THE DATASHEET OF

SLDB104S

RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

SLDB101S THRU SLDB107S

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 1.0 Ampere

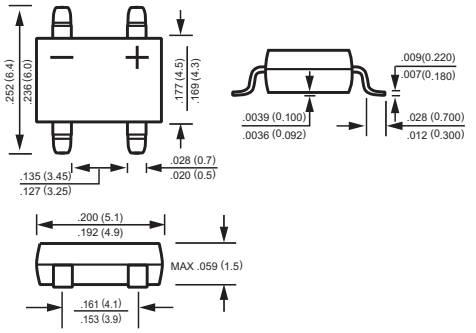
FEATURES

* 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-O
* Halogen-free
* Mounting position: Any
* Weight: 0.33 gram

SLDBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

MAXIMUM RATINGS (At T_A = 25°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°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(t=8.3 ms)	I^2t	3.735							A^2/S
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	62.5							°C/W
	$R_{\theta JL}$	25							
	$R_{\theta JC}$	8							
Typical Junction Capacitance (Note 3)	C_J	12							pF
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to + 150							°C

ELECTRICAL CHARACTERISTICS (At T_A = 25°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°C	I_R	1.0							uAmps
	@T_A = 125°C		0.05							mAmps

Note: 1." RoHS compliant".
2. Thermal Resistance: Mounted on PCB.
3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2023-11
REV:G

RATING AND CHARACTERISTICS CURVES (SLDB101S THRU SLDB107S)

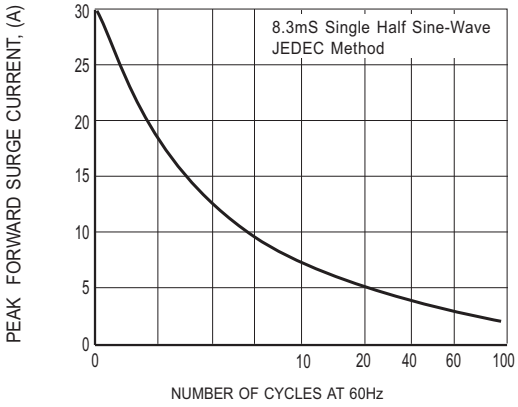


FIG. 1 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

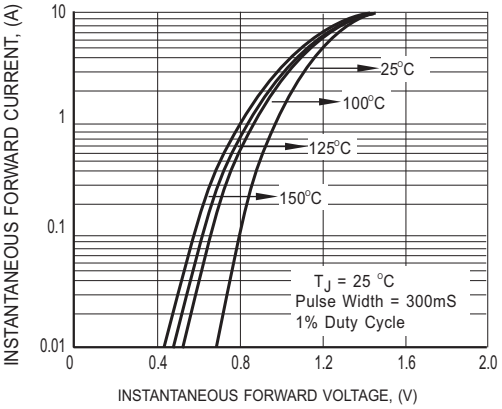


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

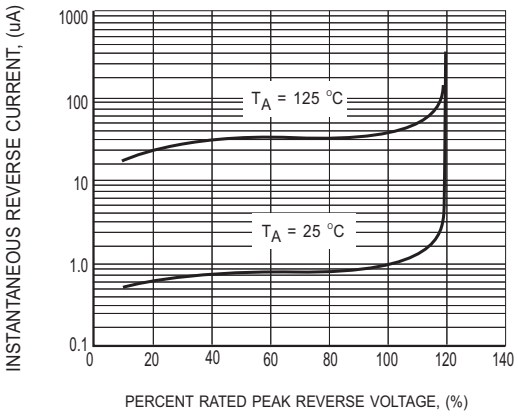


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

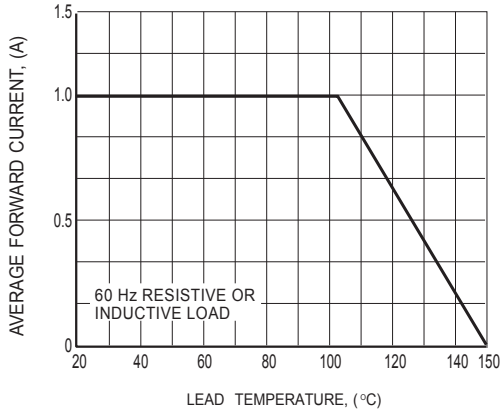
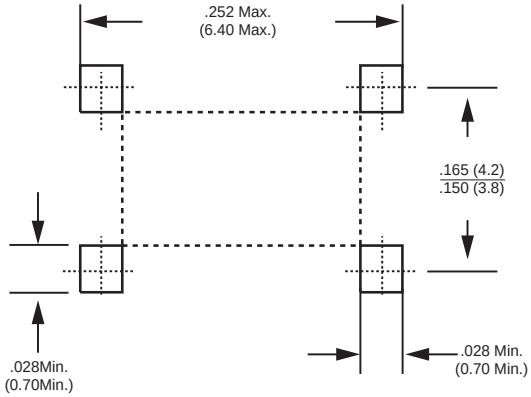


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

Mounting Pad Layout



Dimensions in inches and (millimeters)

REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES-SLDBS

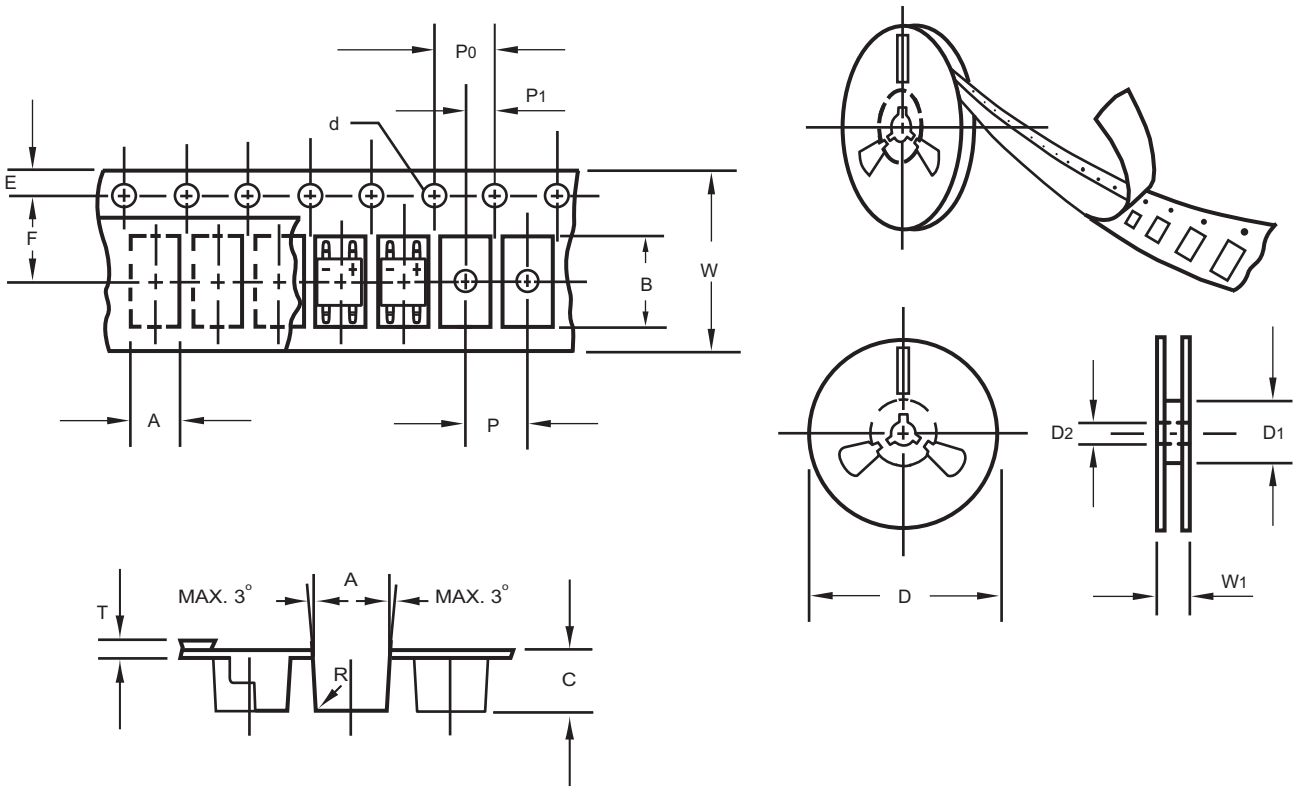
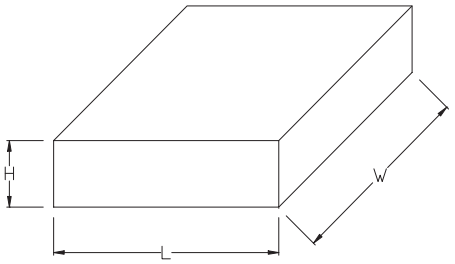


Fig.: Configuration of SLDBS TAPING

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	D_1	50 Min.
Feed hole diameter	D_2	13 ± 0.5 (0.512 ± 0.020)
Stroket 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	P_0	4.0 ± 0.1 (0.157 ± 0.004)
Embossment center	P_1	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	W_1	24.0 ± 2.0 (0.945 ± 0.079)

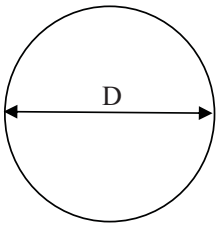
Note: 1.Devices are packed in accordance with EIA standard RS-481-A and specification given above.
2.13 inch (5000 ct.) diameter reels.

1. BOX



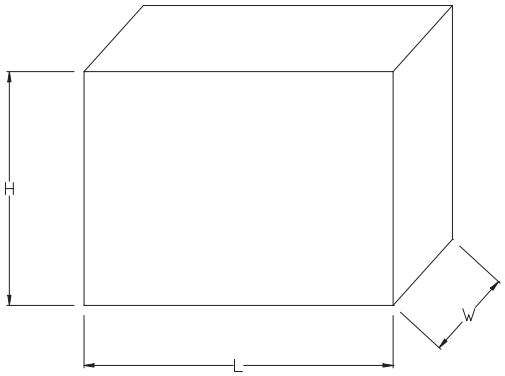
Packing Code	L (mm)	W (mm)	H (mm)
-T/W	338	338	40

2. REEL



Packing Code	D (mm)
-T/W	330

3. CARTON



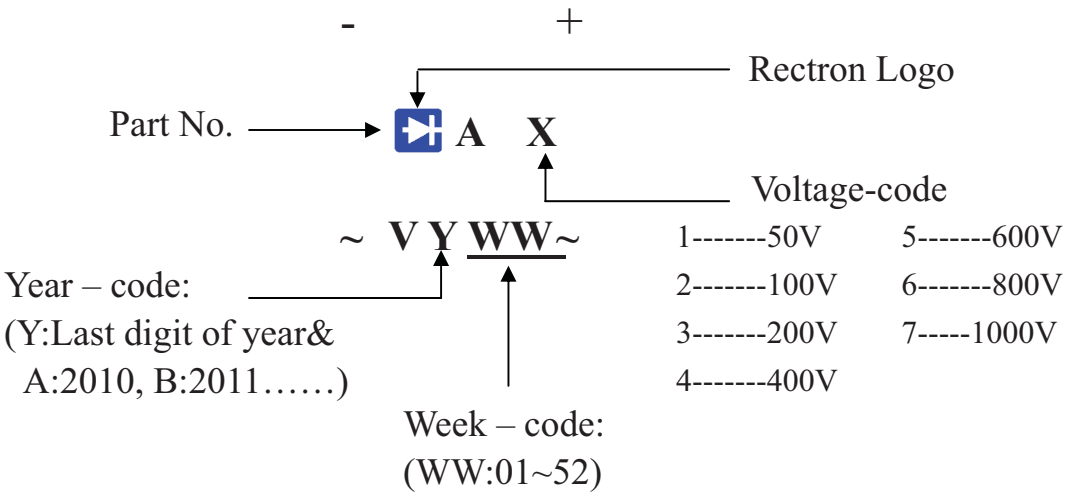
Packing Code	L (mm)	W (mm)	H (mm)
-T/W	360	355	360

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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