



Metallized Polypropylene Capacitor -Radial

MPBN



Construction:

Dielectric : Metallized Polypropylene Film .
 Winding : non-inductive type.
 Leads : Tinned Wire.
 Outer coating : Flame retarding epoxy resin.

Feature:

Self-healing property.
 Low noise
 Materials conform to ROHS.
 Ultra-miniature size(1).

Recommended Application:

Power factor correction(PFC)usage.

Electrical Characteristics:

Related Documents	IEC 60384-16			
Rated Voltage	450VDC			
Rated Temperature	-40°C ~ +85°C.			
Usable upper category temperature	+110°C (Derating ratio of rated voltage to +85°C ~ +110°C: 1.5% per °C for Rated Voltage)			
Capacitance Range	0.1 μF ~ 2.2 μF.			
Capacitance Tolerance	± 3% (H) , ± 5% (J) , ± 10% (K)			
Dissipation Factor	KHz	C ≤ 1.0uF	1.0uF < C ≤ 2.2uF	
	1	≤ 0.1%	≤ 0.1%	
	100	≤ 1.0%	≤ 1.2%	
Insulation Resistance	Terminal to Terminal: (at20°C± 5°C) , Voltage charge time : 1 minute. Voltage charge : 100VDC. ≥ 30000MΩ For C ≤ 0.33uF , ≥ 10000MΩ×uF For C > 0.33uF			
Withstand Voltage	Terminal to Terminal: (at20°C± 5°C) 1.6 × V _R applied for 2sec. (cut off current 10mA) Slow-up voltage speed:100V/sec			
Rated Voltage Pulse Slope dV/dt (V/μs)	Pitch			
	V _R	10m/m	15m/m	22.5m/m
	450 VDC	220	160	100



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Reliability Test :

Item	Test Method	Requirements
Resistance to soldering heat IEC 60068-2-20”	Solder bath: 260°C± 5°C Immersion time: 10sec± 1sec	Capacitance change $\Delta C/C$ ≤ 1 % DF change $\Delta \tan \delta$: 0.1% at 1Khz IR: ≥ limit value.
Resistance to vibration IEC 60068-2-6 ”	Frequency range: 10hz to 55hz Amplitude: 1.5 m/m Duration : 6 hours	There shall be no visible damage, no intermittent contact, no open or short circuit
Damp heat ,steady state IEC 60068-2-3”	Temperature: 40°C± 2°C Relative humidity: 90% to 95% Duration : 1000 hours	Capacitance change $\Delta C/C$ ≤ 3 % DF change $\Delta \tan \delta$: 0.1% at 1Khz IR: ≥ 50% limit value.
Electrical endurance IEC 60384-16”	Temperature: 85°C± 2°C Voltage applied: 1.25×Vr(DC) Duration : 1000 hours	Capacitance change $\Delta C/C$ ≤ 3 % DF change $\Delta \tan \delta$: 0.1% at 1Khz IR: ≥ 50% limit value.

Cap. (μF)

Size unit: m/m

R.V. Cap. / Size	450VDC				
	W	H	T	P	dφ
0.1	13.0	10	5	10	0.6
0.15	13.0	11	5.5	10	0.6
0.22	13.0	13	7	10	0.6
0.33	13.0	14	8	10	0.6
0.22	18.0	11	5	15	0.8
0.33	18.0	12	6	15	0.8
0.47	18.0	13	7	15	0.8
0.68	18.0	18.5	5.5	15	0.8
1.0	18.0	17.5	7.5	15	0.8
1.5	18.0	19	10.5	15	0.8
2.2	18.0	19.5	13.5	15	0.8
1.0	26.0	17	9	22.5	0.8
1.5	26.0	20	11	22.5	0.8
2.2	26.0	22.5	13	22.5	0.8

Maximum dimensions (mm): W max = W+0.2