

Bridge Rectifier

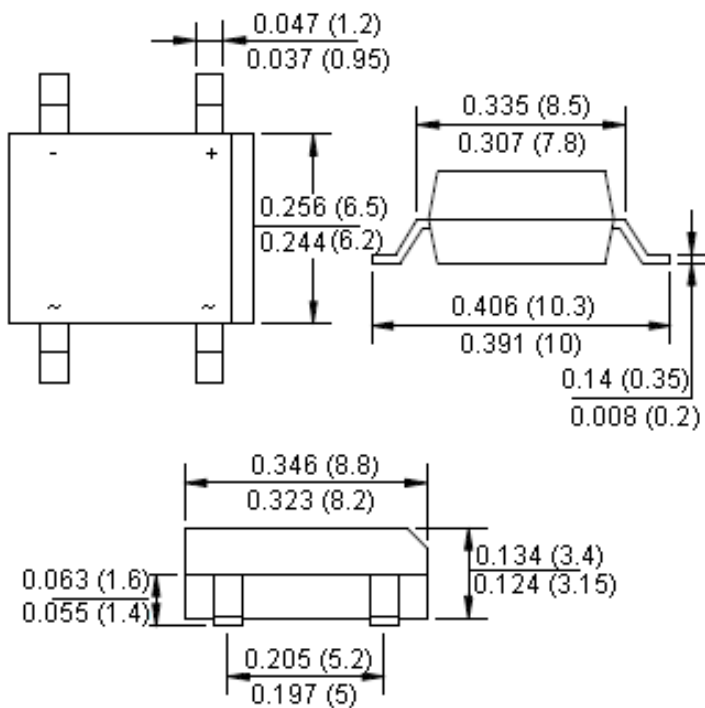


Features:

- 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 - 100 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.

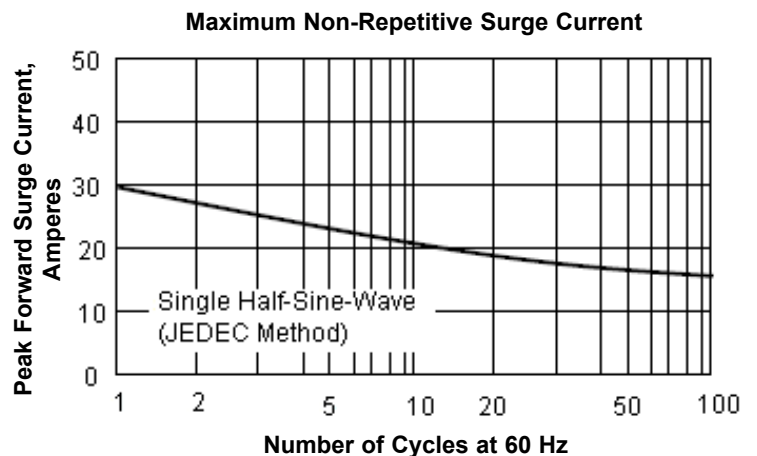
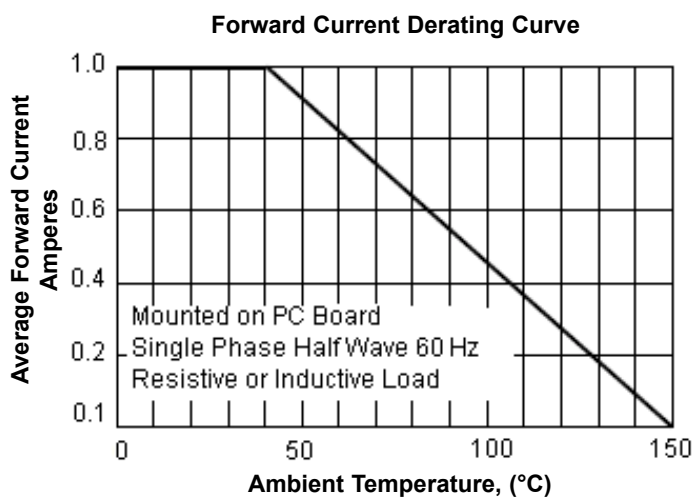
For capacitive load, derate current by 20%.

Characteristics	Symbol	DB102S	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	
Maximum DC Blocking Voltage	V_{DC}	100	
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	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	$^\circ\text{C/W}$
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 0.5×0.5 " (13×13 mm) copper pads.

Ratings and Characteristics Curves

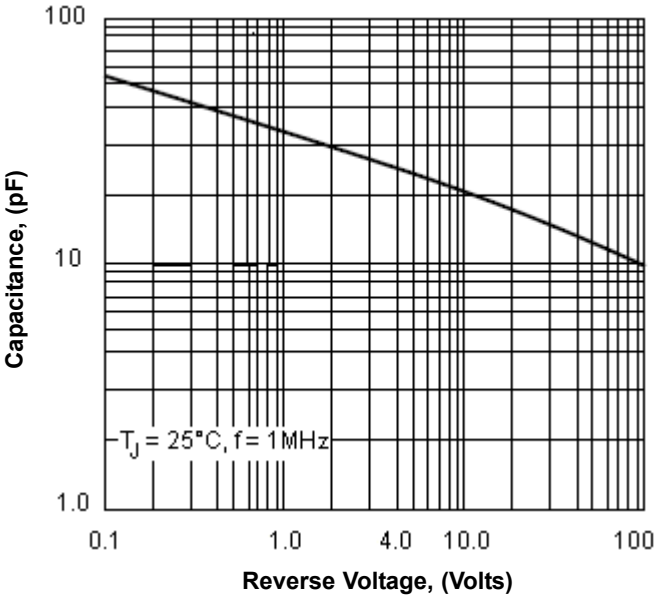


Bridge Rectifier

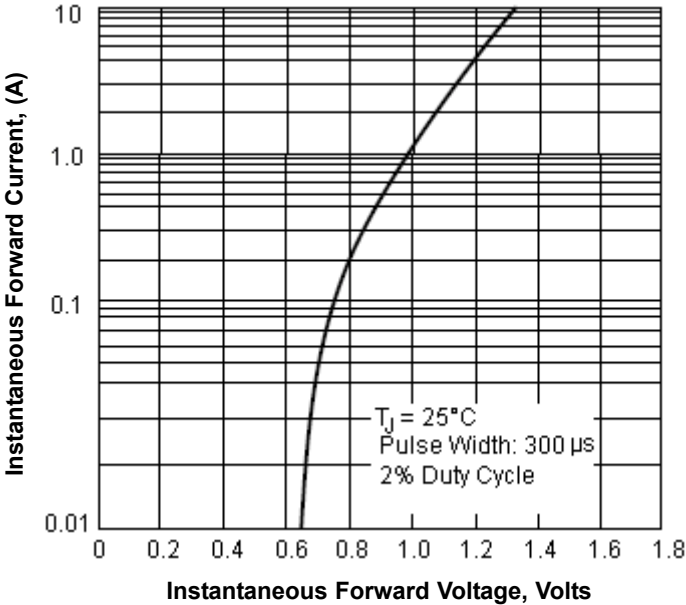


Ratings and Characteristics Curves

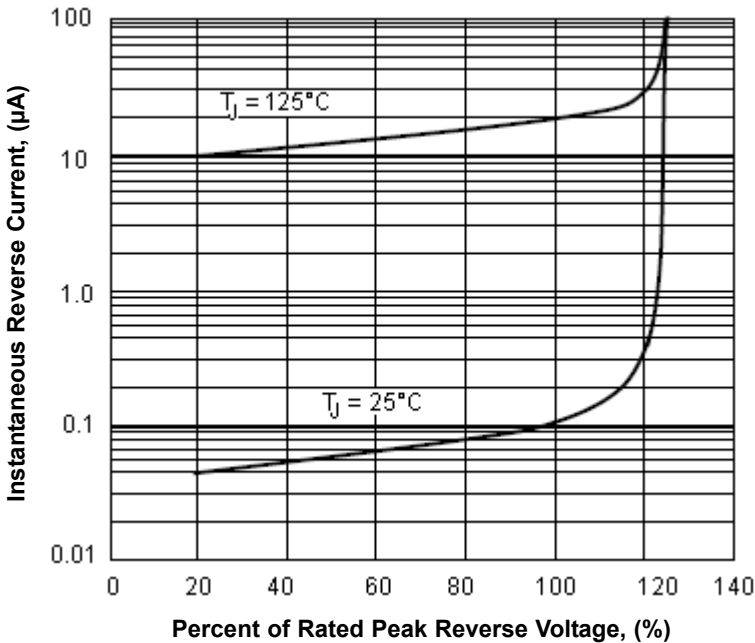
Typical Junction Capacitance



Typical Forward Characteristics



Typical Reverse Characteristics



Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2011.

