LITE-ON SEMICONDUCTORS

B250 thru B260

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE – 50 to 60 Volts
FORWARD CURRENT – 2.0 Amperes

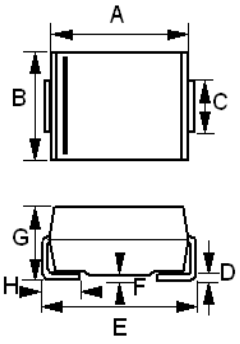
FEATURES

- For surface mounted application
- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Very Low forward voltage drop
- High current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

MECHANICAL DATA

- Case: Molded plastic
- Case Material: Molding compound, UL Flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free".
- Polarity: Color band denotes cathode
- Weight:0.003 ounces, 0.093 grams

SMB



SMB		
DIM.	MIN.	MAX.
A	4.06	4.57
B	3.30	3.94
C	1.96	2.21
D	0.15	0.31
E	5.21	5.59
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	B250	B260	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	V
Maximum Average Forward Rectified Current @TL=130°C	I_{AV}	2.0		A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	50		A
Maximum Forward Voltage at 2.0A DC	V_F	0.7		V
Maximum DC Reverse Current @Tj=25°C at Rated DC Blocking Voltage @Tj=100°C	I_R	0.05 15		mA
Typical Junction Capacitance (Note 1)	Cj	100		pF
Typical Thermal Resistance (Note 2)	$R_{\Theta JL}$	15		°C/W
Operating Junction Temperature Range	Tj	-55 to +150		°C
Storage Temperature Range	T_{STG}	-55 to +150		°C

REV.5, Aug-2014, KSHB18

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

RATING AND CHARACTERISTIC CURVES
B250 thru B260

FIG.1- FORWARD CURRENT DERATING CURVE

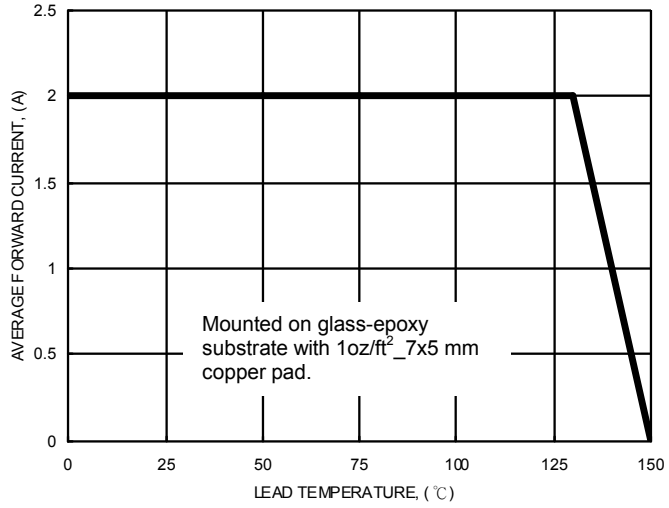


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

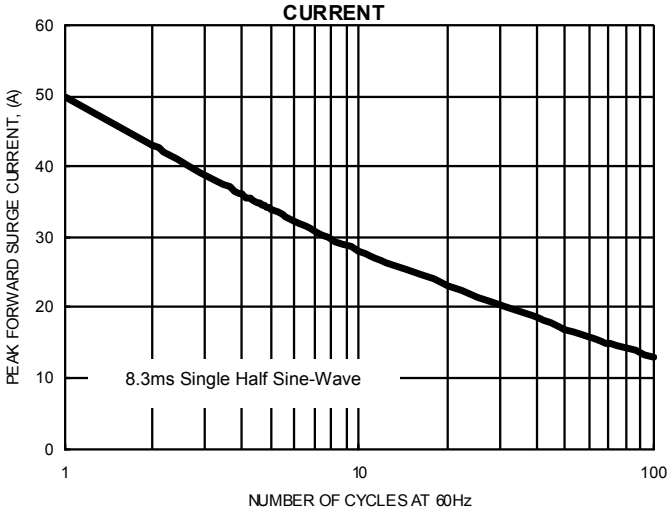


FIG.3- TYPICAL JUNCTION CAPACITANCE

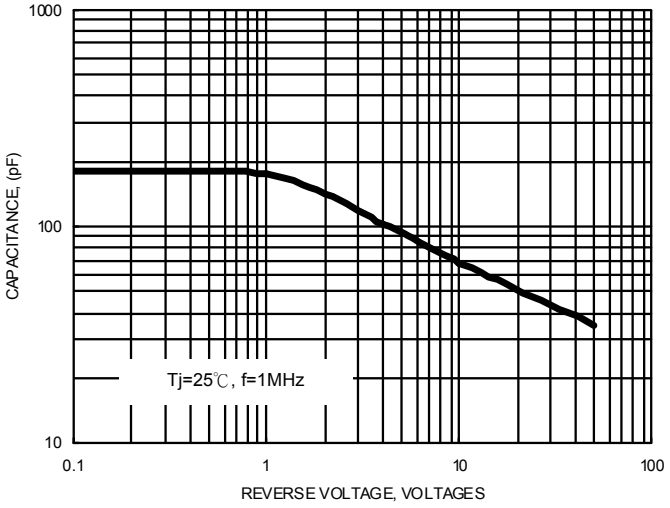


FIG.3- TYPICAL FORWARD CHARACTERISTICS

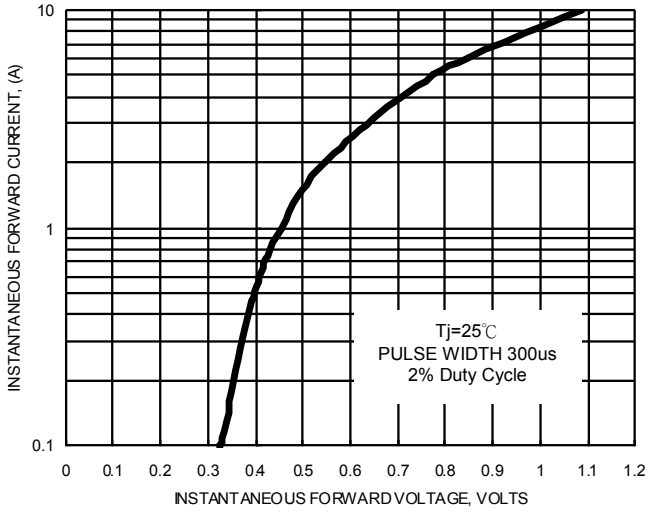


FIG.5- TYPICAL REVERSE CHARACTERISTICS

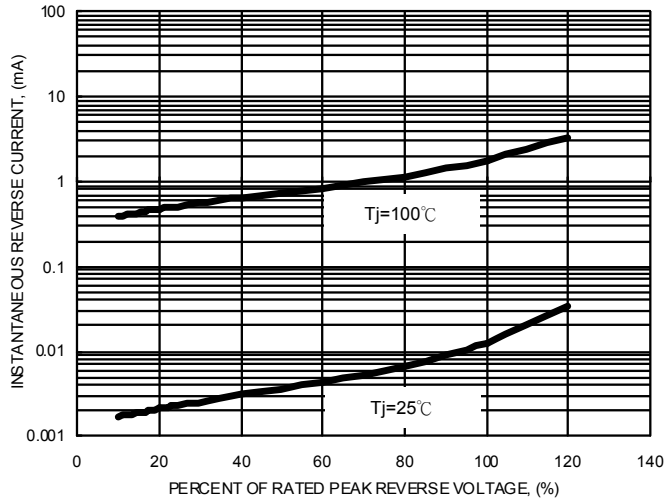
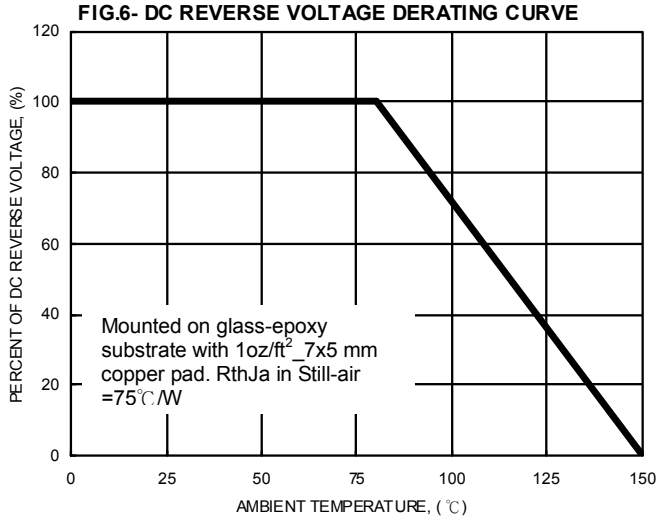


FIG.6- DC REVERSE VOLTAGE DERATING CURVE



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