

# IR Chip--ORT 809LIRA

## 1. Scope:

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

## 2. Structure:

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

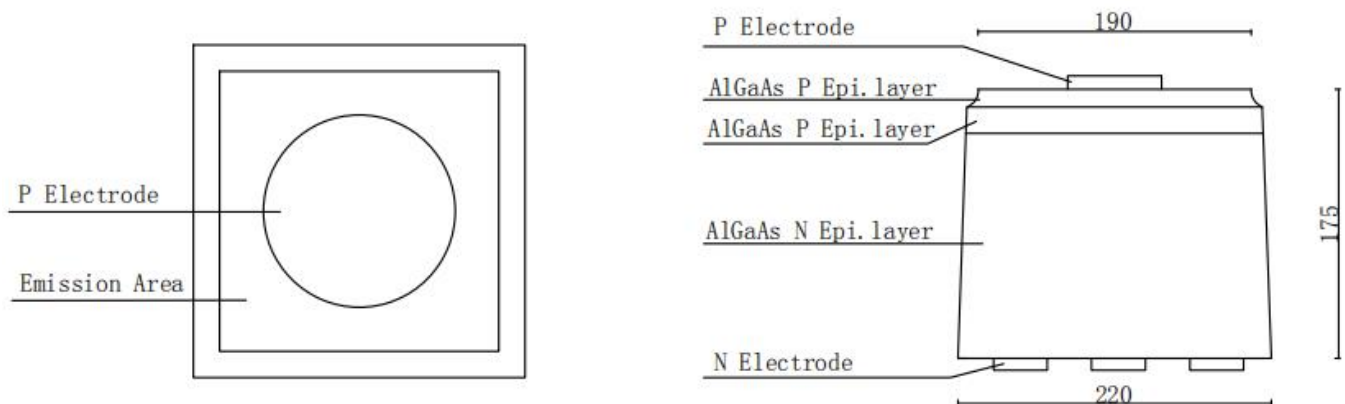
## 3. Size:

- Top Size:  $190\mu\text{m}\times 190\mu\text{m} \pm 30\mu\text{m}$ ; Bottom Size:  $220\mu\text{m}\times 220\mu\text{m} \pm 30\mu\text{m}$
- Chip Height:  $175\mu\text{m}\pm 45\mu\text{m}$
- Pad Size:  $112\mu\text{m}\pm 20\mu\text{m}$
- 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		1.45	1.55	$I_F=20\text{mA}$
Reverse voltage	$V_R$	V	5			$I_R=10\mu\text{A}$
Peak wavelength	$W_{LP}$	nm	840			$I_F=20\text{mA}$
Radiated output Power	$P_O$	mw	2.2			$I_F=20\text{mA}$



unit:  $\mu\text{m}$

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  $P_O$ ,  $V_F$ ,  $W_{LP}$  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  $\pm 5\text{nm}$

## 7. Storage and transportation

- Chips should be stored at ambient temperatures of 0-40 degrees Celsius. Relative humidity is less than 90%. No acid, alkali or other corrosive gases shall be allowed in the surrounding environment. The storage life of general packaging products is one year, If the product exceeds the storage period, the company's inspection department shall conduct a re-inspection according to the ex-factory inspection. After passing the inspection can be used.
- Packaged products can be transported by any means, During transportation, it is necessary to avoid mechanical damage .such as rain and snow intrusion, long sunshine, extrusion and impact, and not to contact corrosive gases