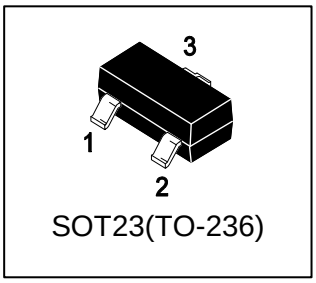
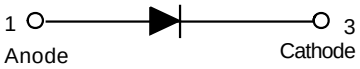
LBAS70LT1G
S-LBAS70LT1G

Schottky barrier diode



SOT23(TO-236)



1. FEATURES

- Low forward current
- High breakdown voltage
- Guard ring protected
- Low diode capacitance.
- 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. APPLICATIONS

- Ultra high-speed switching
- Voltage clamping
- Protection circuits.

3. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
LBAS70LT1G	BE	3000/Tape&Reel
LBAS70LT3G	BE	10000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Continuous reverse voltage	VR	70	V
Continuous forward current	IF	70	mA
Repetitive Peak forward surge current(tp ≤1s,δ≤0.5)	IFRM	70	mA
Non-repetitive peak forward current (tp <10ms)	IFSM	100	mA
Storage temperature	Tstg	-65~+150	℃
Junction temperature	Tj	150	℃
Operating ambient temperature	Tamb	-65~+150	℃

5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Thermal resistance from junction to ambient (Note 1)	RθJA	500	℃/W

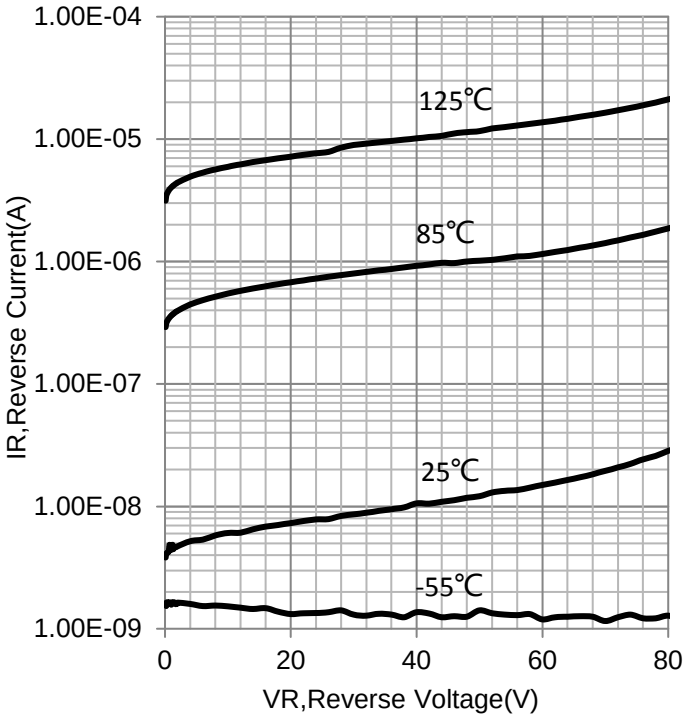
1. Refer to SOT23 or SOT143B standard mounting conditions.

6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

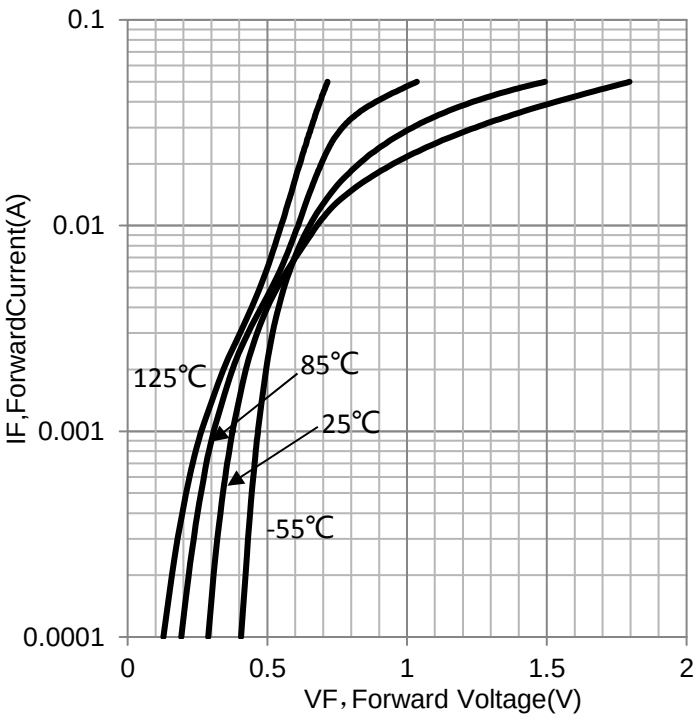
CHARACTERISTICS	Symbol	Limits	Unit
Forward voltage			
(IF =1mA)	VF	410	mV
(IF =10mA)		750	mV
(IF =15mA)		1	V
Reverse current(Note 2)			
(VR=50V)	IR	100	nA
(VR=70V)		10	μA
Charge carrier life time	τ		
(IF =5mA)		100	pS
Diode capacitance	Cd		
(f=1MHz,VR =0)		2	pF

2.Pulse test:tp =300μs,δ=0.02.

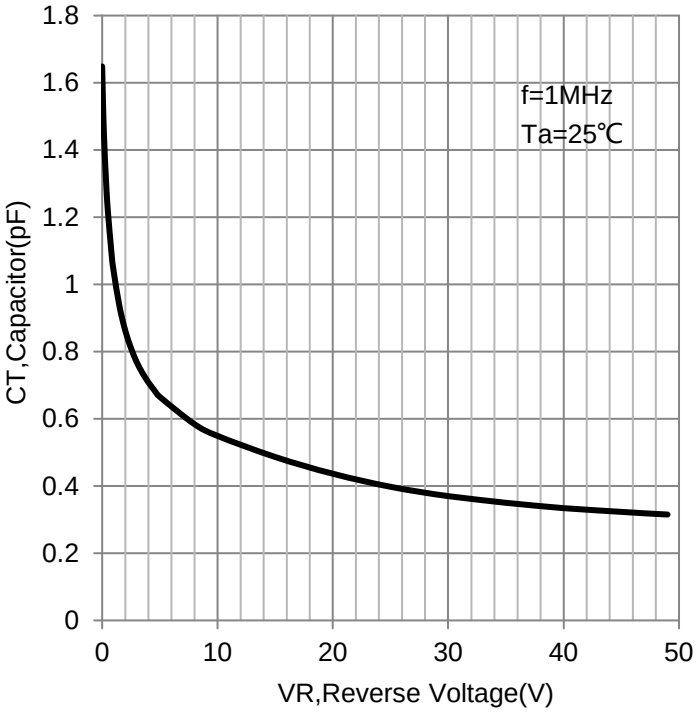
7. ELECTRICAL CHARACTERISTICS CURVES



IR vs. VR

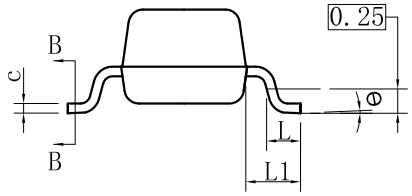


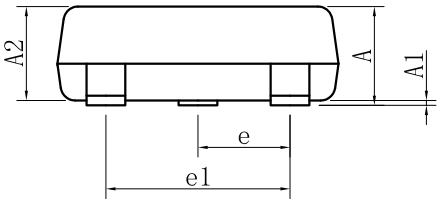
IF vs. VF

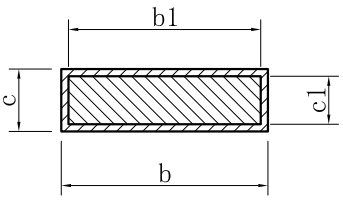


CT vs. VR

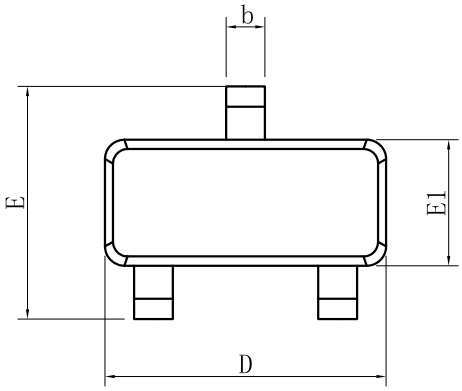
8.OUTLINE AND DIMENSIONS







SECTION B-B

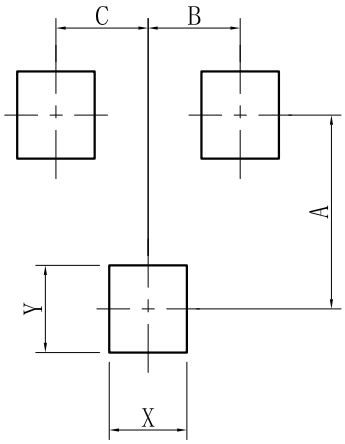


SOT23			
DIM	MIN	NOR	MAX
A	0.89	-	1.12
A1	0.01	-	0.10
A2	0.88	0.95	1.02
b	0.30	-	0.50
b1	0.30	0.40	0.45
c	0.08	-	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	-	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	-	8°
All Dimensions in mm			

GENERAL NOTES

1. Top package surface finish Ra0.4±0.2um
2. Bottom package surface finish Ra0.7±0.2um
3. Side package surface finish Ra0.4±0.2um

9.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.

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