

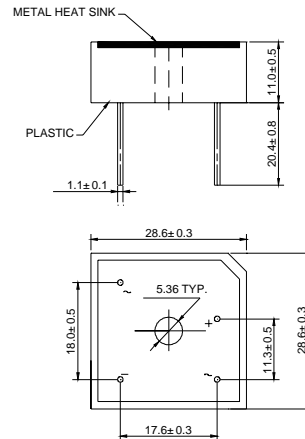
**SILICON BRIDGE RECTIFIERS**

**VOLTAGE RANGE: 50 --- 1000 V**  
**CURRENT: 25.0 A**

**FEATURES**

- ◇ Rating to 1000V PRV
- ◇ Surge overload rating to 300 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
- ◇ Mounting: thru hole for # 8 screw mounting

**BR - W**



Dimensions in millimeters

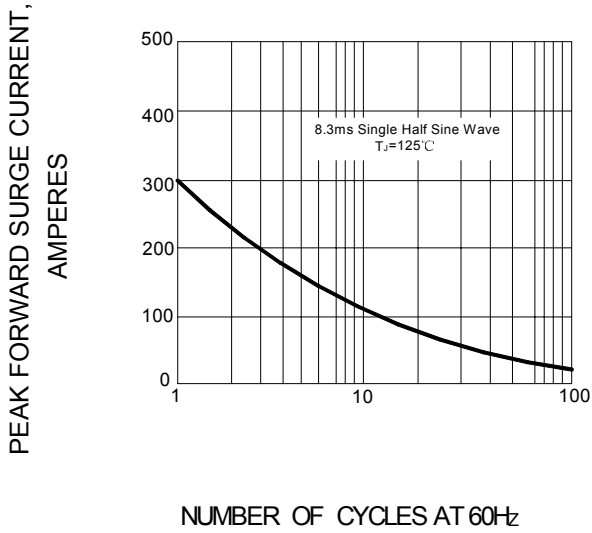
**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

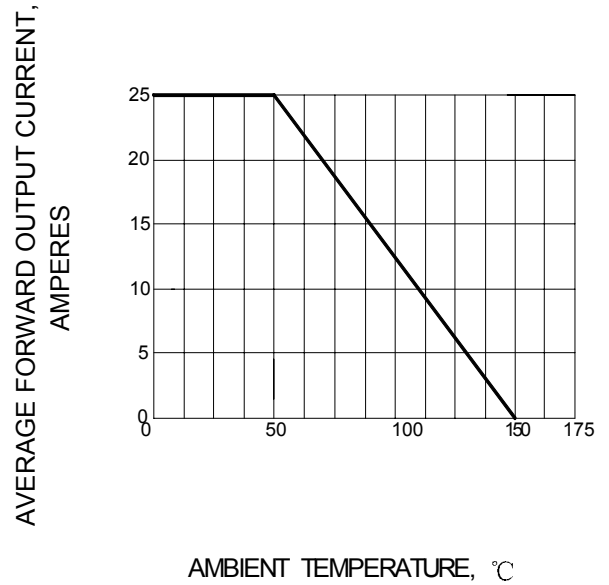
Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate by 20%.

|  |             | BR<br>25005<br>(W) | BR<br>2501<br>(W) | BR<br>2502<br>(W) | BR<br>2504<br>(W) | BR<br>2506<br>(W) | BR<br>2508<br>(W) | BR<br>2510<br>(W) | 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 @ $T_A=50^\circ C$                                      | $I_{F(AV)}$ | 25.0               |                   |                   |                   |                   |                   |                   | A             |
| Peak forward surge current<br>8.3ms single half-sine-wave<br>superimposed on rated load        | $I_{FSM}$   | 300.0              |                   |                   |                   |                   |                   |                   | A             |
| Maximum instantaneous forward voltage at 12.5 A  | $V_F$       | 1.1                |                   |                   |                   |                   |                   |                   | V             |
| Maximum reverse current @ $T_A=25^\circ C$<br>at rated DC blocking voltage @ $T_A=100^\circ C$ | $I_R$       | 5.0<br>0.5         |                   |                   |                   |                   |                   |                   | $\mu A$<br>mA |
| Operating junction temperature range   | $T_J$       | - 55 ---- + 150    |                   |                   |                   |                   |                   |                   | $^\circ C$    |
| Storage temperature range  | $T_{STG}$   | - 55 ---- + 150    |                   |                   |                   |                   |                   |                   | $^\circ C$    |

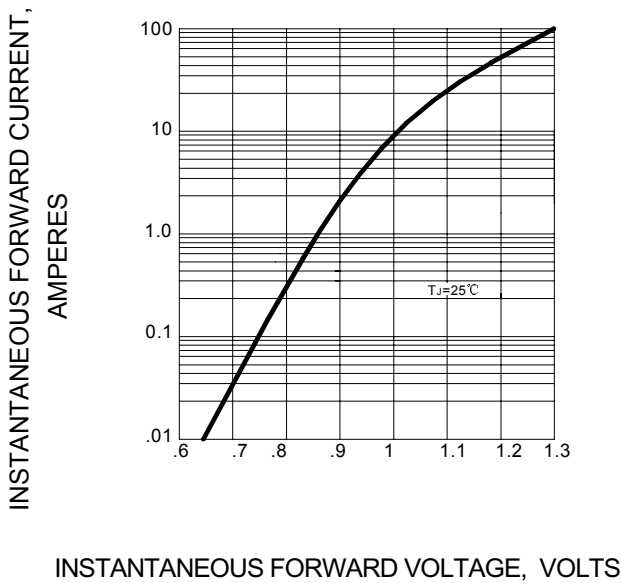
**FIG.1 – PEAK FORWARD SURGE CURRENT**



**FIG.2 – FORWARD DERATING CURVE**



**FIG.3 – TYPICAL FORWARD CHARACTERISTIC**



**FIG.4 – TYPICAL REVERSE CHARACTERISTIC**

