

-, Dimension, marking and encapsulation

1.Dimension

Dimension : (mm)					P D H H	
Dmax	Hmax	F	h _{max}	Lmin	d	h
13.0	5.0	5.0±1.0	17.0	3.0	0.60±0.10	P d L L

2. Model marking

Model	SPMZB-13 25Ω±25%
Marking	240V 03

3. Encapsulation material and color

■ Silicone resin	■ Green

4. Lead wire

■ Tinned copper wire	■ Kink





___. Electrical properties

NO.	Item	Test conditions and methods	Technical requirement
2.0	Standard test conditions	25±2℃、65%RH	
2.1	Rated Zero Power Resistance (Rn)	Test sample is placed in still air at 25 ±2℃ for 2 hours then use a resistor meter with a precision not less than 0.1to measure.	25Ω±25%
2.2	Non-operating current	Put PTC in still air with temperature of 25 +2°C, supply 220 VAC, 123 mA current, lasting for 60 minutes.	123mA △R/Rn≤50%
2.3	Operating characteristic	Put the PTC in an environment with a temperature of 25 ± 2 ° C.Power supply 220VAC, 245mA, the PTC enters a high resistance state within 5 minutes.	245mA≤5min
2.4	Curie temperature	Place the PTC in an incubator at 5 minutes / °C heating rate, using a multimeter to measure the zero power resistance value, The resistance is equal to 2 times the room temperature resistance.	115±7℃
2.5	Maximum operating voltage	Starting 1A current at ambient temperature of 25 ± 2 ° C ,lasting 10S, sudden break to 440VAC, lasting 10S,After standing for 24 hours, retest the zero power resistance value according to 2.1.	440VAC △R/Rn≤30%
2.6		The spent time that place the PTC in still air at a temperature of 25 ± 2 ° C, power supply 220VAC, starting current 1A,Naturally cooled after 30S, the PTC resistor is restored to 2Rn.	≤1min



三. Mechanical character

NO.	Item	Test conditions and methods	Technical requirement
3.1	Appearance	eye-measurement	Surface should be bright and smooth, printing should be clear, without any reduction damage of usability.
3.2	Leading end strength	Follow GB/T 2423.29 standard to test	No mechanical damage
	Vibration test	Frequency range:10Hz-55 Hz-10 Hz; Displacement amplitude: 0.75 mm Test according to 4.16 of GB10193-88	
3.3			No mechanical damage
3.4	Solderability	Test according to GB2423-28 Solder bath method, temperature: 235±5℃; immersion time 2±0.5 seconds; impregnation depth2±0.5mm。	At least 95% continuous new solder on the terminal
3.5	Resistance to welding heat	Test according to GB2423-29 .After standing for 24 hours at room temperature, retest zero power Resistance value.	Resistance change rate before and after the experiment △R/Rn≤20%

四.Endurance test

NO.	Item	Test conditions and methods	Technical requirement
4.1	High temperature storage	After being placed at 125±2°C temperature without load for 1000 hours, place In normal temperature and humidity for 1 to 2hours, and measure its characteristic.	
4.2	Wet storage	Place at 40±2°C, 90%-95% RH without load for 1000 hours, then take it to normal temperature and humidity for 1 to 2 hours,after that measure its characteristics	Nominal resistance change rate ≤±15%
4.3	Low temperature storage	After 1000 hours without load at -40±2°C temperature, take it In normal temperature and humidity, place for 1 to 2 hours, and measure its characteristics.	





五. Product use environment

Relative humidity	≤95%
Atmosphere	86-106Kpa
Shake frequency	10-50Hz
Snake frequency	10-30HZ
Acceleration	98m/S²
Storage temperature	-40-85℃