

# MBRS320 - MBRS3100

## SURFACE MOUNT SCHOTTKY BARRIER DIODES

VOLTAGE RANGE: 20 - 100V CURRENT: 3.0 A

#### **Features**

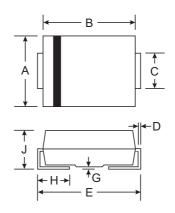
- For Surface Mounted Applications
- High Temperature Metallurgically Bonded Contacts
- Plastic Material UL Flammability Classification 94V-0
- High Reliability
- High Current Capability and Low VF Submersible Temperature of 265°C for 10 Seconds in Solder Bath

#### **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						
Α	5.59	6.22					
В	6.60	7.11					
С	2.75	3.18					
D	0.15	0.31					
E	7.75	8.13					
G	0.10	0.20					
Н	0.76	1.52					
J	2.00	2.62					
All Dimensions in mm							

### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 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 Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	20	30	40	50	60	80	100	V
RMS Reverse Voltage	VR(RMS)	14	21	28	35	42	56	71	V
Average Rectified Output Current @T <sub>L</sub> = 105°C	lo	3.0						Α	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	80						А	
Forward Voltage @I <sub>F</sub> = 2.0A	VFM	0.50 0.70 0.85					V		
	IRM	1.0 20						mA	
Typical Thermal Resistance (Note 1)	RθJL RθJA	10 50						°C/W	
Operating Temperature Range	Tj	-65 to +125						°C	
Storage Temperature Range	Tstg	-65 to +150						°C	

Note: 1. Mounted on P.C. Board with 8.0mm<sup>2</sup> copper pad area.