LITE-ON SEMICONDUCTORS

SB560L

SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE – 60 Volts
FORWARD CURRENT – 5.0 Amperes

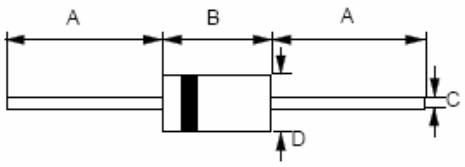
FEATURES

- 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

MECHANICAL DATA

- Case : JEDEC DO-201AD molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.04 ounces, 1.1 grams
- Mounting position : Any
- Component in accordance to RoHs 2002/95/EC

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	SB560L	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	60	V
Maximum RMS Voltage		V_{RMS}	42	V
Maximum DC Blocking Voltage		V_{DC}	60	V
Maximum Average Forward Rectified Current		I_{AV}	5.0	A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	150	A
Maximum Forward Voltage at 5.0A DC		V_F	0.55	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@Tj=25°C @Tj=100°C	I_R	0.1 20	mA
Thermal Resistance. Junction to Lead (Note 1)		$R_{\Theta JL}$	8	°C/W
Thermal Resistance, Junction to Case (Note 1)		$R_{\Theta JC}$	10	°C/W
Thermal Resistance, Junction to Ambient (Note 1)		$R_{\Theta JA}$	30	°C/W
Typical Junction Capacitance (Note 2)		Cj	430	pF
Operating Junction Temperature Range		Tj	-55 to +125	°C
Storage Temperature Range		T_{STG}	-55 to +150	°C

Note :
(1) Unit mounted on glass-epoxy substrate with 1oz/ft2_ø5mm
(2) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

RATING AND CHARACTERISTIC CURVES
SB560L

FIG.1- FORWARD CURRENT DERATING CURVE

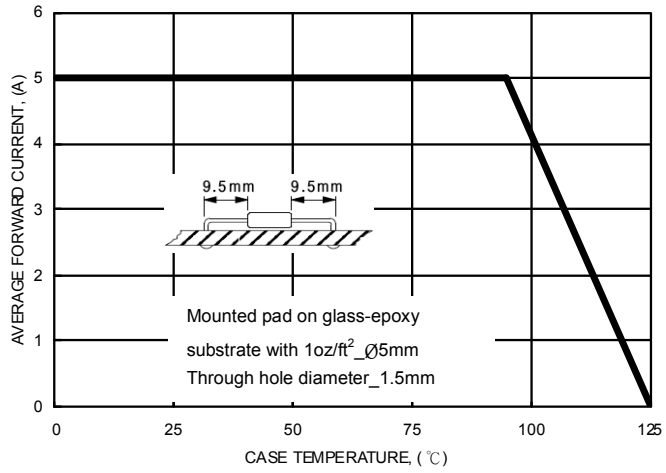


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

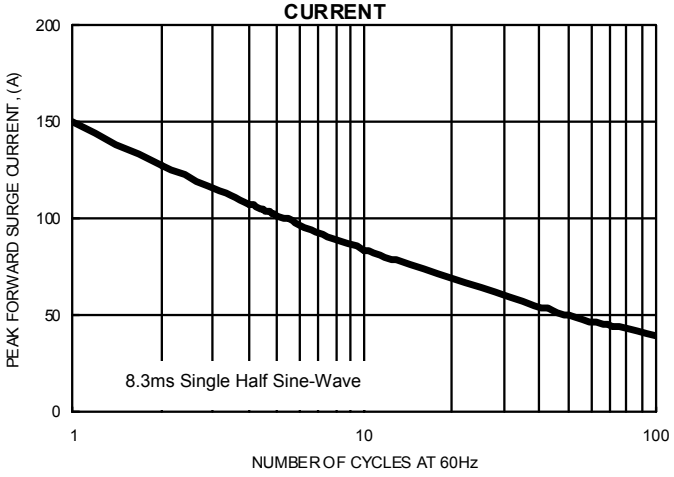


FIG.3- TYPICAL JUNCTION CAPACITANCE

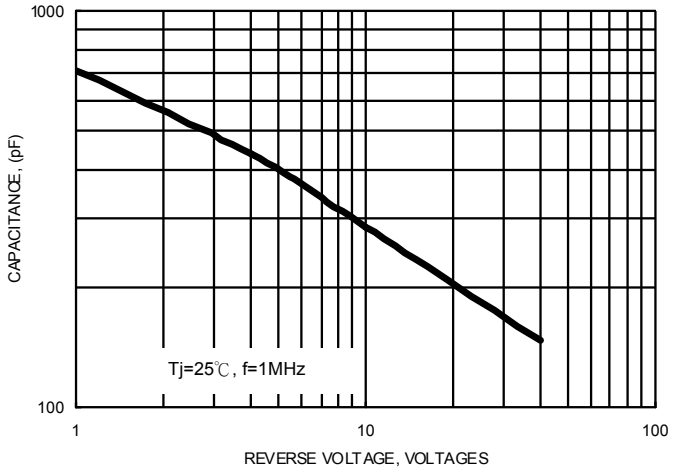


FIG.4- TYPICAL FORWARD CHARACTERISTICS

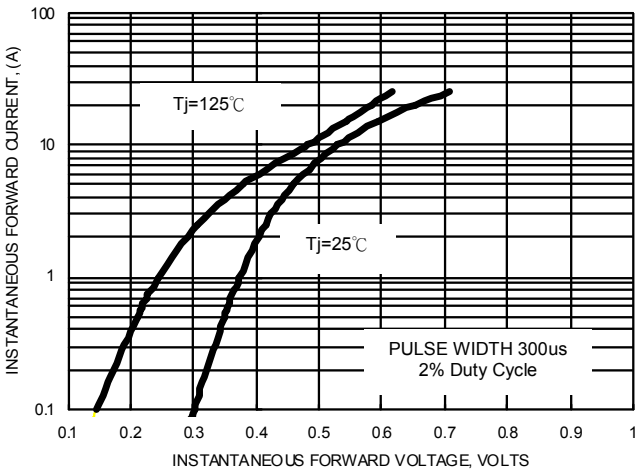


FIG.5- TYPICAL REVERSE CHARACTERISTICS

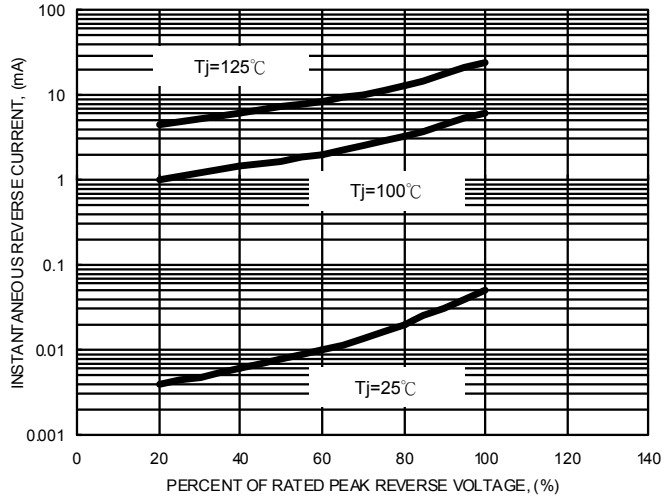
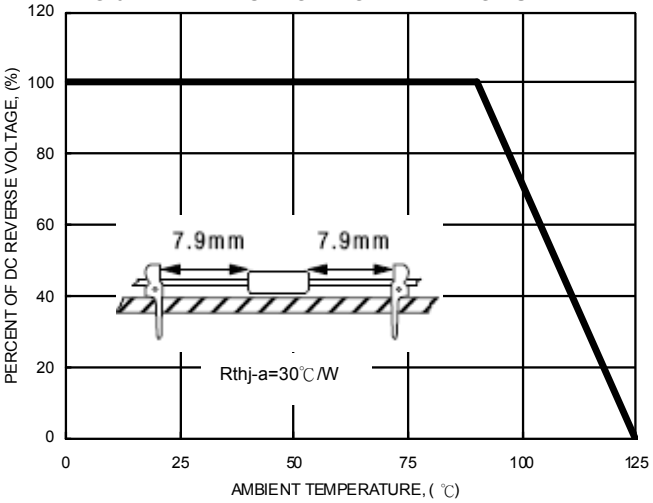


FIG.6- DC REVERSE VOLTAGE DERATING CURVE



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