

# PolySwitch® PTC Devices

## Overcurrent Protection Device

PRODUCT: TCF250-100T-RB-B-0.5

DOCUMENT: SCD26193  
REV LETTER: D  
REV DATE: MAY 11, 2011  
PAGE NO.: 1 OF 1

### Specification Status: Released

#### Operating Conditions at 20°C:

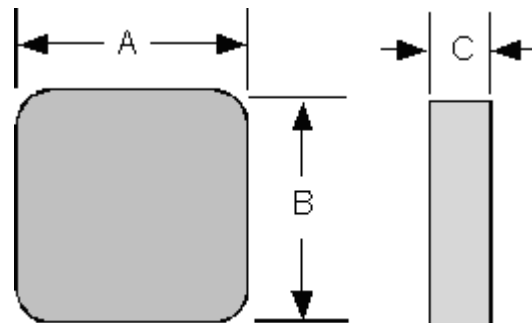
Maximum Continuous Operating Voltage ( $V_{MCO}$ ): 60V<sub>DC</sub>  
Maximum Interrupt Current ( $I_{INT}$ ): 3A<sub>RMS</sub>

#### Fault Ratings at 20°C:

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

#### Additional Info at 20°C:

- Resistance matched: 0.5 Ohm
- Lightning withstand:  
- ITU-T K.20, K.21 - 1.0 kV
- Helps equipment meet ITU-T K.20 Recommendations
- Helps equipment meet Telcordia GR1089 intrabuilding requirements



#### Marking:

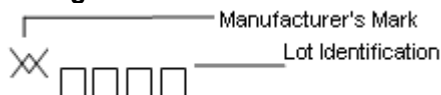


TABLE I. DIMENSIONS:

	A		B		C	
	MIN	MAX	MIN	MAX	MIN	MAX
mm:	4.6	4.9	4.6	4.9	2.0	2.3
in.*	(0.184)	(0.192)	(0.184)	(0.192)	(0.079)	(0.091)

\*Rounded off approximation.

TABLE II. PERFORMANCE RATINGS @ 20°C, unless otherwise noted (as measured in TE test board # T2978):

HOLD CURRENT* (A) @ 40°C	TRIP CURRENT* (A) @ 40°C	RESISTANCE (Ω)			TIME TO TRIP(Sec) @ 1A		OPERATING TEMPERATURE (°C)		TRIPPED POWER DISSIPATION (W) @ 60V <sub>DC</sub> *	
		R MIN	R MAX	R <sub>1MAX</sub> **	TYP	MAX	MIN	MAX	TYP	MAX
0.090	0.150	15.4	18.0	24.0	0.2	0.4	-40	85	0.6	0.7

\* Dependent on Heat Sinking of Mounting Fixture.

\*\*Maximum device resistance at 20°C measured 1hour post trip.

TABLE III. APPLICABLE PART DESCRIPTIONS:

PART DESCRIPTION	PACKAGING TYPE	NOTES
TCF250-100T-RB-B-0.5	Bulk	N/A

Agency Recognitions: N/A  
Reference Documents: Raychem 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

Directive 2002/95/EC  
Compliant

ELV Compliant

Directive 2000/53/EC  
Compliant

Pb-Free

