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# PolySwitch® PTC Devices

**Overcurrent Protection Device**

**PRODUCT: TRF250-080U**

DOCUMENT: SCD26315
REV LETTER: G
REV DATE: JULY 26,2016


## Specification Status: Released

**Operating Conditions at 20°C:**

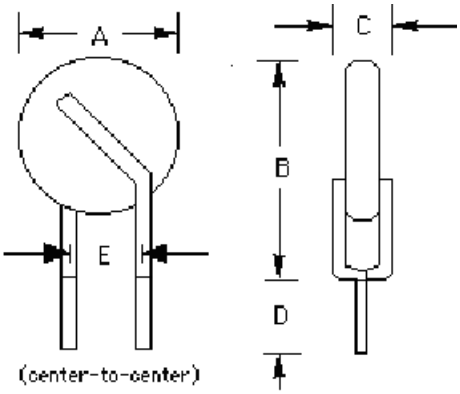
Maximum Continuous Operating Voltage ($V_{MCO}$): $60V_{DC}$
Maximum Interrupt Current ($I_{INT}$): $3A_{RMS}$

**Fault Ratings at 20°C:**

$250V_{RMS}$, 3A, 10 applications

**Additional Info at 20°C:**

- Resistance matched: n/a
- Lightning withstand: 1.0 kV per ITU-T K.20, K.21
- Helps equipment meet ITU-T K.20, K.21 Recommendations




**Lead Material:**

22 AWG Sn-Plated Copper (0.64 mm [0.025"] nominal diameter)

**External Coating Material:**

None

**Marking:**

None

**TABLE I. DIMENSIONS:**

| | A | | B | | C | | D | | E |
|---|---|---|---|---|---|---|---|---|---|
| | MIN | MAX | MIN | MAX | MIN | MAX | MIN | MAX | NOM |
| mm: | -- | 4.8 | -- | 9.3 | -- | 3.8 | 4.7 | -- | 5.0 |
| in*: | -- | (0.19) | -- | (0.37) | -- | (0.15) | (0.19) | -- | (0.20) |

*Rounded off approximation

**TABLE II. PERFORMANCE RATINGS @ 20°C:**

| HOLD CURRENT (A) | TRIP CURRENT (A) | RESISTANCE (Ω) | | | TIME TO TRIP(Sec) @ 0.35A | | OPERATING TEMPERATURE (°C) | | TRIPPED POWER DISSIPATION (W) @ $60V_{DC}$ | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | R MIN | R MAX | $R_{1\ MAX}$* | TYP | MAX | MIN | MAX | TYP | MAX |
| 0.080 | 0.160 | 14.0 | 20.0 | 33.0 | 2.5 | 4.0 | -40 | 85 | 0.6 | 0.7 |

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

**TABLE III. APPLICABLE PART DESCRIPTIONS:**

| PART DESCRIPTION | PACKAGING TYPE | NOTES |
|---|---|---|
| TRF250-080U | Bulk | N/A |

**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** — Directive 2000/53/EC Compliant

**Pb-Free**

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