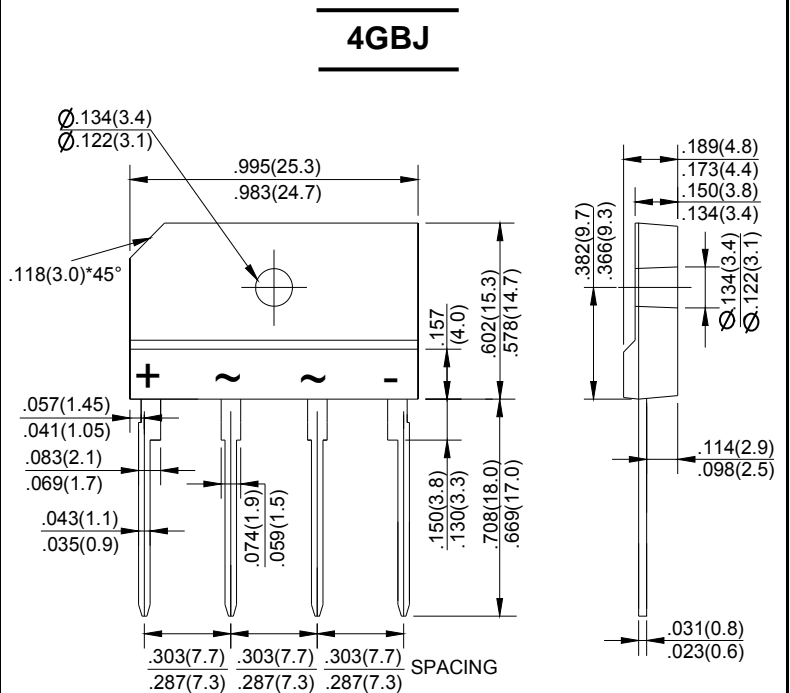


## GLASS PASSIVATED BRIDGE RECTIFIERS

REVERSE VOLTAGE - 50 to 1000Volts  
FORWARD CURRENT - 6.0 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 U/L flammability classification 94V-0



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 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            | 4GBJ 6005   | 4GBJ 601 | 4GBJ 602 | 4GBJ 604 | 4GBJ 606 | 4GBJ 608 | 4GBJ 610 | UNIT |                  |
|---|-------------------|-------------|----------|----------|----------|----------|----------|----------|------|------------------|
| Maximum Recurrent Peak Reverse Voltage  | V <sub>RRM</sub>  | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V    |                  |
| Maximum RMS Voltage   | V <sub>RMS</sub>  | 35          | 70       | 140      | 280      | 420      | 560      | 700      | V    |                  |
| Maximum DC Blocking Voltage   | V <sub>DC</sub>   | 50          | 100      | 200      | 400      | 600      | 800      | 1000     | V    |                  |
| Maximum Average Forward Rectified Current @ T <sub>c</sub> =100°C (with heatsink Note 2) @ T <sub>c</sub> =100°C (without heatsink) | I <sub>(AV)</sub> | 6.0         |          |          |          |          |          |          | 2.8  | A                |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)                                   | I <sub>FSM</sub>  | 170         |          |          |          |          |          |          |      | A                |
| Maximum Forward Voltage at 3.0A DC  | V <sub>F</sub>    | 1.0         |          |          |          |          |          |          |      | V                |
| Maximum DC Reverse Current at Rated DC Blocking Voltage @ T <sub>J</sub> =25°C @ T <sub>J</sub> =125°C                              | I <sub>R</sub>    | 10.0        |          |          |          |          |          |          | 500  | μA               |
| I <sup>2</sup> t Rating for Fusing (t<8.3ms)  | I <sup>2</sup> t  | 120         |          |          |          |          |          |          |      | A <sup>2</sup> s |
| Typical Junction Capacitance Per Element (Note1)  | C <sub>J</sub>    | 55          |          |          |          |          |          |          |      | pF               |
| Typical Thermal Resistance  | R <sub>θJC</sub>  | 1.8         |          |          |          |          |          |          |      | °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\*75mm\*1.6mm Cu plate heatsink.

FIG.1-FORWARD CURRENT DERATING CURVE

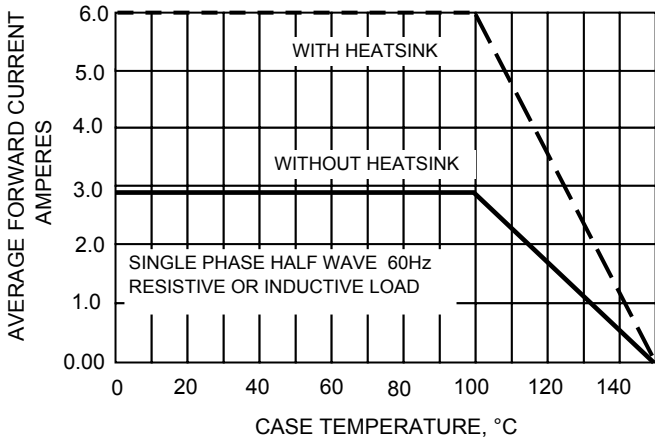


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

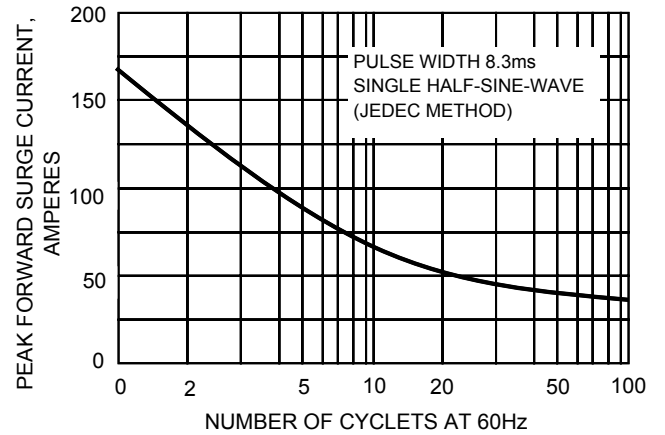


FIG.3-TYPICAL JUNCTION CAPACITANCE

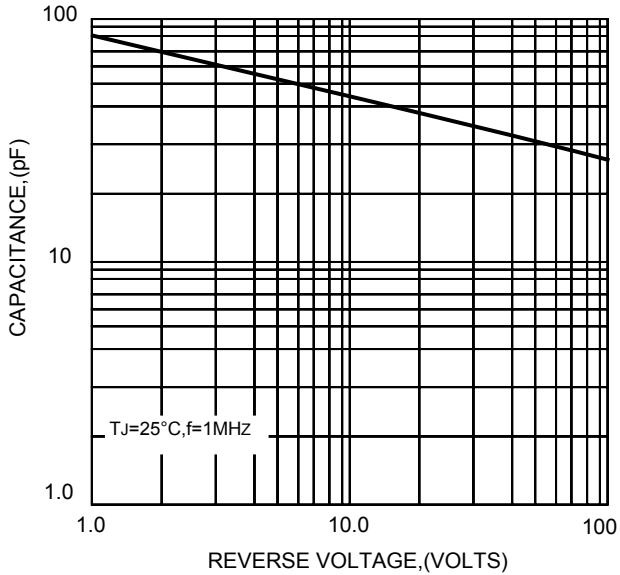


FIG.4-TYPICAL FORWARD CHARACTERISTICS

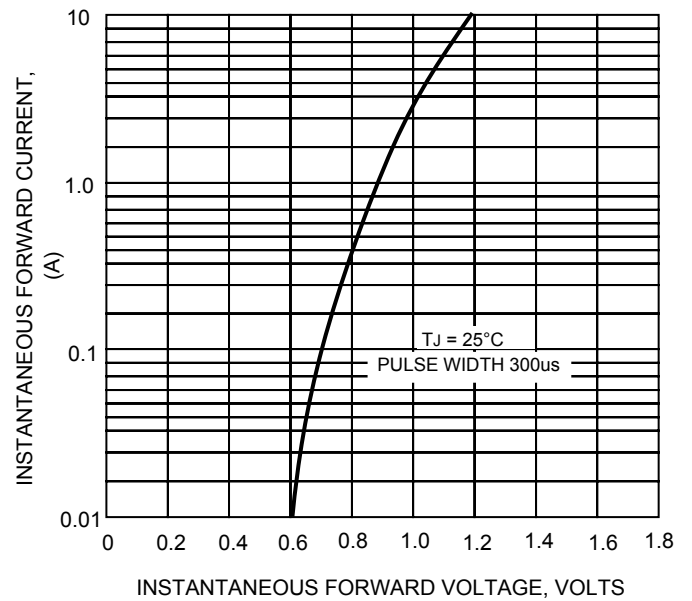


FIG.5-TYPICAL REVERSE CHARACTERISTICS

