



Radial Lead Resettable Polymer PTCs

SC16-400SZ0A

Features

- RoHS Compliant and Halogen-Free
- Radial leaded Devices
- Cured,flame retardant epoxy polymer insulating material meets UL94V-0 requirements
- ♦ Operation Current: 4.00A, 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) | I _{trip} (A) | V _{max} (Vdc) | l _{max} (A) | P _{dtyp} (W) | Maximum Time To Trip | | Resistance | | |
|--------------|-----------------------|-----------------------|---------------------------|-------------------------|--------------------------|-------------------------|-------------|--------------------------|--------------------------|--------------------------|
| | | | | | | Current (A) | Time (S) | R _{min} (mΩ) | R _{max} (mΩ) | R1 _{max} (mΩ |
| SC16-400SZ0A | 4.0 | 6.8 | 16 | 100 | 2.4 | 12 | 7.0 | 20 | 44 | 60 |

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

I $_{trip}$ = Trip current: minimum current at which the device will always 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 $_{\text{min}}\text{=}$ Minimum device resistance at 25 $^\circ\!\!\!\!\mathrm{C}$ $\,$ prior to tripping.

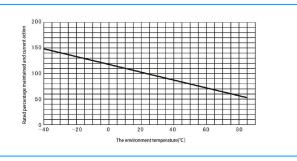
R $_{\text{max}}\text{=}$ Maximum device resistance at 25 $^\circ\!\!\!\mathrm{C}^\circ$ prior to tripping.

 $R1_{max}\text{=}$ Maximum resistance of device at 25 $^\circ\,$ C measured one hour after tripping.

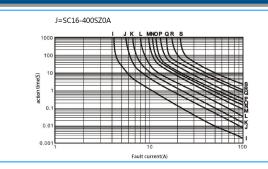
Caution: Operation beyond the specified rating may result in damage and possible arcing and flame.

| Part Number | Maximum Ambient Operation Temperature | | | | | | | | | |
|--------------|---------------------------------------|---------------|-------------------|------|-------------|------------|------------|------|------|--|
| | -40 ℃ | -20° ℃ | 0℃ 0℃ 25℃ 40℃ 50℃ | | 60 ℃ | 70℃ | 85℃ | | | |
| | Hold Current (A) | | | | | | | | | |
| SC16-400SZ0A | 5.90 | 5.30 | 4.80 | 4.00 | 3.50 | 3.20 | 2.80 | 2.50 | 1.90 | |

Average Time Current Curves

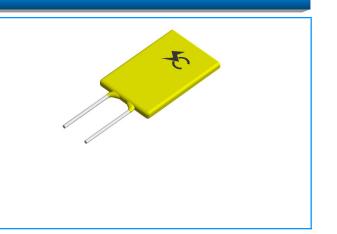


Temperature Rerating Curve



SOCAY Electronics Corp., Ltd.

www.socay.com





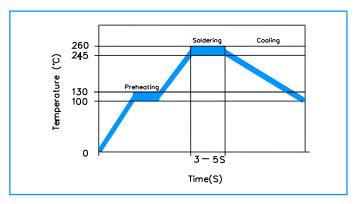
Radial Lead Resettable Polymer PTCs

SC16-400SZ0A

Test Procedures and Requirements

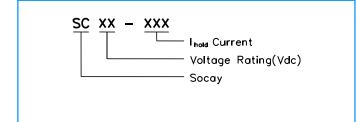
| Test Item | Test Conditions | Accept/Reject Criteria | | |
|--------------------------------|--|--------------------------------------|--|--|
| Resistance | In still air @25℃ | R _{min} ≤R≤R _{max} | | |
| Hold Current | 60 min, @ I _{hold} | No trip | | |
| Time to Trip | Specified current, V _{max} , @25°C | 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

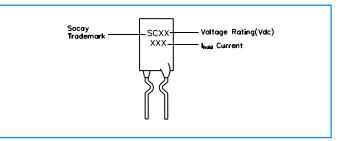


| Pre-Heating Zone | Refer to the condition recommended by the manufacturer. Max. ramping rate should not exceed 4°C/Sec | | | | |
|------------------|---|--|--|--|--|
| Soldering Zone | Max. solder temperature should not exceed 260 $^\circ\!\mathrm{C}$ | | | | |
| Cooling Zone | Cooling by natural convection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

Part Numbering



Part Marking



Packaging and Storage

| Part Number | Quantity |
|--------------|----------------------------|
| SC16-400SZ0A | 1000Pcs/Bag or 2000Pcs/Box |

SOCAY Electronics Corp., Ltd. 2018
Specifications are subject to change without notice.
Please refer to www.socay.com for current information.

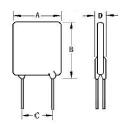




Radial Lead Resettable Polymer PTCs

SC16-400SZ0A

Dimensions



| Part Number | | Lead Material | | | |
|--------------|---------|---------------|---------|---------|-------------------|
| | A (Max) | B (Max) | С | D (Max) | Tinned Metal (mm) |
| SC16-400SZ0A | 8.8 | 13.5 | 5.1±0.5 | 3.0 | 24 AWG/Φ0.8 |

SOCAY Electronics Corp., Ltd.

RevisionAugust 17, 2018

www.socay.com