

## Glass Passivated Bridge Rectifiers

Reverse Voltage - 50 to 1000 Volts

Forward Current - 4.0 Amperes

### Features

- Glass passivated chip
- Low forward voltage drop
- Ideal for printed circuit board
- High surge current capability

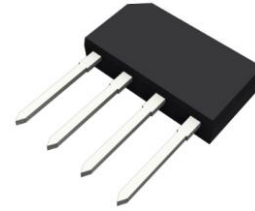
### Mechanical Data

- Polarity: Symbol marked on body
- Mounting position: Any

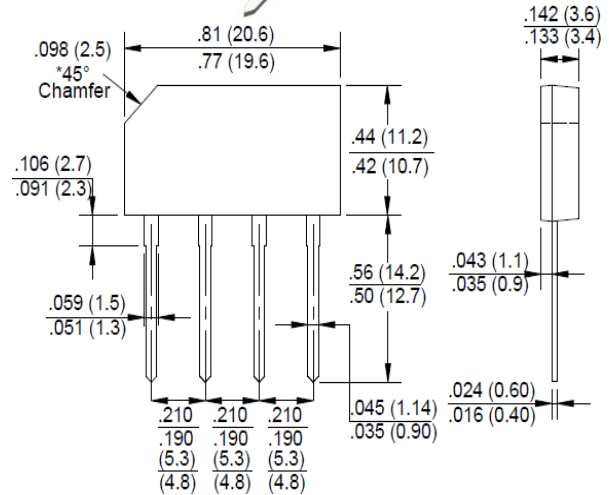
### Applications

- General purpose use in AC/DC bridge full wave rectification, for SMPS, lighting ballaster, adapter, etc.

2GBJ



RoHS  
COMPLIANT



## Maximum Ratings and Electrical Characteristics

Rating 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            | GBL005      | GBL01 | GBL02 | GBL04 | GBL06 | GBL08 | GBL10 | Unit             |
|--|-------------------|-------------|-------|-------|-------|-------|-------|-------|------------------|
| Maximum Repetitive Peak Reverse Voltage  | V <sub>RRM</sub>  | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V                |
| Maximum RMS Voltage  | V <sub>RMS</sub>  | 35          | 70    | 140   | 280   | 420   | 560   | 700   | V                |
| Maximum DC Blocking Voltage  | V <sub>DC</sub>   | 50          | 100   | 200   | 400   | 600   | 800   | 1000  | V                |
| Maximum Average Forward Rectified Current @ T <sub>A</sub> =50 °C                                  | I <sub>(AV)</sub> | 4.0         |       |       |       |       |       |       | A                |
| Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method) | I <sub>FSM</sub>  | 135         |       |       |       |       |       |       | A                |
| I <sup>2</sup> t Rating for Fusing (t<8.3mS)   | I <sup>2</sup> t  | 75.6        |       |       |       |       |       |       | A <sup>2</sup> s |
| Peak Forward Voltage Per Diode at 2A DC  | V <sub>F</sub>    | 0.95        |       |       |       |       |       |       | V                |
| Peak Forward Voltage per Diode at 4A DC  | V <sub>F</sub>    | 1.05        |       |       |       |       |       |       | V                |
| Maximum DC Reverse Current at Rated @ T <sub>J</sub> =25°C   | I <sub>R</sub>    | 5.0         |       |       |       |       |       |       | μA               |
| DC Blocking Voltage per Diode @ T <sub>J</sub> =125°C  |                   | 500         |       |       |       |       |       |       |                  |
| Typical Thermal Resistance to Ambient  | R <sub>θJA</sub>  | 28          |       |       |       |       |       |       | °C/W             |
| Typical Thermal Resistance to case   | R <sub>θJC</sub>  | 4.2         |       |       |       |       |       |       |                  |
| Typical Thermal Resistance to lead   | R <sub>θJL</sub>  | 4           |       |       |       |       |       |       |                  |
| Operating Junction Temperature Range   | T <sub>J</sub>    | -55 to +150 |       |       |       |       |       |       | °C               |
| Storage Temperature Range  | T <sub>STG</sub>  | -55 to +150 |       |       |       |       |       |       | °C               |

Note: 1. Mounting conditions ,0.5" lead length maximum.

2.The typical data above is for reference only

Fig. 1 - Forward Current Derating Curve

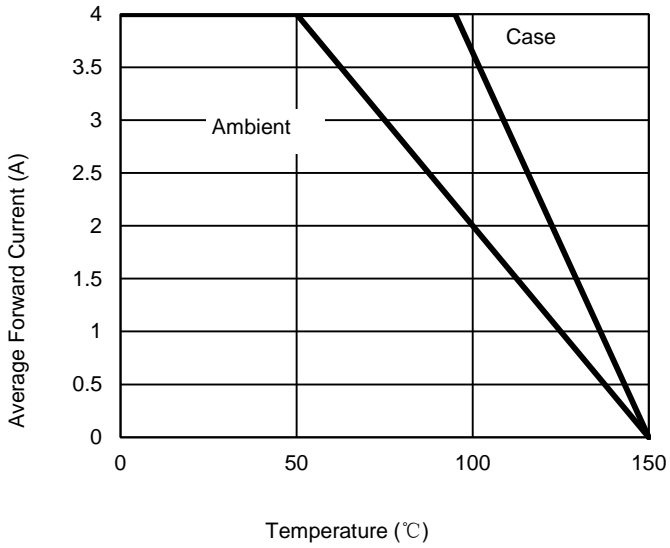


Fig. 2 - Maximum Non-Repetitive Surge Current

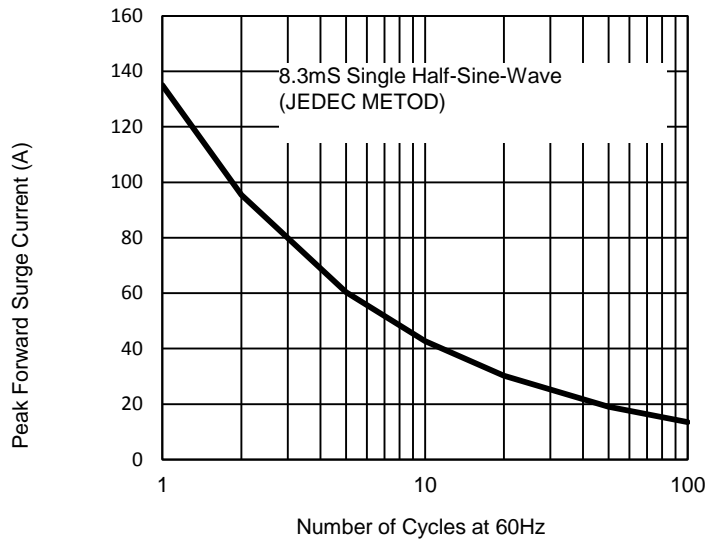


Fig. 3 - Typical Reverse Characteristics

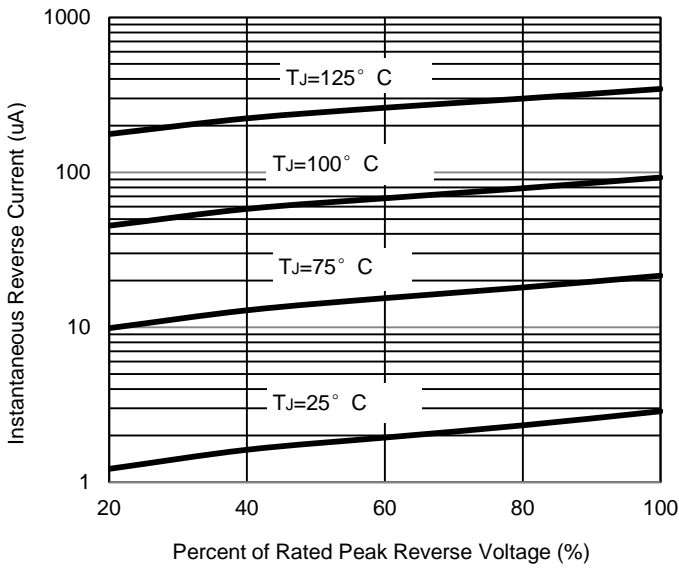
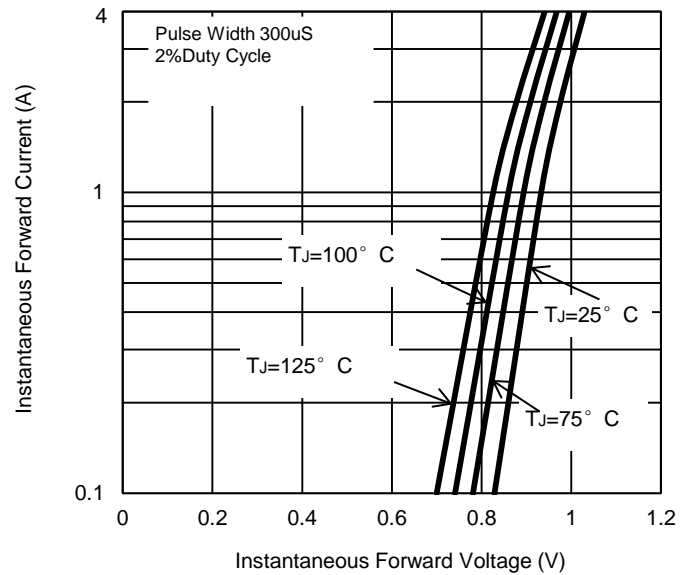


Fig. 4 - Typical Forward Characteristics



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