

GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - **400to 1000** Volts
FORWARD CURRENT - **15** Amperes

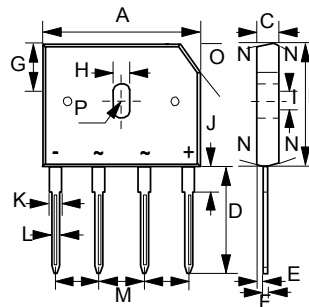
FEATURES

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- UL Recognition File # E95060

MECHANICAL DATA

- Polarity : As marked on Body
- Weight : 0.15 ounces, 4.0 grams
- Mounting position : Any

GBU



| GBU | | |
|------------------------------|--------------|-------|
| DIM. | MIN. | MAX. |
| A | 21.80 | 22.30 |
| B | 18.30 | 18.80 |
| C | 3.30 | 3.56 |
| D | 17.50 | 18.00 |
| E | 0.76 | 1.00 |
| F | 0.46 | 0.56 |
| G | 7.40 | 7.90 |
| H | 3.50 | 4.10 |
| I | 1.65 | 2.16 |
| J | 2.25 | 2.75 |
| K | 1.95 | 2.35 |
| L | 1.02 | 1.27 |
| M | 4.83 | 5.33 |
| N | 7.0° TYPICAL | |
| O | 3.2 x 45° | |
| P | 1.90 RADIUS | |
| 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 | GBU 1504 | GBU 1506 | GBU 1508 | GBU 1510 | 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 Rectified Current @Tc=100°C (with heatsink Note 2) @Tc=100°C (without heatsink) | I(AV) | 15 3.2 | | | | A |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load | IFSM | 200 | | | | A |
| Maximum forward Voltage at 7.5A DC | VF | 1.1 | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @TJ =25°C @TJ =125°C | IR | 5.0 500 | | | | uA |
| I ² t Rating for fusing (t < 8.3ms) | I ² t | 166 | | | | A ² S |
| Typical Junction Capacitance per element (Note 1) | CJ | 50 | | | | pF |
| Typical Thermal Resistance (Note 2) | RθJC | 2.0 | | | | °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 200mm x 200mm x 5mm Al Plate Heatsink.

REV. 0, Jan-2007, KBDJ08

FIG.1 - FORWARD CURRENT DERATING CURVE

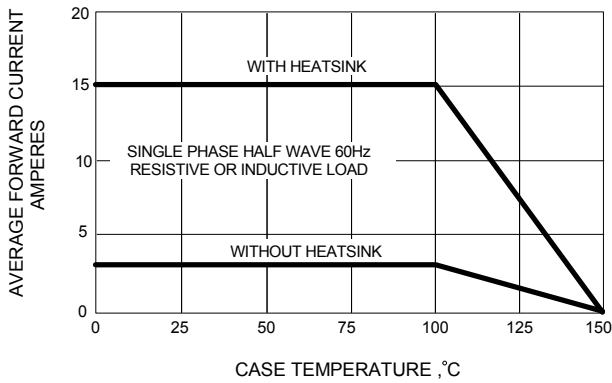


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

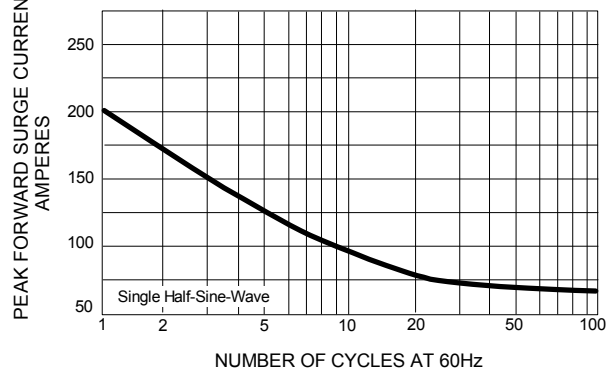


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

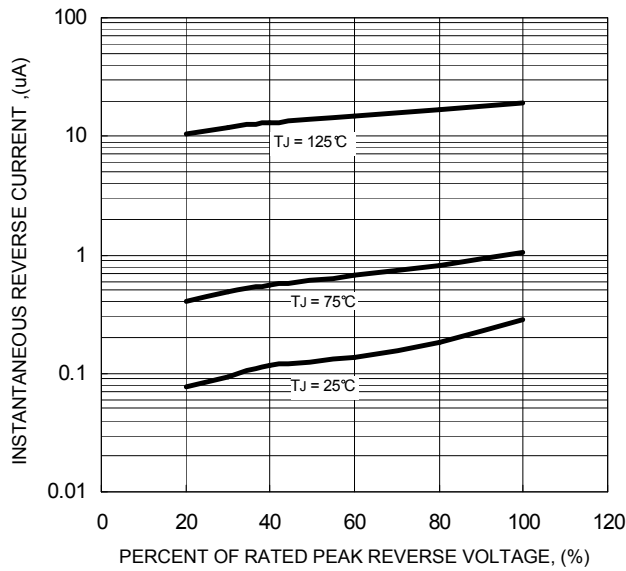


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

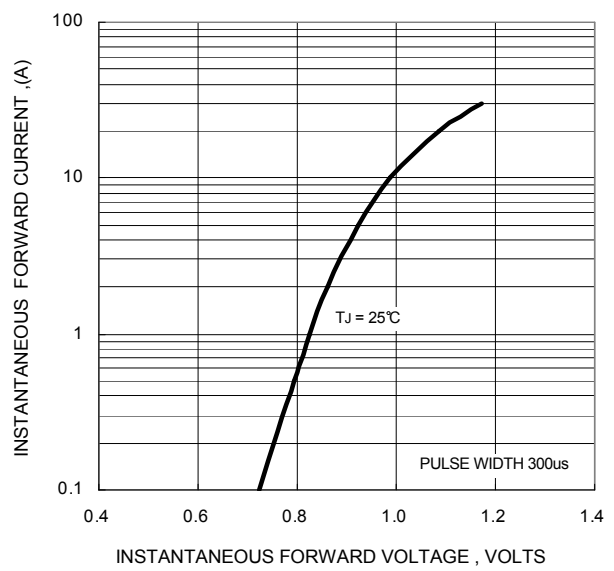


FIG.5 - TYPICAL JUNCTION CAPACITANCE

