

Radial Lead Resettable Polymer PTCs

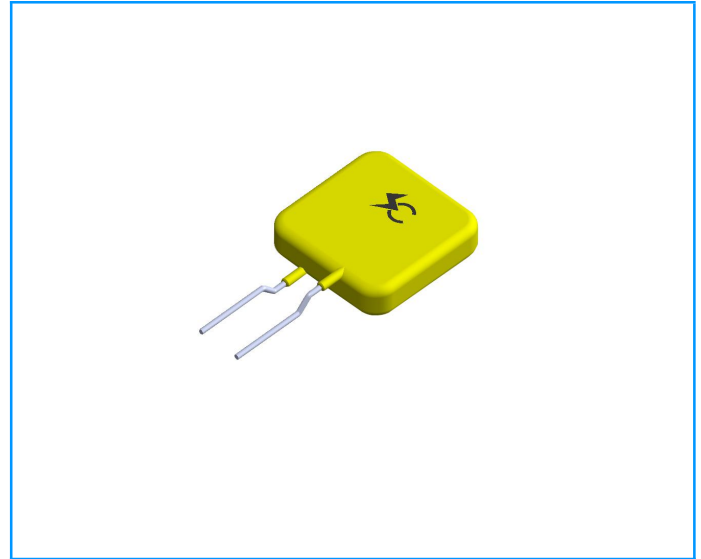
SC250-110SW0D

Features

- ◆ Radial leaded Devices
- ◆ Over-current protection
- ◆ High voltage surge capabilities
- ◆ Flame retardant epoxy polymer insulating material meets UL94 V-0 requirement
- ◆ Available in lead-free version
- ◆ Meets MSL level 1, per J-STD-020
- ◆ Relative Humidity: $\leq 80\%RH$
- ◆ Operation Current: 0.11A, Maximum Voltage: 220Vdc
- ◆ Operating Temperature: $-40^{\circ}C \sim +85^{\circ}C$

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} (V)	I_{max} (A)	P_{dtyp} (W)	Maximum Time To Trip		Resistance		
						Current (A)	Time (S)	R_{min} (Ω)	R_{max} (Ω)	R_{1max} (Ω)
SC250-110SW0D	0.11	0.22	220	3	1.0	0.55	0.75	7	11	17

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

I_{trip} = Trip current: minimum current at which the device will always trip at $25^{\circ}C$ 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 $25^{\circ}C$ prior to tripping.

R_{max} = Maximum device resistance at $25^{\circ}C$ prior to tripping.

R_{1max} = Maximum resistance of device at $25^{\circ}C$ measured one hour after tripping.

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

Thermal Derating Chart – I_{hold} (A)

Part Number	Maximum Ambient Operation Temperature								
	$-40^{\circ}C$	$-20^{\circ}C$	$0^{\circ}C$	$23^{\circ}C$	$40^{\circ}C$	$50^{\circ}C$	$60^{\circ}C$	$70^{\circ}C$	$85^{\circ}C$
	Percentage Reduction								
SC250-110SW0D	145%	130%	120%	100%	88%	80%	71%	66%	56%

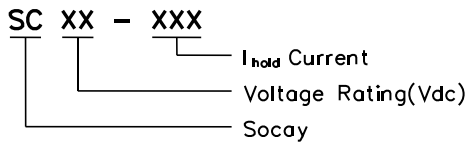
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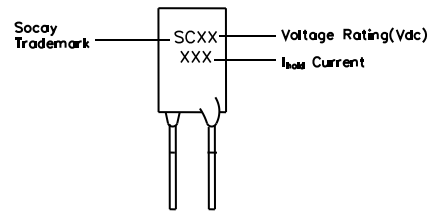
Test Procedures and Requirement

Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @25±2°C	$R_{min} \leq R \leq R_{max}$
Hold Current	60 min, at I_{hold} , In still air @25±2°C	No trip
Time to Trip	Specified current, V_{max} , @25±2°C	$T \leq$ 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

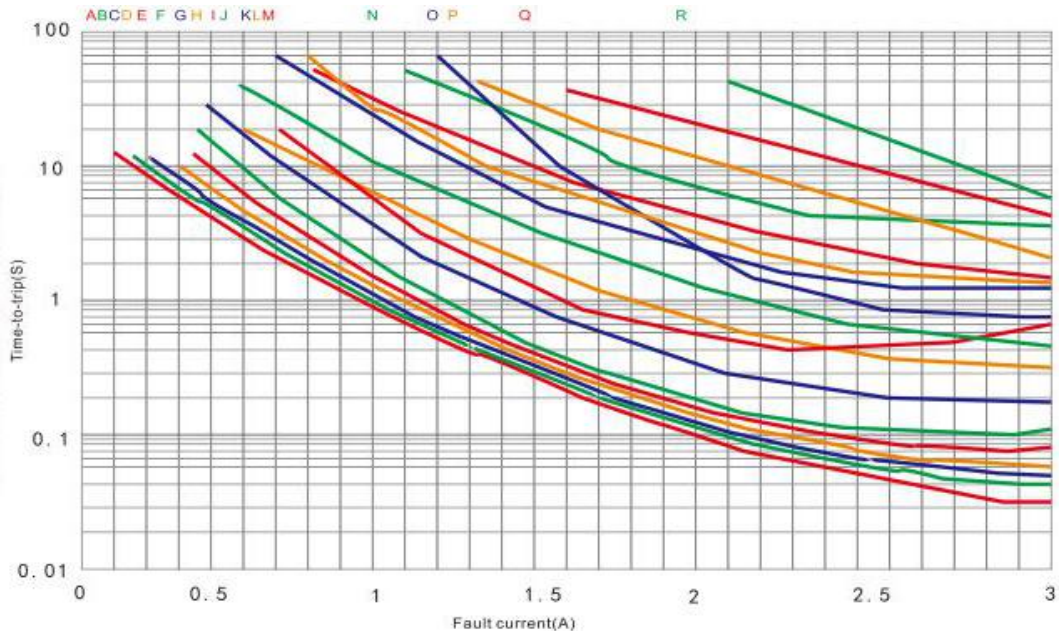
Part Numbering



Part Marking



Typical Time-To-Trip at 25°C ±2°C

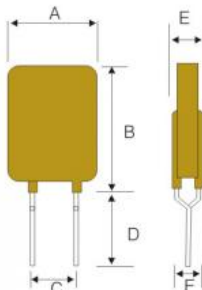


Note: G=SC250-110SW0D

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Dimensions



Part Number	Dimensions (mm)						Lead Material
	A (Max)	B (Max)	C (Typ)	D (Min)	E (Max)	F (Typ)	Tinned Metal (mm)
SC250-110SW0D	7.0	11.5	5.1	7.6	3.8	—	22 AWG/Φ0.6

Packaging Quantity

Part Number	Quantity (pcs/Bag)
SC250-110SW0D	1000