

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



Mechanical Data

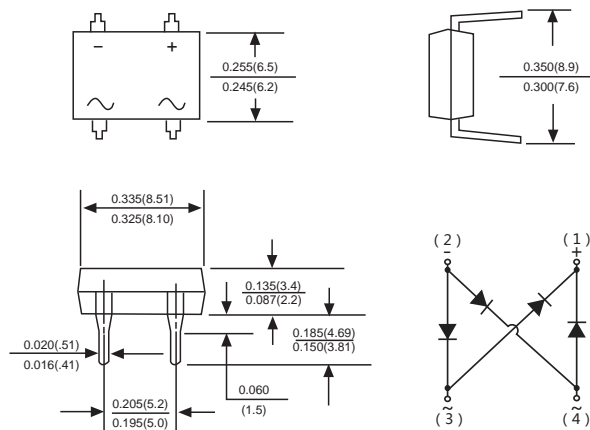
Case : JEDEC DB Molded plastic body

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



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 | MDD | MDD | MDD | MDD | MDD | MDD | MDD | UNITS |
|---|-------------|-------------|-------|-------|-------|-------|-------|-------|------------|
| | | DB101 | DB102 | DB103 | DB104 | DB105 | DB106 | DB107 | |
| 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 $T_C=40^\circ C$ | $I_{F(AV)}$ | 1.0 | | | | | | | A |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 30 | | | | | | | A |
| Maximum instantaneous forward voltage drop per leg at 1A | V_F | 1.1 | | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage | I_R | 10 | | | | | | | μA |
| $T_A=25^\circ C$ | | 500 | | | | | | | |
| Operating temperature range | T_J | -55 to +150 | | | | | | | $^\circ C$ |
| storage temperature range | T_{STG} | -55 to +150 | | | | | | | $^\circ C$ |

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

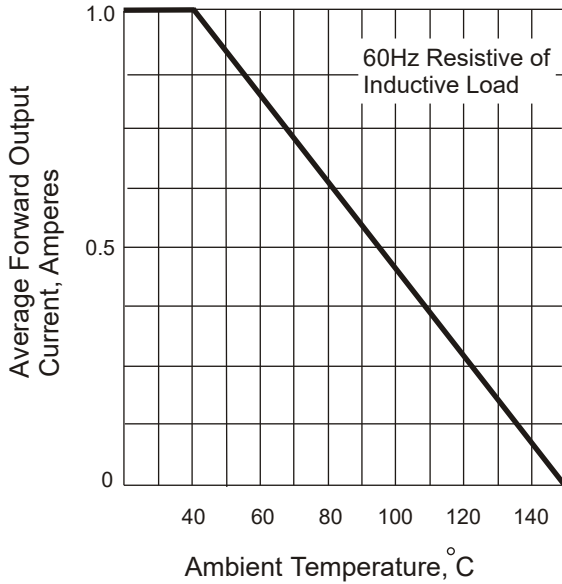


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

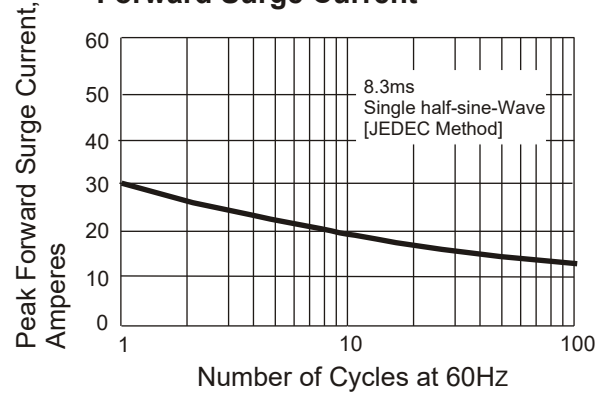


Fig. 3 Typical Instantaneous Forward Characteristics

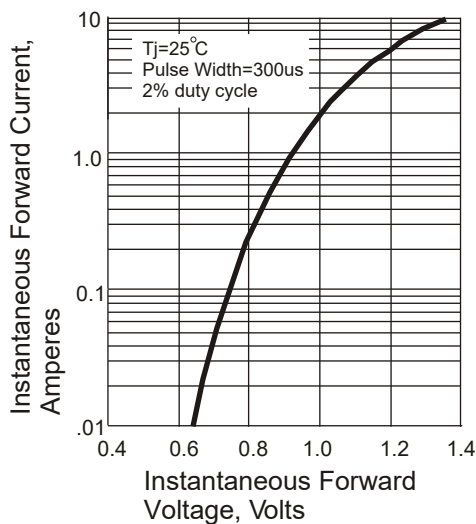


Fig. 4 Typical Revers Characteristics

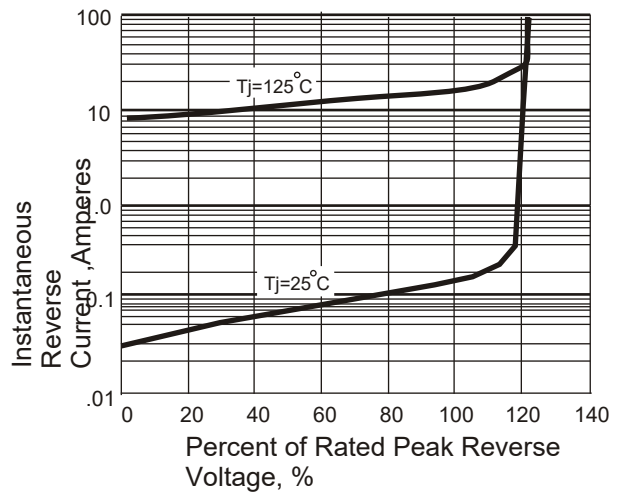
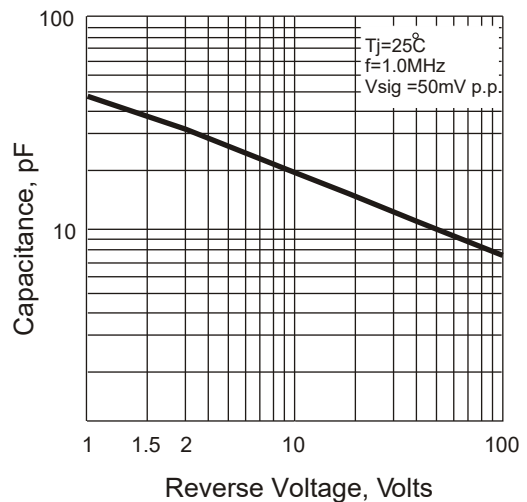


Fig. 5 Typical Junction Capacitance



The curve above is for reference only.