LITE-ON SEMICONDUCTOR

B320A thru B360A

SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **20** to **60** Volts
FORWARD CURRENT - **3.0** Amperes

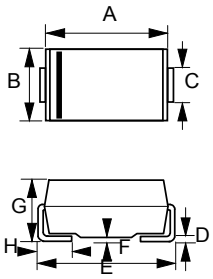
FEATURES

- For surface mounted applications
- Metal-Semiconductor junction with guardring
- 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 applications

MECHANICAL DATA

- Case : Molded plastic
- Polarity : Indicated by cathode band
- Weight : 0.002 ounces, 0.064 grams

SMA



SMA		
DIM.	MIN.	MAX.
A	4.06	4.57
B	2.29	2.92
C	1.27	1.63
D	0.15	0.31
E	4.83	5.59
F	0.05	0.20
G	2.01	2.40
H	0.76	1.52
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	B320A	B330A	B340A	B350A	B360A	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current @T_L =100°C	$I_{(AV)}$	3.0					A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I_{FSM}	100					A
Maximum forward Voltage at 3.0A DC	V_F	0.5			0.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T_J =25°C @T_J =100°C	I_R	0.5 20					mA mA
Typical Junction Capacitance (Note 1)	C_J	200					pF
Typical Thermal Resistance (Note 2, 4)	$R_{\theta JL}$	22					°C/W
Typical Thermal Resistance (Note 3, 4)	$R_{\theta JA}$	100					°C/W
Operating Temperature Range	T_J	-55 to +125			-55 to +150		℃
Storage Temperature Range	T_{STG}	-55 to +150					℃

NOTES : 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 0.75t glass-epoxy substrate with 2x3 mm copper pad.

REV. 6, Mar-2010, KSHA05

RATING AND CHARACTERISTIC CURVES
B320A thru B360A

FIG.1 - FORWARD CURRENT DERATING CURVE

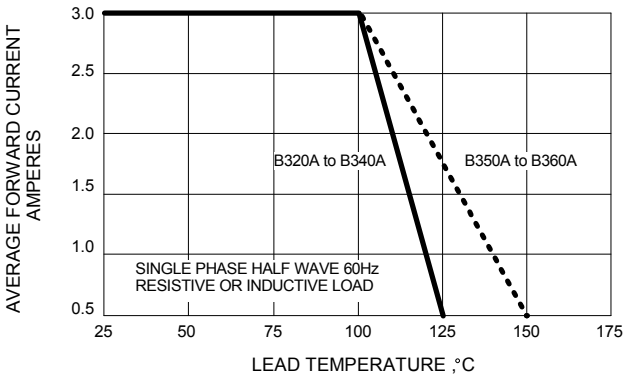


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

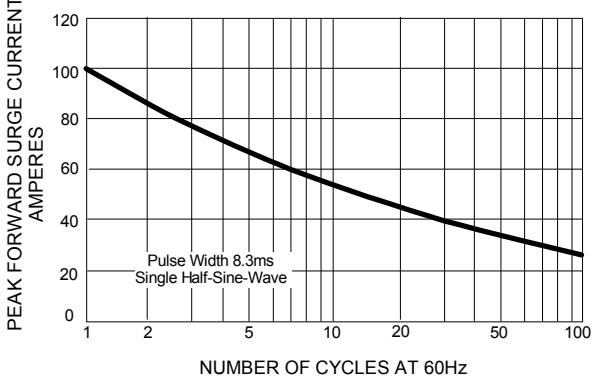


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

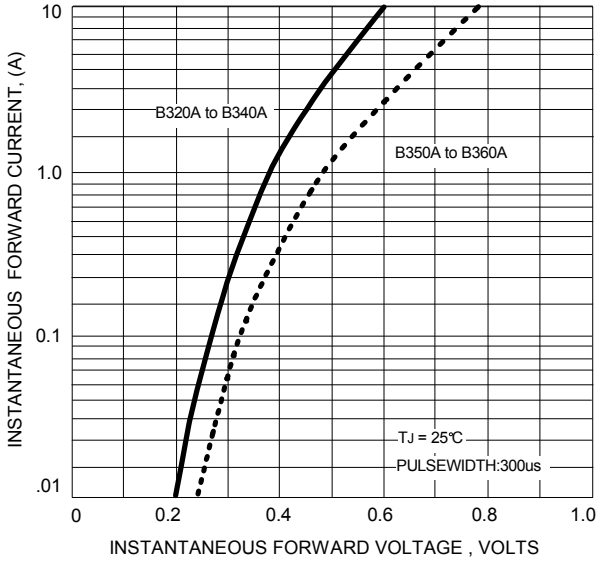


FIG.4 - TYPICAL JUNCTION CAPACITANCE

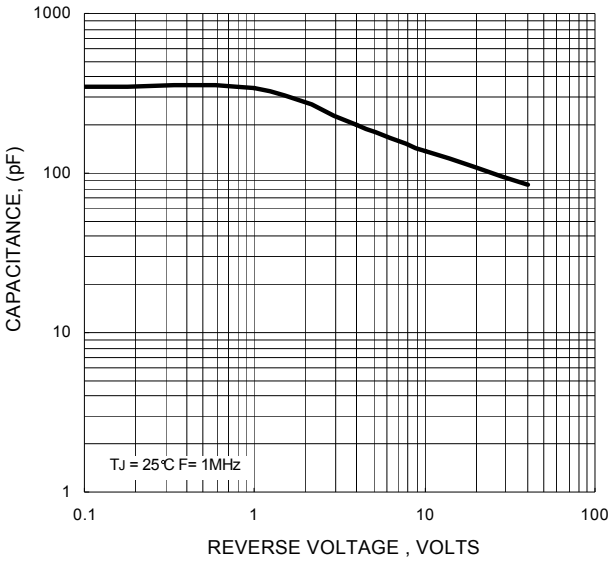


FIG.5 - TYPICAL REVERSE CHARACTERISTICS