

Radial Lead Resettable Polymer PTCs

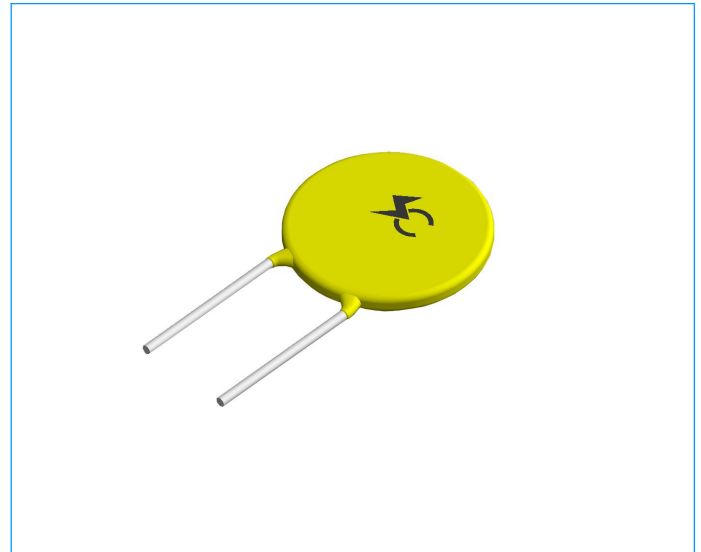
SC60-065CZ0D

Features

- ◆ RoHS Compliant and Halogen-Free
- ◆ Radial leaded Devices
- ◆ Cured, flame retardant epoxy polymer insulating material meets UL94V-0 requirements
- ◆ Operation Current: 0.65 A, Maximum Voltage: 60Vdc, 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 _{1max} (Ω) |
| SC60-065CZ0D | 0.65 | 1.30 | 60 | 40 | 0.90 | 3.25 | 5.3 | 0.27 | 0.72 |

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.

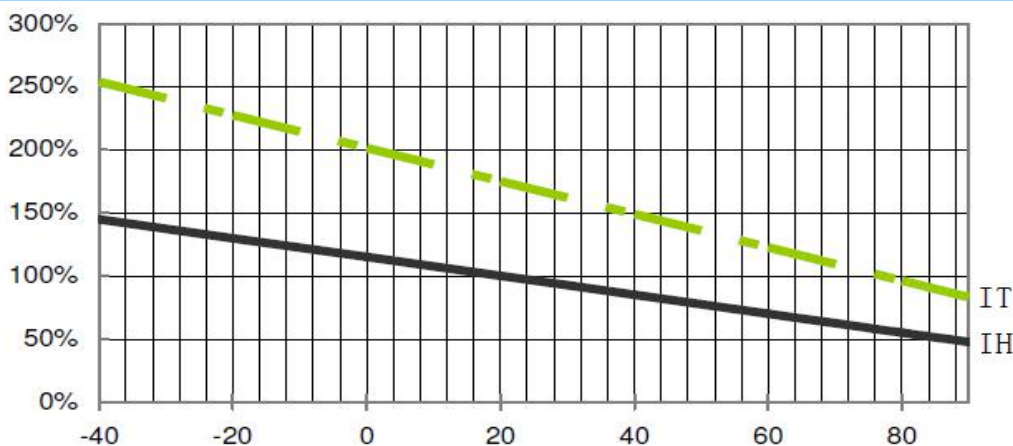
R_{min}= Minimum device resistance at 25°C prior to tripping.

R_{max}= Maximum device resistance at 25°C prior to tripping.

R_{1max}= 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



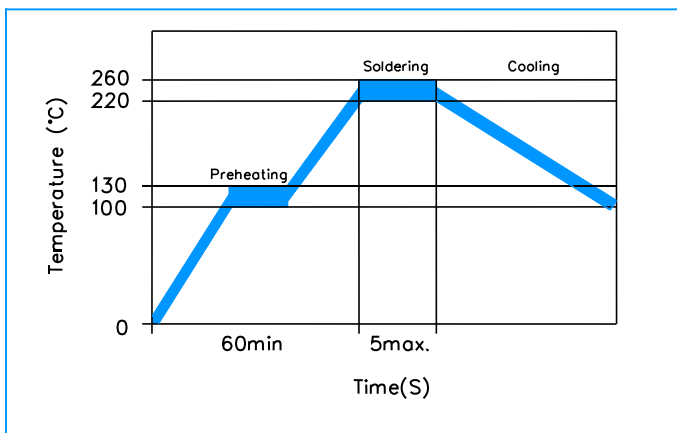
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Test Procedures and Requirement

| 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



| | |
|-------------------------|---|
| 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°C |
| Cooling Zone | Cooling by natural convection in air |

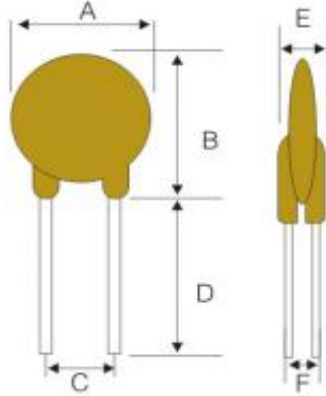
Physical Specifications

| | |
|----------------------------------|---|
| 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 |

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Dimensions



| Part Number | Dimensions (mm) | | | | | |
|--------------|-----------------|---------|---------|---------|---------|---------|
| | A (Max) | B (Max) | C (Typ) | D (Min) | E (Max) | F (Typ) |
| SC60-065CZ0D | 9.4 | 14.5 | 5.1 | 7.6 | 3.1 | 1.1 |

Packaging Quantity

| Part Number | Quantity (pcs/reel) |
|--------------|---------------------|
| SC60-065CZ0D | 1000 |