RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

SLDB2020S

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 2000 Volts CURRENT 2.0 Ampere

FEATURES

* Good for automation insertion
* Ideal for printed circuit board
* Reliable low cost construction utilizing molded
* Glass passivated device
* Polarity symbols molded on body

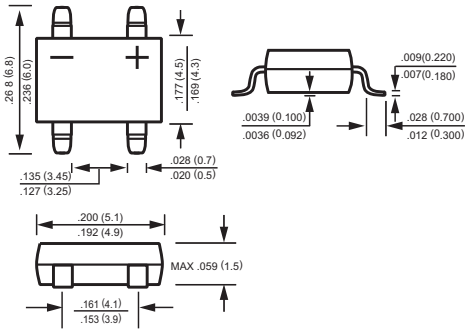
MECHANICAL DATA

* Epoxy: Device has UL flammability classification 94V-O
* Halogen-free
* Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

SLDBS



Dimensions in inches and (millimeters)

MAXIMUM RATINGS (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	SLDB2020S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	2000	Volts
Maximum RMS Bridge Input Voltage	V_{RMS}	1400	Volts
Maximum DC Blocking Voltage	V_{DC}	2000	Volts
Maximum Average Forward Output Current at T_L = 105°C	I_O	2.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	35	Amps
Typical Current Squared Time(t=8.3 ms)	I^2t	5.084	A^2/S
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	85	°C/W
Typical Junction Capacitance (Note 3)	C_J	23	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	SLDB2020S	UNITS
Maximum Forward Voltage Drop per Bridge Element at 2.0A DC		V_F	1.1	Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@T_A = 25°C	I_R	2.0	uAmps
	@T_A = 125°C		0.2	mAmps

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

2026-08
REV:O

RATING AND CHARACTERISTICS CURVES (SLDB2020S)

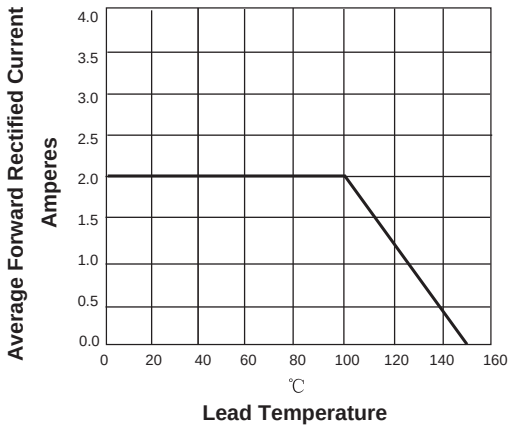


FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

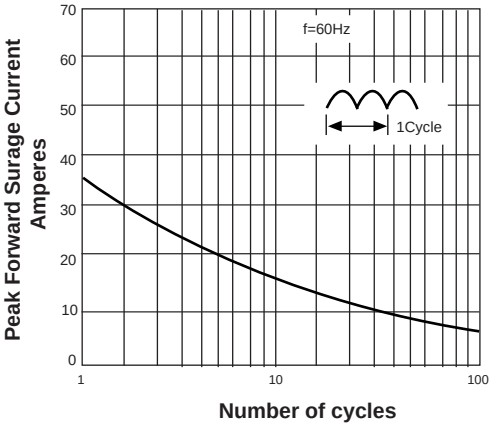


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

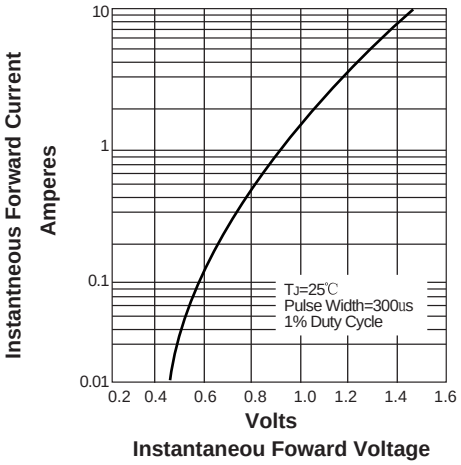


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

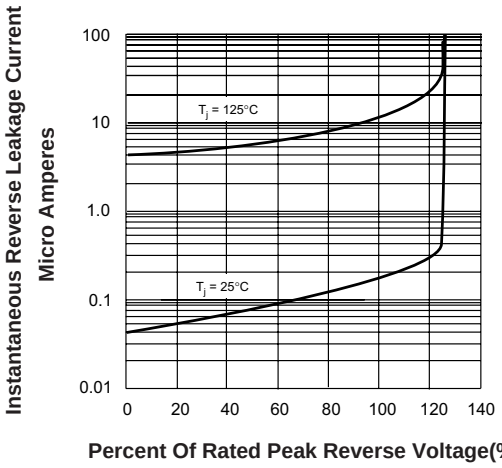
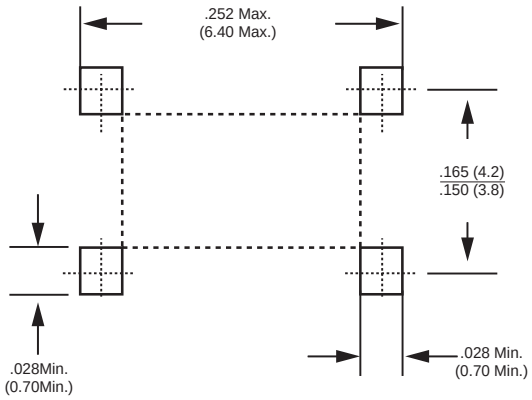


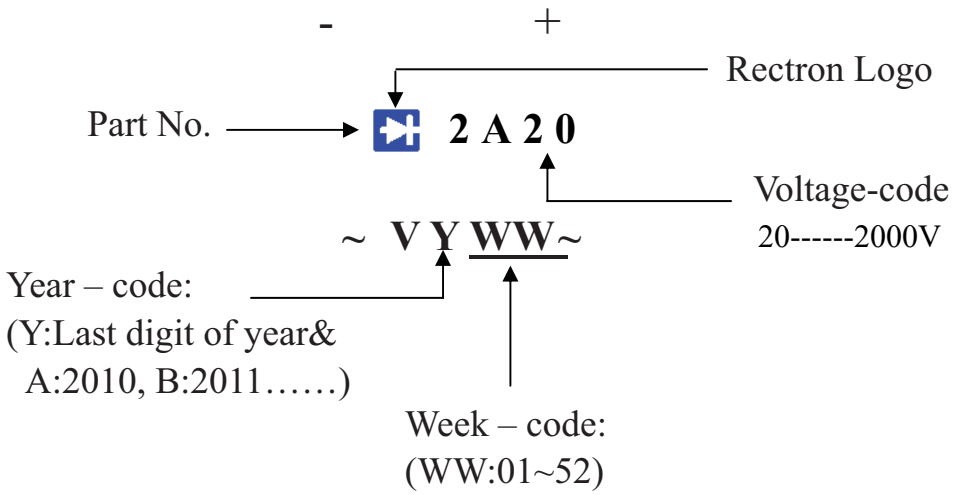
FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

Mounting Pad Layout



Dimensions in inches and (millimeters)

Marking Description



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	-W	5,000	10,000	---	---	330	360*355*360	80,000	16.18

REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES-SLDBS

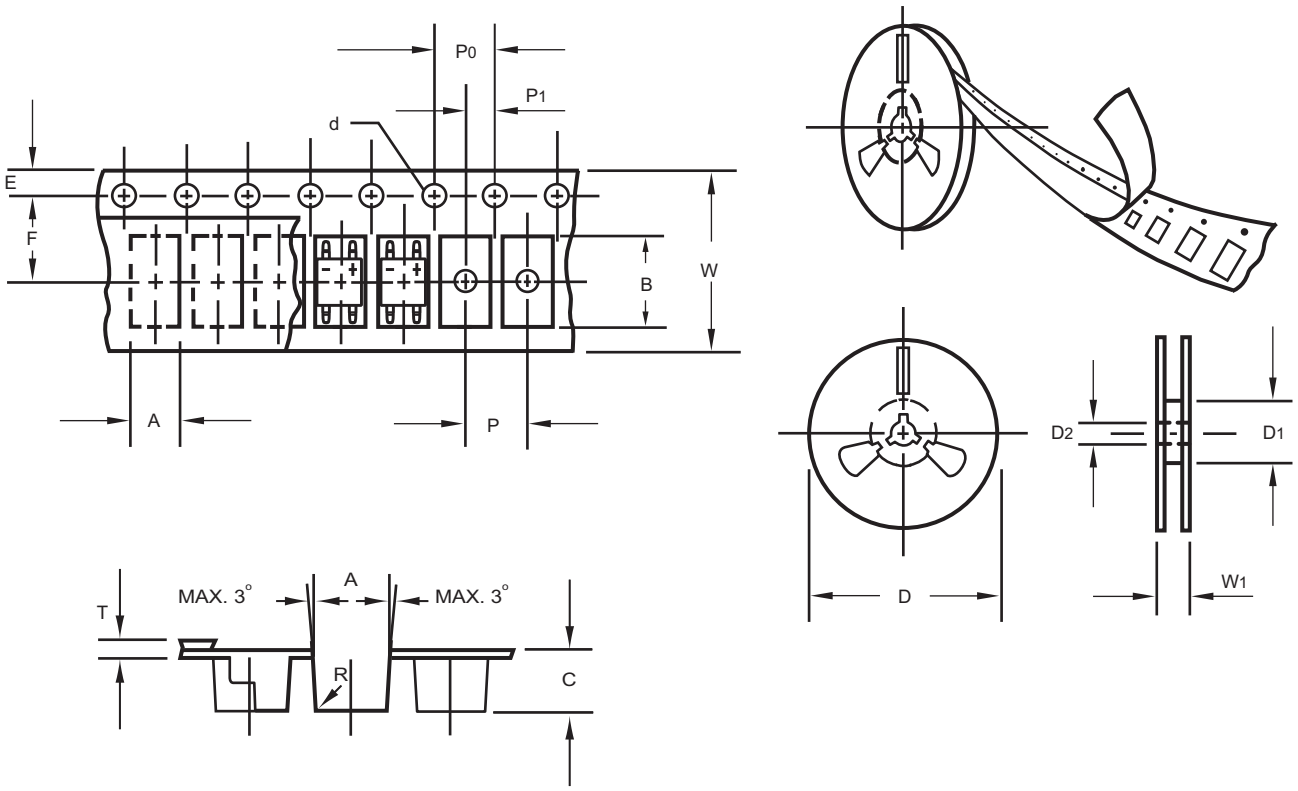


Fig.: Configuration of SLDBS TAPING

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.

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