

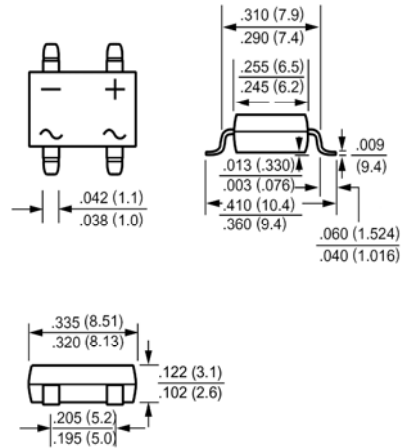
REVERSE VOLTAGE: 50 to 1000 VOLTS
FORWARD CURRENT: 1.0 AMPERE

Mechanical Data

- Case: Molded plastic, DB-S
- Epoxy: UL 94V-O rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- Mounting position: Any
- Weight: 0.02ounce, 0.4gram

Product Features

- Plastic material has Underwriters Laboratory
- Flammability Classification 94V-0
- High surge overload rating of 50 Amperes peak
- Ideal for printed circuit board
- Glass passivated chip junction



Package Dimensions in inches (mm)

Absolute Maximum Ratings

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

	Symbols	DB101S	DB102S	DB103S	DB104S	DB105S	DB106S	DB107S	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current at $T_A=40^\circ\text{C}$	$I_{(AV)}$	1.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50							Amp
Maximum Forward Voltage at 1.0A DC and 25	V_F	1.1							Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$	I_R	5.0							uAmp
at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$		500							
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							$^\circ\text{C}$

Notes:

- 1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- 2- Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads.

Ratings and Characteristic Curves

Fig. 1 - Derating Curve Output Rectified Current

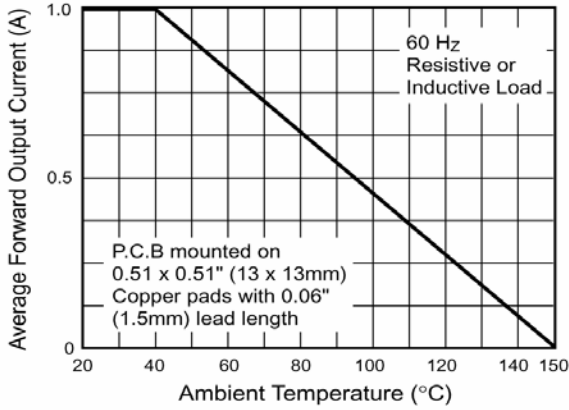


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

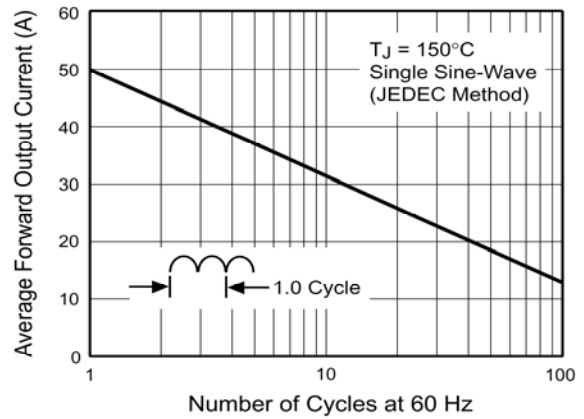


Fig. 3 - Typical Forward Characteristics Per Leg

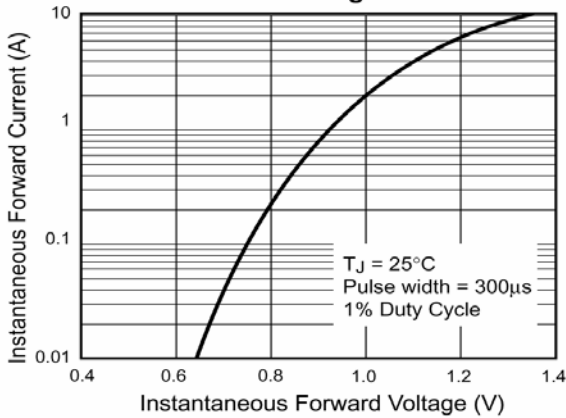


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

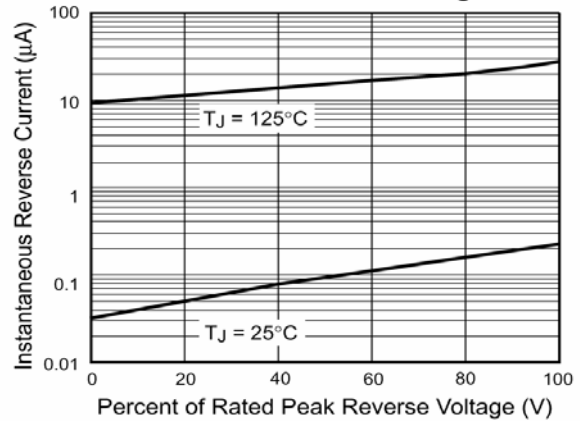


Fig. 5 - Typical Junction Capacitance Per Leg

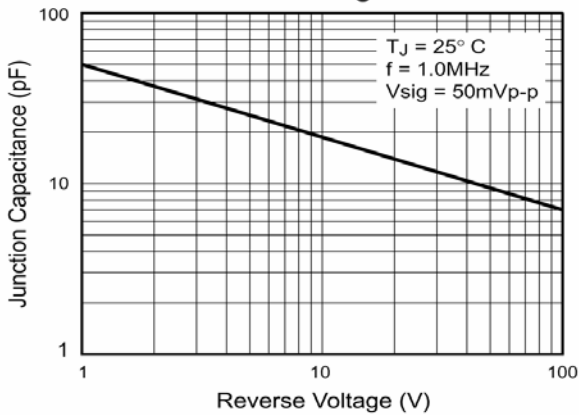
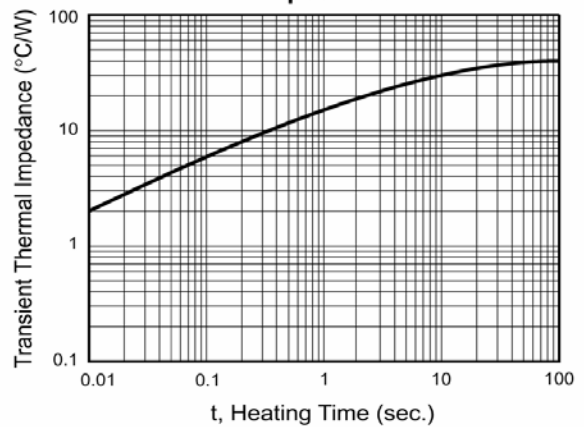


Fig. 6 - Typical Transient Thermal Impedance



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