

## Specification Status: Released

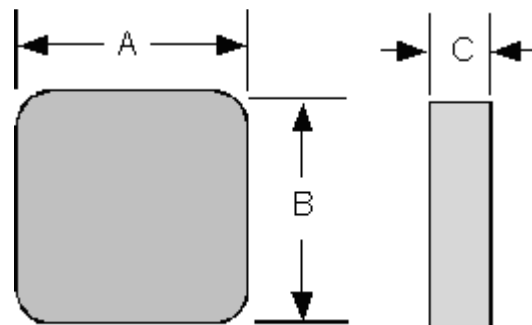
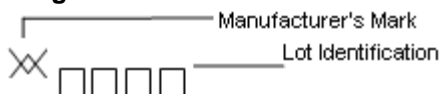
**Operating Conditions at 20°C:**

 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:
  - ITU-T K.20, K21 - 1.5 kV
  - ITU-T K.20, K21 - 4.0 kV when tested with 230V GDT primary protector
- Helps equipment meet ITU-T K.20, K.21 Recommendations
- Helps equipment meet Telcordia GR1089 intrabuilding requirements


**Marking:**

**TABLE I. DIMENSIONS:**

	A		B		C	
	MIN	MAX	MIN	MAX	MIN	MAX
mm:	6.9	7.1	6.9	7.1	1.3	1.6
in.*	(0.27)	(0.28)	(0.27)	(0.28)	(0.05)	(0.06)

\*Rounded off approximation.

**TABLE II. PERFORMANCE RATINGS @ 20°C (as measured in test board # T2978):**

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>24</sub> MAX**	TYP	MAX*	MIN	MAX	TYP	MAX
0.180	0.38	1.9	3.0	4.2	3.4	6.5	-40	85	0.8	0.9

\* Dependent on Heat Sinking of Mounting Fixture.

\*\*Maximum device resistance at 20°C measured 24 hour post trip

**TABLE III. APPLICABLE PART DESCRIPTIONS:**

PART DESCRIPTION	PACKAGING TYPE	NOTES
TCF250-180T	Bulk	N/A

Agency Recognitions:

UL (File # E74889)

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


**PolySwitch®**  
**PTC Devices**  
Overcurrent Protection Device

**PRODUCT: TCF250-180T**

DOCUMENT: SCD27309  
REV LETTER: D  
REV DATE: JULY 26, 2016  
PAGE NO.: 2 OF 2

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