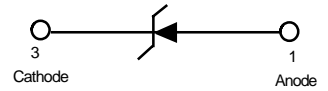
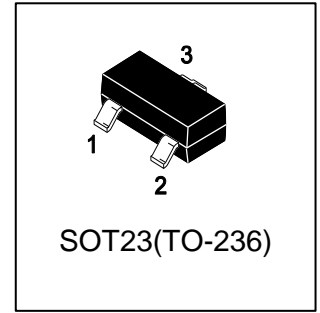


# S-LBZX84C6V2LT1G-S

## Zener Voltage Regulator Diodes

### 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 ORDERING INFORMATION

Device	Marking	Shipping
S-LBZX84C6V2LT1G-S	Z4	3000/Tape&Reel
S-LBZX84C6V2LT3G-S	Z4	13000/Tape&Reel

### 3. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C	PD	300	mW
Thermal Resistance Junction-to-Ambient	R $\theta$ JA	435	°C/W
Thermal Resistance Junction-to-Case	R $\theta$ JC	190	°C/W
Junction temperature	TJ	-55 ~ +150	°C
Storage temperature	Tstg	-55 ~ +150	°C

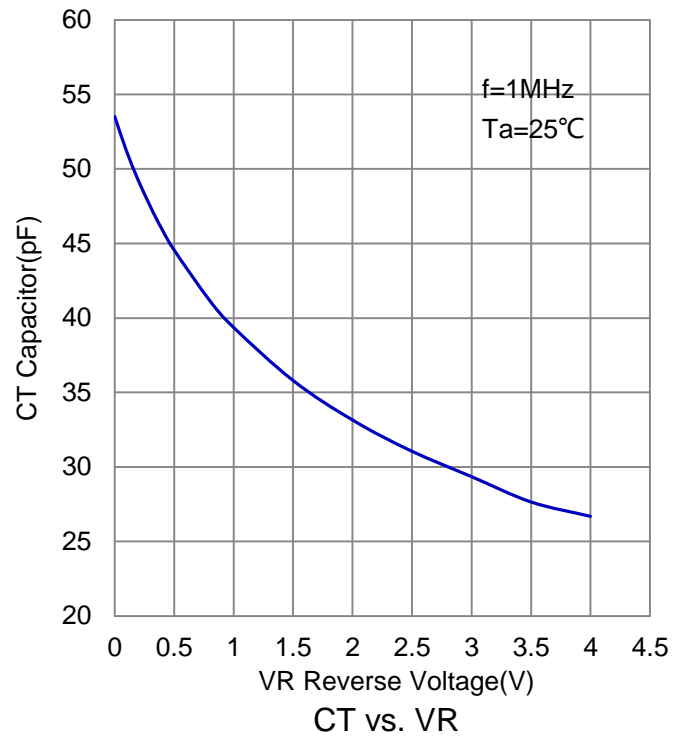
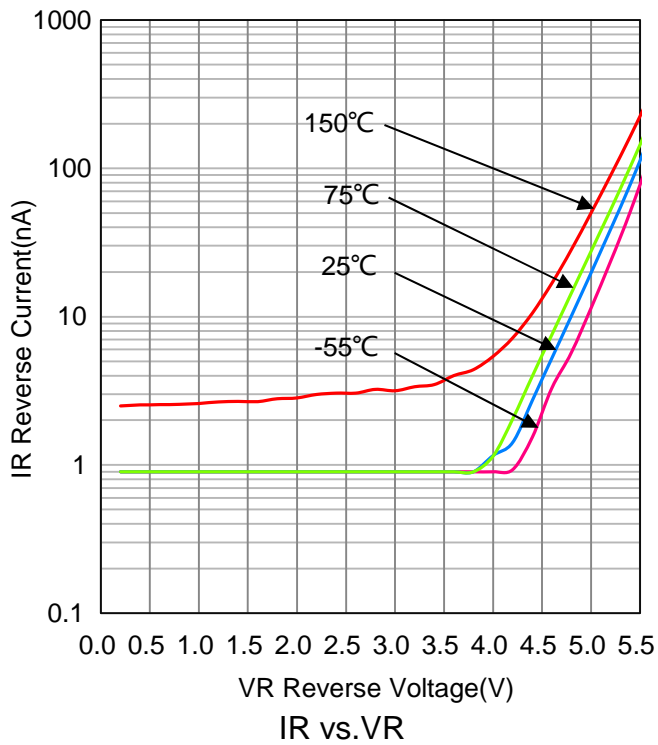
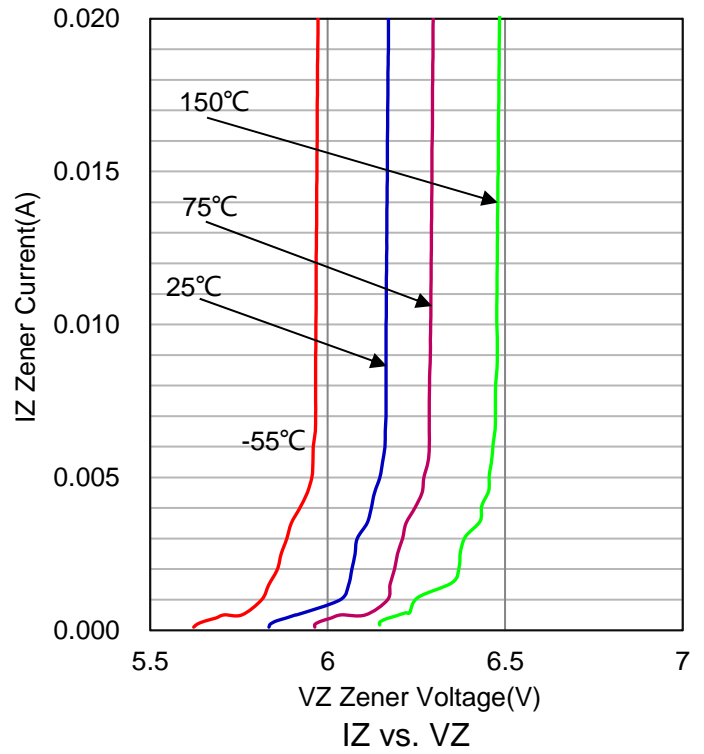
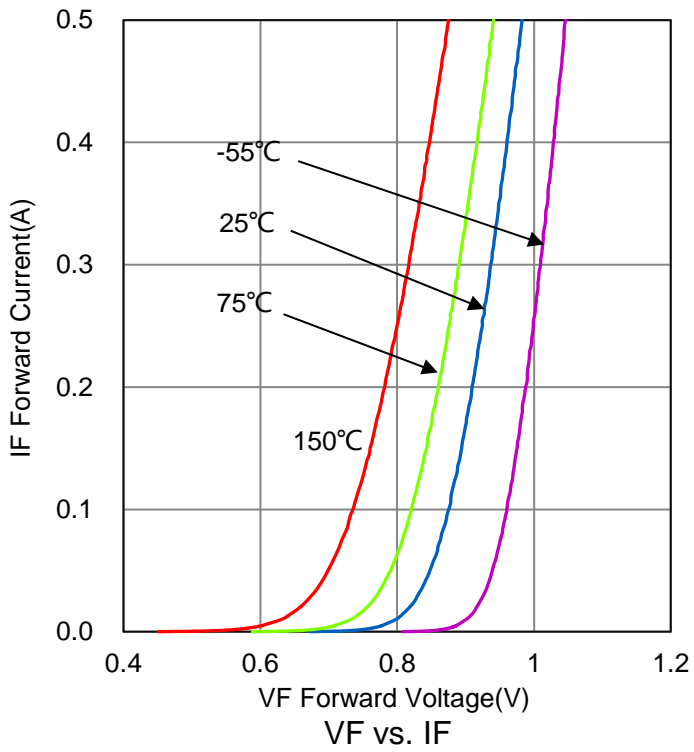
1. Device mounted on an FR-4 PCB, single-sided copper, tin-plated and standard footprint.

**4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)**

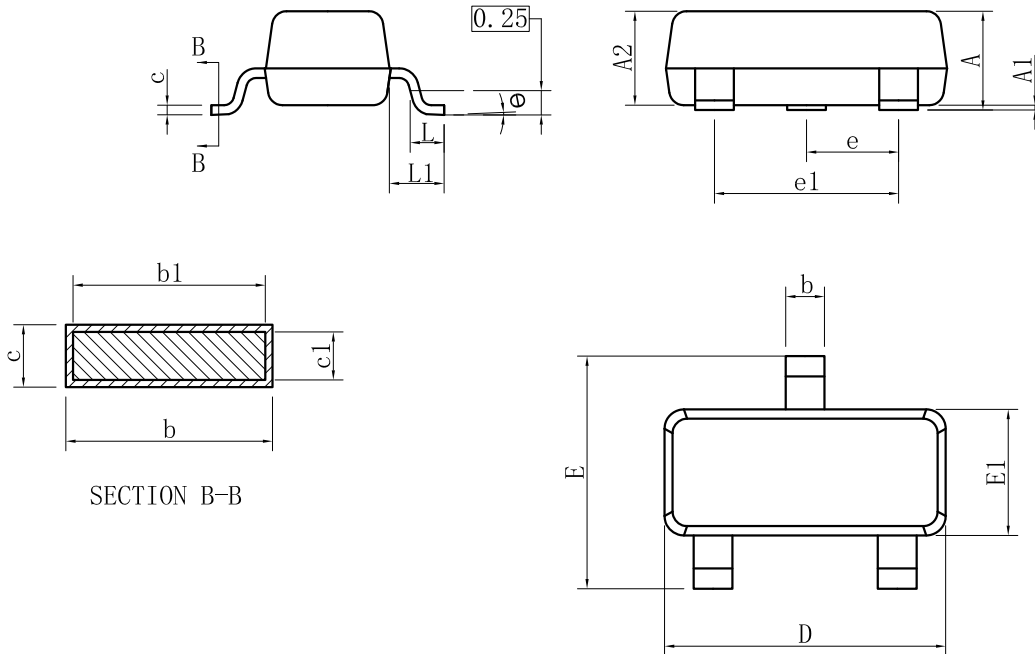
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Zener Voltage(Note 2) (IZT1 = 5 mA) (IZT2 = 1 mA) (IZT3 = 20 mA)	VZ	5.8 5.6 5.8	6.2 - -	6.6 6.6 6.8	V
Zener Impedance (IZT1 = 5 mA) (IZT2 = 1 mA) (IZT3 = 20 mA)	ZZT	- - -	- - -	10 150 6	Ω
Reverse Leakage Current (VR=4V)	IR	-	-	3	μA
Forward voltage (IF=10mA)	VF	-	-	0.9	V
Capacitance (VR=0,f=1MHz)	C	-	-	185	pF
Temperature Coefficient (IZT1 = 5mA)	θVZ	0.4	-	3.7	mV/k

2.Zener voltage is measured with a pulse test current IZ at an ambient temperature of 25°C.

**5.ELECTRICAL CHARACTERISTICS CURVES**



### 6.OUTLINE AND DIMENSIONS

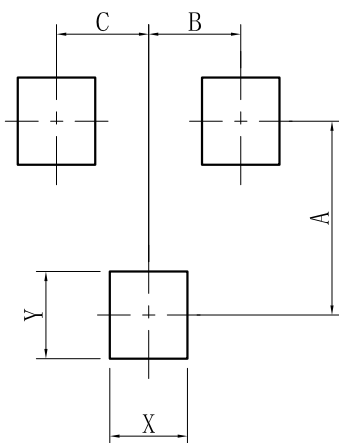


SOT23			
DIM	MIN	NOR	MAX
A	0.89	-	1.12
A1	0.01	-	0.10
A2	0.88	0.95	1.02
b	0.30	-	0.50
b1	0.30	0.40	0.45
c	0.08	-	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	-	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	-	8°
All Dimensions in mm			

#### GENERAL NOTES

- 1.Top package surface finish Ra0.4±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.
- 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.