

## Specification Status: Released

### Electrical Rating

**Voltage: 16V<sub>DC</sub> MAX**  
**Current: 100A MAX**

Insulating Material:  
Cured, Flame Retardant Epoxy Polymer  
meets UL94 V-0 Requirements

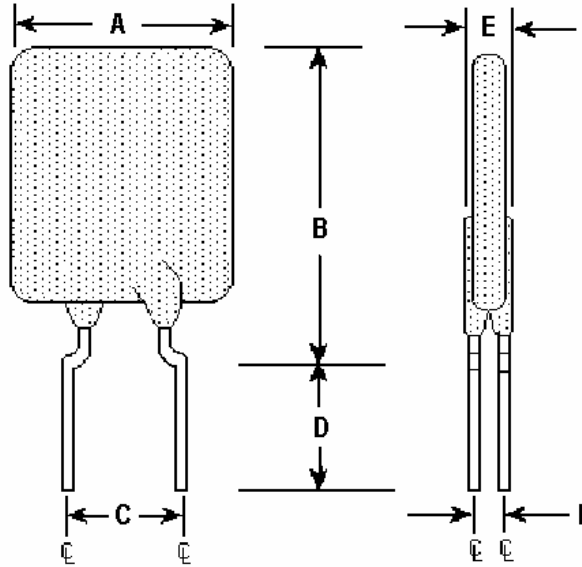
Lead Material:  
20 AWG Tin Plated Copper  
(0.8 mm [0.032] nom. diameter)

Marking:  

 Manufacturer's Mark  
and Voltage

HF8 — Part Identification

Lot Identification  
(can be on back)



**TABLE I. DIMENSIONS:**

	A		B		C		D		E		F
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP
mm:	--	16.5	--	22.5	4.3	5.8	7.6	--	--	3	1.2
in*:	--	(0.65)	--	(0.88)	(0.17)	(0.23)	(0.3)	--	--	(0.12)	(0.05)

\*Rounded off approximation

**TABLE II. PERFORMANCE RATINGS:**

CURRENT RATINGS		TIME TO TRIP	INITIAL RESISTANCE VALUES		R <sub>a</sub> MAX	TRIPPED-STATE POWER DISSIPATION
AMPS AT 25°C HOLD	AMPS AT 25°C TRIP	SECONDS AT 25°C, 40 A MAX	OHMS AT 25°C MIN	OHMS AT 25°C MAX	OHMS AT 25°C MAX	WATTS AT 25°C 16V TYP
8.0	15.0	8.0	0.0072	0.0135	0.020	4.2

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.

### Materials Information

ROHS Compliant

ELV Compliant

Pb-Free

Directive 2002/95/EC  
Compliant

Directive 2000/53/EC  
Compliant





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**PolySwitch®**  
**PTC Devices**  
**Overcurrent Protection Device**  
*Raychem Circuit Protection Products*

**PRODUCT: AHRF800**

DOCUMENT: SCD 26638  
PCN: RF0203  
REV LETTER: C  
REV DATE: MAY 8, 2007  
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.