



**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
SS12B THRU SS110B**

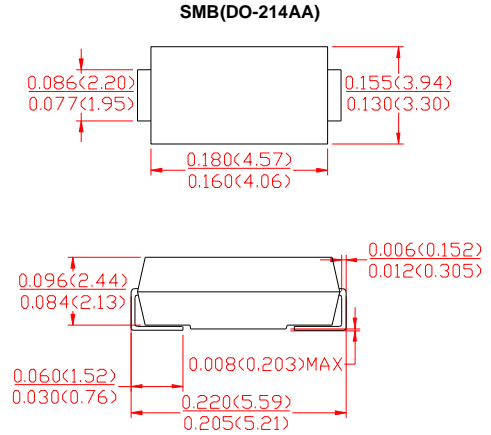
**VOLTAGE RANGE 20 to 100 Volts
Forward Current 1.0 Amperes**

FEATURES

- | Plastic package has Unerwrites Laboratory Flammability Classification 94V-0
- | Metal silicon junction, majority carrier conduction
- | For surface mount applications
- | Guard ring for over voltage protection
- | Low power loss, high efficiency
- | High current capability, Low forward boltage drop
- | High surge capability
- | For use in low voltage, high frequency inventers, Free wheeling, and polarity protection applications
- | High temperature soldering guaranteed:
250°C/10 seconds at terminals

MECHANICAL DATA

- | Case: JEDED SMA (DO-214AC) molded plastic body
- | Terminals: Solder Plated, solderable per MIL-STD-750 Method 2026
- | Polarity: Color band denotes cathode end
- | Weight: 0.002ounce, 0.064 gram



Dimensions in inches and (millimeters)

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, derate by 20%.

	SYMBOLS	SS12B	SS13B	SS14B	SS15B	SS16B	SS18B	SS19B	SS110B	UNITS	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	90	100	Volts	
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	63	70	Volts	
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	90	100	Volts	
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length (see Fig.1)	$I_{(AV)}$	1.0								Amps	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0								Amps	
Maximum Instantaneous Forward Voltage of 1.0A (Note 1)	V_F	0.55			0.75		0.85			Volts	
Maximum instantaneous Reverse Current at rated DC blocking voltage (Note 1)	$T_A=25^\circ\text{C}$	0.5								mA	
	$T_A=125^\circ\text{C}$	10									
Typical thermal capacitance (Note 2)	R_{QIL} R_{QA}	28.0 88.0									°C/W
Operating and Storage Temperature Range	T_J	-65 to +125				-65 to +150				°C	
Storage temperature range	T_{STG}	-65 to +150									

NOTES:

- 1.Pulse test: 300µs pulse width, 1% duty cycle.
- 2.P.C.B. Mounted with 0.2*0.2"(5.0*5.0mm) copper pads.

RATINGS AND CHARACTERISTIC CURVES SS12B THRU SS1110B

Fig. 1 - Forward Current Derating Curve

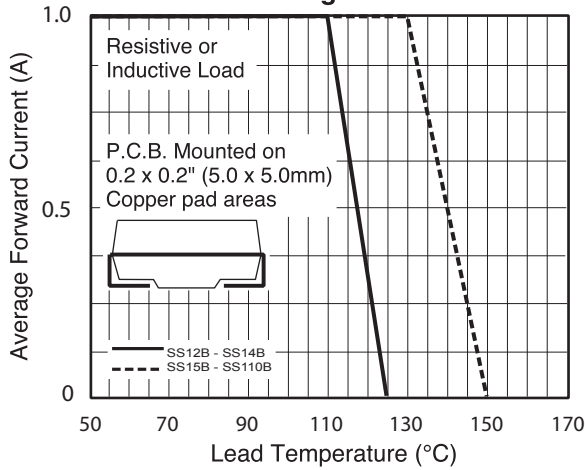


Fig. 2 - Maximum Non-repetitive Surge Current

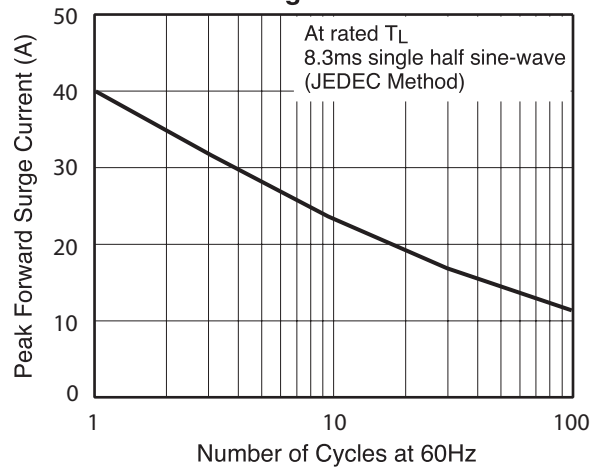


Fig. 3 - Typical Instantaneous Forward Characteristics

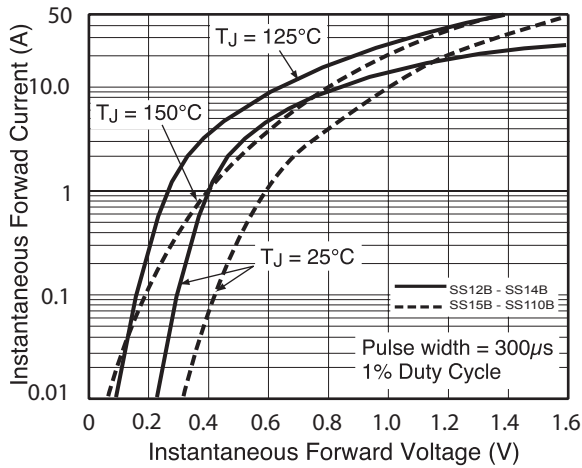


Fig. 4 - Typical Reverse Current Characteristics

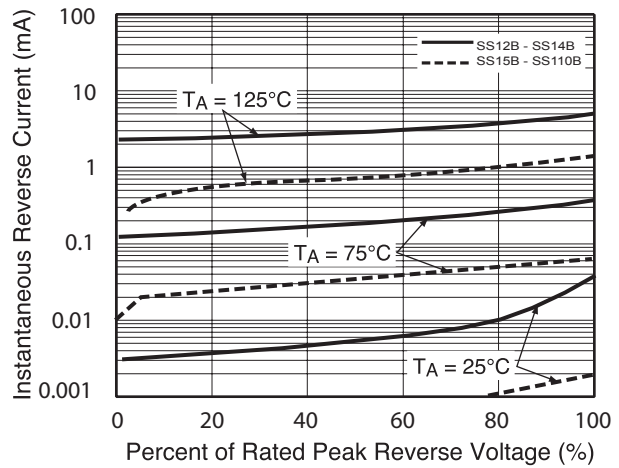


Fig. 5 - Typical Junction Capacitance

