



## PLAIN POLYESTER FILM CAPACITORS (INDUCTIVE TYPE LOW PROFILE)

**MAIN APPLICATION:** Blocking, bypassing, filtering, coupling and decoupling, interference suppression in low voltage applications, low pulse applications.

**CONSTRUCTION:** Film/foil inductive type construction with aluminum foil as electrode and polyester (PET) film as dielectric coated with flame retardant epoxy resin.

**CLIMATIC CATEGORY:** 40/100/56

**APPLICABLE SPECIFICATION:** IEC 384-11

**CAPACITANCE VALUE, RATED VOLTAGE (DC):** Refer dimension chart.

**CAPACITANCE TOLERANCE:**  $\pm 5\%$ ,  $\pm 10\%$

### VOLTAGE PROOF

Between terminals: 2 times of rated voltage for 2 seconds.

### INSULATION RESISTANCE

Minimum Insulation Resistance $R_{IS}$	$V_R$	$C_R \leq 0.33 \mu f$	$C_R > 0.33 \mu f$
(or) time constant $T=C_R \times R_{IS}$	$\leq 100V$ DC	$30 G\Omega$	$10000s$
at $25^\circ C$ , relative humidity $\leq 70\%$	$\geq 250V$ DC	$100 G\Omega$	$10000s$

**TAN  $\delta$ :** 0.8% (maximum) at 1 kHz.

**LIFE TEST CONDITIONS (Loading at elevated temperature)**  
Loaded at 1.5 times of rated voltage at  $85^\circ C$  or 1.5 times of category voltage at  $100^\circ C$  for 1000 hours. Category voltage is 80% of rated voltage.

### AFTER THE TEST

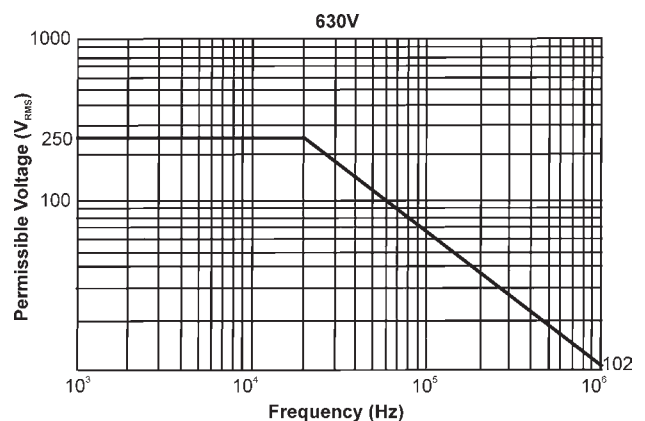
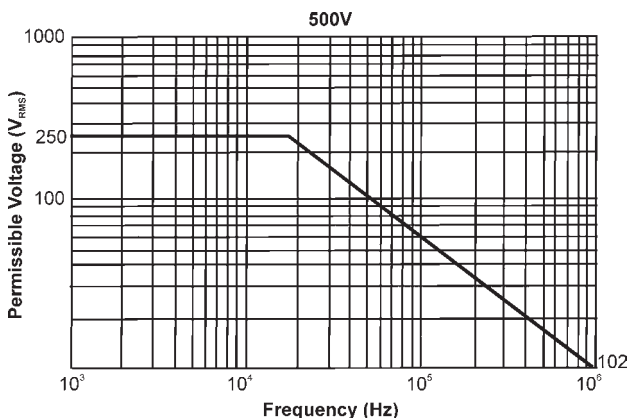
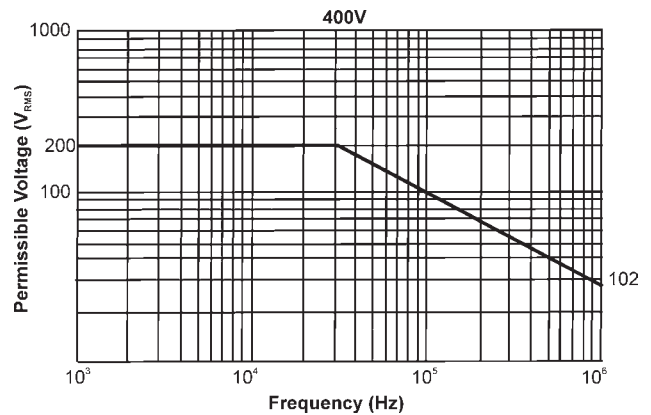
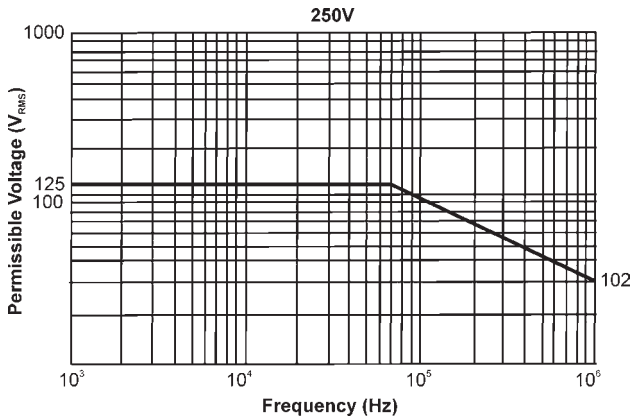
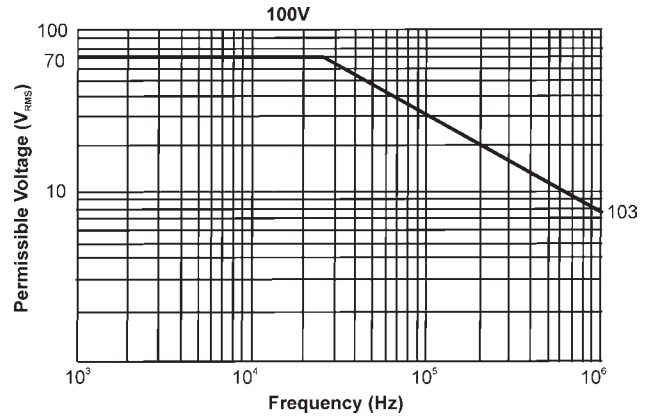
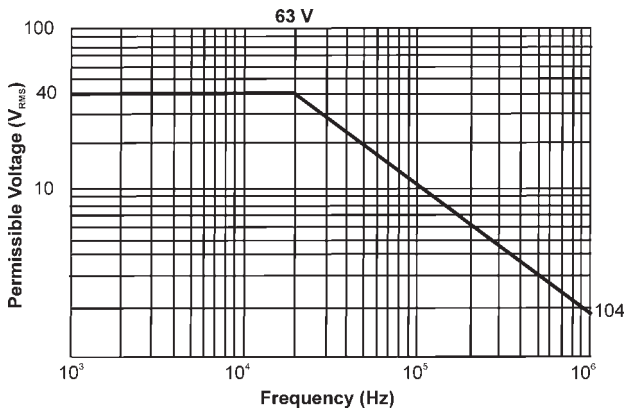
$\Delta c/c$ :  $\leq 5\%$  of initial value.

**Change in Tan  $\delta$ :**  $\leq 0.01$  or 1.2 times the value measured before the test, whichever is higher.

**Insulation resistance:**  $\geq 50\%$  of the value mentioned in IR chart.

**APPROVALS:** Tested at ERTL (North) as per IEC 384-11. Approved by CACT for telecom applications.

Permissible AC Voltage  $V_{RMS}$  vs. Frequency F at Ambient Temperature  $25^\circ C$



## Ordering Code and Packing Units: Plain Polyester Film Capacitors (Inductive Type Low Profile)

Rated Voltage	Rated Cap. (µf)	Maximum Dimensions (mm)						Dv/Dt V/µs	Wt g	Ordering code	Packing units		
		L	H	W	d	S	F				Ammo	Bulk	
63V DC	0.0010	7.5	9.50	3.5	0.5	5	5	5000	0.24	51 102 +1J <sup>*^</sup>	5000	2000	
	0.0015	7.5	9.50	3.5	0.5	5	5	5000	0.23	51 152 +1J <sup>*^</sup>	5000	2000	
	0.0022	7.5	9.50	3.5	0.5	5	5	5000	0.26	51 222 +1J <sup>*^</sup>	5000	2000	
	0.0033	7.5	9.50	3.5	0.5	5	5	5000	0.24	51 332 +1J <sup>*^</sup>	5000	2000	
	0.0047	7.5	9.50	3.5	0.5	5	5	5000	0.26	51 472 +1J <sup>*^</sup>	5000	2000	
	0.0068	7.5	9.50	3.5	0.5	5	5	5000	0.27	51 682 +1J <sup>*^</sup>	4500	2000	
	0.01	7.5	9.50	3.5	0.5	5	5	5000	0.25	51 103 +1J <sup>*^</sup>	4500	2000	
	0.015	7.5	9.50	4.0	0.5	5	5	5000	0.26	51 153 +1J <sup>*^</sup>	4500	2000	
	0.022	7.5	9.50	4.5	0.5	5	5	5000	0.38	51 223 +1J <sup>*^</sup>	4500	2000	
	0.033	8.0	9.50	4.5	0.5	5	5	5000	0.35	51 333 +1J <sup>*^</sup>	4500	2000	
	0.047	8.5	9.50	4.5	0.5	5	5	5000	0.55	51 473 +1J <sup>*^</sup>	4000	2000	
	0.1	10.0	10.50	7.0	0.5	5	5	5000	0.75	51 104 +1J <sup>*^</sup>	4000	2000	
100V DC	0.0010	7.5	9.50	3.5	0.5	5	5	5000	0.24	51 102 +2A <sup>*^</sup>	5000	2000	
	0.0015	7.5	9.50	3.5	0.5	5	5	5000	0.23	51 152 +2A <sup>*^</sup>	5000	2000	
	0.0022	7.5	9.50	3.5	0.5	5	5	5000	0.26	51 222 +2A <sup>*^</sup>	5000	2000	
	0.0033	7.5	9.50	3.5	0.5	5	5	5000	0.23	51 332 +2A <sup>*^</sup>	5000	2000	
	0.0047	7.5	9.50	4.0	0.5	5	5	5000	0.26	51 472 +2A <sup>*^</sup>	5000	2000	
	0.0068	7.5	9.50	4.0	0.5	5	5	5000	0.27	51 682 +2A <sup>*^</sup>	4500	2000	
	0.01	7.5	9.50	4.0	0.5	5	5	5000	0.25	51 103 +2A <sup>*^</sup>	4500	2000	
	0.015	7.5	9.50	4.0	0.5	5	5	5000	0.28	51 153 +2A <sup>*^</sup>	4500	2000	
	0.022	7.5	9.50	4.5	0.5	5	5	5000	0.38	51 223 +2A <sup>*^</sup>	4500	2000	
	0.027	7.5	9.50	4.5	0.5	5	5	5000	0.34	51 273 +2A <sup>*^</sup>	4500	2000	
	250V DC	0.0010	7.5	9.50	3.5	0.5	5	5	5000	0.24	51 102 +2E <sup>*^</sup>	5000	2000
		0.0015	7.5	9.50	3.5	0.5	5	5	5000	0.23	51 152 +2E <sup>*^</sup>	5000	2000
0.0022		7.5	9.50	3.5	0.5	5	5	5000	0.26	51 222 +2E <sup>*^</sup>	5000	2000	
0.0033		7.5	9.50	3.5	0.5	5	5	5000	0.23	51 332 +2E <sup>*^</sup>	5000	2000	
0.0047		7.5	9.50	4.5	0.5	5	5	5000	0.26	51 472 +2E <sup>*^</sup>	5000	2000	
0.0068		8.5	9.50	4.5	0.5	5	5	5000	0.27	51 682 +2E <sup>*^</sup>	4500	2000	
0.0082		8.5	9.50	4.5	0.5	5	5	5000	0.28	51 822 +2E <sup>*^</sup>	4500	2000	
400V DC	0.0010	7.5	9.50	3.5	0.5	5	5	5000	0.24	51 102 +2G <sup>*^</sup>	5000	2000	
	0.0015	7.5	9.50	3.5	0.5	5	5	5000	0.23	51 152 +2G <sup>*^</sup>	5000	2000	
	0.0022	7.5	9.50	3.5	0.5	5	5	5000	0.26	51 222 +2G <sup>*^</sup>	5000	2000	
	0.0027	7.5	9.50	3.5	0.5	5	5	5000	0.27	51 272 +2G <sup>*^</sup>	5000	2000	
	0.0033	7.5	9.50	3.5	0.5	5	5	5000	0.23	51 332 +2G <sup>*^</sup>	5000	2000	
	0.0047	7.5	9.50	4.5	0.5	5	5	5000	0.30	51 472 +2G <sup>*^</sup>	5000	2000	
	0.0068	8.5	9.50	4.5	0.5	5	5	5000	0.34	51 682 +2G <sup>*^</sup>	4500	2000	
0.0082	8.5	9.50	4.5	0.5	5	5	5000	0.28	51 822 +2G <sup>*^</sup>	4500	2000		
500V DC	0.0056	7.5	9.50	4.5	0.5	5	5	5000	0.29	51 562 +2H <sup>*^</sup>	5000	2000	
	0.0068	8.5	9.50	4.5	0.5	5	5	5000	0.27	51 682 +2H <sup>*^</sup>	4500	2000	
	0.0082	8.5	9.50	4.5	0.5	5	5	5000	0.28	51 822 +2H <sup>*^</sup>	4500	2000	
630V DC	0.0010	7.5	9.50	3.5	0.5	5	5	5000	0.24	51 102 +2J <sup>*^</sup>	5000	2000	
	0.0012	7.5	9.50	3.5	0.5	5	5	5000	0.26	51 122 +2J <sup>*^</sup>	5000	2000	
	0.0015	8.0	9.50	4.0	0.5	5	5	5000	0.23	51 152 +2J <sup>*^</sup>	5000	2000	
	0.0018	8.0	9.50	4.0	0.5	5	5	5000	0.24	51 182 +2J <sup>*^</sup>	5000	2000	
	0.0022	8.5	9.50	4.5	0.5	5	5	5000	0.26	51 222 +2J <sup>*^</sup>	5000	2000	
	0.0027	8.5	9.50	4.5	0.5	5	5	5000	0.27	51 272 +2J <sup>*^</sup>	5000	2000	

### NOTE

- Replace the + by the code letter for the required tolerance.  
F:±1%, G:±2%, H:±2.5%, J:±5%, K:±10%, M:±20%
- Replace \* by the code letter for packing type.  
1 : Bulk Packing  
2 : Bulk Packing (After forming & cutting)  
3 : Ammo Packing (F&T)  
4 : Bulk Packing (forming in original pitch)  
5 : Bulk Packing (formed & without cut)  
6 : Ammo Packing (Straight Lead)  
7 : Bulk Packing (Straight Lead cut)
- Replace ^ by the code letter indicated drawing reference.  
A : As per the catalogue  
B-Z : customer drawing reference
- These are the most popular values. Other values in the range are available on request.  
For dimensions, please refer to the closest higher value.

