

## PolySwitch® PTC Devices

**Overcurrent Protection Device** 

PRODUCT: AHRF900

DOCUMENT: SCD26085 REV LETTER: E

REV DATE: JULY 26, 2016 PAGE NO.: 1 OF 2

### **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

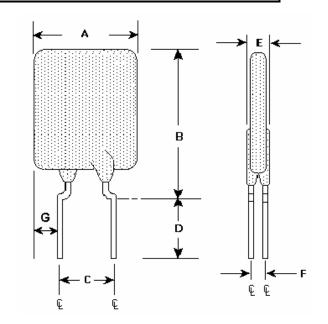
Part Marking:

Manufacturer's Mark

Manufacturer's Mark

Mart Identification

□□□□ — Lot Identification



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

mm: in\*:

		4	E	3	C			)	l l		F	(	G
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP	MIN	MAX
		16.5	•	25.7	4.3	5.8	7.6	-	-	3.0	1.2		
		(0.65)	-	(1.01)	(0.17)	(0.23)	(0.30)			(0.12)	(0.05)		
-													

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

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

I HOLD RATED CURRENT		RENT INGS	TIME TO TRIP	RESIS	TIAL TANCE LUES	R <sub>a MAX</sub>	NOMINAL TRIPPED POWER DISSIPATION
AMPS	AMF	'S AT	SECONDS AT	OH	HMS	OHMS	WATTS AT
AT 25°C	2	5°C	25°C, 45A	AT	25°C	AT 25°C	25°C 16V
HOLD	HOLD	TRIP	MAX	MIN	MAX	MAX	TYP
9.0	9.0	18.5	11.5	0.0061	0.012	0.0170	5.0

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, 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

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