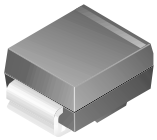
FAIRCHILD
SEMICONDUCTOR®

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°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°C	1.0	A
I_{FSM}	Non-repetitive Peak Forward Surge Current	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 (Half wave, single phase, 60 Hz)	12	°C/W

Electrical Characteristics

T_A = 25°C unless otherwise noted

Symbol	Parameter		Value	Units
V_F	Forward Voltage	@ I_F = 1.0A,	600	mV
I_R	Reverse Current	@ V_R = 40 V, V_R = 40 V, T_A = 100 °C	1.0 10	mA mA

Typical Characteristics

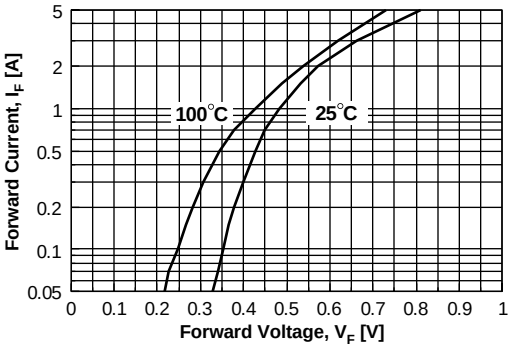


Figure 1. Forward Voltage Characteristics

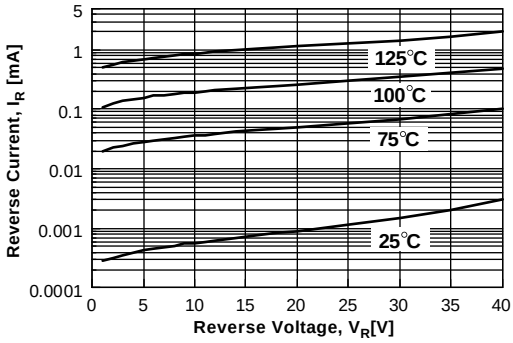


Figure 2. Reverse Current vs Reverse Voltage

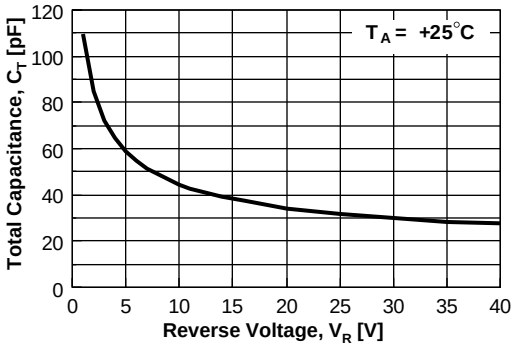


Figure 3. Total Capacitance

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