

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

General-purpose Rectifier
SMA

SMA

SPECIFICATION

683	S1_XXXXXXX	SMAX	L05
Type	Type	Package	Packing
683: General- purpose Rectifier	S1_	SMA	L05: tape in box (paper tape) for 5k pc (13'REEL)

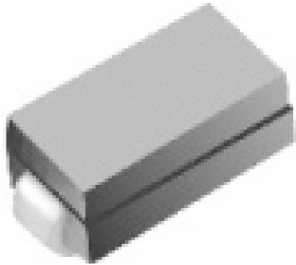
All products according to RoHS (2015/863/EU)

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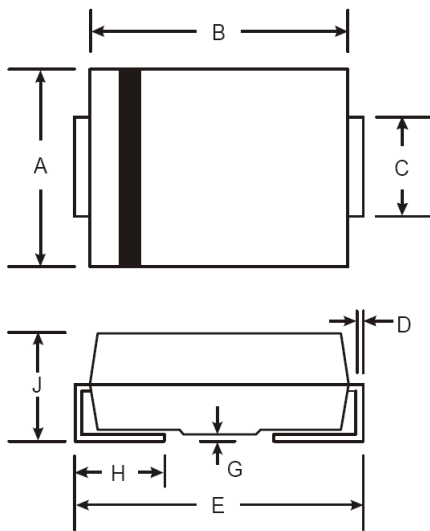
SMA

FrelTec
General-purpose Rectifier
S1A thru S1M

PACKAGE OUTLINE



DIMENSIONS



Dim	Min(mm)	Max(mm)
A	2,50	2,90
B	4,00	4,60
C	1,20	1,60
D	0,152	0,305
E	4,80	5,28
G	0,051	0,203
H	0,76	1,52
J	2,0	2,44

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General-purpose Rectifier

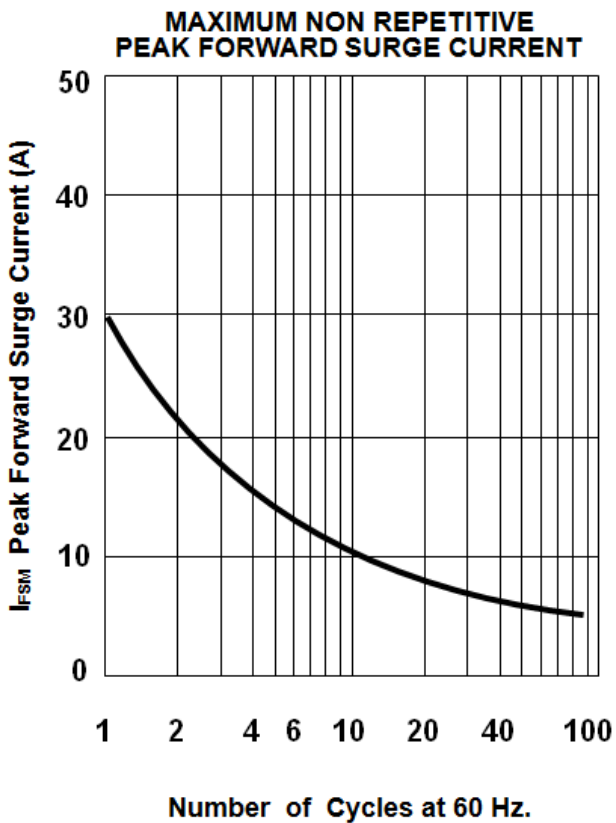
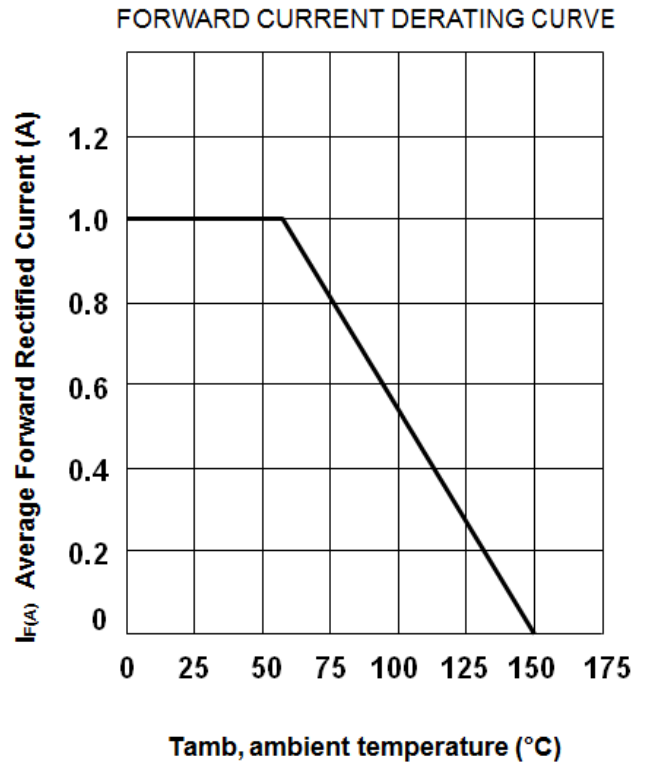
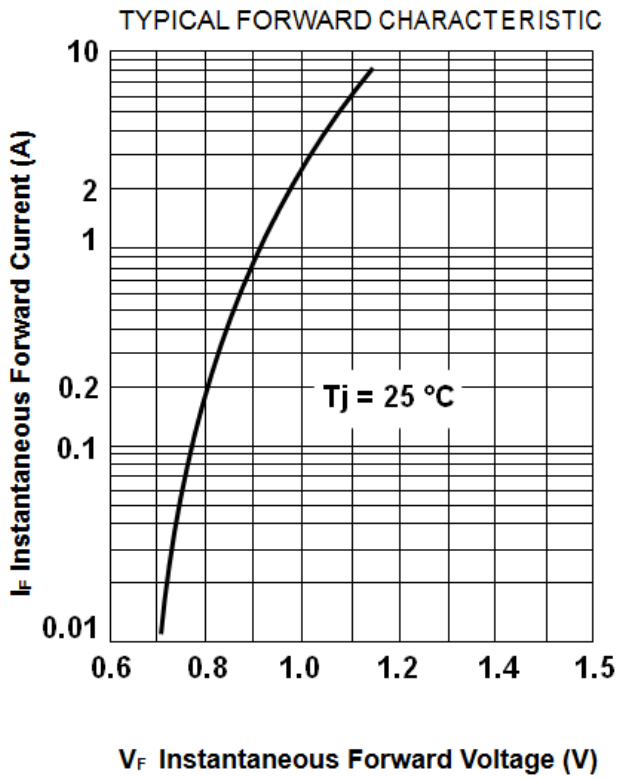
Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

Parameter	Symbols	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VR(RMS)	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	IF(AV)	1							A
IF=1,0A Maximum forward voltage	VF	1,1							V
Peak forward surge current 8,3 ms single half sine-wave	IFSM	30							A
Maximum reverse current TA = 25°C TA =100°C	IR	5 50							uA
Typical thermal resistance	Rsja	75					85		°C /W
VR = 4,0V f = 1,0MHz Type junction capacitance	Cj	12							PF
Operating junction and storage temperature range	Tj, Tstg	-55 ...+150							°C

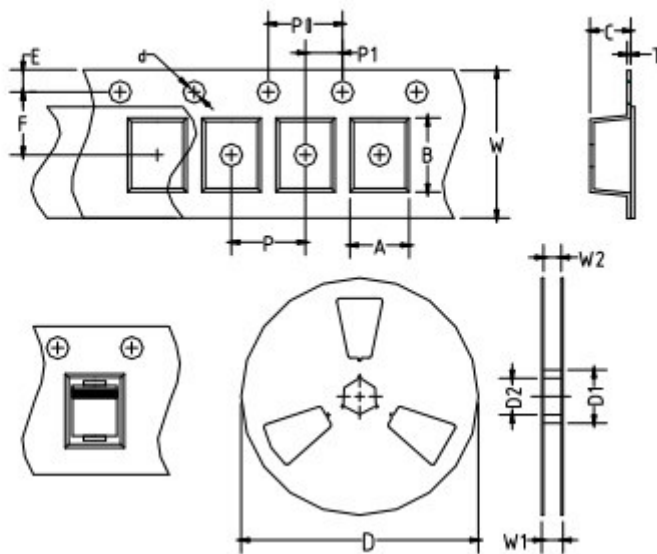
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Characteristics(Typical)



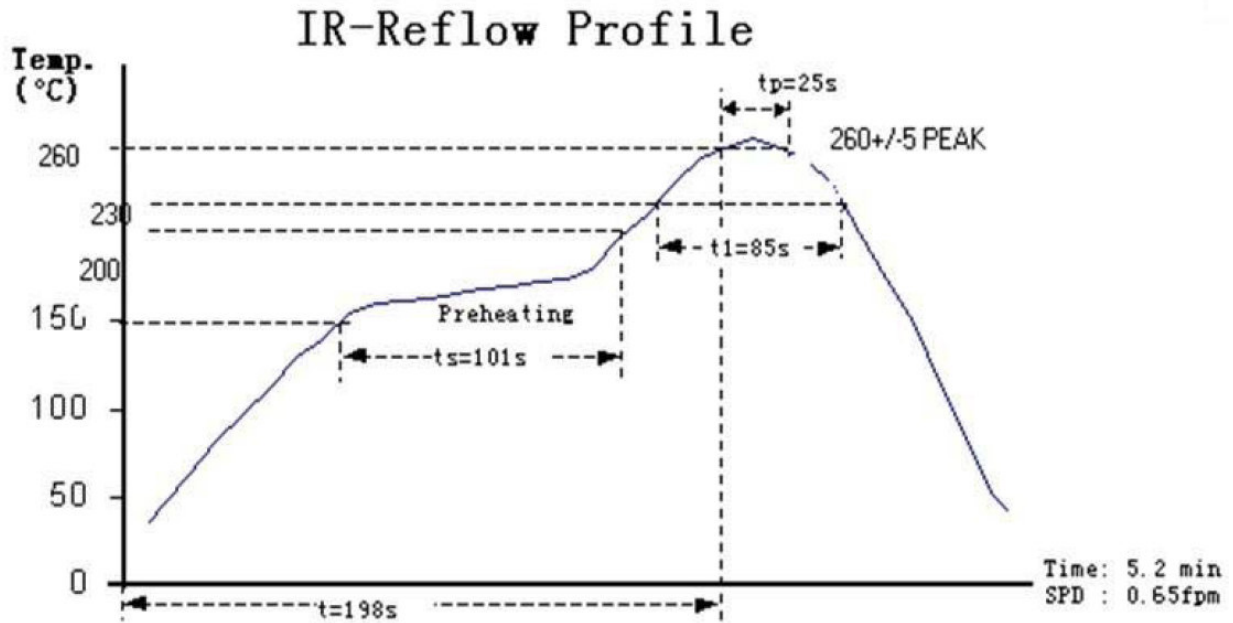
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Size (Unit:mm)



Item	Symbol	SMA
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
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



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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

11/8/2020

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Please read cautions and warnings and important notes at the end of this document.

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Published by FrelTec® GmbH
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