

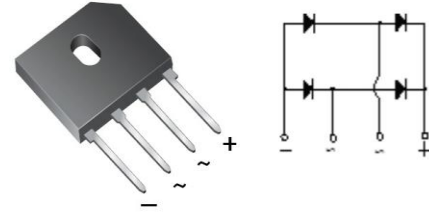


SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER GBU8A ~ GBU8M

Single Phase Glass Passivated Bridge Rectifier

Features

- UL recognized under component index, file Number E54124
- High forward surge capability
- Glass passivated chip junction
- High case dielectric strength
- High temperature soldering guaranteed:
260°C/10 seconds
- RoHS and REACH Compliance



Case Style GBU

Mechanical Data

| | |
|---------------------------|--|
| Case: | Transfer molded plastic |
| Polarity | Polarity symbols marked on case |
| Terminals: | Lead solderable per MIL-STD-750 method 2026 |
| Mounting torque | / |
| Mounting position: | Thru hole for #6 screw, 5-in-lbs torque max (Note 2) |
| Weight: | 0.15 ounce, 4.0 gram |

Maximum Ratings ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

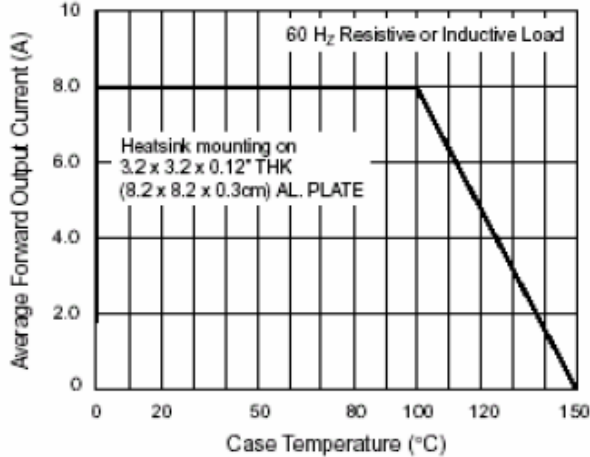
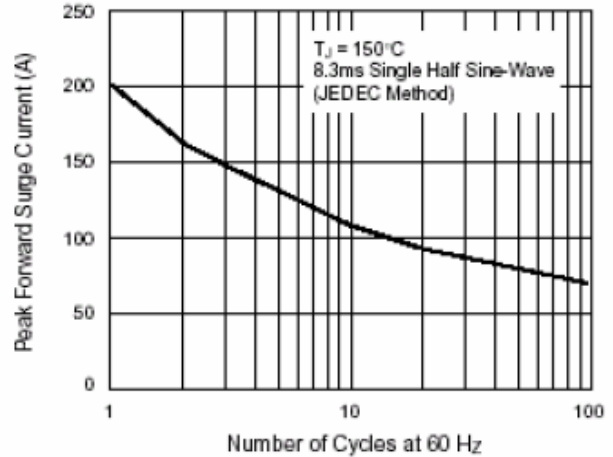
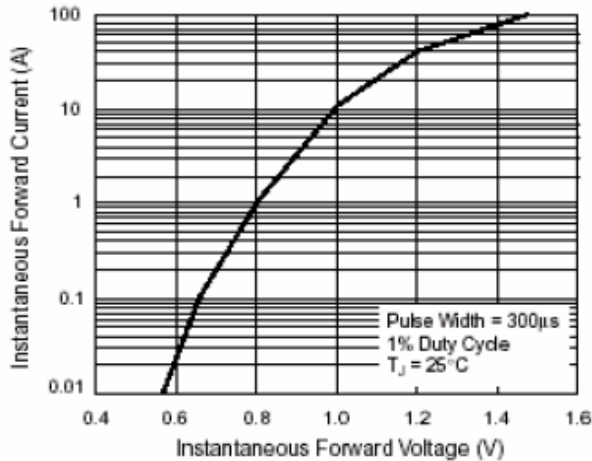
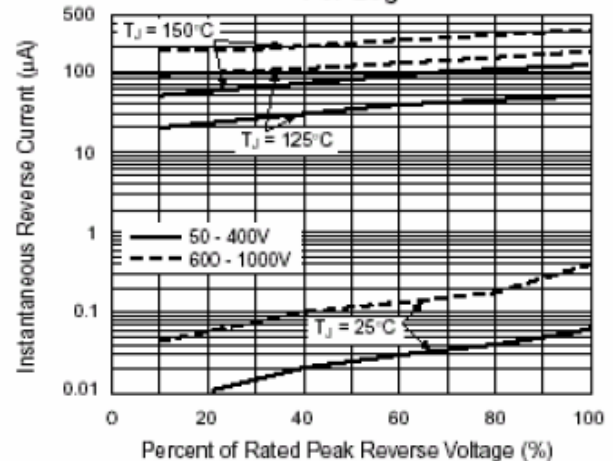
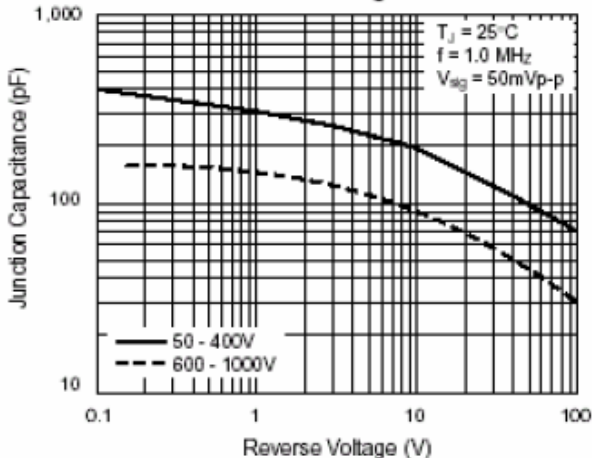
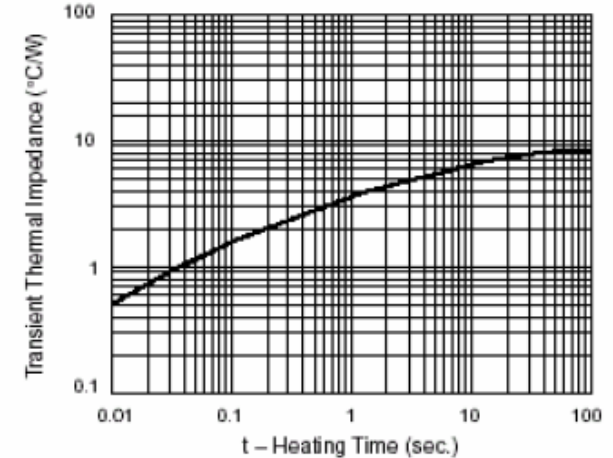
| Symbol | Description | GBU8A | GBU8B | GBU8D | GBU8G | GBU8J | GBU8K | GBU8M | Unit | Conditions |
|---------|---|-------------|-------|-------|-------|-------|-------|-------|------|--|
| VRRM | Max Recurrent Peak Reverse Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| VRMS | Max RMS Voltage | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| VDC | Max DC Blocking Voltage | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| I(AV) | Max Average Forward Rectified Current | 8.0 | | | | | | | A | @Tc=100°C (Note1 & 2) |
| IFSM | Peak Forward Surge Current | 200 | | | | | | | A | 8.3ms single half sine-wave (JEDEC method) |
| TJ,TSTG | Operating and Storage Temperature Range | -55 to +150 | | | | | | | °C | |
| I2t | Rating for Fusing | 166 | | | | | | | A2s | T<8.3mS |

Electrical Characteristics ($T_{Ambient}=25^{\circ}C$ unless noted otherwise)

| Symbol | Description | GBU8A | GBU8B | GBU8D | GBU8G | GBU8J | GBU8K | GBU8M | Unit | Conditions |
|----------------|---|-------|-------|-------|-------|-------|-------|-------|------|------------------------------|
| V _F | Max Instantaneous Forward Voltage | 1.0 | | | | | | | V | Drop per Bridge element 8.0A |
| I _R | Max DC Reverse Current at Rated DC Blocking Voltage | 5.0 | | | | | | | µA | TA=25°C |
| | | 0.5 | | | | | | | | Tc=125°C |
| Rθ-Ja | Typical Thermal Resistance per leg | 21 | | | | | | | °C/W | Note 2 |
| Rθ-JC | | 2.2 | | | | | | | °C/W | Note 3 |
| C _J | Typical Junction capacitance per leg | 211 | | | 94 | | | | pF | Measured at 1.0MHz/4.0V |

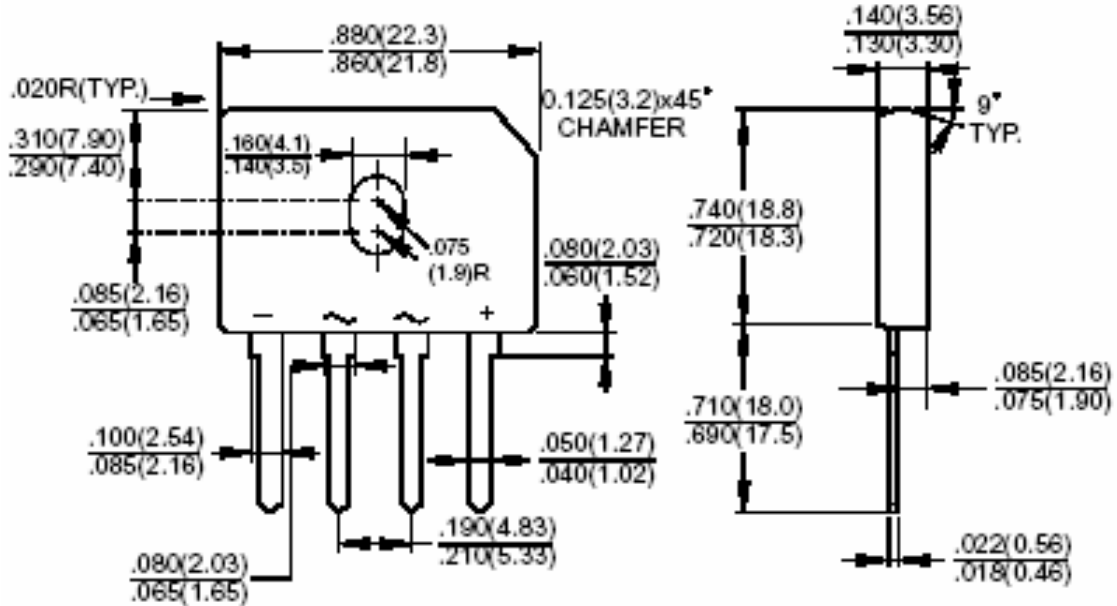
Note:

1. Unit mounted on 3.2" x 3.2" x 0.12" (8.2cm x 8.2cm x 0.3cm) AL plate
2. Unit mounted in free air, no heat sink on PCB 0.5" x 0.5" (12mm x 12mm) copper pads, 0.375" (9.5mm) lead length
3. Recommended mounting position is to bolt down on heat-sink using #6 screw and silicon thermal compound for maximum heat transfer

GBU8A ~ GBU8M
RATINGS AND CHARACTERISTIC CURVES GBU8A THRU GBU8M
Fig. 1 – Derating Curve Output Rectified Current

Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current Per Leg

Fig. 3 – Typical Forward Characteristics Per Leg

Fig. 4 – Typical Reverse Characteristics Per Leg

Fig. 5 – Typical Junction Capacitance Per Leg

Fig. 6 – Typical Transient Thermal Impedance Per Leg


GBU8A ~ GBU8M

Dimensions in inches (mm)



Contact us:

US HEADQUARTERS

MEI SEMI INC.

2902 Corvin Drive, Santa Clara, CA95051, USA

Tel: 1-408-733-0808 Fax: 1-408-733-2828