

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS	REVERSE VOLTAGE – 20 to 40 Volts FORWARD CURRENT – 2.0 Amperes
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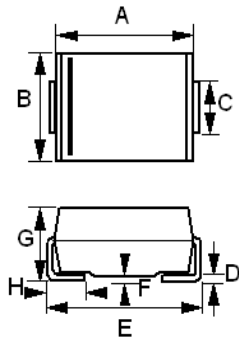
FEATURES

- 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: 0.002 ounces, 0.064 grams

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

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			$^\circ\text{C}/\text{W}$
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

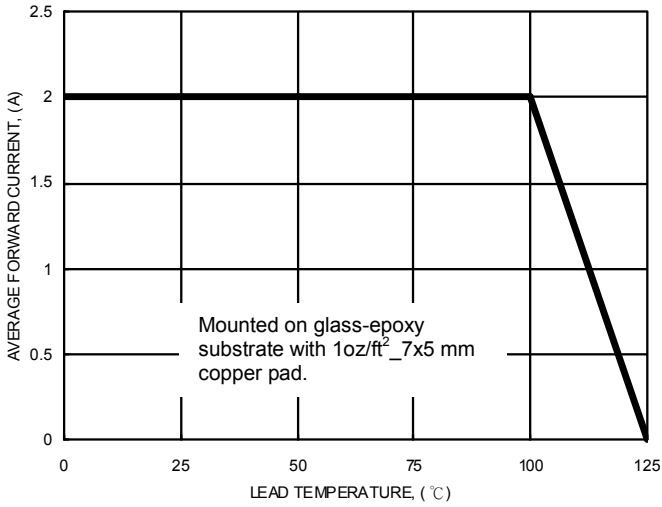


FIG. 2- MAXIMUM NON-REPETITIVE SURGE CURRENT

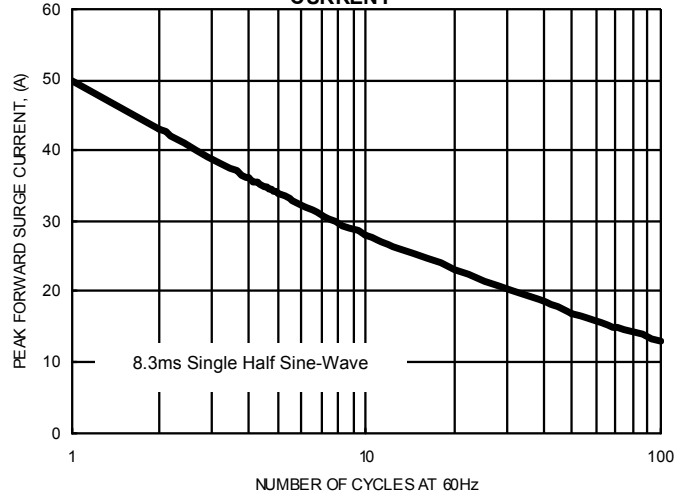


FIG. 3- TYPICAL JUNCTION CAPACITANCE

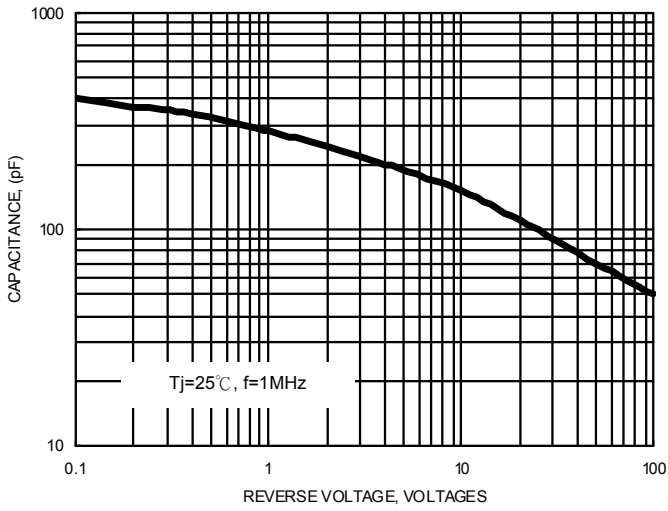


FIG. 3- TYPICAL FORWARD CHARACTERISTICS

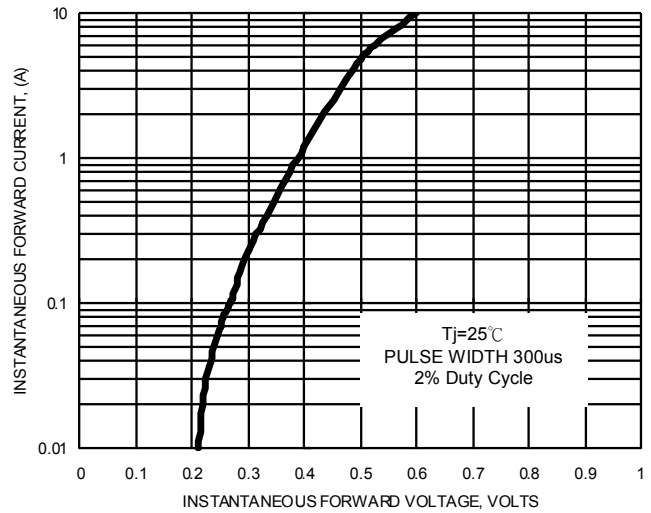


FIG. 5- TYPICAL REVERSE CHARACTERISTICS

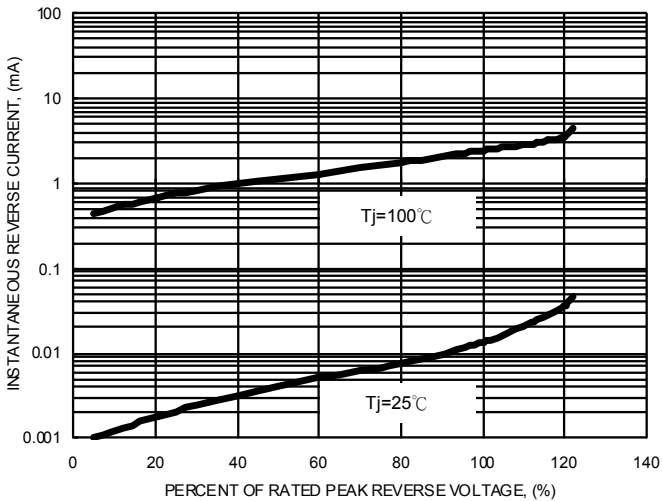


FIG. 6- DC REVERSE VOLTAGE DERATING CURVE

