

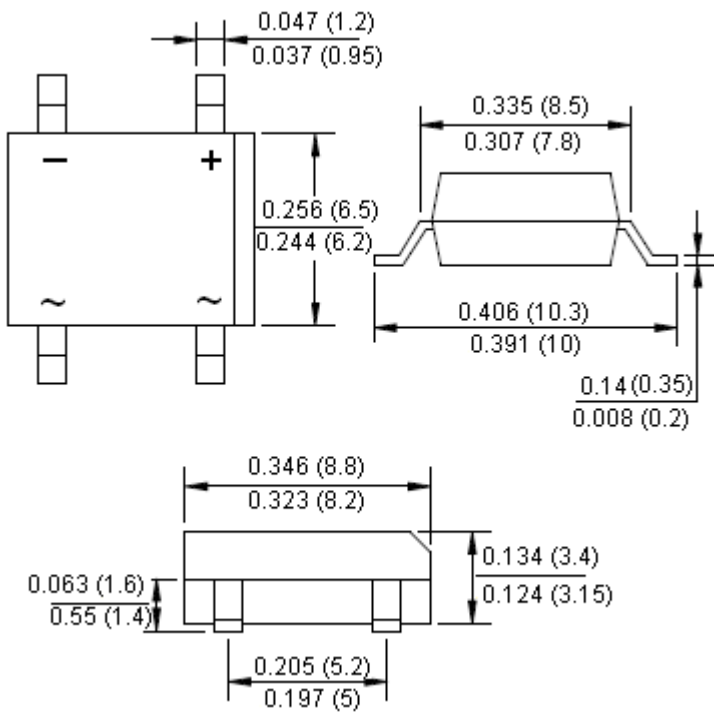
# DB10 Series Bridge Rectifiers



## 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
- The plastic material has UL flammability classification 94V-0

Reverse Voltage - 50 to 1,000 V  
Forward Current - 1 Ampere



Dimensions : Inches (Millimetres)

## Mechanical Data

Weight : 0.02 oz, 0.38 g

Mounting position: Any

# DB10 Series Bridge Rectifiers



## Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

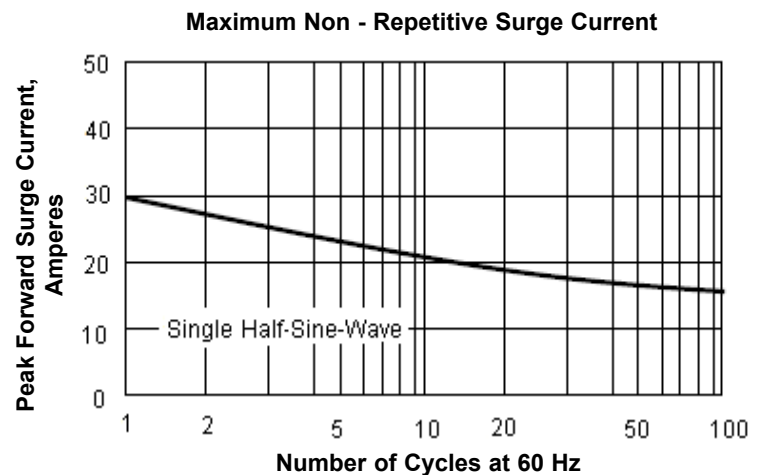
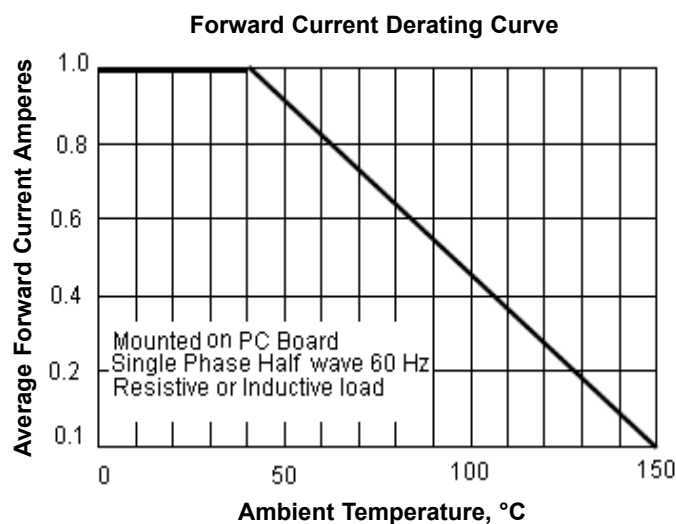
Single phase, half wave, 60 Hz, resistive or inductive load

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	$I_{FSM}$	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	$T_{STG}$	-55 to +150							

- Note:**
1. Measured at 1 MHz and applied reverse voltage of 4 V dc
  2. Thermal resistance from junction to ambient mounted on PCB with 0.5 × 0.5 inches (13 × 13 mm) copper pads

## Ratings and Characteristics Curves

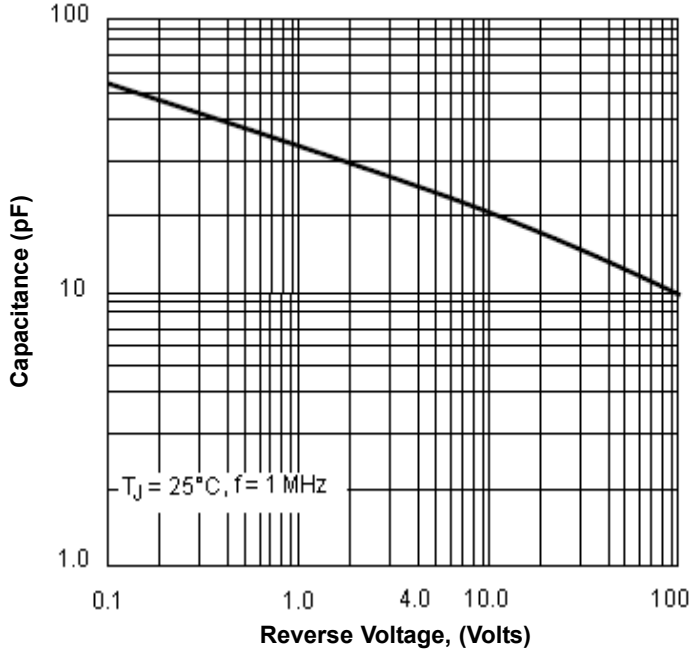


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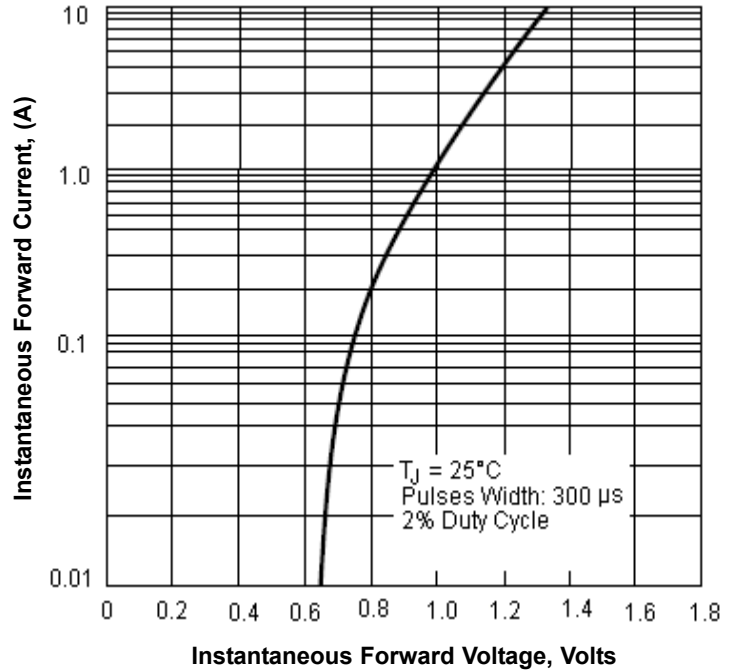


## Ratings and Characteristics Curves

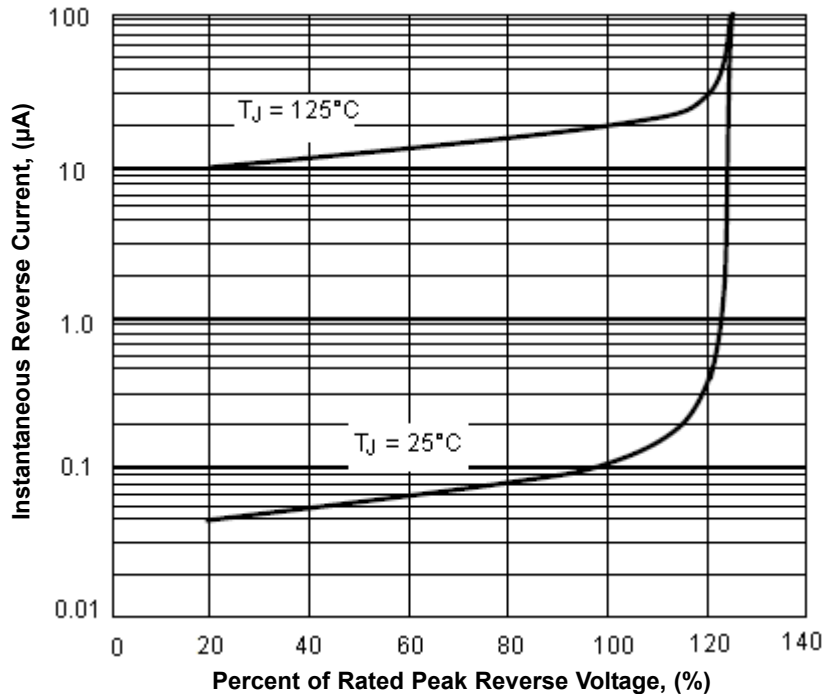
Typical Junction Capacitance



Typical Forward Characteristics



Typical Reverse Characteristics



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