

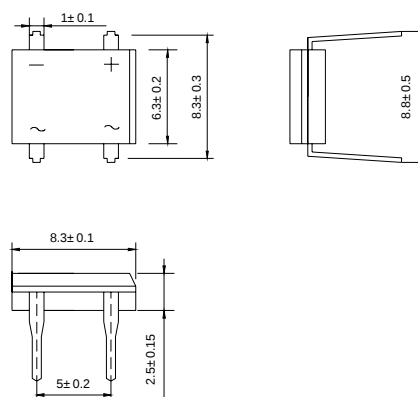
## SILICON BRIDGE RECTIFIERS

**VOLTAGE RANGE: 50 --- 1000 V**  
**CURRENT: 2.0 A**

### FEATURES

- ◇ Rating to 1000V PRV
- ◇ Surge overload rating to 40 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
- ◇ Lead: silver plated copper, solderde plated
- ◇ Plastic material has UL flammability classification 94V-O
- ◇ Polarity symbols molded on body
- ◇ Weight: 0.016 ounces, 0.45 grams

### DB - 1



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%.

|                                                                                                            |             | DB201           | DB202 | DB203 | DB204 | DB205 | DB206 | DB207 | 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 @ $T_A=25^\circ\text{C}$                                            | $I_{F(AV)}$ | 2.0             |       |       |       |       |       |       | A                   |
| Peak forward surge current<br>8.3ms single half-sine-wave<br>superimposed on rated load                    | $I_{FSM}$   | 60              |       |       |       |       |       |       | A                   |
| Maximum instantaneous forward voltage at 2.0 A                                                             | $V_F$       | 1.1             |       |       |       |       |       |       | V                   |
| Maximum reverse current @ $T_A=25^\circ\text{C}$<br>at rated DC blocking voltage @ $T_A=100^\circ\text{C}$ | $I_R$       | 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 |       |       |       |       |       |       | $^\circ\text{C}$    |

FIG.1 -- PEAK FORWARD SURGE CURRENT

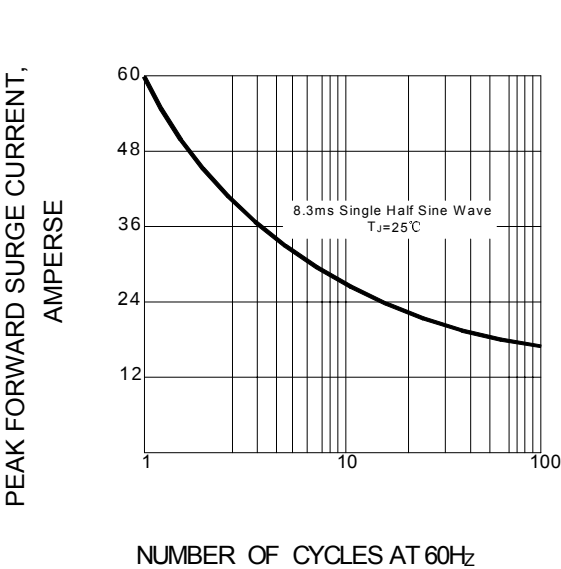


FIG.2 -- FORWARD DERATING CURVE

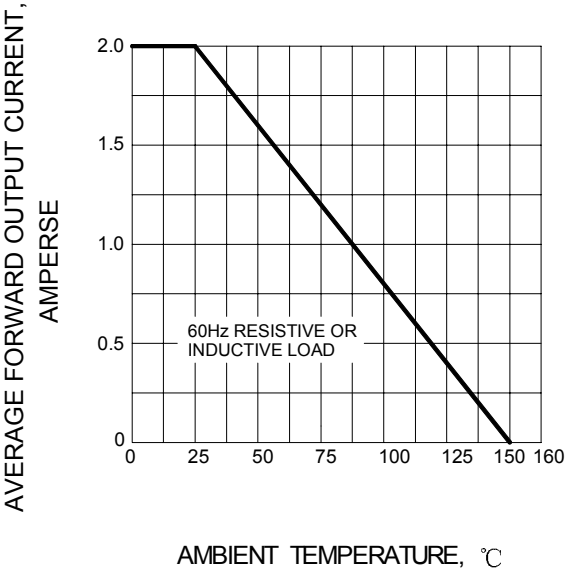


FIG.3 -- TYPICAL FORWARD CHARACTERISTIC

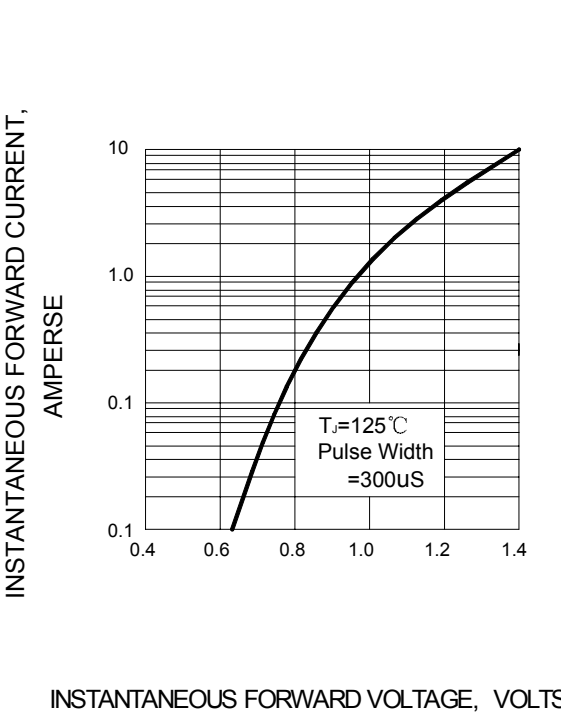


FIG.4 -- TYPICAL REVERSE CHARACTERISTIC

