

B180-B1100(LS)

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE – 80 to 100 Volts
FORWARD CURRENT – 1.0 Amperes

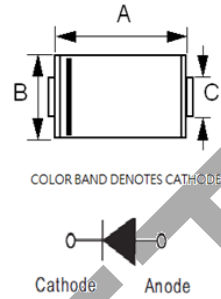
FEATURES

- For surface mounted application
- Metal-Semiconductor junction with guarding
- Epitaxial construction
- Very Low forward voltage drop
- High current
- Qualification is according to JEDEC
- For use 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

- Package: Molded plastic
- Package Material: Molding compound, UL Flammability classification 94V-0,(No Br. Sb. Cl.) "Halogen-free".
- Polarity: Indicated by cathode band
- Weight: 0.002 ounces, 0.066 grams (Approximate)

SMA



SMA		
DIM.	MIN.	MAX.
A	4.06	4.57
B	2.29	2.92
C	1.27	1.63
D	0.15	0.31
E	4.83	5.59
F	0.05	0.20
G	2.01	2.40
H	0.76	1.52

All Dimensions in millimeter

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

ABSOLUTE RATINGS

CHARACTERISTICS	SYMBOL	B180	B1100	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	80	100	V
Maximum RMS Voltage	V_{DC}	56	70	V
Maximum DC Blocking Voltage	V_{DC}	80	100	
Maximum Average Forward Rectified Current @ $T_L=100^\circ\text{C}$	$I_{(AV)}$	1.0		A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I_{FSM}	30		A
Maximum forward Voltage at 1.0A DC	V_F	0.79 0.69		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	0.02 5.0		mA
Typical Junction Capacitance (Note 4)	C_j	30		pF
Typical Thermal Resistance (Notes 5, 6)	R_{QJL}	20		$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-55 to +150		$^\circ\text{C}$
Storage Temperature Range	TSTG	-55 to +150		$^\circ\text{C}$

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.
6. Device mounted on glass-epoxy substrate with 1oz/ft² 7x5 mm copper pad.

RATING AND CHARACTERISTIC CURVES
B180-B1100

OBSOLETE - PART DISCONTINUED

FIG.1 - FORWARD CURRENT DERATING CURVE

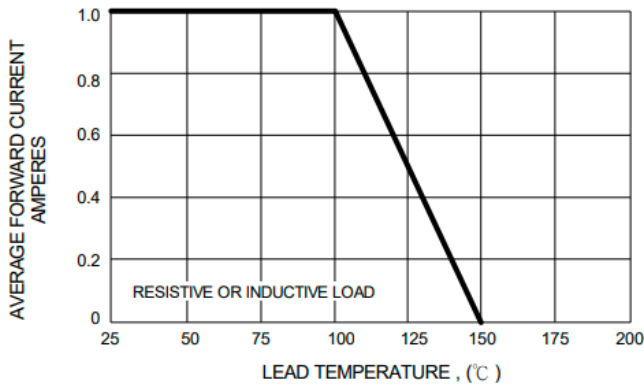


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

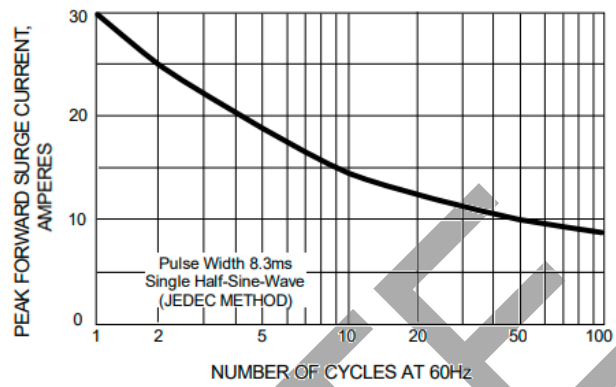


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

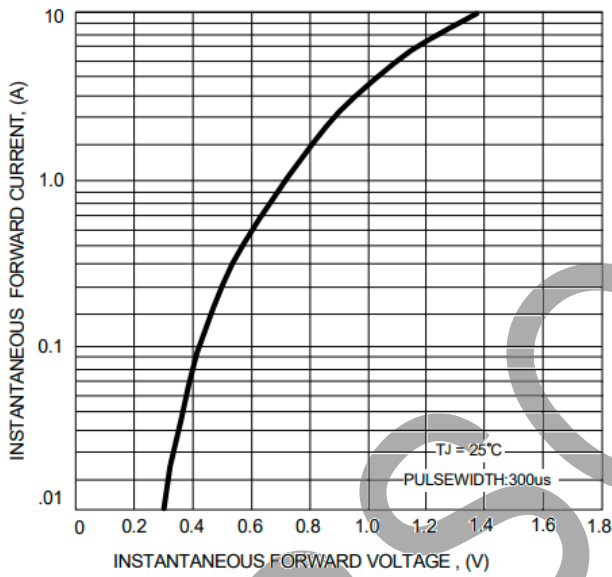


FIG.4 - TYPICAL JUNCTION CAPACITANCE

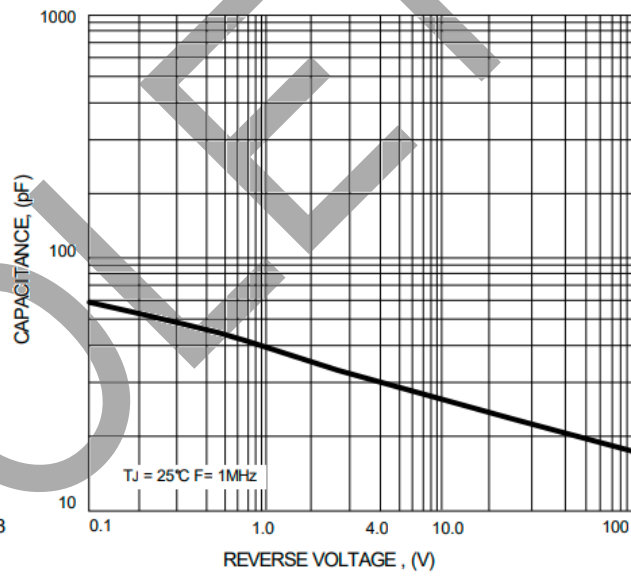
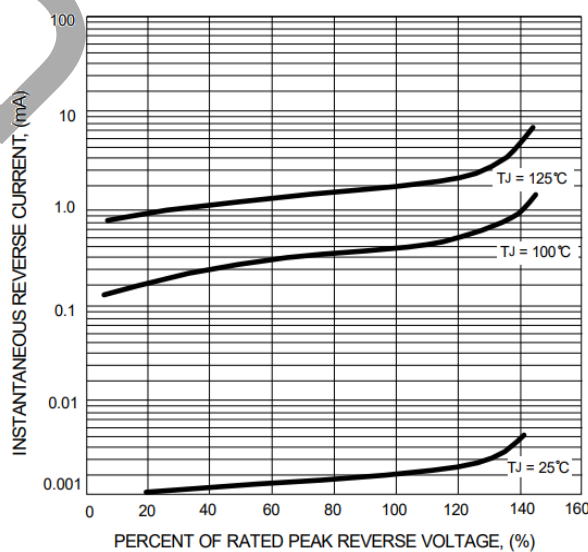


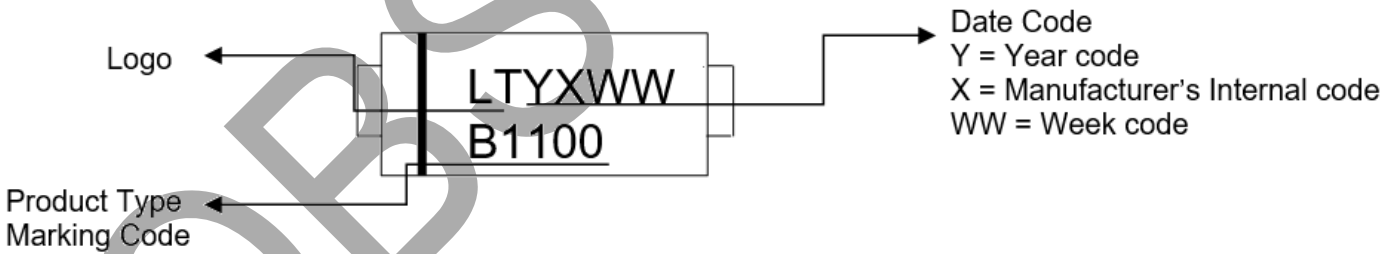
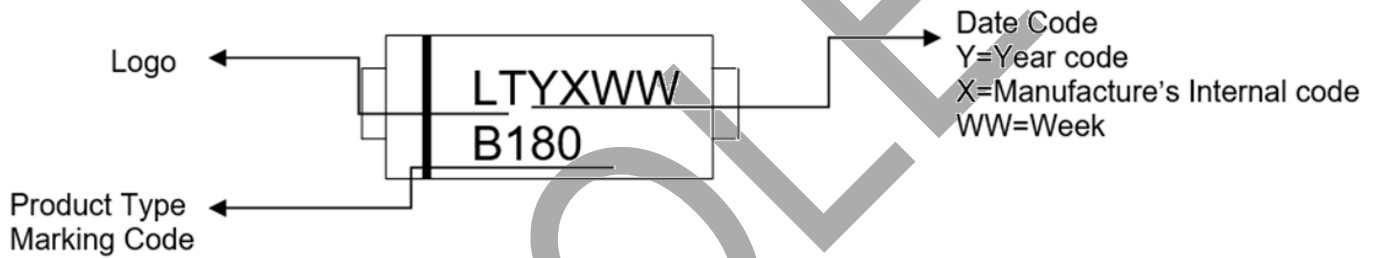
FIG.5 - TYPICAL REVERSE CHARACTERISTICS



Ordering Information :

Part Number	Package	Packing	
		Qty.	Carrier
B180	SMA	5000	Tape & Reel
B1100	SMA	5000	Tape & Reel

Marking Information :



OBSOLETE - PART DISCONTINUED

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