

Bridge Rectifier

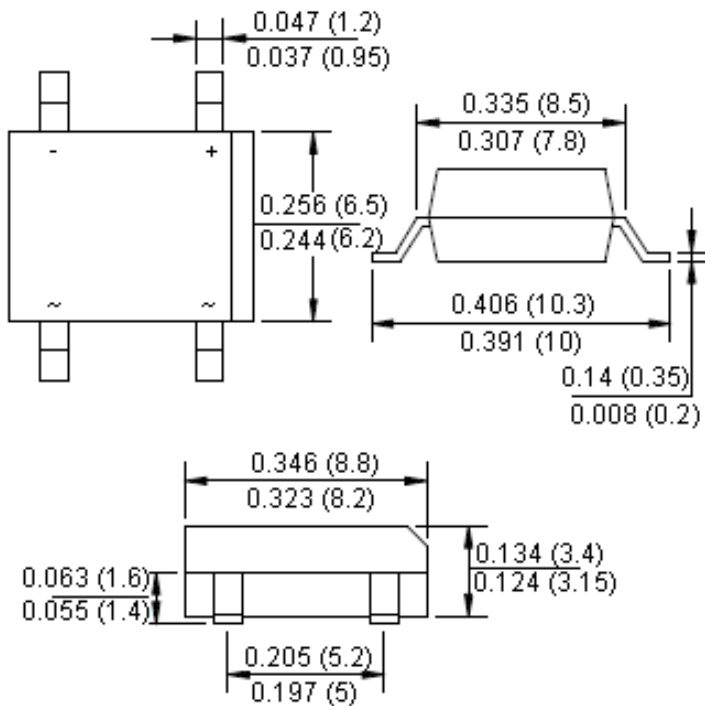


Features:

- Glass passivated.
- Surface mount.
- Ideal for printed circuit board.
- Low forward voltage drop, high current capability.
- Reliable low cost construction utilizing moulded plastic technique results in inexpensive product.

Reverse Voltage - 50 V
Forward Current - 1 Ampere

DBS



Dimensions : Inches (Millimetres)

Mechanical Data

Polarity : As marked on body.
Weight : 0.02 oz, 0.38 g.
Mounting position : Any.

Bridge Rectifier



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

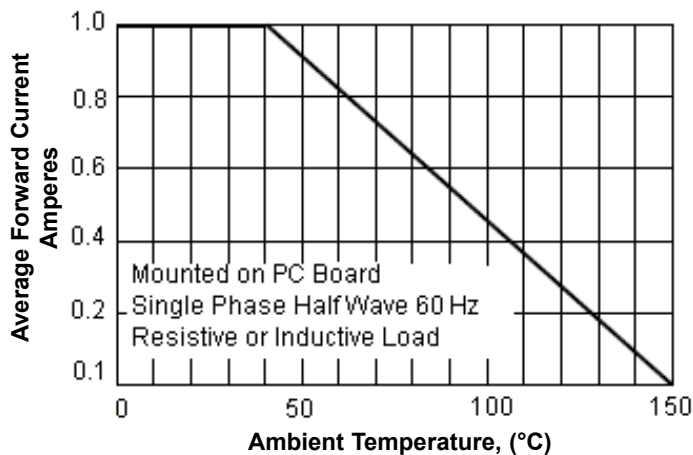
| Characteristics | Symbol | DB101S | Unit |
|---|-----------------|-------------|----------------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | V |
| Maximum RMS Voltage | V_{RMS} | 35 | |
| Maximum DC Blocking Voltage | V_{DC} | 50 | |
| Maximum Average Forward Rectified Current at $T_A = 40^\circ\text{C}$ | $I_{(AV)}$ | 1 | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine-wave Super Imposed on Rated Load (JEDEC Method) | I_{FSM} | 30 | |
| Maximum Forward Voltage at 1 A dc | V_F | 1.1 | V |
| Maximum DC Reverse Current at $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_J = 125^\circ\text{C}$ | I_R | 10 500 | μA |
| I^2t Rating for Fusing ($t < 8.3$ ms) | I^2t | 10.4 | A^2s |
| Typical Junction Capacitance Per Element (Note 1) | C_J | 25 | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JA}$ | 40 | $^\circ\text{C/W}$ |
| Operating Temperature Range | T_J | -55 to +150 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | | |

Notes : 1. Measured at 1 MHz and applied reverse voltage of 4 V dc.

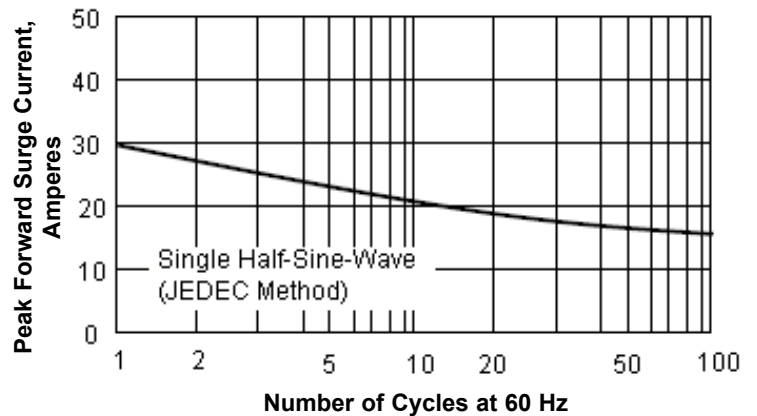
2. Thermal resistance from junction to ambient mounted on P C B with $0.5 \times 0.5''$ (13×13 mm) copper pads.

Ratings and Characteristics Curves

Forward Current Derating Curve



Maximum Non-Repetitive Surge Current

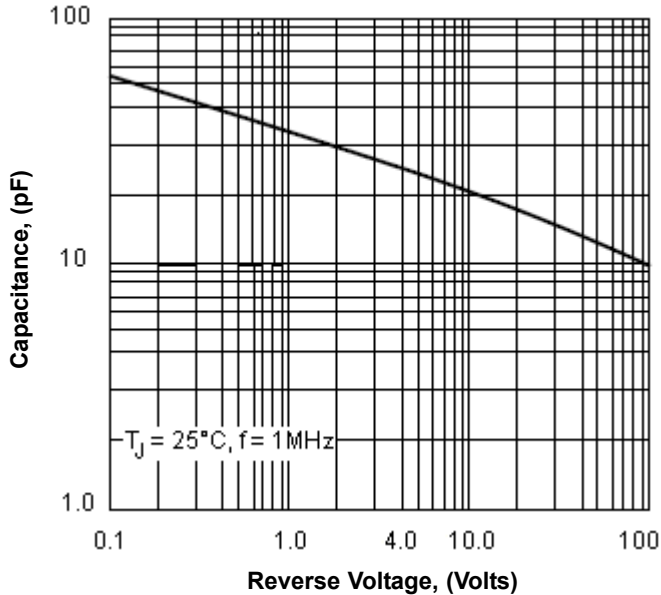


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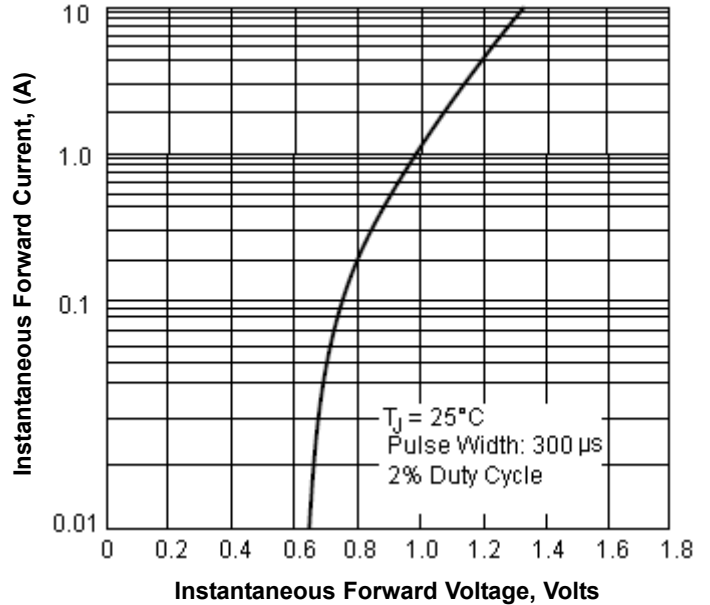


Ratings and Characteristics Curves

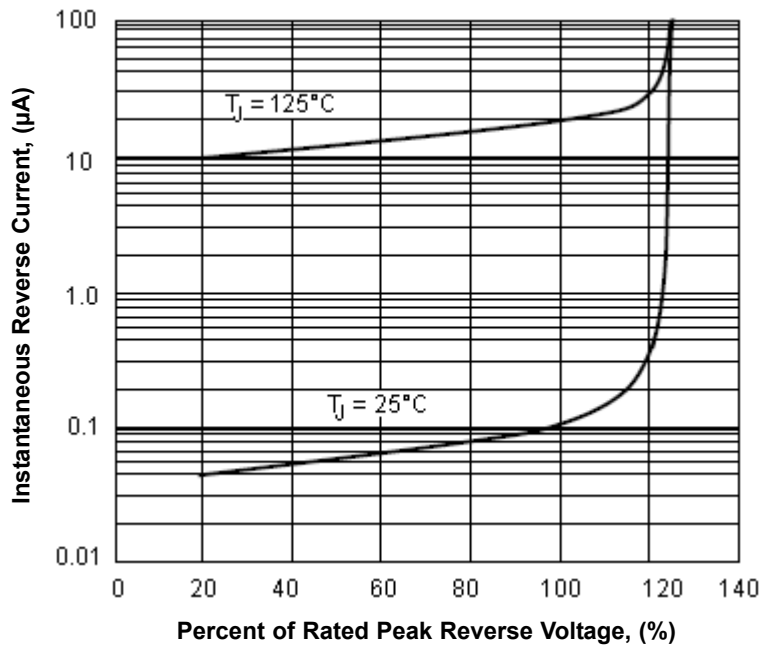
Typical Junction Capacitance



Typical Forward Characteristics



Typical Reverse Characteristics



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