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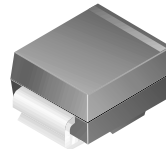
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# MBRS130L

## Features

- Compact surface mount package with J-bend leads.
- 1.5 Watt Power Dissipation package.
- 1.0 Ampere, forward voltage less than 395 mV.



**SMB/DO-214AA**  
Color Band Denotes Cathode  
Mark: 1BL3

## Schottky Rectifiers

### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

| Symbol      | Parameter                                                                                       | Value       | Units            |
|-------------|-------------------------------------------------------------------------------------------------|-------------|------------------|
| $V_{RRM}$   | Maximum Repetitive Reverse Voltage                                                              | 30          | V                |
| $I_{F(AV)}$ | Average Rectified Forward Current<br>@ $T_A = 120^\circ\text{C}$<br>@ $T_A = 110^\circ\text{C}$ | 1.0<br>2.0  | A<br>A           |
| $I_{FSM}$   | Non-Repetitive Peak Forward Surge Current<br>8.3 ms Single Half-Sine-Wave                       | 40          | A                |
| $T_{stg}$   | Storage Temperature Range                                                                       | -65 to +150 | $^\circ\text{C}$ |
| $T_J$       | Operating Junction Temperature                                                                  | -65 to +125 | $^\circ\text{C}$ |

\*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

### Thermal Characteristics

| Symbol          | Parameter                              | Value | Units              |
|-----------------|----------------------------------------|-------|--------------------|
| $R_{\theta JL}$ | Thermal Resistance, Junction to Lead * | 12    | $^\circ\text{C/W}$ |

\*Device mounted on FR-4 PCB 0.013 mm.

### Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

| Symbol | Parameter                                                                                  | Value      | Units    |
|--------|--------------------------------------------------------------------------------------------|------------|----------|
| $V_F$  | Forward Voltage<br>@ $I_F = 1.0\text{ A}$<br>@ $I_F = 2.0\text{ A}$                        | 395<br>445 | mV<br>mV |
| $I_R$  | Reverse Current<br>@ $V_R = 30\text{ V}$<br>@ $V_R = 30\text{ V}, T_A = 100^\circ\text{C}$ | 1.0<br>10  | mA<br>mA |

Schottky Rectifier  
(continued)

Typical Characteristics

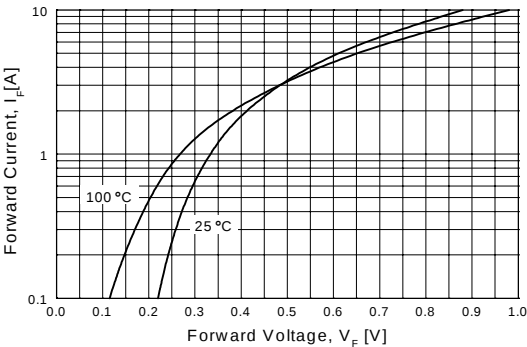


Figure 1. Forward Voltage Characteristics

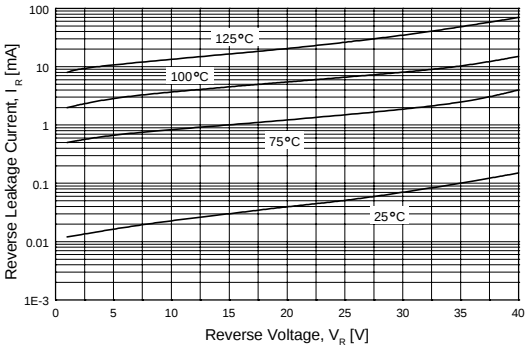


Figure 2. Reverse Current vs Reverse Voltage

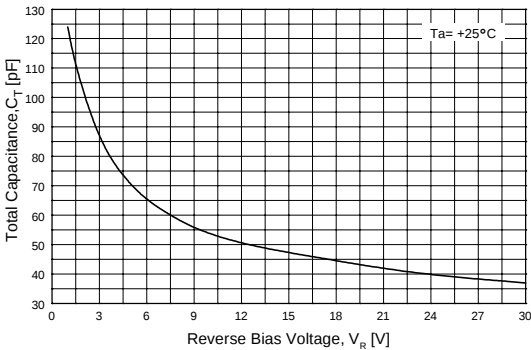


Figure 3. Total Capacitance

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