

1. 结构特性/Mechanical Specification

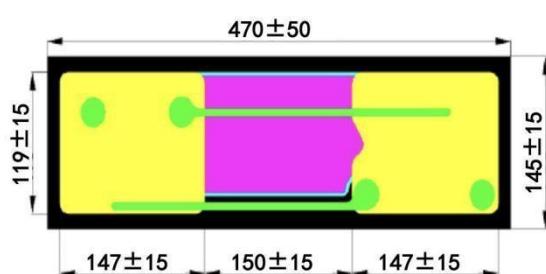
1-1 尺寸/Dimension

- 芯片尺寸/Chip size: $145\pm15\mu\text{m} \times 470\pm50\mu\text{m}$
- 芯片厚度/Chip thickness: $120\pm15\mu\text{m}$
- P焊盘大小/P bonding pad size: $119\pm15\mu\text{m} \times 147\pm15\mu\text{m}$
- N焊盘大小/N bonding pad size: $119\pm15\mu\text{m} \times 147\pm15\mu\text{m}$
- P,N间隙/ P/N gap distance: $150\pm15\mu\text{m}$

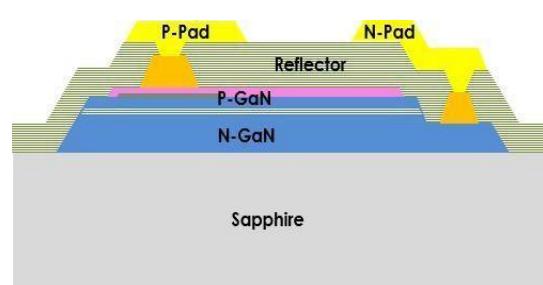
1-2 电极金属/Metallization

- P电极/P electrode: Au alloy
- N电极/N electrode: Au alloy

2. LED芯片图示/LED Chip Diagram



Cross-section view



3. 产品特点/Product Features

- 高辐射通量、高电流密度
High radiant flux、High current intensity
- 长使用寿命
Long operation life

4. 应用/Application

照明,

数码产品应用



0620G-A绿光LED芯片规格书说明
Specification of 0620G-A, GaN-based Green LED chip

5. 光电参数/Electro-optical characteristics (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
正向电压 Forward Voltage	V _f	If=1uA	2.0		2.2	V
	V _f	If=5mA	2.3	-	2.6	V
反向电流 Reverse Current	I _r	V _r = -7V	0	-	0.1	uA
辐射通量 Radiant Flux	P _O	If= 5mA	4	-	6.4	mW
主波长 Dominant Wavelength	W _d	If= 5mA	517.5	-	532.5	nm

·亮度公差容许范围 Tolerance limit of Po: ±6%

·波长公差容许范围 Tolerance limit of Wd: ±1nm

·正向电压公差容许范围 Tolerance limit of VF : ± 0.06V

6. 最大额定值/Absolute Maximum Ratings

Parameter	Symbol	Condition	Rating	Unit
正向直流电流 Forward DC Current	I _f	Ta=25°C	≤20	mA
反向电压 Reverse Voltage	V _z	Ta=25°C	≥7	V
反向电流 Reverse Current	I _r	Ta=25°C	≤1	uA
结温 Junction Temperature	T _j	---	≤125	°C
封装温度 Temperature during Packaging	---	---	280 (<10s)	°C
储存温度 Storage Temperature		Chip on tape/storage	0~40	°C

7. 特性曲线/Characteristic Curves

Fig.1 Relative Light Intensity vs Forward Current Ta=25°C

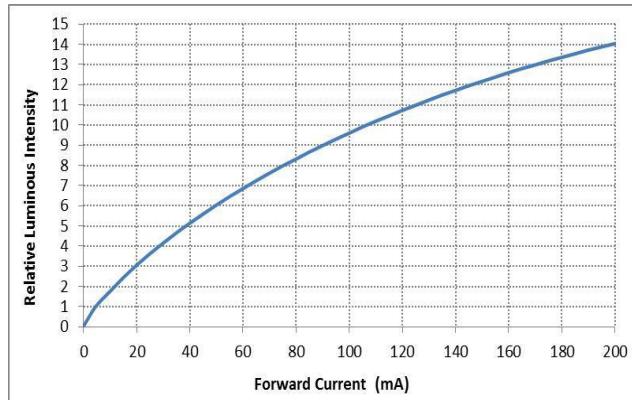


Fig.2 Forward Current vs Forward Voltage Ta=25°C

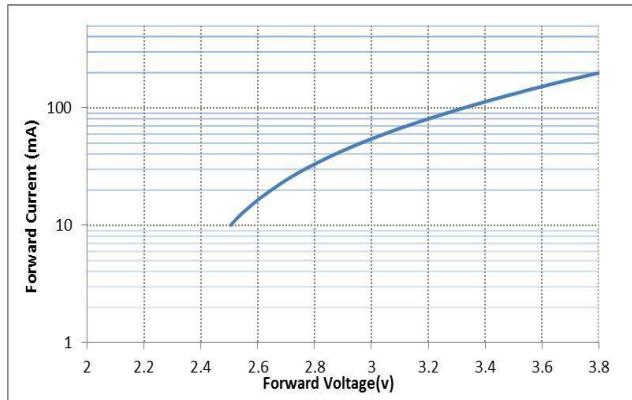


Fig.3 Forward Voltage Shift vs Ambient Temperature

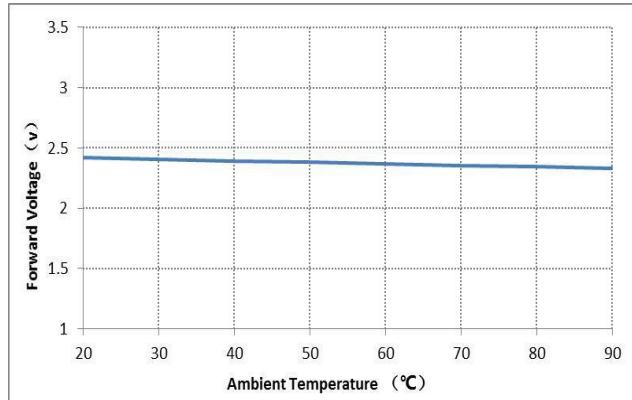


Fig.4 Relative Light Intensity vs Ambient Temperature

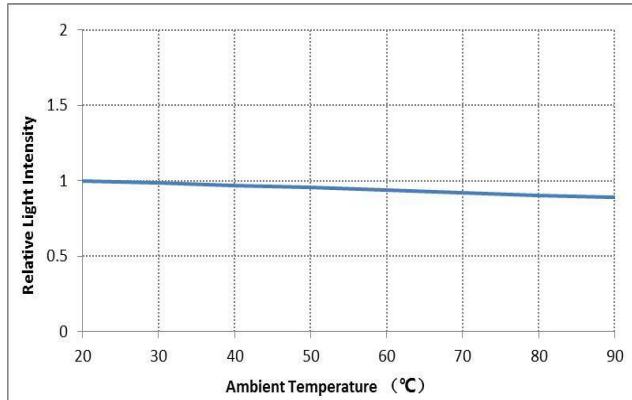


Fig.5 Wavelength Shift vs Ambient Temperature

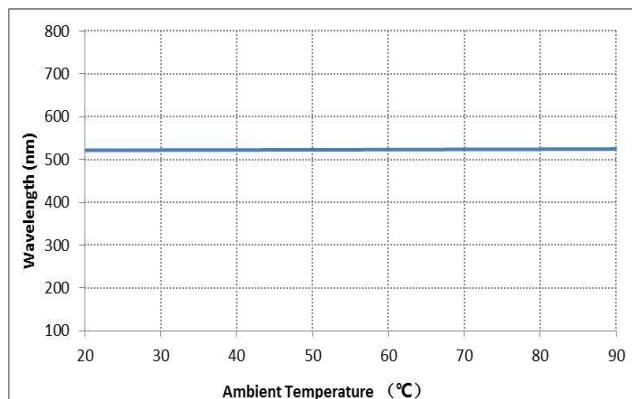
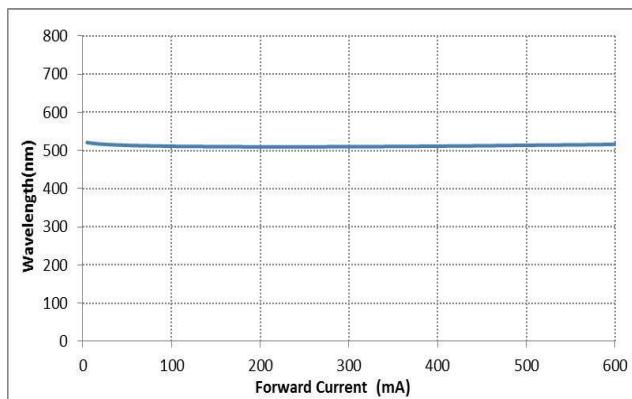


Fig.6 Wavelength Shift vs Forward Current Ta=25°C



8. 分Bin规则/Bin Definitions

Items	Units	Bin1	Bin2	Bin3	Bin4	Bin5	Bin6
WD	nm	517.5-520	520-522.5	522.5-525	525-527.5	527.5-530	530-532.5
Lop	mW	4-4.4	4.4-4.8	4.8-5.2	5.2-5.6	5.6-6.0	6.0-6.4
VF	V	2.3-2.4	2.4-2.5	2.5-2.6			
VF3	V	2.0-2.1	2.1-2.2				

9. 包装规格/Packing Specification

- 标准蓝膜尺寸 (200 ± 10) mm \times (200 ± 10) mm。Standard blue tape size is (200 ± 10) mm \times (200 ± 10) mm.
- 芯片粘贴区域。
Chip attachment area.
- 标签贴于蓝膜右下角，标签内容包括：公司名称、型号、完成日期、数量、光电参数。
Label on the lower-right corner of the blue tape. Label content includes Corporation name, Model name, Date, Quantity and electro-optical parameters.

