



Micro Commercial Components



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## GBJ6005 THRU GBJ610

### Features

- Halogen free available upon request by adding suffix "-HF"
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)

### Maximum Ratings

- Mounting Torque: 5.0 in-lbs Maximum
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| GBJ6005            | GBJ6005        | 50V                                    | 35V                 | 50V                         |
| GBJ601             | GBJ601         | 100V                                   | 70V                 | 100V                        |
| GBJ602             | GBJ602         | 200V                                   | 140V                | 200V                        |
| GBJ604             | GBJ604         | 400V                                   | 280V                | 400V                        |
| GBJ606             | GBJ606         | 600V                                   | 420V                | 600V                        |
| GBJ608             | GBJ608         | 800V                                   | 560V                | 800V                        |
| GBJ610             | GBJ610         | 1000V                                  | 700V                | 1000V                       |

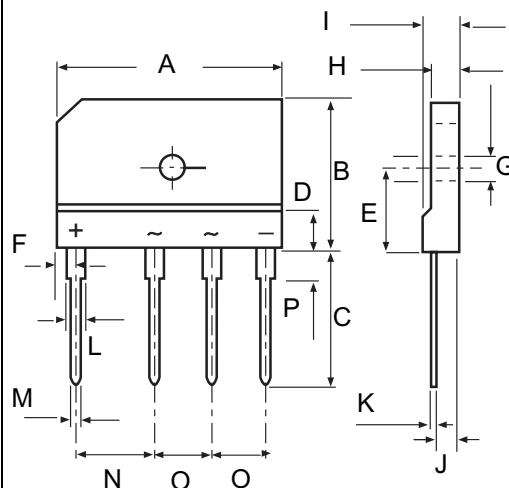
### Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |                 |                          |   |
|---|-----------------|--------------------------|---|
| Average Forward Current                                 | $I_{F(AV)}$     | 6 A                      | $T_c = 110^\circ\text{C}$                             |
| Peak Forward Surge Current                              | $I_{FSM}$       | 170A                     | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage                   | $V_F$           | 1.0V                     | $I_{FM} = 3.0A$<br>$T_J = 25^\circ\text{C}$           |
| 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 thermal resistance                              | $R_{\theta JC}$ | 1.8°C/W                  |   |
| Typical Junction Capacitance                            | $C_J$           | 55 pF                    | Measured at 1.0MHz, $V_R=4.0V$                        |

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

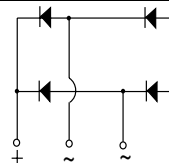
## 6 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

GBJ



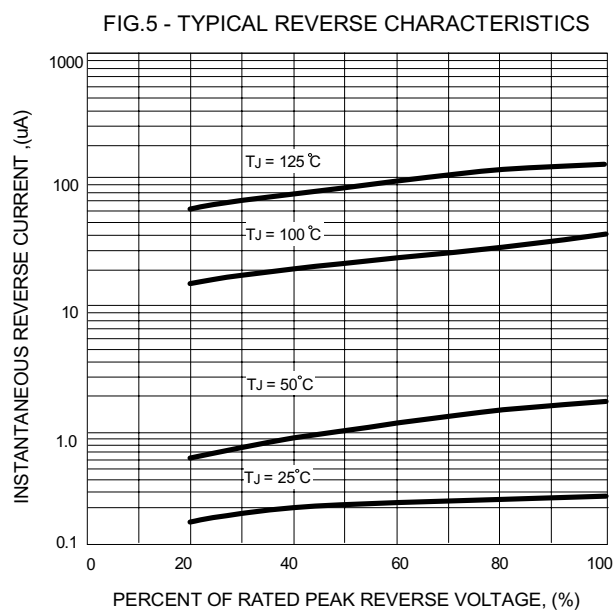
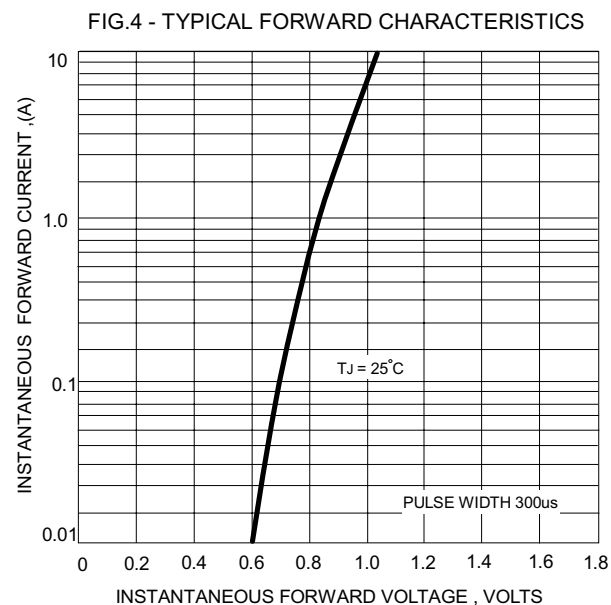
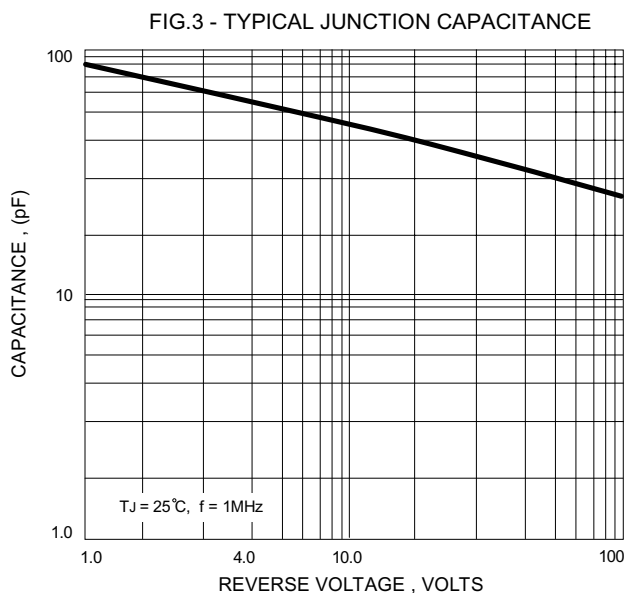
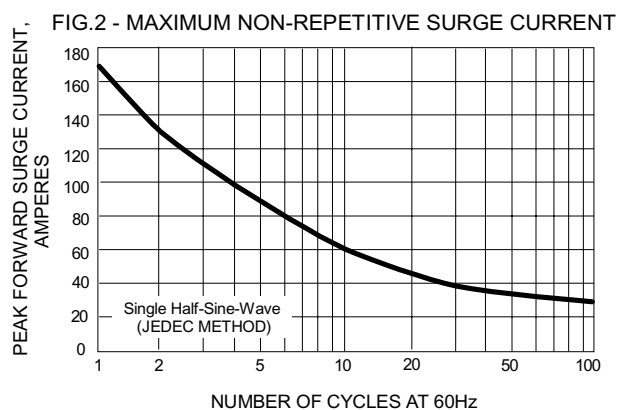
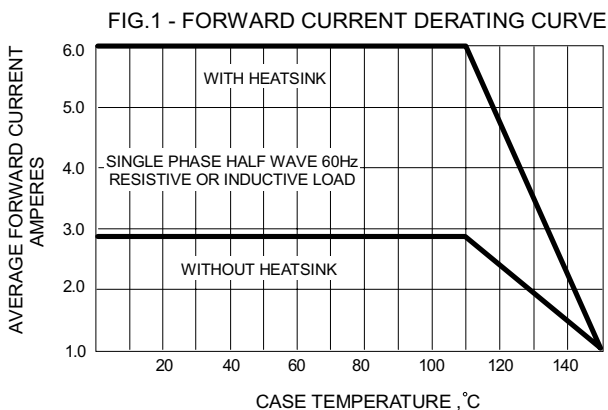
#### DIMENSIONS

| DIM | INCHES |       | MM    |       | NOTE |
|-----|--------|-------|-------|-------|------|
|     | MIN    | MAX   | MIN   | MAX   |      |
| A   | 1.170  | 1.190 | 29.70 | 30.30 |      |
| B   | .780   | .800  | 19.70 | 20.30 |      |
| C   | .670   | .710  | 17.00 | 18.00 |      |
| D   | .019   | .019  | 4.70  | 4.90  |      |
| E   | .430   | .440  | 10.80 | 11.20 |      |
| F   | .090   | .110  | 2.30  | 2.70  |      |
| G   | .120   | .130  | 3.10  | 3.40  |      |
| H   | .130   | .150  | 3.40  | 3.80  |      |
| I   | .170   | .190  | 4.40  | 4.80  |      |
| J   | .100   | .110  | 2.50  | 2.90  |      |
| K   | .020   | .030  | 0.60  | 0.80  |      |
| L   | .080   | .090  | 2.00  | 2.40  |      |
| M   | .040   | .040  | 0.90  | 1.10  |      |
| N   | .390   | .400  | 9.80  | 10.20 |      |
| O   | .290   | .300  | 7.30  | 7.70  |      |
| P   | .150   | .170  | 3.80  | 4.20  |      |



Case Type

[www.mccsemi.com](http://www.mccsemi.com)



## Ordering Information :

| Device         | Packing        |
|----------------|----------------|
| Part Number-BP | Bulk; 1.5K/Ctn |

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

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