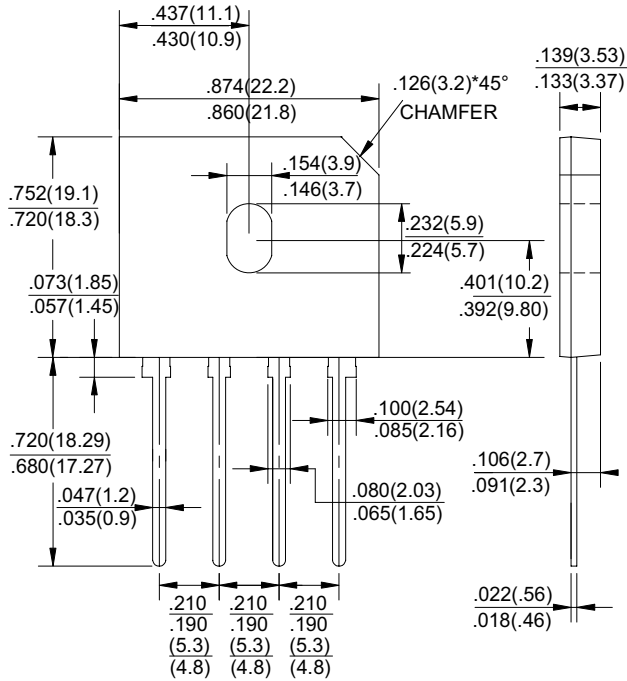


# GBU8005 thru GBU810 SERIES

**GLASS PASSIVATED BRIDGE RECTIFIERS**  
**REVERSE VOLTAGE - 50 to 1000Volts FORWARD CURRENT - 8.0Amperes**



Dimensions in inches and (millimeters)

## Package: GBU

| CHARACTERISTICS  | SYMBOL            | GBU8005     | GBU801 | GBU802 | GBU804 | GBU806 | GBU808 | GBU810 | 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 Note 2)<br>Rectified Current @ T <sub>c</sub> =100°C (without heatsink) | I <sub>(AV)</sub> | 8.0         |        |        |        |        |        |        | 3.2  | A                |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load (JEDEC Method)        | I <sub>FSM</sub>  | 200         |        |        |        |        |        |        |      | A                |
| Maximum Forward Voltage at 4.0A DC   | V <sub>F</sub>    | 1.1         |        |        |        |        |        |        |      | V                |
| Maximum DC Reverse Current @ T <sub>J</sub> =25°C<br>at Rated DC Blocking Voltage @ T <sub>J</sub> =125°C      | I <sub>R</sub>    | 10.0        |        |        |        |        |        |        | 500  | uA               |
| I <sup>2</sup> t Rating for Fusing (t<8.3ms)   | I <sup>2</sup> t  | 166         |        |        |        |        |        |        |      | A <sup>2</sup> s |
| Typical Junction Capacitance Per Element (Note1)   | C <sub>J</sub>    | 60          |        |        |        |        |        |        |      | pF               |
| Typical Thermal Resistance (Note2)   | 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 75mm\*75mm\*1.6mm cu plate heatsink.

## FEATURES

- Surge overload rating -200 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- flammability classification 94V-0
- Mounting position:Any
- Weight: 0.134 ounces , 3.79 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%

# GBU8005 thru GBU810 SERIES

FIG.1-FORWARD CURRENT DERATING CURVE

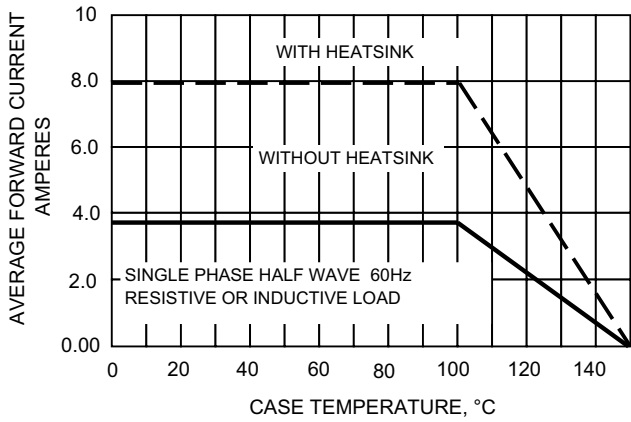


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

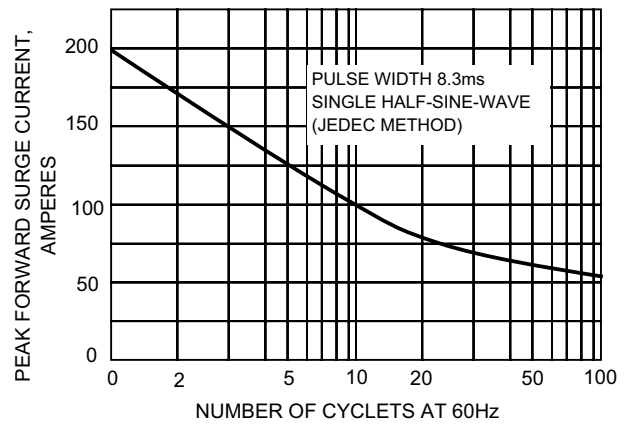


FIG.3-TYPICAL JUNCTION CAPACITANCE

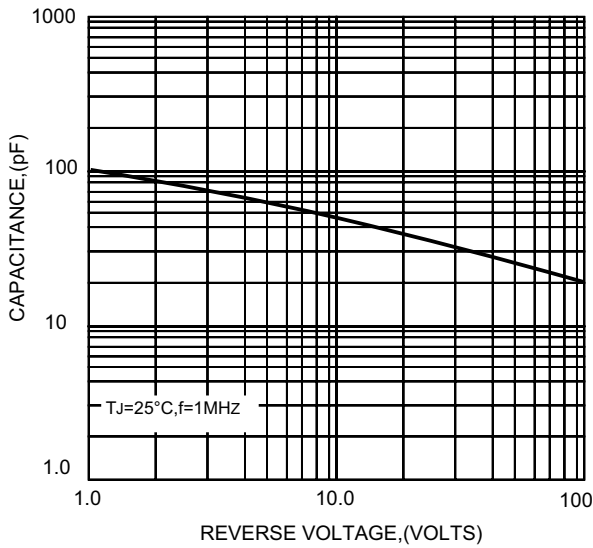


FIG.4-TYPICAL FORWARD CHARACTERISTICS

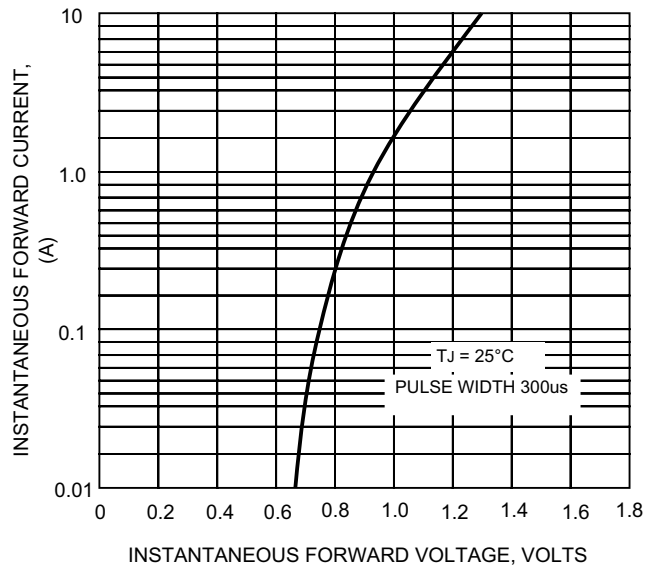


FIG.5-TYPICAL REVERSE CHARACTERISTICS

