

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

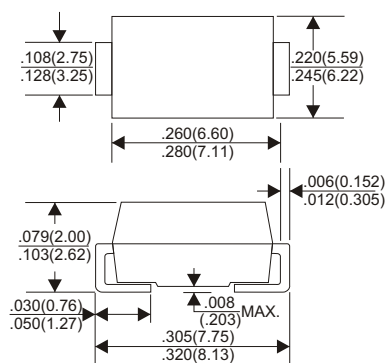
VOLTAGE RANGE

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%.

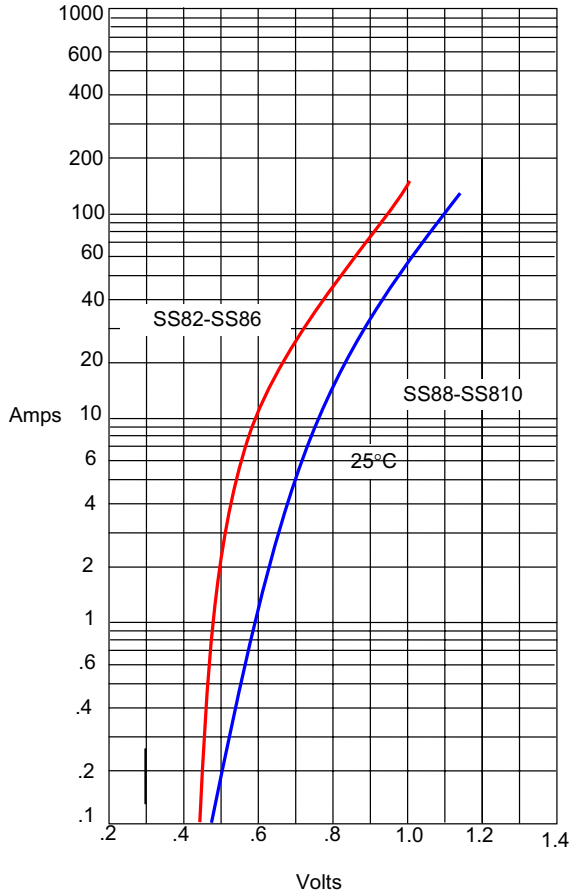
TYPE NUMBER	SS82	SS84	SS845	SS85	SS86	SS88	SS810	UNITS	
Maximum Recurrent Peak Reverse Voltage	20	40	45	50	60	80	100	V	
Maximum RMS Voltage	14	28	31	35	42	56	70	V	
Maximum DC Blocking Voltage	20	40	45	50	60	80	100	V	
Maximum Average Forward Rectified Current									
See Fig. 1								8.0	A
Peak Forward 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.

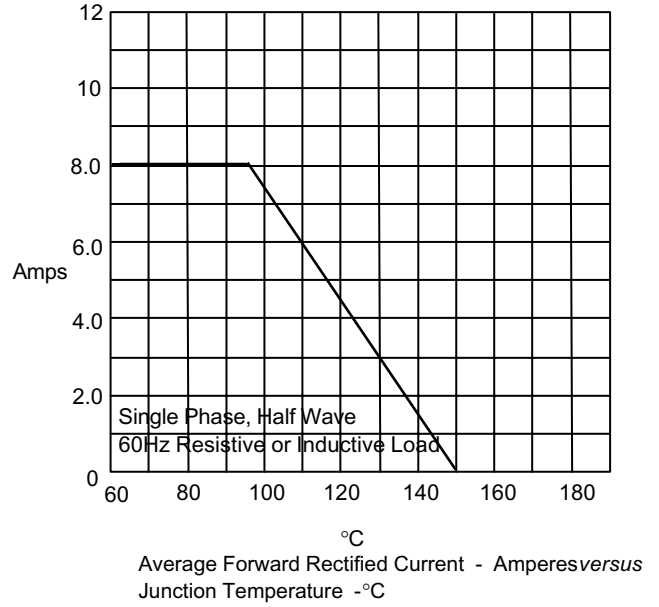
RATING AND CHARACTERISTIC CURVES (SS82 THRU SS810)

Figure 1
Typical Forward Characteristics



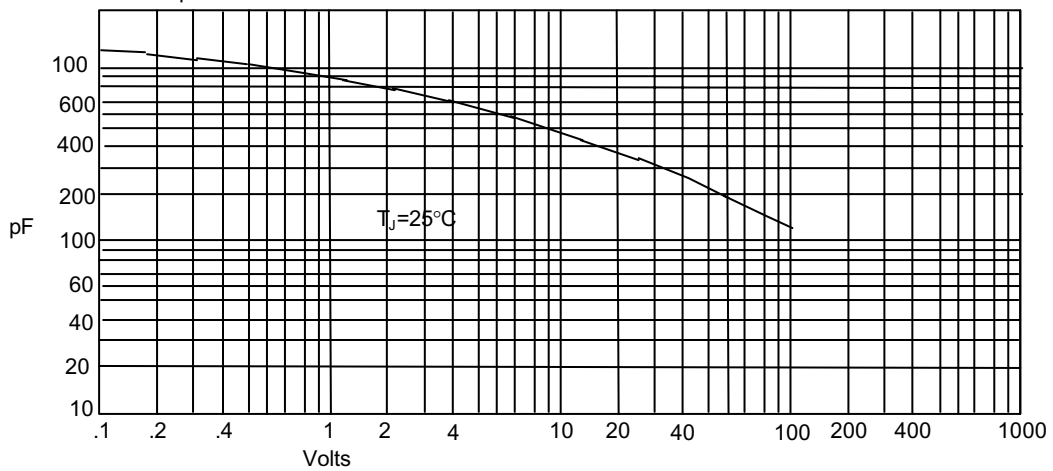
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



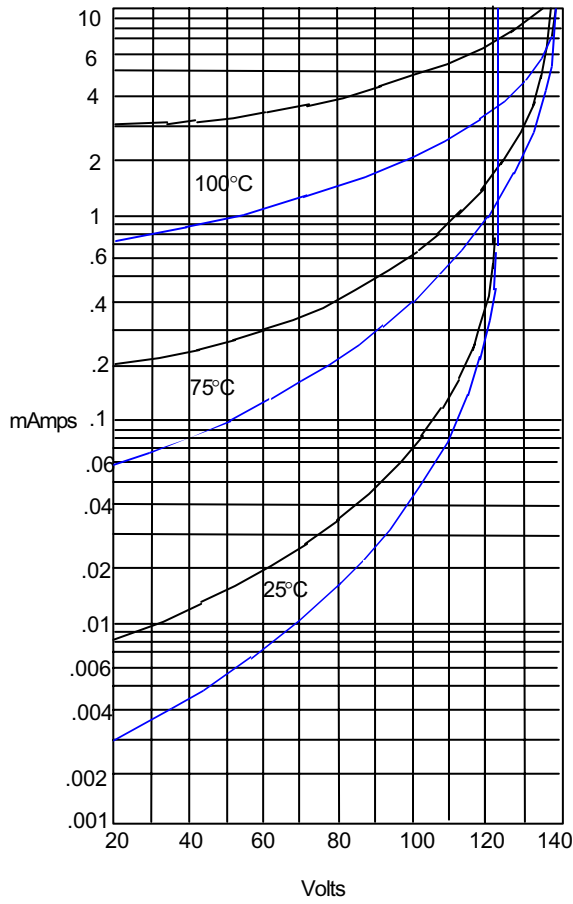
Average Forward Rectified Current - Amperes versus
Junction Temperature - °C

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

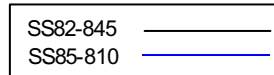
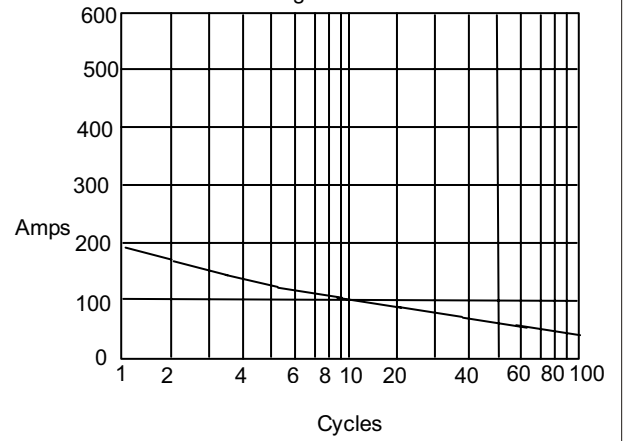


Figure 5
Peak Forward Surge Current



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