

# ELMENCO

CAPACITORS

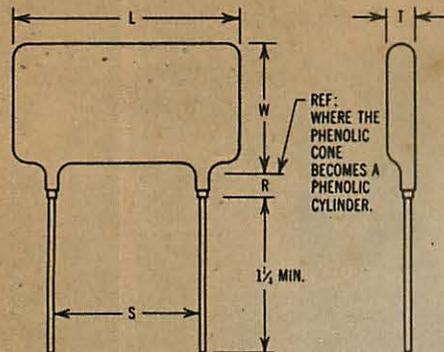
# DIMENSIONAL DATA

## Maximum Dimensions

The following is a tabulation of maximum dimensions of the various DM case sizes. They have been specified to anticipate variations in coat thickness and minor protrusions on the surface. As a result, average dimensions of a given lot may be appreciably smaller than those listed.

It is to be noted that the leads are not centered in the thickness dimension as can be seen on the end view dimensional drawing. Construction of Elmenco Dur-Mica capacitors provides for leads to project from one surface of the mica stack, causing them in turn to extend from one edge of the capacitor. Regardless of case size and overall thickness, leads will always be within  $\frac{1}{16}$  to  $\frac{1}{32}$  from one of the capacitor surfaces. (Exclude SCDM).

Not all dimensions of every capacitance value are listed below. It has been found that size varies almost linearly with capacitance value. As a result, dimensions of values between those specified below should be determined by interpolation.



	DM-10	DM-15	DM-16	DM-19	DM-20	DM-30	DM-42	DM-43
R MAX.	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{8}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
S $\pm \frac{1}{32}$	$\frac{3}{4}$	$\frac{1}{4}$	$\frac{1}{2}$	$\frac{1}{32}$	$\frac{3}{8}$	$\frac{3}{8}$	$1\frac{1}{8}$	$1\frac{1}{8}$
LEAD WIRE GAGE	#26	#22	#22	#20	#20	#18	#18	#18

All Dur-Mica capacitor leads are tinned brass except the following which are copper-clad steel, 30% minimum conductivity:

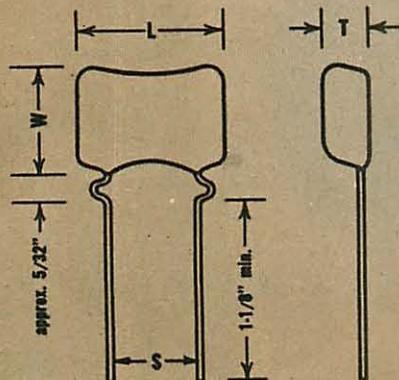
DM-10, DM-42, and DM-43.

DM-19 and DM-20 — 3000 mmf. and above.

DM-30 — 10,000 mmf. and above.

### Crimped Leads

In addition to the straight lead design, DM capacitors are also available with crimped leads for printed circuit application. The crimp provides a positive stop when capacitors are mounted. This prevents interference of resin coat on the leads with dip-solder operation, provides greater mounting uniformity, and elevates the components slightly above the surface of the board. The crimp lead design is not a regularly stocked item, but it is available to special order at a small fixed handling charge.



Lead wire gage for crimped lead units is the same as for straight lead capacitors with the exception of DM-15 and DM-16. Crimped lead gage of DM-15 and DM-16 is #20. The DM-10 case size is not available with crimped leads.

CASE SIZE	Cap. mmf.	Volt. VDCW	L max.	W max.	T max.
DM-10	10	500	.360	.330	.190
	50	500	.370	.340	.190
	100	500	.370	.350	.200
	150	500	.380	.360	.210
	250	500	.390	.380	.220
	300	300	.390	.380	.220
	390	100	.390	.380	.220
DM-15 (CM05)	10	500	.450	.360	.170
	100	500	.460	.360	.180
	200	500	.460	.380	.190
	300	500	.470	.390	.210
	500	500	.490	.420	.240
		560	300	.470	.390
	680	300	.470	.390	.210
	820	300	.470	.400	.230
	1000	100	.490	.420	.240
DM-16	430	500	.730	.390	.210
	600	500	.740	.400	.220
	720	500	.740	.410	.230
		720	300	.730	.380
	900	300	.740	.390	.220
	1300	300	.740	.390	.230
DM-19 (CM06)	100	500	.640	.500	.190
	500	500	.650	.510	.200
	1000	500	.650	.520	.220
	2000	500	.670	.530	.240
	3000	500	.680	.550	.280
	5000	500	.710	.590	.360
	6200	300	.690	.570	.330
	8200	100	.700	.580	.350
DM-20	680	500	.750	.510	.200
	1000	500	.750	.510	.200
	2000	500	.760	.520	.220
	3900	500	.780	.560	.300
	5600	500	.790	.570	.340
		6800	300	.790	.560
	7500	100	.780	.560	.300
	10000	100	.790	.570	.340
DM-30 (CM07)	4300	500	.780	.860	.270
	6800	500	.780	.870	.300
	10000	500	.800	.890	.340
	15000	500	.810	.900	.390
	20000	500	.830	.920	.450
		20000	300	.810	.890
	25000	300	.820	.910	.420
	30000	300	.830	.920	.460
	36000	100	.830	.920	.450
DM-42 (CM08)	20000	500	1.420	.870	.300
	30000	500	1.440	.890	.350
	50000	500	1.480	.920	.460
	62000	300	1.470	.920	.450
	82000	100	1.480	.920	.460
DM-43	50000	500	2.060	.900	.380
	68000	500	2.070	.910	.440
	75000	300	2.060	.900	.380
	100000	300	2.070	.910	.440
	130000	100	2.090	.930	.490

# ELMENCO

CAPACITORS

# DUR-MICA

## SPACE-SAVER

### TYPE SCDM THIN COAT DUR-MICA CAPACITORS (ELMENCO TYPE ICR)

In applications requiring the high performance characteristics of dipped mica capacitors where space is at a premium, the Type SCDM reduced coat ELMENCO capacitors may often be used to advantage. A single protective resin coat is applied instead of the full series of dips incorporated in the standard unit. The amount of coat material is thereby reduced to a minimum consistent with good design, and a significant reduction of all dimensions is achieved.

All electrical and environmental requirements of MIL-C-5 are retained with the exception of case insulation (3.5.3) and moisture resistance (3.14). A maximum voltage stress of 100 VDC through the case insulation is recommended for SCDM units. Although some lots of this type capacitor will not meet stringent MIL moisture resistance specifications, all will meet the humidity requirements of Paragraph 2.3.6 of EIA Standard RS-153. Therefore, the SCDM capacitors will operate with satisfaction where they will not be exposed to extensive periods of high humidity. It is recommended that if these capacitors are destined for operation under extreme environmental conditions, they should be given additional moisture protection such as encapsulation or hermetic sealing of the assembly.

Prices for the Type SCDM are the same as for the standard production units of equivalent value.

### TYPE SCDM SINGLE COAT

CASE SIZE	Cap. mmf.	Volt. VDCW	L max.	W max.	T max.
SCDM10	10	500	.310	.230	.120
	100	500	.320	.230	.130
	180	500	.330	.240	.150
	250	500	.340	.250	.160
	300	300	.340	.250	.160
	390	100	.340	.250	.160
SCDM15	10	500	.430	.280	.140
	100	500	.430	.280	.150
	270	500	.440	.300	.160
	510	500	.450	.310	.190
	560	300	.450	.310	.160
	820	300	.450	.310	.170
SCDM19	1000	100	.450	.310	.170
	100	500	.610	.450	.130
	1000	500	.620	.460	.160
	3000	500	.630	.470	.230
	5100	500	.660	.500	.320
	5600	300	.640	.480	.250
	6800	300	.640	.490	.270
	8200	100	.650	.490	.300

### TYPE DM-10

#### 500VDCW

(SCDM10 values and prices the same)

CAP. MMF.	PART NUMBER	Net Price (1-24) Tolerance			
		±10% "K"	±5% "J"	±2% "G"	±1% "F"
1	DM-10-010	\$0.18			
2	DM-10-020	.18			
3	DM-10-030	.18			
5	DM-10-050	.18			
10	DM-10-100	.18	\$0.27		
12	DM-10-120	.21	.27		
15	DM-10-150	.21	.27		
18	DM-10-180	.21	.27		
20	DM-10-200	.21	.23		
22	DM-10-220	.21	.23		
24	DM-10-240	.21	.23		
27	DM-10-270	.21	.23	\$0.38	
30	DM-10-300	.21	.23	.38	
33	DM-10-330	.21	.23	.38	
36	DM-10-360	.21	.23	.38	
39	DM-10-390	.21	.23	.38	
43	DM-10-430	.21	.23	.38	
47	DM-10-470	.24	.26	.43	
50	DM-10-500	.24	.26	.43	\$0.60
51	DM-10-510	.24	.26	.43	.60
56	DM-10-560	.24	.26	.43	.60
62	DM-10-620	.24	.26	.43	.60
68	DM-10-680	.24	.26	.43	.66
75	DM-10-750	.24	.26	.43	.66
82	DM-10-820	.24	.26	.43	.66
91	DM-10-910	.24	.26	.43	.66
100	DM-10-101	.24	.26	.43	.60
110	DM-10-111	.24	.26	.43	.60
120	DM-10-121	.27	.30	.50	.60
130	DM-10-131	.27	.30	.50	.60

NET (For quantities of 25 or more, please contact your local Arco-Elmenco Distributor)

### DM-10 (Continued)

CAP. MMF.	PART NUMBER	Net Price (1-24) Tolerance			
		±10% "K"	±5% "J"	±2% "G"	±1% "F"
150	DM-10-151	.30	.33	.55	.66
160	DM-10-161	.33	.37	.61	.74
180	DM-10-181	.36	.40	.66	.80
200	DM-10-201	.36	.40	.66	.80
220	DM-10-221	.39	.43	.71	.86
240	DM-10-241	.42	.46	.76	.92
250	DM-10-251	.42	.46	.76	.92
270*	DM-10-271	.42	.46	.76	.92
300*	DM-10-301	.45	.50	.83	1.00
330**	DM-10-331	.45	.50	.83	1.00
360**	DM-10-361	.48	.53	.87	1.06
390**	DM-10-391	.51	.56	.92	1.12

### TYPE DM-15 (CM05)

(SCDM15 values and prices the same)

CAP. MMF.	PART NUMBER	MIL-C-5 TYPE DESIGNATION	Net Price (1-24) Tolerance			
			±10% "K"	±5% "J"	±2% "G"	±1% "F"
1	DM-15-010†		\$0.17			
2	DM-15-020†		.17			
3	DM-15-030†		.17			
5	DM-15-050†	CM-05-C-050K03†	.17			
6	DM-15-060	CM-05-C-060K03	.17			
7	DM-15-070	CM-05-C-070K03	.17			
8	DM-15-080	CM-05-C-080K03	.17			
10	DM-15-100	CM-05-C-100†03	.15	\$0.17		
12	DM-15-120	CM-05-C-120†03	.15	.17		
15	DM-15-150	CM-05-C-150†03	.15	.17		
18	DM-15-180	CM-05-C-180†03	.15	.17		
20	DM-15-200	CM-05-E-200†03	.15	.17		
22	DM-15-220	CM-05-E-220†03	.15	.17		
24	DM-15-240	CM-05-E-240†03	.15	.17		
27	DM-15-270	CM-05-E-270†03	.15	.17	\$0.24	
30	DM-15-300	CM-05-E-300†03	.15	.17	.24	
33	DM-15-330	CM-05-E-330†03	.15	.17	.24	
36	DM-15-360	CM-05-E-360†03	.15	.17	.24	
39	DM-15-390	CM-05-E-390†03	.15	.17	.24	
43	DM-15-430	CM-05-E-430†03	.15	.17	.24	
47	DM-15-470	CM-05-E-470†03	.15	.17	.24	
50	DM-15-500		.15	.17	.20	\$0.29
51	DM-15-510	CM-05-E-510†03	.15	.17	.20	.29
56	DM-15-560	CM-05-E-560†03	.15	.17	.20	.29
62	DM-15-620	CM-05-E-620†03	.15	.17	.20	.29
68	DM-15-680	CM-05-E-680†03	.15	.17	.20	.29
75	DM-15-750	CM-05-E-750†03	.15	.17	.20	.29
82	DM-15-820	CM-05-E-820†03	.15	.17	.20	.29
91	DM-15-910	CM-05-F-910†03	.15	.17	.20	.29
100	DM-15-101	CM-05-F-101†03	.15	.17	.20	.29
110	DM-15-111	CM-05-F-111†03	.18	.20	.23	.29
120	DM-15-121	CM-05-F-121†03	.18	.20	.23	.29
130	DM-15-131	CM-05-F-131†03	.18	.20	.23	.29
150	DM-15-151	CM-05-F-151†03	.18	.20	.23	.29
160	DM-15-161	CM-05-F-161†03	.21	.23	.28	.34
180	DM-15-181	CM-05-F-181†03	.21	.23	.28	.34
200	DM-15-201	CM-05-F-201†03	.21	.23	.28	.34
220	DM-15-221	CM-05-F-221†03	.24	.26	.31	.38
240	DM-15-241	CM-05-F-241†03	.24	.26	.31	.38
250	DM-15-251		.24	.26	.31	.38
270	DM-15-271	CM-05-F-271†03	.27	.30	.35	.43
300	DM-15-301	CM-05-F-301†03	.27	.30	.35	.43
330	DM-15-331	CM-05-F-331†03	.30	.33	.39	.48
360	DM-15-361	CM-05-F-361†03	.30	.33	.39	.48
390	DM-15-391	CM-05-F-391†03	.33	.37	.43	.53
430	DM-15-431		.33	.37	.43	.53
470	DM-15-471		.36	.40	.47	.58
500	DM-15-501		.36	.40	.47	.58
510	DM-15-511		.36	.40	.47	.58
560*	DM-15-561		.39	.43	.51	.62
620*	DM-15-621		.42	.46	.55	.67
680*	DM-15-681		.45	.50	.59	.72
750*	DM-15-751		.48	.53	.62	.77
820*	DM-15-821		.51	.56	.67	.82
910**	DM-15-911		.57	.63	.74	.86
1000**	DM-15-102		.60	.66	.78	.96
1100**	DM-15-112		.69	.76	.90	1.10
1200**	DM-15-122		.78	.86	1.01	1.25

### TYPE DM-16

#### 500VDCW

Although not tabulated here, DM16 is available in capacitance values up through 1600 mmf. Most values are in stock. Write for price and delivery.

\*300VDCW

\*\*100VDCW

†Minimum tolerance ±1 mmf. Add 50% for ±0.5 mmf.

‡Minimum tolerance ±0.5 mmf.

DM-10 and DM-15 "C" characteristic 1 through 18 mmf.

DM-10 and DM-15 "E" characteristic 20 through 82 mmf.

DM-10 and DM-15 "F" characteristic 91 mmf. and up.

All listed DM-16 are characteristic "F".

‡Insert appropriate letter designating capacitance tolerance.

# ELMENCO

CAPACITORS

# DUR-MICA

## TYPE DM-19 (CM-06) 500VDCW

SCDM19 Values &amp; Prices The Same

CAP. MMF.	PART NUMBER	TYPE DESIGNATION	Net Price (1-24) Tolerance			
			±10% "K"	±5% "J"	±2% "G"	±1% "F"
100	DM-19-101		\$0.15	\$0.17	\$0.18	\$0.23
110	DM-19-111		.18	.20	.22	.27
120	DM-19-121		.18	.20	.22	.27
130	DM-19-131		.18	.20	.22	.27
150	DM-19-151		.18	.20	.22	.27
160	DM-19-161		.18	.20	.22	.27
180	DM-19-181		.18	.20	.22	.27
200	DM-19-201		.18	.20	.22	.27
220	DM-19-221		.18	.20	.22	.27
240	DM-19-241		.21	.23	.25	.32
250	DM-19-251		.21	.23	.25	.32
270	DM-19-271		.24	.26	.29	.36
300	DM-19-301		.24	.26	.29	.36
330	DM-19-331		.24	.26	.29	.36
360	DM-19-361		.27	.30	.32	.41
390	DM-19-391		.27	.30	.32	.41
430	DM-19-431	CM-06-F-431±03	.27	.30	.32	.41
470	DM-19-471	CM-06-F-471±03	.30	.33	.36	.45
500	DM-19-501		.30	.33	.36	.45
510	DM-19-511	CM-06-F-511±03	.30	.33	.36	.45
560	DM-19-561	CM-06-F-561±03	.33	.37	.40	.50
620	DM-19-621	CM-06-F-621±03	.33	.37	.40	.50
680	DM-19-681	CM-06-F-681±03	.36	.40	.43	.54
750	DM-19-751	CM-06-F-751±03	.36	.40	.43	.54
820	DM-19-821	CM-06-F-821±03	.36	.40	.43	.54
910	DM-19-911	CM-06-F-911±03	.39	.43	.47	.59
1000	DM-19-102	CM-06-F-102±03	.42	.46	.51	.63
1100	DM-19-112	CM-06-F-112±03	.42	.46	.51	.63
1200	DM-19-122	CM-06-F-122±03	.45	.50	.54	.68
1300	DM-19-132	CM-06-F-132±03	.48	.53	.58	.72
1500	DM-19-152	CM-06-F-152±03	.51	.57	.62	.77
1600	DM-19-162	CM-06-F-162±03	.54	.60	.65	.82
1800	DM-19-182	CM-06-F-182±03	.60	.66	.72	.90
2000	DM-19-202	CM-06-F-202±03	.66	.73	.79	.99
2200	DM-19-222	CM-06-F-222±03	.72	.79	.87	1.08
2400	DM-19-242	CM-06-F-242±03	.78	.86	.94	1.17
2500	DM-19-252		.81	.89	.97	1.23
2700	DM-19-272	CM-06-F-272±03	.84	.92	1.01	1.26
3000	DM-19-302	CM-06-F-302±03	.90	.99	1.08	1.35
3300	DM-19-332	CM-06-F-332±03	.96	1.06	1.15	1.44
3600	DM-19-362	CM-06-F-362±03	1.02	1.12	1.23	1.53
3900	DM-19-392	CM-06-F-392±03	1.08	1.19	1.30	1.62
4300	DM-19-432	CM-06-F-432±03	1.14	1.26	1.37	1.71
4700	DM-19-472	CM-06-F-472±03	1.20	1.32	1.44	1.80
5000	DM-19-502		1.26	1.39	1.51	1.89
5100	DM-19-512		1.26	1.39	1.51	1.89
5600*	DM-19-562		1.32	1.45	1.58	1.89
6200*	DM-19-622		1.38	1.52	1.66	2.07
6800**	DM-19-682		1.38	1.52	1.66	2.07
7500**	DM-19-752		1.44	1.58	1.73	2.16
8200**	DM-19-822		1.50	1.65	1.80	2.25

## TYPE DM-20 500VDCW

CAP. MMF.	PART NUMBER	TYPE DESIGNATION	Net Price (1-24) Tolerance			
			±10% "K"	±5% "J"	±2% "G"	±1% "F"
680	DM-20-681		\$0.30	\$0.33	\$0.36	\$0.45
750	DM-20-751		.30	.33	.36	.45
820	DM-20-821		.30	.33	.36	.45
910	DM-20-911		.33	.37	.40	.50
1000	DM-20-102		.36	.40	.43	.54
1100	DM-20-112		.36	.40	.43	.54
1200	DM-20-122		.39	.43	.47	.59
1300	DM-20-132		.42	.46	.50	.63
1500	DM-20-152		.45	.50	.54	.68
1600	DM-20-162		.48	.53	.58	.72
1800	DM-20-182		.54	.59	.65	.81
2000	DM-20-202		.57	.63	.68	.86
2200	DM-20-222		.63	.70	.76	.95
2400	DM-20-242		.66	.73	.79	.99
2500	DM-20-252		.66	.73	.79	.99
2700	DM-20-272		.72	.79	.86	1.08
3000	DM-20-302		.78	.86	.94	1.17
3300	DM-20-332		.84	.92	1.01	1.26
3600	DM-20-362		.90	.99	1.08	1.35
3900	DM-20-392		.96	1.06	1.15	1.44
4300	DM-20-432		1.02	1.12	1.22	1.53
4700	DM-20-472		1.08	1.19	1.30	1.62
5000	DM-20-502		1.14	1.25	1.37	1.71
5100	DM-20-512		1.17	1.29	1.40	1.76
5600	DM-20-562		1.20	1.32	1.44	1.80
6200*	DM-20-622		1.20	1.32	1.44	1.80
6800*	DM-20-682		1.26	1.39	1.51	1.89
7500**	DM-20-752		1.32	1.45	1.58	1.98
8200**	DM-20-822		1.44	1.58	1.73	2.16
9100**	DM-20-912		1.62	1.78	1.94	2.43
10000**	DM-20-103		1.80	1.98	2.16	2.70

Notes: Higher DM-20 values are available on special order as follows: up to 10,000 mmf. at 500VDCW, up to 12,000 mmf. at 300VDCW, up to 18,000 mmf. at 100VDCW. Characteristics of DM-19 and DM-20 are as follows: C characteristic 1 to 180 mmf. E characteristic 200 to 510 mmf. F characteristic 560 and up. For ±½% double the list price of the 5% units.

## TYPE DM-30 (CM-07) 500VDCW

CAP. MMF.	PART NUMBER	TYPE DESIGNATION	Net Price (1-24) Tolerance			
			±10% "K"	±5% "J"	±2% "G"	±1% "F"
4300	DM-30-432		\$0.96	\$1.06	\$1.15	\$1.25
4700	DM-30-472		1.02	1.12	1.22	1.33
5000	DM-30-502		1.05	1.16	1.26	1.37
5100	DM-30-512	CM-07-F-512±03	1.05	1.16	1.26	1.37
5600	DM-30-562	CM-07-F-562±03	1.08	1.19	1.30	1.40
6200	DM-30-622	CM-07-F-622±03	1.14	1.25	1.37	1.48
6800	DM-30-682	CM-07-F-682±03	1.26	1.39	1.51	1.64
7500	DM-30-752	CM-07-F-752±03	1.38	1.52	1.66	1.79
8200	DM-30-822	CM-07-F-822±03	1.50	1.65	1.80	1.95
9100	DM-30-912	CM-07-F-912±03	1.62	1.78	1.94	2.11
10000	DM-30-103	CM-07-F-103±03	1.80	1.98	2.16	2.34
11000	DM-30-113	CM-07-F-113±03	1.95	2.15	2.34	2.54
12000	DM-30-123	CM-07-F-123±03	2.10	2.31	2.52	2.73
13000	DM-30-133	CM-07-F-133±03	2.25	2.48	2.70	2.93
15000	DM-30-153	CM-07-F-153±03	2.55	2.81	3.06	3.32
16000	DM-30-163	CM-07-F-163±03	2.70	2.97	3.24	3.51
18000	DM-30-183	CM-07-F-183±03	3.00	3.30	3.60	3.90
20000	DM-30-203	CM-07-F-203±03	3.30	3.63	3.96	4.29
22000*	DM-30-223		3.42	3.76	4.10	4.45
24000*	DM-30-243		3.69	4.06	4.43	4.80
25000*	DM-30-253		3.84	4.22	4.61	4.99
27000*	DM-30-273		4.11	4.52	4.93	5.35
30000*	DM-30-303		4.50	4.95	5.40	5.85
33000**	DM-30-333		4.95	5.45	5.94	6.44
36000**	DM-30-363		5.40	5.94	6.48	7.02

## TYPE DM-42 (CM-08) 500VDCW

CAP. MMF.	PART NUMBER	TYPE DESIGNATION	Net Price (1-24) Tolerance		
			±10% "K"	±5% "J"	±2% "G"
10000	DM-42-103		\$2.25	\$2.48	\$2.70
12000	DM-42-123		2.64	2.90	3.17
13000	DM-42-133		2.76	3.04	3.31
15000	DM-42-153		3.12	3.43	3.74
16000	DM-42-163		3.36	3.70	4.03
18000	DM-42-183		3.66	4.03	4.39
20000	DM-42-203		3.96	4.36	4.75
22000	DM-42-223	CM-08-F-223±03	4.29	4.72	5.15
24000	DM-42-243	CM-08-F-243±03	4.68	5.15	5.62
25000	DM-42-253		4.80	5.28	5.76
27000	DM-42-273	CM-08-F-273±03	5.19	5.71	6.23
30000	DM-42-303	CM-08-F-303±03	5.67	6.24	6.80
33000	DM-42-333	CM-08-F-333±03	6.15	6.77	7.38
36000	DM-42-363	CM-08-F-363±03	6.75	7.43	8.10
39000	DM-42-393	CM-08-F-393±03	7.20	7.92	8.64
43000	DM-42-433	CM-08-F-433±03	7.80	8.58	9.36
47000	DM-42-473	CM-08-F-473±03	8.40	9.24	10.08
50000	DM-42-503		8.85	9.74	10.62
51000	DM-42-513		9.00	9.90	10.80
51000*		CM-08-F-513±03	7.92	8.71	9.50
56000*	DM-42-563	CM-08-F-563±03	8.58	9.44	10.30
62000*	DM-42-623	CM-08-F-623±03	9.30	10.23	11.16
68000**	DM-42-683		9.00	9.90	10.80
75000**	DM-42-753		9.60	10.56	11.52
82000**	DM-42-823		10.20	11.22	12.24

## TYPE DM-43 500VDCW

CAP. MMF.	PART NUMBER	TYPE DESIGNATION	Net Price (1-24) Tolerance		
			±10% "K"	±5% "J"	±2% "G"
47000	DM-43-473				
50000	DM-43-503				
51000	DM-43-513				
56000	DM-43-563				
62000	DM-43-623				
68000	DM-43-683				
75000*	DM-43-753				
82000*	DM-43-823				
91000*	DM-43-913				
100000*	DM-43-104				
110000**	DM-43-114				
120000**	DM-43-124				
130000**	DM-43-134				

Prices on Request

All capacities marked with \* are 300WV.

All capacities marked with \*\* are 100WV.

All capacities listed above, in DM-30, DM-42 and DM-43 case sizes are "F" characteristic.

For ±½% tolerance, double the ±5% list price.

†Tolerance designation in part number. Insert the proper letter signifying capacitance tolerance required (See table on page 7).

NET (For quantities of 25 or more, please contact your local Arco-Elmenco distributor)

# ELMENCO

CAPACITORS

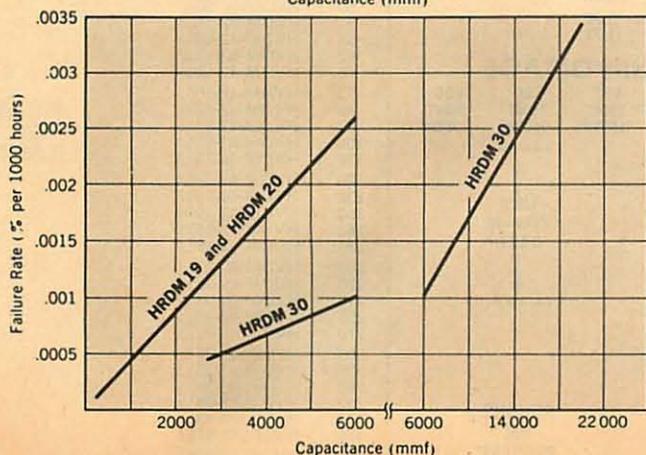
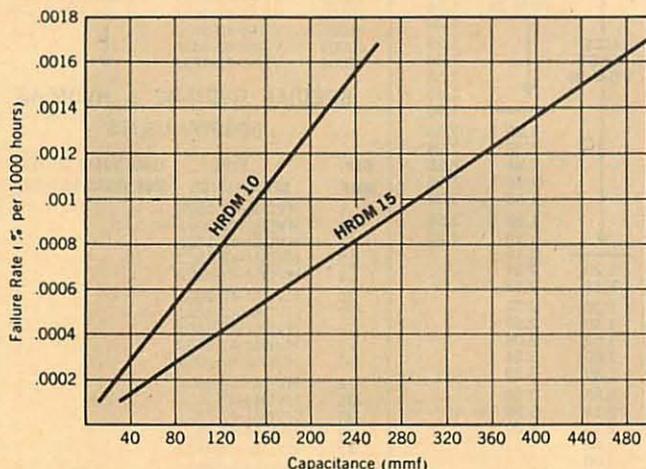
## High Reliability Dur-Mica

### Type HRDM

Missile, Computer, and other applications wherein entire system performance depends on reliable operation of thousands of components has prompted development of a High Reliability line of ELMENCO Dur-Mica dipped silvered mica capacitors. Selected DM units are subjected to a special "debugging" process to eliminate potential early failures. This process is particularly effective when the capacitors are to be subjected to operation near their maximum rated temperatures. The HRDM capacitors are exposed to double rated voltage for 48 hours at 125°C. The graphs below indicate the reliability levels of these capacitors. The curves have been derived from the results of tens of thousands of hours of testing of tens of thousands of capacitors of all values and case sizes. Further information on the performance characteristics of HRDM capacitors is available upon request.

### RELIABILITY OF ELMENCO HRDM CAPACITORS

Failure Rate in % per 1000 Hours (90% Confidence Level) vs. Capacitance Value □ 500VDCW Operation at 85°C.



To conserve catalog space, part numbers for each HRDM capacitor are not listed as they are for the standard units. Capacitance values are shown for each case size with corresponding list prices indicated for each standard tolerance. Voltage ratings are the same as for the standard DM capacitors.

To specify part number, merely prefix the regular DM part number by the letters "HR". For example, a high reliability DM15-101J would be called out by the part number HRDM15-101J.

NET (For quantities of 25 or more, please contact your local Arco-Elmenco distributor)

Capacitance values (mmf.)		Net Price (1-24) Tolerance			
		±10%	±5%	±2%	±1%
DM-10					
1-10§		\$0.33			
12-18†		.36	\$0.42		
20-43		.36	.38	\$0.53	
47-110		.39	.41	.58	\$0.81
120-130		.42	.45	.65	.75
150		.46	.49	.71	.82
160		.49	.53	.78	.90
180-200		.52	.56	.82	.96
220		.55	.59	.87	1.02
240-270		.60	.64	.94	1.10
300-330		.63	.68	1.01	1.20
360		.66	.71	1.06	1.26
390		.69	.75	1.11	1.32
DM-15					
1-100§		.32	.32	.39	.44
110-150		.33	.35	.39	.44
160-200		.36	.39	.43	.49
220-250		.39	.42	.47	.53
270-300		.42	.45	.51	.59
330-360		.45	.48	.54	.63
390-430		.48	.52	.59	.68
470-510		.51	.56	.63	.74
560		.56	.60	.68	.80
620		.59	.64	.72	.86
680		.62	.68	.77	.92
750		.66	.71	.81	.96
820		.69	.75	.86	1.02
910		.75	.81	.94	1.06
1000		.80	.85	.98	1.11
DM-19	DM-20				
100		.30	.32	.33	.38
110-220		.33	.35	.37	.42
240-250		.36	.39	.41	.47
270-330		.39	.42	.44	.51
360-430		.42	.45	.48	.56
470-510	680-820	.45	.48	.51	.60
560-620	910	.48	.52	.55	.65
680-820	1000-1100	.51	.56	.59	.70
910	1200	.54	.59	.62	.75
1000-1100	1300	.57	.62	.66	.79
1200	1500	.60	.65	.70	.84
1300	1600	.63	.68	.74	.88
1500		.66	.72	.78	.93
1600	1800	.70	.76	.81	.98
	2000	.73	.79	.84	1.02
1800		.76	.82	.88	1.07
2000	2200	.79	.86	.92	1.12
2200	2400-2500	.82	.89	.96	1.16
	2700	.88	.96	1.03	1.25
		.90	.98	1.06	1.29
2400	3000	.95	1.02	1.11	1.35
2500		.97	1.05	1.14	1.38
2700	3300	1.00	1.09	1.17	1.43
3000	3600	1.04	1.13	1.22	1.49
		1.10	1.20	1.29	1.58
3300	3900	1.17	1.27	1.37	1.68
3600	4300	1.23	1.34	1.45	1.78
3900	4700	1.30	1.41	1.53	1.88
4300	5000-5100	1.37	1.49	1.61	1.98
4700	5600-6200	1.43	1.55	1.69	2.08
5000-5100	6800	1.50	1.62	1.77	2.18
5600	7500	1.56	1.70	1.86	2.29
6200-6800		1.63	1.77	1.94	2.39
7500	8200	1.69	1.85	2.03	2.50
8200		1.76	1.92	2.11	2.61
	9100	1.85	2.04	2.21	2.75
	10000	2.07	2.25	2.45	3.04

PRICES FOR HRDM30, HRDM42, AND HRDM43 ON REQUEST.

§ Minimum tolerance ±1 mmf. Add \$0.09 for ±0.5 mmf.

† Minimum tolerance ±0.5 mmf.

NOTE: Voltage ratings of items listed correspond to those indicated for the standard line DM capacitors in equivalent values and case sizes indicated on previous pages.

**There is a set-up charge of \$3.00 per item when the quantity of the item is less than 100. This charge is added to the unit prices indicated above.**

# ELMENCO

CAPACITORS

# High Voltage Dur-Mica

A new line of ELMENCO Silvered Hi-Voltage Dur-Mica capacitors is now available to complement the similar values in the molded configuration. These high voltage capacitors afford the same facility of use in low power applications by providing reliable operation in a small case size. Elmenco Dur-Mica capacitors may be substituted for similarly rated molded units normally supplied in the larger CM45, CM50, CM55, and CM60 case sizes.

The Dur-Mica design provides advantage of higher temperature operation (125°C. max.); radial leads for printed circuit application; higher capacitance in a given case size; and improved reliability. The dipped units, being solidly impregnated with corona resistant material, do not have the voids which make molded types susceptible to corona. As a

result, the dipped capacitors can be supplied with voltage rating as high as 5000VDCW.

All Elmenco Dur-Mica capacitors are silvered mica construction. They conform to electrical and environmental specifications set forth in MIL-C-5 specifications.

The physical configuration of these capacitors is the same as for the standard DM units. This information is found on page 8. The only difference is that for a given capacitance value case dimensions will be larger for higher voltage ratings because the mica is thicker. The maximum case dimensions for each of the case sizes indicated below is the same as the maximums indicated in the tabulation.

## VDM-20 HI-VOLTAGE

TOLERANCE  $\pm 5\%$ 

CAP. MMF.	TYPE DESIGNATION	VDC 2000T 1000W NET	VDC 3000T 1500W NET	VDC 5000T 2500W NET
5	VDM-20-050K			\$0.18
10	VDM-20-100J			.18
12	VDM-20-120J			.18
15	VDM-20-150J			.18
18	VDM-20-180J			.21
20	VDM-20-200J		.18	.21
22	VDM-20-220J		.18	.21
24	VDM-20-240J		.18	.21
27	VDM-20-270J		.18	.21
30	VDM-20-300J		.18	.21
33	VDM-20-330J		.18	.21
36	VDM-20-360J		.18	.21
39	VDM-20-390J		.18	.21
43	VDM-20-430J	.18	.21	.24
47	VDM-20-470J	.18	.21	.27
50	VDM-20-500J	.18	.21	.27
51	VDM-20-510J	.18	.21	.27
56	VDM-20-560J	.18	.21	.27
62	VDM-20-620J	.18	.21	.30
68	VDM-20-680J	.18	.21	.30
75	VDM-20-750J	.18	.21	.30
82	VDM-20-820J	.18	.24	.33
91	VDM-20-910J	.18	.24	.36
100	VDM-20-101J	.21	.24	.36
110	VDM-20-111J	.21	.24	.39
120	VDM-20-121J	.21	.24	.39
130	VDM-20-131J	.21	.27	.42
150	VDM-20-151J	.21	.27	.45
160	VDM-20-161J	.21	.27	.48
180	VDM-20-181J	.21	.30	.51
200	VDM-20-201J	.24	.30	.57
220	VDM-20-221J	.24	.33	.60
240	VDM-20-241J	.24	.33	.63
250	VDM-20-251J	.24	.36	.66
270	VDM-20-271J	.24	.36	.72
300	VDM-20-301J	.24	.36	.78
330	VDM-20-331J	.24	.39	.84
360	VDM-20-361J	.24	.39	.90
390	VDM-20-391J	.27	.42	
430	VDM-20-431J	.27	.45	
470	VDM-20-471J	.27	.48	
500	VDM-20-501J	.30	.51	
510	VDM-20-511J	.30	.51	
560	VDM-20-561J	.30	.54	
620	VDM-20-621J	.33	.60	
680	VDM-20-681J	.36	.66	
750	VDM-20-751J	.36	.72	
820	VDM-20-821J	.39	.78	
910	VDM-20-911J	.42	.84	
1000	VDM-20-102J	.42	.90	
1100	VDM-20-112J	.45	.96	
1200	VDM-20-122J	.48	1.02	
1300	VDM-20-132J	.51	1.08	
1500	VDM-20-152J	.54		
1600	VDM-20-162J	.57		
1800	VDM-20-182J	.60		
2000	VDM-20-202J	.66		
2200	VDM-20-222J	.72		
2400	VDM-20-242J	.78		
2700	VDM-20-272J	.87		
3000	VDM-20-302J	.96		

## VDM-30 HI-VOLTAGE

TOLERANCE  $\pm 5\%$ 

CAP. MMF.	TYPE DESIGNATION	VDC 2000T 1000W NET	VDC 3000T 1500W NET	VDC 5000T 2500W NET
390	VDM-30-391J			\$0.72
430	VDM-30-431J			.78
470	VDM-30-471J			.84
500	VDM-30-501J			.90
510	VDM-30-511J			.90
560	VDM-30-561J			.96
620	VDM-30-621J			1.02
680	VDM-30-681J			1.08
750	VDM-30-751J			1.14
820	VDM-30-821J			1.20
910	VDM-30-911J			1.29
1000	VDM-30-102J			1.38
1100	VDM-30-112J			1.50
1200	VDM-30-122J			1.65
1300	VDM-30-132J			1.80
1500	VDM-30-152J		1.20	2.10
1600	VDM-30-162J		1.32	2.25
1800	VDM-30-182J		1.44	2.58
2000	VDM-30-202J		1.56	2.94
2200	VDM-30-222J		1.68	3.30
2400	VDM-30-242J		1.89	3.66
2700	VDM-30-272J		1.98	4.20
3000	VDM-30-302J		2.16	
3300	VDM-30-332J	1.20	2.34	
3600	VDM-30-362J	1.32	2.52	
3900	VDM-30-392J	1.38	2.70	
4300	VDM-30-432J	1.50	2.88	
4700	VDM-30-472J	1.62	3.06	
5000	VDM-30-502J	1.80	3.24	
5100	VDM-30-512J	1.80	3.30	
5600	VDM-30-562J	1.86	3.60	
6200	VDM-30-622J	2.10	3.90	
6800	VDM-30-682J	2.34	4.20	
7500	VDM-30-752J	2.64		
8200	VDM-30-822J	3.00		
9100	VDM-30-912J	3.36		
10000	VDM-30-103J	3.72		

## VDM-42 HI-VOLTAGE

CAP. MMF.	TYPE DESIGNATION	VDC 2000T 1000W	VDC 1500T 1500W	VDC 5000T 2500W
3000	VDM-42-302J			
3300	VDM-42-332J			
3600	VDM-42-362J			
3900	VDM-42-392J			
4300	VDM-42-432J			
4700	VDM-42-472J			
5000	VDM-42-502J			
5100	VDM-42-512J			
5600	VDM-42-562J			
6200	VDM-42-622J			
6800	VDM-42-682J			
7500	VDM-42-752J			
8200	VDM-42-822J			
9100	VDM-42-912J			
10000	VDM-42-103J			
12000	VDM-42-123J			
13000	VDM-42-133J			
15000	VDM-42-153J			
16000	VDM-42-163J			
18000	VDM-42-183J			
20000	VDM-42-203J			
22000	VDM-42-223J			
24000	VDM-42-243J			
25000	VDM-42-253J			
27000	VDM-42-273J			
30000	VDM-42-303J			

## VDM-43 HI-VOLTAGE

TOLERANCE  $\pm 5\%$ 

CAP. MMF.	TYPE DESIGNATION	VDC 2500WV	VDC 15000WV	VDC 1000WV
12000	VDM-43-123J			
13000	VDM-43-133J			
15000	VDM-43-153J			
20000	VDM-43-203J			
22000	VDM-43-223J			
24000	VDM-43-243J			
25000	VDM-43-253J			
27000	VDM-43-273J			
30000	VDM-43-303J			
33000	VDM-43-333J			
36000	VDM-43-363J			
39000	VDM-43-393J			
43000	VDM-43-433J			
47000	VDM-43-473J			

## SPECIAL HVDM-42 & HVDM-43 5000WV UNITS

CAP. MMF.	TYPE DESIGNATION	10000 VOLTS DC TEST 5000 VOLTS DC WKG.
5	HVDM-42-050K	
10	HVDM-42-100J	
12	HVDM-42-120J	
15	HVDM-42-150J	
18	HVDM-42-180J	
20	HVDM-42-200J	
22	HVDM-42-220J	
24	HVDM-42-240J	
27	HVDM-42-270J	
30	HVDM-42-300J	
33	HVDM-42-330J	
36	HVDM-42-360J	
39	HVDM-42-390J	
43	HVDM-42-430J	
47	HVDM-42-470J	
50	HVDM-42-500J	
51	HVDM-42-510J	
56	HVDM-42-560J	
62	HVDM-42-620J	
68	HVDM-42-680J	
75	HVDM-42-750J	
82	HVDM-42-820J	
91	HVDM-42-910J	
100	HVDM-42-101J	
110	HVDM-42-111J	
120	HVDM-42-121J	
130	HVDM-42-131J	
150	HVDM-42-151J	
160	HVDM-42-161J	
180	HVDM-42-181J	
200	HVDM-42-201J	
220	HVDM-42-221J	
240	HVDM-42-241J	
250	HVDM-42-251J	
270	HVDM-42-271J	
300	HVDM-42-301J	
330	HVDM-42-331J	
360	HVDM-42-361J	
390	HVDM-42-391J	
430	HVDM-42-431J	
470	HVDM-42-471J	
500	HVDM-42-501J	
510	HVDM-42-511J	
560	HVDM-42-561J	
620	HVDM-42-621J	
680	HVDM-43-681J	
750	HVDM-43-751J	
820	HVDM-43-821J	
910	HVDM-43-911J	

**PLEASE SPECIFY WORKING VOLTAGE RATING WHEN ORDERING**

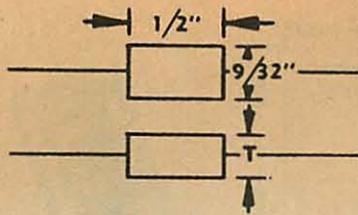
NET (For quantities of 25 or more, please contact your local Arco-Elmenco distributor)

Above prices are for Standard 5% Tolerance. Closer Tolerances to  $\pm 1\%$  available. Pricing on request.

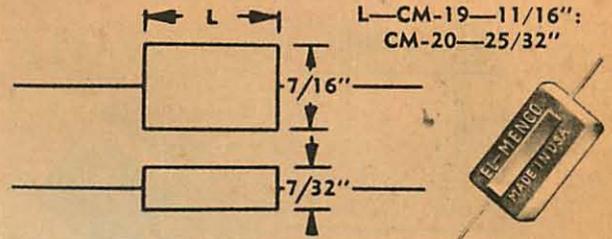
# ELMENCO

CAPACITORS

## Molded Silvered Mica



T—from 1-300 mmf. 3/16"  
T—from 310-510 mmf. 7/32"



### TYPE CM-19 & 20

500VDCW

### TYPE CM-15

500VDCW

CAP. MMF.	TYPE DESIGNATION	Net Price (1-24) Tolerance		
		"J" ±5%	"G" ±2%	"F" ±1%
1	CM-15-C-010†	\$0.18		
2	CM-15-C-020†	.18		
3	CM-15-C-030†	.18		
5	CM-15-C-050†	.18		
10	CM-15-C-100	.18		
12	CM-15-C-120	.18		
15	CM-15-C-150	.18		
18	CM-15-C-180	.18		
20	CM-15-C-200	.18		
22	CM-15-C-220	.18		
24	CM-15-E-240	.18		
27	CM-15-E-270	.18	\$0.25	
30	CM-15-E-300	.18	.25	
33	CM-15-E-330	.18	.25	
36	CM-15-E-360	.18	.25	
39	CM-15-E-390	.18	.25	
43	CM-15-E-430	.18	.25	
47	CM-15-E-470	.18	.25	
50	CM-15-E-500	.18	.25	\$0.30
51	CM-15-E-510	.18	.25	.30
56	CM-15-E-560	.18	.25	.30
62	CM-15-E-620	.18	.25	.30
68	CM-15-E-680	.18	.25	.30
75	CM-15-E-750	.18	.25	.30
82	CM-15-E-820	.18	.25	.30
91	CM-15-E-910	.18	.25	.30
100	CM-15-E-101	.18	.25	.30
110	CM-15-E-111	.21	.25	.30
120	CM-15-E-121	.21	.25	.30
130	CM-15-E-131	.21	.25	.30
150	CM-15-E-151	.21	.25	.30
160	CM-15-E-161	.24	.29	.34
180	CM-15-E-181	.24	.29	.34
200	CM-15-E-201	.24	.29	.34
220	CM-15-E-221	.27	.32	.39
240	CM-15-E-241	.27	.32	.39
250	CM-15-E-251	.27	.32	.39
270	CM-15-E-271	.30	.36	.43
300	CM-15-E-301	.30	.36	.43
330	CM-15-E-331	.33	.40	.47
360	CM-15-E-361	.36	.43	.52
390	CM-15-E-391	.39	.47	.56
430	CM-15-E-431	.39	.45	.56
470	CM-15-E-471	.42	.50	.61
500	CM-15-E-501	.42	.50	.61
510	CM-15-E-511	.42	.50	.61
560**	CM-15-E-561	.42	.50	.61
620**	CM-15-E-621	.45	.54	.65
680**	CM-15-E-681	.48	.58	.69
750**	CM-15-E-751	.51	.61	.73
820**	CM-15-E-821	.54	.65	.78

† Capacities marked with † denote that closest tolerance is ±0.5 mmf.

\* Voltage rating 300 VDCW.

\*\* Voltage rating 100 VDCW.

CAP. MMF.	TYPE DESIGNATION	Net Price (1-24) Tolerance		
		"J" ±5%	"G" ±2%	"F" ±1%
5	CM-20-C-050†	\$0.18		
10	CM-20-C-100	.18		
12	CM-20-C-120	.18		
15	CM-20-C-150	.18		
18	CM-20-C-180	.18		
20	CM-20-C-200	.18		
22	CM-20-C-220	.18		
24	CM-20-C-240	.18		
27	CM-20-C-270	.18		
30	CM-20-C-300	.18		\$0.23
33	CM-20-C-330	.18		.23
36	CM-20-C-360	.18		.23
39	CM-20-C-390	.18		.23
43	CM-20-C-430	.18		.23
47	CM-20-C-470	.18		.23
50	CM-20-C-500	.18		.23
51	CM-20-C-510	.18		.23
56	CM-20-C-560	.18		.23
62	CM-20-C-620	.18		.23
68	CM-20-C-680	.18		.23
75	CM-20-C-750	.18		.23
82	CM-20-C-820	.18		.23
91	CM-20-C-910	.18		.23
100	CM-20-C-101	.18		.23
110	CM-20-C-111	.21		.23
120	CM-20-C-121	.21		.23
130	CM-20-C-131	.21		.23
150	CM-20-C-151	.21		.23
160	CM-20-C-161	.21		.23
180	CM-20-C-181	.21		.23
200	CM-20-D-201	.21	.23	.29
220	CM-20-D-221	.21	.23	.29
240	CM-20-D-241	.24	.26	.34
250	CM-20-D-251	.24	.26	.34
270	CM-20-D-271	.24	.26	.34
300	CM-20-D-301	.24	.26	.34
330	CM-20-D-331	.24	.26	.34
360	CM-20-D-361	.24	.26	.34
390	CM-20-D-391	.27	.30	.38
430	CM-20-D-431	.27	.30	.38
470	CM-20-D-471	.27	.30	.38
500	CM-20-D-501	.30	.33	.42
510	CM-20-D-511	.30	.33	.42
560	CM-20-D-561	.30	.33	.42
620	CM-20-D-621	.33	.37	.46
680	CM-20-D-681	.36	.40	.50
750	CM-20-D-751	.36	.40	.50
820	CM-20-D-821	.39	.43	.55
910	CM-20-D-911	.42	.46	.59
1000	CM-20-E-102	.42	.46	.59
1100	CM-20-E-112	.45	.50	.63
1200	CM-20-E-122	.48	.53	.67
1300	CM-20-E-132	.48	.53	.67
1500	CM-20-E-152	.51	.56	.71
1600	CM-20-E-162	.54	.59	.76
1800	CM-20-E-182	.60	.66	.84
2000	CM-20-E-202	.66	.73	.92
2200	CM-20-E-222	.72	.79	1.01
2400	CM-20-E-242	.75	.83	1.05
2500	CM-20-E-252	.78	.86	1.09
2700	CM-20-E-272	.84	.92	1.18
3000	CM-20-E-302	.90	.99	1.26
3300	CM-20-E-332	.96	1.06	1.34
3600*	CM-20-E-362	1.02	1.12	1.43
3900*	CM-20-E-392	1.08	1.19	1.51
4300*	CM-20-E-432	1.14	1.25	1.60
4700*	CM-20-E-472	1.20	1.32	1.68
5000*	CM-20-E-502	1.26	1.39	1.76
5100*	CM-20-E-512	1.26	1.39	1.76

Capacities from 5 to 2400 mmf. can be supplied in CM-19 cases. In values above 1000 mmf. the list prices for CM-19 are 10% higher than those listed above.

NET (For quantities of 25 or more, please contact your local Arco-Elmenco distributor)

#### SPECIFICATIONS NOTES:

±½% tolerance available above 100 mmf. at double ±5% list price.

CM-15, available "F" characteristic above 30 mmf.

CM-19, 20 available "E" characteristic above 110 mmf.

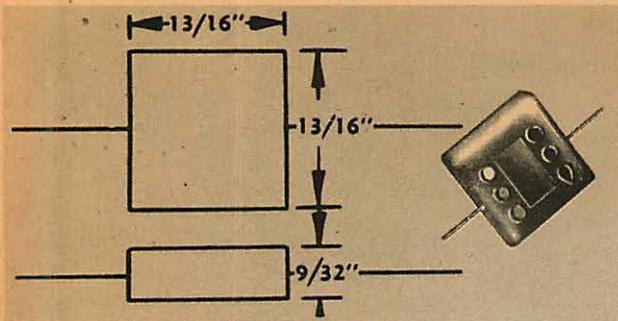
CM-19, 20 available "F" characteristic above 200 mmf.

All CM-30, 35, and 42 values listed are available in "F" characteristic.

# ELMENCO

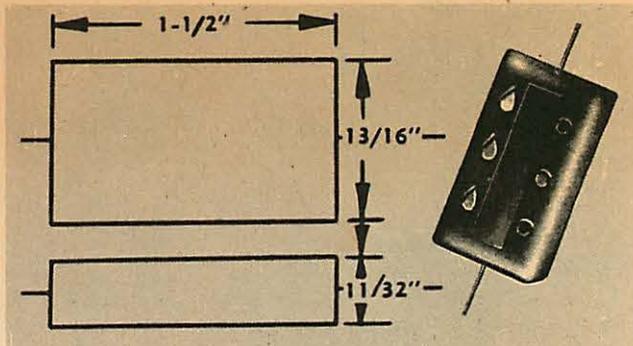
CAPACITORS

## Molded Silvered Mica



**TYPE CM-30**  
500VDCW

CAP. MMF.	TYPE DESIGNATION	Net Price (1-24) Tolerance		
		"J" ±5%	"G" ±2%	"F" ±1%
510	CM-30-E-511	\$0.33	\$0.37	\$0.40
560	CM-30-E-561	.36	.40	.43
620	CM-30-E-621	.36	.40	.43
680	CM-30-E-681	.39	.43	.47
750	CM-30-E-751	.39	.43	.47
820	CM-30-E-821	.42	.46	.50
910	CM-30-E-911	.42	.46	.50
1000	CM-30-E-102	.45	.50	.54
1100	CM-30-E-112	.45	.50	.54
1200	CM-30-E-122	.45	.50	.54
1300	CM-30-E-132	.48	.53	.58
1500	CM-30-E-152	.51	.56	.61
1600	CM-30-E-162	.51	.56	.61
1800	CM-30-E-182	.54	.59	.65
2000	CM-30-E-202	.60	.66	.72
2200	CM-30-E-222	.66	.73	.79
2400	CM-30-E-242	.72	.79	.86
2500	CM-30-E-252	.72	.79	.86
2700	CM-30-E-272	.78	.86	.94
3000	CM-30-E-302	.84	.92	1.01
3300	CM-30-E-332	.90	.99	1.08
3600	CM-30-E-362	.96	1.06	1.15
3900	CM-30-E-392	1.02	1.12	1.22
4300	CM-30-E-432	1.08	1.19	1.30
4700	CM-30-E-472	1.14	1.25	1.37
5000	CM-30-E-502	1.20	1.32	1.44
5100	CM-30-E-512	1.20	1.32	1.44
5600	CM-30-E-562	1.26	1.39	1.51
6200	CM-30-E-622	1.32	1.45	1.58



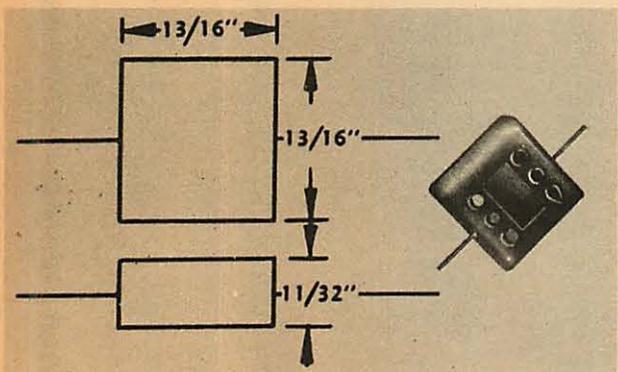
**TYPE CM-42**  
500VDCW

CAP. MMF.	TYPE DESIGNATION	Net Price (1-24) Tolerance		
		"J" ±5%	"G" ±2%	"F" ±1%
12000	CM-42-E-123	\$2.82	\$3.25	\$3.53
13000	CM-42-E-133	3.06	3.52	3.83
15000	CM-42-E-153	3.48	4.00	4.35
16000	CM-42-E-163	3.72	4.28	4.65
18000	CM-42-E-183	4.14	4.76	5.18
20000	CM-42-E-203	4.56	5.24	5.70
22000	CM-42-E-223	4.98	5.73	6.23
24000	CM-42-E-243	5.40	6.21	6.75
25000	CM-42-E-253	5.64	6.49	7.05
27000*	CM-42-E-273	5.40	6.21	6.75
30000*	CM-42-E-303	5.64	6.49	7.05
33000*	CM-42-E-333	6.12	7.04	7.65
36000*	CM-42-E-363	6.84	7.87	8.55
39000*	CM-42-E-393	7.56	8.69	9.45

All capacities marked with \* are 300VDCW.  
For ±½% double the ±1% list price.

### TYPES CM-25 & CM-40

Although CM-25 and CM-40 are not listed, they are still available and most items are in stock. Use CM-20 list prices for corresponding CM-25 values and CM-30 and CM-35 prices for comparable CM-40 values.



**TYPE CM-35**

CAP. MMF.	TYPE DESIGNATION	Net Price (1-24) Tolerance		
		"J" ±5%	"G" ±2%	"F" ±1%
6800*	CM-35-E-682	\$1.32	\$1.45	\$1.58
7500*	CM-35-E-752	1.44	1.58	1.73
8200*	CM-35-E-822	1.56	1.72	1.87
9100*	CM-35-E-912	1.68	1.85	2.02
10000*	CM-35-E-103	1.86	2.05	2.23
12000*	CM-35-E-123	2.16	2.38	2.59
15000*	CM-35-E-153	2.58	2.84	3.10
6800	VCM-35-E-682	1.44	1.58	1.73
7500	VCM-35-E-752	1.56	1.72	1.87
8200	VCM-35-E-822	1.68	1.85	2.02
9100	VCM-35-E-912	1.86	2.05	2.23
10000	VCM-35-E-103	2.04	2.24	2.45

All capacities marked with \* are 300WV.

NOTE:—All above "SILVERED MICA" units can be supplied in "F" Characteristic at no extra cost.  
For ±½% Tolerance double the 5% list prices.

NET (For quantities of 25 or more, please contact your local Arco-Elmenco distributor)

### MICA CAPACITOR NOTES

Off standard capacitance values — non-standard values not listed in part number tabulations of molded and dipped mica capacitors are priced at next higher listed value and are subject to a \$1.00 set-up charge per item.

Minimum tolerance — Regardless of capacitance and percentage tolerance indicated, the minimum absolute capacitance tolerance normally supplied is ±0.5% mmf. It is ARCO standard practice to supply ±0.5 mmf. automatically on orders for ±5% or ±10% which calculate to less than ±0.5 mmf. If ±2% or ±1% tolerance is specified, customer is notified of deviation for approval. In some cases, decided individually depending upon capacitance value and current availability, we can provide ±0.25 mmf. at an added charge.

Source Inspection — Government Source Inspection is performed on MIL-C-5 capacitors, both dipped and molded, when specified. Prompt service is afforded on nearly all items from case size CM-05 to CM-40 inclusive.

# ELMENCO

CAPACITORS

## High Temperature Molded Silvered Mica

The standard Elmenco molded mica capacitor is designed for use at a maximum of 85°C., the former industry and military standard prior to issuance of MIL-C-5. Now, in some applications, these components are expected to operate without derating and with the same order of reliability at 125°C. The latter requirement is particularly difficult to cope with and obviously requires vast improvement over the standard design.

A specially designed Elmenco molded mica capacitor, designated type HTCM, has been developed which will afford complete satisfaction at the higher levels of temperature stress. The resulting units have been carefully evaluated in millions of unit-hours of life and environmental testing to verify their performance excellence.

In order to retain proper characteristics at 125°C., the following steps are taken:

1. Every mica film is screened for high temperature characteristics. This is done 100%, not on a sampling basis.
2. A special high temperature molding resin is employed to preserve the strength and electrical characteristic of the mica at 125°C. This molding material was also selected for the lower molding pressure required. This reduced stress greatly enhances the reliability of the mica films.

3. A solid high temperature impregnant is used instead of wax for greater stability and retention of the moisture resistance characteristic. Wax will have a tendency to melt out at high temperature, causing possible change in capacitance value, loss of moisture seal, and possible fouling of adjacent circuitry. The HTCM capacitors will remain physically and electrically stable at 125°C.

With these design innovations, vast improvement is obtained in operating reliability at elevated temperature. The expected failure rate is reduced to a small fraction of what might otherwise be expected of standard design capacitors.

### HTCM CAPACITORS MEET ALL ELECTRICAL AND ENVIRONMENTAL SPECIFICATIONS FOR MIL-C-5 TEMPERATURE RANGE "O".

The Elmenco high temperature molded mica capacitor is designated simply by adding prefix letters "HT" to the standard part number. For example, a 100 mmf.  $\pm 5\%$  CM-15, standard part number CM-15-E-101J, would be called an HTCM-15-E-101J, for high temperature operation.

The HTCM capacitors may be recognized by their gray-brown color as compared with the red molding resin of the standard 85°C. capacitors.

To conserve catalog space, part numbers for each individual HTCM capacitor are not listed as they are for the standard units. Capacitance values are shown for each case size with corresponding prices indicated for each tolerance. Voltage ratings are the same as for standard CM capacitors.

NET PRICE (1-24)				NET PRICE (1-24)				NET PRICE (1-24)			
CAP. MMF.	$\pm 5\%$	$\pm 2\%$	$\pm 1\%$	CAP. MMF.	$\pm 5\%$	$\pm 2\%$	$\pm 1\%$	CAP. MMF.	$\pm 5\%$	$\pm 2\%$	$\pm 1\%$
<b>HTCM15</b>				560	\$0.60	\$0.70	\$0.76	*3600	\$1.35	\$1.55	\$1.69
1-75	\$0.39	\$0.45	\$0.49	620	.60	.70	.76	*3900	1.41	1.63	1.77
82-150	.42	.49	.53	680	.63	.73	.79	*4300	1.47	1.69	1.84
160-200	.45	.52	.57	750	.63	.73	.79	*4700	1.53	1.76	1.92
220	.48	.55	.61	820	.66	.76	.83	*5000	1.59	1.83	1.99
240	.48	.55	.61	910	.66	.76	.83	*5100	1.59	1.83	1.99
250	.48	.55	.61	1000	.69	.80	.87	<b>HTCM30, HTCM35</b>			
270	.51	.59	.64	1100	.69	.80	.87	3600	1.41	1.63	1.77
300	.51	.59	.64	1200	.75	.86	.94	3900	1.47	1.69	1.84
330	.54	.62	.68	1300	.75	.86	.94	4300	1.53	1.76	1.92
360	.57	.66	.72	1500	.84	.97	1.06	4700	1.59	1.83	1.99
390	.57	.66	.72	1600	.84	.97	1.06	5000	1.68	1.93	2.11
430	.60	.70	.76	1800	.90	1.04	1.13	5100	1.68	1.93	2.11
470	.63	.73	.79	2000	.90	1.11	1.21	5600	1.92	2.21	2.41
500	.63	.73	.79	2200	1.02	1.18	1.28	6200	2.07	2.38	2.59
510	.63	.73	.79	2400	1.08	1.24	1.36	6800*	1.83	2.11	2.29
<b>HTCM19, HTCM20</b>				2500	1.11	1.28	1.39	7500*	1.92	2.21	2.41
5-100	.39	.45	.49	2700	1.17	1.35	1.47	8200*	2.07	2.38	2.59
110-220	.42	.49	.53	3000	1.29	1.49	1.62	9100*	2.22	2.56	2.78
240-360	.48	.55	.61	3300	1.35	1.55	1.69	10000*	2.40	2.76	3.01
390-430	.54	.62	.68	Add 10% to indicated prices for HTCM19 in values above 1000 mmf. to a maximum of 2400 mmf.				*300VDCW			
470-510	.57	.66	.72								

THERE IS A \$5.00 PER ITEM SET-UP CHARGE FOR NON-STANDARD CAPACITANCE VALUES IN QUANTITIES LESS THAN 100 OF A SIZE. ALL VALUES LISTED ON PRIOR PAGES FOR THE STANDARD SILVERED MOLDED MICA ARE CONSIDERED STANDARD STOCK VALUES FOR WHICH THERE IS NO SET-UP CHARGE.

NET (For quantities of 25 or more, please contact your local Arco-Elmenco distributor)

# ELMENCO

CAPACITORS

## High Voltage Molded Mica

Demand for smaller units in higher voltages designed to meet the requirements for TELEVISION, POWER AMPLIFIERS, LOW POWER TRANSMITTERS, and various INDUSTRIAL USES has increased. ELMENCO designed and produced units listed below are especially adaptable to compact circuits where space is an important factor. Their acceptance has been overwhelming by the various manufacturers of TELEVISION RECEIVERS.

In many cases, these units will do the work of capacitors molded in

CM-45, CM-50, and CM-55 cases without breaking down. NO SPECIAL MOUNTINGS ARE NECESSARY; just wire right into the circuit.

The capacitors are molded in low-loss Phenolic Resin in CM-20, CM-35, CM-42 cases and tested at double the branded voltage. They are tested for dielectric strength, insulation resistance, temperature coefficient capacitance drift, susceptibility to humidity, and length of life, according to EIA Standards. All units are wax-dipped for protection against salt water immersion.

### VCM-20 HI-VOLTAGE MOLDED SILVERED MICA

CAP. MMF.	TYPE DESIGNATION	2000VDC T 1000VDC W		3000VDC T 1500VDC W		5000VDC T 2500VDC W		LIST	NET	LIST	NET		
		±20% (M)		±5% (J)		±20% (M)						±5% (J)	
		LIST	NET	LIST	NET	LIST	NET					LIST	NET
5	VCM-20-050	USE 2500VW		USE 2500VW		\$0.25	\$0.15	\$0.30	\$0.18				
10	VCM-20-100					.25	.15	.30	.18				
12	VCM-20-120					.25	.15	.30	.18				
15	VCM-20-150					.25	.15	.30	.18				
18	VCM-20-180					.25	.15	.30	.18				
20	VCM-20-200					.25	.15	.30	.18				
22	VCM-20-220					.25	.15	.30	.18				
24	VCM-20-240					.25	.15	.30	.18				
27	VCM-20-270					.25	.15	.30	.18				
30	VCM-20-300	USE 1500VW				.25	.15	.30	.18				
33	VCM-20-330					.25	.15	.30	.18				
36	VCM-20-360					.25	.15	.30	.18				
39	VCM-20-390					.25	.15	.30	.18				
43	VCM-20-430	\$0.25	\$0.15	\$0.30	\$0.18	.30	.18	.35	.21	.35	.21		
47	VCM-20-470	.25	.15	.30	.18	.30	.18	.35	.21	.40	.24		
50	VCM-20-500	.25	.15	.30	.18	.30	.18	.35	.21	.40	.24		
51	VCM-20-510	.25	.15	.30	.18	.30	.18	.35	.21	.40	.24		
56	VCM-20-560	.25	.15	.30	.18	.30	.18	.35	.21	.40	.24		
62	VCM-20-620	.25	.15	.30	.18	.30	.18	.35	.21	.45	.27		
68	VCM-20-680	.25	.15	.30	.18	.30	.18	.35	.21	.45	.27		
75	VCM-20-750	.25	.15	.30	.18	.30	.18	.35	.21	.45	.27		
82	VCM-20-820	.25	.15	.30	.18	.35	.21	.40	.24	.50	.30		
91	VCM-20-910	.25	.15	.30	.18	.35	.21	.40	.24	.50	.30		
100	VCM-20-101	.30	.18	.35	.21	.35	.21	.40	.24	.50	.30		
110	VCM-20-111	.30	.18	.35	.21	.35	.21	.40	.24	.55	.33		
120	VCM-20-121	.30	.18	.35	.21	.35	.21	.40	.24	.55	.33		
130	VCM-20-131	.30	.18	.35	.21	.40	.24	.45	.27	.60	.36		
150	VCM-20-151	.30	.18	.35	.21	.40	.24	.45	.27	.65	.39		
160	VCM-20-161	.30	.18	.35	.21	.40	.24	.45	.27	.70	.42		
180	VCM-20-181	.30	.18	.35	.21	.45	.27	.50	.30	.70	.42		
200	VCM-20-201	.35	.21	.40	.24	.45	.27	.50	.30	.80	.48		
220	VCM-20-221	.35	.21	.40	.24	.50	.30	.55	.33	.85	.51		
240	VCM-20-241	.35	.21	.40	.24	.50	.30	.55	.33				
250	VCM-20-251	.35	.21	.40	.24	.50	.30	.60	.36				
270	VCM-20-271	.35	.21	.40	.24	.50	.30	.60	.36				
300	VCM-20-301	.35	.21	.40	.24	.50	.30	.60	.36				
330	VCM-20-331	.35	.21	.40	.24	.55	.33	.65	.39				
360	VCM-20-361	.35	.21	.40	.24	.55	.33	.65	.39				
390	VCM-20-391	.40	.24	.45	.27	.60	.36	.70	.42				
430	VCM-20-431	.40	.24	.45	.27	.65	.39	.75	.45				
470	VCM-20-471	.40	.24	.45	.27	.65	.39	.80	.48				
500	VCM-20-501	.45	.27	.50	.30	.70	.42	.85	.51				
510	VCM-20-511	.45	.27	.50	.30	.70	.42	.85	.51				
560	VCM-20-561	.45	.27	.50	.30	.75	.45	.90	.54				
620	VCM-20-621	.50	.30	.55	.33								
680	VCM-20-681	.50	.30	.60	.36								
750	VCM-20-751	.50	.30	.60	.36								
820	VCM-20-821	.55	.33	.65	.39								
910	VCM-20-911	.60	.36	.70	.42								
1000	VCM-20-102	.60	.36	.70	.42								
1100	VCM-20-112	.65	.39	.75	.45								
1200	VCM-20-122	.70	.42	.80	.48								
1300	VCM-20-132	.75	.45	.85	.51								

### VCM-35 & 42 HI-VOLTAGE MOLDED SILVERED MICA

CAP. MMF.	TYPE DESIGNATION	2000VDC T 1000VDC W		3000VDC T 1500VDC W		5000VDC T 2500VDC W		LIST	NET	LIST	NET
		±5%		±5%		±5%					
		LIST	NET	LIST	NET	LIST	NET				
240	VCM-35-241					\$0.25	\$0.15	\$0.30	\$0.18		
250	VCM-35-251					.25	.15	.30	.18		
270	VCM-35-271					.25	.15	.30	.18		
300	VCM-35-301										
330	VCM-35-331										
360	VCM-35-361										
390	VCM-35-391										
430	VCM-35-431										
470	VCM-35-471										
500	VCM-35-501										
510	VCM-35-511										
560	VCM-35-561										
620	VCM-35-621										
680	VCM-35-681										
750	VCM-35-751										
820	VCM-35-821										
910	VCM-35-911										
1000	VCM-35-102										
1100	VCM-35-112										
1200	VCM-35-122										
1300	VCM-35-132										
1500	VCM-35-152										
1600	VCM-35-162										
1800	VCM-35-182										
2000	VCM-35-202										
2200	VCM-35-222										
2400	VCM-35-242										
2700	VCM-35-272										
3000	VCM-35-302										
3300	VCM-35-332										
3600	VCM-35-362										
3900	VCM-35-392										
4300	VCM-35-432										
4700	VCM-35-472										
5000	VCM-35-502										
5100	VCM-35-512										
5600	VCM-35-562										
6200	VCM-42-622										
6800	VCM-42-682										
7500	VCM-42-752										
8200	VCM-42-822										
9100	VCM-42-912										
10000	VCM-42-103										
12000	VCM-42-123										
13000	VCM-42-133										
15000	VCM-42-153										
16000	VCM-42-163										

PLEASE SPECIFY  
WORKING VOLTAGE RATING  
WHEN ORDERING

#### NOTES:

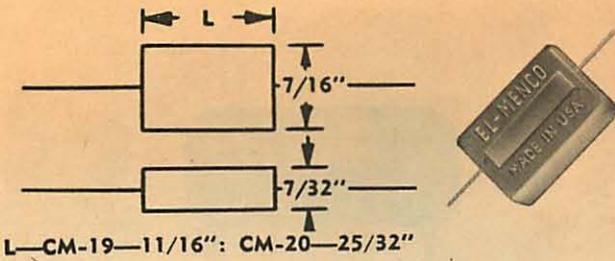
For ±10% tolerance, add 10% to ±20% price.  
Closer Tolerances to ±1% available.  
Pricing on request.

NET (For quantities of 25 or more, please contact your local Arco-Elmenco distributor)

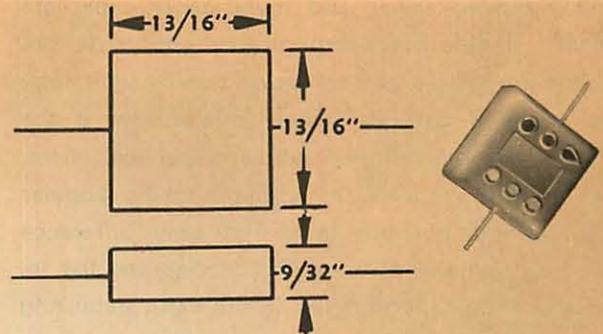
# ELMENCO

CAPACITORS

## Molded Foil Mica



**TYPE CM-19 & 20**  
500VDCW

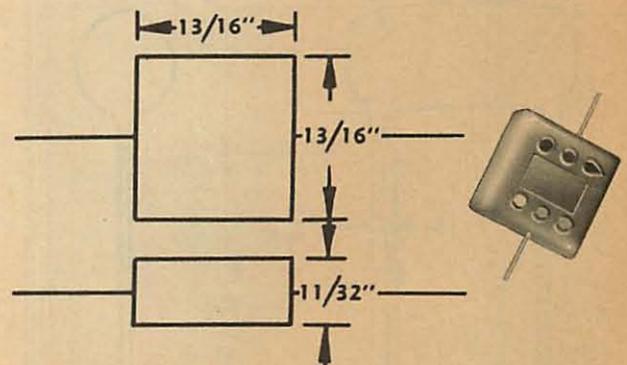


**TYPE CM-30**  
500VDCW

CAP. MMF.	TYPE DESIGNATION	Net Price (1-24) Tolerance		
		"M" ±20%	"K" ±10%	"J" ±5%
5	CM-20-B-050	\$0.18	\$0.20	\$0.23
10	CM-20-B-100	.18	.20	.23
12	CM-20-B-120	.18	.20	.23
15	CM-20-B-150	.18	.20	.23
18	CM-20-B-180	.18	.20	.23
20	CM-20-B-200	.18	.20	.23
22	CM-20-B-220	.18	.20	.23
24	CM-20-B-240	.18	.20	.23
27	CM-20-B-270	.18	.20	.23
30	CM-20-B-300	.18	.20	.23
33	CM-20-B-330	.12	.13	.15
36	CM-20-B-360	.12	.13	.15
39	CM-20-B-390	.12	.13	.15
43	CM-20-B-430	.12	.13	.15
47	CM-20-B-470	.12	.13	.15
50	CM-20-B-500	.12	.13	.15
51	CM-20-B-510	.12	.13	.15
56	CM-20-B-560	.12	.13	.15
62	CM-20-B-620	.12	.13	.15
68	CM-20-B-680	.12	.13	.15
75	CM-20-B-750	.12	.13	.15
82	CM-20-B-820	.12	.13	.15
91	CM-20-B-910	.12	.13	.15
100	CM-20-B-101	.12	.13	.15
110	CM-20-B-111	.12	.13	.15
120	CM-20-B-121	.12	.13	.15
130	CM-20-B-131	.15	.17	.19
150	CM-20-B-151	.15	.17	.19
160	CM-20-B-161	.15	.17	.19
180	CM-20-B-181	.15	.17	.19
200	CM-20-B-201	.15	.17	.19
220	CM-20-B-221	.15	.17	.19
240	CM-20-B-241	.18	.20	.23
250	CM-20-B-251	.18	.20	.23
270	CM-20-B-271	.18	.20	.23
300	CM-20-B-301	.18	.20	.23
330	CM-20-B-331	.18	.20	.23
360	CM-20-B-361	.18	.20	.23
390	CM-20-B-391	.18	.20	.23
430	CM-20-B-431	.18	.20	.23
470	CM-20-B-471	.18	.20	.23
500	CM-20-B-501	.18	.20	.23
510	CM-20-B-511	.18	.20	.23
560	CM-20-B-561	.21	.23	.26
620	CM-20-B-621	.21	.23	.26
680	CM-20-B-681	.21	.23	.26
750	CM-20-B-751	.21	.23	.26
820	CM-20-B-821	.24	.26	.30
910	CM-20-B-911	.27	.30	.34
1000	CM-20-B-102	.27	.30	.34
1100	CM-20-B-112	.30	.33	.38
1200	CM-20-B-122	.30	.33	.38
1300	CM-20-B-132	.30	.33	.38
1500	CM-20-B-152	.36	.40	.45
1600	CM-20-B-162	.36	.40	.45
1800	CM-20-B-182	.42	.46	.53
2000	CM-20-B-202	.45	.50	.56
2200	CM-20-B-222	.48	.53	.60
2400	CM-20-B-242	.51	.56	.64
2500	CM-20-B-252	.54	.59	.68
2700	CM-20-B-272	.57	.63	.71
3000	CM-20-B-302	.60	.66	.75
3300	CM-20-B-332	.63	.70	.79
3600*	CM-20-B-362	.60	.66	.75
3900*	CM-20-B-392	.63	.70	.79
4300*	CM-20-B-432	.66	.73	.83
4700*	CM-20-B-472	.72	.79	.90
5000*	CM-20-B-502	.75	.83	.94
5100*	CM-20-B-512	.75	.83	.94

Capacities from 5 to 2400 mmf. can be supplied in CM-19 cases. In values above 1000 mmf. the list prices for CM-19 are 10% higher than those listed above.

CAP. MMF.	TYPE DESIGNATION	Net Price (1-24) Tolerance		
		"M" ±20%	"K" ±10%	"J" ±5%
510	CM-30-B-511	\$0.18	\$0.22	\$0.23
560	CM-30-B-561	.18	.22	.23
620	CM-30-B-621	.18	.22	.23
680	CM-30-B-681	.18	.22	.23
750	CM-30-B-751	.18	.22	.23
820	CM-30-B-821	.18	.22	.23
910	CM-30-B-911	.18	.22	.23
1000	CM-30-B-102	.21	.23	.26
1100	CM-30-B-112	.21	.23	.26
1200	CM-30-B-122	.21	.23	.26
1300	CM-30-B-132	.21	.23	.26
1500	CM-30-B-152	.24	.26	.30
1600	CM-30-B-162	.24	.26	.30
1800	CM-30-B-182	.27	.30	.34
2000	CM-30-B-202	.27	.30	.34
2200	CM-30-B-222	.27	.30	.34
2400	CM-30-B-242	.30	.33	.38
2500	CM-30-B-252	.30	.33	.38
2700	CM-30-B-272	.30	.33	.38
3000	CM-30-B-302	.36	.40	.45
3300	CM-30-B-332	.36	.40	.45
3600	CM-30-B-362	.36	.40	.45
3900	CM-30-B-392	.39	.45	.51
4300	CM-30-B-432	.39	.45	.51
4700	CM-30-B-472	.39	.45	.51
5000	CM-30-B-502	.42	.49	.55
5100	CM-30-B-512	.42	.49	.55
5600	CM-30-B-562	.42	.49	.55
6200	CM-30-B-622	.54	.62	.70



**TYPE CM-35**  
500VDCW

6800*	CM-35-B-682	\$0.57	\$0.63	\$0.71
7500*	CM-35-B-752	.60	.66	.75
8200*	CM-35-B-822	.69	.76	.86
9100*	CM-35-B-912	.69	.76	.86
10000*	CM-35-B-103	.84	.92	1.05
12000*	CM-35-B-123	.96	1.06	1.20
15000*	CM-35-B-153	1.20	1.32	1.50
6800	VCM-35-B-682	.63	.70	.79
7500	VCM-35-B-752	.69	.76	.86
8200	VCM-35-B-822	.78	.86	.97
9100	VCM-35-B-912	.78	.86	.97
10000	VCM-35-B-103	.93	1.03	1.16

All capacities marked with \* are 300VW.

NET (For quantities of 25 or more, please contact your local Arco-Elmenco Distributor)

# ELMENCO

CAPACITORS

# DIPPED TUBULARS

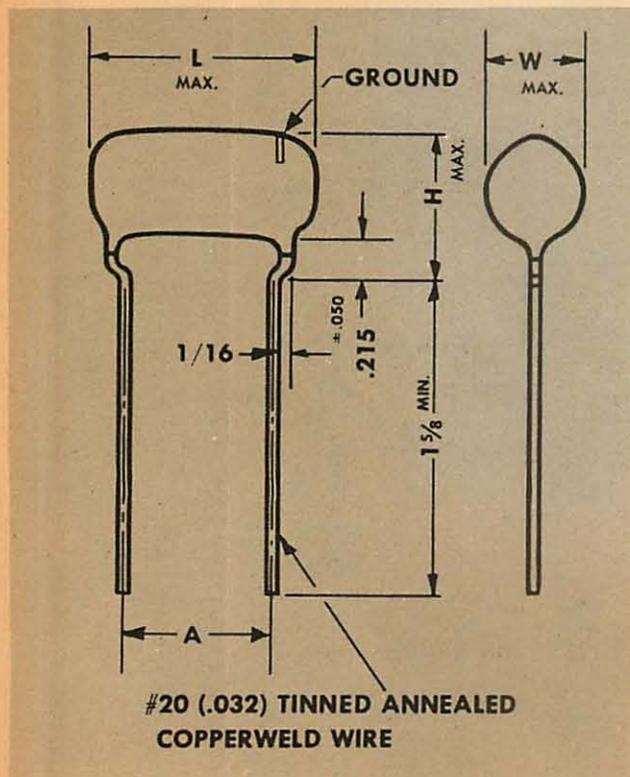
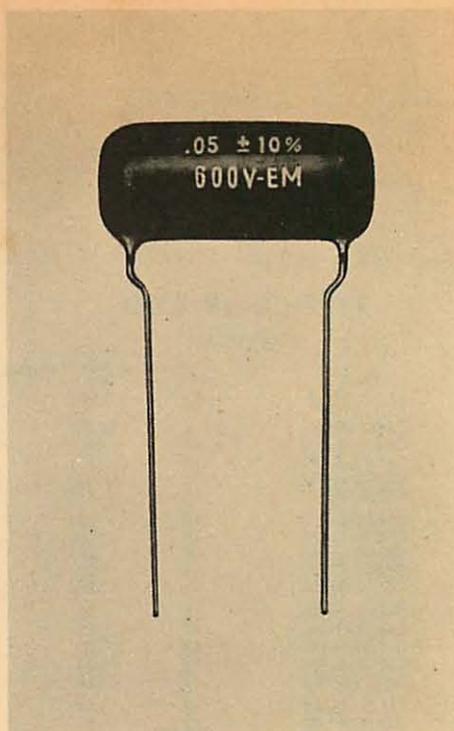
MYLAR<sup>®</sup> and MYLAR-PAPER

\* Reg. DuPont Trademark

ELMENCO dipped mylar and mylar-paper capacitors represent a double break-through in capacitor design. They combine missile and computer quality with commercial radio-TV cost. A recent development is the addition of precision dipped tubular capacitors in tolerances as low as  $\pm 1\%$  in addition to the popular  $\pm 10\%$  general purpose unit. The only difference between the general purpose "dp" series and the industrial precision capacitors lies in the extra stabilizing processes applied to close tolerance capacitors to insure retention of accuracy in the field under operating extremes.

Elmenco Type MPD capacitors are non-inductively wound and vacuum dipped to obtain solid impregnation and a rugged, moisture-proof coat. New fabricating techniques realize the full potential of the dielectric materials utilizing most of the low-cost procedures of the exclusive Elmenco dip-coat process. The result is a product of electrical excellence with high reliability in operation at  $125^{\circ}\text{C}$ . without derating. The specifications listed on this and following pages well-illustrate the inherent quality of these capacitors.

NOTE: The 100VDCW rated dp units are pure mylar<sup>®</sup> dielectric capacitors.



## SPECIFICATIONS

**TOLERANCE:**  $\pm 10\%$ ,  $\pm 5\%$ ,  $\pm 2\%$ ,  $\pm 1\%$ .

**VOLTAGE RATINGS:** Mylar-Paper — 200, 400, 600, 1600VDCW (no derating) Mylar — 100VDCW (derate 1% per  $^{\circ}\text{C}$ . over  $85^{\circ}\text{C}$ .)

**TEMPERATURE RANGE:**  $-55$  to  $125^{\circ}\text{C}$ .

INSULATION RESISTANCE:	Temperature	MYLAR-PAPER		MYLAR	
		Megohm-Microfarads Whichever is the lesser	Or Megohms	Megohm-Microfarads Whichever is the lesser	Or Megohms
	$25^{\circ}\text{C}$ .	10,000	50,000	20,000	100,000
	$85^{\circ}\text{C}$ .	200	1,000	300	1,500
	$105^{\circ}\text{C}$ .	50	250	80	400
	$125^{\circ}\text{C}$ .	15	75	20	100

**POWER FACTOR:** 1% maximum at 1 kc.

**CAPACITANCE CHANGE VS. TEMPERATURE:** See curves on following page.

CASE SIZE	1	2	3	4	5	6	7	8
DIM. "A" $\pm \frac{1}{32}$	$\frac{1}{4}$	$\frac{3}{16}$	$\frac{7}{32}$	$\frac{7}{32}$	$1\frac{1}{32}$	$1\frac{1}{32}$	$1\frac{3}{32}$	$1\frac{7}{32}$

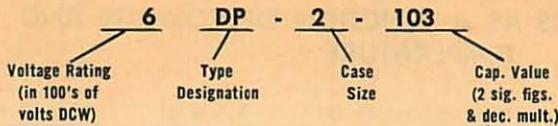
# ELMENCO

## CAPACITORS

# TYPE DP

## GENERAL PURPOSE

## Part Numbers:



The above example calls for a .01 mfd. capacitor with a 600VDCW voltage rating.

## 600VDCW

CAP. MFD.	PART NUMBER	L	W	H	LIST PRICE	NET PRICE (1-24)	CAP. MFD.	PART NUMBER	L	W	H	LIST PRICE	NET PRICE (1-24)
.001	6DP-1-102	3/32	3/64	5/8	\$0.25	\$0.15	.001	6DP-1-102	3/32	3/64	5/8	\$0.25	\$0.15
.0012	6DP-1-122	3/32	3/64	5/8	.25	.15	.0012	6DP-1-122	3/32	3/64	5/8	.25	.15
.0015	6DP-1-152	3/32	3/64	5/8	.25	.15	.0015	6DP-1-152	3/32	3/64	5/8	.25	.15
.002	6DP-1-202	3/32	3/64	5/8	.25	.15	.002	6DP-1-202	3/32	3/64	5/8	.25	.15
.0022	6DP-1-222	3/32	3/64	5/8	.25	.15	.0022	6DP-1-222	3/32	3/64	5/8	.25	.15
.0025	6DP-1-252	3/32	3/64	5/8	.25	.15	.0025	6DP-1-252	3/32	3/64	5/8	.25	.15
.0027	6DP-1-272	3/32	3/64	5/8	.25	.15	.0027	6DP-1-272	3/32	3/64	5/8	.25	.15
.003	6DP-1-302	3/32	3/64	5/8	.25	.15	.003	6DP-1-302	3/32	3/64	5/8	.25	.15
.0033	6DP-1-332	3/32	3/64	5/8	.25	.15	.0033	6DP-1-332	3/32	3/64	5/8	.25	.15
.0039	6DP-1-392	3/32	3/64	5/8	.25	.15	.0039	6DP-1-392	3/32	3/64	5/8	.25	.15
.004	6DP-1-402	3/32	3/64	4 1/8	.25	.15	.004	6DP-1-402	3/32	3/64	4 1/8	.25	.15
.0047	6DP-1-472	3/32	3/64	4 1/8	.25	.15	.0047	6DP-1-472	3/32	3/64	4 1/8	.25	.15
.005	6DP-1-502	3/32	3/64	4 1/8	.25	.15	.005	6DP-1-502	3/32	3/64	4 1/8	.25	.15
.0056	6DP-1-562	3/32	3/64	4 1/8	.25	.15	.0056	6DP-1-562	3/32	3/64	4 1/8	.25	.15
.006	6DP-1-602	3/32	3/8	5/8	.25	.15	.006	6DP-1-602	3/32	3/8	5/8	.25	.15
.0068	6DP-1-682	3/32	3/8	5/8	.30	.18	.0068	6DP-1-682	3/32	3/8	5/8	.30	.18
.0075	1DP-1-752	1 1/4	3/64	5/8	.30	.18	.0075	1DP-1-752	1 1/4	3/64	5/8	.30	.18
.01	1DP-1-103	1 1/4	3/64	5/8	.30	.18	.01	1DP-1-103	1 1/4	3/64	5/8	.30	.18
.015	1DP-1-153	2 1/2	1 1/2	1 1/2	.30	.18	.015	1DP-1-153	2 1/2	1 1/2	1 1/2	.30	.18
.02	1DP-1-203	2 1/2	1 1/2	1 1/2	.30	.18	.02	1DP-1-203	2 1/2	1 1/2	1 1/2	.30	.18
.022	1DP-1-223	2 1/2	1 1/2	1 1/2	.30	.18	.022	1DP-1-223	2 1/2	1 1/2	1 1/2	.30	.18
.025	1DP-1-253	2 1/2	1 1/2	1 1/2	.30	.18	.025	1DP-1-253	2 1/2	1 1/2	1 1/2	.30	.18
.03	1DP-1-303	2 1/2	3/8	5/8	.30	.18	.03	1DP-1-303	2 1/2	3/8	5/8	.30	.18
.033	1DP-1-333	2 1/2	3/8	5/8	.30	.18	.033	1DP-1-333	2 1/2	3/8	5/8	.30	.18
.04	1DP-1-403	2 1/2	3/8	5/8	.30	.18	.04	1DP-1-403	2 1/2	3/8	5/8	.30	.18
.047	1DP-2-473	7/8	1 1/2	1 1/2	.35	.21	.047	1DP-2-473	7/8	1 1/2	1 1/2	.35	.21
.05	1DP-2-503	7/8	1 1/2	1 1/2	.35	.21	.05	1DP-2-503	7/8	1 1/2	1 1/2	.35	.21
.056	1DP-2-563	7/8	1 1/2	1 1/2	.35	.21	.056	1DP-2-563	7/8	1 1/2	1 1/2	.35	.21
.068	1DP-2-683	7/8	1 1/2	5/8	.35	.21	.068	1DP-2-683	7/8	1 1/2	5/8	.35	.21
.075	1DP-2-753	7/8	1 1/2	5/8	.35	.21	.075	1DP-2-753	7/8	1 1/2	5/8	.35	.21
.1	1DP-2-104	2 1/2	3/64	1 1/2	.35	.21	.1	1DP-2-104	2 1/2	3/64	1 1/2	.35	.21
.15	1DP-3-154	1 1/4	3/64	1 1/2	.40	.24	.15	1DP-3-154	1 1/4	3/64	1 1/2	.40	.24
.2	1DP-3-204	1 1/2	1/2	2 1/2	.45	.27	.2	1DP-3-204	1 1/2	1/2	2 1/2	.45	.27
.22	1DP-3-224	1 1/2	1/2	2 1/2	.45	.27	.22	1DP-3-224	1 1/2	1/2	2 1/2	.45	.27
.25	1DP-3-254	1 1/2	1/2	3/4	.50	.30	.25	1DP-3-254	1 1/2	1/2	3/4	.50	.30
.33	1DP-4-334	1 3/8	3/64	1 1/2	.60	.36	.33	1DP-4-334	1 3/8	3/64	1 1/2	.60	.36
.47	1DP-4-474	1 3/8	2 1/2	2 1/2	.75	.45	.47	1DP-4-474	1 3/8	2 1/2	2 1/2	.75	.45
.5	1DP-4-504	1 3/8	2 1/2	2 1/2	.75	.45	.5	1DP-4-504	1 3/8	2 1/2	2 1/2	.75	.45
.68	1DP-5-684	1 1/2	1 1/2	1 1/2	.95	.57	.68	1DP-5-684	1 1/2	1 1/2	1 1/2	.95	.57
1.0	1DP-5-105	1 1/2	3/4	1	1.20	.72	1.0	1DP-5-105	1 1/2	3/4	1	1.20	.72
.2	6DP-5-204	1 1/4	5/64	1 1/2	.70	.42	.2	6DP-5-204	1 1/4	5/64	1 1/2	.70	.42
.22	6DP-5-224	1 1/4	5/64	1 1/2	.70	.42	.22	6DP-5-224	1 1/4	5/64	1 1/2	.70	.42
.25	6DP-5-254	1 1/4	5/64	1 1/2	.75	.45	.25	6DP-5-254	1 1/4	5/64	1 1/2	.75	.45
.33	6DP-6-334	1 7/8	7/8	1 1/2	1.05	.63	.33	6DP-6-334	1 7/8	7/8	1 1/2	1.05	.63
.47	6DP-6-474	2 3/8	2 1/2	1 1/2	1.50	.90	.47	6DP-6-474	2 3/8	2 1/2	1 1/2	1.50	.90
.5	6DP-6-504	2 3/8	1 1/2	1 1/2	1.50	.90	.5	6DP-6-504	2 3/8	1 1/2	1 1/2	1.50	.90

## 200VDCW

CAP. MFD.	PART NUMBER	L	W	H	LIST PRICE	NET PRICE (1-24)
.1	2DP-3-104	1 1/4	1/2	4 1/4	\$0.35	\$0.21
.15	2DP-3-154	1 1/4	3/64	2 1/2	.40	.24
.2	2DP-4-204	1 3/4	3/64	2 1/2	.45	.27
.22	2DP-4-224	1 3/4	3/64	2 1/2	.45	.27
.25	2DP-4-254	1 3/4	5/8	7/8	.50	.30
.33	2DP-5-334	1 3/8	5/8	1 1/2	.60	.36
.47	2DP-5-474	1 3/8	4 1/4	6 1/4	.75	.45
.5	2DP-5-504	1 3/8	4 1/4	6 1/4	.75	.45

## 400VDCW

CAP. MFD.	PART NUMBER	L	W	H	LIST PRICE	NET PRICE (1-24)
.01	4DP-1-103	2 1/2	1 1/2	4 1/4	\$0.25	\$0.15
.015	4DP-1-153	2 1/2	2 1/4	4 1/4	.25	.15
.02	4DP-2-203	7/8	3/64	1 1/2	.25	.15
.022	4DP-2-223	7/8	3/64	1 1/2	.30	.18
.025	4DP-2-253	7/8	1 1/2	2 1/2	.30	.18
.03	4DP-2-303	7/8	1 1/2	2 1/2	.30	.18
.033	4DP-2-333	7/8	1 1/2	2 1/2	.30	.18
.04	4DP-3-403	1 1/4	3/64	4 1/4	.30	.18
.047	4DP-3-473	1 1/4	3/64	4 1/4	.35	.21
.05	4DP-3-503	1 1/4	3/64	4 1/4	.35	.21
.056	4DP-3-563	1 1/4	3/64	4 1/4	.35	.21
.068	4DP-3-683	1 1/4	3/64	4 1/4	.40	.24
.075	4DP-3-753	1 1/4	3/64	4 1/4	.40	.24
.1	4DP-3-104	1 1/4	5/8	5 1/4	.40	.24
.15	4DP-4-154	1 3/4	4 1/4	5 1/4	.45	.27
.2	4DP-5-204	1 3/4	2 1/2	5 1/4	.55	.33
.22	4DP-5-224	1 3/4	2 1/2	5 1/4	.55	.33
.25	4DP-5-254	1 3/4	4 1/4	6 1/4	.60	.36
.27	4DP-5-274	1 3/4	4 1/4	6 1/4	.60	.36
.33	4DP-5-334	1 3/8	4 1/4	6 1/4	.90	.54
.47	4DP-6-474	1 3/8	1 1/2	1 1/2	1.10	.66
.5	4DP-6-504	1 7/8	2 1/2	1 1/2	1.20	.72

## 1600 VDCW

CAP. MFD.	PART NUMBER	L	W	H	LIST PRICE	NET PRICE (1-24)
.001	16DP-2-102	7/8	1 1/2	3/64	\$0.40	\$0.24
.0015	16DP-2-152	7/8	1 1/2	3/64	.40	.24
.0018	16DP-2-182	7/8	3/8	1 1/2	.40	.24
.002	16DP-2-202	7/8	3/8	1 1/2	.40	.24
.0022	16DP-2-222	7/8	3/8	1 1/2	.40	.24
.0025	16DP-2-252	7/8	1 1/2	5/8	.45	.27
.003	16DP-2-302	7/8	3/64	2 1/2	.45	.27
.0033	16DP-2-332	7/8	3/64	2 1/2	.45	.27
.004	16DP-2-402	7/8	1 1/2	2 1/2	.45	.27
.0047	16DP-2-472	7/8	1/2	2 1/2	.45	.27
.005	16DP-2-502	7/8	1 1/2	3/4	.45	.27
.006	16DP-3-602	1 1/4	3/64	2 1/2	.50	.30
.007	16DP-3-702	1 1/4	1 1/2	1 1/2	.50	.30
.0075	16DP-3-752	1 1/4	1/2	2 1/2	.50	.30
.008	16DP-3-802	1 1/4	1 1/2	3/4	.50	.30
.01	16DP-3-103	1 1/4	1 1/2	3/4	.50	.30
.015	16DP-4-153	1 1/2	3/64	2 1/2	.55	.33
.018	16DP-4-183	1 1/2	5/8	7/8	.60	.36
.02	16DP-4-203	1 1/2	2 1/2	7/8	.60	.36
.022	16DP-5-223	1 1/2	5/8	7/8	.70	.42
.025	16DP-5-253	1 1/2	2 1/2	7/8	.70	.42
.03	16DP-5-303	1 1/2	1 1/2	1 1/2	.70	.42
.033	16DP-5-333	1 1/2	2 1/2	1 1/2	.70	.42
.04	16DP-5-403	1 1/2	3/4	1	.75	.45
.047	16DP-5-473	1 1/2	1 1/2	1 1/2	.80	.48
.05	16DP-5-503	1 1/2	1 1/2	1 1/2	.80	.48

NET (For quantities of 25 or more, please contact your local Arco-Elmenco distributor)

**ELMENCO**  
CAPACITORS

**DIPPED TUBULARS**  
MYLAR\* and MYLAR-PAPER

\* Reg. DuPont Trademark

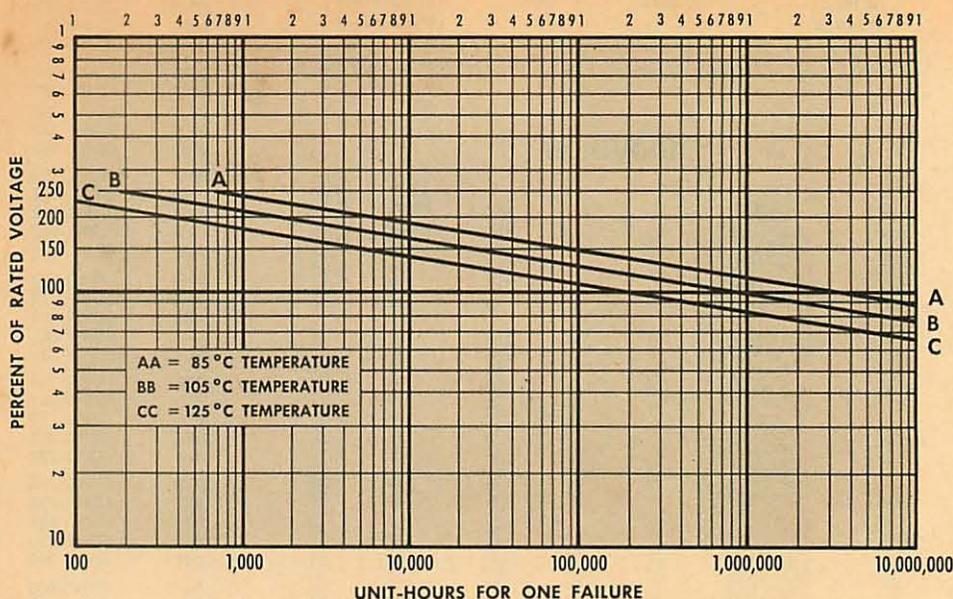
## RELIABILITY

Exhaustive evaluation of ELMENCO Dipped Mylar\*-Paper Capacitors has been conducted during the past four years and the product refined to its present high level of quality. The graph to the right is a plot of typical life expectancy for a theoretical 1 MFD. unit expressed in unit-hours operation to first failure as a function of voltage and temperature. It will be noted that those capacitors can be operated at 125°C. in most applications with excellent reliability.

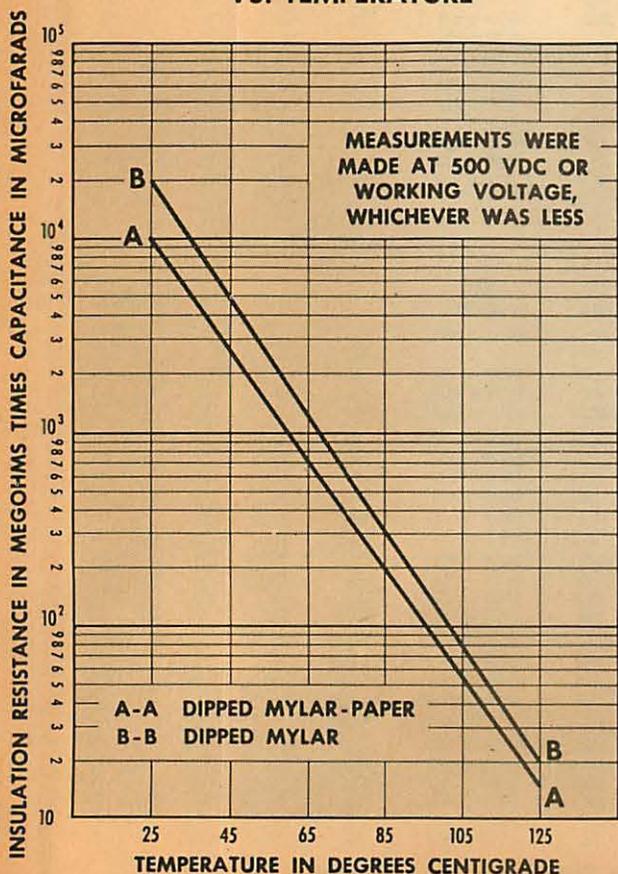
The number of unit-hours to first failure is inversely proportional to the capacitance value in mfd.

As an example, a 0.1 mfd. capacitor operated at full rated voltage and at 105°C. will have a life expectancy of 10 x 500,000 or 5,000,000 unit-hours to first failure. This quality level is continually verified by continuing accelerated life testing on all production.

## MINIMUM LIFE EXPECTANCY FOR 1 MFD MYLAR\*-PAPER DIPPED CAPACITORS AS A FUNCTION OF VOLTAGE AND TEMPERATURE

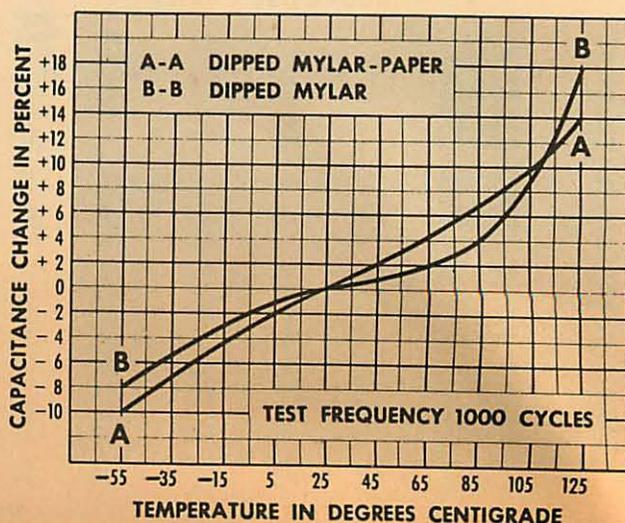


## MINIMUM INSULATION RESISTANCE VS. TEMPERATURE



These curves represent characteristics as they change with temperature. They have been charted only after thorough long-term testing of thousands of capacitors to assure validity.

## MAXIMUM CAPACITANCE CHANGE VS. TEMPERATURE



# ELMENCO

CAPACITORS

## Precision Dipped Tubular

(ELMENCO TYPES MD and MPD)

### 100VDCW

FOR VALUES LESS THAN .005, USE 600V UNITS

CAP. MFD.	PART NUMBER	Net Price (1-24) Tolerance				CAP. MFD.	PART NUMBER	Net Price (1-24) Tolerance			
		"K" ±10%	"J" ±5%	"G" ±2%	"F" ±1%			"K" ±10%	"J" ±5%	"G" ±2%	"F" ±1%
.005	1MD-1-502	\$0.18	\$0.27	\$1.10	\$1.38	.022	4MPD-2-223	\$0.18	\$0.27	\$1.22	\$1.53
.0051	1MD-1-512	.18	.27	1.10	1.38	.024	4MPD-2-243	.18	.27	1.27	1.59
.0056	1MD-1-562	.18	.27	1.10	1.38	.025	4MPD-2-253	.18	.27	1.27	1.59
.006	1MD-1-602	.18	.27	1.10	1.38	.027	4MPD-2-273	.18	.27	1.27	1.59
.0062	1MD-1-622	.18	.27	1.10	1.38	.03	4MPD-2-303	.18	.27	1.35	1.69
.0068	1MD-1-682	.18	.27	1.10	1.38	.033	4MPD-2-333	.18	.27	1.35	1.69
.0075	1MD-1-752	.18	.27	1.10	1.38	.036	4MPD-3-363	.18	.27	1.44	1.80
.0082	1MD-1-822	.18	.27	1.10	1.38	.039	4MPD-3-393	.18	.27	1.44	1.80
.0091	1MD-1-912	.18	.27	1.10	1.38	.04	4MPD-3-403	.18	.27	1.49	1.83
.01	1MD-1-103	.18	.27	1.10	1.38	.043	4MPD-3-433	.21	.31	1.49	1.83
.012	1MD-1-123	.18	.27	1.10	1.38	.047	4MPD-3-473	.21	.31	1.49	1.83
.015	1MD-1-153	.18	.27	1.10	1.38	.05	4MPD-3-503	.21	.31	1.51	1.88
.018	1MD-1-183	.18	.27	1.10	1.38	.051	4MPD-3-513	.21	.31	1.56	1.94
.02	1MD-1-203	.18	.27	1.10	1.38	.056	4MPD-3-563	.21	.31	1.56	1.94
.022	1MD-1-223	.18	.27	1.10	1.38	.062	4MPD-3-623	.24	.36	1.63	2.04
.024	1MD-1-243	.18	.27	1.13	1.41	.068	4MPD-3-683	.24	.36	1.63	2.04
.025	1MD-1-253	.18	.27	1.13	1.45	.075	4MPD-3-753	.24	.36	1.71	2.13
.027	1MD-1-273	.18	.27	1.15	1.45	.082	4MPD-3-823	.24	.36	1.71	2.13
.03	1MD-1-303	.18	.27	1.15	1.45	.091	4MPD-3-913	.24	.36	1.78	2.23
.033	1MD-1-333	.18	.27	1.21	1.51	.1	4MPD-3-104	.24	.36	1.78	2.23
.036	1MD-1-363	.18	.27	1.24	1.55	.12	4MPD-3-124	.27	.41	2.07	2.59
.039	1MD-1-393	.18	.27	1.24	1.55	.15	4MPD-4-154	.27	.41	2.16	2.70
.04	1MD-1-403	.18	.27	1.24	1.55	.18	4MPD-4-184	.33	.50	2.39	2.95
.043	1MD-2-433	.21	.32	1.30	1.62	.2	4MPD-5-204	.33	.50	2.50	3.12
.047	1MD-2-473	.21	.32	1.30	1.62	.22	4MPD-5-224	.33	.50	2.62	3.27
.05	1MD-2-503	.21	.32	1.37	1.71	.25	4MPD-5-254	.36	.54	2.69	3.36
.051	1MD-2-513	.21	.32	1.37	1.71	.27	4MPD-5-274	.36	.54	2.81	3.51
.056	1MD-2-563	.21	.32	1.37	1.71	.3	4MPD-5-304	.45	.68	2.98	3.72
.062	1MD-2-623	.21	.32	1.40	1.75	.33	4MPD-5-334	.54	.79	3.15	3.93
.068	1MD-2-683	.21	.32	1.43	1.79	.39	4MPD-5-394	.60	.85	3.41	4.26
.075	1MD-2-753	.21	.32	1.48	1.85	.47	4MPD-5-474	.66	.94	3.75	4.68
.082	1MD-2-823	.21	.32	1.52	1.90	.5	4MPD-6-504	.72	1.05	4.20	5.25
.091	1MD-2-913	.21	.32	1.55	1.93	.51	4MPD-6-514	.75	1.09	4.37	5.45
.1	1MD-2-104	.21	.32	1.57	1.96						
.12	1MD-3-124	.24	.36	1.72	2.15						
.15	1MD-3-154	.24	.36	1.85	2.31						
.18	1MD-3-184	.27	.41	2.02	2.53						
.2	1MD-3-204	.27	.41	2.12	2.64						
.22	1MD-3-224	.27	.41	2.20	2.75						
.25	1MD-3-254	.30	.45	2.26	2.84						
.27	1MD-3-274	.36	.54	2.30	2.88						
.3	1MD-3-304	.36	.54	2.34	2.93						
.33	1MD-4-334	.36	.54	2.39	2.98						
.39	1MD-4-394	.39	.59	2.55	3.19						
.47	1MD-4-474	.45	.68	2.78	3.47						
.5	1MD-4-504	.45	.68	2.80	3.63						
.56	1MD-4-564	.51	.77	3.13	3.91						
.62	1MD-5-624	.54	.81	3.35	4.19						
.68	1MD-5-684	.57	.86	3.55	4.44						
.75	1MD-5-754	.63	.95	3.80	4.75						
.82	1MD-5-824	.66	.99	4.00	4.97						
1.0	1MD-5-105	.72	1.08	4.38	5.45						

### 600VDCW

Net Price (1-24) Tolerance

CAP. MFD.	PART NUMBER	Net Price (1-24) Tolerance				CAP. MFD.	PART NUMBER	Net Price (1-24) Tolerance			
		"K" ±10%	"J" ±5%	"G" ±2%	"F" ±1%			"K" ±10%	"J" ±5%	"G" ±2%	"F" ±1%
.0025	6MPD-1-252	\$0.15	\$0.23	\$1.06	\$1.32	.0027	6MPD-1-272	.15	.23	1.06	1.32
.003	6MPD-1-302	.15	.23	1.06	1.32	.0033	6MPD-1-332	.15	.23	1.06	1.32
.0036	6MPD-1-362	.15	.23	1.06	1.32	.0039	6MPD-1-392	.15	.23	1.06	1.32
.004	6MPD-1-402	.15	.23	1.06	1.32	.0043	6MPD-1-432	.15	.23	1.06	1.32
.0047	6MPD-1-472	.15	.23	1.06	1.32	.0051	6MPD-1-512	.15	.23	1.06	1.32
.005	6MPD-1-502	.15	.23	1.06	1.32	.0056	6MPD-1-562	.15	.23	1.06	1.32
.0051	6MPD-1-512	.15	.23	1.06	1.32	.0062	6MPD-1-622	.15	.23	1.09	1.36
.0056	6MPD-1-562	.15	.23	1.06	1.32	.0068	6MPD-1-682	.18	.27	1.09	1.36
.0062	6MPD-1-622	.15	.23	1.06	1.32	.0075	6MPD-2-752	.18	.27	1.10	1.38
.0068	6MPD-1-682	.18	.27	1.10	1.38	.0082	6MPD-2-822	.18	.27	1.10	1.38
.0075	6MPD-2-752	.18	.27	1.10	1.38	.0091	6MPD-2-912	.18	.27	1.13	1.41
.0082	6MPD-2-822	.18	.27	1.10	1.38	.01	6MPD-2-103	.18	.27	1.13	1.41
.0091	6MPD-2-912	.18	.27	1.13	1.41	.012	6MPD-2-123	.18	.27	1.15	1.46
.01	6MPD-2-103	.18	.27	1.13	1.41	.015	6MPD-2-153	.18	.27	1.15	1.46
.012	6MPD-2-123	.18	.27	1.15	1.46	.018	6MPD-2-183	.18	.27	1.21	1.51
.015	6MPD-2-153	.18	.27	1.15	1.46	.02	6MPD-2-203	.18	.27	1.26	1.57
.018	6MPD-2-183	.18	.27	1.21	1.51	.022	6MPD-2-223	.18	.27	1.30	1.63
.02	6MPD-2-203	.18	.27	1.26	1.57	.024	6MPD-2-243	.21	.31	1.36	1.71
.022	6MPD-2-223	.18	.27	1.30	1.63	.025	6MPD-2-253	.21	.31	1.36	1.71
.024	6MPD-2-243	.21	.31	1.36	1.71	.027	6MPD-3-273	.21	.31	1.36	1.71
.025	6MPD-2-253	.21	.31	1.36	1.71	.03	6MPD-3-303	.21	.31	1.45	1.81
.027	6MPD-3-273	.21	.31	1.36	1.71	.033	6MPD-3-333	.21	.31	1.45	1.81
.03	6MPD-3-303	.21	.31	1.45	1.81	.036	6MPD-3-363	.21	.31	1.49	1.87
.033	6MPD-3-333	.21	.31	1.45	1.81	.039	6MPD-3-393	.21	.31	1.49	1.87
.036	6MPD-3-363	.21	.31	1.49	1.87	.043	6MPD-3-433	.24	.36	1.51	1.89
.039	6MPD-3-393	.21	.31	1.49	1.87	.047	6MPD-3-473	.24	.36	1.51	1.89
.043	6MPD-3-433	.24	.36	1.51	1.89	.05	6MPD-3-503	.24	.36	1.54	1.92
.047	6MPD-3-473	.24	.36	1.51	1.89	.051	6MPD-3-513	.24	.36	1.54	1.92
.05	6MPD-3-503	.24	.36	1.54	1.92	.056	6MPD-3-563	.24	.36	1.59	1.98
.051	6MPD-3-513	.24	.36	1.54	1.92	.062	6MPD-3-623	.27	.41	1.72	2.14
.056	6MPD-3-563	.24	.36	1.59	1.98	.068	6MPD-4-683	.27	.41	1.84	2.30
.062	6MPD-3-623	.27	.41	1.72	2.14	.075	6MPD-4-753	.27	.41	1.88	2.34
.068	6MPD-4-683	.27	.41	1.84	2.30	.082	6MPD-4-823	.27	.41	1.92	2.37
.075	6MPD-4-753	.27	.41	1.88	2.34	.091	6MPD-4-913	.27	.41	1.95	2.43
.082	6MPD-4-823	.27	.41	1.92	2.37	.1	6MPD-4-104	.27	.41	1.99	2.49
.091	6MPD-4-913	.27	.41	1.95	2.43	.12	6MPD-5-124	.36	.54	2.21	2.76
.1	6MPD-4-104	.27	.41	1.99	2.49	.15	6MPD-5-154	.36	.54	2.48	3.09
.12	6MPD-5-124	.36	.54	2.21	2.76	.18	6MPD-5-184	.42	.66	2.71	3.39
.15	6MPD-5-154	.36	.54	2.48	3.09	.2	6MPD-5-204	.42	.66	2.86	3.58
.18	6MPD-5-184	.42	.66	2.71	3.39	.22	6MPD-5-224	.42	.66	2.98	3.72
.2	6MPD-5-204	.42	.66	2.86	3.58	.25	6MPD-5-254	.45	.68	3.05	3.81
.22	6MPD-5-224	.42	.66	2.98	3.72	.27	6MPD-5-274	.51	.77	3.34	4.17
.25	6MPD-5-254	.45	.68	3.05	3.81	.3	6MPD-6-304	.57	.86	3.75	4.68
.27	6MPD-5-274	.51	.77	3.34	4.17	.33	6MPD-6-334	.63	.95	4.18	5.20
.3	6MPD-6-304	.57	.86	3.75	4.68	.39	6MPD-7-394	.78	1.17	4.87	6.10
.33	6MPD-6-334	.63	.95	4.18	5.20	.47	6MPD-8-474	.90	1.35	5.80	7.25
.39	6MPD-7-394	.78	1.17	4.87	6.10	.5	6MPD-8-504	.90	1.35	5.90	7.40
.47	6MPD-8-474	.90	1.35	5.80	7.25	.51	6MPD-8-514	.90	1.35	6.00	7.50
.5	6MPD-8-504	.90	1.35	5.90	7.40						
.51	6MPD-8-514	.90	1.35	6.00	7.50						

Case dimensions are the same as for Type dp capacitors listed on page 21.

If the capacitance value is not shown, use the closest value listed under Type dp in the same case size designation.

NET (For quantities of 25 or more, please contact your local Arco-Elmenco Distributor)

# ELMENCO

CAPACITORS

## Variable Compression Mica

### TRIMMERS

Elmenco Trimming Condensers are treated for resistance to humidity and for permanence of capacity setting.

The base is made of the lowest dielectric loss ceramic material available and the mica is clear India Ruby.

The soldering lugs may be bent in any position without affecting capacity setting due to the rigid construction of adjusting plates.

Trimmers shown here are standard sizes and capacities.

Voltage 350 VDCT — 175 VDCW.



TYPE 42 MIDGET TRIMMER  $\frac{3}{8}$ " x  $\frac{3}{4}$ "

#### TYPE 42 — MIDGET TRIMMER

TYPE 42 PART NUMBER	NUMBER OF PLATES	GUARANTEED RANGE		LIST PRICE	NET PRICE (1-24)
		At Tight Cap. Will Be More Than MMF.	At 3 Turns Open Cap. Will Be Less Than MMF.		
420	1 1/8 Pl.	12	1	\$0.50	\$0.30
421	1 3/4 Pl.	25	2	.50	.30
422	2 Pl.	40	4	.50	.30
423	3 Pl.	100	7	.55	.33
424	4 Pl.	150	14	.65	.39
425	5 Pl.	200	24	.70	.42
426	6 Pl.	250	37	.80	.48
427	7 Pl.	300	55	.90	.54
428	8 Pl.	350	70	.95	.57
429	9 Pl.	400	90	1.05	.63
4210	10 Pl.	450	110	1.25	.75
4211	11 Pl.	500	130	1.40	.84
4212	12 Pl.	550	150	1.50	.90
4213	13 Pl.	600	170	1.65	.99
4214	14 Pl.	650	190	1.75	1.05
4215	15 Pl.	700	210	1.90	1.14

#### TYPE PC — PRINTED CIRCUIT TRIMMERS



The Elmenco Trimmer capacitors, Types 40, 42, and 46, have been adapted for printed circuit techniques through alteration of terminals and mounting configuration. The holes in the terminal lugs are removed since necessity for hook-up is eliminated. The resulting solid terminals have greatly increased spring action, allowing the trimmer to be "snapped in" the printed circuit board and firmly held until soldered. The mounting lug portion of the trimmer has also been modified to facilitate positioning and support of the unit. Drawings of the trimmers and mounting layout are available upon request at no charge.

This printed circuit style is identified by the prefix letters "PC" preceding the regular part number. All listed values are available in the PC style.

For list price add \$0.05, for net price add \$0.03, to the respective prices of the standard trimmer.

NET (For quantities of 25 or more, please contact your local Arco-Elmenco Distributor)



TYPE 46 STANDARD TRIMMER  $\frac{3}{4}$ " x  $\frac{5}{8}$ "

#### TYPE 46 — STANDARD TRIMMER

TYPE 46W PART NUMBER	NUMBER OF PLATES	GUARANTEED RANGE		LIST PRICE	NET PRICE (1-24)
		At Tight Cap. Will Be More Than MMF.	At 3 Turns Open Cap. Will Be Less Than MMF.		
460	1 1/4 Pl.	15	1.5	\$0.50	\$0.30
461	1 3/4 Pl.	30	2.7	.50	.30
462	2 Pl.	80	5	.50	.30
463	3 Pl.	180	9	.55	.33
464	4 Pl.	280	25	.65	.39
465	5 Pl.	380	50	.70	.42
466	6 Pl.	480	80	.80	.48
467	7 Pl.	580	110	.90	.54
468	8 Pl.	680	140	.95	.57
469	9 Pl.	780	170	1.05	.63
4610	10 Pl.	900	190	1.20	.72
4611	11 Pl.	1000	210	1.30	.78
4612	12 Pl.	1100	240	1.40	.84
4613	13 Pl.	1200	300	1.55	.93
4614	14 Pl.	1300	340	1.70	1.02
4615	15 Pl.	1400	390	1.85	1.11



TYPE 40 MINIATURE TRIMMER  $\frac{3}{8}$ " x  $\frac{3}{16}$ "

#### TYPE 40 — MINIATURE TRIMMER

TYPE 40 PART NUMBER	NUMBER OF PLATES	GUARANTEED RANGE		LIST PRICE	NET PRICE (1-24)
		At Tight Cap. Will Be More Than MMF.	At 3 Turns Open Cap. Will Be Less Than MMF.		
400	1 1/8 Pl.	7	0.9	\$0.50	\$0.30
402	2 Pl.	20	1.5	.50	.30
403	3 Pl.	35	3	.60	.36
404	4 Pl.	60	8	.65	.39

# ELMENCO

CAPACITORS

## Variable Compression Mica

### SINGLE AND DUAL PADDERS

ELMENCO Padding Condensers have been acclaimed by engineers as the finest development in adjustable mica condensers.

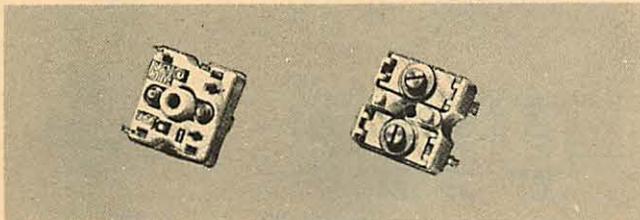
The construction is such as to completely enclose and protect the delicate edges of the mica films, made of the finest quality clear India ruby mica.

The phosphor bronze adjusting plates assure permanent resilience and freedom from mechanical fatigue. All parts are heavily plated to resist corrosion.

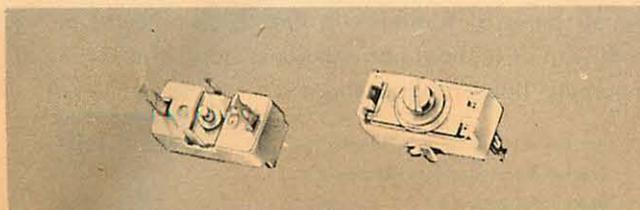
#### TYPE 30 500 Volts DC Flash-Test — 250 WVDC

PART NUMBER	NUMBER OF PLATES	GUARANTEED RANGE		LIST PRICE	NET PRICE (1-24)
		At 1 1/4 Inch Pounds Cap. Will Be More Than MMF.	At 3 Turns Open Cap. Will Be Less Than MMF.		
302	2 Pl.	130	15	\$1.05	\$0.63
303	3 Pl.	340	65	1.10	.66
304	4 Pl.	550	100	1.20	.72
305	5 Pl.	760	190	1.30	.78
306	6 Pl.	970	275	1.40	.84
307	7 Pl.	1180	350	1.50	.90
308	8 Pl.	1390	450	1.60	.96
309	9 Pl.	1600	550	1.70	1.02
310	10 Pl.	1890	650	1.80	1.08
311	11 Pl.	2110	780	1.95	1.17
312	12 Pl.	2330	880	2.05	1.23
313	13 Pl.	2605	1150	2.15	1.29
314	14 Pl.	2830	1300	2.30	1.38
315	15 Pl.	3055	1400	2.45	1.47

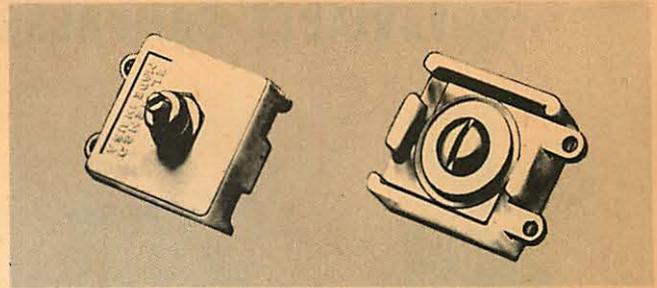
Screw is insulated from top plate by mica washer. Above maximum capacity values are based on using 1 1/2 to 1 3/4 Mil Mica films.



TYPE 50 DUAL PADDER — 175 VDCW  
(will fit any size shield having dimensions exceeding 1 1/8" x 1 1/8")



TYPE 58 PADDER 1" x 1 1/32" — 175 VDCW



TYPE 30 AND TYPE 30-M PADDER 7/8" x 1 1/16"

#### TYPE 30-M 1000 Volts DC Flash-Test — 500 WVDC

PART NUMBER	NUMBER OF PLATES	GUARANTEED RANGE		LIST PRICE	NET PRICE (1-24)
		At 1 1/4 Inch Pounds Cap. Will Be More Than MMF.	At 3 Turns Open Cap. Will Be Less Than MMF.		
302-M	2 Pl.	120	15	\$1.05	\$0.63
303-M	3 Pl.	320	65	1.15	.69
304-M	4 Pl.	500	100	1.25	.75
305-M	5 Pl.	690	180	1.35	.81
306-M	6 Pl.	880	265	1.50	.90
307-M	7 Pl.	1070	340	1.60	.96
308-M	8 Pl.	1260	425	1.70	1.02
309-M	9 Pl.	1415	525	1.85	1.11
310-M	10 Pl.	1600	615	1.95	1.17
311-M	11 Pl.	1785	730	2.10	1.26
312-M	12 Pl.	1970	800	2.25	1.35
313-M	13 Pl.	2155	1000	2.35	1.41
314-M	14 Pl.	2340	1100	2.50	1.50
315-M	15 Pl.	2525	1200	2.70	1.62

Screw is insulated from top plate by mica washer. Above maximum capacity values are based on using 2 to 2 1/4 Mil Mica.

#### TYPE 50

PART NUMBER	NUMBER OF PLATES	GUARANTEED RANGE		LIST PRICE	NET PRICE (1-24)
		At Tight Cap. Will Be More Than MMF.	At 2 Turns Open Cap. Will Be Less Than MMF.		
502	2 Pl.	80	7.5	\$1.00	\$0.60
503	3 Pl.	160	19	1.15	.69
504	4 Pl.	240	50	1.30	.78

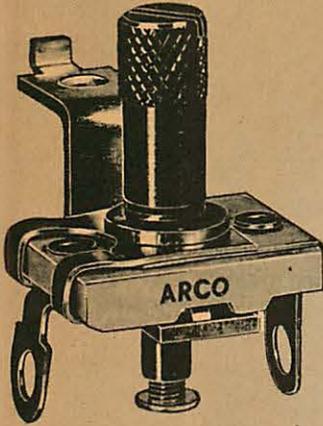
← TYPE 50 Dual Padders provide two variable trimmers mounted on a single base. This unit is designed as a tuning component for I.F. transformers; and as such, may be snap-in mounted along with the transformer coil in any size shield having dimensions exceeding 1 1/8" x 1 1/8".

#### TYPE 58

PART NUMBER	NUMBER OF PLATES	GUARANTEED RANGE		LIST PRICE	NET PRICE (1-24)
		At Tight Cap. Will Be More Than MMF.	At 2 Turns Open Cap. Will Be Less Than MMF.		
582	2 Pl.	80	7.5	\$0.65	\$0.39
583	3 Pl.	160	19	.70	.42
584	4 Pl.	240	50	.75	.45

← TYPE 58 Padder is a single variable trimmer section provided with a two-pronged staple mounting for attachment to bracket or chassis. Base is made of lowest loss steatite and the mica is India Ruby.

NET (For quantities of 25 or more, please contact your local Arco-Elmenco Distributor)

**ELMENCO**  
CAPACITORS*Variable Compression  
Mica Capacitors***VARIABLE COMPRESSION MICA CAPACITORS****TYPE S46**

For List Price add \$0.45, For Net Price add \$0.27 to the respective prices of trimmer alone.

A complete Type 46 trimmer assembly with mounting bracket and adjusting shaft for ease of tuning. Can be supplied as pictured from stock or with construction variations to order.

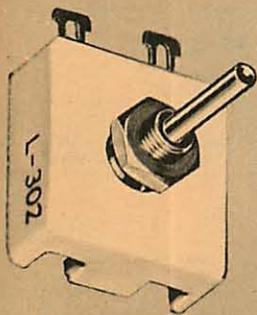
To specify precede trimmer part number with the letter "S".

For example:

Type 460 trimmer will be ordered as S-460.

The two new assemblies shown at left have been developed due to increasing demands for miniaturized tuning devices. However, certain precautions must be taken in design so that these variable mica capacitors are not used in circuits for which they are not adapted. These assemblies are highly stable for components of their design, but they do not match the stability of the air dielectric tuners. Short term drift of the mica trimmers and padders after tuning is negligible. Long term drift at one setting due to changes in atmospheric conditions and physical motion should be well within  $\pm 2\%$ .

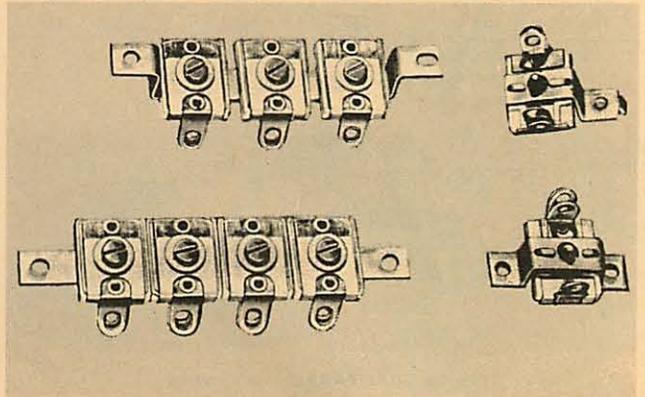
It should also be remembered that variable compression type mica capacitors do not have linear variation with adjustment. Rate of change of capacity decreases per turn as the screw is withdrawn. For example, a 306 padder will reduce to half the nominal maximum value within one opening turn. Those with a greater number of plates require further screw disengagement for a similar percentage reduction in capacity value. On the other hand, a 302 padder will reach one-half the nominal maximum in less than one-half turn open. Type 46 trimmers operate in much the same way. Detailed information on specific sizes is available upon request.

**TYPE L30**

For List Price add \$0.10, For Net Price add \$0.06 to the respective prices of padder alone.

The Type 30 or Type 30M padder can now be obtained with a special adjusting screw which has been lengthened to accommodate a tuning knob. To obtain a padder with the special screw, precede the regular padder part number with the letter "L". For example, a 302 padder with the special screw would be specified as "L-302".

NOTE: Knobs may also be obtained if desired at a cost of 30¢ each list, 18¢ each net.



Mounting brackets as illustrated above can be supplied for all types of trimmers in flat "Z" (single mounting hole with or without non-rotational stop), and "U" (dual mounting hole) configurations.

	List Price	Net Price (1-24)
Bracket for mounting 1 Trimmer .....	\$0.15	\$0.09
Bracket for mounting 2 Trimmers.....	.18	.11
Bracket for mounting 3 Trimmers.....	.21	.13
Bracket for mounting 4 Trimmers.....	.24	.14
Bracket for mounting 5 Trimmers.....	.27	.16
Bracket for mounting 6 Trimmers.....	.30	.18