

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE – 20 to 40 Volts FORWARD CURRENT – 3.0 Amperes
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<p>FEATURES</p> <ul style="list-style-type: none"> • 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 <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case: Molded plastic • Polarity: Color band denotes cathode • Weight: 0.003 ounces, 0.093 grams

SMB																																
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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 @ $T_L=100^\circ\text{C}$	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	0.5 15			mA
Typical Junction Capacitance (Note 1)	C_j	210			pF
Typical Thermal Resistance (Note 2, 4)	$R_{\theta JL}$	25			$^\circ\text{C/W}$
Typical Thermal Resistance (Note 3, 4)	$R_{\theta JA}$	95			$^\circ\text{C/W}$
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.

RATING AND CHARACTERISTIC CURVES
B320B thru B340B

FIG.1- FORWARD CURRENT DERATING CURVE

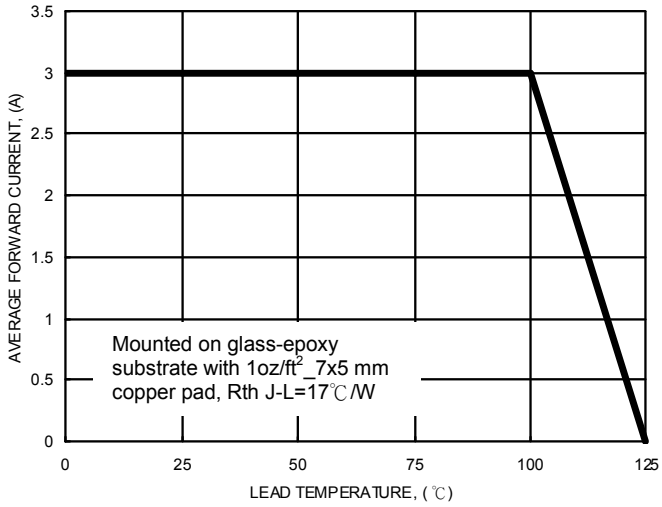


FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

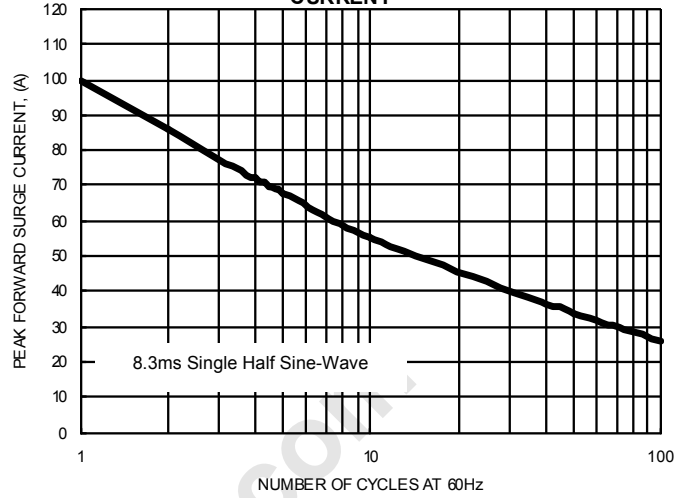


FIG.3- TYPICAL JUNCTION CAPACITANCE

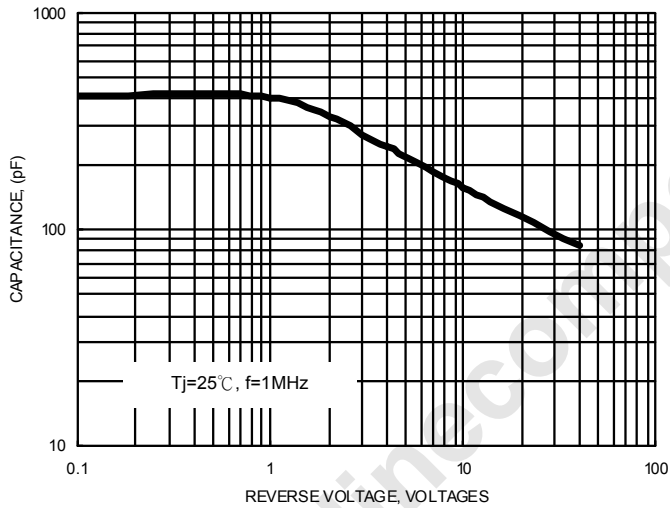


FIG.3- TYPICAL FORWARD CHARACTERISTICS

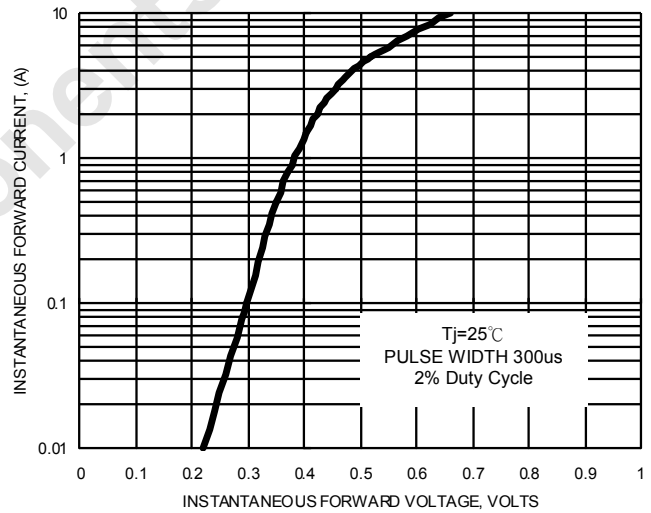


FIG.5- TYPICAL REVERSE CHARACTERISTICS

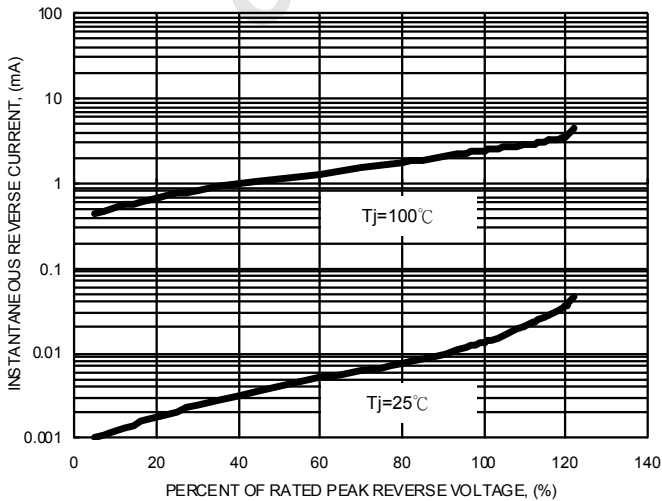
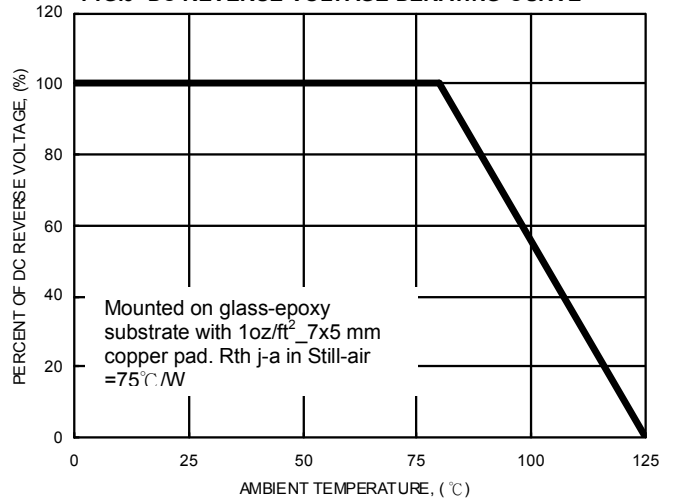


FIG.6- DC REVERSE VOLTAGE DERATING CURVE



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