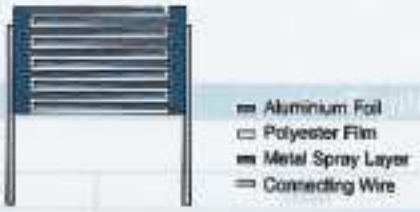
Polyester Film Capacitor-Radial

SERIES

PEN



Construction:

Dielectric : Polyester Film .
Electrodes : Aluminum Foil.
Winding : non-inductive type.
Leads : Tinned Wire.
Outer coating : Flame retarding epoxy resin.

Feature:

Low ESR , High stability.
Small and compact.
Available for automatic insertion.

Recommended Application:

Consumer electronic products.
Blocking ,by-pass and coupling circuits.
Pulse , logic and timing circuit.
General purpose usage.

Electrical Characteristics:

Related Documents	IEC 60384-11
Rated Voltage	100VDC ,200VDC .
Rated Temperature	-40°C ~ +85°C.
Usable upper category temperature	+105°C (Derating ratio of rated voltage to +85°C ~ +105°C: 1.3% per °C for Rated Voltage)
Capacitance Range	0.001 μF ~ 0.47 μF.
Capacitance Tolerance	± 5% (J) , ± 10% (K)
Dissipation Factor	0.75 % (max.) at 1 KHZ
Insulation Resistance	Terminal to Terminal: (at20± 5°C) , Voltage charge time : 1 minute. Voltage charge : 100VDC ≥20000MΩ for C ≤ 0.1μF , ≥2000MΩ×μF for C > 0.1μF .
Withstand Voltage	Terminal to Terminal: (at20°C± 5°C) 2.5 × V_R applied for 2sec. (cut off current 10mA)

Rated Voltage Pulse Slope dV/dt (V/μs)	V.R \ Pitch	7m/m	10m/m	15m/m	22.5m/m	27.5m/m
	100VDC	7000	3800	1900	----------	----------
	200VDC	14000	7000	3800	1900	900

PEN

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 | ΔC/C | :≤ 2 % DF change Δtanδ: 0.5% at 1Khz IR: ≥ limit value.
Resistance to vibration IEC 60068-2-6"	Frequency range: 10hz to 55hz Amplitude: 1.5m/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 | ΔC/C | :≤ 5 % DF change Δtanδ: 0.5% at 1Khz IR: ≥ 50% limit value.
Endurance IEC 60384-11"	Temperature: 85°C± 2°C Voltage applied: 1.25×Vr(DC) Duration : 2000 hours	Capacitance change | ΔC/C | :≤ 5 % DF change Δtanδ: 0.5% at 1Khz IR: ≥ 50% limit value.

Cap. (μF)

Size Unit: m/m

R.V.	100VDC					200VDC				
Size / Cap.(μF)	W	H	T	P	dϕ	W	H	T	P	dϕ
.001	10.5	9.5	5.0	7	0.6	10.5	9.5	5.0	7	0.6
.0015	10.5	9.5	5.5	7	0.6	10.5	9.5	5.5	7	0.6
.0022	10.5	9.5	5.5	7	0.6	10.5	9.5	5.5	7	0.6
.0033	10.5	9.5	5.5	7	0.6	10.5	9.5	5.5	7	0.6
.0047	10.5	9.5	5.5	7	0.6	10.5	9.5	5.5	7	0.6
.0068	10.5	9.5	5.5	7	0.6	10.5	9.5	5.5	7	0.6
0.01	10.5	9.5	6.0	7	0.6	10.5	9.5	6.0	7	0.6
0.015	10.5	9.5	6.0	7	0.6	13.5	10.0	6.0	10	0.6
0.022	10.5	9.5	6.0	7	0.6	13.5	11.0	6.0	10	0.6
0.033	13.5	10.0	6.0	10	0.6	13.5	13.0	7.0	10	0.6
0.047	13.5	11.5	7.5	10	0.6	14.0	14.0	8.0	10	0.6
0.068	13.5	12.5	7.0	10	0.6	19.0	16.0	9.0	15	0.8
0.1	14.0	13.0	8.0	10	0.6	19.0	17.0	9.0	15	0.8
0.15	19.0	13.5	7.5	15	0.8	20.0	18.0	10.0	15	0.8
0.22	20.0	15.0	8.5	15	0.8	26.0	21.0	10.5	22.5	0.8
0.33	20.0	17.5	10.5	15	0.8	26.0	22.0	11.5	22.5	0.8
0.47	20.0	21.5	13.5	15	0.8	31.0	24.0	13.0	27.5	0.8