

# SS12L~SS110L

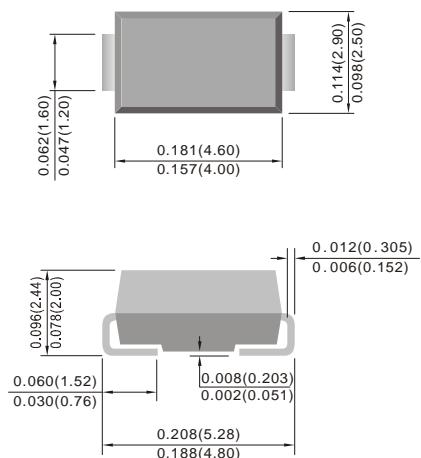
**LOW VF SURFACE MOUNT SCHOTTKY RECTIFIER**

**VOLTAGE 20 to 100 Volts CURRENT 1.0 Amperes**



**SMA / DO-214AC**

Unit : inch(mm)



## FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier, majority carrier conduction
- Low power loss, high efficiency
- High surge capacity
- High current capacity, low VF
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS 2002/95/EC directives

## MECHANICAL DATA

- Case: JEDEC SMA/DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)

## MAXIMUM RATINGS(T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	SS12L	SS13L	SS14L	SS16L	SS18L	SS110L	LUNIT
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	60	80	100	V
Maximum rms voltage	V <sub>RMS</sub>	14	21	28	42.0	64	70	V
Maximum dc blocking voltage	V <sub>R</sub>	20	30	40	60	80	100	V
Maximum average forward rectified current	I <sub>F(AV)</sub>				1			A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>			30		30		A
Maximum thermal resistance	R <sub>θJA</sub> R <sub>θJL</sub>			120 40				°C/W
Operating junction temperature range	T <sub>J</sub>			-55 to + 150				°C
Storage temperature range	T <sub>STG</sub>			-55 to + 150				°C

## ELECTRICAL CHARACTERISTICS(T<sub>A</sub>=25°C unless otherwise noted)

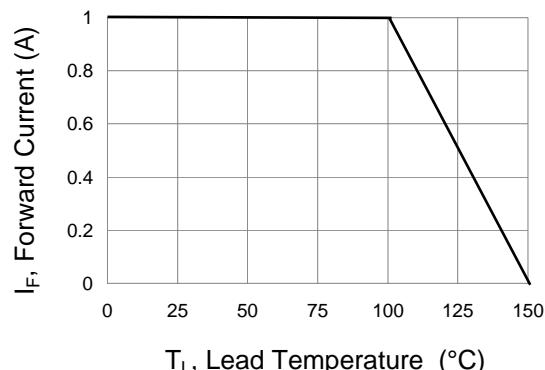
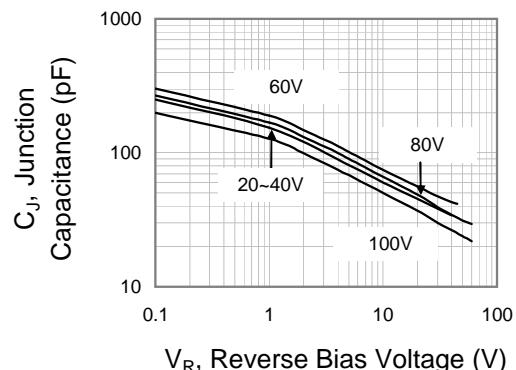
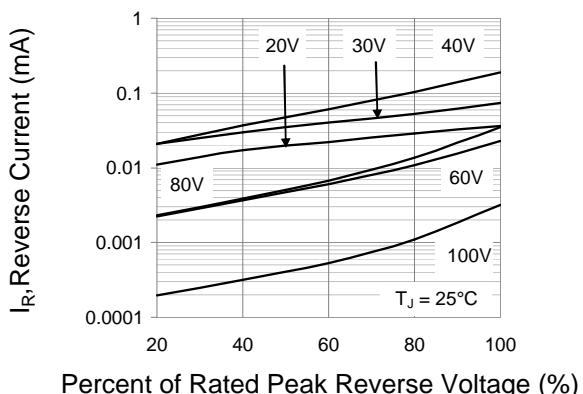
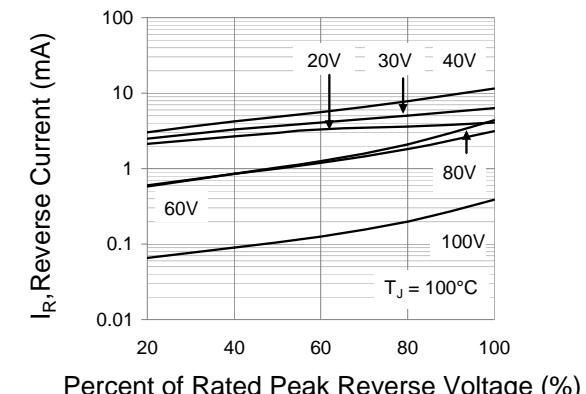
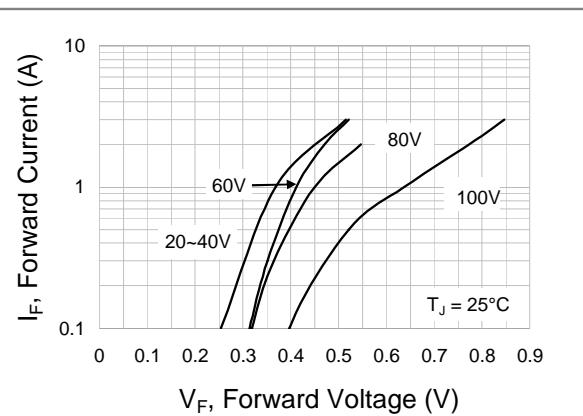
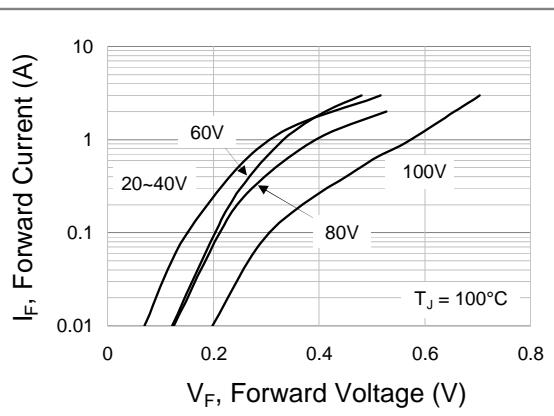
PARAMETER	SYMBOL	TEST CONDITIONS	SS12L	SS13L	SS14L	SS16L	SS18L	SS110L	UNIT
Maximum instantaneous forward voltage (Notes 1)	V <sub>F</sub>	I <sub>F</sub> =1.0A		0.45		0.55	0.70	0.73	V
Maximum reverse current at rated peak reverse voltage	I <sub>R</sub>	T <sub>J</sub> =25°C T <sub>J</sub> =100°C			0.2 20				mA

NOTES:

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

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## RATING AND CHARACTERISTIC CURVES

**Fig.1 Forward Current Derating Curve****Fig.2 Typical Junction Capacitance****Fig.3 Typical Reverse Characteristics****Fig.4 Typical Reverse Characteristics****Fig.5 Typical Forward Characteristics****Fig.6 Typical Forward Characteristics**

The curve graph is for reference only, can't be the basis for judgment