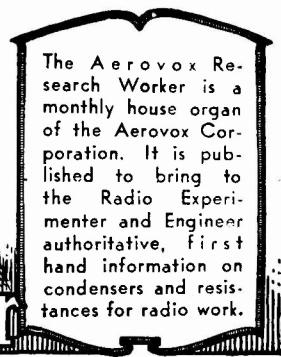


The AEROVOX Research Worker



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50c per year in U.S.A.
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Design Data for *m*-Derived Type Filters

PART VIII

By the Engineering Department, Aerovox Corporation

THE *m*-DERIVED band-suppression filter section is designed to attenuate sharply frequencies within a given elimination band and to pass, with as little attenuation as possible, frequencies above and below this band. As in the case of the band-pass filter, the width of the band in which the filter is effective is governed by relation of the upper and lower cut-off frequencies and the upper and lower infinite attenuation frequencies to the mid frequency. Frequency data for series- and shunt-derived band-suppression filters was given in chart form in Part VII of this series.

The Circuit Components Chart accompanying this article lists capacitor and inductor values for *series-derived* band-suppression sections for twenty-three common mid frequencies from 100 cycles to 10 megacycles and twelve bandwidths from 0.05 to 0.9. Constants may be taken directly from this chart, without making any computations, when working with the mid-frequency and bandwidth values stated, and may be obtained by simple computations (as will be shown later) when operation is desired at

other bandwidths and mid frequencies. All listings are in henries and microfarads, except in the last four columns. In the 10- and 100-kc. columns, listings are in millihenries and microfarads; and in the 1- and 10-Mc. columns are in millihenries and micromicrofarads.

The component values have been calculated for a characteristic impedance of 500 ohms. However, corresponding values for mid frequencies and characteristic impedances other than those upon which the chart is based may be obtained by interpolation, all component values being inversely proportional to the new mid-frequencies. The inductance values are directly proportional and the capacitance values inversely proportional to the characteristic impedance.

In determining values for conditions other than those indicated on the chart, first locate on the chart the L and C values corresponding to 500 ohms impedance. Values corresponding to the desired new impedance of R ohms will then be equal to the 500-ohm inductance multiplied by R/500, and the 500-ohm capacitance divided by R/500.

Circuit diagram of the series-derived band-suppression filter section is given in Figure 7 (originally published in Part I, September-October 1942 issue).

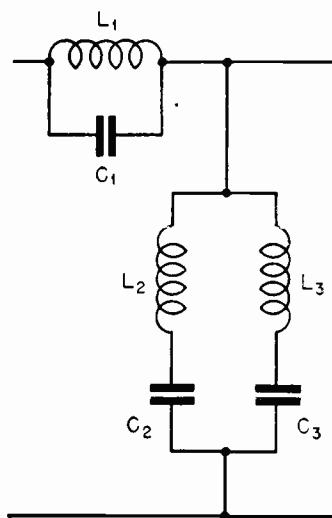


FIG. 7

AEROVOX PRODUCTS ARE BUILT BETTER



CHART 6 — Series-Derived Band-Suppression Filters ($R=500$ Ohms)

Band Width	$f_m = 100$	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
0.05	L_1 0.0837	0.00837	0.00557	0.00418	0.00335	0.00279	0.00236	0.0021	0.00186	0.00167	0.00151	0.00139
	L_2 14.76	1.476	0.9830	0.7380	0.5904	0.4915	0.4162	0.3690	0.3277	0.2952	0.2671	0.2450
	L_3 15.55	1.555	1.0356	0.7775	0.6220	0.5178	0.4385	0.3887	0.3452	0.3110	0.2814	0.2581
	C_1 30.3	3.03	2.0179	1.5150	1.2120	1.0089	0.8545	0.7575	0.6727	0.6060	0.5484	0.5029
	C_2 0.1632	0.01632	0.0109	0.00816	0.00653	0.00543	0.00460	0.0041	0.0036	0.00326	0.00295	0.00271
0.1	C_3 0.172	0.0172	0.01145	0.00860	0.00688	0.00573	0.00485	0.0043	0.00382	0.00344	0.00311	0.00285
	L_1 0.1167	0.01167	0.00777	0.00583	0.00467	0.00389	0.00329	0.00292	0.00259	0.00232	0.00211	0.00194
	L_2 10.34	1.034	0.6953	0.5170	0.4176	0.3443	0.2916	0.2585	0.2295	0.2068	0.1871	0.1716
	L_3 11.45	1.145	0.7626	0.5725	0.4580	0.3183	0.3229	0.2862	0.2542	0.2290	0.2072	0.1900
	C_1 21.8	2.18	1.4519	1.0900	0.8720	0.7259	0.6147	0.5450	0.4839	0.4360	0.3946	0.3619
0.15	C_2 0.222	0.0222	0.01478	0.01110	0.0089	0.0074	0.0063	0.0055	0.0049	0.0067	0.0040	0.0037
	C_3 0.245	0.0245	0.01632	0.01225	0.0098	0.00816	0.0069	0.0061	0.0054	0.0049	0.0044	0.0041
	L_1 0.1487	0.01487	0.0099	0.00743	0.0059	0.00495	0.0042	0.0037	0.0033	0.0029	0.0027	0.0025
	L_2 7.92	0.792	0.5275	0.3960	0.3168	0.2637	0.2233	0.1980	0.1758	0.1584	0.1433	0.1315
	L_3 9.23	0.923	0.6147	0.4615	0.3692	0.3073	0.2603	0.2307	0.2049	0.1846	0.1671	0.1532
0.2	C_1 17.08	1.708	1.1375	0.8540	0.6832	0.5687	0.4816	0.4270	0.3792	0.3416	0.3091	0.2835
	C_2 0.275	0.0275	0.01831	0.01375	0.0110	0.00916	0.0077	0.0069	0.0061	0.0055	0.0049	0.0046
	C_3 0.321	0.0321	0.02138	0.01605	0.0128	0.0173	0.0090	0.0080	0.0071	0.0064	0.0058	0.0053
	L_1 0.1798	0.01798	0.01197	0.00899	0.00719	0.0059	0.0051	0.0045	0.0040	0.0036	0.0032	0.0029
	L_2 6.42	0.642	0.4276	0.3210	0.2568	0.2138	0.1810	0.1605	0.1425	0.1284	0.1162	0.1066
0.25	L_3 7.84	0.784	0.5221	0.3920	0.3136	0.2611	0.2211	0.1960	0.1740	0.1568	0.1419	0.1301
	C_1 14.12	1.412	0.9404	0.7060	0.5648	0.4702	0.3982	0.3530	0.3135	0.2824	0.2555	0.2344
	C_2 0.324	0.0324	0.0216	0.0162	0.01296	0.0108	0.0091	0.0081	0.0072	0.0065	0.0058	0.0054
	C_3 0.395	0.0395	0.0263	0.0197	0.0158	0.0131	0.0111	0.0099	0.0088	0.0079	0.0071	0.0065
	L_1 0.211	0.0211	0.01405	0.0105	0.0084	0.00702	0.00595	0.00527	0.00468	0.00422	0.00382	0.00350
0.3	L_2 5.34	0.534	0.3556	0.2670	0.2136	0.1778	0.1506	0.1335	0.1185	0.1068	0.0966	0.0886
	L_3 6.87	0.687	0.4575	0.2435	0.2748	0.2288	0.1937	0.1712	0.1525	0.1374	0.1243	0.1140
	C_1 12.03	1.203	0.8012	0.6015	0.4812	0.4006	0.3392	0.3007	0.2671	0.2406	0.2177	0.1997
	C_2 0.370	0.037	0.0246	0.0185	0.0148	0.0123	0.0104	0.00925	0.00821	0.00740	0.0067	0.00617
	C_3 0.476	0.0476	0.0317	0.0238	0.0190	0.0158	0.0134	0.0119	0.0106	0.00952	0.00861	0.00790
0.4	L_1 0.241	0.0241	0.0160	0.0120	0.0096	0.00802	0.00679	0.0060	0.0053	0.00482	0.00436	0.0040
	L_2 4.58	0.458	0.3050	0.2290	0.1832	0.1525	0.1291	0.1145	0.1016	0.0916	0.0829	0.0760
	L_3 6.18	0.618	0.4116	0.3090	0.2472	0.2058	0.1743	0.1545	0.1371	0.1236	0.1118	0.1026
	C_1 10.53	1.053	0.7013	0.5625	0.4212	0.3506	0.2969	0.2632	0.2338	0.2106	0.1906	0.1748
	C_2 0.411	0.0411	0.0274	0.0205	0.0164	0.0137	0.0116	0.0103	0.00912	0.00822	0.00744	0.00682
0.5	C_3 0.555	0.0555	0.0369	0.0277	0.0222	0.0185	0.0156	0.0139	0.0123	0.0111	0.0100	0.00921
	L_1 0.300	0.0300	0.0199	0.0150	0.0120	0.0099	0.00846	0.0075	0.0067	0.0060	0.00543	0.00498
	L_2 3.53	0.353	0.2351	0.1765	0.1412	0.1175	0.0995	0.0882	0.0784	0.0706	0.0639	0.0586
	L_3 5.27	0.527	0.3509	0.2635	0.2108	0.1755	0.1486	0.1317	0.1170	0.1054	0.0954	0.0875
	C_1 8.47	0.847	0.5641	0.4235	0.3388	0.2820	0.2388	0.2117	0.1880	0.1694	0.1541	0.1406
0.6	C_2 0.482	0.0482	0.0321	0.0241	0.0193	0.0160	0.0136	0.0120	0.0107	0.00964	0.00872	0.0080
	C_3 0.720	0.0720	0.0479	0.0360	0.0288	0.0239	0.0203	0.0180	0.0160	0.0144	0.0130	0.0119
	L_1 0.357	0.0357	0.0238	0.0178	0.0143	0.0119	0.0100	0.0089	0.0079	0.00714	0.0066	0.0059
	L_2 2.86	0.286	0.1905	0.1430	0.1144	0.0952	0.0806	0.0715	0.0635	0.0572	0.0518	0.0475
	L_3 4.70	0.470	0.3130	0.2350	0.1880	0.1565	0.1325	0.1175	0.1043	0.0940	0.0852	0.0780
0.7	C_1 7.12	0.712	0.4742	0.3560	0.2848	0.2371	0.2007	0.1780	0.1580	0.1424	0.1289	0.1182
	C_2 0.541	0.0541	0.0360	0.0270	0.0216	0.0180	0.0152	0.0135	0.0120	0.0108	0.0098	0.0089
	C_3 0.888	0.0888	0.0591	0.0444	0.0355	0.0295	0.0250	0.0222	0.0196	0.0178	0.0161	0.0147
	L_1 0.412	0.0412	0.0274	0.0206	0.0165	0.0137	0.0116	0.0103	0.0091	0.00824	0.00746	0.00684
	L_2 2.39	0.239	0.1592	0.1195	0.0956	0.0796	0.0674	0.0597	0.0530	0.0478	0.0432	0.0397
0.8	L_3 4.32	0.432	0.2877	0.2160	0.1728	0.1438	0.1218	0.1080	0.0959	0.0864	0.0782	0.0717
	C_1 6.17	0.617	0.4109	0.3085	0.2468	0.2055	0.1740	0.1542	0.1370	0.1234	0.1117	0.1024
	C_2 0.588	0.0588	0.0392	0.0294	0.0235	0.0196	0.0166	0.0147	0.0130	0.0114	0.0106	0.00976
	C_3 1.062	0.1062	0.0707	0.0531	0.0425	0.0354	0.0299	0.0265	0.0236	0.0212	0.0192	0.0176
	L_1 0.467	0.0467	0.0311	0.0233	0.0187	0.0155	0.0132	0.0117	0.0104	0.0093	0.00845	0.00775
0.9	L_2 2.05	0.205	0.1365	0.1025	0.0820	0.0683	0.0578	0.0512	0.0455	0.0410	0.0371	0.0340
	L_3 4.06	0.406	0.2704	0.2030	0.1624	0.1352	0.1145	0.1015	0.0901	0.0812	0.0735	0.0674
	C_1 5.44	0.544	0.3623	0.2720	0.2176	0.1811	0.1534	0.1360	0.121	0.1088	0.0984	0.0903
	C_2 0.626	0.0626	0.0417	0.0313	0.0250	0.0208	0.0176	0.0156	0.0139	0.0125	0.0113	0.0104
	C_3 1.237	0.1237	0.0824	0.0618	0.0495	0.0412	0.0349	0.0309	0.0275	0.0247	0.0224	0.0205
0.8	L_1 0.520	0.0520	0.0346	0.0260	0.0208	0.0173	0.0147	0.0130	0.0115	0.0104	0.00941	0.00863
	L_2 1.778	0.1778	0.1184	0.0889	0.0711	0.0592	0.0501	0.0444	0.0395	0.0356	0.0322	0.0295
	L_3 3.88	0.388	0.2584	0.1940	0.1552	0.1292	0.1094	0.0970	0.0861	0.0776	0.0702	0.0644
	C_1 4.88	0.488	0.3250	0.2440	0.1952	0.1625	0.1376	0.1220	0.1083	0.0976	0.0883	0.0810
	C_2 0.655	0.0655	0.0436	0.0327	0.0262	0.0218	0.0185	0.0164	0.0145	0.0131	0.0118	0.0109
0.9	C_3 1.427	0.1427	0.0950	0.0713	0.05710	0.0475	0.0402	0.0357	0.0317	0.0285	0.0258	0.0237
	L_1 0.572	0.0572	0.0381	0.0286	0.0229	0.0190	0.0161	0.0143	0.0127	0.0114	0.0103	0.00949
	L_2 1.574	0.1574	0.1048	0.0787	0.0629	0.0524	0.0444	0.0393	0.0349	0.0315	0.0285	0.0261
	L_3 3.77	0.377	0.2511	0.1885	0.1508	0.1255	0.1063	0.0942	0.0837	0.0754	0.0682	0.0625
	C_1 4.44	0.444	0.2957	0.2220	0.1776	0.1478	0.1252	0.1110	0.0895	0.0890	0.0804	0.0737
0.9	C_2 0.673	0.0673	0.0448	0.0336	0.0269	0.0224	0.01898	0.0168	0.0149	0.0135	0.0	



CHART 6 — Series-Derived Band-Suppression Filters (R=500 Ohms)

Band Width	$f_m = 6500$	7000	7500	8000	8500	9000	9500	10 kc.*	100 kc.*	1 Mc.*	10 Mc.*
0.05	L₁ 0.00128	0.0012	0.0011	0.0010	0.00098	0.00093	0.00088	0.837	0.0837	0.00837	0.000837
	L₂ 0.2258	0.2081	0.1963	0.1845	0.1727	0.1638	0.1549	147.6	14.76	1.476	0.1476
	L₃ 0.2379	0.2192	0.2068	0.1944	0.1819	0.1726	0.1633	155.5	15.55	1.555	0.1555
	C₁ 0.4636	0.4272	0.4029	0.3787	0.3545	0.3363	0.3181	0.303	0.0303	3030	303.0
	C₂ 0.0025	0.0023	0.0022	0.0020	0.0019	0.0018	0.0017	0.001632	0.0001632	16.32	1.632
	C₃ 0.0026	0.0024	0.0023	0.0021	0.0020	0.0019	0.0018	0.001720	0.0001720	17.20	1.720
0.1	L₁ 0.00178	0.0016	0.0015	0.0014	0.0014	0.0013	0.0012	1.167	0.1167	0.01167	0.001167
	L₂ 0.1582	0.1458	0.1375	0.1292	0.1209	0.1148	0.1086	103.4	10.34	1.034	0.1034
	L₃ 0.1752	0.1614	0.1523	0.1431	0.1339	0.1271	0.1202	114.5	11.45	1.145	0.1145
	C₁ 0.3335	0.3074	0.2899	0.2725	0.2550	0.2419	0.2289	0.218	0.0218	2180	218.0
	C₂ 0.0034	0.0031	0.0029	0.0028	0.0026	0.0025	0.0023	0.00222	0.000222	22.2	2.22
	C₃ 0.0037	0.0034	0.0032	0.0031	0.0029	0.0027	0.0026	0.00245	0.000245	24.5	2.45
0.15	L₁ 0.0023	0.0021	0.0019	0.0018	0.0017	0.0016	0.0015	1.487	0.1487	0.01487	0.001487
	L₂ 0.1212	0.1117	0.1053	0.0990	0.0927	0.0879	0.0832	79.2	7.92	0.792	0.0792
	L₃ 0.1412	0.1301	0.1227	0.1154	0.1079	0.1024	0.0970	92.3	9.23	0.923	0.0923
	C₁ 0.2613	0.2408	0.2272	0.2135	0.1998	0.1896	0.1793	0.1708	0.01708	1708	170.8
	C₂ 0.0027	0.0039	0.0036	0.0034	0.0032	0.00305	0.0029	0.00275	0.000275	27.5	2.75
	C₃ 0.0049	0.0045	0.0043	0.0040	0.0037	0.0036	0.0034	0.00321	0.000321	32.1	3.21
0.2	L₁ 0.0027	0.0025	0.0024	0.0022	0.0021	0.0019	0.0018	1.798	0.1798	0.01798	0.001798
	L₂ 0.0982	0.0905	0.0854	0.0802	0.0751	0.0713	0.0674	64.2	6.42	0.642	0.0642
	L₃ 0.1199	0.1105	0.1043	0.0980	0.0917	0.0876	0.0823	78.4	7.84	0.784	0.0784
	C₁ 0.2160	0.1991	0.1878	0.1765	0.1652	0.1567	0.1483	0.1412	0.01412	1412	141.2
	C₂ 0.0049	0.0046	0.0043	0.0040	0.0038	0.0036	0.0034	0.00324	0.000324	32.4	3.24
	C₃ 0.0060	0.0056	0.0052	0.0049	0.0046	0.0044	0.0041	0.00395	0.000395	39.5	3.95
0.25	L₁ 0.00332	0.00297	0.00280	0.00264	0.00247	0.00234	0.00221	2.11	0.211	0.0211	0.00211
	L₂ 0.0817	0.0753	0.0710	0.0667	0.0625	0.0593	0.0561	53.4	5.34	0.534	0.0534
	L₃ 0.1051	0.0969	0.0914	0.0859	0.0804	0.0762	0.0721	68.7	6.87	0.687	0.0687
	C₁ 0.1840	0.1696	0.1599	0.1504	0.1407	0.1335	0.1263	0.1203	0.01203	1203	120.3
	C₂ 0.00566	0.00522	0.00492	0.00462	0.00433	0.00411	0.00388	0.00370	0.000370	37.0	3.70
	C₃ 0.00728	0.00671	0.00633	0.00595	0.00557	0.00528	0.00499	0.00476	0.000476	47.6	4.76
0.3	L₁ 0.00369	0.00340	0.00320	0.00301	0.00282	0.00267	0.00253	2.41	0.241	0.0241	0.00241
	L₂ 0.0701	0.0646	0.0609	0.0572	0.0536	0.0508	0.0481	45.8	4.58	0.458	0.0458
	L₃ 0.0945	0.0871	0.0822	0.0772	0.0723	0.0686	0.0649	61.8	6.18	0.618	0.0618
	C₁ 0.1611	0.1485	0.1400	0.1316	0.1232	0.1169	0.1106	0.1053	0.01053	1053	105.3
	C₂ 0.00629	0.00579	0.00547	0.00514	0.00481	0.00456	0.00431	0.00411	0.000411	41.1	4.11
	C₃ 0.00849	0.00782	0.00738	0.00694	0.00649	0.00616	0.00583	0.00555	0.000555	55.5	5.55
0.4	L₁ 0.00459	0.00423	0.00399	0.00375	0.00351	0.00333	0.00315	3.0	0.30	0.030	0.0030
	L₂ 0.0540	0.0498	0.0469	0.0441	0.0413	0.0392	0.0371	35.3	3.53	0.353	0.0353
	L₃ 0.0806	0.0743	0.0701	0.0659	0.0616	0.0585	0.0553	52.7	5.27	0.527	0.0527
	C₁ 0.1306	0.1194	0.1126	0.1059	0.0991	0.0940	0.0889	0.0847	0.00847	847	84.7
	C₂ 0.00737	0.00679	0.00641	0.00602	0.00564	0.00535	0.00506	0.00482	0.000482	48.2	4.82
	C₃ 0.0110	0.0101	0.00958	0.0090	0.00842	0.00799	0.00756	0.0072	0.00072	72.0	7.20
0.5	L₁ 0.00546	0.00503	0.00475	0.00446	0.00418	0.00396	0.00374	3.57	0.357	0.0357	0.00357
	L₂ 0.0437	0.0403	0.0380	0.0357	0.0335	0.0317	0.0269	28.6	2.86	0.286	0.0286
	L₃ 0.0719	0.0663	0.0625	0.0587	0.0549	0.0522	0.0493	47.0	4.70	0.470	0.0470
	C₁ 0.1089	0.1004	0.0947	0.0890	0.0833	0.0790	0.0748	0.0712	0.00712	712	71.2
	C₂ 0.00828	0.00763	0.00719	0.00676	0.00633	0.00606	0.00568	0.00541	0.000541	54.1	5.41
	C₃ 0.0136	0.0125	0.0118	0.0111	0.0104	0.00986	0.00932	0.00888	0.000888	88.8	8.88
0.6	L₁ 0.0063	0.00581	0.00548	0.00515	0.00482	0.00457	0.00433	4.12	0.412	0.0412	0.00412
	L₂ 0.0365	0.0337	0.0318	0.0299	0.0279	0.0265	0.0251	23.9	2.39	0.239	0.0239
	L₃ 0.0661	0.0609	0.0574	0.0540	0.0505	0.0479	0.0454	43.2	4.32	0.432	0.0432
	C₁ 0.0944	0.0870	0.0821	0.0771	0.0722	0.0685	0.0648	0.0617	0.00617	617	61.7
	C₂ 0.00899	0.00829	0.00782	0.00735	0.00688	0.00653	0.00617	0.00588	0.000588	58.8	5.88
	C₃ 0.0162	0.0150	0.0141	0.0133	0.0124	0.0118	0.0111	0.01062	0.001062	106.2	10.62
0.7	L₁ 0.00714	0.00658	0.00621	0.00584	0.00536	0.00518	0.00490	4.67	0.467	0.0467	0.00467
	L₂ 0.0314	0.0289	0.0273	0.0256	0.0241	0.0227	0.0215	20.5	2.05	0.205	0.0205
	L₃ 0.0621	0.0572	0.0540	0.0507	0.0475	0.0451	0.0426	40.6	4.06	0.406	0.0406
	C₁ 0.0832	0.0767	0.0723	0.0680	0.0636	0.0604	0.0571	0.0544	0.00544	54.4	5.4
	C₂ 0.00958	0.00882	0.00832	0.00782	0.00732	0.00695	0.00657	0.00626	0.000626	62.6	6.26
	C₃ 0.0189	0.0174	0.0164	0.0155	0.0145	0.0137	0.0129	0.01237	0.001237	123.7	12.37
0.8	L₁ 0.00795	0.00733	0.00692	0.00650	0.00608	0.00577	0.00546	5.20	0.520	0.0520	0.00520
	L₂ 0.0272	0.0251	0.0236	0.0222	0.0208	0.0197	0.0187	17.78	1.778	0.1778	0.01778
	L₃ 0.0594	0.0547	0.0516	0.0485	0.0454	0.0431	0.0407	38.8	3.88	0.388	0.0388
	C₁ 0.0747	0.0688	0.0649	0.0610	0.0571	0.0542	0.0512	0.0488	0.00488	48.8	4.88
	C₂ 0.0100	0.00923	0.00871	0.00819	0.00766	0.00727	0.00688	0.00655	0.000655	65.5	6.55
	C₃ 0.0218	0.0201	0.0189	0.0178	0.0167	0.0158	0.0149	0.01427	0.001427	142.7	14.27
0.9	L₁ 0.00875	0.00806	0.00760	0.00715	0.00669	0.00635	0.0060	5.72	0.572	0.0572	0.00572
	L₂ 0.0241	0.0222	0.0209	0.0197	0.0184	0.0175	0.0165	15.74	1.574	0.1574	0.01574
	L₃ 0.0577	0.0531	0.0501	0.0471	0.0441	0.0418	0.0396	37.7	3.77	0.377	0.0377
	C₁ 0.0679	0.0626	0.0590	0.0555	0.0519	0.0493	0.0466	0.0444	0.00444	44.4	4.4
	C₂ 0.0103	0.00949	0.00895	0.00841	0.00787	0.00747	0.00707	0.00673	0.000673	67.3	6.73
	C₃ 0.0247	0.0227	0.0214	0.0201	0.0189	0.0179	0.0169	0.01612	0.001612	161.2	16.12

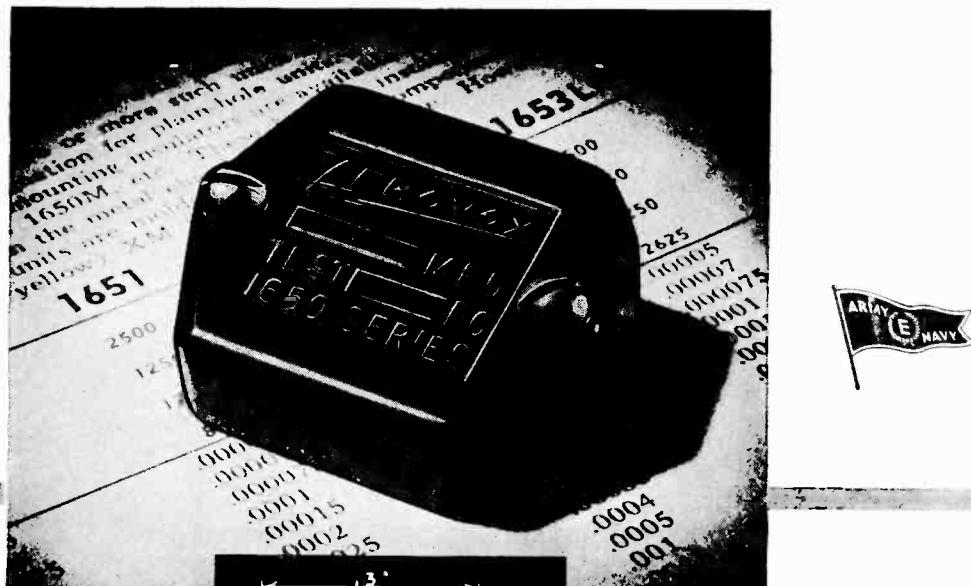
* C: Microfarads, in all columns, except last two columns which are given in mmfds.

L: Millihenries in last four columns; all others are given in henries.

In ratings from 1000 volts to 10,000 volts test . . .

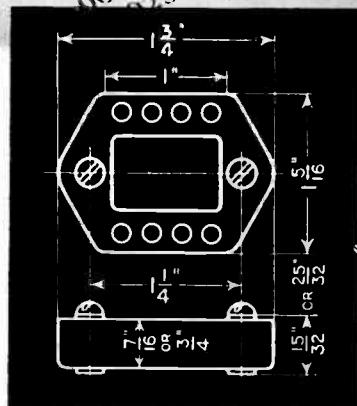
Molded-in-Bakelite

MICA CAPACITORS



- The 1650 Series is the most rugged of the heavy-duty molded-in-bakelite mica capacitors of the extensive Aerovox line. These high-voltage units are intended for the most critical service of low-powered transmitting circuits, buffer stages, power amplifiers, laboratory equipment, etc. Also recommended for use in ultra-high-frequency circuits, and accordingly their r.f. current ratings are given in the Aerovox Capacitor Catalog.

The extra-generous use of high-grade dielectric material provides that greater factor of safety for longer service under severest operating conditions.



Standard units with tapped holes take 6/32 screws which serve for terminals. Also available with clearance holes through which screws or rods may be slipped, so that two or more units can be stack-mounted. Low-loss ceramic mounting insulators are available for mounting on metal surfaces. Standard units molded in brown bakelite. Also available in low-loss (yellow) XM bakelite.

In 1000, 2500, 5000, 7500 and 10,000 volts D.C. test. Capacitance ratings from .00005 mfd. to .06 mfd. in Type 1650 at 1000 v. D.C. test; .00005 mfd. to .001 mfd. in Type 1654L at 10,000 v. D.C. test.

• Literature on request . . .