

**GLASS PASSIVATED BRIDGE RECTIFIERS**

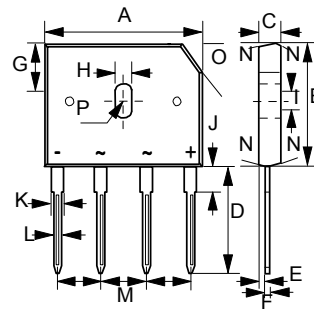
REVERSE VOLTAGE - **400 to 1000** Volts  
FORWARD CURRENT - **6.0** Amperes

**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 604     | GBU 606 | GBU 608 | GBU 610 | UNIT             |
|---------------------------------------------------------------------------------------------------------------|-------------------|-------------|---------|---------|---------|------------------|
| Maximum Recurrent Peak Reverse Voltage                                                                        | V <sub>RRM</sub>  | 400         | 600     | 800     | 1000    | V                |
| Maximum RMS Voltage                                                                                           | V <sub>RMS</sub>  | 280         | 420     | 560     | 700     | V                |
| Maximum DC Blocking Voltage                                                                                   | V <sub>DC</sub>   | 400         | 600     | 800     | 1000    | V                |
| Maximum Average Forward (with heatsink Note 2)<br>Rectified Current @T <sub>c</sub> =100°C (without heatsink) | I <sub>(AV)</sub> | 6.0<br>2.8  |         |         |         | A                |
| Peak Forward Surge Current<br>8.3ms single half sine-wave<br>superimposed on rated load                       | I <sub>FSM</sub>  | 175         |         |         |         | A                |
| Maximum forward Voltage at 3.0A DC                                                                            | V <sub>F</sub>    | 1.0         |         |         |         | V                |
| Maximum DC Reverse Current @T <sub>J</sub> =25°C<br>at Rated DC Blocking Voltage @T <sub>J</sub> =125°C       | I <sub>R</sub>    | 5.0<br>500  |         |         |         | uA               |
| I <sup>2</sup> t Rating for fusing (t < 8.3ms)                                                                | I <sup>2</sup> t  | 127         |         |         |         | A <sup>2</sup> S |
| Typical Junction<br>Capacitance per element (Note 1)                                                          | C <sub>J</sub>    | 45          |         |         |         | pF               |
| Typical Thermal Resistance (Note 2)                                                                           | R <sub>θJC</sub>  | 2.2         |         |         |         | °C/W             |
| Operating Temperature Range                                                                                   | T <sub>J</sub>    | -55 to +150 |         |         |         | °C               |
| Storage Temperature Range                                                                                     | T <sub>STG</sub>  | -55 to +150 |         |         |         | °C               |

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2.Device mounted on 75mm x 75mm x 1.6mm Cu Plate Heatsink.

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FIG.1 - FORWARD CURRENT DERATING CURVE

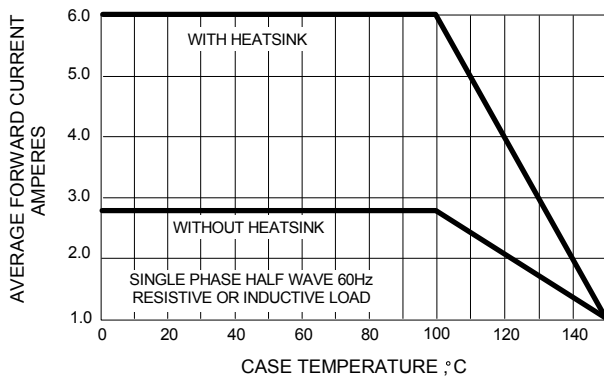


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

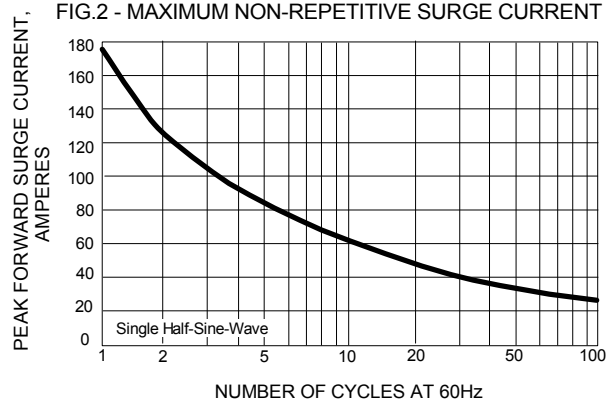


FIG.3 - TYPICAL JUNCTION CAPACITANCE

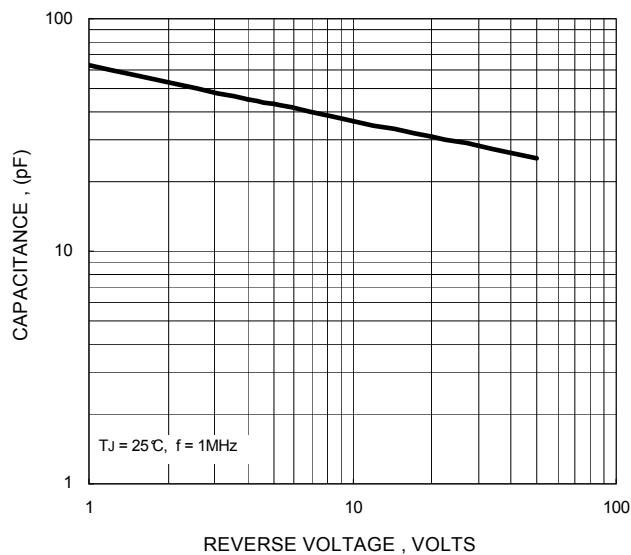


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

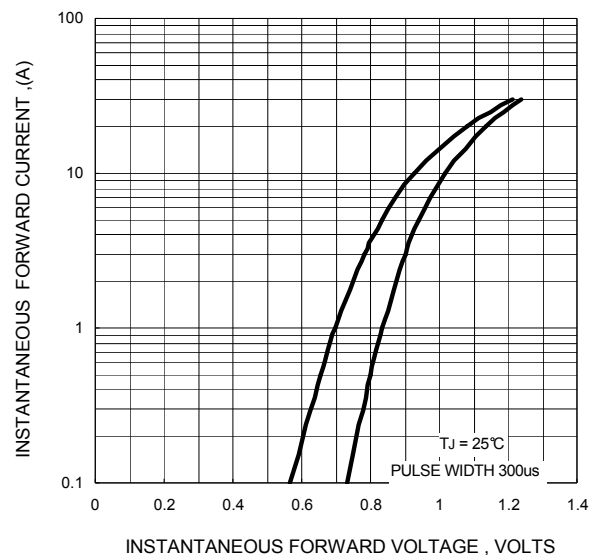


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

