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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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Micro Commercial Components



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# GBJ15005 THRU GBJ1510

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

### Features

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

### Maximum Ratings

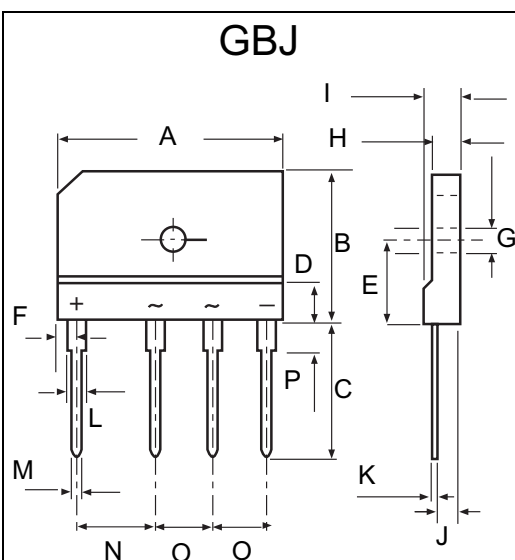
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance 0.8°C/W J to C (With heatsink)
- Typical Thermal Resistance 3.5°C/W J to L (Without heatsink)
- Typical Thermal Resistance 12°C/W J to A (Without heatsink)
- UL Recognized File # E165989; Mounting torque: 5in-lbs.

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| GBJ15005           | GBJ15005       | 50V                                    | 35V                 | 50V                         |
| GBJ1501            | GBJ1501        | 100V                                   | 70V                 | 100V                        |
| GBJ1502            | GBJ1502        | 200V                                   | 140V                | 200V                        |
| GBJ1504            | GBJ1504        | 400V                                   | 280V                | 400V                        |
| GBJ1506            | GBJ1506        | 600V                                   | 420V                | 600V                        |
| GBJ1508            | GBJ1508        | 800V                                   | 560V                | 800V                        |
| GBJ1510            | GBJ1510        | 1000V                                  | 700V                | 1000V                       |

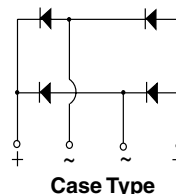
### Electrical Characteristics @ 25°C Unless Otherwise Specified

|   |             |                           |   |
|---|-------------|---------------------------|---|
| Average Forward Current                                 | $I_{F(AV)}$ | 15 A                      | $T_C = 100^\circ\text{C}$                             |
| Peak Forward Surge Current                              | $I_{FSM}$   | 240A                      | 8.3ms, half sine                                      |
| Maximum Instantaneous Forward Voltage                   | $V_F$       | 1.05V                     | $I_{FM} = 7.5A$<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>$T_J = 125^\circ\text{C}$ |
| $I^2t$ Rating for fusing                                | $I^2t$      | 240A <sup>2</sup> S       | ( $t < 8.3\text{ms}$ )                                |
| Typical Junction Capacitance                            | $C_J$       | 60 pF                     | Measured at 1.0MHz, $V_R = 4.0V$                      |

- Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7  
3. Device mounted on 300mm \* 300mm \* 1.6mm Cu Plate Heatsink



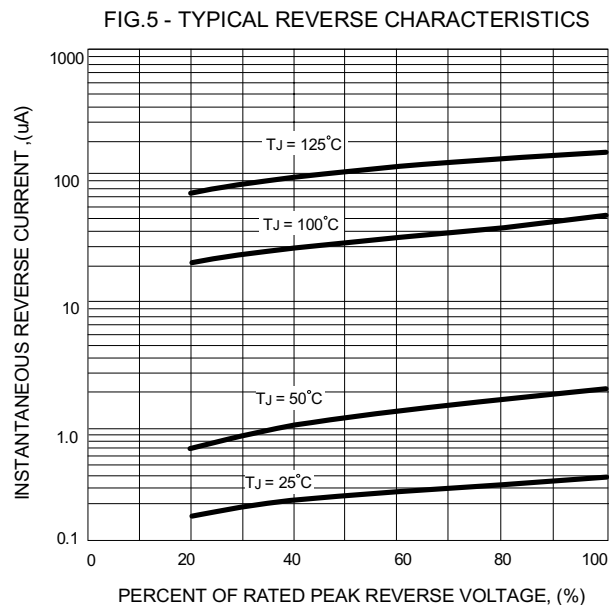
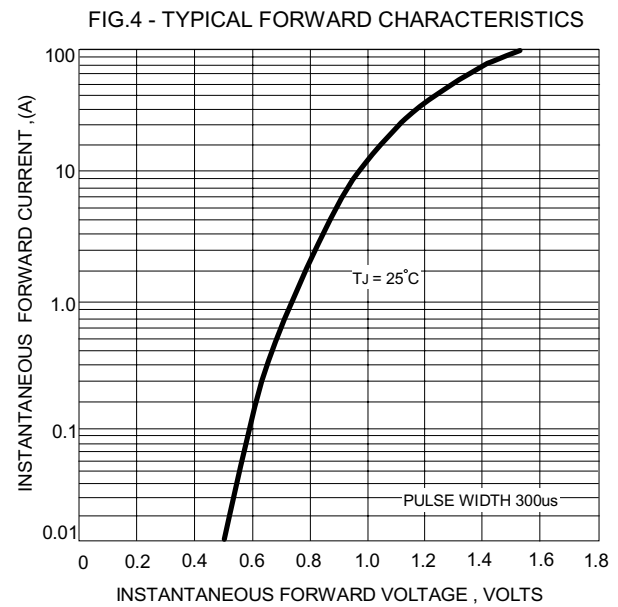
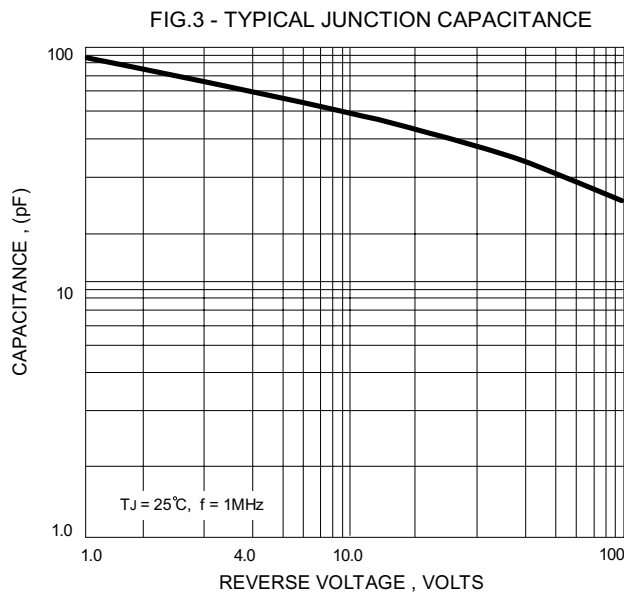
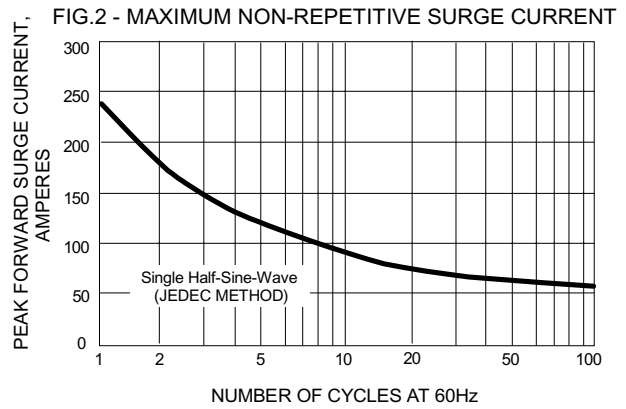
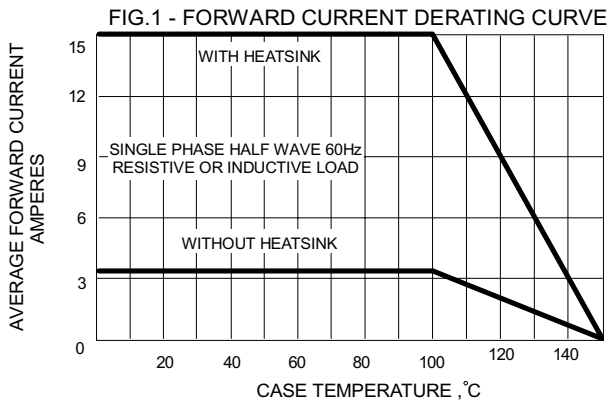
| DIM | INCHES |       | MM    |       | NOTE |
|-----|--------|-------|-------|-------|------|
|     | MIN    | MAX   | MIN   | MAX   |      |
| A   | 1.170  | 1.190 | 29.70 | 30.30 |      |
| B   | .780   | .800  | 19.70 | 20.30 |      |
| C   | .670   | .710  | 17.00 | 18.00 |      |
| D   | .019   | .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)

**RATING AND CHARACTERISTIC CURVES**  
**GBJ15005 thru GBJ1510**





Micro Commercial Components

### Ordering Information :

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

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

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