

## 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:

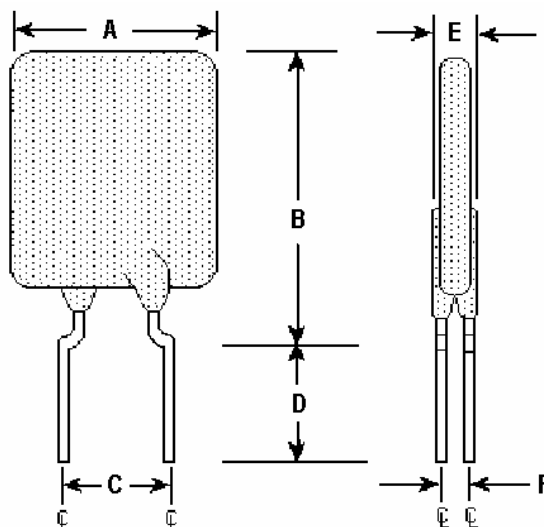
20 AWG Tin Plated Copper  
(0.8 mm [0.032] nom. diameter)

### Marking:

XX 16 — Manufacturer's Mark  
and Voltage

HF3 — Part Identification

□□□□ — Lot Identification  
(can be on back)



**TABLE I. DIMENSIONS:**

|      | A   |        | B   |        | 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) |

\*Rounded off approximation

**TABLE II. PERFORMANCE RATINGS:**

| CURRENT RATINGS |                      | TIME TO TRIP |              | INITIAL RESISTANCE VALUES |              | R <sub>a</sub> MAX | TRIPPED-STATE POWER DISSIPATION |               |
|-----------------|----------------------|--------------|--------------|---------------------------|--------------|--------------------|---------------------------------|---------------|
| AMPS AT 25°C    | SECONDS AT 25°C, 15A | OHMS AT 25°C | OHMS AT 25°C | OHMS AT 25°C              | OHMS AT 25°C | OHMS AT 25°C       | WATTS AT 25°C                   | WATTS AT 25°C |
| HOLD            | TRIP                 | MIN          | MAX          | MIN                       | MAX          | MAX                | TYP                             | TYP           |
| 3.0             | 6.5                  | 5.0          | 0.029        | 0.053                     | 0.079        | 3.0                |                                 |               |

### Reference Documents:

PS400, PS300 (reference for R<sub>1</sub> 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

ELV Compliant

Pb-Free

Directive 2002/95/EC  
Compliant

Directive 2000/53/EC  
Compliant





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**PolySwitch®**  
**PTC Devices**  
**Overcurrent Protection Device**

*Raychem Circuit Protection Products*

**PRODUCT: AHRF300**

DOCUMENT: SCD 26634  
PCN: RF0205  
REV LETTER: C  
REV DATE: MAY 8, 2007  
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<br>(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<br>(see note 1)   | 3 cycles, 26V, 1 minute duration |
| Load Dump Endurance<br>(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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