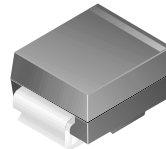




MBRS130L

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

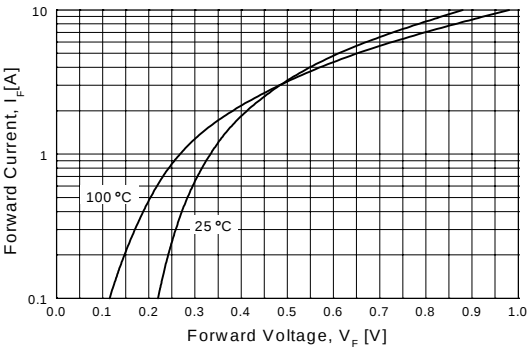


Figure 1. Forward Voltage Characteristics

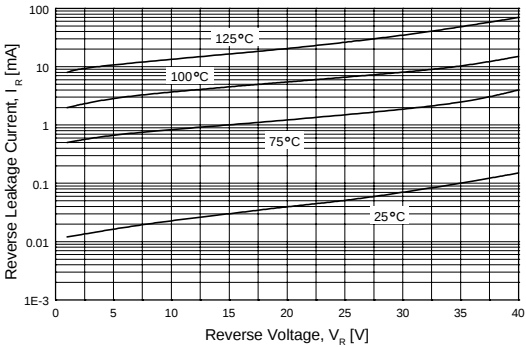


Figure 2. Reverse Current vs Reverse Voltage

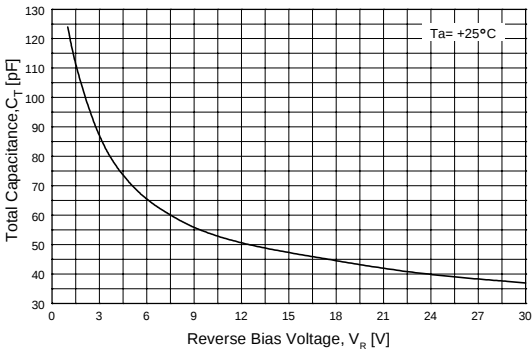


Figure 3. Total Capacitance

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