



Micro Commercial Components



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GBU6A THRU GBU6M

Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"
- Glass Passivated Chip Junction
- High Surge Overload Rating
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)

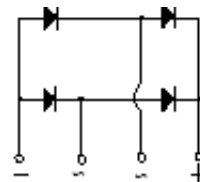
6 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

Maximum Ratings

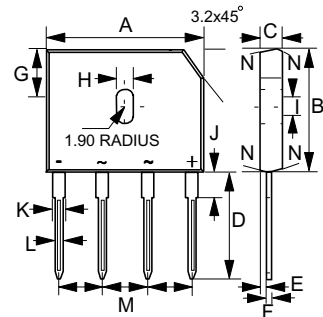
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 2.2°C/W Junction to Case
- UL Recognized File # E165989
- Mounting Torque: 5.0 in-lbs Maximum

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| GBU6A | GBU6A | 50V | 35V | 50V |
| GBU6B | GBU6B | 100V | 70V | 100V |
| GBU6D | GBU6D | 200V | 140V | 200V |
| GBU6G | GBU6G | 400V | 280V | 400V |
| GBU6J | GBU6J | 600V | 420V | 600V |
| GBU6K | GBU6K | 800V | 560V | 800V |
| GBU6M | GBU6M | 1000V | 700V | 1000V |

GBU



Case Style



Electrical Characteristics @ 25°C Unless Otherwise Specified

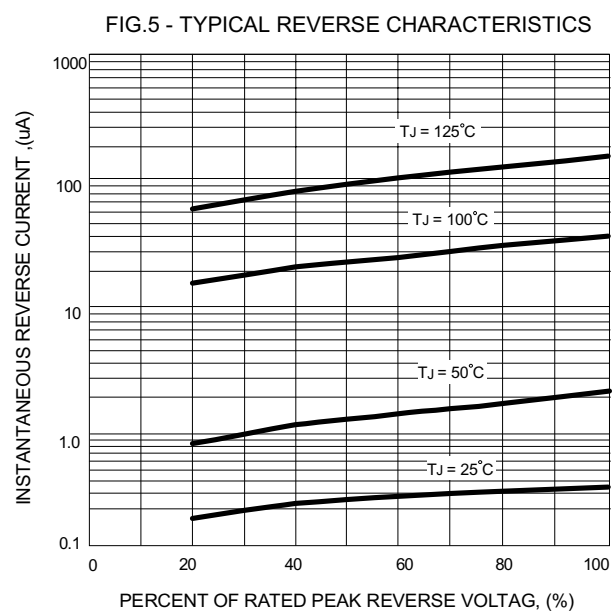
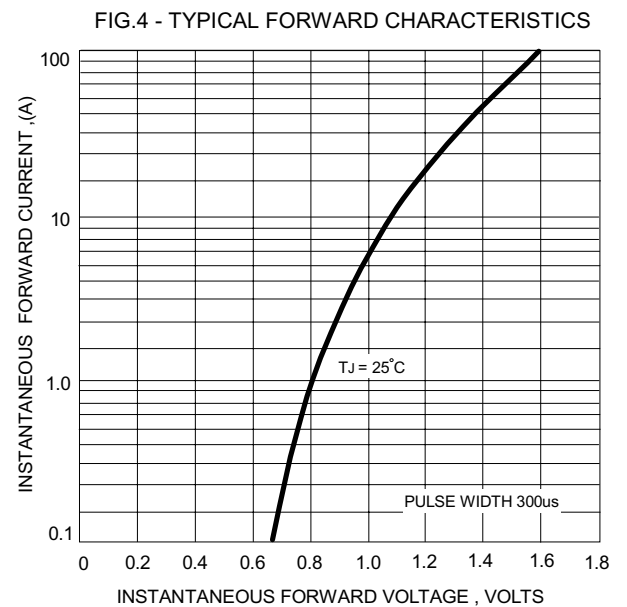
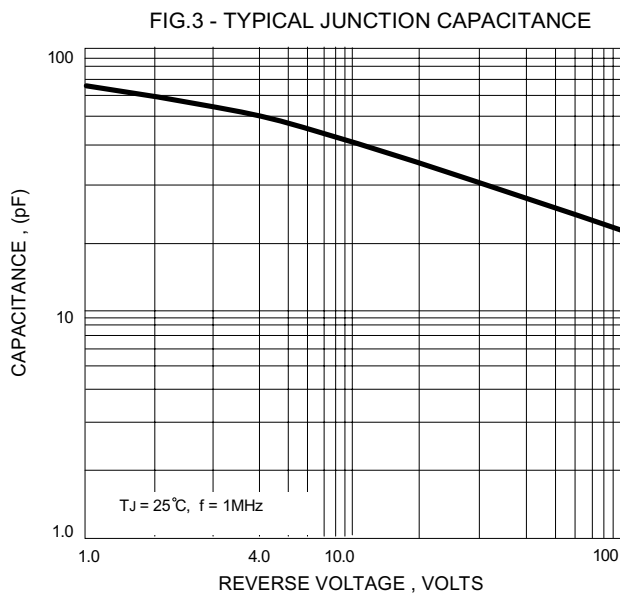
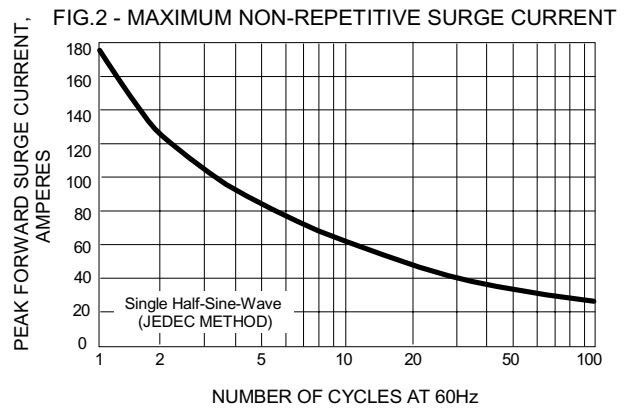
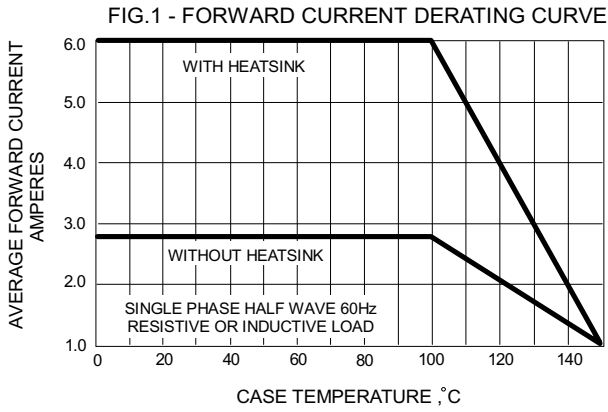
| | | | |
|---|-------------|--------------------------|---|
| Average Forward Current (NOTE 2) | $I_{F(AV)}$ | 6 A | $T_C = 100^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 175A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | 1.0V | $I_{FM}=3A$ $T_J = 25^\circ\text{C}$ |
| I^2t Rating for fusing | I^2t | 127A ² S | ($t < 8.3\text{ms}$) |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 5 μA 500uA | $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ |
| Typical Junction Capacitance | C_J | 50pF | Measured at 1.0MHz, $V_R=4.0V$ |

DIMENSIONS

| DIM | INCHES | | MM | | NOTE |
|-----|--------------|------|-------|-------|------|
| | MIN | MAX | MIN | MAX | |
| A | .860 | .880 | 21.80 | 22.30 | |
| B | .720 | .740 | 18.30 | 18.80 | |
| C | .130 | .142 | 3.30 | 3.60 | |
| D | .690 | .717 | 17.50 | 18.20 | |
| E | .030 | .039 | 0.76 | 1.00 | |
| F | .018 | .024 | 0.46 | 0.60 | |
| G | .290 | .310 | 7.40 | 7.90 | |
| H | .140 | .160 | 3.50 | 4.10 | |
| I | .065 | .085 | 1.65 | 2.16 | |
| J | .060 | .096 | 1.52 | 2.45 | |
| K | .077 | .098 | 1.95 | 2.50 | |
| L | .040 | .050 | 1.02 | 1.27 | |
| M | .190 | .210 | 4.83 | 5.33 | |
| N | 7.0° TYPICAL | | | | |

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7
2. Unit mounted on 50 x 50 x 1.6mm copper plate heatsink.

GBU6A thru GBU6M





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Ordering Information

| | |
|----------------------------|------------------------|
| Device (Part Number)-BP | Packing Bulk;1K/Box |
|----------------------------|------------------------|

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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