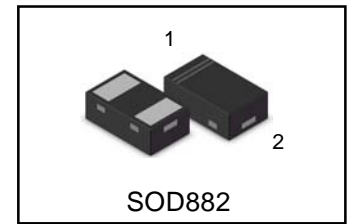


LNZ8F5V6T5G

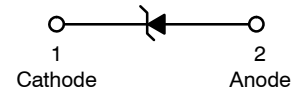
Zener Voltage Regulators

400 mW SOD-882 Surface Mount



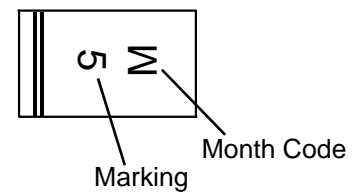
1. FEATURES

- Standard Zener Breakdown Voltage Range – 5.6 V
- Steady State Power Rating of 400 mW
- ESD Rating of Class 3 (>16 kV) per Human Body Model
- We declare that the material of product compliance with RoHS requirements and Halogen Free.



2. DEVICE MARKING AND ORDERING INFORMATION

| Device | Marking | Shipping |
|-------------|---------|-----------------|
| LNZ8F5V6T5G | 5 | 10000/Tape&Reel |



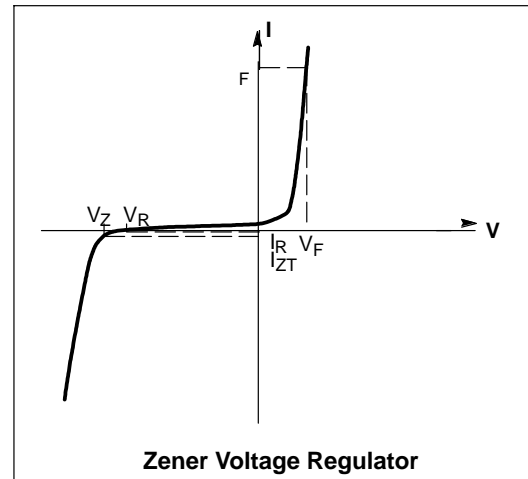
3. MAXIMUM RATINGS(Ta = 25°C)

| Parameter | Symbol | Limits | Unit |
|--|--------|------------|------|
| Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C | PD | 400 | mW |
| Thermal Resistance, Junction-to-Ambient | RθJA | 310 | °C/W |
| Junction-to-Case | RθJC | 130 | |
| Junction temperature | Tj | -65 ~ +150 | °C |
| Storage temperature | Tstg | -65 ~ +150 | °C |

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

4. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

| Symbol | Parameter |
|---------------|--|
| VZ | Reverse Zener Voltage @ IZT |
| IZT | Reverse Current |
| ZZT | Maximum Zener Impedance @ IZT |
| IZK | Reverse Current |
| ZZK | Maximum Zener Impedance @ IZK |
| IR | Reverse Leakage Current @ VR |
| VR | Reverse Voltage |
| IF | Forward Current |
| VF | Forward Voltage @ IF |
| θ_{VZ} | Maximum Temperature Coefficient of VZ |
| C | Max. Capacitance @VR = 0 and f = 1 MHz |

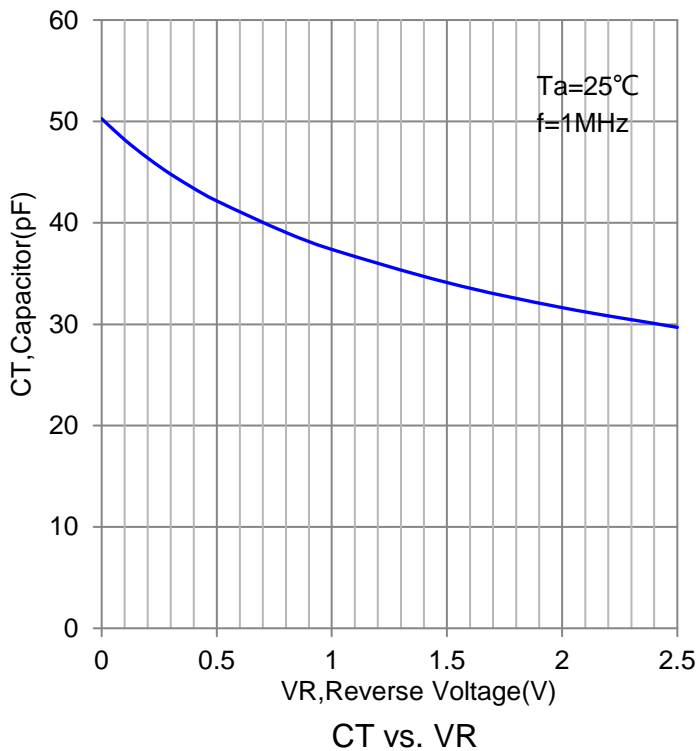
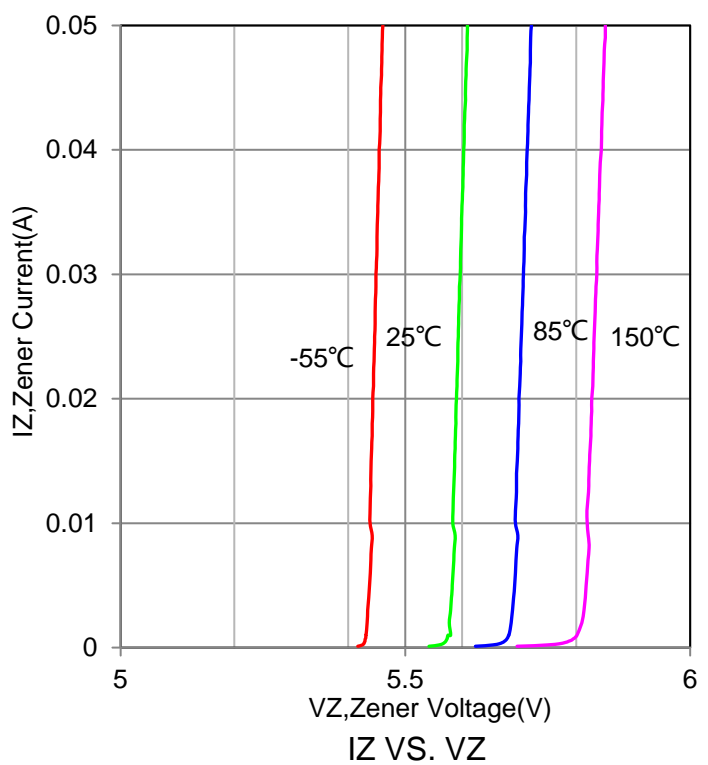
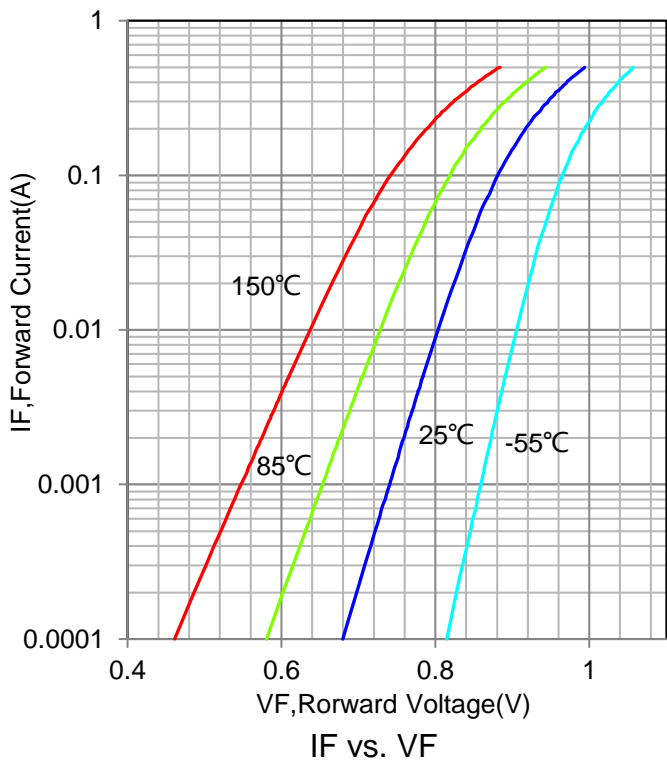


5. ELECTRICAL CHARACTERISTICS

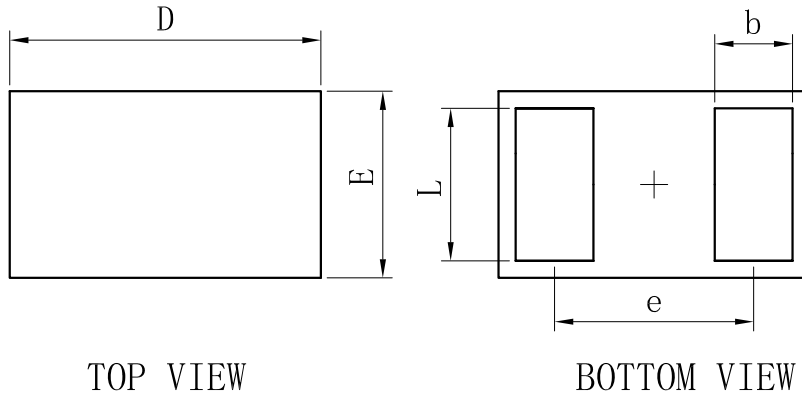
| Characteristic | Symbol | Min. | Typ. | Max. | Unit |
|--|---------------|------|------|---------|---------------|
| Forward Voltage (IF = 10 mA) | VF | - | - | 0.9 | V |
| Zener voltage (IZT=5mA) | VZ | 5.32 | 5.6 | 5.88 | V |
| Operating resistance (IZT=5mA) | ZZT | - | - | 60 | Ω |
| Rising operating resistance (IZK=0.5mA) | ZZK | - | - | 200 | Ω |
| Reverse current (VR=2.5V) (VR=3.8V) | IR | - | - | 1 10 | μA |
| Maximum Temperature Coefficient of VZ (IZT=5mA) | θ_{VZ} | -2 | - | 2.5 | mV/k |
| Capacitance (VR = 0V, f = 1 MHz) | Cd | - | - | 115 | pF |

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

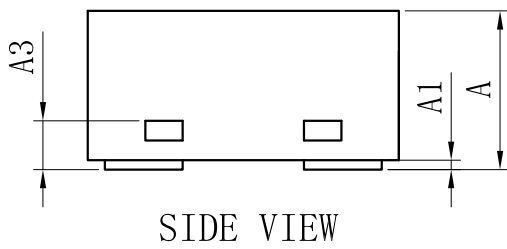
6. ELECTRICAL CHARACTERISTICS CURVES



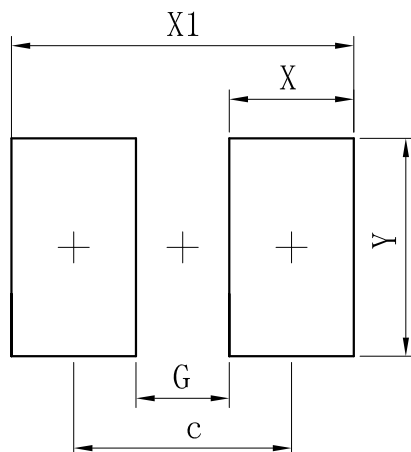
7. OUTLINE AND DIMENSIONS



| SOD882 | | | |
|----------------------|-----------|------|------|
| Dim | Min | Typ | Max |
| D | 0.95 | 1.00 | 1.05 |
| E | 0.55 | 0.60 | 0.65 |
| e | - | 0.64 | - |
| L | 0.44 | 0.49 | 0.54 |
| b | 0.20 | 0.25 | 0.30 |
| A | 0.43 | 0.48 | 0.53 |
| A1 | 0 | - | 0.05 |
| A3 | 0.127REF. | | |
| All Dimensions in mm | | | |



8. SOLDERING FOOTPRINT



| Dimensions | (mm) |
|------------|------|
| c | 0.70 |
| G | 0.30 |
| X | 0.40 |
| X1 | 1.10 |
| Y | 0.70 |

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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