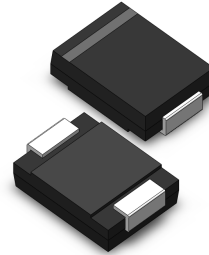


**VOLTAGE RANGE: 20 - 100V**  
**CURRENT: 10A**

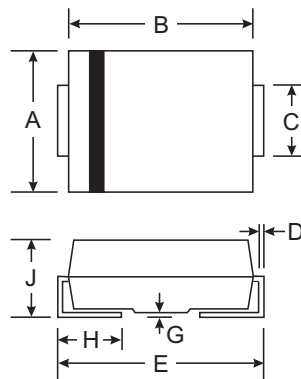
### Features

- 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<sub>A</sub> = 25°C unless otherwise specified

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

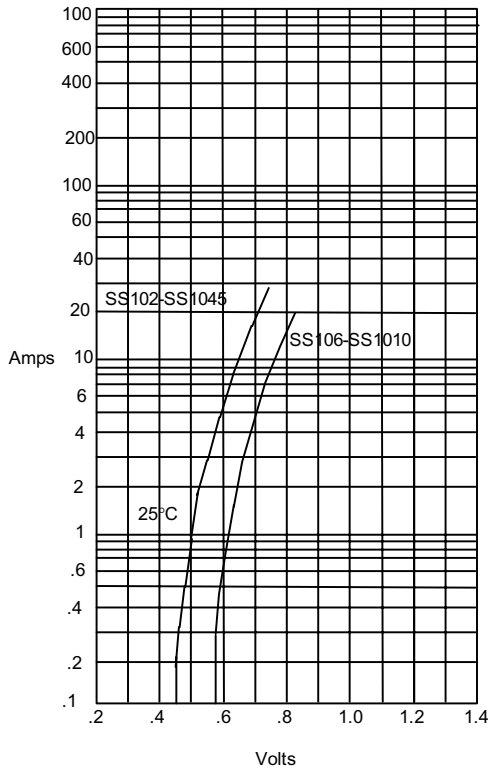
Characteristic	Symbol	SS102	SS103	SS1035	SS104	SS1045	SS106	SS108	SS1010	Unit	
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>										
Working Peak Reverse Voltage	V <sub>RWM</sub>	20	30	35	40	45	60	80	100	V	
DC Blocking Voltage	V <sub>R</sub>										
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	24.5	28	31.5	42	56	70	V	
Average Rectified Output Current @T <sub>L</sub> = 90°C	I <sub>O</sub>	10.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	F <sub>SM</sub>	250.0								A	
Forward Voltage @I <sub>F</sub> = 10 A	V <sub>FM</sub>	0.65						0.85		V	
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	R <sub>M</sub>					1.0 20					mA
Typical junction capacitance (Note1)	C <sub>J</sub>					500					pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>					18					°C/W
Operating Temperature Range	T <sub>j</sub>					-65 to +125					°C
Storage Temperature Range	T <sub>STG</sub>					-65 to +150					°C

**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



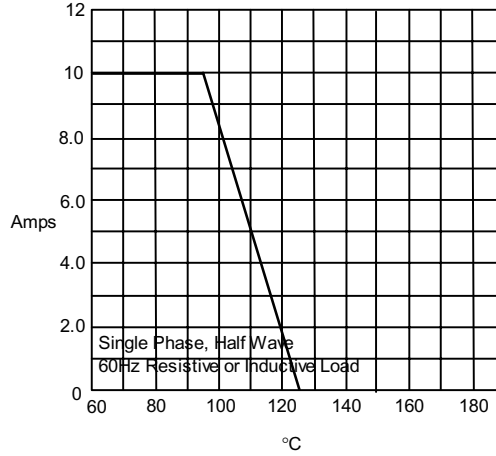
## RATINGS AND CHARACTERISTIC CURVES SS102 THRU SS1010

Figure 1  
Typical Forward Characteristics



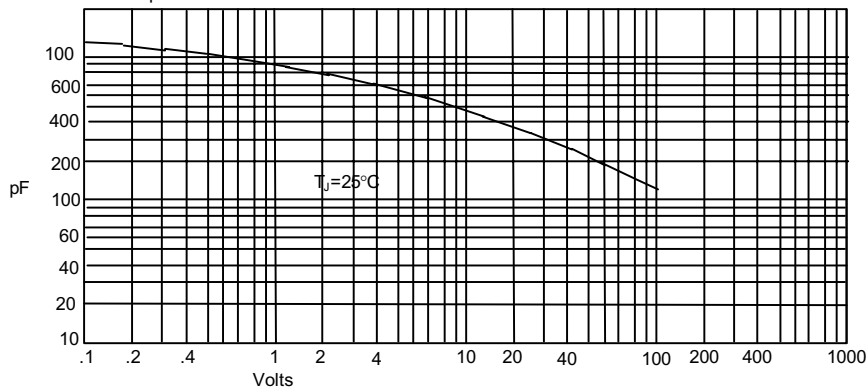
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



Average Forward Rectified Current - Amperes  
versus Lead Temperature - C

Figure 3  
Junction Capacitance

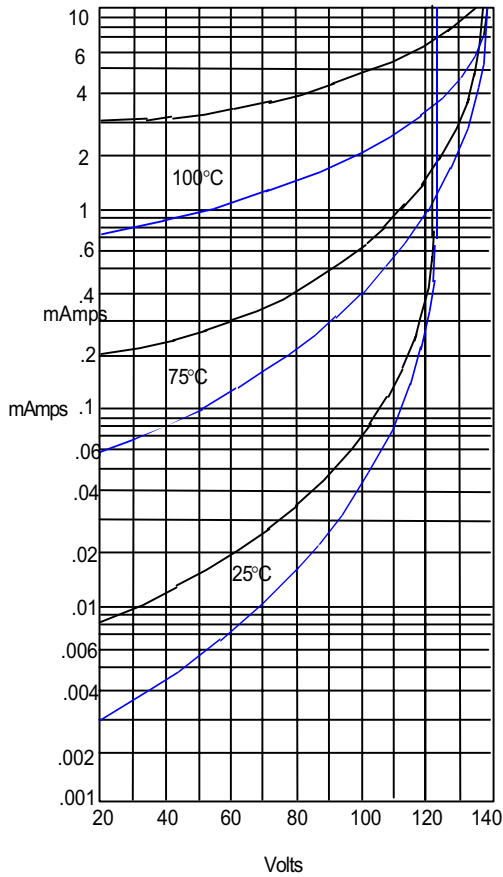


Junction Capacitance - pF versus  
Reverse Voltage - Volts



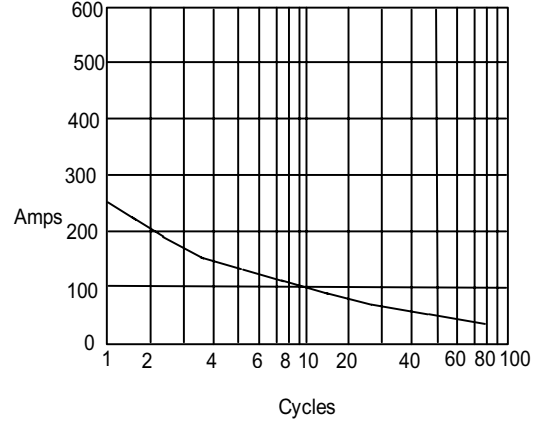
## RATINGS AND CHARACTERISTIC CURVES SS102 THRU SS1010

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 5  
Peak Forward Surge Current



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

