

<b>SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS</b>	<b>REVERSE VOLTAGE – 20 to 40 Volts</b> <b>FORWARD CURRENT – 2.0 Amperes</b>
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<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• For surface mounted application</li> <li>• Metal-Semiconductor junction with guard ring</li> <li>• Epitaxial construction</li> <li>• Very Low forward voltage drop</li> <li>• High current capability</li> <li>• Plastic material has UL flammability classification 94V-0</li> <li>• For use in low voltage, high frequency inverters, free wheeling, and polarity protection application</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• Case: Molded plastic</li> <li>• Polarity: Color band denotes cathode</li> <li>• Weight: 0.002 ounces, 0.064 grams</li> </ul>
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**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	B220	B230	B240	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 @ $T_L=100^\circ\text{C}$	$I_{AV}$	2.0			A
Peak Forward Surge 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	50			A
Maximum Forward Voltage at 2.0A DC	$V_F$	0.5			V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ $T_j=25^\circ\text{C}$ @ $T_j=100^\circ\text{C}$	$I_R$	0.5 15			mA
Typical Junction Capacitance (Note 1)	$C_j$	200			pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	25			$^\circ\text{C/W}$
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

RATING AND CHARACTERISTIC CURVES  
B220 thru B240

FIG. 1- FORWARD CURRENT DERATING CURVE

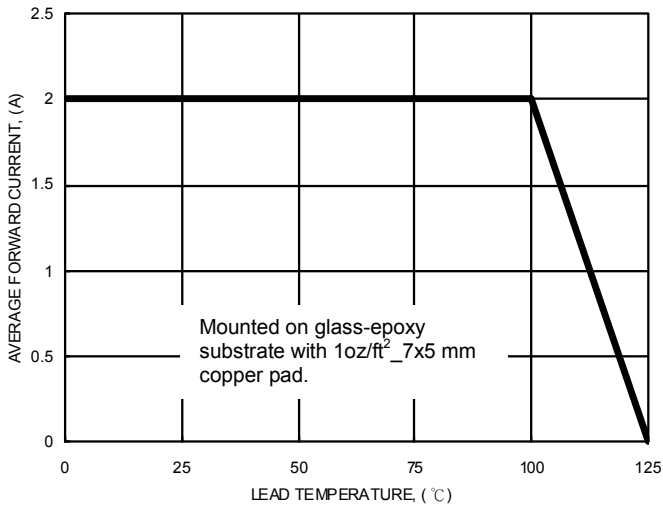


FIG. 2- MAXIMUM NON-REPETITIVE SURGE CURRENT

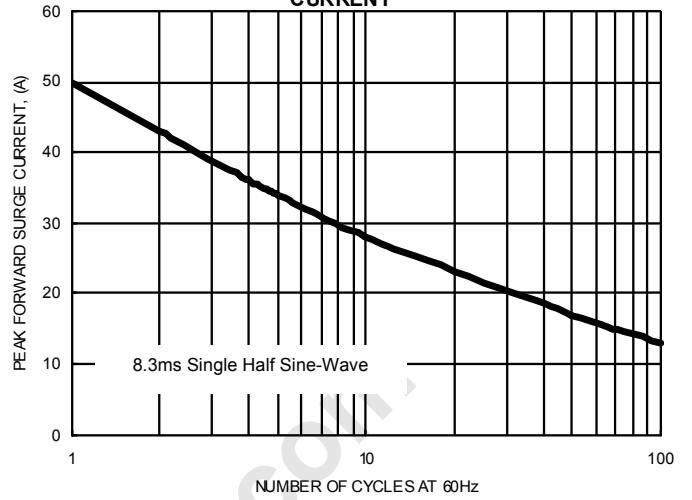


FIG. 3- TYPICAL JUNCTION CAPACITANCE

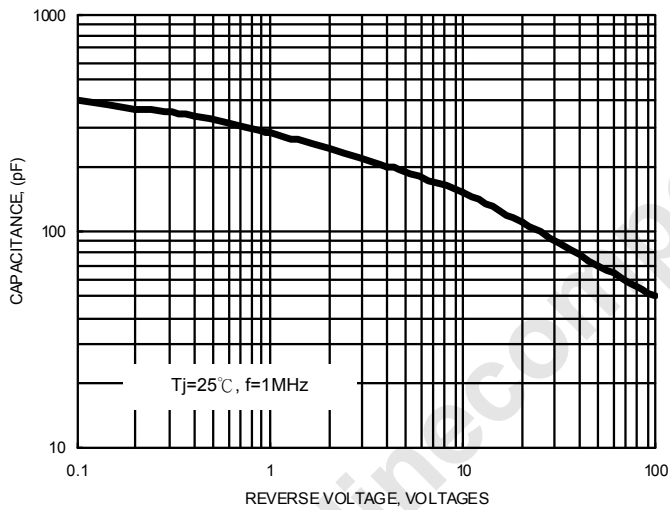


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

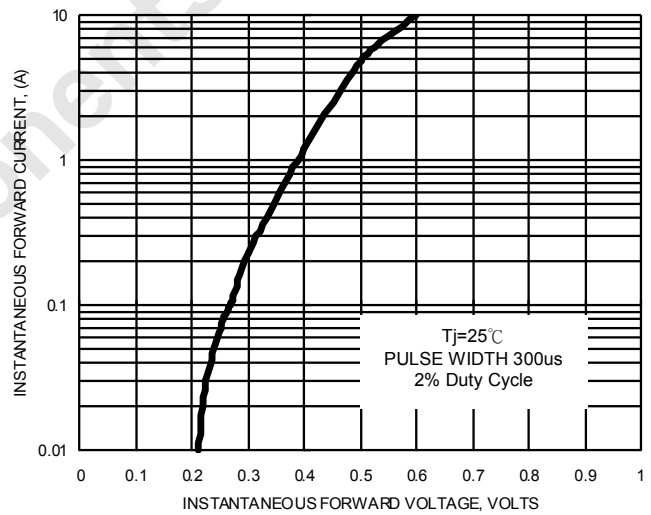


FIG. 5- TYPICAL REVERSE CHARACTERISTICS

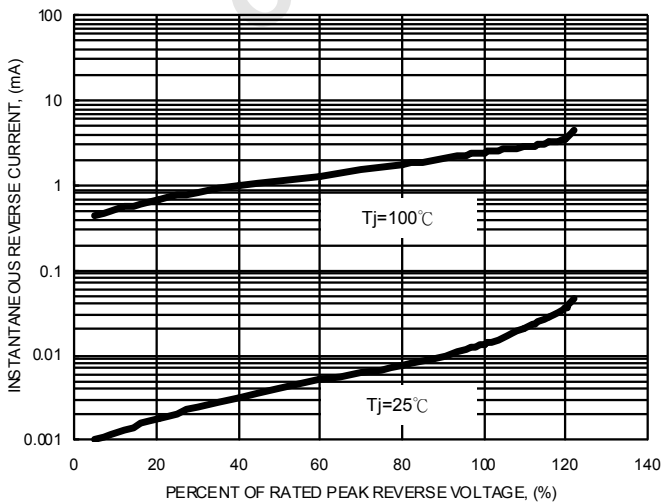
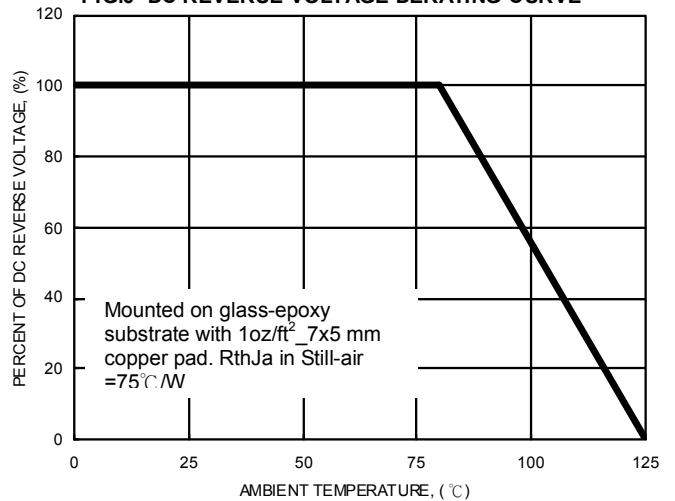


FIG. 6- DC REVERSE VOLTAGE DERATING CURVE



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