# **DB10 Series Bridge Rectifiers**

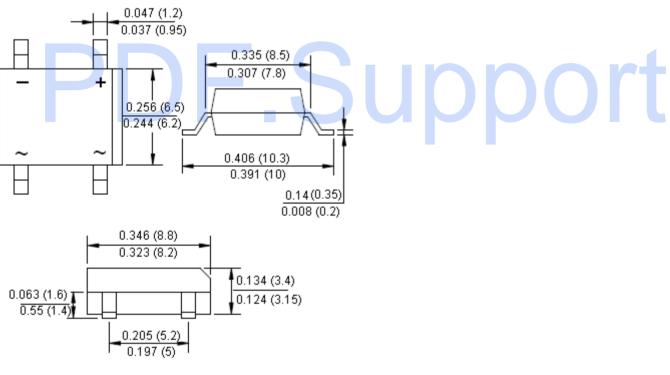




#### Features:

- 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**

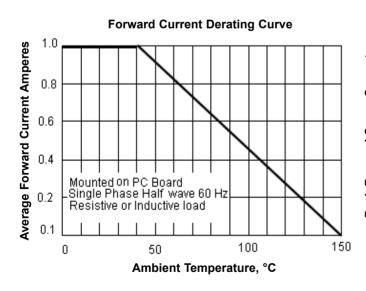
Rating at 25°C ambient temperature unless otherwise specified Single phase, half wave, 60 Hz, resistive or inductive load For capacitive load, derate current by 20%

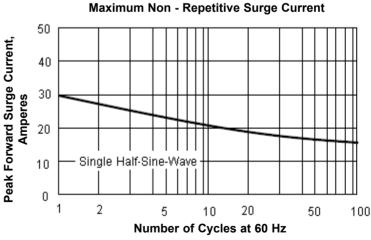
Characteristics	Symbol	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1,000	
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1,000	
Maximum Average Forward Rectified Current at T <sub>A</sub> = 40°C	I <sub>(AV)</sub>	1							- A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave	I <sub>FSM</sub>	30							
Maximum Forward Voltage at 1 A dc	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at $T_J = 25^{\circ}$ C at Rated DC Blocking Voltage at $T_J = 125^{\circ}$ C	I <sub>R</sub>	10 500							μA
I <sup>2</sup> t Rating for Fusing (t < 8.3 ms)	I <sup>2</sup> t	10.4							A <sup>2</sup> s
Typical Junction Capacitance Per Element (Note 1)	CJ		25						
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$		40						
Operating Temperature Range	TJ		-55 to +150						
Storage Temperature Range	T <sub>STG</sub>		-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**





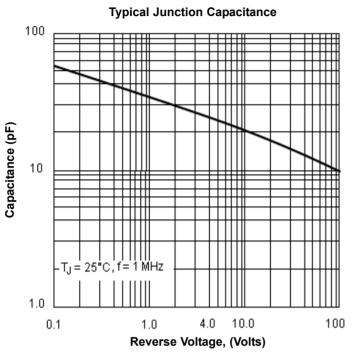
www.element14.com www.farnell.com www.newark.com

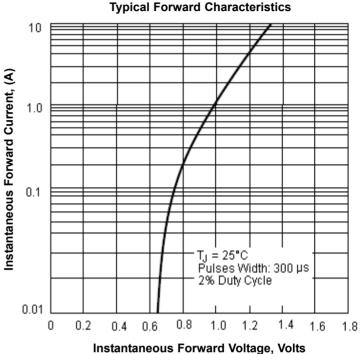


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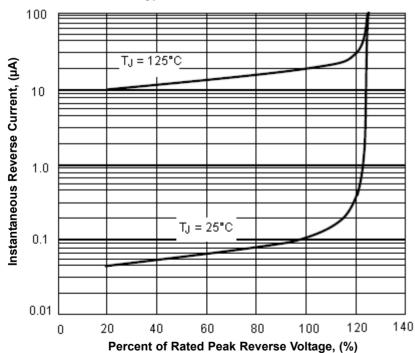


## **Ratings and Characteristics Curves**





#### **Typical Reverse Characteristics**



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