

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: AHRF550

DOCUMENT: SCD 26636

PCN: RF0206 REV LETTER: C

REV DATE: MAY 8, 2007

PAGE NO.: 1 OF 2

# **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)

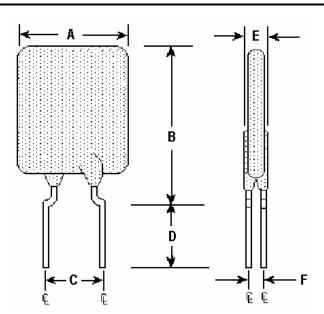
Marking:

mm: in\*:

Manufacturer's Mark and Voltage

HF5.5 — Part Identification

Lot Identification (can be on back)



# **TABLE I. DIMENSIONS:**

	Α		В		С		D		E		F
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP
1:		11.2		18.9	4.3	5.8	7.6			3.0	1.2
	-	(0.44)		(0.74)	(0.17)	(0.23)	(0.3)	-		(0.12)	(0.05)

<sup>\*</sup>Rounded off approximation

#### **TABLE II. PERFORMANCE RATINGS:**

CURRENT		TIME TO	INITIAL		R <sub>a MAX</sub>	TRIPPED-
RATINGS		TRIP	RESISTANCE			STATE
			VALUES			POWER
						DISSIPATION
AMPS		SECONDS AT	AT OHMS		OHMS	WATTS AT
AT 25°C		25°C, 27.5	AT 25°C		AT 25°C	25°C 16V
HOLD	TRIP	MAX	MIN	MAX	MAX	TYP
5.5	10.0	6.0	0.013	0.025	0.037	3.5

Reference Documents: PS400, PS300 (reference for R<sub>1 MAX</sub>)

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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### 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.