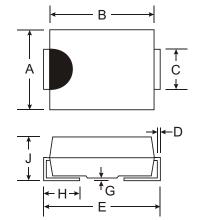


1.0A HIGH VOLTAGE SCHOTTKY BARRIER RECTIFIER

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		
Α	3.30	3.94		
В	4.06	4.57		
С	1.96	2.21		
D	0.15	0.31		
E	5.00	5.59		
G	0.10	0.20		
Н	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
- Also Available in Lead Free Plating (Matte Tin Finish). Please See
 Ordering Information, Note 4, on Page 2
- Polarity: Cathode Band or Cathode Notch
- Marking: B110LB and Date Code
- Weight: 0.093 grams (approx.)

Maximum Ratings and Electrical Characteristics @ TA = 25°C unless otherwise specified

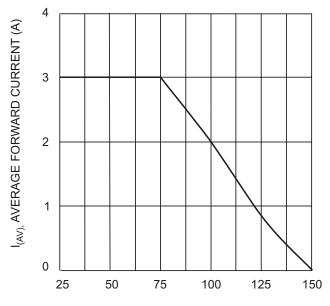
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage @ I _R = 0.5mA	V _{RRM} V _{RWM} V _R	100	V
RMS Reverse Voltage	V _R (RMS)	70	V
Average Rectified Output Current @ $T_T = 120^{\circ}$ C @ $T_T = 100^{\circ}$ C	lo	1.0 2.0	А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	50	А
Forward Voltage @ $I_F = 1.0A$, $T_A = 25$ °C	V _{FM}	0.75	V
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	I _{RM}	0.5 5.0	mA
Typical Total Capacitance (Note 2)	Ст	100	pF
Typical Thermal Resistance Junction to Terminal (Note 1)	$R_{ heta JT}$	22	°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-65 to +150	°C

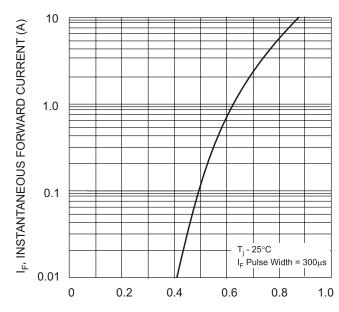
Notes:

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

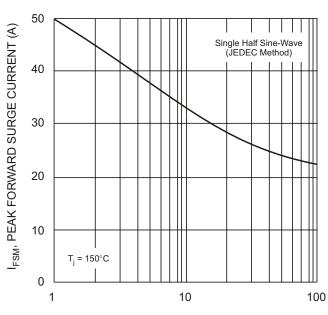




T_T, TERMINAL TEMPERATURE (°C) Fig. 1 Forward Current Derating Curve



V_F, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics



NUMBER OF CYCLES AT 60Hz Fig. 3 Max Non-Repetitive Peak Forward Surge Current

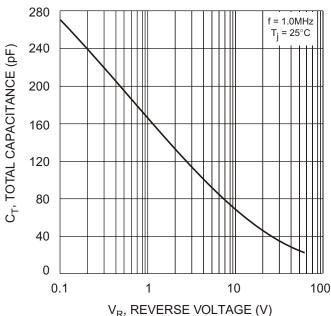


Fig. 4 Typical Total Capacitance

Ordering Information (Note 3 & 4)

Device*	Packaging	Shipping
B1100LB-13	SMB	3000/Tape & Reel

Notes: 3. For Packaging Details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

4. For lead free terminal plating part number, please add "-F" suffix to part number above. Example: B1100LB-13-F.



);; = Manufacturers' code markingYWW = Date code markingY = Last digit of year ex: 2 for 2002WW = Week code 01 to 52

Note: Device has a cathode band (as shown above) and may also have a cathode notch (as shown on Page 1).