

# PolySwitch® PTC Devices

**Overcurrent Protection Device** 

**PRODUCT: AHRF300** 

DOCUMENT: SCD26634 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:

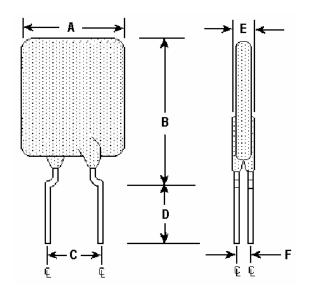
Cured, Flame Retardant Epoxy Polymer meets UL94 V-0 Requirements

#### Lead Material:

20 AWG Tin Plated Copper (0.8 mm [0.032] nom. diameter)

#### Marking:





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

	Α		В		C		D		E		F
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP
mm:		8.8	-	13.8	4.3	5.8	7.6		-	3.0	1.2
in*:		(0.35)		(0.55)	(0.17)	(0.23)	(0.3)			(0.12)	(0.05)

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

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

<u> </u>								
CURRENT	RATINGS	TIME TO TRIP		TIAL STANCE	Ra мах	TRIPPED-STATE POWER		
		11311						
			VALUES			DISSIPATION		
AMPS		SECONDS AT 25°C,	OHMS		OHMS	WATTS AT		
AT 25°C		15A	AT 25°C		AT 25°C	25°C		
HOLD	TRIP	MAX	MIN	MAX	MAX	TYP		
3.0	6.5	5.0	0.029	0.053	0.079	3.0		

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 for the detailed test procedures.

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