FAIRCHILD SEMICONDUCTOR™

MBRS130L

Features

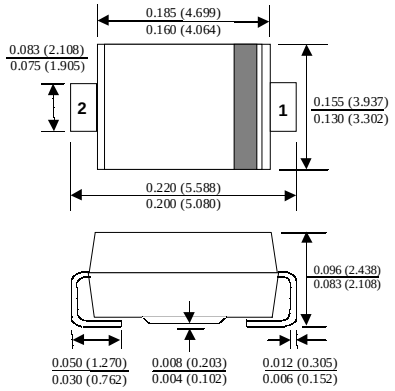
- Compact surface mount package with J-bend leads.
- 1.5 Watt Power Dissipation package.
- 1.0 Ampere, forward voltage less than 395 mv.

Ordering

- 13 inch reel (330 mm); 12 mm Tape; 3,000 units per reel.

SMB/DO-214AA

COLOR BAND DENOTES CATHODE
TOP MARK: 1BL3



1.0 Ampere Schottky Power Rectifiers

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
I_O	Average Rectified Current @ T_A = 120°C @ T_A = 110°C	1.0 2.0	A A
V_{RRM}	Repetitive Peak Reverse Voltage	30	V
$i_{f(surge)}$	Non-Repetitive Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	40	A
$R_{\theta JL}$	Thermal Resistance, Junction to Lead **	12	°C/W
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.

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

Electrical Characteristics*

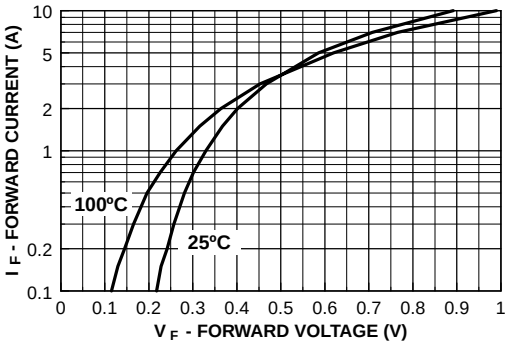
T_A = 25°C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Max	Units
I_R	Reverse Leakage Current	V_R = 30 V, T_A = 25 °C V_R = 30 V, T_A = 100 °C		1.0 10	mA mA
V_F	Forward Voltage	I_F = 1.0 A, T_A = 25 °C I_F = 2.0 A, T_A = 25 °C		395 445	mV mV

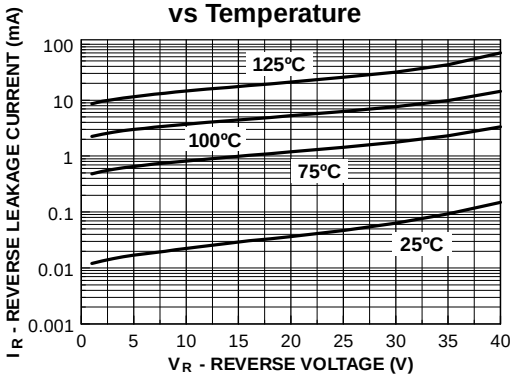
*Pulse Test: Pulse Width ≤ 300 µs, Duty Cycle ≤ 2.0%

Typical Characteristics

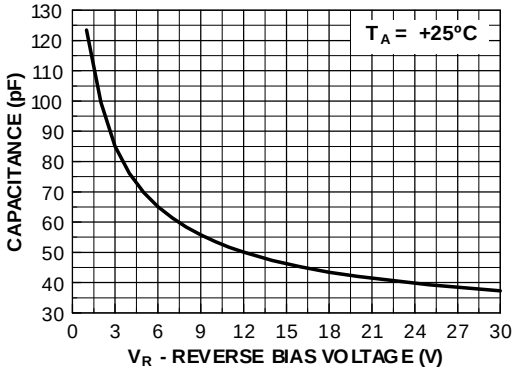
Forward Voltage vs Temperature



Reverse Leakage Current vs Temperature



Capacitance vs. Reverse Bias Voltage



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Definition of Terms

Datasheet Identification	Product Status	Definition
Advance Information	Formative or In Design	This datasheet contains the design specifications for product development. Specifications may change in any manner without notice.
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