

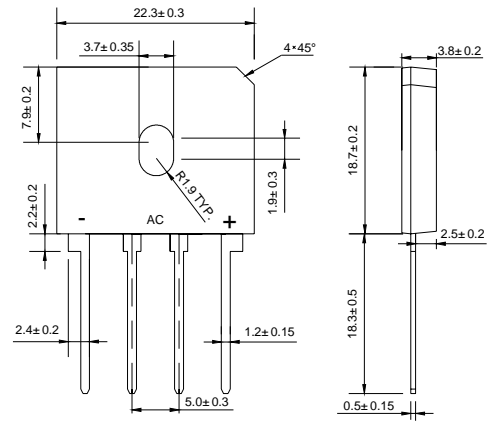
### SILICON BRIDGE RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V  
CURRENT: 8.0A

#### FEATURES

- ◇ Rating to 1000V PRV
- ◇ Surge overload rating to 200 Amperes peak
- ◇ Ideal for printed circuit board
- ◇ Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- ◇ Lead solderable per MIL-STD-202 method 208
- ◇ Glass passivated junctions

#### GBU



Dimensions in millimeters

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

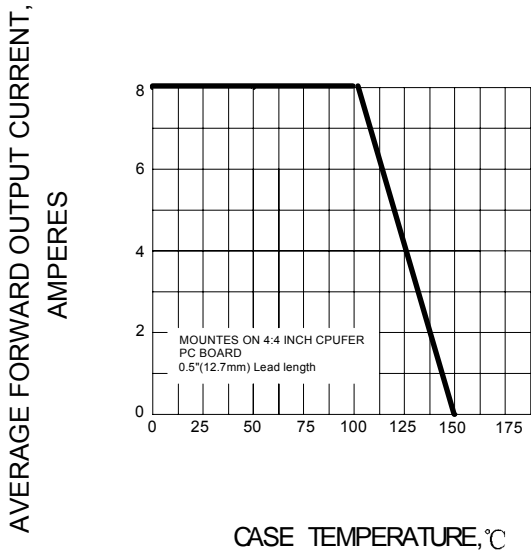
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

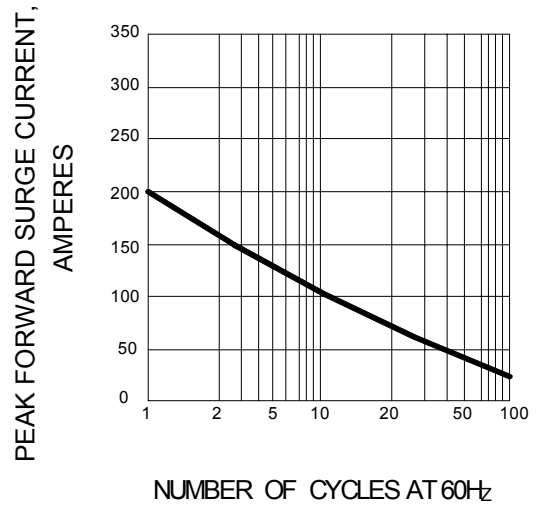
|  |             | GBU 8A          | GBU 8B | GBU 8D | GBU 8G | GBU 8J | GBU 8K | GBU 8M | UNITS               |
|--|-------------|-----------------|--------|--------|--------|--------|--------|--------|---------------------|
| Maximum recurrent peak reverse voltage   | $V_{RRM}$   | 50              | 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 output current @ $T_C=100^\circ\text{C}$   | $I_{F(AV)}$ | 8.0             |        |        |        |        |        |        | A                   |
| Peak forward surge current<br>8.3ms single half-sine-wave<br>superimposed on rated load                    | $I_{FSM}$   | 200.0           |        |        |        |        |        |        | A                   |
| Maximum instantaneous forward voltage @ 4.0 A  | $V_F$       | 1.0             |        |        |        |        |        |        | V                   |
| Maximum reverse current @ $T_A=25^\circ\text{C}$<br>at rated DC blocking voltage @ $T_A=125^\circ\text{C}$ | $I_R$       | 5.0<br>0.5      |        |        |        |        |        |        | $\mu\text{A}$<br>mA |
| Operating junction temperature range   | $T_J$       | - 55 ---- + 150 |        |        |        |        |        |        | $^\circ\text{C}$    |
| Storage temperature range  | $T_{STG}$   | - 55 ---- + 150 |        |        |        |        |        |        | $^\circ\text{C}$    |

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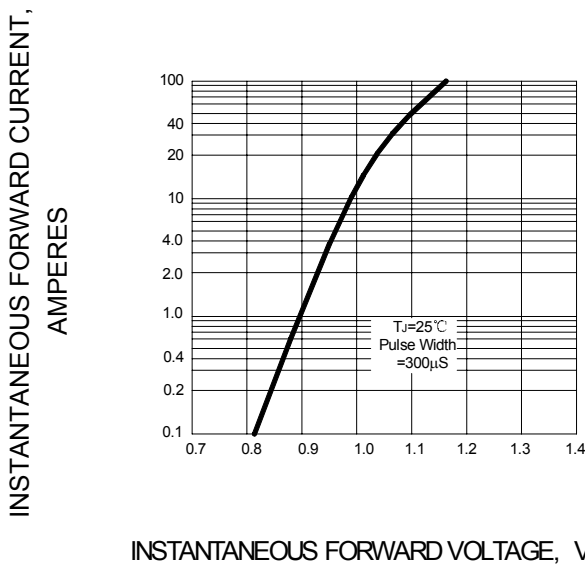
**FIG.1 – TYPICAL FORWARD CURRENT DERATING CURVE**



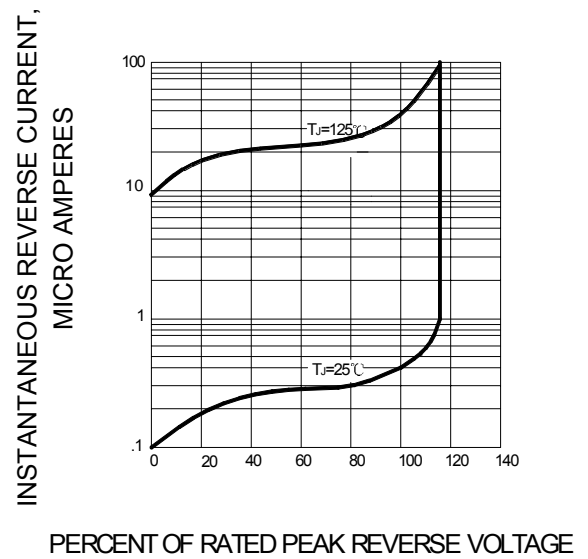
**FIG.2 – MAXIMUM FORWARD SURGE CURRENT**



**FIG.3 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.4 – TYPICAL REVERSE CHARACTERISTIC**



**FIG.5 – TYPICAL JUNCTION CAPACITANCE PER ELEMENT**

