



GBU4005GI THRU GBU410GI

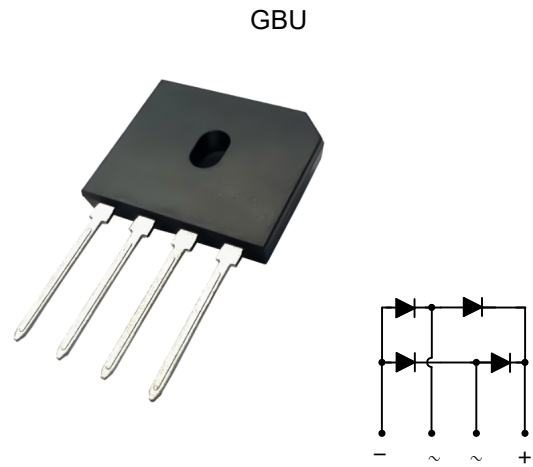
4.0AMP Glass Passivated Bridge Rectifier

1. Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability

2. Mechanical Data

- Case:Molded Plastic,GBU.
- Epoxy:UL 94V-0 rate flame retardant.
- Terminals:Plated Leads Solderable per MIL-STD-750,Method-2026.
- Marking:marked on body.



3. Maximum Ratings and Electrical Characteristics

Electrical Characteristics Rating at 25°C ambient temperature unless otherwise specified.

| PARAMETER | | SYMBOL | GBU4005GI | GBU401GI | GBU402GI | GBU404GI | GBU406GI | GBU408GI | GBU410GI | UNIT |
|---|---|--------------------|---------------------|----------|----------|----------|----------|----------|----------|------------------|
| | | Code | GBU4005G | GBU401G | GBU402G | GBU404G | GBU406G | GBU408G | GBU410G | |
| 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 |
| Average Rectified Output Current | (with heatsink) @T _C =135 °C (without heatsink)@T _A =25 °C | I _{F(AV)} | 4 2.3 | | | | | | | A |
| Peak Forward Surge Current 8.3ms @T _J =25 °C Single half sine-wave superimposed @T _J =125 °C on rated load (JEDEC Method) | | I _{FSM} | 130 104 | | | | | | | A |
| I ² t Rating for Fusing (t < 8.3ms) | | I ² t | 70 | | | | | | | A ² S |
| Maximum Instantaneous Forward Voltage @I _F =2A | | V _{FM} | 1.0 | | | | | | | V |
| Maximum DC reverse current @T _J =25 °C at rated DC blocking voltage @T _J =125 °C | | I _R | 5.0 200 | | | | | | | uA |
| Dielectric Strength | | V _{ids} | 2500 | | | | | | | V |
| The proposed installation torque Max torque | | Tor | Typ. 5.0 Max 8.0 | | | | | | | Kgf.cm |
| Typical Junction Capacitance (Note 1) | | C _j | 30 | | | | | | | pF |
| Typical Thermal Resistance | | R _{θJA} | 25 | | | | | | | °C/W |
| | | R _{θJL} | 3.5 | | | | | | | |
| | | R _{θJC} | 2.0 | | | | | | | |
| Operating Temperature Range | | T _j | -55 to+150 | | | | | | | °C |
| Storage Temperature Range | | T _{STG} | -55 to+150 | | | | | | | °C |

Note:

1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C



4. Rating And Characteristic Curves

Fig. 1 Forward Current Derating Curve

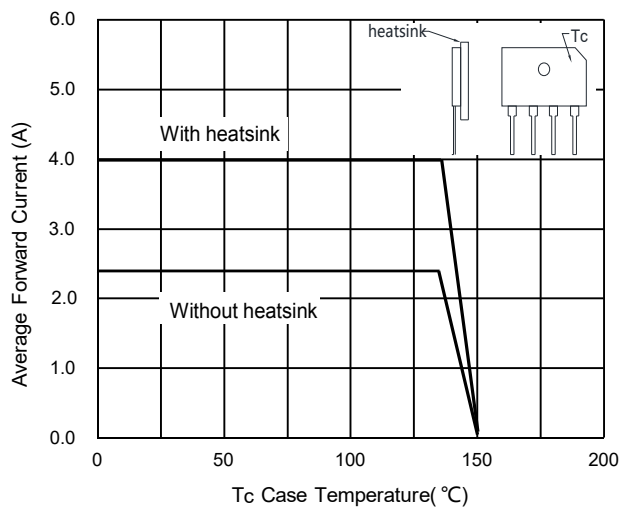


Fig. 2 Typical Forward Characteristics

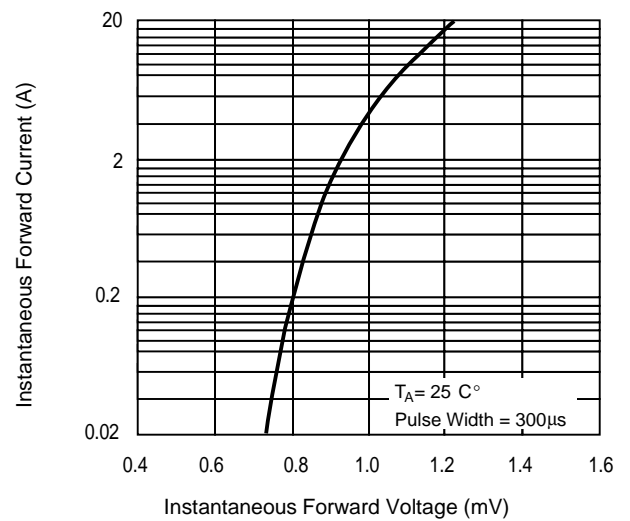


Fig. 3 Forward Surge Current Capability

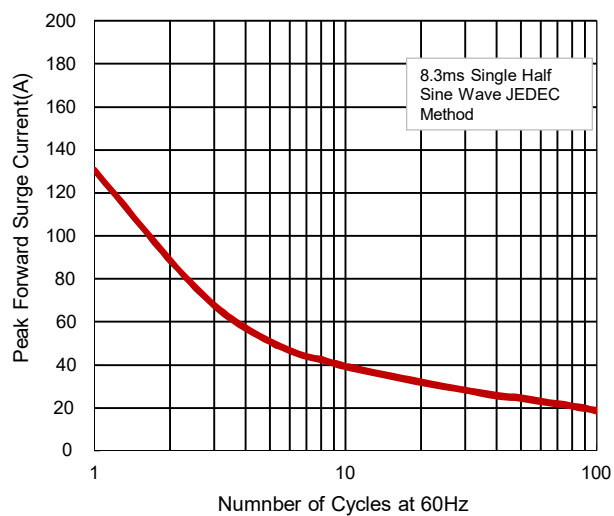
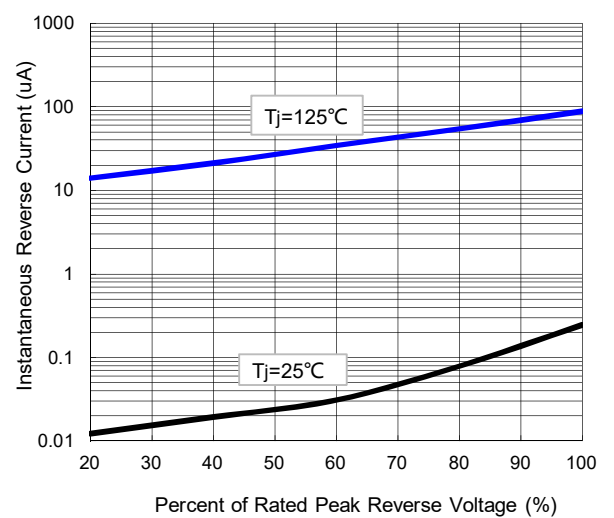


Fig.4 Typical Reverse Characteristics

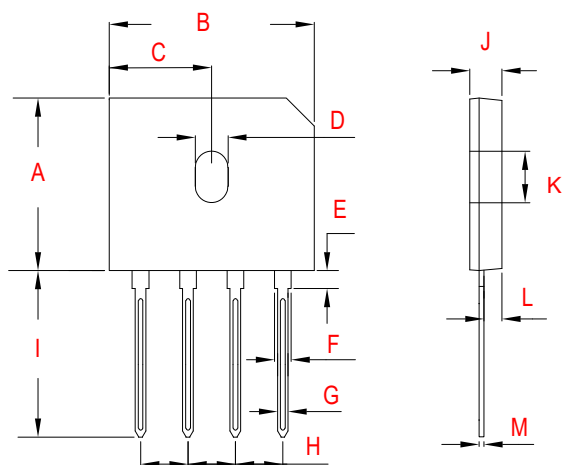




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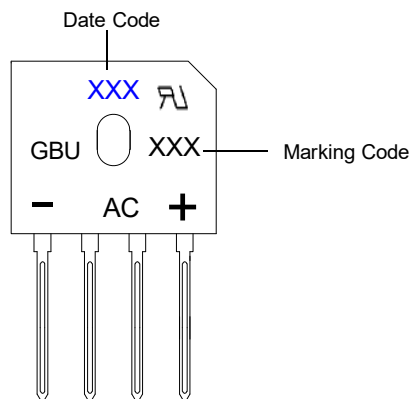
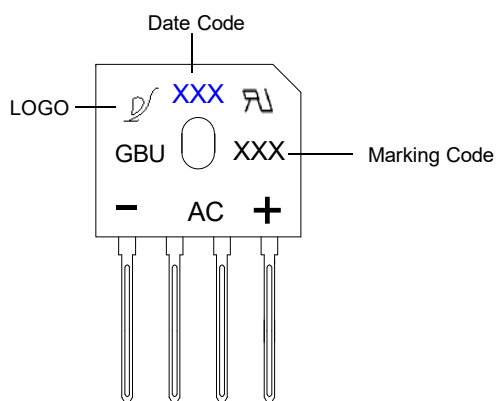
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5. Dimensions



| Dimensions | Inches | | Millimeters | |
|------------|--------|-------|-------------|------|
| | Min | Max | Min | Max |
| A | 0.720 | 0.752 | 18.3 | 19.1 |
| B | 0.858 | 0.874 | 21.8 | 22.2 |
| C | 0.429 | 0.437 | 10.9 | 11.1 |
| D | 0.146 | 0.154 | 3.7 | 3.9 |
| E | 0.083 | 0.094 | 2.1 | 2.4 |
| F | 0.087 | 0.091 | 2.2 | 2.3 |
| G | 0.035 | 0.051 | 0.9 | 1.3 |
| H | 0.189 | 0.209 | 4.8 | 5.3 |
| I | 0.680 | 0.720 | 17.3 | 18.3 |
| J | 0.133 | 0.139 | 3.37 | 3.53 |
| K | 0.217 | 0.232 | 5.5 | 5.9 |
| L | 0.071 | 0.087 | 1.8 | 2.2 |
| M | 0.018 | 0.087 | 0.46 | 0.56 |

6. Part Marking System



7. Package Information

| Package | Minimum Package (pcs) | Inner Box Quantity(pcs) | Outer Carton Quantity(pcs) | Delivery Mode |
|---------|-----------------------|-------------------------|----------------------------|---------------|
| GBU | 20 | 1000 | 2000 | Tube |



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