

## Specification Status: Released

### Operating Conditions at 20°C:

Maximum Continuous Operating Voltage ( $V_{MCO}$ ): 100V<sub>DC</sub>  
 Maximum Interrupt Current ( $I_{INT}$ ): 10A<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: 1.5 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

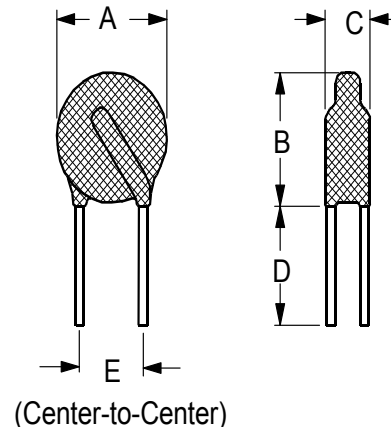
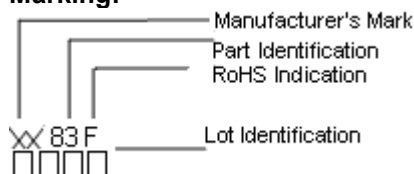
### Lead Material:

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

### External Coating Material:

Cured, flame retardant epoxy polymer, meeting UL94 V-0 requirements

### Marking:



**TABLE I. DIMENSIONS:**

|      | A   |        | B   |        | C   |        | D      |     | E      |
|------|-----|--------|-----|--------|-----|--------|--------|-----|--------|
|      | MIN | MAX    | MIN | MAX    | MIN | MAX    | MIN    | MAX | NOM    |
| mm:  | --  | 7.5    | --  | 9.5    | --  | 3.8    | 4.7    | --  | 5.0    |
| in.* | --  | (0.29) | --  | (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) @ 3A |     | OPERATING TEMPERATURE (°C) |     | TRIPPED POWER DISSIPATION (W) @ 100V <sub>DC</sub> |     |
|------------------|------------------|----------------|-------|---------------------|------------------------|-----|----------------------------|-----|----------------------------------------------------|-----|
|                  |                  | R MIN          | R MAX | R <sub>1</sub> MAX* | TYP                    | MAX | MIN                        | MAX | TYP                                                | MAX |
| 0.183            | 0.685            | 0.8            | 2.0   | 3.4                 | 0.55                   | 1.8 | -40                        | 85  | 0.9                                                | 1.1 |

\*Post Trip Resistance measured after one hour.

**TABLE III. APPLICABLE PART DESCRIPTIONS:**

| PART DESCRIPTION | PACKAGING TYPE | NOTES                  |
|------------------|----------------|------------------------|
| TRF250-183S      | Bulk           | N/A                    |
| TRF250-183S-2    | 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

ELV Compliant

Pb-Free

Directive 2002/95/EC  
Compliant

Directive 2000/53/EC  
Compliant



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