

MBRS130L

Features

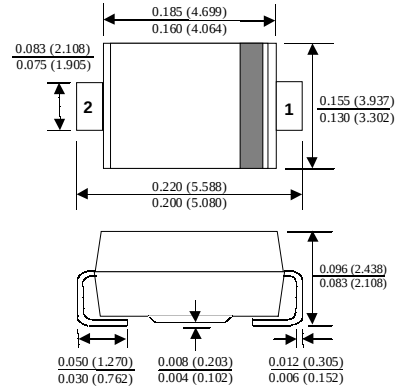
- Compact surface mount package with J-bend leads.
- 1.5 Watt Power Dissipation package.
- 1.0 Ampere, forward voltage less than 395 mV.

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*

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

Symbol	Parameter	Value	Units
I_O	Average Rectified Current @ $T_A = 120^\circ\text{C}$ @ $T_A = 110^\circ\text{C}$	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	$^\circ\text{C/W}$
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.

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

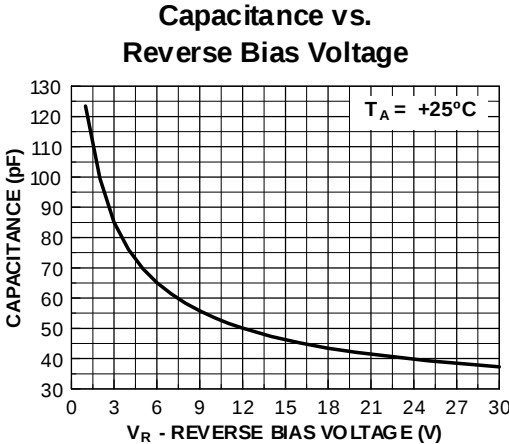
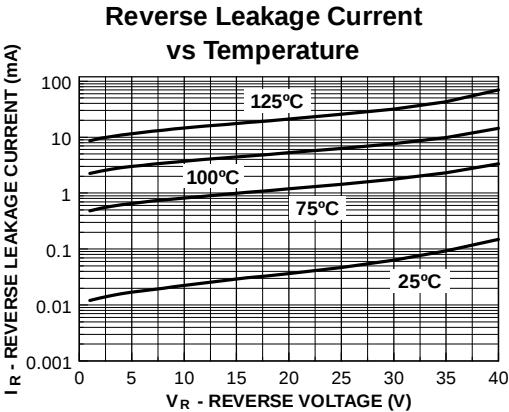
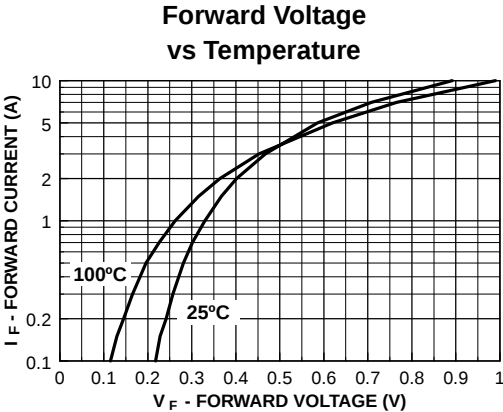
Electrical Characteristics*

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

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

*Pulse Test: Pulse Width $\leq 300\text{ }\mu\text{s}$, Duty Cycle $\leq 2.0\%$

Typical Characteristics



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FAST ^r ™	SuperSOT™-6
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