

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

FEATURES

- * Good for automation insertion
- * Surge overload rating - 30 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 1.0 gram

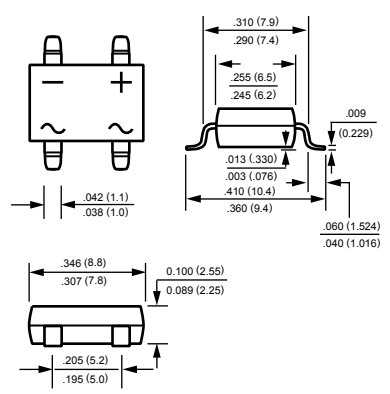
MECHANICAL DATA

- * Epoxy: Device has UL flammability classification 94V-0

NEW RELEASE



DB-LS



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings 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%.

MAXIMUM RATINGS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

RATINGS	SYMBOL	DB101LS	DB102LS	DB103LS	DB104LS	DB105LS	DB106LS	DB107LS	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input 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 Output Current at $T_A = 40^\circ\text{C}$	I_O	1.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							Amps
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	40							°C/W
	$R_{\theta JL}$	15							
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (At $T_A = 25^\circ\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	DB101LS	DB102LS	DB103LS	DB104LS	DB105LS	DB106LS	DB107LS	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@ $T_A = 25^\circ\text{C}$	5.0							uAmps
	@ $T_A = 125^\circ\text{C}$	0.5							

Note: 1. "Fully ROHS compliant", "100% Sn plating (Pb-free).
2. Thermal Resistance: Mounted on PCB.

RATING AND CHARACTERISTICS CURVES (DB101LS THRU DB107LS)

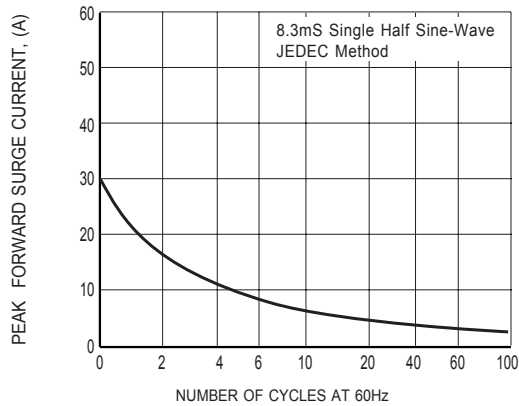


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

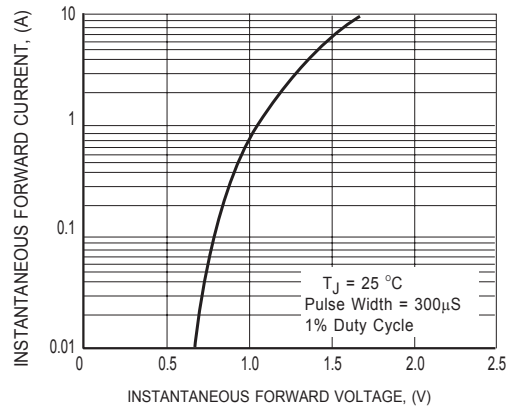


FIG. 2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

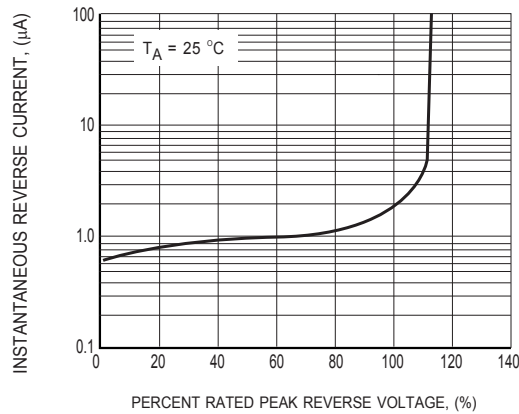


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

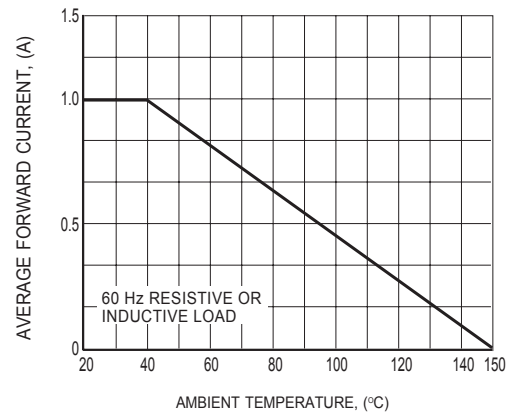
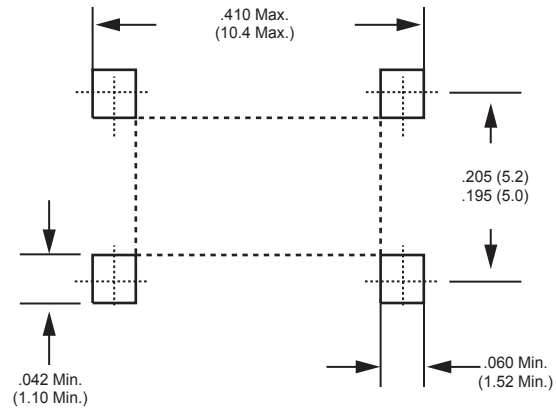


FIG. 4 TYPICAL FORWARD CURRENT DERATING CURVE

Mounting Pad Layout



Dimensions in inches and (millimeters)

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