



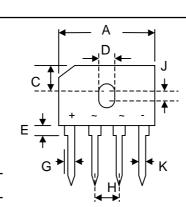
### 4.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

### Features

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Recognized File # E157705

### **Mechanical Data**

- Case: GBU, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 4.0 grams (approx.)
- Mounting Position: Any
- Mounting Torque: 10 cm-kg (8.8 in-lbs) Max.
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4



M

В

| GBU                  |       |       |  |  |
|----------------------|-------|-------|--|--|
| Dim                  | Min   | Max   |  |  |
| Α                    | 21.80 | 22.30 |  |  |
| В                    | 18.30 | 18.80 |  |  |
| С                    | 7.40  | 7.90  |  |  |
| D                    | 3.50  | 4.10  |  |  |
| E                    | 1.52  | 2.03  |  |  |
| G                    | 2.16  | 2.54  |  |  |
| Н                    | 4.83  | 5.33  |  |  |
| J                    | 1.65  | 2.16  |  |  |
| к                    | 1.02  | 1.27  |  |  |
| L                    | 0.76  | 1.02  |  |  |
| М                    | 3.30  | 3.56  |  |  |
| Ν                    | 17.50 | 18.00 |  |  |
| Р                    | 0.45  | 0.75  |  |  |
| All Dimensions in mm |       |       |  |  |

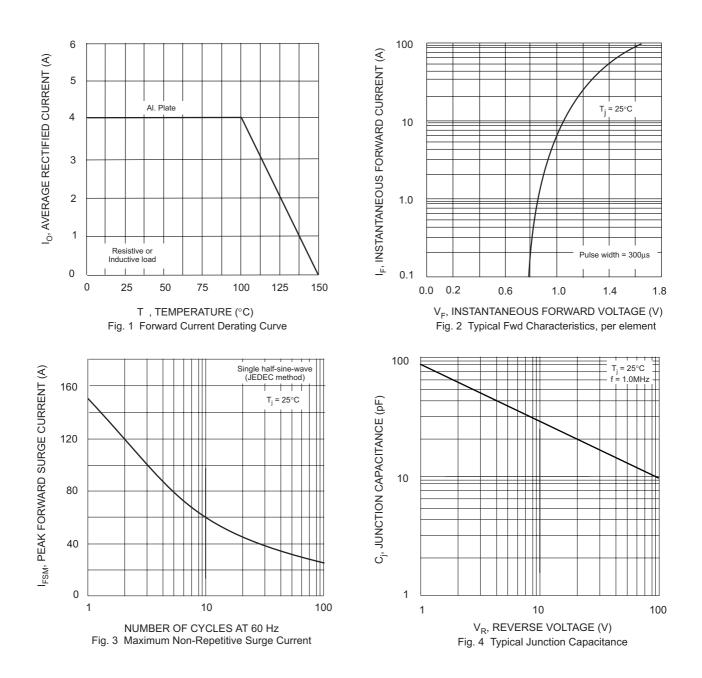
## Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

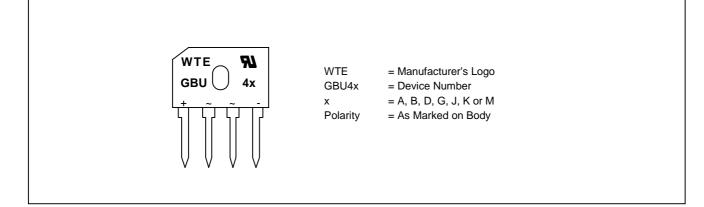
| Characteristic  | Symbol             | GBU4A | GBU4B | GBU4D | GBU4G      | GBU4J | GBU4K | GBU4M | Unit |
|---|--------------------|-------|-------|-------|------------|-------|-------|-------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | Vrrm<br>Vrwm<br>Vr | 50    | 100   | 200   | 400        | 600   | 800   | 1000  | V    |
| RMS Reverse Voltage   | VR(RMS)            | 35    | 70    | 140   | 280        | 420   | 560   | 700   | V    |
| Average Rectified Output Current @T <sub>c</sub> = 100°C<br>(Note 1)  | lo                 |       |       |       | 4.0        |       |       |       | А    |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave superimposed on<br>rated load (JEDEC Method) | IFSM               |       |       |       | 150        |       |       |       | А    |
| I <sup>2</sup> t Rating for Fusing (t < 8.3ms)  | l <sup>2</sup> t   |       |       |       | 93         |       |       |       | A²s  |
| Forward Voltage per leg $@I_F = 2.0A$   | VFM                |       |       |       | 1.0        |       |       |       | V    |
| Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 125^{\circ}C$                          | lr                 |       |       |       | 5.0<br>500 |       |       |       | μA   |
| Typical Thermal Resistance per leg (Note 2)   | R∂ja               | 22    |       |       |            | °C/W  |       |       |      |
| Typical Thermal Resistance per leg (Note 1)   | R⊕JC               | 4.2   |       |       |            | °C/W  |       |       |      |
| Operating and Storage Temperature Range   | Tj, TSTG           |       |       | -     | 55 to +15  | 0     |       |       | °C   |

Note: 1. Mounted on 40 x 40 x 15mm Al. plate.

2. Mounted on PCB at 9.5mm lead length with 12mm<sup>2</sup> copper pad.



### MARKING INFORMATION



# PACKAGING INFORMATION

### BULK

| Inner Box Size | Quantity | Carton Size     | Quantity | Approx. Gross Weight |
|----------------|----------|-----------------|----------|----------------------|
| L x W x H (mm) | (PCS)    | L x W x H (mm)  | (PCS)    | (KG)                 |
| 340 x 337 x 45 | 1,000    | 375 x 360 x 213 | 4,000    | 16.5                 |

Note: 1. Paper box, white or brown color.

#### **ORDERING INFORMATION**

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| GBU4A       | SIL Bridge   | 1000 Units/Box    |
| GBU4B       | SIL Bridge   | 1000 Units/Box    |
| GBU4D       | SIL Bridge   | 1000 Units/Box    |
| GBU4G       | SIL Bridge   | 1000 Units/Box    |
| GBU4J       | SIL Bridge   | 1000 Units/Box    |
| GBU4K       | SIL Bridge   | 1000 Units/Box    |
| GBU4M       | SIL Bridge   | 1000 Units/Box    |

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department. 2.

To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, GBU4A-LF.

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