8.0 AMP SCHOTTKY BARRIER RECTIFIERS

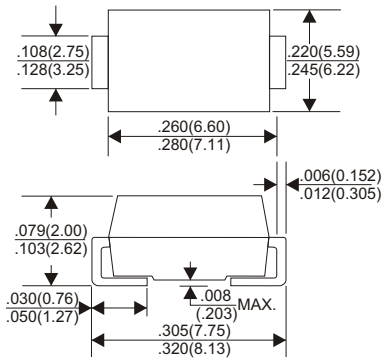
Features:

* 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 guranteed
* Polarity: Color band denotes cathode end
* Mounting position: Any
* Weight: 0.215 grams
* Lead Free Finish/RoHS Compliant

DO-214AB(SMC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25℃ ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SS82	SS84	SS845	SS85	SS86	SK88	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℃	500							uA
at Rated DC Blocking Voltage Ta=100℃	50							mA
Typical Junction Capacitance (Note1)	380							pF
Typical Thermal Resistance RθJA (Note 2)	10							℃/W
Operating Temperature Range TJ	-65 —+125			-65 —+150				℃
Storage Temperature Range TSTG	-65 — +150							℃

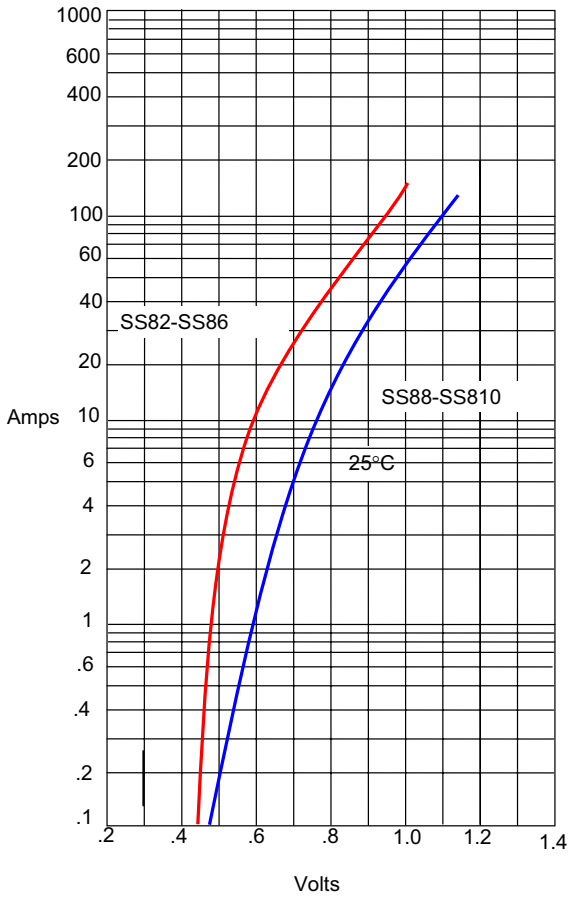
NOTES:

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.

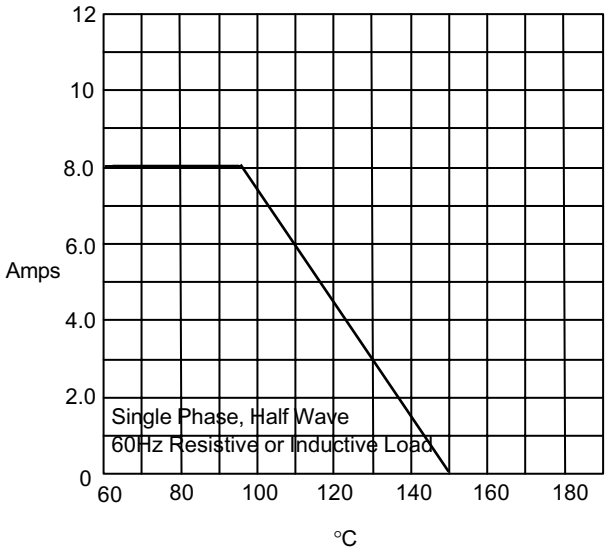
RATING AND CHARACTERISTIC CURVES (SS82 THRU SS810)

Figure 1
Typical Forward Characteristics



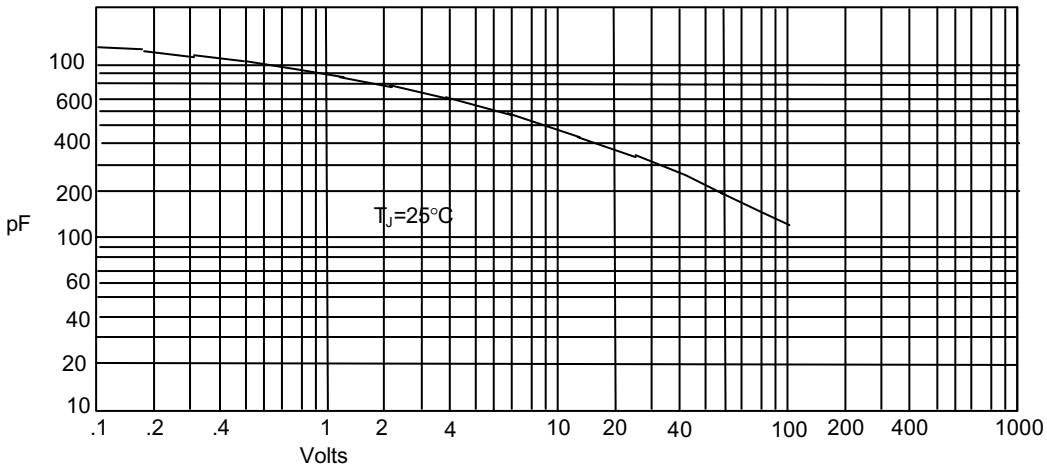
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



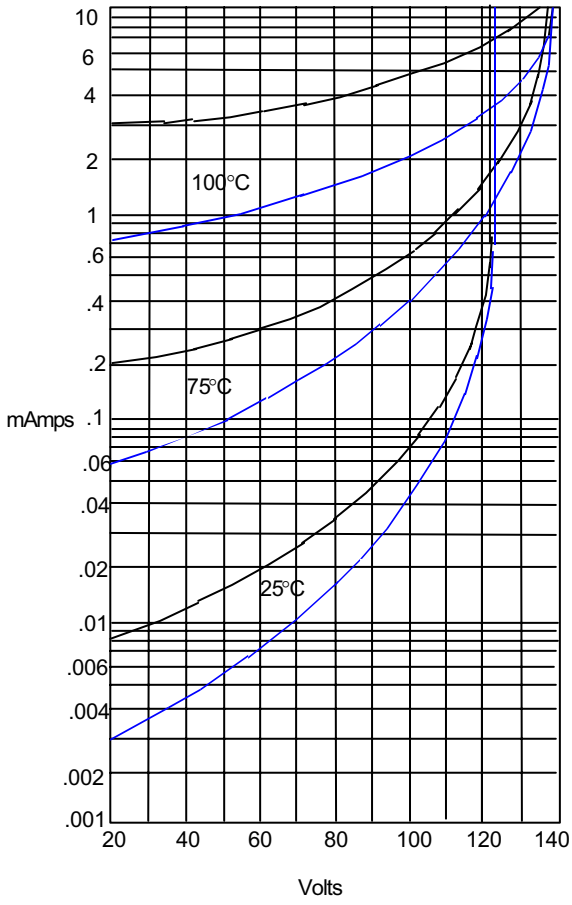
Average Forward Rectified Current - Amperes *versus*
Junction Temperature -°C

Figure 3
Junction Capacitance



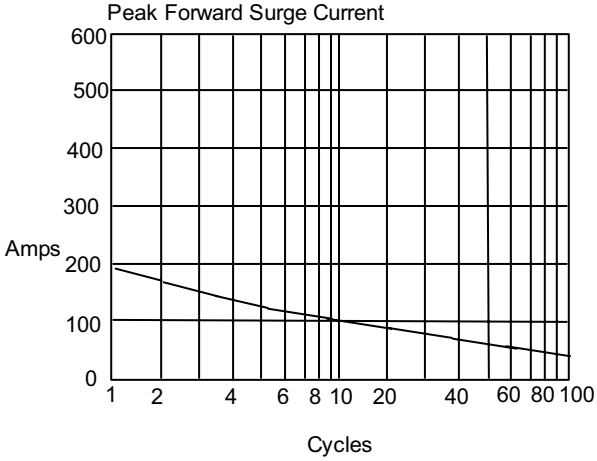
Junction Capacitance - pF *versus*
Reverse Voltage - Volts

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

SS82-845
SS85-810