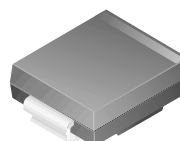




MBRS320

Features

- Compact surface mount with J-bend leads (SMC)
- 3.0 Watt Power Dissipation package
- 3.0 Ampere, forward voltage less than 500 mV



SMC (D0-214AB)
Color Band Denotes Cathode
Mark: B32

Schottky Rectifier

Absolute Maximum Ratings*

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

| Symbol | Parameter | Value | Units |
|-------------|---|-------------|------------------|
| V_{RRM} | Maximum Repetitive Reverse Voltage | 20 | V |
| $I_{F(AV)}$ | Average Rectified Forward Current @ $T_L = 100^\circ\text{C}$ $T_L = 90^\circ\text{C}$ | 3.0 4.0 | A A |
| I_{FSM} | Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz) | 80 | 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 | 11 | $^\circ\text{C/W}$ |

Electrical Characteristics

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

| Symbol | Parameter | Value | Units |
|--------|--|-----------|----------|
| V_F | Forward Voltage @ $I_F = 3.0\text{A}$, | 500 | mV |
| I_R | Reverse Current @ $V_R = 20\text{V}$, $V_R = 20\text{V}$, $T_A = 100^\circ\text{C}$ | 2.0 20 | mA mA |

Typical Characteristics

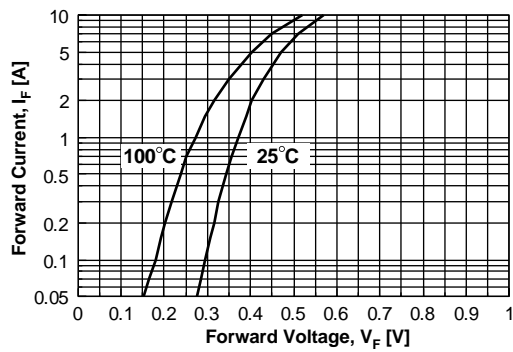


Figure 1. Forward Voltage Characteristics

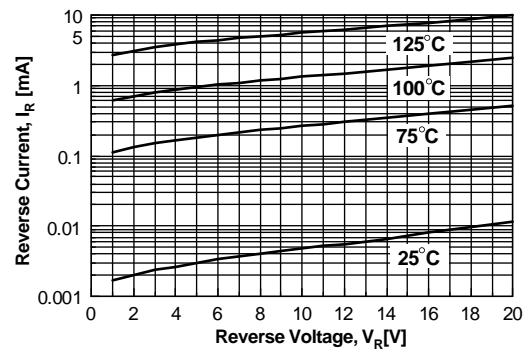


Figure 2. Reverse Current vs Reverse Voltage

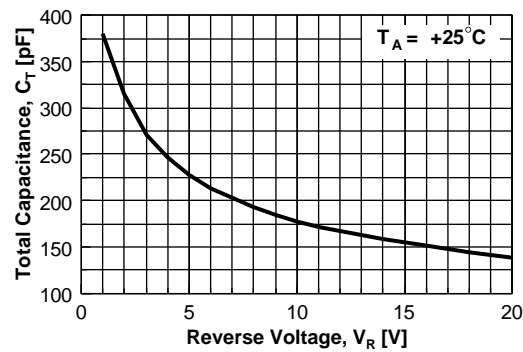


Figure 3. Total Capacitance

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