

Radial Lead Resettable Polymer PTCs

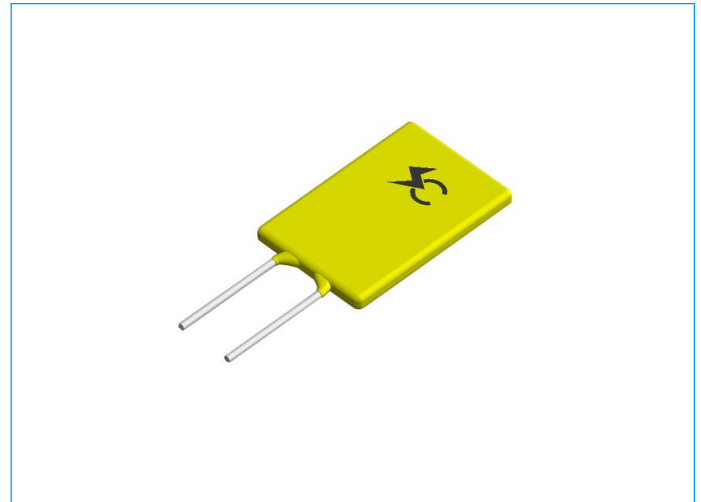
SC250-120SZ0D

Features

- ◆ RoHS Compliant and Halogen-Free
- ◆ Radial leaded Devices
- ◆ Flame retardant epoxy polymer insulating material meets UL94 V-0 requirement.
- ◆ Operation Current: 0.12 A, Maximum Voltage: 220Vdc, Operating Temperature: -40°C to +85°C

Applications

- ◆ IT equipment
- ◆ Access network equipment
- ◆ Central office equipment
- ◆ ISDN and xDSL equipments
- ◆ Phone set and fax machine
- ◆ LAN/WAN and VOIP cards



Electrical Parameters

Part Number	I_{hold} (A)	I_{trip} (A)	V_{max} (Vdc)	I_{max} (A)	P_{dtyp} (W)	Maximum Time To Trip		Resistance	
						Current (A)	Time (S)	R_{min} (Ω)	R_{1max} (Ω)
SC250-120SZ0D	0.12	0.24	220	3.0	1.0	0.60	15.0	8.0	18.0

I_{hold} = Hold current: maximum current at which the device will not trip at 25°C still air.

I_{trip} = Trip current: minimum current at which the device will always trip at 25°C still air.

V_{max} = Maximum voltage device can withstand without damage at rated current.

I_{max} = Maximum fault current device can withstand without damage at rated voltage.

T_{trip} = Maximum time to trip(s) at assigned current.

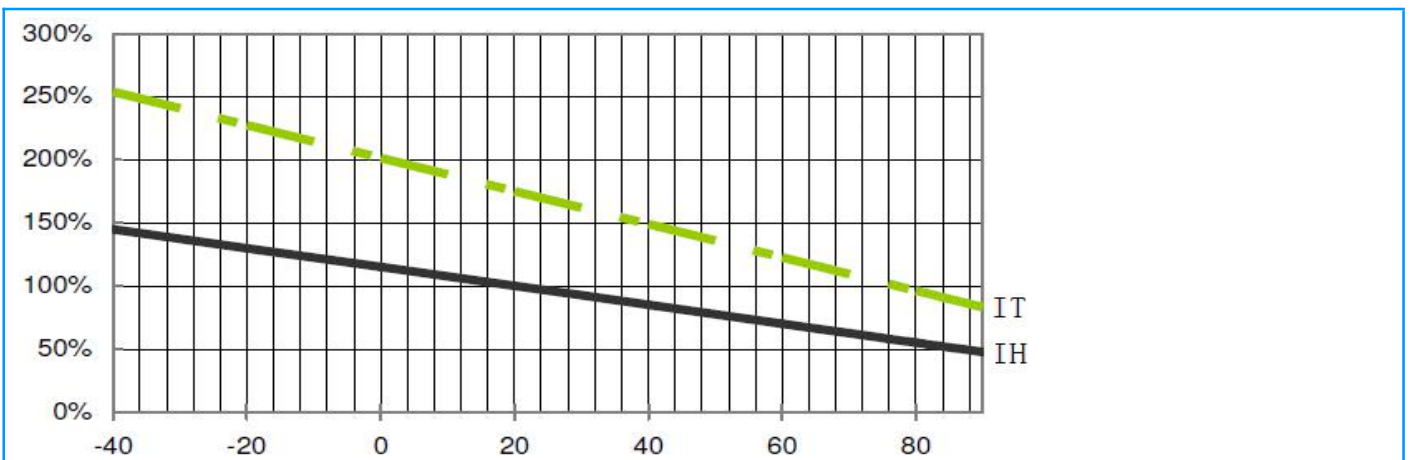
P_{dtyp} = Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

R_{min} = Minimum device resistance at 25°C prior to tripping.

R_{1max} = Maximum resistance of device at 25°C measured one hour after tripping.

Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.

Temperature Derating Curve



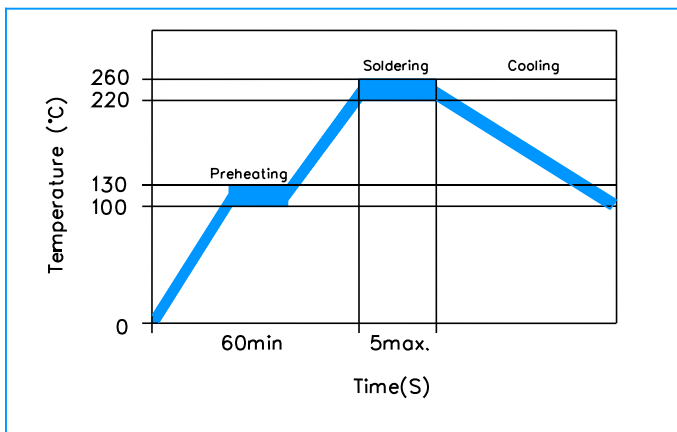
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Test Procedures and Requirement

Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ $25 \pm 2^\circ\text{C}$	$R_{\min} \leq R \leq R_{1\max}$
Hold Current	60 min, at I_{hold} , In still air @ $25 \pm 2^\circ\text{C}$	No trip
Time to Trip	Specified current, V_{\max} , @ $25 \pm 2^\circ\text{C}$	$T \leq \text{Maximum Time To Trip}$
Trip Cycle Life	V_{\max} , I_{\max} , 100 cycles	No arcing or burning
Trip Endurance	V_{\max} , 24hours	No arcing or burning

Soldering Parameters



Pre-Heating Zone	Refer to the condition recommended by the manufacturer. Max. ramping rate should not exceed 4°C/Sec
Soldering Zone	Max. solder temperature should not exceed 260°C
Cooling Zone	Cooling by natural convection in air

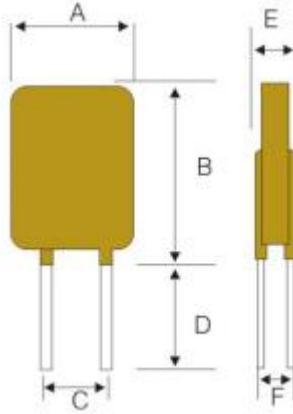
Physical Specifications

Lead Material	0.03-1.85A Tin-plated Copper clad steel 2.50-5.00A Tin-plated Copper
Soldering Characteristics	Solder ability per MIL-STD-202, Method 208E
Insulating Material	Cured, flame retardant epoxy polymer meets UL 94V-0 requirements.
Device Labeling	Marked with 'SC', voltage, current rating

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Dimensions



Part Number	Dimensions (mm)					
	A (Max)	B (Max)	C (Typ)	D (Min)	E (Max)	Lead(ϕ)
SC250-120SZ0D	7.0	13.0	5.1	7.6	4.4	0.60CP

Packaging Quantity

Part Number	Quantity (Pcs/Bag)
SC250-120SZ0D	1000