

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

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)

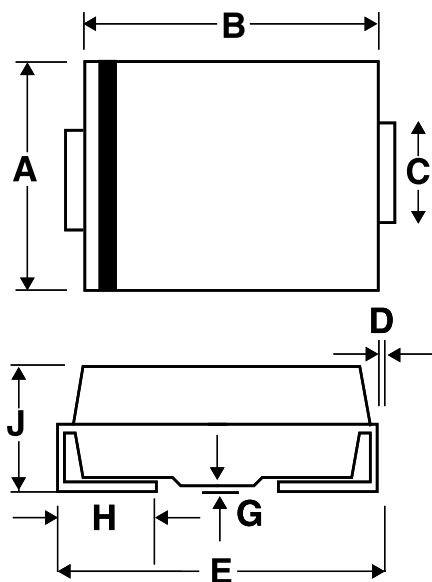
REVERSE VOLTAGE
20 TO 200 VOLTS
FORWARD CURRENT
3.0 AMPERE



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 _{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	I _F	3.0									A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	80.0									A
Maximum Instantaneous I _F =3.0A	V _F	0.50			0.62		0.80		0.83	0.85	V
Maximum DC Reverse Current @T _j =25°C At Rated DC Blocking Voltage @T _j =100°C	I _R	0.5 10					0.2 5			mA	
Typical Junction Capacitance (Note 1)	C _J	180			150		110		100	80	P _F
Typical Thermal Resistance	R _{θJA} R _{θJC}	70 30									°C/W
Operating Temperature Range	T _J	-55 to+125							-55 to+150		°C
Storage Temperature Range	T _{STG}	-55 to+150									°C

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

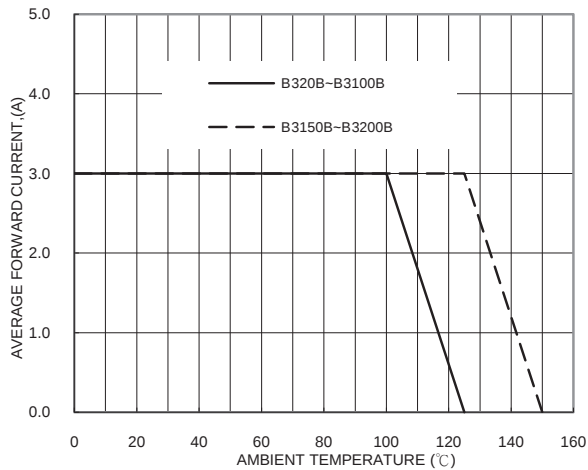


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

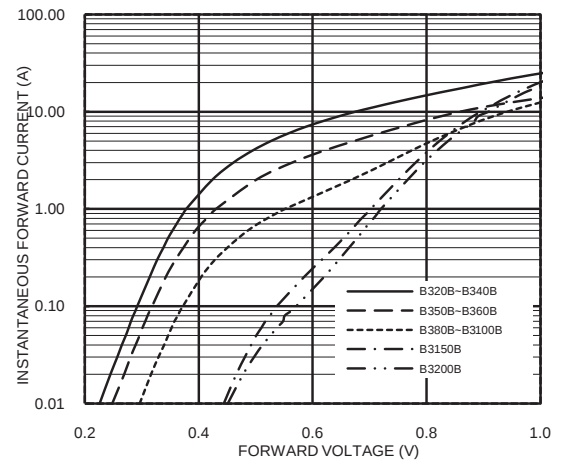


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

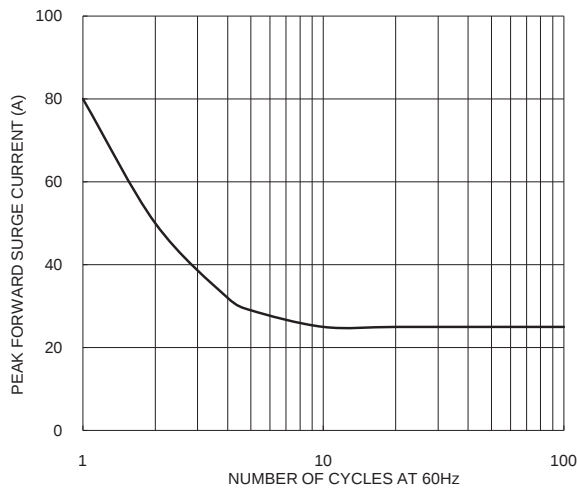


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

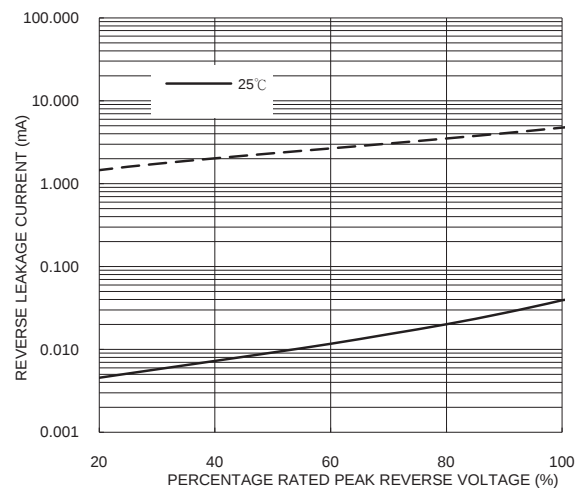


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

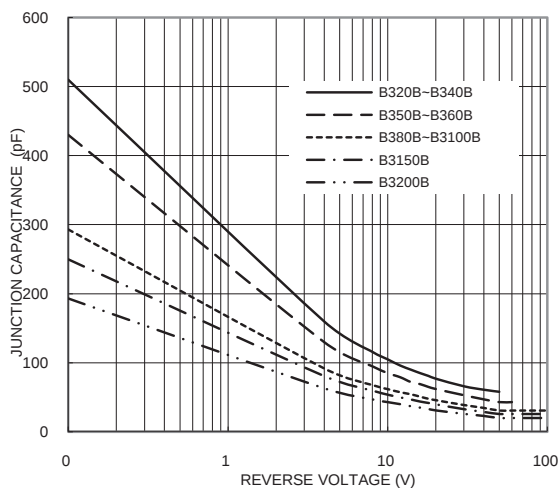


FIG. 5-TYPICAL JUNCTION CAPACITANCE