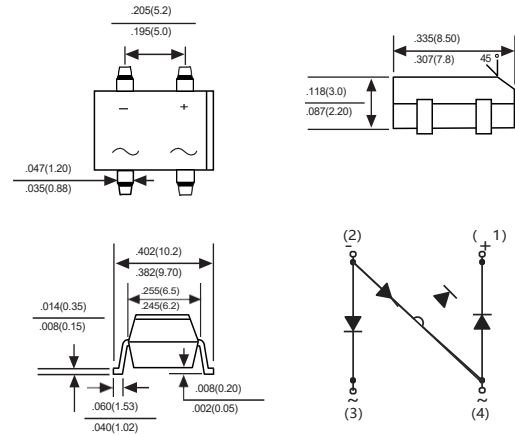


## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIERS

### 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

### DBS



Dimensions in inches and (millimeters)

### Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

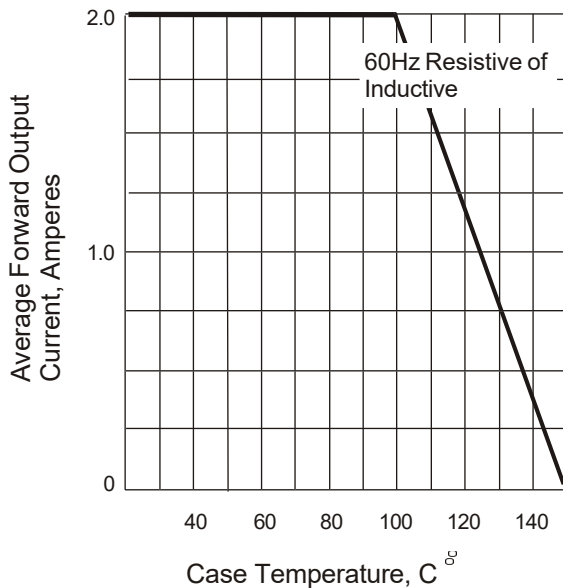
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

| Parameter                                                                                                    | SYMBOLS     | DB201S      | DB202S | DB203S | DB204S | DB205S | DB206S | DB207S | 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 |        |        |        |        |        |        | $^\circ\text{C}$               |

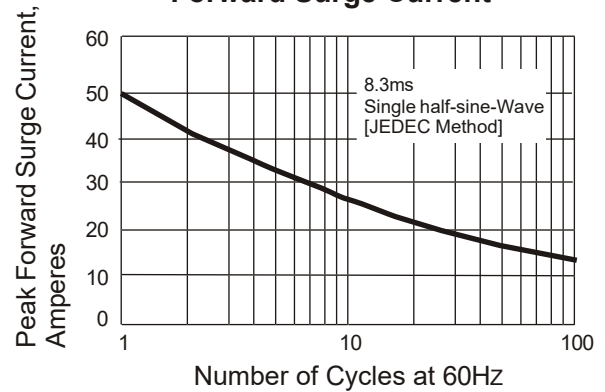
NOTES: DBS for surface mount package.

## Ratings And Characteristic Curves

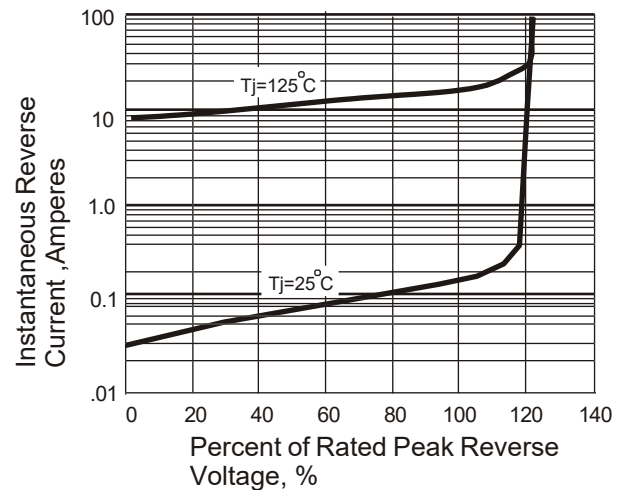
**Fig. 1 Derating Curve for Output Rectified Current**



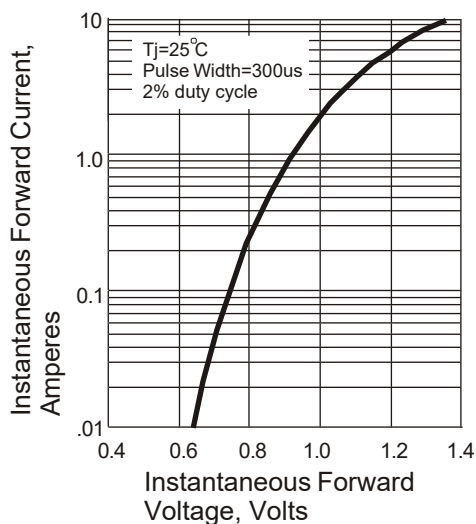
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



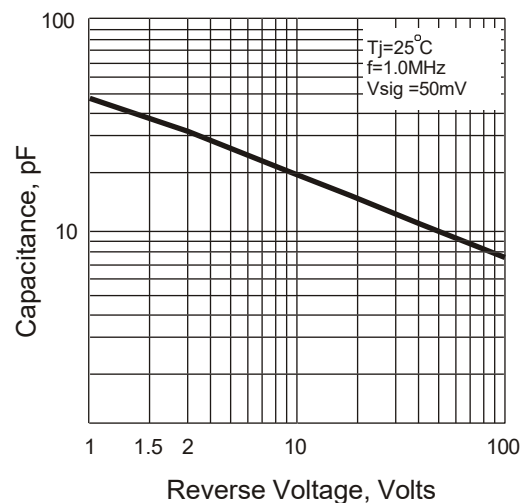
**Fig. 4 Typical Revers Characteristics**



**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 5 Typical Junction Capacitance**



The curve above is for reference only.