

Plain Polypropylene+Plain Polyester Film Capacitors

Series Code
38

PEP - Inductive

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

Film/foil inductive type construction with aluminum foil as electrode and PET + PP film as mixed dielectric coated with epoxy resin.

Climatic Category

40/100/56

Rated and Maximum Operating Temperature

85°C and 100°C

Capacitance Value

0.00068μF-0.0056μF

Capacitance Tolerance

±2.5%, ±5%, ±10%

Insulation Resistance

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

Rated Voltage

1000VDC-1250VDC

Voltage Proof

Between terminals: 2 times of rated voltage.

Tan δ

0.25% (maximum) at 1.0 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.

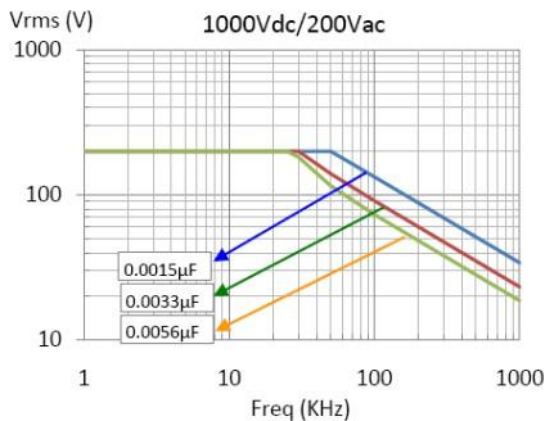
After the test

$\Delta C/C: \leq 3\%$.

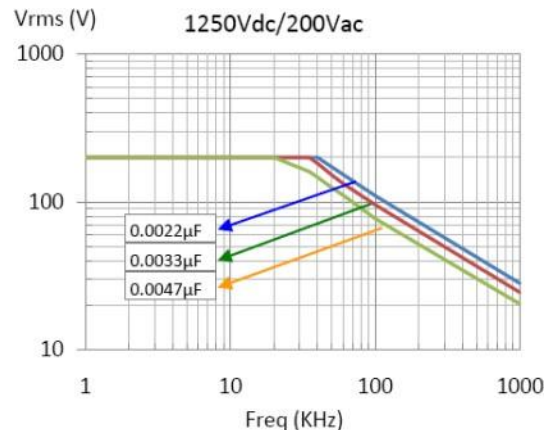
Increase of Tan δ: ≤ 1.4 times the value measured before the test.

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)



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Ordering codes and packaging units

Rated Voltage	Rated Cap. (μF)	Dimensions (mm)								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	DV/DT V/μs	Ammo			Bulk	
1000 V	0.00068	5.0	13.5	8.5	0.5	5.0	5	10000	0.040	38 681 +3A**	3500	2000	
	0.001	4.0	13.0	7.5	0.5	4.5	5	10000	0.350	38 102 +3A**	5000	2000	
	0.0022	5.0	14.0	8.5	0.5	5.0	5	10000	0.400	38 222 +3A**	3000	2000	
	0.0033	5.5	14.0	8.5	0.5	5.0	5	10000	0.450	38 332 +3A**	3000	2000	
	0.0047	6.5	14.0	9.5	0.5	5.0	5	10000	0.600	38 472 +3A**	2500	2000	
	0.0056	6.5	14.0	9.5	0.5	5.0	5	10000	0.650	38 562 +3A**	2000	2000	
1250 V	0.00068	5.0	13.5	8.5	0.5	5.0	5	10000	0.550	38 681 +3B**	3500	2000	
	0.001	4.0	13.0	7.5	0.5	5.0	5	10000	0.045	38 102 +3B**	3500	2000	
	0.0022	5.0	14.0	8.5	0.5	5.0	5	10000	0.055	38 222 +3B**	3000	2000	
	0.0033	6.0	15.0	9.5	0.5	5.0	5	10000	0.550	38 332 +3B**	2000	2000	
	0.0047	6.5	14.0	9.5	0.5	5.0	5	10000	0.750	38 472 +3B**	1500	2000	
	0.0056	6.5	14.0	9.5	0.5	5.0	5	10000	0.820	38 562 +3B**	1500	2000	

