

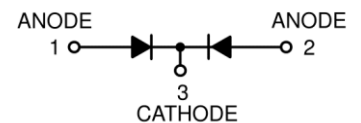
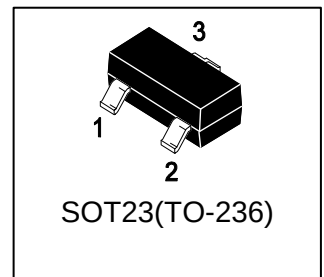
LBAS21CLT1G

S-LBAS21CLT1G

High Voltage Switching Diode

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.



2. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
LBAS21CLT1G	JU	3000/Tape&Reel
LBAS21CLT3G	JU	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Continuous reverse voltage	VR	250	V
Peak Forward Current	IF	225	mA
Peak Forward Surge Current	IFSM	625	mA

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation FR- 5 Board, (Note 1) TA = 25°C	PD	225	mW
Derate above 25°C		1.8	mW/°C
Thermal resistance from junction to ambient	RθJA	556	°C/W
Total Device Dissipation Alumina Substrate, (Note 2) TA = 25°C	PD	300	mW
Derate above 25°C		2.4	mW/°C
Thermal resistance from junction to ambient	RθJA	417	°C/W
Junction and Storage Temperature	TJ , Tstg	-55~+150	°C

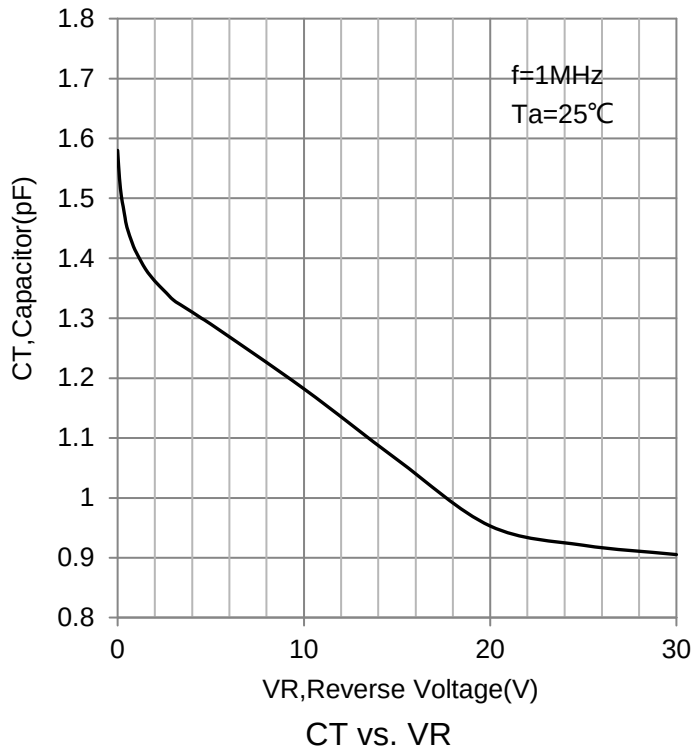
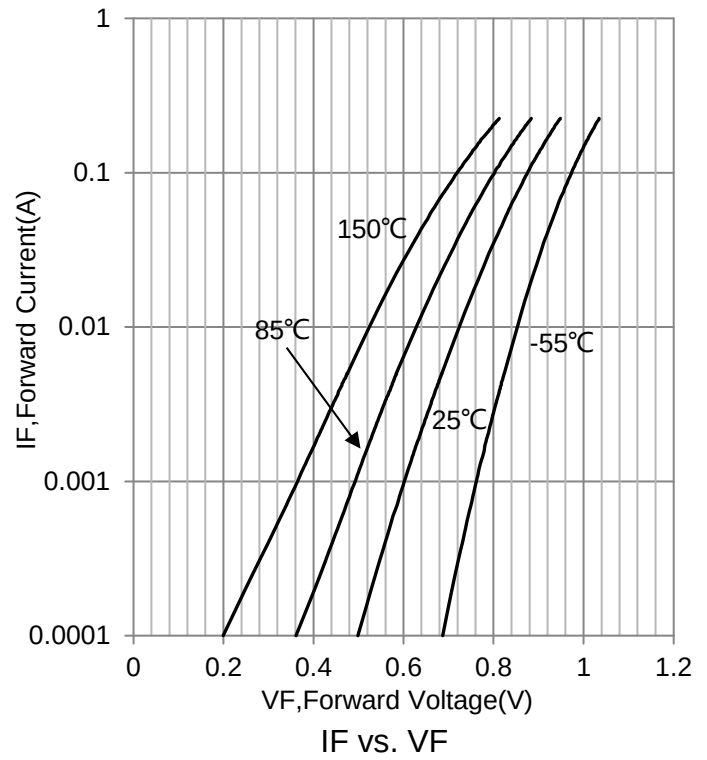
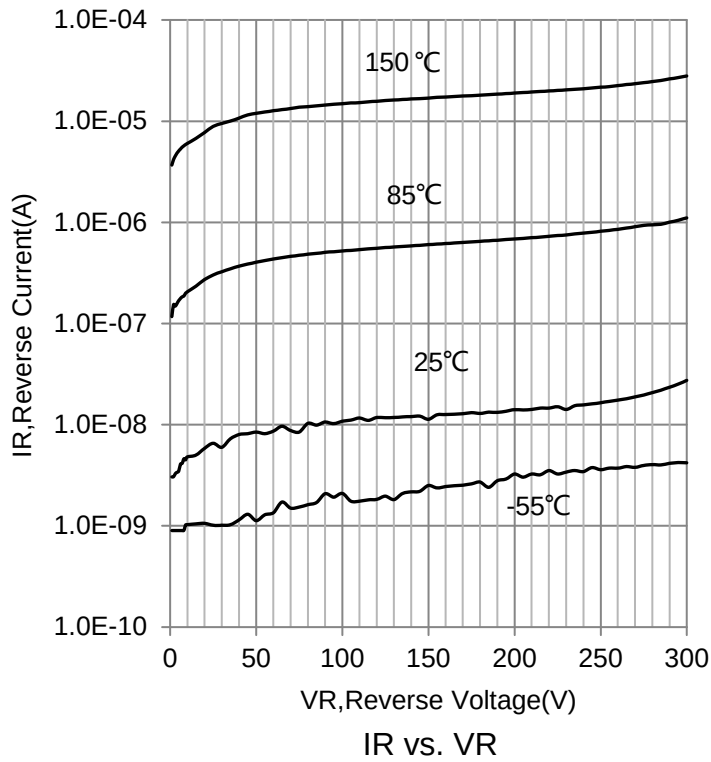
1. FR-5 = 1.0 x 0.75 x 0.062 in.

2. Alumina = 0.4 x 0.3 x 0.024 in. 99.5% alumina.

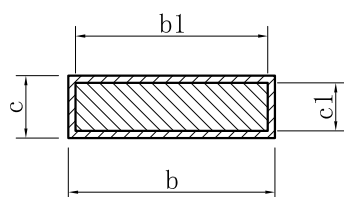
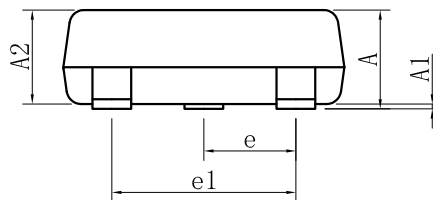
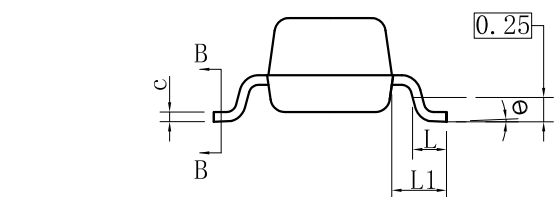
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

CHARACTERISTICS	Symbol	Min	Max	Unit
Reverse Voltage Leakage Current (VR = 250V) (VR=200V) (VR=200V, TJ = 150°C)	IR	-	100	μA
		-	0.1	
		-	100	
Reverse Breakdown Voltage (IBR = 100 μA)	VBR	250	-	V
Forward voltage (IF =100mA) (IF =200mA)	VF	-	1000	mV
		-	1250	
Diode capacitance (f=1MHz,VR =0)	Cd	-	5	pF
Reverse Recovery Time (IF = IR = 30mA, RL = 100 Ω)	Trr	-	50	nS

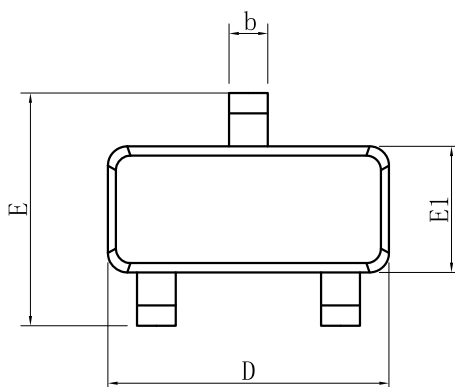
6. ELECTRICAL CHARACTERISTICS CURVES



7.OUTLINE AND DIMENSIONS



SECTION B-B

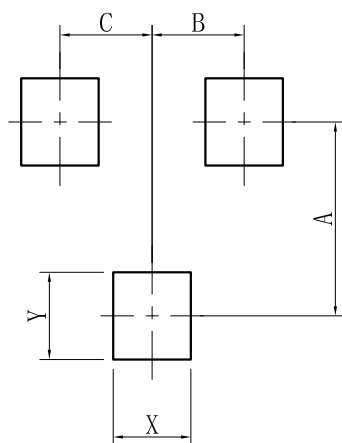


SOT23			
DIM	MIN	NOR	MAX
A	0.89	—	1.12
A1	0.01	—	0.10
A2	0.88	0.95	1.02
b	0.30	—	0.50
b1	0.30	0.40	0.45
c	0.08	—	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	—	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	—	8°
All Dimensions in mm			

GENERAL NOTES

- 1.Top package surface finish $Ra0.4 \pm 0.2\mu m$
- 2.Bottom package surface finish $Ra0.7 \pm 0.2\mu m$
- 3.Side package surface finish $Ra0.4 \pm 0.2\mu m$

8.SOLDERING FOOTPRINT



SOT-23	
DIM	(mm)
X	0.80
Y	0.90
A	2.00
B	0.95
C	0.95

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.
- Before you use our Products for new Project, you are requested to carefully read this document and fully understand its contents. LRC shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any LRC's Products against warning, caution or note contained in this document.
- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using LRC's Products, please confirm the latest information with a LRC sales representative.