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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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# PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: TRF250-180

DOCUMENT: SCD25040 REV LETTER: M

**REV DATE: JULY 26, 2016** 

PAGE NO.: 1 OF 2

### **Specification Status: Released**

#### Operating Conditions at 20°C:

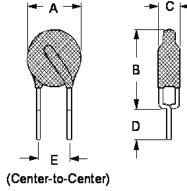
Maximum Continuous Operating Voltage (V<sub>MCO</sub>): 100V<sub>DC</sub> Maximum Interrupt Current (I<sub>INT</sub>): 10A<sub>BMS</sub>

#### 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



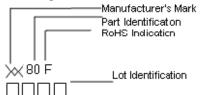
#### **Lead Material:**

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:



Please use TRF250-183 & TRF250-184 Series for New Programs.

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

	Α		В		С		D		E
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	NOM
mm:	-	9.0	1	12.0		3.8	4.7		5.0
in:*		(0.35)	-	(0.47)		(0.15)	(0.19)	•	(0.20)

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

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

HOLD	TRIP	RESISTANCE (Ω)			TIME TO TRIP(Sec)		OPERATING		TRIPPED	
CURRENT				@ 3A		TEMPERATURE				
(A)	(A)			i		(°C)		(W) @ 100V <sub>DC</sub>		
		R MIN	R MAX	R <sub>1</sub> MAX*	TYP	MAX	MIN	MAX	TYP	MAX
0.180	0.650	0.8	2.2	4.0	0.5	2.0	-40	85	0.9	1.2

<sup>\*</sup>Post Trip Resistance measured after one hour.

#### TABLE III. APPLICABLE PART DESCRIPTIONS:

PART DESCRIPTION	PACKAGING TYPE	NOTES
TRF250-180	Bulk	N/A
TRF250-180-2	Tape & Reel	Dim D not applicable



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Agency Recognitions: UL (File #E74889), CSA (File #78165C), TUV

Reference Documents: Littelfuse 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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