

**GLASS PASSIVATED BRIDGE RECTIFIERS**

REVERSE VOLTAGE - 50 to 1000 Volts  
FORWARD CURRENT - 25 Amperes

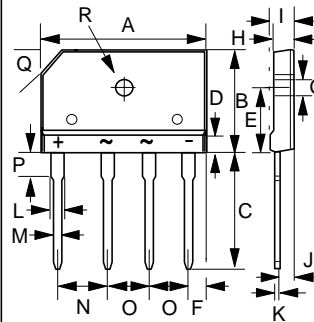
**FEATURES**

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0
- UL Recognition File # E95060

**MECHANICAL DATA**

- Polarity : Symbols molded on body
- Weight : 0.23 ounces, 6.6 grams
- Mounting position : Any

**GBJ**



| GBJ  |             |             |
|------|-------------|-------------|
| DIM. | MIN.        | MAX.        |
| A    | 29.70       | 30.30       |
| B    | 19.70       | 20.30       |
| C    | 17.0        | 18.0        |
| D    | 4.70        | 4.90        |
| E    | 10.80       | 11.20       |
| F    | 2.30        | 2.70        |
| G    | 3.10        | 3.40        |
| H    | 3.40        | 3.80        |
| I    | 4.40        | 4.80        |
| J    | 2.50        | 2.90        |
| K    | 0.60        | 0.80        |
| L    | 2.00        | 2.40        |
| M    | 0.90        | 1.10        |
| N    | 9.80        | 10.20       |
| O    | 7.30        | 7.70        |
| P    | 3.80        | 4.20        |
| Q    | (3.0) x 45° |             |
| R    | 3.10 $\phi$ | 3.40 $\phi$ |

All Dimensions in millimeter

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

| CHARACTERISTICS  | SYMBOL           | GBJ 25005   | GBJ 2501 | GBJ 2502 | GBJ 2504 | GBJ 2506 | GBJ 2508 | GBJ 2510 | UNIT             |
|--|------------------|-------------|----------|----------|----------|----------|----------|----------|------------------|
| Maximum Recurrent Peak Reverse Voltage   | VRRM             | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V                |
| Maximum RMS Voltage  | VRMS             | 35          | 70       | 140      | 280      | 420      | 560      | 700      | V                |
| Maximum DC Blocking Voltage  | VDC              | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V                |
| Maximum Average Forward (with heatsink Note 2) Rectified Current @Tc =100°C (without heatsink)   | I(AV)            | 25.0<br>4.2 |          |          |          |          |          |          | A                |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC METHOD) | IFSM             | 350         |          |          |          |          |          |          | A                |
| Maximum forward Voltage at 12.5A DC  | VF               | 1.05        |          |          |          |          |          |          | V                |
| Maximum DC Reverse Current @TJ =25°C at Rated DC Blocking Voltage @TJ =125°C                     | IR               | 10<br>500   |          |          |          |          |          |          | uA               |
| I <sup>2</sup> t Rating for fusing (t < 8.3ms)   | I <sup>2</sup> t | 510         |          |          |          |          |          |          | A <sup>2</sup> S |
| Typical Junction Capacitance per element (Note 1)  | CJ               | 85          |          |          |          |          |          |          | pF               |
| Typical Thermal Resistance (Note 2)  | R $\theta$ JC    | 0.6         |          |          |          |          |          |          | °C/W             |
| Operating Temperature Range  | TJ               | -55 to +150 |          |          |          |          |          |          | °C               |
| Storage Temperature Range  | TSTG             | -55 to +150 |          |          |          |          |          |          | °C               |

NOTES : 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Device mounted on 300mm x 300mm x 1.6mm Cu Plate Heatsink.

REV. 2, 01-Dec-2000, KBDG06

