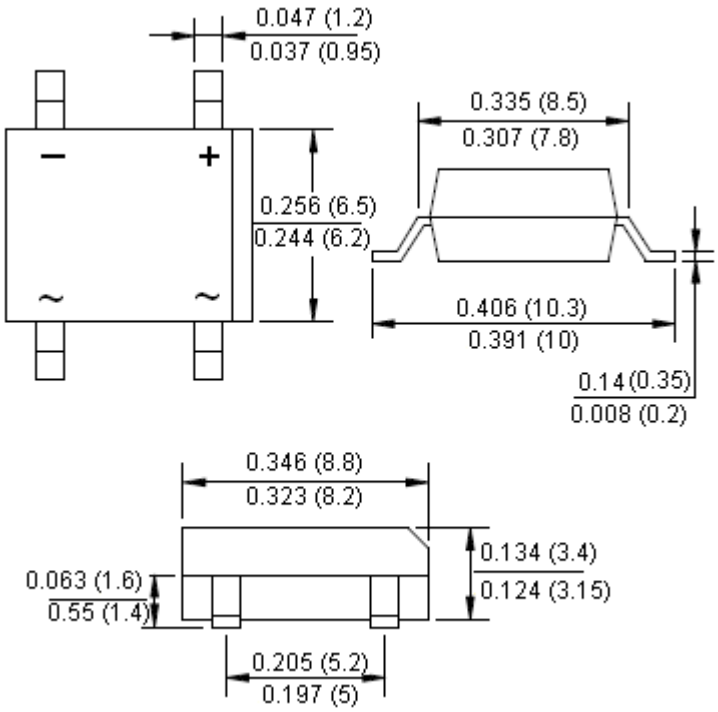
DB10 Series Bridge Rectifiers

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

Maximum Ratings and Electrical Characteristics

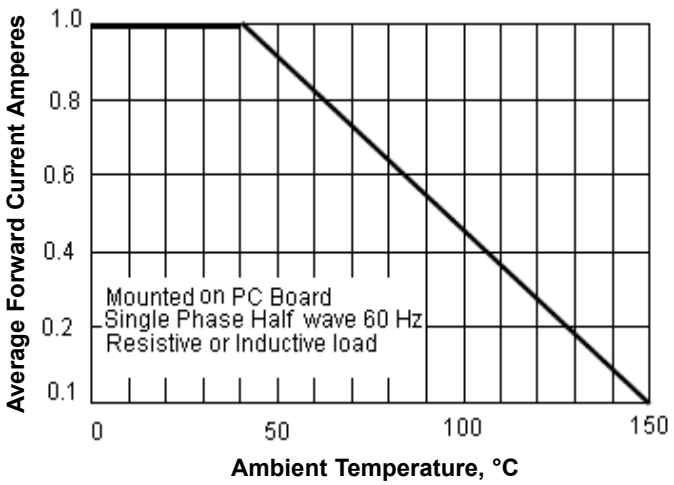
Rating at 25°C ambient temperature unless otherwise specified
Single phase, half wave, 60 Hz, resistive or inductive load
For capacitive load, derate current by 20%

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°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°C at Rated DC Blocking Voltage at T_J = 125°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							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							

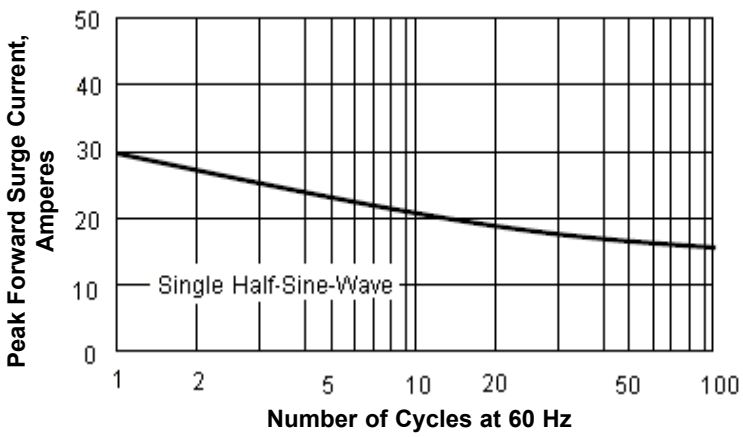
Note: 1. Measured at 1 MHz and applied reverse voltage of 4 V dc
2. Thermal resistance from junction to ambient mounted on PCB with 0.5 × 0.5 inches (13 × 13 mm) copper pads

Ratings and Characteristics Curves

Forward Current Derating Curve

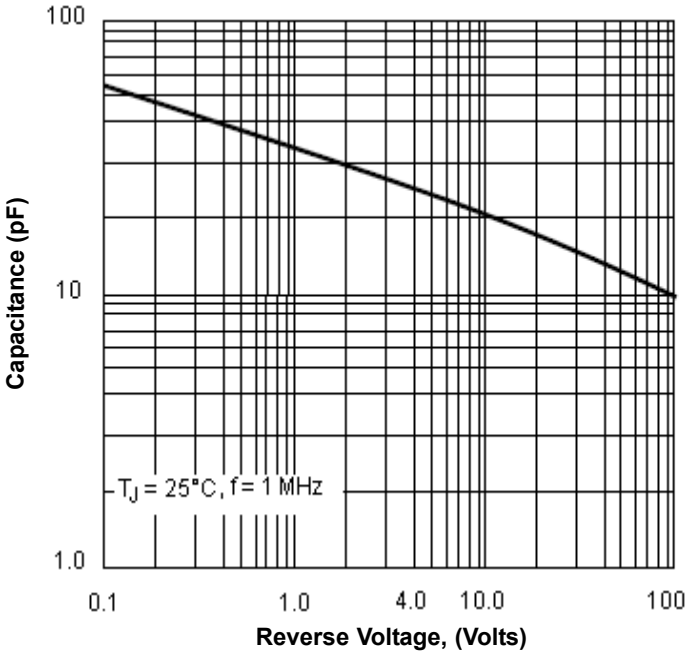


Maximum Non - Repetitive Surge Current

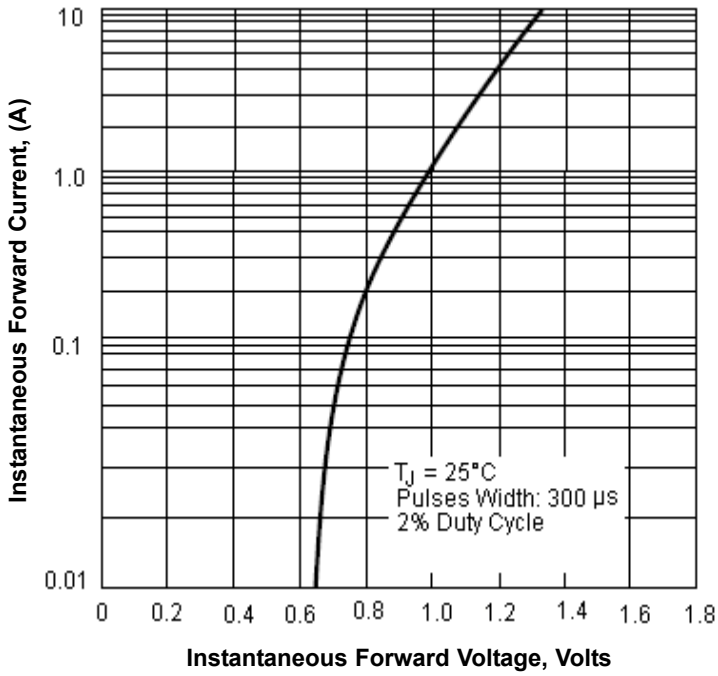


Ratings and Characteristics Curves

Typical Junction Capacitance



Typical Forward Characteristics



Typical Reverse Characteristics