
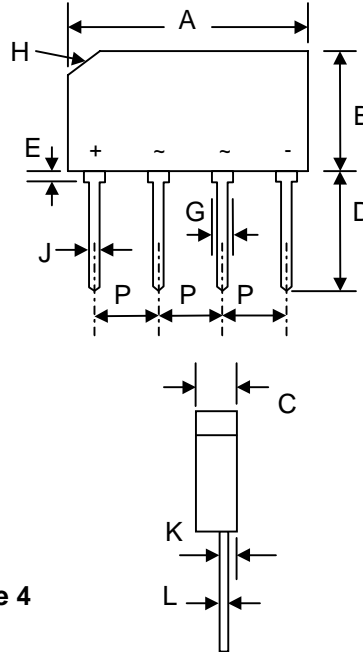


2.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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



| GBL | | |
|----------------------|------------|------|
| Dim | Min | Max |
| A | 20.7 | 20.9 |
| B | 10.4 | 10.7 |
| C | 3.25 | 3.56 |
| D | 17.3 | 18.2 |
| E | 1.50 | 2.03 |
| G | 2.03 | 2.41 |
| H | 3.17 x 45° | |
| J | 1.02 | 1.27 |
| K | 1.27 | 1.53 |
| L | 0.46 | 0.56 |
| P | 4.8 | 5.3 |
| All Dimensions in mm | | |

Mechanical Data

- Case: GBL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 2.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

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

| Characteristic | Symbol | GBJ2A | GBJ2B | GBJ2D | GBJ2G | GBJ2J | GBJ2K | GBJ2M | Unit |
|--|-----------------|-------------|-------|-------|-------|-------|-------|-------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | | | | | | | | |
| Working Peak Reverse Voltage | V_{RWM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| DC Blocking Voltage | V_R | | | | | | | | |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current @ $T_C = 50^\circ\text{C}$ | I_O | 2.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 60 | | | | | | | A |
| Forward Voltage per leg @ $I_F = 2.0\text{A}$ | V_{FM} | 1.1 | | | | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ\text{C}$ | I_R | 5.0 | | | | | | | μA |
| At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$ | | 300 | | | | | | | |
| Typical Thermal Resistance per leg (Note 1) | $R_{\theta JA}$ | 40 | | | | | | | $^\circ\text{C/W}$ |
| Typical Thermal Resistance per leg (Note 2) | $R_{\theta JL}$ | 12 | | | | | | | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range | T_j, T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

Note: 1. Mounted on 75 x 75 x 3.0mm Al. plate.
2. Mounted on PCB at 9.5mm lead length with 12mm² copper pad.

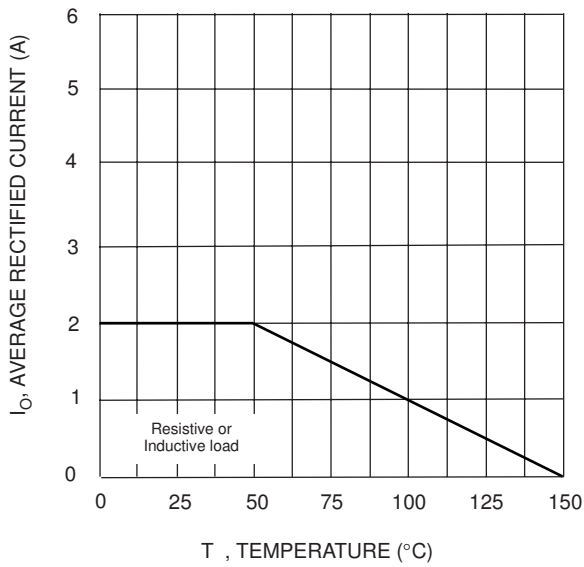


Fig. 1 Forward Current Derating Curve

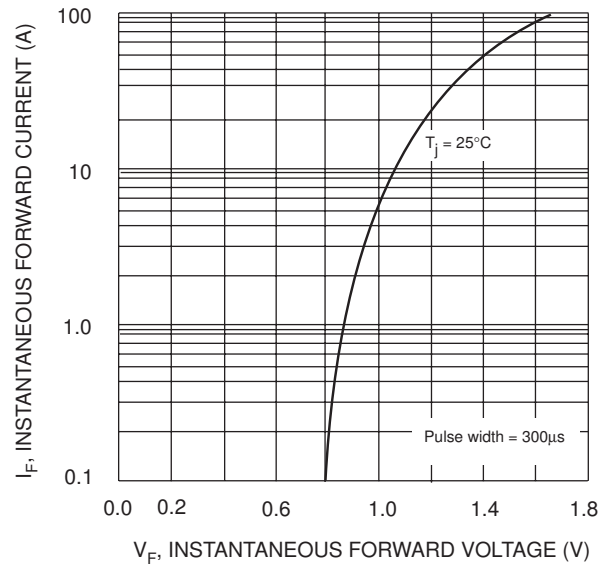


Fig. 2 Typical Fwd Characteristics, per element

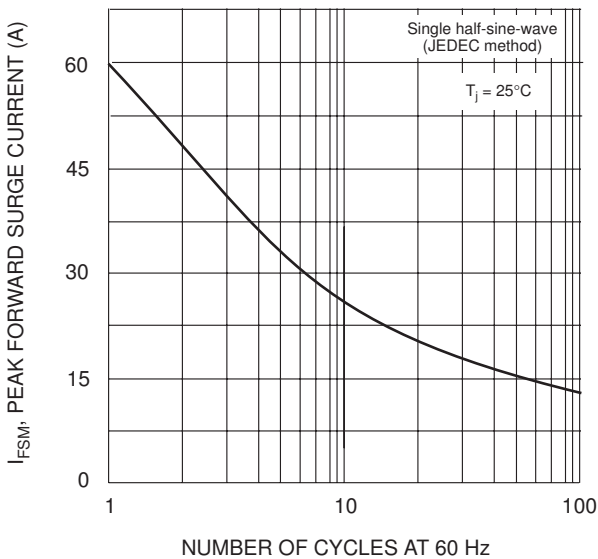


Fig. 3 Maximum Non-Repetitive Surge Current

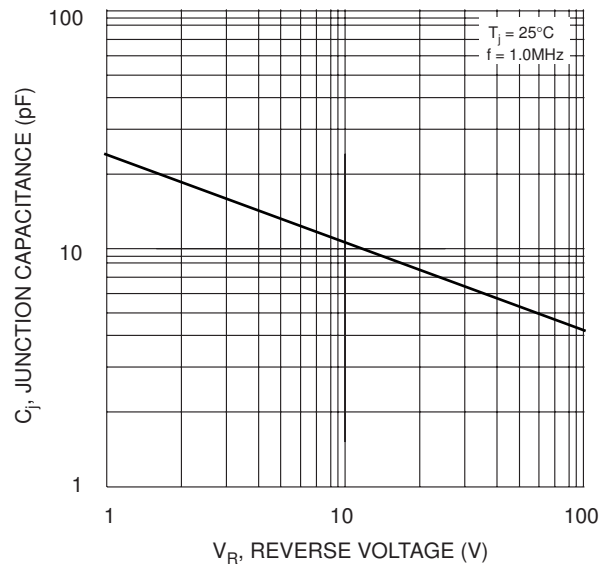
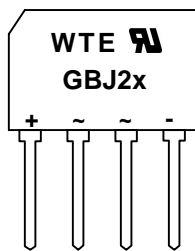


Fig. 4 Typical Junction Capacitance

MARKING INFORMATION



WTE = Manufacturer's Logo
 GBJ2x = 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) |
|-----------------------------|-------------------|----------------------------------|-------------------|-------------------------------|-------------------|------------------------------|
| 443 x 31 x 6 | 20 | 450 x 136 x 72 | 800 | 495 x 245 x 180 | 2,400 | 10.0 |

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

ORDERING INFORMATION

| Product No. | Package Type | Shipping Quantity |
|-------------|--------------|-------------------|
| GBJ2A | SIL Bridge | 20 Units/Tube |
| GBJ2B | SIL Bridge | 20 Units/Tube |
| GBJ2D | SIL Bridge | 20 Units/Tube |
| GBJ2G | SIL Bridge | 20 Units/Tube |
| GBJ2J | SIL Bridge | 20 Units/Tube |
| GBJ2K | SIL Bridge | 20 Units/Tube |
| GBJ2M | 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, GBJ2A-LF.**

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