

# FrelTec

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82319 Starnberg  
Germany

Schottky Diode  
SMA

FrelTec

## SMA

## SPECIFICATION

683	SS1_Axxxx	SMAx	L05
Type	Type	Package	Packing
683: Schottky Diode	SS1_L	SMA	L05: tape and Reel(embossed tape)for 5k pc (13'REEL)

All products according to RoHS (2015/863/EU)

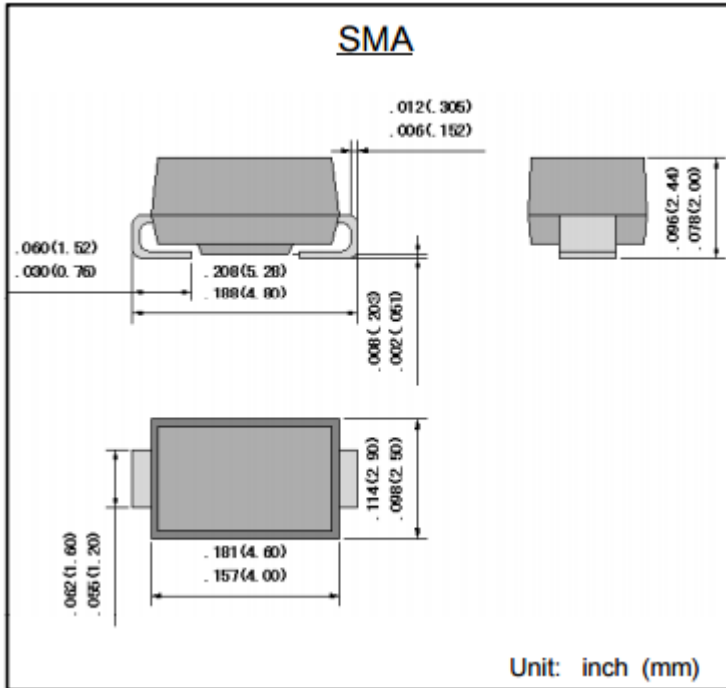
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Schottky Barrier Rectifier

SS14A-SS120A

**PACKAGE OUTLINE**



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## SMA

## Schottky Barrier Rectifier

## Absolute Maximum Ratings

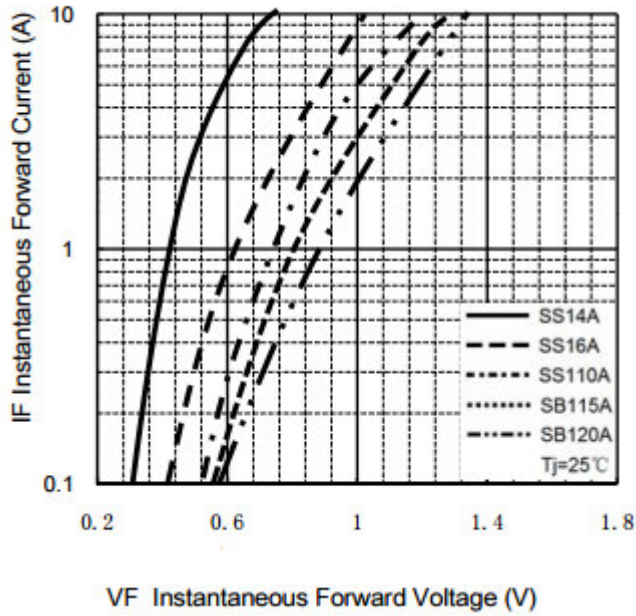
 $T_A = 25^\circ\text{C}$  unless otherwise noted

Parameter	Symbol	SS14A	SS16A	SS110A	SS115A	SS120A	Unit
Maximum repetitive Peak Reverse Voltage	$V_{RRM}$	40	60	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	28	42	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	40	60	100	150	200	V
Maximum average forward rectified current	$I_{F(AV)}$	1,0					A
Non-repetitive peak Forward Surge Current 8.3ms Single Half Sine-wave	$I_{FSM}$	30					A
@ $I_F=1,0A$ Maximum forward voltage	$V_F$	0,50	0,70	0,85	0,92	0,95	V
$T_A=25^\circ\text{C}$ Maximum reverse current	$I_R$	500	100	50			$\mu\text{A}$
Typical thermal resistance(Note 1)	$R_{\theta JA}$	95					$^\circ\text{C/W}$
Operating junction temperature Storage Temperature Range	$T_J, T_{STG}$	-55 to +125		-55 to +150			$^\circ\text{C}$

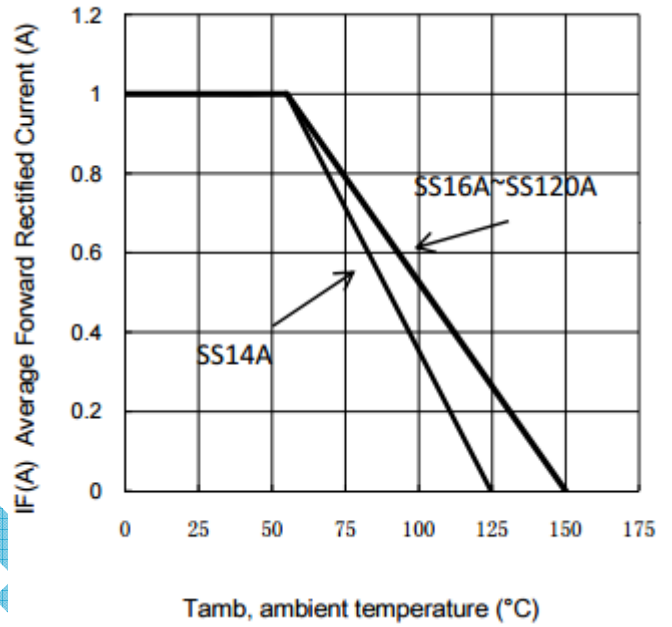
1) Thermal resistance from junction to ambient, PCB mounted.

## Rating and Characteristic Curves

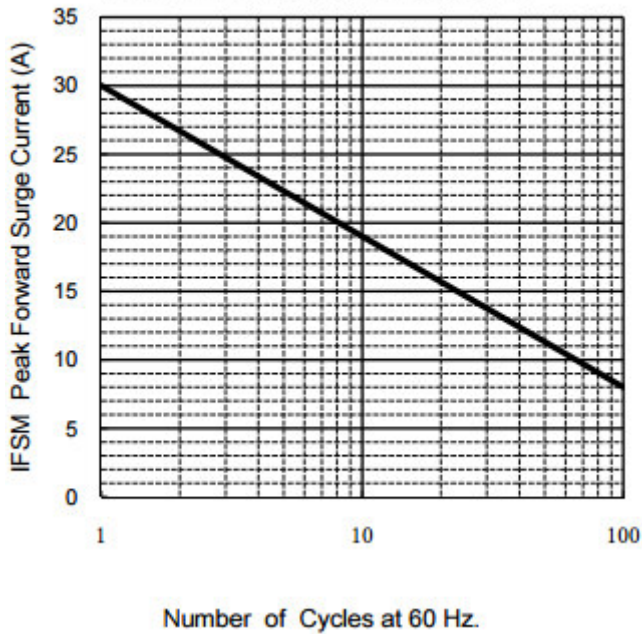
**TYPICAL FORWARD CHARACTERISTIC**



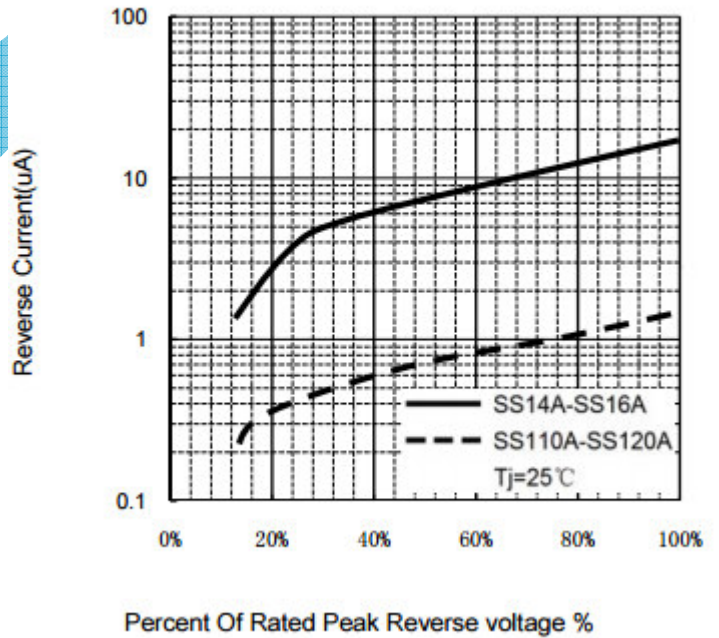
**FORWARD CURRENT DERATING CURVE**



**MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT**



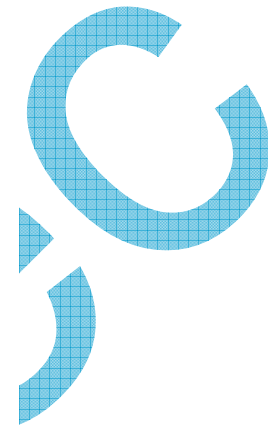
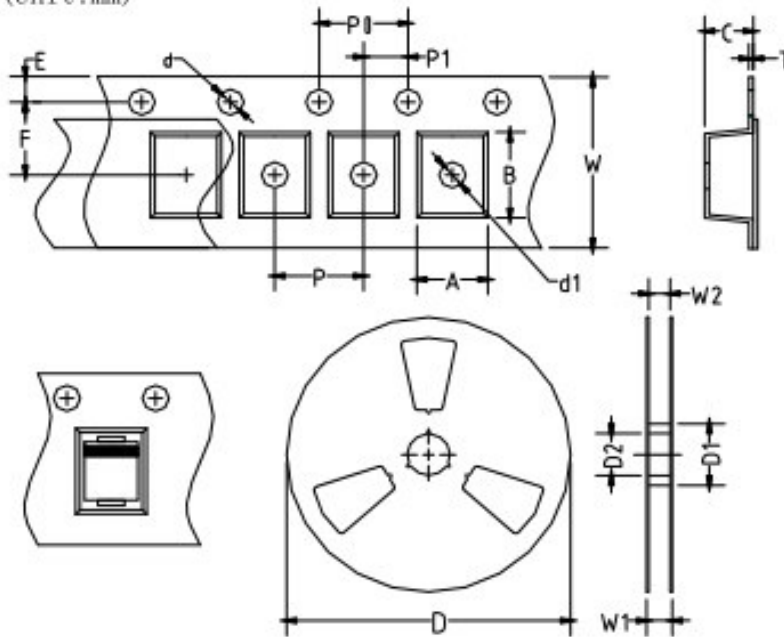
**Typical Reverse Characteristics**



SMA

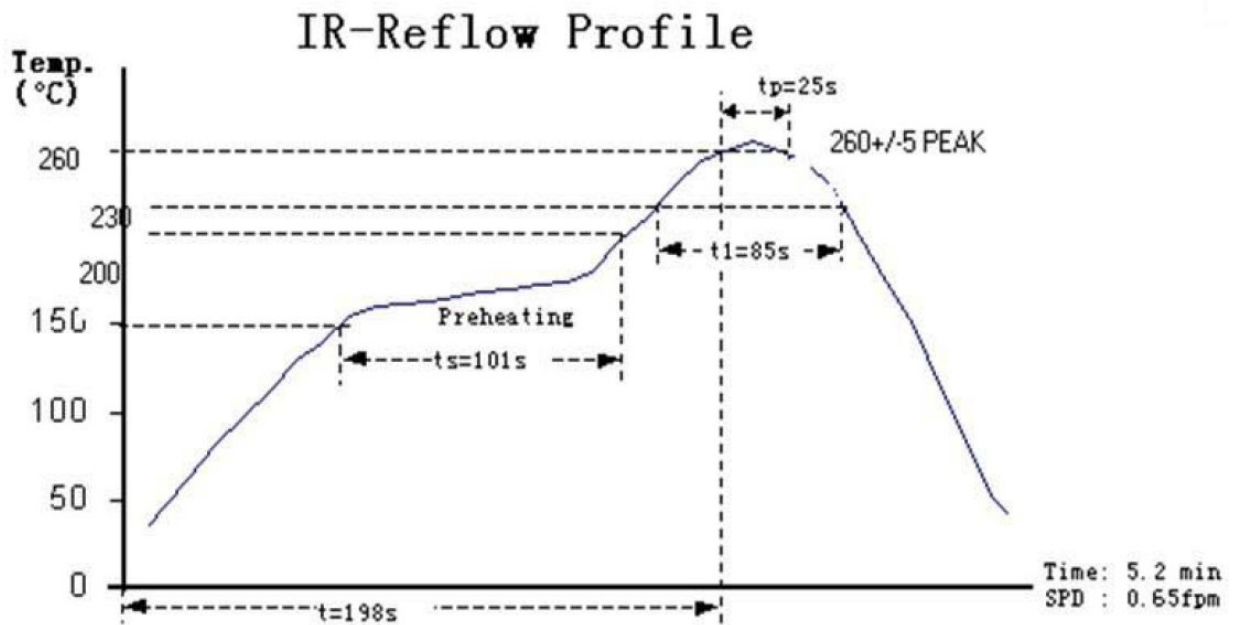
Size (Unit:mm)

Size (Unit:mm)



Item	Symbol	SMA-W
Carrier width	A	2.79±0.15
Carrier length	B	5.33±0.15
Carrier depth	C	2.36±0.15
Sprocket hole	d	1.50±0.10
Carrier hole	d1	1.50±0.10
Reel outside diameter	D	330.0±1.0
Reel inner diameter	D1	75±1.0
Feed hole diameter	D2	13.5±1.0
Sprocket hole position	E	1.75±0.10
Punch hole position	F	5.50±0.05
Punch hole pitch	P	4.00±0.10
Sprocket hole pitch	P0	4.00±0.10
Embossment center	P1	2.00±0.10
Total tape thickness	T	0.30±0.10
Tape width	W	12.00±0.15
Reel width	W1	18.1±1.5
Reel width	W2	13.5±1.0

## Lead Free Reflow Soldering Profile



## Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of 0-35°C and a relative humidity 35-75%RH

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