

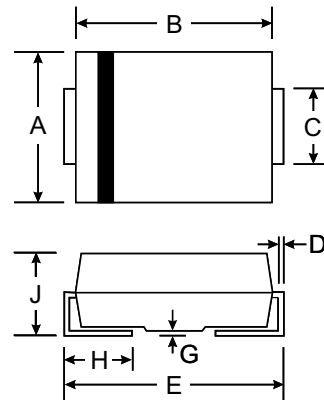
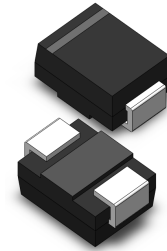
**VOLTAGE RANGE: 20 - 100V**  
**CURRENT: 2.0 A**

### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- For Use in Low Voltage Application
- Guard Ring Die Construction
- Plastic Case Material has UL Flammability Classification Rating 94V-O

### Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.093 grams (approx.)



SMB(DO-214AA)		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.70
C	1.91	2.21
D	0.15	0.31
E	5.00	5.59
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<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	MBRS220	MBRS230	MBRS240	MBRS260	MBRS2100	Unit	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>							
Working Peak Reverse Voltage	V <sub>RWM</sub>	20	30	40	60	100	V	
DC Blocking Voltage	V <sub>R</sub>							
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	42	71	V	
Average Rectified Output Current @T <sub>L</sub> = 105°C	I <sub>O</sub>	2.0						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50						A
Forward Voltage @I <sub>F</sub> = 2.0A	V <sub>FM</sub>	0.50			0.70	0.85	V	
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>			0.5			mA	
				20				
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub> R <sub>θJA</sub>			17 75			°C/W	
Operating Temperature Range	T <sub>j</sub>			-65 to +125			°C	
Storage Temperature Range	T <sub>STG</sub>			-65 to +150			°C	

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

FIG. 1 - FORWARD CURRENT DERATING CURVE

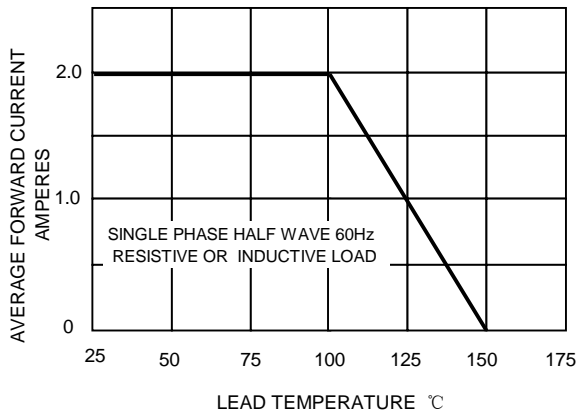


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

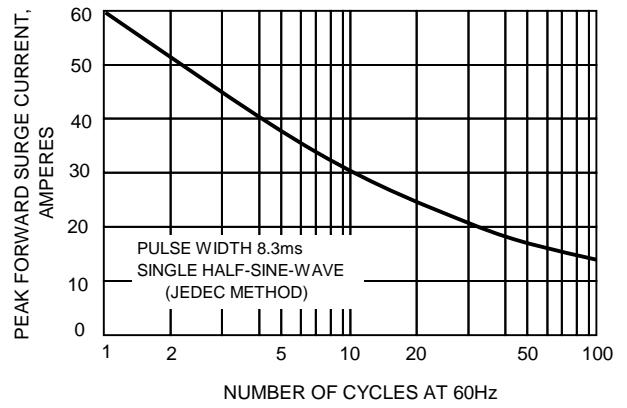


FIG.4-TYPICAL FORWARD CHARACTERISTICS

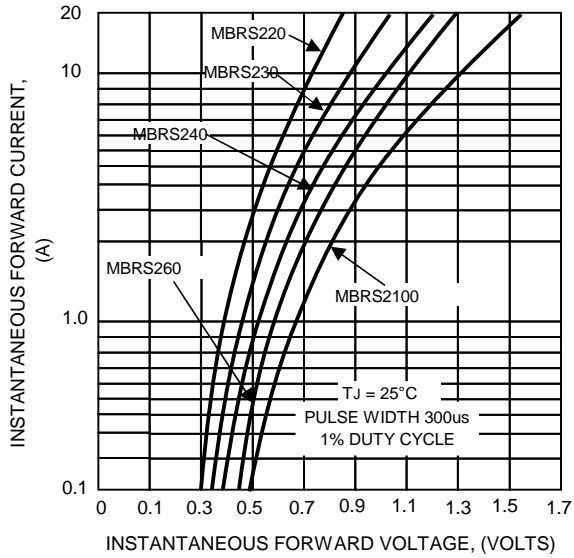


FIG.4-TYPICAL JUNCTION CAPACITANCE

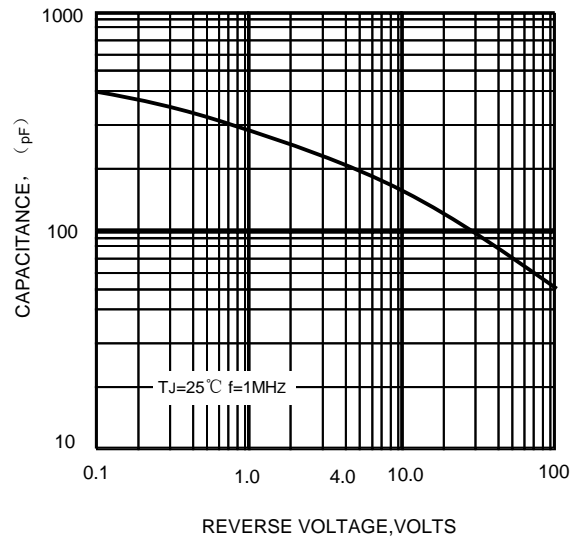


FIG.5-TYPICAL REVERSE CHARACTERISTICS

