

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

**FEATURES**

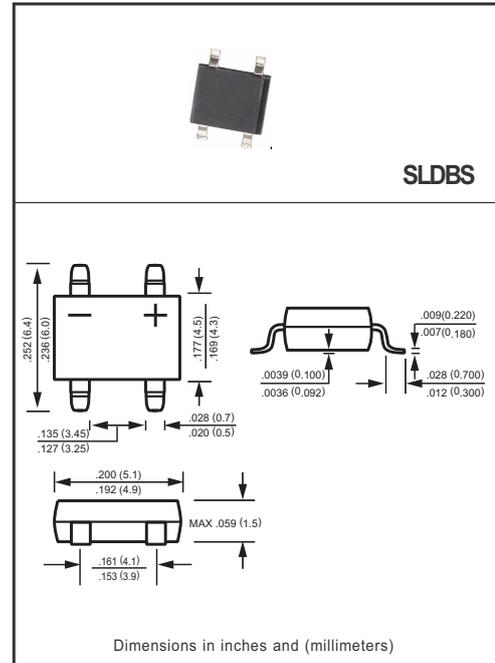
- \* Good for automation insertion
- \* Surge overload rating - 30 amperes peak
- \* Ideal for printed circuit board
- \* Reliable low cost construction utilizing molded
- \* Glass passivated device
- \* Polarity symbols molded on body

**MECHANICAL DATA**

- \* Epoxy: Device has UL flammability classification 94V-0
- \* Halogen-free
- \* Mounting position: Any
- \* Weight: 0.33 gram

**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 $T_L = 105^\circ\text{C}$	$I_O$	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 Current Squared Time	$I^2t$	3.7							$\text{A}^2\text{S}$
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	62.5							$^\circ\text{C/W}$
	$R_{\theta JL}$	25							
Operating and Storage Temperature Range	$T_J, T_{STG}$	-55 to + 150							$^\circ\text{C}$

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	$V_F$	1.0							Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@ $T_A = 25^\circ\text{C}$	1.0							uAmps
	@ $T_A = 150^\circ\text{C}$	1.0							

Note: 1.\* ROHS compliant\*.

2. Thermal Resistance: Mounted on PCB.

2020-04  
REV:E

# RATING AND CHARACTERISTICS CURVES ( SLDB101S THRU SLDB107S )

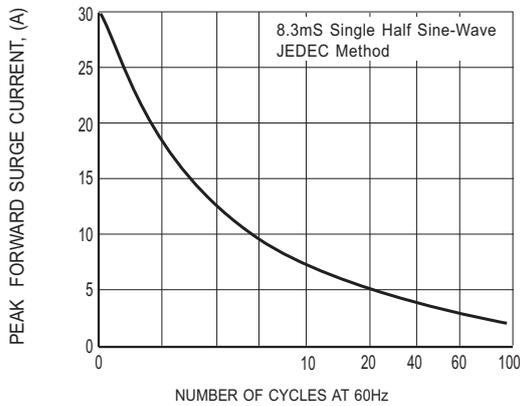


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

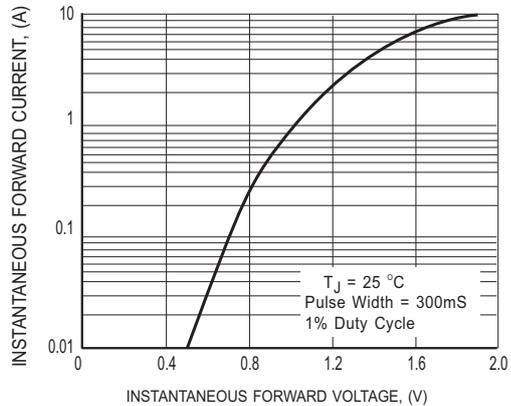


FIG. 2 - MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

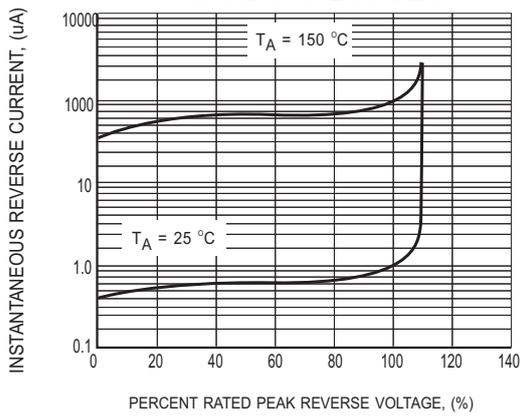


FIG. 3 - MAXIMUM REVERSE CHARACTERISTICS

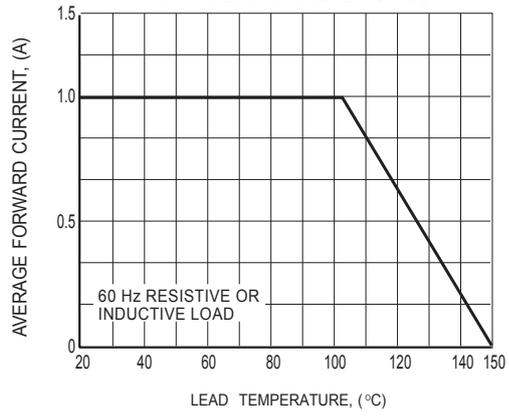
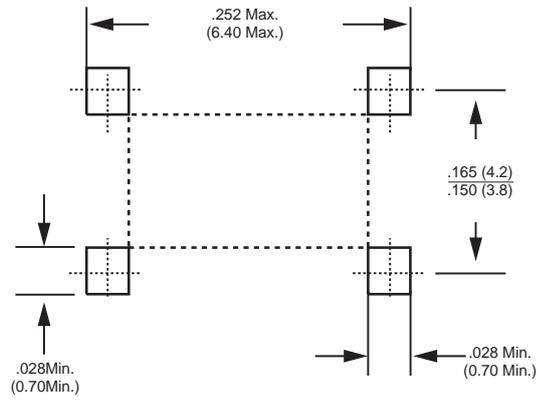


FIG. 4 - TYPICAL FORWARD CURRENT DERATING CURVE

## Mounting Pad Layout



Dimensions in inches and (millimeters)

# REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES-SLDBS

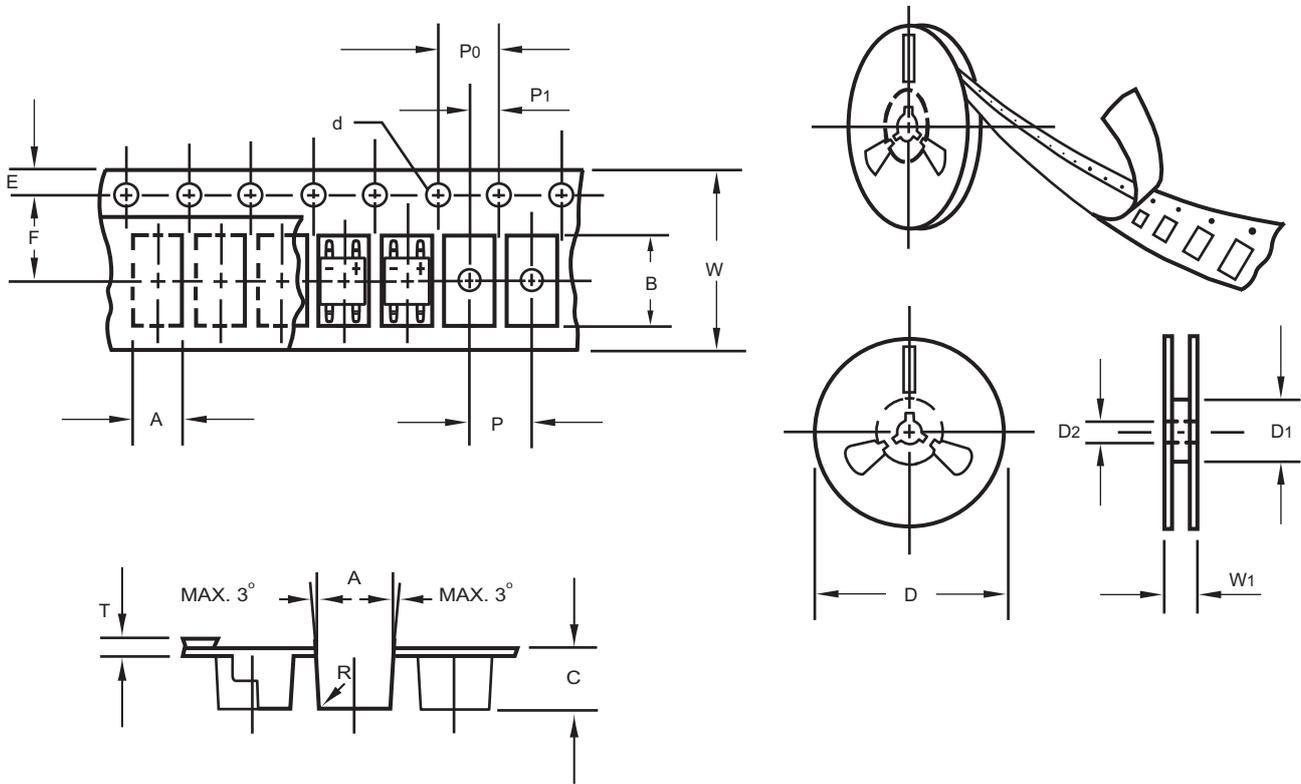
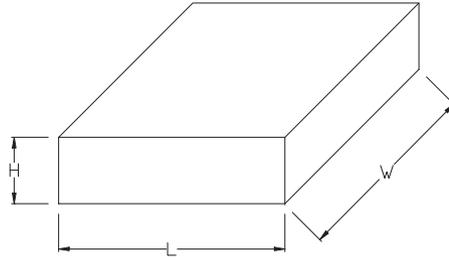


Fig.: Configuration of SLDBS TAPING

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

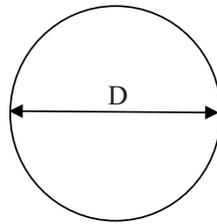
Note: 1.Devices are packed in accordance with EIA standard RS-481-A and specification given above.  
2.13 inch ( 5000 ct. ) diameter reels.

1. BOX



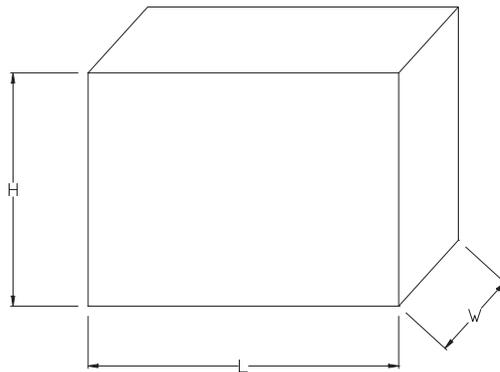
Packing Code	L (mm)	W (mm)	H (mm)
-T/W	338	338	40

2. REEL



Packing Code	D (mm)
-T/W	330

3. CARTON



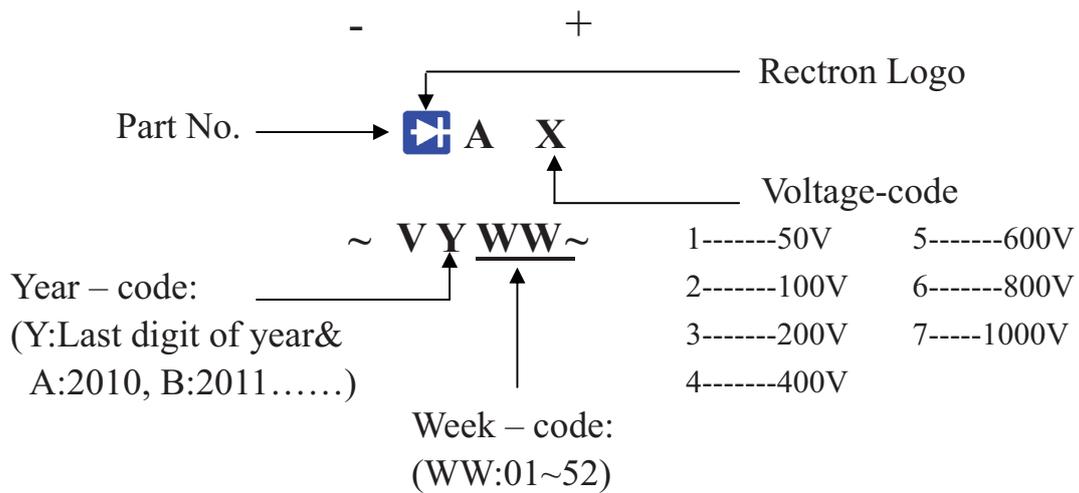
Packing Code	L (mm)	W (mm)	H (mm)
-T/W	360	355	360

## 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

## Marking Description



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