

## PLAIN POLYPROPYLENE + PLAIN POLYESTER FILM (PEP) CAPACITORS (Inductive Type)

**MAIN APPLICATION:** Oscillator, timing and LC/RC filter circuits, Snubber circuits, high frequency coupling of fast digital and analog ICs. Wherever stable capacitance with respect to frequency and temperature is required. Mainly used in CFL and where stable temperature characteristics are required

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

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

**RATED TEMPERATURE:** 85° C. Between 85° C and 110° C, a voltage derating of 1.25% per °C on the rated voltage has to be applied

**MAXIMUM OPERATING TEMPERATURE:** 110° C

**INSULATION RESISTANCE**

Minimum Insulation Resistance  $R_{is}$        $C_R = 0.33 \mu F$   
 (or) time constant  $T = C_R \times R_{is}$       100 GO  
 at 25° C, relative humidity = 70%

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

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

**VOLTAGE PROOF:** Between terminals: 2 times of rated voltage.

**TAN d:** 0.25% (maximum) at 1.0 kHz, 0.50% at 100 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 at 100° C

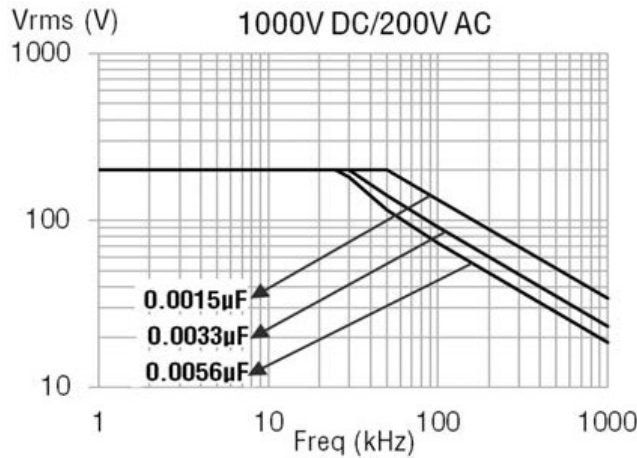
**Criteria after the test:**

**Δc/c:** = 3% ±5 pfd of initial value

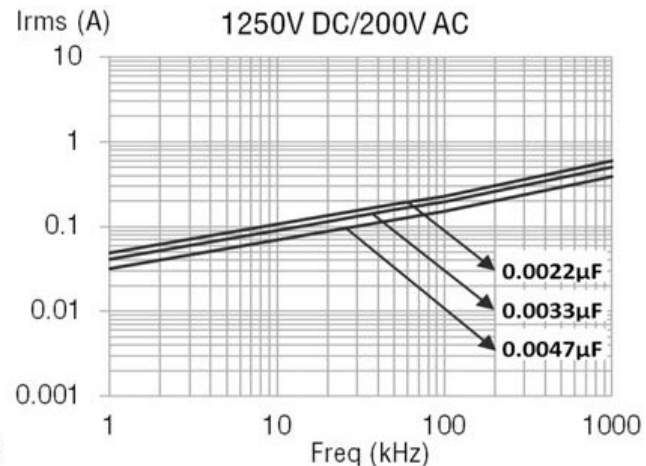
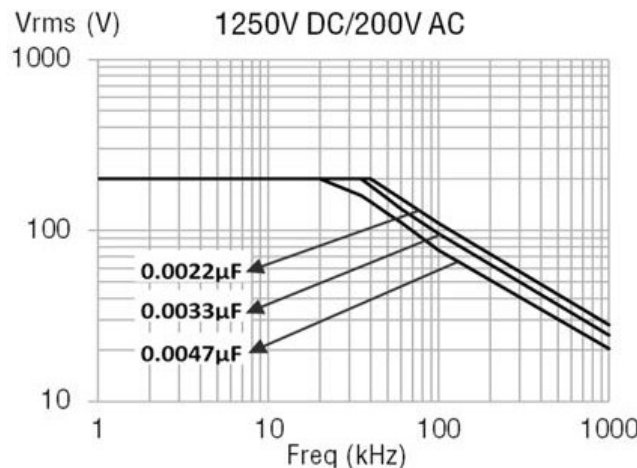
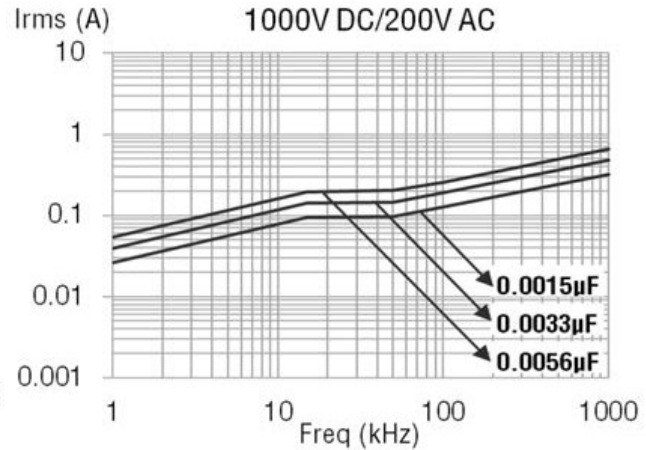
**Change in Tan δ:** = 1.4 times the value measured before the test

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

**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 actual observed values.

**PLAIN POLYPROPYLENE + PLAIN POLYESTER FILM (PEP) CAPACITORS**  
**(Inductive Type) - Ordering codes and packaging units**

Rated Voltage	Rated Cap. (µF)	Dimensions(mm)						F	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						Ammo	Bulk
1000V	0.00068	4.0	12.5	7.0	0.5	5.0	5	10000	0.040	38 681 +3A*^	3500	2000	
	0.00100	4.0	13.0	7.5	0.5	4.5	5	10000	0.350	38 102 +3A*^	5000	2000	
	0.00150	5.0	14.0	8.5	0.5	5.0	5	10000	0.350	38 152 +3A*^	5000	2000	
	0.00220	5.0	14.0	8.5	0.5	5.0	5	10000	0.400	38 222 +3A*^	3000	2000	
	0.00270	5.5	14.0	8.5	0.5	5.0	5	10000	0.420	38 272 +3A*^	3000	2000	
	0.00330	5.5	14.0	8.5	0.5	5.0	5	10000	0.450	38 332 +3A*^	3000	2000	
	0.00390	6.5	14.0	9.5	0.5	5.0	5	10000	0.550	38 392 +3A*^	4000	2000	
	0.00470	6.5	14.0	9.5	0.5	5.0	5	10000	0.600	38 472 +3A*^	2500	2000	
	0.00560	6.5	14.0	9.5	0.5	5.0	5	10000	0.650	38 562 +3A*^	2000	2000	
1250V	0.00068	5.0	13.5	8.5	0.5	5.0	5	10000	0.550	38 681 +3B*^	3500	2000	
	0.00100	4.0	14.0	7.5	0.5	5.0	5	10000	0.045	38 102 +3B*^	3500	2000	
	0.00150	5.0	14.0	8.5	0.5	5.0	5	10000	0.500	38 152 +3B*^	3000	2000	
	0.00220	5.0	14.0	8.5	0.5	5.0	5	10000	0.055	38 222 +3B*^	3000	2000	
	0.00270	5.5	14.0	8.5	0.5	5.0	5	10000	0.550	38 272 +3B*^	2000	2000	
	0.00330	6.0	14.0	9.5	0.5	5.0	5	10000	0.550	38 332 +3B*^	2000	2000	
	0.00390	6.5	14.0	9.5	0.5	5.0	5	10000	0.720	38 392 +3B*^	1500	2000	
	0.00470	6.5	14.0	9.5	0.5	5.0	5	10000	0.750	38 472 +3B*^	1500	2000	
	0.00560	6.5	14.0	9.5	0.5	5.0	5	10000	0.820	38 562 +3B*^	1500	2000	

