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### **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<sub>A</sub> = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	20	V
I <sub>F(AV)</sub>	Average Rectified Forward Current @ $T_L = 100^{\circ}$ C $T_L = 90^{\circ}$ C	3.0 4.0	A A
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz)	80	А
T <sub>stg</sub>	Storage Temperature Range	-65 to +150	°C
T <sub>j</sub>	Operating Junction Temperature	-65 to +125	°C

<sup>\*</sup>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	°C/W

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

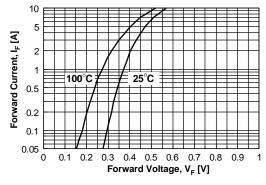
Symbol		Value	Units	
$V_{F}$	Forward Voltage	@ I <sub>F</sub> = 3.0A,	500	mV
I <sub>R</sub>	Reverse Current	@ V <sub>R</sub> = 20 V, V <sub>R</sub> = 20 V, T <sub>A</sub> = 100 °C	2.0 20	mA mA

### **Schottky Rectifier**

125°C

(continued)

### **Typical Characteristics**



0.001 0 2 4 6 8 10 12 14 16 18 20 Reverse Voltage, V<sub>R</sub>[V]

Figure 1. Forward Voltage Characteristics

Figure 2. Reverse Current vs Reverse Voltage

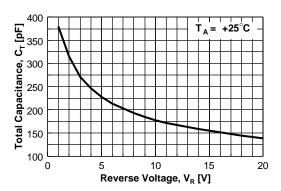


Figure 3. Total Capacitance

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