

## Surface Mount Schottky Barrier Rectifiers

**(Pb)** Lead(Pb)-Free

### Feature:

- \* Low profile package
- \* Ideal for automated placement
- \* Guard Ring for over voltage protection
- \* Low forward voltage drop
- \* Component in accordance to RoHS 2002/95/EC

**REVERSE VOLTAGE  
20 TO 200 VOLTS  
FORWARD CURRENT  
3.0 AMPERE**

### Mechanical Data

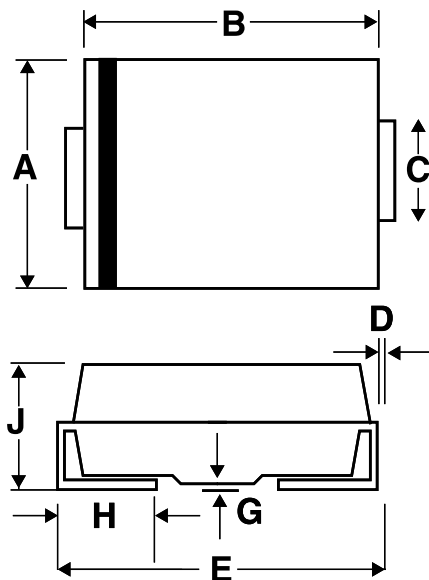
- \* Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- \* Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- \* Polarity: Cathode Band
- \* Weight: 0.095grams (approximate)



**SMB(DO-214AA)**

### SMB Outline Dimension

Unit:mm



SMB		
Dim	Min	Max
A	3.30	3.94
B	4.06	4.57
C	1.95	2.20
D	0.15	0.31
E	5.21	5.59
G	0.10	0.20
H	0.76	1.52
J	2.13	2.44

## MAXIMUM RATINGS (TA=25°C unless otherwise noted)

Characteristic	Symbol	B320B	B330B	B340B	B350B	B360B	B380B	B3100B	B3150B	B3200B	Unit
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	I <sub>F</sub>	3.0									A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I <sub>FSM</sub>	80.0									A
Maximum Instantaneous I <sub>F</sub> =3.0A	V <sub>F</sub>	0.50		0.62		0.80		0.83	0.85	V	
Maximum DC Reverse Current @T <sub>j</sub> =25°C At Rated DC Blocking Voltage @T <sub>j</sub> =100°C	I <sub>R</sub>	0.5			0.2			5			mA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	180		150		110		100	80	Pf	
Typical Thermal Resistance	R <sub>θJA</sub> R <sub>θJC</sub>	70 30									°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to+125							-55 to+150		°C
Storage Temperature Range	T <sub>STG</sub>	-55 to+150									°C

NOTES:1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

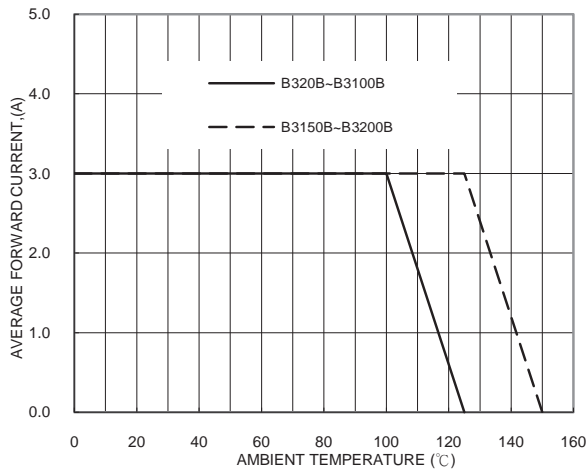


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

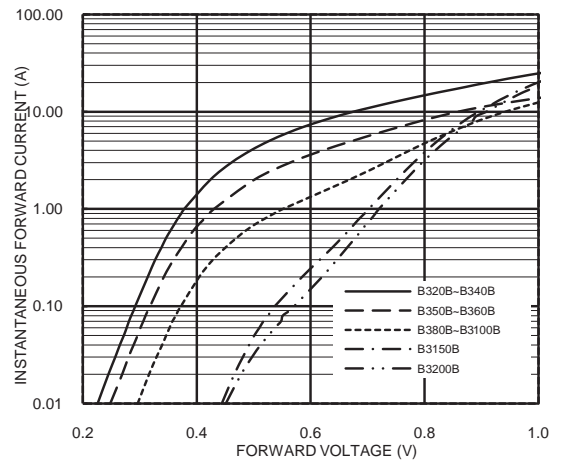


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

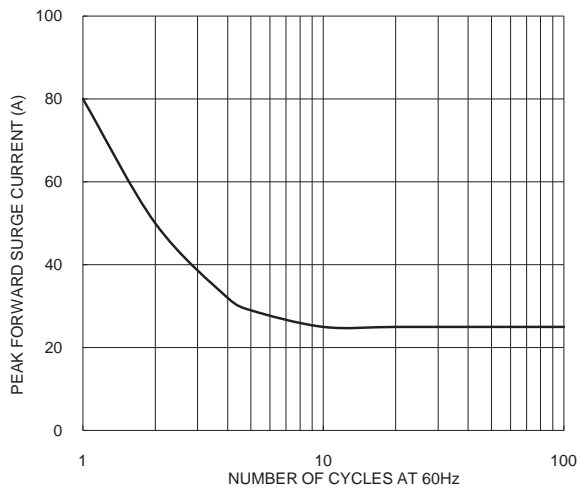


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

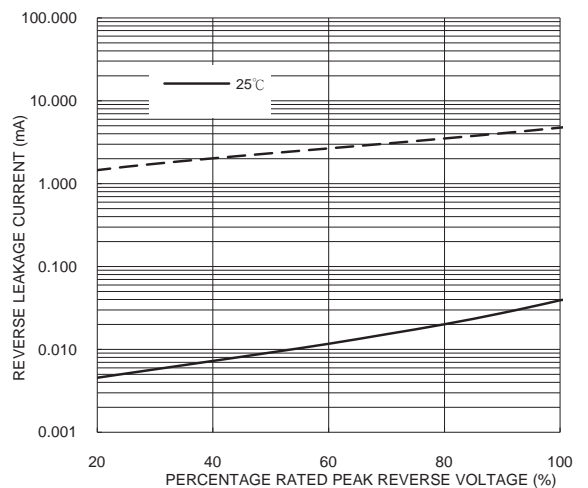


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

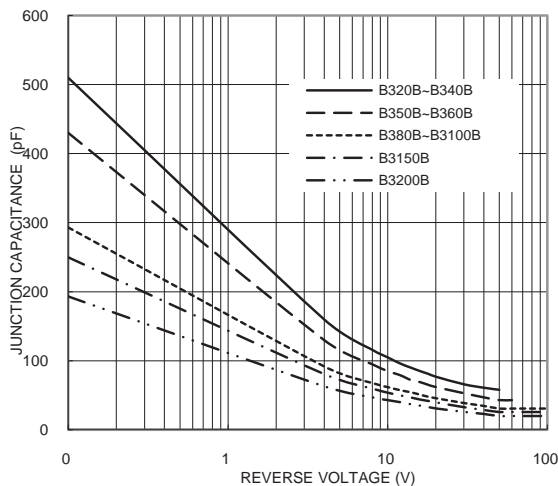


FIG. 5-TYPICAL JUNCTION CAPACITANCE