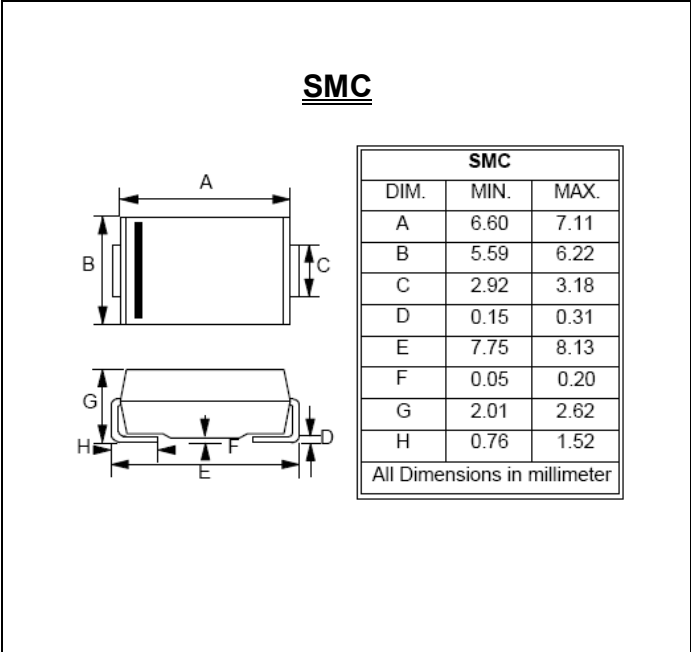


**SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**

**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: 0.007 ounces, 0.21 grams



**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%.

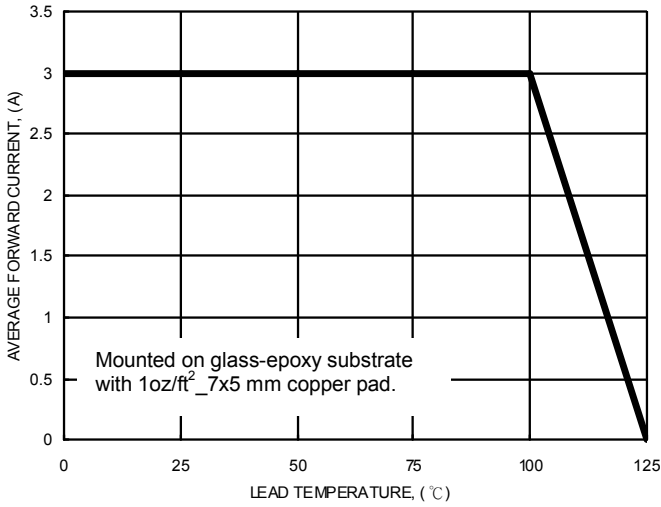
CHARACTERISTICS	SYMBOL	B320	B330	B340	UNIT
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	20	30	40	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	V
Maximum DC Blocking Voltage	VDC	20	30	40	A
Maximum Average Forward Rectified Current @TL=100°C	$I_{AV}$	3.0			A
Peak Forward Surge 8.3ms single half sine-wave 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.

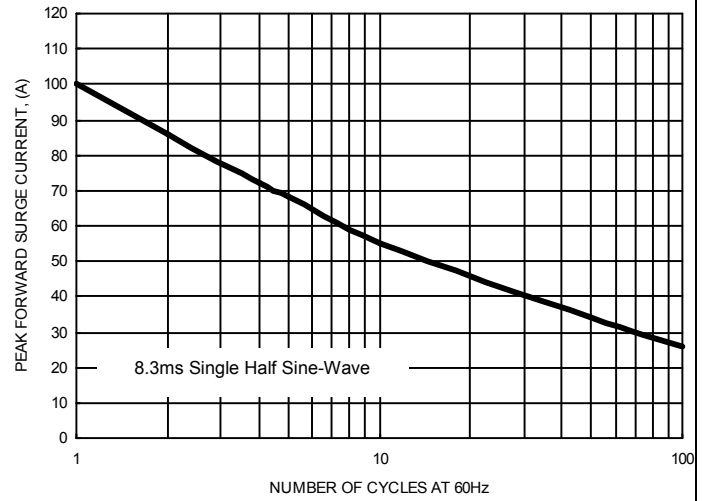
**RATING AND CHARACTERISTIC CURVES  
B320 thru B340**



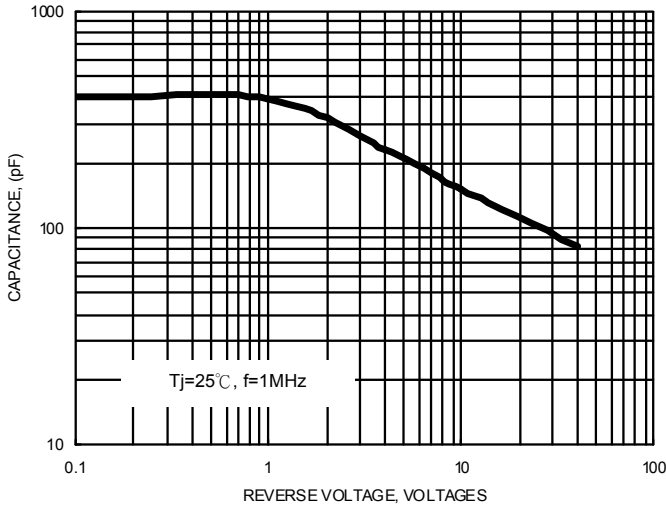
**FIG. 1- FORWARD CURRENT DERATING CURVE**



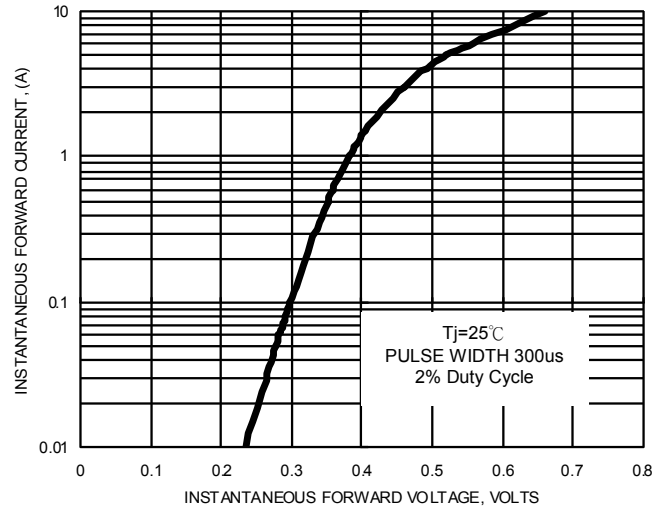
**FIG. 2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



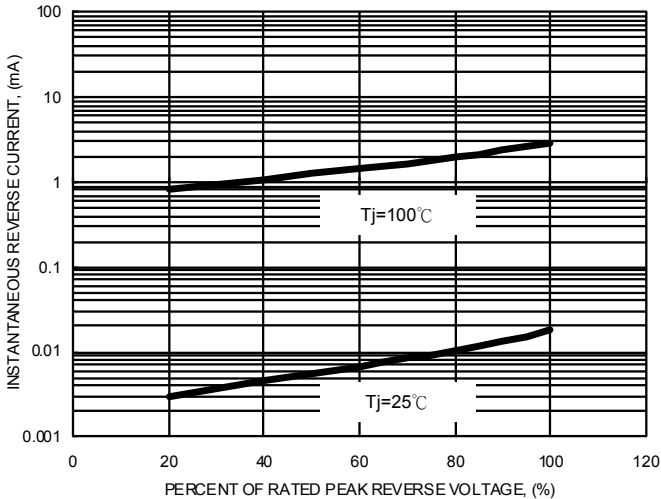
**FIG. 3- TYPICAL JUNCTION CAPACITANCE**



**FIG. 4- TYPICAL FORWARD CHARACTERISTICS**



**FIG. 5- TYPICAL REVERSE CHARACTERISTICS**



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

