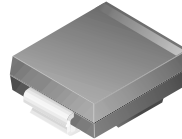




# MBRS320

## 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

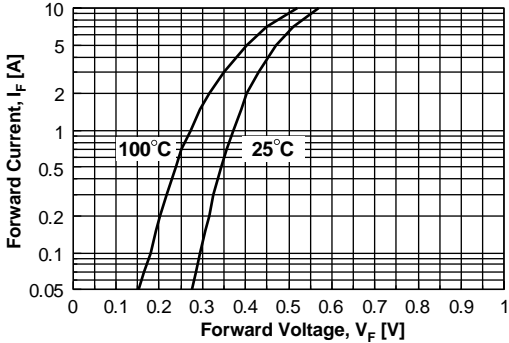
Symbol	Parameter	Value	Units
$R_{\theta JL}$	Thermal Resistance, Junction to Lead	11	$^\circ\text{C}/\text{W}$

### Electrical Characteristics

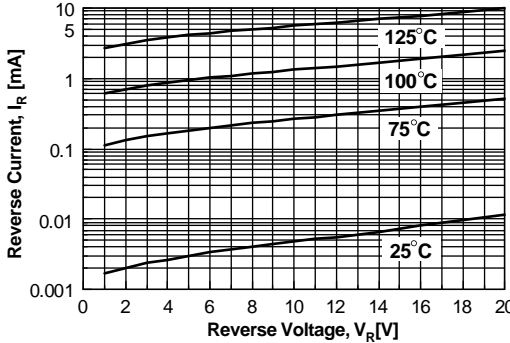
$T_A = 25^\circ\text{C}$  unless otherwise noted

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

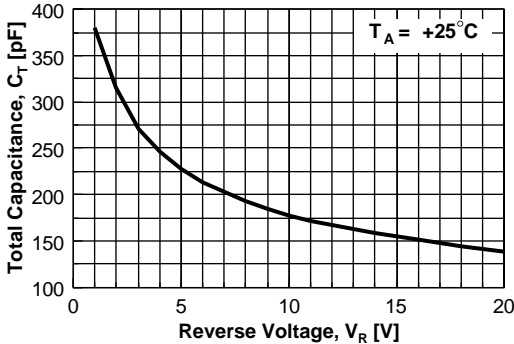
**Typical Characteristics**



**Figure 1. Forward Voltage Characteristics**



**Figure 2. Reverse Current vs Reverse Voltage**



**Figure 3. Total Capacitance**

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