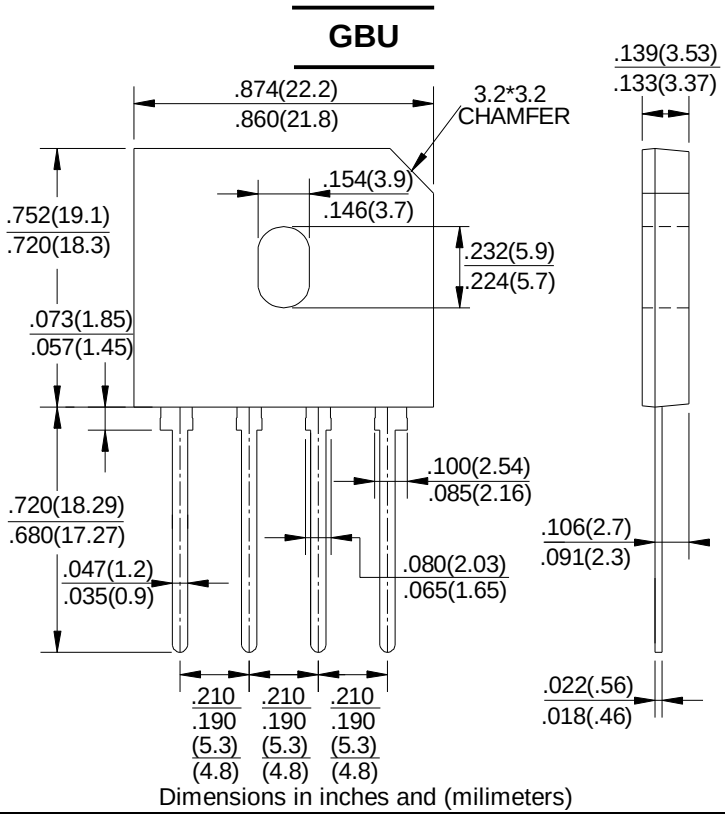
**GLASS PASSIVATED**
**BRIDGE RECTIFIERS**

REVERSE VOLTAGE - **50** to **1000**Volts
FORWARD CURRENT - **6.0** Amperes

## FEATURES

- Surge overload rating -175 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L flammability classification 94V-0
- Mounting postition:Any



Dimensions in inches and (milimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ 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 | $V_{RRM}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Voltage | $V_{RMS}$ | 30 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage | $V_{DC}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward (with heatsink Note 2)<br>Rectified Current @ $T_C$=100℃ (without heatsink) | $I_{(AV)}$ | 6.0<br>2.8 | | | | | | | A |
| Peak Forward Surage Current<br>8.3ms Single Half Sine-Wave<br>Super Imposed on Rated Load (JEDEC Method) | $I_{FSM}$ | 175 | | | | | | | A |
| Maximum Forward Voltage at 3.0A DC | $V_F$ | 1.1 | | | | | | | V |
| Maximum DC Reverse Current @ $T_J$=25℃<br>at Rated DC Blocking Voltage @ $T_J$=125℃ | $I_R$ | 10.0<br>500 | | | | | | | uA |
| $I^2t$ Rating for Fusing (t<8.3ms) | $I^2t$ | 127 | | | | | | | $A^2s$ |
| Typical Junction Capacitance Per Element (Note1) | $C_J$ | 50 | | | | | | | pF |
| Typical Thermal Resistance (Note2) | $R_{\theta JC}$ | 2.2 | | | | | | | ℃/W |
| Operating Temperature Range | $T_J$ | -55 to +150 | | | | | | | ℃ |
| Storage Temperature Range | $T_{STG}$ | -55 to +150 | | | | | | | ℃ |

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

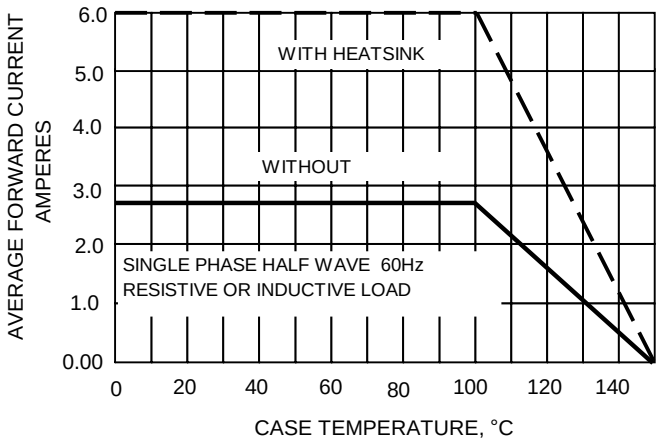



FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

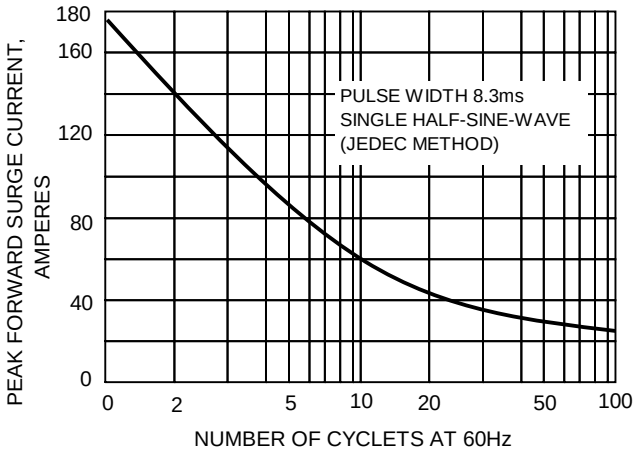



FIG.3-TYPICAL JUNCTION CAPACITANCE

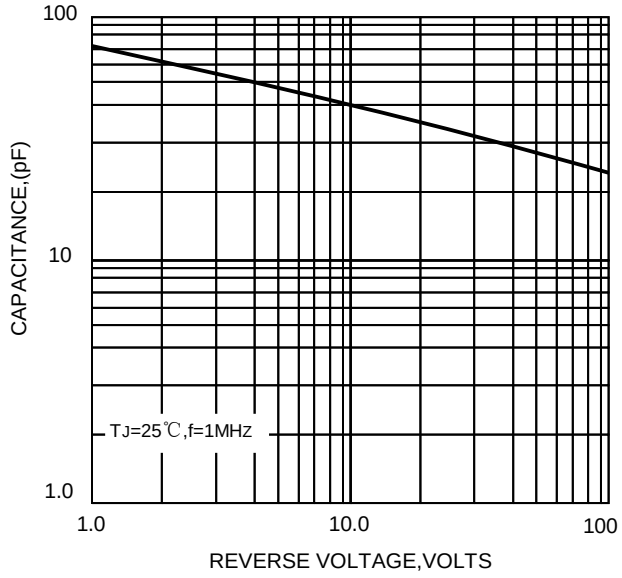



FIG.4-TYPICAL FORWARD CHARACTERISTICS

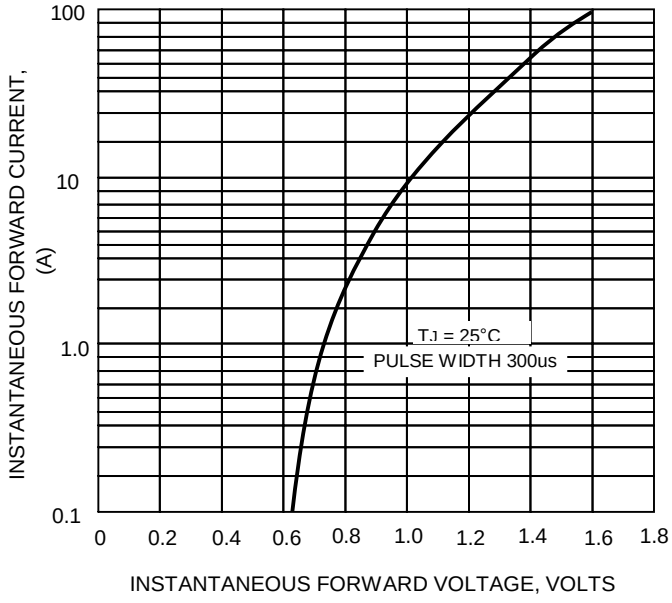
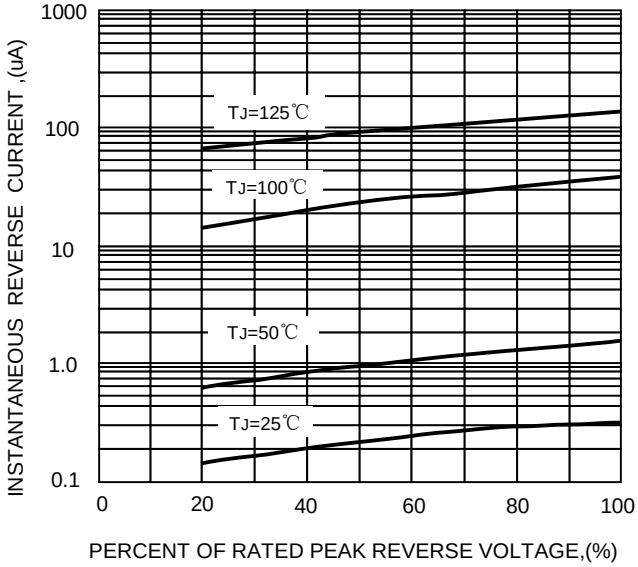



FIG.5-TYPICAL REVERSE CHARACTERISTICS



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