

# Bridge Rectifier

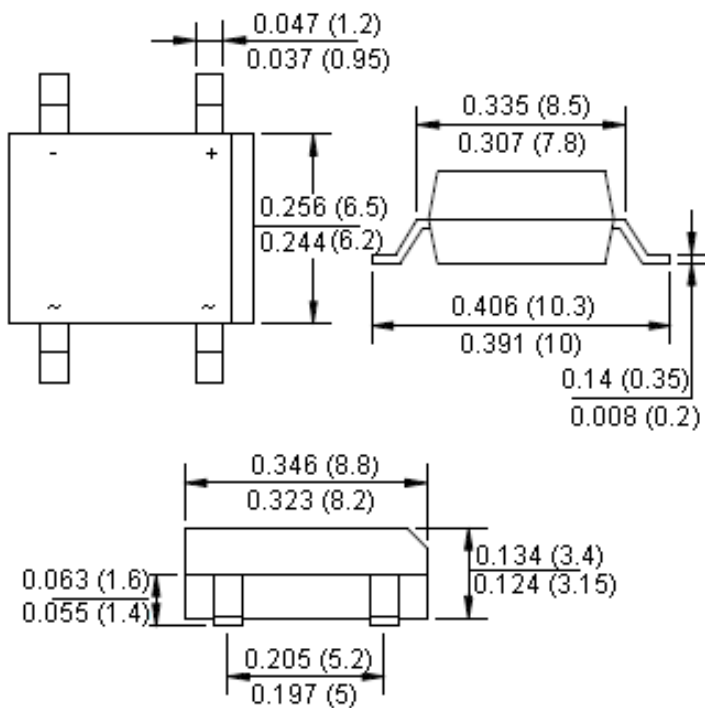


## Features:

- 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 - 200 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%.

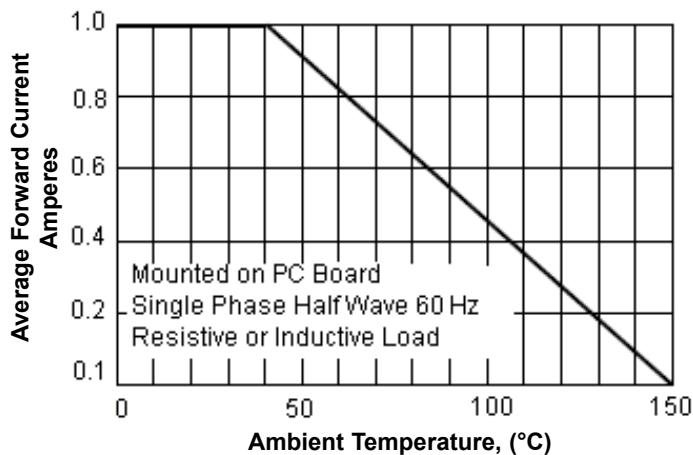
Characteristics	Symbol	DB103S	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	V
Maximum RMS Voltage	$V_{RMS}$	140	
Maximum DC Blocking Voltage	$V_{DC}$	200	
Maximum Average Forward Rectified Current at $T_A = 40^\circ\text{C}$	$I_{(AV)}$	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave 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	$\mu\text{A}$
$I^2t$ Rating for Fusing ( $t < 8.3$ ms)	$I^2t$	10.4	$\text{A}^2\text{s}$
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.

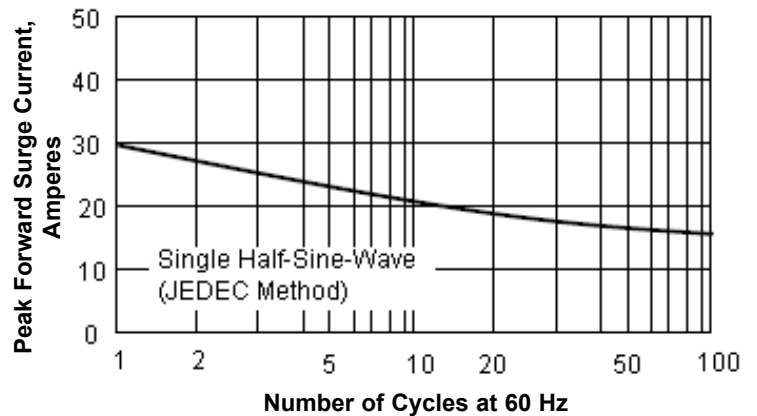
2. Thermal resistance from junction to ambient mounted on P C B with  $0.5 \times 0.5''$  ( $13 \times 13$  mm) copper pads.

## Ratings and Characteristics Curves

**Forward Current Derating Curve**



**Maximum Non-Repetitive Surge Current**

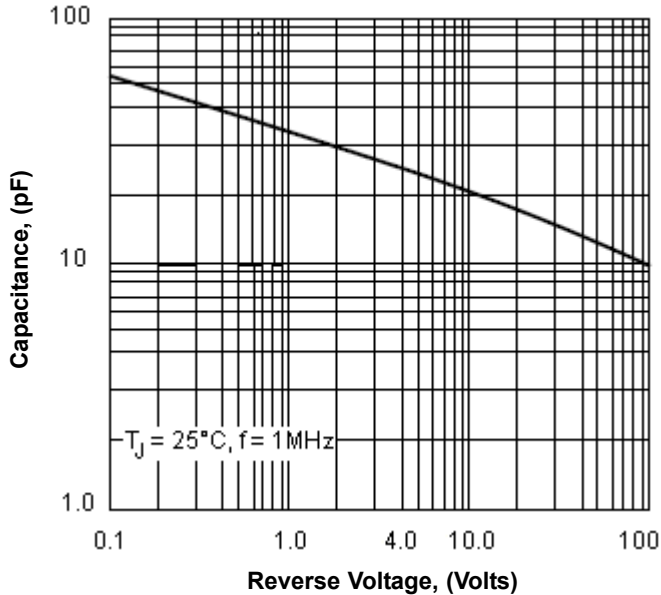


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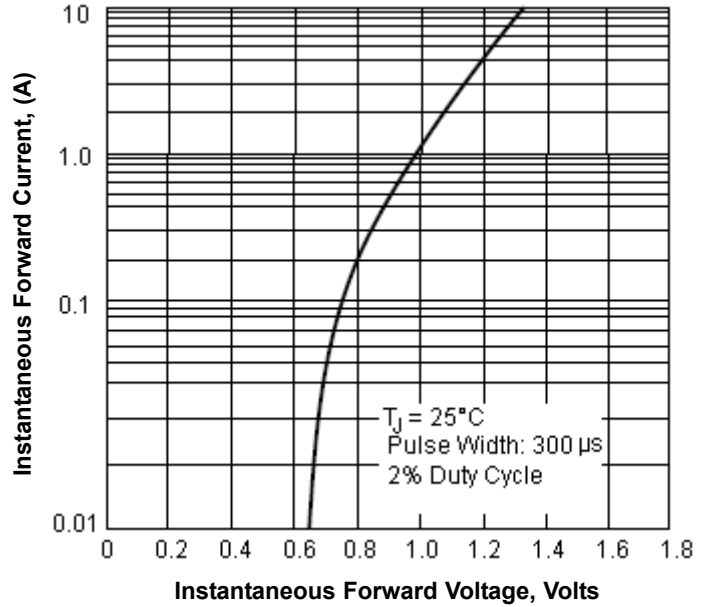


## Ratings and Characteristics Curves

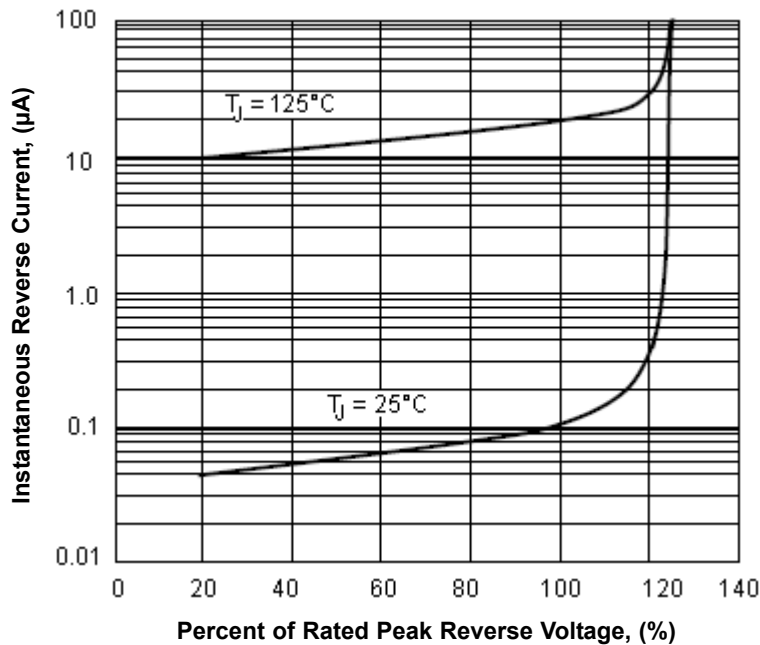
Typical Junction Capacitance



Typical Forward Characteristics



Typical Reverse Characteristics



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