

VOLTAGE RANGE: 20 - 100V
CURRENT: 10A

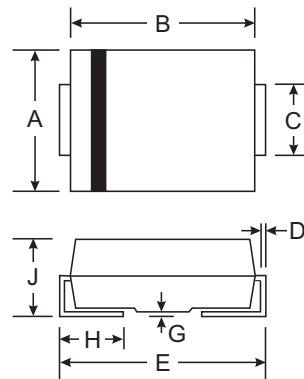
Features

- 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-0



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	SS1020	SS1030	SS1035	SS1040	SS1045	SS1060	SS1080	SS10100	Unit	
Peak Repetitive Reverse Voltage	V _{RRM}										
Working Peak Reverse Voltage	V _{RWM}	20	30	35	40	45	60	80	100	V	
DC Blocking Voltage	V _R										
RMS Reverse Voltage	V _{R(RMS)}	14	21	24.5	28	31.5	42	56	70	V	
Average Rectified Output Current @T _L = 90°C	I _o	10.0								A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	F _{SM}	250.0								A	
Forward Voltage @I _F = 10 A	V _{FM}	0.65						0.85		V	
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}					1.0					mA
Typical junction capacitance (Note 1)	C _J					500					pF
Typical Thermal Resistance (Note 2)	R _{θJA}					18					°C/W
Operating Temperature Range	T _J					-65 to +125					°C
Storage Temperature Range	T _{STG}					-65 to +150					°C

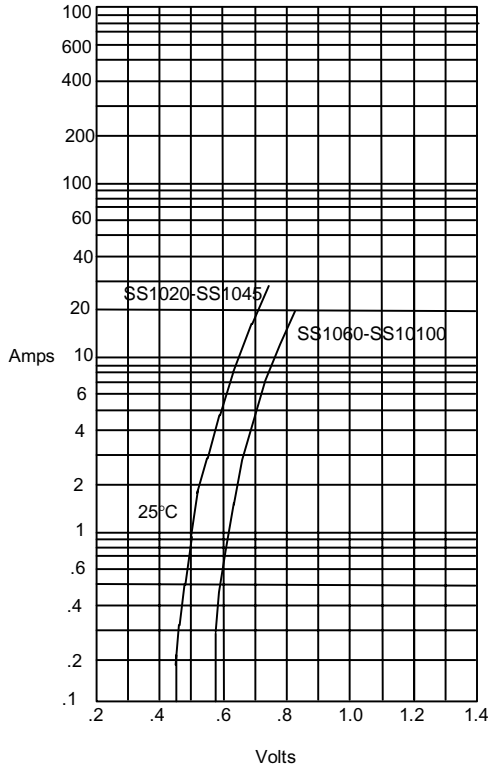
Note:

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



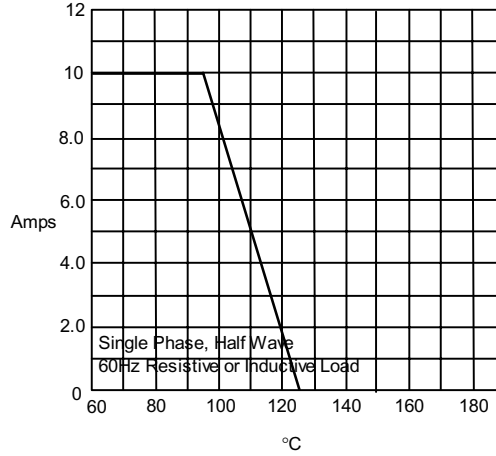
RATINGS AND CHARACTERISTIC CURVES SS1020 THRU SS10100

Figure 1
Typical Forward Characteristics



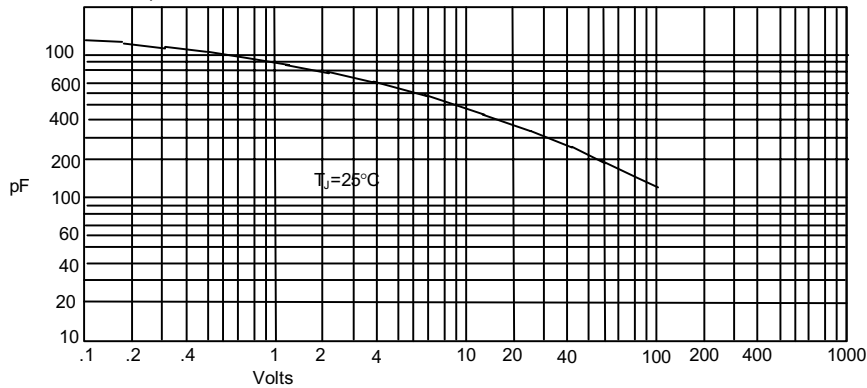
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes
versus Lead Temperature - C

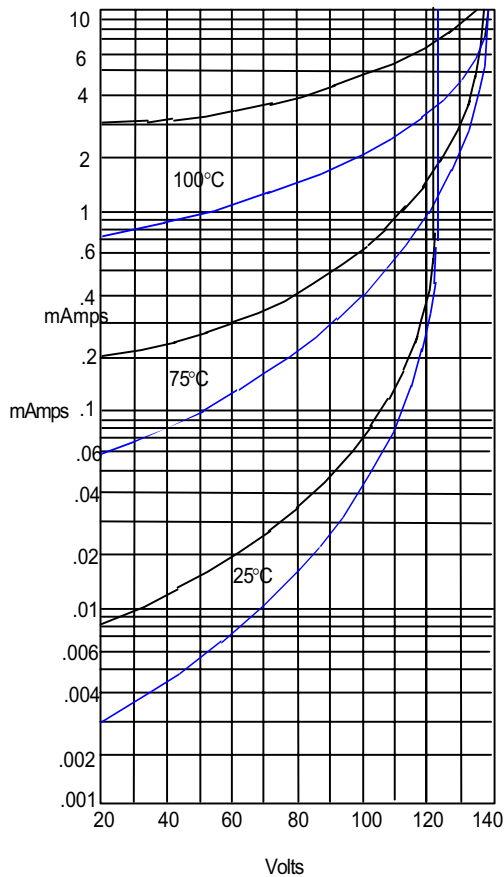
Figure 3
Junction Capacitance



Junction Capacitance - pF versus
Reverse Voltage - Volts

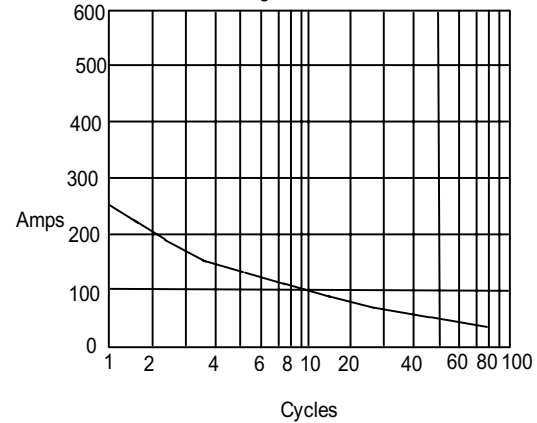
RATINGS AND CHARACTERISTIC CURVES SS1020 THRU SS10100

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

SS1020-SS1045 ———
SS1050-SS10100 ———