

**SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIERS**

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

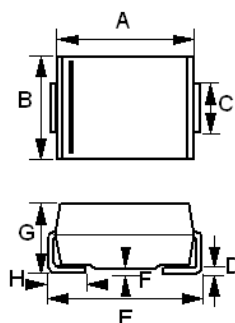
FEATURES

- 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: 0.003 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	B320B	B330B	B340B	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	A
Maximum Average Forward Rectified Current @TL=100°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	0.5			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)	C_j	210			pF
Typical Thermal Resistance (Note 2, 4)	$R_{\theta JL}$	25			°C/W
Typical Thermal Resistance (Note 3, 4)	$R_{\theta JA}$	95			°C/W
Operating Junction Temperature Range	Tj	-55 to +125			°C
Storage Temperature Range	T _{STG}	-55 to +150			°C

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.

REV.3, Oct-2010, KSHB16

RATING AND CHARACTERISTIC CURVES
B320B thru B340B

FIG.1- FORWARD CURRENT DERATING CURVE

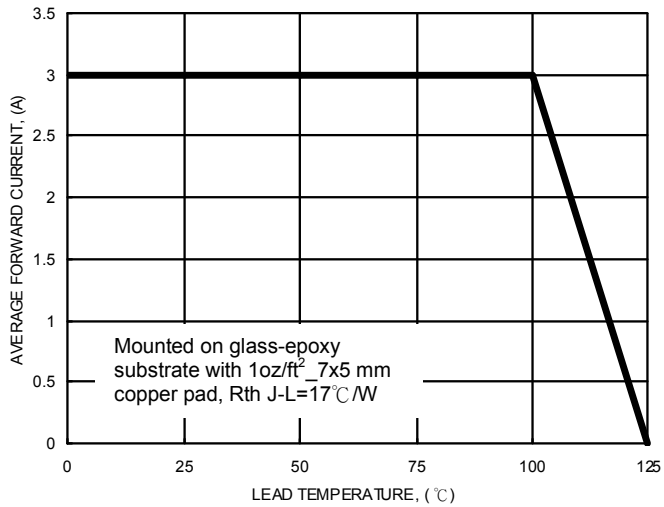


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

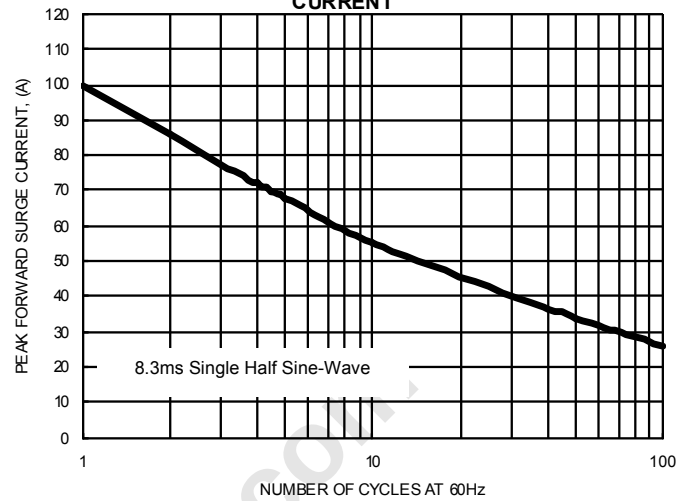


FIG.3- TYPICAL JUNCTION CAPACITANCE

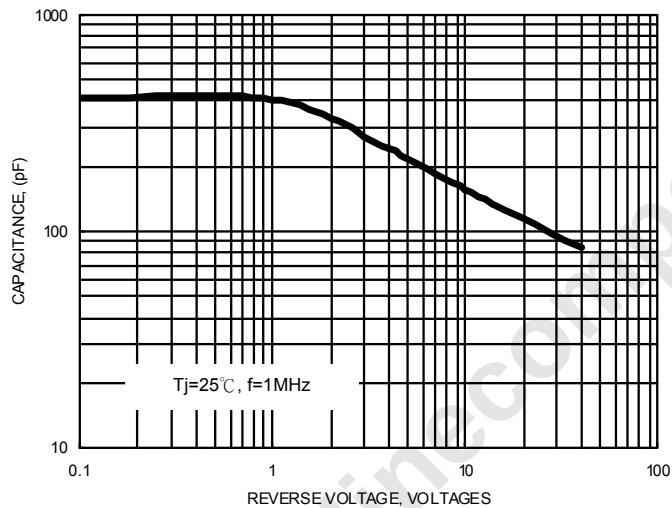


FIG.3- TYPICAL FORWARD CHARACTERISTICS

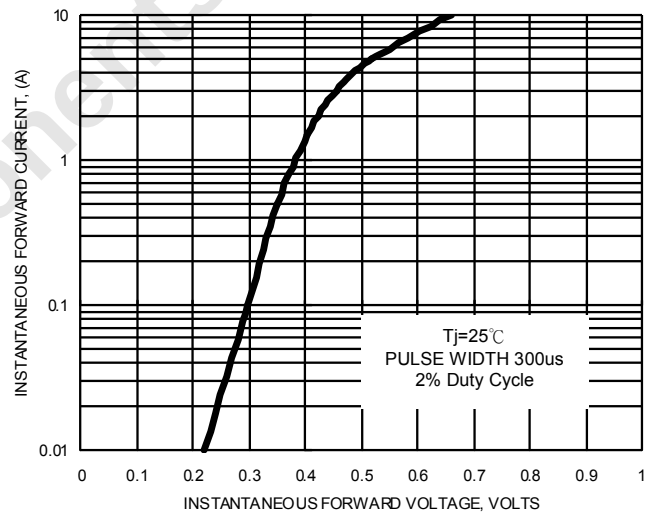


FIG.5- TYPICAL REVERSE CHARACTERISTICS

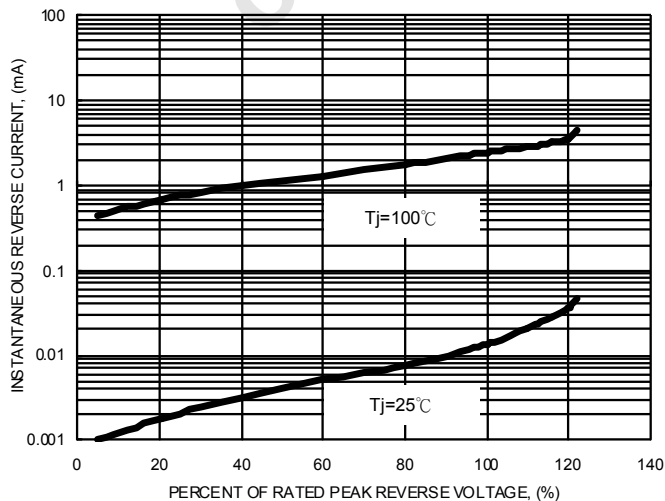
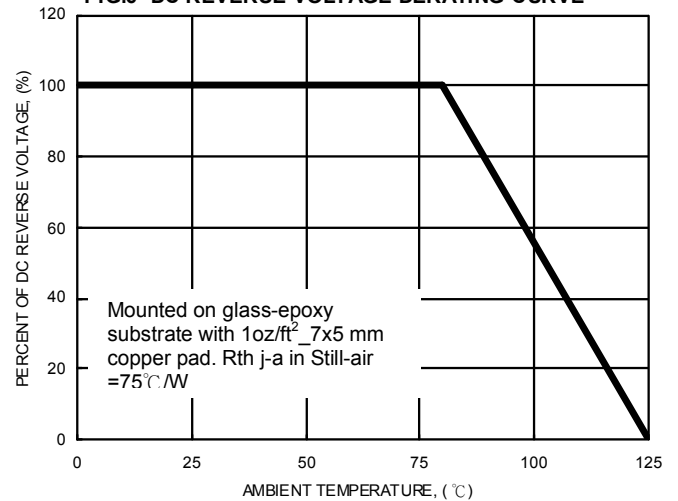


FIG.6- DC REVERSE VOLTAGE DERATING CURVE



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