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PolySwitch® **PTC Devices**

Overcurrent Protection Device

PRODUCT: AHRF1300

DOCUMENT: SCD 25302

PCN: C42424 REV LETTER: C

REV DATE: MAY 8, 2007 PAGE NO.: 1 OF 2

Raychem Circuit Protection Products

Specification Status: RELEASED

Electrical Rating Voltage: 16V_{DC} MAX

Insulating Material:

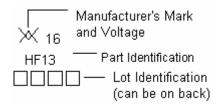
Cured, Flame Retardant Epoxy

Polymer

Lead Material:

18 AWG Tin Plated Copper (1.0 mm [0.040] nom. diameter)

Part Marking:



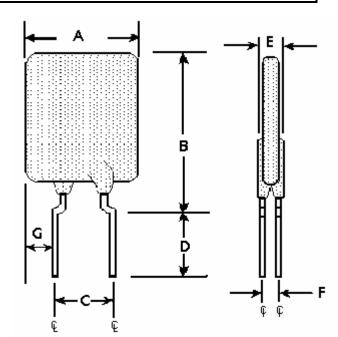


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	Α		В		С		D		Е		F	(G
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
mm:		23.5		28.7	9.4	10.9	7.6			3.5	1.4		7.82
in*:		(0.93)	-	(1.13)	(0.37)	(0.43)	(0.30)			(0.14)	(0.06)		(0.31)

^{*}Rounded off approximation

TABLE IL PERFORMANCE RATINGS:

TABLE II. FERT ORWINGE RATINGS.							
CURRENT		TIME TO	RESISTANCE		R _{a MAX}	TRIPPED-STATE	
RATINGS		TRIP				POWER	
						DISSIPATION	
AMPS		SECONDS AT O		IMS	OHMS	WATTS AT	
AT 25°C		25°C, 65 A	AT 25°C		AT 25°C	25°C	
HOLD	TRIP	MAX	MIN	MAX		TYP	
13.0	27.0	15.0	.0034	.0069	0.010	6.9	

Reference Documents: PS400, PS300 (reference for R_{1 MAX})

This specification takes precedence over documents referenced herein. Precedence:

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.

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TABLE III. AUTOMOTIVE SPECIFIC STRESS TESTS AND TEST CONDITIONS:

ELECTRICAL STRESS TESTS	TEST CONDITIONS (see note 2)
ESD Voltage Withstand (see note 1)	25kV
Short Circuit Fault Current Durability	25 cycles, 16V, 200A
Fault Current Durability	350 cycles, 16V/100A
End-of-life Mode Verification	1750 cycles, 16V/100A
Jump Start Endurance (see note 1)	3 cycles, 26V, 1 minute duration
Load Dump Endurance (see note 1)	10 cycles, 86.5V

Note 1: The PolySwitch devices are tested in series with a load resistance and the voltages specified in the test conditions are shared between the PolySwitch device and the load resistance as specified in PS400.

Note 2: Please refer to Appendix A of PS400 for the detailed test procedures