

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE – 20 to 40 Volts FORWARD CURRENT – 3.0 Amperes
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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
- IEC 61000-4-2, level 4 (ESD), > 15KV (air)

MECHANICAL DATA

- Case: Molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.007 ounces, 0.21 grams

SMC

SMC		
DIM.	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.92	3.18
D	0.15	0.31
E	7.75	8.13
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	B320	B330	B340	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 @ $T_L=100^\circ\text{C}$	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 @ $T_j=25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_j=100^\circ\text{C}$	I_R	0.15 15			mA
Typical Junction Capacitance (Note 1)	C_j	230			pF
Typical Thermal Resistance (Note 2, 4)	$R_{\theta JL}$	18			$^\circ\text{C/W}$
Typical Thermal Resistance (Note 3, 4)	$R_{\theta JA}$	60			$^\circ\text{C/W}$
Operating Junction Temperature Range	T_j	-55 to +125			$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150			$^\circ\text{C}$

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.4, Mar-2012, KSHC07

**RATING AND CHARACTERISTIC CURVES
B320 thru B340**



FIG.1- FORWARD CURRENT DERATING CURVE

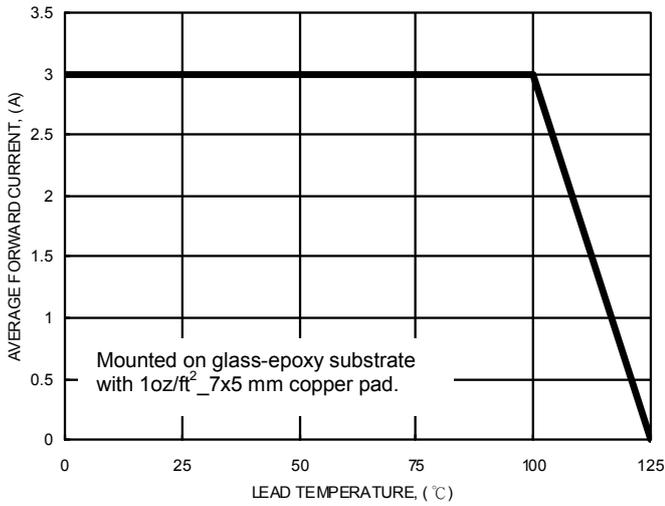


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

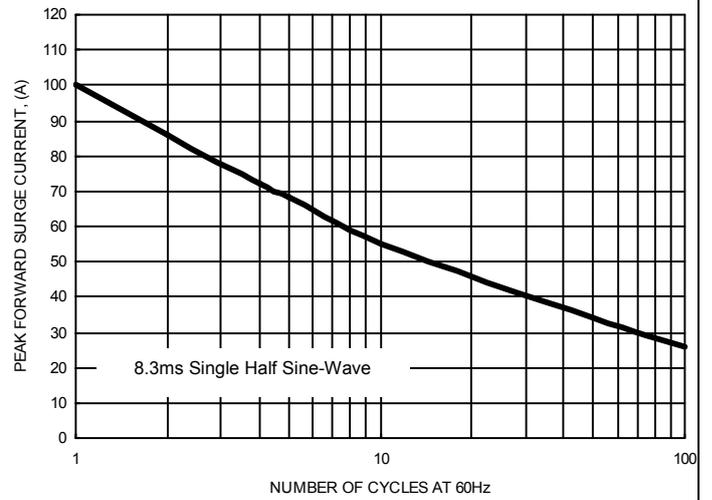


FIG.3- TYPICAL JUNCTION CAPACITANCE

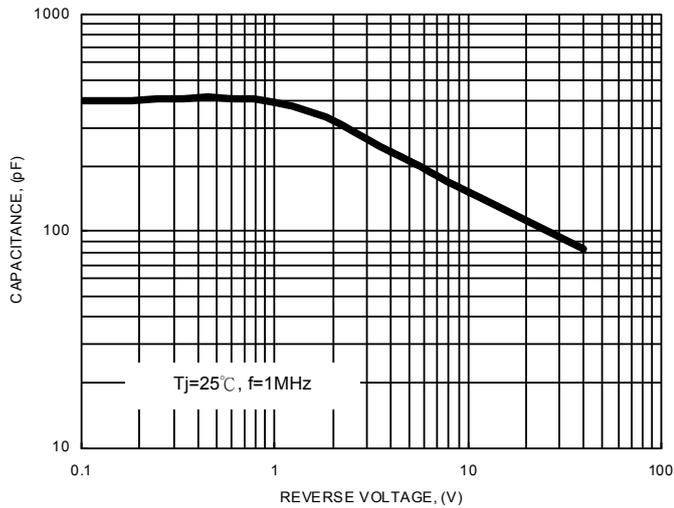


FIG.4- TYPICAL FORWARD CHARACTERISTICS

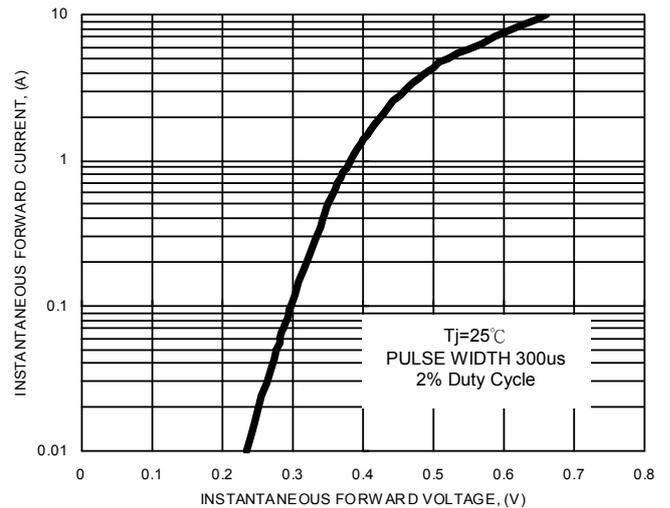


FIG.5- TYPICAL REVERSE CHARACTERISTICS

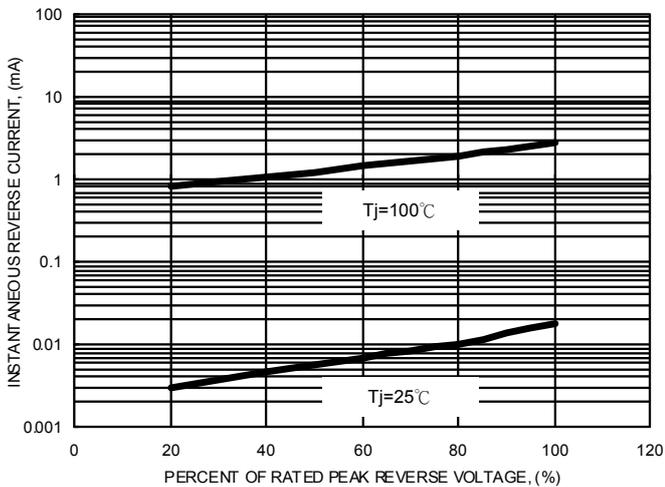
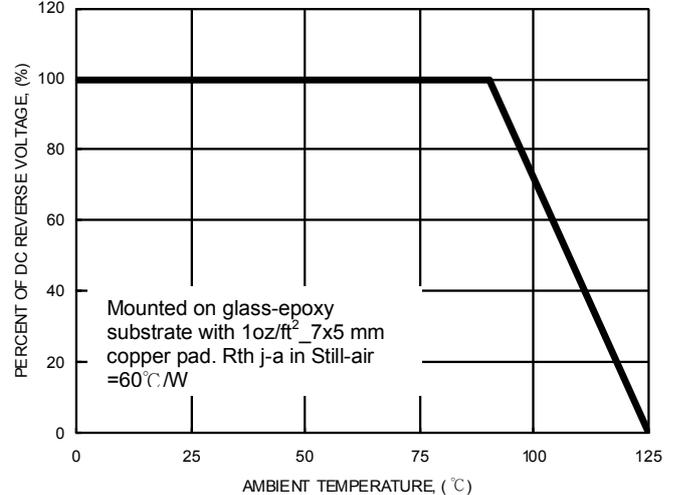


FIG.6- DC REVERSE VOLTAGE DERATING CURVE



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