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|---|----------------|
|  | <b>E502650</b> |
|---|----------------|

**Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Low Leakage And Low Forward Voltage
- Any Mounting Position
- Silver Plated Copper Leads
- Solder Dip 275 °C Max. 7s, Per JESD 22-B106

**Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance(Note 2): 18°C/W Junction to Ambient
- Typical Thermal Resistance(Note 3): 3.0°C/W Junction to Case
- Maximum Mounting Torque: 10 cm·kg (8.8 inches·lbs)

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| RS801           | RS801          | 50V                                    | 35V                 | 50V                         |
| RS802           | RS802          | 100V                                   | 70V                 | 100V                        |
| RS803           | RS803          | 200V                                   | 140V                | 200V                        |
| RS804           | RS804          | 400V                                   | 280V                | 400V                        |
| RS805           | RS805          | 600V                                   | 420V                | 600V                        |
| RS806           | RS806          | 800V                                   | 560V                | 800V                        |
| RS807           | RS807          | 1000V                                  | 700V                | 1000V                       |

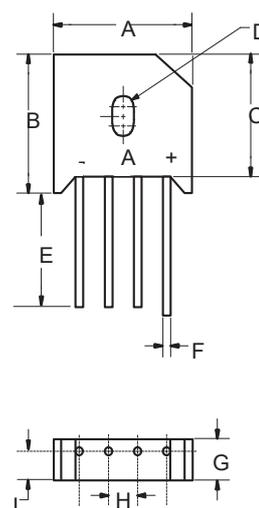
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

|   |             |              |   |
|---|-------------|--------------|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 8.0A<br>6.0A | $T_C = 90^\circ C$<br>$T_A = 45^\circ C$  |
| Peak Forward Surge Current                              | $I_{FSM}$   | 300A         | 8.3ms, Half Sine                          |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 1.0V         | $I_{FM} = 8A$ ;<br>$T_J = 25^\circ C$     |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$       | 10µA<br>1mA  | $T_J = 25^\circ C$<br>$T_J = 125^\circ C$ |

- Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a.  
 2. Units Mounted in Free Air, No Heatsink, P.C.B 0.375"(9.5mm) Lead Length with 0.5 × 0.5"(12 12mm) Copper Pads.  
 3. Units Mounted on a 3.0 × 3.0 0.11"(7.5 × 7.5 × 0.3cm) Al.Plate Heatsink.

**8 Amp  
Single Phase  
Bridge Rectifier  
50 to 1000 Volts**

RS-6



| DIM | DIMENSIONS |       |       |       | NOTE |
|-----|------------|-------|-------|-------|------|
|     | INCHES     |       | MM    |       |      |
|     | MIN        | MAX   | MIN   | MAX   |      |
| A   | 0.895      | 0.935 | 22.70 | 23.70 |      |
| B   | ---        | 0.760 | ---   | 19.30 |      |
| C   | 0.660      | 0.728 | 16.80 | 18.50 |      |
| D   | 0.150      | 0.23L | 3.80  | 5.57L | HOLE |
| E   | 0.787      | ---   | 20.00 | ---   |      |
| F   | 0.048      | 0.052 | 1.20  | 1.30  |      |
| G   | 0.260      | 0.280 | 6.60  | 7.10  |      |
| H   | 0.180      | 0.220 | 4.60  | 5.60  |      |
| I   | 0.181      | 0.205 | 4.60  | 5.20  |      |

## Curve Characteristics

Fig. 1 - Forward Current Derating Curve

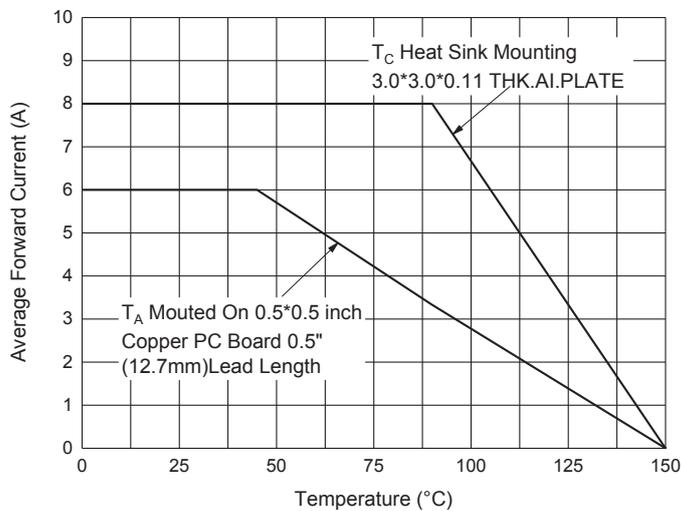


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

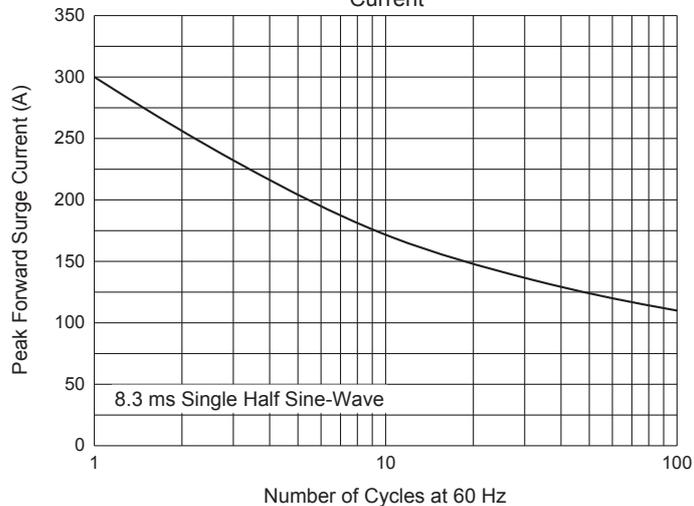


Fig. 3 - Typical Instantaneous Forward Characteristics

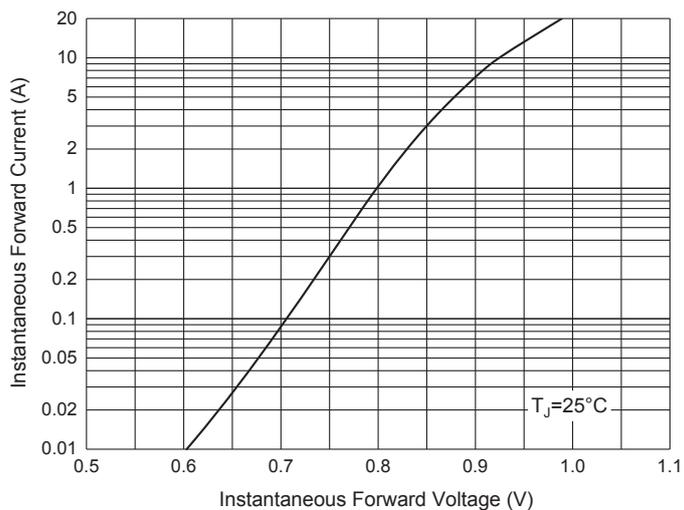
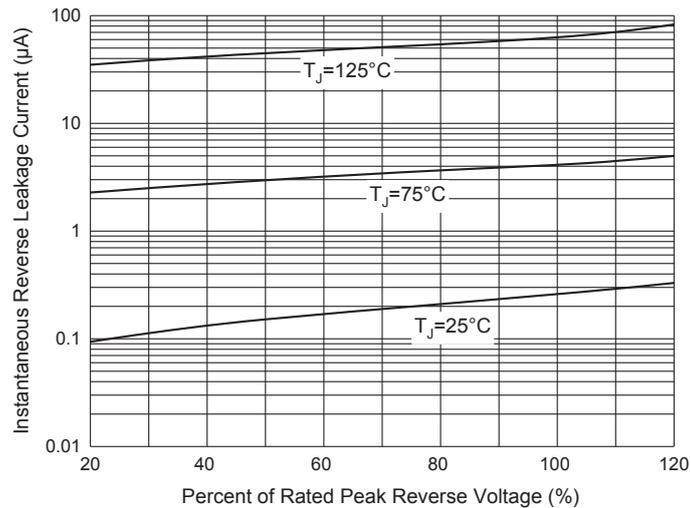


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

| Device         | Packing                         |
|----------------|---------------------------------|
| Part Number-BP | Bulk: 400Pcs/Box,2.4KPcs/Carton |

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