



Micro Commercial Components



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GBJL20005 THRU GBJL2010

20 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

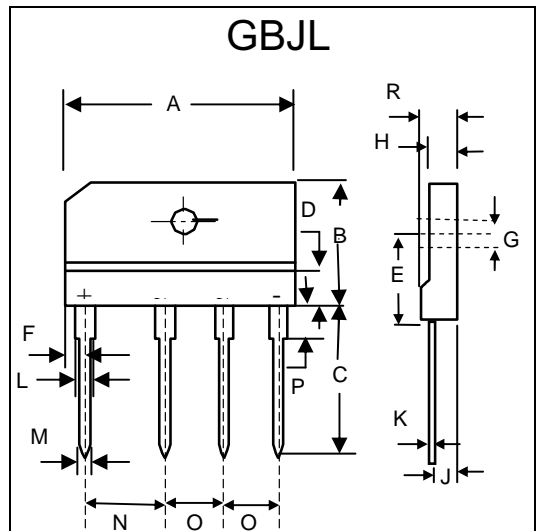
Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Rating to 1000V PRV
- Low forward voltage drop, high current capability.
- Ideal for printed circuit board
- Halogen free available upon request by adding suffix "-HF"

Maximum Ratings

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

| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|--|---------------------|-----------------------------|
| GBJL20005 | GBJL20005 | 50V | 35V | 50V |
| GBJL2001 | GBJL2001 | 100V | 70V | 100V |
| GBJL2002 | GBJL2002 | 200V | 140V | 200V |
| GBJL2004 | GBJL2004 | 400V | 280V | 400V |
| GBJL2006 | GBJL2006 | 600V | 420V | 600V |
| GBJL2008 | GBJL2008 | 800V | 560V | 800V |
| GBJL2010 | GBJL2010 | 1000V | 700V | 1000V |



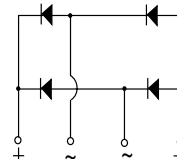
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-----------------|---------------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 20 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 | $I_{FM} = 10.0\text{ A}$ $T_J = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 10 μA 500uA | $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ |
| Typical thermal resistance | $R_{\theta JC}$ | 0.8°C/W | |
| Typical Junction Capacitance | C_J | 60 pF | Measured at 1.0MHz, $V_R=4.0\text{V}$ |

*Pulse Test: Pulse Width 300 μsec , Duty Cycle 1%

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

| DIM | INCHES | | MM | | NOTE |
|-----|----------|-------|----------|-------|------|
| | MIN | MAX | MIN | MAX | |
| A | 1.067 | 1.091 | 27.10 | 27.70 | |
| B | .551 | .575 | 14.00 | 14.60 | |
| C | .570 | .610 | 14.50 | 15.50 | |
| D | .071 typ | | 1.80 typ | | |
| E | .339 | .354 | 8.60 | 9.00 | |
| F | .071 | .087 | 1.80 | 2.20 | |
| G | .120 | .134 | 3.00 | 3.40 | |
| H | .110 | .126 | 2.80 | 3.20 | |
| J | .098 | .114 | 2.50 | 2.90 | |
| K | .012 | .028 | 0.30 | 0.70 | |
| L | .098 | .114 | 2.50 | 2.90 | |
| M | .035 | .043 | 0.90 | 1.10 | |
| N | .390 | .400 | 9.80 | 10.20 | |
| O | .290 | .300 | 7.30 | 7.70 | |
| P | .079 | .094 | 2.00 | 2.40 | |
| R | .150 | .157 | 3.60 | 4.00 | |



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RATING AND CHARACTERISTIC CURVES
GBJL20005 thru GBJL2010

FIG.1 - FORWARD CURRENT DERATING CURVE

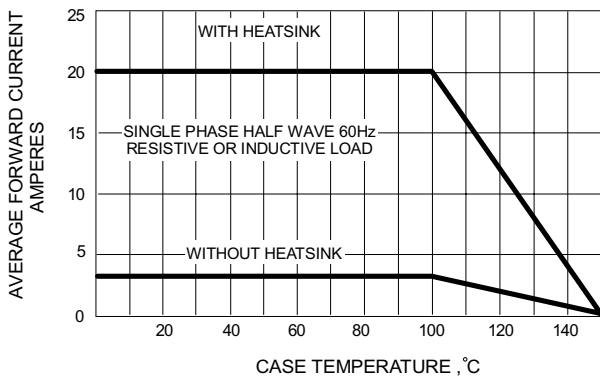


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

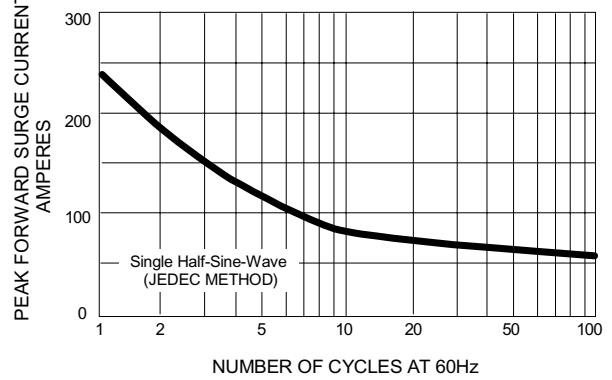


FIG.3 - TYPICAL JUNCTION CAPACITANCE

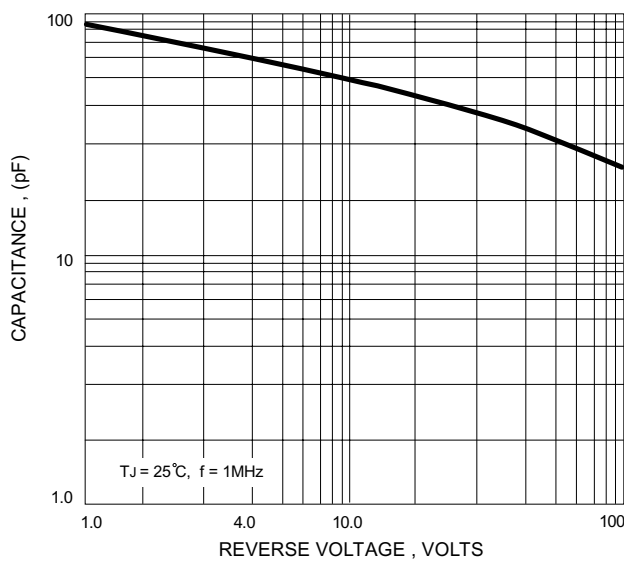


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

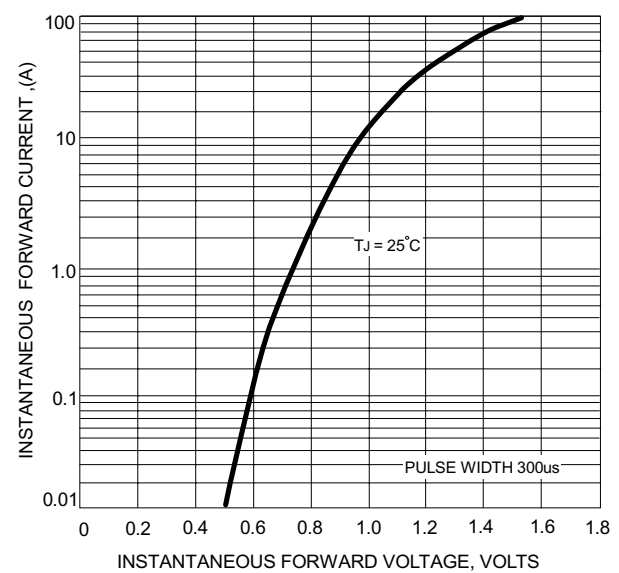
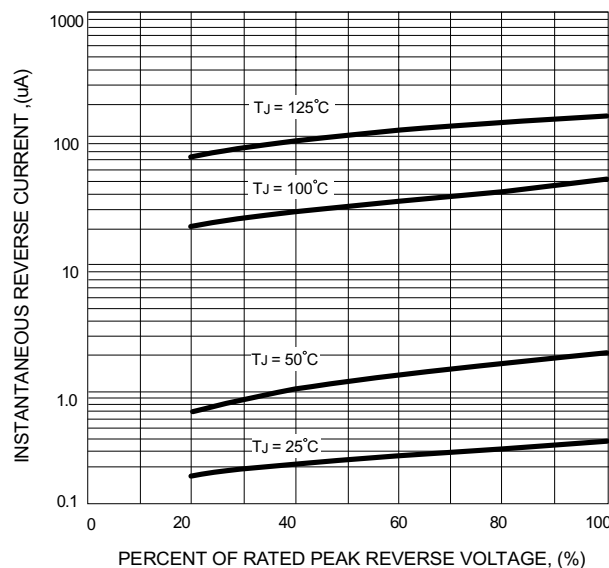


FIG.5 - TYPICAL REVERSE CHARACTERISTICS





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Ordering Information :

| Device | Packing |
|----------------|----------------|
| Part Number-BP | Bulk: 2.2K/Ctn |

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

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