



### SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

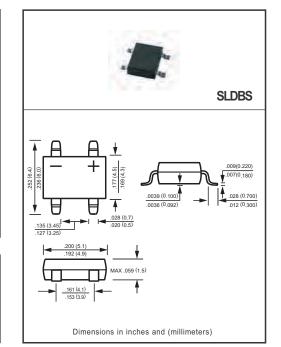
VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

#### 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: 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<sub>A</sub> = 25°C unless otherwise noted)

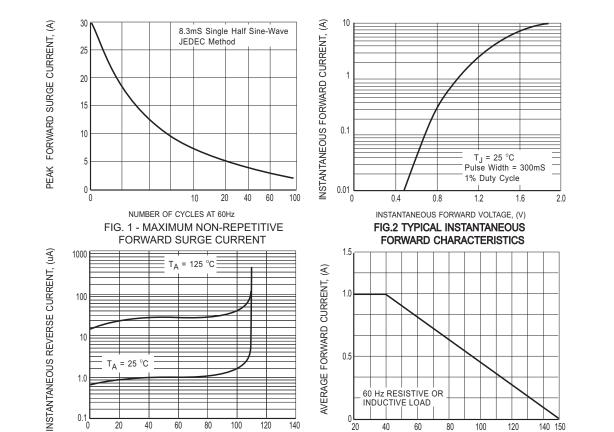
RATINGS		SLDB101S	SLDB102S	SLDB103S	SLDB104S	SLDB105S	SLDB106S	SLDB107S	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage		35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		50	100	200	400	600	800	1000	Volts
Maximum Average Forward Output Current at T <sub>A</sub> = 40°C		1.0							
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	30							Amps
Typical Current Squared Time	l <sup>2</sup> t	3.7							A <sup>2</sup> /S
Turing Thermal Devictory (Math. 0)		62.5							
Typical Thermal Resistance (Note 2)	R <sub>OJL</sub>	25							•C/W
Operating and Storage Temperature Range	TJ,TSTG	-55 to + 150							٥C

ELECTRICAL CHARACTERISTICS (At T<sub>A</sub> = 25°C unless otherwise noted)

CHARACTERISTICS			SLDB101S	SLDB102S	SLDB103S	SLDB104S	SLDB105S	SLDB106S	SLDB107S	UNITS
Maximum Forward Voltage Drop per Bridge			1.0							Volts
Element at 1.0A DC									VOILS	
Maximum Reverse Current at Rated	@T <sub>A</sub> = 25°C	I <sub>R</sub>			1.0					uAmps
DC Blocking Voltage per element	@T <sub>A</sub> = 125°C	אי	50						uAmps	

Note: 1."Fully ROHS compliant","100% Sn plating(Pb-free).

2. Thermal Resistance: Mounted on PCB.



 $T_A = 25$  °C

20

40

60

PERCENT RATED PEAK REVERSE VOLTAGE, (%)

FIG.3 TYPICAL REVERSE CHARACTERISTICS

80

100

120

140

1.0

0.1 **l** 

0.5

0L 20

60 Hz RESISTIVE OR INDUCTIVE LOAD

60

80

AMBIENT TEMPERATURE, (°C)

FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

100

120

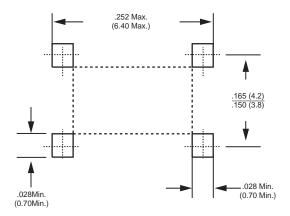
140 150

40

### RATING AND CHARACTERISTICS CURVES (SLDB101S THRU SLDB107S)



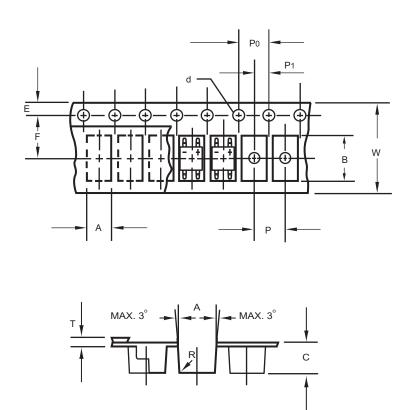
## Mounting Pad Layout

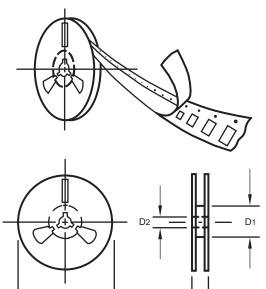


Dimensions in inches and (millimeters)



## REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES-SLDBS





D

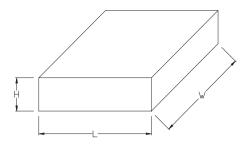
W1

Fig.: Configuration of SLDBS TAPING

ITEM	SYMBOL	SLDBS mm(inch)
Carrier width	A	6.0 ± 0.1 (0.236 ± 0.004)
Carrier length	В	8.30 ± 0.1 (0.327 ± 0.004)
Carrier depth	С	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	Po	4.0 ± 0.1 (0.157 ± 0.004)
Embossment center	P1	4.0 ± 0.1 (0.157 ± 0.004)
Totall tape thickness	Т	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)

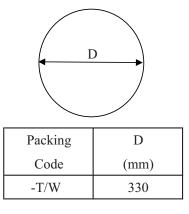
Note: 1.Devices are packed in accordance with EIA standard RS-481-A and specification given above. 2.13 inch ( 5000 ct. ) diameter reels.

1. BOX

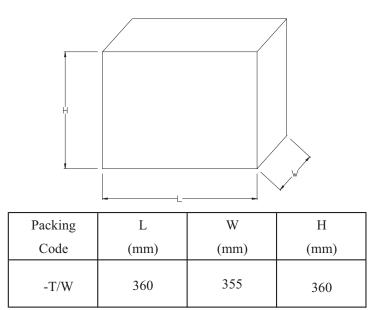


Packing	L	W	Н		
Code	(mm)	(mm)	(mm)		
-T/W	338	338	40		

#### 2. REEL



#### 3. CARTON

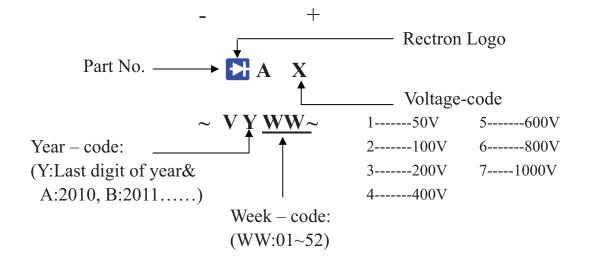


# PACKAGING OF DIODE AND BRIDGE RECTIFIERS

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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