
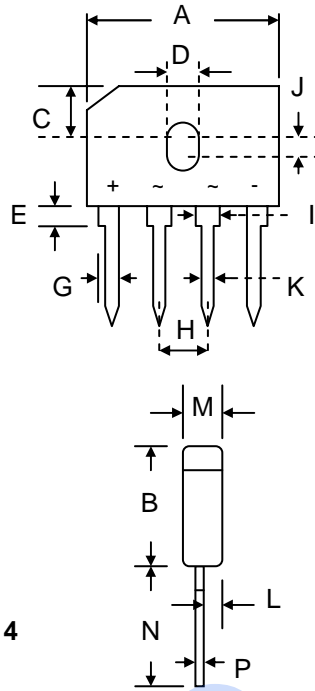


4.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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



| GBU | | |
|----------------------|-------|-------|
| Dim | Min | Max |
| A | 21.80 | 22.30 |
| B | 18.30 | 18.80 |
| C | 7.40 | 7.90 |
| D | 3.50 | 4.10 |
| E | 1.52 | 2.03 |
| G | 2.16 | 2.54 |
| H | 4.83 | 5.33 |
| I | 1.65 | 2.03 |
| J | 1.65 | 2.16 |
| K | 1.02 | 1.27 |
| L | 1.90 | 2.16 |
| M | 3.30 | 3.56 |
| N | 17.50 | 18.00 |
| P | 0.45 | 0.56 |
| All Dimensions in mm | | |

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**

Maximum Ratings and Electrical Characteristics @T_A=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 Working Peak Reverse Voltage DC Blocking Voltage | V _{RRM} V _{RWM} V _R | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V _{R(RMS)} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @T _C = 100°C (Note 1) | I _O | 4.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 150 | | | | | | | A |
| I ² t Rating for Fusing (t < 8.3ms) | I ² t | 93 | | | | | | | A ² s |
| Forward Voltage per leg @I _F = 2.0A | V _{FM} | 1.0 | | | | | | | V |
| Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 125°C | I _R | 5.0 500 | | | | | | | μA |
| Typical Thermal Resistance per leg (Note 2) | R _{θJA} | 22 | | | | | | | °C/W |
| Typical Thermal Resistance per leg (Note 1) | R _{θJC} | 4.2 | | | | | | | °C/W |
| Operating and Storage Temperature Range | T _j , T _{STG} | -55 to +150 | | | | | | | °C |

Note: 1. Mounted on 40 x 40 x 15mm Al. plate.
2. Mounted on PCB at 9.5mm lead length with 12mm² copper pad.

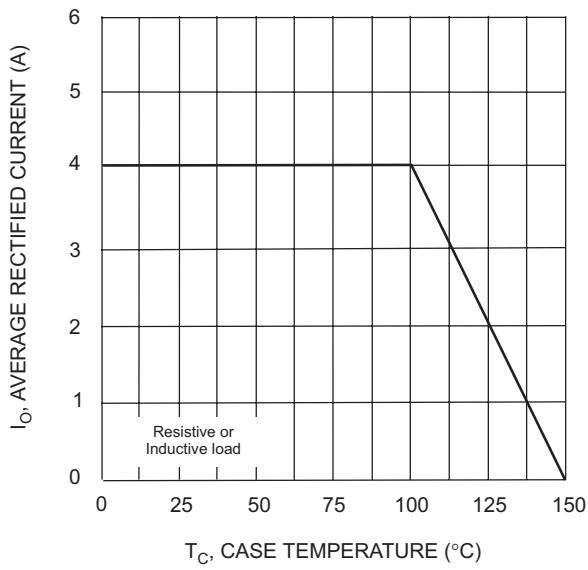


Fig. 1 Forward Current Derating Curve

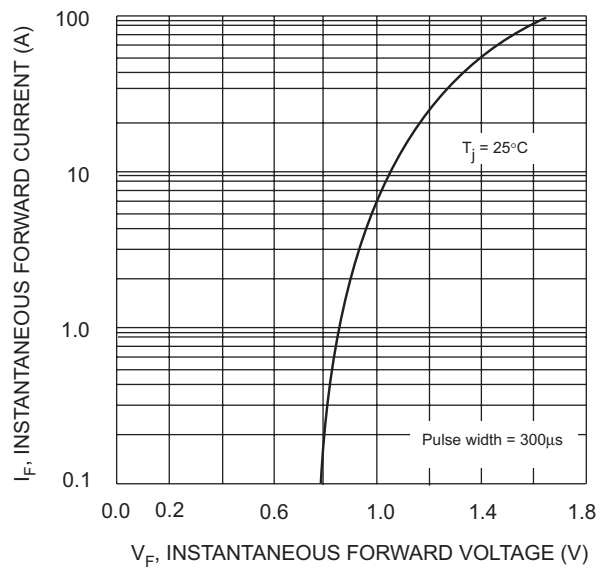


Fig. 2 Typical Fwd Characteristics

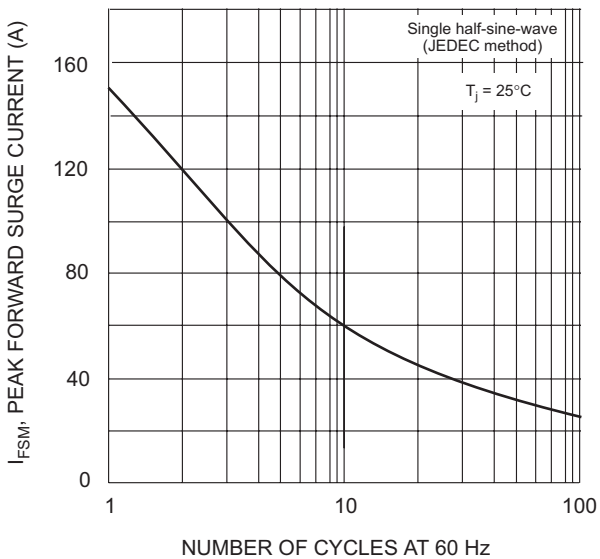


Fig. 3 Maximum Non-Repetitive Surge Current

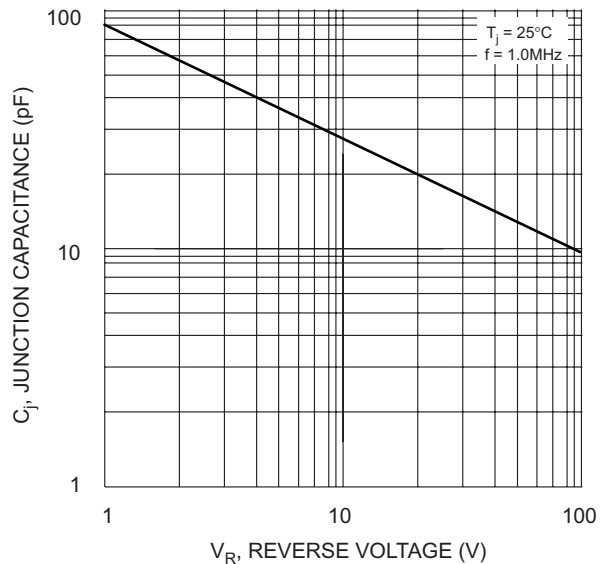
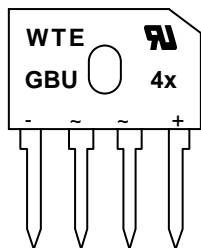


Fig. 4 Typical Junction Capacitance

MARKING INFORMATION



WTE = Manufacturer's Logo
 GBU4x = Device Number
 x = A, B, D, G, J, K or M
 Polarity = As Marked on Body

PACKAGING INFORMATION

BULK

| Tube Size L x W x H (mm) | Quantity (PCS) | Inner Box Size L x W x H (mm) | Quantity (PCS) | Carton Size L x W x H (mm) | Quantity (PCS) | Approx. Gross Weight (KG) |
|-----------------------------|-------------------|----------------------------------|-------------------|-------------------------------|-------------------|------------------------------|
| 470 x 42 x 7 | 20 | 495 x 150 x 140 | 1,000 | 520 x 320 x 170 | 2,000 | 14.0 |

Note: 1. Anti-static tube, water clear color.

ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| GBU4A | SIL Bridge | 20 Units/Tube |
| GBU4B | SIL Bridge | 20 Units/Tube |
| GBU4D | SIL Bridge | 20 Units/Tube |
| GBU4G | SIL Bridge | 20 Units/Tube |
| GBU4J | SIL Bridge | 20 Units/Tube |
| GBU4K | SIL Bridge | 20 Units/Tube |
| GBU4M | SIL Bridge | 20 Units/Tube |

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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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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