LITE-ON SEMICONDUCTORS

B350 thru B360

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE – 50 to 60 Volts
FORWARD CURRENT – 3.0 Amperes

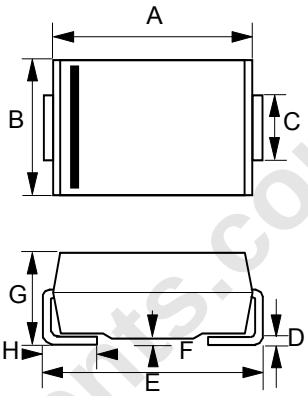
FEATURES

- For surface mounted application
- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Very Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

MECHANICAL DATA

- Case: Molded plastic
- Polarity: Color band denotes cathode
- Weight:0.007 ounces, 0.21 grams

SMC



SMC		
DIM.	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.92	3.18
D	0.15	0.31
E	7.75	8.13
F	0.05	0.20
G	2.01	2.50
H	0.76	1.52
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	B350	B360	UNIT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	60	V
Maximum RMS Voltage	V_{RMS}	35	42	V
Maximum DC Blocking Voltage	VDC	50	60	A
Maximum Average Forward Rectified Current @TL=110°C	I_{AV}	3.0		A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100		A
Maximum Forward Voltage at 3.0A DC	V_F	0.7		V
Maximum DC Reverse Current @Tj=25°C at Rated DC Blocking Voltage @Tj=100°C	I_R	0.5 15		mA
Typical Junction Capacitance (Note 1)	Cj	170		pF
Typical Thermal Resistance (Note 2, 4)	$R_{\Theta JL}$	20		°C/W
Typical Thermal Resistance (Note 3, 4)	$R_{\Theta JA}$	60		°C/W
Operating Junction Temperature Range	Tj	-55 to +150		°C
Storage Temperature Range	T_{STG}	-55 to +150		°C

REV.2, Oct-2010, KSHC08

Note: (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC...
(2) Thermal Resistance Junction to Lead
(3) Thermal Resistance Junction to Ambient
(4) Unit mounted on glass epoxy substrate 1oz/ft2 7x5 mm copper pad.

RATING AND CHARACTERISTIC CURVES
B350 thru B360

LITEON

FIG.1- FORWARD CURRENT DERATING CURVE

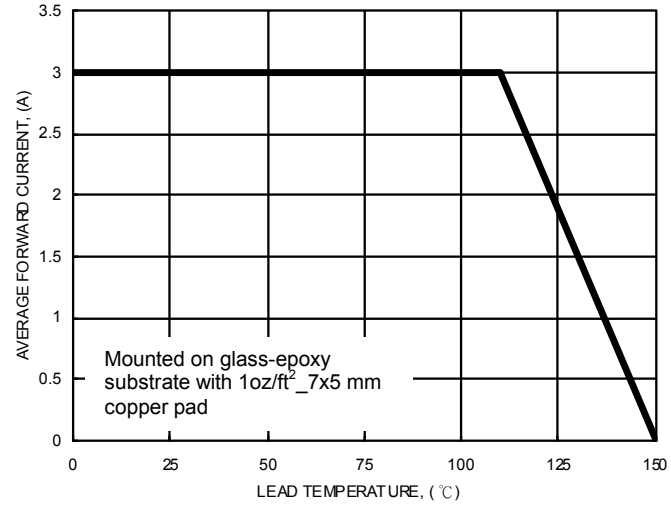


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

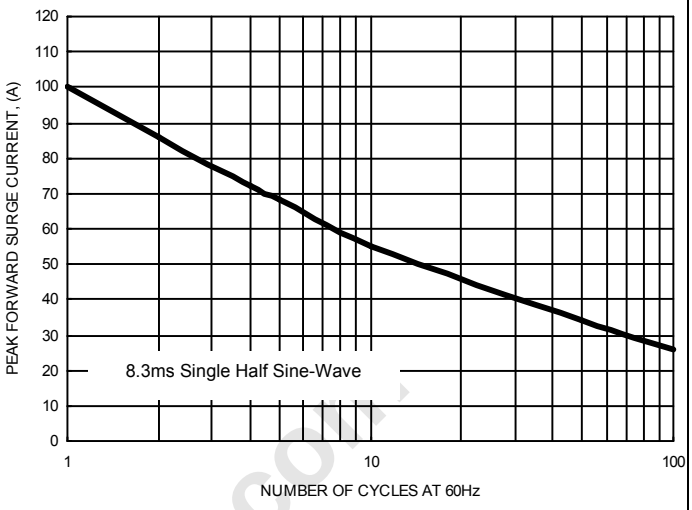


FIG.3- TYPICAL JUNCTION CAPACITANCE

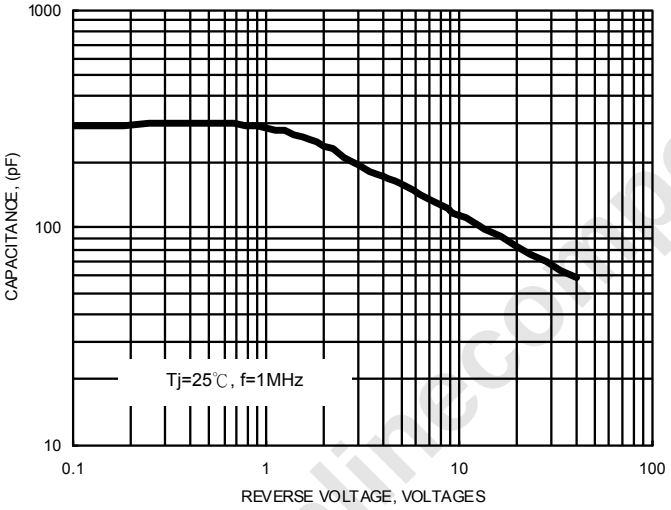


FIG.4- TYPICAL FORWARD CHARACTERISTICS

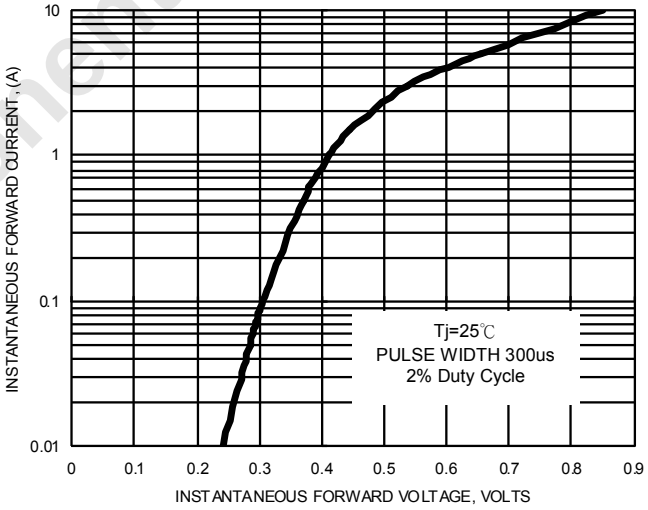


FIG.5- TYPICAL REVERSE CHARACTERISTICS

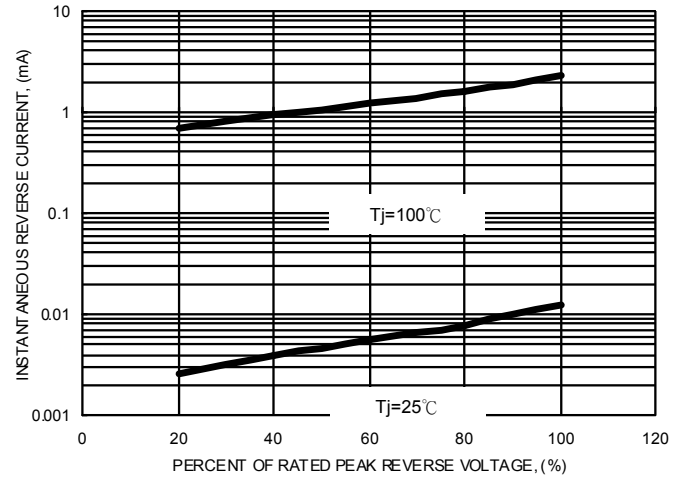
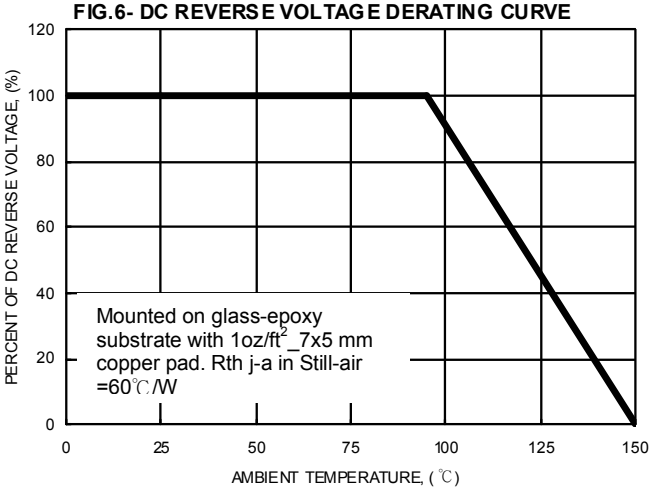


FIG.6- DC REVERSE VOLTAGE DERATING CURVE



Important Notice and Disclaimer

LSC reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

LSC makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does LSC assume any liability for application assistance or customer product design. LSC does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of LSC.

LSC products are not authorized for use as critical components in life support devices or systems without express written approval of LSC.