LITE-ON SEMICONDUCTORS

SB320 thru SB340

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE – 20 to 40 Volts
FORWARD CURRENT – 3.0 Amperes

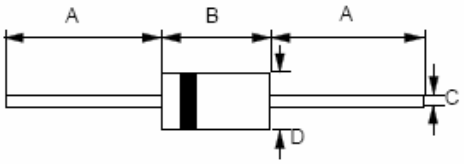
FEATURES

- 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-201AD molded plastic
- Polarity: Color band denotes cathode
- Weight:0.04 ounces, 1.1 grams
- Mounting position: Any

DO-201AD



DO-201AD		
Dim.	Min.	Max.
A	25.4	-
B	7.30	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS
Ratings at 25°C ambient temperature unless otherwise specified.

CHARACTERISTICS	SYMBOL	SB320	SB330	SB340	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	V
Maximum Average Forward Rectified Current	I_{AV}	3.0			A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	80			A
Maximum Forward Voltage at 3.0A DC	V_F	0.50			V
Maximum DC Reverse Current @Tj=25°C at Rated DC Blocking Voltage @Tj=100°C	I_R	0.15 20			mA
Typical Thermal Resistance (Note 1)	$R_{\Theta JA}$ $R_{\Theta JL}$ $R_{\Theta JC}$	30 10 10			°C/W
Typical Junction Capacitance (Note 2)	Cj	200			pF
Operating Junction Temperature Range	Tj	-55 to +125			°C
Storage Temperature Range	T_{STG}	-55 to +150			°C

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

REV. 4, Nov-2013, KDHF14

RATING AND CHARACTERISTIC CURVES
SB320 thru SB340

FIG.1- FORWARD CURRENT DERATING CURVE

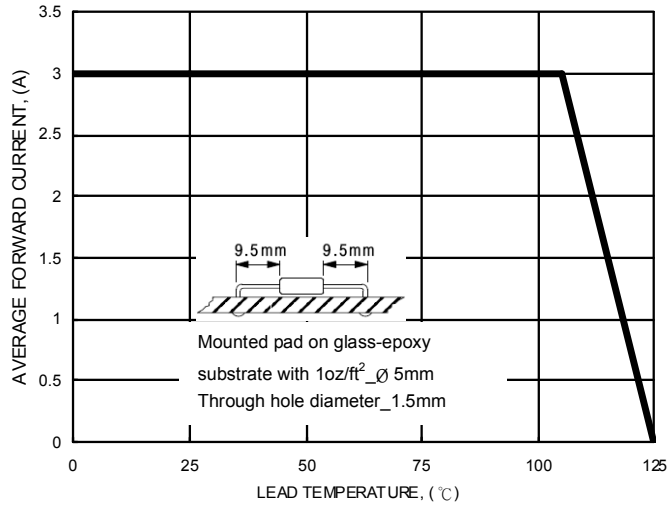


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

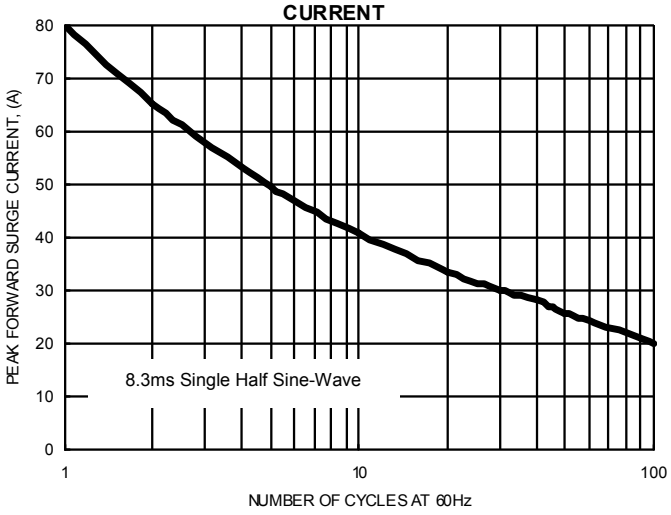


FIG.3- TYPICAL JUNCTION CAPACITANCE

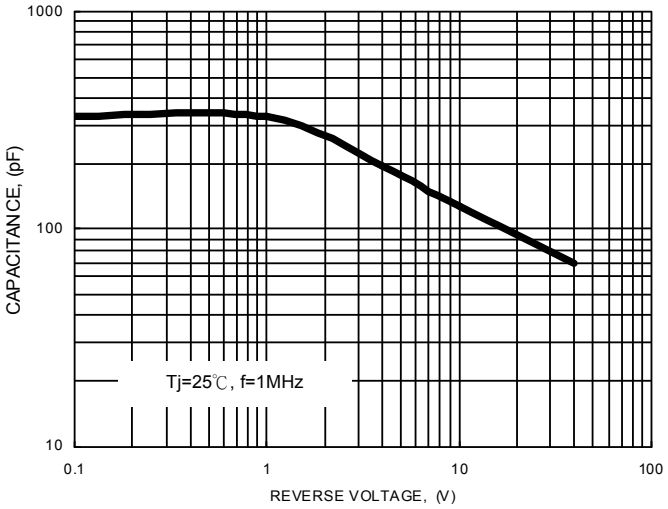


FIG.4- TYPICAL FORWARD CHARACTERISTICS

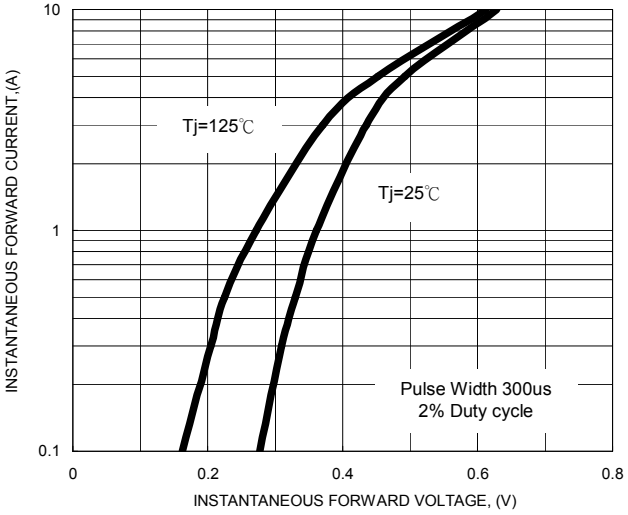


FIG.5- TYPICAL REVERSE CHARACTERISTICS

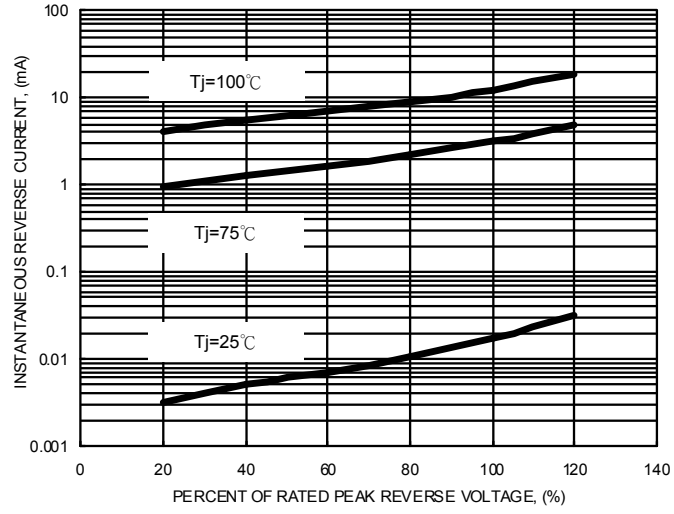
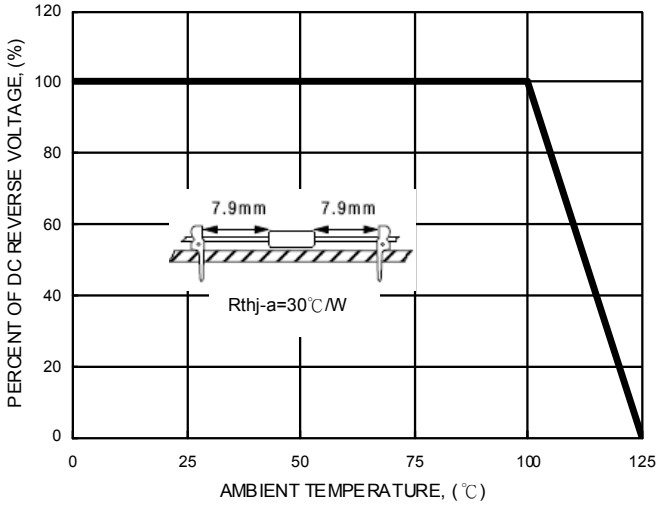


FIG.6- DC REVERSE VOLTAGE DERATING CURVE



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