SHANGHAI
JINPEI ELECTRONICS
CO. , LTD

AXIAL METALLIZED POLYESTER FILM CAPACITOR

CL20

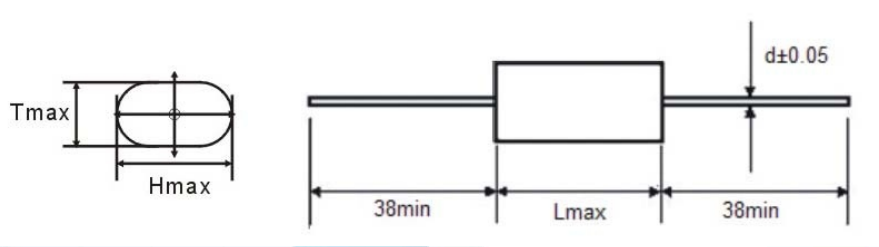
FEATURES

- Metallized polyester film, non-inductive wound construction
- Small size, light weight, excellent self-healing property
- Wrapped with polyester adhesive tape and ends filled

TYPICAL APPLICATIONS

- Suitable for blocking, by-pass ,coupling, and decoupling

OUTLINE DRAWING



SPECIFICATIONS

Reference Standard	GB 7332(IEC 60384-2)
Climatic Category	55/105/21
Rated temperature	85℃
Rated Voltage	50V, 63V, 100V, 250V, 400V, 630V, 1 000V
Capacitance Range	0.0010μF ~ 10μF
Capacitance Tolerance	±5%(J), ±10%(K), ±20%(M)
Voltage Proof	$1.6U_R$(5s)
Dissipation Factor	≤1.0% (20℃,1kHz)
Insulation Resistance	≥30 000MΩ, C_R≤0.33 μ F (20℃,1min) ≥10 000$_s$, C_R>0.33 μ F

TEST METHOD AND PERFORMANCE

No.	Item		Performance	Test method (IEC60384–2)
1	Solderability		Good quality of tinning	Solder temperature:245℃ ± 5℃ Immersion time: 2.0s ± 0.5s
2	Initial measurement		Capacitance Tg δ :1kHz, C > 1.0 μ F 10kHz, C≤1.0 μ F	
	Terminal strength		There shall be no visible damage	Ref. item 4.3 Tension: 0.6≤ Φd≤0.8mm, 10N □ Φd=1.0mm, 20N Bend: 0.6≤ Φd≤0.8mm, 5N Φd=1.0mm, 10N 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) Increase of tg δ : ≤0.005 (10kHz,C≤1.0 μ F) ≤0.003 (1kHz,C>1.0 μ F)	
3	Initial measurement		Capacitance, Tg δ : 1kHz, C > 1.0 μ F 10kHz, C≤1.0 μ F	
	Rapid change of temperature		There shall be no evidence of deterioration.	θ_A=–55℃, θ_B =+85℃ 5 cycles Duration: t=30min
	Vibration		There shall be no evidence of deterioration.	Amplitude 0.75mm or acceleration 98m/s^2 (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/s^2 ,Pulse duration, 6ms
	Final measurement		△C/C≤ ±5%(relative to the initial value) Increase of tg δ : ≤0.003 (C≤1.0 μ F) ≤0.002 (C>1.0 μ F) IR:≥50%of the rated value	
4	Climate sequence	Initial measurement	Capacitance, Tg δ :1kHz, C>1.0 μ F 10kHz, C≤1.0 μ F	
		Dry heat		+85℃, 16h

No.	Item		Performance	Test method (IEC60384-2)
4	Climate sequence	Damp heat,Cyclic		Test Db, Severity: b, the first cycle
		Cold		-55℃, 2h
		Low air pressure	There shall be no permanent breakdown, flashover or other harmful deformation when applying U_R at the last 1 minute.	15℃~ 35℃, 8.5kPa, 1h,
	climate sequence (continue)	Damp heat, cyclic other		Test Db, Severity b, the other cycles, Applying U_R for 1 minute after the test finished.
		Final measurement	There shall be no evidence of deterioration and the marking shall be legible. △C/C≤ ±5%(relative to the initial value) Increase of tg δ : ≤0.005(10kHz, C≤1.0μF) ≤0.003 (1kHz, C>1.0μF) 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≤ ±5%(relative to the initial value) Increase of tg δ ≤0.005 IR:≥50%of the rated value	Temperature:40℃ ±2℃ Humidity: 93^{+2}_{-3}%RH Duration: 21days
6	Endurance		△C/C≤ ±8%(relative to the initial value) Increase of tg δ : ≤0.003 (10kHz, C≤1.0μF) ≤0.002 (1kHz, C>1.0μF) IR:≥50%of the rated value	Temperature: +85℃ Voltage: 1.25 × U_R Duration: 1 000h
7	Charging and discharging		△C/C≤ ±5%(relative to the initial value) Increase of tg δ : ≤0.003 (10kHz, C≤1.0μF) ≤0.002 (1kHz, C>1.0μF) IR:≥50%of the rated value	Times: 10 000 Duration of charging: 0.5s Duration of discharging: 0.5s Charging voltage: rated voltage Charging resistance: 220/C_R(Ω) Discharging resistance: R=10/C_R(Ω) or 20□(whichever is the greater) C_R: rated capacitance (μF)