

SCHOTTKY BARRIER RECTIFIER
VOLTAGE 100 Volts CURRENT 3.0 Ampere

FEATURES

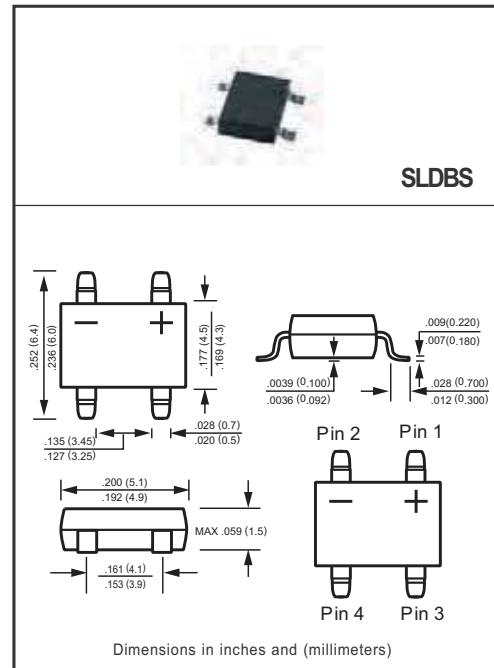
- * Good for automation insertion
- * Surge overload rating - 120 amperes peak
- * Ideal for printed circuit board
- * Reliable low cost construction utilizing molded
- * Glass passivated device
- * Polarity symbols molded on body
- * Mounting position: Any
- * Weight: 0.33 gram

MECHANICAL DATA

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

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	KSLDB3100S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	Volts
Maximum RMS Bridge Input Voltage	V_{RMS}	70	Volts
Maximum DC Blocking Voltage	V_{DC}	100	Volts
Maximum Average Forward Output Current at $T_A = 75^\circ\text{C}$	I_O	3.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	120	Amps
Typical Current Squared Time	I^2t	60	A^2S
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	50	$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	20	
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	KSLDB3100S	UNITS	
Maximum Forward Voltage Drop per Bridge Element at 3.0ADC	V_F	.79	Volts	
Maximum Reverse Current at Rated	I_R	@ $T_A = 25^\circ\text{C}$	2.0	μAmps
DC Blocking Voltage per element		@ $T_A = 150^\circ\text{C}$	0.2	mAmps

Note: 1. Thermal Resistance: Mounted on PCB.

2018-09
REV:0

RATING AND CHARACTERISTICS CURVES (KSLDB3100S)

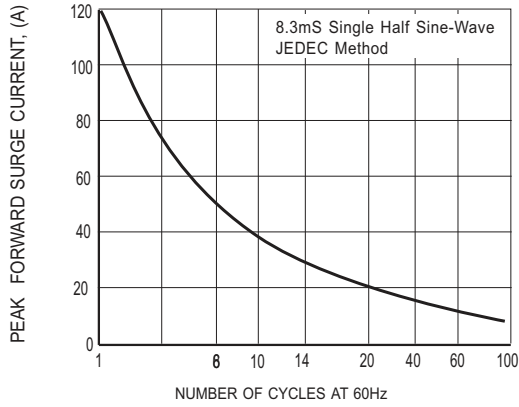


FIG. 1 - TYPICAL NON-REPETITIVE FORWARD SURGE CURRENT

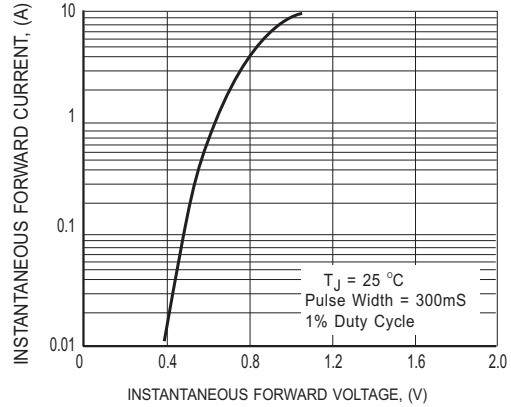


FIG. 2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

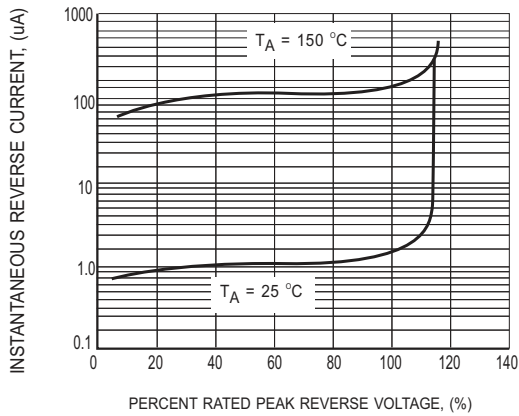


FIG. 3 MAXIMUM REVERSE CHARACTERISTICS

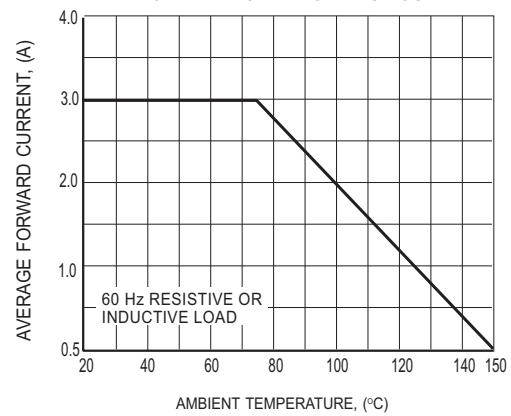
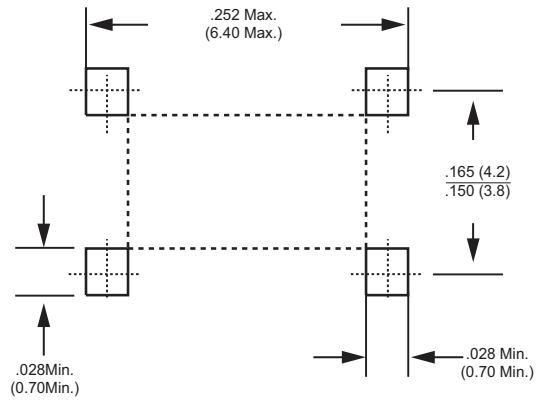


FIG. 4 TYPICAL FORWARD CURRENT DERATING CURVE

Mounting Pad Layout



Dimensions in inches and (millimeters)

REEL TAPING SPECIFICATIONS FOR SURFACE MOUNT DEVICES-SLDBS

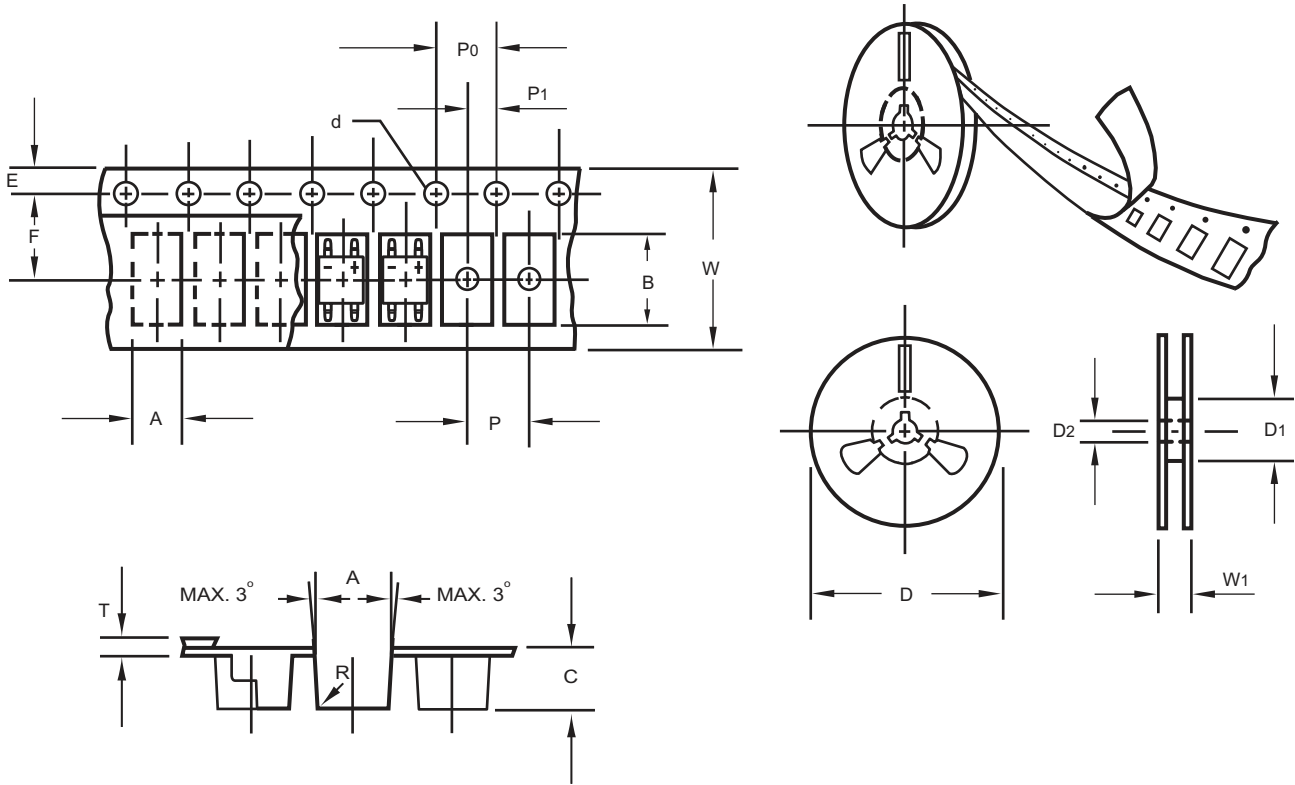
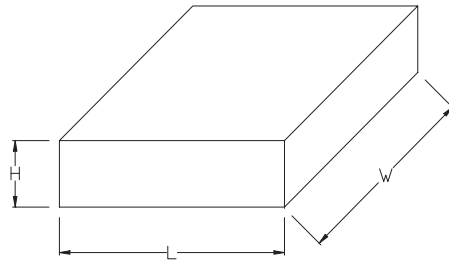


Fig.: Configuration of SLDBS TAPING

ITEM	SYMBOL	SLDBS mm(inch)
Carrier width	A	6.0 ± 0.1 (0.236 \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)

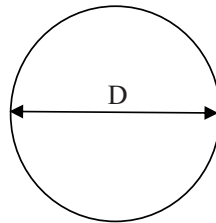
Note: 1.Devices are packed in accordance with EIA standard RS-481-A and specification given above.
 2.13 inch (5000 ct.) diameter reels.

1. BOX



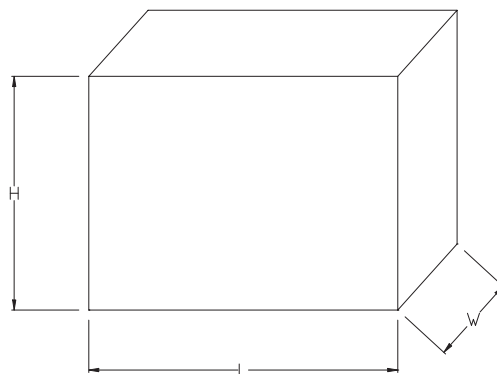
Packing Code	L (mm)	W (mm)	H (mm)
-T	340	340	40

2. REEL



Packing Code	D (mm)
-T	330

3. CARTON



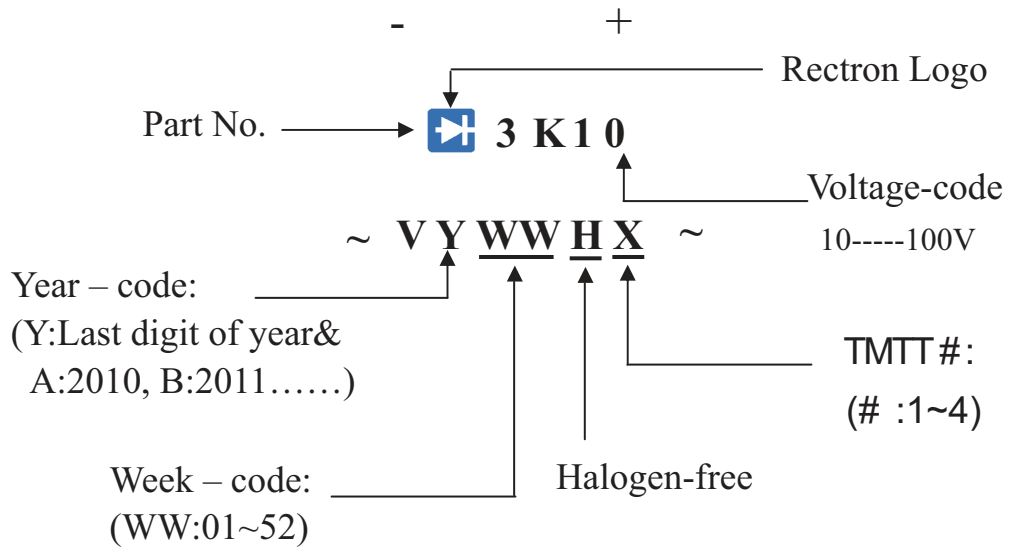
Packing Code	L (mm)	W (mm)	H (mm)
-T	355	360	360

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

Marking Description



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