

308 Constitution Drive Menlo Park, CA 94025-1164

Phone: 800-227-4856

www.circuitprotection.com

### **PolySwitch**® **PTC Devices**

**Overcurrent Protection Device** 

**PRODUCT: AHRF1300** 

DOCUMENT: SCD 25302

PCN: C42424 REV LETTER: C

REV DATE: MAY 8, 2007 PAGE NO.: 1 OF 2

Raychem Circuit Protection Products

## **Specification Status: RELEASED**

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

Insulating Material:

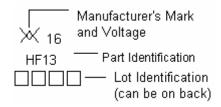
Cured, Flame Retardant Epoxy

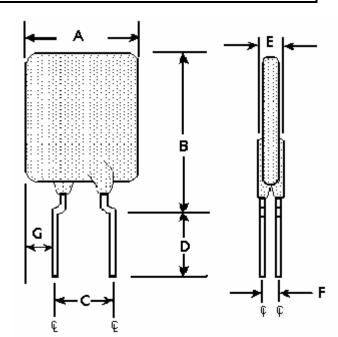
Polymer

Lead Material:

18 AWG Tin Plated Copper (1.0 mm [0.040] nom. diameter)

#### Part Marking:





#### TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	Α		В		С		D		Е		F	(	G
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
mm:		23.5		28.7	9.4	10.9	7.6			3.5	1.4		7.82
in*:		(0.93)		(1.13)	(0.37)	(0.43)	(0.30)			(0.14)	(0.06)		(0.31)

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

#### TARLE IL PERFORMANCE RATINGS:

TABLE II: TERT ORMANOL RATINGO:							
CURRENT		TIME TO	RESIS	TANCE	R <sub>a MAX</sub>	TRIPPED-STATE	
RATINGS		TRIP			<del>-</del>	POWER	
						DISSIPATION	
AMPS		SECONDS AT	OHMS		OHMS	WATTS AT	
AT 25°C		25°C, 65 A	AT 25°C		AT 25°C	25°C	
HOLD	TRIP	MAX	MIN	MAX		TYP	
13.0	27.0	15.0	.0034	.0069	0.010	6.9	

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

This specification takes precedence over documents referenced herein. Precedence:

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.

© 2004,2007 Tyco Electronics Corporation. All rights reserved.



308 Constitution Drive Menlo Park, CA 94025-1164

Phone: 800-227-4856

# PolySwitch® PTC Devices

**Overcurrent Protection Device** 

PRODUCT: AHRF1300

DOCUMENT: SCD 25302

PCN: C42424 REV LETTER: C

REV DATE: MAY 8, 2007 PAGE NO.: 2 OF 2

www.circuitprotection.com Raychem Circuit Protection Products

#### 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