

# PolySwitch® PTC Devices

Overcurrent Protection Device

**PRODUCT: TRF250-145**

DOCUMENT: SCD26221  
REV LETTER: F  
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## 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: 1.5 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

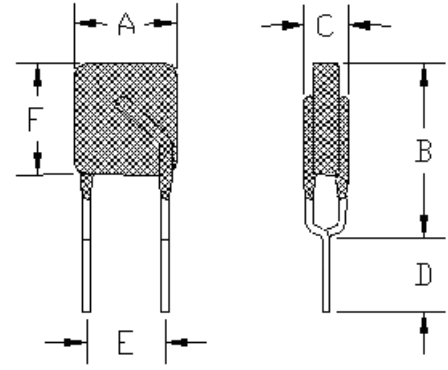
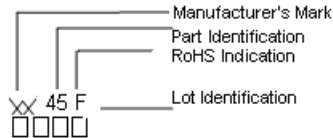
### Lead Material:

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:**

	A		B		C		D		E	F	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	NOM	MIN	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)

\*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 MIN	R MAX	R <sub>1 MAX</sub> *	TYP	MAX	MIN	MAX	TYP	MAX
0.145	0.290	3.0	6.0	14.0	2.5	5.0	-40	85	0.8	0.9

\*Post Trip Resistance measured after one hour.

**TABLE III. APPLICABLE PART DESCRIPTIONS:**

PART DESCRIPTION	PACKAGING TYPE	NOTES
TRF250-145	Bulk	N/A
TRF250-145-2	Tape and Reel	Dim "D" not applicable

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

