

I Description Of The SPMZC Intelligent PTCR PTC Thermistor

Sensors and components need keep improving with the demands of markets for higher and higher quality products. Our company introduced patent producing technology of intelligent PTCR to produce preheating-starting components of electronic ballasts and electronic energy-saving lamps ,which enormously increase the number of switching cycles and life of fluorescent lamps .At the same time ,they overcome temperature warming up and energy wasting of normal PTCR after they preheated and started electronic ballasts or electronic energy-saving lamps. They enhance luminous flux ,lumen numbers and luminescence efficiency,so they are called another creative revolution of green illuminance electricities.

II Features Of The SPMZC Intelligent PTCR PTC Thermistor

1. PTC and varistor composite;
2. No heat and no power consumption after the filament is warmed up;
3. Small size for easy installation;
4. Operating temperature range: -40 -- +125°C(V=Vmax);

III Dimensional Drawing Of The SPMZC Intelligent PTCR PTC Thermistor

Dimension: (mm)						Marking	
						<input type="checkbox"/> No marking <input checked="" type="checkbox"/> SP729565	
						Coating	
Material						Color	
<input type="checkbox"/> Epoxy resin <input checked="" type="checkbox"/> Silicon resin <input type="checkbox"/> Phenolic resin <input type="checkbox"/> Non-coating						<input type="checkbox"/> Red <input type="checkbox"/> Yellow <input checked="" type="checkbox"/> Green <input type="checkbox"/> Black	
Terminal						Shape	
<input type="checkbox"/> Tinned Cu wire <input checked="" type="checkbox"/> CP wire <input type="checkbox"/> Tinned phosphor <input type="checkbox"/> Leadless						<input type="checkbox"/> Side kink <input type="checkbox"/> Outer kink <input checked="" type="checkbox"/> Inner kink	
Dmax	F±1	hmax	Lmin	Φd±0.05	Hmax		
8.0	5.0	16.5	20.0	0.60	6.0		
Electrical performance							
Item	Technical requirement		Test condition and method				
Rated resistance R _r	300Ω±50%		Temperature:25 ± 2 °C, Testing voltage≤1.5VDC; Metering accuracy:± 0.5Ω				
Reference temperature T _{ref}	105±7°C		The temperature corresponding to twice as rated current. Thermal conductivity of static dielectric is silicone oil or air, temperature precision ±0.5°C, temperature maintaining time ≥15min; temperature upgrade ≤30°C/h				
Varistor Voltage V _{rms}	290 ±10%V		T _a : 25±2°C Testing Current : 1.0mA				

IV Application environment Of The SPMZC Intelligent PTCR PTC Thermistor

Ambient temperature: -10 -- +60°C
 Relative humidity: ≤95%RH(+40°C)
 Barometric pressure: 86 -- 106Kpa
 Vibration frequency:10 -- 50Hz
 Accelerated velocity:98m/s²
 Storage temperature: -40 -- +125°C

V Reliability test Of The SPMZC Intelligent PTCR PTC Thermistor

Appearance	No visible damage	Visual test
Solderability	At least 95% of terminal electrode is covered by new solder	Refer to IEC68-2-20(GB2423.28) T _a Dip each lead into 230±5°C solder for 3~5sec to the 5mm above body
Vibration	No marked defect.	The capacitor shall firmly be soldered to the supporting terminal and vibration, which is 10 to 55Hz in the vibration frequency range, 0.75mm in total amplitude, and about 10Hz to 55Hz and back to 10Hz. According to 4.16 in GB10193-88.
Solder ability	The terminals shall be uniformly tinned, and its area ≥95%	Dipping the PTCR' s terminals to a depth of 2-0.5mm in a soldering bath of 235±5°C for 5±0.5S.
Resistance to soldering heat	ΔV1mA/ V1mA≤±5% ΔR/R _n ≤20% No outstanding damage	After each lead shall be dipped into a solder bath having a temperature 260±5°C. To a point 2.0 to 2.5mm from the body of the unit. Using shielding. Board(t=1.5mm).be held there for specified time (5 series:5±1s and others:10±1s) and then be stored at room temperature and humidity for 1 to 2 hours. Refer to IEC68-2-20(GB2423.28) T _b
Flame-retardant		Refer to IEC695-2-2

Notes:

1. The production with a * is also used in electronic ballasts such as T5, T8.
2. The data is only for reference, you can forward your detailed requirements if possible.
3. We have obtained the SGS test report about the content of Lead,Cadmium,Mercury, Hexavalent Chromium,PBBs,PBDEs in the SPMZC series PTCR.