

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

Super-Fast Recovery Rectifier SMA

SMA

SPECIFICATION

683	ES1_XXXXXX	SMAX	L05
Type	Type	Package	Packing
683: Super Fast Recovery Rectifier	ES1_	SMA	L05: tape and Reel(embossed tape)for 5k pc (13'REEL)

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

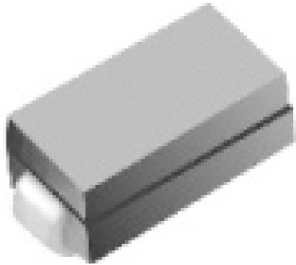
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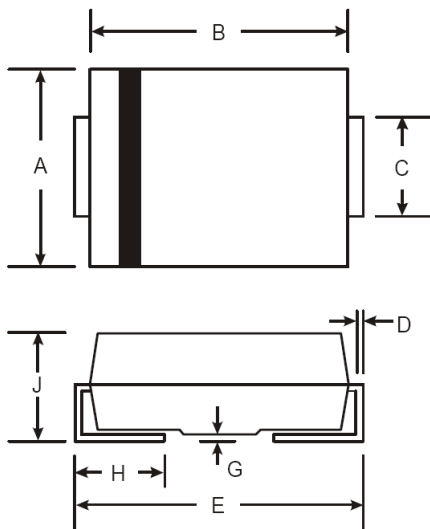
FrelTec Super Fast Recovery Rectifier

ES1_

PACKAGE OUTLINE



DIMENSIONS



Dim	Min(mm)	Max(mm)
A	2,18	2,79
B	4,06	4,57
C	1,29	1,70
D	0,15	0,31
E	4,70	5,31
G	0,10	0,2
H	0,89	1,50
J	1,70	2,31

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FrelTec Super Fast Recovery Rectifier

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

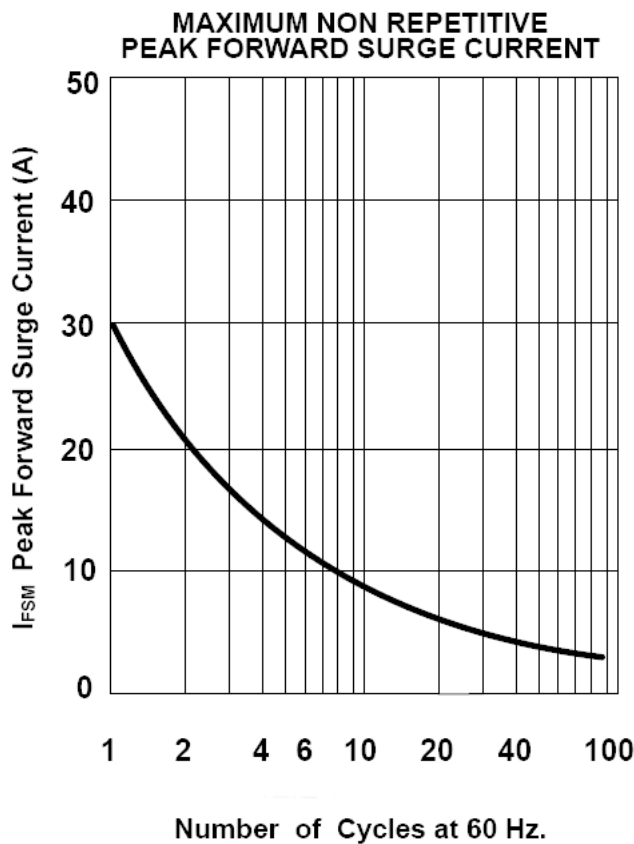
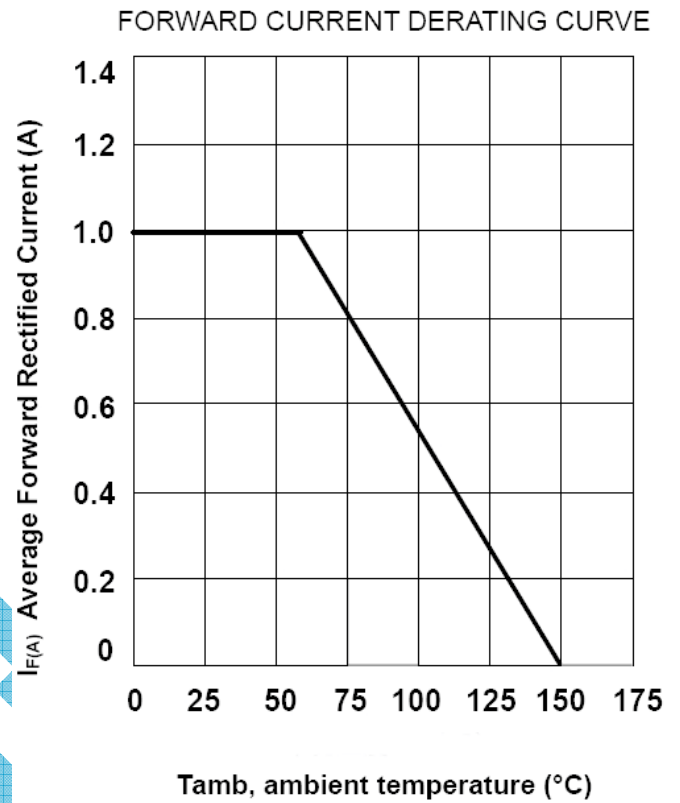
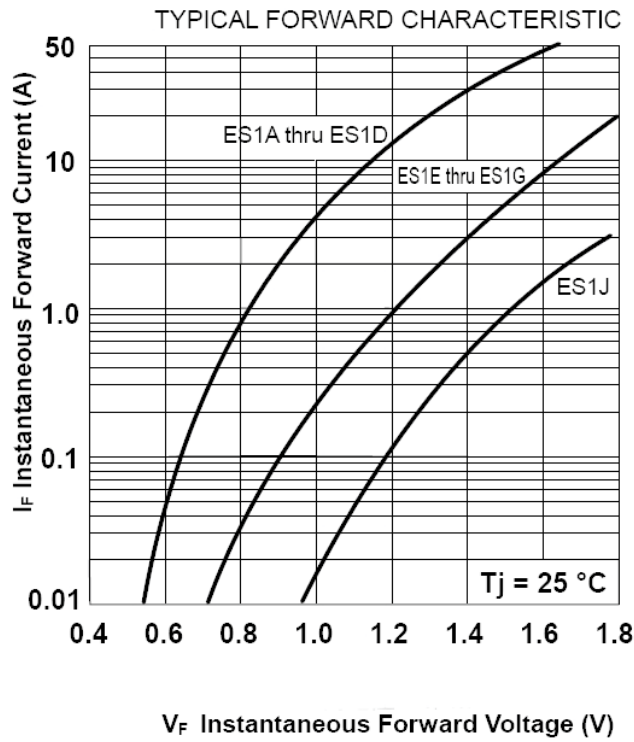
Parameter	Symbols	ES1	ES1	ES1	ES1	ES1	ES1	ES1	Unit
		A	B	C	D	E	G	J	
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	300	400	600	V
Maximum RMS voltage	VRMS	35	70	105	140	210	280	420	V
Maximum DC blocking voltage	VDC	50	100	150	200	300	400	600	V
Maximum average forward rectified current	IF(AV)	1,0							A
Peak forward surge current 8,3 ms single half sine-wave	IFSM	30							A
Typical thermal resistance	RθJA	85							°C/W
Operating junction and storage temperature range	Tj, TSTG	-55 --- +150							°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbols	ES1	ES1	ES1	ES1	ES1	ES1	ES1	Unit
		A	B	C	D	E	G	J	
IF = 1,0A Maximum forward voltage	VF	0,95				1,25		1,7	V
TA= 25°C Maximum reverse current TA=100°C	IR	5,0 100				μA			
IF=0,5A IR=1,0A IRR=0,25A MAX. Reverse Recovery Time	trr	35				nS			
VR = 4,0V, f = 1MHz Type junction capacitance	Cj	15				pF			

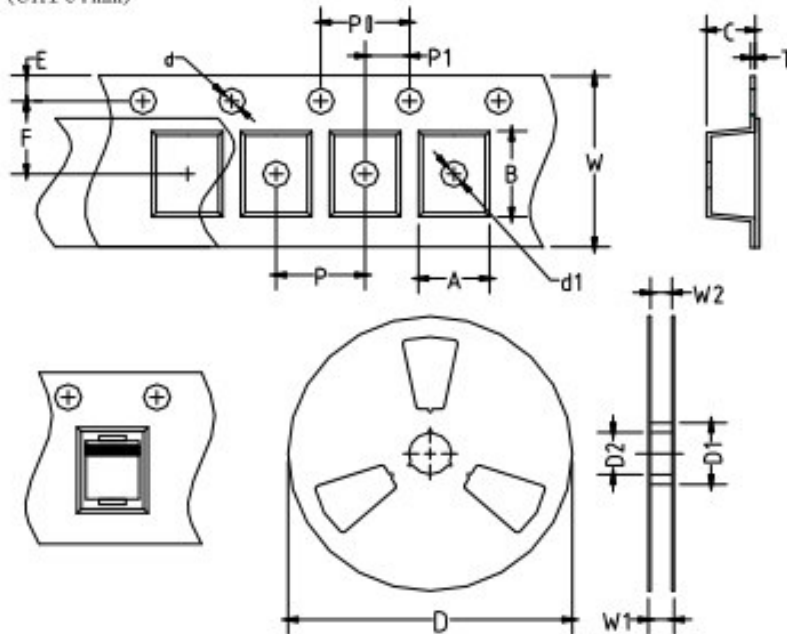
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Characteristics(Typical)



SMA

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



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

3/4/2020

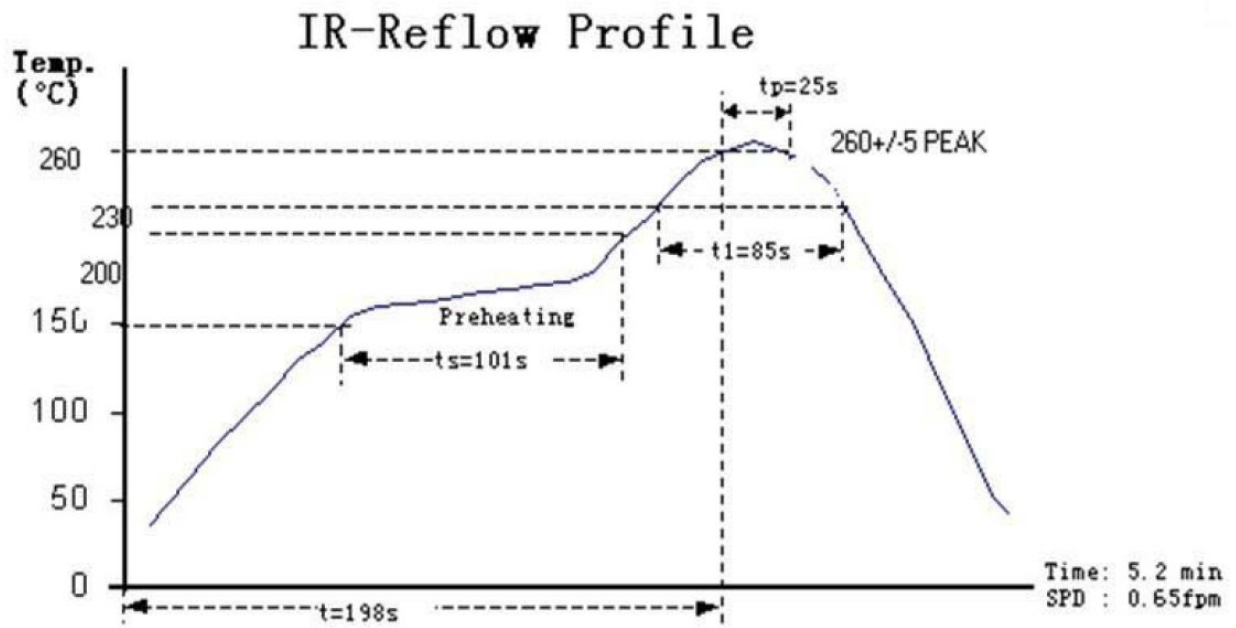
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Please read cautions and warnings and important notes at the end of this document.

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Lead Free Reflow Soldering Profile



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SMA

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