

The new rugged Series 945 metallized capacitors offer high frequency operation, high current and low ESR in a miniature package. They are able to handle high surge currents without degrading thus making them an excellent electrolytic capacitor replacement. Series 945 are ideal for audio systems. This capacitor series was designed for AC and pulsing applications. The units are rated for 67 VRMS and 100 and 270 VRMS (to 100 KHz), but may also be used for all DC applications up to 200 VDC and 400 VDC respectively.

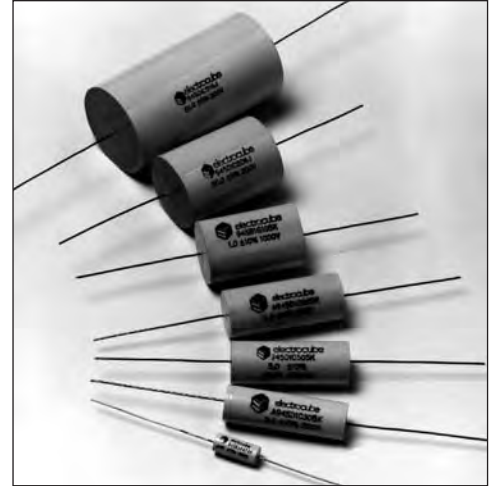
Units are available in axial-lead wrap and fill, in oval and round shapes, and in voltages of 100, 200, 400 and 600 VDC.

All capacitors feature extended foil construction and standard tin-coated copper leads.

Protective clear wrap is offered on all wrap and fill units.

The potting material and endfills of Electrocube's capacitors meet or exceed the flammability requirements of UL94V0.

Dimensional variations for all MFD values are available with the same volume to meet your design requirements.



## SPECIFICATIONS

**Temperature:** -55°C to +85°C at rated voltage; to +105°C with 50% voltage derating.

**Dielectric Voltage Test:** Will withstand the application of 150 VDC, 300 VDC, 600 VDC and 900 VDC on 67 VAC, 135 VAC, 270 VAC and 440 VAC, respectively at 25° C for a period not to exceed 1 minute; current limited to 5 mA.

**DC Life Tests:** Will withstand the application of 138 VDC, 280 VDC, 560 VDC and 840 VDC, respectively, on the 67 VRMS, 135 VRMS, 270 VRMS and 440 VRMS parts at 105°C for 250 hrs., with not more than 1 failure in 12 permitted, current limited to 5 mA.

For life test details, contact the factory.

**Dissipation Factor:** Shall not exceed 0.1% at 25°C for values to 1 mfd; 0.2% for values 1 mfd and over.

**Dielectric Absorption:** Shall not exceed 0.1% at 25°C per MIL-C-19978.

**Acceptance Criteria:** Measurement frequency for capacitance and dissipation factor shall be 1000 Hz for values up to 1 mfd and 120 Hz for values of 1 mfd and over.

**NOTES:**

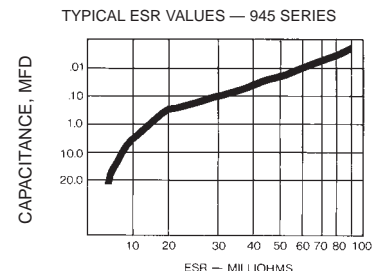
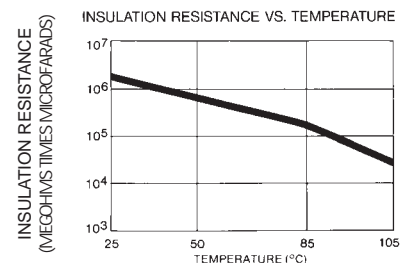
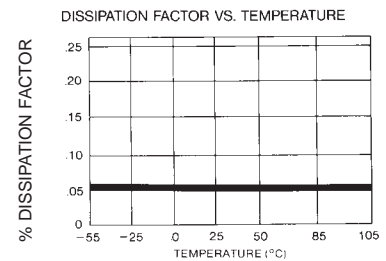
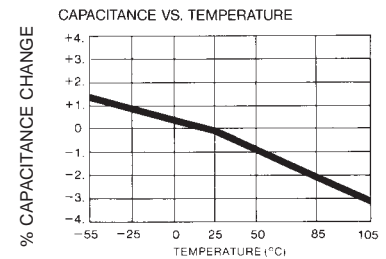
For information regarding insulating sleeves, mountings, special terminals, non-standard leads, circuit connections and other hardware, please consult factory.

For styles and ratings not shown, or for unusual requirements necessitated by special circuit applications (including higher IR or lower DF), consult the factory direct.

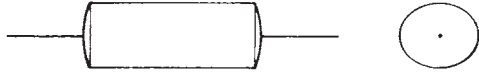

945 SERIES				
RMS CURRENT (MAX) 20 Hz to 100 KHz*				
CAP. MFD.	CURRENT (AMPS)			
	100V	200V	400V	600V
.001	.085	.085	.085	.085
.0015	.085	.085	.085	.090
.0022	.098	.098	.098	.125
.0033	.138	.138	.138	.140
.0047	.192	.192	.192	.192
.0068	.225	.225	.225	.225
.0082	.233	.233	.233	.233
.010	.275	.275	.275	.275
.015	.275	.275	.300	.350
.022	.390	.390	.390	.400
.033	.400	.420	.560	.560
.047	.400	.560	.780	.790
.068	.560	.850	1.19	1.25
.082	.670	.950	1.19	1.25
.10	.850	1.25	1.25	1.30
.15	1.25	1.35	1.39	1.45
.22	1.65	1.65	1.65	1.75
.33	1.65	1.65	1.65	1.75
.47	1.65	1.95	1.95	2.00
.68	2.75	2.75	2.75	3.00
.82	3.05	3.10	3.35	3.50
1.0	3.35	3.45	3.55	3.75
2.0	4.50	4.50	5.25	5.35
5.0	6.67	8.40	11.20	15.50

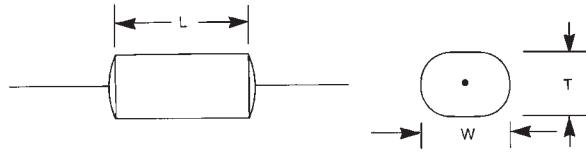
NOTES: Derate Amp 30% @ 50°C.  
Current ratings based on component ambient temperature of 25° C.

## TYPICAL DIELECTRIC CHARACTERISTIC CURVES



**All Electrocube film capacitors have endfills and tape that meet or exceed the flammability requirements of UL94V0.**

SERIES NO.	DESCRIPTION
<p style="text-align: center;"><b>945B</b></p>	<p><b>FLAME RETARDANT WRAP AND FILL, OVAL</b></p> 
<p style="text-align: center;"><b>945D</b></p>	<p><b>FLAME RETARDANT WRAP AND FILL, ROUND</b></p> 



**WRAP AND FILL  
OVAL CONFIGURATION**

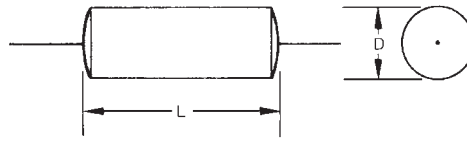
For max. T, W and L dimensions, allow +.050".

LEAD LENGTH: 2.0" ± .50"

100 VOLT DC/67 VAC						200 VOLT DC/135 VAC				
MFD	PART NO.	DIMENSIONS			LEAD SIZE (AWG)	PART NO.	DIMENSIONS			LEAD SIZE (AWG)
		T	W	L			T	W	L	
.0010	945B1B102*	.09	.18	.40	26	945B1C102*	.09	.18	.40	26
.0015	945B1B152*	.09	.18	.40	26	945B1C152*	.09	.18	.40	26
.0022	945B1B222*	.09	.18	.40	26	945B1C222*	.09	.18	.40	26
.0033	945B1B332*	.09	.18	.40	26	945B1C332*	.09	.18	.40	26
.0047	945B1B472*	.09	.18	.40	26	945B1C472*	.09	.18	.40	26
.0068	945B1B682*	.09	.18	.40	26	945B1C682*	.09	.18	.40	26
.0082	945B1B822*	.09	.18	.40	26	945B1C822*	.09	.18	.40	26
.010	945B1B103*	.09	.18	.40	26	945B1C103*	.09	.18	.40	26
.015	945B1B153*	.09	.18	.40	26	945B1C153*	.09	.18	.53	26
.022	945B1B223*	.09	.18	.40	26	945B1C223*	.09	.18	.53	26
.033	945B1B333*	.09	.18	.53	26	945B1C333*	.12	.21	.53	26
.047	945B1B473*	.09	.18	.53	26	945B1C473*	.15	.24	.53	24
.068	945B1B683*	.10	.20	.53	26	945B1C683*	.18	.28	.53	24
.082	945B1B823*	.12	.21	.53	26	945B1C823*	.20	.30	.53	24
.10	945B1B104*	.14	.23	.53	24	945B1C104*	.23	.32	.53	24
.15	945B1B154*	.18	.27	.53	24	945B1C154*	.22	.32	.65	24
.22	945B1B224*	.22	.32	.53	24	945B1C224*	.23	.33	.78	24
.33	945B1B334*	.22	.32	.65	24	945B1C334*	.30	.39	.78	24
.47	945B1B474*	.23	.33	.78	24	945B1C474*	.32	.41	.90	22
.68	945B1B684*	.29	.38	.78	24	945B1C684*	.29	.45	1.15	22
.82	945B1B824*	.32	.42	.78	22	945B1C824*	.32	.49	1.15	22
1.0	945B1B105*	.21	.38	1.15	22	945B1C105*	.36	.53	1.15	20
2.0	945B1B205*	.33	.50	1.15	22	945B1C205*	.47	.64	1.40	20
5.0	945B1B505*	.44	.60	1.65	20	945B1C505*	.64	.81	1.90	20
10.0	945B1B106*	.59	.76	1.90	20	945B1C106*	.94	1.11	1.90	20
15.0	945B1B156*	.75	.91	1.90	20	945B1C156*	1.20	1.39	1.90	20
20.0	945B1B206*	.88	1.05	1.90	20	945B1C206*	1.37	1.54	1.90	20

400 VOLT DC/270 VAC						600 VOLT DC/440 VAC				
MFD	PART NO.	DIMENSIONS			LEAD SIZE (AWG)	PART NO.	DIMENSIONS			LEAD SIZE (AWG)
		T	W	L			T	W	L	
.0010	945B1E102*	.09	.18	.40	26	945B1F102*	.09	.18	.40	26
.0015	945B1E152*	.09	.18	.40	26	945B1F152*	.09	.18	.40	26
.0022	945B1E222*	.09	.18	.40	26	945B1F222*	.09	.18	.40	26
.0033	945B1E332*	.09	.18	.40	26	945B1F332*	.14	.23	.40	26
.0047	945B1E472*	.09	.18	.40	26	945B1F472*	.15	.24	.40	26
.0068	945B1E682*	.09	.18	.40	26	945B1F682*	.13	.22	.53	26
.0082	945B1E822*	.09	.18	.53	26	945B1F822*	.14	.23	.53	26
.010	945B1E103*	.09	.18	.53	26	945B1F103*	.15	.24	.53	26
.015	945B1E153*	.09	.18	.53	24	945B1F153*	.19	.29	.53	24
.022	945B1E223*	.12	.21	.53	24	945B1F223*	.15	.24	.69	22
.033	945B1E333*	.16	.26	.53	24	945B1F333*	.23	.33	.69	22
.047	945B1E473*	.20	.30	.53	24	945B1F473*	.28	.38	.69	22
.068	945B1E683*	.25	.35	.53	24	945B1F683*	.26	.35	.95	22
.082	945B1E823*	.22	.31	.65	24	945B1F823*	.28	.48	.95	22
.10	945B1E104*	.24	.34	.65	22	945B1F104*	.31	.41	.95	22
.15	945B1E154*	.31	.40	.65	22	945B1F154*	.38	.48	.95	20
.22	945B1E224*	.34	.43	.78	20	945B1F224*	.40	.49	1.21	20
.33	945B1E334*	.42	.52	.78	20	945B1F334*	.49	.59	1.21	20
.47	945B1E474*	.32	.48	1.15	20	945B1F474*	.45	.61	1.46	20
.68	945B1E684*	.39	.57	1.15	20	945B1F684*	.52	.64	1.72	20
.82	945B1E824*	.45	.61	1.15	20	945B1F824*	.58	.75	1.72	20
1.0	945B1E105*	.43	.60	1.40	22	945B1F105*	.63	.79	1.72	20
2.0	945B1E205*	.57	.74	1.65	20	945B1F205*	.89	1.03	1.96	20
5.0	945B1E505*	.87	1.04	1.90	20	945B1F505*	1.39	1.56	1.96	20
10.0	945B1E106*	1.27	1.44	1.90	20	945B1F106*	-	-	-	-
15.0	945B1E156*	-	-	-	-	945B1F156*	-	-	-	-
20.0	945B1E206*	-	-	-	-	945B1F206*	-	-	-	-

\*Add tolerance designator to complete part number: F = ±1%, G = ±2%, J = ±5%, K = ±10%, M = ±20%



**WRAP AND FILL  
ROUND CONFIGURATION**

For max. D and L dimensions, allow +.050".

LEAD LENGTH: 2.0" ± .50"

100 VOLT DC/67 VAC					200 VOLT DC/135 VAC			
MFD	PART NO.	DIMENSIONS		LEAD SIZE (AWG)	PART NO.	DIMENSIONS		LEAD SIZE (AWG)
		D	L			D	L	
.0010	945D1B102*	.15	.40	24	945D1C102*	.15	.40	24
.0015	945D1B152*	.15	.40	24	945D1C152*	.15	.40	24
.0022	945D1B222*	.15	.40	24	945D1C222*	.15	.40	24
.0033	945D1B332*	.15	.40	24	945D1C332*	.15	.40	24
.0047	945D1B472*	.15	.40	24	945D1C472*	.15	.40	24
.0068	945D1B682*	.15	.40	24	945D1C682*	.15	.40	24
.0082	945D1B822*	.15	.40	24	945D1C822*	.15	.40	24
.010	945D1B103*	.15	.40	24	945D1C103*	.15	.40	24
.015	945D1B153*	.15	.40	24	945D1C153*	.15	.53	24
.022	945D1B223*	.15	.40	24	945D1C223*	.15	.53	24
.033	945D1B333*	.15	.53	24	945D1C333*	.18	.53	24
.047	945D1B473*	.15	.53	24	945D1C473*	.21	.53	24
.068	945D1B683*	.16	.53	24	945D1C683*	.24	.53	24
.082	945D1B823*	.18	.53	24	945D1C823*	.26	.53	24
.10	945D1B104*	.20	.53	24	945D1C104*	.29	.53	24
.15	945D1B154*	.24	.53	24	945D1C154*	.28	.65	24
.22	945D1B224*	.28	.53	24	945D1C224*	.29	.78	24
.33	945D1B334*	.28	.65	24	945D1C334*	.36	.78	22
.47	945D1B474*	.29	.78	24	945D1C474*	.38	.90	22
.68	945D1B684*	.35	.78	22	945D1C684*	.39	1.15	22
.82	945D1B824*	.38	.78	22	945D1C824*	.43	1.15	22
1.0	945D1B105*	.31	1.15	22	945D1C105*	.47	1.15	22
2.0	945D1B205*	.43	1.15	22	945D1C205*	.57	1.40	20
5.0	945D1B505*	.55	1.65	20	945D1C505*	.74	1.90	20
10.0	945D1B106*	.70	1.90	20	945D1C106*	1.05	1.90	20
15.0	945D1B156*	.86	1.90	20	945D1C156*	1.31	1.90	20
20.0	945D1B206*	.99	1.90	20	945D1C206*	1.48	1.90	20

400 VOLT DC/270 VAC					600 VOLT DC/440 VAC			
MFD	PART NO.	DIMENSIONS		LEAD SIZE (AWG)	PART NO.	DIMENSIONS		LEAD SIZE (AWG)
		D	L			D	L	
.0010	945D1E102*	.15	.40	24	945D1F102*	.15	.40	24
.0015	945D1E152*	.15	.40	24	945D1F152*	.15	.40	24
.0022	945D1E222*	.15	.40	24	945D1F222*	.15	.40	24
.0033	945D1E332*	.15	.40	24	945D1F332*	.15	.40	24
.0047	945D1E472*	.15	.40	24	945D1F472*	.15	.40	24
.0068	945D1E682*	.15	.40	24	945D1F682*	.19	.53	24
.0082	945D1E822*	.15	.53	24	945D1F822*	.20	.53	24
.010	945D1E103*	.15	.53	24	945D1F103*	.21	.53	24
.015	945D1E153*	.15	.53	24	945D1F153*	.23	.53	24
.022	945D1E223*	.18	.53	24	945D1F223*	.25	.69	24
.033	945D1E333*	.22	.53	24	945D1F333*	.29	.69	24
.047	945D1E473*	.26	.53	24	945D1F473*	.34	.69	22
.068	945D1E683*	.31	.53	24	945D1F683*	.32	.95	22
.082	945D1E823*	.28	.65	24	945D1F823*	.34	.95	22
.10	945D1E104*	.30	.65	22	945D1F104*	.37	.95	22
.15	945D1E154*	.37	.65	22	945D1F154*	.45	.95	22
.22	945D1E224*	.39	.78	22	945D1F224*	.46	1.21	20
.33	945D1E334*	.48	.78	20	945D1F334*	.55	1.21	20
.47	945D1E474*	.43	1.15	20	945D1F474*	.65	1.21	20
.68	945D1E684*	.49	1.15	20	945D1F684*	.63	1.71	20
.82	945D1E824*	.55	1.15	20	945D1F824*	.69	1.71	20
1.0	945D1E105*	.54	1.40	20	945D1F105*	.75	1.71	20
2.0	945D1E205*	.68	1.65	20	945D1F205*	.96	1.96	20
5.0	945D1E505*	.98	1.90	20	945D1F505*	1.24	2.71	20
10.0	945D1E106*	1.38	1.90	20	945D1F106*	-	-	-
15.0	945D1E156*	-	-	-	945D1F156*	-	-	-
20.0	945D1E206*	-	-	-	945D1F206*	-	-	-

\*Add tolerance designator to complete part number: F = ±1%, G = ±2%, J = ±5%, K = ±10%, M = ±20%