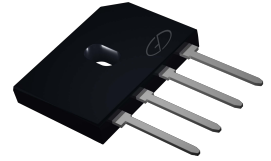


# GBU25005 thru GBU2510

Glass Passivated Bridge Rectifiers  
 Reverse Voltage 50 to 1000Volts Forward Current 25.0Amperes

## Features

- Surge overload rating -350 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0
- Mounting position:Any



Package: GBU

## Maximum Ratings and Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)

Single phase, half wave ,60Hz, resistive or inductive load. For capacitive load, derate current by 20%

| Parameter  | Symbol            | GBU 25005   | GBU 2501 | GBU 2502 | GBU 2504 | GBU 2506 | GBU 2508 | GBU 2510 | 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 Rectified Current @ T <sub>C</sub> =100°C (with heatsink Note 2)<br>@ T <sub>C</sub> =100°C (without heatsink) | I <sub>(AV)</sub> | 25.0<br>4.2 |          |          |          |          |          |          | A                |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load (JEDEC Method)                                | I <sub>FSM</sub>  | 350         |          |          |          |          |          |          | A                |
| Maximum Forward Voltage at 12.5A DC  | V <sub>F</sub>    | 1.1         |          |          |          |          |          |          | V                |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ T <sub>J</sub> =25°C<br>@ 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  | 200         |          |          |          |          |          |          | A <sup>2</sup> s |
| Typical Junction Capacitance Per Element (Note1)   | 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.

## Typical Characteristic Curves

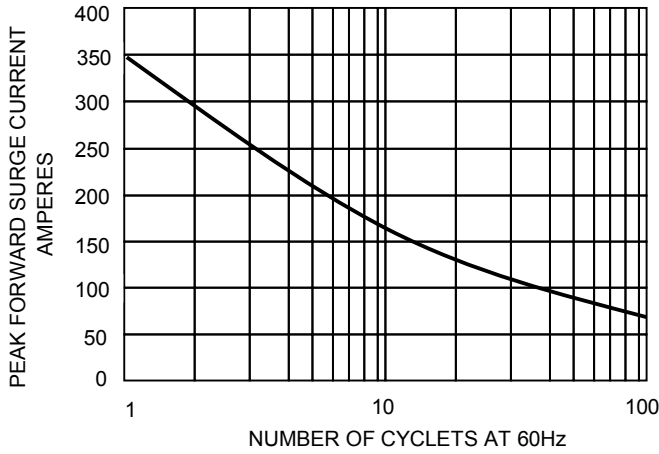


FIG.1-MAXIMUM FORWARD SURGE CURRENT

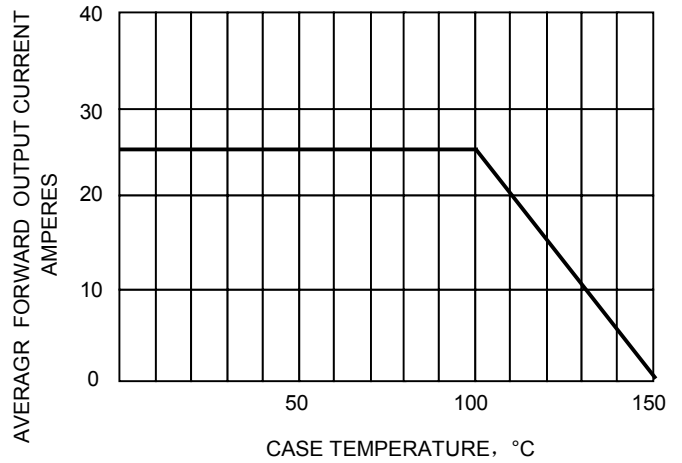


FIG.2- DERATING CURVE  
 OUTPUT RECTIFIED CURRENT

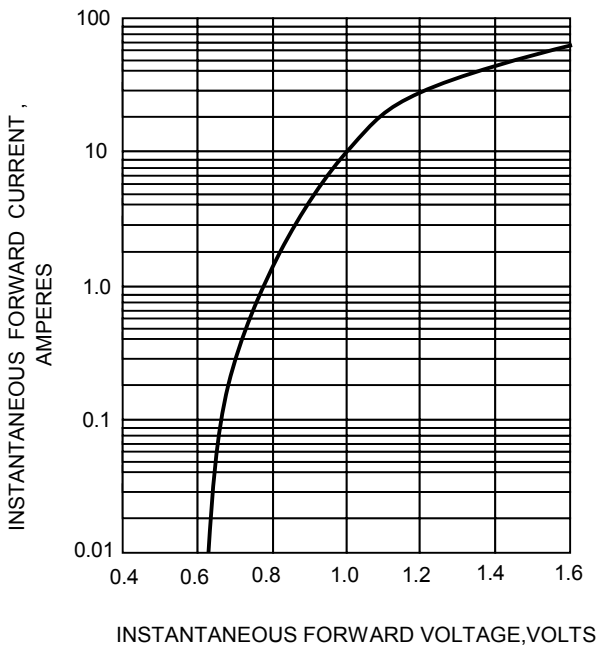


FIG.3-TYPICAL FORWARD CHARACTERISTICS

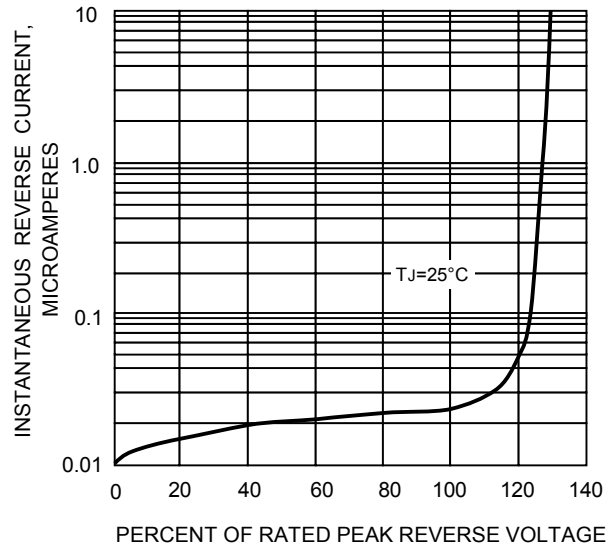


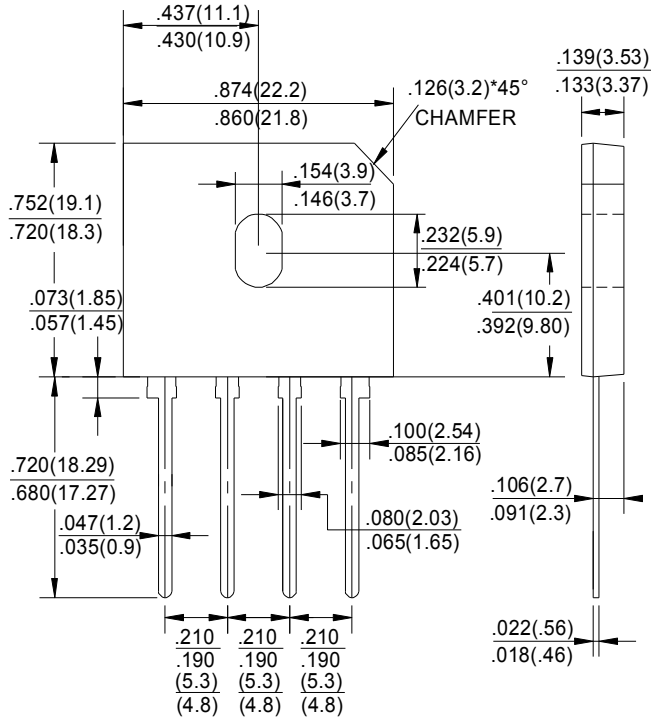
FIG.4-TYPICAL REVERSE CHARACTERISTICS

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## Product Outline Dimensions

### GBU



Dimensions in inches and (millimeters)