

## Specification Status: Released

### Electrical Rating

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

Insulating Material:

Cured, Flame Retardant Epoxy Polymer

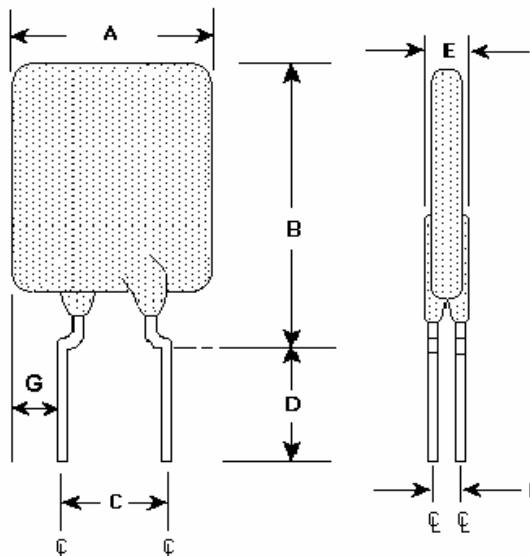
Lead Material:

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

Part Marking:

— Manufacturer's Mark  
XX G8 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:  | --  | 12.7   | --  | 22.2   | 4.3    | 5.8    | 7.6    | --  | --  | 3.0    | 1.2    | --  | 5.08    |
| in*: | --  | (0.50) | --  | (0.88) | (0.17) | (0.23) | (0.30) | --  | --  | (0.12) | (0.05) | --  | (0.200) |

\*Rounded off approximation

**TABLE II. PERFORMANCE RATINGS:**

| CURRENT RATINGS                  |                                  |      | TIME TO TRIP                    | INITIAL RESISTANCE |        | R <sub>1</sub> MAX<br>1 HR. POST TRIP<br>RESISTANCE<br>STANDARD TRIP | R <sub>A</sub> MAX | TRIPPED-STATE<br>POWER<br>DISSIPATION |
|----------------------------------|----------------------------------|------|---------------------------------|--------------------|--------|----------------------------------------------------------------------|--------------------|---------------------------------------|
| AMPS<br>AT 25°C                  |                                  |      | SECONDS<br>AT 25°C, 40 A<br>MAX | OHMS<br>AT 25°C    |        | OHMS<br>AT 25°C                                                      | OHMS<br>AT 25°C    | WATTS AT<br>25°C<br>TYP               |
| HOLD<br>AT<br>R <sub>1</sub> MAX | HOLD<br>AT<br>R <sub>A</sub> MAX | TRIP |                                 | MIN                | MAX    |                                                                      |                    |                                       |
| 8.0                              | 7.6                              | 15.0 | 5.5                             | 0.0049             | 0.0113 | 0.0175                                                               | 0.0181             | 3.2                                   |

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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