

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: AHRF1500

DOCUMENT: SCD 26086

PCN: C64205 **REV LETTER: B**

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

Specification Status: Released

Electrical Rating

Voltage: 16V_{DC} MAX Current: 100A MAX

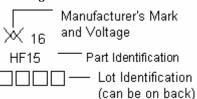
Insulating Material:

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

Lead Material:

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

Marking:



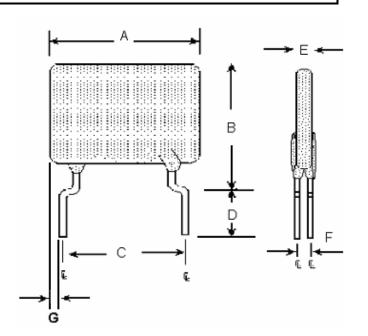


TABLE I. INSTALLATION ENVELOPE DIMENSIONS:

	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		1	3.5	1.4		7.82
in*:		(0.93)		(1.13)	(0.37)	(0.43)	(0.30)			(0.14)	(0.06)		(0.31)

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

I HOLD RATED CURRENT	CURRENT RATINGS		TIME TO TRIP	INITIAL RESISTANCE VALUES		R _{a MAX}	NOMINAL TRIPPED POWER DISSIPATION
AMPS	AMPS AMPS AT		SECONDS AT	OHMS		OHMS	WATTS AT
AT 25°C	25°C		25°C,75A	AT 25°C		AT 25°C	25°C 16V
HOLD	HOLD	TRIP	MAX	MIN	MAX	MAX	TYP
15.0	15.0	33.0	20.0	0.0027	0.0063	0.0092	7.0

Reference Documents: PS400, PS300 (reference for R_{1 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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TABLE III. AUTOMOTIVE SPECIFIC STRESS TESTS AND TEST CONDITIONS:

ELECTRICAL STRESS TESTS	TEST CONDITIONS (see note 2)			
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ESD Voltage Withstand	25kV			
(see note 1)	ZJKV			
Short Circuit Fault Current Durability	25 cycles, 16V, 200A			
Short Circuit Fault Current Durability	25 Cycles, 10V, 200A			
Fault Current Durability	350 cycles, 16V/100A			
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End-of-life Mode Verification	1750 cycles, 16V/100A			
Jump Start Endurance	3 cycles, 26V, 1 minute duration			
(see note 1)				
Load Dump Endurance	10 cycles, 86.5V			
(see note 1)				

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