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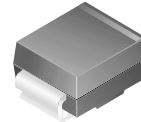
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# MBRS130

## Features

- Compact Surface Mount with J-bend Leads (SMB)
- 1.5 Watt Power Dissipation Package
- 1.0 Ampere, Forward Voltage Less than 550mV



**SMB (DO-214AA)**

Color Band Denotes Cathode  
Mark: B130

## Schottky Rectifier

### Absolute Maximum Ratings \* T<sub>A</sub> = 25°C unless otherwise noted

| Symbol             | Parameter                                                                   | Value       | Units |
|--------------------|-----------------------------------------------------------------------------|-------------|-------|
| V <sub>RRM</sub>   | Maximum Repetitive Reverse Voltage                                          | 30          | V     |
| I <sub>F(AV)</sub> | Average Rectified Forward Current @ T <sub>L</sub> = 120°C                  | 1.0         | A     |
| I <sub>FSM</sub>   | Non-repetitive Peak Forward Surge Current<br>(8.3ms, Single half sine wave) | 40          | A     |
| T <sub>STG</sub>   | Storage Temperature Range                                                   | -65 to +150 | °C    |
| T <sub>J</sub>     | Operating Junction Temperature                                              | -65 to +125 | °C    |

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

## Thermal Characteristics

| Symbol           | Parameter                           | Value | Units |
|------------------|-------------------------------------|-------|-------|
| R <sub>θJL</sub> | Thermal Resistance Junction to Lead | 12    | °C/W  |

## Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise noted

| Symbol         | Parameter                                                                               | Min. | Max.      | Units    |
|----------------|-----------------------------------------------------------------------------------------|------|-----------|----------|
| V <sub>F</sub> | Forward Voltage @ I <sub>F</sub> = 1.0A                                                 |      | 550       | mV       |
| I <sub>R</sub> | Reverse Leakage<br>V <sub>R</sub> = 30V<br>V <sub>R</sub> = 30V, T <sub>A</sub> = 100°C |      | 1.0<br>10 | mA<br>mA |

# Typical Characteristics

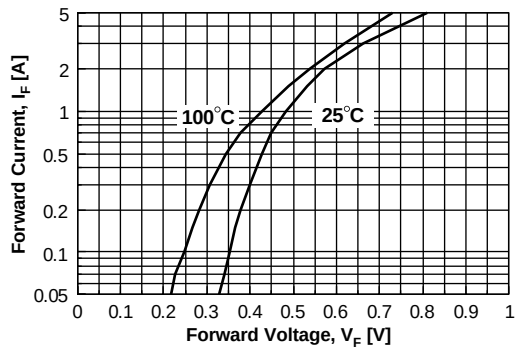


Figure 1. Forward Voltage Characteristics

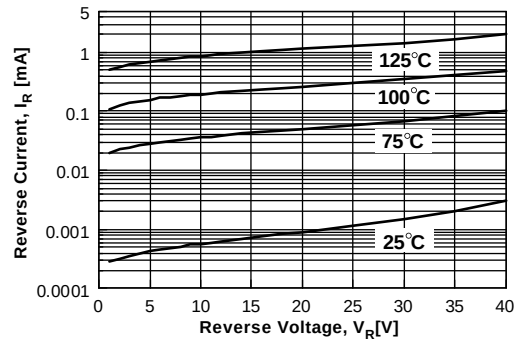


Figure 2. Reverse Current vs Reverse Voltage

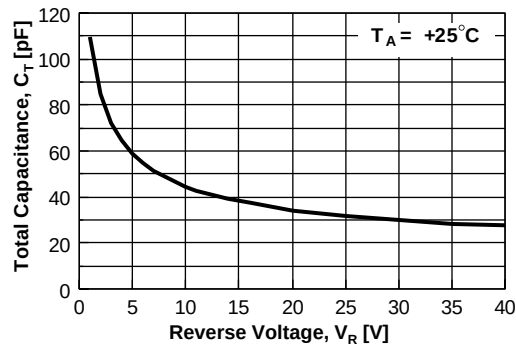


Figure 3. Total Capacitance

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| FACT Quiet Series™                   |                     | OPTOLOGIC <sup>®</sup> | SILENT SWITCHER <sup>®</sup> | VCX™                   |
| Across the board. Around the world.™ |                     | OPTOPLANAR™            | SMART START™                 |                        |
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