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PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: TCF250-180

DOCUMENT: SCD25293

REV LETTER: I

REV DATE: MAY 13, 2011

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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



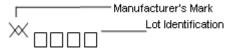


TABLE I. DIMENSIONS:

	Α		E	3	С		
	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 Tyco Electronics test board # T2978):

HOLD*	TRIP*	RESISTANCE (Ω)			TIME TO TRIP(Sec)		OPERATING		TRIPPED	
CURRENT	CURRENT			@ 1A*		TEMPERATURE		POWER DISSIPATION		
(A)	(A)					(°C)		(W) @ 60V _{DC} *		
		R MIN	R MAX	R _{24 MAX} **	TYP	MAX*	MIN	MAX	TYP	MAX
0.180	0.650	1.0	2.2	4.0	6.3	15.5	-40	85	0.8	0.9

^{*} Dependent on Heat Sinking of Mounting Fixture.

TABLE III. APPLICABLE PART DESCRIPTIONS:

PART DESCRIPTION	PACKAGING TYPE	NOTES
TCF250-180	Bulk	N/A
TCF250-180-2	Tape and Reel	N/A

Agency Recognitions: UI

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

Directive 2002/95/EC

Compliant

ROHS Compliant ELV Compliant

Directive 2000/53/EC Compliant



Ph-Free

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^{**}Maximum device resistance at 20°C measured 24 hour post trip