

## SS82 THRU SS810



## 8.0 AMP SCHOTTKY BARRIER RECTIFIERS

## FEATURES



- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability
- \* Epitaxial construction

## MECHANICAL DATA

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.215 grams
- \* Lead Free Finish/RoHS Compliant

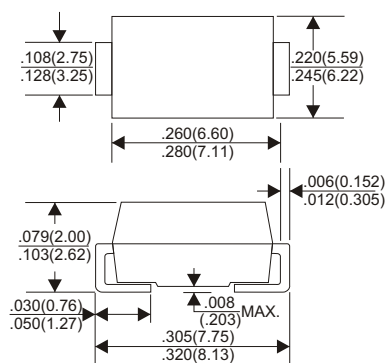
## VOLTAGE RANGE

20 to 100 Volts

## CURRENT

8.0 Amperes

## DO-214AB(SMC)



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.  
Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

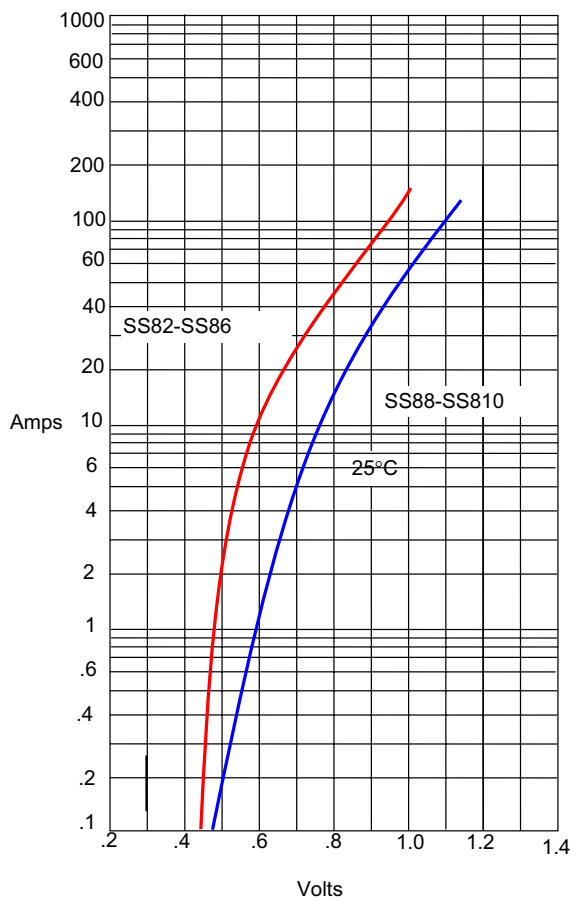
TYPE NUMBER	SS82	SS84	SS845	SS85	SS86	SS88	SS810	UNITS	
Maximum Recurrent Peak Reverse Voltage	20	40	45	50	60	80	100	V	
Maximum RMS Voltage	14	28	31	35	42	56	70	V	
Maximum DC Blocking Voltage	20	40	45	50	60	80	100	V	
Maximum Average Forward Rectified Current									
See Fig. 1								8.0	A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)								150	A
Maximum Instantaneous Forward Voltage at 8.0A	0.55		0.70		0.85			V	
Maximum DC Reverse Current Ta=25°C								500	uA
at Rated DC Blocking Voltage Ta=100°C								50	mA
Typical Junction Capacitance (Note1)								380	pF
Typical Thermal Resistance RθJA (Note 2)								10	°C/W
Operating Temperature Range Tj	-65 — +125			-65 — +150				°C	
Storage Temperature Range Tstg	-65 — +150							°C	

## NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient Vertical PC Board Mounting 0.5"(12.7mm) Lead Length.

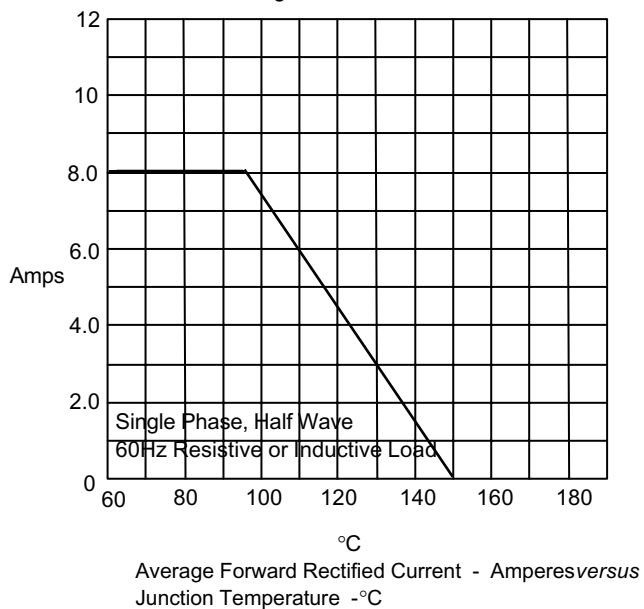
### RATING AND CHARACTERISTIC CURVES (SS82 THRU SS810)

Figure 1  
Typical Forward Characteristics



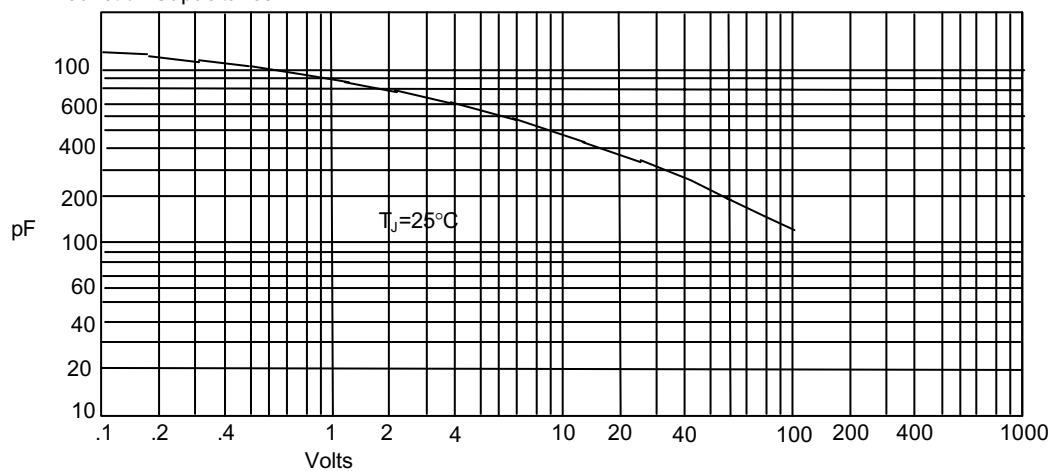
Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

Figure 2  
Forward Derating Curve



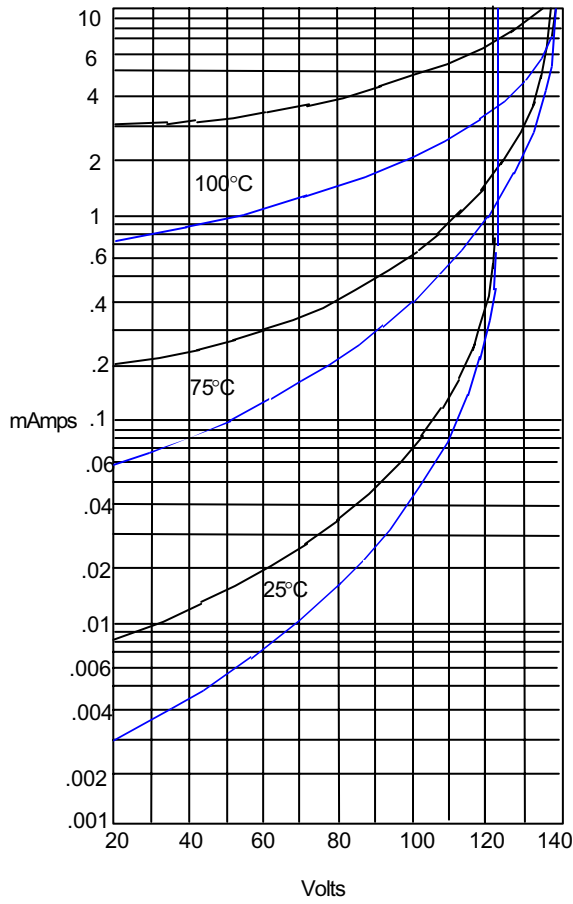
Average Forward Rectified Current - Amperes versus Junction Temperature - °C

Figure 3  
Junction Capacitance



Junction Capacitance - pF versus Reverse Voltage - Volts

Figure 4  
Typical Reverse Characteristics



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

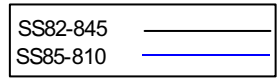
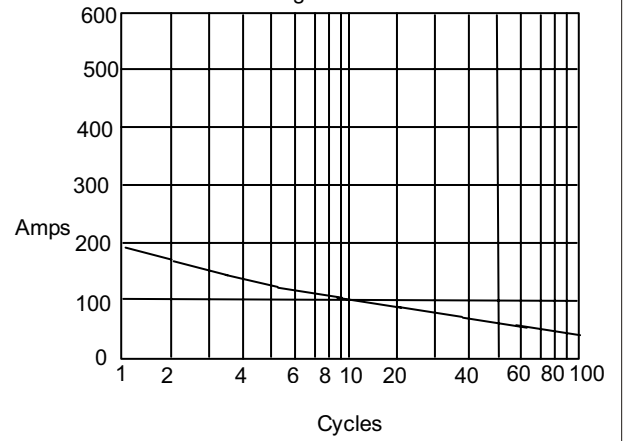


Figure 5  
Peak Forward Surge Current



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