

## Specification Status: Released

### Operating Conditions at 20°C:

Maximum Continuous Operating Voltage ( $V_{MCO}$ ): 60V<sub>DC</sub>

Maximum Interrupt Current ( $I_{INT}$ ): 3A<sub>RMS</sub>

### Fault Ratings at 20°C:

250V<sub>RMS</sub>, 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
- Helps equipment meet Telcordia GR1089 intrabuilding requirements

### Lead Material:

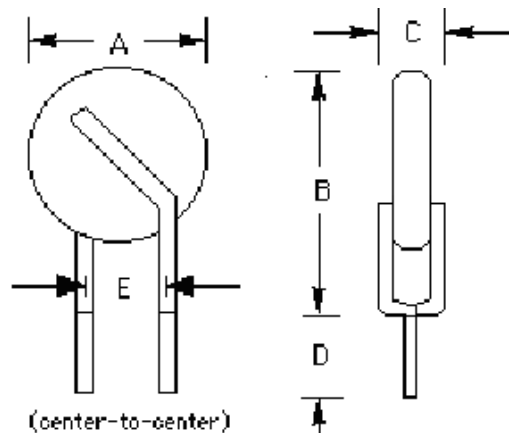
22 AWG Sn-Plated Copper (0.64 mm [0.025"] nominal diameter)

### External Coating Material:

None

### Marking:

None



**TABLE I. DIMENSIONS:**

|      | A   |        | B   |        | C   |        | D      |     | E      |
|------|-----|--------|-----|--------|-----|--------|--------|-----|--------|
|      | MIN | MAX    | MIN | MAX    | MIN | MAX    | MIN    | MAX | NOM    |
| mm:  | --  | 5.3    | --  | 9.4    | --  | 3.8    | 4.7    | --  | 5.0    |
| in*: | --  | (0.21) | --  | (0.37) | --  | (0.15) | (0.19) | --  | (0.20) |

\*Rounded off approximation

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

| HOLD<br>CURRENT<br>(A) | TRIP<br>CURRENT<br>(A) | RESISTANCE (Ω) |       |                     | TIME TO TRIP(Sec)<br>@ 1A |     | OPERATING<br>TEMPERATURE<br>(°C) |     | TRIPPED<br>POWER DISSIPATION<br>(W) @ 60V <sub>DC</sub> |     |
|------------------------|------------------------|----------------|-------|---------------------|---------------------------|-----|----------------------------------|-----|---------------------------------------------------------|-----|
|                        |                        | R MIN          | R MAX | R <sub>1</sub> MAX* | TYP                       | MAX | MIN                              | MAX | TYP                                                     | MAX |
| 0.110                  | 0.220                  | 5.0            | 9.0   | 16.0                | 0.75                      | 1.2 | -40                              | 85  | 0.6                                                     | 0.7 |

\*Maximum device resistance at 20°C measured 1-hour post trip

**TABLE III. APPLICABLE PART DESCRIPTIONS :**

| PART DESCRIPTION | PACKAGING TYPE | NOTES |
|------------------|----------------|-------|
| TRF250-110U      | Bulk           | N/A   |

Agency Recognitions:  
Reference Documents :  
Precedence:  
Effectivity:  
CAUTION:

UL File #E74889, CSA File #78165C, TUV  
Littelfuse PS300, ITU-T K.20/K.21  
This specification takes precedence over documents referenced herein.  
Reference documents shall be the issue in effect on the date of invitation for bid.  
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



**PolySwitch®**  
**PTC Devices**  
**Overcurrent Protection Device**

**PRODUCT : TRF250-110U**

DOCUMENT : SCD26316  
REV LETTER: G  
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PAGE NO.: 2 OF 2

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