

# PolySwitch® PTC Devices

**Overcurrent Protection Device** 

PRODUCT: TRF250-183S

DOCUMENT: SCD26744 REV LETTER: F

REV DATE: JULY 26, 2016

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# **Specification Status: Released**

## Operating Conditions at 20°C:

Maximum Continuous Operating Voltage (V<sub>MCO</sub>): 100V<sub>DC</sub>

Maximum Interrupt Current (IINT): 10ARMS

#### Fault Ratings at 20°C:

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

### Additional Info at 20°C:

- ☐ 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

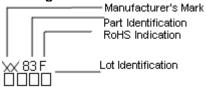
#### **Lead Material:**

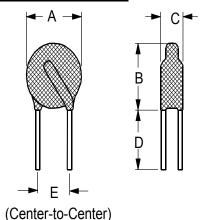
22 AWG Sn-Plated Copper (0.64 mm [0.025"] nominal diameter)

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

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

#### Marking:





**TABLE I. DIMENSIONS:** 

	Α		В		С		D		E	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	NOM	
mm:		7.5		9.5		3.8	4.7		5.0	
in:*		(0.29)		(0.37)		(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 (A)	(A)			@ 3A		TEMPERATURE (°C)		POWER DISSIPATION (W) @ 100V <sub>DC</sub>		
		R MIN	R MAX	R <sub>1 MAX</sub> *	TYP	MAX	MIN	MAX	TYP	MAX
0.183	0.685	0.8	2.0	3.4	0.55	1.8	-40	85	0.9	1.1

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

#### TABLE III. APPLICABLE PART DESCRIPTIONS:

PART DESCRIPTION	PACKAGING TYPE	NOTES			
TRF250-183S	Bulk	N/A			
TRF250-183S-2	Tape and Reel	Dim "D" not applicable			

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