

SILICON BRIDGE RECTIFIER

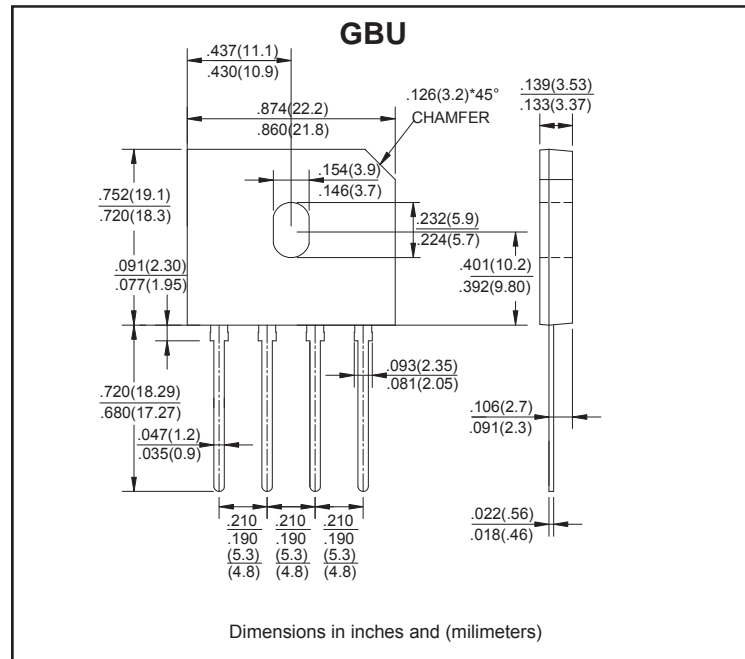
REVERSE VOLTAGE - 50 to 1000V
FORWARD CURRENT - 8.0A

FEATURES

- Surge overload rating -200 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L the flammability classification 94V-0

MECHANICAL DATA

- Case style: GBU plastic molded
- Mounting position: Any
- Weight: 0.138 ounces , 3.9 grams



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted) Single phase, half wave, 60 Hz, resistive or inductive load.
 For capacitive load, derate by 20%.

| CHARACTERISTICS | SYMBOL | GBU8005 | GBU801 | GBU802 | GBU804 | GBU806 | GBU808 | GBU810 | UNIT | |
|--|-------------------|-------------|--------|--------|--------|--------|--------|--------|------|------------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS Voltage | V _{RMS} | 35 | 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) Rectified Current @ T _c =100°C (without heatsink) | I _(AV) | 8.0 | | | | | | 3.2 | | A |
| Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method) | I _{FSM} | 200 | | | | | | | | A |
| Maximum Forward Voltage at 4.0A DC | V _F | 1.1 | | | | | | | | V |
| Maximum DC Reverse Current @ T _J =25°C at Rated DC Blocking Voltage @ T _J =125°C | I _R | 10.0 | | | | | | 500 | | uA |
| I ² t Rating for Fusing (t<8.3ms) | I ² t | 166 | | | | | | | | A ² s |
| Typical Junction Capacitance Per Element (Note1) | C _J | 60 | | | | | | | | pF |
| Typical Thermal Resistance (Note2) | R _{θJC} | 2.2 | | | | | | | | °C/W |
| Operating Temperature Range | T _J | -55 to +150 | | | | | | | | °C |
| Storage Temperature Range | T _{STG} | -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.

RATINGS AND CHARACTERISTIC CURVES

FIG.1-FORWARD CURRENT DERATING CURVE

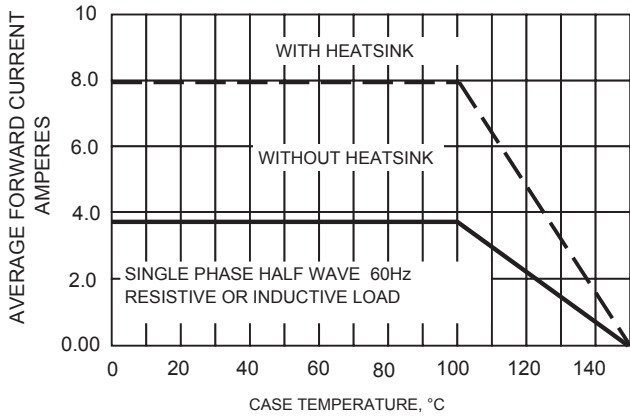


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

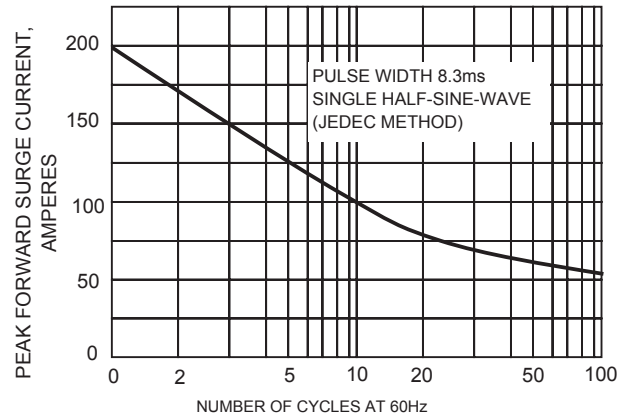


FIG.3-TYPICAL JUNCTION CAPACITANCE

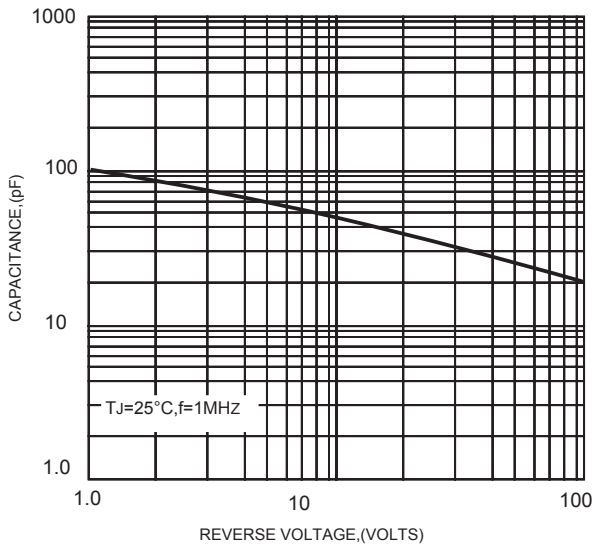


FIG.4-TYPICAL FORWARD CHARACTERISTICS

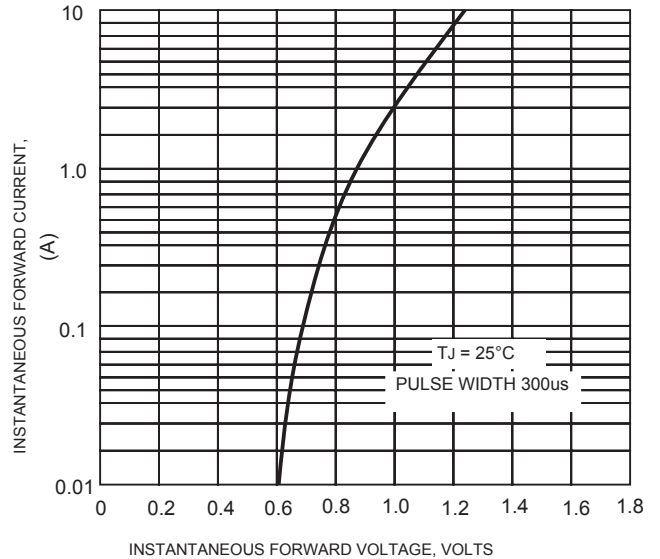


FIG.5-TYPICAL REVERSE CHARACTERISTICS

