PECLERS ®

DB101 THRU DB107

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

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

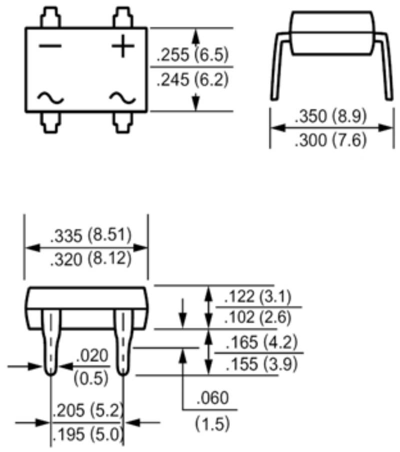
FEATURES

- 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

Case: Molded plastic, DB
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

DB



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

	Symbols	*DB101*	*DB102*	*DB103*	*DB104*	*DB105*	*DB106*	*DB107*	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℃	$I_{(AV)}$	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 Rated DC Blocking Voltage at T_A=25℃ / T_A=125℃	I_R	5.0 / 500							**uAmp**
Typical Junction Capacitance (Note 1)	C_J	25							**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							**℃/W**
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	15							**℃/W**
Operating and Storage Temperature Range	T_J, Tstg	-55 to +150							℃

NOTES:

1- Measured at 1 MH_Z 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

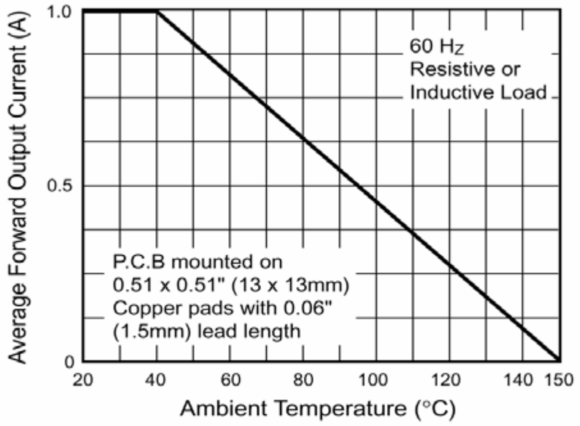


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

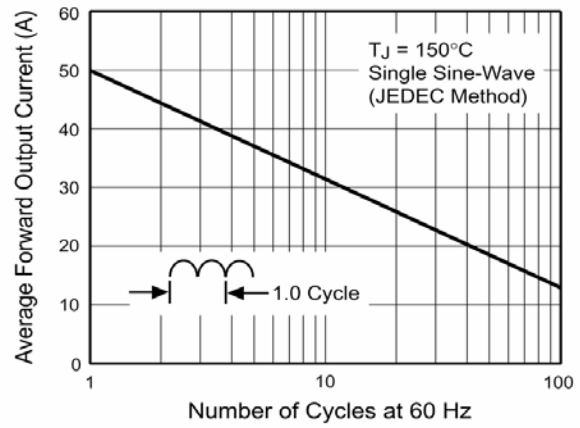


Fig. 3 - Typical Forward Characteristics Per Leg

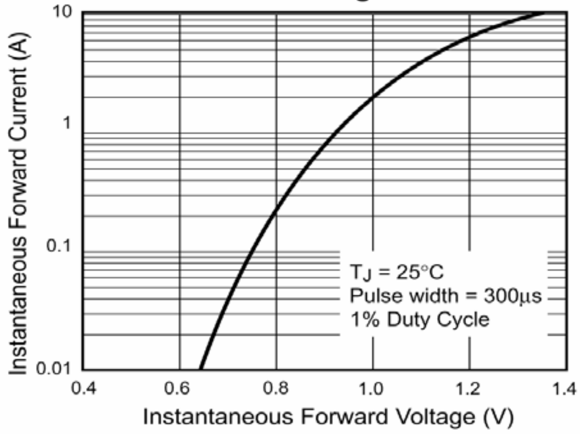


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

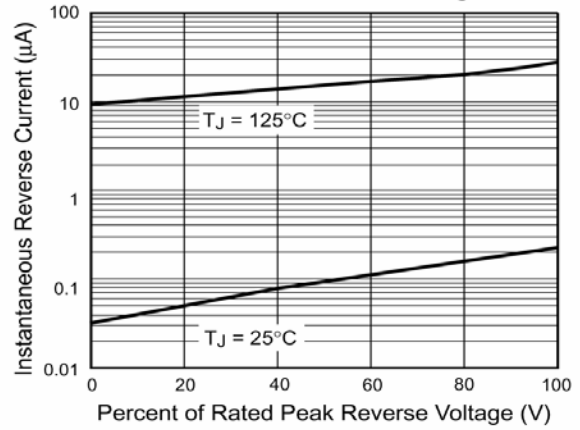


Fig. 5 - Typical Junction Capacitance Per Leg

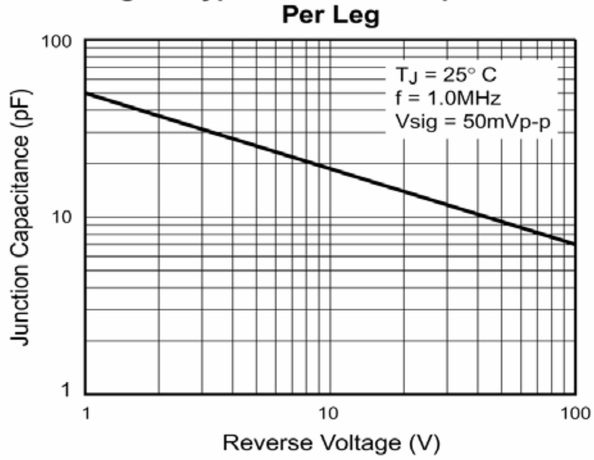


Fig. 6 - Typical Transient Thermal Impedance