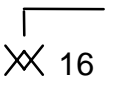
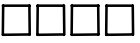


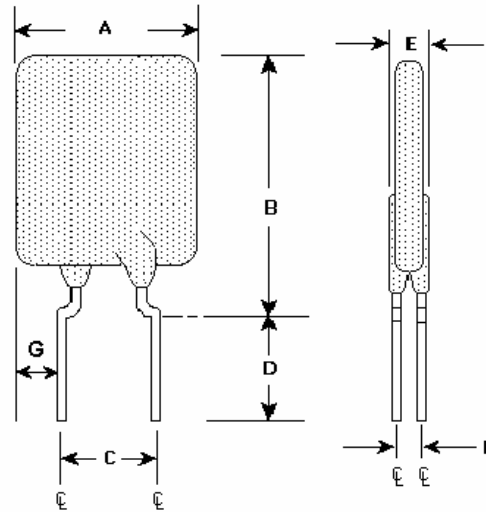
**Specification Status: Released**

**Electrical Rating**  
**Voltage: 16V<sub>DC</sub> MAX**

Insulating Material:  
 Cured, Flame Retardant Epoxy Polymer

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

Part Marking:  
 Raychem Logo and Voltage  
**XX 16**  
**HF4.5** — 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)	--	(0.16)

\*Rounded off approximation

**TABLE II. PERFORMANCE RATINGS:**

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

Reference Documents:  
 PS40  
 0, PS300 (reference for R<sub>1</sub> 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.  
 Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

CAUTION:

**Materials Information**

ROHS Compliant

ELV Compliant

Pb-Free



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**TABLE III. AUTOMOTIVE SPECIFIC STRESS TESTS AND TEST CONDITIONS:**

**Tyco / Electronics**  
**Raychem Circuit Protection**  
308 Constitution Drive  
Menlo Park, CA 94025-1164  
Phone: 800-227-4856  
Fax: 800-227-4866

**PolySwitch®**  
**PTC Devices**  
**Overcurrent Protection Device**

**PRODUCT: AHRF450**

DOCUMENT: SCD 25183  
PCN: A05383  
REV LETTER: B  
REV DATE: DECEMBER 22, 2005  
PAGE NO.: 2 OF 2

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