

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

Symbol	Parameter	Value	Units
$V_{RRM}$	Maximum Repetitive Reverse Voltage	30	V
I <sub>F(AV)</sub>	Average Rectified Forward Current @ $T_A = 120$ °C @ $T_A = 110$ °C	1.0 2.0	A A
I <sub>FSM</sub>	Non-Repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	40	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 *	12	°C/W

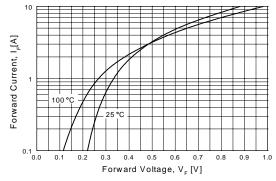
<sup>\*</sup>Device mounted on FR-4 PCB 0.013 mm.

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

Symbol	Parameter		Value	Units
$V_{F}$	Forward Voltage	@ I <sub>F</sub> = 1.0 A	395	mV
		$I_F = 2.0 \text{ A}$	445	mV
I <sub>R</sub>	Reverse Current	@ V <sub>R</sub> = 30 V	1.0	mA
		$V_{R} = 30 \text{ V}, T_{A} = 100 ^{\circ}\text{C}$	10	mA

# Schottky Rectifier (continued)

### **Typical Characteristics**



**Figure 1. Forward Voltage Characteristics** 

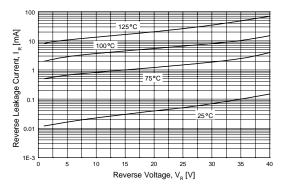
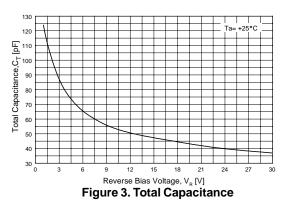


Figure 2. Reverse Current vs Reverse Voltage



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