Tyco / Electronics
Raychem Circuit Protection
308 Constitution Drive
Menlo Park, CA 94025-1164
Phone: 800-227-4856
Fax: 800-227-4866

PolySwitch® PTC Devices

Overcurrent Protection Device

PRODUCT: AHRF900

DOCUMENT: SCD 26085
PCN: 109614
REV LETTER: B
REV DATE: JANUARY 16, 2006

Specification Status: Released

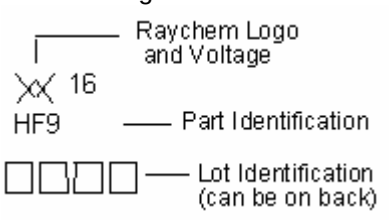
Electrical Rating

Voltage: 16V MAX
Current: 100A MAX

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

Lead Material:
20 AWG Tin Plated Copper

Part Marking:



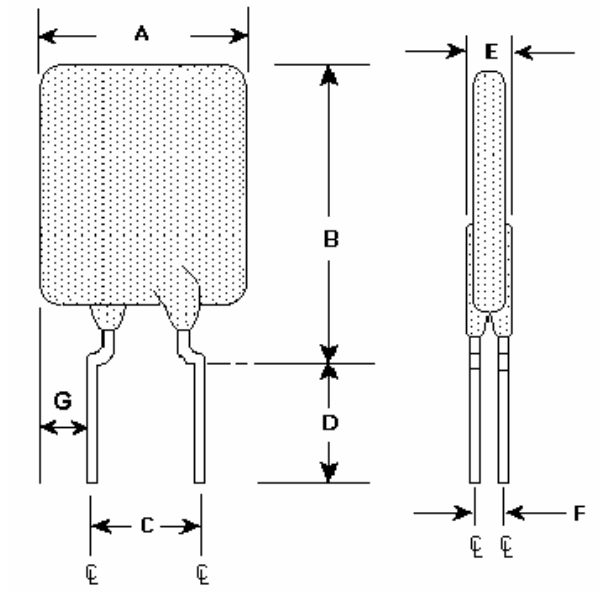


TABLE I. DIMENSIONS:

	A		B		C		D		E		F	G	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
mm:	--	16.5	--	25.7	4.3	5.8	7.6	--	--	3.0	1.2		
in*:	--	(0.65)	--	(1.01)	(0.17)	(0.23)	(0.30)	--	--	(0.12)	(0.05)		

*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 AT 25°C HOLD	AMPS AT 25°C HOLD	TRIP	SECONDS AT 25°C, 45A MAX	OHMS AT 25°C MIN	MAX	OHMS AT 25°C MAX	WATTS AT 25°C 16V TYP
9.0	9.0	18.5	11.5	0.0061	0.012	0.0170	5.0

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 — Directive 2002/95/EC Compliant

ELV Compliant — Directive 2000/53/EC Compliant

Pb-Free

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