

Radial Lead Resettable Polymer PTCs

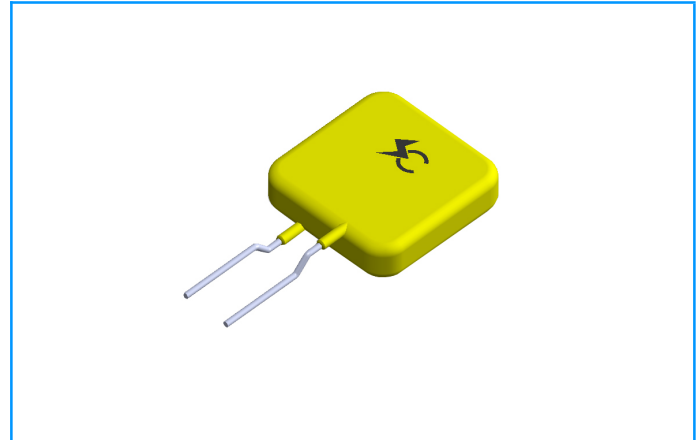
SC600-150SW0D

Features

- RoHS Compliant and Halogen-Free
- Radial leaded Devices
- Cured, flame retardant epoxy polymer insulating material meets UL94V-0 requirements
- Operation Current: 0.15A, Maximum Voltage: 400Vdc, Operating Temperature: -40°C to +85°C

Applications

- USB hubs, ports and peripherals
- Power ports
- IEEE1394 ports
- Motor protection
- Automotive application
- Computers and peripherals
- General electronics



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 _{max} (Ω)	R1 _{max} (Ω)
SC600-150SW0D	0.15	0.30	400	3.0	1.5	0.75	5.0	6.0	12.0	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 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_{max}= Maximum device resistance at 25°C prior to tripping.

R1_{max}= 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.

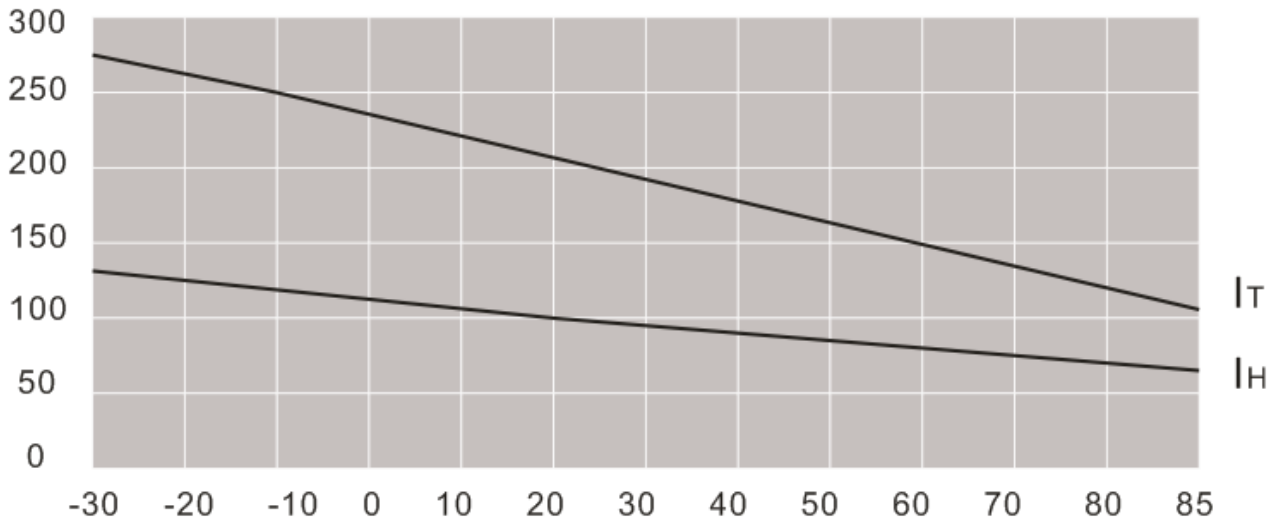
Temperature Derating Chart - I_{hold} (A)

Ambient Operation Temperature	-40°C	-20°C	0°C	23°C	30°C	40°C	50°C	60°C	70°C	85°C
Percentage Reduction	145%	130%	120%	100%	95%	88%	80%	71%	66%	56%

Radial Lead Resettable Polymer PTCs

SC600-150SW0D

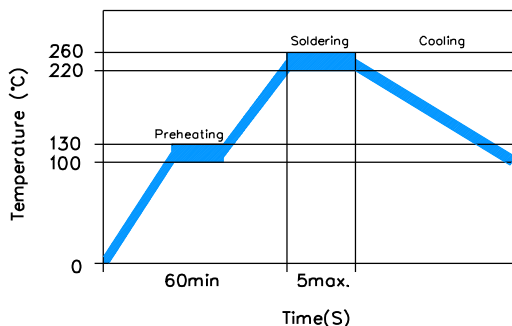
Temperature Derating Curve



Test Procedures and Requirement

Test	Test Conditions	Accept/Reject Criteria
Resistance	In still air @ $25 \pm 2^\circ\text{C}$	$R_{\min} \leq R \leq R_{\max}$
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} , 24 hours	No arcing or burning

Soldering Parameters



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

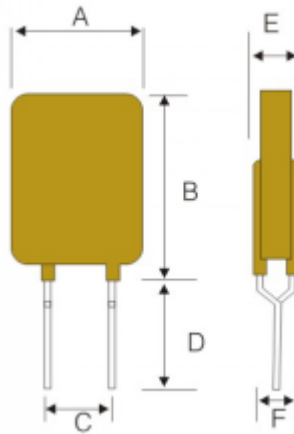
Radial Lead Resettable Polymer PTCs

SC600-150SW0D

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

Dimensions



Part Number	Dimensions (mm)						Lead Material
	A (Max)	B (Max)	C (Typ)	D (Min)	E (Max)	F (Typ)	Tinned Metal (mm)
SC600-150SW0D	14.5	16.0	5.1	7.6	6.3	/	Φ0.80

Packaging Quantity

Part Number	Quantity
SC600-150SW0D	500 PCS