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# **PolySwitch® PTC Devices**

**Overcurrent Protection Device** 

Raychem Circuit Protection Products

PRODUCT: TSM600-250-RA

DOCUMENT: SCD 24939

PCN: 644560-000

REV LETTER: **OBSOLETE** (E) REV DATE: FEBRUARY 4, 2009

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# **Specification Status: RELEASED**

### Max Electrical Rating at 20°C

Operating Voltage: 250V<sub>DC</sub> Interrupt Current: 3A<sub>RMS</sub>

Fault Voltage: 600V<sub>RMS</sub>

Lead Material: Tin plated brass

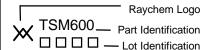
Configuration: Two PPTC devices per

TSM600 part

Case Material: Nylon Resin (UL94 V-0)

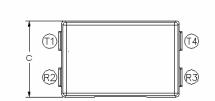
1000V dielectric rating

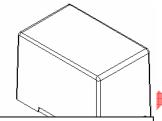
Marking:



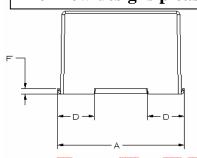
Terminal Description:

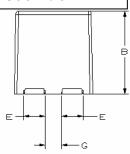
T1 = Tip InT4 = Tip OutR2 = Ring In R3 = Ring Out





## Not to be used for new designs. For new designs please use TSM600-250F-RA





#### **TABLE I. DIMENSIONS:**

	Α		В		C		D		E		F		G	
	MIN	MAX												
mm:	17.0	17.6	11.2	11.7	10.4	11.2	4.8	5.2	2.5	2.8	0.6	1.0	2.2	3.1
in:	(0.671)	(0.691)	(0.440)	(0.460)	(0.410)	(0.440)	(0.187)	(0.203)	(0.099)	(0.111)	(0.022)	(0.038)	(0.087)	(0.122)

#### TABLE II. PERFORMANCE RATINGS @ 20°C (unless otherwise noted):

IHOL	.D (A)	RE	TIME TO TRIP		OPERATING		Tripped State		
		#	@ 20° C		@ :	3 A	TEMPERA	TURE (°C)	Power
		4		7	(Seco	onds)			Dissipation
									@ 250V
20°C	60°C <u></u> ✓	R MIN	RTYP	R <sub>1 MAX</sub> *	TYP	MAX	MIN	MAX	(Watts) TYPICAL
0.250	0.140	1.0	3.0	5.0	1	6	-40	85	2

<sup>\*</sup> Maximum device resistance, measured 1-hour post reflow or post trip.

\*\* Resistance per PPTC device.

Additional Ratings @ 20°C

Resistance Matched: 0.5 Ohm measured 24 hours after Storage Temperature: -40° to 85° C

reflow installation

Line Balance: 0.5 Ohm, 59 dB @ 4 kHz minimum\*\*\* Storage Humidity: Per IPC/JEDEC J-STD-

020A Level 2a

\*\*\*Tested in accordance with IEEE 455 with a device having a series longitudinal balance value of at least 60dB.

UL, CSA Agency Recognition: Reference Documents: PS300

Precedence: This specification takes precedence over documents referenced herein.

Reference documents shall be the issue in effect on the date of invitation for bid. Effectivity:

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