

IR Chip--ORT112IRA

1. Scope:

- This specification applies to GaAlAs/GaAs infrared emitting diode chips

2. Structure:

- Mesa Type: rough surface.
- Electrodes:
P (Anode) Side: gold alloy.
N (Cathode) Side: gold alloy.

3. Size:

- Top Size: $260\mu\text{m} \times 260\mu\text{m} \pm 30\mu\text{m}$; Bottom Size: $300\mu\text{m} \times 300\mu\text{m} \pm 30\mu\text{m}$
- Chip Height: $220\mu\text{m} \pm 15\mu\text{m}$
- Pad Size: $105\mu\text{m} \pm 10\mu\text{m}$
- Pattern Drawing: fig.1.

4. Electro-Optical Characteristics:

($T_a = +25^\circ\text{C}$)

| Parameter | Symbol | Unit | Min | Typ | Max | Test Condition |
|-----------------------|--------|------|-----|------------|------|-----------------------|
| Forward voltage | V_F | V | | 1.20 | 1.40 | $I_F = 20\text{mA}$ |
| Reverse voltage | V_R | V | 5 | | | $I_R = 10\mu\text{A}$ |
| Peak wavelength | WLP | nm | | 940 | | $I_F = 20\text{mA}$ |
| Radiated output Power | P_O | mw | 1.3 | ≥ 1.5 | | $I_F = 20\text{mA}$ |

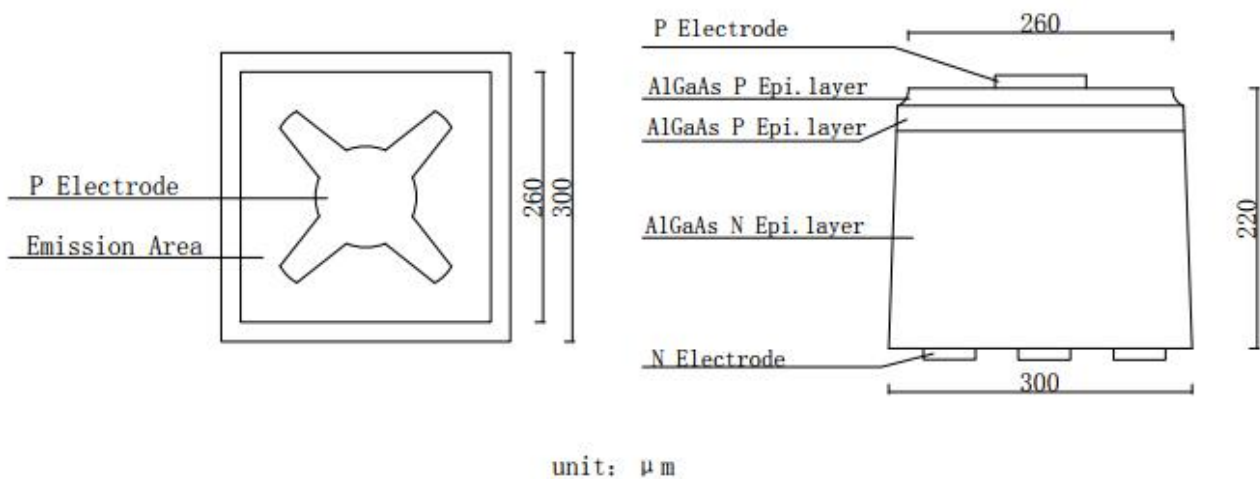


fig.1

5. Packing and Labeling:

- Packing: Sheet Type
- Each pellet is mounted on an adhesive sheet with wire-bonded electrode side up.
- Labeling: Each lot has a label sheet, writing Type, Lot No, Pcs, Avg P_O , V_F , Wlp and quantity of good chips.



6. Application Notes:

- All data are measured by Orient' s tester on bare chips within 98% of the nominal value.
- Measurement error for dominant wavelength and peak wavelength is $\pm 5\text{nm}$