

## 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:

250 V<sub>RMS</sub>, 3A, 10 applications

### Additional Info at 20°C:

- Resistance matched: 0.5 Ohm
- 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

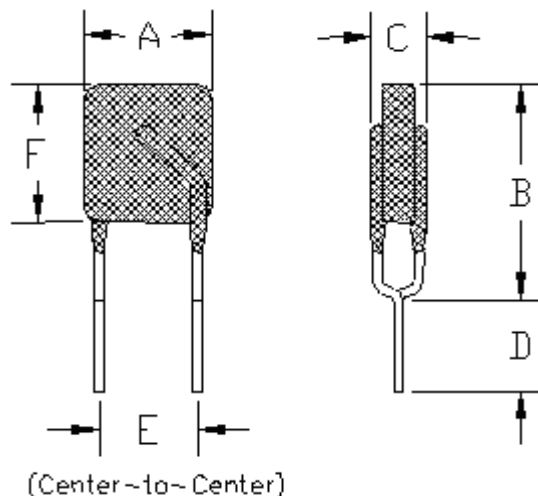
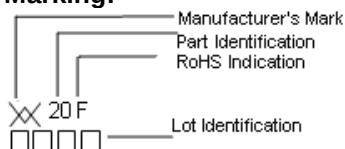
### Lead Material:

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      | F      |
|-------|-----|--------|-----|--------|-----|--------|--------|-----|--------|--------|
| mm:   | MIN | MAX    | MIN | MAX    | MIN | MAX    | MIN    | MAX | NOM    | MAX    |
| in: * | --  | 6.5    | --  | 11.0   | --  | 4.6    | 4.7    | --  | 5.0    | 7.0    |
|       | --  | (0.26) | --  | (0.43) | --  | (0.18) | (0.19) | --  | (0.20) | (0.28) |

\*Rounded off approximation

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

| HOLD CURRENT (A) | TRIP CURRENT (A) | RESISTANCE (Ω) |       |                     | TIME TO TRIP(Sec) @ 1A<br>TYP | OPERATING TEMPERATURE (°C) |     | TRIPPED POWER DISSIPATION (W) @ 60V <sub>DC</sub> |     |
|------------------|------------------|----------------|-------|---------------------|-------------------------------|----------------------------|-----|---------------------------------------------------|-----|
|                  |                  | R MIN          | R MAX | R <sub>1</sub> MAX* |                               | MIN                        | MAX | TYP                                               | MAX |
| 0.120            | 0.240            | 8.0            | 10.5  | 16.0                | 0.75                          | -40                        | 85  | .0.8                                              | 0.9 |

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

**TABLE III. APPLICABLE PART DESCRIPTIONS :**

| PART DESCRIPTION     | PACKAGING TYPE | NOTES |
|----------------------|----------------|-------|
| TRF250-120T-R2-B-0.5 | Bulk           | N/A   |

Agency Recognitions:

UL (File #E74889), CSA (File #78165), 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



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