

The Series 950 foil capacitors offer high frequency operation, high current and low ESR. They are able to handle high surge currents without degrading. This capacitor series was designed for high voltage AC and pulsing applications. The units are rated for 135, 270, 440 and 660VAC (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,

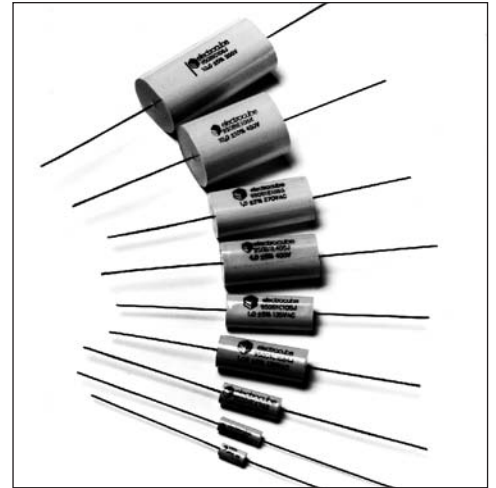
400, 600 and 1000 VDC.

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 400 VDC, 800 VDC, 1200 VDC and 1500 VDC on 135 VAC, 270 VAC, 440 VAC and 660VAC, 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 280 VDC, 560 VDC, 840 VDC and 1380 VDC, respectively, on the 135 VRMS, 270 VRMS, 440 VRMS and 660 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:

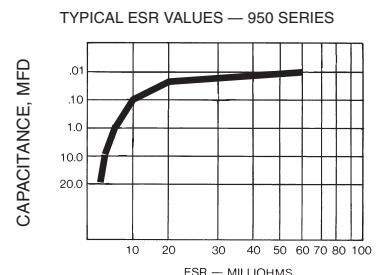
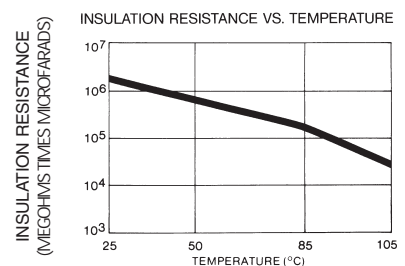
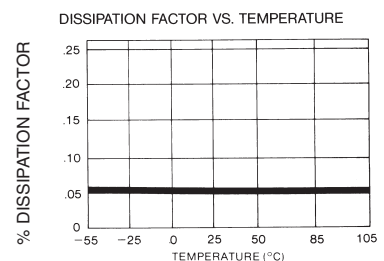
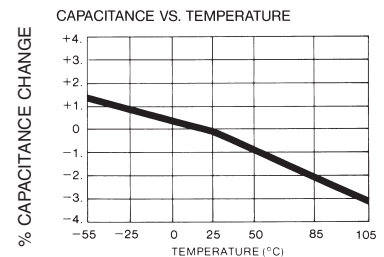
For information regarding insulating sleeves, mountings, special terminals, non-standard leads, circuit connections and other hardware, please consult factory.

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.

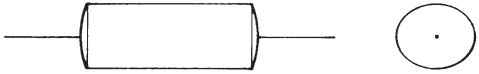

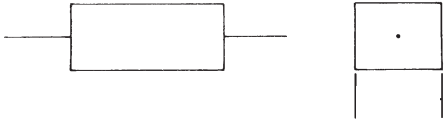
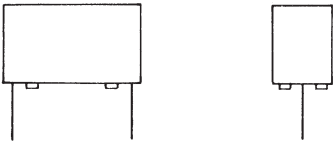
950 SERIES				
RMS CURRENT (MAX) 20 Hz to 100 KHz				
CAP. MFD.	CURRENT (AMPS)			PART NO.
	200V	400V	1000V	
.0010	.075	.200	.300	102
.0015	.100	.225	.500	152
.0022	.125	.300	.600	222
.0033	.150	.350	.900	332
.0047	.200	.400	.950	472
.0068	.300	.600	.975	682
.0082	.400	.700	1.00	822
.010	.500	.825	1.10	103
.015	.700	1.00	1.25	153
.022	.825	1.00	1.50	223
.033	.750	1.00	2.00	333
.047	1.00	1.25	2.25	473
.068	1.00	1.50	2.50	683
.082	1.25	1.50	3.00	823
.10	1.30	2.00	5.00	104
.15	1.75	2.25	6.00	154
.22	2.00	3.00	8.00	224
.33	2.50	3.50	10.0	334
.47	3.75	3.75	12.0	474
.68	4.50	5.75	11.0	684
.82	4.25	5.75	14.0	824
1.0	5.25	6.50	18.0	105
2.0	9.00	11.0	30.0	205
5.0	15.0	25.0	50.0	505

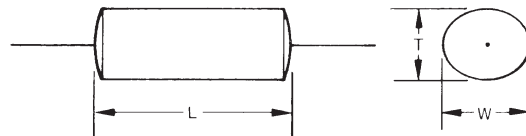
NOTES: Derate Amp 30% @ 50°C.  
Current ratings based on component ambient temperature of 25°C.

## TYPICAL DIELECTRIC CHARACTERISTIC CURVES



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

SERIES NO.	DESCRIPTION
950B	<b>FLAME RETARDANT WRAP AND FILL, OVAL</b> 
950D	<b>FLAME RETARDANT WRAP AND FILL, ROUND</b> 
951A	<b>FLAME RETARDANT EPOXY CASE, RECTANGULAR AXIAL LEADS</b> 
952A	<b>FLAME RETARDANT EPOXY CASE, RECTANGULAR RADIAL LEADS</b> 

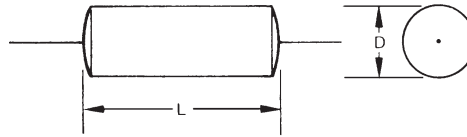

**WRAP AND FILL  
OVAL CONFIGURATION**

For max. T, W and L dimensions, allow  $+.050''$ . LEAD LENGTH:  $2.0'' \pm .50''$

200 VOLT DC/135 VAC						400 VOLT DC/270 VAC				
MFD	PART NO.	DIMENSIONS			LEAD SIZE (AWG)	PART NO.	DIMENSIONS			LEAD SIZE (AWG)
		T	W	L			T	W	L	
.0010	950B1C102*	.09	.18	.56	26	950B1E102*	.14	.24	.75	24
.0015	950B1C152*	.09	.18	.56	26	950B1E152*	.18	.27	.75	24
.0022	950B1C222*	.09	.18	.56	26	950B1E222*	.18	.28	.75	24
.0033	950B1C332*	.09	.18	.56	26	950B1E332*	.18	.28	.75	24
.0047	950B1C472*	.09	.18	.56	26	950B1E472*	.18	.28	.75	24
.0068	950B1C682*	.11	.20	.56	26	950B1E682*	.18	.28	.75	24
.0082	950B1C822*	.11	.21	.56	26	950B1E822*	.20	.29	.75	24
.010	950B1C103*	.13	.22	.56	26	950B1E103*	.22	.31	.75	24
.015	950B1C153*	.16	.25	.56	24	950B1E153*	.29	.38	.75	24
.022	950B1C223*	.19	.29	.56	24	950B1E223*	.20	.30	1.00	22
.033	950B1C333*	.18	.28	.69	24	950B1E333*	.26	.36	1.00	22
.047	950B1C473*	.22	.31	.69	24	950B1E473*	.32	.42	1.00	22
.068	950B1C683*	.23	.32	.81	24	950B1E683*	.27	.43	1.25	22
.082	950B1C823*	.25	.34	.81	24	950B1E823*	.30	.46	1.25	22
.10	950B1C104*	.28	.37	.81	24	950B1E104*	.34	.50	1.25	22
.15	950B1C154*	.30	.40	.95	22	950B1E154*	.43	.60	1.25	20
.22	950B1C224*	.27	.44	1.21	22	950B1E224*	.54	.71	1.25	20
.33	950B1C334*	.34	.51	1.21	22	950B1E334*	.56	.73	1.50	20
.47	950B1C474*	.41	.58	1.21	20	950B1E474*	.54	.70	2.00	20
.68	950B1C684*	.39	.56	1.72	20	950B1E684*	.67	.83	2.00	20
.82	950B1C824*	.43	.60	1.72	20	950B1E824*	.74	.91	2.00	20
1.0	950B1C105*	.49	.66	1.72	20	950B1E105*	.83	.99	2.00	20
2.0	950B1C205*	.66	.83	1.96	20	950B1E205*	1.21	1.37	2.00	20
5.0	950B1C505*	1.18	1.35	1.96	20	950B1E505*	-	-	-	-

600 VOLT DC/440 VAC						1000 VOLT DC/660 VAC				
MFD	PART NO.	DIMENSIONS			LEAD SIZE (AWG)	PART NO.	DIMENSIONS			LEAD SIZE (AWG)
		T	W	L			T	W	L	
.0010	950B1F102*	.14	.24	.75	26	950B1G102*	.11	.20	.75	22
.0015	950B1F152*	.18	.27	.75	26	950B1G152*	.13	.22	.75	22
.0022	950B1F222*	.28	.75	.75	26	950B1G222*	.17	.26	.75	22
.0033	950B1F332*	.19	.29	.75	24	950B1G332*	.21	.31	.75	22
.0047	950B1F472*	.32	.41	.75	24	950B1G472*	.23	.33	.75	20
.0068	950B1F682*	.22	.31	.95	24	950B1G682*	.19	.29	1.00	20
.0082	950B1F822*	.23	.31	.95	24	950B1G822*	.26	.36	1.00	20
.010	950B1F103*	.27	.36	.95	24	950B1G103*	.29	.39	1.00	20
.015	950B1F153*	.33	.43	.85	24	950B1G153*	.35	.45	1.00	20
.022	950B1F223*	.28	.45	1.25	20	950B1G223*	.25	.42	1.25	20
.033	950B1F333*	.36	.57	1.25	20	950B1G333*	.32	.49	1.25	20
.047	950B1F473*	.43	.60	1.25	20	950B1G473*	.33	.50	1.50	20
.068	950B1F683*	.53	.70	1.25	20	950B1G683*	.42	.59	1.50	18
.082	950B1F823*	.49	.65	1.50	18	950B1G823*	.47	.63	1.50	18
.10	950B1F104*	.55	.71	1.50	18	950B1G104*	.58	.71	1.50	18
.15	950B1F154*	.59	.77	1.75	18	950B1G154*	.67	.83	1.50	18
.22	950B1F224*	.73	.90	1.75	18	950B1G224*	.83	.99	1.50	18
.33	950B1F334*	.91	1.08	1.75	18	950B1G334*	1.04	1.20	1.50	18
.47	950B1F474*	.99	1.15	2.00	18	950B1G474*	1.23	1.67	1.50	18
.68	950B1F684*	1.20	1.37	2.00	18	950B1G684*	1.18	1.35	2.00	18
.82	950B1F824*	1.33	1.49	2.00	18	950B1G824*	1.31	1.48	2.00	18
1.0	950B1F105*	1.55	1.75	2.00	18	950B1G105*	1.46	1.63	2.00	18
2.0	950B1F205*	1.21	1.40	2.50	18	950B1G205*	1.67	1.84	2.75	18
5.0	950B1F505*	1.68	1.98	3.00	18	950B1G505*	2.70	2.87	2.75	18

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


**WRAP AND FILL  
ROUND CONFIGURATION**

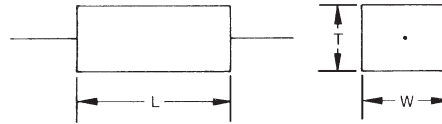
For max. D and L dimensions, allow +.050".

LEAD LENGTH: 2.0" ± .50"

200 VOLT DC/135 VAC					400 VOLT DC/270 VAC				
MFD	PART NO.	DIMENSIONS		LEAD SIZE (AWG)	PART NO.	DIMENSIONS		LEAD SIZE (AWG)	
		D	L			D	L		
.0010	950D1C102*	.15	.56	24	950D1E102*	.21	.75	24	
.0015	950D1C152*	.15	.56	24	950D1E152*	.24	.75	24	
.0022	950D1C222*	.15	.56	24	950D1E222*	.24	.75	24	
.0033	950D1C332*	.15	.56	24	950D1E332*	.24	.75	24	
.0047	950D1C472*	.15	.56	24	950D1E472*	.24	.75	24	
.0068	950D1C682*	.16	.56	24	950D1E682*	.24	.75	24	
.0082	950D1C822*	.17	.56	24	950D1E822*	.26	.75	24	
.010	950D1C103*	.19	.56	24	950D1E103*	.28	.75	24	
.015	950D1C153*	.22	.56	24	950D1E153*	.35	.75	24	
.022	950D1C223*	.25	.56	24	950D1E223*	.26	1.00	22	
.033	950D1C333*	.24	.69	24	950D1E333*	.32	1.00	22	
.047	950D1C473*	.28	.69	24	950D1E473*	.38	1.00	22	
.068	950D1C683*	.29	.81	24	950D1E683*	.38	1.25	22	
.082	950D1C823*	.31	.81	24	950D1E823*	.41	1.25	22	
.10	950D1C104*	.34	.81	24	950D1E104*	.45	1.25	22	
.15	950D1C154*	.36	.95	22	950D1E154*	.54	1.25	20	
.22	950D1C224*	.37	1.21	22	950D1E224*	.65	1.25	20	
.33	950D1C334*	.44	1.21	22	950D1E334*	.67	1.50	20	
.47	950D1C474*	.52	1.21	20	950D1E474*	.65	2.00	20	
.68	950D1C684*	.51	1.72	20	950D1E684*	.78	2.00	20	
.82	950D1C824*	.56	1.72	20	950D1E824*	.85	2.00	20	
1.0	950D1C105*	.60	1.72	20	950D1E105*	.94	2.00	20	
2.0	950D1C205*	.77	1.96	20	950D1E205*	1.32	2.00	20	
5.0	950D1C505*	1.20	1.96	20	950D1E505*	-	-	-	

600 VOLT DC/440 VAC					1000 VOLT DC/660 VAC				
MFD	PART NO.	DIMENSIONS		LEAD SIZE (AWG)	PART NO.	DIMENSIONS		LEAD SIZE (AWG)	
		D	L			D	L		
.0010	950D1F102*	.25	.75	24	950D1G102*	.19	.75	22	
.0015	950D1F152*	.26	.75	24	950D1G152*	.23	.75	22	
.0022	950D1F222*	.28	.75	24	950D1G222*	.27	.75	20	
.0033	950D1F332*	.32	.75	22	950D1G332*	.32	.75	20	
.0047	950D1F472*	.35	.75	22	950D1G472*	.38	.75	20	
.0068	950D1F682*	.33	.85	20	950D1G682*	.28	1.00	20	
.0082	950D1F822*	.35	.85	20	950D1G822*	.30	1.00	20	
.010	950D1F103*	.38	.85	20	950D1G103*	.33	1.00	20	
.015	950D1F153*	.44	.85	20	950D1G153*	.39	1.00	20	
.022	950D1F223*	.45	1.00	20	950D1G223*	.39	1.25	20	
.033	950D1F333*	.53	1.00	18	950D1G333*	.46	1.25	20	
.047	950D1F473*	.55	1.00	18	950D1G473*	.46	1.50	20	
.068	950D1F683*	.55	1.25	18	950D1G683*	.55	1.50	18	
.082	950D1F823*	.56	1.25	18	950D1G823*	.59	1.50	18	
.10	950D1F104*	.66	1.25	18	950D1G104*	.65	1.50	18	
.15	950D1F154*	.77	1.25	18	950D1G154*	.79	1.50	18	
.22	950D1F224*	.80	1.50	18	950D1G224*	.94	1.50	18	
.33	950D1F334*	.84	1.90	18	950D1G334*	1.15	1.50	18	
.47	950D1F474*	.98	1.90	18	950D1G474*	1.36	1.50	18	
.68	950D1F684*	1.05	2.00	18	950D1G684*	1.31	2.00	18	
.82	950D1F824*	1.19	2.00	18	950D1G824*	1.42	2.00	18	
1.0	950D1F105*	1.18	2.50	18	950D1G105*	1.58	2.00	18	
2.0	950D1F205*	1.34	2.50	18	950D1G205*	1.79	2.75	18	
5.0	950D1F505*	1.98	2.75	18	950D1G505*	2.81	2.75	18	

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



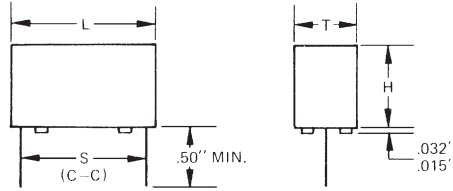
**EPOXY CASE  
RECTANGULAR  
CONFIGURATION**

For max. T and W dimensions, allow + .010".  
For max. L dimension, allow + .030".

LEAD LENGTH: 2.0" ± .50"

MFD	200 VOLT DC/135 VAC					400 VOLT DC/270 VAC				
	PART NO.	DIMENSIONS			LEAD SIZE (AWG)	PART NO.	DIMENSIONS			LEAD SIZE (AWG)
		T	W	L			T	W	L	
.0010	951A1C102*	.17	.29	.55	26	951A1E102*	.29	.42	.67	24
.0015	951A1C152*	.17	.29	.55	26	951A1E152*	.29	.42	.67	24
.0022	951A1C222*	.17	.29	.55	26	951A1E222*	.29	.42	.67	24
.0033	951A1C332*	.17	.29	.55	26	951A1E332*	.29	.42	.67	24
.0047	951A1C472*	.17	.29	.55	26	951A1E472*	.29	.42	.67	24
.0068	951A1C682*	.17	.29	.55	26	951A1E682*	.29	.42	.67	24
.0082	951A1C822*	.23	.36	.55	26	951A1E822*	.29	.42	.67	24
.010	951A1C103*	.23	.36	.55	26	951A1E103*	.29	.42	.67	24
.015	951A1C153*	.23	.36	.55	26	951A1E153*	.29	.42	.67	24
.022	951A1C223*	.29	.42	.55	24	951A1E223*	.39	.54	1.04	22
.033	951A1C333*	.29	.42	.67	24	951A1E333*	.39	.54	1.04	22
.047	951A1C473*	.29	.42	.67	24	951A1E473*	.39	.54	1.04	22
.068	951A1C683*	.29	.42	.82	24	951A1E683*	.39	.54	1.24	22
.082	951A1C823*	.39	.54	.82	24	951A1E823*	.39	.54	1.24	22
.10	951A1C104*	.39	.54	.82	24	951A1E104*	.39	.54	1.24	22
.15	951A1C154*	.39	.54	1.04	22	951A1E154*	.56	.72	1.24	22
.22	951A1C224*	.39	.54	1.24	22	951A1E224*	.56	.72	1.24	22
.33	951A1C334*	.56	.72	1.24	20	951A1E334*	.56	.72	1.50	20
.47	951A1C474*	.56	.72	1.24	20	951A1E474*	.56	.72	1.95	20
.68	951A1C684*	.56	.72	1.80	20	951A1E684*	-	-	-	-
.82	951A1C824*	.56	.72	1.80	20	951A1E824*	-	-	-	-
1.0	951A1C105*	.56	.72	1.80	20	951A1E105*	-	-	-	-

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



**EPOXY CASE  
RECTANGULAR  
CONFIGURATION**

For max. T, H and L dimensions, allow  $+.010''$ .  
For max. S dimensions, allow  $+.015''$ .

		200 VOLT DC/135 VAC					400 VOLT DC/270 VAC					
MFD	PART NO.	DIMENSIONS				LEAD SIZE (AWG)	PART NO.	DIMENSIONS				LEAD SIZE (AWG)
		T	H	L	S			T	H	L	S	
.0010	952A1C102*	.18	.30	.55	.400	22	952A1E102*	.30	.43	.67	.500	22
.0015	952A1C152*	.18	.30	.55	.400	22	952A1E152*	.30	.43	.67	.500	22
.0022	952A1C222*	.18	.30	.55	.400	22	952A1E222*	.30	.43	.67	.500	22
.0033	952A1C332*	.18	.30	.55	.400	22	952A1E332*	.30	.43	.67	.500	22
.0047	952A1C472*	.18	.30	.55	.400	22	952A1E472*	.30	.43	.67	.500	22
.0068	952A1C682*	.18	.30	.55	.400	22	952A1E682*	.30	.43	.67	.500	22
.0082	952A1C822*	.18	.30	.55	.400	22	952A1E822*	.30	.43	.67	.500	22
.010	952A1C103*	.18	.30	.55	.400	22	952A1E103*	.30	.43	.67	.500	22
.015	952A1C153*	.24	.37	.55	.400	22	952A1E153*	.30	.43	.67	.500	22
.022	952A1C223*	.30	.43	.55	.400	22	952A1E223*	.40	.55	1.04	.800	20
.033	952A1C333*	.30	.43	.67	.500	22	952A1E333*	.40	.55	1.04	.800	20
.047	952A1C473*	.30	.43	.67	.500	22	952A1E473*	.40	.55	1.04	.800	20
.068	952A1C683*	.30	.43	.82	.600	22	952A1E683*	.40	.55	1.24	1.100	20
.082	952A1C823*	.40	.55	.82	.600	20	952A1E823*	.40	.55	1.24	1.100	20
.10	952A1C104*	.40	.55	.82	.600	20	952A1E104*	.40	.55	1.24	1.100	20
.15	952A1C154*	.40	.55	1.04	.800	20	952A1E154*	.57	.73	1.24	1.100	20
.22	952A1C224*	.40	.55	1.24	1.100	20	952A1E224*	.57	.73	1.24	1.100	20
.33	952A1C334*	.57	.73	1.24	1.100	20	952A1E334*	.57	.73	1.75	1.600	20
.47	952A1C474*	.57	.73	1.24	1.100	20	952A1E474*	-	-	-	-	-
.68	952A1C684*	.57	.73	1.75	1.600	20	952A1E684*	-	-	-	-	-
.82	952A1C824*	.57	.73	1.75	1.600	20	952A1E824*	-	-	-	-	-
1.0	952A1C105*	.57	.73	1.75	1.600	20	952A1E105*	-	-	-	-	-

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