

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **400 to 1000** Volts
FORWARD CURRENT - **25** Amperes

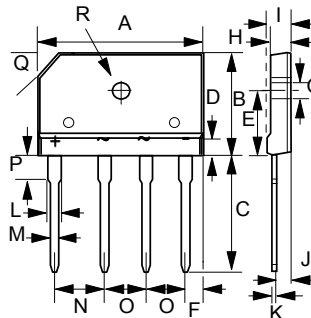
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has UL flammability classification 94V-0
- UL Recognition File # E95060

MECHANICAL DATA

- Polarity : Symbols molded on body
- Weight : 0.23 ounces, 6.6 grams
- Mounting position : Any

GBJ



| GBJ | | |
|------|-------------|-------------|
| DIM. | MIN. | MAX. |
| A | 29.70 | 30.30 |
| B | 19.70 | 20.30 |
| C | 17.0 | 18.0 |
| D | 4.70 | 4.90 |
| E | 10.80 | 11.20 |
| F | 2.30 | 2.70 |
| G | 3.10 | 3.40 |
| H | 3.40 | 3.80 |
| I | 4.40 | 4.80 |
| J | 2.50 | 2.90 |
| K | 0.60 | 0.80 |
| L | 2.00 | 2.40 |
| M | 0.90 | 1.10 |
| N | 9.80 | 10.20 |
| O | 7.30 | 7.70 |
| P | 3.80 | 4.20 |
| Q | (3.0) x 45° | |
| R | 3.10 ϕ | 3.40 ϕ |

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

| CHARACTERISTICS | SYMBOL | GBJ 2504 | GBJ 2506 | GBJ 2508 | GBJ 2510 | UNIT |
|--|------------------|-------------|----------|----------|----------|------------------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | VRMS | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | VDC | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward (with heatsink Note 2) Rectified Current @Tc =100°C (without heatsink) | I(AV) | 25.0 4.2 | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | IFSM | 350 | | | | A |
| Maximum forward Voltage at 12.5A DC | VF | 1.05 | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ =25°C @TJ =125°C | IR | 10 500 | | | | uA |
| I ² t Rating for fusing (t < 8.3ms) | I ² t | 510 | | | | A ² S |
| Typical Junction Capacitance per element (Note 1) | CJ | 85 | | | | pF |
| Typical Thermal Resistance (Note 2) | R θ JC | 1.0 | | | | °C/W |
| Operating Temperature Range | TJ | -55 to +150 | | | | °C |
| Storage Temperature Range | TSTG | -55 to +150 | | | | °C |

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2.Device mounted on 250mm x 250mm x 20mm Aluminum Plate Heatsink.

FIG.1 - FORWARD CURRENT DERATING CURVE

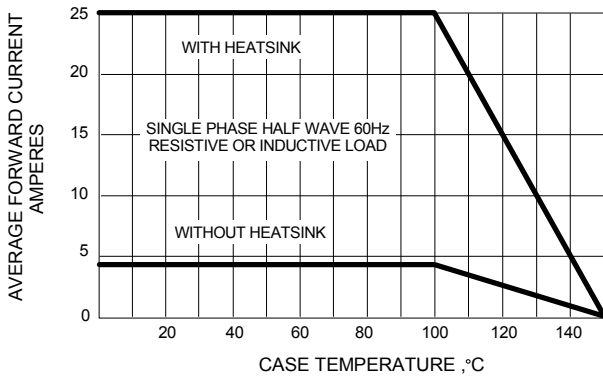


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

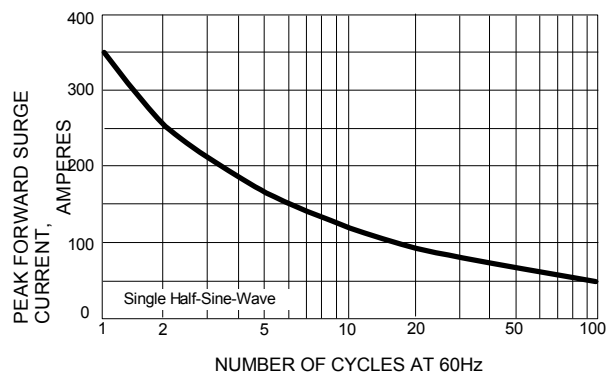


FIG.3 - TYPICAL JUNCTION CAPACITANCE

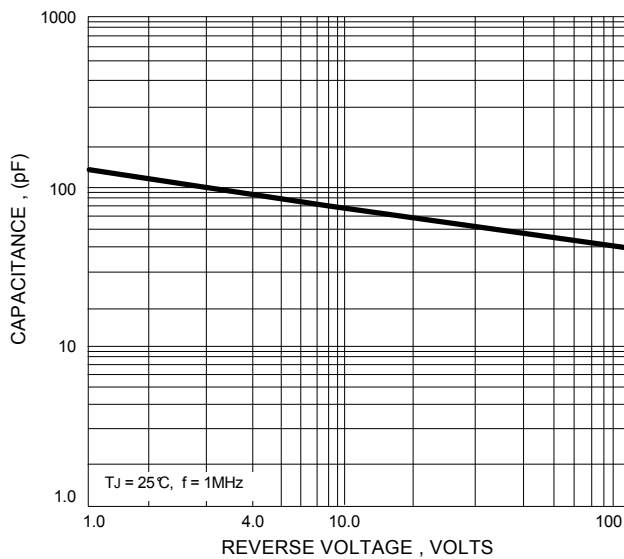


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

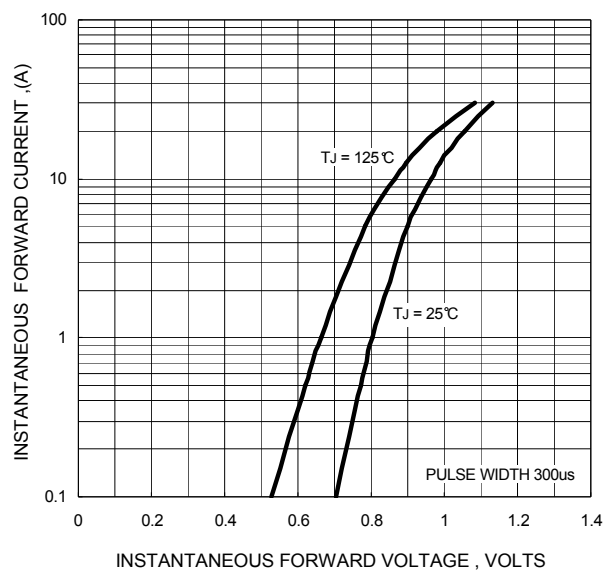


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

