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Please note: As part of the Fairchild Semiconductor integration, some of the Fairchild orderable part numbers will need to change in order to meet ON Semiconductor's system requirements. Since the ON Semiconductor product management systems do not have the ability to manage part nomenclature that utilizes an underscore (_), the underscore (_) in the Fairchild part numbers will be changed to a dash (-). This document may contain device numbers with an underscore (_). Please check the ON Semiconductor website to verify the updated device numbers. The most current and up-to-date ordering information can be found at www.onsemi.com. Please email any questions regarding the system integration to Fairchild_questions@onsemi.com.

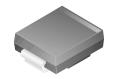
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MBRS320

Features

- Compact surface mount with J-bend leads (SMC)
- 3.0 Watt Power Dissipation package
- 3.0 Ampere, forward voltage less than 500 mV



SMC (D0-214AB) Color Band Denotes Cathode Mark: B32

Schottky Rectifier

Absolute Maximum Ratings* T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{RRM}	Maximum Repetitive Reverse Voltage	20	V
I _{F(AV)}	Average Rectified Forward Current @ $T_L = 100^{\circ}C$ $T_L = 90^{\circ}C$	3.0 4.0	A A
I _{FSM}	Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz)	80	A
T _{stg}	Storage Temperature Range	-65 to +150	°C
Tj	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

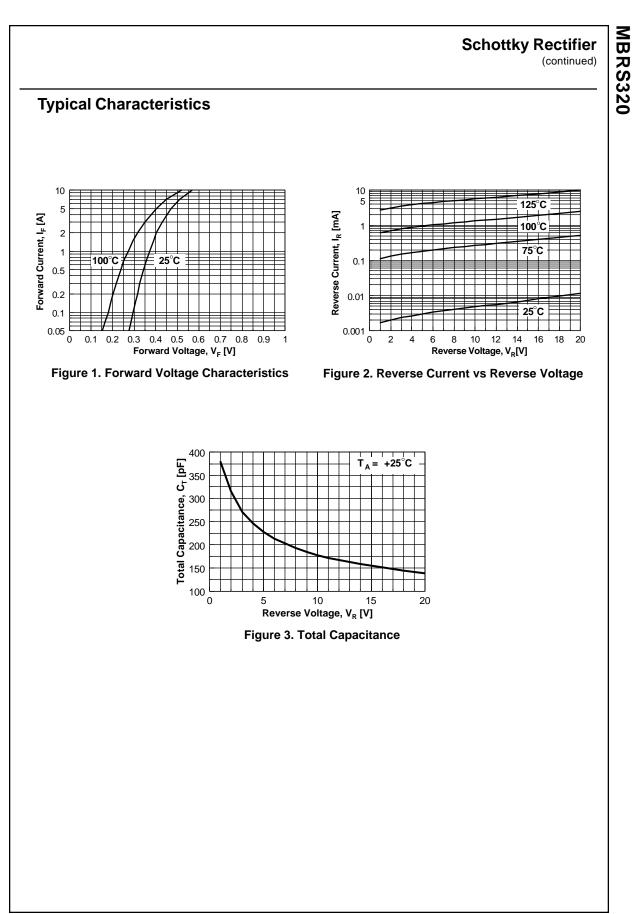
Symbol	Parameter	Value	Units
$R_{ extsf{ extsf{ hextsf{ hextsf hextsf{ $	Thermal Resistance, Junction to Lead	11	°C/W

Electrical Characteristics T_A = 25°C unless otherwise noted

Symbol	Parameter		Value	Units
V _F	Forward Voltage	@ I _F = 3.0A,	500	mV
I _R	Reverse Current	@ V _R = 20 V, V _R = 20 V, T _A = 100 °C	2.0 20	mA mA

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MBRS320, Rev. B



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PRODUCT STATUS DEFINITIONS

Definition of Terms

Datasheet Identification	Product Status	Definition		
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Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.		
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