



SS22 thru SS2100

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts
Forward Current - 2.0 Amperes

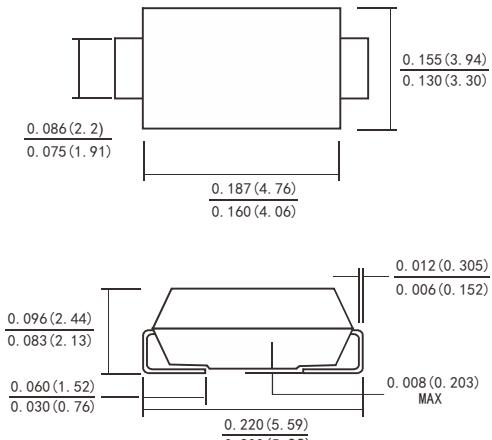
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- Guard ring for overvoltage protection
- Built-in strain relief
- For surface mounted applications
- Low profile package
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- High surge capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- Case: JEDEC SMB(DO-214AA) molded plastic body
- Terminals: solder plated, solderable per MIL-STD-750, method 2026
- Polarity: color band denotes cathode end
- Weight: 0.003 ounce, 0.093 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, resistive or inductive load. For capacitive load, derate by 20%.)

	V _{RRM}	SS 22	SS 23	SS 24	SS 25	SS 26	SS 28	SS 2100	Volts
Maximum repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum average forward rectified current (See Fig. 1)	I _(AV)				2.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}				50.0				Amps
Maximum instantaneous forward voltage at 2.0 A (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 T _A = 100°C	I _R		0.2					
				10.0					mA
Typical thermal resistance (Note 2)	R _{JA} R _{JL}		75.0 17.0						°C/W
Operating junction temperature range	T _J	-65 to +125		-65 to +150					°C
Storage temperature range	T _{STG}		-65 to +150						°C

Notes: 1. Pulse test: 300 µs pulse width, 1% duty cycle

2. P.C.B. mounted with 0.2 X 0.2" (5.0 X 5.0mm) copper pad areas

Rating and Characteristic Curves ($T_A=25^\circ\text{C}$ Unless otherwise noted)

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FIG.1-FORWARD CURRENT DERATING CURVE

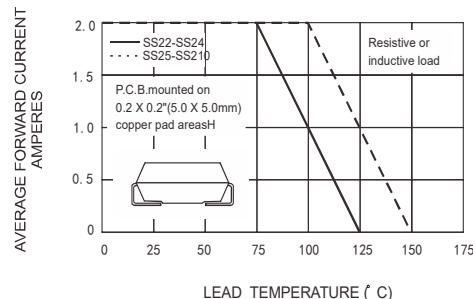


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

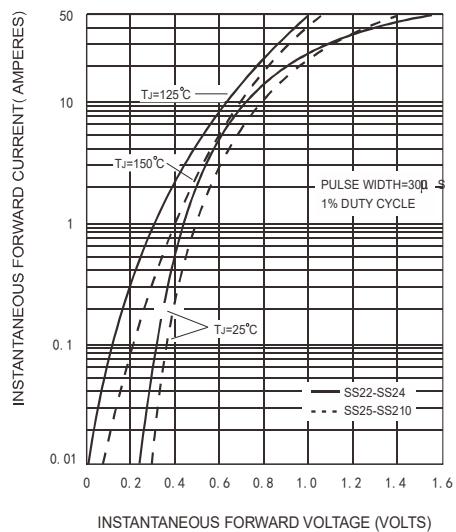


FIG.5-TYPICAL JUNCTION CAPACITANCE

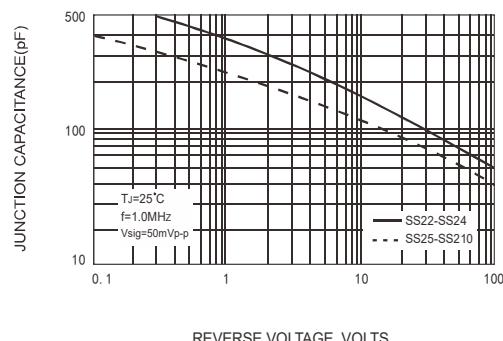


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

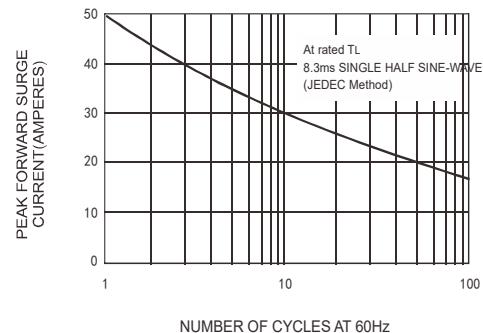


FIG.4-TYPICAL REVERSE CHARACTERISTICS

