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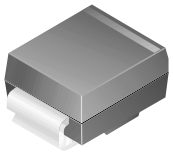
FAIRCHILD
SEMICONDUCTOR®

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°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°C @ T_A = 110°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	°C
T_J	Operating Junction Temperature	-65 to +125	°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	°C/W

*Device mounted on FR-4 PCB 0.013 mm.

Electrical Characteristics

T_A = 25°C unless otherwise noted

Symbol	Parameter		Value	Units
V_F	Forward Voltage	@ I_F = 1.0 A I_F = 2.0 A	395 445	mV mV
I_R	Reverse Current	@ V_R = 30 V V_R = 30 V, T_A = 100 °C	1.0 10	mA mA

Typical Characteristics

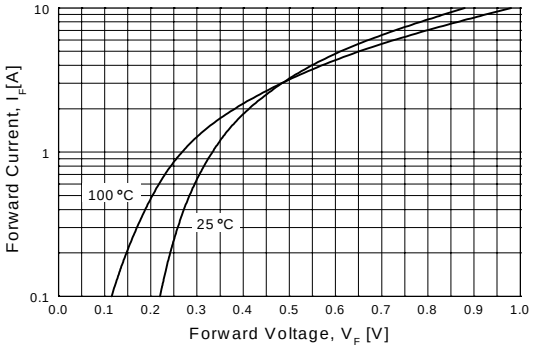


Figure 1. Forward Voltage Characteristics

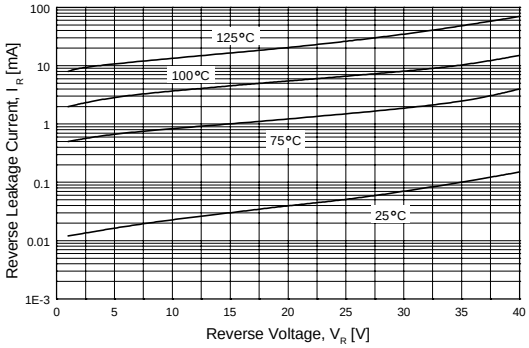


Figure 2. Reverse Current vs Reverse Voltage

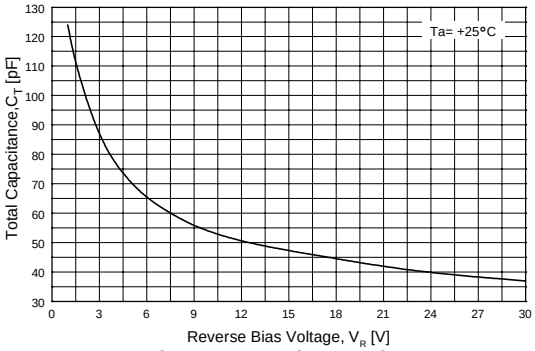


Figure 3. Total Capacitance

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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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