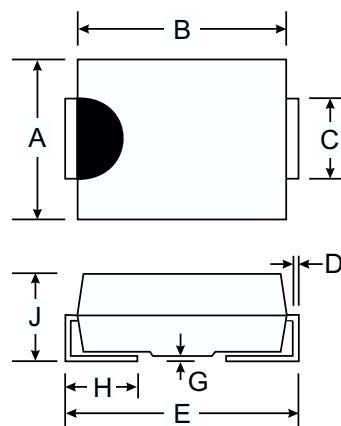


### Features

- 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

### 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.)



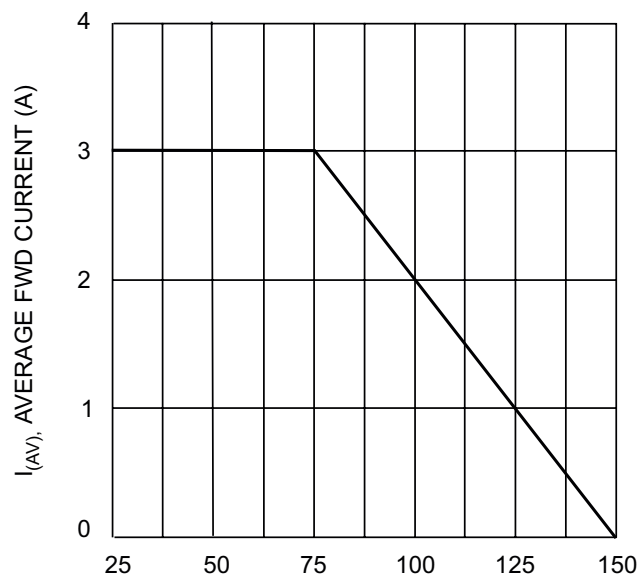
| SMB                  |      |      |
|----------------------|------|------|
| Dim                  | Min  | Max  |
| A                    | 3.30 | 3.94 |
| B                    | 4.06 | 4.57 |
| C                    | 1.96 | 2.21 |
| D                    | 0.15 | 0.31 |
| E                    | 5.00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

### Maximum Ratings and Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

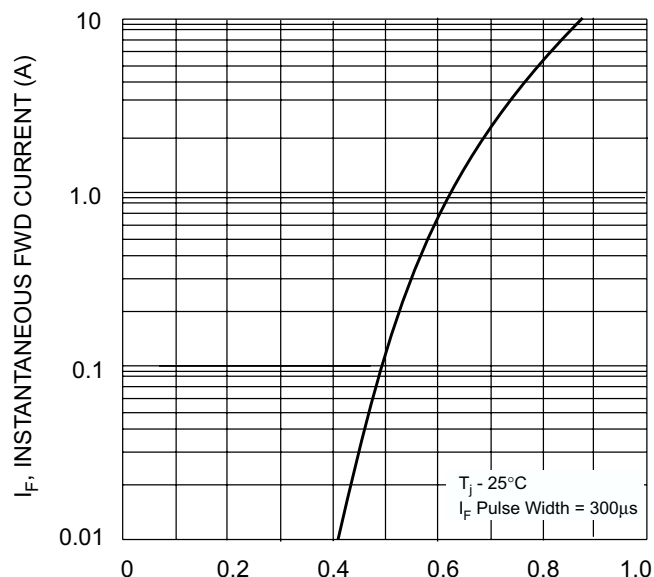
Single phase, half wave, 60Hz, resistive or inductive load.  
 For capacitive load, derate current by 20%.

| Characteristic                                                                                                        | Symbol                          | B1100LB     | Unit             |
|-----------------------------------------------------------------------------------------------------------------------|---------------------------------|-------------|------------------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage                                | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 100         | V                |
| RMS Reverse Voltage                                                                                                   | $V_{R(RMS)}$                    | 70          | V                |
| Average Rectified Output Current<br>@ $T_T = 120^\circ\text{C}$<br>@ $T_T = 100^\circ\text{C}$                        | $I_O$                           | 1.0<br>2.0  | A                |
| Non-Repetitive Peak Forward Surge Current<br>8.3ms Single half sine-wave Superimposed on Rated Load<br>(JEDEC Method) | $I_{FSM}$                       | 50          | A                |
| Forward Voltage<br>@ $I_F = 1.0\text{A}$ , $T_A = 25^\circ\text{C}$                                                   | $V_{FM}$                        | 0.75        | V                |
| Peak Reverse Current<br>@ $T_A = 25^\circ\text{C}$<br>at Rated DC Blocking Voltage<br>@ $T_A = 100^\circ\text{C}$     | $I_{RM}$                        | 0.5<br>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 | $^\circ\text{C}$ |

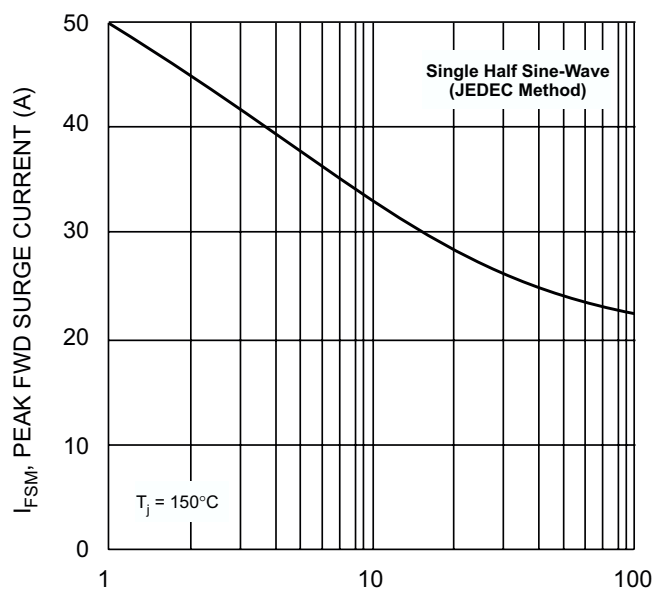
- Notes: 1. Valid provided that terminals are kept at ambient temperature.  
 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.



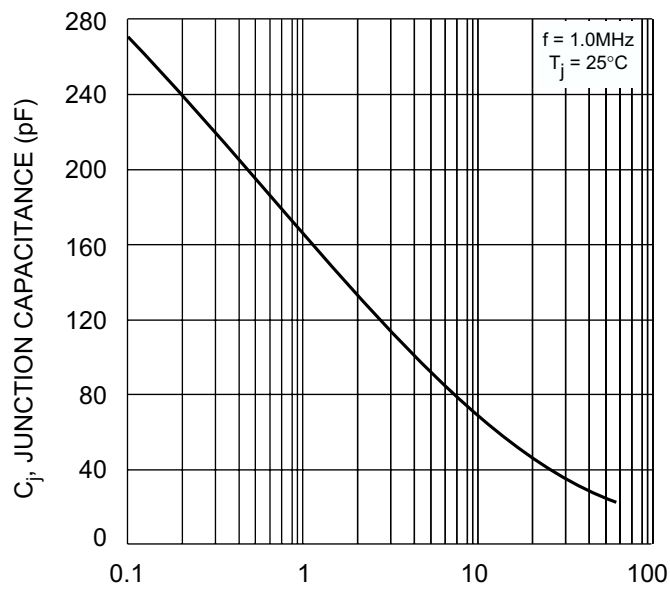
$T_T$ , TERMINAL TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



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



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



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typical Junction Capacitance