FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

Schottky Diode
SOT363

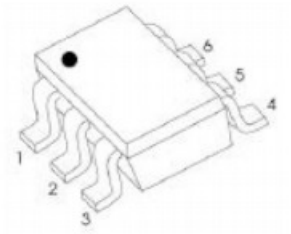
SOT363

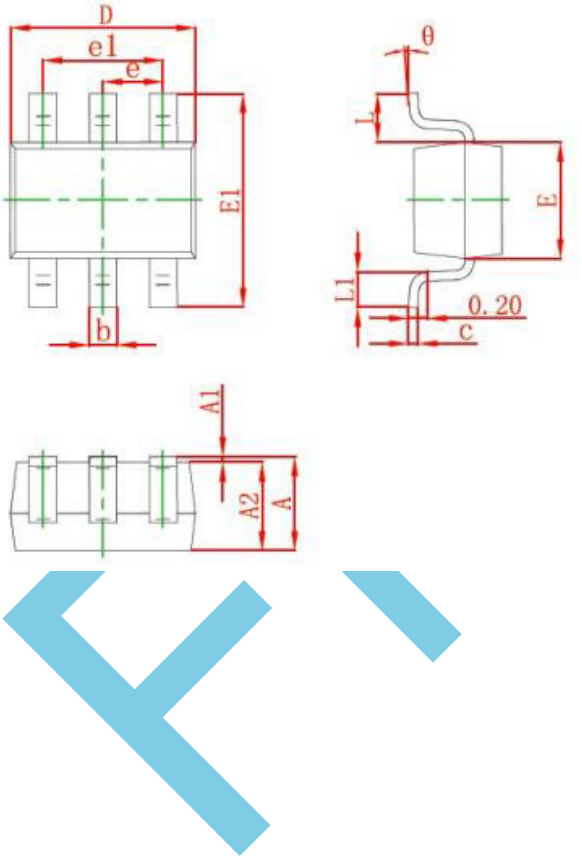
SPECIFICATION

62A		BAT54___xx		ST33		E03
Type		Type		Package		Packing
62A: Schottky Diode		BAT54ADWxx: BAT54ADW		ST33: SOT363		E03: Embossed tape and reel for 3k pc (7'REEL)
		BAT54BRWxx: BAT54BRW				
		BAT54CDWxx: BAT54CDW				
		BAT54SDWxx: BAT54SDW				
		BAT54DWxxx: BAT54DW				
		BAT54JWxxx: BAT54JW				
		BAT54TWxxx: BAT54TW				

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

PACKAGE OUTLINE





Symbol	Dimensions In Millimeters	
	Min	Max
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.100	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.400
e	0.650 TYP	
e1	1.200	1.400
L	0.525 REF	
L1	0.260	0.460
θ	0°	8°

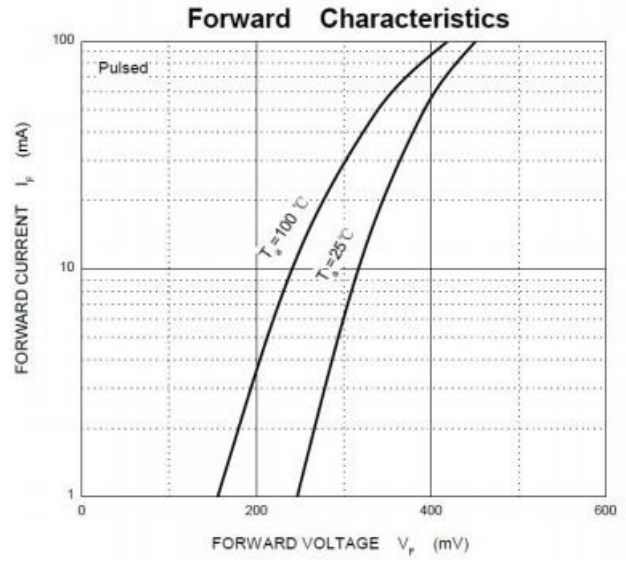
Maximum Ratings & Thermal Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified.)

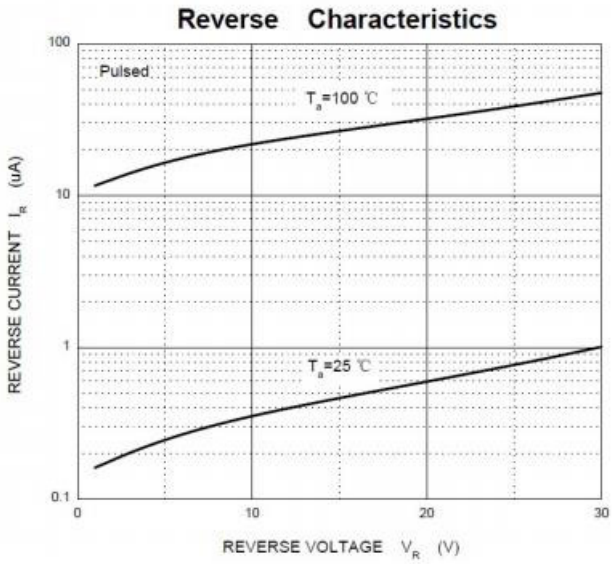
Parameters	Symbol	Limit	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	30	V
Working Peak Reverse voltage	V_{RWS}	30	V
DC blocking voltage	V_R	30	V
Repetitive Peak forward Surge current @t=8.3ms	I_{FRM}	300	mA
Peak forward surge current 8.3 ms single half sine-wave	I_{FSM}	600	mA
Typical thermal resistance	$R_{\theta JA}$	250	℃/W
Power Dissipation	PD	200	mW
Junction temperature	Tj	125	℃
Storage temperature range	T_{STG}	-50-+150	℃

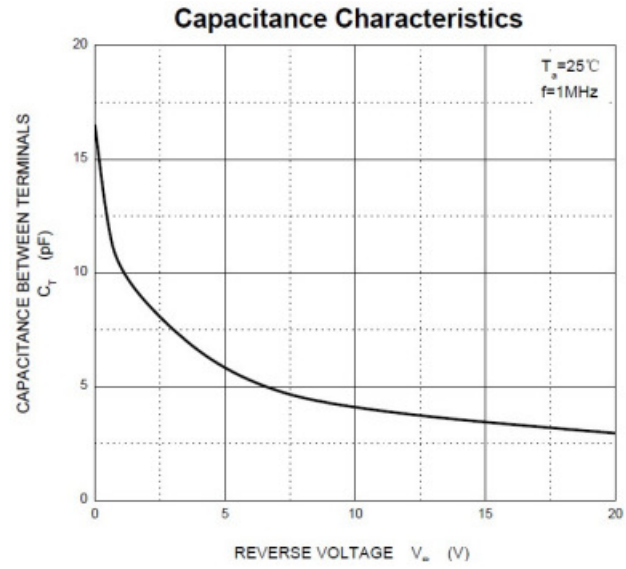
Electrical Characteristics (Ratings at 25℃ ambient temperature unless otherwise specified).

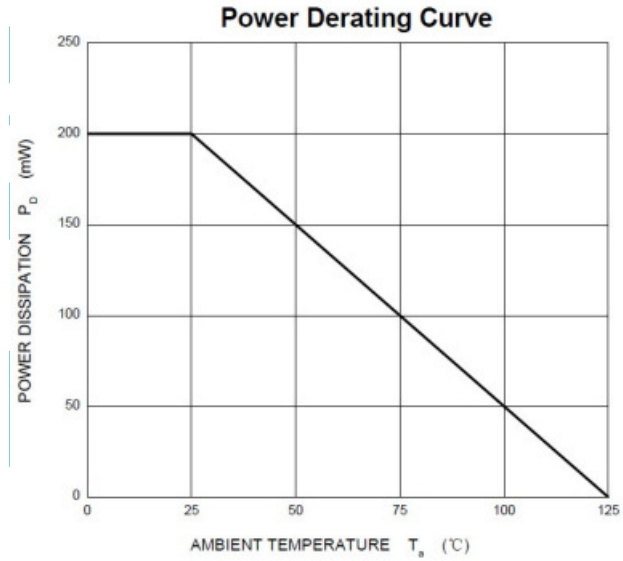
Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Maximum forward voltage	V_F	IF = 1mA			320	mV
		IF = 10mA			400	
		IF = 30mA			500	
		IF = 100mA			1000	
Maximum reverse breakdown voltage	VR	IR=100uA	30			V
Maximum reverse current	I_R	VR=25V			2	uA
Type junction capacitance	Cj	VR = 1,0V, f = 1MHz			10	pF

Typical Performance Characteristics



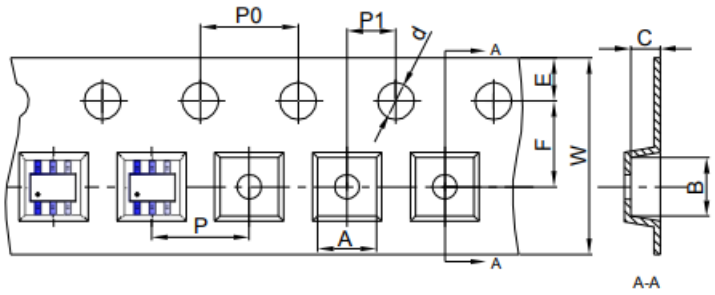






SPECIFICATION

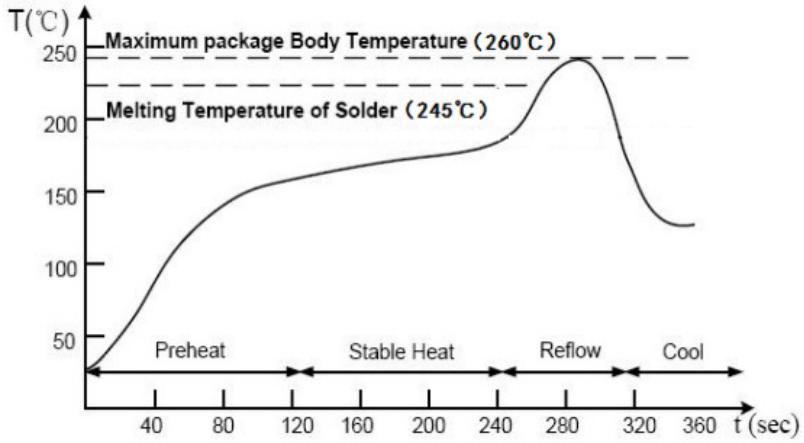
Embossed Carrier Tape



Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-363	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

Lead Free Reflow Soldering Profile

Suggested Soldering Temperature Profile



Note

- Recommended reflow methods: IR, vapor phase oven, hot air oven, wave solder.
- The device can be exposed to a maximum temperature of 260°C for 10 seconds.
- Devices can be cleaned using standard industry methods and solvents.
- If reflow temperatures exceed the recommended profile, devices may not meet the performance requirements.

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 25°C ± 3°C and a relative humidity less than 80%RH

Published by FrelTec® GmbH
Mathildenstr. 10A; 82319 Starnberg; Germany

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