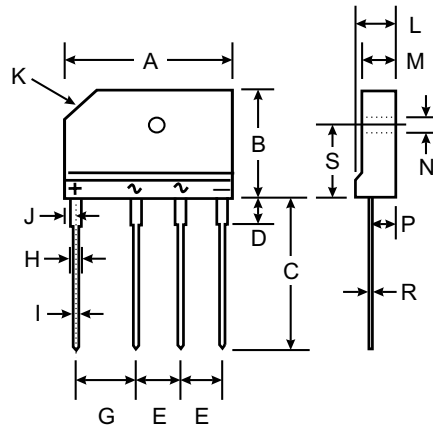


Features

- Glass Passivated Die Construction
- High Case Dielectric Strength of $1500V_{RMS}$
- Low Reverse Leakage Current
- Surge Overload Rating to 350A Peak
- Ideal for Printed Circuit Board Applications
- Plastic Material - UL Flammability Classification 94V-0
- UL Listed Under Recognized Component Index, File Number E94661

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads, Solderable per MIL-STD-202, Method 208
- Polarity: Molded on Body
- Mounting: Through Hole for #6 Screw
- Mounting Torque: 5.0 in-lbs Maximum
- Weight: 6.6 grams (approx)
- Marking: Type Number



| GBJ | | |
|----------------------|-----------|-------|
| Dim | Min | Max |
| A | 29.70 | 30.30 |
| B | 19.70 | 20.30 |
| C | 17.00 | 18.00 |
| D | 3.80 | 4.20 |
| E | 7.30 | 7.70 |
| G | 9.80 | 10.20 |
| H | 2.00 | 2.40 |
| I | 0.90 | 1.10 |
| J | 2.30 | 2.70 |
| K | 3.0 X 45° | |
| L | 4.40 | 4.80 |
| M | 3.40 | 3.80 |
| N | 3.10 | 3.40 |
| P | 2.50 | 2.90 |
| R | 0.60 | 0.80 |
| S | 10.80 | 11.20 |
| All Dimensions in mm | | |

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

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

| Characteristic | Symbol | GBJ 25005 | GBJ 2501 | GBJ 2502 | GBJ 2504 | GBJ 2506 | GBJ 2508 | GBJ 2510 | 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 Forward Rectified Output Current (Note 1) @ $T_C = 100^\circ\text{C}$ | I_o | 25 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 350 | | | | | | | A |
| Forward Voltage (per element) @ $I_F = 12.5\text{A}$ | V_{FM} | 1.05 | | | | | | | V |
| Peak Reverse Current at Rated DC Blocking Voltage @ $T_C = 25^\circ\text{C}$ @ $T_C = 125^\circ\text{C}$ | I_R | 10 500 | | | | | | | μA |
| I^2t Rating for Fusing ($t < 8.3\text{ms}$) (Note 1) | I^2t | 510 | | | | | | | A^2s |
| Typical Junction Capacitance (per element) (Note 2) | C_j | 85 | | | | | | | pF |
| Typical Thermal Resistance Junction to Case (Note 3) | $R_{\theta JC}$ | 0.6 | | | | | | | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range | T_j, T_{STG} | -65 to +150 | | | | | | | $^\circ\text{C}$ |

- Notes:
1. Non-repetitive, for $t > 1\text{ms}$ and $< 8.3\text{ms}$.
 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
 3. Thermal resistance from junction to case per element. Unit mounted on 220 x 220 x 1.6mm aluminum plate heat sink.