

# PolySwitch® PTC Devices

**Overcurrent Protection Device** 

PRODUCT: TRF250-120T-RA-B-0.5

DOCUMENT : SCD26216 REV LETTER: E

**REV DATE: JULY 26, 2016** 

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# **Specification Status: Released**

#### Operating Conditions at 20°C:

Maximum Continuous Operating Voltage ( $V_{\text{MCO}}$ ):  $60V_{\text{DC}}$ 

Maximum Interrupt Current (IINT): 3ARMS

### 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

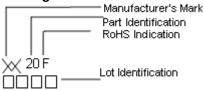
#### Lead Material:

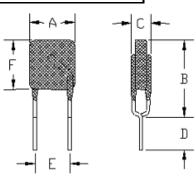
22 AWG Sn-Plated Copper (0.64 mm [0.025"] nominal diameter)

#### **External Coating Material:**

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

# Marking:





(Center~to~Center)

#### **TABLE I. DIMENSIONS:**

	Α		В		С		D		E	F
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	NOM	MAX
mm:		6.5		11.0		4.6	4.7		5.0	7.0
in:*		(0.26)		(0.43)		(0.18)	(0.19)		(0.20)	(0.28)

<sup>\*</sup>Rounded off approximation

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

HOLD	TRIP	RESISTANCE (Ω)		TIME TO TRIP(Sec)	OPERATING		TRIPPED			
CURRENT	CURRENT				@ 1A	<b>TEMPERATURE</b>		POWER DISSIPATION		
(A)	(A)				(°C)		(W) @ 60V <sub>DC</sub>			
		R MIN	R MAX	R <sub>1</sub> MAX*	TYP	MIN	MAX	TYP	MAX	
0.120	0.240	7.0	9.0	16.0	1.2	-40	85	0.8	0.9	

<sup>\*</sup>Maximum device resistance at 20°C measured 1 hour post trip

#### **TABLE III. APPLICABLE PART DESCRIPTIONS:**

PART DESCRIPTION	PACKAGING TYPE	NOTES		
TRF250-120T-RA-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 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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