JINPEI SHANGHAI ELECTRONICS CO., LTD

POLYESTER/POLYPROPYLENE FILM METAL FOIL CAPACITOR(INDUCTIVE)

CH11

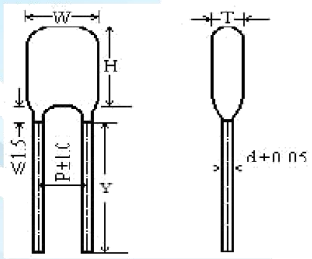
FEATURES

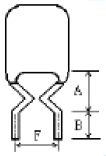
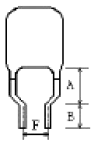
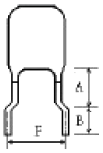
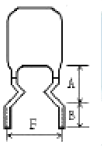
- Polyester/Polypropylene film/Foil, inductive wound construction
- Temperature coefficient of capacitance at a certain temperature range is small and similar to polycarbonate
- Low loss at high frequency
- High insulation resistance, good capacitance stability
- Epoxy resin vacuum-dipped

TYPICAL APPLICATIONS

- Suitable for timing circuit and oscillation circuit, etc.

OUTLINE DRAWING



Forming Lead Shapes			
I	II	III	IV
			
P ≥ F		P < F	
0mm≤P-F≤3mm	3mm<P-F≤8mm	3mm<F-P≤5mm	0mm<F-P≤3mm
F±1.0mm; A≤5.0mm; B=4.5±0.5mm			

SPECIFICATIONS

Reference Standard	GB/T 6346(IEC 60384-11)
Climatic Category	55/105/21
Rated temperature	85℃
Operating Temperature	-55℃~105℃ (+85℃ to +105℃: decreasing factor 1.25% per ℃ for VR(dc))
Rated Voltage	1 000V/1 200V
Capacitance Range	0.00051μF ~ 0.010μF
Capacitance Tolerance	±5%(J), ±10%(K), ±20%(M),
Voltage Proof	$2.0U_R(5_s)$≤0.5%（20℃,1kHz）
Dissipation Factor	≤0.5%（20℃,1kHz）
Insulation Resistance	≥50 000MΩ (20℃,1min)

TEST METHOD AND PERFORMANCE

No.	Item		Performance	Test method (IEC60384-11)
1	Solderability		Good quality of tinning	Solder temperature:245℃±5℃ Immersion time: 2.0s±0.5s
2	Initial measurement		Capacitance	
	Terminal strength		There shall be no visible damage	Tension: 5N(Φd=0.5) 10N(Φd≥0.6) Bend: 2.5N(Φd=0.5) 5N(Φd≥0.6) The terminals shall be bent 2 times in each direction.
	Resistance to solder heat		There shall be no visible damage	Solder temperature:260℃±5℃ Immersion time: 10s±1s
	Final measurement		△C/C≤±2%(relative to the initial value)	
3	Initial measurement		Capacitance, tgδ:1kHz	
	Rapid change of temperature		There shall be no evidence of deterioration	θ_A=-55°C,θ_B=+85°C 5 cycles, Duration: t=30min
	Vibration		There shall be no evidence of deterioration	98m/s² (whichever is the smaller severity), f: 10Hz to 500Hz. Three directions, 2h for each direction, total 6h
	Bump		There shall be no evidence of deterioration	4000 times, Acceleration: 390m/s²,Pulse duration, 6ms
	Final measurement		△C/C≤±(2%+2pF) (relative to the initial value) Tgδ≤0.005 (1KHz)	
4	Climate sequence	Initial measurement	Capacitance、Tgδ:1kHz	
		Dry heat		+85℃, 16h
		Damp heat,Cyclic		Test Db, Severity: b, the first cycle

No.	Item	Performance	Test method (IEC60384-11)
4	Climate sequence Cold		-55℃, 2h
	Low air pressure	There shall be no permanent breakdown, flashover or other harmful deformation when applying UR at the last 1 minute	15℃~35℃, 8.5kPa, 1h,
	Damp heat, cyclic other		Test Db, Severity b, the other cycles, Applying UR for 1 minute after the test finished
	Final measurement	There shall be no evidence of deterioration and the marking shall be legible. △C/C≤±(2%+2pF)(relative to the initial value) tgδ≤0.005(1KHz)or 1.2times initial value (whichever is the greater) IR:≥50%of the rated value	
5	Damp heat steady state	There shall be no evidence of deterioration and the marking shall be legible. △C/C≤±(2%+2pF)(relative to the initial value) tgδ≤0.005(1KHz)or 1.2times initial value (whichever is the greater) IR:≥50%of the rated value	Temperature:40℃±2℃ Humidity: 93 $^{+2}_{-3}$ %RH Duration: 21days
6	Endurance	There shall be no evidence of deterioration and the marking shall be legible △C/C≤±(2%+2pF)(relative to the initial value) tgδ≤0.005(1KHz)or 1.2times initial value (whichever is the greater) IR:≥50%of the rated value	Temperature: +85℃ Voltage: 1.5×U_R Duration: 1 000h
7	Temperature characteristic	Measuring capacitance at test point b, d, f : Characteristic at lower category temperature -55℃ -8%≤(Cb-Cd)/Cd≤0% Characteristic at upper category temperature +85℃: 0%≤(C_f-C_d)/C_d≤+5%	Static method: The Capacitors should be kept at the following temperature in turn: a(+20±2)℃, b(-55±2) ℃, d(20±2) ℃ f(+85±2) ℃, g(+20±2) ℃