

# PolySwitch® PTC Devices

**Overcurrent Protection Device** 

PRODUCT: AHEF070

DOCUMENT: SCD26996

REV LETTER: D REV DATE: JULY 26, 2016

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### **Specification Status: Released**

Electrical Rating
Voltage: 32V<sub>DC</sub> MAX
Current: 100A MAX

Insulating Material:

Cured, Flame Retardant Epoxy Polymer

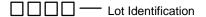
Lead Material:

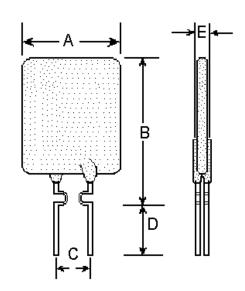
24 AWG Tin Plated Copper Clad Steel

Marking:

Manufacturer's Mark

X E0.7 and Part Identification





#### **TABLE I. DIMENSIONS:**

	Α		В		С		D		E	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
mm:		6.9		10.8	4.3	5.8	7.6			3.0
in*:		(0.27)		(0.43)	(0.17)	(0.23)	(0.30)			(0.12)

<sup>\*</sup>Rounded off approximation

#### **TABLE II. PERFORMANCE RATINGS:**

I HOLD	CURRENT		INITIAL		TIME TO TRIP	R <sub>aMAX</sub>	TRIPPED-
RATED	RATINGS		RESISTANCE			- GIVII U	STATE
CURRENT		VALUES				POWER	
							DISSIPATION
AMPS	AMPS		OHMS		SECONDS AT	OHMS	WATTS
AT 25°C	AT 25°C		AT 25°C		25°C, 3.5 A	AT 25°C	AT 25°C
HOLD	HOLD	TRIP	MIN	MAX	MAX	MAX	TYP
0.70	0.70	1.40	0.23	0.54	3.2	0.8	1.4

Reference Documents: PS400, PS300 (reference for R<sub>1 MAX</sub>)

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** 

Halogen Free\*

Directive 2002/95/EC Compliant Directive 2000/53/EC Compliant





<sup>\*</sup> Halogen Free refers to: Br≤900ppm, Cl≤900ppm,Br+Cl≤1500ppm.



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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

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