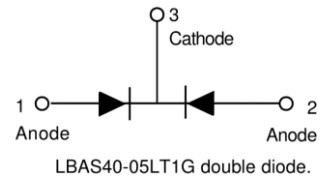
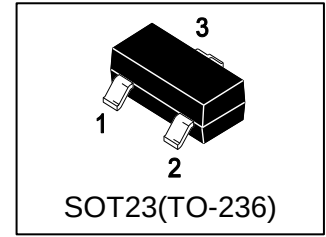


S-LBAS40-05LT1G

Schottky barrier diode

1. FEATURES

- Low forward current
- 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.
- Blocking diodes.

3. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
S-LBAS40-05LT1G	45	3000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Continuous reverse voltage	VR	40	V
Continuous forward current	IF	120	mA
Repetitive Peak forward surge current(tp <1s,δ<0.5)	IFSM	120	mA
Non-repetitive peak forward current (tp <10ms)	IFSM	200	mA
Storage temperature	Tstg	-65~+150	°C
Junction temperature	Tj	150	°C
Operating ambient temperature	Tamb	-65~+150	°C

5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Power Dissipation	PD	225	mW
Thermal resistance from junction to ambient (Note 1)	RθJA	500	°C/W
Thermal resistance from junction to Case (Note 1)	RθJC	300	°C/W

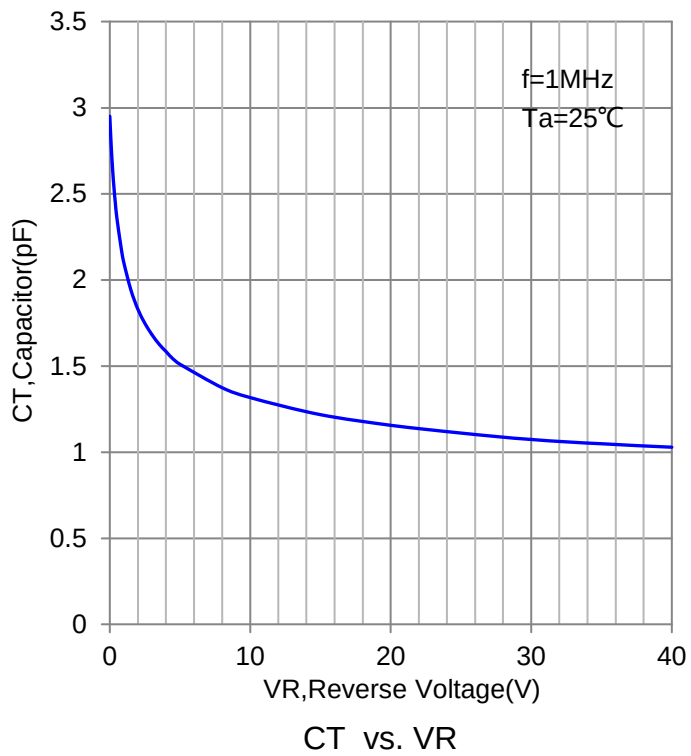
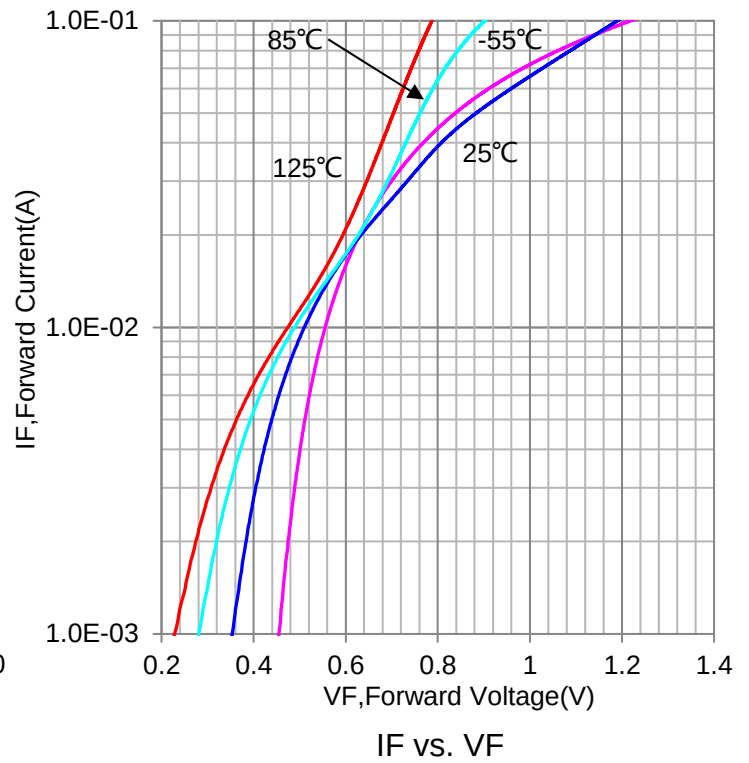
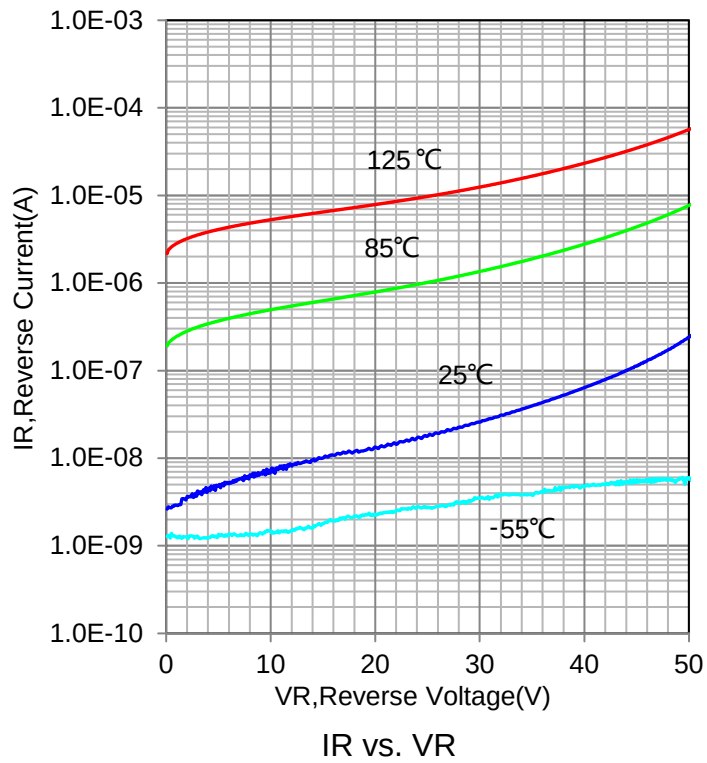
1. 30.0mm ×25.0mm ×1.6mm(FR4), Thickness of copper film:35um.

6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

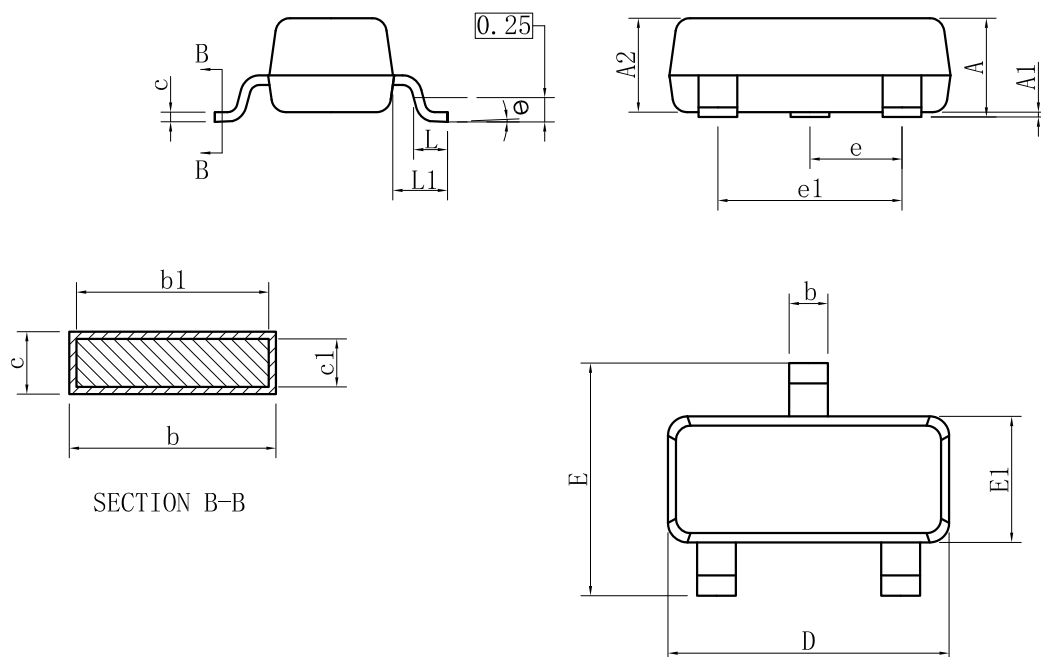
CHARACTERISTICS	Symbol	Limits	Unit
Forward voltage (IF =1mA)	VF	400	mV
(IF =10mA)		560	mV
(IF =40mA)		1	V
Reverse current(Note 2) (VR=30V)	IR	1	μA
(VR=40V)		10	μA
Diode capacitance (f=1MHz,VR =0)	Cd	5	pF

2.Pulse test:tp =300μs,δ=0.02.

7. ELECTRICAL CHARACTERISTICS CURVES



8.OUTLINE AND DIMENSIONS

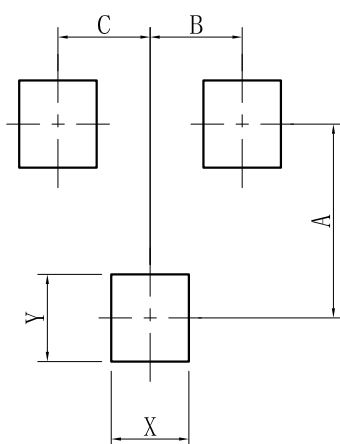


SOT23			
DIM	MIN	NOR	MAX
A	0.89	-	1.12
A1	0.01	-	0.10
A2	0.88	0.95	1.02
b	0.30	-	0.50
b1	0.30	0.40	0.45
c	0.08	-	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	-	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	-	8°
All Dimensions in mm			

GENERAL NOTES

- 1.Top package surface finish $Ra0.4\pm0.2\mu m$
- 2.Bottom package surface finish $Ra0.7\pm0.2\mu m$
- 3.Side package surface finish $Ra0.4\pm0.2\mu m$

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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