



# DB201 THRU DB207

Voltage Range - 50 to 1000 Volts Current - 1.0 Ampere

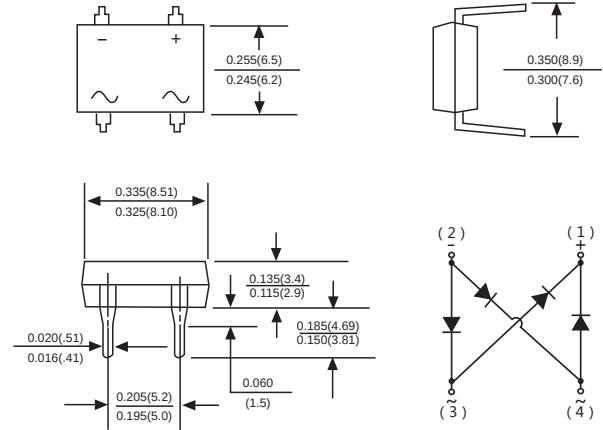
## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

### 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**

**RoHS**  
COMPLIANT



Dimensions in inches and (millimeters)

### Mechanical Data

**Case :** JEDEC DB Molded plastic body

**Terminals :** Solder plated, solderable per MIL-STD-750, Method

**2026 Polarity :** Polarity symbol marking on case

**Mounting Position :** Any

**Weight :** 0.02 ounce, 0.4 grams

### 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     | MDD<br>DB201 | MDD<br>DB202 | MDD<br>DB203 | MDD<br>DB204 | MDD<br>DB205 | MDD<br>DB206 | MDD<br>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 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  |              |              |              |              |              |              | $^\circ\text{C}$               |

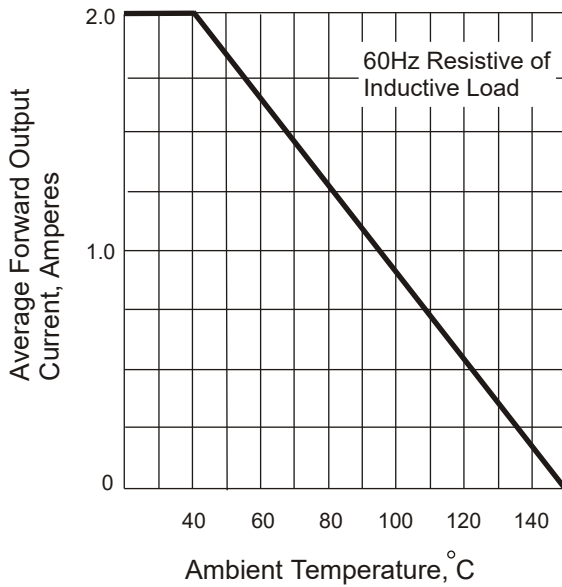
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.

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

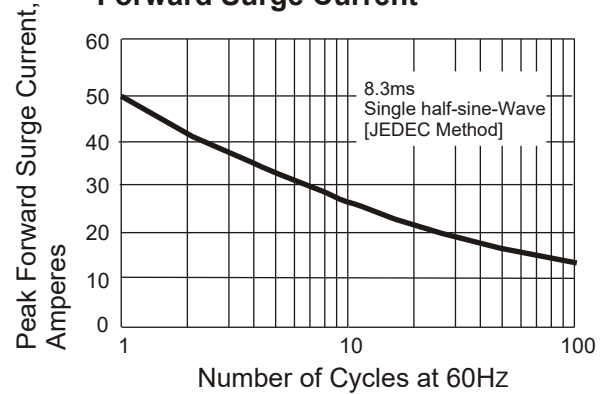


## Ratings And Characteristic Curves

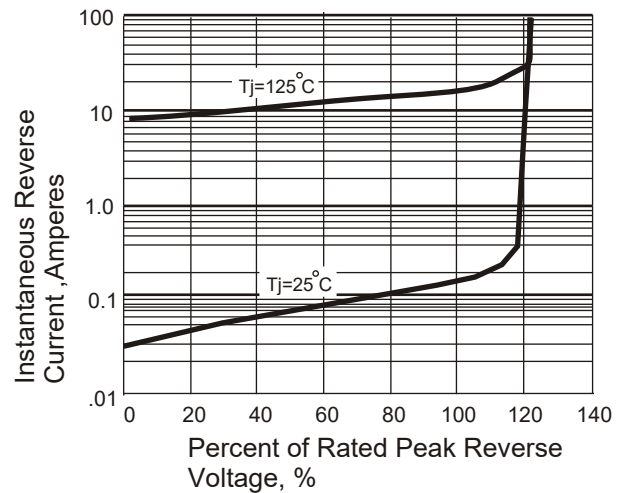
**Fig. 1 Derating Curve for Output Rectified Current**



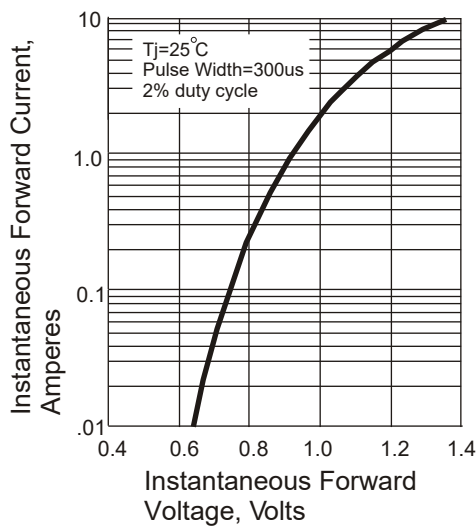
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



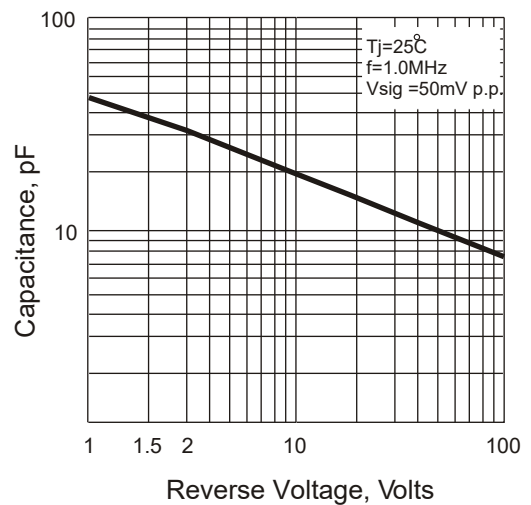
**Fig. 4 Typical Revers Characteristics**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 5 Typical Junction Capacitance**



The curve above is for reference only.