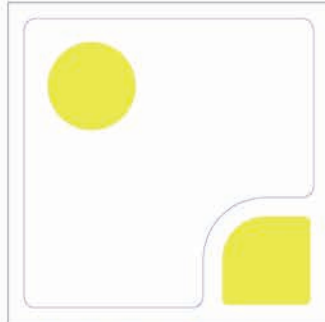


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XGL-B12BW##L##V#-###



B12B Chip Top View

Features

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

Mechanical Specification

Description	Dimension
Structure	InGaN/GaN MQW
Chip Size (μm^2)	300×300 (± 25)
Chip Thickness (μm)	85 \pm 10
Electrode Size (μm)	85 \pm 5
Electrode Material	Au alloy

Optical and Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition		Min	Max	Unit
Forward Voltage	V_F	$I_F=10\text{mA}$	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	$V_R = -8\text{V}$		---	0.5	μA
Dominant Wavelength	λ_D	$I_F=10\text{mA}$	W09	460	462	nm
			
			W12	466	468	
			W13	468	470	
			W16	474	476	

Luminous Intensity (Ta=25°C)

		L06	L07	L08	L09	L10	L11	L12	L13	L14
I_V (mcd)	Min	50	60	70	80	90	100	110	120	135
	Max	60	70	80	90	100	110	120	135	150

Absolute Maximum Ratings (Ta=25°C)

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

Notes

- All parameters are measured using XGL's tester on bare chips.
- Assembly processing temperature must not exceed 280°C for 10 seconds.
- Humidity and temperature range: 50%~70% & 18°C~25°C.
- GaN LEDs are ESD sensitive. Please observe appropriate precautions during handling and processing.

For further information please refer to MIL-STD-1686A.