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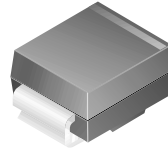
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MBRS130L

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°C unless otherwise noted

| Symbol | Parameter | Value | Units |
|--------------------|---|---------------------------------|--------|
| V _{RRM} | Maximum Repetitive Reverse Voltage | 30 | V |
| I _{F(AV)} | Average Rectified Forward Current | @ T _A = 120°C 2.0 | A A |
| I _{FSM} | Non-Repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave | 40 | A |
| T _{stg} | Storage Temperature Range | -65 to +150 | °C |
| T _J | Operating Junction Temperature | -65 to +125 | °C |

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

Thermal Characteristics

| Symbol | Parameter | Value | Units |
|------------------|--|-------|-------|
| R _{θJL} | Thermal Resistance, Junction to Lead * | 12 | °C/W |

*Device mounted on FR-4 PCB 0.013 mm.

Electrical Characteristics T_A = 25°C unless otherwise noted

| Symbol | Parameter | Value | Units | |
|----------------|-----------------|--|-------|----|
| V _F | Forward Voltage | @ I _F = 1.0 A | 395 | mV |
| | | I _F = 2.0 A | 445 | mV |
| I _R | Reverse Current | @ V _R = 30 V | 1.0 | mA |
| | | V _R = 30 V, T _A = 100 °C | 10 | mA |

Typical Characteristics

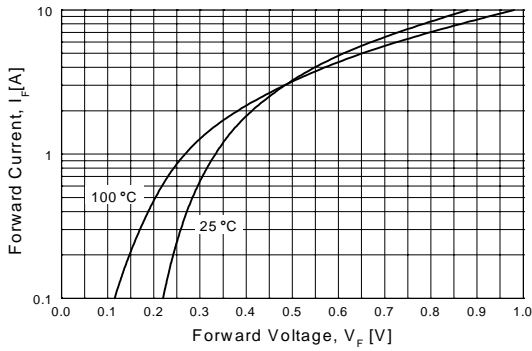


Figure 1. Forward Voltage Characteristics

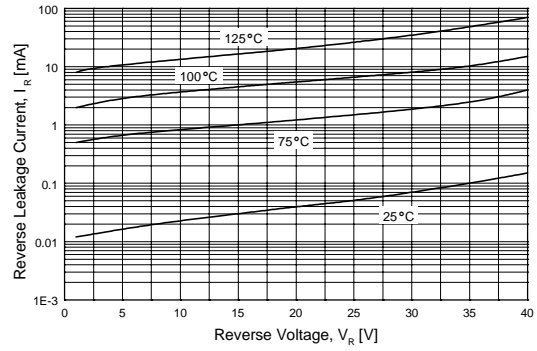


Figure 2. Reverse Current vs Reverse Voltage

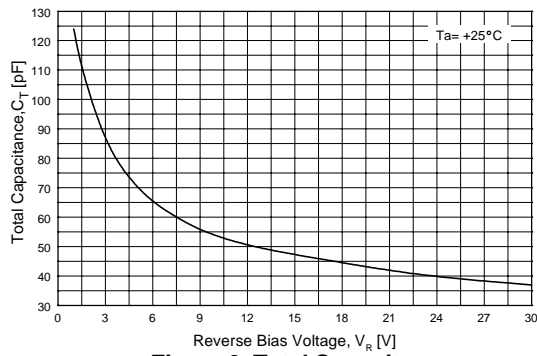


Figure 3. Total Capacitance

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