

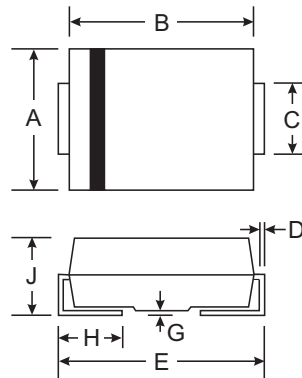
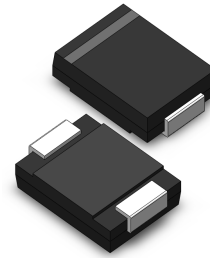
VOLTAGE RANGE: 20 - 100V
CURRENT: 5.0 A

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: 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
A	5.59	6.22
B	6.60	7.11
C	2.75	3.18
D	0.15	0.31
E	7.75	8.13
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	B520C	B530C	B540C	B550C	B560C	B580C	B590C	B5100C	Unit	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	20	30	40	50	60	80	90	100	V	
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 At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}					0.5 20					mA
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.

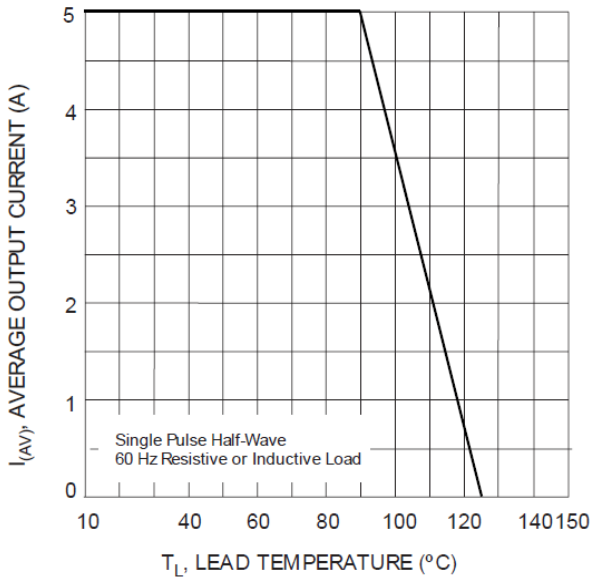


Fig. 1 Forward Current Derating Curve

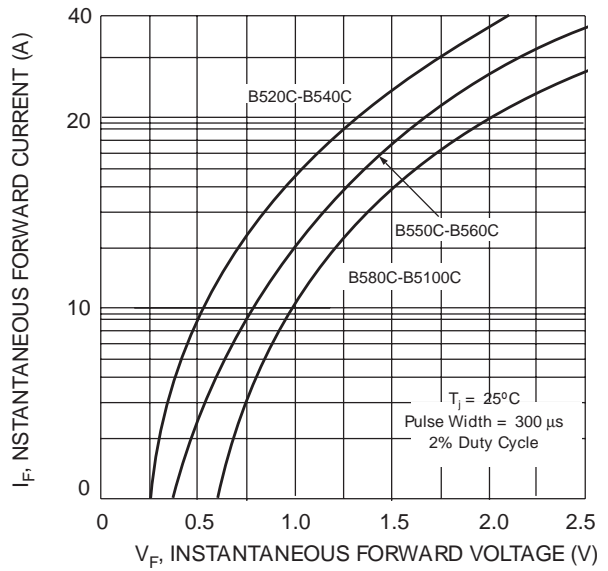


Fig. 2 Typical Forward Characteristics

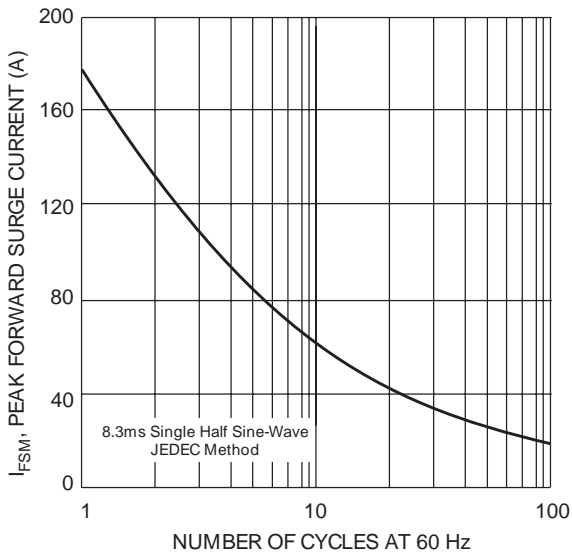


Fig. 3 Maximum Non-Repetitive Peak Fwd Surge Current

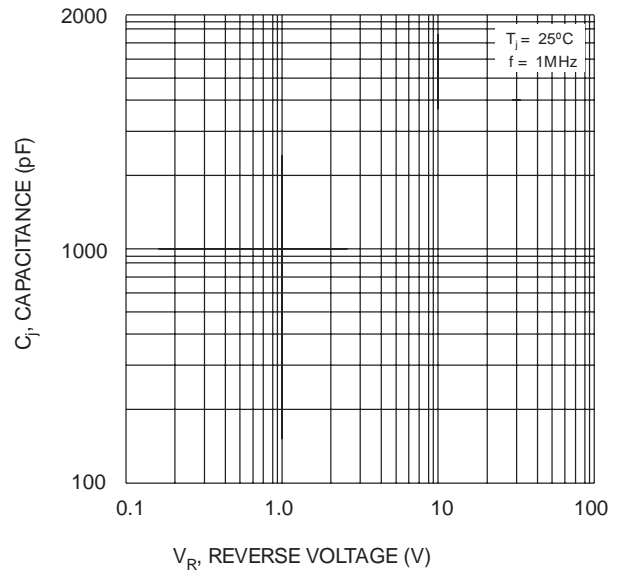


Fig. 4 Typical Junction Capacitance