

PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: TSL250-080F-B-0.5

DOCUMENT: SCD26291 REV LETTER: D REV DATE: JULY 26, 2016

PAGE NO.: 1 OF 2

Specification Status: Released

Operating Conditions at 20°C:

Maximum Continuous Operating Voltage (V_{MCO}): 80V_{DC} Maximum Interrupt Current (I_{INT}): 3A_{RMS}

Fault Ratings at 20°C:

250V_{RMS}, 3A, 10 applications

Additional Info at 20°C:

- Resistance matched: 0.5 ohm
- Lightning withstand: 1.0 kV per ITU-T K.20, K.21
 - 1.5 kV per Telcordia GR1089 Intrabuilding Surge 1 & 2
- Helps equipment meet ITU-T K.20, K.21 Recommendations
- Helps equipment meet Telcordia GR1089 Intrabuilding requirements

Terminal Material: Tin-Plated Brass

Marking:

Manufacturer's Mark

T08 — Part Identification

Lot Identification

TABLE I. DIMENSIONS:

| | Α | | В | | С | | D | | E | |
|------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| | MIN | MAX | MIN | MAX | MIN | MAX | | MAX | MIN | MAX |
| | | | | | | | MIN | | | |
| mm: | 6.7 | 7.9 | 2.7 | 3.7 | 4.8 | 5.3 | 0.2 | 0.4 | 2.5 | 3.1 |
| in:* | (0.265) | (0.310 | (0.110) | (0.145) | (0.190) | (0.210) | (0.008) | (0.015) | (0.100) | (0.120) |

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

| HOLD CURRENT (A) | | TRIP CURRENT (A) | RESISTANCE (Ω) | | | TIME TO TRIP(Sec) @ 1A | | OPERATING TEMPERATURE (°C) | | TRIPPED POWER DISSIPATION (W) @ 80VDC | |
|------------------------|-------|------------------------|----------------|-------|---------------------|---------------------------|-----|----------------------------------|-----|---------------------------------------|-----|
| 20°C | 70°C | | R MIN | R MAX | R ₁ MAX* | TYP | MAX | MIN | MAX | TYP | MAX |
| 0.080 | 0.044 | 0.24 | 5.0 | 11.0 | 20.0 | 0.8 | 1.6 | -40 | 85 | 1.0 | 1.2 |

^{*}Maximum device resistance at 20°C measured 1 hour post trip and 24 hours post reflow

TABLE III. APPLICABLE PART DESCRIPTIONS:

| ı | PART DESCRIPTION | PACKAGING TYPE | NOTE |
|---|-------------------|----------------|----------------------|
| ı | TSL250-080F-B-0.5 | Tape and Reel | Dim D not applicable |

Agency Recognitions: UL (File #E74889), CSA (File #78165C), TUV

Reference Documents: PS300, ITU-T K.20, K.21

Precedence: This specification takes precedence over documents referenced herein.

Effectivity: Reference documents shall be the issue in effect on the date of invitation for bid.

Caution: Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

Materials Information ROHS Compliant

Directive 2002/95/EC

Compliant

ELV Compliant

Pb-Free

Directive 2000/53/EC Compliant



© 2016 Littelfuse,Inc Specifications are subject to change without notice. Revised July 26, 2016 Littelfuse.com

В



PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: TSL250-080F-B-0.5

DOCUMENT: SCD26291 REV LETTER: D

REV DATE: JULY 26, 2016 PAGE NO.: 2 OF 2

Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, military, aerospace, medical, lifesaving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse.