

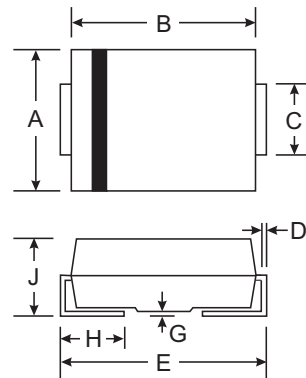
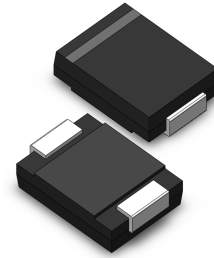
**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 8.0 A**

### Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Low Power Loss
- Built-in Strain Relief
- 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<sub>A</sub> = 25°C unless otherwise specified

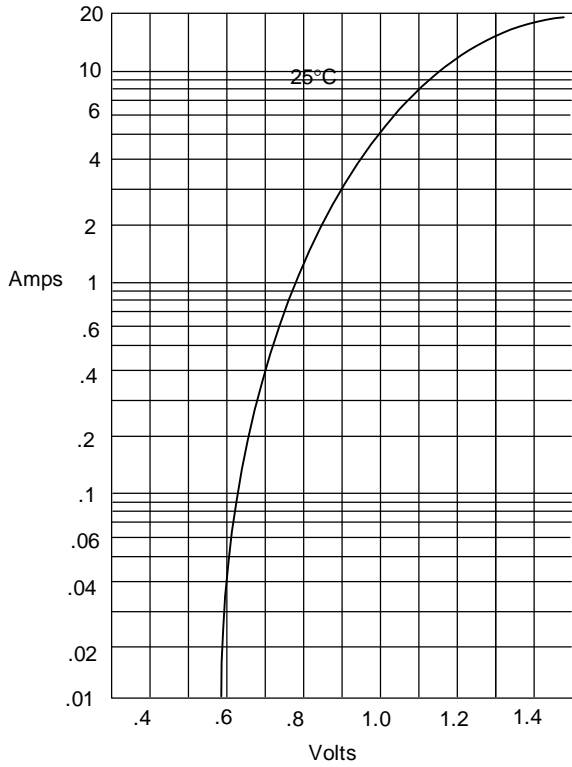
Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	S8A	S8B	S8D	S8G	S8J	S8K	S8M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current <small>@T<sub>A</sub> = 75°C</small>	I <sub>O</sub>	8.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	300							A
Forward Voltage <small>@I<sub>F</sub> = 8.0A</small>	V <sub>FM</sub>	1.2							V
Peak Reverse Current <small>@T<sub>A</sub> = 25°C</small> At Rated DC Blocking Voltage <small>@T<sub>A</sub> = 100°C</small>	I <sub>RM</sub>	10 100							μA
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	150							pF
Typical Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	30							°C/W
Operating Temperature Range	T <sub>j</sub>	-50 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-50 to +150							°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

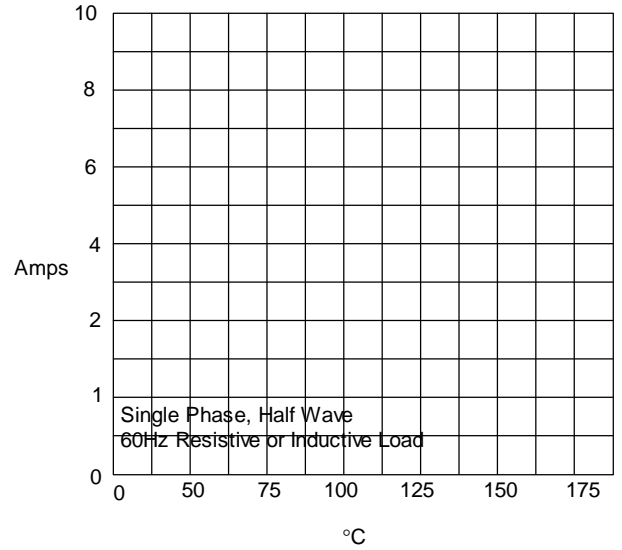


Figure 1  
Typical Forward Characteristics



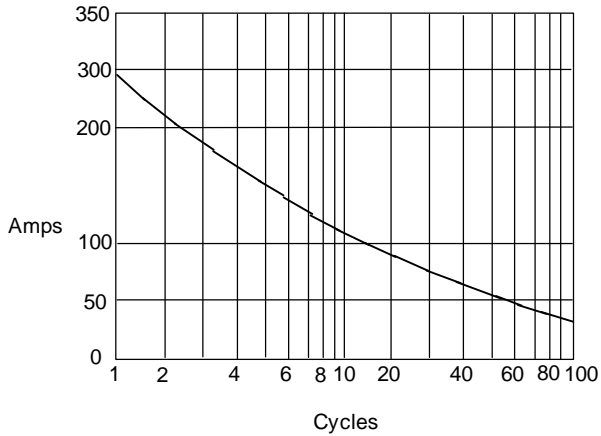
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles