



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

**SLDB101S
THRU
SLDB107S**

FEATURES

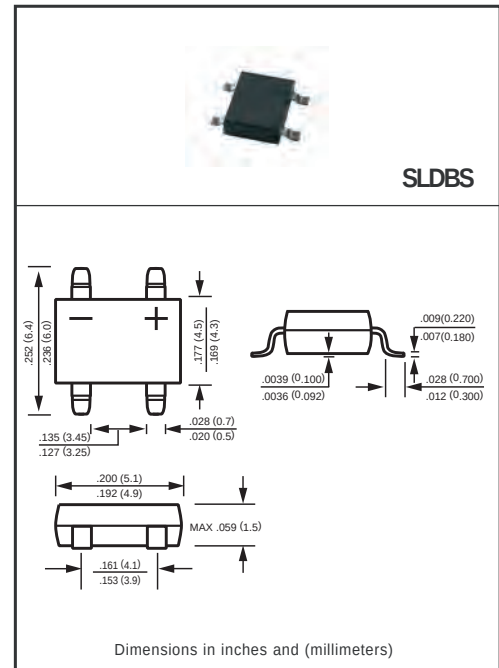
- * Good for automation insertion
- * Surge overload rating - 30 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 0.33 gram

MECHANICAL DATA

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

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.



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

RATINGS	SYMBOL	SLDB101S	SLDB102S	SLDB103S	SLDB104S	SLDB105S	SLDB106S	SLDB107S	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	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 Current Squared Time	i ² t	3.7							A ² /S
Typical Thermal Resistance (Note 2)	R _{θJA}	62.5							°C/W
	R _{θJL}	25							
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	SLDB101S	SLDB102S	SLDB103S	SLDB104S	SLDB105S	SLDB106S	SLDB107S	UNITS
Maximum Forward Voltage Drop per Bridge Element at 1.0A DC	V_F	1.1							Volts
Maximum Reverse Current at Rated	I_R	5.0							μAmps
DC Blocking Voltage per element									
		0.5							mAmps

Note: 1. "Fully RoHS compliant", "100% Sn plating (Pb-free).
2. Thermal Resistance: Mounted on PCB.
3. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

2013-03
REV:B

RATING AND CHARACTERISTICS CURVES (SLDB101S THRU SLDB107S)

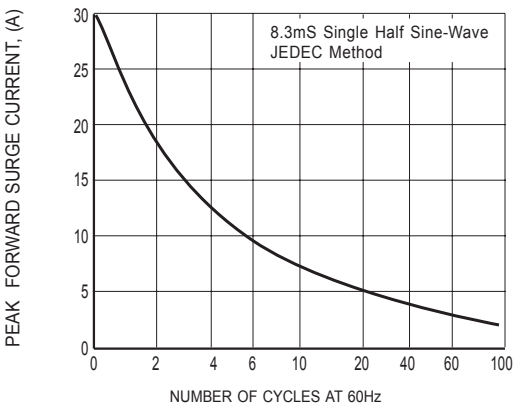


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

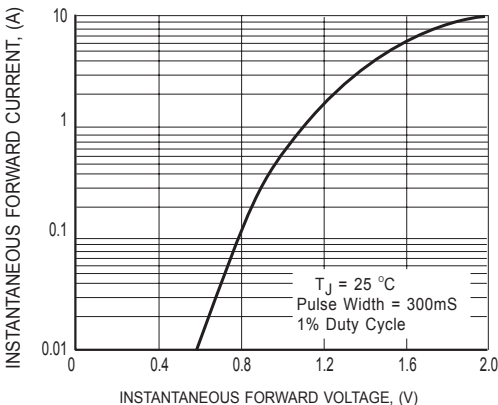


FIG. 2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

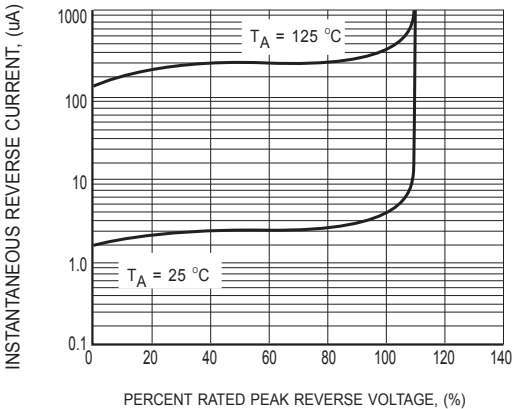


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

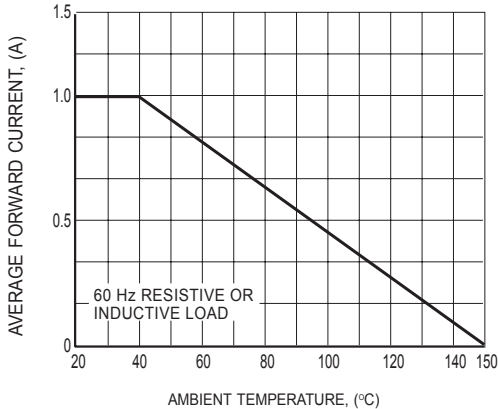
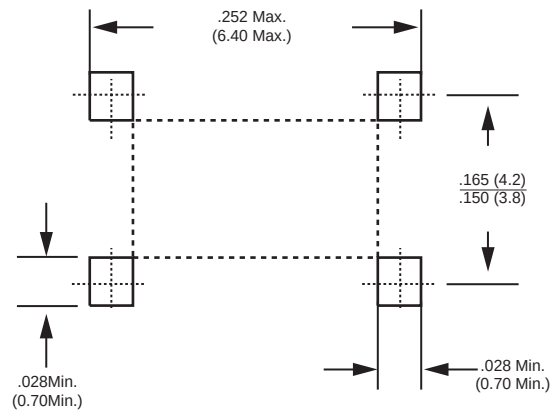


FIG. 4 TYPICAL FORWARD CURRENT DERATING CURVE

Mounting Pad Layout



Dimensions in inches and (millimeters)

REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES-SLDBS

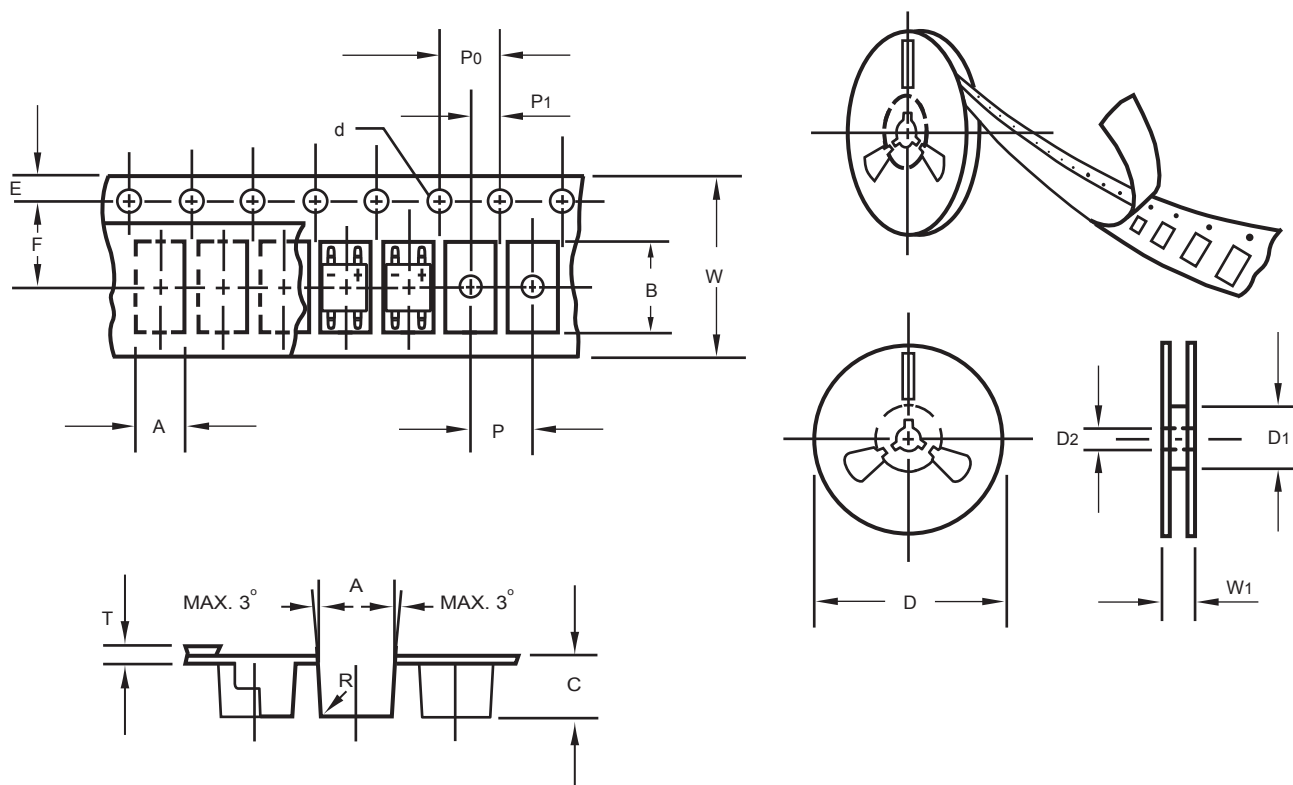
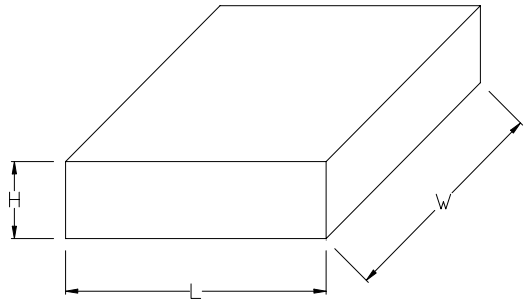


Fig.: Configuration of SLDBS TAPING

ITEM	SYMBOL	SLDBS mm(inch)
Carrier width	A	6.0 ± 0.1 (0.236 $\pm$ 0.004)
Carrier length	B	8.30 ± 0.1 (0.327 $\pm$ 0.004)
Carrier depth	C	2.5 ± 0.1 (0.098 $\pm$ 0.004)
Sprocket hole	d	1.5 ± 0.1 (0.059 $\pm$ 0.004)
Reel outside diameter	D	330 ± 2.0 (13.0 $\pm$ 0.079)
Reel inner diameter	D1	50 Min.
Feed hole diameter	D2	13 ± 0.5 (0.512 $\pm$ 0.020)
Stroket hole position	E	1.5 ± 0.1 (0.059 $\pm$ 0.004)
Punch hole position	F	7.65 ± 0.05 (0.301 $\pm$ 0.002)
Punch hole pitch	P	8.0 ± 0.1 (0.315 $\pm$ 0.004)
Sprocket hole pitch	P0	4.0 ± 0.1 (0.157 $\pm$ 0.004)
Embossment center	P1	4.0 ± 0.1 (0.157 $\pm$ 0.004)
Totall tape thickness	T	0.6 Max.
Tape width	W	16.0 ± 0.2 (0.630 $\pm$ 0.008)
Reel width	W1	24.0 ± 2.0 (0.945 $\pm$ 0.079)

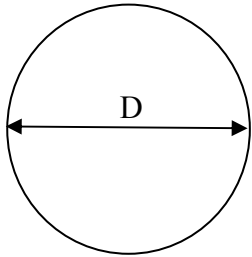
Note: 1.Devices are packed in accordance with EIA standard RS-481-A and specification given above.
2.13 inch (5000 ct.) diameter reels.

1. BOX



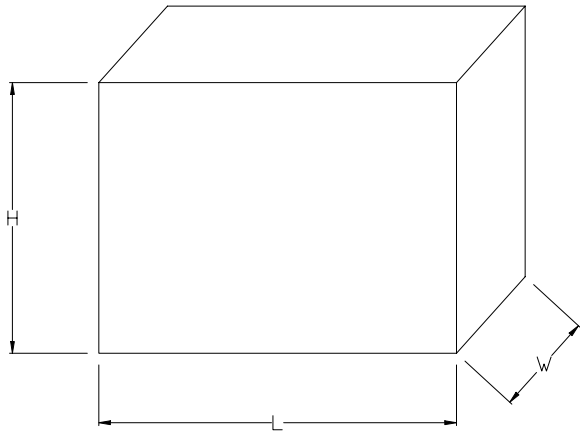
Packing Code	L (mm)	W (mm)	H (mm)
-T	450	140	84

2. REEL



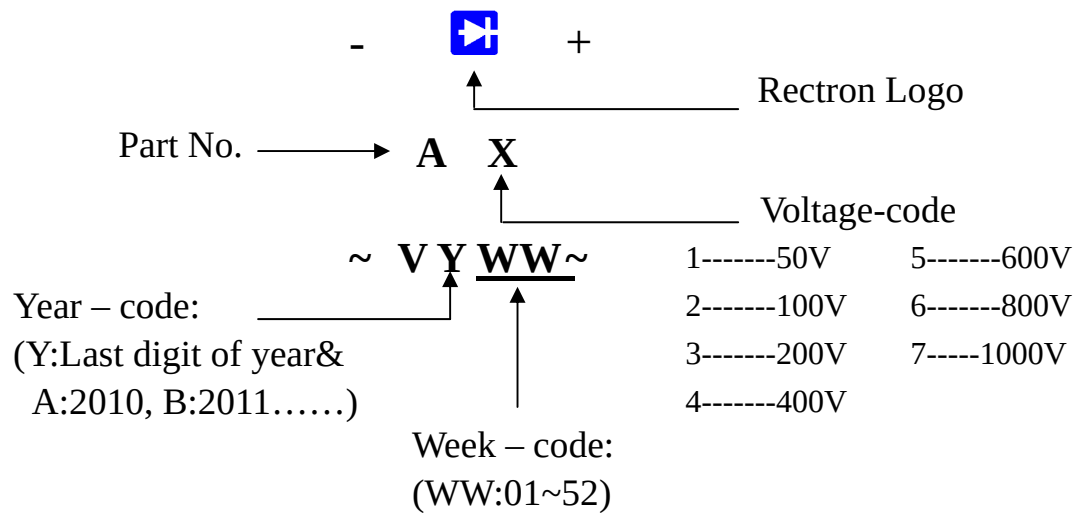
Packing Code	D (mm)
-T	330

3. CARTON



Packing Code	L (mm)	W (mm)	H (mm)
-T	355	360	185

Marking Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	COMPONENT SPACE(mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON
SLDBS	-T	5,000	---	---	330	355*360*185	40,000

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