

**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

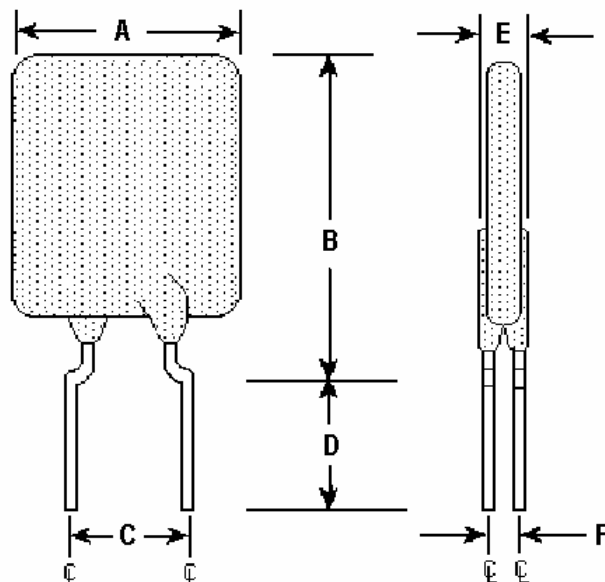
**Lead Material:**

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

**Marking:**

— Manufacturer's Mark  
XX H7 and Part Identification

□□□□ — Lot Identification



**TABLE I. DIMENSIONS:**

|      | A   |        | B   |        | C      |        | D     |     | E   |        | F      |
|------|-----|--------|-----|--------|--------|--------|-------|-----|-----|--------|--------|
|      | MIN | MAX    | MIN | MAX    | MIN    | MAX    | MIN   | MAX | MIN | MAX    | TYP    |
| mm:  | --  | 14.0   | --  | 21.9   | 4.3    | 5.8    | 7.6   | --  | --  | 3.0    | 1.2    |
| in*: | --  | (0.55) | --  | (0.86) | (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, 35A | OHMS AT 25°C | OHMS AT 25°C              | OHMS AT 25°C | OHMS AT 25°C       | WATTS AT 25°C 16V               |
| HOLD            | TRIP                 | MIN          | MAX                       | MAX          | MAX                | TYP                             |
| 7.0             | 13.1                 | 7.0          | 0.0087                    | 0.0164       | 0.025              | 4.0                             |

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**

**Halogen Free\***

Directive 2002/95/EC  
Compliant

Directive 2000/53/EC  
Compliant



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

**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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