

# Bridge Rectifier

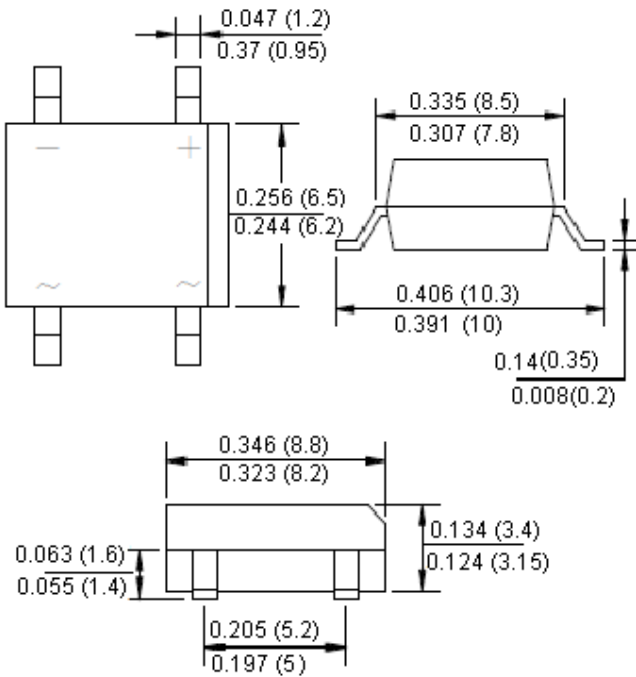
## DB101S thru DB107S



### Features:

- Rating to 1,000 V PRV.
- Ideal for printed circuit board.
- Low forward voltage drop, high current capability.
- Reliable low cost construction utilizing moulded plastic technique results in inexpensive product.

### DBS



Dimensions : Inches (Millimetres)

Reverse Voltage : 50 to 1,000 Volts.

Forward Current : 1 Ampere.

### Mechanical Data

Polarity : As marked on body.

Mounting position: Any.

# Bridge Rectifier



## DB101S thru DB107S

### 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%.

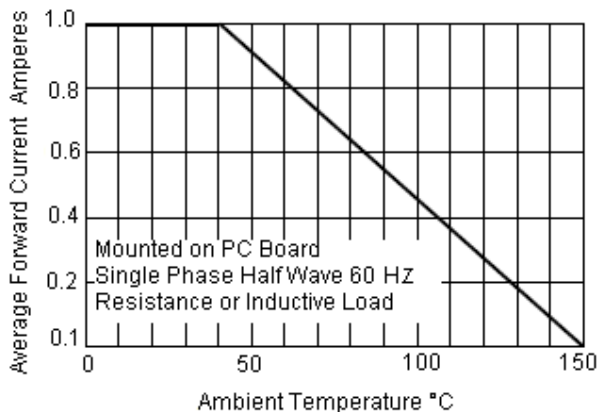
Characteristics	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1,000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1,000	
Maximum Average Forward 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							$^\circ\text{C} / \text{W}$
Operating Temperature Range	$T_J$	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$								

**Note:**

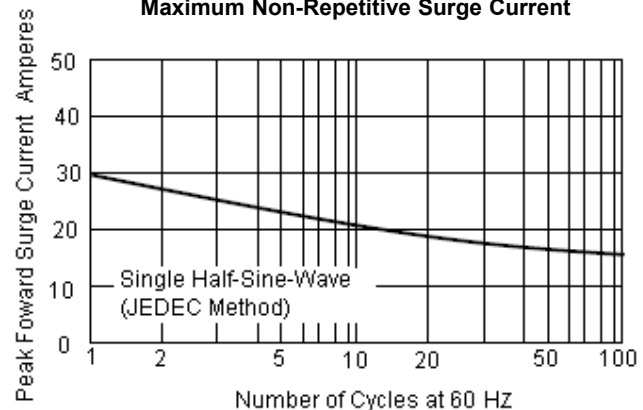
- Measured at 1 MHz and applied reverse voltage of 4 V dc.
- Thermal resistance from junction to ambient mounted on PCB with  $0.5 \times 0.5$  Inches ( $13 \times 13$  mm) copper pads.

### Rating and Characteristic Curves (DB101S thru DB107S)

**Forward Current Derating Curve**



**Maximum Non-Repetitive Surge Current**



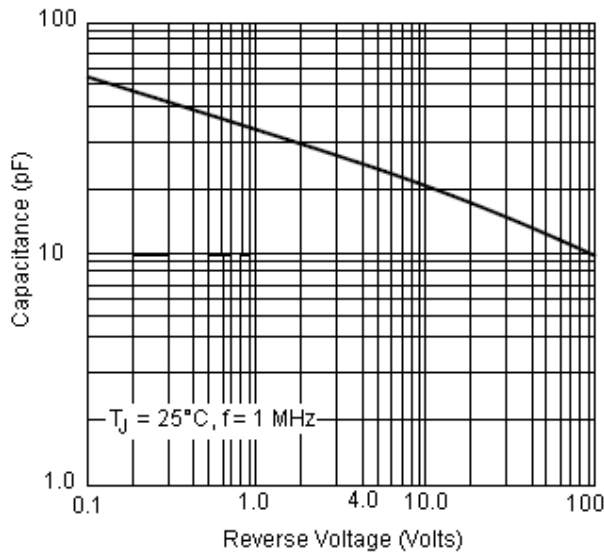
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## DB101S thru DB107S

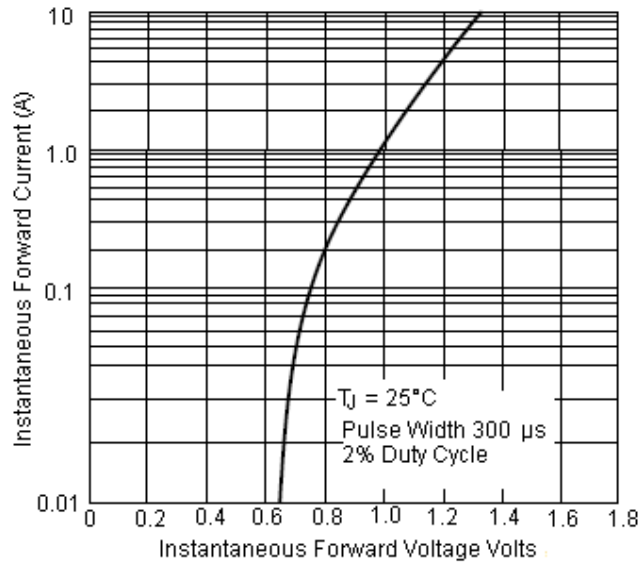


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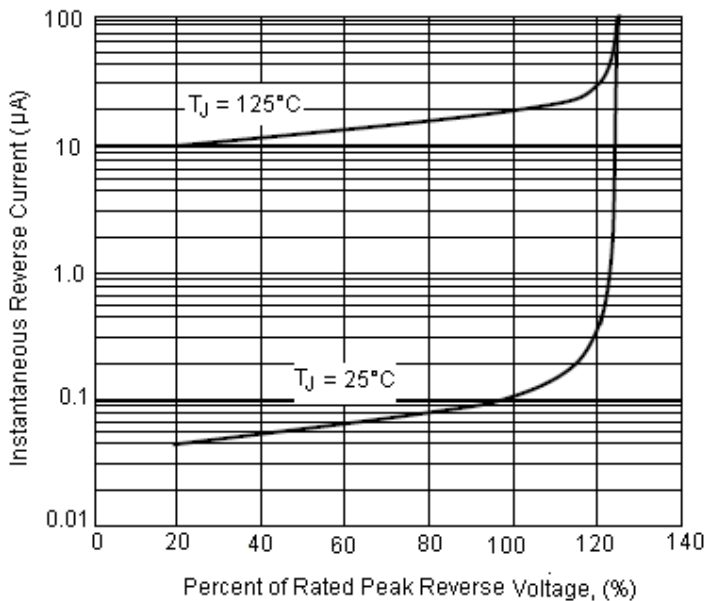
Typical Junction Capacitance



Typical Forward Characteristics



Typical Reverse Characteristics



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