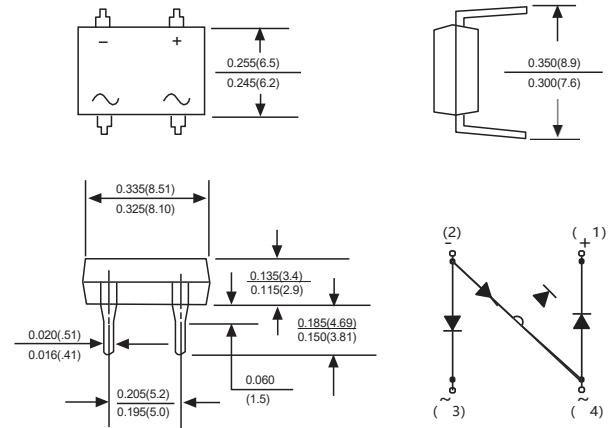


## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

### Features

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction utilizing molded plastic technique
- ◆ High temperature soldering guaranteed: 260°/10 seconds at 5 lbs., (2.3kg) tension
- ◆ Small size, simple installation
- ◆ High surge current capability

### DB



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

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

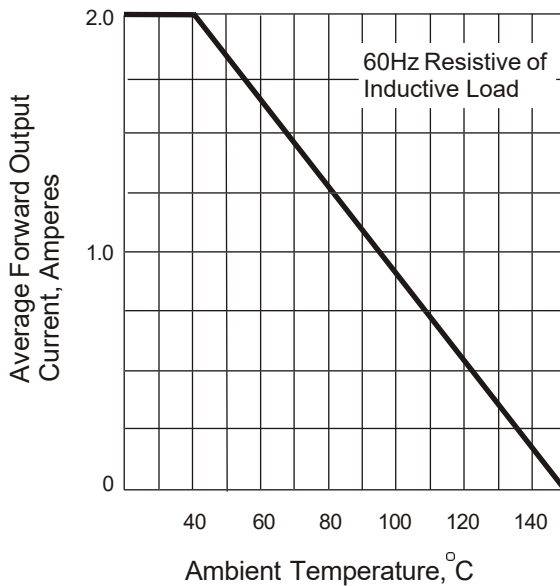
| Parameter                                                                                                       | SYMBOLS     | DB201       | DB202 | DB203 | DB204 | DB205 | DB206 | DB207 | UNITS                          |
|-----------------------------------------------------------------------------------------------------------------|-------------|-------------|-------|-------|-------|-------|-------|-------|--------------------------------|
| Marking Code                                                                                                    |             |             |       |       |       |       |       |       |                                |
| Maximum repetitive 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 rectified current at $T_C=40^\circ\text{C}$                                             | $I_{F(AV)}$ | 2.0         |       |       |       |       |       |       | A                              |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)               | $I_{FSM}$   | 50          |       |       |       |       |       |       | A                              |
| Maximum instantaneous forward voltage drop per leg at 2A                                                        | $V_F$       | 1.1         |       |       |       |       |       |       | V                              |
| Maximum DC reverse current<br>at rated DC blocking voltage<br>$T_A=25^\circ\text{C}$<br>$T_A=100^\circ\text{C}$ | $I_R$       | 10<br>500   |       |       |       |       |       |       | $\mu\text{A}$<br>$\mu\text{A}$ |
| Operating temperature range                                                                                     | $T_J$       | -55 to +150 |       |       |       |       |       |       | $^\circ\text{C}$               |
| storage temperature range                                                                                       | $T_{STG}$   | -55 to +150 |       |       |       |       |       |       | $^\circ\text{C}$               |

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

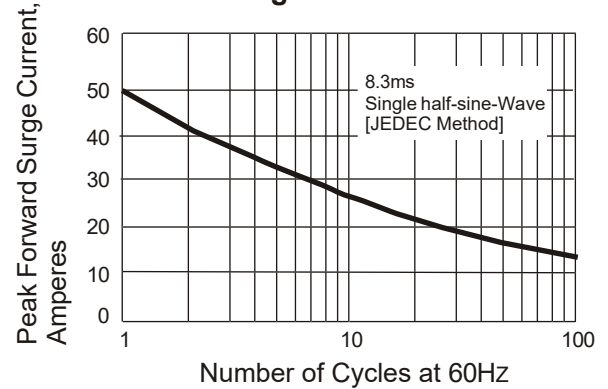
2. Unit mounted on P.C. board with 0.51" x 0.51" (13x13mm) copper pads.

## Ratings And Characteristic Curves

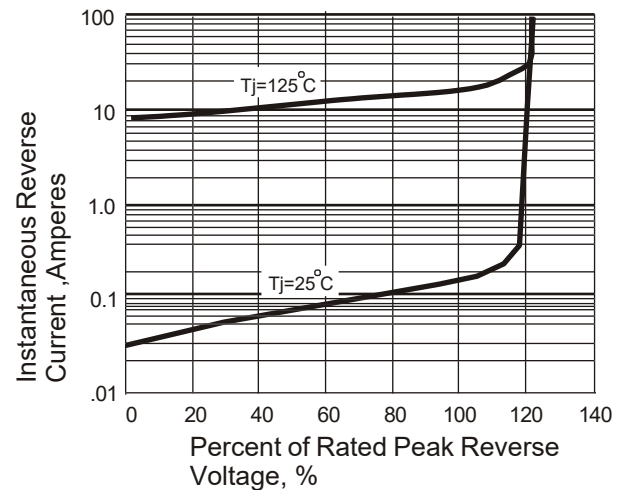
**Fig. 1 Derating Curve for Output Rectified Current**



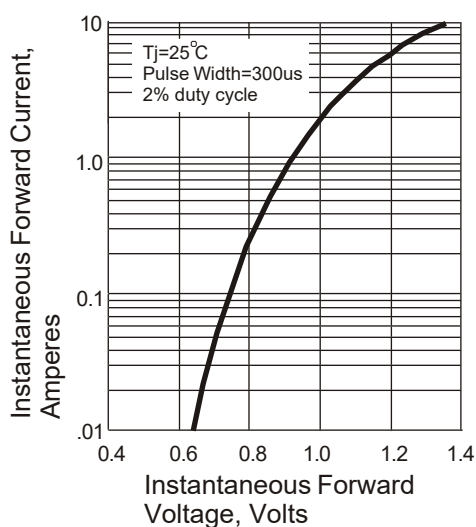
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



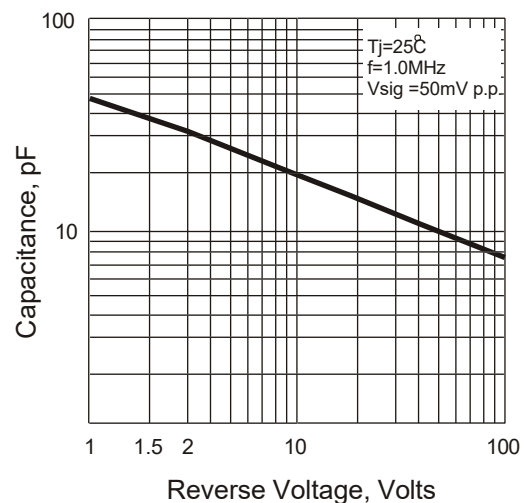
**Fig. 4 Typical Revers Characteristics**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 5 Typical Junction Capacitance**



The curve above is for reference only.