

**LOW VF SURFACE MOUNT
SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - **30** Volts
FORWARD CURRENT- **1.0** Ampere

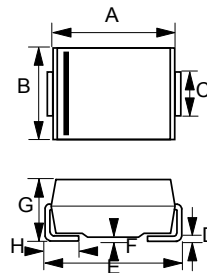
FEATURES

- 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	B130LB	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	30	V
Maximum RMS Voltage	V _{RMS}	21	V
Maximum DC Blocking Voltage	V _{DC}	30	V
Maximum Average Forward Rectified Current @T _L = 120°C @T _L = 110°C	I _(AV)	1.0 2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	I _{FSM}	40	A
Maximum Instantaneous Forward Voltage at I _F = 1.0A I _F = 2.0A @T _J = 25°C	V _F	0.395 0.445	V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J = 25°C @T _J = 100°C	I _R	1.0 20	mA
Typical Junction Capacitance (Note 1)	C _J	90	pF
Typical Thermal Resistance (Note 2)	R _{θJL} R _{θJC} R _{θJA}	20 15 60	°C/W
Operating Temperature Range	T _J	-55 to +125	°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

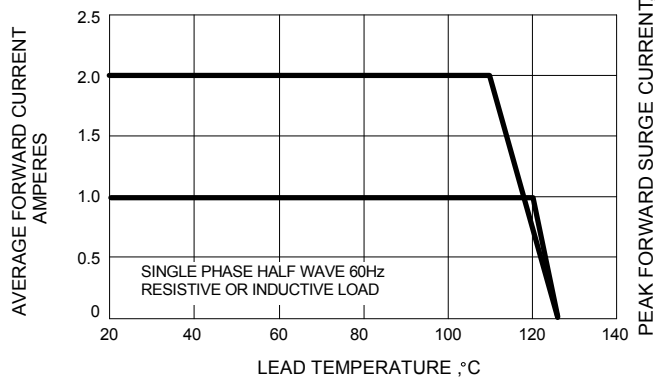


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

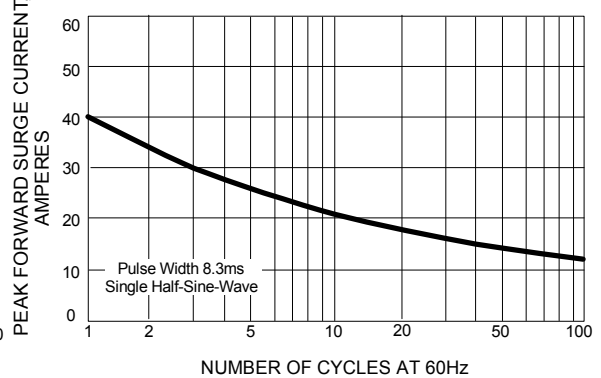


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

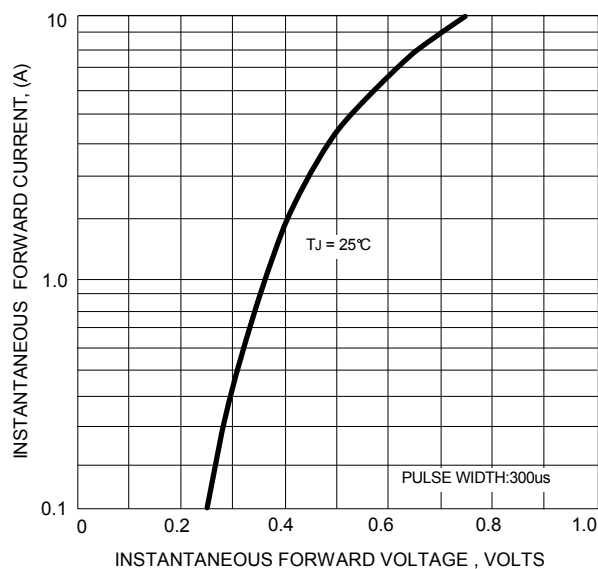


FIG.4 - TYPICAL JUNCTION CAPACITANCE

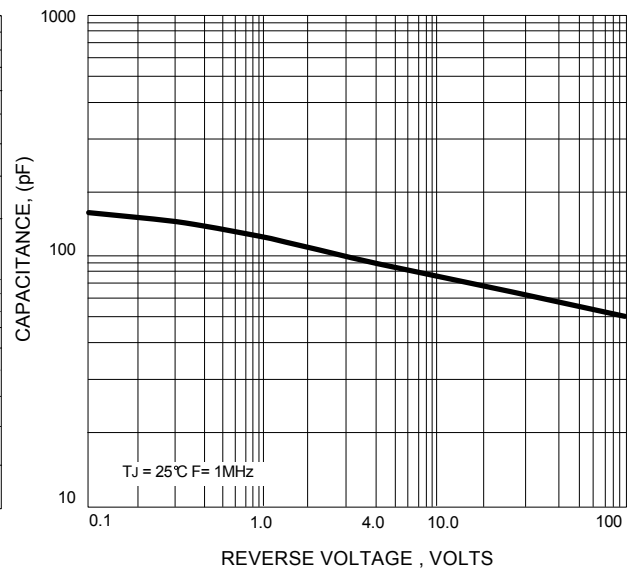
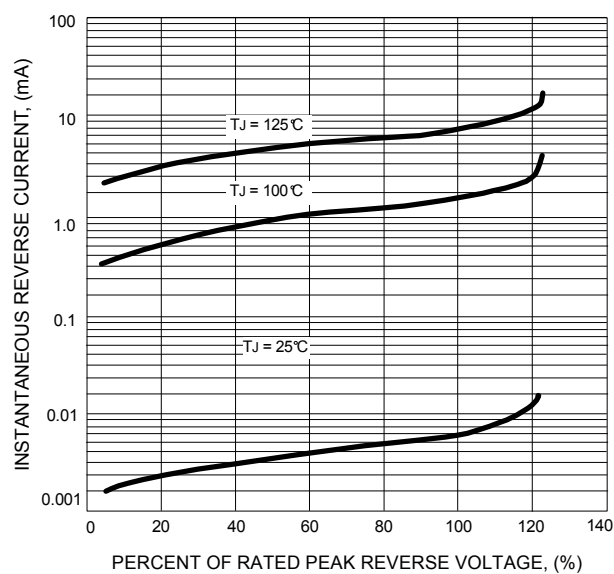


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



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