SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER
SS12B THRU SS110B

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

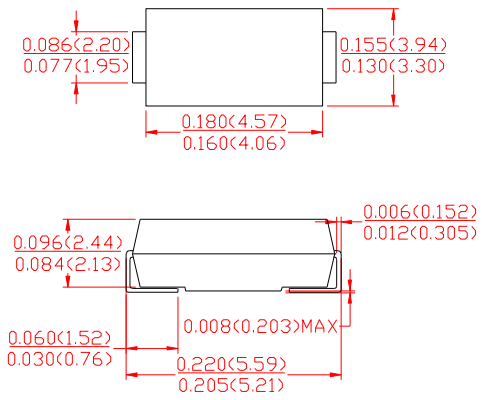
FEATURES

- 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

SMB(DO-214AA)



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 °C	I_R	0.5								mA
Maximum instantaneous Reverse Current at rated DC blocking voltage (Note 1) T_A=125 °C	I_R	10								mA
Typical thermal capacitance (Note 2)	R_{QJL} R_{QJA}	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								°C

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

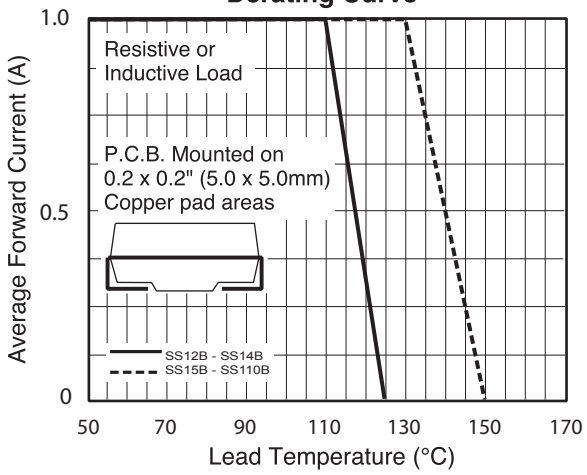


Fig. 2 - Maximum Non-repetitive Surge Current

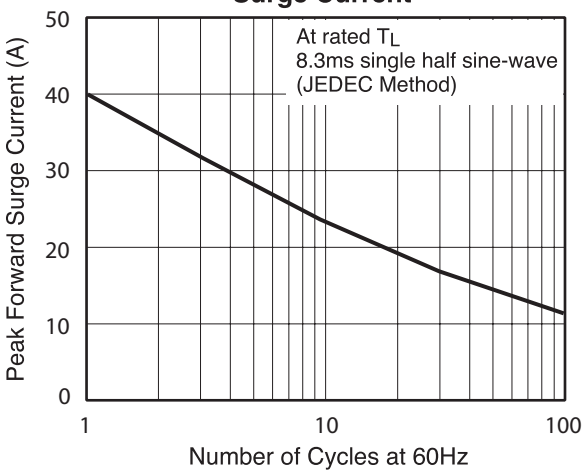


Fig. 3 - Typical Instantaneous Forward Characteristics

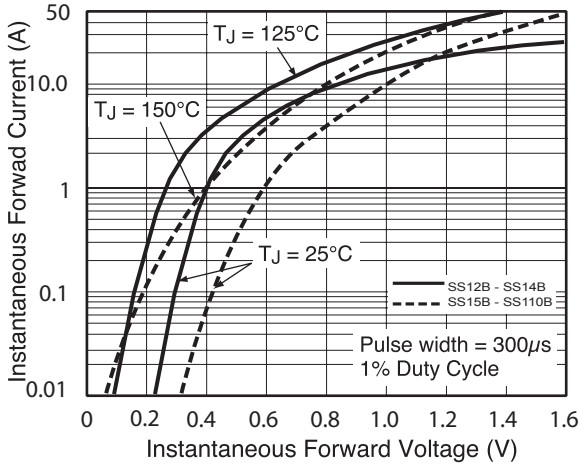


Fig. 4 - Typical Reverse Current Characteristics

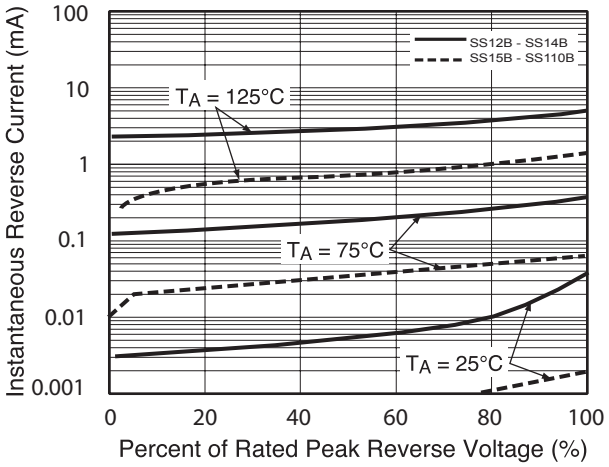


Fig. 5 - Typical Junction Capacitance