

## Features

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Power Loss, High Efficiency
- Excellent High Temperature Stability

## Mechanical Data

- Case: TO-277 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.093 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS/Lead Free Version

## 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                             | SB1545L     | Unit                 |
|---|------------------------------------|-------------|----------------------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage  | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$    | 45          | V                    |
| RMS Reverse Voltage   | $V_{R(RMS)}$                       | 28          | V                    |
| Average Rectified Output Current (Note 1) @ $T_L = 90^{\circ}\text{C}$  | $I_o$                              | 15.0        | A                    |
| Non-Repetitive Peak Forward Surge Current 8.3ms<br>Single half sine-wave superimposed on rated load<br>(JEDEC Method) @ $T_L = 75^{\circ}\text{C}$  | $I_{FSM}$                          | 275         | A                    |
| Forward Voltage Drop @ $I_F = 15\text{A}, T_j = 25^{\circ}\text{C}$   | $V_{FM}$                           | 0.55        | V                    |
| Peak Reverse Current @ $V_F = 45\text{V}, T_j = 25^{\circ}\text{C}$<br>At Rated DC Blocking Voltage @ $V_F = 45\text{V}, T_j = 100^{\circ}\text{C}$ | $I_{RM}$                           | 0.3<br>15   | mA                   |
| Typical Thermal Resistance Junction to Ambient  | $R_{\theta JA}$<br>$R_{\theta JL}$ | 80<br>15    | $^{\circ}\text{C/W}$ |
| Operating Temperature Range   | $T_j$                              | -55 to +150 | $^{\circ}\text{C}$   |
| Storage Temperature Range   | $T_{STG}$                          | -55 to +150 | $^{\circ}\text{C}$   |

Note: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.  
2. FR-4 PCB, 2oz. Copper, minimum recommended pad layout .  
3. Polyimide PCB, 2oz. Copper. Cathode pad dimensions 18.8mm x 14.4mm. Anode pad dimensions 5.6mm x 14.4mm.

Typical Characteristics

Fig.1 - Forward Current Derating Curve

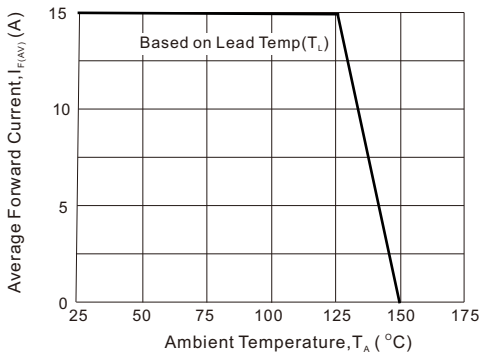


Fig2 : Instantaneous Forward Voltage

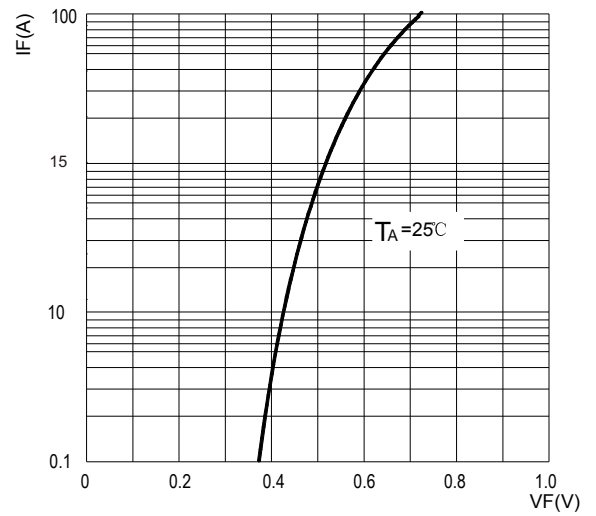


Fig3: Surge Forward Current Capadility

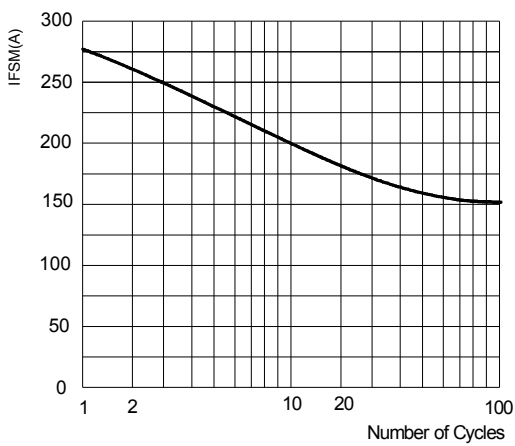
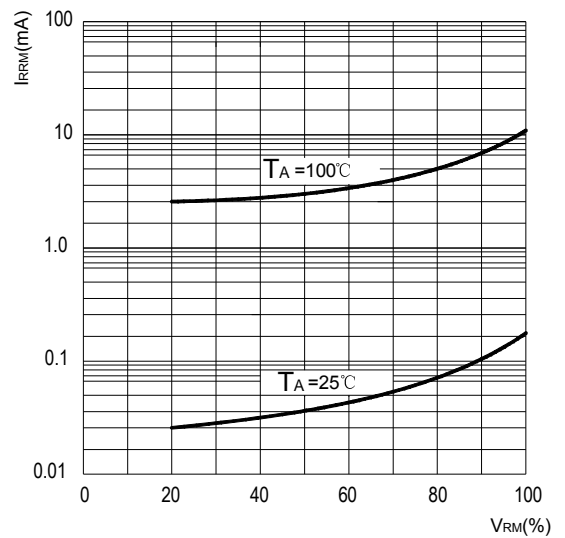


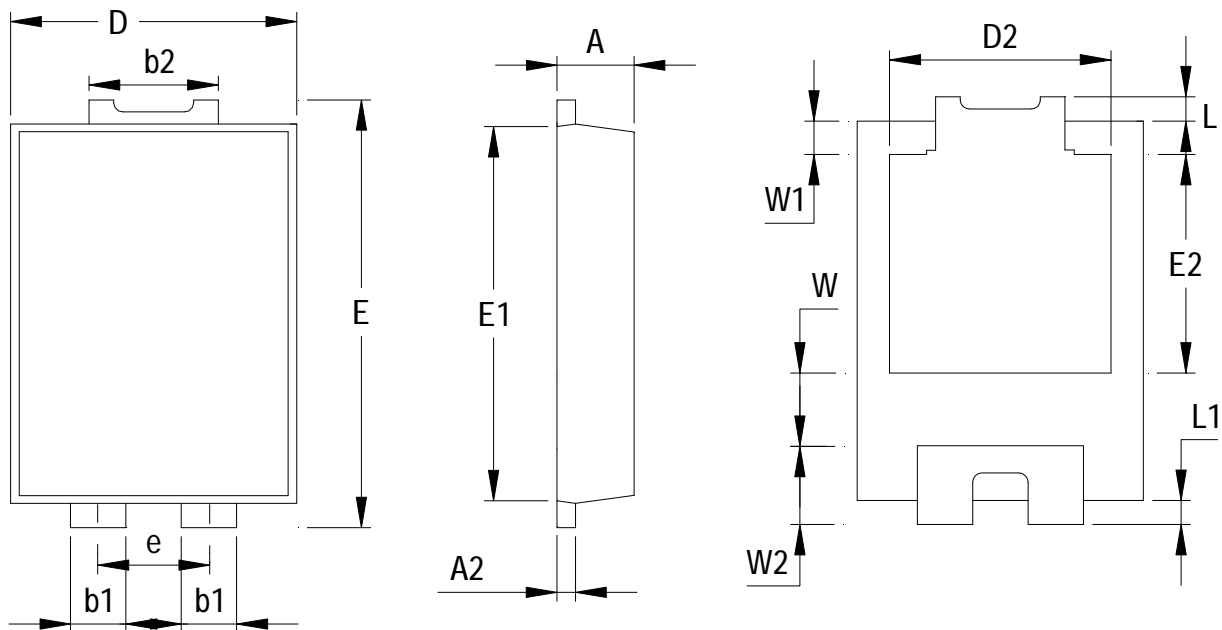
Fig4: Typical Reverse Characteristics



Package Dimension

TO-277

Units: mm



| NO                          | Dimensions | NO   | Dimensions |
|-----------------------------|------------|------|------------|
| A                           | 1.25±0.05  | e    | 1.8Typ     |
| A2                          | 0.30±0.02  | E1   | 6.25±0.05  |
| b1                          | 0.9±0.05   | E2   | 3.6±0.2    |
| b2                          | 2.1±0.05   | L/L1 | 0.4±0.05   |
| D                           | 4.65±0.05  | W    | 1.2±0.2    |
| D2                          | 3.60Typ    | W1   | 0.55±0.15  |
| E                           | 7.05±0.1   | W2   | 1.3±0.2    |
| <b>All Dimensions in mm</b> |            |      |            |

单击下面可查看定价，库存，交付和生命周期等信息

[>>TWGMC\(台湾迪嘉\)](#)