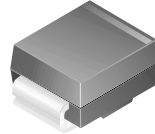




MBRS140

Features

- Compact surface mount with J-bend leads (SMB)
- 1.5 Watt Power Dissipation package
- 1.0 Ampere, forward voltage less than 600 mV



SMB (D0-214AA)
Color Band Denotes Cathode
Mark: B140

Schottky Rectifier

Absolute Maximum Ratings*

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

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	40	V
$I_{F(AV)}$	Average Rectified Forward Current @ $T_L = 120^\circ\text{C}$	1.0	A
I_{FSM}	Non-repetitive Peak Forward Surge Current	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 (Half wave, single phase, 60 Hz)	12	$^\circ\text{C}/\text{W}$

Electrical Characteristics

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

Symbol	Parameter	Value	Units
V_F	Forward Voltage @ $I_F = 1.0\text{A}$,	600	mV
I_R	Reverse Current @ $V_R = 40\text{V}$, $V_R = 40\text{V}$, $T_A = 100^\circ\text{C}$	1.0 10	mA mA

Typical Characteristics

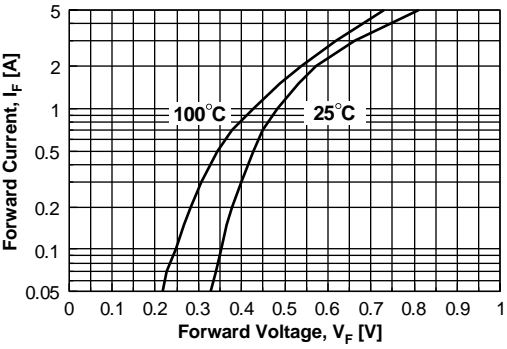


Figure 1. Forward Voltage Characteristics

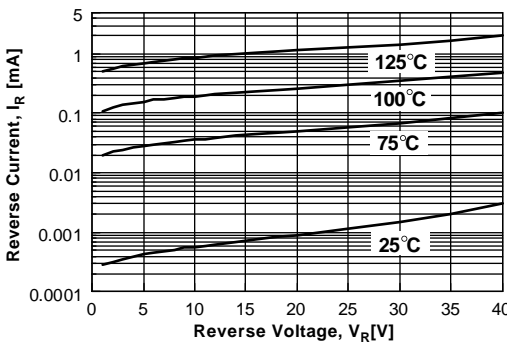


Figure 2. Reverse Current vs Reverse Voltage

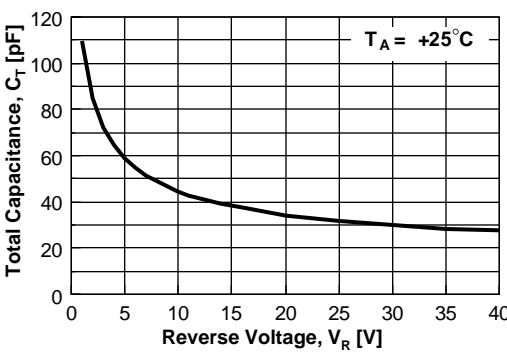


Figure 3. Total Capacitance

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