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|  | E502650 |
|---|----------------|

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- High Current Capability

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 1.6°C/W Junction to Case (Note 2)

Mechanical Data

- Mounting Torque: 5in-lbs

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| GBJ8005 | GBJ8005 | 50V | 35V | 50V |
| GBJ801 | GBJ801 | 100V | 70V | 100V |
| GBJ802 | GBJ802 | 200V | 140V | 200V |
| GBJ804 | GBJ804 | 400V | 280V | 400V |
| GBJ806 | GBJ806 | 600V | 420V | 600V |
| GBJ808 | GBJ808 | 800V | 560V | 800V |
| GBJ810 | GBJ810 | 1000V | 700V | 1000V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

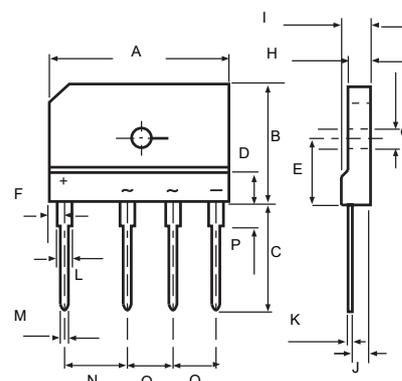
| | | | |
|---|-------------|--------------------------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 8A | $T_C = 110^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 170A | 8.3ms, Half Sine |
| Maximum Instantaneous Forward Voltage | V_F | 1.0V | $I_{FM} = 4.0\text{A}; T_J = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 5 μA 500 μA | $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ |
| Typical Junction Capacitance | C_J | 55pF | Measured at 1.0MHz, $V_R = 4.0\text{V}$ |
| Rating for Fusing | I^2t | 120 A ² s | $t < 8.3\text{ms}$ |

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

2. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

8 Amp Glass Passivated Bridge Rectifier 50 - 1000 Volts

GBJ



DIMENSIONS

| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|-------|-------|------|
| | MIN | MAX | MIN | MAX | |
| A | 1.170 | 1.190 | 29.70 | 30.30 | |
| B | 0.780 | 0.800 | 19.70 | 20.30 | |
| C | 0.670 | 0.710 | 17.00 | 18.00 | |
| D | 0.190 | 0.190 | 4.70 | 4.90 | |
| E | 0.430 | 0.440 | 10.80 | 11.20 | |
| F | 0.090 | 0.110 | 2.30 | 2.70 | |
| G | 0.120 | 0.130 | 3.10 | 3.40 | |
| H | 0.130 | 0.150 | 3.40 | 3.80 | |
| I | 0.170 | 0.190 | 4.40 | 4.80 | |
| J | 0.100 | 0.110 | 2.50 | 2.90 | |
| K | 0.020 | 0.030 | 0.60 | 0.80 | |
| L | 0.080 | 0.090 | 2.00 | 2.40 | |
| M | 0.040 | 0.040 | 0.90 | 1.10 | |
| N | 0.390 | 0.400 | 9.80 | 10.20 | |
| O | 0.290 | 0.300 | 7.30 | 7.70 | |
| P | 0.150 | 0.170 | 3.80 | 4.20 | |

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

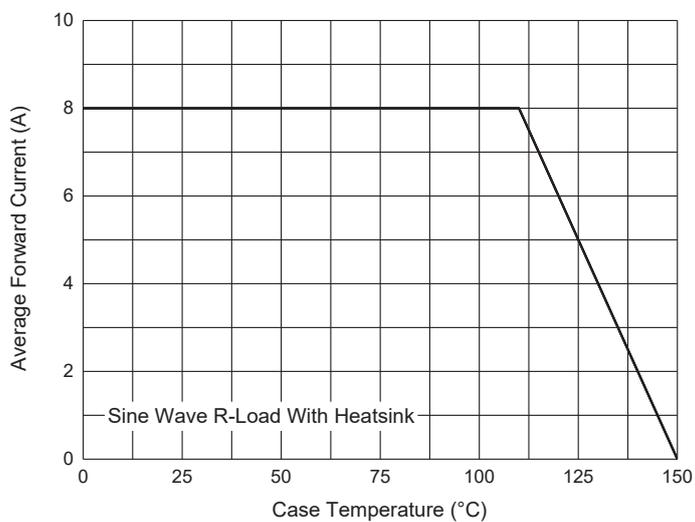


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

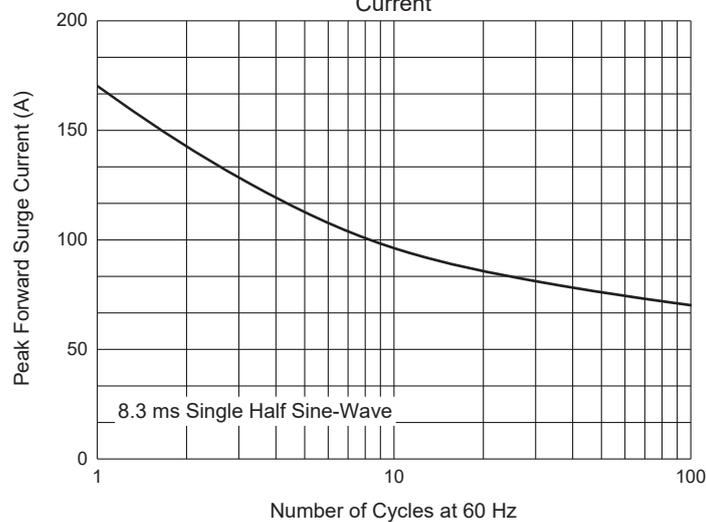


Fig. 3 - Typical Instantaneous Forward Characteristics

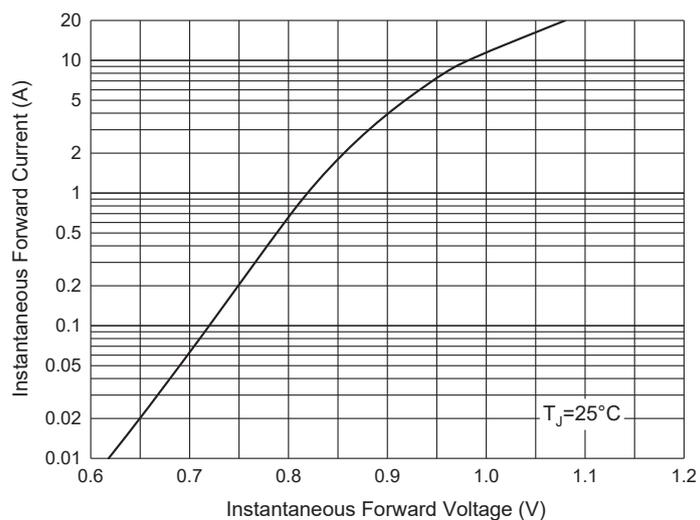
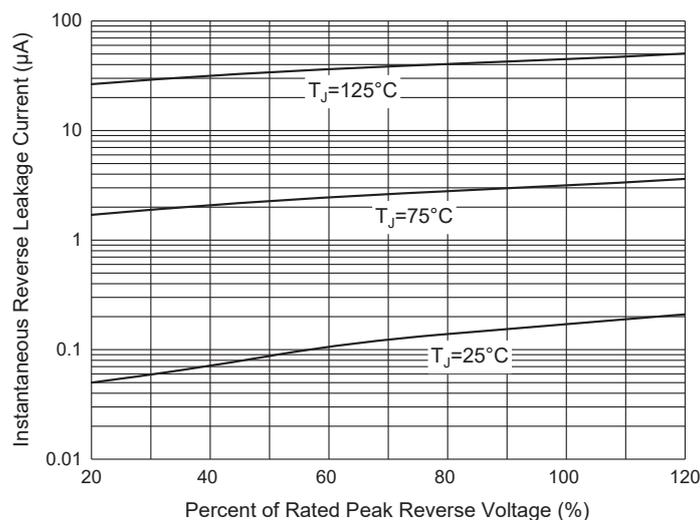


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

| Device | Packing |
|----------------|---|
| Part Number-BP | Bulk:15pcs/Tube,750pcs/Box,1500pcs/Carton |

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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