

**SURFACE MOUNT  
SCHOTTKY BARRIER RECTIFIERS**

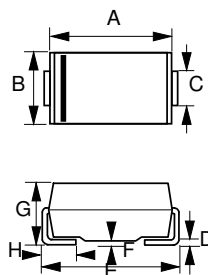
REVERSE VOLTAGE - **70 to 100** Volts  
FORWARD CURRENT - **1.0** Ampere

**FEATURES**

- For surface mounted applications
- Metal-Semiconductor junction with guardring
- Epitaxial construction
- Very Low forward voltage drop
- High current
- Qualified according to AEC-Q101 Rev\_C
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

**MECHANICAL DATA**

- Case : Molded plastic
- Case Material: Molding compound, UL Flammability classification 94V-0, "Halogen-free".
- Polarity : Indicated by cathode band
- Weight : 0.002 ounces, 0.066 grams (Approximate)

**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	B170	B180	B190	B1100	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	70	80	90	100	V
Maximum RMS Voltage	V <sub>RMS</sub>	49	56	63	70	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	70	80	90	100	V
Maximum Average Forward Rectified Current @T <sub>L</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 @T <sub>J</sub> = 25°C @T <sub>J</sub> = 100°C	V <sub>F</sub>	0.79 0.69				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> = 25°C @T <sub>J</sub> = 100°C	I <sub>R</sub>	0.02 5.0				mA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	30				pF
Typical Thermal Resistance (Note 2, 3)	R <sub>θJL</sub>	20				°C/W
Operating Temperature Range	T <sub>J</sub>	-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.

3. Device mounted on glass-epoxy substrate with 1oz/ft<sup>2</sup> 7x5 mm copper pad.

REV.-11, Sep-2019, KSHA02

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FIG.1 - FORWARD CURRENT DERATING CURVE

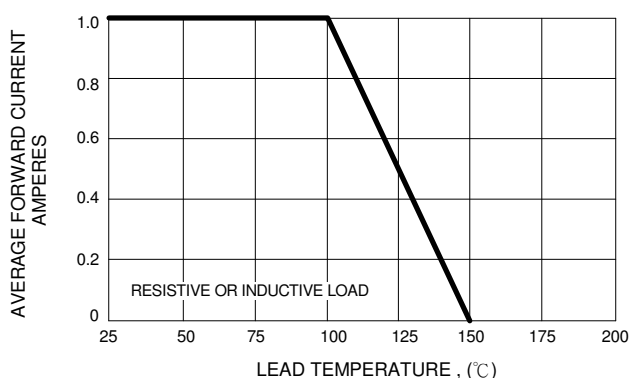


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

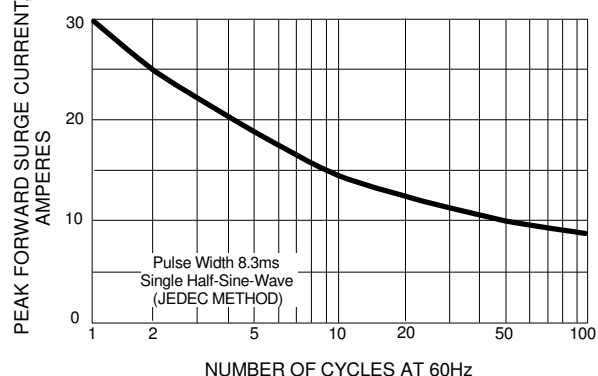


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

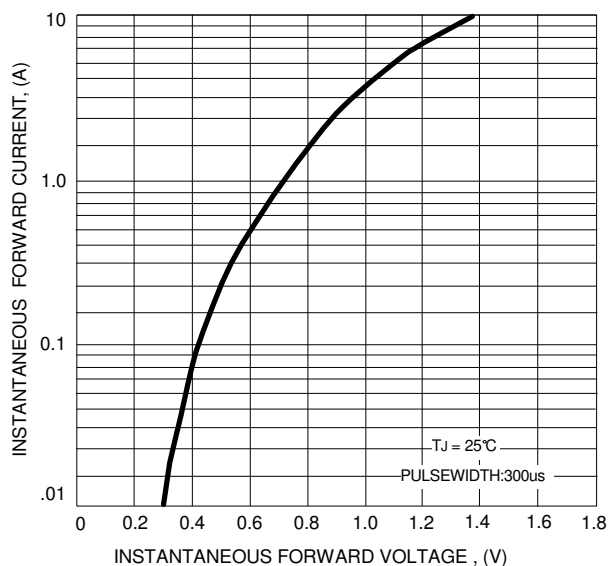


FIG.4 - TYPICAL JUNCTION CAPACITANCE

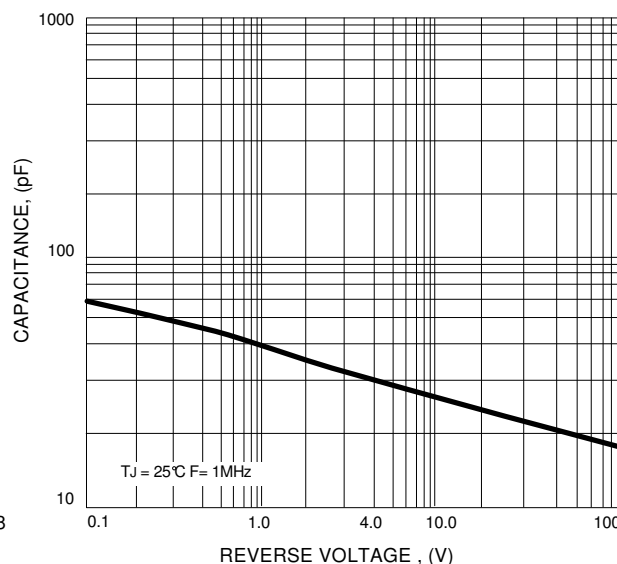
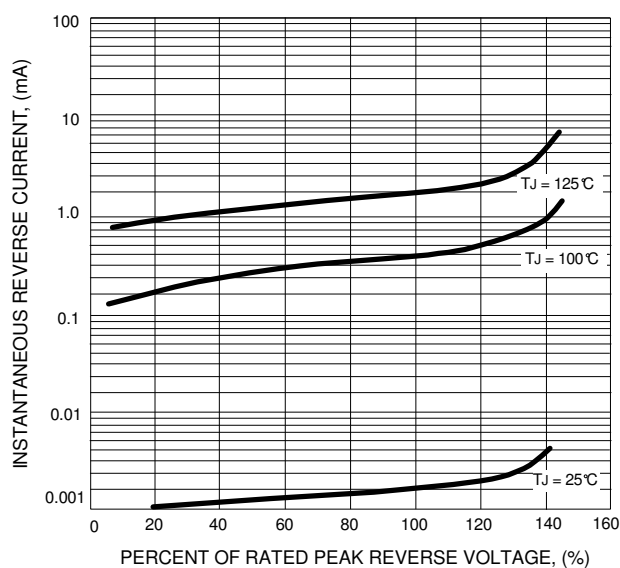


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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