

SS12L SERIES

LOW VF SURFACE MOUNT SCHOTTKY RECTIFIER

VOLTAGE 20 to 90 Volt **CURRENT** 1.0 Ampere

SMA / DO-214AC

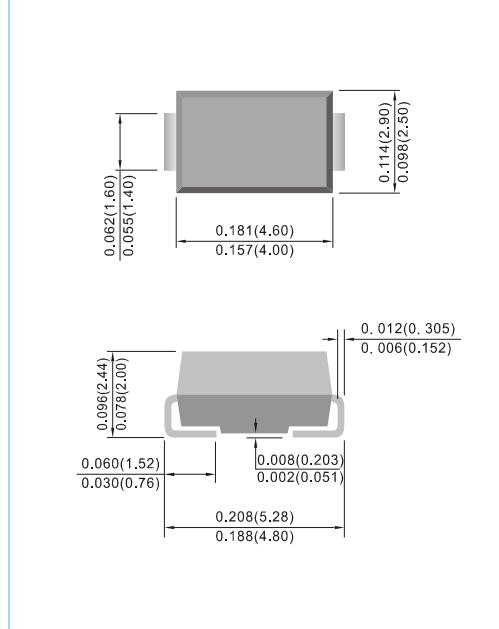
Unit : inch(mm)

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
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

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 ounces, 0.0679 grams



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

PARAMETER	SYMBOL	SS12L	SS13L	SS14L	SS14AL	SS16L	SS19L	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	45	60	90	V
Maximum rms voltage	V_{RMS}	14	21	28	31.5	42	64	V
Maximum dc blocking voltage	V_R	20	30	40	45	60	90	V
Maximum average forward rectified current	$I_{F(AV)}$	1						A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30					40	A
Maximum thermal resistance	$R_{\theta JA}$ $R_{\theta JL}$	120 40						$^{\circ}\text{C/W}$
Operating junction temperature range	T_J	-55 to + 125					-55 to +150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to + 150					-55 to +150	$^{\circ}\text{C}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	SS12L	SS13L	SS14L	SS14AL	SS16L	SS19L	UNIT
Maximum instantaneous forward voltage (Notes 1)	V_F	$I_F=1.0\text{A}$	0.42			0.45	0.50	0.68	V
Maximum reverse current at rated peak reverse voltage	I_R	-	200		100		80		μA

NOTES:

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

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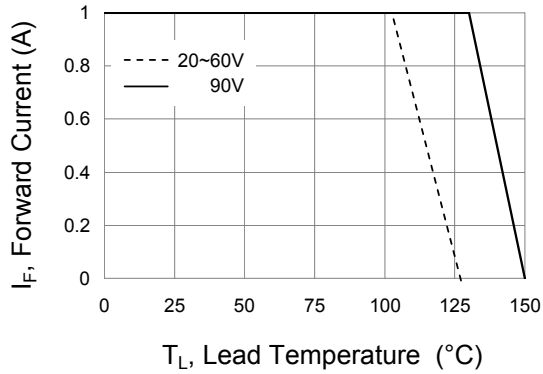


Fig.1 Forward Current Derating Curve

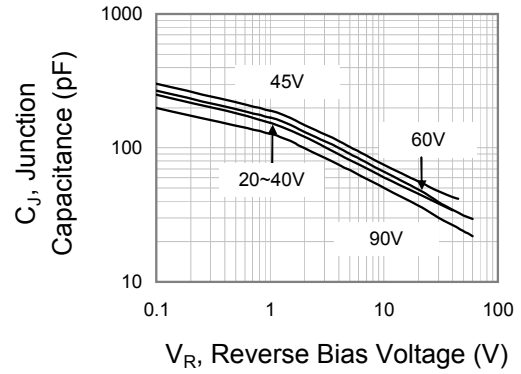


Fig.2 Typical Junction Capacitance

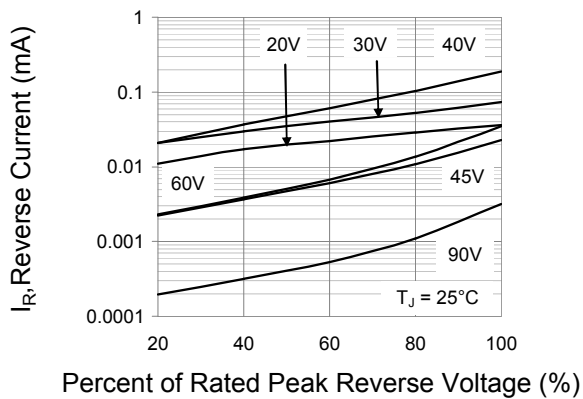


Fig.3 Typical Reverse Characteristics

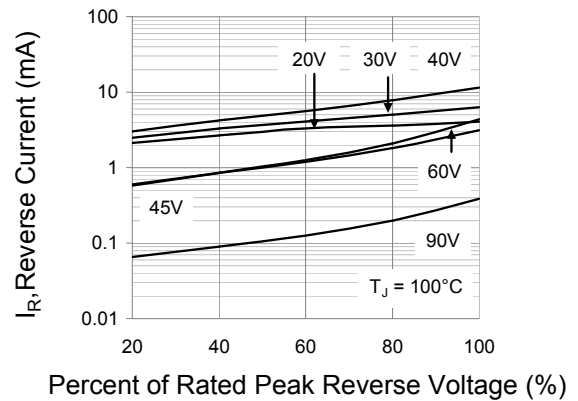


Fig.4 Typical Reverse Characteristics

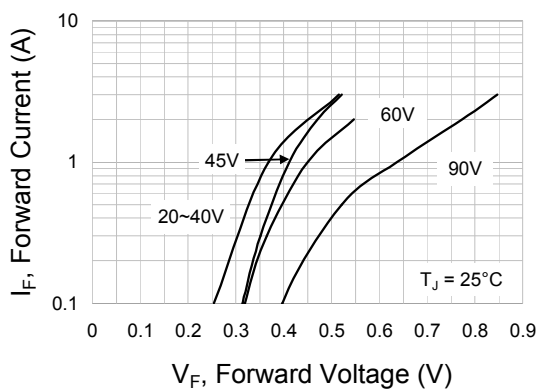


Fig.5 Typical Forward Characteristics

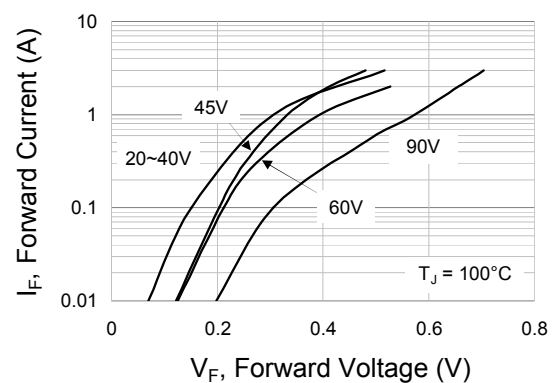
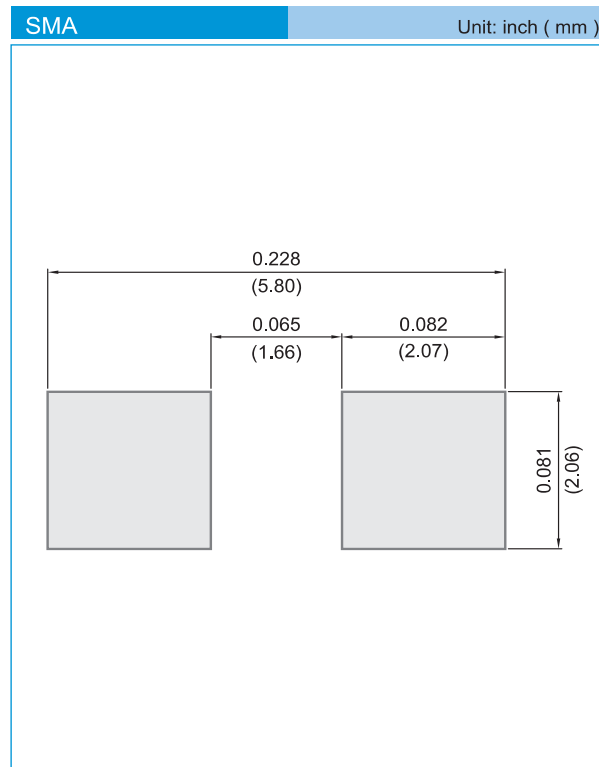


Fig.6 Typical Forward Characteristics



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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

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Part No_packing code_Version

SS12L_R1_00001

SS12L_R2_00001

For example :

RB500V-40_R2_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

Packing Code XX				Version Code XXXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			



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