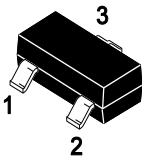
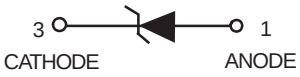
S-LBZX84B18LT1G

Zener Voltage Regulators



SOT23(TO-236)



1. FEATURES

- Non-wire bonding structure improves
- Silicon epitaxial planar
- 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 ORDERING INFORMATION

Device	Marking	Shipping
S-LBZX84B18LT1G	65	3000/Tape&Reel

3. THERMAL CHARACTERISTICS

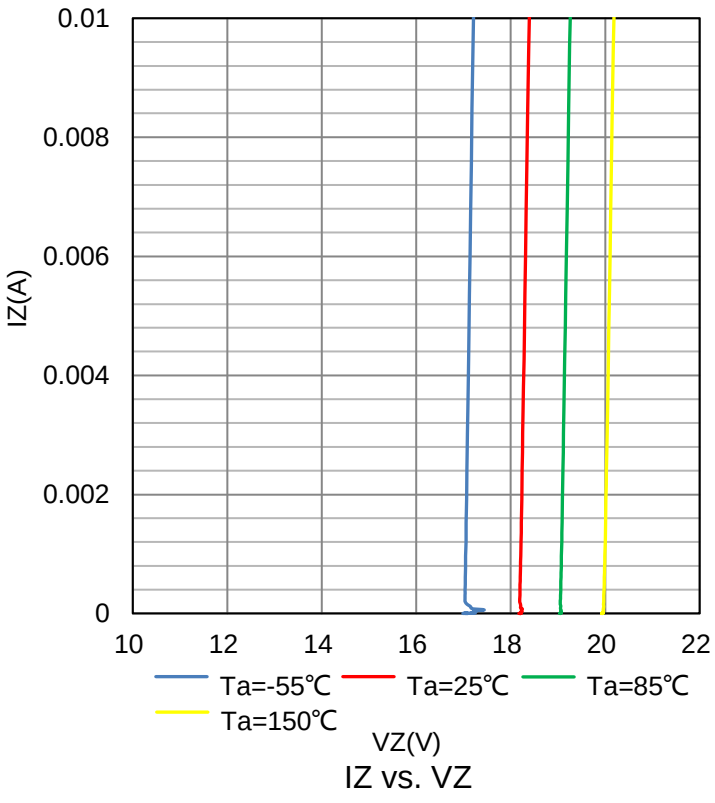
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−4 Board (Note 1) @ TA = 25ºC	PD	300	mW
Thermal Resistance Junction–to–Ambient	RΘJA	435	ºC/W
Thermal Resistance Junction–to–Case	RΘJC	190	ºC/W
Junction temperature	TJ	+150	℃
Storage temperature	Tstg	−55～+150	℃
Operating temperature	Topr	−55～+150	℃

1.Device mounted on an FR-4 PCB, single-sided copper, tin-plated and standard footprint.

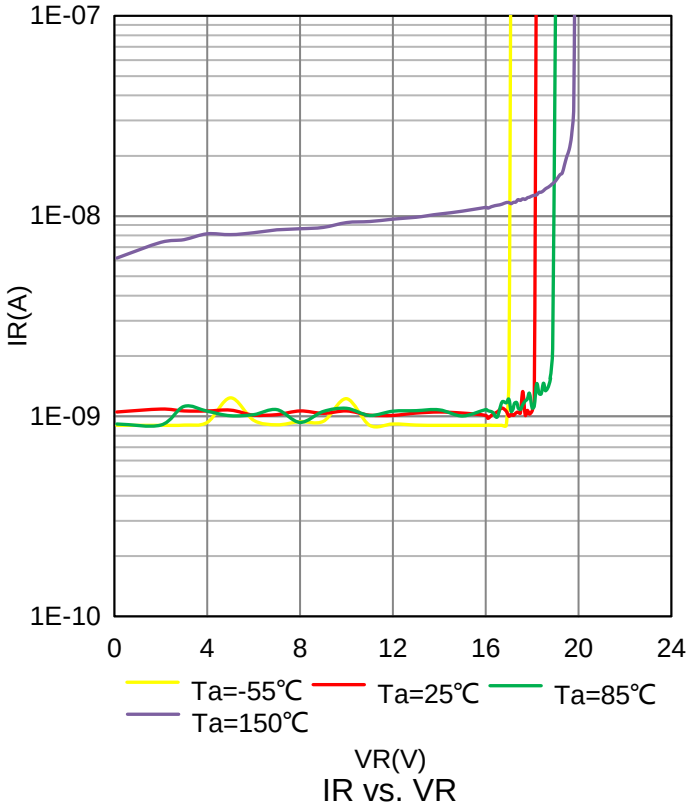
4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage (IF = 10 mA)	VF	-	-	0.9	V
Zener Voltage (IZT = 5 mA)	VZ	17.56	-	18.35	V
Operating Resistance (IZ =5mA)	ZZ	-	-	65	Ω
Rising Operating Resistance (IZ =0.5mA)	ZZK	-	-	80	Ω
Reverse current (VR=13V)	IR	-	-	0.1	μA

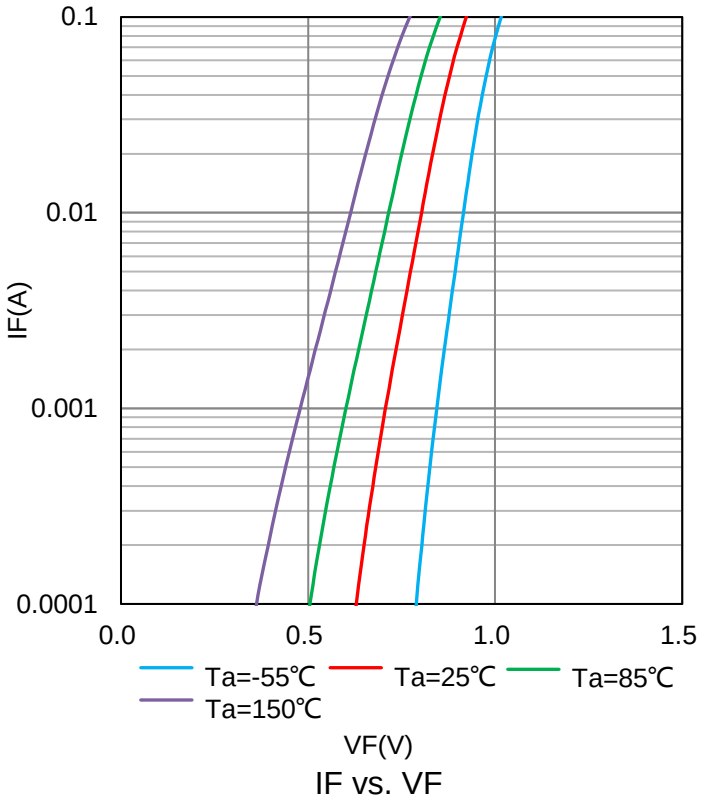
5.ELECTRICAL CHARACTERISTICS CURVES



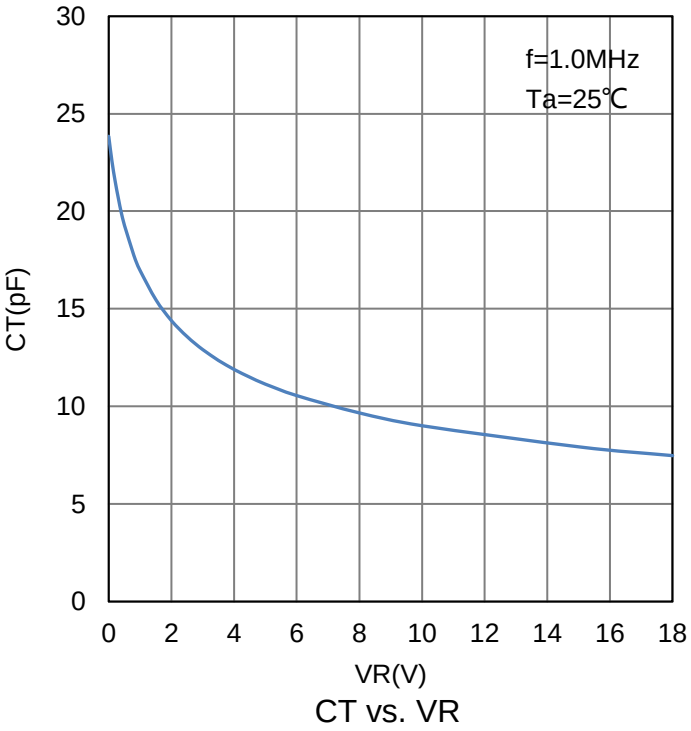
IZ vs. VZ



IR vs. VR

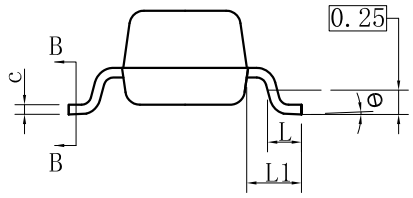


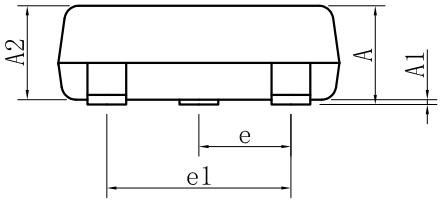
IF vs. VF

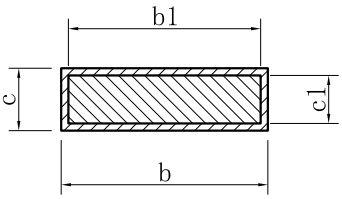


CT vs. VR

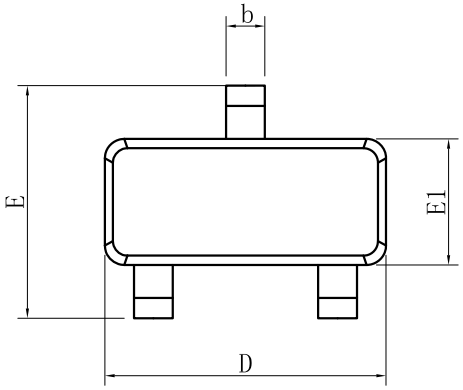
6.OUTLINE AND DIMENSIONS







SECTION B-B

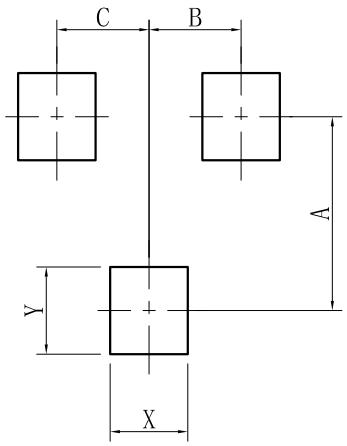


SOT23			
DIM	MIN	NOR	MAX
A	0.89	-	1.12
A1	0.01	-	0.10
A2	0.88	0.95	1.02
b	0.30	-	0.50
b1	0.30	0.40	0.45
c	0.08	-	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	-	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	-	8°
All Dimensions in mm			

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

7.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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