

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:

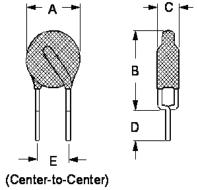
Maximum Continuous Operating Voltage (V_{MCO}): 100V_{DC} Maximum Interrupt Current (I_{INT}): 10A_{RMS}

Fault Ratings at 20°C:

250V_{RMS}, 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



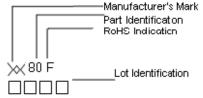
Lead Material:

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	-	12.0	-	3.8	4.7		5.0
in:*		(0.35)	-	(0.47)		(0.15)	(0.19)	•	(0.20)

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS @ 20°C:

HOLD	TRIP	RESISTANCE (Ω)		TIME TO TRIP(Sec)		OPERATING		TRIPPED		
CURRENT		1		@ 3A		TEMPERATURE				
(A)	(A)					(°C)		(W) @ 100V _{DC}		
		R MIN	R MAX	R ₁ 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

^{*}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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