

## PLAIN POLYPROPYLENE FILM CAPACITORS (Non Inductive)

**MAIN APPLICATION:** Oscillator, timing and LC/RC filter circuits, high frequency coupling of fast digital and analog ICs

**CONSTRUCTION (DIP/BOX TYPE):** Film/foil inductive type construction with aluminum foil as electrode and PP film as dielectric coated with flame retardant epoxy resin

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

**APPLICABLE SPECIFICATION:** IEC 384-13

**MAX TEMP RATING:** 100° C. Between 85° C and 100° C, a voltage derating of 1.25% per ° C on the rated voltage has to be applied

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

**VOLTAGE PROOF:** Between terminals: 2 times of rated voltage for 2 seconds

### INSULATION RESISTANCE

Minimum insulation resistance between terminals: 100 GO at 25° C, relative humidity = 70%

**CAPACITANCE TOLERANCE:** ±1%, ±2%, ±2.5%, ±5%, ±10%

**TAN  $\delta$  AT 20° C:** 0.1% (maximum) at 10 kHz

### LIFE TEST CONDITIONS

(Loading at elevated temperature)

Loaded at 1.5 times of rated voltage at 85° C or 1.5 times of category voltage at 100° C for 1000 hours

Category voltage is 80% of rated voltage

### Criteria after the test:

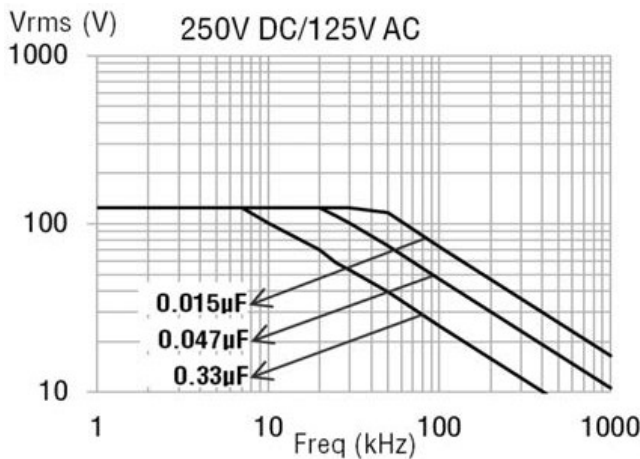
**$\Delta c/c$ :** = 3% ±5 pfd of initial value

**Change in Tan  $\delta$ :** = 1.4 times the value measured before the test

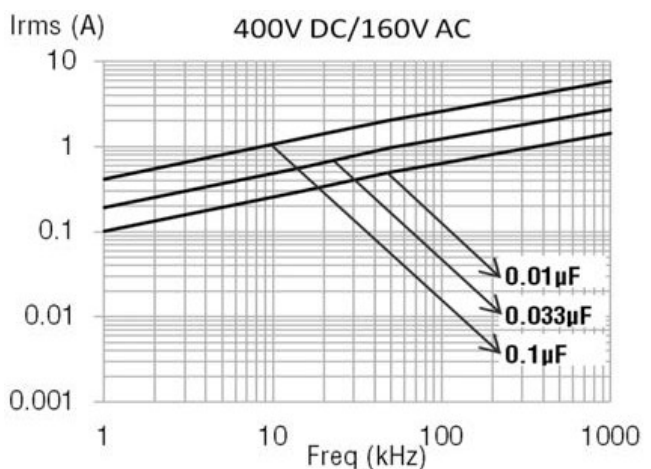
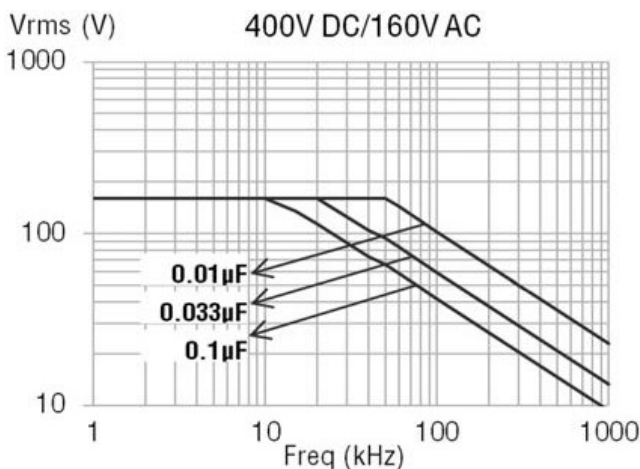
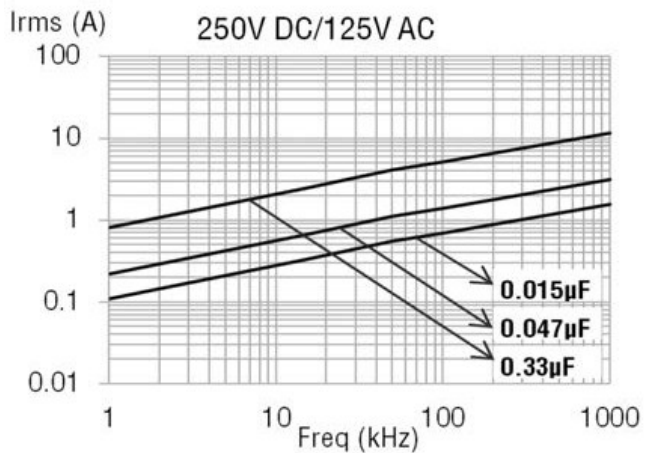
**Insulation resistance:** = 50% of the value mentioned in IR chart

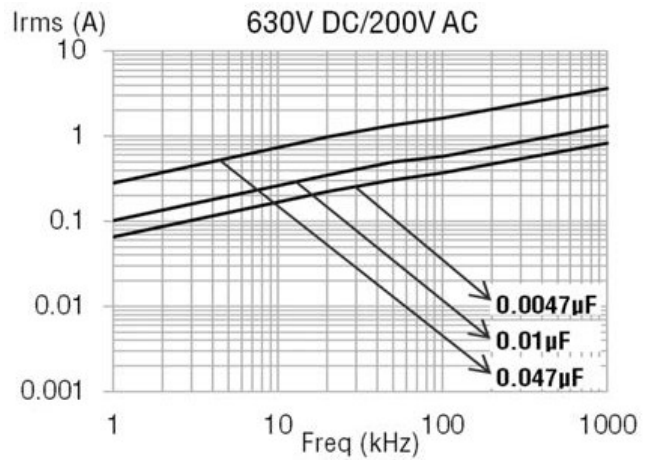
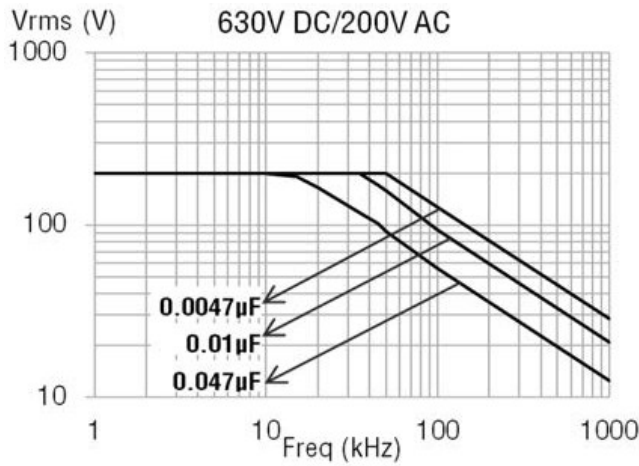
**APPROVALS:** Capacitors are tested at ERTL(North) as per IEC 384-2 and approved by CACT for telecom application

**Max. Voltage (Vrms) vs. Frequency**  
(Sinusoidal Waveform at T = 55° C)



**Max. Current (Irms) vs. Frequency**  
(Sinusoidal Waveform at T = 55° C)





Note: The derating curves are based on the approximate actual values of tand rather than the theoretical values.

### PLAIN POLYPROPYLENE FILM CAPACITORS (Non Inductive) Ordering codes and packaging units - Dip Type

Rated Voltage	Rated Cap. (µF)	Dimensions(mm)						DV/DT V/µs	Wt. g	Ordering code	Packing units	
		W ±0.5	H ±0.5	L ±0.5	d ±0.05	S ±0.5	F 0.8/-0.2				Ammo	Bulk
250V DC	0.0150	6.0	11.0	14	0.6	10.0	10	10000	0.5	32 153 +2E*^	2000	1100
	0.0220	5.5	10.5	19	0.8	15.0	15	10000	0.7	32 223 +2E*^	1000	1100
	0.0330	6.0	11.0	19	0.8	15.0	15	10000	0.9	32 333 +2E*^	1000	1100
	0.0470	6.0	13.5	19	0.8	15.0	15	10000	1.2	32 473 +2E*^	1000	1100
	0.1000	6.5	15.5	27	0.8	22.5	-	10000	1.6	32 104 +2E*^	400	650
	0.2200	9.0	18.0	27	0.8	22.5	-	10000	1.8	32 224 +2E*^	400	450
	0.3300	11.0	20.5	27	0.8	22.5	-	10000	2.1	32 334 +2E*^	400	380
400V DC	0.0100	6.0	13.5	19	0.8	15.0	15	10000	0.5	32 103 +2G*^	1000	1100
	0.0150	6.0	13.5	19	0.8	15.0	15	10000	0.6	32 153 +2G*^	1000	1100
	0.0220	6.0	13.5	19	0.8	15.0	15	10000	0.8	32 223 +2G*^	1000	1100
	0.0330	7.0	15.0	19	0.8	15.0	15	10000	1.1	32 333 +2G*^	1000	950
	0.0470	8.0	17.0	19	0.8	15.0	15	10000	1.4	32 473 +2G*^	1000	800
	0.1000	9.0	18.0	27	0.8	22.5	-	10000	2.7	32 104 +2G*^	400	450
	0.2200	11.5	21.0	32	0.8	27.5	-	10000	4.5	32 224 +2G*^	200	-
630V DC	0.0022	5.5	10.5	14	0.6	10.0	10	10000	0.7	32 222 +2J*^	2000	1100
	0.0047	6.5	13.5	14	0.6	10.0	10	10000	0.9	32 472 +2J*^	2000	1100
	0.0056	5.5	12.0	19	0.8	15.0	15	10000	1.2	32 682 +2J*^	1000	1100
	0.0100	6.0	13.5	19	0.8	15.0	15	10000	1.5	32 103 +2J*^	1000	1100
	0.0220	8.0	17.0	19	0.8	15.0	15	10000	2.0	32 223 +2J*^	1000	800
	0.0470	9.0	18.0	27	0.8	22.5	-	10000	2.8	32 473 +2J*^	400	450
	0.1000	11.5	21.0	32	0.8	27.5	-	10000	3.5	32 104 +2J*^	200	-

