NET **29.11**

Model 404C. Hand-held. Ideal for outdoor use. Designed for high speech intelligibility. Has push-to-talk leaf switch. Response: 400-4000 Hz. Imp. and output: (404C) high, —54 db. (404B) 150-250 ohms, —52 db. Wt., 1 lb.

61F104. Model 404C (High imp.) ... **19.40**
61F103. Model 404B (Low imp.) **19.40**

Model 401B. Controlled magnetic type. Impedance: Low (recommended load impedance 150-250 ohms). Output Level: —48 db. Four conductor (two shielded) cable. Shpg. wt., 12 oz.

61F153. NET **12.94**

Tiny Controlled Magnetic Mikes. For small electronic devices — wherever size and weight are important. Metal cased. Width 1", wt., 1 oz. Shpg. wt., 2½ oz.

Stk. No.	Type	Shape	Imp.	NET
61F132	MC11-J	Circular	1000	7.35
61F133	MC20A-J	Rectangular	2000	8.23
61F134	MC30-J	Square	1850	11.76

● *NEW* UNISPHERE I MICROPHONES

Models 565 & 565S. Unidirectional dynamic microphones. Wire-mesh spherical front, contains filter to provide protection from wind and pop. Solves feed-back problems. Swivel mount. Dual imp. Response: 50-15,000 hz. Output: Lo—57 db, Hi—54.5 db. 15 ft. cable. Wt., 2½ lbs.

62F162. Model 565 (less switch) **55.80**
61F163. Model 565S (on-off switch) . **58.80**

New Model 566 Unisphere I. Same as above but with vibration-isolation shock mounting and dual low imp. Output: —55 db. Wt., 2¾ lbs.

61F164. NET **82.32**

SPHER-O-DYNE MICROPHONES

Model 533SA. Spherical front, built-in wind and pop filter for "pop proof" performance. 40-11,000 hz. High imp. —55 db. Swivel adaptor. 15 ft. single conductor cable. 6 19/32" x 2 1/16" diameter. Wt., 1 lb. 11 oz.

61F160. NET **29.40**

Model 533SB. Same as above except low impedance. —55.4 db, 15 ft. two conductor cable.

61F161. NET **27.93**

Model 540S. Sonodyne II. Response: 60-13,000 hz. Dual impedance. Choice of 50-250 ohms or high. 15 ft. cable. Complete with resonator plate and set-screw for changing response. Polar pattern: omni-directional. Size: 1 21/32": diameter, 3 3/8" long. Shpg. wt., 3⅛ lbs.

61F124. NET **29.37**

NEW MODEL M68 TRANSISTORIZED MICROPHONE MIXER

A practical and efficient way of increasing the efficiency and flexibility of public address and paging systems, or tape recorders using more than one microphone. No loss of output level. Independent volume controls, plus a master control. Lightweight, portable, and easy to operate. Response: ±2 db., 30-20,000 Hz. Inputs: four microphone; and auxiliary high level input. Imp., high or low. Size: 11 5/16 x 5 5/16 x 2 5/8" high. Shpg. wt., 4 lbs.

61F171. NET **73.50**

COMMANDO MICROPHONES

Model 420. Ideal multi-purpose controlled magnetic lavalier microphone. Polar pattern; omni-directional. Dual impedance. Output level: —52 db. Frequency response: 60-10,000 Hz. Includes 20 ft. cable and lavalier assembly. Wt., ¾ lb.

61F128. NET **17.64**

Model 430. Same as above, but for hand-held or stand usage. Press-to-talk switch. Includes 15 ft. cable and swivel adapter.

61F129. NET **22.64**

MICROPHONE ACCESSORIES

Type S36A. Stand. Fits Shure connector type mikes. Adapts to others. Removable

83F060. NET **4.70**

button for switch. 2½ x 5 x 7". 1½ lbs.

Model S38B. Stand. Heavy die-cast base, includes metal screwm achine stud for connecting microphone adapter to stand base. Black finish. Shpg. wt., 2 lbs.

83F066. NET **2.65**

Type A95A. Transformer. Matches 35-50 and 150-250 ohm mike to hi-Z input. 2-cond. cable to low-Z mike. 1⅞ lbs.

39F950. NET **10.29**

Replacement Microphone Cartridges. Not shown. For general replacement in Shure and other make mikes. All are supplied with rubber mounting ring. Overall depth approximately ⅞". Wt., 4 oz.

Type R5 Controlled Magnetic Replacement Cartridge. High impedance, high output. Unaffected by heat, hum. Shipping weight, 4 oz.

61F116. NET **6.47**

Model R5B. Same as above but low impedance.

83F067. NET **6.47**

Type R7 Crystal. High output, with smooth frequency response Replacement for 707A, 708A series. Wt., 4 oz.

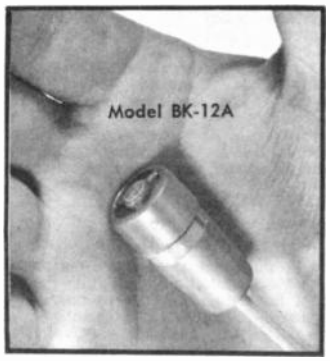
61F117. NET **4.85**

Type R10 Carbon. Replacement for CB, 100, and 120 mikes/ Output: 5 db below 1 v. per 100 microbar speech signal. Recom. for voice only. Wt., 6 oz.

61F118. NET **5.00**

Newark Industrial Electronics Corp., 2114 S. Division Ave., Grand Rapids, Mich. 49507

RCA Microphones & Accessories



SUBMINIATURE DYNAMIC

Model BK-12A. Neutral color makes it inconspicuous when worn around neck or attached to clothing. The BK-12A weighs just 20 grams and has a wide-range frequency response of 60 to 18,000 cycles, with proper speech balance. Impedance voice coil permits use with 30 to 250 ohm unloaded imputs without changing the microphone's impedance. Pick-up characteristics are non-directional. Elimination of output transformer makes magnetic hum sensitivity lower than comparable microphones. Micron-mesh acoustical filter provides dirt and moisture protection. Careful design, improved materials and manufacturing techniques. Repairs can be made in the field by the replacement of the cartridge and/or cable if necessary. Accessories include: Lavalier holder, tie clip holder, and cable clip. All accessories are gold plated to give pleasing jewelry-like appearance. ¾" dia. x 1½" L.
61F318. NET **95.00**

Type BK-6B. Miniature Dynamic Microphone. Lightweight microphone with excellent speech balance. General FM, AM and TV broadcast use or high quality P. A. use when a lightweight or concealed mike is useful, for interviews, etc. Output level is —.65 dbm. EIA ratings —159 db. Frequency response of 60-15,000 Hz. 250 ohm output impedance may be changed to 30 or 150 ohms by changing cable connections. Size: 2⁹⁄₁₆x1⁵⁄₁₆". Supplied with 30 ft. of three conductor cable. Shpg. wt., 2.3 oz.
61F304. NET **86.00**

STANDS AND ADAPTERS

Type MA-01. Desk Stand 7-11" High. ⅝" —27 thread. 3 lbs.
61F309. NET **5.20**

Type MA-02. Banquet Stand 13-25" high ⅝" —27 thread 6 lbs.
61F310. NET **5.85**

Type MA-03. Floor Stand 35-65" High. ⅝" —27 thread. 10 lbs.
61F311. NET **9.00**

Type MA-04. Floor Stand 37-66" High. ⅝" —27 thread. 22 lbs.
61F312. NET **16.50**

Type MA-05. Desk Stand for use with 77DX and BK-5B microphones, ⅝" —27 thread. 2 lbs.
61F313. NET **16.75**

Type MA-06. Desk stand. For use with BK-1A and BK-11A microphone. 6 oz.
61F314. NET **7.75**

Type MA-07. Holder for BK-6B. 6 oz.
61F315. NET **3.35**

Type MA-08. Adapter ⅝" —27 female; ½" male. 6/box. 3 oz.
61F316. NET EACH ..... **.60**

Type MA-09. Adaptor ½" female; ⅝" —27 male. 6/box. 3 oz.
61F317. NET EACH ..... **.90**

Type MA-24. Boom mount. Special shock mounting isolates BK-5B from vibration.
61F322. NET **36.50**

Type MA-25. Windscreen. For BK-5B.
61F323. NET **16.50**

Type MA-32. Swivel adapter. ⅝"-27 female thread used with SK-30, SK-31.
61F324. NET **3.40**

Type BK-1A. Commentator, Microphone. The pressure actuated microphone provides uniform response from 50-15,000 cycles. The swivel mounting can be used to control directional characteristics. Used for AM, FM, TV broadcast studios, remote pickup. Outdoor and indoor use. Stand or hand held P. A. work and audience participation. Vertical position is nondirectional; horizontal position is semidirectional. Output impedance 250 ohms (30 & 150 ohm connectors included). Output level —52 dbm. E1A ratings —146 db. Hum pickup is below —102 dbm. Shipping weight, 18 oz.
61F302. NET **86.00**

Type BK-11A. Velocity Microphone with bidirectional characteristics and frequency resopnse of 20 to 20,000 Hz. Three position Voice-Music switch to select best operating characteristics, high quality reproduction over entire audio range, operates well in high hum fields. Stainless steel screens, swivel mounted for 45 degree tilt. ½" pipe thread mounting Used in High Fidelity-AM, FM, TV broadcast and recording studios. Especially suited for high fidelity music pick-up. Output level of —56 dbm @ 1000 cycles. EIA rating, —150 db. Output can be connected for 30, 150, and 250 ohms. Size: 8x2⅞ x 2⅜". Shpg. wt., 2 lbs.
61F305. NET **107.00**

Type BK-5B. Uniaxial mike. A ribbon instrument with an unidirectional characteristic. Incorporated in the unit is a blast filter which reduces damage to the microphone from violent noises. Three position Voice-Music switch to select best operating characteristics, operates in high hum fields, shock mounted, wide frequency range and smooth response, very insensitive to vibration. Used in AM, FM, TV broadcast and recording studios. Frequency response 30 to 20,000 Hz. Output impedance 250 ohms, may be changed to 30 or 150 ohms. Output level at 1000 Hz. —56 dbm. E1A rating —150 dbm. Mounted ½" thread female. Size: 7 x 1¾" dia. Shpg. wt., 2 lbs.
61F303. NET **158.00**

Type SK-30. Low impedance microphone designed for use with 30 to 250 ohm unloaded inputs. Frequency response is 50 to 14,000 cycles. Output level is 1000 cycles at —55 dbm (EIA rating, —149 db). Mount by removing end-cap. Complete with 20 feet of two conductor shielded cable, less connector. 1½" diameter, 4½" long. Wt. 8 oz.
61F319. NET **30.00**

Type SK-31. Same as above except, high impedance, 30,000 ohms. Output —57 db below 1v. 20 ft single conductor shield.
61F320. NET **31.00**

Type SK-45B. —56 db output level when connected for a 150 to 200 ohm balanced output and —58 db when connected for a 15000 ohm output. EIA rating, —150 db. Response from 70 to 12000 cycles. Used for paging, PA indoors or outdoors, voice or music. Mounting with any ⅝ inch —27 fixture thread permits the use of low cost stands. Finish is low gloss gray. Supplied with 25 ft. of cable less connector. Size: 5½"x1⅝"x2". 1 lb.
61F307. NET **37.00**

Type 77-DX. Polydirectional mike available in two models: one with low-gloss finish for TV, the other satin chrome and gray enamel finish for AM & FM. Offers a choice of unidirectional, bidirectional, or non-directional pickup pattern controlled by a selector switch. Three frequency response variations on basic pickup patterns giving a total of nine directional characteristics. A 30 to 20,000 cycle frequency response. Three position Voice-Music switch to select best operating characteristics, exceptionally well-shielded against hum, three position shutter switch to select best directional pattern, shock mounted, high quality reproduction over entire audio range, very insensitive to vibration. ½" pipe thread mounting. Output impedance 250 ohms. Effective output levels are —50 dbm in bidirectional pattern; —53 & —56 dbm in the uni- and non-directional patterns. 11½x3¾x2½". 4½ lbs.
61F300. Satin Chrome Finish **290.00**
61F301. Gray Enamel Finish. **NET** **275.00**

Type SK39B/SK40B. (Low Z/High Z). These are utility mikes. Relatively insensitive to both mechanical shock and wind and resistant to both rain and moisture. Close-talking announce remote pick-up and mobile use, Public Address work, etc. Solder to your connector for high or low impedance inputs. Output level: —52dBV (High 2), —72dBV (Low Z). The mike's frequency response: 60-10,000 Hz. Mount on any ⅝" —27 fixture thread. Supplied with seven feet of unterminated, three conductor shielded cable. Shipping weight: 20 ounces.
61F306. SK-39B (Low Z) **33.00**
62F325. SK-40B (High Z) **33.00**

Type SK-46. Economy Velocity mike. Used in AM, FM. and TV studio and control room announcing or any indoor application requiring excellent response and small size. Reduces feedback. Insensitive to vibration. Has bidirectional pickup characteristics. Output impedance 200 ohms, but may be reconnected for 15000 ohm output. Output level is —58 dbm at 250 ohms or —60 dbm at 15000 ohms. EIA rating. —152 db. Supplied with a ⅝ inch —27 mounting thread and 25 ft. of two conductor cable, less connector. Size: 5⅛x1¹⁵⁄₁₆x1⅜". Shipping weight. 13 oz.
61F308. NET **54.95**

ASTATIC

MODEL 331

High impedance ceramic microphone. Voice range unit specifically designed for communication applications, paging and 27 megacycle citizen band use. Small, compact, modern styling design. Frequency range: 300-7000 cps. Output level: —58 db. (1 volt/dyne/cm²). Has built-in momentary-on spring-return switch. Cable provides for audio and relay connections. Complete with hang up bracket. Die-cast black housing and grill with chrome cap. Size: 4½x1¼ sq. Wt., 1 lb.

61F034. NET **10.53**

MODEL 332

Slim crystal mike. It features a slide switch with a "lock-on" position. Uniform frequency response from 30 to 15,000 cps. High (1-5 megohm) input impedance. Omni-directional. Output: —54 db (0-1 volt microbar). 4½" overall height, 1¼" diameter. Die cast housing. With eight feet of extra-flexible single conductor shielded cable, lavalier cord assembly and stand adapter for ⅝" —27 mtg. 1 lb.

61F033. NET **10.53**

MODELS 10C AND 10D

Tailored response and higher talk power makes these microphones ideal for SSB and AM transmitter use. Output: —54 db. freq. range: 300-3000 cps. High impedance. Model 10C contains ceramic element immune to temperature and humidity. Plug-in ⅝"-27 thread mounting with 5' single conductor shielded cable. Size: 2³²⁄₃₂"Dx6"L. Wt. 1 lb.

61F026. NET **17.46**

Model 10D contains dynamic unit. High impedance. Output—52db. 1 lb.

61F027. NET **23.34**

MODEL JT-30

Specially designed for PA recording and communications. Semi-directional unit. Wide-range response 30-10,000 cps. High impedance. High output level of —49 decibels. Suitable for modest gain requirements. Handsome opalescent gray finish, with bright chrome grille. Unit comes complete with an 8 ft. cable and a desk stand. The base of the stand detaches quickly for hand-held use. 8" high. 2 lbs.

61F000. NET **10.81**

MODEL 788

Omidirectional microphone for commercial sound installations, recording, FM and T.V. Hand use in addition to normal application as nested in its floor or desk stand holder. 150/25C ohms, or high impedance output. Freq. Resp.-Smooth from 60 to 13,000 cps. with 18 ft. of two-conductor shielded cable. Alloy die castings finished in non-reflecting baked synthetic enamel. Wt. 17 oz.

61F043. NET **46.75**

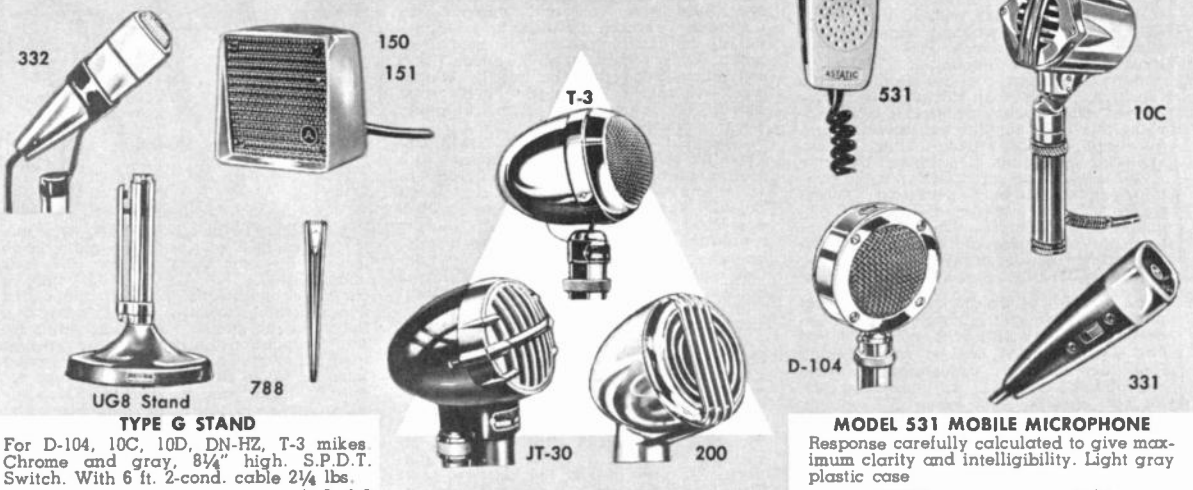
MODEL D-104

High output crystal. Balanced performance for maximum intelligibility within the voice range. Response 30-7,500 cps has a rising characteristic for crisp articulate speech. High output of —46 decibels (1 volt/dyne/cm²). Metal seal element defies humidity. Machine brass parts, bright chrome finish, and 5 ft. of single conductor cable. Size: 3½"x1¹⁄₁₆". Shpg. wt. 1¾ lbs.

61F005. NET **18.23**

61F042. Model D-104C. Ceramic..... 18.23

MICROPHONES & ACCESSORIES



TYPE G STAND

For D-104, 10C, 10D, DN-HZ, T-3 mikes. Chrome and gray, 8¼" high. S.P.D.T. Switch. With 6 ft. 2-cond. cable 2¼ lbs.

61F016. NET **14.66**

MODEL UG8 STAND

Same as above except for DPDT switch and terminal strip in stand base. For T-3, D-104, 10C, 10D, DN-HZ DN-50 mikes. 4-cond. cable.

61F038. NET **17.61**

MODEL MC-151 REPLACEMENT CARTRIDGE

For models 200, T-3, JT-30. Wt. 8 oz.

61F017. Crystal cart. **NET** **4.12**

MODEL 77

Uniform from 30 to 15,000 Hz 18db. F to B. —48db output. Multiswitch selection "L" 30 to 50 ohms. "M" 150 to 250 ohms and "H" high imped. 40,000 ohms. Complete with 90° swivel built-in On-Off switch. 20 foot cable. Size: 8x2³⁄₁₆x2¾" deep. Wt., 3 lbs.

61F029. NET **48.51**

MODEL 531 MOBILE MICROPHONE

Response carefully calculated to give maximum clarity and intelligibility. Light gray plastic case

(DPDT spring return switch)

vinyl jacketed coil cord. Response: 150-3500 hv. Output: -50 db below 1 volt/dyne/cm². High impedance ceramic element. Mounting bracket supplied. Wt. 8 oz.

61F039. NET **7.50**

MODEL 150 AND 151

High output, low cost "stand up microphones, are designed for use with tape recorders. Model 150 - Crystal: Model 151 - Ceramic. Output: —44 db re 1 volt/dyne/cm² for 150; -48 db re 1 volt/dyne/cm² for 151. Response; 30-10,000 hz for both. 5' flexible cable . . . 2³⁄₁₆" square by 1¼" deep. Wt., 4 oz.

61F031 (Model 150) NET **3.82**

61F032 (Model 151) NET **3.82**

MODEL 200 VELVET-VOICE

High impedance, semi-directional crystal microphone that features wide-range, high output. Response 30-10,000 cps. with output level of —50 db. Built-in handle has separate "quick-lock" detachable base. Comes with stand and 8 ft. cable. Case and handle are finished in gold, with chrome grille. 8" high. Wt. 2 lbs.

61F001. NET **11.47**

MODEL 200-S

Exactly like Model 200 microphone above, except has built-in on-off switch. Complete with stand. Shpg. wt., 2 lbs.

61F002. NET **12.64**

MODEL T-3

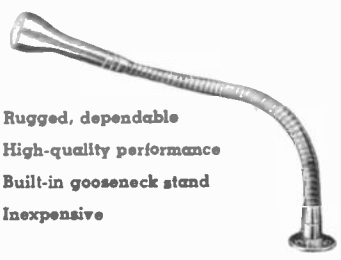
Tilting head mike with self-locking hinge. Response 30-10,000 cps. Output —54 db. High impedance. With 10 ft. cable. Type G stand recomd. Size: 2³²⁄₃₂" Dia. x 6" long. Wt., 2 lbs.

61F008. NET **17.23**

SONOTONE CERAMIC FLEX-MIKE

Model CM-17A. Omnidirectional high-impedance microphone with rugged ceramic element and flexible gooseneck stand for permanent installation. Ideal for podium mounting. Frequency response of 30 to over 12,000 cps and high (—56 db) output are more than ample for speech needs. Ceramic transducer and metal damping grid are immune to extreme variations in temperature and humidity. Transducer is encased in neoprene and cushion-mounted for protection from physical shocks and drops. Supplied with 6' of shielded cable. One-piece microphone is diecast metal with brush-chrome finish; 17" long. Shpg. wt. 2 lbs.

61F035. NET **15.44**



- **Rugged, dependable**
- **High-quality performance**
- **Built-in gooseneck stand**
- **Inexpensive**

ATLAS SOUND EQUIPMENT

MICROPHONE BOOM STANDS

Model BS-36W. Professional Boom Stand. Features Safety Air-Lock Cushion, built into vertical section to prevent sudden slippage of upright section. Has gyromatic swivel joint to hold mike in proper position. Has adjustable counterweight, removable boom and ball bearing casters. Boom extension 62"—upright is adjustable from 48" to 72". Base diameter, 17". In chrome and gun metal. Snap-on hangers hold cable to boom. Shpg. wt., 38 lbs.
83F043. NET **49.98**

DESK AND BANQUET STANDS

Model DS-5. Employs same fine finish and workmanship as embodied in all ATLAS products. The DS-5 is a 4 inch tall non-adjustable microphone stand. Base diameter is 6". Chrome tube, and gray base. Wt. 3 lbs.
83F039. NET **2.20**

Model DS-7. As above but adjustable from 8" to 13".
83F040. NET **3.67**

Model TS-8. Adjustable banquet stand using full grip control. Adjustable from 14½ to 26 inches. All chrome.
83F051. NET **6.76**

"VELVET ACTION" STANDS

"Velvet Action" stands featuring "Ful-Grip" clutch which offers an extended length body, permitting a secure, full-hand grip. The attractive bases are functionally designed for stability with maximum base mass located where the concentrated weight is most useful. They include self-leveling, shock-absorbing base pads, plus three additional "anti-tip" points located between the base pads.

Model MS-11C. Adjustable from 34" to 62". Base dia., 10". Base and tube assembly chrome finished. Wt., 13 lbs.
83F032. NET **8.97**

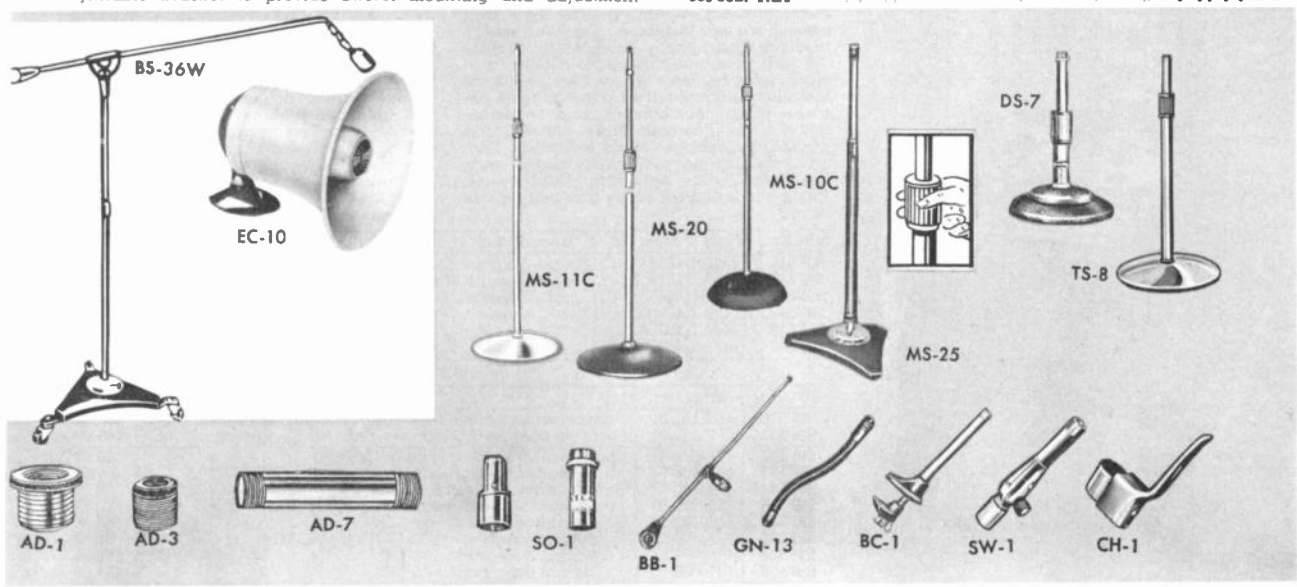
Model MS-20. Height adjustable from 37" to 66". Base dia., 12". Gray base. Chrome finished tube. Wt., 15 lbs.
83F033. NET **11.17**

Model MS-10C. Height adjustable from 35" to 63". Base dia., 10". Gray base. Chrome finished tube. Wt., 10 lbs.
83F030. NET **6.76**

Deluxe Model MS-25. "Safety Air Lock Cushion" permits smooth and quiet collapse of stand without sudden slippage. Base dia., 17". Adjustable ht., 38-67". Chrome finish. Sh. wt., 22 lbs.
83F034. NET **18.23**

MODEL EC-10 PAGING SPEAKER

Equipped with a ceramic type magnet and handling capabilities of 6 watts. Impedance 8 ohms; frequency response of 400 to 10,000 cycles per second. Sound level 11.3Db. Featuring an adjustable bracket to provide swivel mounting and adjustment for correct sound pattern. Overall length 6⅜" with a bell diameter of 6¼" and a sound dispersion of 125°. Weight 2 lbs.
83F052. NET **14.41**



MICROPHONE ATTACHMENTS & ACCESSORIES

Model BB-1. "Baby Boom" Attachment. Can be easily and quickly attached to any microphone floor stand. Boom arm is equipped with universal swivel that can be adjusted and locked in any position. Sliding counterweight. Has ⅝"—27 thread. 32-inch tube section is chrome plated. Gray castings. Shipping weight, 3½ lbs.
83F038. NET **5.44**

Model GN-13 Flexible Goose Neck. Attaches to mike stand, providing convenient adjustment for individual use. Bright chrome finish. 13" long, ⅝"-27 thread. Wt., 1 lb.
83F037. NET **1.76**

Atlas Model GN-19 Goose Neck. Can be attached to any microphone stand or fixture. 19" long. With male and female threads ⅝"-27. Shpg. wt., 1 lb.
83F048. NET **2.50**

Model BC-1 Bracket Clamp. For attaching mike boom arm, or goose neck to desk or other solid object. Can be clamped or permanently screwed or bolted in position. 6" chrome stem, gray finish clamp. ⅝-27 thread. Shpg. wt., 1 lb.
83F042. NET **2.50**

SW-1 Gyromatic Swivel. Adjusts to any angle. Locks in any position. Fits any floor or desk stand. Chrome finish. 4½" long, ⅝-27 male, female threads.
39F912. NET **3.38**

CH-1. Cable Hanger. Fits tubes from ⅞" to 1¼" dia. Mike can be quickly coiled, looped over it when moving. Easy 1-screw attachment. Chrome finish.
39F913. NET **1.76**

Atlas Model FS-1 Footswitch. For use with any mike having single ended inputs. Completely shielded and noise free. Can be hand operated on table top. Uses long life micro switch. Cork base prevents skidding. 2½x3".
83F046. NET **8.67**

Model AD-1. Handy adapter for fitting RCA mike to std. mike stand. Has ½" male pipe thread and std. ⅝"—female thread.
39F900. NET .62

Model AD-2. ⅛" pipe female to ⅝"—27 male.
39F901. NET .44

Model AD-3. ⅛" pipe female to ⅝"—27 female.
39F902. NET .47

Model AD-4. ¾" long ⅝"—27 male running thread.
39F903. NET .29

Model AD-5. ⅝"—27 female to ⅝"—27 female.
39F904. NET .47

Model AD-6. ⅞"—27 female to ⅞" female coupling.
39F905. NET .88

Model AD-7. 3" long tube ⅝"—27 male each end.
39F906. NET .59

Model AD-8. 6" long tube ⅝"—27 male each end.
39F907. NET .59

Model AD-9. ⅞"—27 female to ⅝"—27 female.
39F908. NET .65

Model AD-10. ⅝"—24 female to ⅝"—27 female.
39F909. NET .97

Model AD-11. Flange, ⅝" ⅝-27 female. Base dia., 1¼".
39F910. NET .65

Model AD-12. Flange, ⅝"—27 male. ⅞" mtg. ctrs.
39F911. NET .65

Atlas Model SB-1 Switchboard Microphones Support. Designed for use in supporting a microphone over conventional types of telephone switchboards. 12" flexible chrome plated goose neck arm mounted on spring loaded swivel. Wt. 13 lbs.
83F047. NET **11.17**

MODEL SO-1 MIKE ATTACHMENT

Provides a fast, safe means of attaching any microphone to any floor stand. Eliminates the need of threading the microphone on and off stand. Consists of a two-section "Snap-On" ball bearing spring sleeve. Shipping weight, 2 lbs.
39F920. NET **1.91**

AMPEX PROFESSIONAL RECORDERS

AG500 SERIES

Solid-state, compact studio quality recorders for rack or portable use. Precision milled die cast top-plate eliminates flexing and maintains alignment. All functions can be completely remote controlled. All frequently used record and bias adjustments are accessible from the front. Can accommodate up to 4-head stack. Erase heads have new high efficiency ferrite core construction. Eddy current clutches assure gentle tape handling and permit the use of thin base tapes.

Overall frequency response: 30-18,000 Hz ±2dB at 15 ips; 30-15,000 Hz +2dB —4dB at 7½ ips; 40-8000 Hz +2dB —4dB at 3¾ ips. Inputs, two per channel. Flutter and wow: less than 0.15% rms at 15 ips; less than 0.18% rms at 7½ ips; less than 0.25% rms at 3¾ ips. Signals to noise ratio: 55dB at 15 and 7½ ips (half track or two track), and 3¾ (full track); 60 dB at 15 and 7½ ips; 50 dB at 3¾ ips. For 117V, 60 Hz AC or 3 wire grounded cable supplied. Other models available on special order.

Stk. No.	Type	Mfr.No.	Description	Head	Mounting	Speed	Lbs.	NET
99F510	AG500-1	4010048-02	Single Channel	Full Track	Unmounted	7½ and	40	1202.00
99F511	AG500-1	4010048-04	Single Channel	Two Track	Unmounted	15 ips	40	1202.00
99F512	AG500-1	4010048-06	Single Channel	Full Track	Unmounted	3¾ &	40	1202.00
99F513	AG500-1	4010048-08	Single Channel	Two Track	Unmounted	7½ ips	40	1202.00
99F514	AG500-4	4010049-08	Two Channel	Four Track	Unmounted	3¾ & 7½	50	1432.00

AG440 SERIES

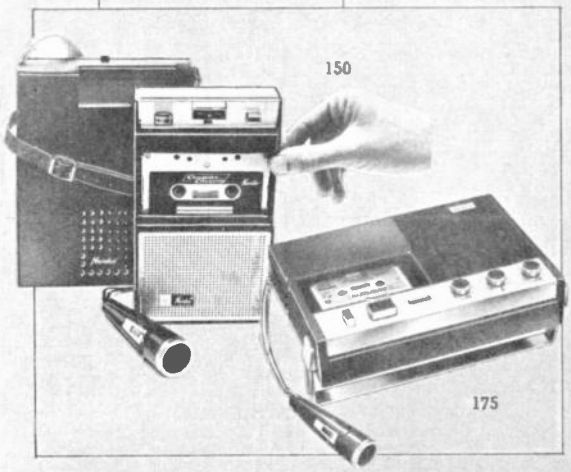
Solid-state recorders/reproducers. Rigid die cast frame provides flat mounting for all mechanical components. Fully convertible between ¼ and ½ inch tape operation by changing head assemblies and adding electronics panels. One quarter inch head assemblies are standard. The over bridge modular mount easily accepts four or more 3½ inch panels so that single channel machine may be built up to four channels. Modular design front of panel plug-in assures rapid maintenance and minimum down time. Features three motors, and pushbutton, relay-solenoid operation. Separate record and play electronics permits monitoring while recording. Dual speed. Automatic equalization by non-relay diode circuit.

Specifications: Frequency response; 15 ips: ±2dB 30-18,000 Hz; 7½ ips: ±2dB 40-10,000 Hz, +2—4dB 30-15,000 Hz. Signal to noise ratio: 15 ips: Full track, 68dB; 2 track, 60dB; 7½ ips: Full track, 68dB, 2 track, 60dB. Flutter and wow: (by ASA standards): 15 ips: below 0.08% rms; 7½ ips: below 0.1% rms. Timing accuracy: 0.2% (±3.6 seconds in 30 minutes recording time). Record input: 100K unbalanced bridging with dummy plug supplied or 20K balanced bridging with plug-in transformer supplied with each electronics. —17dBm to produce recommended operating level. Playback output: +8 dBm into 600 ohm, balanced or unbalanced. Reel size: up to 10½", adj. to 11½". Power requirements: 117V, 60 Hz AC.

Stk. No.	Type	Mfg. No.	Description	Head	Mounting	Speed	Lbs.	NET
99F515	AG440-1	4010071-03	Single Channel	Full Track	Unmounted	7½-15	50	1970.00
99F516	AG440-1	4010071-01	Single Channel	Full Track	Console	7½-15	288	2350.00
99F517	AG440-1	4010071-05	Single Channel	Full Track	Portable	7½-15	60	2110.00
99F518	AG440-2	4010072-01	Two Channel	Two Track	Unmounted	7½-15	50	2640.00
99F519	AG440-2	4010072-03	Two Channel	Two Track	Console	7½-15	288	3020.00
99F520	AG440-2	4010072-05	Two Channel	Two Track	Portable	7½-15	60	2780.00

ACCESSORIES

Stk. No.	Mfg. No.	Description	Net
99F530	4150161-01	Portable case for AG500 Single Channel Recorders	100.00
99F531	4150231-01	Portable case for AG500 Two Channel Recorders	105.00
99F532	4010080-01	Remote control, desk type for AG440	60.00
99F533	4010066 01	Microphone preamp—plug-in module for AG440/500	55.00
99F534	4580200 01	Balanced bridging input trans. plug-in for AG440/500	20.00
99F535	4580200-02	Line matching input trans. plug-in for AG440/500	20.00
99F536	4010069-01	Scrape flutter idler kit for AG440	50.00
99F537	4020269-03	Equalizers—record-7½-15 CCIR for AG440	25.00
99F538	4010086-01	1 Channel case set for AG440	165.00
99F539	4010086-02	2 Channel case set for AG440	165.00
99F044	087-007	Head Cleaner—4 oz. can	1.45
99F045	4010825 02	Lubricating oil—1½ oz. plastic oiler	.95
76F060	4040575-30	Head Demagnetizer	9.95
99F658	1-31311-01	Standard & Alignment tape for NAB equalization, 15 ips.	21.95
99F619	1-31321 01	Same as above for 7½ ips.	21.95
99F659	1-31331-01	Same for 120 μsec equalization, 3¾ ips.	21.95
99F729	4012201-02	Position indicator, 4 digit, resettable, for AG-500	35.00
99F738	96900-03	MX-10 Mixer. 4-position, 2-chan. for AG-440	395.00



NORELCO

● NEW NORELCO CASSETTE TAPE RECORDERS

Model 150 Carry Corder. Cassette loading and cordless. Capstan drive and constant speed, transistor regulated motor. 80-10,000 Hz ±3db. Complete with tape cassette, dynamic mike, fitted carrying case, patch cord. 3 lbs. Signal to noise ratio: better than —45 db. 2 tracks. Wow & flutter: 0.1% rms. 7⅞x4½x2¼". 20 hr. battery life. Use 5 type C batteries.

96F840. NET **69.50**

Model 175 Continental Compact Cassette. Like above, but with oversize speaker for 'big sound' playback quality. Fast forward/rewind; volume, tone, recording level controls. 40 hrs. battery life. 5 lbs. 11¼x9½x2¾". Use 6 type D flashlight batteries.

96F841. NET **89.50**

ACCESSORIES

Stk. No.	Type	Description	Net
96F842	BE-50	AC Adapter	19.90
96F843	HP-86	Listening Headset	12.75
96F844	FP-86	Foot Pedal	17.75
96F845	TP-86	T-Phone pick-up coil	7.45
96F846	CTM-86	Close Talking Mike	29.25
96F847	C60	60 Min. Tape Cassette	2.65
96F848	C90	90 min. Tape Cassette	3.95
96F849	CMU-150	Car Mount	24.95

TAPE RECORDERS

Revere-Wollensak Division

● NEW MODEL 4200 CORDLESS RECORDER

Battery operated cartridge tape recorder offers complete portability. Easy to use—one 4-position function switch controls all operating modes. Constant speed capstan drive provides a full continuous hour of operation. Solid state operation permits instant warmup and reliability. VU meter for correct recording level and battery condition along with separate record level and volume controls are outstanding features of the "Cordless." Frequency response: 80-10000 hz ±3 db. Wow and flutter rms: 0.3%. Power output: 400 mW. Tape speed: 1⅞ ips. Signal to noise ratio: better than —45 db. Recorder comes with dynamic microphone, Scotch Brand magnetic tape cartridge, and rugged carrying case designed to accommodate recorder, microphone, and two extra tape cartridges. Size: 4½x7¾x2¼". Uses five "C" cells (not supplied). Wt.: 4 lbs.

96F974. NET **74.95**

ACCESSORIES FOR MODEL 4200

Stk. No.	Type	Description	NET
49F261	1	"C" cell	.18
49F721	AL-1	Alkaline "C" cell	.39
96F950	A-0469	110 VAC adapter	17.93
96F951	A-0471	Foot Control	15.98
96F952	A-0470	Earphone	11.48
96F953	A-0473	Patch Cord	3.68
96F954	A-0472	Replacement Microphone	13.47

Type 271. Tape cartridge for Model 4200.
76F649. 1-11, Ea. ..... 2.09 12-up,Ea. 1.88

MODEL 1500 SS MONO RECORDER

The 1500 SS is a compact, top-quality 2-track monophonic recorder. Powerful, solid-state amplifier, and high efficiency speaker provide big, rich tone. Lightweight, and with push button operational ease, the 1500 SS is built for a wide range of uses. The 1500 SS features a solid-state push-pull output amplifier, simple keyboard operation, dual speed, provision for monitoring and P.A. use, and all-metal construction. All inputs and outputs for recording or playing back through any source are conveniently grouped on one rear panel. Complete with dynamic microphone, patch cord, 7" reel of tape and self-threading take-up reel. Frequency response: 40-15000 cps ±3 db @ 7½ ips, 40-8000 cps ±3 db @ 3¾ ips. Size: 6½x10¼x11¾". Shp. wt., 18½ lbs.

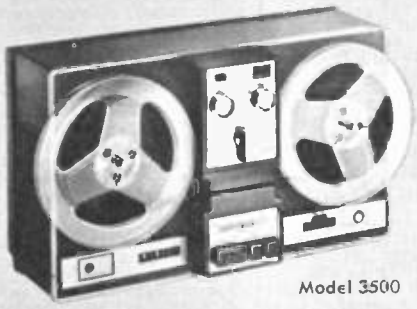
96F976. NET **184.95**

Model 1500 SS

MODEL 3500 AC-DC TAPE RECORDER

ARL (Automatic Record Level) automatically compensates recording levels for perfect recordings every time, eliminates need for manual setting, and adjusts for variations in recording levels. Operates on batteries or household current (no adapter needed). Compact 5-inch reels. Features: Solid-state for instant warm-up and reliability; ARL with manual override; VU meter; Counter; capstan drive. Freq. Resp: 100-8000 hz ±4 db @ 3¾ IPS. Wow and Flutter RMS: less than 0.4% @ 3¾ IPS. Tape speeds: 3¾ and 1⅞ IPS. Power Requirements: 6 1.5V D cells or 117V AC. Size: 11½" x 10¼" x 4". Includes: Dynamic microphone, earphone, patch cord, accessory pouch, blank tape, and take-up reel. Shpg. wt. 8.75 lbs.

96F960. NET **89.95**

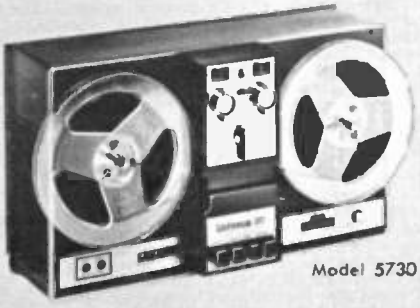


Model 3500

MODEL 5730 STEREO RECORDER

Four track stereo and monaural solid state recorder. The 5730 features power activated push button control central; automatic shut-off; separate tone and volume controls; external circuit breaker; instant pause control; two VU meters; and automatic head demagnetization. Frequency response: 40-17000 cps ±3 db @ 7½ ips, and 40-10000 cps ±3 db @ 3¾ ips. Also operates at 1⅞ ips. Complete with cover lid, dynamic microphone, 7" tape reel, and self-threading take-up reel. Size: 16x10x7". Ship. wt., 22 lbs.

96F956. NET **199.95**

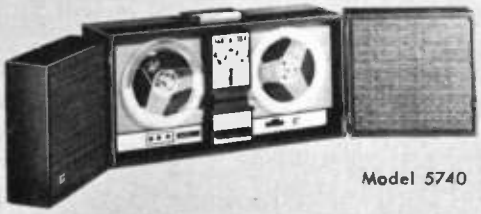


Model 5730

MODEL 5740 STEREO RECORDER

Three speed stereo and monaural solid state recorder. The 5740 has detachable wing speakers, and a vinyl covered case. Features include power activated push buttons, two VU meters, external circuit breaker, FM multiplex ready FM multiplex four digit tape counter and separate tone and volume controls. Frequency response: 40-17,000 cps ±3 db @ 7½ ips, 40-10,000 cps ±3 db @ 3¾ ips. Wow and flutter: less than 0.25% @ 7½ ips, less than 0.3% @ 3¾ ips. Signal to noise ratio: greater than 48 db @ 7½ ips, greater than 45 db @ 3¾ ips. Also operates at 1⅞ ips. Wings contain 2-6" round speakers. Complete with dynamic microphone, 2 speaker cables, 7" reel of tape and one self-threading take-up reel. Size: 21⅛x10⁹⁄₃₂x10½". Ship. wt., 28 lbs.

96F957. NET **229.95**



Model 5740

ACCESSORIES FOR WOLLENSAK RECORDERS

Carrying Case. For 5710, 5730 and older models 5150 and 5250.

96F971. Type A-0456. NET. **9.90**

Carrying Case. For 1500SS and older models 1500, 1600 and 1616.

96F981. Type A-059. NET. **9.00**

Foot Control. For all models except 4200.
96F983. Type TF-404. NET. **17.10**

SONY®

Model TCV-2020
Consists of CVM-51UWP
Receiver/Monitor and
CV-2000 Videocorder
Tape Deck in Walnut Cabinet

Model CVM 2300

Packard Bell
Model MPS-16

Model
VCK-2000

Model VSC-20

For Additional Information and Specifications Order . . .
SONY VIDEOCORDER LITERATURE PACKAGE
99F808 ..... FREE

VIDEOCORDER WITH RECEIVER/MONITOR

Feature video tape recorder with built-in 8½" receiver/monitor. All solid state circuitry. Can be used to (1) record "live" action in sight-and-sound using the Sony Video Camera System; (2) record off-the-air both the video and audio portion of any TV channel. Built-in monitor indicates exactly what is being recorded on the tape visually. Serves as the TV screen for instant playback of recorded material; also as program source for off-the-air recording. Can be connected to additional monitors for presentations to various groups. Receiver/monitor also can be used as regular VHF-UHF Television set. When used with the VCK-2000 Camera Ensemble, Videocorder will record "live" indoor and outdoor scenes in both sight-and-sound . . . recorded material can be played back instantly or stored for future use. Unit is supplied with sample tape (10 minutes). 7" empty reel, head cleaner set, lubricating oil, 8-ohm earphone, external antenna connector, splicing tape.

Model TCV-2010. In portable leatherette covered case with removable hinged cover. Size: 27½ x 16¼ x 11". Wt. 66 lbs.
99F806. NET **995.00**

Model TCV-2020. In deluxe, oil finished Walnut cabinet with friction-hinged split lid. Includes built-in clock timer to record programs automatically. Size: 29½ x 17¼ x 11". Weight 70 lbs.
99F807. NET **1150.00**

VCK-2000 VIDEO CAMERA SYSTEM

Solid state vidicron camera, VCK2000 with 25mm F/1.9"C" mount lens, elevator tripod, dynamic microphone. Use with all Videocorders. With the camera, Videocorders record "live" action in most any illumination. Camera has rugged Vidicon tube and full automatic sensitivity control. Horizontal resolution is better than 350 lines at center of screen. 26 transistors and 25 diodes. When used with Videocorders and TV monitor, operator can see how the pictures being taped will look while recording. Distancering and lens opening ring located on standard lens. Electronic focus control adjusts to sharpen picture.

Dynamic Uni-Directional (cardioid) microphone supplied. Output impedence: low impedence 230 ohms with tripod and necessary cable. Camera 3⅛ x 5¼ x 9⅞". Supplied with custom fitted case 24¾ x 11¾ x 4⅞". Power requirements: 117 VAC, 60 Hz. 10 watts. Complete ensemble weight: 20 lbs.
99F802. NET **350.00**

RECEIVER/MONITOR

Two monitors for use with Sony Videocorders. Serve as program source when recording off-the-air and as the picture screen-and-sound system during playback. When used with a TV camera it serves as a monitor. 82-channel TV receivers. Model CVM-51UWP Receiver/Monitor. Solid state unit with monopole antenna, connections for external antenna—75 or 300 ohms with connector supplied. Has 8½" rectangular picture tube. 5' monitor connection cable. Also equipped with earphone, front cover, TV hood, external connector, standard monitor connection cable. Size: 9 x 10 x 8⅝". Wt.: 10 lbs.
99F804. NET **195.00**

Model CVM-2300U Receiver/Monitor. Large 22" monitor housed. Monitor functions as conventional TV receiver. Antenna system: built-in VHF dipole with externally connected UHF loop. External antenna input 300 ohms balanced. Also supplied with 10' monitor connection cable and control cable. Size 27¾ x 20 x 16". Weight is 70 lbs.
99F805. NET **295.00**

VIDEOCORDER DECKS

Solid state decks record both video and audio portion of any off-the-air TV channel on ½" video tape when used with Receiver/Monitor. Using the Sony TV camera, these decks record "live" action . . . and are able to play back the recorded material through a monitor or TV receiver in both sight-and-sound. One hour of material can be recorded on one 7" reel . . . at a cost of less than $40, at a tape speed of 7½ ips. Units are designed for use with Receiver/Monitors, the large screen CVM-2300U or portable CVM-51UWP. Complete with 10 min. sample tape, empty reel, head cleaner set, lubricating oil, splicing tape, 8-pin and 2-pin connector. Power req. 117 VAC, 60 Hz, ±0.4, 80 watts.

Model CV-2000. Portable Video Tape Recorder housed in durably constructed, leatherette covered carrying case. Size: 18½ x 11⅞ x 15¾". Weight 46 lbs.
99F800. NET **730.00**

Model CV-2000D. Compact deck housed in attractive Walnut finished case. Size: 19¾ x 9⅞ x 15¼". Weight 42 lbs.
99F801. NET **695.00**

½" VIDEO TAPE — 7" REEL

3M Brand		Sony Brand			
Stk. No.	Type	Stk. No.	Type	Description	Net
76F300	351-½-1250-R86B	99F829	V-31	½ hour	21.95
76F301	351-½-2400-R86B	99F830	V-32	1 hour	39.95
76F302	R86B-½-7	99F831	RH-V7	Empty Reel	2.95

VIDEOCORDER ACCESSORIES

Stk. No.	Type	Description	NET
99F809	AC-2300	AC Adaptor for CVM-2300U	15.95
99F810	CCF-10	32 ft. Camera Extension Cord	9.95
99F811	CCF-25	82 ft. Camera Extension Cord	22.95
99F812	CCF-50	164 ft. Camera Extension Cord	44.95
99F813	CVO-2	Metal Dust Cover for CV-2000D	19.95
99F814	CVO-1	Plastic Cover for Videocorders	12.95
99F815	EC-10M	32 ft. Microphone Exten. Cord	4.95
99F816	EC-25M	82 ft. Microphone Exten. Cord	9.95
99F817	GC-1	Roll Cart for TVC-2010/2020	35.00
99F818	Lens-214	Telephoto Lens, 75 mm. F 1.9	45.00
99F819	Lens-507	Wide Angle Lens, 12½ mm. F 1.9	65.00
99F820	Lens-VCL-20	Zoom Lens 4 to 1—20 to 80 mm.	199.95
99F821	VCS-20	Camera Selector Switch	15.95
99F822	VDA-2	Video Dist. Amplifier	49.95
99F823	VI-1	Inverter from DC 12V to AC 120V	495.00
99F824	VCM-1B	Branch Cord for Sony Monitors	21.95
99F825	VCM-1C	Branch Cord for Video Monitors	15.95
99F828	VCM-1D	Branch Cord—16' Cable	27.95
99F826	VMC-10A	32 ft. Video Extension Cable	22.95
99F827	VMC-25A	82 ft. Video Extension Cable	34.50

PACKARD BELL

ALL TRANSISTOR MODULATOR

Model MPS 16—Channel 13. Produces two-radio-frequency carriers and modulates RF carriers with both sound and picture signals on the same channel. Self-contained, and transformer operated, this solid state TV modulator features high impedence dynamic microphone input. Also includes Neon on/off indicator and UHF coaxial Connectors. RF output is 30 db. at 75 ohms and 25 db at 300 ohms. Video Input: 75 ohms. Coaxial cable output: 75 ohms. Twin wire output: 300 ohms. Power input: 115 volts 60 cps AC. Size 5x7x3". Crystal controlled. .001% frequency stability. Channels 2 through 12 available on special orders.
99F803. NET **110.00**

audiotape

A complete line of professional quality sound recording tapes. Maximum fidelity; uniform frequency response; and freedom from noise and distortion. Five formulations.

FORMULA 10 — ALL PURPOSE

Formula 10—in the Orange Box

LONGER RECORDING on 1-mil MYLAR.* 50% more recording time per reel. Durable polyester film base assures trouble-free operation even under severe conditions.

Stk. No.	Type	Length	Reel	1-9	10-Up
76F537	261	225'	3" Plastic Self-Mailer	0.66	0.59
76F573	961	900'	5" Plastic C-Slot	2.35	2.12
76F574	1861	1800'	7" Plastic C-Slot	4.05	3.65

Stk. No.	Type	Length	Reel	1-4	5-Up
76F576	3661R	3600'	10½" Aluminum	9.38	8.44

Formula 10—in the Red Box

STANDARD RECORDING on 1½-mil plastic base, meets the most exacting requirements of the professional, educational, and home recordist at minimum cost.

Stk. No.	Type	Length	Reel	1-9	10-Up
76F615	151	150'	3" Plastic	0.46	0.41
76F613	351	300'	4" Plastic	0.88	0.79
76F606	651	600'	5" Plastic C-Slot	1.47	1.32
76F597	1251	1200'	7" Plastic C-Slot	2.29	2.06

Formula 10—in the tan box

DOUBLE RECORDING on ½ mil MYLAR.* Twice as much recording time per reel as standard plastic base tape. Suitable for extended-play applications where tape tension not extensive.

Stk. No.	Type	Length	Reel	1-9	10-Up
76F569	1231	1200'	5" Plastic C-Slot	2.29	2.06
76F570	2431	2400'	7" Plastic C-Slot	4.24	3.82

Formula 10—in the maroon box

DOUBLE RECORDING on "Tempered" MYLAR.* Twice as much recording time per reel as standard plastic-base tape. Twice as strong as other double-length tapes. Will not stretch or break on any tape recorder. Will not dry out with age.

Stk. No.	Type	Length	Reel	1-9	10-Up
76F538	331T	300'	3" Plastic Self-Mailer	1.05	0.94
76F539	1231T	1200'	5" Plastic C-Slot	3.56	3.20
76F540	2431T	2400'	7" Plastic C-Slot	6.20	5.59

FORMULA 11 — TRIPLE RECORDING

Formula 11—in the ollve box

Uses especially thin oxide coating on ½-mil "Tempered" Mylar* to provide three times the recording time per reel as standard plastic-base tape; plus extra strength.

Stk. No.	Type	Length	Reel	1-9	10-Up
76F545	633T	600'	3¼" Self-Mailer	1.93	1.73
76F546	1733T	1800'	5" Plastic C-Slot	4.55	4.09
76F547	3633T	3600'	7" Plastic C-Slot	7.81	7.03

FORMULA 14 — LOW PRINT MASTER RECORDING

Formula 14—in the green and gold box

On 1½-mil Mylar.* Finest professional-quality recording tape. Maximum fidelity, uniformity, and frequency response. Withstands extreme temperatures; plus low print-through.

Stk. No.	Type	Length	Reel	1-9	10-Up
76F557	671-M	600'	5" Plastic C-Slot	2.09	1.88
76F558	1271-M	1200'	7" Plastic C-Slot	3.33	3.00

Stk. No.	Type	Length	Reel	1-4	5-Up
76F560	2517R-M	2500'	10½" Aluminum	8.82	7.94

Formula 14—in the red and gold box

FORMULA 14—LOW PRINT on 1½-mil acetate.

Stk. No.	Type	Length	Reel	1-9	10-Up
76F552	651-M	600'	5" Plastic C-Slot	1.79	1.62
76F553	1251-M	1200'	7" Plastic C-Slot	2.80	2.53

FORMULA 15 — LOW NOISE

Formula 15—in the red box

On 1½-mil acetate. Provides high signal to noise ratio, drastically lowered hiss level without sacrificing other properties needed for critical professional recording.

Stk. No.	Type	Length	Reel	1-9	10-Up
76F531	1257	1200'	7" Plastic C-Slot	2.80	2.53

FORMULA 17 — LUBRICATED

Formula 17—in the orange box

On 1-mil Mylar.* for continuous loop cartridges where superior high frequency response is so important. Will not chip; edges resist nicking; unaffected by humidity & temp. change.

Stk. No.	Type	Length	Reel	1-9	10-Up
76F550	1761-Lube	1700'	7" Plastic C-Slot	3.79	3.45

*Mylar—DuPont Polyester film

AUDIO HEAD DEMAGNETIZER

Removes all permanent magnetism from recording and reproducing heads in seconds.
76F592. NET **5.88**

AUDIO HEAD CLEANER

Type 2HC. Specially formulated for cleaning magnetic recording heads. Contains 2 oz. bottle of silicone with brush.
76F534. 1-9 .....**.66** 10-up ..... **.59**

AUDIO HEAD ALIGNING TAPE

Type 200. Pre-recorded at 2,000; 10,000; 15,000; Hz (15"/sec) with precisely correct head alignment. 300' on 4" reel.
76F591. Type 200. **NET** **5.86**

SELF TIMING LEADER TAPE

Durable tape of white Mylar with spaced markings. ¼"x100'.
76F593. Type 3L. 1-9 .....**.59** 10-up .....**.53**

EMPTY AUDIOTAPE REELS IN INDIVIDUAL BOXES

5" and 7" reels feature C-Slot for fast, easy threading.

Stk. No.	Type	Size	1-9	10-Up
76F536	3.2PMB	3¼" in Mailing Box	0.26	0.24
76F551	5PB	5" Clear Plastic	0.42	0.38
76F577	7PB	7" Clear Plastic	0.49	0.44
76F586	7PBR	7" Red Plastic	0.49	0.44
76F587	7PBB	7" Blue Plastic	0.49	0.44
76F588	7PBG	7" Green Plastic	0.49	0.44
76F589	7PBY	7" Yellow Plastic	0.49	0.44

Stk. No.	Type	Size	1-4	5-Up
76F590	10FS	10½" Fiberglass	2.94	2.65

MAILING BOXES

Strong, re-usable corrugated containers for reels & boxes.
76F595 Type 5M for 5" reels. 1-9.....**.10** 10-up .....**.09**
76F596 Type 7M for 7" reels. 1-9.....**.13** 10-up.....**.12**

ADHESIVE REEL LABELS

Positive identification of tapes. Pkg. of 30. ½" x 2".
76F594. Type 30AL. 1-9 .....**.12** 10-up .....**.12**

"HOW TO MAKE GOOD TAPE RECORDINGS"

Definitive handbook of tape recording. More than 150 pages, clearly written and liberally illustrated. Stereo Edition.
53F071. NET ..... **.89**

AUDIO DISCS

A complete line of recording blanks for professional recordists.

Red Label

For Professional use. Optimum quality and dependability. Aluminum base. Double faced.

Stk. No.	Type	Size	Thickness	Each	Pkg. of 25
77F048	7R2***	7"	.050"	1.61	36.50
77F001	10R2	10"	.040"	1.53	34.74
77F002	12R2	12"	.050"	3.27	74.25

Yellow Label

For General use which requires high uniform quality. Aluminum base. Double sided.

Stk. No.	Type	Size	Thickness	Each	Pkg. of 25
77F009	7Y***	7"	.050"	1.46	33.25
77F010	8Y	8"	.040"	1.10	25.00
77F011	10Y	10"	.040"	1.32	30.00
77F012	12Y	12"	.050"	2.78	63.25

Blue Label

For Amateur use. High quality, but on a thinner Aluminum base. Double sided.

Stk. No.	Type	Size	Thickness	Each	Pkg. of 50
77F031	6A	6½"	.030"	.56	25.50

***STANDARD 45 rpm disc with 1½" dia. center hole.

AUDIOPOINTS

Professional Sapphire and Dural

Optimum quality and uniformity. Scientifically inspected and disc-tested. Type 14, std. 87°; Type 20, microgroove.

Stk. No.	Type	Point Material	Shank Material	Each
51F450	14-short	Sapphire	Dural	5.34
51F464	14-long	Sapphire	Dural	5.34
51F463	20-short	Sapphire	Dural	5.34
51F462	20-long	Sapphire	Dural	5.34

Stellite

Cuts a quiet, accurate, uniform groove. Combines good quality and economy.

Stk. No.	Type	Point Material	Shank Material	Each
51F454	34-short	Stellite	Brass	1.74

3M COMPANY SCOTCH® BRAND VIDEO TAPE

Types 351 & 357. Designed for helical scan video tape recorders, longitudinally oriented tape. Offers an improved signal-to-noise ratio over previous longitudinally oriented tapes. Considerably improved in wear characteristics. "A" wind (oxide surface in). "B" wind (oxide surface out). ½ inch tapes are for Sony, Panasonic, Concord, Shibaden. 351B-1500 and 3000 are for Norelco. *VB-1-10½ box is to be used when purchasing boxes (empty) for 1"x9" reel. 357 for use on the ampex VR-7000 and VR-6000 video tape recorders.

Stock No.	Type	Tape Wind	Reel Size	Reel Type	Reels Per Ctn.	Ctn. Wt.	1-9	10-24	25-49	50-up
76F300	351-½-1250-R86B	A		Plastic Self		5	21.95	20.85	20.19	19.76
76F301	351-½-2400-R86B	A	½"x7"	threading	5	8	39.95	37.95	36.75	35.96
76F302	351B-1-1500-R73B	B		Phenollic hub		9	44.95	42.70	41.35	40.46
76F303	351B-1-3000-R73B	B	1"x9"	with flanges	2	10	59.95	56.95	55.15	53.96
76F305	357-1-1500-R97B	A		Phenolic hub	5	5	44.95	42.70	41.35	40.46
76F306	357-1-3000-R97B	A	1"x9¾"	with flanges	5	8	59.95	56.95	55.15	53.96

351-½-1250 R86B

357

351B-1-1500-R73

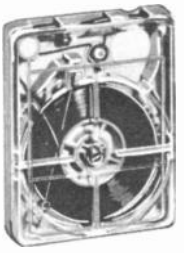
VIDEO TAPE ACCESSORIES

Stock No.	Type	Description	Size	Per Carton	1-5	6-up	1-9	10-up
76F320	R86B-½-7	Empty Video	½"x7"	5	.....	.....	3.00	2.75
76F322	R73B-1-9	In Boxes	1"x9"	2	8.95	8.05	.....	.....
76F323	VB-½-7	Empty	½"x7"	5	.....	.....	1.65	1.50
76F325	*VB-1-10½	Boxes	1"x10½"	2	1.53	1.38	.....	.....
76F326	VIC-1-10½	Empty Plastic Case	1"x10½"	5	.....	.....	4.73	4.50

***Empty box for use with 1"x9" reels. (R73, R97 and 10½" reel.)**

Stock No.	Type	Description	Size	Per Carton			1-11	12-up
76F330	390-¼-66	Aluminized Splicing	¼"x66'	12	.....	.....	3.25	2.93
76F331	390-½-66	Tape—.5 Mil	½"x66'	12	.....	.....	4.87	4.38
76F332	391-¼-66	Aluminized Splicing	¼"x66'	12	.....	.....	3.25	2.93
76F333	391-½-66	Tape—.25 Mil	½"x66'	12	.....	.....	4.87	4.38
76F334	620-7/32-66	Splicing	7/32"x66'	12	.....	.....	3.25	2.93
76F335	620-½-66	Tape	½"x66'	12	.....	.....	4.87	4.38

FIDELIPAC NAB TAPE CARTRIDGES BY TELEPRO



Professional type cartridges manufactured for broadcast use. Made to NAB Specifications: Continuous self-contained single-reel tape magazine which operates on an endless loop principle. The tape is pulled from the center and after passing the playing or recording head is automatically rewound on the outside of the reel contained in the tape magazine. Extremely versatile; variable speeds. Lightweight styrene case. Transparent clear top. 3 tape head openings in models 1200 and 600, and two in model 300. Shpg. wt., 1.5 lbs.

Stk. No.	Type	Time @ 7½ ips	Length	1-99	100-499	500-999	1000-up
76F200	NAB25	40 sec.	25'	2.16	1.91	1.68	1.52
76F201	NAB44	70 sec.	44'	2.23	2.02	1.78	1.59
76F202	NAB63	100 sec.	63'	2.40	2.12	1.86	1.66
76F203	NAB132	3½ min.	132'	2.74	2.42	2.14	1.92
76F204	NAB207	5½ min.	207'	3.14	2.78	2.44	2.18
76F205	NAB394	10½ min.	394'	4.12	3.64	3.20	2.86
76F206	6NAB600	16 min.	600'	6.76	5.96	5.26	4.70
76F207	12CX1163	31 min.	1163'	11.90	10.70	8.95	8.35
76F208	3NAB-A	empty		1.70	1.50	1.34	1.18
76F209	6NAB-A	empty		2.82	2.50	2.20	1.98
76F210	12CX-A	empty		4.24	3.74	3.30	2.96

				1-11	12-up
76F728	153-16	¼"x1600'	Lubricated tape for cont. loop cartridges	3.57	3.24

AMERLINE TAPE CARTRIDGES

Professional type cartridges manufactured for broadcast use by tape reel specialist. Made to NAB specifications. Designed for continual operation, Amerline tape cartridges utilize the endless loop principle—the tape is pulled from the center and after passing the playing or recording head, is automatically rewound on the outside of the reel contained in the tape magazine. Clear plastic ribbed case for non-slip grip and convenience in handling. Snug tape lock and quality construction assures no lose turns and no warping. Rigid Delrin base.

Stk. No.	Type	Time @ 7½ IPS	1-11	12-23	24-47	48-up
76F225	7257	Empty	1.88	1.70	1.64	1.59
76F226	8540	20 sec.	2.06	1.96	1.96	1.91
76F227	8726	30 sec.	2.11	2.01	2.01	1.96
76F228	8541	40 sec.	2.11	2.01	2.01	1.96
76F229	8542	60 sec.	2.17	2.07	2.01	1.96
76F230	8543	70 sec.	2.17	2.07	2.01	1.96
76F231	8544	90 sec.	2.22	2.12	2.07	2.01
76F232	8545	100 sec.	2.22	2.12	2.07	2.01
76F233	8546	2½ min.	2.38	2.28	2.23	2.17
76F234	8547	3 min.	2.43	2.33	2.28	2.23
76F235	8548	3½ min.	2.51	2.41	2.35	2.30
76F236	8549	5 min.	2.80	2.70	2.65	2.60
76F237	8550	5½ min.	2.86	2.76	2.70	2.65

AMERLINE PLASTIC REELS

Stk. No.	Description	10 for	100 for
76F215	3" Reel	.64	5.57
76F216	3¼" Reel	.90	7.89
76F217	4" Reel	1.28	11.13
76F218	5" Reel	1.70	14.84
76F219	7" Reel	2.02	17.62
76F220	7" Reel 4" plastic hub.	2.96	25.97
76F221	5" Reel 3" plastic hub.	2.54	22.26
76F222	10½" Reel NAB hub fibreglass	15.48	135.45

NEWARK TAPE

Tape is splice-free. One continuous reel ¼" wide and thickness of .5 Mil., 1.0 Mil., 1.5 Mil. With Acetate or Mylar base for uniform output and lower noise level. 1.0 Mil. thick tape offers 50% more recording time, .5 Mil. offers 100% more, than 1.5 Mil. types.

*Mylar †Acetate

Stk. No.	Mil.	Size	Reel	1-9	10-24	25-up
76F751	1.5 Mil†	1200'	7"	1.22	1.14	1.06
76F753	1.0 Mil†	1800'	7"	1.68	1.58	1.47
76F755	1.0*	1800'	7"	1.92	1.80	1.68
76F759	0.5*	2400'	7"	2.40	2.25	2.10
76F750	1.5 Mil†	600'	5"	.94	.89	.83
76F752	1.0 Mil†	900'	5"	1.15	1.08	1.01
76F754	1.0*	900'	5"	1.44	1.35	1.26
76F756	1.0*	225'	3"	.72	.68	.63
76F757	.5*	300'	3"	.82	.77	.72
76F758	.5*	600'	3¼"	1.44	1.35	1.26

JIFFY RECORDING ACCESSORIES

Type P-30 "Jiffy-Rase" Tape Eraser. Easily erases magnetic tape without rewinding noise. Place the Jiffy-Rase over the reel of tape, to be demagnetized and move it around while pressing the on-off switch. Also demagnetizes screwdrivers, pliers, etc. For 100-130 VAC 60 cycle. 4¾"D x 4½"H. Shpg. wt., 4½ lbs.

76F101. NET **21.17**

Jiffy Tape Splicer.
76F100. NET **1.50**

Recording Tape, Accessories

TYPE 175 HEAVY DUTY TENZAR—1.5 MIL

For applications requiring frequent repeat, fast starts and stop. New heavy duty coating. Lasts 15 times longer than ordinary tapes. Improved conductivity drains off static. Non-drying.

Stk. No.	Type	Len.	Reel	1-11	12-up
76F708	175-6	600'	5" Plastic	1.57	1.41
76F709	175-12	1,200'	7" Plastic	2.45	2.20
76F741	175-25RPS	2,500'	10½" Plastic—EIA	7.33	6.60

SUPER RUGGED TYPE 282 "SANDWICH"—1.5 MIL

Ideal for use in the language labs and audio-visual centers. Features protective, micro-thin plastic shield over oxide coating which eliminates rub-off, wears up to 30 times longer. Polyester backing insures strength and resistance to temperature and humidity changes. On clear plastic reels.

76F711	282-6	600'	5" Plastic	2.03	1.82
76F712	282-12	1,200'	7" Plastic	3.23	2.91

TYPE 111 1.5 MIL PLASTIC

The acknowledged standard in the recording field. Famous for flawless sound reproduction at lowest possible cost.

Stock No.	Type No.	Size	Reel	1-11 Ea.	12-up Ea.
76F628	111-1.5	150 ft.	3" Plastic	.46	.41
76F625	111-3	300 ft.	4" Plastic	.90	.81
76F627	111-6	600 ft.	5" Plastic	1.47	1.32
76F626	111-12	1200 ft.	7" Plastic	2.29	2.06

Stock No.	Type	Size	Reel	1-11 Ea.	12-up Ea.
76F629	111-25H	2500'	NAB Hub	5.13	4.62
76F633	111-25RO	2500'	10½" Alum.-NAB	7.06	6.35
76F639	111-25RPS	2500'	10½" Plastic-EIA	7.06	6.35

TYPE 153-16 1 MIL POLYESTER TAPE

Single coated, with external lubrication on backing side only. High potency oxide coating on 1 mil polyester backing. Available in size ¼" x 1600' on 7" plastic reels. Designed for continuous loop cartridges. Shpg. wt., 1½ lbs.
76F728. 1-11 ..... 3.57 12-up 3.24

TYPE 190 EXTRA LENGTH 1 MIL PLASTIC TAPE

Tape that gives you 50% more recording time from a conventional size reel with complete purity of sound, thanks to supersensitive high potency oxide. Acetate base for economy.

Stk. No.	Type	Len.	Reel	1-11	12-up
76F682	190-9	900'	5" Plastic	2.29	2.06
76F683	190-18	1800'	7" Plastic	3.59	3.23
76F684	190-36H	3600'	NAB Hub	6.44	5.79
76F685	190-36RO	3600'	10½" Alum.-NAB	8.36	7.53

TYPE 150 EXTRA LENGTH 1 MIL POLYESTER TAPE

Made with tough durable polyester backing, this tape is "weather balanced." It offers 50% more recording time.

76F686	150-9	900'	5" Plastic	2.35	2.12
76F687	150-18	1800'	7" Plastic	4.05	3.65
76F688	150-36H	3600'	NAB Hub	7.45	6.70
76F689	150-36RO	3600'	10½" Alum.-NAB	9.38	8.44

TYPE 200 DOUBLE LENGTH .5 MIL TENSILIZED POLYESTER

Plays twice as long as standard tape. Invisible polyester "muscles," conditioned by exclusive tensilized process.

Stock No.	Type	Size	Reel	1-11 Ea.	12-up Ea.
76F707	200-12	1200'	5"	3.56	3.20
76F701	200-24	2400'	7"	6.20	5.59

TYPE 120 HIGH OUTPUT 1.5 MIL PLASTIC

Magnetic tape with .65 mil coating of high output oxide on 1.5 cellulose acetate backing. Capable of recording a lower than normal input with equal volume and no distortion.

76F640	120-6	600'	5" Plastic	1.47	1.32
76F641	120-12	1200'	7" Plastic	2.29	2.06

TYPE 131 LOW PRINT THROUGH 1.5 MIL PLASTIC

First tape to reduce print-through to a point below noise level on even the most critical professional machines.

76F703	131-12	1200'	7" Plastic	2.87	2.59
76F705	131-25RO	2500'	10½" Alm.—NAB	7.98	7.17

DYNARANGE® SERIES TAPE

These tapes offer wider frequency response and improved signal.

Type 201—1½ mil plastic base.
Type 202—Extra strength 1½ Mil polyester base.
Type 203—Extra length, extra strength 1 Mil polyester base.

Stock No.	Type	Size	Reel	1-11	12-up
76F674	201-¼-600	¼" x 600'	5"	1.83	1.65
76F735	201-¼-1200	¼" x 1200'	7"	2.87	2.59
76F736	201-¼-2500RO	¼" x 2500'	10½"	7.98	7.17
76F678	202-¼-600	¼" x 600'	5"	1.80	1.68
76F679	202-¼-1200	¼" x 1200'	7"	3.33	3.00
76F680	202-¼-2500RO	¼" x 2500'	10½"	9.08	8.17
76F675	203-¼-900	¼" x 900'	5"	2.77	2.50
76F737	203-¼-1800	¼" x 1800'	7"	4.80	4.32
76F738	203-¼-3600RO	¼" x 3600'	10½"	11.20	10.08

Exclusive! All tapes feature built-in lifetime Silicone lubrication to protect recorder heads against wear and extend tape life. Free in each box: "End-of-reel" TAPE CLIP to prevent spilling.

TYPE 290 TRIPLE LENGTH—.5 MIL TENSILIZED POLYESTER TAPE

For maximum recording time on given size reel. Ideal for use with portable transistorized recorders and for recording meetings, conventions, etc.

Stk. No.	Type	Len.	Reel	1-11	12-up
76F731	290-18	1800'	5" Plastic	4.54	4.09
76F729	290-36	3600'	7" Plastic	7.81	7.03

LIVING LETTERS IN PLASTIC MAILING BOXES

Just write in address, apply postage and mail.

Stock No.	Type	Description	Size	1-11	12-up
76F732	111-¼-150LL	1.5 Mil Plastic	¼"x150'	.59	.53
76F733	200-¼-300LL	.5 Mil Polyester	¼"x300'	1.21	1.09
76F734	290-¼-600LL	.5 Mil Polyester	¼"x600'	1.93	1.73

ADDRESS LABELS FOR "LIVING LETTERS"

Extra address labels for use with above mailing—boxed tape.
76F742. Per pkg. of 10 ..... .32
Lots of 12 pkgs. (per pkg.) ..... .28

QUICK LOAD CARTRIDGE

No. 8000. For cartridge tape recorders. Contains 500 ft. of tape.
76F706. NET EACH (Lots of 1-11) 2.94
Lots of 12 or more EACH 2.65
No. 271. Tape cartridge for Wollensak model 4100, 4200 and similar recorders.
76F649. 1-11 ..... 2.09 Ea. 12-Up ..... 1.88 Ea.

TYPE 24 LEADER AND TIMING TAPE

¼" wide by 100 feet long in dispenser package.

Stk. No.	Type	Color	1-11	12-up
76F713	24-1W	White	.59	.53
76F717	24-1Y	Yellow		

TYPE 41 SPLICING TAPE

Coated one side with non-run pressure sensitive adhesive. ½x150" *in metal dispenser.

Stk. No.	Type	Size	1-11	12-up
76F650	41-½-S*	½x50"	.38	.34
76F652	41-½-66	½x66'	.74	.67
76F653	41-¾-66	¾x66'	.99	.89
76F656	41-7/32-66	7/32"x 66'	.56	.50

TYPE 51 ALUMINIZED SENSING TAPE

For recorders with automatic "stop" and "reverse" controls. Has pressure sensitive, non-run adhesive on one side—foil on other.

76F718	51-7/32S	7/32"x150"	1.85	1.67

EMPTY SELF-THREADING REEL WITH COLLAR AND LABELS

Permits instant threading. Holds tape firmly. Threads all tape thicknesses. Snap-tight plastic collar. Solid slides.
76F730. Type PRST-7. Net. 1-11 ..... .98 Ea. 12-up ..... .88 Ea.

EMPTY REELS IN BOXES

Supplied with index box. *In plastic mailing box.

Stock No.	Type	Reel Dia.	Reel	1-11 Ea.	12-up
76F700	RB-14M	14"	Aluminum-NAB	5.68	5.12
76F667	RB-10½M	10½"	Aluminum-NAB	2.94	2.65
76F669	RB-10½RPS	10½"	Plastic-opaque	2.94	2.65
76F660	RB-7	7"	Plastic	.49	.44
76F661	RB-5	5"	Plastic	.43	.38
76F663	RB-4	4"	Plastic	.49	.44
76F739	RLL-¼-3*	3"	Plastic	.39	.35
76F662	RB-3	3"	Plastic	.17	.15

EMPTY BOXES FOR TAPE REELS

Stock No.	Type	Description	1-11 Ea.	12-up
76F740	LL-¼-3	3" Plastic Mailing Box	29c	26c
76F695	B-5	5" Hinged Box	13c	12c
76F696	B-7	7" Hinged Box	13c	12c
76F698	B-10½	10½" Hinged Box	49c	44c

END-OF-REEL TAPE CLIPS FOR ¼" WIDE TAPE

Clip securely to tape, prevents spilling or tangling in handling, storage and mailing.
76F710. Per pkg. of 10..... .23 Lots of 12 pkgs. (per pkg.)..... .21

REEVES SOUNDCRAFT

MAGNA-SEE MAGNETIC TAPE VISUALIZER KIT

Lets you see the magnetic track recorded on your tape. This method affords a fast, simple and accurate way to check for head alignment, track uniformity, balance and head wear. Kit contains: ½ pint Magna-See solution—Plastic Bath-Eye piece magnifier—roll of pressure sensitive tape —5 glass slides.

PRK. Magna-See kit for sound recording, video, instrumentation and data processing applications.
76F133. NET **7.20**

PRR. ½ pt. replacement can of Magna-See.
76F134. NET **2.55**

EDITALL TAPE EDITING BLOCKS

Type S-3. Block only for splicing ¼" tape. Has two mounting holes for operation on tape recorder "deck" or top panel as instant use aid. Has two deep-cut slits, one for straight splices and one for diagonal cuts. Made of machine duraluminum. Size: 5¾x1x⅜". Shpg. wt., 3 oz.

76F103. NET **8.00**

Type S-2. For compact machines. Adhesive back. Without mtg. holes. Size: 4"x ¾" x ¼". Shpg. wt., 6 oz.

76F104. NET **6.50**

PLASTIC BLOCK-EDITING KIT

Type KP-2. Editing kit for ¼" tape. A comprehensive Instruction booklet comes with each kit to guide you in this simple operation of splicing tape for editing. EDITabs join spliced tape easily, quickly. No splice overlap. Never pulls apart. No overflow gunk. The EDITab block is simply mounted by means of its adhesive backing or screws on or near your tape recorder. Kit includes the patented EDITall block, 30 EDITab splicing tapes, a demagnetized razor blade, instruction booklet, tape guide and grease pencil. 6 oz.
76F106. NET **3.50**
76F107. Package of 50 EDITabs. 5 oz. **1.50**

TAPE ACCESSORIES

WALSCO KLEEN-TAPE HEAD CLEANER

Type 335. No need to remove head cover. New formula cleaner, impregnated in long-wearing, multiple cleaning tape does a thorough job. Use just like standard recording tapes. Cleans head quickly. Fits all tape recorders. Shipping weight, 4 oz.
76F165. NET **2.10**

COMPCO 7" TAPE STORAGE CAN

Model 1330. Cans are ribbed for stacking. ⅞" thick. Shpg. wt., 1 lb.
76F125. 1-9 Each ..... **.45**
10-24 Each ..... **.39** **25-Up Each** ..... **.35**

TELEPHONE PICKUP COIL

High-impedance coil plugs into amplifier or tape recorder. With 6' cord and ¼" phone plug. 5½x9¼x¾". Shpg. wt. 1¾ lb.
76F105. NET **5.88**

ROBINS INDUSTRIES

PROFESSIONAL TAPE ACCESSORY KITS

Type TK-12. Complete tape accessory kit for everyday maintenance and operating needs. Contains: TS-8D "Stereo 4" Deluxe Tape Splicer; 6 rolls of ½" Splicing Tape; TM-99, U.L. listed Magnetic Bulk Tape Eraser; TD-6 U.L. listed Head Demagnetizer; Tape Threader; Tape Jockey Cloth; 24 Tape Clips; 150 Title Labels; Tape Strobe and Light kit to check recorder speed; Tape Head Cleaner and Lubricant.
76F087. NET **49.25**

TAPE HEAD CLEANER AND LUBE KIT

Type TK-6. Includes: 2 oz. bottle of head cleaner and 2 oz. bottle of tape head and guide lubricant with applicator caps. Tape moves freely across heads and guides.
76F123. NET **1.14**

● *NEW* TAT-100 RECORDING ALIGNMENT TAPE

Recording head azimuth alignment tape facilitates accurate alignment of tape heads to exact angle for max. output. 100 ft. on 3" reel. Instructions. Shpg. wt.: 9 oz.
76F063. TAT-100. **NET** ..... **.99**

● *NEW* THC-1 HEAD-KLEEN AND POLISHING TAPE

Supplied on 3" reel, the 225 feet of polishing tape removes oxides and other particles from heads when the tape is run through the recorder. Weight: 12 oz.
76F062. THC-1. **NET** ..... **.99**

"KLEENEEDLE" BRUSH

Type PB-3. Automatically removes dust and lint from the phonograph stylus as it passes over it during the cycle. Mounts on changer deck; has an adhesive pad for easy mounting
76F114. NET ..... **.75**

● *NEW* TK-11 A/V KIT

Kit contains: TM-77 Bulk tape eraser; TD-3 head demagnetizer; TS-7S tape splicer; roll of ⅜" x 275" splicing tape; TK-6 head cleaner and lubricant kit; Tape Strobe and Light Kit; Tape Threader; Tape Jockey Cloth; 150 Title Labels; 75 Tape Clips; and 150 "Swabbies" for safe cleaning and oiling. Shpg. Wt.: 9 lbs.
76F061. TK-11. **NET** **29.00**

● *NEW* THC-S TAPE-CLEAN

5" reel of chemically treated cloth tape cleans and lubricates heads and guides of recorder, while the recorder is played. Deposits a layer of silicone, insuring friction-free performance. Wt.: 12 oz.
76F084. THC-5. **NET** **1.69**

● *NEW* TW-1 PRECISION TAPE STROBE

Precise, all metal, chrome-plated strobe. For 7½ and 3¾ ips recorders. Checks for speed accuracy, wow and flutter. Features needle bearings. Instructions included. Shpg. Wt.: 1 lb.
76F097. TW-1. **NET** **5.99**

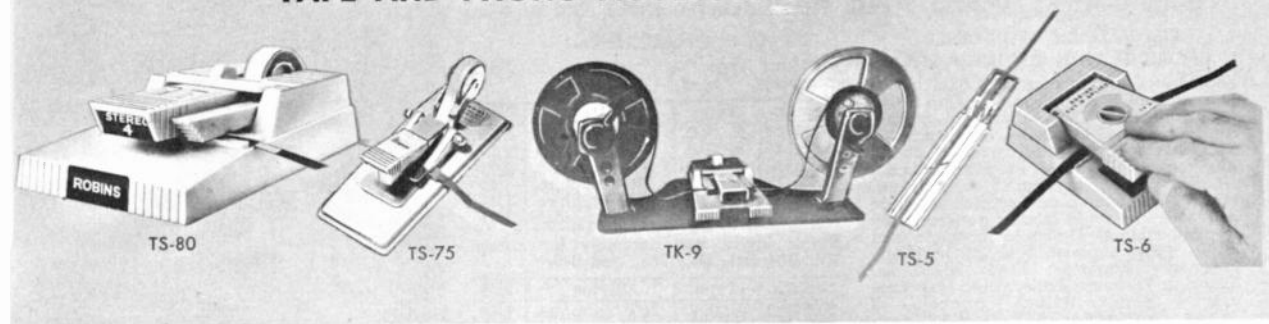
DELUXE TAPE ACCESSORY KIT

Type TK-8DLX. Complete tape accessory kit containing: TS-8D Tape Splicer; ½" Splicing Tape; Tape Threader; Head Cleaner; Head and Guide Lubricant; Tape Jockey Cloth; Tape Clips; Reel Title Labels; Reel Holders; and Tape Editing and Splicing Guide Book. Wt. 1½ lbs.
76F088. NET **11.49**

PROTECTIVE DIS-CLOSURES

Type PJ-18. Round bottom polyethylene plastic protective sleeves for 12" records. Prevents scratching, seals out dust and moisture. Pkg. of 18.
76F089. NET ..... **.69**

TAPE AND PHONO ACCESSORIES ROBINS INDUSTRIES



GIBSON GIRL® TAPE SPLICERS

TS-8D. Gibson Girl "Stereo 4" Deluxe Tape Splicers. "See-thru" windows indicate "Cut" and "Trim" positions. Tape guide and fingers secure tape. Easy threading integral tape dispenser has roll of ½x100" splicing tape. Made of super-strong "Implex". Trims "Gibson Girl" waists at edges of splices to prevent adhesive from contacting critical parts of recorder. With instructions. 1 lb.
76F113. NET **7.69**

TS-7S Standard Stereo Splicer. Plated steel parts and tan plastic base & knob. With ⅜" x 100" Tape. Shipping weight: 12 ozs.
76F112. NET **5.99**

TS-7J. Junior Stereo Splicer. Same as TS-7S, less dispenser and tape. Shpg. Wt.: 8 oz
76F078. NET **4.79**

Type TK-9 Tape Editing Workshop. For editing, splicing, repairing tapes on reels. Includes: 2 Tape Winders and "Stereo" 4" Deluxe Tape Splicer. Handles reels up to 7". Splicer with integral threading tape dispenser and ½"x100" tape. 7x14x5½". Shpg. wt.: 2 lbs.
76F086. NET **14.39**

TS-6 "Cut-N-Splice" Deluxe Splicer. Cuts tape at either 30°, 45°, 90°. Built-in tray for Patches. 25 self-stick splicing patches included. Shpg. wt.: 5 oz.
76F071. NET **2.99**

TS-5 "Cut-N-Splice". Metal block has tape guide and cutting groove to guide hand-held blade. Built-in sliding tray has 25 self-stick patches and blade. Shipping weight: 5 oz.
76F072. NET **1.89**

MYLAR SPLICING TAPE

Tackiness, thickness, strength and cold flow controlled.

Stk. No.	Type	Width	Length	NET
76F081	TST-235	¼"	300"	.59
76F082	TST-376	⅜"	275"	
76F083	TST-501	½"	250"	
76F122	TT-500	½"	100"	.33

PROFESSIONAL AUDIO-VIDEO SPLICERS

Operating lever has control knob for precise "Cut" and "Trim" positions. Produces "Gibson Girl" waists at sides of splices during trim—prevents adhesive from splicing tape from contacting critical parts of recorder. Blades and cutter pad are replaceable. Precision blade centering adjustment.

Stk. No.	Type	Description	NET
76F090	TS-500	½"—For Sony. Concord etc.	51.00
76F091	TS-1000	1"—For Ampex	51.00
76F092	TZ-1	Replacement Blades — Pkg. of 12	2.00

DELUXE VTR VIDEO TAPE SPLICERS

Precision diagonal cut. Tape guide and arms secure tape. Use self-stick, pre-cut patches listed below.

76F067. TSV-50. ½" for Sony, Concord, etc. **NET** **11.90**

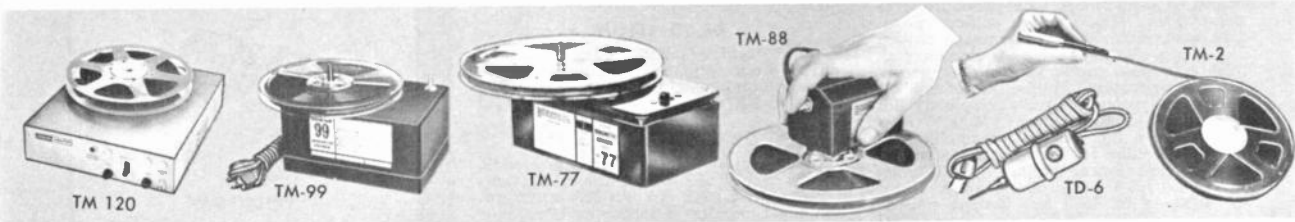
76F068. TSV-100. 1" for Ampex systems. **NET** **11.90**

76F069. TT-247. ½" pre-cut self-stick patches for TSV-50. Wt. 3 Oz. **NET** Pkg. of 60. **.99**

76F070. TT-248. 1" pre-cut, self-stick patches for TSV-100. Wt. 3 Oz. **NET.** Pkg. of 48 **.99**

TL-180. Self-Stick White Title Labels. 2" x ½".
76F065. NET. Pkg. of 180 **.79**

TL-9. Long Title Self-Stock Labels. 9½" x ⅜". Write or type. Labels tape and film canisters, boxes, etc. Supplied in sheets of 10 labels for convenient handling. Wt.: 5 ounces.
76F066. NET. Pkg. of 50 **.59**



MAGNETIC BULK VIDEO AND AUDIO TAPE ERASERS

Reduces noise levels of tape 50-90 db below saturation minimum. Operation: 115 volt 50-60 hertz A.C. Safety features: Overheat indicator, individually fused circuits, heavy duty switches and power cord.

Model TM-120. Has blower system for reels of tape up to 17" dia. Duty cycle: 10 min. On/10 min. Off. Size: 3¾" x 12" x 14".
76F095. NET **105.00**

Model TM-100. (Not illust.) For reels up to 10½" diam. Duty cycle 5 min. On/15 min. Off. Size: 3¾" x 6" x 8".
76F096. NET **53.99**

TM-99. Bulk Tape Eraser. Reduces background noise from 3 to 6 db below normal erase head level. For reels up to 10½" D. x ½" W. Size: 5¼" x 3¾" x 6¾". Operation: 100-120V; 6 amps; 50-60 Hz. A.C. U.L. listed. Wt. 8½ lbs.
76F075. NET **27.60**

TM-77. Lower priced version of the TM-99. Reduces background noise levels of tape from 2 to 4 db. below normal erase head level. Tapes are demagnetized by rotation of reel on spindle. For ¼" tape. Takes reels up to 7". Size: 2⅜" x 3¾" x 8¼". 110-120V. A.C.
76F076. NET **15.90**

Type TD-6 Head Demagnetizer. Removes residual magnetism from tape heads. Magnetized heads raise the recorder's noise level; demagnetizes heads for optimum signal to noise ratio. 4⅝" x 1½". 110V/60 hz. A.C. U.L. approved. Wt.: 1 lb.
76F085. NET **6.59**

TM-2. Magnetic Tape Editing Pen. Simple, precise erasure of single sounds, noise, etc. from recordings. Fade in and fade out sounds. Used like a writing pen, but applied instead to tape areas for desired effects. Shpg. wt.: 4 oz.
76F064. NET **1.19**

Type TM-88 Hand-Held Eraser. Erases tapes by moving unit over each side of reel. Momentary contact switch located in the handle. For ¼" tape, any dia. reel. Size: 4" x 2½" x 4¼". Operation: 4 amps @ 110-120V. 50-60 Hz. A.C. Wt. 2 lbs., 4 oz.
76F077. NET **10.49**

G.E. CARTRIDGES AND REPLACEMENT STYLI

VRII VARIABLE RELUCTANCE CARTRIDGE WITH CLIP-IN-TIP STYLI

Features: 4 gram pressure. "Slim" look. Independently replaceable Clip-in-Tip style. Famous G.E. precision ground diamonds and sapphires. Reduced record wear. Improved tracking ability Electrostatic Shielding. Plug-in terminals. Unaffected by temperature or moisture. Mu metal shielding and special anti-hum coils. No unwanted signals generated by vertical motion. Available in single and triple play models. SPECIFICATIONS: Frequency Response: 20 to 20,000 hz. Tracking Pressure: Professional type tone arm 4 grams. Record Changers—6-8 grams. Equalization: 6.2K for RIAA. Outpt: 22 MV Nominal at 10 cm/sec. Compliance: 1.7x10.6 CM/dyne. Mounting: Either ½" standard or 7/16". Terminals: Plug-in design.

VRII CARTRIDGES

Triple Play Cartridges

Stk. No.	Model	Styli	NET
50FA208	4G-050	1&3 Mil Sapp.	6.99
50FA227	4G-052	1 Mil Dia-3 Mil Sapp.	9.15
50FA230	4G-053	1&3 Mil Dia.	10.77

Single Play Cartridges

50FA212	4G-040	3 Mil Sapp.	5.37
50FA211	4G-041	1 Mil Sapp.	5.37
50FA232	4G-063	3 Mil Dia.	7.53
50FA231	4G-061	1 Mil Dia.	7.53

VRII CLIP-IN-TIP STYLI

50FA337	4G-01S	1 Mil Sapphire	1.44
50FA339	4G-03S	3 Mil Sapphire	1.44
50FA340	4G-01D	1 Mil Diamond	3.75

LOW IMPEDANCE CARTRIDGES

Designed for use with broadcast and studio equipment with low impedance inputs. Styli can be easily replaced. *Dual stylus low impedance cartridges.

Stk. No.	Type	Stylus	NET
50FA178	4GS-02D	.0025 Diamond	7.53
50FA179	4GS-01D	.001 Diamond	7.53
50FA186*	4GD-01D-02D	.001 Diamond .0025 Diamond	10.77
50FA192*	4GD-01S-02S	.001 Sapphire .0025 Sapphire	6.99

PHONO ACCESSORIES

G.E. DUAL-FUNCTION PREAMPLIFIER

Model UPX-003C. Use with phonograph or microphone. Completely self-contained, has two position Phono-Microphone switch. Uses two stages of triode amplification with a double triode special low noise/low microphonics 7025 tube. Provides RIAA compensation on "Phono", completely flat response 30-15,000 hz on "Mike." Also serves as a flat voltage preamplifier in "Mike" position for PA or tape recording applications. Power Rating: 105-125 volts AC, 50-60 hz 4 watts at 115 volts. Gain: 33 decibels at 1000 hz. Output impedances at 30 hz—120,000 ohms, at 15,000 hz—1,700 ohms. Dimensions: 3⅝" wide x 3⅝" long x 3⅛" high. Shpg. wt. ½ lb.

50FA206. NET **10.77**

G. E. REPLACEMENT STYLI

For any type "A" cartridge or stylus assembly.

Stk. No.	Type	Stylus	NET
50FA180	RPJ01D	.001 Diamond	3.75
50FA181	RPJ02D	.0025 Diamond	3.75
50FA182	RPJ03D	.003 Diamond	3.75
50FA183	RPJ01S	.001 Sapphire	1.44
50FA184	RPJ02S	.0025 Sapphire	1.44
50FA185	RPJ03S	.003 Sapphire	1.44

Single stylus and assembly for former RPX-040, 041, 061, 063, and 046.

Stk. No.	Type	Stylus	NET
50FA220	RPJ001	.003 Sapphire	1.44
50FA222	RPJ002	.0025 Diamond	3.75
50FA221	RPJ004	.001 Diamond	3.75
50FA218	RPJ005	.001 Sapphire	1.44

For Dual stylus. Incorporates individual replaceable stylus elements. Fits both former and RPX type, but not VRII.

Stk. No.	Type	Stylus	NET
50FA215	RPJ010A	.001 Sapphire .003 Sapphire	3.12
50FA217	RPJ012A	.001 Diamond .003 Diamond	7.53
50FA224	RPJ013A	.001 Diamond .003 Sapphire	4.38

VR-1000 STEREO CARTRIDGES

VR-1000-7. .7 Mil diamond stereo cartridge. Recommended tracking force: 3-7 grams. Frequency response—20-20,000 hz. Load resistance—47 K ohms. Output: 1 millivolt per cm/sec. Resistance: 1100 ohms. ½" mounting ctrs.

50FA200 ..... **10.49**

VR-1000-5. Same as 1000-7, except .5 Mil Recommended tracking force is 1-3 grams.

50FA201. NET **12.59**

VR-1000 REPLACEMENT STYLI

50FA202. DR-7D. .7 mil. diamond. **NET 6.27**

50FA203. DR-5D. .5 mil. diamond. **NET 6.53**

VR1000-3 ELLIPTICAL CARTRIDGE

Stereo cartridge prevents loss of higher harmonics. Features revolutionary suspension and damping systems. 15° tracking angle eliminates distortion. Tracking force: 3-7 grams. Frequency response: 20-20,000+hz per sec. ±2 db. 1100 ohms per channel resistance. Output: 1 millivolt per cm/sec. minimum. ½" mtg. centers. With DR-3D stylus.

50FA343. NET **18.75**

DR-3D STYLUS

Bi-radial and elliptical, combined with VR1000-3 cartridge, provides purest reproduction. Eliminates "bottoming."

50FA344. NET **12.00**

VR-22 REPLACEMENT STYLI

Replacement styli for former G.E. models VR-225 and VR-227. VR-221 for VR-225 cartridge and VR-222 for VR-227 cartridge. Minimizes tracking distortion and improves frequency response and channel separation.

50FA335. VR-221. .0005 diamond. **NET....5.01**

50FA336. VR-222. .0007 diamond. **NET....4.38**

MISCELLANEOUS PHONO ACCESSORIES

ASTATIC PHONOGRAPH PICKUP

Model KR-314T. Pickup. High output turnover cartridge. For self-replacement and direct replacement where ruggedness at low cost is required. Usable on phonos with low clearance in lid. Includes mtg. hardware and arm rest. Wt., 8 oz.

50FA314. NET **4.09**

PROTECTIVE DIS-CLOSURES

Type PJ-18. Round bottom polyethylene plastic protective sleeves for 12" records. Prevents scratching, seals out dust and moisture. Pkg. of 18.

76F089. NET ..... **.69**

WALCO STATI-CLEAN

All-around protection and assurance of longer record life. Stops dust attraction, cuts needle noise. Spray on. 1 lb.

51F588. NET ..... **.88**

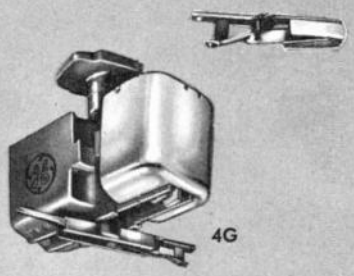
GRANT PHONO DRAWER SLIDES

Type 328-12. Side-mounted, three-section, thin, full-extension slides offer smooth and safe operation with a 50 lb. load capacity. Minimum side space required. Positive stop halts slide at full extension. Model 328-12. Extends 12". Shpg. wt. 2 lbs.

73F617. NET per pair **2.48**

Model 328-18. Extends 18". Shpg. wt. 3 lbs.

73F618. NET per pair **3.08**

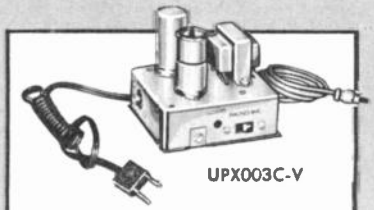


4G

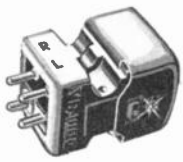
RPJ Dual stylus

RPJ Single stylus

VR1000



UPX003C-V



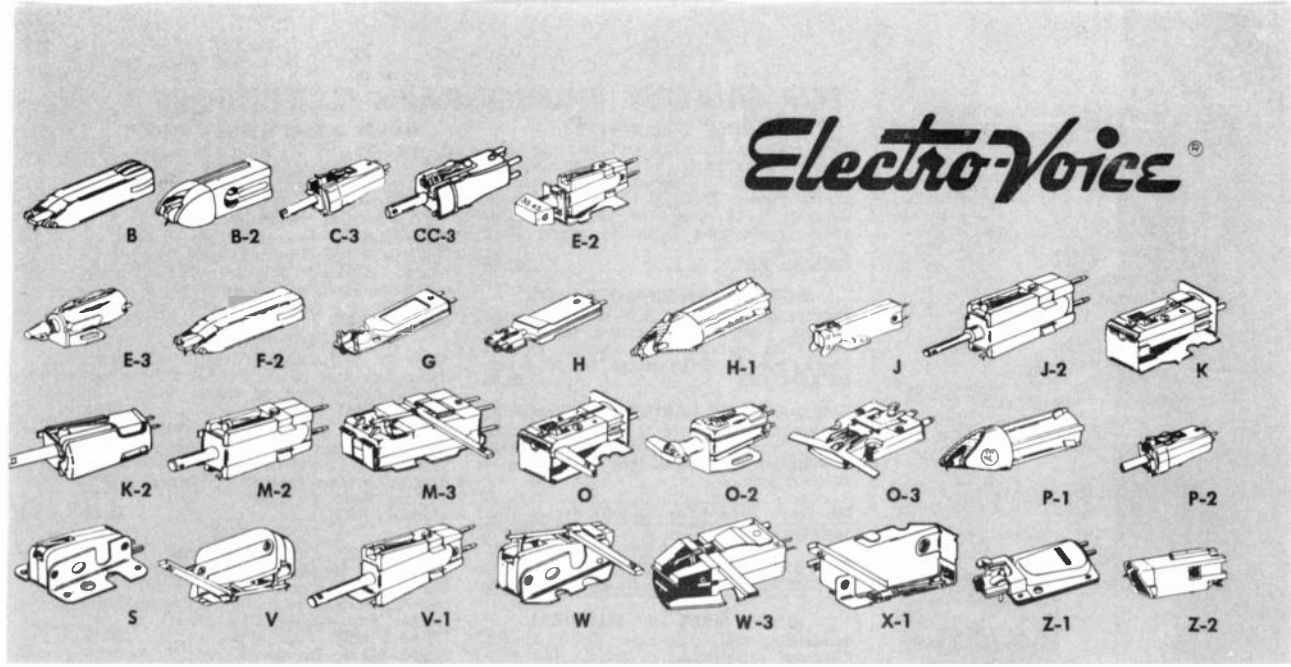
VR1000-3-W

Phono Drawer Slides

- Stops dust attraction
- Longer record life

Stati-Cleon 4/V

Newark-Houston Electronic Corp., 6902 Harwin Drive, Houston, Texas 77036



ELECTRO-VOICE "PRECISIONEERED" CARTRIDGES

Guaranteed for ninety days after purchase. Most popular replacement cartridges made. To choose replacement, determine appropriate heading, i.e., single or dual needle, monophonic or stereo. If not certain of model no., choose most similar illustration. Number in "Needles Used" column indicates tip diam.: 3 mil tips are for 78; 2 mil for 33, 45, 78; 1 mil for 33, 45, and .7 for stereo 16, 33, and 45 rpm. "D"—natural diamond; "S"—synthetic diamond.

SINGLE NEEDLE MONOPHONIC CARTRIDGES

Stock No.	E-V No.	Replacement for Original Mfr. No.	Fig.	Needle Used	Element Type	NET
50FA692	23	Admiral 409A13	J	2S	Ceramic	3.90
50FA698	74	Astatic 408	Z-1	1S	Crystal	2.67
50FA692	23	Amer. Micro. CR-5	J	2S	Ceramic	3.90
50FA694	30	Astatic 51-1	S	1S	Ceramic	2.91
50FA695	35	Astatic 51-1, 51-2, 51-3	S	2S	Ceramic	2.91
50FA698	74	RCA 75575	Z-1	1S	Crystal	2.67
50FA699	41	RCA 103238, 103238A	Z-1	1S	Crystal	2.97
50FA694	30	Sonotone 1P-1S	S	1S	Ceramic	2.91
50FA703	18	Webster Electric F17P	H	2S	Crystal	1.95
50FA704	17	Webster Electric F30	G	2S	Crystal	2.37

DOUBLE NEEDLE MONOPHONIC CARTRIDGES

50FA707	91	Astatic 118*	M-2	1S & 3S	Crystal	3.87
50FA710	120	BSR TC8H**	E-3	1S & 3S	Crystal	2.88
50FA711	119	BSR TC8M**	E-3	1S & 3S	Crystal	2.88
50FA714	87	Ronette DC-500, TO-222*	J-2	1S & 3S	Crystal	3.87
50FA715	80	Ronette TO-284	E-2	1S & 3S	Crystal	3.27
50FA719	72	Sonotone 3T-S	X-1	1S & 3S	Ceramic	4.65
50FA720	72D	Sonotone 3T-SD	X-1	1D & 3S	Ceramic	7.44
50FA721	38	Sonotone 2T-S, 2TA-S	W	1S & 3S	Ceramic	3.39
50FA722	38D	Sonotone 2T-SD, 2TA-SD	W	1D & 3S	Ceramic	5.82
50FA790	37	Sonotone 2T-LB-S	V	1S & 3S	Ceramic	3.39
50FA792	88	Vaco TO-45*	K-2	1S & 3S	Crystal	3.87
50FA797	68	VM 18444	V-1	1S & 3S	Crystal	3.27

SINGLE NEEDLE STEREO CARTRIDGES

50FA723	21D	E-V 21D	K	.7D	Ceramic	9.00

DOUBLE NEEDLE STEREO CARTRIDGES

Stk. No.	E-V No.	Replacement for Original Mfr. No.	Fig.	Needle Used	Element Type	NET
50FA650	149	Astatic 17	W-3	.7S-3S	Ceramic	5.10
50FA651	149D	Astatic 17D	W-3	.7D-3S	Ceramic	7.20
50FA800	143D	Astatic 70D	P-2	.7D-3S	Crystal	7.35
50FA803	167	Astatic 78	C-3	.7D-3S	Crystal	4.35
50FA801	145D	Astatic 80D, 80TS	P-2	.7D-3S	Crystal	7.50
50FA802	146D	Astatic 86D, 86TSB	O-3	.7D-3S	Crystal	7.17
50FA804	164	Astatic 474	CC-3	.7S-3S	Crystal	4.35
50FA805	165	Astatic 472	CC-3	.7S-3S	Crystal	4.50
50FA657	121	BSR TCBS**	E-3	.7S-3S	Crystal	4.68
50FA751	26	E-V 26, 26ST	O	.7S-3S	Ceramic	6.30
50FA752	26D	E-V 26D, 26DST	O	.7D-3S	Ceramic	9.90
50FA658	131	E-V 131	M-3	.7S-3S	Crystal	4.77
50FA650	149	E-V 132	W-3	.7S-3S	Ceramic	5.10
50FA651	149D	E-V 132D	W-3	.7D-3S	Ceramic	7.20

*Imported from Holland. **Imported from England.

DOUBLE NEEDLE STEREO CARTRIDGES (Con't)

Stk. No.	E-V No.	Replacement for Original Mfr. No.	Fig.	Needle Used	Element Type	NET
50FA658	131	Motorola 59P60024A24	M-3	.7S-3S	Crystal	4.77
50FA650	149	Motorola 59C61496A01	W-3	.7S-3S	Ceramic	5.10
50FA651	149D	Motorola 59C61496A02	W-3	.7D-3S	Ceramic	7.20
50FA651	149D	Philco 325-8068	W-3	.7D-3S	Ceramic	7.20
50FA806	54	RCA 110021, 108213	O-3	.7S-3S	Ceramic	6.00
50FA654	96	Ronette 208, 208-2*	O-2	.7S-3S	Crystal	4.77
50FA652	98	Ronette 106-1*	P-2	.7S-3S	Crystal	4.35
50FA655	97	Ronette 105-1*	P-2	.7S-3S	Crystal	4.50
50FA656	95	Ronette 105*	O-2	.7S-3S	Crystal	5.10
50FA650	149	Sonotone 8TA4-S	W-3	.7S-3S	Ceramic	5.10
50FA651	149D	Sonotone 8TA4-SD	W-3	.7D-3S	Ceramic	7.20
50FA655	97	Vaco ST2, ST-20*	P-2	.7S-3S	Crystal	4.50
50FA652	98	Vaco ST-4, ST-40*	P-2	.7S-3S	Crystal	4.35
50FA654	96	Vaco S-45*	O-2	.7S-3S	Crystal	4.77

PLUG-IN CARTRIDGES—STEREO TYPES

Stock No.	E-V No.	Replacement for Original Mfr. No.	Fig.	Needle Used	NET
50F778	13	Astatic 13T	B	.7S-3S	3.57
50F779	13D	Astatic 13TX	B	.7D-3S	5.37
50F765	66	E-V 66	P-1	.7S-3S	3.57

PLUG-IN CARTRIDGES—MONOPHONIC TYPES

Stock No.	E-V No.	Replacement for Original Mfr. No.	Fig.	Needle Used	NET
50FA677	89	Astatic 89T	F-2	1S-3S	2.97
50FA678	89D	Astatic 89TX	F-2	1D-3S	4.77
50FA731	51	E-V 51, 51-1	H-1	1S-3S	2.37
50FA734	56	E-V 56	H-1	1S-3S	2.37
50FA735	56D	E-V 56D, 56DS	H-1	1D-3S	4.17
50FA673	81	RCA 105836	F-2	1S-3S	2.37
50FA674	81D	RCA 106045	F-2	1D-3S	4.17
50FA677	89	RCA 108555	F-2	1S-3S	2.97
50FA741	76	Webcor A1919	B-2	1S-3S	2.37
50FA740	76D	Webcor A1920	B-2	1D-3S	4.17
50FA681	110	Zenith 142-72, 142-73	Z-2	2S	3.00

MOUNTS

Stk. No.	Type	Application	NET
50FA736	PT1	For models 51, 52, 53	.60
50FA738	PT2	For models 56, 56D	.60
50FA758	PT3	For models 66, 66D	.60
50FA760	PT8	For models 76, 76D	.60
50FA761	PT9	For models 13, 13D, 81, 81D, 89, 89D	.60

FEATHERIDE STEREO CERAMIC CARTRIDGES

Floating-action spring-suspension type cartridges. .7 mil. diamond and .3 mil. synthetic sapphire styli. Std. mtg. ctrs.

50FA724. Model 149DF. 2-4 Gram Tracking Force.....10.50

50FA725. Model 150DF. 4-6 Gram Tracking Force.....10.50

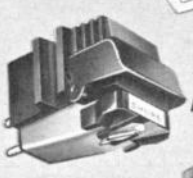
TOP QUALITY PHONOGRAPH CARTRIDGES

V15II

M80E

M44E

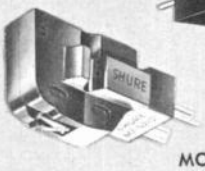
MODEL M3D



M75E

M75-6

MODEL M55E



MODEL M7-N21D

MODEL V-15 TYPE 11

New premier cartridge featuring high frequency trackability. Retractable elliptical .0007" x .0002" diamond stylus. Built-in stylus guard. 20-20,000 Hz. Channel separation, 25 db. Output voltage: 3.5 millivolts. Tracks from ¾ to 1½ grams. Ship wt. 6 ozs.
50FA533. NET **67.50**

MODEL M75E STEREO DYNETIC

Retractable elliptical (.0007"x.0002") Stereo Dynetic cartridge. Diamond stylus. 20-20,000 Hz. Channel separation 25 db. Tracks from ¾ to 1½ grams. Sh. wt. 6 ozs.
50FA534. NET **39.00**

GARD-A-MATIC CARTRIDGE ASSEMBLIES

Designed for Garrard turntables. Scratch-proof, bounce-proof, "floating" cartridge assemblies mounted in tone arm heads to fit your unit.

Stk. No.	Type	For use with	Stylus	Net
50FA516	M98/A	Type A 40,50,60,	.0007"	24.75
50FA517	M99/AT6	A50,AT6,AT60	.0007"	24.75
50FA532	M80E	70,Lab 80,A70	Ellip.	38.00

MODEL M55E 15° ELLIPTICAL

Moderate cost cartridge. 20-20,000 Hz. Channel separation; 25 db. Output voltage: 6.6 millivolts.
50FA521. NET **35.50**

MODEL M75-6 STEREO DYNETIC

Retractable .0006" diamond stylus. 20-20,000 Hz. Tracks from 1½ to 3 grams. Ship. wt. 6 ozs.
50FA535. NET **24.50**

MODEL M44E ELLIPTICAL

The M44E is equipped with a .0004" x .0007" elliptical diamond stylus. The larger radius (.0004") versus the .0002" of other ellipticals permits tracking forces of up to 4 grams.
50FA539. NET **34.50**

MODEL M7-N21D

Resp: 20 to 20,000 Hz Comp: $9x10^{-6}$ cm/dyne. Sep: over 20 db. Tracks at 2 gm. optimum .0007" diamond stylus. 3 oz.
50FA524. NET **17.95**

MODEL M3D STEREO DYNETIC

.0007" diamond stylus. Response: 20 to 15,000 Hz. Compliance: $4x10^{-6}$ cm/dyne. Separation more than 20 db. Tracks at 3 to 6 grams. Ship. wt. 3 ozs.
50FA510. NET **15.75**

TONE ARMS

Model M232. For 12" records. Accepts Stereo and Monophonic cartridges. Tracking force 2-8 grams. Furnished with arm rest, hardware, template, 4 ft. cable assembly. Arm length, 12 11/16". Wt. 1 lb.
50FA514. NET **29.95**

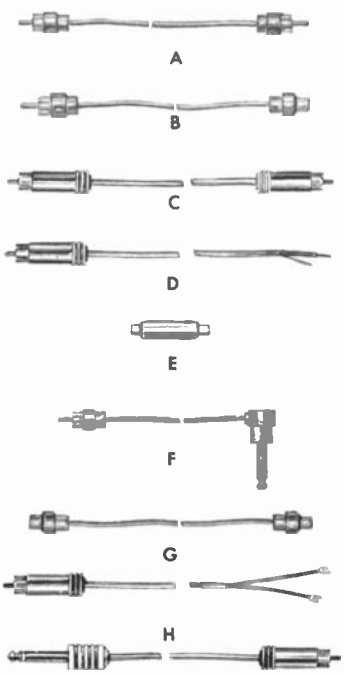
Model M236. As above, for 16" records. Arm length 14½". Wt., 1⅛ lbs.
50FA515. NET **31.95**

SHURE REPLACEMENT STYLI

Stock No.	Stylus No.	For Dynetic Cartridge No.	Tracking Force (grams)	Diamond Tip Size	Net Price
50FA511	N3D	M3D; upgrades M7D, M8D	3-6	.0007	7.95
50FA525	N21D	M21; M7-N21D; M3-N21D; upgrades M3D,M7D	2½ max.	.0007	12.50
50FA526	N44-1	M44 Series (Mono LP)	1½-3	.001	9.75
50FA527	N44-3	M44,M55,M80,V-15 Series 78 rpm	1½-3	.0025	9.00
50FA528	N44-5	M44-5	¾-1½	.0005	11.35
50FA529	N44-7	M44-7,M98/A	1½-3	.0007	9.75
50FA540	N44E	M44 Series Elliptical	1¾-4	Elliptical	18.00
50FA530	N55E	M44,M55,M80 Series	¾-1½	Elliptical	20.00
50FA531	VN2E	V-15	¾-1½	Elliptical	25.00
50FA536	VN15E	V15 II	¾-1½	Elliptical	27.00
50FA537	N75-6	M75-6	1-2½	.0006	11.35
50FA538	N75-E	M75-E	¾-1½	Elliptical	20.00
50FA518	N99	M99 Series	1½-3	.0007	12.95

CONNECTING CABLES

Trouble-free installation for Hi-Fi and Stereo. All are flexible shielded except * unshielded. 2-cond. cable. Av. Shpg. wt., 5 oz.



Stk. No.	Fig.	Lgth.	One End	Other End	NET
39F800	A	18"	Phono pin plug	Phono pin plug	.53
39F801	A	36"	Phono pin plug	Phono pin plug	.62
39F802	A	72"	Phono pin plug	Phono pin plug	.79
39F1752	A	10'	Phono pin plug	Phono pin plug	.90
39F1750	A	20'	Phono pin plug	Phono pin plug	1.71
39F1751	A	30'	Phono pin plug	Phono pin plug	2.34
39F803	B	18"	Phono pin plug	Phono jack	.62
39F804	B	36"	Phono pin plug	Phono jack	.70
39F805	B	72"	Phono pin plug	Phono jack	.88
39F1753	B	10'	Phono pin plug	Phono jack	1.02
39F1754	B	20'	Phono pin plug	Phono jack	1.89
39F1755	B	30'	Phono pin plug	Phono jack	2.52
39F807	G	18"	Phono jack	Phono jack	.82
39F808	G	36"	Phono jack	Phono jack	.91
39F809	G	72"	Phono jack	Phono jack	1.09
39F810	F	72"	Phono pin plug	Rt. ang. phone plug	1.18
39F811*	....	10'	Rt. ang. phono pin plug	Alligator clips	1.32
39F812*	....	10'	Rt. ang. phone plug	Alligator clips	1.41
39F1600	C	10'	Long Phono pin plug	Long Phono pin plug	1.15
39F1601	C	15'	Long Phono pin plug	Long Phono pin plug	1.44
39F1756	....	6'	Phono pin plug	Stripped, tinned	.65
39F1602	D	10'	Long Phono pin plug	Stripped, tinned	.97
39F1603	D	15'	Long Phono pin plug	Stripped, tinned	1.26
39F1757	D	20'	Phono pin plug	Stripped, tinned	1.77
39F1758	D	30'	Phono pin plug	Stripped, tinned	2.40
39F1604	.....	6'	Long Phono pin plug	Phone plug	1.21
39F1605	.....	10'	Long Phono pin plug	Phone plug	1.50
39F1606	.....	15'	Long Phono pin plug	Phone plug	1.79
39F1607	.....	20'	Long Phono pin plug	Phone plug	2.09
39F1759	.....	30'	Phono pin plug	Phone plug	2.49
39F1608	H	10'	Long Phono pin plug	Lugs	1.03
39F1609	H	15'	Long Phono pin plug	Lugs	1.32
39F806	E	Double phono pin jack thru conn.; pin plugs (Adapter)			.59
39F825	....	Phono pin jack to phone plug (Adapter)			.73

Garrard

• *NEW* "SYNCHRO-LAB" SERIES TURNTABLES

• Combines Advontoges of Synchronous & Induction Types
The high cost of eliminating synchronous motor performance problems, such as low starting torque and excessive rumble, explains why even the finest turntables have been using induction motors. Now, GARRARD has combined the synchronous and induction types into one motor with the advantages of both. An induction section of the rotor provides high torque

• Speed Connot Fluctuote—High Torque—Low Rumble
and fast acceleration to the correct speed, at which point the synchronous section "locks in" to the 60 hz line current: voltage may vary from 25 to 250V with NO EFFECT WHATEVER on speed! The Synchro-Lab design also offers a high degree of torsional damping, running smoothness, and freedom from rumble.

SL55 4-SPEED AUTOMATIC TURNTABLE

Provides features and performance of far more expensive units. Synchro-Lab motor guarantees uniform record speed and exceptional freedom from rumble. Manual cueing and pause control; tone arm may be placed in any position on the record, or lifted off as long as desired at any point in the playing cycle. Two interchangeable spindles, one for manual single-record operation, the other a center drop spindle for automatic operation. In automatic mode, records of any size may be intermixed. Lightweight tubular tone arm has built-in stylus pressure adjustment. Super-sensitive trip with DuPont Delrin to offet friction. Lightweight plug-in shell accommodates your choice of cartridges, and has cueing pointer. Four speeds: 16⅔, 33⅓, 45, and 78 rpm. Operates from 100-130 VAC, 60 Hz. only. Requires 4¾" above and 2⅞" below motor board. (Less Cartridge). Shpg. wt., 10½ lbs.

73F739. NET. 59.50

SL65 4-SPEED AUOMATIC TURNTABLE

Superseded the 60 Mk II. Synchro-Lab motor guarantees "locked-in" turntable speed. Comes with two interchangeable spindles, for manual single-record or automatic operation. Has automatic anti-skating control and built-in stylus pressure gauge; supersensitive trip with DuPont Delrin. Lightweight plug-in shell accepts a variety of cartridges. Manual cueing and pause control permits placing the tone arm on the record in any position. Requires 4¾" above and 2⅞" below mounting board. For 100-130 VAC operation. Shpg. wt. 12 lbs.

73F741. NET. 79.50

SL95 3-SPEED AUTOMATIC TURNTABLE

Revolutionary Synchro-Lab motor provides flawless, silent, synchronous speed. Two interchangeable spindles permit single-play manual operation, or six-record automatic operation in automatic mode, Unique anti-skating control, and stylus pressure gauge. Ultra-low-mass tone arm has adjustable counterweight and gyroscopically gimballed pivots. Cartridge clip permits rigid one-end tone arm design. Single manual-cueing-pause lever starts turntable, lifts arm, and lowers it gently to the record. 12" aluminum turntable has anti-static mat with safety grooves at 12", 10" and 7" to protect stylus against accidental damage. 3 speeds: 33⅓, 45 and 78 rpm; operates from 100-130 VAC 60 hz. Requires 4⅜" above mounting board, and 3" below. (Less Cartridge). Shpg. wt., 13 lbs.

73F740. NET. 129.50

SL75 3-SPEED AUTOMATIC TURNTABLE

Auto-Rise safety record platform springs into position for automatic play, retracts when not in use. Automatic spindle holds six records; interchangeable single play manual spindle rotates with record for center-hole protection. 12" turnable with anti-static mat, driven by Synchro-Lab motor for constant record speed and low rumble. Anti-skating control, adjustable tone-arm counterweight, interchangeable cartridge clip, combined manual-cueing-pause control. Stylus force adjustable to ½ gm; built-in pressure gauge. 33⅓, 45, and 78 rpm. operates from 100-130 V 60 cycle. Requires 4⅜" above mtg. broad, 3" below. Sphg. wt., 13 lbs.

73F742. NET. 109.50

40 Mk II AUTOMATIC TURNTABLE

Features oversized turntable & counterweighted tone arm (with safety catch & finger lift). Automatic intermix operation. Dupont Delrin "frictionless" trip mechanism. Garrard 4-pole shaded "Induction Surge" motor. Handsomely styled unitized control panel with separate positions for manual and automatic play. Portable and lightweight. Less cartridge. Spha. wt.: 10½ lbs.

73F725. NET 44.50

• *NEW* MODEL 30 4-SPEED AUTOMATIC TURNTABLE

Comes with ceramic diamond-stylus cartridge. Interchangeable spindles for automatic or manual play. Induction motor designed and built by Garrard. Versatile automatic operation: records may be intermixed in size. Super-sensitive trip with DuPont Delrin to offset friction. Easy stylus pressure adjustment. Dimensions: 14⅞" W x 12½" D, 4⅝" above and 2⅞" below motor board.
Shipping wt.: 10 lbs.

73F745. NET 39.50

SP20 MANUAL PLAYER

4-speed manual turntable for single record. Semi-counterbalanced arm with adjustable stylus pressure. Full size weighted turntable. Trip of Dupont Delrin. Track as light as 2 grams. Automatic return of arm to rest, and shutoff after play. Interchangeable plug-in head, for any cartridge. With line cord, 2 audio cables, plug-in shell (less cartridge). Shpa. wt.: 10 lbs.

73F730. NET 37.50

ACCESSORIES

(*) Also for 60 and 50 series.

Stk. No.	Type	Description	NET
73F733	CB10*	Base for SL55, 40, 30, 20 Series	4.95
73F743	CB11	Base with covered accessory tray. For SL75 and SL95.	5.95
73F735	DC10	Dust cover for SL65, SL55, 40, 30, 20 Series.	4.95
73F734	DC89	Dust cover for SL75 snf SL95. (Also for Lab 80 and 70 Series.)	5.95
73F768	MB10	Mounting board for SL65, SL55, 40, 30, 20	2.25
73F744	MB11	Mounting board for SL75 and SL95.	2.25
73F736	LRS20	45 RPM Spindle for SL65, 40, 30,	3.80
73F782	LRS25	45 RPM Spindle for SL75 and SL95.	3.80
73F738	M7	Extra Plug-In Shell for SL55, SL65, 40, 20, 60 & 50's	1.75
73F790	C1	Extra Cartridge Clip Holder for SL75.	1.75
73F791	C2	Extra Cartridge Clip Holder for SL95.	1.75

• Except Where Noted, All GARRARD Turntables Come Less Cartridge.
See SHURE Cartridge Pages in Index for GARD-A-MATIC Cartridge Assemblies.

SPECIAL OFFER*—GET A CARTRIDGE FOR A PENNY!

For Models 40 and SL55; choose between a Shure M7/N21D (50F524), Electrovoice 149DF (50F724) or G.E. VR-1000-7 (50F-200). For Models SL65, SL75, and SL95; choose any of above or Shure M44E elliptical (50F539) and pay only one cent more than the price of the Garrard unit selected. **How to order:** show stock numbers of the Garrard unit and cartridge selected on seperate lines, bracket the two items and show a combined price of one cent more than the price of the Garrard unit selected. ****Model 30 & SP20 not included in this offer.**

HALLICRAFTERS AMATEUR EQUIPMENT

SR-42A/46A

SR-42A & SR-46A TRANSCEIVER

Full two meter coverage with the SR-42 or full six meter coverage with the SR-46. Power input 12 watts AM. Double conversion superheterodyne receiver with quartz crystal controlled second oscillator. Nuvistor RF amplifier; Zener diode voltage regulation. Adjustable to MARS frequencies. Provision for four transmitter crystals, plus input for external VFO, switch selected from front panel. Built in two-way power supply 117/VAC and 12 VDC. MR40 required for 12VDC operation. Lowest internal and external spurious responses. Exclusive HLC tip up, tip down cabinet for convenient fixed and mobile chassis access. S meter and BFO automatically switched. Full time noise eliminator. Frequency spotting switch. Perfect for fixed, portable or mobile communications. Unit permits instantaneous selection of desired voltage, by merely changing line cords. Size: 5x12x8". Shpg. wt. 13 lbs.

98F025. Model SR-42A..... **199.95**

98F026. Model SR-46A **199.95**

MR-40. Mobile mounting kit and vibrator for above units. Shpg. wt., 3 lbs.

98F107. NET **12.95**

HA-26

HA-26 VARIABLE FREQUENCY OSCILLATOR

This stable VFO is a companion for either the SR-42 or the SR-46 and obtains its power from the transceiver. Front panel: frequency control, band switch 2M-6M; Dial calibration, 50-54 MHz and 144-148 MHz. Rear chassis, cable and plug to transceiver; Slide switch, 117 AC, 12VDC; Tube, 6U8A, oscillator-isolator. Size 4x5x 4". Shpg. wt. 3½ lbs.

98F027. NET **54.95**

HA-18

● *NEW* MODEL HA-1B CODE LEARNING SET

Everything you need to learn code the easy way! Two-transistor audio oscillator comes complete with speaker, adjustable telegraph key, 36-inch leads, and penlight batteries. Set also includes 3 ARRL booklets ("Learning the Radiotelegraph Code," "How to Become a Radio Amateur," and "License Manual") plus a 33⅓ rpm code record. Shpg. wt. 3 lbs.

98F108. NET **14.95**

HT-46

● *NEW* MODEL HA-1BA CODE PRACTICE SET

Compact, solid-state code oscillator with variable pitch control is supplied fully wired, in smartly designed polystyrene case. Telegraph key, connecting wire, and penlight batteries are included. Shpg. wt., 1 lb.

98F109. NET **9.95**

5R-2000

5R-400

MODEL HT-46 5-BAND TRANSMITTER

Designed to complement the SX-146 receiver—works independently or may be interconnected for transceiver operation. 180 watts PEP on SSB, 150W CW; upper or lower sideband via 9 mHz quartz crystal, press-to-talk or optional plug-in VOX; grid-block keying for CW; built-in power supply. Covers 3.5-4.0, 7.0-7.5, 14.0-14.5 21.0-21.5 MHz; also 28-30 MHz in four 500 khz steps: crystal supplied for 28.5-29.0 mhz, other 10 meter crystals optional. Tube complement: 6BA6 VFO, 6EA8 oscillator-mixer, 12AT7 carrier oscillator-3rd audio, 12AT7 mic, amplifier, 6EA8 9 mhz IF amplifier and AALC, 6AH6 mixer, 12BY7 driver, 6HF5 power amplifier, OA2 regulator. Front-panel controls include: frequency- tuning, tuning, operation switch, microphone gain, driver tuning, carrier level, band selector, final tuning, VFO selector, calibrate on/off, and meter switch. Size 5⅞x13⅛x11". Shpg. wt., 26½ lbs.

98F110. NET **369.95**

HA-20

MODEL HA-16 VOX ADAPTER

For use with HT-56 transmitters. Permits voice-actuated transmitter switching, for hands-free operation. Wt., 1 lb.

98F111. NET **37.95**

HA-1

● *NEW* SR-2000 "HURRICANE" 5-BAND SSB TRANSCEIVER

Maximum-power coverage of 80, 40, 20, 15, and 10 meter bands. Transmitter section employs two 8122 output tubes with 2000 watts PEP input on SSB, 1 kw CW.; has variable pi-network; carrier suppression 50 db. Built-in VOX and break-in CW & PTT. 2.1 khz crystal lattice filter; 2-speed blower; S-RFO-AALC and final screen metering; 100 khz xtal calibrator; VFO tunes 500 khz; 1 khz dial calibration. Receiver has better than 1 μv sensitivity for 20 db S/N ratio; features receiver offset control (RIT), permitting ±2 khz adjustment of receiver frequency independent of transmitter; adjustable IF noise blanking; 2W audio output. Front-panel controls include tuning, band selector, final tuning, final loading, rf level, mic. gain, pre-selector, RIT, rf gain, af gain, function switch, operation switch, cal. adjust. Requires external power supply and speaker (P-2000AC, below). Size, 7¾ x 16½ x 15". Shpg. wt., 30 lbs.

98F112. NET **1095.00**

P-2000-AC Power Supply. AC power supply, with speaker, for SR-2000 transceiver. Meters for final plate voltage and current are included in this unit. Size, 7¾ x 9 x 15". Shpg. wt., 65 lbs.

98F113. NET **450.00**

● *NEW* SR-400 "CYCLONE" 5-BAND SSB TRANSCEIVER

Provides full coverage of 80, 40, 20, and 15 meter bands; 10m crystal provided for 28.5-29.0 mhz, other crystals may be added for full 10m coverage. Power input to two 6HF5 output tubes: 400W PEP SSB, 300W CW. Built-in VOX, plus break-in CW and PTT; CW sidetone monitor; 100 khz xtal calibrator; 1 khz dial calibration; VFO tunes 500 khz. Special features: receiver offset control (RIT) permits ±2 khz adjustment of receiver frequency, independent of transmitter, for roundtable or net operation; amplified automatic level control; T-notch filter plus built in CW filter. Transmitter section has variable pi-network, 50 db carrier and SB suppression on SSB. Receiver sensitivity less than 1 μv for 20 db S/N ratio; adjustable IF noise blanker; 2W audio output. Requires external power supply and speaker (see PS-500, below). Size 15 x 6½ x 13". Shpg. wt., 28 lbs.

98F114. NET **799.95**

PS-500-AC. Power supply for SR-400 transceiver, with built-in loudspeaker. Operates from 105-125 VAC. Wt., 28½ lbs.

98F115. NET **119.95**

P-500-DC. Power supply for portable/mobile operation of SR-400. Operates from 12VDC. Without loudspeaker. Size 6x4x 8¼". Shpg. wt., 10 lbs.

98F116. NET **149.95**

Model HA-20. Remote VFO and SWR console for SR-2000 and SR-400 transceivers. Has a VSWR meter with remote bridge connection to continuously monitor antenna performance, and employs the same deluxe VFO found in the SR-400 and SR-2000. When used in conjunction with one of these transceivers, the following operating modes are possible: (1) transceive with main unit; (2) transceive with HA-20; (3) receive on main unit, transmit with HA-20; (4) receive two frequencies simultaneously. Shpg. wt., 12 lbs.

98F117. NET **199.95**

MODEL HA-1 T.O. KEYER

Employs computer-type digital circuitry to produce constant dot-to-space-to-dash ratio. Speed variable from 10 to 65 WPM. Sidetone signal may be monitored through built-in speaker, neon indicator provides visual monitor. Operates from 105-125 VAC. Size, 7x5x7", shpg. wt. 10 lbs.

98F068. NET **79.95**

When in Chicago, try your fist on the Hallicrafters gear in our fully-equipped Ham Shack. Just bring your *original* FCC license. (photostats unacceptable).

HALLICRAFTERS COMMUNICATIONS RECEIVERS

MODEL SX-122 RECEIVER

The SX-122 incorporates major improvements in stability. Standard broadcast and 3 SW bands provide continuous coverage from 538 khz to 34 Mhz. Bandspread calibrated for amateur bands. 50 kc highly selective i.f. system is used. Upper or lower side band is selectable. Dual conversion on all bands. Antenna trimmer. Amplified AVC. Product detector for SSB/CW. Envelope detector for AM. Series noise limiter. Second conversion oscillator crystal controlled. Audio power output: 1.0 watts with 10% or less distortion. Power supply: 105/125 volts. 50/60 Hz AC. 100 kc. crystal calibrator available (HA-7). Front-panel controls: main tuning, bandspread, rf gain, bandswitch, antenna, selectivity, af gain, BFO, function switch. External Connections: 3.2 ohm speaker and standby terminals, terminals for single wire or double antenna (external antenna provided), AC power cord, audio output terminals, "S" meter electrical adjustment and mounting hole for co-axial cable connector. Phones jack on front panel. Shpg. wt., 43 lbs.

98F011. NET **289.95**

● *NEW* S-240 5-BAND FM/AM GENERAL COVERAGE RECEIVER

FM and AM broadcast bands are provided, as well as 2-30 mhz in three bands. BFO permits reception of CW signals. AGC and AFC circuits plus triple antenna system insure high-quality reception on all bands. Circuit incorporates 11 transistors and 6 diodes, with pushpull output stage feeding a full watt to the built-in 4" speaker. jack for phones or external speaker provided). Special features: tuning meter and fine tuning control let you home in on distant stations; tone control adjusts treble and bass response. Operates from 117 VAC line current. 5⅞Hx13⅞Wx8"D; wt. 10 lbs. approximately.

98F129. NET **109.95**

S-210 SHORT-WAVE BROADCAST RECEIVER

FM and AM broadcast bands, plus 4 foreign broadcast short wave bands bring a wide range of programs to the radio listener. The following wave bands allow the listener to tune in on overseas programs as easily as local stations: 5.9-6.25 mc (49 Meters), 9.45-9.8 mc (31 Meters), 11.65-12.05 mc (25 Meters), 15.05-15.55 mc (19 Meters). Controls include Band Selector/AFC with easy-view dial main tuning, on/off volume, tone control. Tuning assembly and dial drive mechanism: ganged, 4-section tuning capacitor assembly. 3 antennas: Ferrite loop for standard broadcast, wire antenna for short wave, line cord for FM. Provisions for external antennas supplied. Audio output impedance: 8 ohms for low impedance headset or external speaker. Power supply: 105/125V 50/60 Hz AC/DC. 3 dual purpose type tubes & 3 single purpose tubes. Speaker uses 1.47 oz. magnet. Walnut colored vinyl covered metal cabinet. 13⅝x6x8¼". Wt. 11.25 lbs.

98F106. NET **79.95**

WR-600 RECEIVER

With new compact styling, this WR-600 Receiver literally provides the radio buff with a world of listening enjoyment. The receiver features an electrical bandspread with slide rule bandspread dial, separate bandspread tuning. Includes complete broadcast coverage plus three short-wave band to 30 Mc. Headphone jack conveniently set into front panel. May also be used with an 8 ohm remote speaker. Has 2 powerful antennas for excellent reception. Controls: Band Selector, main tuning, bandspread tuning, standby-receive. BFO/Selectivity, AC on/off volume. Power supply: 105/125V. 50/60 Hz AC/DC — 30 watts. IF: 455 kc. Brown wood-grain steel cabinet. Size: 13½" wide x 5½" high x 7¾" deep. Shipping wt.: 11¾ lbs.

98F105. NET **69.95**

SX-146 AMATEUR BAND RECEIVER

Features single-conversion signal path and pre-mixed oscillator chain to assure high frequency stability and freedom from adjacent channel cross-modulation products. Employs a 6-pole crystal filter for improved selectivity. Designed to match the HT-46 transmitter. Covers 3.5-4.0, 7.0-7.5, 14.0-14.5, 21.0-21.5, and 28.5-29.0 mhz; Sensitivity better than 1 μv for 20 db S/N ratio. Controls: frequency function switch, aF gain, band-switch, selectivity, preselector, rf gain, AVC xtal cal., ANL phone jack. Operates from 105-125V, 50/60 Hz AC: size, 5⅞x13⅛x11". Shpg. wt, 20 lbs.

98F039. NET **269.95**

HA-19. Crystal calibrator for SX-146.
98F130. NET **19.95**

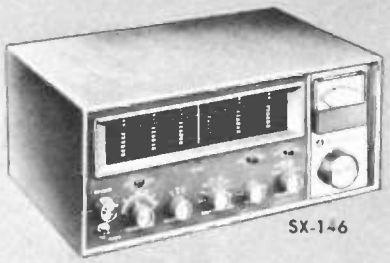
49-321. 500 hz CW filter for SX-146.
98F131. NET **24.95**

49-319. 5 Khz. AM filter for SX-146.
98F132. NET **24.95**

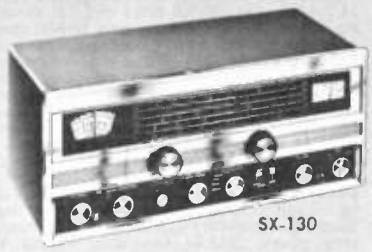
R-47. 4" speaker for SX-115, SX-117, SX-122 and SX-146. Voice frequencies only; 3.2-ohm. 5¼x5½x3½", wt., 3 lbs.
98F046. NET **14.95**

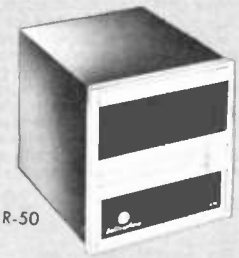
R-49. Mobile speaker; 3.2-ohm voice coil, 5¼x5½x3½" W/BRKT. Wt., 4 lbs.

98F038. NET **16.95**


SX-146

SX-122


SX-130


R-50

MODEL SX-130 RECEIVER

All precision-built receiver features crystal filter, "S" meter, and antenna trimmer. Slide rule bandspread dial. Coverage, broadcast band 533-1600 kc plus 3 short wave bands covers 1700 kc to 34 Mhz. Features: Product detector for CW & SSB; Covers the 10, 15, 20, 40, and 80 meter amateur bands, also 11 meter citizens band, Separate bandspread tuning condenser, crystal filter ,one rf, two i.f. stages and new styling. Improved image rejection. Controls: Antenna tuning, senstiivity, band selector, main tuning, bandspread tuning, volume, tone, standby, selectivity, crystal phasing, noise limiter. Intermediate freq., 1650 kc. Antenna input impedance, 52-600 ohm. Audio output, 3.2 ohms, low impedance headset output. Tube complement, 7 tubes plus 1 rectifier. Audio power output, 2 watts. Ganged, 3 section tuning capacitor with electrical bandspread. Power Supply, 105/125V, 50/60 Hz AC, 56 watts. Gray steel cabinet with silver trim. 18⅞x8x9¾". UL approved. Shipping wt., approximately 25 lbs.

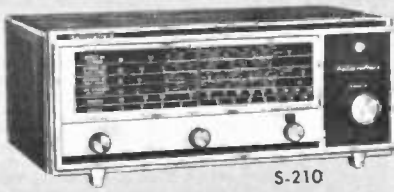
98F040. NET **179.95**

R-51 LOUDSPEAKER

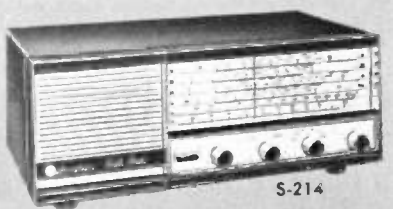
Oval 4x6" speaker, matching in styling both the S-129 and SX-130, with built-in clock. 3.2 ohm, 5 watt voice coil. Suitable for any communications application. Voice frequencies only.

98F043. NET **34.95**

Model R-50. Same as R-51, less clock.
98F042. NET **19.95**


S-210

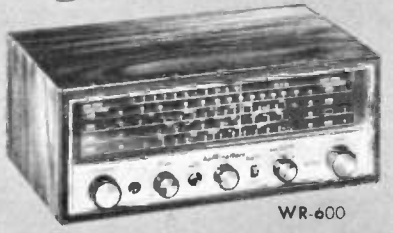
S-240


S-214

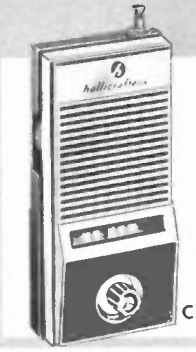
● *NEW* S-214 SOLID STATE 6-BAND FM/AM SHORT-WAVE RECEIVER

Instant warmup 10-transistor design covers FM and AM broadcast bands, plus 5.9-6.25 mhz, 9.4-9.8 mhz, 11.5-12.0 mhz, and 15.05-15.55 mhz SW bands. Has fine tuning and tone controls, AGC and AFC, built-in triple antenna system, and 4" speaker. Die cast chrome front panel, with vinyl covered metal cabinet and silver trim; wt. 10 lbs.

98F133. NET **89.95**


WR-600

HALLICRAFTERS PORTABLE AND ENTERTAINMENT RECEIVERS


CRX-100

CR-3000

CR-44

● *NEW* CRX-100 SERIES PORTABLE SPECIAL FREQUENCY MONITORS

9 transistors and 2 diodes are incorporated into a rugged, compact design to furnish highly sensitive and selective reception. AGC and noise-limiter circuits eliminate piqueing static and a signal-strength variations. Whip antenna is provided for local reception, with provision for external antenna to extend useful range. Sockets are also provided for an external earphone and AC power supply. Ideal for paging or directing police, fire, or public-utilities workers in the field. Only 2 controls, for easy operation by untrained personnel: tuning and on-off-volume. All units measure 6x2¾x1⅝"; weigh approximately 1 lb.

CRX-100. For 27-50 Mhz band.
98F121. NET. **39.95**

CRX-101. For 108-135 Mhz band.
98F122. NET. 39.95

CRX-102. For 144-174 Mhz band.
98F123. NET. 39.95

S-200 "LEGIONNAIRE" SWBC RECEIVER

A professionally-styled short-wave receiver that you can tune as easily as your AM radio! The crowded portions of the foreign broadcast spectrum are spread out into 4 precisely calibrated segments for effortless tuning. Covers AM broadcast band plus 5.9-6.25 mhz (49 meters), 9.45-9.8 mhz (31m), 11.65-12.05 mhz (25m), and 15.05-15.55 mhz (19m). Logging scale helps re-locate stations when the exact frequency is not known. Has ferrite loop antenna for broadcast and wire antenna for SW; 8 ohms audio output for speaker or low-impedance headset. Uses four tubes plus selenium rectifier; operates from 105/125V AC/DC. Walnut wood-grain steel cabinet with silver trim; 13½Wx5⅞Hx 8¾"D; shpg. wt. 11¾ lbs. U/L approved.
98F030. NET. **59.95**

● *NEW* CR-3000 MULTIBAND AM/SW/FM-STEREO RECEIVER

Provides four modes of radio reception as well as inputs for stereo phonos, tape decks, etc. Coverage includes longwave (185-400khz), AM broadcast (550-1600khz), 3 shortwave bands (2-4, 5.9-10.2, and 11.4-18.2 mhz), FM (88-108 mhz) and FM stereo multiplex. Separate bass and treble controls are provided. AFC assures drift-free FM reception. A triple antenna system with provision for external antennas. Stereo headphone jack provided. Short wave bands have fine tuning control, and BFO for CW (radiotelegraph) reception. 34 transistors, 22 diodes, and 4 thermistors are used. Audio characteristics: 10 watts/channel output at less than 1% distortion; stereo separation 30 db; response 70-15000 hz, +2db —3db; harmonic distortion less than 3%. Accessory inputs: ceramic phono, mag. phono (RIAA), tape aux. Output: 8-ohm speaker, headphone, tape. Operates from 117 VAC. Vinyl covered steel cabinet with black, chrome and silver color trim. HWD: 5x15⅛x12¼". Wt. 21 lbs.
98F124. NET. **229.95**

● *NEW* FM-46 SOLID-STATE FM/AM TABLE RADIO

10 transistors and 6 diodes operate instantly, without warmup delay. Walnut-colored cabinet will enhance any decor. Push-pull output stage delivers a full watt of audio power to 4x6" oval speaker for full tone quality. Covers 540-1600 khz and 88-108 mhz, with AFC and AGC for drift-free, stable operation. Supplied with internal antennas. 5½x13⅛x3½. Weight 4 lbs.
09F125. NET. **39.95**

● *NEW* CR-44 "RANGER" 5-BAND PORTABLE AM/FM RECEIVER

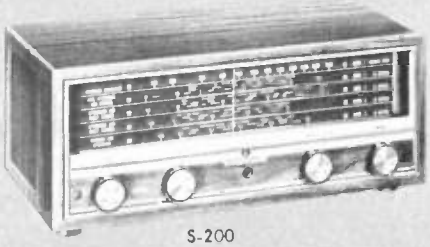
Deluxe portable provides sensitive and selective coverage of 5 bands: 184-400khz (LW), 540-1600khz (AM broadcast), 2.0-5.2 mhz (Marine), 88-108 mhz (FM broadcast) and 152-173 mhz (VHF). In addition, the direction-finder feature permits use as primary navigational aid on small craft. The DF works on 3 bands: LW, AM broadcast, and Marine; special ferrite rod antenna and large, top-mounted compass rose provided. Solid-state circuit uses 12 transistors and 5 diodes, operates from 4 "D" flashlight batteries. Special features: combination "S" and DF meter gives signal strength; separate battery meter; AGC prevents blasting on AM; AFC locks in FM stations; 4" speaker. 117 VAC power supply. Controls include tuning, band selector, on/off/volume, AFC, DF, tone, dial light on-off. Black and chrome case. Wt., 6 lbs.
98F126. NET. **119.95**

● *NEW* CR-50 "SEA-AIR" 5-BAND AM PORTABLE RECEIVER

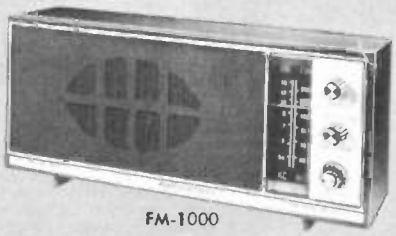
Similar to CR-44 above, but AM only. Also has slightly different frequency coverage. 185-400khz (LW), 550-1600khz (AM broadcast), 2.0-5.2 mhz (marine), 5.2-15.5 mhz (SW), and 108-135 mhz (Aircraft VHF).
98F127. NET. **99.95**

● *NEW* FM-1000 AM/FM PORTABLE

Brings you FM or AM broadcasts indoors and out. 10 transistors and 4 diodes, including an rf stage to increase FM selectivity and sensitivity. Two-way antenna system plus provision for external FM antenna. Tone control. Earphone jack. Requires 4 "AA" penlight cells. 5¾x8⅝x 2⅝". Wt. 4 lbs.
98F128. NET. **39.95**


S-200

FM-46


FM-1000

Newark-Detroit Electronics, Inc., 20700 Hubbell Ave., Detroit, Mich. 48237

E. F. JOHNSON AMATEUR EQUIPMENT

VIKING "MATCHBOX" ANTENNA MATCHING UNITS

Bandswitching antenna matching units match a wide range of impedances and tune out large amounts of reactance on all amateur bands 80 thru 10 meters. Also provide separate matching of receiver. Heavy-duty relay switches antenna and grounds receiver antenna terminals during transmitting. Directional coupler for SWR measurements may be used separately. Tuning is broad enough to cover large portion of band with one setting. 20 db harmonic suppression. Maroon and grey finish. Approved for FCDA matching funds.

250-23-3

KILOWATT MATCHBOX

Model 250-30-3. Kilowatt Matchbox designed to handle unbalanced line impedances from 50 to 2000 ohms, balanced line impedances from 50 to 1500 ohms. The antenna change-over system includes a time delay circuit for the relay, providing "fast make—slow break" action to prevent arcing or sticking of relay contacts. The feature also protects the transmitter and the receiver components from possible damage by high voltage transients during antenna change-over switching. Feed-through insulators are provided for connecting balanced or unbalanced lines. A standard SO-239 connector is provided for 52 ohm coaxial lines. Unit is also capable of tuning out large amounts of capacitative or inductive reactance. Revolutionary design of circuit does away with the annoying use of "plug-in" coils and completely eliminates "load-tapping" necessary in other couplers. In SSB mode, the unit is rated up to 3 kilowatts P.E.P. input. (With directional coupler). Dimensions: 17¼ x 12⅛ x 10⅞". Shipping weight, 27 lbs.

97F464. NET **154.50**

275 WATT MATCHBOX

Model 250-23-3. Designed to match a 52 ohm coaxial link line to reactive and non-reactive loads ranging from 25 to 1500 ohms for balanced lines, and 25 to 3000 ohms for unbalanced lines. The link line operates without standing waves, providing a convenient point for the installation of a Johnson 250-20 Low Pass RF Filter for improved harmonic suppression. Feed-through insulators are provided for connecting balanced or unbalanced feedlines. Completely integrated antenna matching and switching systems for CW and AM transmitters up to 275 watts, with provision for continuous monitoring of either incident or reflected transmission line power. In SSB mode, the 275 watt unit will handle 750 watts P.E.P. input. (With directional coupler). 9⅞x10½x7". Shpg. wt., 11 lbs.

97F463. NET **94.95**

250-30-3

Model 250-23-1. Without directional coupler and indicator.

97F465. NET 64.95

NOISE SUPPRESSOR KIT

Model 250-801. Designed to eliminate automobile ignition and electrical interference. Ideal for mobile radio operation. Includes: 4 coax. capacitors, 8 sparkplug suppressors, 1 V-regulator suppressor, shielded cable and braid, all necessary hdw. and instructions. Shpg. wt., 2 lbs.

97F519. NET **15.50**

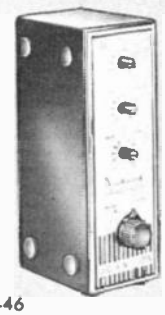
SWR BRIDGE

Model 250-37. Coupler. 7-150 mhz to 1 kw on 52 ohm line. 2⅝ x 6¼". Shpg. wt., 2 lbs.

97F477. NET **11.75**

Model 250-38. Indicator. 0-100 scale. 4x4x4¼". Shpg. wt., 4 lbs.

97F476. NET **25.00**



250-46

LOW PASS FILTER

Model 250-20. Handles more than 1000 watts. Shpg. wt., 3 lbs.

47F920. NET **14.95**

250-20

KEYS AND PRACTICE SETS

VIKING PHONE PATCH

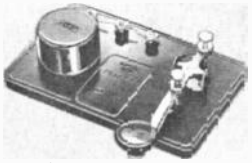
Model 250-46. Fully automatic Hybrid transformer type unit provides for P.T.T., VOX or manual operation on SSB or AM. Line null control offers excellent isolation. Separate gain controls for transmitter and receiver inputs. RF filtering and by-passing prevents RF feedback from telephone line. Heavy gauge steel enclosure with modern styling. Maroon finish. Removable etched aluminum panel. Size: 2x6x 2½". Wt 3 lbs.

97F518. NET **25.00**

B

Fig. A. Practice Set. Provides high frequency tone which simulates code signal. Two can be connected to provide a two-way signal system. Uses two dry cells or "C" battery (Not Supplied).

27F517. Type 114-450. **NET EACH** **5.60**



A

Fig. B. Constant Frequency Buzzer only. as used on practice set.

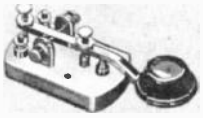
27F530. Type 114-400. NET **2.00**

Type 114-321 Same heavy duty key type assembly as type 114-320 above. Polished chrome-plated base.

27F532. NET **5.85**

Fig. C. Heavy Duty Keys. Heavy die cast base, chrome plated key arm. Well insulated for heavy duty service. Large ¼" coin silver contacts. Navy type knob. Adjustable steel bearings and spring designed to give a light keying touch. Type 114-320. Black wrinkle enamel base.

27F531. NET **4.95**



C

Type No. 114-301. Phenolic Base Keys. High quality key with adjustable bearings. Improved spring-pigtail connection. Nickel plated parts. ⅛" coin silver contacts. Molded phenolic base.

27F518. NET **2.60**

Fig. D. High Speed Standard Key. Fully adjustable spring tension, contact spacing and bearings. .072" platinor contacts. Includes shorting switch. Satin brass. Shpg. wt., 2 .bs.

27F526. Type 114-100-3. NET **8.50**

Standard Keys. Heavy die cast base. Smooth adjustable bearings. Provision for plugging in semi-automatic keys. Silver contacts. With switch. Choice of:

Type 114-310-3. Black wrinkle.

27F528. NET **4.50**

Type 114-311-3. Chrome plated.

27F529. NET **6.50**

D

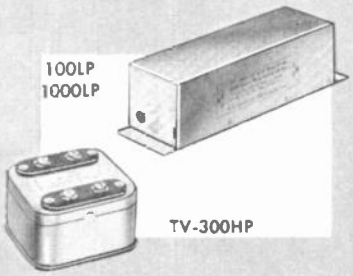
NEWARK — Same Day Shipment From On-The-Shelf Stocks

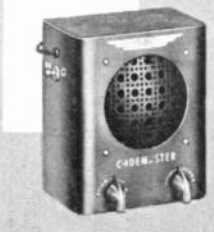
DRAKE AMATEUR EQUIPMENT

TR-4

T-4X

R4-A





CPC-128B.

MODEL TR-4 SIDEBAND TRANSCEIVER

Features: Full frequency coverage—all amateur bands 10 through 80 meters, additional crystals not required; Upper and Lower Sideband on all bands; VOX or PTT on AM and SSB; Automatic transmit receives switching on CW; CW Sidetone Oscillator built in; Diode detector for AM reception; Solid state VFO with linear permeability tuning for max. stability; Output impedance adjustable with Pi-network; 300 watts PEP input SSB; Controlled carrier screen modulator for AM built-in; Shifted carrier CW, 260 watts input; 2 special 9 mc crystal filters for sideband selection. Separate RF and AF gain controls Full AGC with Drake dual time constant system; 2.1 kc passband; 100 kc crystal calibrator built-in; Separate receiver S-meter and transmitter plate ammeter; 20 tubes, including VR, 2 transistors, 8 diodes; Receiver IF selectivity, 2.1 kc at 6 kb, 7.5 kc at 60 db; Receiver sensitivity, less than ½ uV for 10 db S/N; Power Supply, Model AC-4 or Model DC-3 listed below may be used. Size, 5½x10¾x14⅜". Weight, approximately 16 lbs.

97F050. NET **599.95**

Model AC-4. Power Supply for TR-4 above or the T-4X below. 120VAC 50/60 cycle. 5' interconnecting cable with 12 prong connector and speaker connector. 5x5x10¼". 14 lbs.
97F051. NET **99.95**

Model DC-3. DC Power Supply. Transistorized. Operates from 12 VDC. 5' interconnecting cable and speaker connector. 3⅜x4⅜x8". Weight, 7½ lbs.
97F031. NET **149.95**

MODEL T-4X TRANSMITTER

T-4X features: Solid state linear permeability tuned VFO with 1 Kc divisions. Gear driven circular dial. High mechanical, electrical, and temperature stability; Covers ham bands 80, 40, 20, and 15 meters completely and 28.5-29 Mc of 10 meters with crystals furnished; 160 meters covered with accessory crystal. Also certain other 500 Kc ranges between 1.8 and 30 Mc are available. Could include Mars, other 10 meter ranges, or VHF with transmitting converters; will transceive with R-4 Receiver—switch on T-X4 determines frequency control by R-4 or T-4X VFO, or provides independent freq. control; Upper or lower sideband on all bands; VOX or PTT; adjustable pi-network output; Built-in CS Sidetone; Two special crystal lattice filters for side band selection; Transmitting AGC prevents flat topping, Meter reads relative output and plate current selectable with front panel meter switch; Easily adaptable to RTTU; Compact size and rugged construction; Spotting function provided for easy zero-beating; Controlled carrier modulation for AM is completely compatible with SSB liner amplifiers; Automatic transmit receive switching on CW; High impedance input; Power requirements—Model AC-4 Power Supply listed above. Dimensions, 5½x10¾x11⅝". Weight, 14 lbs.
97F046. NET. Less supply. **399.95**

MODEL R-4A RECEIVER

R-4 features: Linear permeability tuned VFO with 1 Kc dial divisions; Covers ham bands 80, 40, 20, 15 meters completely and 28.5 to 29.0 of 10 meters with crystals furnished; Also covers 160 meters, Mars, Citizens Band, WWV, Marine, and short wave broadcasts. (With accessory crystals.); Tuned any ten 500 Kc ranges betw. 1.5 Mc and 30 Mc with accessory crystals, 5.0 to 6.0 Mc not recommended; Four bandwidths of selectivity (equivalent to 4 filters) are furnished, .4, 1.2, 2.4 and 4.8 Kc; Passband tuning; Noise blanker that works on CW, SSB, and AM; Notch filter and 100 Kc crystal calibrator are built in; Crystal lattice filter first IF prevents crossmodulation due to strong adjacent channel signals; Receives SSB, AM, CW, and RTTY with full RF gain, complete AVC action and accurate S-meter indication; Transceive capability—may be used to transceive with the T-4 "Reciter" or T-4X Transmitter; Premixed injection-crystal oscillator and low freq. VFO outputs premixed; Product detector for SSB/CW—diode detector for AM; Excellent overload and cross modulation characteristics—insensitive to operation of nearby transmitters. Power: consumption, 60 watts, 120/240 VAC, 50/60 cycles. Size, 5½x10¾x11⅝". Weight, 16 lbs.
97F045. NET **399.95**

Model T-4 Reciter. New. Receiver-controlled Exciter for use with R-4 Receiver listed above. Identical to the T-4X except that the VFO, HF oscillator and their associated control circuitry have been omitted. Operates with R-4 to provide transceive operation, or will transmit crystal-controlled for DX, net, or novice use.
97F048. NET **299.95**

Model MS-4. Matching Speaker for use with R-4 Receiver (has space to house AC-4 Power Supply), or with TR-4 Transceiver. 5⅜x10¾x11⅛". 6 lbs.
97F047. NET **19.95**

Crystals. For T-4X xmtr or R-4 rcvr. **SPECIAL ORDER ONLY. EACH** **5.00**

R. L. DRAKE FILTERS

Model TV-100-LP. With up to 100 watts max. input. 20 watts max. on 6 meters.
47F915. NET **5.95**

Model TV-1000-LP. With up to 1000 watts max. input. 200 watts max. on 6 meters.
47F916. NET **16.95**

Model TV-300HP. HI-PASS FILTER. Eliminates IF interference from ham bands 6-100 meters. Over 40 db attenuation. 52 Mc and lower. Imped. 300 ohms. Shpg. wt., 2 oz.
47F913. NET **4.50**

BUD

CODE OSCILLATOR AND MONITOR

Model CPO-128B. A practice oscillator for learning the code which can be converted to a fine CW monitor with the flip of a switch. Will operate up to 20 pairs of headphones, or can be heard through its own built-in 4" speaker. Volume and pitch controls can be adjusted to suit your taste and requirements. All controls on the front . . . and all the jacks are on the rear of the 5½" x 3"½ x 6½" cabinet. 110 VAC, 60 hz. Shpg. wt. 3½ lbs.
27F510. NET **19.13**

MAKE NEWARK YOUR DEPENDABLE SOURCE FOR EVERYTHING IN INDUSTRIAL ELECTRONICS

AMECO HAM GEAR AND ACCESSORIES

MODEL TX-62 6 & 2 METER TRANSMITTER

Complete 6 and 2 meter, 75 watt phone and CW transmitter. Features: Frequency coverage: 50-54 mhz and 144-148 mhz; Power input to final, 75 watts. CW, 75 watts peak on phone; 6 Tube lineup; Controls—power switch, phone-CW switch, meter, selector switch, crystal or VFO switch, autio gain ontrol, drive control, bandswitch, final plate tuning, loading; TVI suppressed; Crystal-controlled or can take VFO—crystals used are inexpensive 8 mhz type; Meter reads final cathode current, final grid current and RF output; Mike/key jack and crystal socket on front panel. Plush-to-talk mike jack; Potentiometer type drive control; Audio gain control. Additional connections in rear for key and relay. Solid state power supply included, built-in. lation. 11½x9x6". Shpg. wt., 22 lbs.

97F771. NET **149.95**

MODEL VFO-621

Designed to operate with 2, 6, and 1¼ meter transmitters. Can be used with the AMECO TX-62 or with any other transmitter or transceiver. Uses transistorized oscillator, zener regulated. Each unit is individually temperature compensated to permit stability and keying quality almost non-existent on 2 and 6 meters. No chirp with keying. Warmup time is very short, as both oscillators use transistors. Dial scale calibrated for 144 to 148 mhz and 50 to 52 mhz over the full range. Controls: Power switch, Band switch, Tuning. Terminal strip is wired to work with either cathode or bias keyed transmitters. Connections: Output cable with dummy crystal —cable plugs directly into the TX-62 or any other crystal socket. Internal AC power supply is Zener diode regulated. 6x5x7½". Shpg. wt., 9 lbs.

97F772. NET **59.95**

MODEL BIU BRIDGE INDICATOR UNIT

Will accurately read SWR, percentage power and percentage voltage (3 scales), when used with the Ameco SWB or other make of bridge. Switching circuit provides for reading either one of 2 bridges. Contains 100 μA D'Arsonval meter. Wired and tested. 2¾x5x3". Shpg. wt., 3 lbs.

97F773. NET **15.95**

MODEL SWB STANDING WAVE BRIDGE

High quality bridge that will accurately read SSWR s from 1.8 mhz to 225 mhz, (including Ham, CB and Commercial bands). Contains 2 SO-239 VHF connectors and is packaged in a satin copper case. Handles up to 1000 watts. Uses superior type of inductive coupling. Wired and tested. 1⅝x2¼x4½". Shpg. wt., 1 lb.

97F774. NET **9.95**

AMECO ALL BAND NUVISTOR PREAMPLIFIER

- 6 thru 160 meters
- Wired and tested
- Built-in power supply
- Overall gain more than 20 db.

Model PCL-P. Two Nuvistors in cascade give noise figures of 1.5 to 3.4 db. depending upon the band. The weak signal performance of all receivers as well as image and spurious rejection are greatly improved. The PCL-P's overall gain is in excess of 20 db. Panel contains bandswitch, tuning capacitor and a three position switch which puts the unit into "OFF", "Standby", or "ON", and transfers the antenna directly to the receiver or through the Preamp. Model PCL-P contains its own built-in power supply. An all-band Nuvistor preamplifier covering 1.8 mhz to 54 mhz. Size 5½x3¾x3". Completely wired and tested. With complete instructions. Shpg. wt. 2¼ lbs.

97F770. NET **32.95**

NUVISTOR CONVERTERS

These 6, 2, and 1¼ meter (220 mhz) converters use three Nuvistors for low noise figure and high gain. Average gain 50 db. Noise figure: 50 mhz-2.5 db; 144 mhz-3.0 db; 220 mhz-4.0 db. Image and spurious response more than 70 db down; IF rejection more than 100 db. RF gain control. IF output frequency 14-18 mhz, easily changed when a new receiver is bought. Other IF's on special order. Tubes: 6CW4 RF amp.; 6CW4 RF amp.; 6CW4 mixer; 6J6 crystalosc. Requires 100 to 150 VDC 30 ma; 6.3 V, 1 A. Size: 2½"W x 2"H x 6¾"D. Satin finished copper. Wired and tested. Shipping weight, 2 pounds.

97F755. CN50W, 6 meters. NET **49.95**
97F756. CN144W, 2 meters. NET **49.95**
97F757. CN220W, 1¼ meters. NET **49.95**

AS ABOVE, BUT IN KIT FORM

Complete with instructions.

97F758. CN50K, 6 meters. NET **34.95**
97F759. CN144K, 2 meters. NET **34.95**
97F760. CN220K, 1¼ meters. NET **34.95**

NUVISTOR VHF PREAMPLIFIER

Nuvistor preamplifiers for use ahead of 6, 2, or 1¼ meter (220 mhz) converters. Uses two tuned circuits and neutralized 6CW4 Nuvistor. Over 20 db gain. Noise figure: 50 mhz 2.5 db; 144 mhz-3.0 db; 220 mhz-4.0 db. Size 2½x3½x2". For 100 to 150 VDC, 8 ma; 6.3 volts, .13 amp. Wired and tested. Shipping weight, 10 ounces.

97F764. PV-50, 6 meters. NET **13.95**
97F765. PV-144, 2 meters. NET **13.95**
97F766. PV-220, 1¼ meters. NET **13.95**

POWER SUPPLY FOR AMECO EQUIPMENT

Model PS-1W. For use with all Ameco equipment listed on this page. Delivers: 125 VDC, 50 ma; 6.3 VAC. 2 amps. Size: 2½x4¼x4½". Satin finished copper chassis. Wired and tested. Wt. 2½ lbs.

97F754. NET **12.50**

EICO HAM GEAR

CODE PRACTICE OSCILLATOR

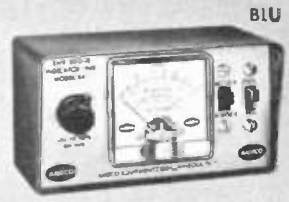
Model 706K. Battery operated transistor audio oscillator. Headset may be plugged in which automatically cuts out loudspeaker. External key terminals are provided on front panel. Tone freq. range: approx. 500 to 2000 hz continuously variable. Bakelite, satin finish, deep etched aluminum. Size: 6½x3¾x2¾". Supplied with 2 "C" cells. Shpg. wt., 2 lbs.

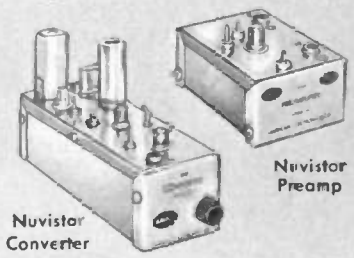
62F862. 706K Kit. NET **8.95**
62F863. 706. Factory wired. NET **12.95**
Battery for above. Requires 2.
49F261. ..... **.14**

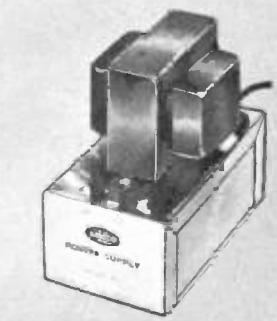
GRID DIP METERS

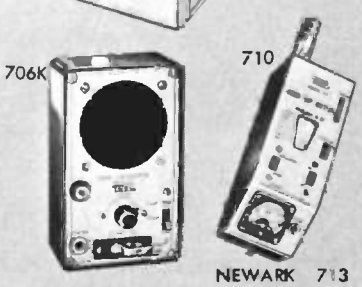
Model 710-K. Covers 400 khz to 250 mhz in 7 overslapping ranges. Uses a 500 ua meter. Determine operating freq., neutralize, etc. Easy to build with complete instructions. Other outstanding features included a reliable sensitivity control, a phone jack, plug-in coils, an illuminated scale. Dimensions: 2¼"x2 9/16"x6 7/8". Less solder. With power supply. For 117 volts 50/60 hz AC. Shpg. wt., 3 lbs.

97F575. NET Kit Form. **29.95**
Model 710. Factory wired and tested.
97F576. NET **49.95**

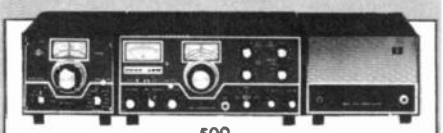








SWAN



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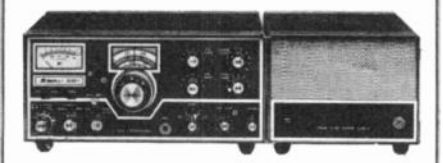


300

MODEL 500 SSB TRANSCEIVER

Model 500. Deluxe companion to the Swan 350. Offers higher power, improved styling and many extra features including selectable upper and lower sideband, 100 KHz crystal calibrator, automatic noise limiter, and factory installed accessory socket for addition of Model 410 external VFO. Transmitter power: 480 watts SSB pep input, 360 watts CW input, 125 watts AM input. Frequency range: 3.5-4.0 MHz, 7.0-7.5 MHz, 13.85-14.35 MHz, 21.0-21.5 MHz, 28.0-29.7 MHz. 5½ in. high, 13 in. wide, 11 in. deep, 15 lbs. weight.
97F400. ..... **495.00**

12 VOLT DC POWER SUPPLY

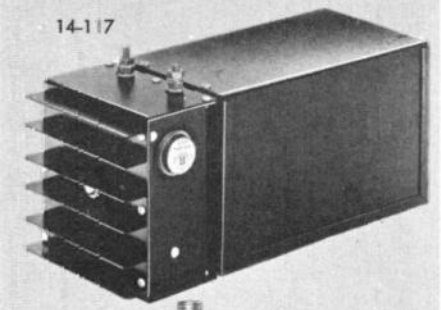
Model 14-117. For mobile operation. Consists of a basic supply, 117-X and a D.C. module 14-X. The 117-X is mounted in the car and the D.C. module attaches to the 117-X. By removing the D.C. module, the power supply may be operated from an A.C. line by simply plugging in an A.C. line cord. Comes complete with all cables, fuses, and hardware. Less AC line cord. Size: 5 in. x 5 in. x 12¼ in. Wt. 16½ lbs.
97F403. ..... **130.00**

MODEL 350 SSB TRANSCEIVER

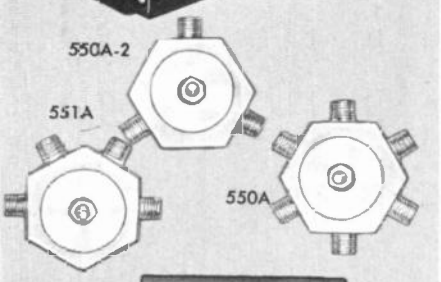
Model 350. Built in full coverage VFO with 5 khz calibration. Frequency Range: 3.5-4.0 MHz 7.0-7.5 MHz 13.85-14.35 MHz 21.0-21.5 MHz 28.0-29.7 MHz. Transmitter Power: 400 watts SSB pep input, 320 watts CW input, 125 watts AM input. Extended frequency capability provides for more operation with external oscillator. External VFO available for separate freq. control. 5½ in. high, 13 in. wide, 11 in deep. 15 lbs. weight.
97F401. ..... **420.00**

AC POWER SUPPLY AND SPEAKER

Model 117XC. Consists of a 117-X basic supply mounted inside a cabinet with speaker, phone jack, and indicator light. Complete with A.C. cord and pre-wired plug readily connect to transceiver, and operate. 117 50/60 Hz. Size: 8 in. wide x 5¼ in. high x 11 in. deep. Weight 21 lbs.
97F402 ..... **95.00**



14-117



550A-2

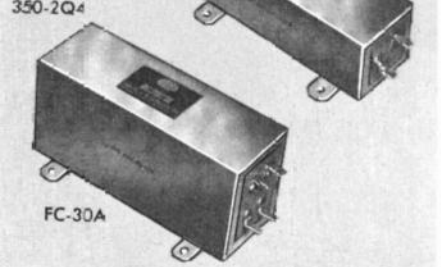
551A

550A

423

350-2Q4

FC-15A



FC-30A

590G

BARKER & WILLIAMSON

LOW PASS FILTERS

Model 423. For 6 meter low power amateur transmitting equipment. For use with operating frequencies up to 54 MHz. Designed to reduce TVI. Radiated spurious and hermonics higher than 62 MHz are attentuated by at least 50 DB. Frequency range: 30-45 MHz. Power rating: 100 watts max. 30-52 MHz—Reduced power above 52 MHz. Attenuation more than 50 DB from 62 MHz throughout the TV and FM channels. Impedance: 52 ohms (reversible). Connectors: two UHF type SO239 5"L x 2"W x 1¾" H. Shpg. wt., 1½ lbs.
40F900. NET **16.50**

Model 424. For citizen's band and low power amateur transmitting equipment. For use with transmitted frequencies up to 30 MHz. Undesirable signals higher than 53 MHz and related harmonics appearing in the TV and FM bands are attenuated by at least 50 DB. Power rating: 100 watts max. Freq. rnge, 1.5 to 30 MHz. Imp. 52/75 ohms (reversible). 5"Lx2" Wx1½"H. Shpg. wt., 1½ lbs.
40F901. NET **14.50**

Model 425. Passes 160-10 meter bands. Use with transmitters operating at 1 kw input when SWR is not excessive. Reduces radiation. Imped. 52 ohms. Shpg. wt., 1½ lbs.
47F903. NET **15.75**

GROUNDED GRID FILAMENT CHOKES

Model FC-30A. Twin dual winding filament choke with 30 amp current carrying capacity. Four winding permits separate filament transformer and cathode circuit metering for each of two tubes.
40F994. NET **23.95**

Model FC-15A. Dual winding choke with current carrying capacity of 15 amps. Shpg. wt. 8 oz.
40F993. NET **16.50**

COAX SWITCHES

Model 550A-2. Single pole, two position switch for use by Radio Amateurs, Citizen's banders, and Commercial users. Switches transmitter from one antenna to the other. Designed for panel mounting through a ⅜" hole. Common terminal identified by a large letter "C" stamped on the case of the switch. Equipped with three standard type UHF fittings SO-239. Freq. Range: Audio to 100 MHz. Cross Talk: minus 60 db. between terminals at 30 MHz. Dimensions: 4" overall dia., 2¼" depth behind panel, shaft 1" long, ¼" dia. with flat. Shpg. wt., 1½ lbs.
40F995. NET **10.50**

Model 550A. Permits easy selection of antennas, transmitters, exciters, receivers and other RF devices using 52 or 75 ohm coax. Housed in 2¾" dia. aluminum case, equipped with six SO239 type connectors for selecting any one of five lines. Single hole mounting. Will handle 1 kw of modulated power with maximum crosstalk of —45 db at 30 MHz. Wt., 4 lbs.
40F996. NET **10.35**

Model 551A. Multi-position coaxial switch. DPDT unit for switching various devices using 52 or 75 ohm coaxial lines in or out of series connection. It may also be utilized to switch low impedance coupled power amplifiers in or out of the circuit at will, permitting the driver stage to be connected to a low impedance antenna circuit or similar load as desired. Shipping weight, 5 lbs.
40F998. NET **9.85**

AUDIO PHASE SHIFT NETWORK

Model 350-2Q4. Highly compact, shielded, octal based audio phase shift network for SSB rcvg. and xmtg. Unit splits any audio signal within the range of 300-3000 Hz into two equal-amplitude components 90° (±1.5°) out of phase with respect to one another. Shpg. wt., 1 lb.
40F997. NET **6.60**

● NEW MODEL 590-G SWITCH

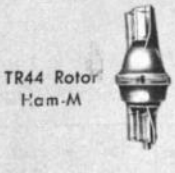
Model 590-G. Single pole 5-position switch. Designed for panel mounting — equipped with 6 standard UHF fittings type SO239. It automatically grounds all unused positions. Freq. range: audio to 500 MHZ. R.F. power rating 1 k.w. Impedance 50-75 ohms, VSWR 1.05:1 at 150 MHZ. Isolation 75 db @ 30 MHZ. Dimensions 3½" overall dia. x 1¾" depth behind panel, ½" shaft, ¼" diameter with flat.
40F992. NET. **12.50**

To Serve You Better and Faster —
Ten Stocking Warehouses from Coast-to-Coast

Newark-Denver Electronics Supply Corp., 2170 So. Grope St., Denver, Colo. 80222

AMATEUR ACCESSORIES

CDR ANTENNA ROTORS



Model AR-22R. Fully automatic control system. Knob is turned to desired direction and unit takes over, rotates antenna and stops at desired point. No delicate electronic circuits that can be damaged by voltage surges. Color is finished in black vinyl over steel, with brushed aluminum sides. Dial is softly edge-lighted when in operation. Uses four wire cable. Shpg. wt. 15 lbs.
92F732. NET **33.95**

Model TR-44. Designed for intermediate amateur requirements. Surpasses TV rotors in wind resistance, torque and dead weight capability. Calibrated to provide rotation and indication through a complete 360 range. 110 VAC is standard; 220VAC models also available on special order. Uses seven wire cable. Shpg. wt. 19 lbs.
92F736. NET **69.95**

Model Ham-M. Heavy duty. Rotates 360 degrees. Input voltage: 115 VAC 60 Hz. Motor: 24 V., 2¼ amp., split phase 10% duty 360 inch-pounds torque. Control box size: 5 13/16" wide x 6" deep x 5¼" high. Rotator size: 8" max. dia. x 20" high. Uses eight wire cable #18. Shpg. wt., 26 lbs.
92F734. NET **129.95**

TR44, Ham-M Indicator

AR-22-R Indicator

PETERSEN PR CRYSTALS

Less than 2 cycles per MC per degree Centigrade. High activity, stability and output. .486" pin spacing. Sealed against contamination and moisture.

TYPE Z-1 MARS & CAP CRYSTALS. Official assigned transmitter frequencies in the Frequency range 1600 to 10000 Kc., Tolerance .005%. Shpg. wt., 4 oz.
27F474. NET **3.45**

Type Z-1. TV Marker Crystal.
27F324. 10.7 Mc. FM, IF, .01% **2.95**

TYPE 2XP. Special crystals outside Amateur bands. Suitable for converters, experimental, etc.

Stk. No.	Frequency Range	Tolerance	Net
27F478	1600 to 12000 Kc. (Fund.)	± 5 Kc.	3.45
27F479	12001 to 25000 Kc. (3d Mode)	± 10 Kc.	4.45

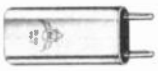
TYPE Z-9R VHF AIRCRAFT. For aircraft equipment operating in the 121 Mc region, requiring crystals in the 30 Mc. range. Specify manufacturer and model number of equipment. Shpg. wt., 4 oz.
27F477. NET **4.95**

TYPE Z-6A. 100 Kc. Frequency Standard. Shpg. wt., 4 oz.
27F491. NET **6.95**

CRYSTALS

Z-1
2XP

Z-9R



Z-6A

KV3

MC9

BLILEY COMMERCIAL CRYSTALS

Provide high temperature stability for close frequency tolerances in transmitters, receivers, etc. In compact holders.

Type KV3. Precision 100 kc crystal. Tolerance ±.005%. Includes recommended oscillator circuit. Mounts in octal socket. Wt., 3 oz.
27F458. NET **8.50**

Type MC9. Code E-22. Available at all exact frequencies from 3-12 mc, ±.03%. Specify frequency desired. 3 oz.
27F460. NET **6.50**

MILLEN CRYSTAL SOCKETS

Low loss steatite with silver-plated phosphor-bronze contacts, and tinned solder lugs. For chassis mtg. 2 ozs.

Stock No.	Type	Pin Space	Pin Dia	Xtal Type	NET
38F656	33102	.487"	.095	FT243	.43
38F658	33302	.487"	.050	HC6U	.43

MASTERCRAFTERS

8" 24-HOUR CLOCK

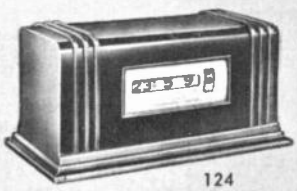
Model 191. 8" dia. 24 hour chrome plated metal wall clock. Inner dial has south polar projection map of the world indicating world time zones. Dial can be adjusted for various time zones. Self starting. UL approved. 110 VAC, 60 Hz. Shpg. wt.: 1½ lbs.
97F911. NET **9.15**

191

LF-601

TYMETER

Model 124. 24 hour, direct reading clock with 10 minute repeating timer. Timer can be turned on when beginning QSO. Clock operates continuously. Dome shaped full vision window. ¼" high numerals. 110V, 60 Hz. 4x7¾x4" plastic walnut case. Shpg. wt. 4 lbs.
97F909. NET **22.50**
Model 100-24H-¼. As above less timer.
97F908. NET **14.85**



124

AMATEUR BAND CRYSTALS

All are fundamental type Z-9C, except the † (3rd overtone) and ‡ (5th overtone) type Z-9A. *For novice use. All Z-9C crystals correlated in oscilator having load capacity of 32 mmfd. Many of xtals in ranges listed are carried in stock. Fits standard crystal socket. .486" pin spacing .093" pin diameter. Specify exact frequency desired within the ranges listed.

Stock No.	XTAL Freq. kc	Operating Freq.	NET
27F462	1750-2000	1750-2000 kc	2.95
27F463	3500-4000	3500-4000 kc	2.95
27F325	3700-3750*	3700-3750 kc	2.95
27F326	7000-7300	7000-7300 kc	2.95
27F327	7150-7200*	7150-7200 kc	2.95
27F328	7000-7175	14000-14350 kc	2.95
27F329	7000-7150	21.000-21.450 kc	2.95
27F330	7034-7083*	21.100-21.250 kc	2.95
27F467	7000-7425	28000-29.700kc	2.95
27F469	8334-9000	50.00-54.00 mc	2.95
27F472	25000-27000†	50.00-54.00 mc	3.95
27F473	50000-54000‡	50.00-54.00 mc	4.95
27F468	8000-8222	144.0-148.0 mc	2.95
27F331	8060-8160*	145.0-147.0 mc	2.95
27F471	24000-24666†	144.0-148.0 mc	3.95

RADIO CONTROL CRYSTALS

Special crystals used in remote control applications such as model planes, boats, for garage door openers, etc. Calibrated to .005% tolerance.

Stk. No.	Type	Frequency	NET
27F332	Z-9R	26.995	2.95
27F333		27.045	
27F334		27.095	
27F335		27.145	
27F336		27.195	
27F337		27.255	

CTS KNIGHTS, INC.

CITIZENS BAND CRYSTALS

Crystals are available for channels 1-23 at ±.003%. These crystals are standard replacements for most C.B. equipment. Some crystals are carried in stock. 2-3 weeks required for delivery on others. Shipping weight, 4 oz.
How to order: Specify manufacturer's name and model number of equipment, channel number desired and whether for transmit or receive. This information must accompany all orders.
27F300. NET **2.95**

CUSHCRAFT

COAXIAL LIGHTNING ARRESTOR

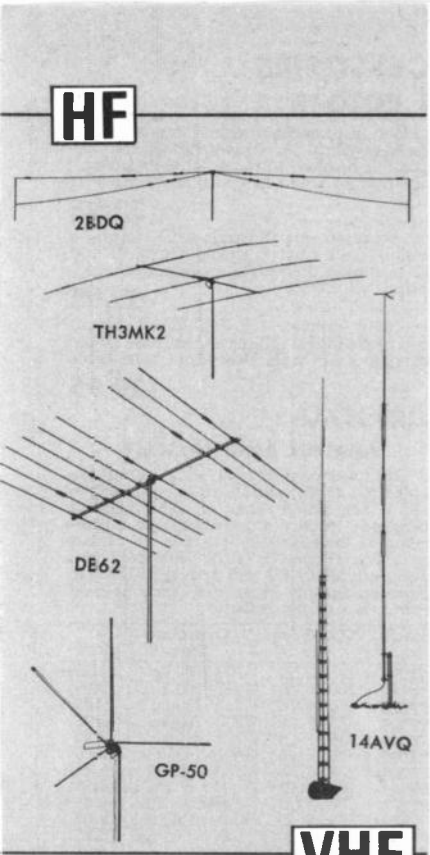
Cush Craft. Model LAC-1. For Standard coaxial cable. Eliminates heavy static charge build up—protecting valuable radio equipment. No insertion loss and will not affect performance or S/W/R to 500 mc. ¾" O.D. Shpg. wt., 1 lb.
92F096. NET **3.95**

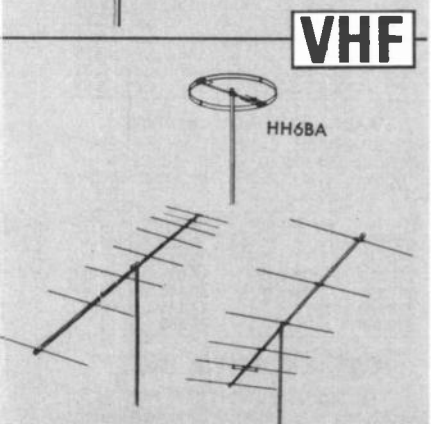
BUD

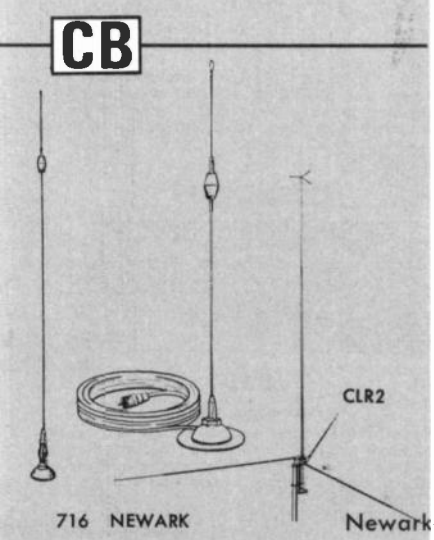
LOW PASS FILTER

Type LF-601. Input and output imped. adjustable from 52 to 72 ohms. Min attenuation of 85 db above 54 mc. and a min. of 93 db. above 70 mc. Shpg. wt., 2 lbs.
47F950. NET **19.00**

HY-GAIN COMMUNICATION ANTENNAS







AMATEUR ANTENNAS

MULTI-BAND TRAP DOUBLETS

Features new Hy-Q. Traps encased in a solid aluminum housing. New higher Q. lower absorption loss trap design provides maximum frequency stability. SWR less than 2:1 at resonance on every band. Install horizontally or a a inverted V. Take max. legal power.

Stk. No.	Type	Frequency	Length	Shpg. Wt.	NET
92F546	2BDQ	40, 80 Meters	110.5'	2 lbs.	29.50
92F549	5BDQ	10, 15, 20, 40, 80 Meters	111.5'	5 lbs.	44.50

THUNDERBIRD TRIBANDER BEAMS FOR 10, 15 AND 20 METERS

Model TH3MK2. 3-element model. Separate, matched traps. 8 db forward gain. F/B ratio, 25 db. SWR less than 2:1. 52 ohm. Takes max. power. Longest element, 28 ft., Boom, 14 ft. Turning radius, 15.7 ft. Wind survival 100 MPH. Shpg. wt. 36 lbs.
92F537. NET **114.95**

Model BN86. Ferrite Balun for 10 thru 80 meters which works with all beams and doublets for perfect antenna balance, and lower SWR.
92F531. NET **14.95**

FIXED STATION VERTICAL

Model 14AVQ. Improved version of the popular Model 14AVS self-supporting vertical for 10 thru 40 meters. New Hy-Q frequency-stabilized traps. Double-grip mast bracket. Taper swaged seamless aluminum radiator. Shpg. wt. 10 lbs.
92F485. Model 14AVQ. **NET** **32.50**

Model LC-80Q. Loading coil for 14AVQ. Adds 80 meter operation. Shpg. wt. ½ lb.
92F539. NET **9.95**

Model 14RMQ. Roof Mounting kit and radial system for 14AVQ. Shpg. wt. 5 lbs.
92F486. Model 14RMQ. **NET** **14.95**

Model 18HT. Hy-Tower for 80 thru 10 meters. 52 ohm. Takes max. power, delivers omnidirectional performance on all bands. 5.6 ft. overall. Shpg. wt., 108 lbs.
92F490.NET **149.50**

VHF MONOBAND AMATEUR BEAMS

Beta Match permits maximum gain and F/B ratio with 50 ohm feedback impedance. F/B ratio, 20-30 db. Coaxial Balun. VSWR 1.5"1 at resonance. All aluminum construction. All steel hardware iridite treated to MIL specs. 100 mph maximum wind survival.

Stock No.	Type	Gain	No. of Elements	Boom Length	Longest Element	Shipping Weight	NET EACH
2 METERS							
92F897	23	9 db	3	3 ft.	3.5 ft.	5 lbs.	8.95
92F898	28	14.5 db	8	14 ft.	3.5 ft.	9 lbs.	18.95
92F479	215B	17.8 db	15	28 ft.	3.5 ft.	20 lbs.	39.50
6 METERS							
92F984	66B	15 db	6	24 ft.	9 ft. 9 in.	20 lbs.	39.95

DUO BAND BEAM FOR 6 AND 2 METERS

Model DB62. Delivers 8db gain on 6 meters; 15db gain on 2 meters. F/B radio, 15-20 db. SWR below 1.5:1 both bands. Automatic band switching. Feeds with 52 ohm coax. Survives winds of 100 MPH. Shpg. wt., 8 lbs.
92F478. Model DB62. **NET** **34.95**

CENTER MOUNT 2- OR 6-METER MOBILE HALO

Model HH2BA. Beta Match insures optimum transfer of energy. Hard drawn seamless aluminum construction. Heavy gauge machine formed mounting hardware. Shpg. wt., 2 lbs.
92F488. Model HH2BA. **NET** **6.95**

Model HH6BA. As above but 6 Meter.
92F489.NET **12.95**

CITIZENS BAND ANTENNAS

¼ WAVELENGTH UNITY GAIN GROUND PLANES

Omni-directional antennas. Radiator at DC ground. Prevents static build-up, protects against lightning. Radiator and radials constructed of heavy wall ⅝" and 7/16" OD Aluminum tubing. Base mount molded high impact cycolac insulator. Iridite treated hardware for max. weather-ability. Installs up to 1⅝" OD. Max. RF power 500 watts. Radiator and Radial lengths: ¼ wave 1. Wind Survival 80 MPH.

Model GP-50. For 25-50 mc. Shpg. wt., 3 lbs.
92F534. NET **12.95**

Model SPG-2. For 108-450 mc. Shpg. wt., 1 lb.
92F533. NET **6.95**

CLR-2 COLINEAR GROUND PLANE

Model CLR-2. 9.4 db circuit gain. 6-20 db gain Signal-to-Noise Ratio. 52 ohm connector in moisture-safe housing. SWR less than 1.2:1. Installs in 15 minutes. Radiator, 19'10"; radials, 9'. Shipping weight, 10 lbs.
92F641. NET **32.95**

CB MOBILE TOPPERS

Model TQRDX. Outperforms any other CB mobile antenna. Loading coil delivers 3 times "talk power" of base-loaded mobile whips. With mount, shock spring, 16' coax cable and connector. Ht., 50". Shpg. wt., 3 lbs.
92F491. NET **16.95**

Model TQRMB. Alnico magnet base mount for installation on any vehicle; no holes to drill, no special tools needed. Ht., 29". Shpg. wt., 2 lbs.
92F492. NET **15.95**

ACCESSORIES

COAXIAL LIGHTNING ARRESTOR.

Cuss Craft. Model LAC-1. For Standard coaxial cable. Eliminates heavy static charge build up—protecting valuable radio equipment. No insertion loss and will not affect performance or S/W/R to 500 MHz. ¾" O.D. Shpg. wt. 1 lb.
92F096. NET **3.95**

HY-Gain Model CI. Heavy duty center insulator. Molded from high impact cycolac plastic. Use for horizontal or inverted V installations. Shpg. wt., 4 oz.
92F540. NET **3.95**

Hy-Gain Model EI. High impact cycolac plastic End Insulator. Shpg. wt., 3 oz.
92F541. NET Per Pair **2.00**

Newark-Herrlinger Electronics Corp., 112 E. Liberty St., Cincinnati, Ohio 45210

AMATEUR AND C. B. ANTENNAS & TOWERS

ANTENNA SPECIALISTS ANTENNAS

AMATEUR AND CITIZENS BAND ANTENNAS

All antennas are for mobile use except *, for base station.

Stk. No.	Type	Lgth.	Description	Wt.	NET
92F629	M-1D	102"	Complete body mtg. antenna assembly includes chromed swivel base, spring and whip.	5 lbs.	13.80
92F630	MB-24	102"	Complete antenna assembly. Includes double, chain bumper mount, cad. plated spring, stainless steel whip, 20' RG58/U cable with PL-259 conn. and whip hold down clip.	6 lbs.	22.15
92F525	M-74	39"	Auto cowl fender or deck mounting. 12' RG-58/U cable with PL-259's both ends. ¾" hole.	2 lbs.	14.60
92F524	M-73	39"	Trunk groove mount 12' RG-58/U cable with PL-259 included. 7/32" holes.	1½ lbs.	14.60
92F618	M-117	18'	Super Magnum ½ wave length, end feed 27 Mc. freq. range.	12 lbs.	32.55
92F466	M-3B	102"	Stainless steel whip with plated brass adapter. Can be cut if necessary.	2 lbs.	5.00
92F640	M-81*	18' 4"	Magnum 27 antenna, provides 6db gain. Mounts on pipe mast.	12 lbs.	25.05
92F500	M-124	36"	Similar to M-67 whip but with stainless steel spring. ¾" mtg. hole. With 20' RG-58/U cable. Whip adaptor or fine tuning.	1½ lbs.	16.70
92F501	M-130	18"	"Mighty Mite". 27 mc. High performance roof-mounter. Stainless shock spring, adjustable tuning, more effective loading coil. Snap-in ⅜" mount, no soldering.	1½ lbs.	12.10
92F502	M-131	18"	"Maggie Mite". Same size and high performance of the M-130, but for gutter clip mounting.	2½ lbs.	16.30

AMATEUR COMMUNICATIONS

Stk. No	Type	Description	Wt.	NET
92F457	ASP-157	130-470Mc. Gutter clamp 18x¾" long. For temp. mt. on rain gutter. With 12' RG-58 & PL-259.	2½ lbs.	9.60
92F470	M-3D	Amateur swivel base, chrome.	1⅛ lbs.	5.85
92F469	M-7A	Light weight to be cut to desired frequency.	3 lbs.	6.70

AMATEUR BAND MOBILE WHIP ANTENNAS

Stk. No.	Type	Description	Wt.	NET
92F468	ASP-201	144mc. Roof top 18x¾" long; mts. in ⅜" hole.	2 lbs.	3.35
92F599	ASP-242	Two meter coaxial double chain bumper mount.	3½ lbs.	24.65

WHIP ACCESSORIES

92F459	M4	Whip Clip. Fastens to car rain gutter w/o holes.	½ lb.	.85
92F529	M-54	Kwick Kupler. Allows whips to be removed from base with one quick twist. Chromed brass.	½ lb.	3.35
92F527	MA54	Top piece of M-54 use for interchanging several whips.	1 lb.	2.90

BODY MOUNTS

92F450	M-3	Amateur Swivel base, alum. ball. Solder lug cable conn.	1½ lb.	4.50
92F451	M-13	Deluxe amateur swivel base, chrome ball. Coax conn.	2 lbs.	7.10

BUMPER MOUNTS

Stk. No.	Type	Description	Wt.	NET
92F458	ASP-143	Double chain mount, reduces sway. Cad. plated steel.	2 lbs.	9.20

SPRINGS

Stk. No.	Type	Description	Wt.	NET
92F461	M-3A	Standard amateur cad. plated steel.	1 lb.	2.50
92F462	M-9A	For extra heavy and center loaded amateur antennas	1½ lb.	5.45

JONTZ SUPER KWICK-CLIMB TOWER

Model 500. Up to 60-ft. self-supporting; tested to withstand wind loads up to 80 mph. Constructed of finest electrically welded steel tubing. Sections are hot-dipped galvanized for extra-long weather protection. Additional sections may be added up to 500 ft. by using guys every 20 ft. Tower sections are bolted with 2 self-locking ⅜" bolts in each leg. Each 10-ft section is constructed of 1¼"x16 gauge tubular uprights. Towers may be ordered by specific sections. For BEST FREIGHT RATES plus storage convenience. 40 and 50-ft. towers will be shipped in section combinations permitting 2 telescoped bundles, unless otherwise specified. F.O.B. Mishawaka, Ind. No C.O.D. orders.

Stk. No.	Height	Weight	NET
92F671	30'	129 lbs.	72.00
92F672	40'	175 lbs.	93.00
92F673	50'	226 lbs.	117.00
92F674	60'	277 lbs.	141.00
92F675	70'	317 lbs.	164.00
92F676	80'	372 lbs.	188.00

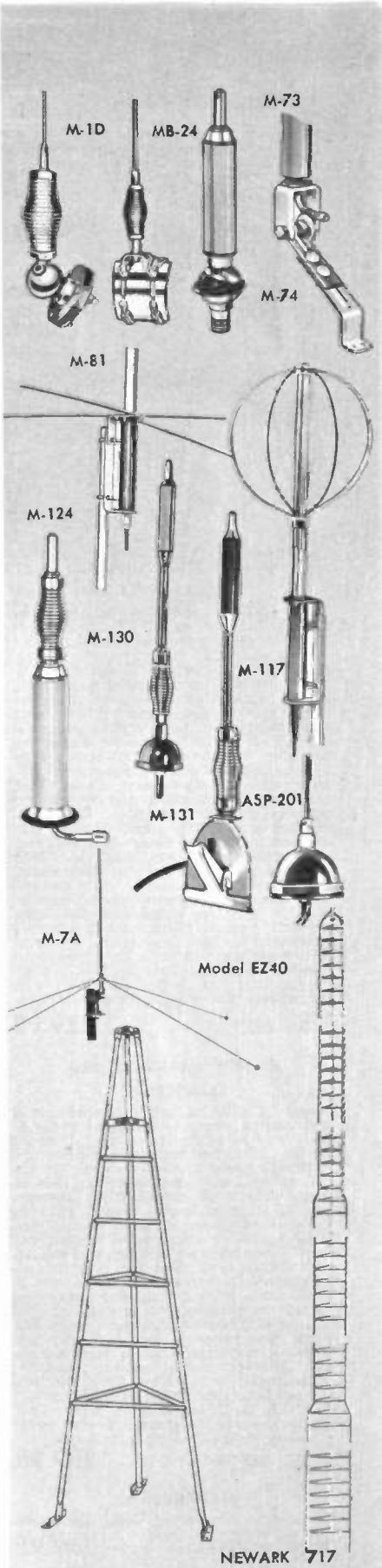
"EASY UP"

10 FT. TOWER

Type EZ40. Completely self supporting without need of guys. Constructed of 1¼" heavy gauge steel tubing. Legs on 16" centers to align with roof rafters. Mounts on flat or peaked roof. Accommodates 1¼" to 1¾" mast or CDR rotor. Sturdy enough to climb. Assembles in two minutes. Adaptor assembly available for mounting CDR rotor inside of tower. Shpg. Wt. 29 lbs. F.O.B. Racine, Wisc. only.

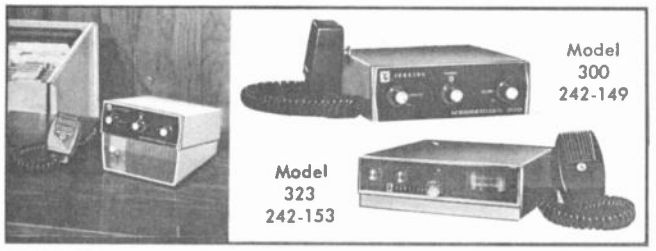
92F680. Tower **16.00**

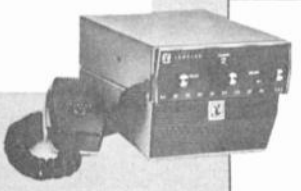
92F681. EZ40-2 CDR Adapter 3.00



E. F. JOHNSON

MESSENGERS





● *NEW* MESSENGER 323 TRANSCEIVER

Model 242-153. Precision fingertip frequency selection on all 23 CB channels means more convenience and greater operating ease. The crystal filter in the receiver of the Messenger 323 virtually eliminates adjacent channel interference. The double conversion super-heterodyne receiver provides the ultimate in selectivity and sensitivity. Unique speech compression circuit in the transmitter makes the maximum use of legal input power without distortion. Built-in combination "S" meter and RF output meter allows visual monitoring of received and transmitted signals. Features include: Adjustable squelch unit; Effective built-in noise limiter, and Illuminated meter. Fully temperature compensated from —22° to 140°F. Automatic gain control keeps volume constant — eliminates blasting. All transistorized construction draws less current on standby than an automobile tail light; Ceramic element microphone is virtually unaffected by heat or moisture. Provision for tone alert; Use as a base station or portable unit. Unit dim.: 2½"Hx8"Wx9½" Depth. Shpg. wt. 8 lbs. Furnished with microphone and crystals for all CB channels.

97F505. NET **229.95**

● *NEW* MESSENGER 300 TRANSCEIVER

Model 242-149. Rugged all-transistorized construction assures top flight performance and reliability in a very compact package. This unit features a double conversion, superheterodyne receiver for excellent sensitivity and selectivity. For in areas of high CB radio activity, Messenger 300 has an added crystal filter to virtually eliminate adjacent channel interference. Multi-stage noise limiting circuit; "Set-and-Forget" squelch and volumn controls (reduce need for constant readjusting); Instant selection from any of 12 channels; transistor circuitry draws less current on standby than a stop light; Illuminated channel indicator turns red when transmitter is on. Accessory AC power supply available for base station use; Accessory socket on rear panel accommodates Tone Alert Plug; Built-in P.A. system. Unit measures 2¾₁₆"H x6⁹⁄₁₆" W x 8¾" D. Comes complete with microphone; crystals for channel 9, and mobil mounting bracket. Shpg. wt. 8 lbs.

97F506. (242-149-9). **189.95**

MESSENGER III

Same specifications as Model 300 above but without crystal filter.

97F530. (242-143-9). **159.95**

MESSENGER—117 VAC—13.6 VDC TRANSCEIVER

Model 242-128. Ideally suited for daily business use as well as pleasure. A complete 10 tube (including rectifier), crystal-controlled transmitter and receiver enclosed in a steel cabinet. Its compact size and light weight make it easy to install anywhere, even under the dashboard of your car. By moving selector switch on front panel to desired position you may select up to 5 of the 23 available channels. Built-in automatic noise limiter. Automatic volume control effectively prevents distortion at close ranges. Microphone equipped with a push to talk switch. Controls include manual squelch control. Has an effective range up to 20 miles in a car and longer over water 117 VAC and 13 6V DC. Complete with microphone and cord crystals for channel 9, and necessary power cords. Size: 5⅝"H x7"W.x11¾"D. 17 lbs.

97F515. 242-128-9. NET **99.95**

MESSENGER TWO—117 VAC— 13.6 VDC TRANSCEIVER

Model 242-163. Chan. 9. Has tunable receiver and 10 channel crystal controlled transmitter. Featuring highly selective and sensitive superheterodyne receiver, automatic volume control, high efficiency noise limiter and direct plug-in provision for Tone Alert selective calling system. 10 tube circuitry meets all FCC regulations and is designed for legal power on all channels without retuning. Improved adjacent channel rejection through the use of the high efficiency automatic noise limiter and suppression of external electrical noises. The rugged microphone is equipped with a conveniently located push-to-talk switch. Compact and lightweight easy to install anywhere: 5⅝"Hx7"Wx11⅜"D. Furnished with microphone and crystals for channel 9. 17 lbs.

97F525. 242-163-9. NET **149.95**

6-CHANNEL MESSENGER "100"

Model 242-156. "Speech compression" circuit delivers a crisp signal without adjacent channel splatter, boosts average power for greater readability at extended range. Compact unit fits snugly under any dashboard, can be removed in seconds for hand-carried portable operation. May be used as a 3-watt PA amplifier. All-solid-state design assures ruggedness and low power consumption. Six-channel capability; suppplied with ch. 9 crystal. For 12V operation. Size: 2¼ x 6⁹⁄₁₆ x 8¾" HWD.

97F529. NET **129.50**

CB "MATCHBOX"

Model 250-49. Installs permanently between transmitter and antenna. Two simple controls let you knock an SWR as high as 5:1 down to 1.1:1 or better. Insertion loss less than 0.1 db. Frequency range: 26.5 to 30 Mhz. Maximum power, 15 watts. With two SO 239 connectors. Size, 4 x 3¼ x 2⅜".

97F528. NET. **15.95**

PORTABLE FIELD PACK

Model 250-825-3. Powered by self-contained, rechargeable nickel-cadmium battery, the Messenger III or 300, in portable use with a 4 ft. fiberglas antenna, delivers a signal comparable to most mobile installations. Messengers slide easily into this rugged portable carrying case to become a full 5 watt portable pack set that is ideal for any type of field application. Uses two batteries—has built-in recharger. Meter function and rate-of-charge selected by separate front panel switches. Built-in meter indicates battery condition. Accessory cables permit operation from 12 v. vehicle battery through cigarette lighter, or from any 117 v. AC outlet. 9½"x9¾"x 4¾". Less antenna. 8 lbs.

97F535. NET..... **169.95**

POWER SUPPLY

Model 239-125. 117 V AC Power Supply for the Messenger 300, 100, and III.

97F531. NET. **32.95**

1½ WATT PERSONAL MESSENGER

RECHARGEABLE TRANSCEIVER

Model 242-102. Superhet receiver, RF amp. gives twice the sensitivity, 40% greater range. Fully effective noise elimination with the use of 11 transistors and 4 diodes. AVC combined with push-pull audio circuit. Squelch control, razor sharp reception. Complete with rechargeable battery in plug-in compartment and crystals for channel 9. Meets all FCC requirements, 23 channel coverage. High-impact plastic case, telescoping antenna, push to talk sw. 12x4¾x2¾". 3 lbs.

97F536. 242-102-109. NET. **99.95**

PERSONAL MESSENGER ACCESSORIES

Model 250-804. Replacement rechargeable nickel cadmium battery mounted in sealed plug-in compartment for recharging at 115V AC, 50-60 Hz.

97F538. NET **19.95**

Model 250-803. Earphone w/cord-plug.

97F539. NET **4.50**

Model 251-806. Transceiver carrying case.

97F540. NET **8.50**

Model 250-807. Adapter for powering from cigarette lighter on 12 volt cars.

97F541. NET **4.50**

Newark-Electronics Center, Inc., 160 Fifth Ave., New York, New York 10010

HALLICRAFTERS CB TRANSCEIVERS

MODEL CB-20 "REACTOR" 5-CHANNEL 5-WATT TRANSCEIVER

Solid state CB transceiver features 5 crystal -controlled channels, low battery drain, and compact size. Also provides high-order modulation, superb sensitivity, built-in noise suppression. A must for the two way communicator. Circuit employs 12 transistors plus 8 diodes with Zener voltage regulator. Sensitivity: 1 microvolt for 10 db signal-plus-noise/noise. Power input: 5 Watt. Power output: 3 Watt. Push-to-talk ceramic mike. Current Drain: receive, 0.75 amp; transmit, 1.4 amps. Satin black finish with bright chrome-color trim. 7"x6"x2⅛". Trunion type mounting bracket. Operates only on 12VDC. Includes set of channel 11 crystals. License required. 4 lbs.

98F022. NET **99.95**

CB-24 23-CHANNEL TRANSCEIVER

Equipped for 23-channel operation to span the entire Citizens' Band. Solid-state design (21 transistors, 8 diodes, 4 thermistors) provides low battery drain, zero warmup time, long life. Dual conversion receiver has squelch control and AGC to eliminate annoying background noise and variations in signal level. A number of special features make this unit especially attractive: combination "S" meter and relative output indicator, ceramic filters for razor-sharp selectivity (6khz bandwidth at 6db) and adjacent channel rejection, provision for use as PA system. Black metal cabinet has chrome front panel, measures 2⁹⁄₁₆x6x8". Operates from 13.8 VDC (12 V. nom.) Shpg. wt., 6 lbs. License required.

98F119. NET **199.95**

PS-20 Power Supply. Permits operation of CB-20, CB-21 and CB-24 units from 117 VAC. 6¼x3x7", shpg. wt., 2¼ lbs.

98F120. NET. **34.95**

CB-17 5 WATT TRANSCEIVER

Superheterodyne receiver sensitive to less than micro-v of signal strength. Adjustable electronic squelch. 100% modulation cap. 117VAC or 12 VDC. Complete with microphone, power cords, mounting hardware, and channel 11 crystals. 6 channels, crystal controlled. Dim.: 12" long, 5" high, 7" deep. Shpg. wt. 15 lbs.

98F134. NET **99.95**

CB-21 8-CHANNEL 5-WATT TRANSCEIVER

Eight-channel capability (supplied with channel 11 crystal, others extra). All-solid-state circuitry employs 17 transistors and 6 diodes; 5 watts rf input output to 50-ohm antenna. Receiver sensitivity 4 uv for 10 db S/N, selectivity 6.5 knz. at 6 db. Features include squelch control, AGC to compensate for variations in signal level, dual conversion receiver with ceramic filter for added selectivity, provision for use as PA amplifier. Operates from 13.8 VDC (12 v nom.); comes in grey steel cabinet with chrome front panel. Size 2¾₁₆x6x8", shpg. wt., 5½ lbs. License required.

98F118. NET **139.95**

CB-181 2-CHANNET 2-WATT PORTABLE TRANSCEIVER

Maximum performance and reliability for business and personal communications. Ideal companion to CB-21. Highly sensitive and selective double-conversion receiver provides adjacent-channel rejection greater than 25 db; 2-watt transmitter feeds collapsible 50" antenna. Employs 14 transistors and 4 diodes; operates on eight "AA" alkaline or mercury cells (not supplied). Provision for using rechargeable batteries listed below. Complete with carrying case and crystals for channel 11. LICENSE REQUIRED. Size, 8¹⁵⁄₁₆x3⅜x1³⁄₁₆; wt., 2.5 lbs.

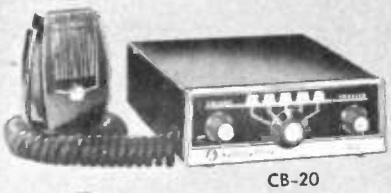
98FX006. NET EACH **79.95**

BT-181. Two heavy duty nickel cadmium batteries for CB-181. Can be recharged up to 500 ties with BC-181 below.

98FX008. NET (per pair) **32.95**

BC-181. Battery recharger for BT-181.

98FX009. NET 7.95

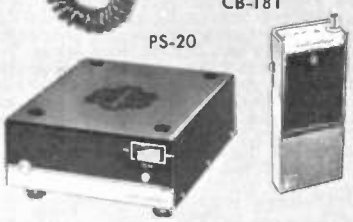


CB-20

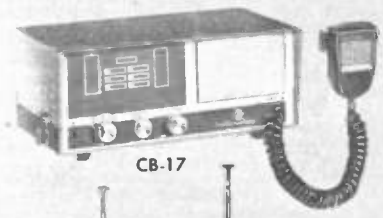
CB-24

CB-2

CB-181



PS-20



CB-17

MONARCH

MONARCH TC-109 TRANSCEIVER SET

Nine transistor CB transceivers, requiring no license for operation. Radiate at full 99 milliwatts for range of ½ to 2 miles on land, up to 7 miles over water. Superhet receiver with built-in noise limiter. Uses standard 9 volt transistor batteries. 59" telescoping antenna, wrist strap, push to talk switch, volume control. With batteries. 2½ lbs.

97FX543. NET (Set of 2) **39.95**

MONARCH WALKIE-TALKIE SET

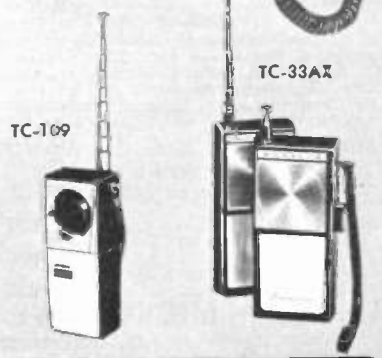
Model TC-33AX. Brushed aluminum grille, wrist strap, telescoping antenna, on-off switch, press-to-talk button. Complete with batteries. Wt. 2 lbs.

97FX544. NET (Set of 2) **14.95**

MONACOR MICRO TRANSCEIVER SET

Model TC-66. Six-transistor transceivers designed for short distance communication in 27 MHz band. Has: Telescopic rod antenna, on-off switch & volume control, push-to-talk switch, speaker-microphone. Size: 6"H x 2¾" W x 1¼" D. Weight 3.4 lbs.

97FX542. NET (Set of 2) **24.95**



TC-109

TC-33AX

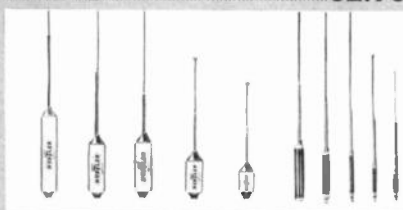
NOTE: Transceivers with power input greater than 100 mw must be licensed by the FCC. Such licenses are available to U.S. citizens upon application. NO TEST REQUIRED.

New-Tronics Antennas

4-BTV FOUR BAND TRAP VERTICLE

Whole band coverage in one setting. Outperforms all others; provides a better signal. Constructed with stronger materials, heavy walled aluminum tubing and cadmium plated steel with cycolac insulators. Precisely tuned high-Q traps. Can be used on 75 meters with the addition of the RM-75 or RM-75-S on top. SWR is 1.5:1 or better at resonance. Bandwidth 40 through 10-meters no more than 2:1 SWR to band edge. Power capability is legal limit. Feedpoint impedance . . . 52 ohm coax required. Radials required for grnd. mount.

92F612. NET **32.98**



For 10-15 20-40 75 Meters

50 ohm nominal base impedance and a fold over swivel mast. Heat treated aluminum and chrome plated brass construction. No special matching requriements. Use any length coax. Frequency adjusted by tuning the stainless steel tip rod to a low SWR. Shake-proof sleeve clutch for vertical hold.

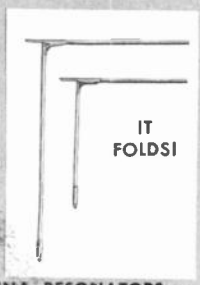
MO-1 MO-2 MASTS FOR DECK OR BUMPER MOUNT

Foldover for entering garages or carports: rotates 360° for easy change of resonators. Made of heat treated ½" aluminum. Have hinge and sleeve clutch mechanism. Mast has ⅜"-24 base thread to fit any std. mobile mount.

MO-1. 54" Mast folds at 15" above base. For deck or fender mount. Shpg. wt. 2 lbs.

MO-2. 54". Mast folds 27" above base For bumper mount. Shpg. wt. 2 lbs.

92F610. MO-1. Net
92F611. MO-2. Net **7.98**



STANDARD HUSTLER MOBILE ANTENNA RESONATORS

Stk. No	Type	Description	Height	Weight	Net
92F600	RM-10	10 meter	80"-75"	11 oz.	6.98
92F601	RM-15	15 meter	81"-76"	12 oz.	7.98
92F602	RM-20	20 meter	83"-78"	13 oz.	8.98
92F603	RM-40	40 meter	92"-87"	1 lb., 4 oz.	10.98
92F604	RM-75	75 meter	97"-91"	1 lb., 7 oz.	12.98

SUPER HUSTLER MOBILE ANTENNA RESONATORS

Stk. No.	Type	Description	Height	Net
92F605	RM-10S	10 meter	80"-75"	11.98
92F606	RM-15S	15 meter	81"-76"	13.98
92F607	RM-20S	20 meter	83"-78"	15.98
92F608	RM-40S	40 meter	92"-87"	19.98
92F609	RM-75S	75 meter	97"-91"	24.98

FANON SELECTIVE CB CALL SYSTEM

One of the most annoying aspects of CB operation—that of continually having to listen to unwanted calls and constant "hash" (noise) on the air, now has been eliminated Model CT5 is a compatible unit that plugs into built-in sockets on the base of Fanon models L-2000 and DCL-50 transceivers. From the completely quiet "standby" position, these units are always ready to selectively call or receive from other CT-5 equipped transcievers. Any one other unit can now be called without distrubing the others. Simply choose the designated number for the unit being called and a frequency control tone will alert just that party, bypassing the other units. Once alerted, transcievers go into normal voice transmission. The other units, not being alerted, remain in "standby" and are not disturbed by the conversation. Up to 10 Fanon transceivers can be selectively called with the CT-5 (5 on Channel A plus 5 on Channel B). Shpg. wt. 1 lb.

97F350. NET **16.50**

The CT-5 can be plugged into the base of the L-2000 or DCL-50.

DCL-50

Offering 100% modulation and extended range in a ruggedly built, dependable unit, the Pathfinder is a top rated performer. Squelch control reduces background noise. Built-in meter indicates battery strength at a glance. Can be operated on AC with an optional power supply. Complete with earphone, 8 penlite cells and handstrap. Use with optional "Call-Tone Selector". Die-cast metal case 8"x3¼"x1½".

97F351. NET **39.95**

L-2000

2 channel operation. Equipped for Channel 9. Call-Tone signal permits unit to call another with "beep" tone. Use with optional 5-tone selective calling adapter Model CT-5 to "beep" up to 5 others on Channel A and 5 on Channel B. Variable squelch control. Complete with earphone, 10 penlite cells and handy strap. Separate mike and speaker. Jack for external 12v. power source and antenna. Die-cast metal case—8½"x3½"x2½".

97F352 ..... **79.95**

DCB-92

2 Channel operation. Deluxe circuit for extended range and durability. Features a "beep" tone signal to alert other DCB-92's. Complete with earphone, batteries and carrying strap. Equipped with crystals for Channel 9 only.8"x3½"x1½".

97F353. NET **29.95**

DCB-11

Basically the same as Model DCL-50 but rated 100 Milliwatts. Every desired feature has been incorporated to assure maximum efficiency and flexibility under all conditions. No license required-input power conforms to FCC regulations.

97F354. NET **33.75**

LEATHER CARRYING CASES

LC-4. Leather Case for DCB-92, DCL-50, DCB-11.
97F355. NET **3.75**

LC-5. Leather Case for CT-5.
97F356. NET **1.90**

LC-6. Leather Case for L-2000.
97F357. NET **4.50**

POWER SUPPLY UNITS

Model PS-140. AC Power Supply for DCB-92, DCB-11 (100 mw.)
97F358. NET **4.95**

Model PS-150. AC Power Supply and battery charger for DCB-92, DCB-11, DCL-50, L-2000.
97F359. NET **17.95**

MICROWAVE DEVICES INC.

CITIZENS BAND & SWR METER

Model 290. Micro Match Citizens Band Power & SWR Meter. Measures actual RF power output in watts on an accurately calibrated 0 to 4 watt scale. Indicates when transmitter and antenna are tuned for maximum output. No external power required. Compact size (4½" x 2" x 2¼") makes this unit ideal for dashboard mounting. Continuous reading.

97F298. NET **26.50**

SWR BRIDGES & INDICATORS

Model 261. Coupler. Operating range: 500 kc—225mc. For 52 ohm coax line. May be left in transmission line as a monitor at up to 1 KW RF power. Complete instructions included. Used with 262 Indicator below or a home made type. UHF type connectors. Size 3x4¾". Shpg. wt., 1 lb.

97F295. NET **22.50**

Model 262. Indicator. Used with 261 coupler above. 4¼x4¼x4". Shpg. wt., 2 lbs.

97F296. NET **14.50**

Model 263.2. Both coupler and indicator similar to 261 and 262 except calibrated to read RF power in actual watts on 10, 100, and 1000 scales. UHF type connectors.

97F297. NET **85.00**

Model 263.3. As above with "N" connectors.

97F292. NET **85.00**

Model 711N. Single unit with both coupler and indicator. 25-1000 mc on 50 ohm coax line. Ranges: 0-30, 30-75, 75-300 watts. Type N connectors, includes UHF adapters. Size: 3 1/16x5 5/32x3". Shpg. wt., 3 lbs.

97F293. NET **135.00**

Newark-New Orleans Electronic Corp., 100 Jefferson Hwy., New Orleans, La. 70121

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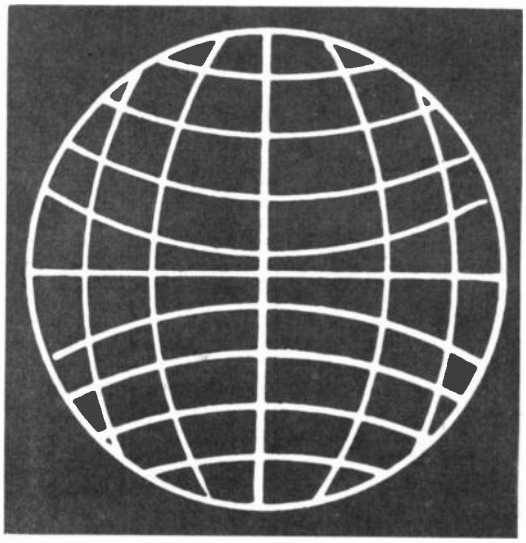

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IF YOU WRITE TO US ABOUT YOUR ORDER

Include all popers and correspondence that we returned to you. For a damaged shipment, send a full report from your Postmaster or Express Agent.

C.O.D. SHIPMENTS

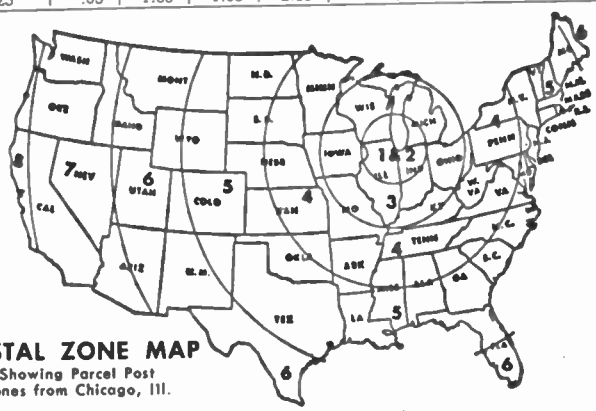
On parcel post C.O.D. shipments, the Post Office charges an additional collection fee and a money order fee for forwarding the amount collected to us. You can save money by sending full remittance with order. The following are the charges on C.O.D. orders.

Amt. C.O.D.	C.O.D. Fee
$ 0.01 to $ 10.00	60 Cents
10.01 to 25.00	70 Cents
25.01 to 50.00	80 Cents
50.01 to 100.00	90 Cents
100.01 to 200.00	$1.00

PARCEL POST RATES

See the table and zone map below for parcel post rates. Save C.O.D. charges by sending enough money to cover postage. On parcels under 16 ounces, allow 4c for first 2 ounces or fraction, and 2c for each additional ounce.

Weight in Pounds	ZONES Local	1-2 Up to 150 Miles	3 150 to 300 Miles	4 300 to 600 Miles	5 600 to 1000 Miles	6 1000 to 1400 Miles	7 1400 to 1800 Miles	8 Over 1800 Miles
1								
2	$0.40	$0.50	$0.50	$0.55	$0.60	$0.70	$0.75	$0.80
3	.40	.55	.60	.65	.75	.85	.95	1.05
4	.45	.60	.65	.75	.85	1.00	1.10	1.25
5	.45	.65	.70	.80	.95	1.10	1.30	1.45
6	.45	.70	.80	.90	1.05	1.25	1.45	1.65
7	.50	.80	.85	1.00	1.15	1.40	1.60	1.85
8	.50	.85	.90	1.05	1.30	1.50	1.75	2.00
9	.55	.90	.95	1.15	1.40	1.65	1.90	2.20
10	.55	.95	1.05	1.20	1.50	1.75	2.10	2.40
11	.55	1.00	1.10	1.30	1.60	1.90	2.25	2.60
12	.60	1.05	1.15	1.35	1.70	2.00	2.40	2.75
13	.60	1.10	1.20	1.45	1.80	2.10	2.55	2.95
14	.65	1.15	1.30	1.50	1.90	2.25	2.70	3.10
15	.65	1.20	1.35	1.60	2.00	2.35	2.85	3.30
16	.65	1.25	1.40	1.65	2.10	2.45	3.00	3.45
17	.70	1.30	1.45	1.75	2.20	2.60	3.15	3.65
18	.70	1.35	1.50	1.80	2.30	2.70	3.30	3.80
19	.75	1.40	1.60	1.90	2.40	2.85	3.45	4.00
20	.75	1.40	1.65	1.95	2.50	2.95	3.60	4.15
21	.75	1.45	1.70	2.05	2.60	3.05	3.75	4.35
22	.80	1.50	1.75	2.10	2.65	3.15	3.90	4.50
23	.80	1.55	1.80	2.15	2.75	3.30	4.05	4.65
24	.85	1.60	1.85	2.20	2.85	3.40	4.15	4.85
25	.85	1.60	1.90	2.30	2.90	3.50	4.30	5.00



POSTAL ZONE MAP
Showing Parcel Post Zones from Chicago, Ill.

AIR PARCEL POST RATES

ZONES	1 & 2	3	4	5	6	7	8	
1 Lb.	$0.68	$0.68	$0.73	$0.78	$0.83	$0.83	$0.88	U. S. Territories & Possessions
For Each Extra Lb.	Add 48c	Add 48c	Add 50c	Add 56c	Add 64c	Add 72c	Add 80c	8th Zone Rate

PARCEL POST INSURANCE

For your protection, all parcel post shipments are insured by the Hartford Insurance Company against loss or damage. Allow for insurance at the following rates:

Amt. Insurance	Ins. Fee
$ 0.01 to $15.00	20 Cents
15.01 to 50.00	30 Cents
$ 50.01 to $100.00	40 Cents
100.01 to 150.00	50 Cents
150.01 to 200.00	60 Cents

EXPRESS CHARGES

Do Not Send Money for Express Charges if your Station has an agent.

Weight in Pounds	Mileage 50	150	300	500	750	1000	1500	2250
5	$4.70	$4.70	$4.70	$4.70	$4.70	$4.70	$4.85	$5.05
10	5.20	5.20	5.20	5.20	5.20	5.20	5.50	5.90
15	5.20	5.20	5.20	5.20	5.60	5.70	6.15	6.80
20	5.20	5.20	5.20	5.55	6.10	6.20	6.80	7.70
25	5.20	5.40	5.40	5.90	6.35	6.70	7.45	8.55
35	5.45	5.75	5.90	6.65	7.50	7.70	8.80	10.30
45	5.70	6.10	6.40	7.35	8.45	8.70	10.10	12.05
55	5.95	6.50	6.90	8.05	9.40	9.75	11.45	13.80
70	6.35	7.05	7.65	9.10	10.85	11.25	13.40	16.45
80	6.65	7.40	8.15	9.80	11.75	12.25	14.75	18.20
For each 100 lbs.	6.35	7.30	8.35	10.40	12.95	13.60	16.55	21.15

EXPRESS INSURANCE RATES

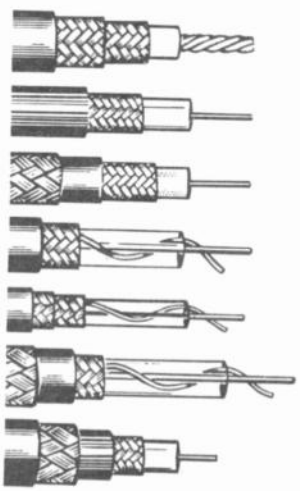
Amt. Insurance	Ins. Fee
$ 0.01 to $ 50.00	No Fee
$50.01 to $150.00	25c

Each additional $100.00 of value or fraction 25c.

IN STOCK AT NEWARK ELECTRONICS

The nation's largest selection of coaxial cables from

alpha



ALL RG MILITARY TYPES

SPECIAL COAX FOR COLOR, BLACK & WHITE TV

CABLE FOR CATV MATV, CCTV, & ETV

TEFLON COAXIAL CABLE

ALL ALPHA WIRE, CABLE, AND TUBING IS IN STOCK AT NEWARK

- MILITARY HOOK-UP WIRE
- AIRCRAFT WIRE
- COAXIAL CABLE
- CONTROL & INSTRUMENTATION
- AUDIO CABLE
- POWER CORDS, SETS
- HEAVY INDUSTRIAL CABLE
- SHIELDING & BRAIDING
- GEN. WIRE & CABLE
- PVC & TEFLON TUBING
- LACING CORD
- FIT SHRINKABLE TUBING

See Index For Complete Listing of Alpha Products

3½ Digit Integrated Circuit Multimeter

$299

FAIRCHILD INSTRUMENTATION

FAIRCHILD MODEL 7050 MULTIMETER

The 7050 represents a true breakthrough in the cost/performance ratio of digital multimeters. Only the most recent advances in integrated circuits, packaging, and manufacturing techniques make it possible to offer an instrument of such substantial capabilities at so low a price. The 7050 is a three-digit instrument with both DC voltage and resistance measurement capabilities. DC current measurement is an available option. It incorporates as standard such high-price features as input impedance greater than 1000 megohms, floating input, and readout storage (non-blinking display). Yet its low cost makes it an economical replacement for analog type meters, panel indicators, and more expensive digital instruments. It can be used on the production line, in quality assurance, in service applications, in educational laboratories, and in a variety of test and control systems.

STK. NO. 62F1040 Model 7050 NET..... $299

Abbreviated Specifications

FUNCTIONS	
DC Volts	1.500V f.s. (1mV resolution) 15.00V f.s. 150.0V f.s. 1000.0V f.s.
Maximum Voltage	1000V may be applied to any range without damage.
Resistance	1.500KΩ f.s. (1Ω resolution) 15.00KΩ f.s. 150.0KΩ f.s. 1.500MΩ f.s. 15.00MΩ f.s.
Maximum Voltage	125 volts (AC or DC) may be applied to any range without damage.

SIZE AND WEIGHT	
Dimensions	3¼" high x 6¼" wide x 7¼" deep
Weight	Less than four pounds
Price	$299.00

ACCURACY	
From 15°C to 35°C	
DC Volts:	±0.1% of Rdg., ±1 digit
K Ohms:	±0.2% of Rdg., ±1 digit
M Ohms:	±1% of Rdg., ±1 digit
From 0°C to 15°C and 35°C to 45°C	
DC Volts:	±0.2% of Rdg., ±2 digits
K Ohms:	±0.3% of Rdg., ±2 digits
M Ohms:	±3.0% of Rdg., ±2 digits

INPUT IMPEDANCE (Voltage Ranges)	
1.5V Range	>1000MΩ
15 Volt to 1000 Volt Ranges	10MΩ

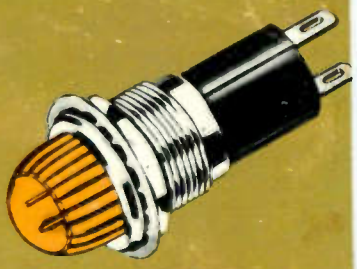
INPUT CURRENT (Resistance Ranges)	
1.5K Range	1mA
15K Range	100μA
150K Range	10μA
1.500K Range	1μA
15M Range	100nA

READOUT	
	3 Digital Readout Indicators with Automatic Decimal Point 1 Overrange Digit Automatic Polarity Indicator Display Storage (Non-Blinking)
POWER	115VAC ±10% 50-400cps 7 watts

ACCESSORIES

Stock No.	Type	Full Scale Current	Price
62F1043	09045091	150 μA	$10
62F1044	09045101	1.5 MA	$10
62F1045	09045111	15 MA	$10
62F1046	09045121	150 MA	$10
62F1047	09045131	1.5 A	$20
62F1048		Complete Set of Shunts	$45
62F1049	64020251	Tilt Stand/Handle	$16

Rack Mount—For 1 or 2—7050's
Stk. No. 62F1041 Type 93000256 $30



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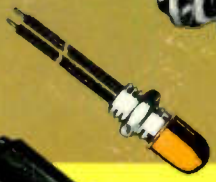


INDICATOR LIGHTS

Meet rigid Military and Commercial requirements

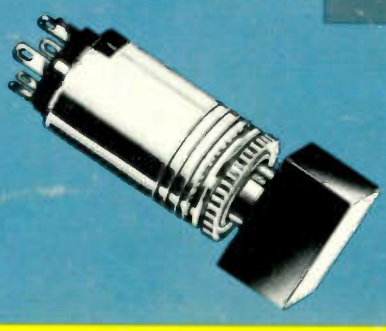
Dialco indicators can supply the answers to your exacting requirements. Whether there be military standards to be met (such as MIL-L-3661B) cr indicators needed for commercial applications, you'll find the desired assemblies in a most complete DIALCO selection.

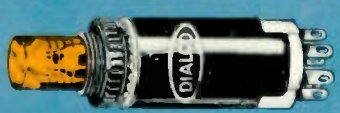
Choose from the traditional neon and incandescent assemblies, or illuminated push button switches, or even from the more sophisticated flashing indicator lights.

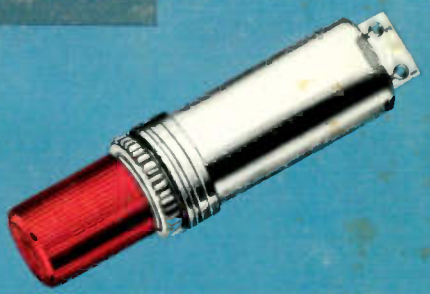
Dialco builds more than 25 years of experience into each assembly, and takes pride in the quality, reliability and value which is so much a part of every assembly offered for sale.

Be sure to specify DIALCO—choose from the largest line available today!

See Index for complete listing of DIALCO products.







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