

**Specification Status: RELEASED**

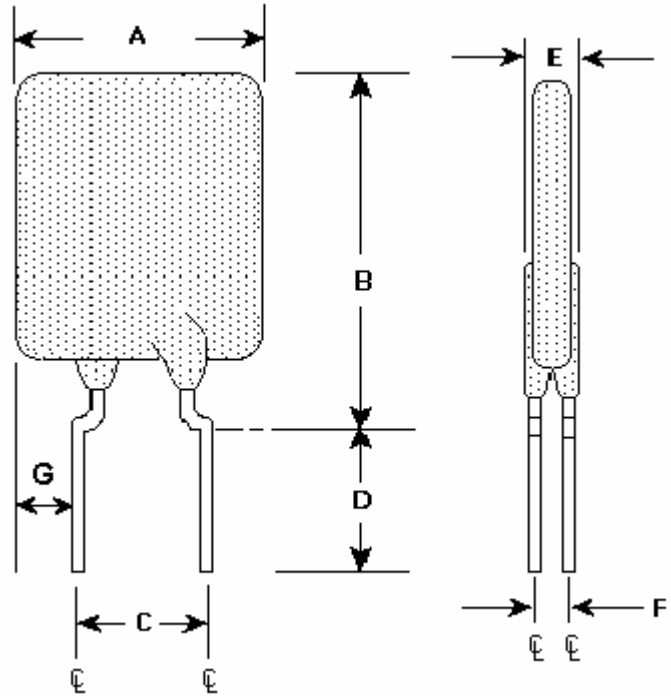
**Electrical Rating**  
**Voltage: 16V<sub>DC</sub> MAX**

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
- ⊗ 16
- HF10 — 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:	--	17.5	--	26.5	9.4	10.9	7.6	--	--	3.0	1.2	--	7.47
in*:	--	(0.69)	--	(1.04)	(0.37)	(0.43)	(0.30)	--	--	(0.12)	(0.05)	--	(0.29)

\*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   TRIP	SECONDS AT 25°C, 50 A	OHMS AT 25°C		OHMS AT 25°C	WATTS AT 25°C
		MAX	MIN	MAX		TYP
10.0	20.5	10.5	.0051	.0105	0.015	5.3

Reference Documents:

PS400, 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.

CAUTION:

Operation beyond the rated voltage or current may result in rupture, electrical arcing or flame.

**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: AHRF1000**

DOCUMENT: SCD 25187  
PCN: 238482  
REV LETTER: A  
REV DATE: DECEMBER 17, 2002  
PAGE NO.: 2 OF 2

**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