

ROHS

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# GBJL20005 THRU GBJL2010

## **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 PŔV
- 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       | Device    | Maximum      | Maximum | Maximum  |
|-----------|-----------|--------------|---------|----------|
| Catalog   | Marking   | Reccurrent   | RMS     | DC       |
| Number    |           | Peak Reverse | Voltage | Blocking |
|           |           | Voltage      | _       | 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    |

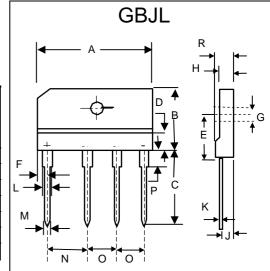
### Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward    | $I_{F(AV)}$     | 20 A          | Tc = 100°C                   |
|--------------------|-----------------|---------------|------------------------------|
| Current            |                 |               |                              |
| Peak Forward Surge | $I_{FSM}$       | 240A          | 8.3ms, half sine             |
| Current            |                 |               |                              |
| Maximum            |                 |               | I <sub>FM</sub> = 10.0 A     |
| Instantaneous      | $V_{F}$         | 1.05V         | 1FM - 10.0 A                 |
| Forward Voltage    |                 |               | T <sub>J</sub> = 25°C        |
| Maximum DC         |                 |               |                              |
| Reverse Current At | $I_R$           | 10 μ <b>A</b> | T <sub>J</sub> = 25°C        |
| Rated DC Blocking  |                 | 500uA         | T <sub>J</sub> = 125°C       |
| Voltage            |                 |               |                              |
| Typical thermal    |                 |               |                              |
| resistance         | $R_{\Theta JC}$ | 0.8°C/W       |                              |
| Typical Junction   | С <sup>л</sup>  | 60 pF         | Measured at                  |
| Capacitance        |                 | •             | 1.0MHz, V <sub>R</sub> =4.0V |

<sup>\*</sup>Pulse Test: Pulse Width 300µsec, Duty Cycle 1%

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

# 20 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

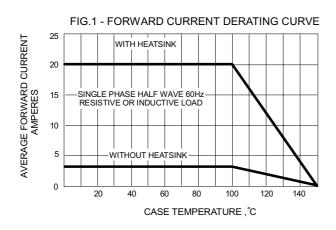


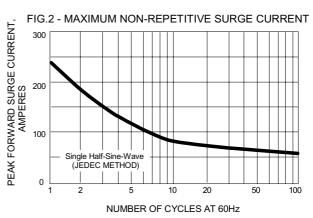
| DIMENSIONS |          |       |          |       |      |  |
|------------|----------|-------|----------|-------|------|--|
|            | INCHES   |       | ММ       |       |      |  |
| DIM        | MIN      | MAX   | MIN      | MAX   | NOTE |  |
| Α          | 1.067    | 1.091 | 27.10    | 27.70 |      |  |
| В          | .551     | .575  | 14.00    | 14.60 |      |  |
| C          | .570     | .610  | 14.50    | 15.50 |      |  |
| D          | .071 typ |       | 1.80 typ |       |      |  |
| Е          | .339     | .354  | 8.60     | 9.00  |      |  |
| F          | .071     | .087  | 1.80     | 2.20  |      |  |
| G          | .120     | .134  | 3.00     | 3.40  |      |  |
| Η          | .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  |      |  |
| М          | .035     | .043  | 0.90     | 1.10  |      |  |
| Ζ          | .390     | .400  | 9.80     | 10.20 |      |  |
| 0          | .290     | .300  | 7.30     | 7.70  |      |  |
| Р          | .079     | .094  | 2.00     | 2.40  |      |  |
| R          | .150     | .157  | 3.60     | 4.00  |      |  |
|            |          |       |          |       |      |  |

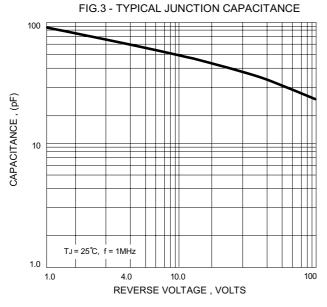


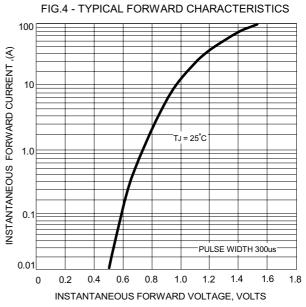
#### **RATING AND CHARACTERISTIC CURVES** GBJL20005 thru GBJL2010

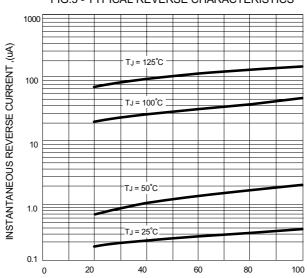












PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)



#### **Ordering Information:**

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

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

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