

Raychem Corporation

300 Constitution Drive
Menlo Park, CA 94025
800-227-4856
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Raychem**PolySwitch®****PTC Devices****Resettable Fuse****PRODUCT: AHR450**

DOCUMENT: SCD 24385

PCN: 371747

REV LETTER: D

REV DATE: JANUARY 14, 2000

PAGE NO.: 1 OF 2

Specification Status: RELEASED**Electrical Rating****Voltage: 16V_{DC} MAX****INSULATING MATERIAL:**

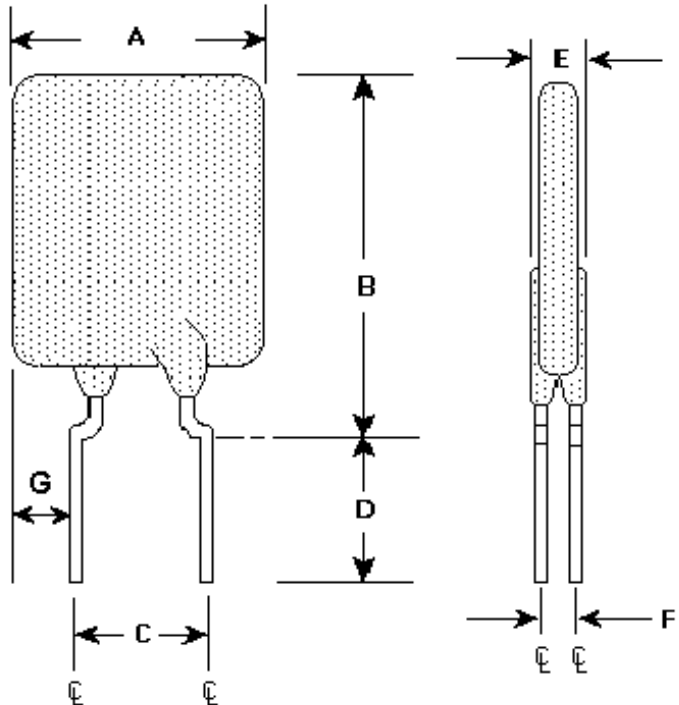
Cured, Flame Retarded Epoxy Polymer

LEAD MATERIAL:

20 AWG Tin/Lead Plated Copper
(0.8 mm [0.032] nom. diameter)

PART MARKING:

Raychem Logo
and Voltage
X 16
H4.5 — 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:	--	10.4	--	15.6	4.3	5.8	7.6	--	--	3.0	1.2	--	3.94
in*:	--	(0.41)	--	(0.61)	(0.17)	(0.23)	(0.30)	--	--	(0.12)	(0.05)	--	(0.155)

*Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

CURRENT RATINGS		TIME TO TRIP	RESISTANCE		R _a MAX	TRIPPED-STATE POWER DISSIPATION
AMPS AT 25°C		SECONDS AT 25°C, 22.5 A	OHMS AT 25°C		OHMS AT 25°C	WATTS AT 25°C
HOLD	TRIP	MAX	MIN	MAX		TYP
4.5	8.7	4.0	0.017	.036	0.054	3.6

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