

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

PCN: RF0201

REV LETTER: C REV DATE: MAY 8, 2007

PRODUCT: AHRF700

DOCUMENT: SCD 26637

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:

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

Marking:

Manufacturer's Mark and Voltage XX 16

HF7 Part Identification

Lot Identification (can be on back)

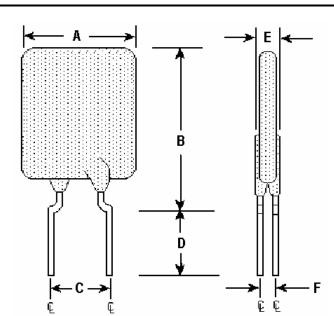


TABLE I. DIMENSIONS:

	Α		В		С		D		Е		F
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP
mm:		14.0	-	21.9	4.3	5.8	7.6	-	-	3.0	1.2
in*:		(0.55)	-	(0.86)	(0.17)	(0.23)	(0.3)	-	-	(0.12)	(0.05)

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

CURRENT		TIME TO	INI	ΓIAL	R _{a MAX}	TRIPPED-	
RATINGS		TRIP	RESIS	TANCE		STATE	
		VAL		LUES		POWER	
						DISSIPATION	
AMPS		SECONDS	OHMS		OHMS	WATTS AT	
AT 25°C		AT 25°C, 35A	AT 25°C		AT 25°C	25°C 16V	
HOLD	TRIP	MAX	MIN	MAX	MAX	TYP	
7.0	13.1	7.0	0.0087	0.0164	0.025	4.0	

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)
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.