

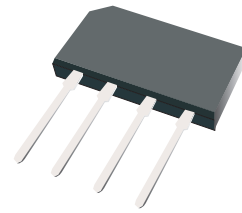
# Glass Passivated Bridge Rectifiers

## GBL005-G Thru. GBL10-G

Reverse Voltage: 50 to 1000V

Forward Current: 4.0A

RoHS Device

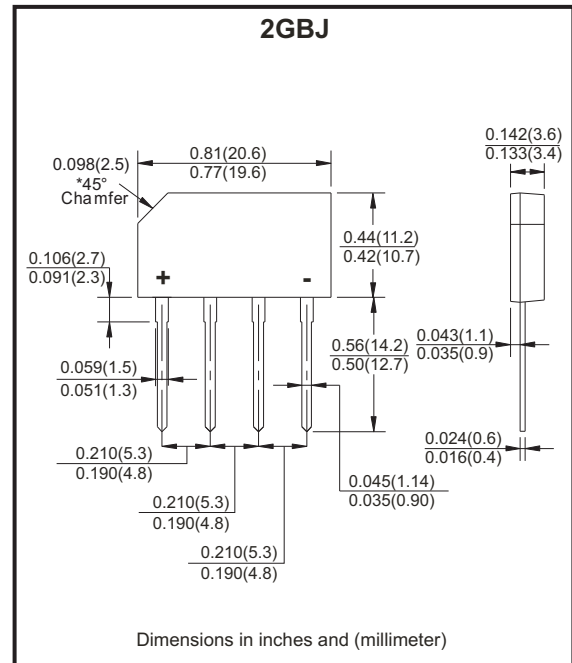


### Features

- Surge overload rating -125 amperes peak.
- Ideal for printed circuit board.
- UL recognized file # E349301 

### Mechanical Data

- Epoxy: UL 94V-0 rate flame retardant.
- Case: Molded plastic, 2GBJ
- Mounting position: Any.
- Weight: 2.151 grams.



### 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%

| Parameter                                                                           | Symbol     | GBL 005-G   | GBL 01-G | GBL 02-G | GBL 04-G | GBL 06-G | GBL 08-G | GBL 10-G | Unit             |
|-------------------------------------------------------------------------------------|------------|-------------|----------|----------|----------|----------|----------|----------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                              | $V_{RRM}$  | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V                |
| Maximum RMS Bridge Input Voltage                                                    | $V_{RMS}$  | 35          | 70       | 140      | 280      | 420      | 560      | 700      | V                |
| Maximum DC Blocking Voltage                                                         | $V_{DC}$   | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V                |
| Maximum Average Forward Rectified Output Current @ $T_A=50^\circ\text{C}$           | $I_{(AV)}$ | 4.0         |          |          |          |          |          |          | A                |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load | $I_{FSM}$  | 125         |          |          |          |          |          |          | A                |
| Maximum Forward Voltage Drop Per Bridge Element at 2.0A Peak                        | $V_F$      | 1.0         |          |          |          |          |          |          | V                |
| Maximum Forward Voltage Drop Per Bridge Element at 4.0A Peak                        | $V_F$      | 1.1         |          |          |          |          |          |          | V                |
| Maximum Reverse Current At Rate DC Blocking Voltage                                 | $I_R$      | 10.0        |          |          |          |          |          |          | $\mu\text{A}$    |
| Maximum Reverse Current At Rate DC Blocking Voltage @ $T_J=100^\circ\text{C}$       | $I_R$      | 1.0         |          |          |          |          |          |          | mA               |
| Operating Temperature Range                                                         | $T_J$      | -55 to +150 |          |          |          |          |          |          | $^\circ\text{C}$ |
| Storage Temperature Range                                                           | $T_{STG}$  | -55 to +150 |          |          |          |          |          |          | $^\circ\text{C}$ |

Notes: 1. Mounting Conditions, 0.5" lead length maximum.

Company reserves the right to improve product design, functions and reliability without notice.

REV: C

## Rating and Characteristics Curves (GBL005-G Thru. GBL10-G)

Fig.1 - Maximum Non-repetitive Surge Current

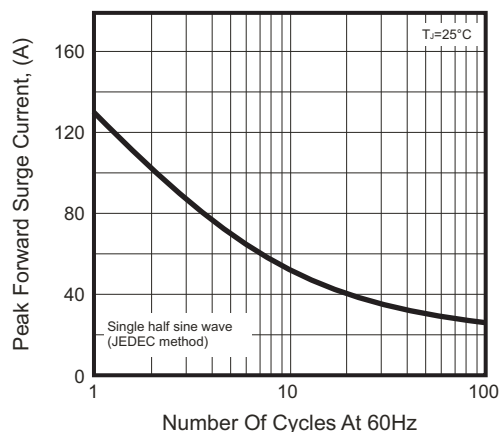


Fig.2 - Forward Derating Current

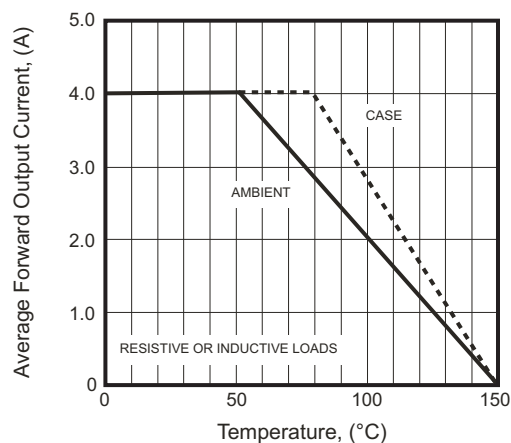


Fig.3 - Typical Forward Characteristics

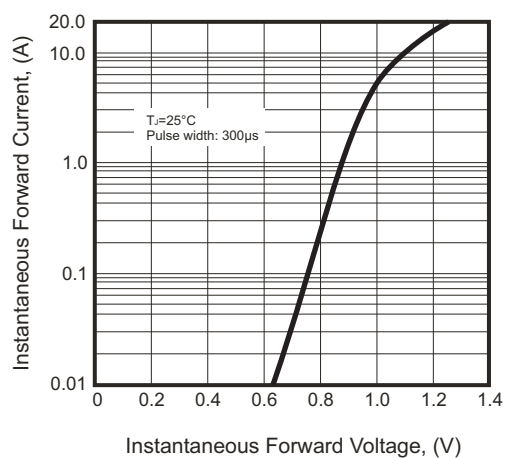
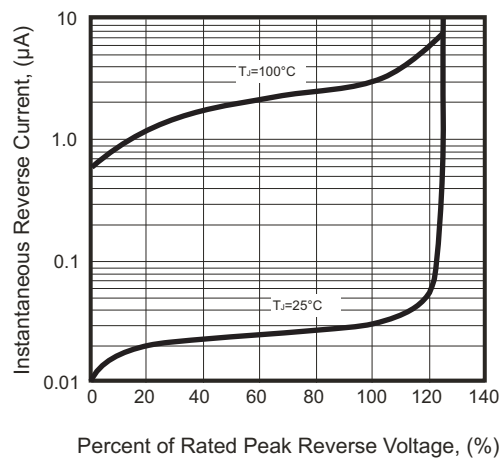
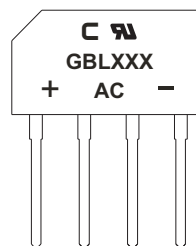


Fig.4 - Typical Reverse Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| GBL005-G    | GBL005       |
| GBL01-G     | GBL01        |
| GBL02-G     | GBL02        |
| GBL04-G     | GBL04        |
| GBL06-G     | GBL06        |
| GBL08-G     | GBL08        |
| GBL10-G     | GBL10        |



**XX / XXX = Product type marking code**  
**C = Compchip Logo**

## Standard Packaging

| Case Type | TUBE PACK       |                   |
|-----------|-----------------|-------------------|
|           | TUBE<br>( pcs ) | Carton<br>( pcs ) |
| 2GBJ      | 20              | 2,000             |

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