

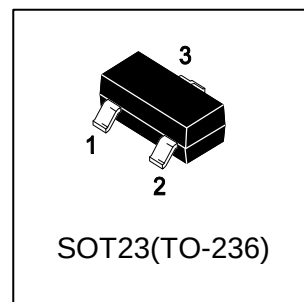
# LBZX84B5V6LT1G

## S-LBZX84B5V6LT1G

### Zener Voltage Regulators

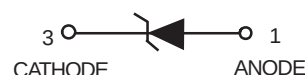
#### 1. FEATURES

- 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. Applications

- General regulation functions



#### 3. DEVICE MARKING AND ORDERING INFORMATION

| Device           | Marking | Shipping       |
|------------------|---------|----------------|
| LBZX84B5V6LT1G   | C2      | 3000/Tape&Reel |
| S-LBZX84B5V6LT1G | C2      | 3000/Tape&Reel |

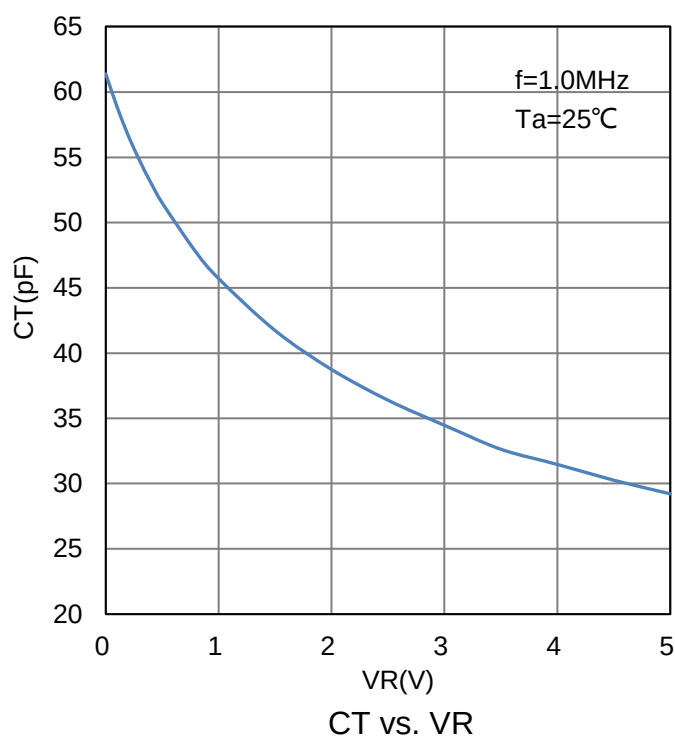
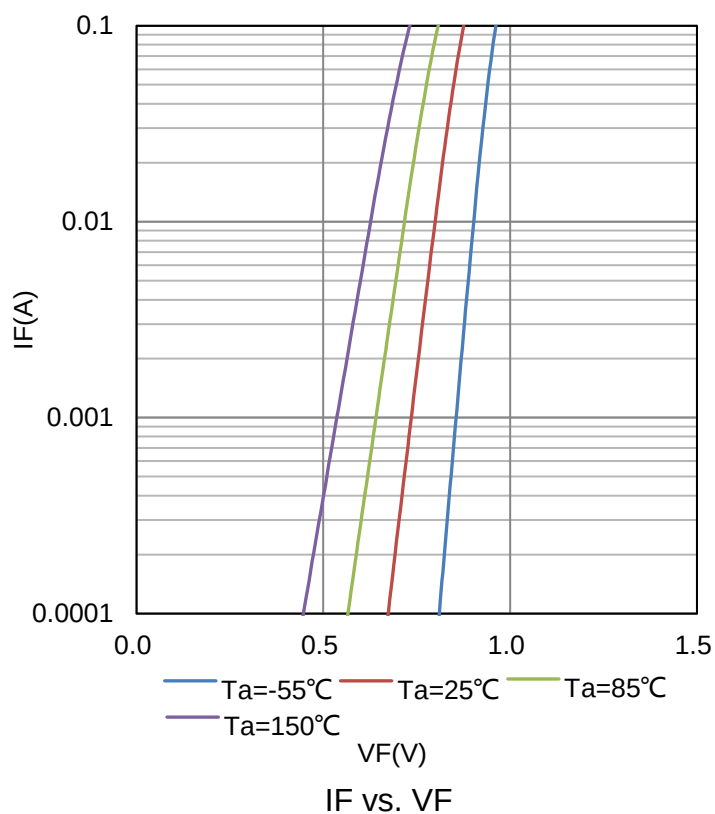
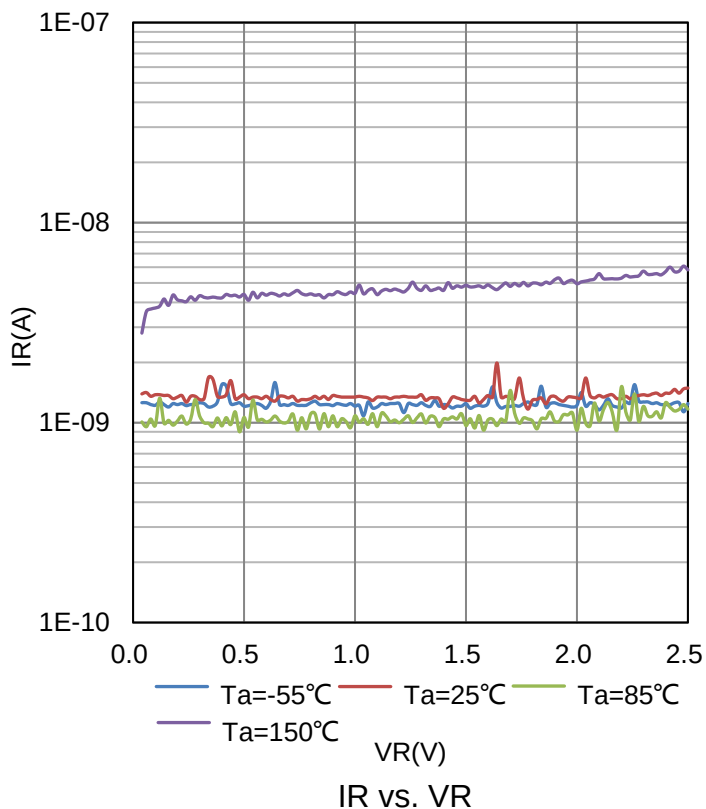
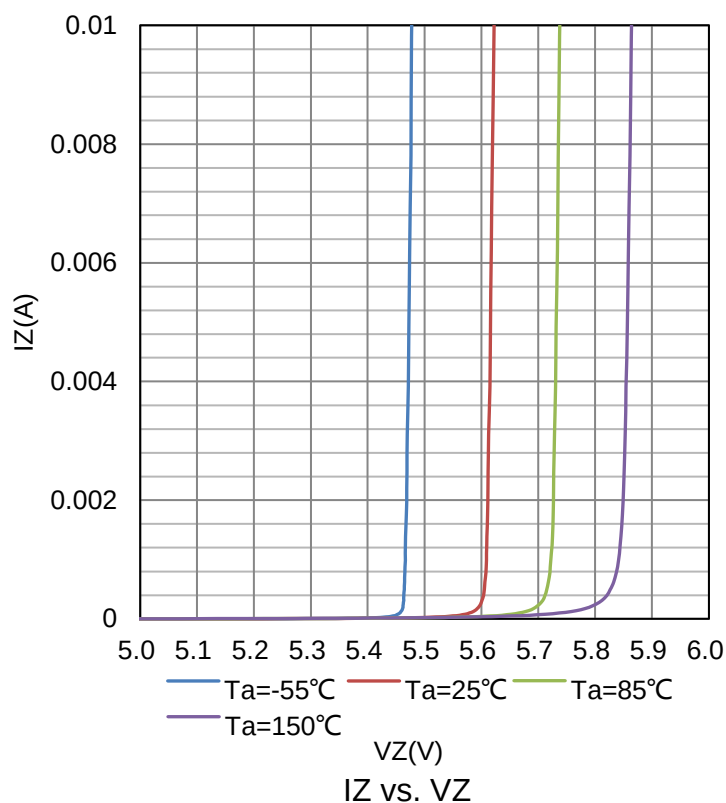
#### 4. THERMAL CHARACTERISTICS

| Parameter             | Symbol | Limits     | Unit |
|-----------------------|--------|------------|------|
| Power dissipation     | PD     | 225        | mW   |
| Junction temperature  | TJ     | +150       | ℃    |
| Storage temperature   | Tstg   | -55 ~ +150 | ℃    |
| Operating temperature | Topr   | -55 ~ +150 | ℃    |

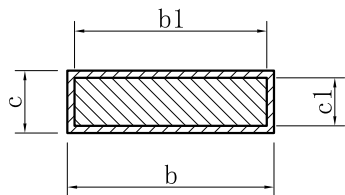
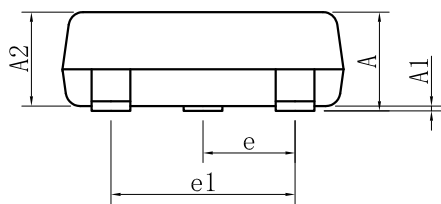
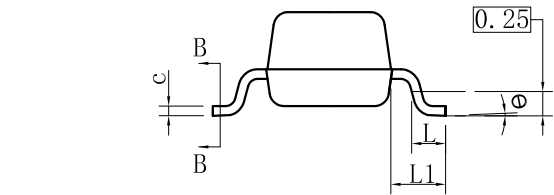
#### 5. ELECTRICAL CHARACTERISTICS (Ta= 25℃)

| Characteristic                              | Symbol | Min. | Typ. | Max. | Unit |
|---------------------------------------------|--------|------|------|------|------|
| Zener Voltage<br>(IZT = 5 mA)               | VZ     | 5.49 | -    | 5.73 | V    |
| Operating Resistance<br>(IZ = 5mA)          | ZZ     | -    | -    | 60   | Ohm  |
| Rising Operating Resistance<br>(IZ = 0.5mA) | ZZK    | -    | -    | 200  | Ohm  |
| Reverse current<br>(VR=2.5V)                | IR     | -    | -    | 1    | μA   |

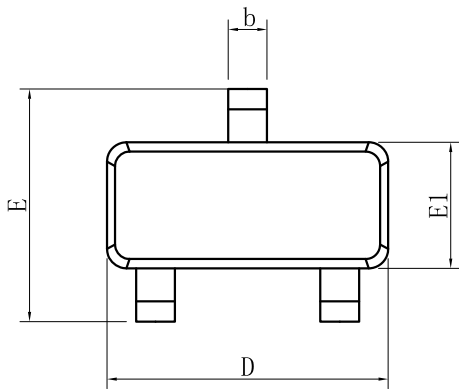
## 6.ELECTRICAL CHARACTERISTICS CURVES



### 7.OUTLINE AND DIMENSIONS



SECTION B-B

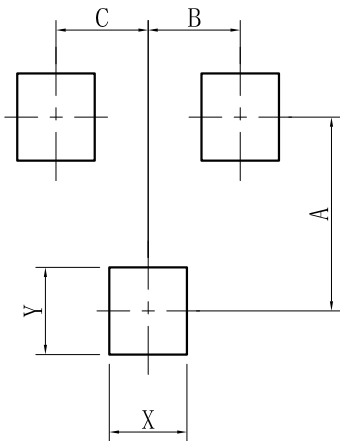


| SOT23                |         |      |      |
|----------------------|---------|------|------|
| DIM                  | MIN     | NOR  | MAX  |
| A                    | 0.89    | -    | 1.12 |
| A1                   | 0.01    | -    | 0.10 |
| A2                   | 0.88    | 0.95 | 1.02 |
| b                    | 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  $Ra0.4\pm0.2\mu m$
- 2.Bottom package surface finish  $Ra0.7\pm0.2\mu m$
- 3.Side package surface finish  $Ra0.4\pm0.2\mu m$

### 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.