

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

REVERSE VOLTAGE - **20 to 60** Volts
 FORWARD CURRENT - **1.0** Ampere

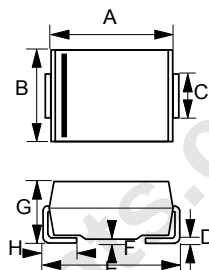
FEATURES

- For surface mounted applications
- Metal-Semiconductor junction with guardring
- 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 applications

MECHANICAL DATA

- Case : Molded plastic
- Polarity :Color band denotes cathode.
- Weight : 0.003 ounces, 0.093 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.

CHARACTERISTICS	SYMBOL	B120B	B130B	B140B	B150B	B160B	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	V
Maximum Average Forward Rectified Current (see Fig.1)	I _(AV)	1.0					A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I _{FSM}	30					A
Maximum forward Voltage at 1.0A DC	V _F	0.5			0.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	0.5 10					mA
Typical Junction Capacitance (Note 1)	C _J	110					pF
Typical Thermal Resistance (Note 2)	R _{θJL}	22					°C/W
Operating Temperature Range	T _J	-55 to +125			-55 to +150		°C
Storage Temperature Range	T _{STG}	-55 to +150					°C

NOTES : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2.Unit mounted on 0.75t glass-epoxy substrate with 2x3 mm copper pad.

REV. 6, Oct-2010, KSHB01

FIG.1 - FORWARD CURRENT DERATING CURVE

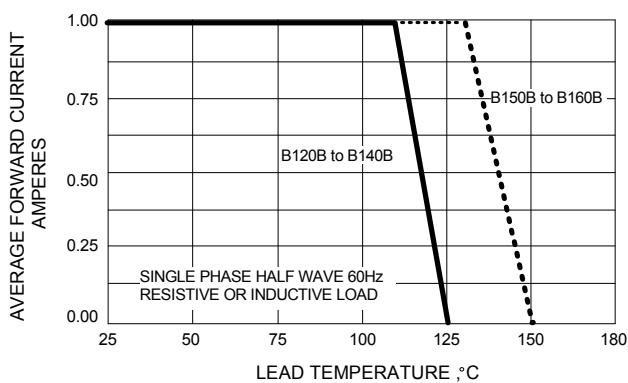


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

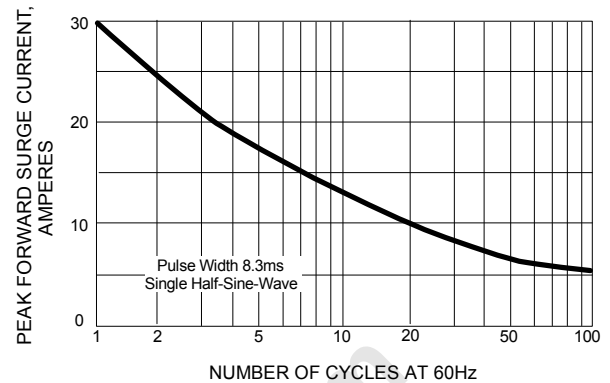


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

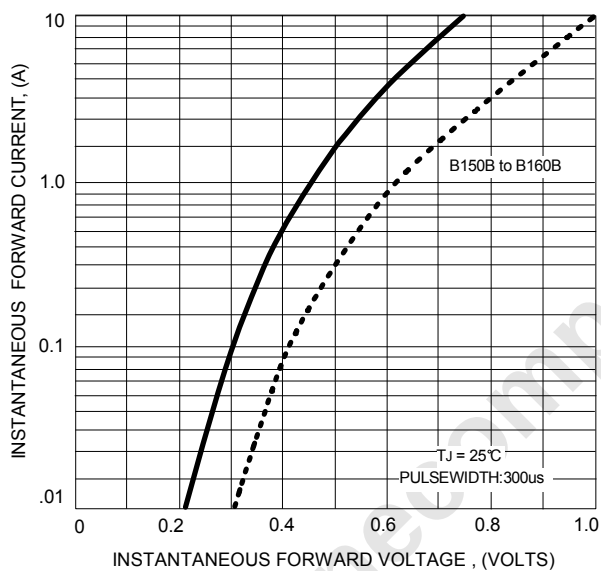


FIG.4 - TYPICAL JUNCTION CAPACITANCE

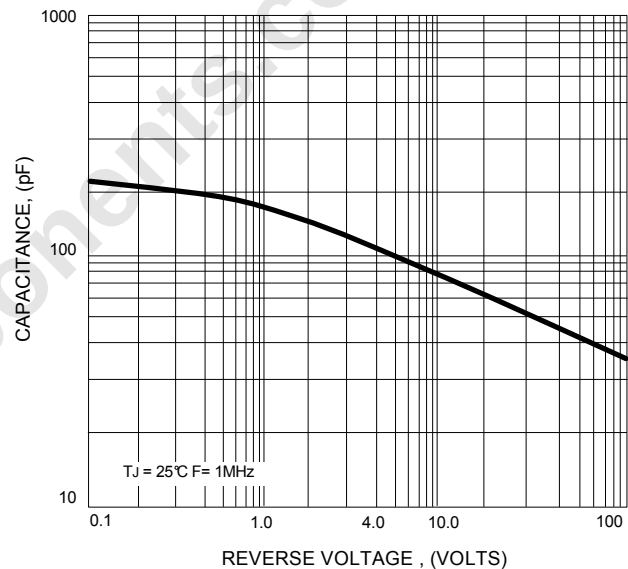
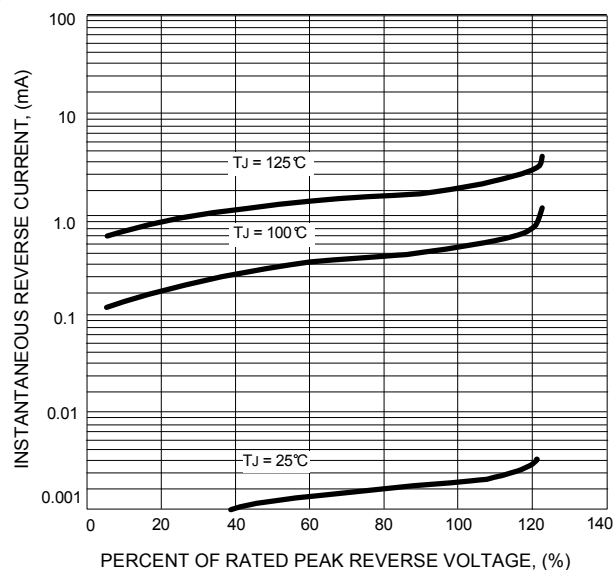


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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