

## PolySwitch® PTC Devices

**Overcurrent Protection Device** 

**PRODUCT: AHRF200** 

DOCUMENT: SCD26632

**REV LETTER: F** 

REV DATE: JULY 26,2016

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### **Specification Status: Released**

Electrical Rating
Voltage: 16V<sub>DC</sub> MAX
Current: 100A MAX

Insulating Material:

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

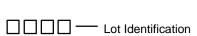
Lead Material:

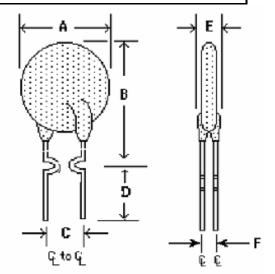
24 AWG Tin Plated Copper Clad Steel (0.51mm[0.020]nom. diameter)

Part Marking:

Manufacturer's Mark

H2 and Part Identification





### TABLE I. DIMENSIONS:

mm: in\*:

Α		В		С		D		E		F
MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	TYP
	9.4	-	14.4	4.3	5.8	7.6			3.0	1.2
	(0.37)	-	(0.57)	(0.17)	(0.23)	(0.30)			(0.12)	(0.05)

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

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

17.B22 III 1 2.11 G11III/11/10 10.						
CURRENT RATINGS		TIME TO TRIP	RESIS	TIAL TANCE UES	Ra MAX	TRIPPED-STATE POWER DISSIPATION
AMPS		SECONDS AT	OHMS		OHMS	WATTS AT
AT 25°C		25°C, 10.0 A	AT 25°C		AT 25°C	25°C 16V
HOLD	TRIP	MAX	MIN	MAX	MAX	TYP
2.0	3.8	4.8	0.039	0.074	0.11	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 2000/53/EC Compliant Directive 2002/95/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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