LITE-ON SEMICONDUCTORS

SB220 thru SB240

SHOTTKY RECTIFIERS

REVERSE VOLTAGE – 20 to 40 Volts
FORWARD CURRENT – 2.0 Amperes

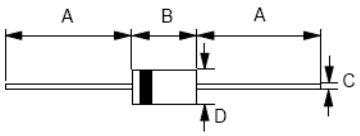
FEATURES

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection application
- IEC 61000-4-2, level 4 (ESD), > 15KV (air)

MECHANICAL DATA

- Case: JEDEC DO-15 molded plastic
- Polarity: Color band denotes cathode
- Weight:0.015 ounces, 0.4 grams
- Mounting position: Any

DO-15



	DO-15	
Dim.	Min.	Max.
A	25.4	-
B	5.80	7.60
C	0.71 ⌀	0.86 ⌀
D	2.60 ⌀	3.60 ⌀
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

CHARACTERISTICS	SYMBOL	SB220	SB230	SB240	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	V
Maximum RMS Voltage	V_{RMS}	14	21	28	V
Maximum DC Blocking Voltage	VDC	20	30	40	A
Maximum Average Forward Rectified Current	I_{AV}	2.0			A
Peak Forward Surge 8.3ms single half sine-wave super imposed on rated load	I_{FSM}	60			A
Maximum forward Voltage at 2.0A DV Maximum forward Voltage at 1.5A DV	V_F	0.55 ---			V
Maximum DC Reverse Current @Tj=25°C at Rated DC Blocking Voltage @Tj=100°C	I_R	0.15 15			mA
Typical thermal Resistance (Note 1)	$R_{\Theta JC}$ $R_{\Theta JL}$ $R_{\Theta JA}$	15 18 45			°C/W
Typical Junction Capacitance(Note 2)	Cj	150			pF
Operating Junction Temperature Range	Tj	-55 to +150			°C
Storage Temperature Range	T_{STG}	-55 to +150			°C

Note: (1) Thermal Resistance Junction to Case, Lead and Ambient
(2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

REV.2, Oct-2012, KDHD04

RATING AND CHARACTERISTIC CURVES
SB220 thru SB240

LITEON

FIG.1- FORWARD CURRENT DERATING CURVE

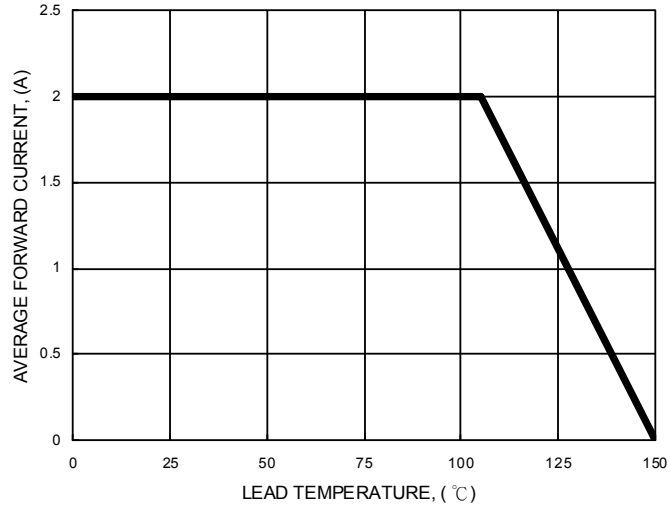


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

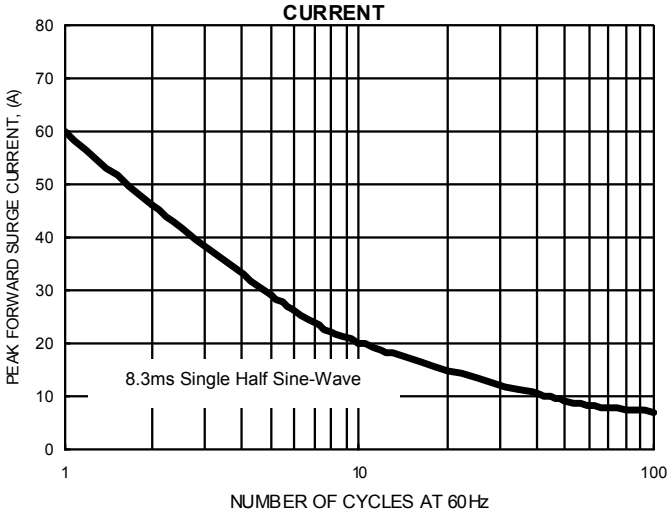


FIG.3- TYPICAL JUNCTION CAPACITANCE

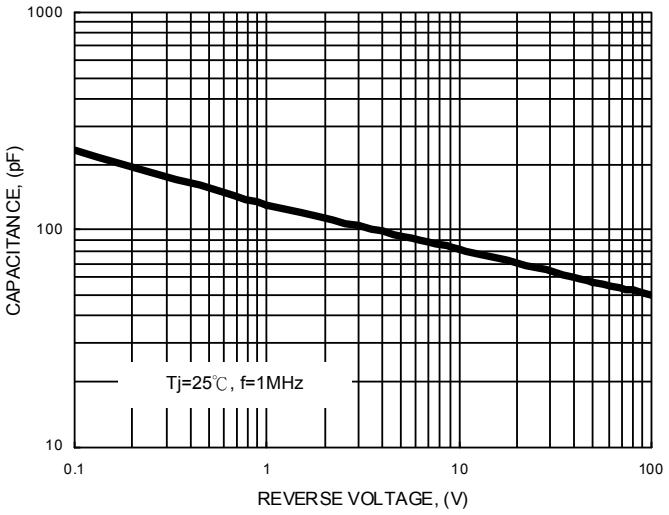


FIG.4- TYPICAL FORWARD CHARACTERISTICS

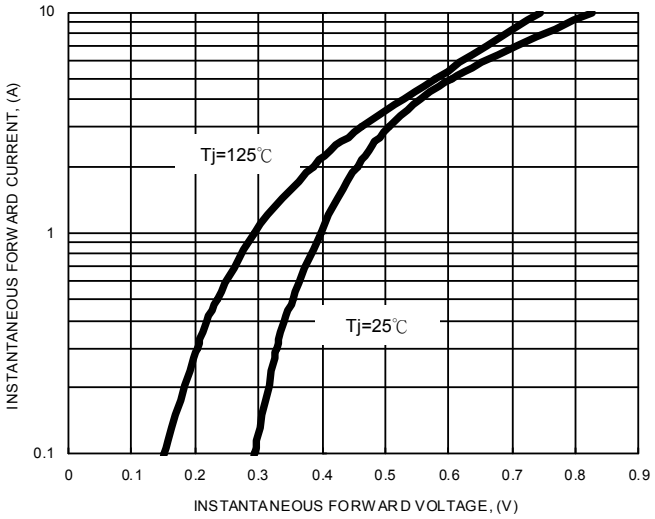
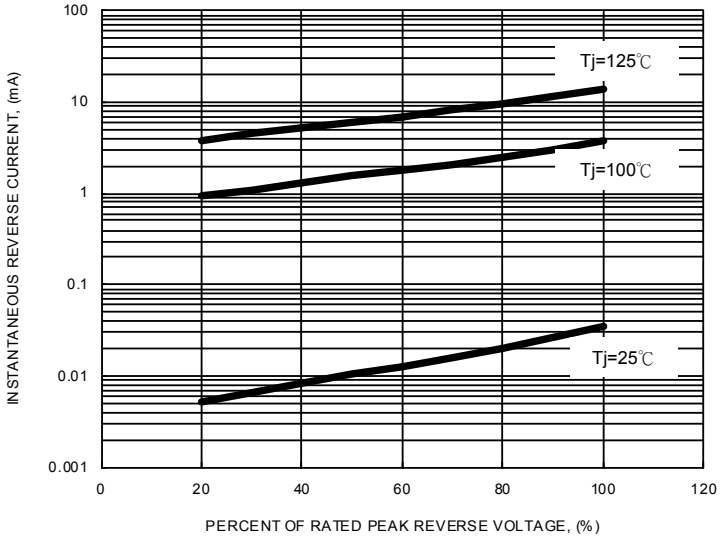


FIG.5- TYPICAL REVERSE CHARACTERISTICS



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