



MBRS320 - MBRS3100

SURFACE MOUNT SCHOTTKY BARRIER DIODES

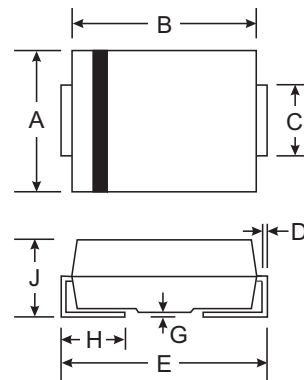
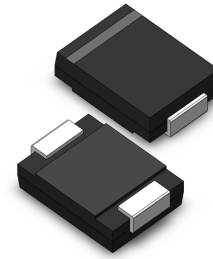
VOLTAGE RANGE: 20 - 100V
CURRENT: 3.0 A

Features

- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Plastic Material - UL Flammability Classification 94V-0
- High Reliability
- High Current Capability and Low VF
Submersible Temperature of 265°C for 10 Seconds in Solder Bath

Mechanical Data

- Case: SMC/DO-214AB, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)



SMC/DO-214AB		
Dim	Min	Max
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
G	0.10	0.20
H	0.76	1.52
J	2.00	2.62
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	MBRS 320	MBRS 330	MBRS 340	MBRS 350	MBRS 360	MBRS 380	MBRS 3100	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}	20	30	40	50	60	80	100	V
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	35	42	56	71	V
Average Rectified Output Current @T _L = 105°C	I _O	3.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80							A
Forward Voltage @I _F = 2.0A	V _{FM}	0.50		0.70		0.85		V	
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	1.0 20							mA
Typical Thermal Resistance (Note 1)	R _{θJL} R _{θJA}	10 50							°C/W
Operating Temperature Range	T _J	-65 to +125							°C
Storage Temperature Range	T _{STG}	-65 to +150							°C

Note: 1. Mounted on P.C. Board with 8.0mm² copper pad area.