

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

Switching Diode
SOT-23

SOT-23
SPECIFICATION

61B		BAV99xxxxx		ST23		E03
Type		Type		Package		Packing
61B: Switching Diode		BAV99		SOT23		E03: tape and Reel(embossed tape)for 3k pc (7'REEL)

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

FrelTec

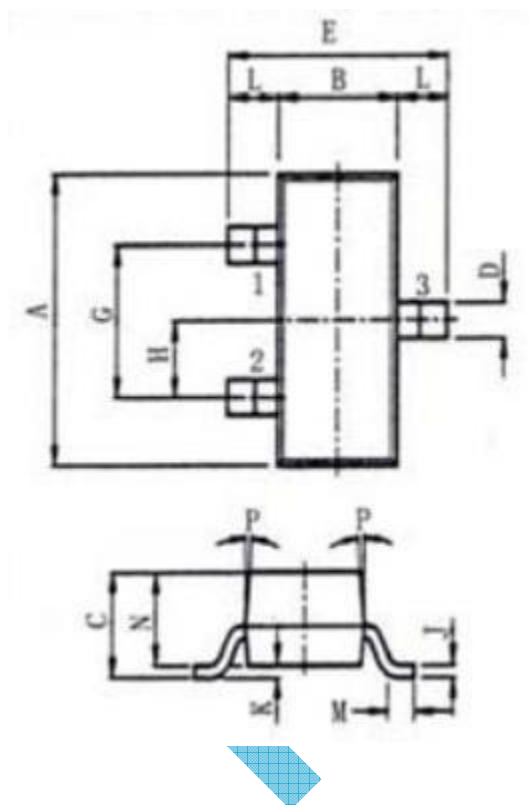
SOT-23

FrelTec
Switching Diode
BAV99

PACKAGE OUTLINE



DIMENSIONS



A	2.9±0.02
B	1.30+0.20/-0.15
C	1.30MAX
D	0.40+0.15/-0.05
E	2.40+0.30/-0.20
G	1.9±0.2
H	0.95±0.1
J	0.10+0.10/-0.05
K	0.00-0.10
L	0.55±0.1
M	0.2MIN
N	1.00+0.20/-0.10
P	7"

SOT-23

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

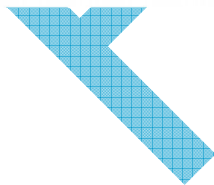
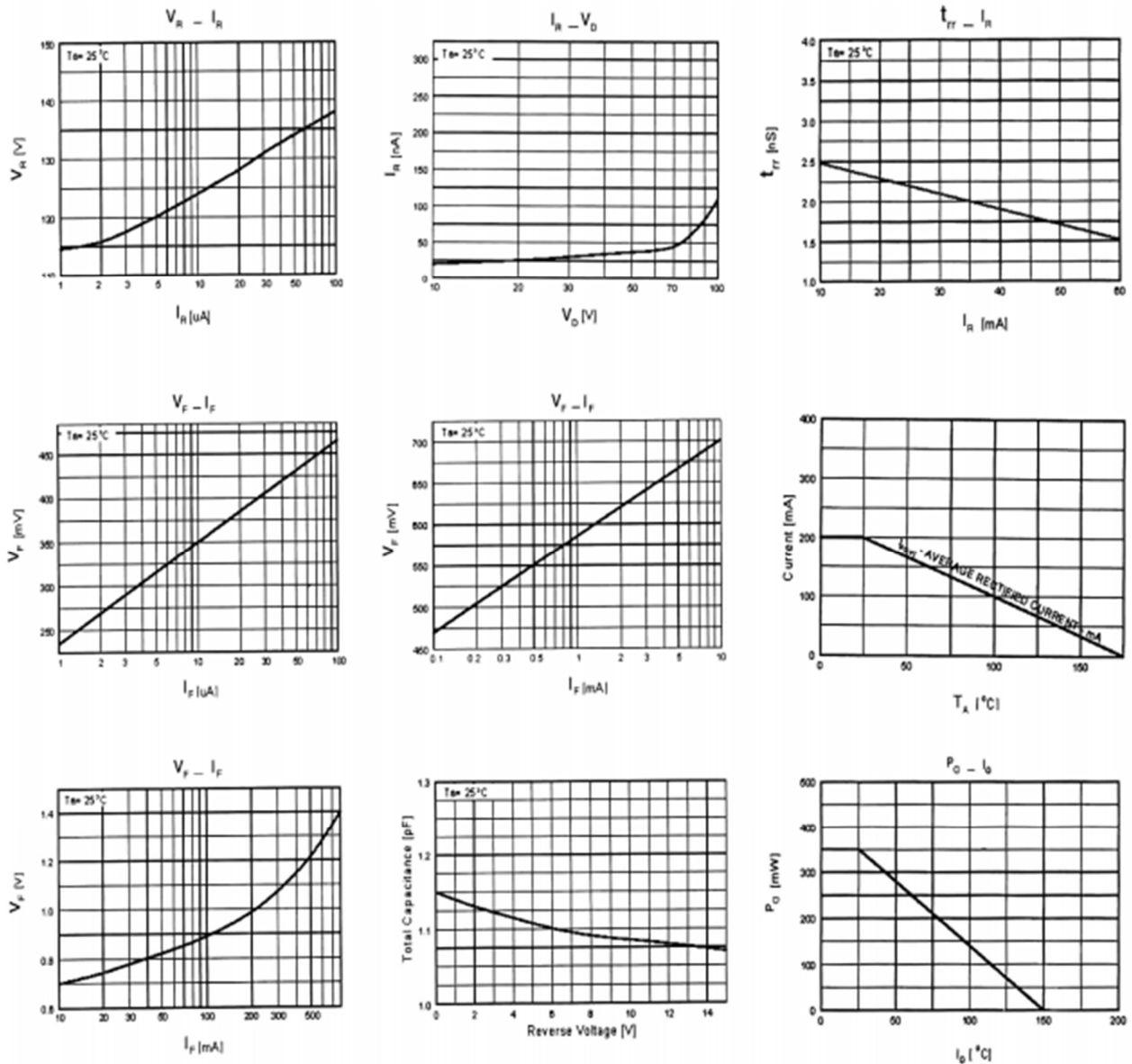
Symbol	Rating	Unit
VRRM	70	V
IF(AV)	200	mA
IFSM(1)(pulse width=1.0S)	1.0	A
IFSM(2)(pulse width=1.0mS)	2.0	A
PD	350	mW
R _{θJA}	357	°C/W
T _j	150	°C
Tstg	-55~150	°C

Electrical characteristics(Ta=25°C)

Symbol	Test condition	Rating			Unit
		Min	Typ	Max	
V _R	I _R =100μA	70			V
V _F	I _F =1.0mA			715	mV
	I _F =10mA			855	mV
	I _F =50mA			1.0	V
	I _F =150mA			1.25	V
I _R	V _R =70V			2.5	μA
	V _R =25V T _A =150°C			30	μA
	V _R =70V T _A =150°C			50	μA
C _T	V _R =0 f=1.0MHz			1.5	pF
t _{rr}	I _F =I _R =10mA I _{RR} =1.0mA R _L =100Ω			4.0	ns

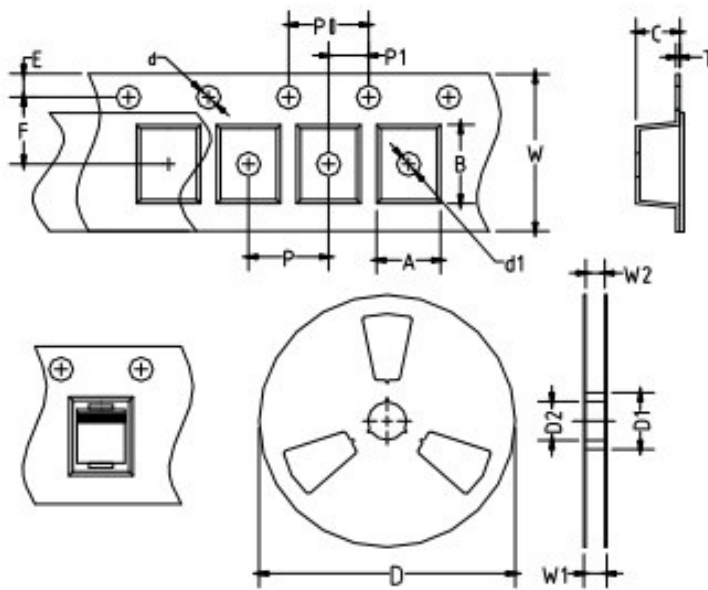
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Characteristics(Typical)



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Size (Unit:mm)



Item	Symbol	SOT-23
Carrier width	A	3.15±0.10
Carrier length	B	2.77±0.10
Carrier depth	C	1.22±0.10
Sprocket hole	d	1.50±0.10
Carrier hole	d1	1.00±0.10
Reel outside diameter	D	177.8±1.0
Reel inner diameter	D1	50±1.0
Feed hole diameter	D2	13.0±1.0
Stroket hole position	E	1.75±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	11.4±1.5
Reel width	W2	9.4±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

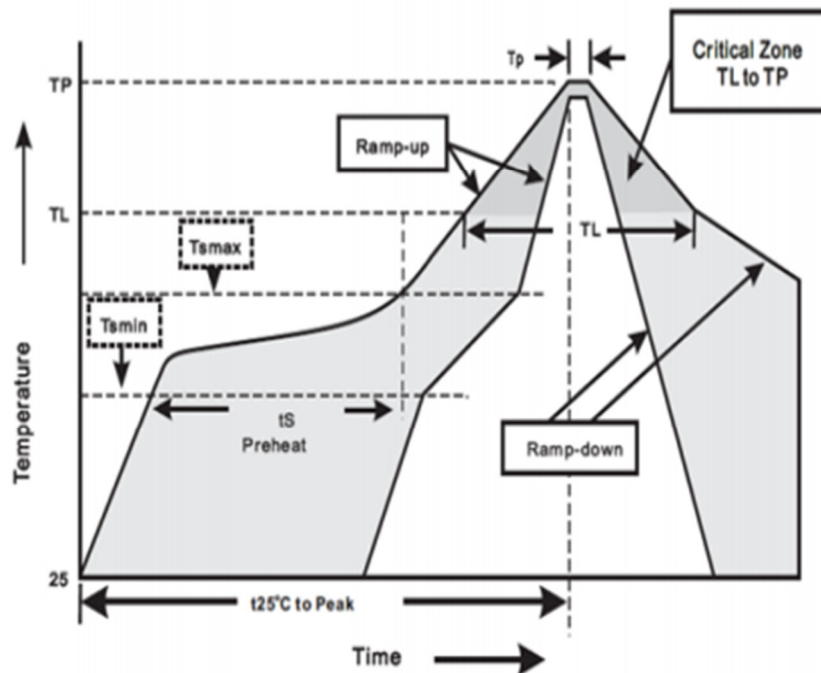
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Please read cautions and warnings and important notes at the end of this document.

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Soldering Parameters

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