

## Specification Status: Released

### Electrical Rating

**Voltage: 16V<sub>DC</sub> MAX**

Insulating Material:

Cured, Flame Retardant Epoxy Polymer

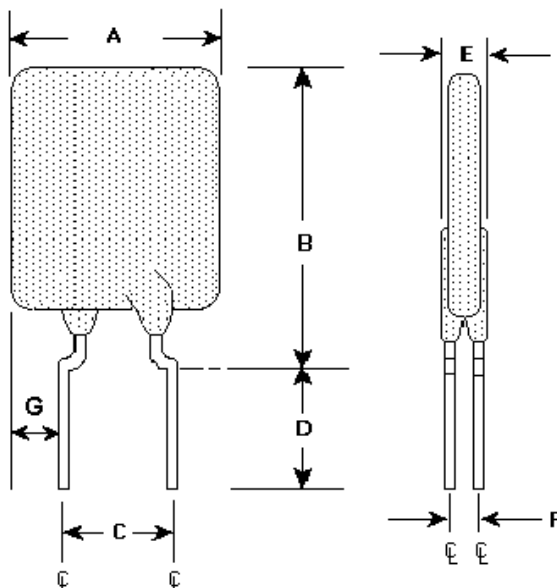
Lead Material:

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

Part Marking:

— Manufacturer's Mark  
X H10 and Part Identification

□ □ □ □ — Lot Identification



**TABLE I. INSTALLATION ENVELOPE DIMENSIONS:**

|      | A   |        | B   |        | C      |        | D      |     | E   |        | F      | G   |        |
|------|-----|--------|-----|--------|--------|--------|--------|-----|-----|--------|--------|-----|--------|
|      | MIN | MAX    | MIN | MAX    | MIN    | MAX    | MIN    | MAX | MIN | MAX    | TYP    | MIN | MAX    |
| mm:  | --  | 17.5   | --  | 26.5   | 9.4    | 10.9   | 7.6    | --  | --  | 3.0    | 1.2    | --  | 7.47   |
| in*: | --  | (0.69) | --  | (1.04) | (0.37) | (0.43) | (0.30) | --  | --  | (0.12) | (0.05) | --  | (0.29) |

\*Rounded off approximation

**TABLE II. PERFORMANCE RATINGS:**

| CURRENT RATINGS   |                   | TIME TO TRIP              | RESISTANCE       |                  | R <sub>a</sub> MAX | TRIPPED-STATE POWER DISSIPATION |
|-------------------|-------------------|---------------------------|------------------|------------------|--------------------|---------------------------------|
| AMPS AT 25°C HOLD | AMPS AT 25°C TRIP | SECONDS AT 25°C, 50 A MAX | OHMS AT 25°C MIN | OHMS AT 25°C MAX | OHMS AT 25°C       | WATTS AT 25°C TYP               |
| 10.0              | 20.5              | 10.5                      | .0051            | .0105            | 0.015              | 5.3                             |

Reference Documents:

Precedence:

Effectivity:

CAUTION:

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

This specification takes precedence over documents referenced herein.

Reference documents shall be the issue in effect on the date of invitation for bid.

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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