

**Specification Status: Released**

**Electrical Rating**

Voltage: 16V<sub>DC</sub> MAX

Insulating Material:

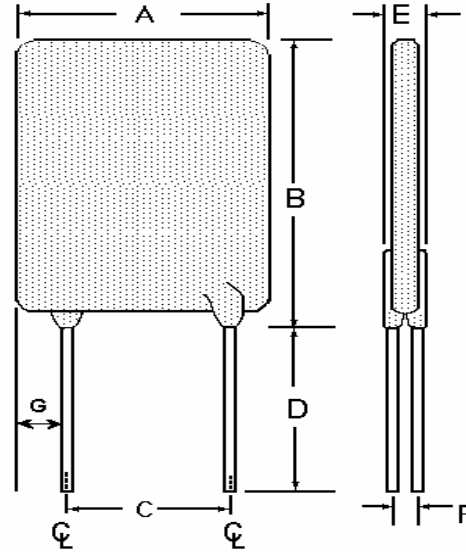
Cured, Flame Retardant Epoxy  
Polymer

Lead Material:

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

Part Marking:

Manufacturer's Mark and Voltage  
 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:	--	12.7	--	22.2	4.3	5.8	7.6	--	--	3.0	1.2	--	5.08
in*:	--	(0.50)	--	(0.88)	(0.17)	(0.23)	(0.30)	--	--	(0.12)	(0.05)	--	(0.20)

\*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, 32.5 A MAX	OHMS AT 25°C MIN	OHMS AT 25°C MAX	OHMS AT 25°C	WATTS AT 25°C TYP
6.5	13.7	7.0	0.009	0.018	0.026	4.3

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.

**Materials Information**

ROHS Compliant

ELV Compliant

Pb-Free





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: AHRF650S**

DOCUMENT: SCD 26280  
PCN: RF0089  
REV LETTER: B  
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