

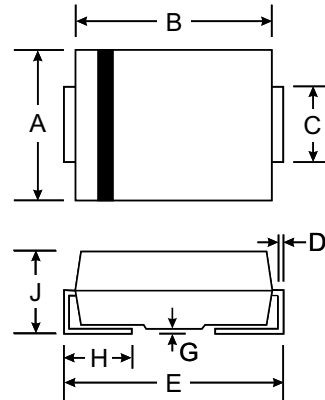
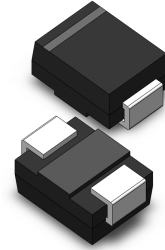
VOLTAGE RANGE: 20 - 100V
CURRENT: 5.0 A

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_A = 25°C unless otherwise specified

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

Characteristic	Symbol	B520B	B530B	B540B	B550B	B560B	B580B	B590B	B5100B	Unit
Peak Repetitive Reverse Voltage	V _{RRM}									
Working Peak Reverse Voltage	V _{RWM}	20	30	40	50	60	80	90	100	V
DC Blocking Voltage	V _R									
RMS Reverse Voltage	V _{R(RMS)}	14	21	28	35	42	56	64	71	V
Average Rectified Output Current @ T _L = 90°C	I _O	5.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	175								A
Forward Voltage @ I _F = 5.0A	V _{FM}	0.50		0.75		0.85				V
Peak Reverse Current @ T _A = 25°C	I _{RM}	0.5								mA
At Rated DC Blocking Voltage @ T _A = 100°C		20								
Typical Thermal Resistance (Note 1)	R _{θJL} R _{θJA}	14 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 14mm² copper pad area.

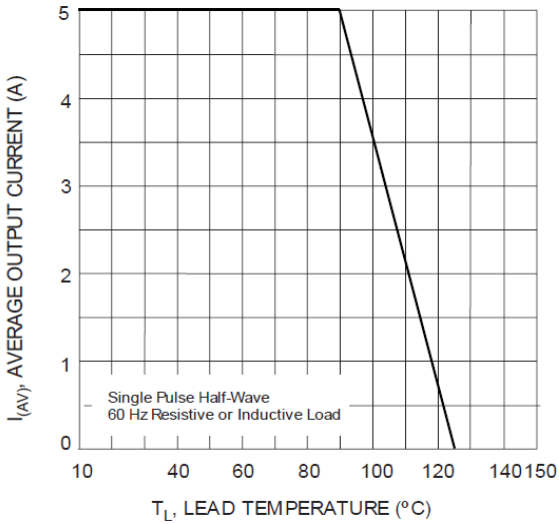


Fig. 1 Forward Current Derating Curve

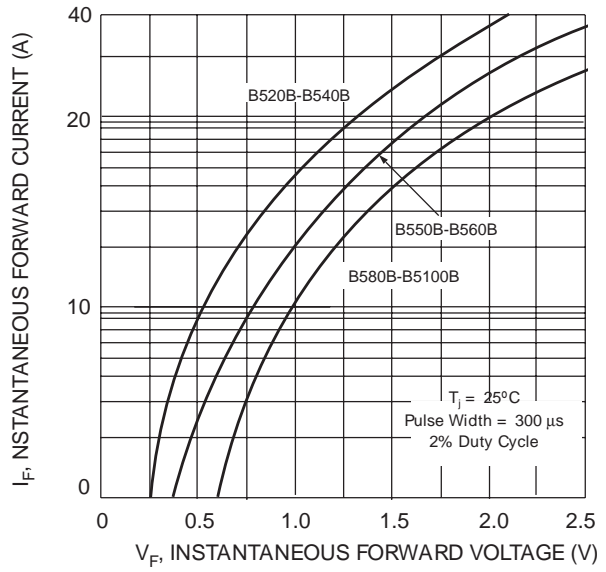


Fig. 2 Typical Forward Characteristics

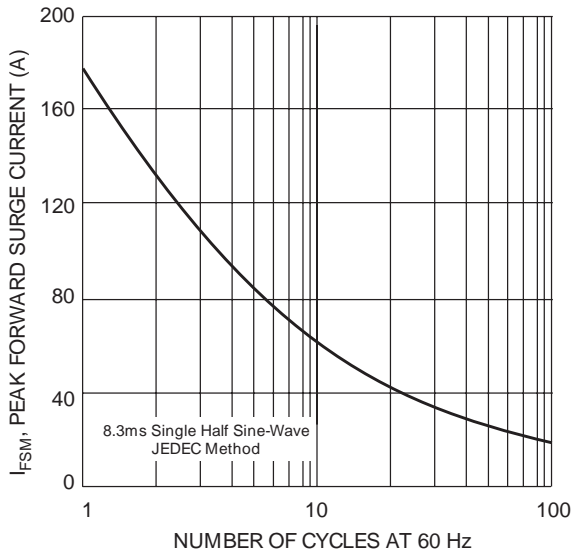


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

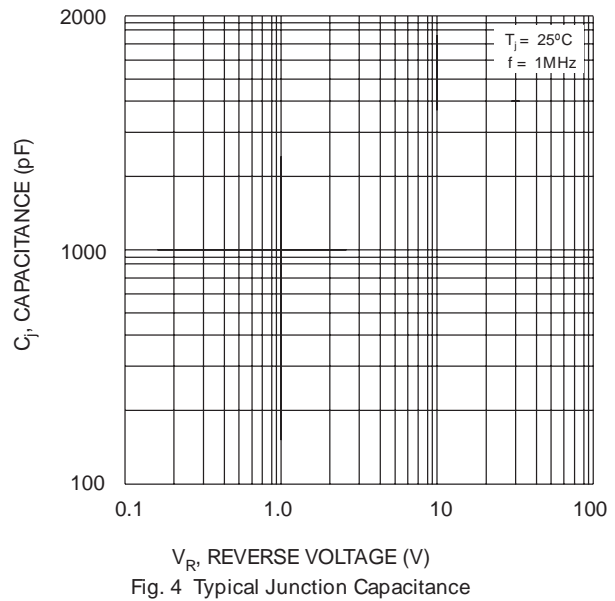


Fig. 4 Typical Junction Capacitance