



308 Constitution Drive
Menlo Park, CA 94025-1164
Phone: 800-227-4856
www.circuitprotection.com

PolySwitch®
PTC Devices
Overcurrent Protection Device

Raychem Circuit Protection Products

PRODUCT: AHRF1300

DOCUMENT: SCD 25302
PCN: C42424
REV LETTER: C
REV DATE: MAY 8, 2007
PAGE NO.: 1 OF 2

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:

- Manufacturer's Mark and Voltage
- HF13 Part Identification
- Lot Identification (can be on back)

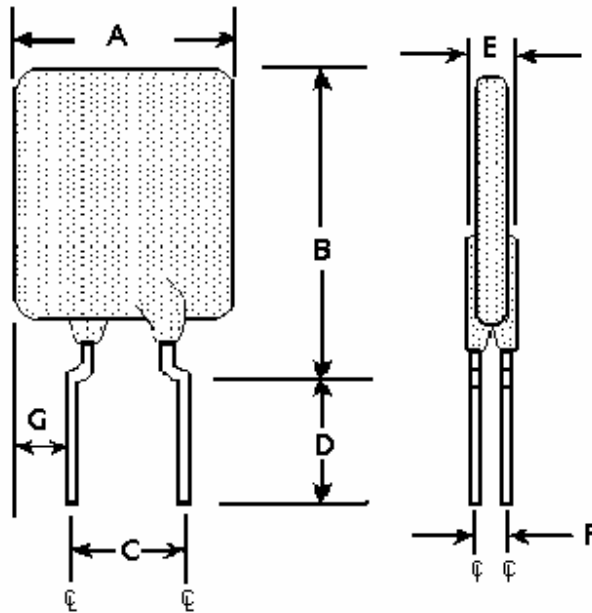


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	A		B		C		D		E		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 II. PERFORMANCE RATINGS:

CURRENT RATINGS	TIME TO TRIP	RESISTANCE		R _a MAX	TRIPPED-STATE POWER DISSIPATION
AMPS AT 25°C HOLD TRIP	SECONDS AT 25°C, 65 A MAX	OHMS AT 25°C MIN MAX		OHMS AT 25°C	WATTS AT 25°C TYP
13.0 27.0	15.0	.0034	.0069	0.010	6.9

Reference Documents: PS400, PS300 (reference for R₁ MAX)
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.



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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