

SS12L SERIES

LOW VF SURFACE MOUNT SCHOTTKY RECTIFIER

VOLTAGE 20 to 40 Volts **CURRENT** 1.0 Amperes

SMA / DO-214AC

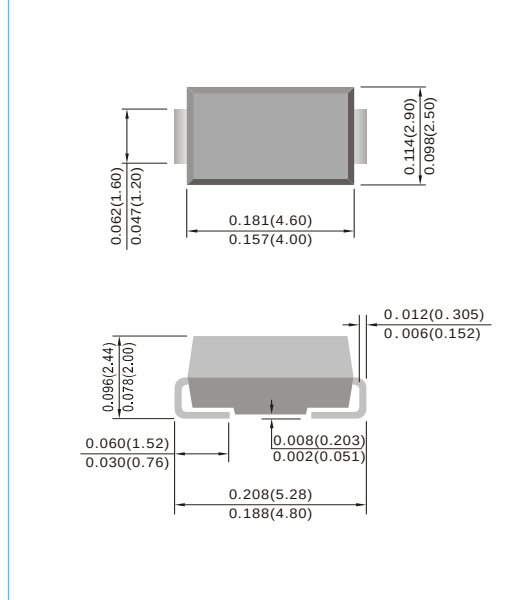
Unit : inch(mm)

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 V_F
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC 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)
- Weight: 0.0023 ounce, 0.0679 gram



MAXIMUM RATINGS($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	SS12L	SS13L	SS14L	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	V
Maximum rms voltage	V_{RMS}	14	21	28	V
Maximum dc blocking voltage	V_{DC}	20	30	40	V
Maximum average forward rectified current at $T_L=110^\circ\text{C}$	$I_{F(AV)}$	1			A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30			A
Maximum Thermal Resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	120 28			$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to + 125			$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to + 150			$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS($T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	SS12L	SS13L	SS14L	UNIT
Maximum instantaneous forward voltage (Note 2)	V _F	I _F =0.1A	0.31			V
		I _F =1.0A				
		I _F =0.1A	0.16			V
		I _F =1.0A				
Maximum reverse current at rated peak reverse voltage (Note 2)	I _R	T _J =25°C	0.2		0.5	mA
		T _J =100°C				

NOTES:

1. P.C.B. mounted on 0.2 x 0.2" (5.0 x 5.0 mm) copper pad areas.
2. Pulse test : 300 μs pulse width, 1% duty cycle.

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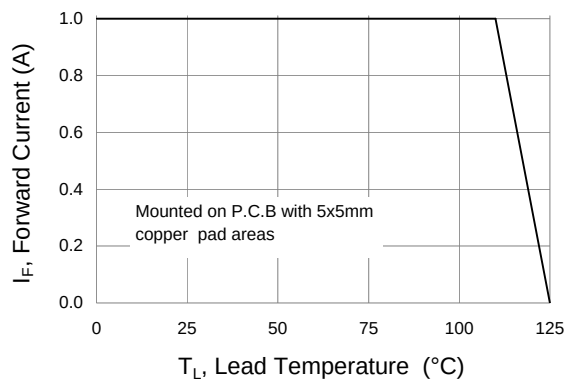


Fig.1 Forward Current Derating Curve

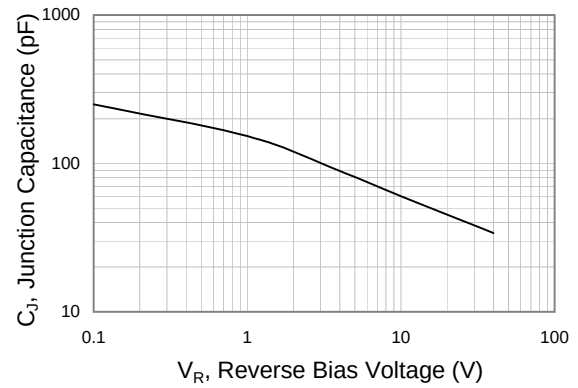


Fig.2 Typical Junction Capacitance

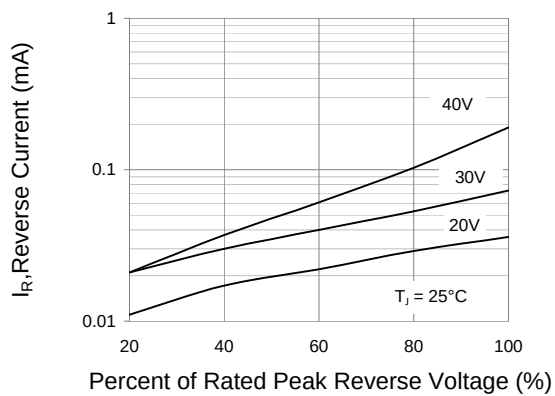


Fig.3 Typical Reverse Characteristics

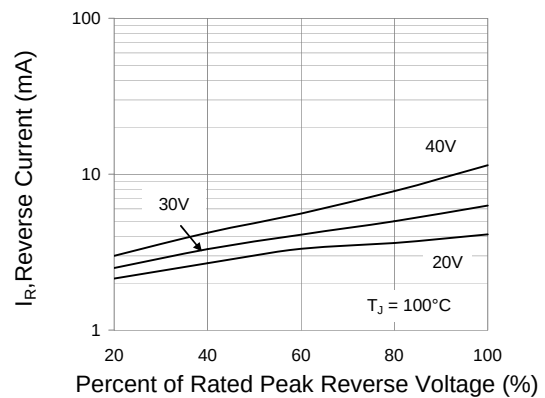


Fig.4 Typical Reverse Characteristics

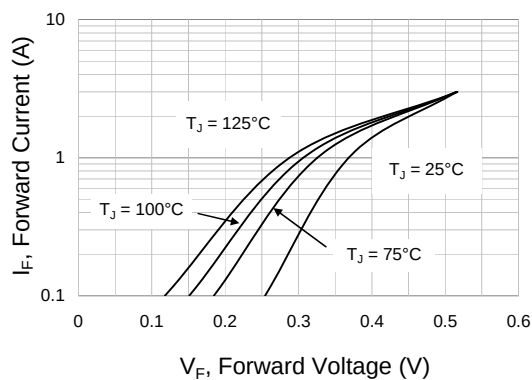
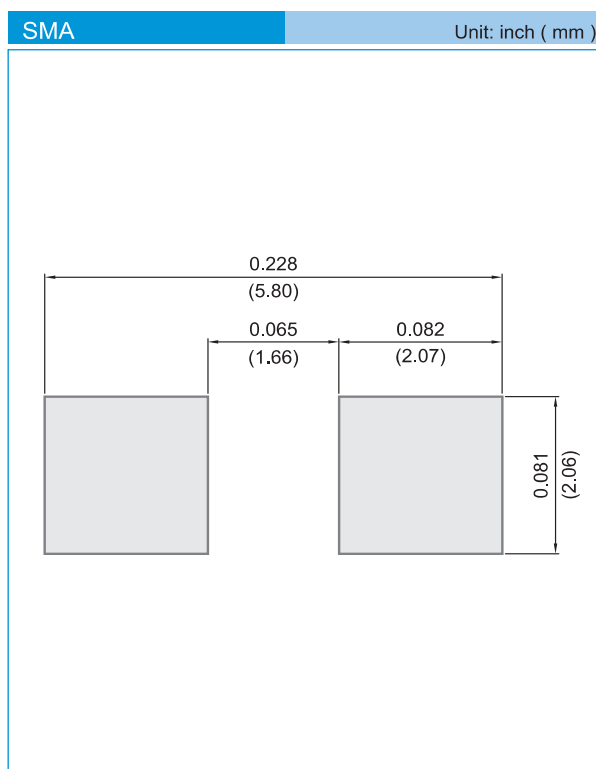


Fig.5 Typical Forward Characteristics

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MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
 - T/R - 7.5K per 13" plastic Reel
 - T/R - 1.8Kper 7" plastic Reel

LEGAL STATEMENT

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