

# Radial Lead Resettable Polymer PTCs

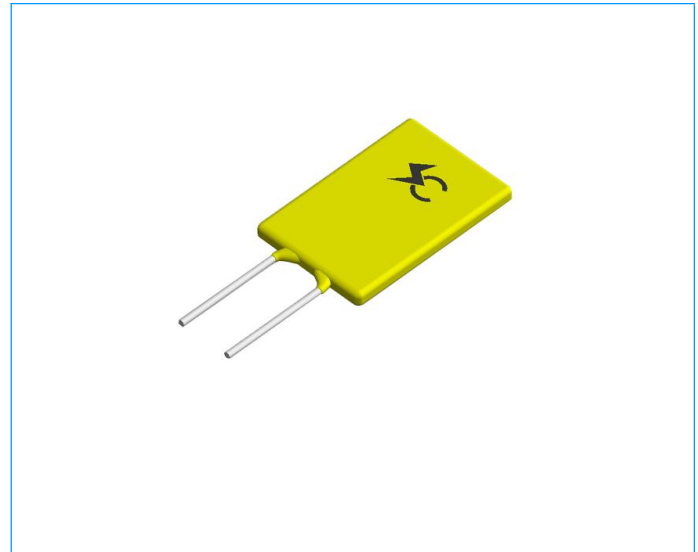
## SC16-1000SZ0D

### Features

- ◆ RoHS Compliant and Halogen-Free
- ◆ Radial leaded Devices
- ◆ Cured, flame retardant epoxy polymer insulating material meets UL94V-0 requirements
- ◆ Operation Current: 10 A, Maximum Voltage: 16Vdc, Operating Temperature: -40°C to +85°C

### Applications

- ◆ USB hubs, ports and peripherals
- ◆ Power ports
- ◆ IEEE1394 ports
- ◆ Motor protection
- ◆ 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)	$R_{min}$ ( $\Omega$ )	$R1_{max}$ ( $\Omega$ )
SC16-1000SZ0D	10.00	20.00	16	40	3.6	50.0	12.5	0.004	0.013

$I_{hold}$  = 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.

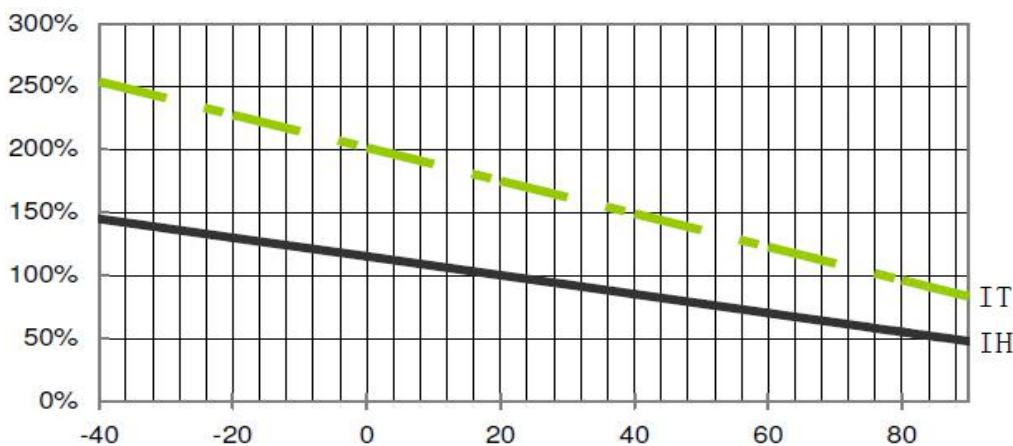
$R_{min}$  = Minimum device resistance at 25°C prior to tripping.

$R_{max}$  = 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 Curve



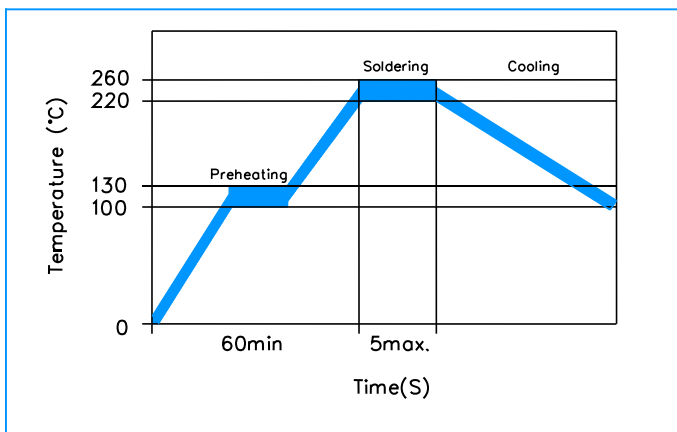
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## SC16-1000SZ0D

### 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	$T \leq \text{Maximum Time To Trip}$
Trip Cycle Life	$V_{max}$ , $I_{max}$ , 100 cycles	No arcing or burning
Trip Endurance	$V_{max}$ , 24hours	No arcing or burning

### Soldering Parameters



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

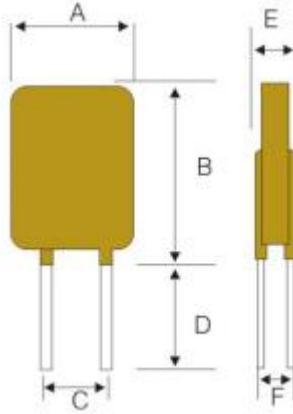
### Physical Specifications

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

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**SC16-1000SZ0D**

### Dimensions



Part Number	Dimensions (mm)					
	A (Max)	B (Max)	C (Typ)	D (Min)	E (Max)	F (Typ)
SC16-1000SZ0D	16.5	25.2	5.1	7.6	3.0	1.2

### Packaging Quantity

Part Number	Quantity (pcs/reel)
SC16-1000SZ0D	200