

# FrelTec

Mathildenstr. 10A  
82319 Starnberg  
Germany

## Surface Mount Schottky Rectifier SOD-123FL

SOD-123FL

Surface Mount Schottky Rectifier

SPECIFICATION

62B	FS_____xxxx	S13F	E03
Type	Type	Package	Packing
62B: Surface Mount Schottky Rectifier	FS_____	SOD-123FL	E03: tape in Embossed tape and reel for 3000 pc (7'REEL)

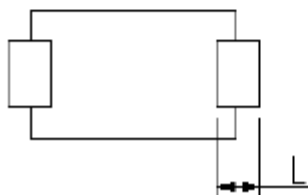
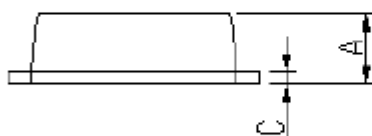
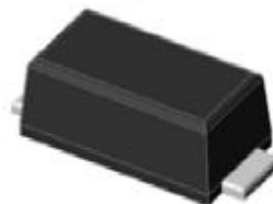
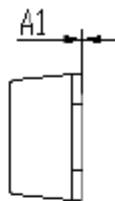
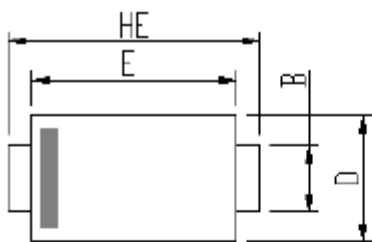
All products according to RoHS (2015/863/EU)



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## PACKAGE OUTLINE



SOD-123FL  
eSGA

	Min	Max
A	0,9	1,08
A1	0	0,1
B	0,85	1,05
C	0,1	0,25
D	1,7	2
E	2,9	3,1
L	0,43	0,83
HE	3,5	3,9

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Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified,

Parameter	Symbol	FS12	FS13	FS14	FS16	FS1B	FS1B5H	FS1CH	Unit	
Maximum repetitive peak reverse voltage	VRRM	20	30	40	60	100	150	200	V	
Maximum RMS voltage	VRMS	14	21	28	42	70	105	140	V	
Maximum DC blocking voltage	VDC	20	30	40	60	100	150	200	V	
Maximum average forward rectified current	IF(AV)	1,0							A	
Peak forward surge current 8,3 ms single half sine- wave superimposed on rated load	IFSM	30,0							A	
Operating junction temperature range	TJ	- 55 to + 150					- 55 to + 175			°C
Storage temperature range	TSTG	- 55 to + 150							°C	

Parameter	Test Conditions	Symbol	FS12	FS13	FS14	FS16	FS1B	FS1B5H	FS1CH	Unit
Maximum instantaneous forward voltage	IF=0,5A, TA=25°C	VF	0,40	0,45	0,55	0,75	0,80			Volts
	IF=1 A, TA=25°C		0,50	0,70	0,81	0,90				
Maximum DC reverse current at rated DC blocking voltage	TA=25°C	IR	200	200	200	150	200			uA
	TA=125°C		10	30	20					mA
Typical thermal resistance <sup>1)</sup>	junction to ambient	RθJA	90				°C/W			
	junction to case	RθJC	60							
	junction to mount	RθJM	20							

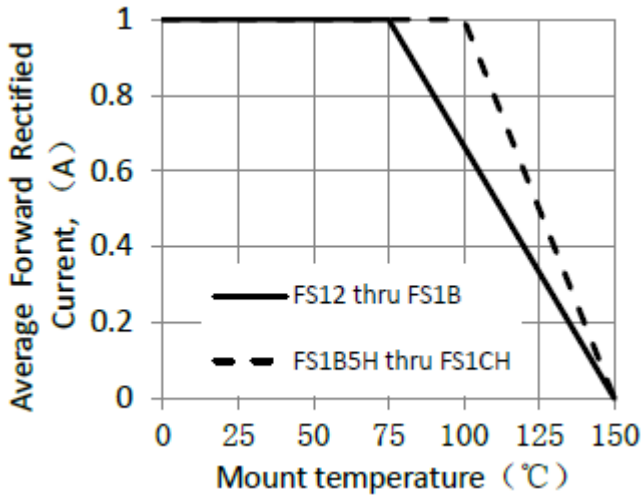
Note:1), The thermal resistance from junction to ambient, case or mount, mounted on P.C.B with 5×5mm copper pads,2 OZ, FR4 PCB

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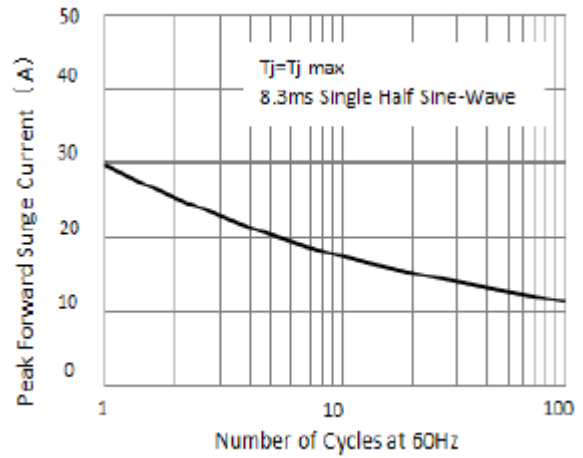
Surface Mount Schottky Rectifier

Ratings and Characteristics Curves

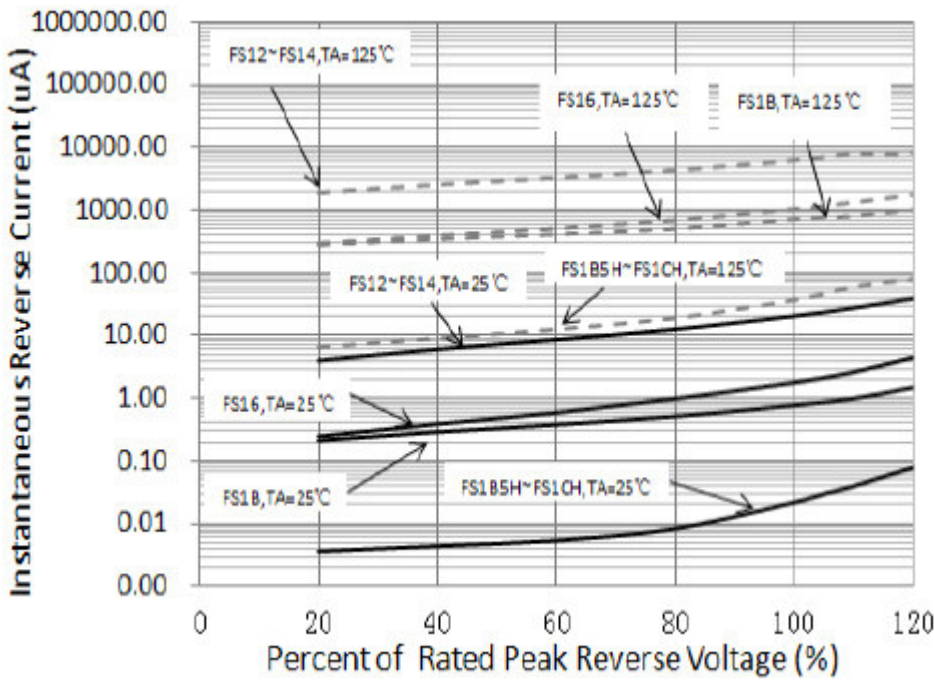
TA = 25°C unless otherwise noted



Forward Current Derating Curve



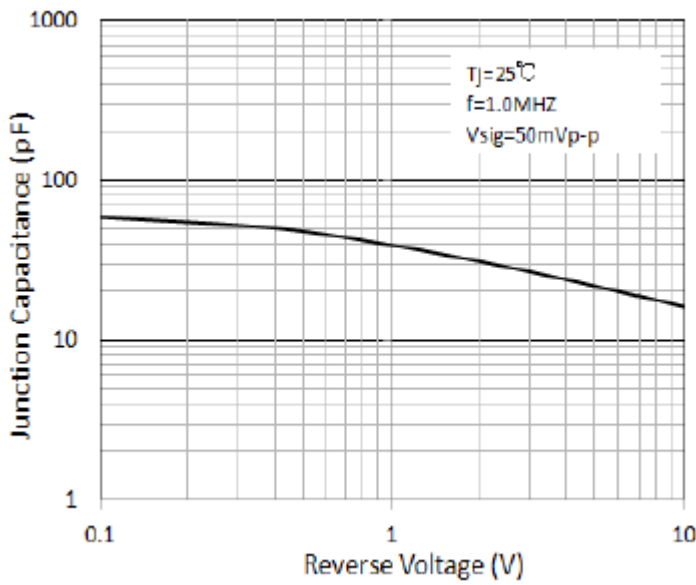
Maximum Non-Repetitive Peak Forward Surge Current



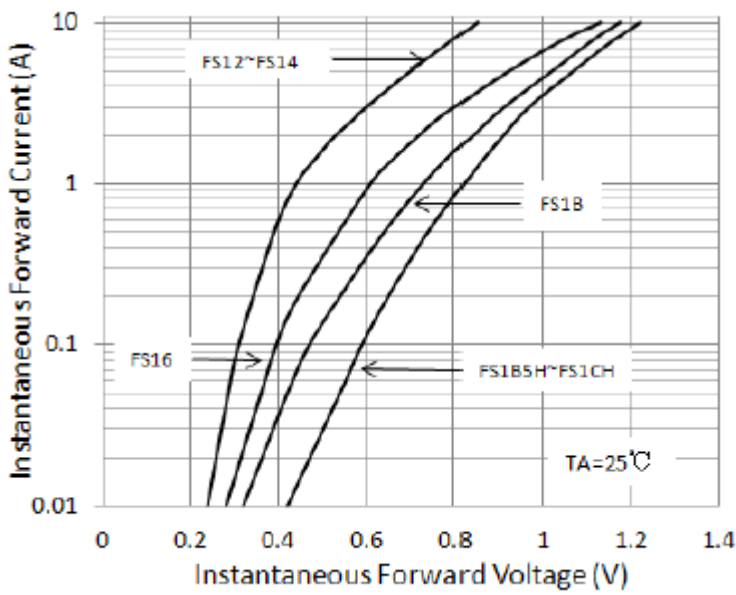
Typical Instantaneous Reverse Characteristics

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Typical Junction Capacitance



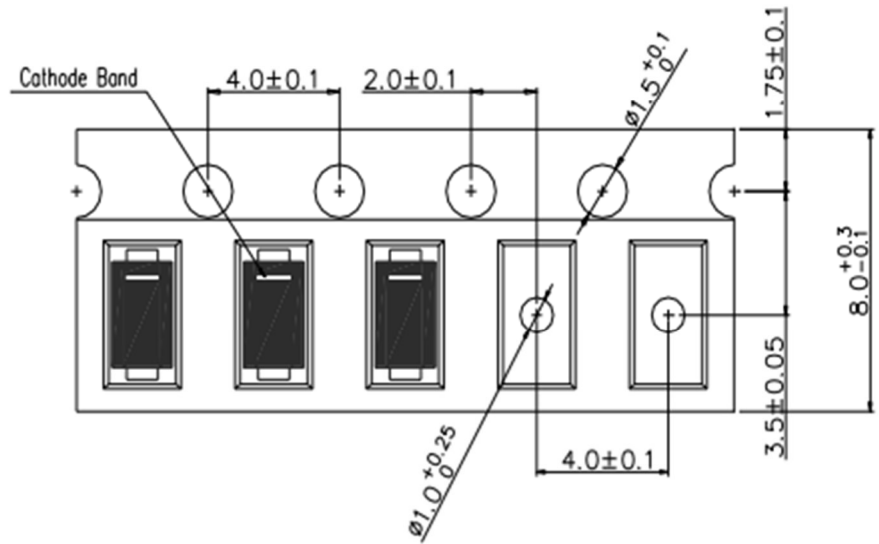
Typical Instantaneous Forward Characteristics

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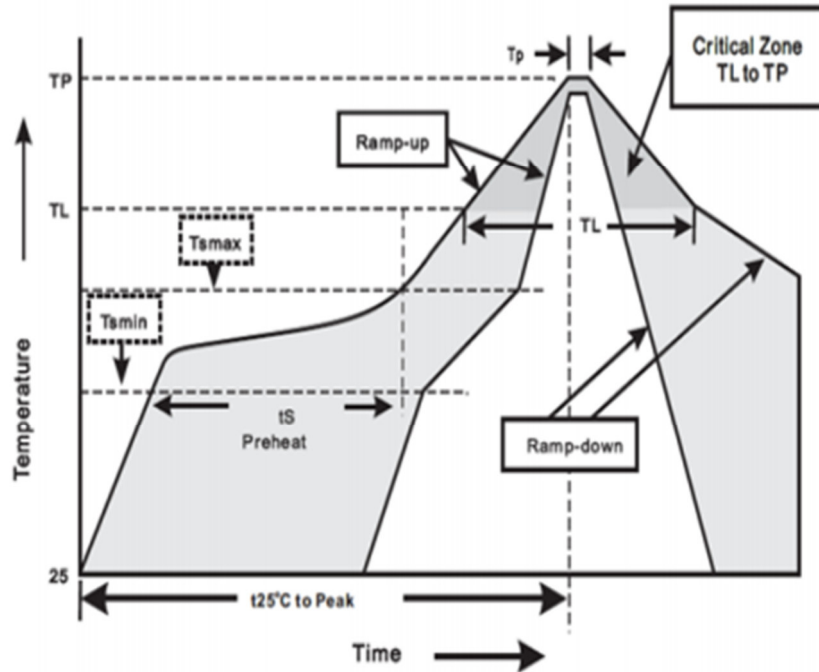
## SPECIFICATION

### Tape & Reel Specification



FrelTec

**Soldering Parameters**



**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 20-30°C and a relative humidity 20-60%RH



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