

**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:**

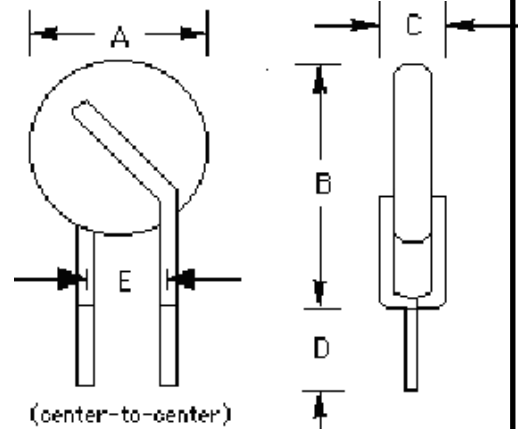
22 AWG Sn-Plated Copper (0.64 mm [0.025"] nominal diameter)

**External Coating Material:**

None

**Marking:**

None



**TABLE I. DIMENSIONS:**

	A		B		C		D		E NOM
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
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 CURRENT (A)	TRIP CURRENT (A)	RESISTANCE (Ω)			TIME TO TRIP(Sec) @ 1A		OPERATING TEMPERATURE (°C)		TRIPPED POWER DISSIPATION (W) @ 60V <sub>DC</sub>	
		R <sub>MIN</sub>	R <sub>MAX</sub>	R <sub>1 MAX*</sub>	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-B-0.5	Bulk	N/A

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

UL File #E74889, CSA File #78165C, TUV 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

ELV Compliant

Pb-Free

Directive 2002/95/EC Compliant

Directive 2000/53/EC Compliant



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

**PRODUCT: TRF250-110U-B-0.5**

DOCUMENT: SCD28835  
REV LETTER: A  
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.