

Specification Status: Released

Electrical Rating

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:

— Manufacturer's Mark
XX E0.5 and Part Identification

□□□□ — Lot Identification

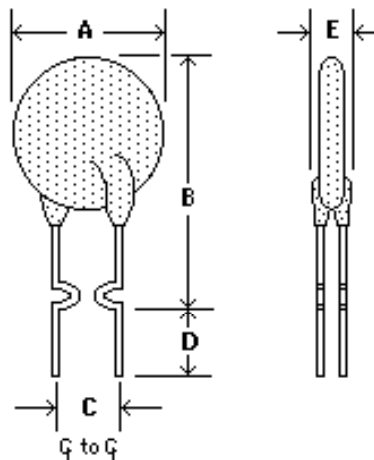


TABLE I. DIMENSIONS:

	A		B		C		D		E	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
mm:	--	7.4	--	12.7	4.3	5.8	7.6	--	--	3.3
in*:	--	(0.29)	--	(0.50)	(0.17)	(0.23)	(0.30)	--	--	(0.13)

*Rounded off approximation

TABLE II. PERFORMANCE RATINGS:

I HOLD RATED CURRENT	CURRENT RATINGS		INITIAL RESISTANCE VALUES		TIME TO TRIP	RaMax	TRIPPED- STATE POWER DISSIPATION
AMPS AT 25°C HOLD	AMPS AT 25°C HOLD	AMPS AT 25°C TRIP	OHMS AT 25°C MIN	OHMS AT 25°C MAX	SECONDS AT 25°C, 2.5 A MAX	OHMS AT 25°C MAX	WATTS AT 25°C TYP
0.50	0.50	1.00	0.35	0.78	3.0	1.10	0.9

Reference Documents:

PS400, PS300 (reference for R₁ 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



Halogen Free*



* Halogen Free refers to: Br≤900ppm, Cl≤900ppm, Br+Cl≤1500ppm.

PolySwitch®
PTC Devices
Overcurrent Protection Device**PRODUCT: AHEF050**DOCUMENT: SCD26995
REV LETTER: D
REV DATE: MARCH 12, 2013
PAGE NO.: 2 OF 2**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