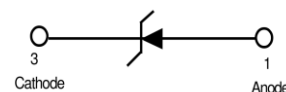
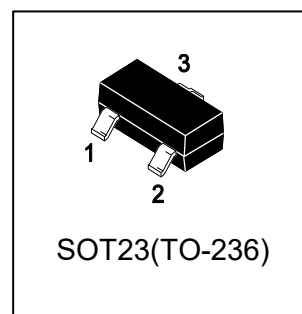


## 1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- Moisture sensitivity level: Level 3
- Storage Period: 2 years

## 2. DEVICE MARKING AND ORDERING INFORMATION

| Device     | Marking | Shipping       |
|------------|---------|----------------|
| LBZX84C5V1 | Z2      | 3000/Tape&Reel |



## 3. THERMAL CHARACTERISTICS

| Parameter                                                                         | Symbol | Limits      | Unit        |
|-----------------------------------------------------------------------------------|--------|-------------|-------------|
| Total Device Dissipation,<br>FR-4 Board (Note 1) @ TA = 25°C<br>Derate above 25°C | PD     | 297<br>2.37 | mW<br>mW/°C |
| Thermal Resistance Junction-to-Ambient                                            | RθJA   | 421         | °C/W        |
| Junction temperature                                                              | TJ     | -55 ~ +150  | °C          |
| Storage temperature                                                               | Tstg   | -55 ~ +150  | °C          |

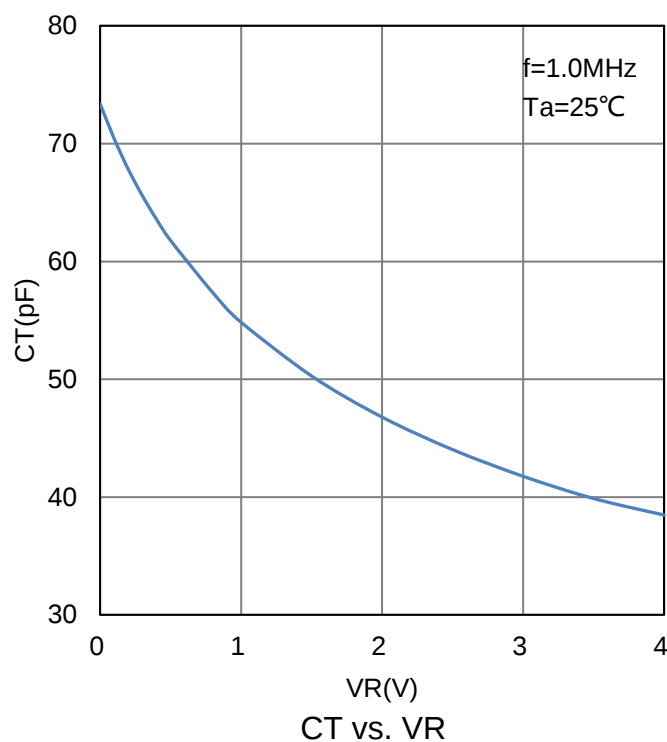
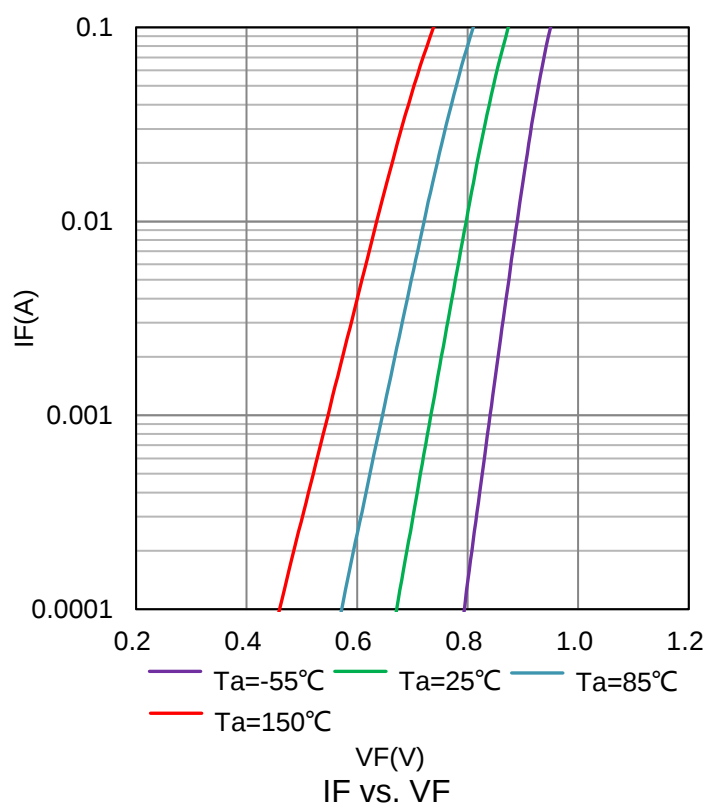
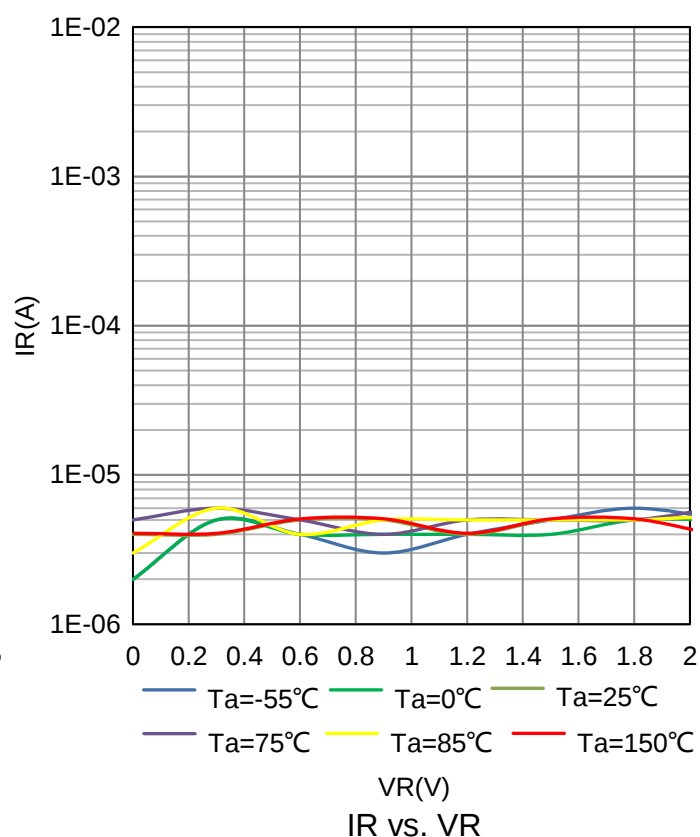
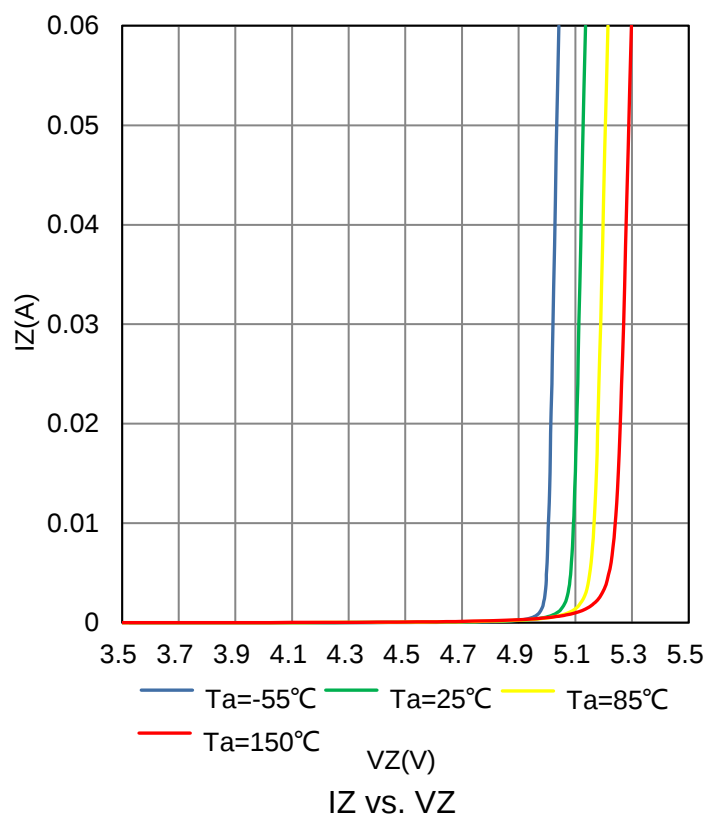
1.30.0mm×25.0mm×1.6mm(FR4), Copper foil thickness 35μm;

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

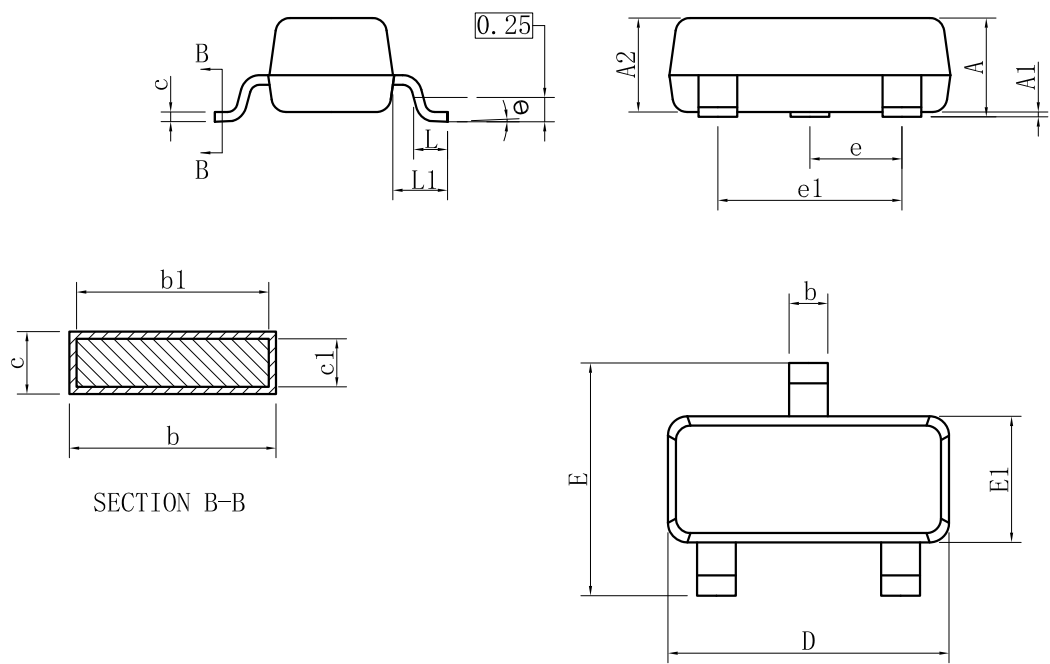
| Characteristic                                                            | Symbol | Min.            | Typ.          | Max.              | Unit  |
|---------------------------------------------------------------------------|--------|-----------------|---------------|-------------------|-------|
| Zener Voltage(Note 2)<br>(IZT1 = 5 mA)<br>(IZT2 = 1 mA)<br>(IZT3 = 20 mA) | VZ     | 4.8<br>4.2<br>5 | 5.1<br>-<br>- | 5.4<br>5.3<br>5.9 | V     |
| Zener Impedance<br>(IZT1 =5mA)<br>(IZT1 =1mA)<br>(IZT1 =20mA)             | ZZT    | -<br>-<br>-     | -<br>-<br>-   | 60<br>480<br>15   | Ohm   |
| Reverse Leakage Current<br>(VR=2V)                                        | IR     | -               | -             | 2                 | μA    |
| Capacitance<br>(VR=0,f=1MHz)                                              | C      | -               | -             | 225               | pF    |
| Temperature Coefficient<br>(IZT1 = 5 mA)                                  | θVZ    | -2.7            | -             | 1.2               | mV/°C |

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

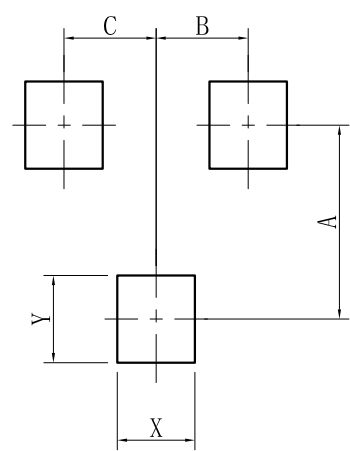


| SOT23                |         |      |      |
|----------------------|---------|------|------|
| DIM                  | MIN     | NOR  | MAX  |
| A                    | 0.89    | –    | 1.12 |
| A1                   | 0.01    | –    | 0.10 |
| A2                   | 0.88    | 0.95 | 1.02 |
| b                    | 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 |