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PolySwitch® PTC Devices

Overcurrent Protection Device

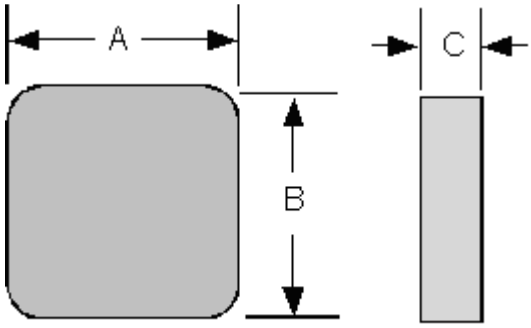
PRODUCT: TCF250-180T

DOCUMENT: SCD27309
REV LETTER: D
REV DATE: JULY 26, 2016

Specification Status: Released

Operating Conditions at 20°C:

Maximum Continuous Operating Voltage (V_{MCO}): $60V_{DC}$
Maximum Interrupt Current (I_{INT}): $3A_{RMS}$



Fault Ratings at 20°C:

$250V_{RMS}$, 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:

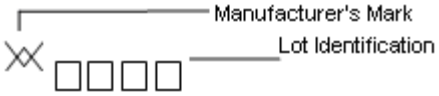


TABLE I. DIMENSIONS:

	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) @ $60V_{DC}$*	
		R MIN	R MAX	$R_{24\ MAX}$**	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
Directive 2002/95/EC Compliant

ELV Compliant
Directive 2000/53/EC Compliant

Pb-Free