

**SINGLE-PHASE GLASS PASSIVATED
SILICON BRIDGE RECTIFIER**
VOLTAGE RANGE 50 to 1000 Volts CURRENT 0.5 Ampere

FEATURES

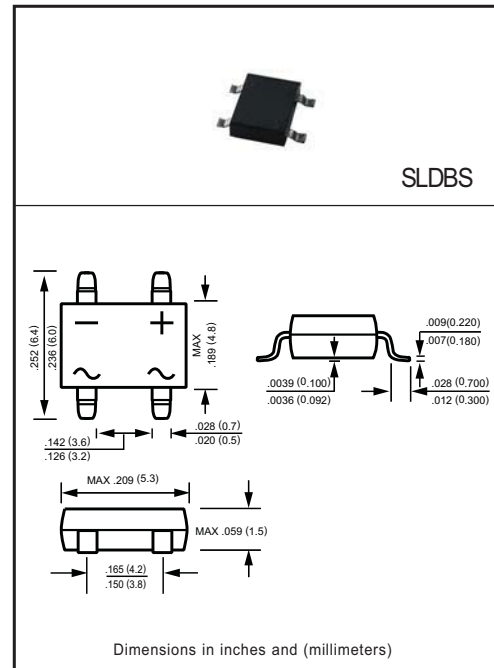
- * Good for automation insertion
- * Surge overload rating - 15 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 0.33 gram

MECHANICAL DATA

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

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	SLDB051S	SLDB052S	SLDB053S	SLDB054S	SLDB055S	SLDB056S	SLDB057S	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°C	I _O	0.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	15							Amps
Typical Current Squarad Time	I ² t	0.93							A ² /Sec
Typical Thermal Resistance (Note 2)	R _{θJA}	70							°C/W
	R _{θJL}	30							
Operating and Storage Temperature Range	T _{J,TSTG}	-55 to + 150							°C

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

CHARACTERISTICS	SYMBOL	SLDB051S	SLDB052S	SLDB053S	SLDB054S	SLDB055S	SLDB056S	SLDB057S	UNITS
Maximum Forward Voltage Drop per Bridge Element at 0.5A DC	V_F	1.0							Volts
Maximum Reverse Current at Rated	I_R	1.0							μAmps
DC Blocking Voltage per element									
		0.05							mAmps

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

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REV:A

RATING AND CHARACTERISTICS CURVES (SLDB051S THRU SLDB057S)

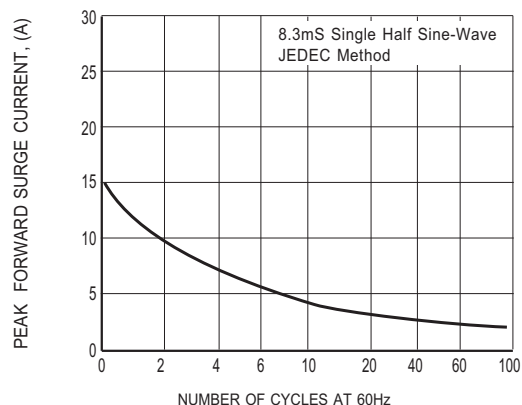


FIG. 1 - MAXIMUM NON-REPETITIVE
FORWARD SURGE CURRENT

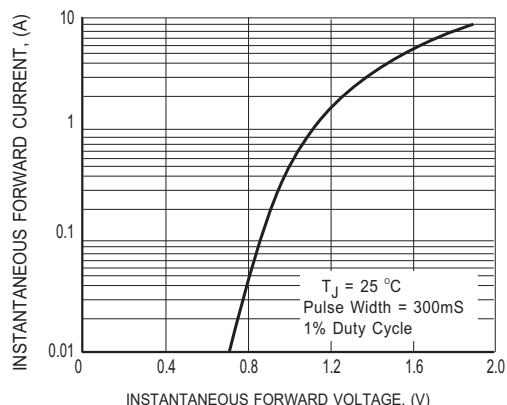


FIG. 2 TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS

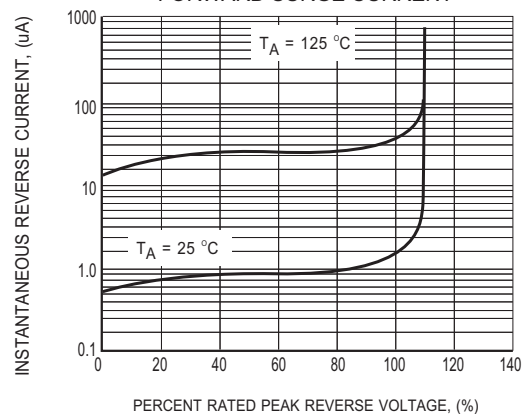


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

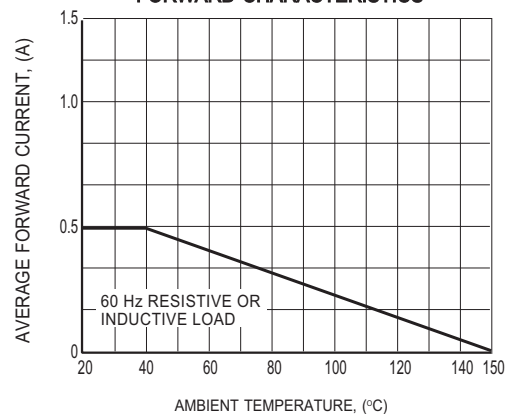
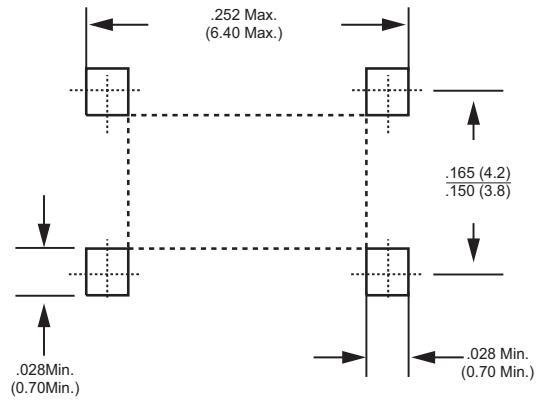


FIG. 4 TYPICAL FORWARD CURRENT
DERATING CURVE

Mounting Pad Layout



Dimensions in inches and (millimeters)

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SLDBS	-T/W	5,000	10,000	---	---	330	360*355*360	80,000	16.18

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