



# Blue Chip--ORT09AW

## 1. Features (产品特点):

- Low Voltage, High Brightness and High Luminous Efficiency.  
电压低、亮度高和光效高
- High Reliability and Long Lifetime.  
可靠性好, 寿命长
- Excellent Uniformity on Wavelength and Luminous Intensity.  
波长和光强一致性好
- ESD2000V 100% Probing Test and Sorting.  
ESD2000V 100%测试分选

## 2. Scope (范围):

- This specification applies to high brightness LED chip of InGaN/Sapphire.
- 本技术条件适用于铟镓氮/蓝宝石结构高亮度发光二极管芯片。

## 3. Structure (结构):

- Mesa Type: smooth surface. 台面型: 光滑表面
- Electrodes (电极):  
P (Anode) Side: gold alloy. P 面 (阳极): 金合金  
N (Cathode) Side: gold alloy. N 面 (阴极): 金合金

## 4. Size (尺寸):

- Chip Size:  $130 \pm 10 \mu\text{m} \times 195 \mu\text{m} \pm 10 \mu\text{m}$
- Chip Height (芯片厚度):  $90 \mu\text{m} \pm 10 \mu\text{m}$
- P Pad Size (P 电极尺寸):  $62 \mu\text{m} \pm 5 \mu\text{m}$  N Pad Size (N 电极尺寸):  $62 \mu\text{m} \pm 5 \mu\text{m}$
- Pattern Drawing: fig.1. 模型图: 附图 1

## 5. Electro-Optical Characteristics (光电性能):

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

Parameter 参数名称	Symbol 符号	Unit 单位	Min 最小值	Typ 典型值	Max 最大值	Test Condition 测试条件
Forward voltage 正向电压	$V_F$	V	2.7	2.96	3.1	$I_F = 5\text{mA}$
Reverse current 反向电流	$I_R$	$\mu\text{A}$	0	0.1	0.2	$V_R = 7\text{V}$
Dominant wavelength 主波长	$\lambda_{ld}$	nm	447.5	455	460	$I_F = 5\text{mA}$
Luminous Intensity 发光强度	$I_v$	mcd	50	100	180	$I_F = 5\text{mA}$

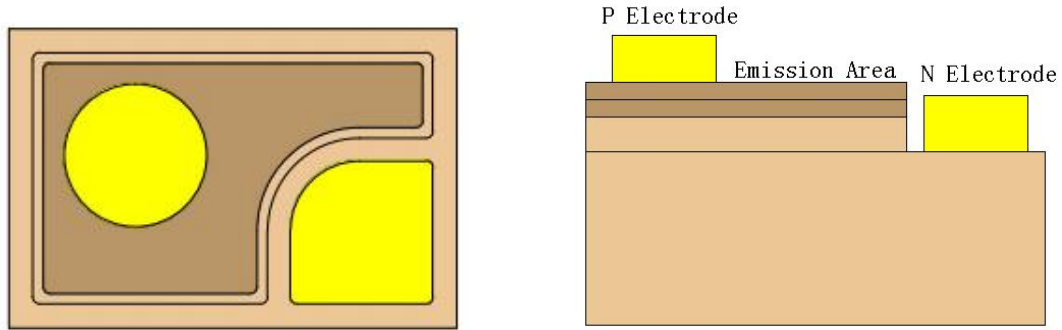


fig.1

## 6. Application Notes（使用说明）：

- All data are measured by Orient' s tester on bare chips within 98% of the nominal value.  
所有参数均系使用奥伦德测试仪器在晶片条件下测试，98%符合标称值范围
- Measurement error for dominant wavelength and peak wavelength is  $\pm 5\text{nm}$   
主波长和峰值波长测量误差 $\pm 5\text{nm}$
- GaN LEDs are class 1 ESD sensitivity. ESD protection during chip using ahandling is recommended.  
GaN LED 芯片为静电敏感产品，使用和运输时注意静电保护