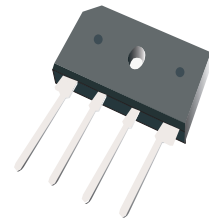


## GBU15005-G Thru. GBU1510-G

Reverse Voltage: 50 to 1000V

Forward Current: 15.0A

RoHS Device



### Features

- Surge overload rating -240 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 15005-G | GBU 1501-G | GBU 1502-G | GBU 1504-G | GBU 1506-G  | GBU 1508-G | GBU 1510-G | Unit                 |
|--|-----------------|-------------|------------|------------|------------|-------------|------------|------------|----------------------|
| Maximum Recurrent Peak Reverse Voltage   | $V_{RRM}$       | 50          | 100        | 200        | 400        | 600         | 800        | 1000       | V                    |
| Maximum RMS 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 (With heatsink Note2) Rectified Current @ $T_c=100^\circ\text{C}$ (without heatsink) | $I_{(AV)}$      |             |            |            |            | 15.0        |            |            | A                    |
|  |                 |             |            |            |            | 3.2         |            |            |                      |
| Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)           | $I_{FSM}$       |             |            |            |            | 240         |            |            | A                    |
| Maximum Forward Voltage at 7.5A DC   | $V_F$           |             |            |            |            | 1.0         |            |            | V                    |
| Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rate DC Blocking Voltage @ $T_J=125^\circ\text{C}$    | $I_R$           |             |            |            |            | 10.0        |            |            | $\mu\text{A}$        |
|  |                 |             |            |            |            | 500         |            |            |                      |
| $I^2T$ Rating for Fusing( $t<8.3\text{ms}$ )   | $I^2t$          |             |            |            |            | 239         |            |            | $\text{A}^2\text{s}$ |
| Typical Junction Capacitance Per Element (Note 1)  | $C_J$           |             |            |            |            | 70          |            |            | pF                   |
| Typical Thermal Resistance   | $R_{\theta JC}$ |             |            |            |            | 2.2         |            |            | $^\circ\text{C/W}$   |
| Operating Temperature Range  | $T_J$           |             |            |            |            | -55 to +150 |            |            | $^\circ\text{C}$     |
| Storage Temperature Range  | $T_{STG}$       |             |            |            |            | -55 to +150 |            |            | $^\circ\text{C}$     |

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

## Rating and Characteristics Curves (GBU15005-G Thru. GBU1510-G)

Fig.1 - Derating Curve Output Rectified Current

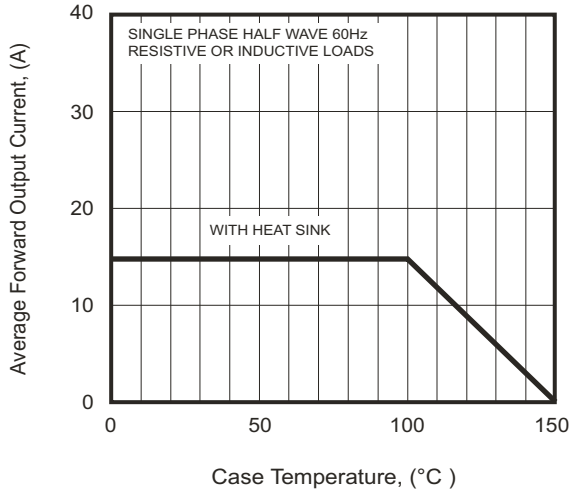


Fig.2 - Max. Forward Surge Current

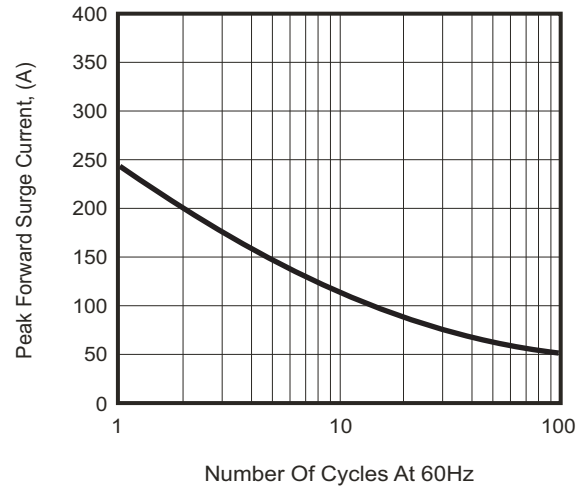


Fig.3 - Typical Forward Characteristics

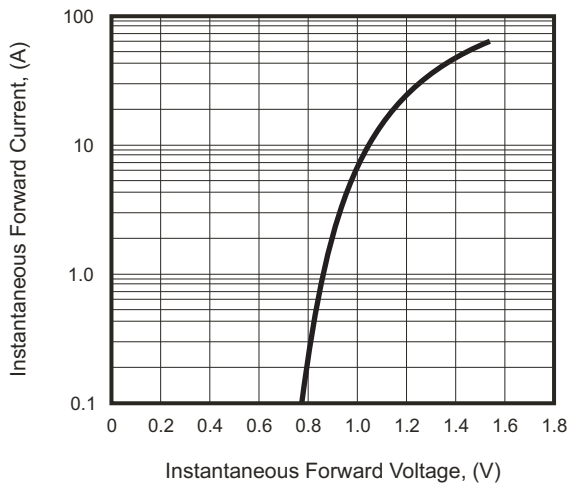
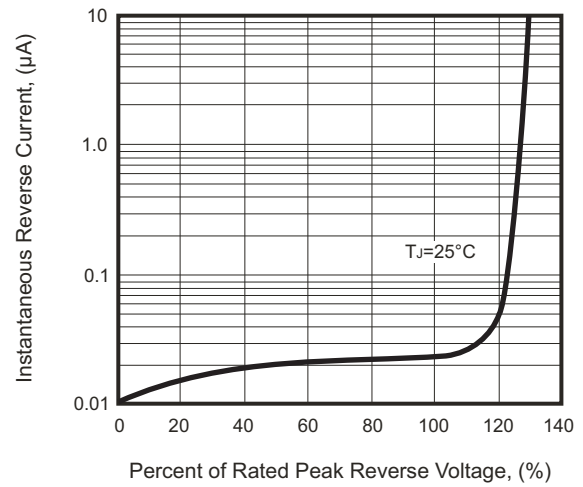
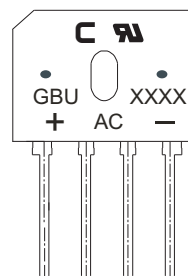


Fig.4 - Typical Reverse Characteristics



## Marking Code

| Part Number | Marking code |
|-------------|--------------|
| GBU15005-G  | GBU15005     |
| GBU1501-G   | GBU1501      |
| GBU1502-G   | GBU1502      |
| GBU1504-G   | GBU1504      |
| GBU1506-G   | GBU1506      |
| GBU1508-G   | GBU1508      |
| GBU1510-G   | GBU1510      |



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             |

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