

| GLASS PASSIVATED<br>BRIDGE RECTIFIERS                                                                                                                                                                                                                                                                                                      | REVERSE VOLTAGE    - 50 to 1000Volts<br>FORWARD CURRENT    - 6.0 Amperes                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
| <b>FEATURES</b> <ul style="list-style-type: none"> <li>● Surge overload rating -175 amperes peak</li> <li>● Ideal for printed circuit board</li> <li>● Reliable low cost construction utilizing molded plastic technique</li> <li>● Plastic material has U/L flammability classification 94V-0</li> <li>● Mounting position:Any</li> </ul> | <div style="text-align: center;"> <b>GBU</b> </div> <p style="text-align: center;">Dimensions in inches and (milimeters)</p> |

## 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                         | GBU6005     | GBU601 | GBU602 | GBU604 | GBU606 | GBU608 | GBU610 | 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>               | 30          | 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 (with heatsink Note 2)<br>Rectified Current @ T <sub>c</sub> =100°C (without heatsink) | I <sub(av)< sub=""></sub(av)<> | 6.0<br>2.8  |        |        |        |        |        |        | A                |
| Peak Forward Surge Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load (JEDEC Method)        | I <sub>FSM</sub>               | 175         |        |        |        |        |        |        | A                |
| Maximum Forward Voltage at 3.0A DC                                                                             | V <sub>F</sub>                 | 1.1         |        |        |        |        |        |        | 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>                 | 10.0<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 Capacitance Per Element (Note1)                                                               | C <sub>J</sub>                 | 50          |        |        |        |        |        |        | pF               |
| Typical Thermal Resistance (Note2)                                                                             | 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\*75mm\*1.6mm cu plate heatsink.

FIG.1-FORWARD CURRENT DERATING CURVE

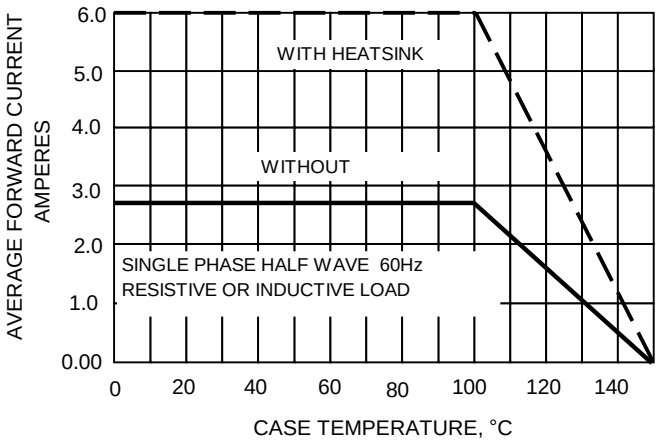


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

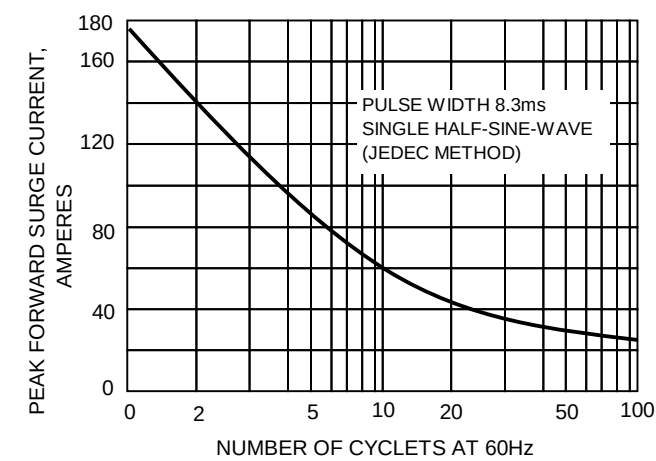


FIG.3-TYPICAL JUNCTION CAPACITANCE

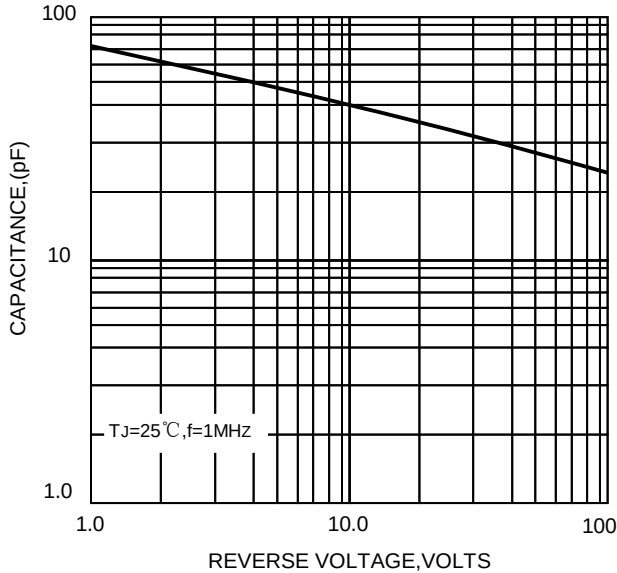


FIG.4-TYPICAL FORWARD CHARACTERISTICS

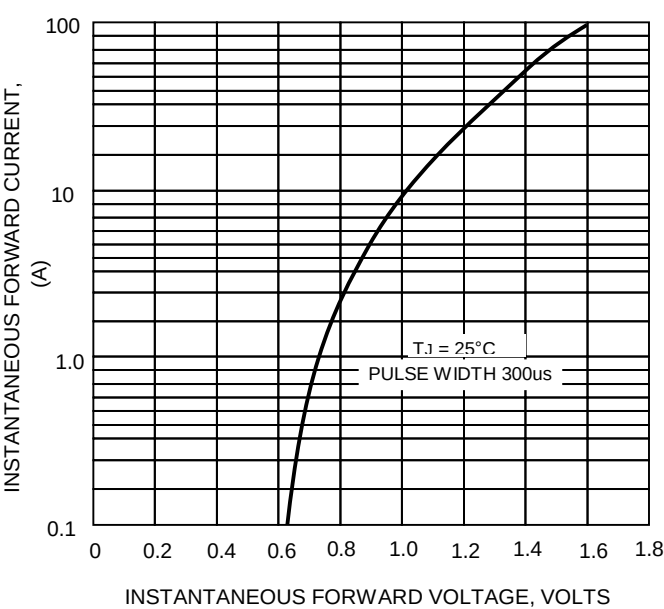


FIG.5-TYPICAL REVERSE CHARACTERISTICS

