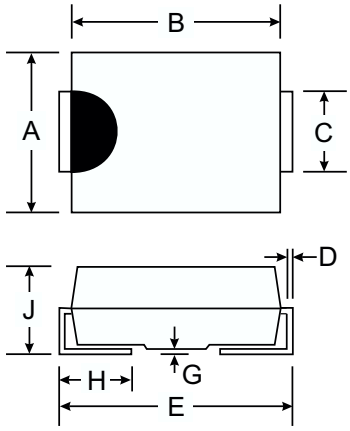
B1100LB

1.0A HIGH VOLTAGE SCHOTTKY BARRIER RECTIFIER

Features

- Schottky Barrier Chip
- Guard Ring Die Construction for Transient Protection
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- Surge Overload Rating to 50A Peak
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Application
- High Temperature Soldering: 260°C/10 Second at Terminal
- Plastic Material: UL Flammability Classification Rating 94V-0



SMB		
Dim	**Min**	**Max**
A	3.30	3.94
B	4.06	4.57
C	1.96	2.21
D	0.15	0.31
E	5.00	5.59
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Mechanical Data

- Case: SMB, Molded Plastic
- Terminals: Solder Plated Terminal - Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band or Cathode Notch
- Marking: B110LB and Date Code
- Weight: 0.093 grams (approx.)

Maximum Ratings and Electrical Characteristics

@ T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	B1100LB	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
Average Rectified Output Current @ T_T = 120°C @ T_T = 100°C	I_O	1.0 2.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50	A
Forward Voltage @ I_F = 1.0A, T_A = 25°C	V_{FM}	0.75	V
Peak Reverse Current @ T_A = 25°C at Rated DC Blocking Voltage @ T_A = 100°C	I_{RM}	0.5 5.0	mA
Typical Junction Capacitance (Note 2)	C_j	100	pF
Typical Thermal Resistance Junction to Terminal (Note 1)	$R_{\theta JT}$	22	K/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150	°C

Notes: 1. Valid provided that terminals are kept at ambient temperature.
2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

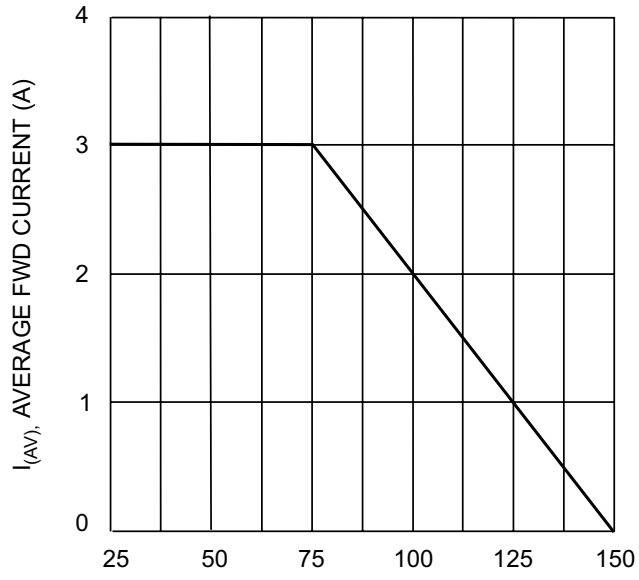


Fig. 1 Forward Current Derating Curve

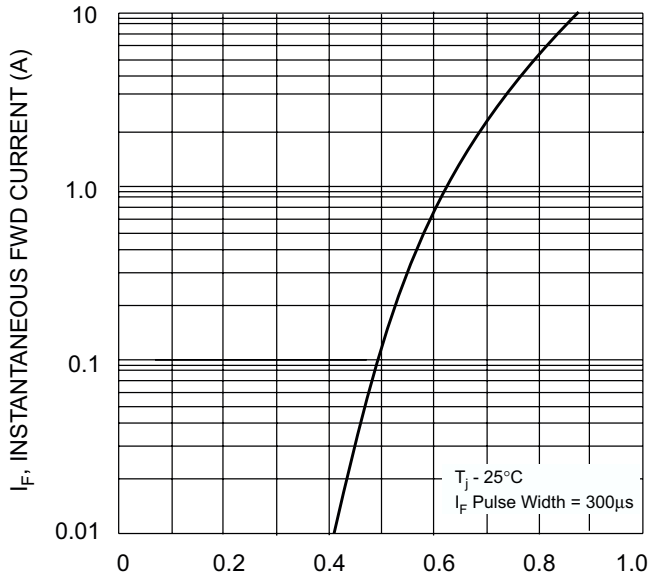


Fig. 2 Typical Forward Characteristics

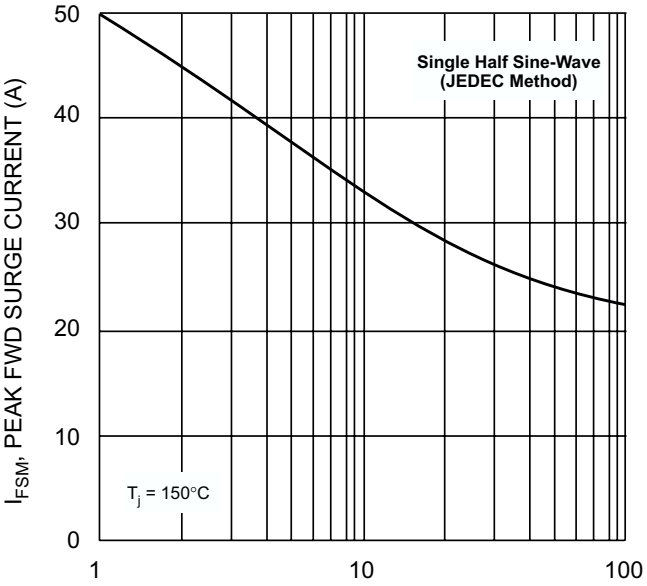


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

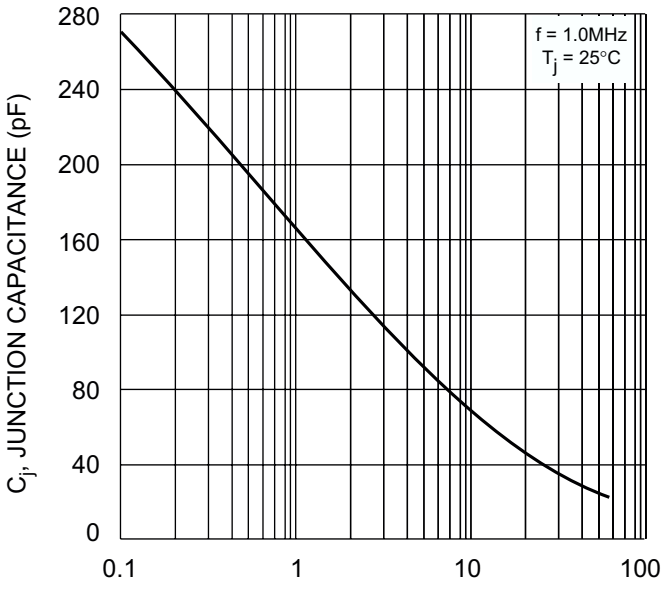


Fig. 4 Typical Junction Capacitance