SS12 THRU SS110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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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 voltage 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

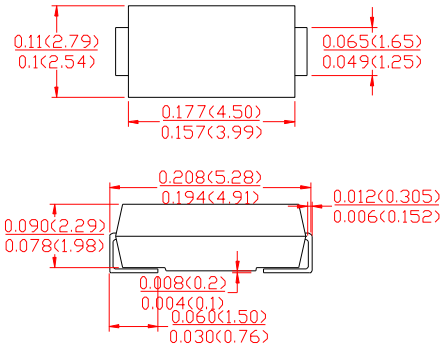
VOLTAGE RANGE

20 to 100 Volts

CURRENT

1.0 Ampere

SMA(DO-214AC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

		SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	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
	T_A=125 °C		10								
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								

NOTES:

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

2.P.C.B. Mounted with 0.2*0.2”(5.0*5.0mm) copper pads.

RATING AND CHRACTERISTIC CURVES SS12 thru SS110

FIG.1–FORWARD CURRENT DERATING CURVE

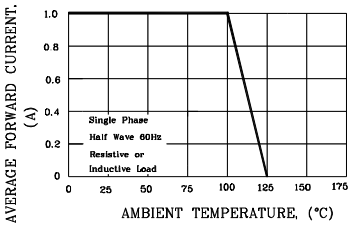


FIG.2–MAXIMUM NON–REPETITIVE SURGE CURRENT

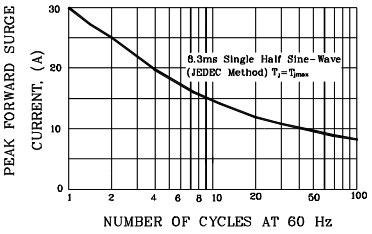


FIG.3–TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

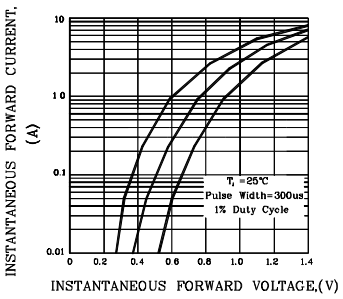


FIG.4–TYPICAL JUNCTION CAPACITANCE

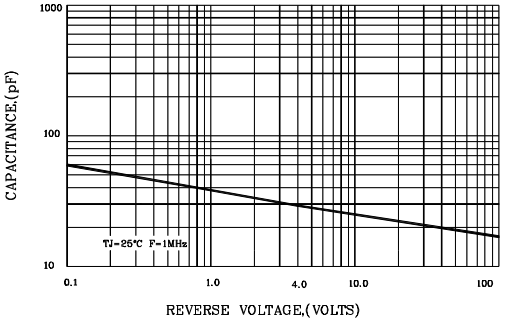


FIG.5–TYPICAL REVERSE CHARACTERISTICS