

# IR Chip--ORT 814IRA

## 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:  $305\mu\text{m}\times 305\mu\text{m} \pm 30\mu\text{m}$ ; Bottom Size:  $350\mu\text{m}\times 350\mu\text{m} \pm 30\mu\text{m}$
- Chip Height:  $175\mu\text{m} \pm 45\mu\text{m}$
- Pad Size:  $104\mu\text{m} \pm 10\mu\text{m}$
- 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		1.42	1.45	$I_F=20\text{mA}$
Reverse voltage	$V_R$	V	5			$I_R=10\mu\text{A}$
Peak wavelength	WLP	nm	840		870	$I_F=20\text{mA}$
Radiated output Power	$P_O$	mw	4.8			$I_F=20\text{mA}$

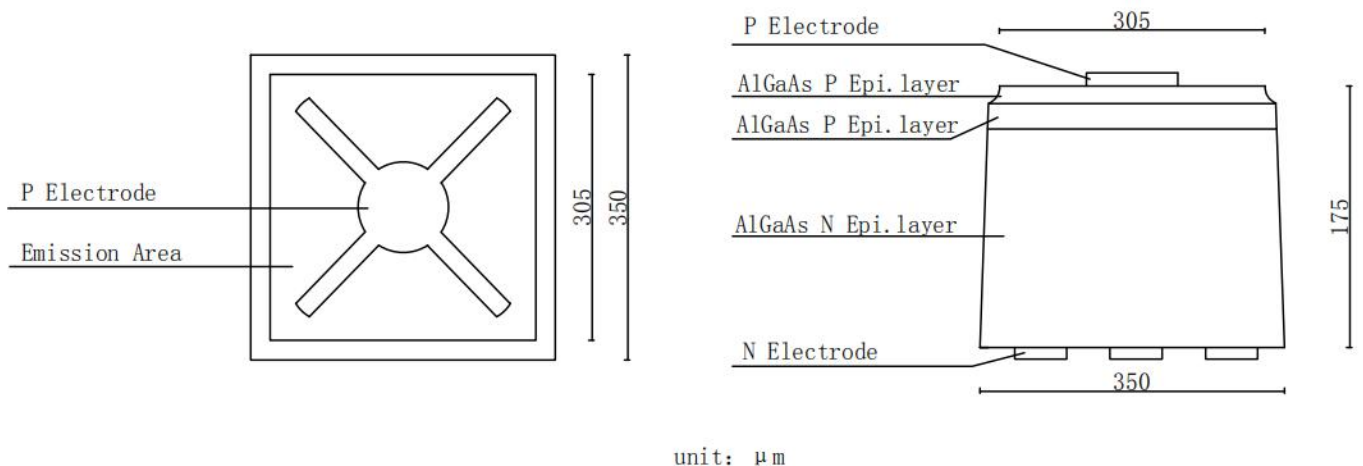


fig.1

## 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  $\pm 5\text{nm}$