

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

General-purpose Rectifier
SOD123

SOD123

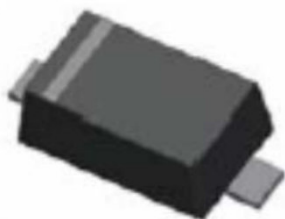
SPECIFICATION

683	S1_Lxxxxxx	SD13	E03
Type	Type	Package	Packing
683: General- purpose Rectifier	S1_L	SOD123	E03: tape in box (paper tape) for 3k pc (7'REEL)

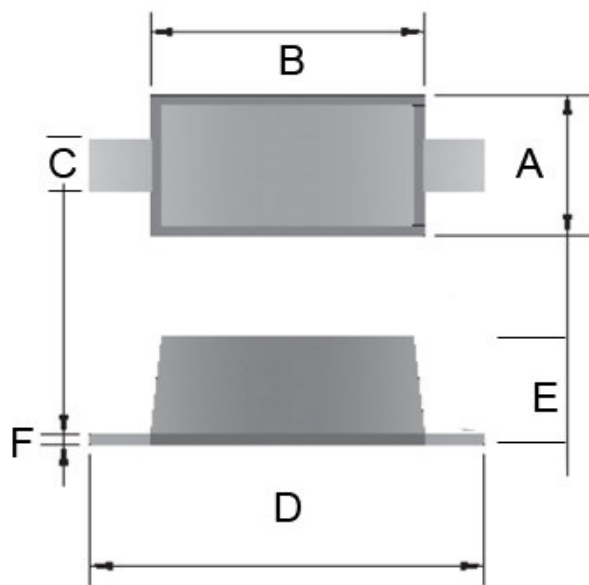
All products according to RoHS (2015/863/EU)

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PACKAGE OUTLINE



DIMENSIONS



Dim	Min(mm)	Max(mm)
A	1,70	1,90
B	2,70	2,90
C	0,98	1,08
D	3,50	3,70
E	0,80	1,10
F	0,10	0,2

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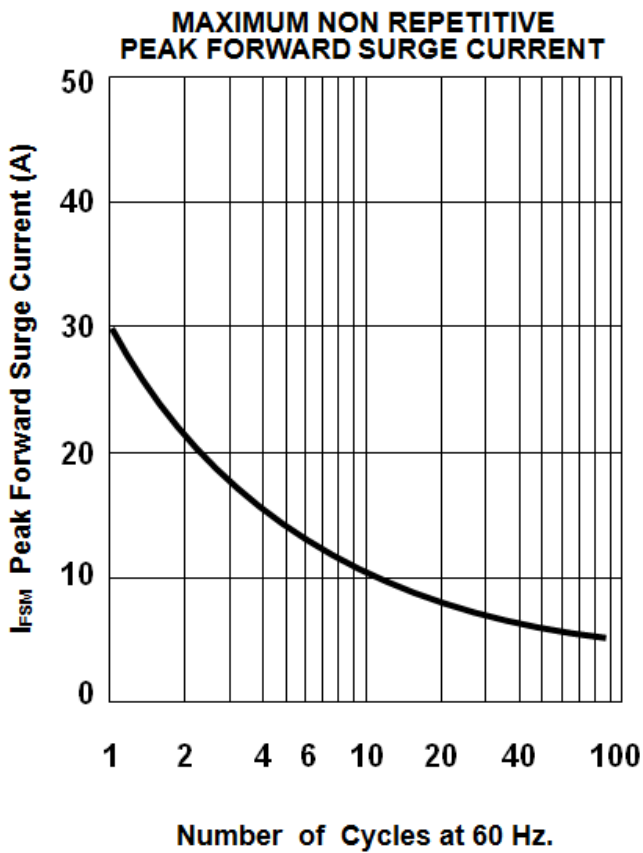
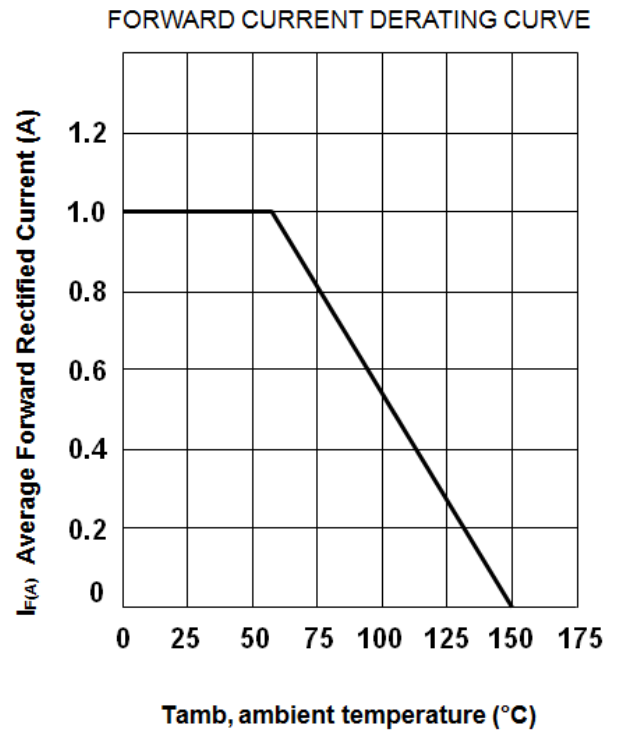
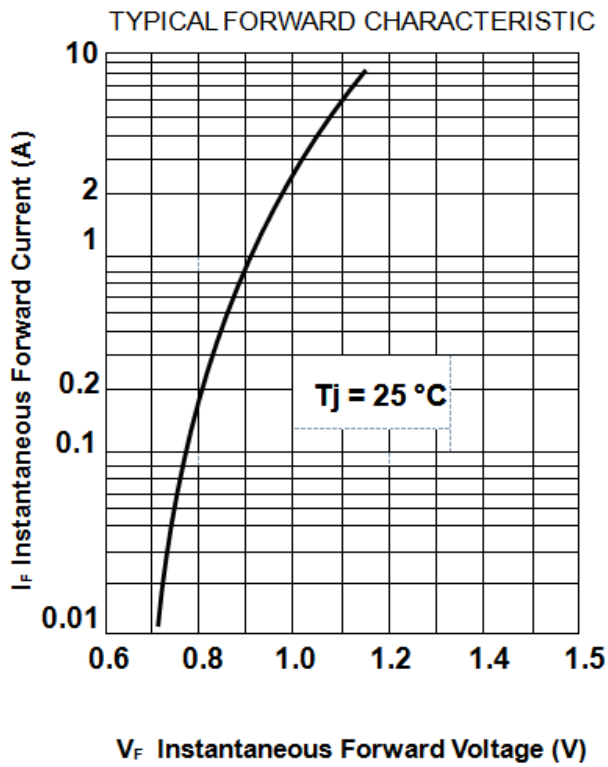
Maximum Ratings & Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

	Symbols	S1 AL	S1 BL	S1 DL	S1 GL	S1 JL	S1 KL	S1 ML	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	IR	5							uA
TA = 100°C	IR	50							uA
Typical thermal resistance	Rsja	85					80		°C /w
VR = 4,0V f = 1,0MHz Type junction capacitance	Cj	9							PF
Operating junction and storage temperature range	Tj, Tstg	-55 ...+150							V

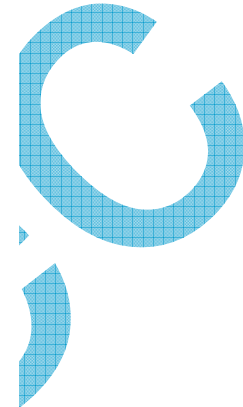
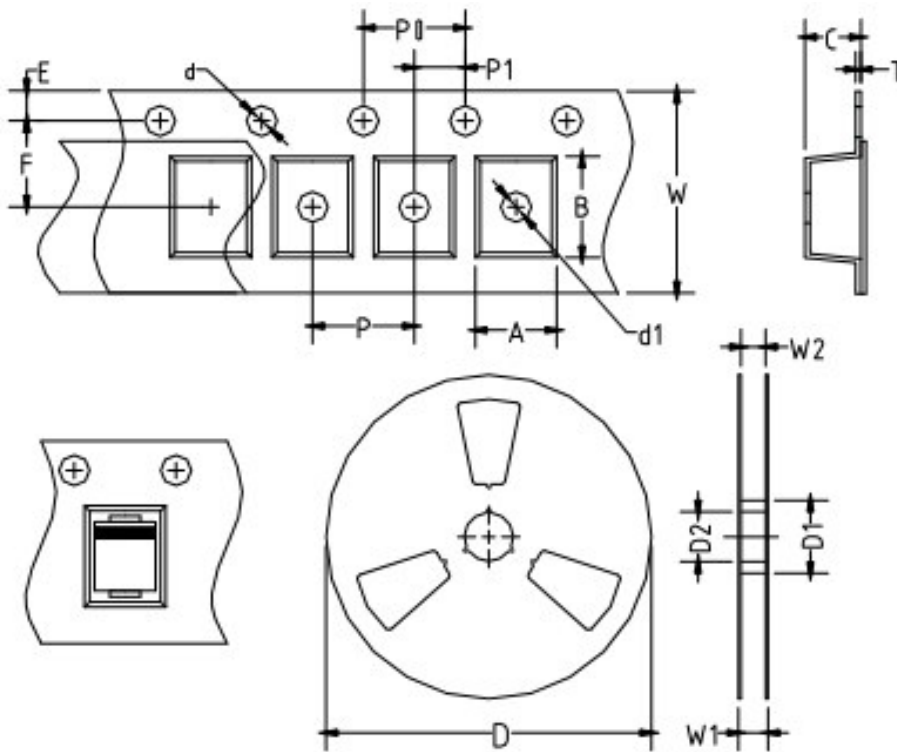
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Rating and Characteristic Curves



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Size (Unit:mm)



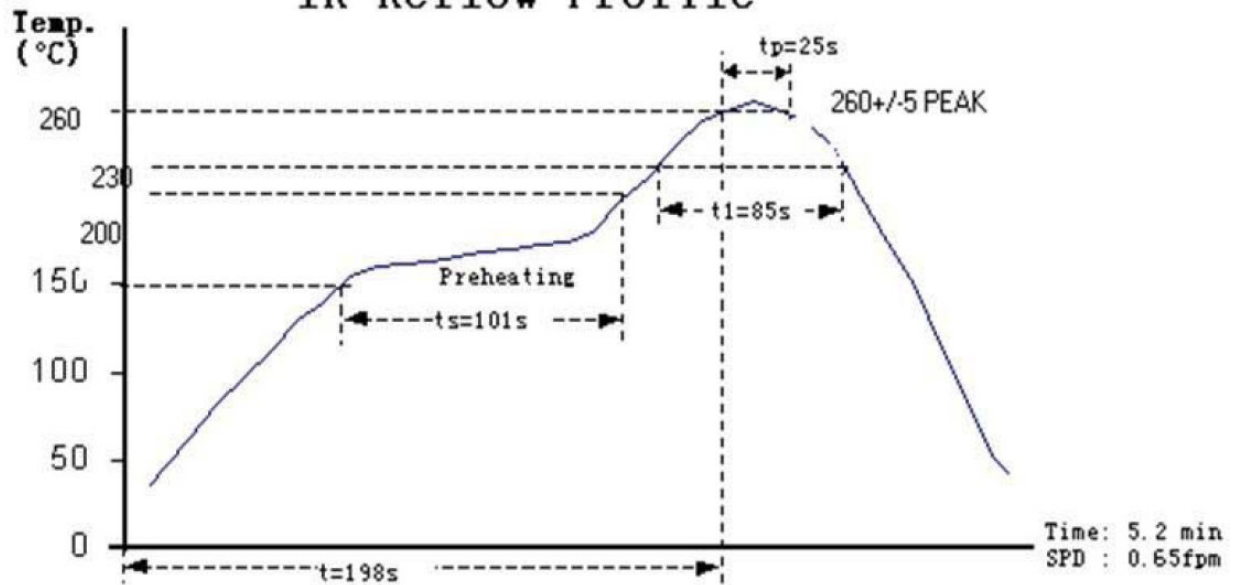
Item	Symbol	SOD123
Carrier width	A	1.80±0.15
Carrier length	B	3.94±0.15
Carrier depth	C	1.58±0.15
Sprocket hole	d	1.50±0.10
Carrier hole	d1	1.10±0.10
Reel outside diameter	D	177.8±1.0
Reel inner diameter	D1	54±1.0
Feed hole diameter	D2	13.0±1.0
Sprocket hole position	E	1.70±0.10
Punch hole position	F	3.50±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	0.20±0.10
Tape width	W	7.95±0.15
Reel width	W1	10.2±1.5
Reel width	W2	9.4±1.0

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Lead Free Reflow Soldering Profile

IR-Reflow 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

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