



Micro Commercial Components



Micro Commercial Components  
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# GBJ10005 THRU GBJ1010

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

### Features

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

### Maximum Ratings

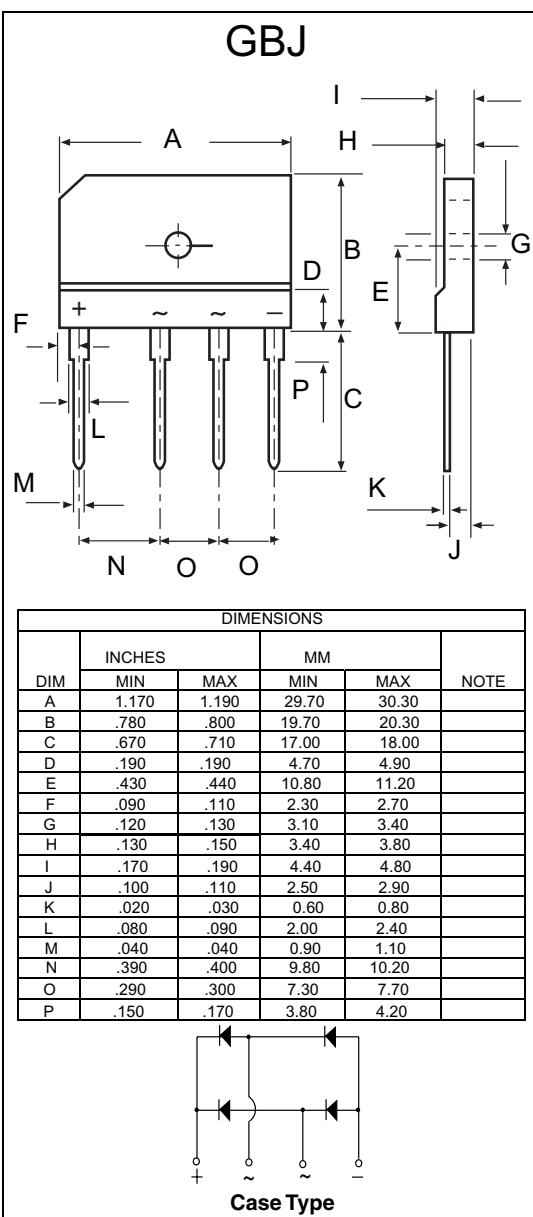
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989; Mounting Torque: 5in-lbs.

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|----------------------------------------|---------------------|-----------------------------|
| GBJ10005           | GBJ10005       | 50V                                    | 35V                 | 50V                         |
| GBJ1001            | GBJ1001        | 100V                                   | 70V                 | 100V                        |
| GBJ1002            | GBJ1002        | 200V                                   | 140V                | 200V                        |
| GBJ1004            | GBJ1004        | 400V                                   | 280V                | 400V                        |
| GBJ1006            | GBJ1006        | 600V                                   | 420V                | 600V                        |
| GBJ1008            | GBJ1008        | 800V                                   | 560V                | 800V                        |
| GBJ1010            | GBJ1010        | 1000V                                  | 700V                | 1000V                       |

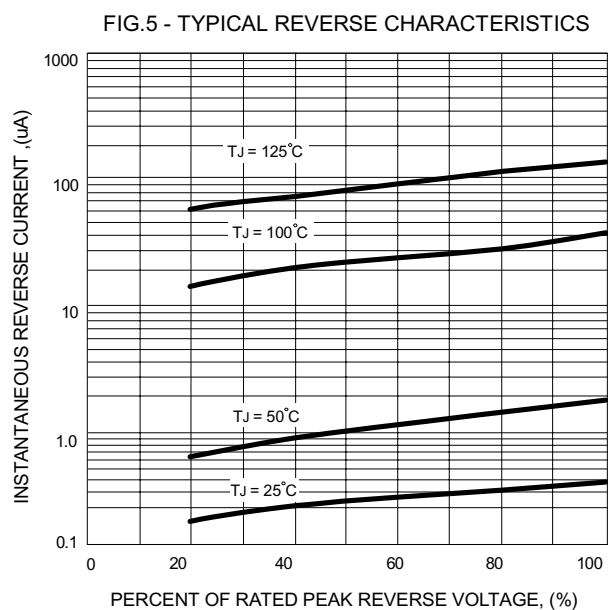
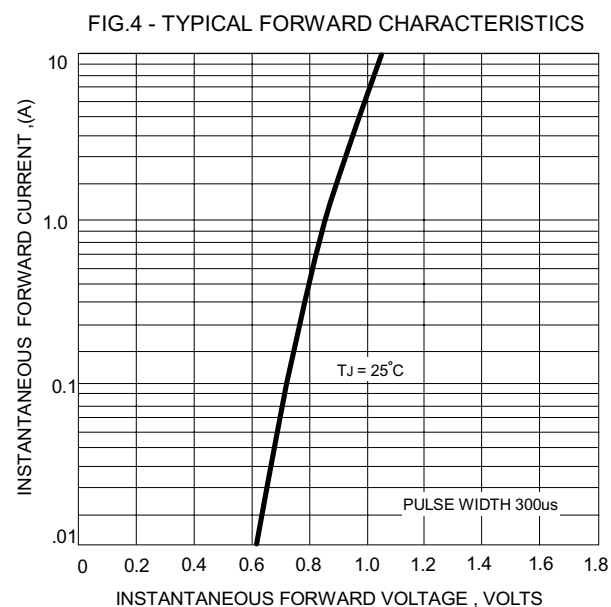
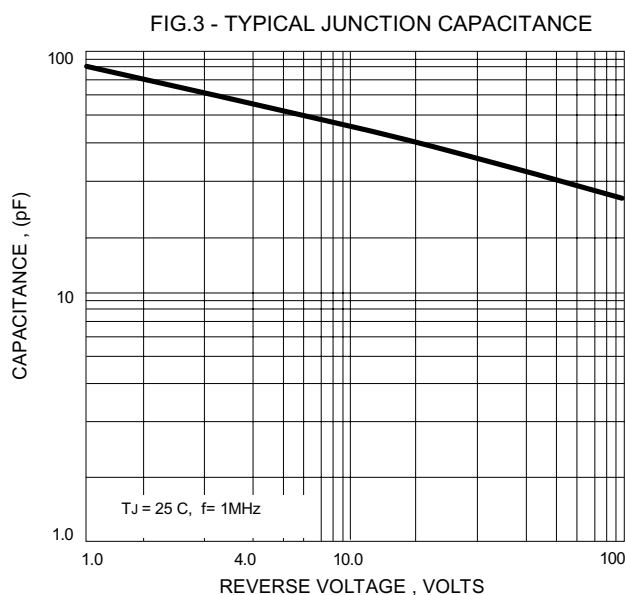
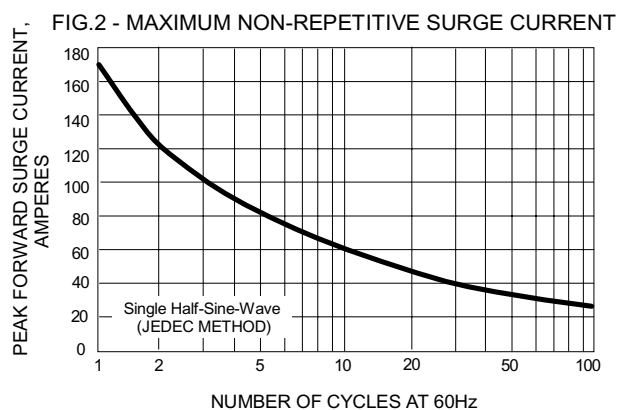
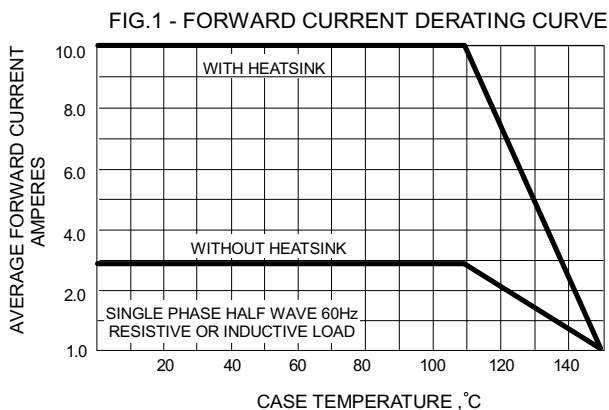
### Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                         |                 |                           |                                                       |
|---------------------------------------------------------|-----------------|---------------------------|-------------------------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$     | 10 A                      | $T_C = 110^\circ\text{C}$                             |
| Peak Forward Surge Current                              | $I_{FSM}$       | 170A                      | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage                   | $V_F$           | 1.05V                     | $I_{FM} = 5.0A$<br>$T_J = 25^\circ\text{C}$           |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$           | 10 $\mu\text{A}$<br>500uA | $T_J = 25^\circ\text{C}$<br>$T_J = 125^\circ\text{C}$ |
| Typical thermal resistance                              | $R_{\theta JC}$ | 1.4°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  
2. Pulse Test: Pulse Width 300usec, Duty Cycle 1%



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



## Ordering Information :

| Device         | Packing          |
|----------------|------------------|
| Part Number-BP | Bulk: 750pcs/Box |

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

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
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