

# Blue Chip--ORT0912B-J

## 1. Scope:

- This specification applies to high brightness LED chip of InGaN/Sapphire.

## 2. Features:

- Low Voltage, High Brightness and High Luminous Efficiency .
- High Reliability and Long Lifetime.
- Excellent Uniformity on Wavelength and Luminous Intensity.
- ESD2000V 100% Probing Test and Sorting.

## 3. Structure:

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

## 4. Size:

- Chip Size:  $185\mu\text{m} \pm 10\mu\text{m} \times 275\mu\text{m} \pm 10\mu\text{m}$ .
- Chip Height:  $100\mu\text{m} \pm 10\mu\text{m}$ .
- P Pad Size:  $80\mu\text{m} \pm 5\mu\text{m}$ , N Pad Size:  $85\mu\text{m} \pm 5\mu\text{m}$ .
- Pattern Drawing: fig.1.

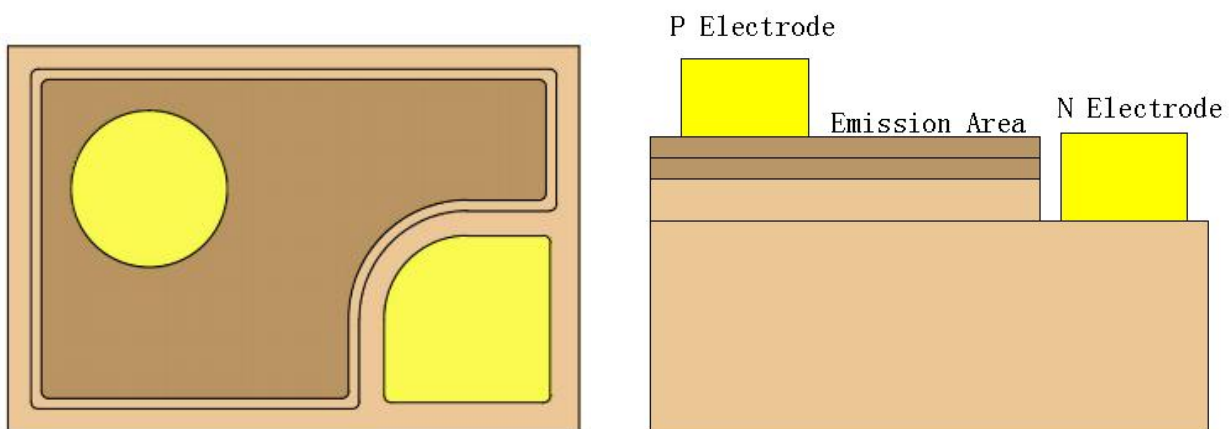


fig.1



## 5. Electro-Optical Characteristics:

(Ta=+25℃)

Parameter	Symbol	Unit	Min	Max	Test Condition
Forward voltage	V <sub>F</sub>	V	3.0	3.3	I <sub>F</sub> =20mA
Reverse current	I <sub>R</sub>	μA	0	0.2	V <sub>R</sub> =10V
Dominant wavelength	Wd	nm	457.5	460	I <sub>F</sub> =20mA
			460	461.5	
			461.5	463	
			463	464.5	
			464.5	466	
			466	467.5	
			467.5	469	
Luminous Intensity	I <sub>v</sub>	mw	24	26	I <sub>F</sub> =20mA
			26	28	
			28	31	

## 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 is ±1nm
- GaN LEDs are class 1 ESD sensitivity. ESD protection during chip using and handling is recommended.