

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: AHEF100

DOCUMENT: SCD 26997 PCN: RF1046 REV LETTER: B

REV DATE: JANUARY 22, 2009

PAGE NO.: 1 OF 2

Specification Status: Released

Voltage: 32V_{DC} MAX Current: 100A MAX

Insulating Material:

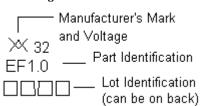
Cured, Flame Retardant Epoxy Polymer

Lead Material:

24 AWG Tin Plated Copper Clad Steel

Part Marking:

mm: in*:



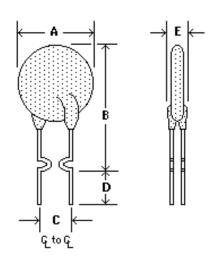


TABLE I. DIMENSIONS:

	Α		В		С		D		Е	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
լ:	-	9.7	-	13.6	4.3	5.8	7.6	-		3.0
		(0.38)		(0.54)	(0.17)	(0.23)	(0.30)			(0.12)

^{*}Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

I HOLD RATED CURRENT	RATED RATINGS		INITIAL RESISTANCE VALUES		TIME TO TRIP	R_{aMAX}	TRIPPED- STATE POWER DISSIPATION
AMPS	AMPS		OHMS		SECONDS AT	OHMS	WATTS
AT 25°C	AT 2	25°C	AT 2	25°C	25°C, 5.0 A	AT 25°C	AT 25°C
HOLD	HOLD	TRIP	MIN	MAX	MAX	MAX	TYP
1.0	1.0	1.9	0.15	0.30	6.2	0.43	1.4

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, 32V, 200A
Fault Current Durability	350 cycles, 32V/100A
End-of-life Mode Verification	1750 cycles, 32V/100A
Jump Start Endurance (see note 1)	3 cycles, 48V, 2 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