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# ON Semiconductor®

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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



### **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	Α
I <sub>FSM</sub> Non-repetitive Peak Forward Surge Current (8.3ms, Single hale 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 the diode may be impaired.

### **Thermal Characteristics**

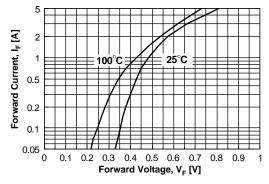
Symbol	Parameter	Value	Units
$R_{\theta JL}$	Thermal Resistance Junctionto Lead	12	°C/W

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

Symbol	Parameter			Max.	Units
V <sub>F</sub>	Forward Voltage	@ I <sub>F</sub> = 1.0A		550	mV
I <sub>R</sub>	Reverse Leakage	$V_R = 30V$		1.0	mA
		$V_R = 30V, T_A = 100^{\circ}C$		10	mA

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# **Typical Characteristics**



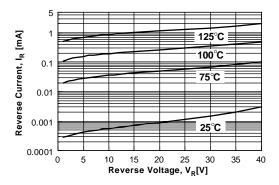


Figure 1. Forward Voltage Characteristics

Figure 2. Reverse Current vs Reverse Voltage

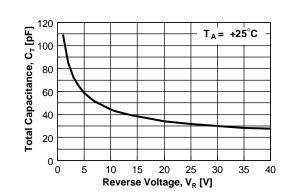


Figure 3. Total Capacitance

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