

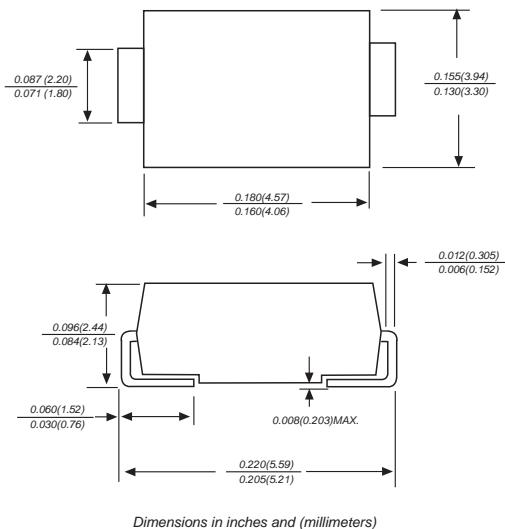


SS82 THRU SS810

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 8.0 Amperes

DO-214AA/SMB



FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low reverse leakage
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AA molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.007 ounce, 0.25grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

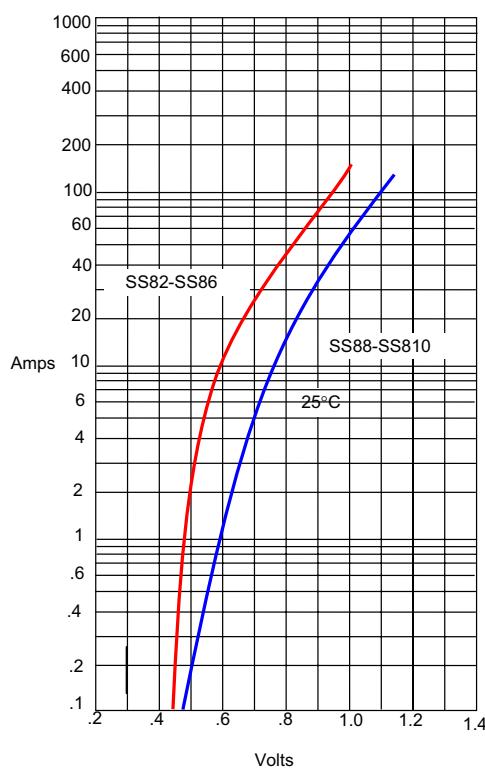
Catalog Number	SYMBOLS	SS82	SS83	SS835	SS84	SS845	SS86	SS88	SS810	UNITS				
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	35	40	45	60	80	100	VOLTS				
Maximum RMS voltage	V _{RMS}	14	21	24.5	28	31.5	42	56	70	VOLTS				
Maximum DC blocking voltage	V _{DC}	20	30	35	40	45	60	80	100	VOLTS				
Maximum average forward rectified current at T _L = 95 °C	I _(AV)	8.0							Amps					
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200.0							Amps					
Maximum instantaneous forward voltage at 8.0A	V _F	0.55			0.75		0.85		Volts					
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=100°C	I _R	1			20				mA					
Typical junction capacitance (NOTE 1)	C _J	400							pF					
Typical thermal resistance (NOTE 2)	R _{θJA}	18.0							°C/W					
Operating junction temperature range	T _J	-50 to +150							°C					
Storage temperature range	T _{STG}	-50 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

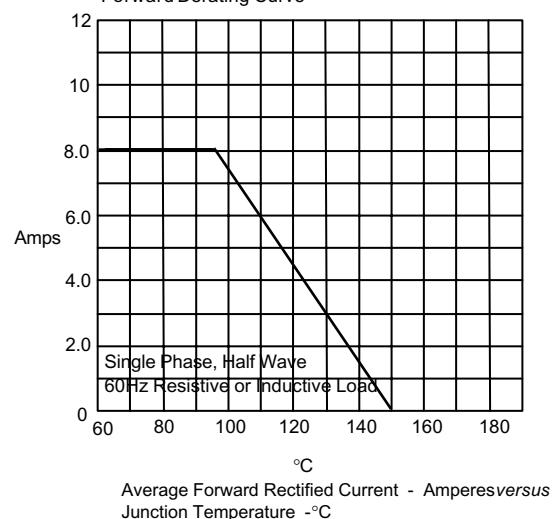
RATINGS AND CHARACTERISTIC CURVES SS82 THRU SS810

Figure 1
Typical Forward Characteristics



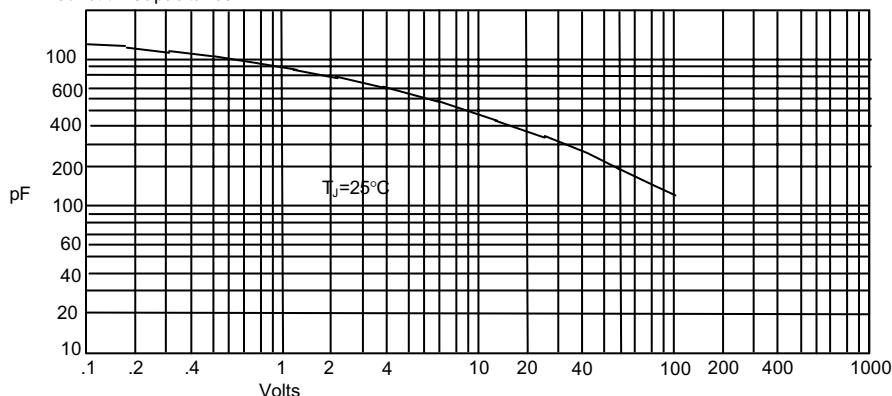
Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



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

Figure 3
Junction Capacitance



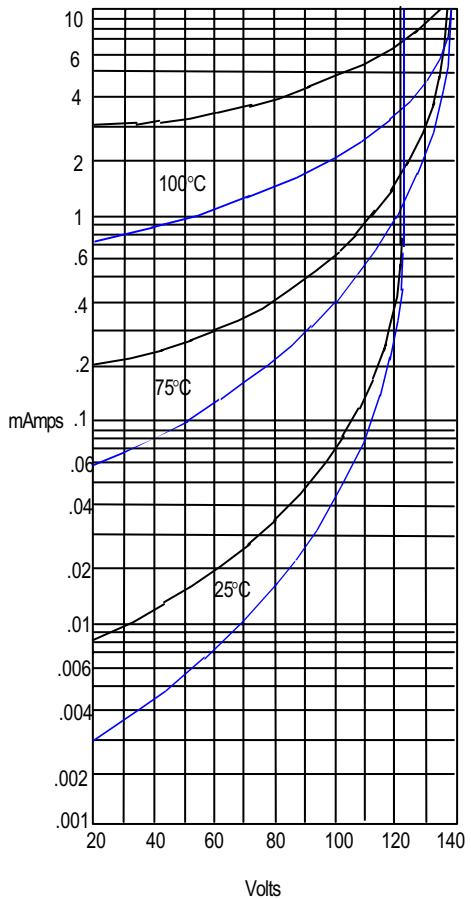
Junction Capacitance - pF versus
Reverse Voltage - Volts

The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

RATINGS AND CHARACTERISTIC CURVES SS82 THRU SS810

Figure 4

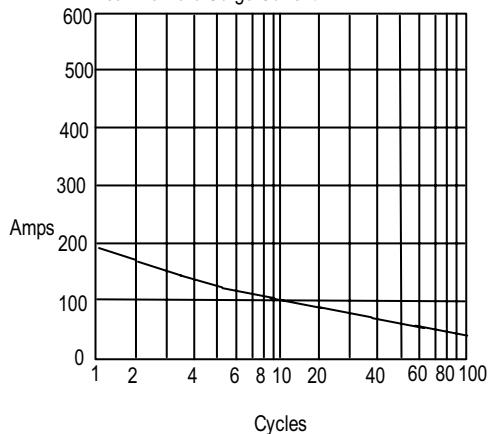
Typical Reverse Characteristics



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 —

The curve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!