



## **Radial Lead Resettable Polymer PTCs**

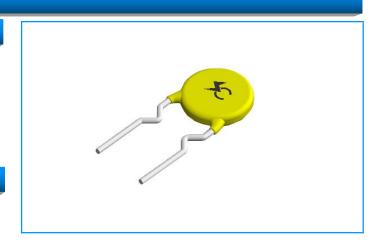
#### SC16-120CW0A

#### **Features**

- RoHS Compliant and Halogen-Free
- Radial leaded Devices
- Cured,flame retardant epoxy polymer insulating material meets UL94V-0 requirements
- ◆ Operation Current: 1.20A, Maximum Voltage: 16Vdc, Operating Temperature: -40°C to +85°C

#### **Applications**

- Computers and peripherals
- Power ports
- General electronics



#### **Electrical Parameters**

Part Number	I hold (A)	1 (0)	V <sub>max</sub>	I <sub>max</sub> (A)	P dtyp (W)	Maximum Time To Trip		Resistance		
		I trip (A)	(Vdc)			Current (A)	Time (S)	$R_{min}$ (m $\Omega$ )	$R_{max}$ (m $\Omega$ )	R1 <sub>max</sub> (mΩ
SC16-120CW0A	1.20	2.40	16	40	0.75	3.60	10	70	140	210

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

P<sub>dtyp.</sub>= Typical power dissipation: typical amount of power dissipated by the device when in state air environment.

R <sub>min</sub>= Minimum device resistance at 25°C prior to tripping.

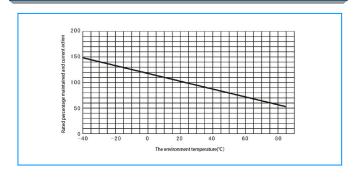
R <sub>max</sub>= Maximum device resistance at 25 ℃ prior to tripping.

R1<sub>max</sub>= Maximum resistance of device at 25° C measured one hour after tripping.

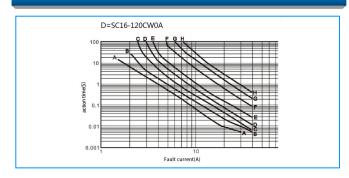
Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.

			M	aximum Ambient Operation Temperature					
Part Number	-40℃	<b>-20</b> ℃	0℃	<b>25</b> ℃	<b>40</b> ℃	50℃	60℃	<b>70</b> ℃	85℃
	Hold Current (A)								
SC16-120CW0A	1.74	1.56	1.38	1.20	1.00	0.92	0.82	0.73	0.62

#### **Average Time Current Curves**



#### **Temperature Rerating Curve**



I  $_{\text{trip}}$ = Trip current: minimum current at which the device will always at 25  $^{\circ}$ C still air.

V <sub>max</sub>= 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.





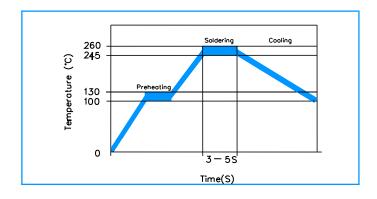
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### SC16-120CW0A

#### **Test Procedures and Requirements**

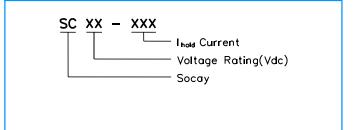
Test Item	Test Conditions	Accept/Reject Criteria		
Resistance	In still air @25℃	R <sub>min</sub> ≤R≤R <sub>max</sub>		
Hold Current	60 min, @ I <sub>hold</sub>	No trip		
Time to Trip	Specified current, V <sub>max</sub> , @25℃	T≤Maximum Time To Trip		
Frequency Current Withstand	V <sub>max</sub> / I <sub>max</sub> ,15 minute	Resistance change rate: ≤50%		
Trip Endurance	V <sub>max</sub> / I <sub>max</sub> ,24 hours	No arcing or burning		

## **Soldering Parameters**

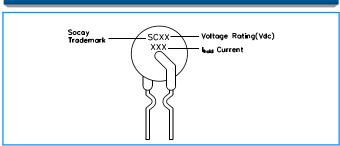


Pre-Heating Zone	Refer to the condition recommended by the manufacturer. Max. ramping rate should not exceed 4°C/Sec				
Soldering Zone	Max. solder temperature should not exceed 260 ℃				
Cooling Zone	Cooling by natural convection in air				

#### **Part Numbering**



## Part Marking



## **Packaging and Storage**

Part Number	Quantity			
SC16-120CW0A	1000Pcs/Bag or 2000Pcs/Box			

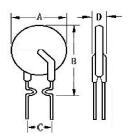




# **Radial Lead Resettable Polymer PTCs**

## SC16-120CW0A

### **Dimensions**



Part Number		Dimensions (mm)			Lead Material
rait Nullibei	A (Max)	B (Max)	C	D (Max)	Tinned Metal (mm)
SC16-120CW0A	7.2	12.2	5.1±0.5	3.0	24 AWG/Ф0.5