



Micro Commercial Components



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)

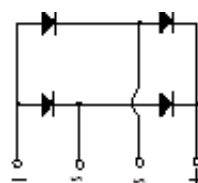
## 6 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

## Maximum Ratings

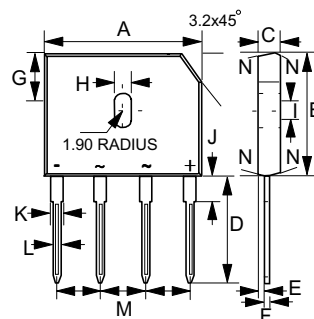
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 2.2°C/W Junction to Case
- UL Recognized File # E165989
- Mounting Torque: 5.0 in-lbs Maximum

| 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

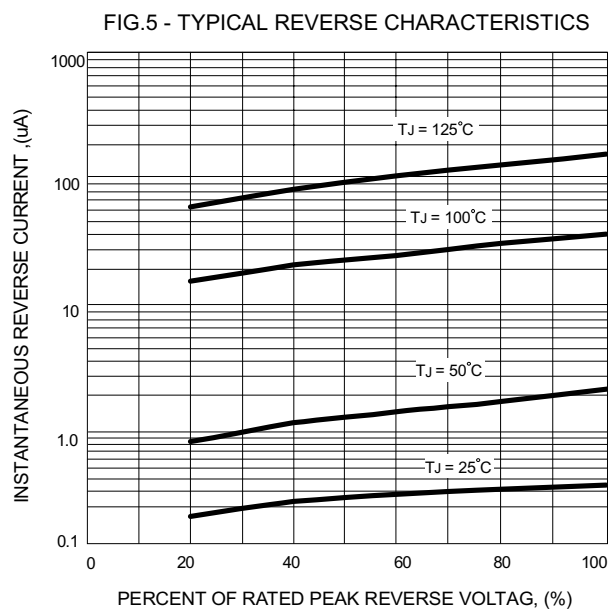
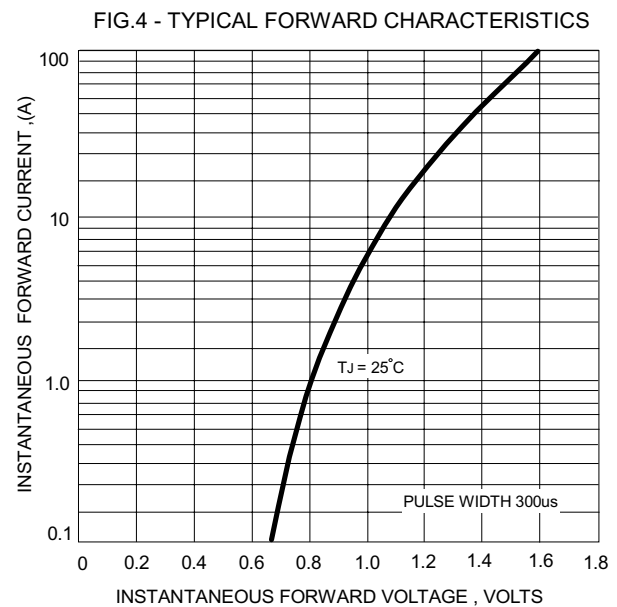
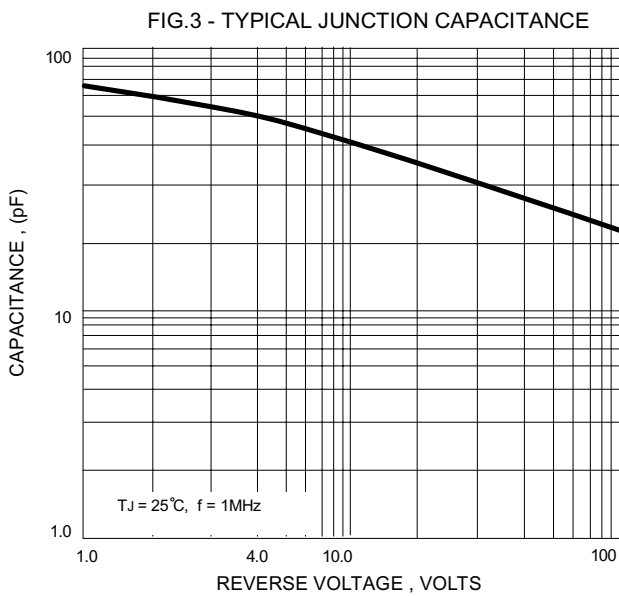
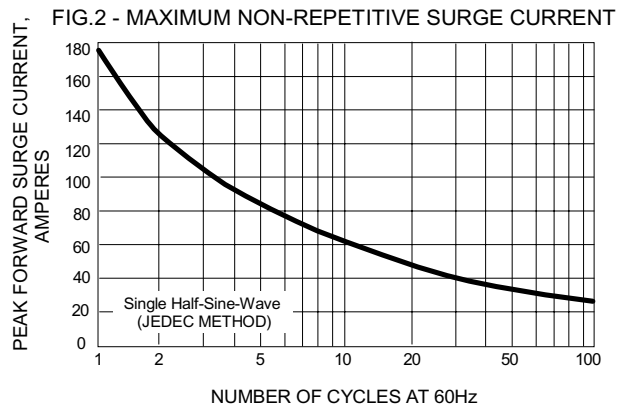
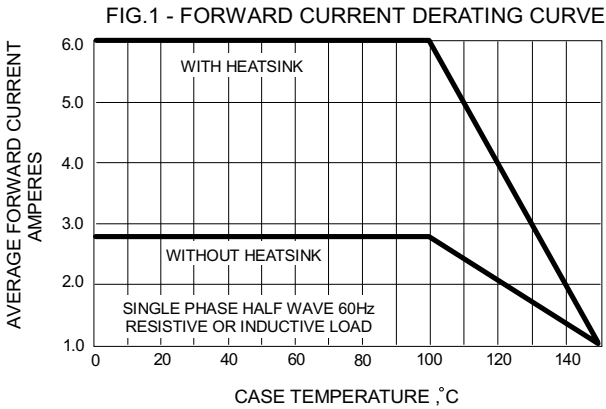
|   |             |                          |   |
|---|-------------|--------------------------|---|
| Average Forward Current (NOTE 2)                        | $I_{F(AV)}$ | 6 A                      | $T_c = 100^\circ\text{C}$                             |
| Peak Forward Surge Current                              | $I_{FSM}$   | 175A                     | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 1.0V                     | $I_{FM}=3A$<br>$T_J = 25^\circ\text{C}$               |
| $I^2t$ Rating for fusing                                | $I^2t$      | 127A <sup>2</sup> S      | ( $t < 8.3\text{ms}$ )                                |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 5 $\mu\text{A}$<br>500uA | $T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$ |
| 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<br>(Part Number)-BP | Packing<br>Bulk;1K/Box |
|----------------------------|------------------------|

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

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