

**SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **70 to 100** Volts  
FORWARD CURRENT - **2.0** Amperes

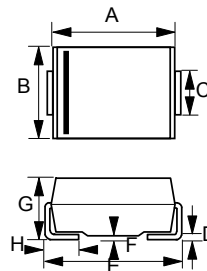
**FEATURES**

- 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 : 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	B270	B280	B290	B2100	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	70	80	90	100	V
Maximum RMS Voltage	VRMS	49	56	63	70	V
Maximum DC Blocking Voltage	VDC	70	80	90	100	V
Maximum Average Forward Rectified Current @ <sub>TL</sub> = 100°C	I(AV)	2.0				A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	IFSM	50				A
Maximum Forward Voltage at 2.0A DC @ <sub>TJ</sub> = 25°C @ <sub>TJ</sub> = 100°C	VF	0.79 0.69				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @ <sub>TJ</sub> = 25°C @ <sub>TJ</sub> = 100°C	IR	10 2				7.0 2 uA mA
Typical Junction Capacitance (Note 1)	CJ	75				pF
Typical Thermal Resistance (Note 2)	RθJL	15				°C/W
Operating Temperature Range	TJ	-55 to +150				°C
Storage Temperature Range	TSTG	-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. 8, Aug-2011, KSHB04

FIG.1 - FORWARD CURRENT DERATING CURVE

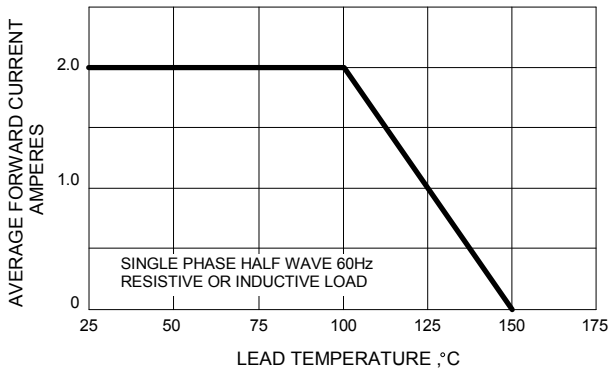


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

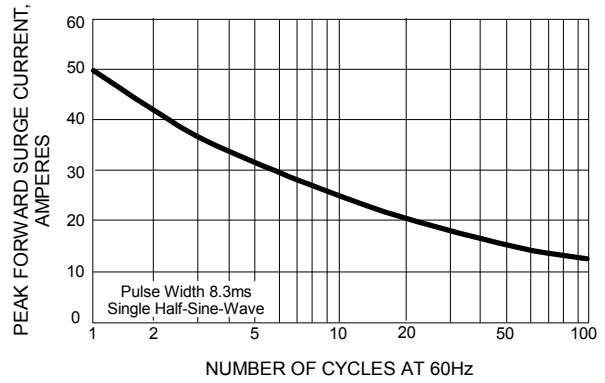


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

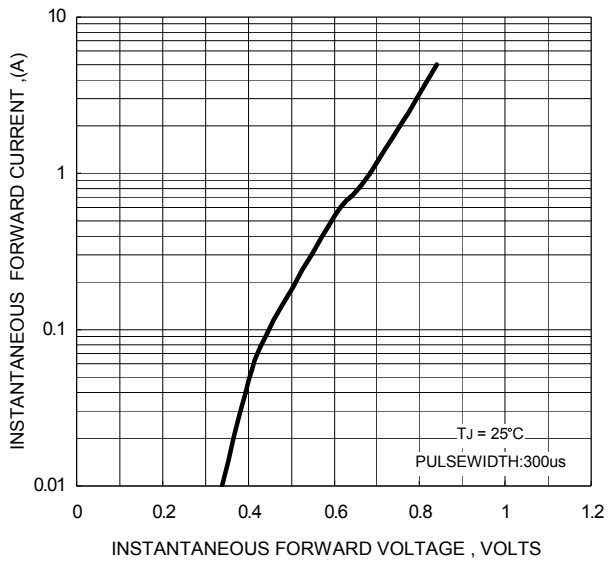


FIG.4 - TYPICAL JUNCTION CAPACITANCE

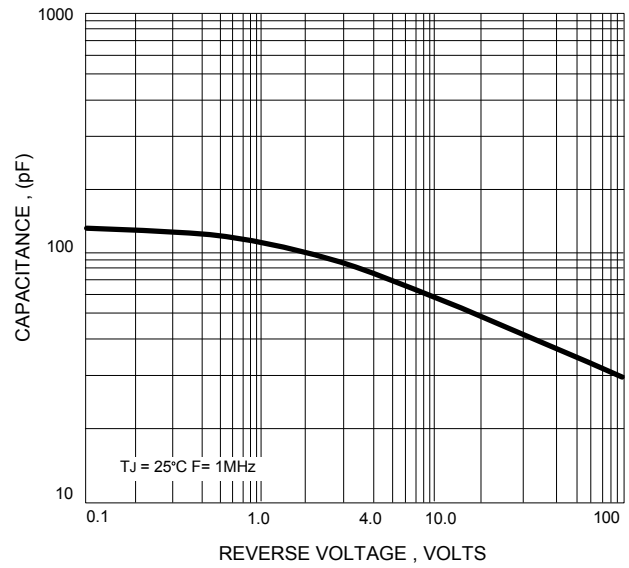
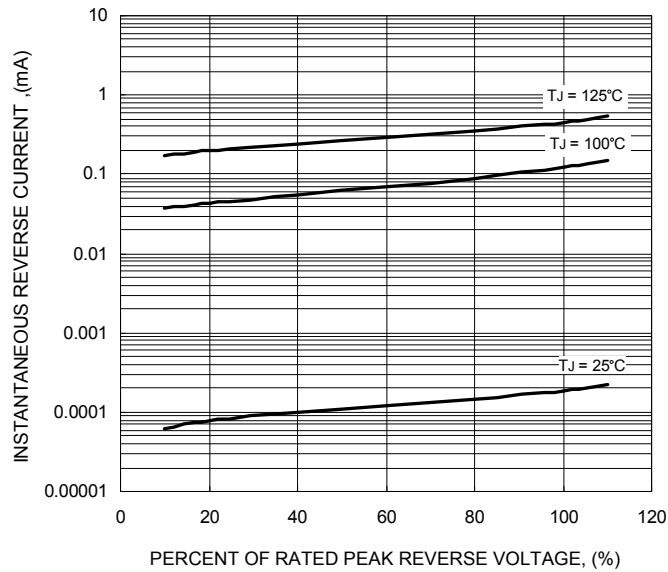


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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