

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

Fast Recover Rectifier
SMA

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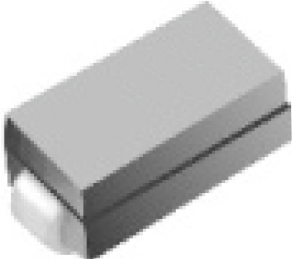
SPECIFICATION

683	RS1_XXXXXX	SMA	L05
Type	Type	Package	Packing
683: Fast Recover Rectifier	RS1_	SMA	L05: tape and Reel(embossed tape) for 5k pc (13'REEL)

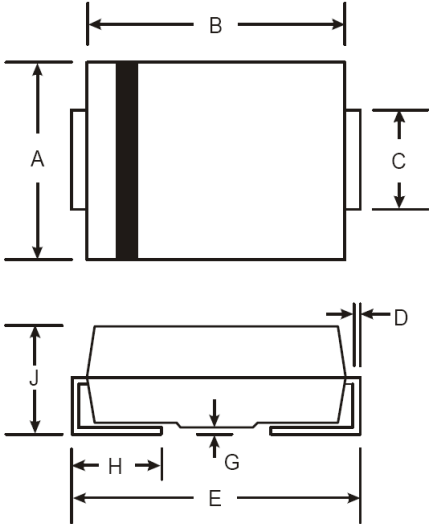
All products according to RoHS (2015/863/EU)

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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

SMA

Fast Recover Rectifier

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

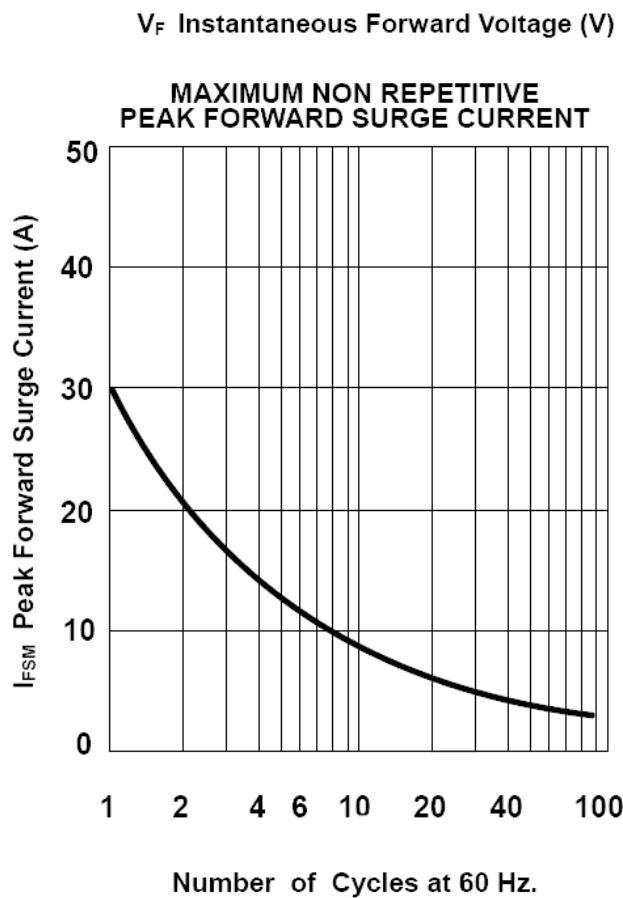
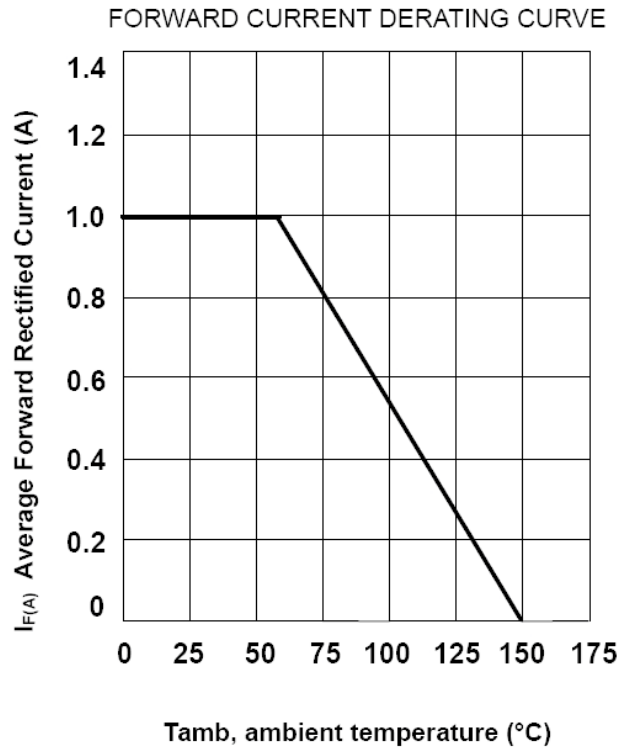
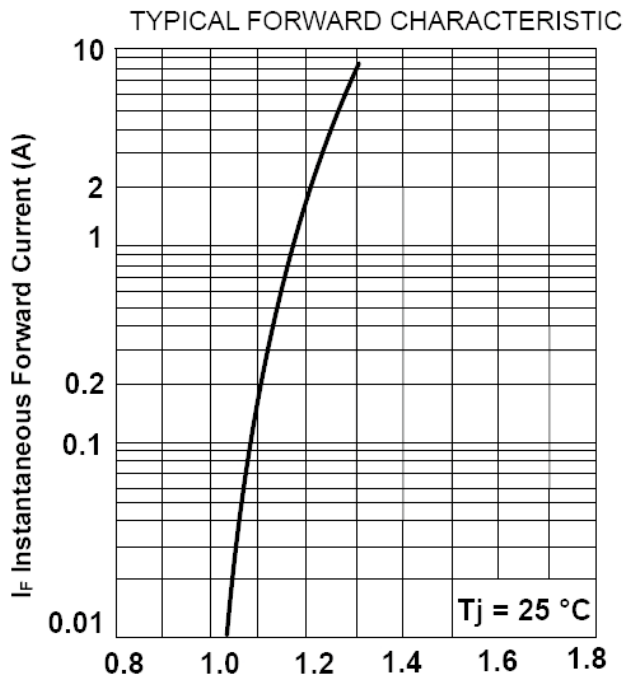
Parameter	Symbols	RS1 A	RS1 B	RS1 D	RS1 G	RS1 J	RS1 K	RS1 M	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	IF(AV)	1,0							A
Peak forward surge current 8,3 ms single half sine-wave	IFSM	30							A
Typical thermal resistance	RθJA	45							°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	RS1 A	RS1 B	RS1 D	RS1 G	RS1 J	RS1 K	RS1 M	Unit
IF = 1,0A Maximum forward voltage	VF	1,3							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	150				250	500		nS
VR = 4,0V, f = 1MHz Type junction capacitance	Cj	15							pF

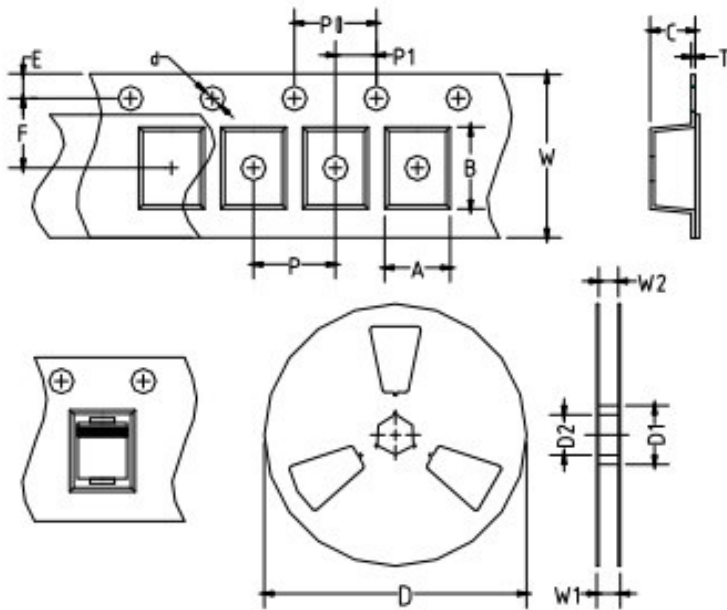
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Characteristics(Typical)

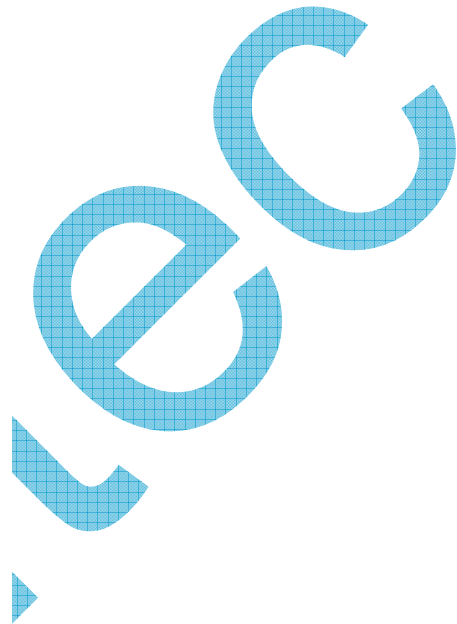


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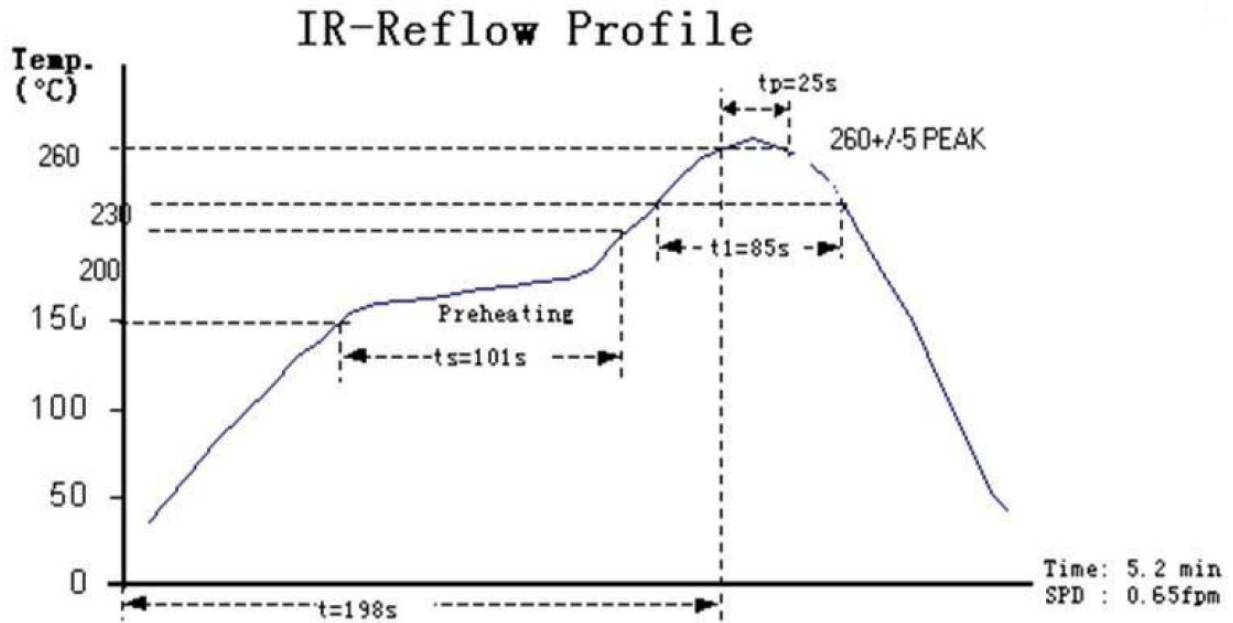
Size (Unit:mm)



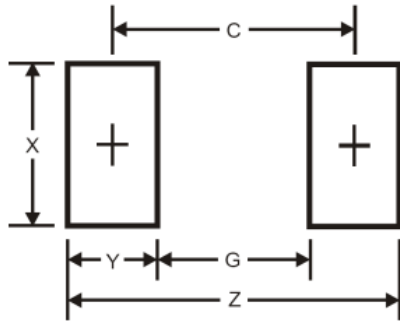
Item	Symbol	SMA
Carrier width	A	2.79±0.15
Carrier length	B	5.33±0.15
Carrier depth	C	2.36±0.15
Sprocket hole	d	1.50±0.10
Reel outside diameter	D	330.0±1.0
Reel inner diameter	D1	75±1.0
Feed hole diameter	D2	13.5±1.0
Stroctet hole position	E	1.75±0.10
Punch hole position	F	5.50±0.05
Punch hole pitch	P	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



Recommended Land Pattern Design :



Dimensions	Value (in mm)
Z	5,45
G	2,41
X	1,68
Y	1,52
C	3,93

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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www.freltec.com

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