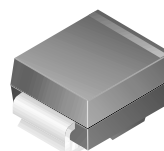




# MBRS130L

## 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\*

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

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

\*Device mounted on FR-4 PCB 0.013 mm.

### Electrical Characteristics

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

Symbol	Parameter	Value	Units
$V_F$	Forward Voltage @ $I_F = 1.0\text{ A}$ @ $I_F = 2.0\text{ A}$	395 445	mV mV
$I_R$	Reverse Current @ $V_R = 30\text{ V}$ @ $V_R = 30\text{ V}, T_A = 100^\circ\text{C}$	1.0 10	mA mA

Typical Characteristics

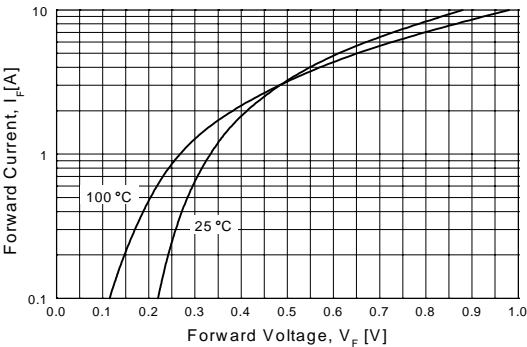


Figure 1. Forward Voltage Characteristics

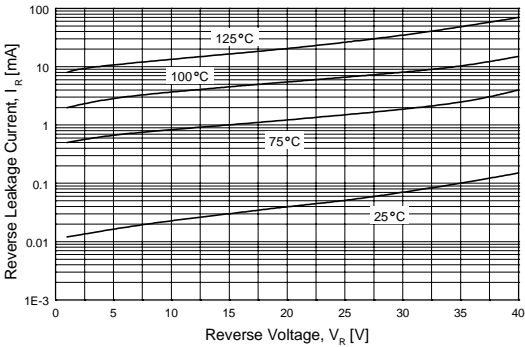


Figure 2. Reverse Current vs Reverse Voltage

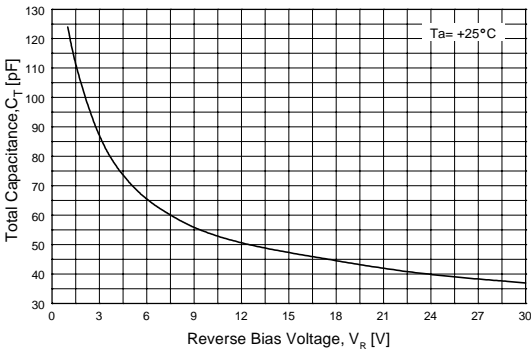


Figure 3. Total Capacitance

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DOMETM	HiSeC™	PowerTrench®	SuperSOT™-8	
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EnSigna™	MicroFET™	QT Optoelectronics™	TruTranslation™	
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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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