SOCAY

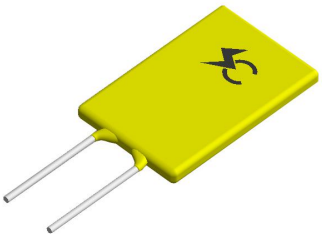
HF RoHS

Radial Lead Resettable Polymer PTCs

SC16-500SZ0A

Features

- RoHS Compliant and Halogen-Free
- Radial leaded Devices
- Cured,flame retardant epoxy polymer insulating material meets UL94V-0 requirements
- Operation Current: 5.00A, Maximum Voltage:16Vdc, Operating Temperature: -40℃ to +85℃



Applications

- Computers and peripherals
- Power ports
- General electronics

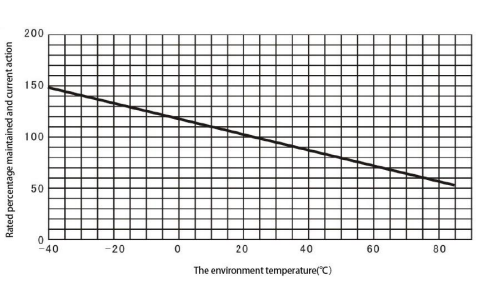
Electrical Parameters

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} (mΩ)	R_{max} (mΩ)	$R1_{max}$ (mΩ
SC16-500SZ0A	5.0	8.5	16	100	2.6	15	10	14	28	34

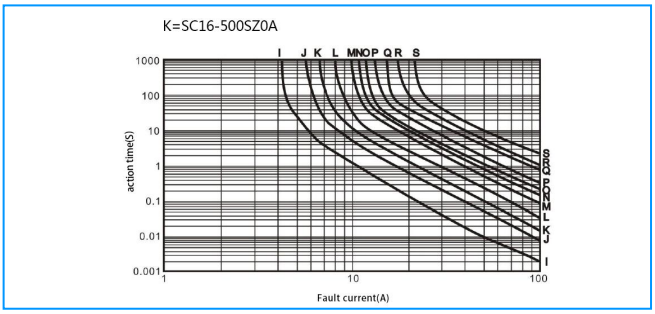
I_{hold}= Hold current: maximum current at which the device will not trip at 25℃ still air.
I_{trip}= Trip current: minimum current at which the device will always at 25℃ still air.
V_{max}= Maximum voltage device can withstand without damage at rated current.
I_{max}= Maximum fault current device can 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℃ prior to tripping.
R_{max}= Maximum device resistance at 25℃ 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.

Part Number	Maximum Ambient Operation Temperature								
	-40℃	-20℃	0℃	25℃	40℃	50℃	60℃	70℃	85℃
	Hold Current (A)								
SC16-500SZ0A	7.30	6.60	6.00	5.00	4.40	4.00	3.60	3.10	2.40

Average Time Current Curves



Temperature Rerating Curve



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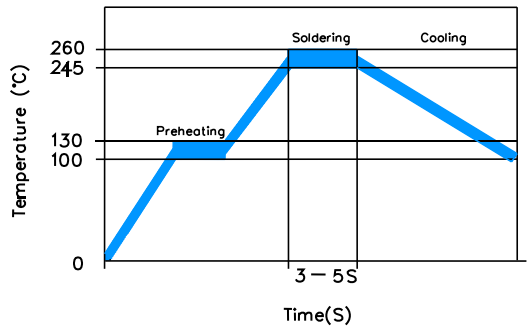
Test Procedures and Requirements

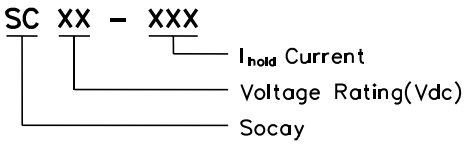
Test Item	Test Conditions	Accept/Reject Criteria
Resistance	In still air @25℃	$R_{min} \le R \le R_{max}$
Hold Current	60 min, @ I_{hold}	No trip
Time to Trip	Specified current, V_{max}, @25℃	T≤Maximum Time To Trip
Frequency Current Withstand	V_{max} / I_{max},15 minute	Resistance change rate：≤50%
Trip Endurance	V_{max} / I_{max},24 hours	No arcing or burning

Soldering Parameters

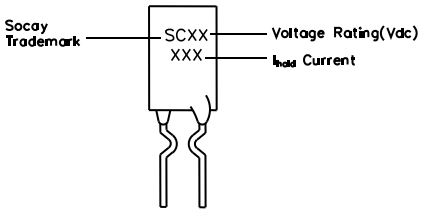


Pre-Heating Zone	Refer to the condition recommended by the manufacturer. Max. ramping rate should not exceed 4℃/Sec
Soldering Zone	Max. solder temperature should not exceed 260℃
Cooling Zone	Cooling by natural convection in air

Part Numbering



Part Marking



Packaging and Storage

Part Number	Quantity
SC16-500SZ0A	1000Pcs/Bag or 2000Pcs/Box

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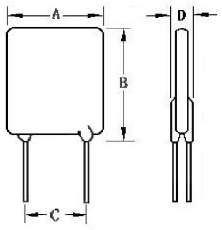
Dimensions



Part Number	Dimensions (mm)				Lead Material
	A (Max)	B (Max)	C	D (Max)	Tinned Metal (mm)
SC16-500SZ0A	10	16	5.1±0.5	3.0	24 AWG/Φ0.8