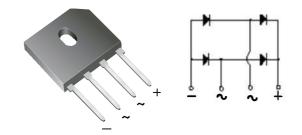


#### **GBU**



#### **Voltage** 400 V to 1000 V

### Current 4.0 A

#### **FEATURES**

- UL recognition file number E320541
- Ideal for printed circuit board
- High case dielectric strength of 1500 Vrms
- High surge current capability
- Solder dip 260°C, 10s
- Component in accordance to RoHS 2011/65/EU and WEEE 2002/96/EC



ROHS

#### **MECHANICAL DATA**

- Case: GBU. Epoxy meets UL 94V-0 flammability rating.
- Polarity: As marked on body
- Mounting Torque: 10cm-kg (8.8 in.- lbs.) Max.
- Recommended Torque: 5.5cm-kg (5 in.- lbs.)
- Terminals: Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test

#### **TYPICAL APPLICATIONS**

Used in ac-to-dc bridge full wave rectification for monitor, TV, printer, switching mode power supply, adapter, audio equipment, and home appliances applications.

### Maximum Ratings and Electrical Characteristics at 25 °C

|                    |  | GBU<br>404G    | GBU<br>405G | GBU<br>406G | GBU<br>407G |
|--------------------|--|----------------|-------------|-------------|-------------|
| Marking Code       |  | GBU404G        | GBU405G     | GBU406G     | GBU407G     |
| $V_{RRM}$          | Maximum Recurrent Peak Reverse Voltage (V)   | 400            | 600         | 800         | 1000        |
| V <sub>RMS</sub>   | Maximum RMS Voltage (V)  | 280            | 420         | 560         | 700         |
| $V_{DC}$           | Maximum DC Blocking Voltage (V)  | 400            | 600         | 800         | 1000        |
| I <sub>F(AV)</sub> | Maximum Average Forward Rectified Current @ T <sub>C</sub> = 100 °C                                      | 4.0 A          |             |             |             |
| I <sub>FSM</sub>   | Peak Forward Surge Current, 8.3 ms Single<br>Half Sine-wave Superimposed on Rated<br>Load (JEDEC Method) | 150 A          |             |             |             |
| Сј                 | Typical Junction capacitance per leg (Note 3)  | 100pF 45pF     |             |             |             |
| Tj                 | Operating Temperature Range  | -55 to +150 °C |             |             |             |
| T <sub>stg</sub>   | Storage Temperature Range  | -55 to +150 °C |             |             |             |

### Electrical Characteristics at Tamb = 25 °C

| V <sub>F</sub>                                 | Maximum Instantaneous Forward Voltage @ = 2.0 A @ = 4.0 A   | 1.0 V<br>1.1 V      |
|--|---|---------------------|
| I <sub>R</sub>                                 | Maximum DC Reverse Current @ $T_A = 25$ °C at Rated DC Blocking Voltage (Note 1) @ $T_A = 125$ °C |                     |
| R <sub>th (j-a)</sub><br>R <sub>th (j-c)</sub> | Typical Thermal Resistance (Note 2)   | 20 °C/W<br>4.0 °C/W |

Notes: 1. Pulse Test with PW=300 µsec, 1% Duty Cycle.

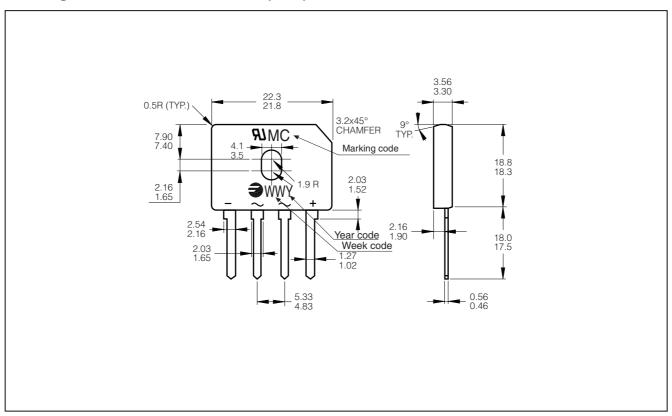
- 2. Mounted on Al. Plate of 4" x 6" x 0.25" Al-Plate Heat sink.
- 3. Measured at 1.0MHZ and Applied Reverse Voltage of 4.0 Volts. D.C.



# **Ordering information**

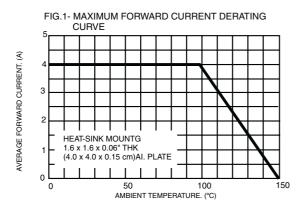
| PREFERRED P/N | PACKAGE CODE | DELIVERY MODE | BASE QUANTITY | UNIT WEIGHT (g) |
|---------------|--------------|---------------|---------------|-----------------|
| GBU406G TU    | TU           | TUBE          | 20            | 3.96            |

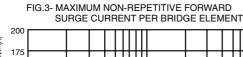
# Package Outline Dimensions: (mm) GBU

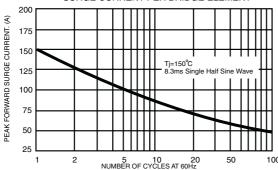


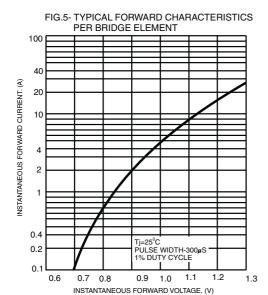


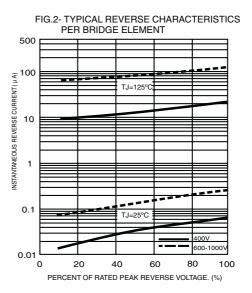
# Ratings and Characteristics (Ta 25 °C unless otherwise noted)

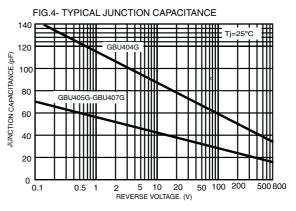














#### **Revision History**

| Date        | Revision | Description of Changes      |
|-------------|----------|-----------------------------|
| 03-Oct-2011 | 0        | Original Data Sheet         |
| 21-Apr-2016 | 1        | Change Ordering information |

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