

DB101S-DB107S

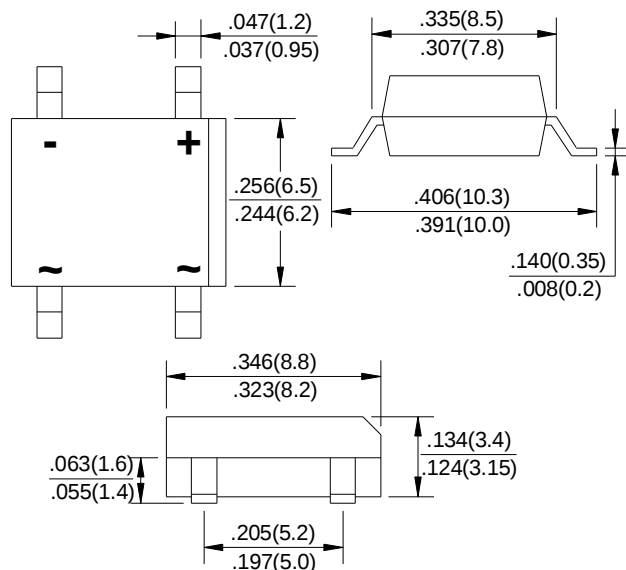
1.0A SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIER

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

MECHANICAL DATA

- ✧ Polarity: As marked on Body
- ✧ Weight: 0.02 ounces, 0.38 gram
- ✧ Mounting position: Any



DBS

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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 $T_A=40^\circ\text{C}$ (Note 2)	$I_{(AV)}$	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°C	V_F	1.1							Volts
Maximum Reverse Current at $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=125^\circ\text{C}$	I_R	5.0 500							uAmp
Typical Junction Capacitance (Note 1)	C_J	25							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							°C/W
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15							°C/W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150							°C

NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Units 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

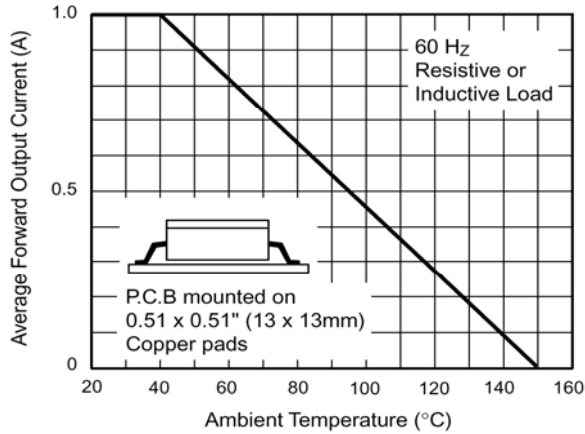


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

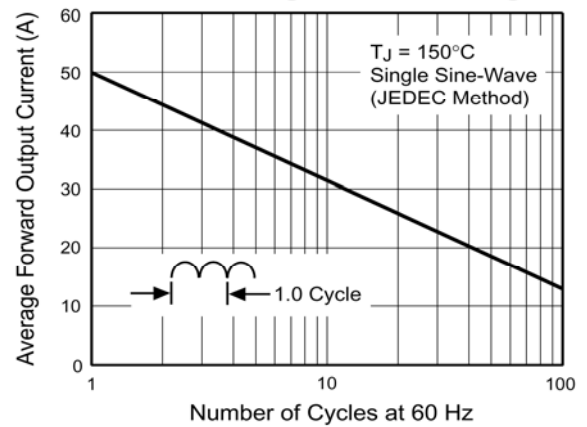


Fig. 3 - Typical Forward Characteristics Per Leg

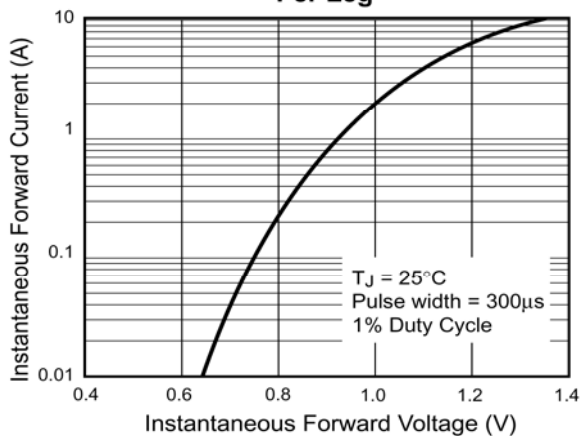


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

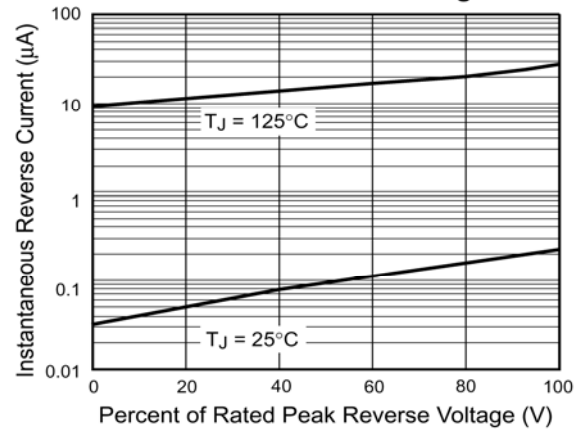


Fig. 5 - Typical Junction Capacitance Per Leg

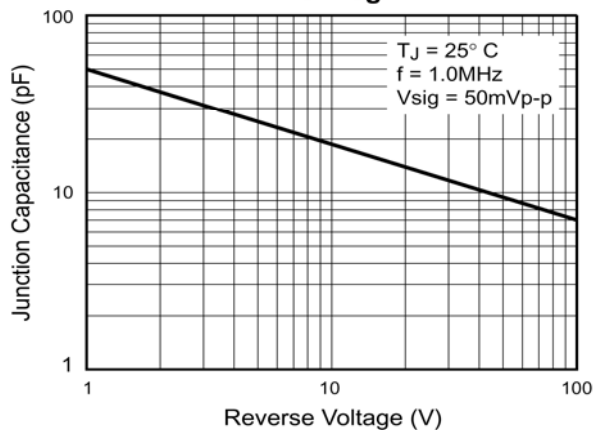


Fig. 6 - Typical Transient Thermal Impedance

