

Bridge Rectifier

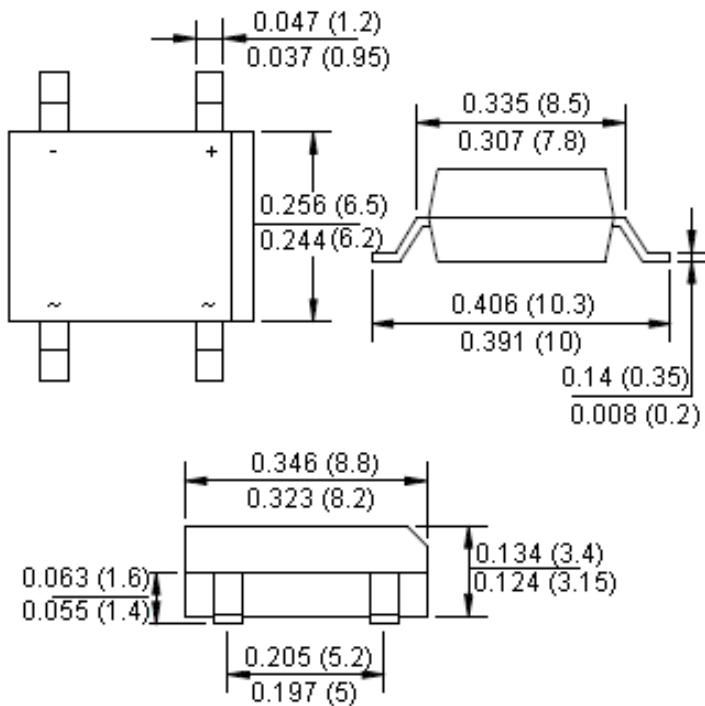


Features:

- 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 - 100 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%.

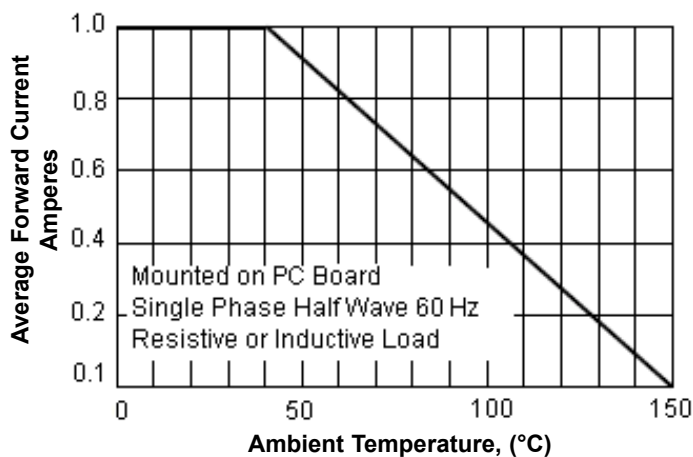
Characteristics	Symbol	DB102S	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	
Maximum DC Blocking Voltage	V_{DC}	100	
Maximum Average Forward Rectified Current at $T_A = 40^\circ\text{C}$	$I_{(AV)}$	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave 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.

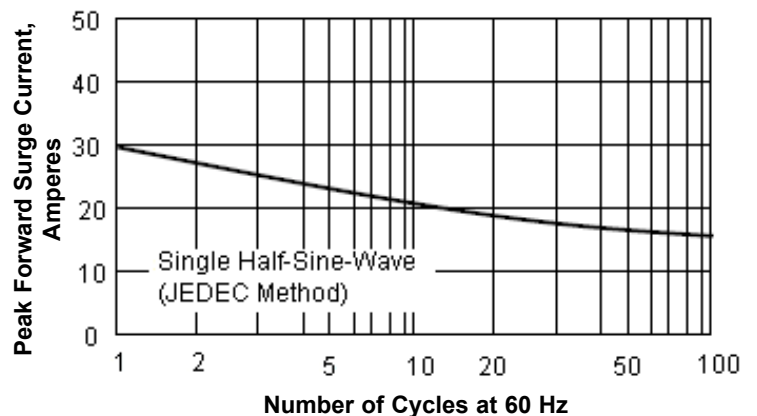
2. Thermal resistance from junction to ambient mounted on P C B with 0.5×0.5 " (13×13 mm) copper pads.

Ratings and Characteristics Curves

Forward Current Derating Curve



Maximum Non-Repetitive Surge Current

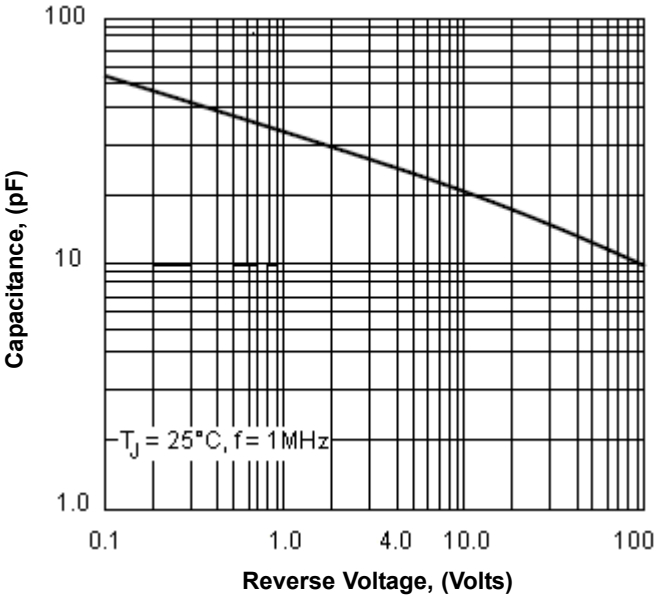


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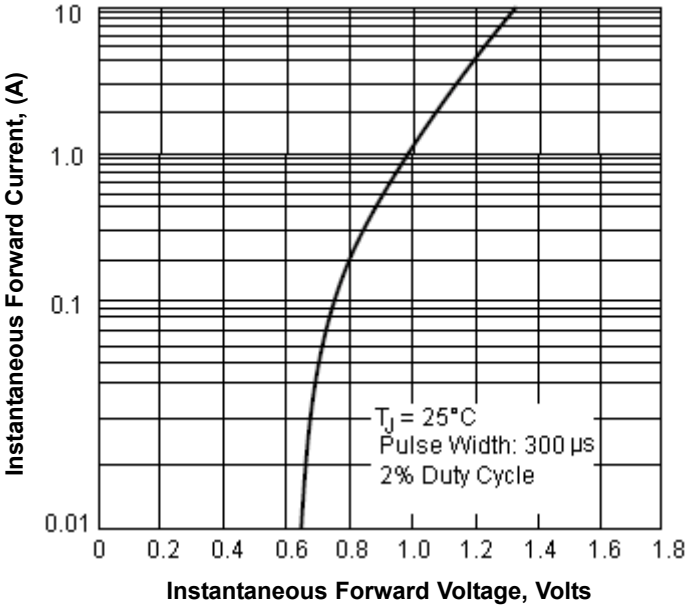


Ratings and Characteristics Curves

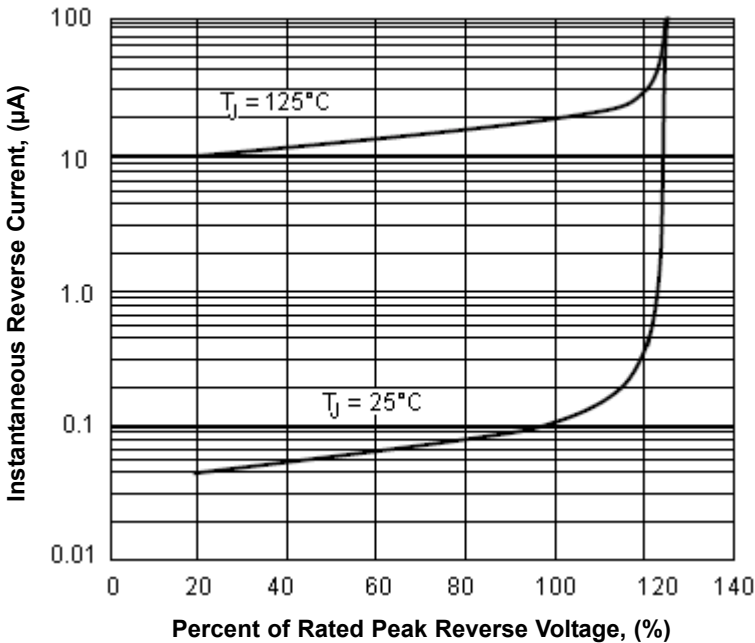
Typical Junction Capacitance



Typical Forward Characteristics



Typical Reverse Characteristics



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