

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

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

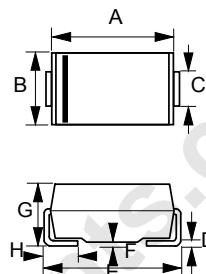
### FEATURES

- For surface mounted applications
- Metal-Semiconductor junction with guarding
- 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 : Indicated by cathode band
- Weight : 0.002 ounces, 0.064 grams

### SMA



SMA		
DIM.	MIN.	MAX.
A	4.06	4.57
B	2.29	2.92
C	1.27	1.63
D	0.15	0.31
E	4.83	5.59
F	0.05	0.20
G	2.01	2.40
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	B120	B130	B140	B150	B160	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	V
Maximum Average Forward Rectified Current @T <sub>J</sub> = 100°C	I <sub>(AV)</sub>				1.0		A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load (JEDEC METHOD)	I <sub>FSM</sub>			30			A
Maximum forward Voltage at 1.0A DC	V <sub>F</sub>		0.5		0.7		V
Maximum DC Reverse Current @T <sub>J</sub> = 25°C at Rated DC Blocking Voltage @T <sub>J</sub> = 100°C	I <sub>R</sub>			0.5 10			mA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>			110			pF
Typical Thermal Resistance (Note 2)	R <sub>θJL</sub>			20			°C/W
Operating Temperature Range	T <sub>J</sub>		-55 to +125		-55 to +150		°C
Storage Temperature Range	T <sub>STG</sub>			-55 to +150			°C

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

2. Thermal Resistance Junction to Lead.

REV. 6, Oct-2010, KSHA01

FIG.1 - FORWARD CURRENT DERATING CURVE

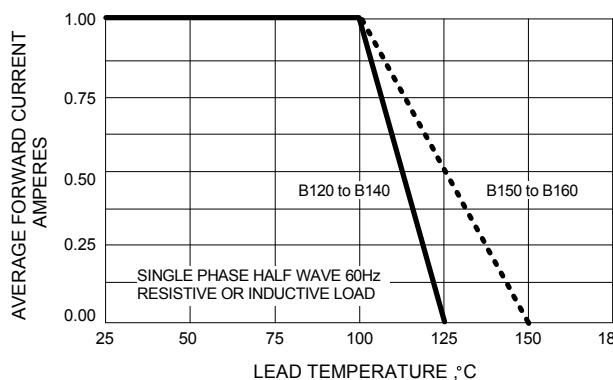


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

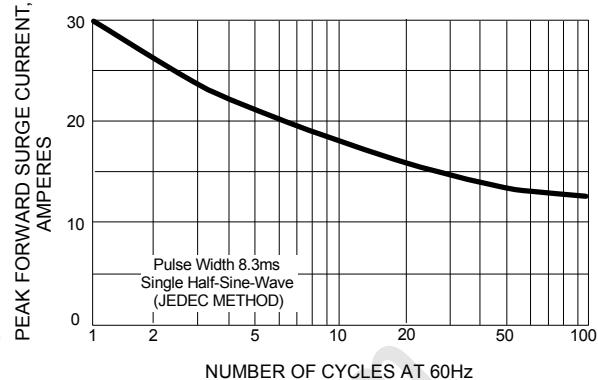


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

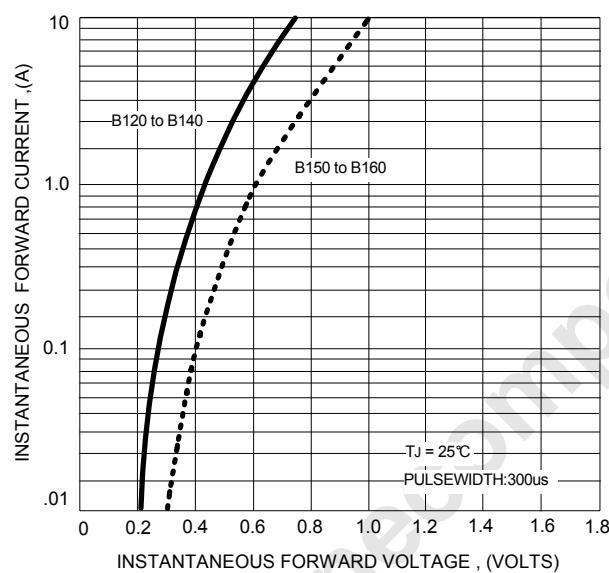


FIG.4 - TYPICAL JUNCTION CAPACITANCE

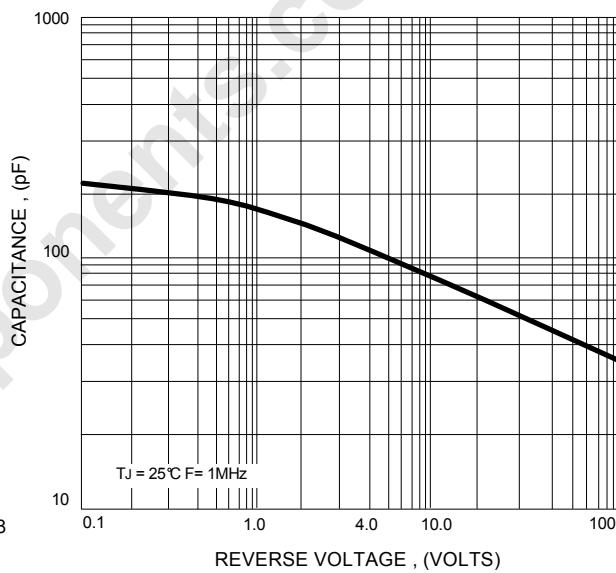
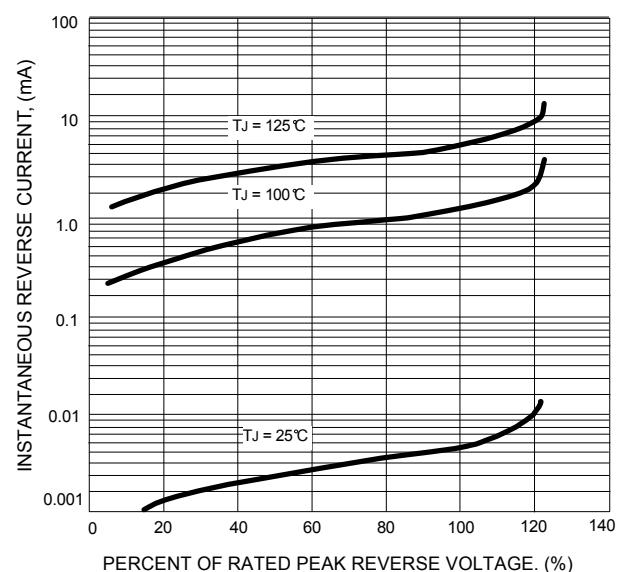


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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