

<b>SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS</b>	<b>REVERSE VOLTAGE</b> – 20 to 40 Volts <b>FORWARD CURRENT</b> – 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

**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.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

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 @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)	$C_j$	230			pF
Typical Thermal Resistance (Note 2, 4)	$R_{\theta JL}$	18			°C/W
Typical Thermal Resistance (Note 3, 4)	$R_{\theta JA}$	60			°C/W
Operating Junction Temperature Range	$T_j$	-55 to +125			°C
Storage Temperature Range	$T_{STG}$	-55 to +150			°C

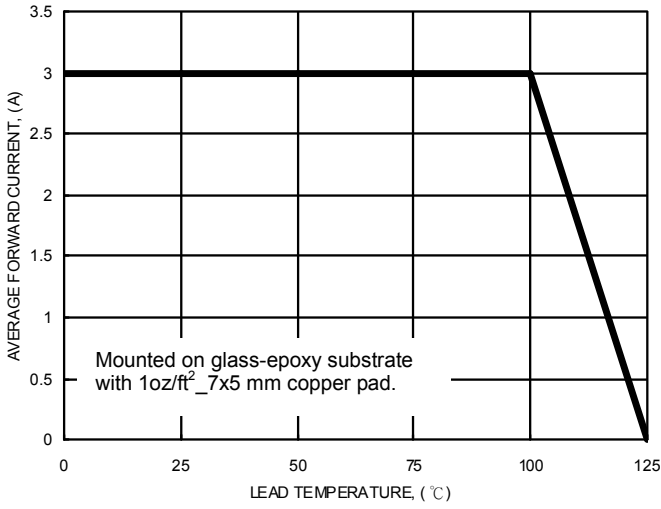
Note: (1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC...  
 (2) Thermal Resistance Junction to Lead  
 (3) Thermal Resistance Junction to Ambient  
 (4) Unit mounted on glass epoxy substrate 1oz/ft<sup>2</sup> 7x5 mm copper pad.

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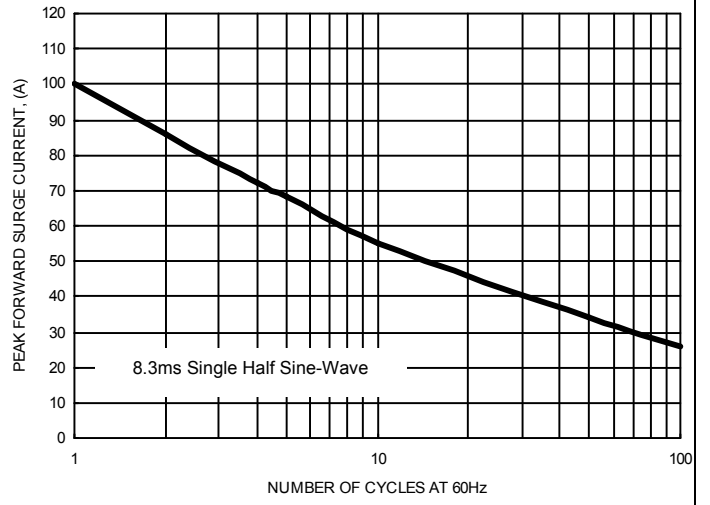
**RATING AND CHARACTERISTIC CURVES**  
**B320 thru B340**



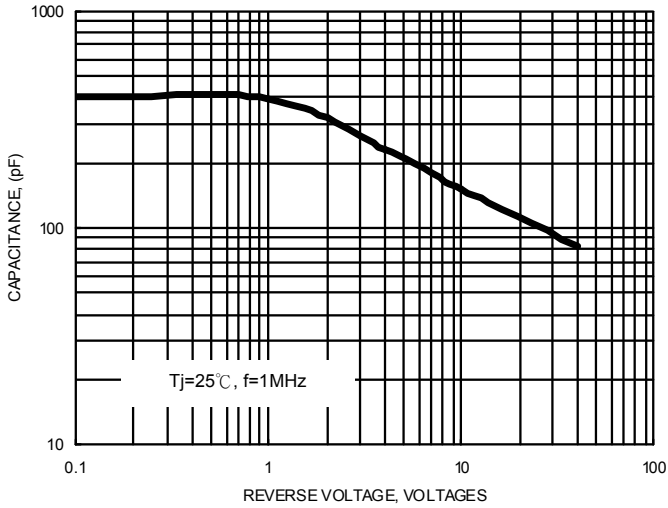
**FIG. 1- FORWARD CURRENT DERATING CURVE**



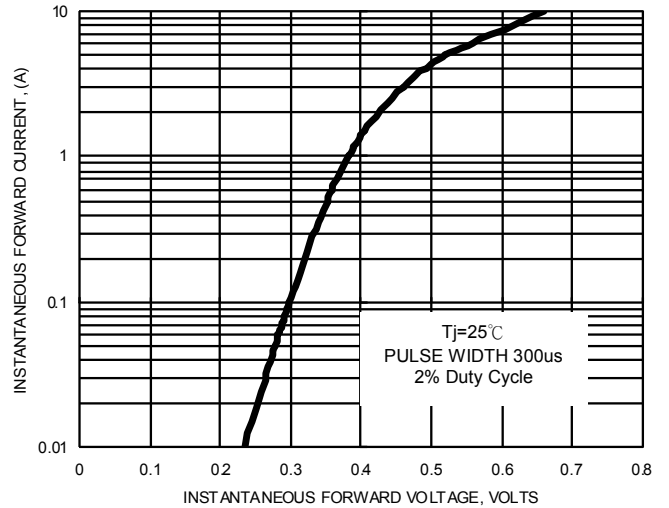
**FIG. 2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



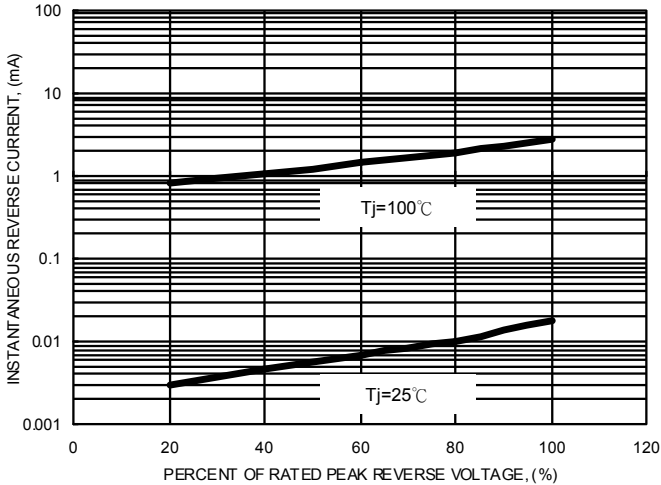
**FIG. 3- TYPICAL JUNCTION CAPACITANCE**



**FIG. 4- TYPICAL FORWARD CHARACTERISTICS**



**FIG. 5- TYPICAL REVERSE CHARACTERISTICS**



**FIG. 6- DC REVERSE VOLTAGE DERATING CURVE**

