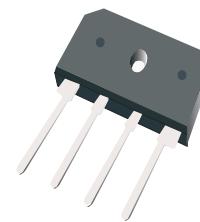


## GBU25005-G Thru. GBU2510-G

**Reverse Voltage: 50 to 1000V**

**Forward Current: 25.0A**

**RoHS Device**



### Features

- Surge overload rating -350 amperes peak.

- Ideal for printed circuit board.

- UL recognized file # E349301

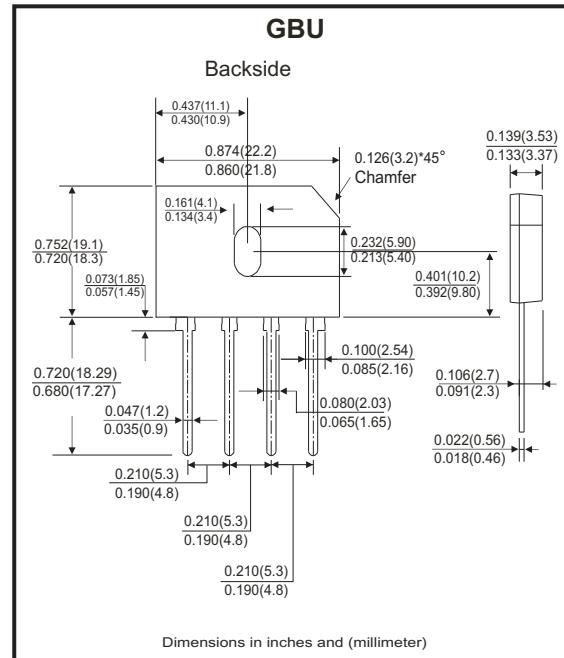
### Mechanical Data

- Epoxy: UL 94V-0 rate flame retardant.

- Case: Molded plastic, GBU

- Mounting position: Any

- Weight: 3.91 grams (approx.).



### 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            | GBU<br>25005-G | GBU<br>2501-G | GBU<br>2502-G | GBU<br>2504-G | GBU<br>2506-G | GBU<br>2508-G | GBU<br>2510-G | Unit             |
|--|-------------------|----------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------|
| Maximum Recurrent 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 (With heatsink Note2)<br>Rectified Current @T <sub>J</sub> =100°C (without heatsink) | I <sub>(AV)</sub> | 25.0<br>4.2    |               |               |               |               |               |               | A                |
| Peak Forward Surge Current, 8.3ms Single<br>Half Sine-Wave Super Imposed On Rated<br>Load (JEDEC Method)     | I <sub>FSM</sub>  | 350            |               |               |               |               |               |               | A                |
| Maximum Forward Voltage at 12.5A DC  | V <sub>F</sub>    | 1.0            |               |               |               |               |               |               | V                |
| Maximum DC Reverse Current @T <sub>J</sub> =25°C<br>At Rate DC Blocking Voltage @T <sub>J</sub> =125°C       | I <sub>R</sub>    | 10.0<br>500    |               |               |               |               |               |               | μA               |
| I <sup>2</sup> T Rating for Fusing (t<8.3ms)   | I <sup>2</sup> t  | 508            |               |               |               |               |               |               | A <sup>2</sup> s |
| Typical Junction Capacitance Per Element<br>(Note 1)   | C <sub>J</sub>    | 70             |               |               |               |               |               |               | pF               |
| Typical Thermal Resistance   | R <sub>θJC</sub>  | 2.2            |               |               |               |               |               |               | °C/W             |
| Operating Temperature Range  | T <sub>J</sub>    | -55 to +150    |               |               |               |               |               |               | °C               |
| Storage Temperature Range  | T <sub>STG</sub>  | -55 to +150    |               |               |               |               |               |               | °C               |

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 100mm\*100mm\*1.6mm Cu plate heatsink.

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

REV: D

# Glass Passivated Bridge Rectifiers

**Comchip**  
SMD Diode Specialist

## Rating and Characteristics Curves (GBU25005-G Thru. GBU2510-G)

Fig.1 - Derating Curve Output Rectified Current

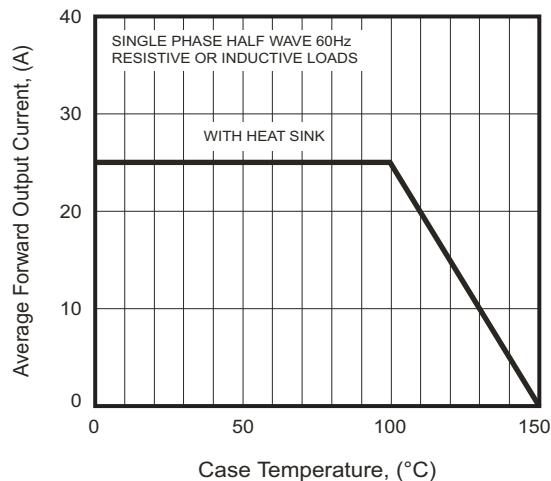


Fig.2 - Max. Forward Surge Current

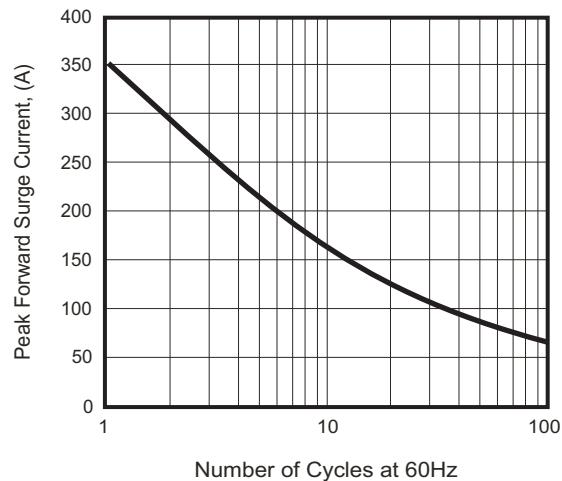


Fig.3 - Typical Forward Characteristics

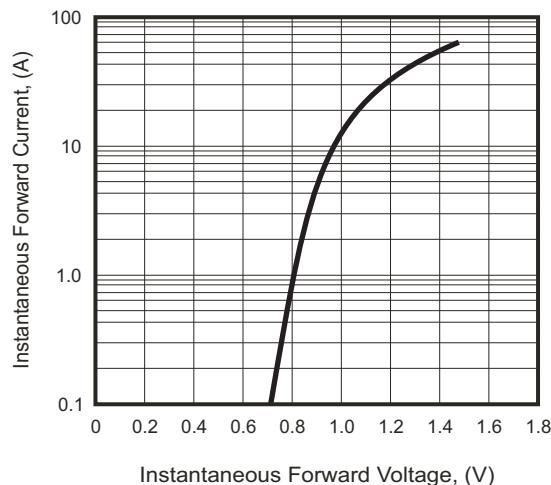
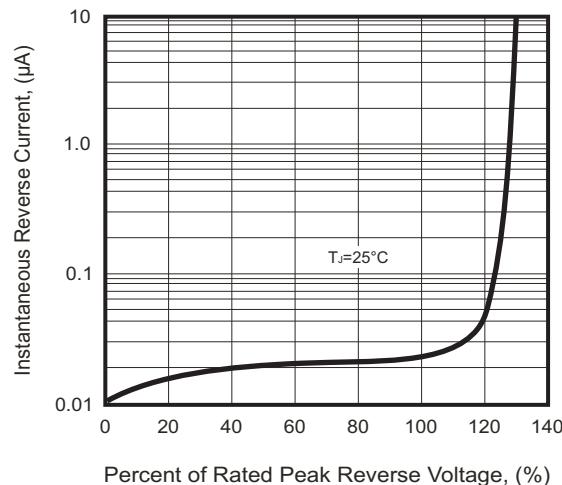


Fig.4 - Typical Reverse Characteristics

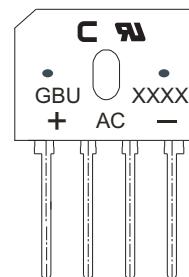


Company reserves the right to improve product design , functions and reliability without notice.

REV: D

## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| GBU25005-G  | GBU25005     |
| GBU2501-G   | GBU2501      |
| GBU2502-G   | GBU2502      |
| GBU2504-G   | GBU2504      |
| GBU2506-G   | GBU2506      |
| GBU2508-G   | GBU2508      |
| GBU2510-G   | GBU2510      |



**XXXX / XXXXX = Product type marking code**  
**C = Compchip Logo**

## Standard Packaging

| Case Type | TUBE PACK       |                   |
|-----------|-----------------|-------------------|
|           | TUBE<br>( pcs ) | Carton<br>( pcs ) |
| GBU       | 20              | 1,000             |

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Comchip Technology:](#)

[GBU2510-G](#)