

**SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **70 to 100** Volts
FORWARD CURRENT - **3.0** Amperes

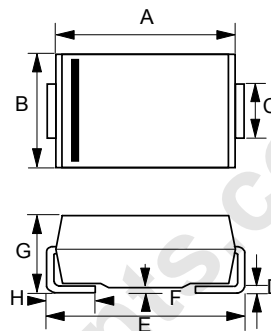
FEATURES

- 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 : 0.007 ounces, 0.21 grams

SMC



SMC		
DIM.	MIN.	MAX.
A	6.60	7.11
B	5.59	6.22
C	2.92	3.18
D	0.15	0.31
E	7.75	8.13
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	B370	B380	B390	B3100	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	70	80	90	100	V
Maximum RMS Voltage	V _{RMS}	49	56	63	70	V
Maximum DC Blocking Voltage	V _{DC}	70	80	90	100	V
Maximum Average Forward Rectified Current @T _L = 90°C	I _(AV)	3.0				A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I _{FSM}	100				A
Maximum Forward Voltage at 3.0A DC @T _J = 25°C @T _J = 100°C	V _F	0.79 0.69				V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J = 25°C @T _J = 100°C	I _R	0.5 20				mA
Typical Junction Capacitance (Note 1)	C _J	125				pF
Typical Thermal Resistance (Note 2)	R _{θJL}	12				°C/W
Operating Temperature Range	T _J	-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. Thermal Resistance Junction to Lead.

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FIG.1 - FORWARD CURRENT DERATING CURVE

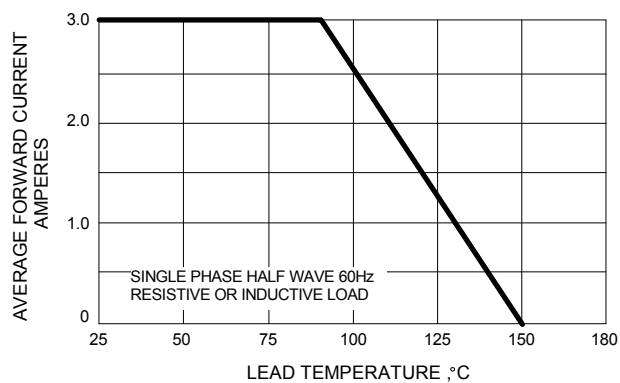


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

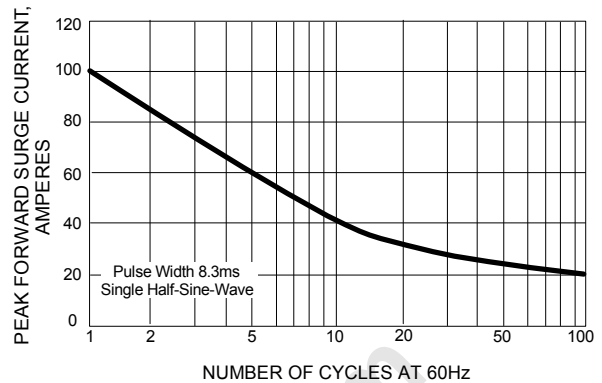


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

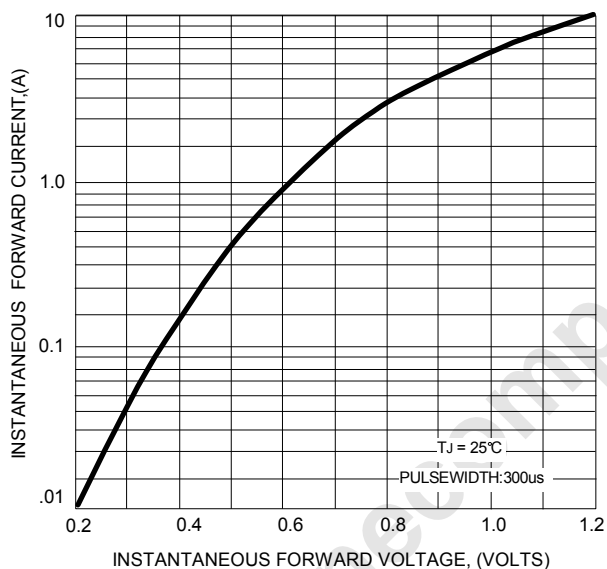


FIG.4 - TYPICAL JUNCTION CAPACITANCE

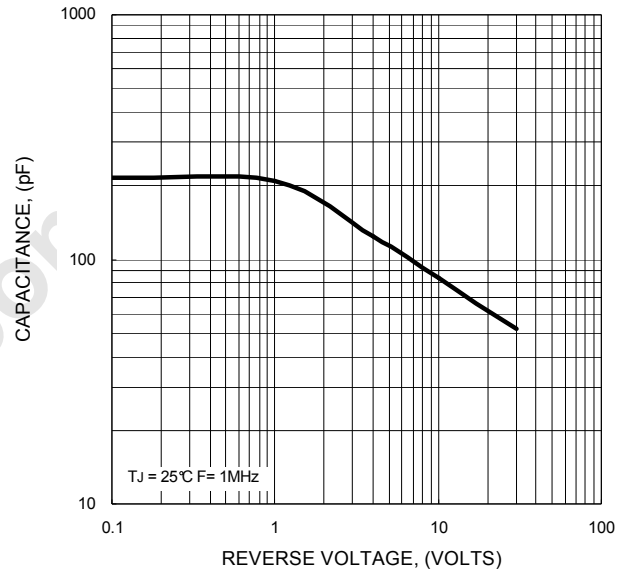
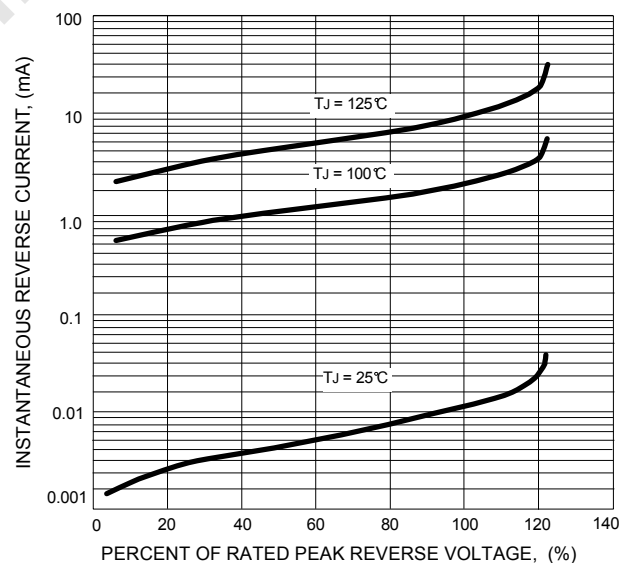


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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