

B1100LB(LS)

**SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIER**

**REVERSE VOLTAGE – 100 Volts
FORWARD CURRENT – 1 Amperes**

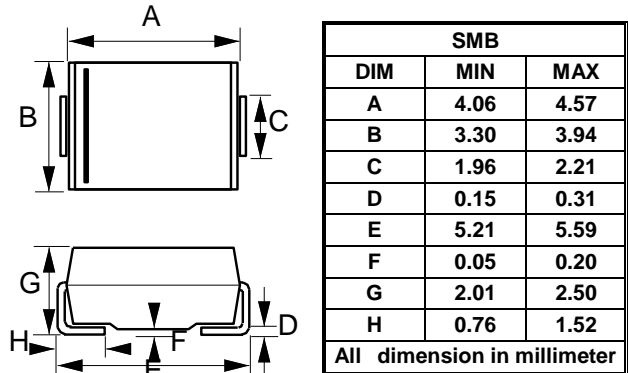
FEATURES

- For surface mounted application
- Metal-semiconductor junction with guardring
- Epitaxial construction
- Very low forward voltage drop
- High current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Case: Molded plastic
- Case Material: Molding compound, UL Flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free"
- Polarity: Indicated by cathode band
- RoHS compliant
- Weight: 0.093 grams

SMB



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

PARAMETER	SYMBOL	B1100LB	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC blocking voltage	V_{DC}	100	V
Maximum Average rectified output current	$I_{(AV)}$	1.0 2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I_{FSM}	50	A
Maximum forward Voltage at 1.0A DC	V_F	0.75	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.5 15.0	mA
Typical Junction Capacitance (Note 4)	C_T	80	pF
Typical Thermal Resistance (Note 5)	R_{thJL}	15	°C/W
Operating Temperature Range	T_J	-55 ~ +150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

Note:

1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See <https://www.diodes.com/quality/lead-free/> for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
4. Measured at 1.0MHz and applied voltage of 4.0V DC.
5. Thermal Resistance Junction to Lead.

REV.-8, Oct-2021, KSHB07

RATING AND CHARACTERISTIC CURVES
B1100B(LS)

FIG.1 - FORWARD CURRENT DERATING CURVE

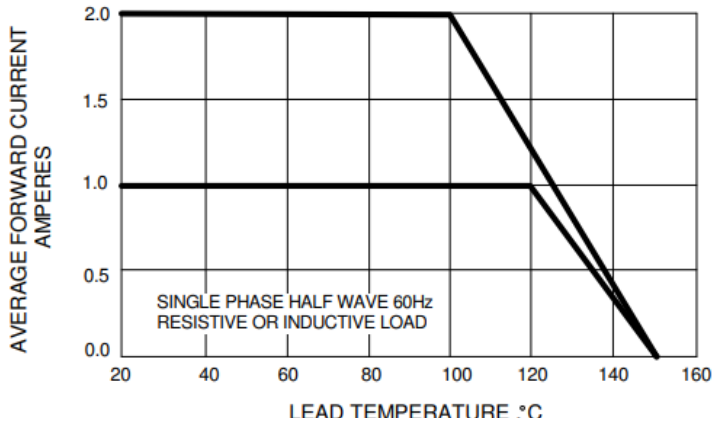


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

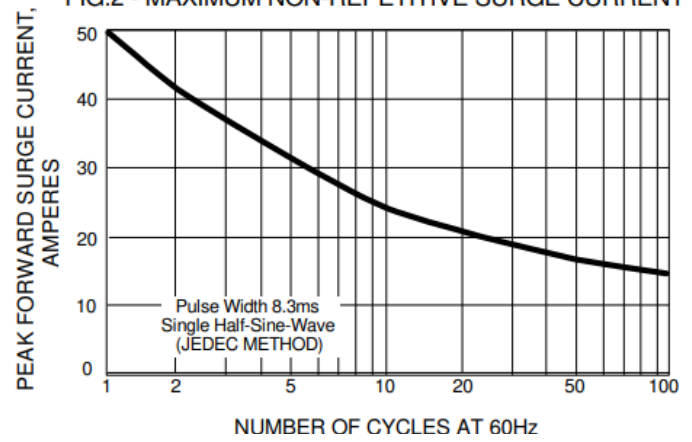


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

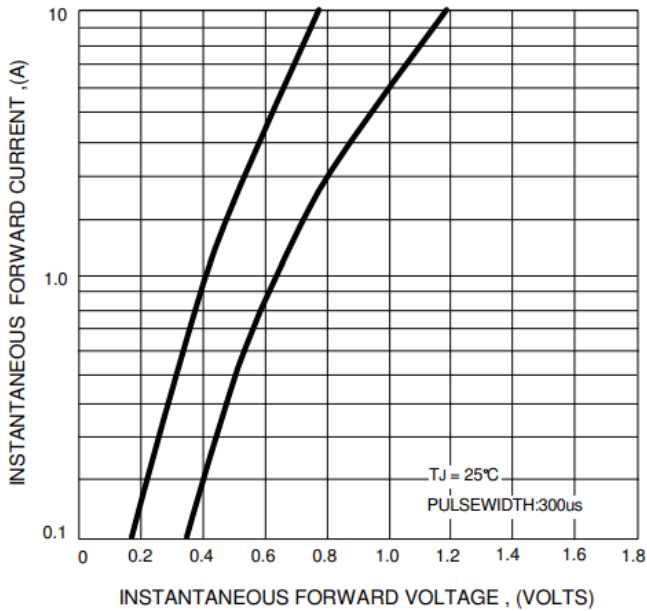


FIG.4 - TYPICAL JUNCTION CAPACITANCE

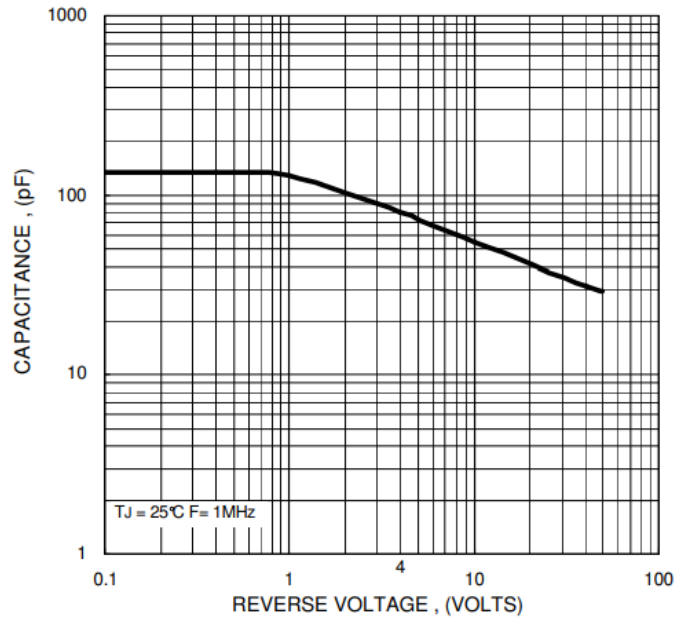
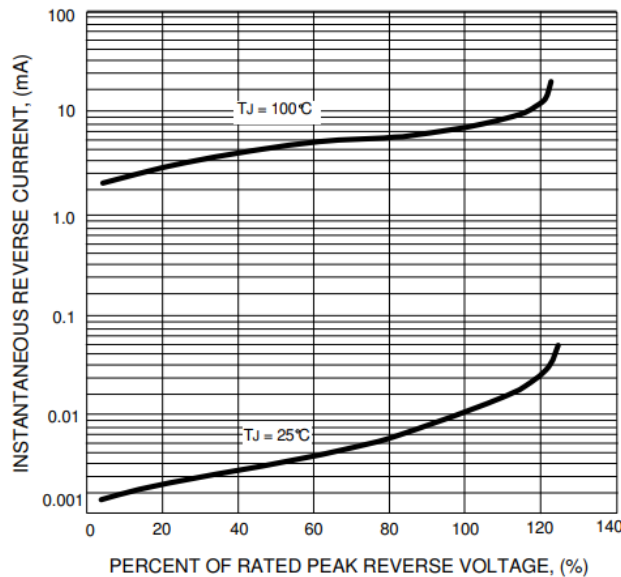


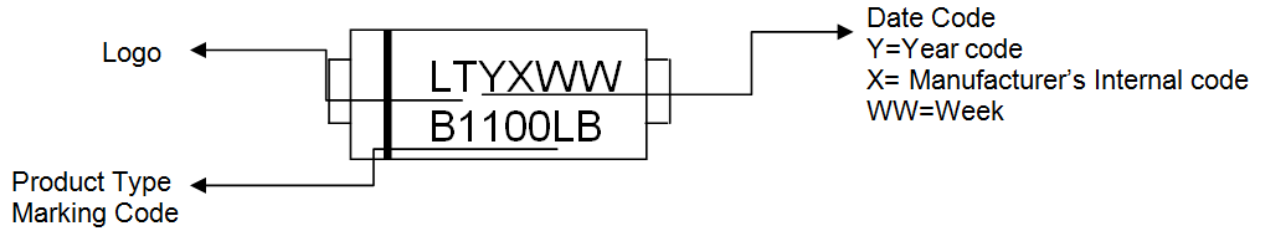
FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Ordering Information:

Part Number	Package	Packing	
		Qty.	Carrier
B1100LB	SMB	3000	Tape & Reel

Marking Information:



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