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GaN Green LED Chip (Ver:A/1)

XGL–G11CW##L##V#–###

Features

- Long lifetime and high reliability,
- High performance
- 100% tested and sorted,
- Special specifications are optional

G11C Chip Top View

Mechanical Specification

Description	Dimention
Structure	InGaN/GaN MQW
Chip Size (μm²)	205×255 (±25)
Chip Thickness (μm)	85 ± 10
Electrode Size (μm)	80 ± 5
Electrode Material	Au alloy

Optical and Electrical Characteristics (Ta=25℃)

Item	Symbol	Condition		Min	Max	Unit
Forward Voltage	V_F	I_F=20mA	V1	2.7	2.9	V
			V2	2.9	3.1	
			V3	3.1	3.3	
			V4	3.3	3.5	
Reverse Current	I_R	V_R= −8V		---	0.5	μA
Dominant Wavelength	λ_D	I_F=20mA	W33	510	512	nm
			…	…	…	
			W38	520	522	
			W39	522	524	
			…	…	…	
			W43	530	532	

Luminous Intensity (Ta=25℃)

		L28	L29	L30	L31	L32	L36	L37	L38	L39	L40
I_V (mcd)	Min	540	600	660	730	810	900	1000	1100	1200	1350
	Max	600	660	730	810	900	1000	1100	1200	1350	1500

Absolute Maximum Ratings (Ta=25℃)

Item	Symbol	Condition	Rating	Unit
DC Forward Current	I_F	Ta=25℃	≤30	mA
Peak Forward Current	I_{FP}	Ta=25℃	≤50	mA
Reverse Voltage	V_R	Ta=25℃	≤10	V
Storage Temperature Range	T_{stg}	chip	-40 ~ +85	℃
		chip-on-tape/storage	0 ~ +40	℃
		chip-on-tape/transportation	-20 ~ +65	℃
ESD (HBM)	V_{esd}	Ta=25℃	2000	V

Notes

- All parameters are measured using XGL's tester on bare chips.
- Assembly processing temperature must not exceed 280℃ for 10 seconds.
- Humidity and temperature range: 50%~70% & 18℃~25℃.
- GaN LEDs are ESD sensitive.Please observe appropriate precautions during handling and processing. For further information please refer to MIL-STD-1686A.