

# QT-Brightek Chip LED Series

## SMD 0805 Green LED

**Part No.: QBLP631-YG1**

**YG1: GaP Green (566 to 575nm)**

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	Version# 1.0	

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## Introduction

### Feature:

- Water clear lens
- Package in tap and reel
- 0805 LED package
- GaP technology
- Viewing angle: 140 deg typ.

### Description:

These ultra bright 0805 LEDs have a height profile of 0.8mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

### Application:

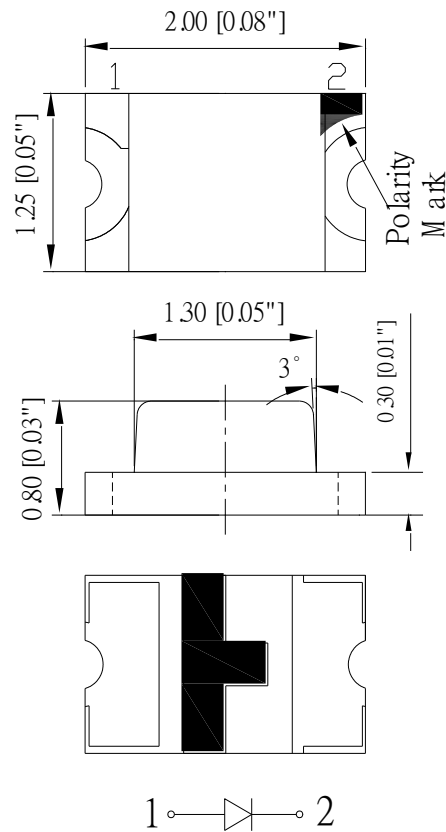
- Status indication
- Back lighting application

### Certification & Compliance:

- ISO9001
- RoHS Compliant



## Dimension:



Units: mm / tolerance = +/-0.1mm

### Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		λ <sub>D</sub> (nm)			λ <sub>P</sub> (nm)	I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP631-YG1	Green	20	2.0	2.5	566	568	575	565	5.0	12

### Absolute Maximum Rating

Material	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SOL</sub> (°C)**
GaP	75	30	125	5	-40 ~ +80	-40 ~ +85	260

\*Duty 1/8 @ 1KHz

\*\*IR Reflow for no more than 10 sec @ 260 °C

### Forward Voltage V<sub>F</sub> @ I<sub>F</sub>=20mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

### Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=20mA

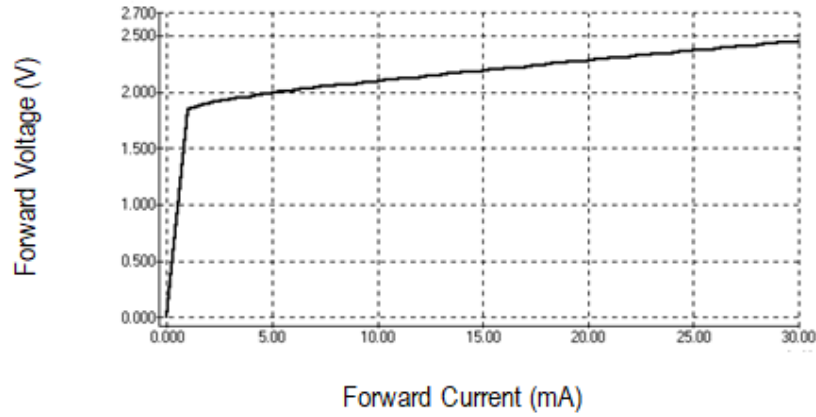
Bin	Min.	Max.	Unit
A	5.0	8.0	mcd
B	8.0	10.5	
C	10.5	14	
D	14	18	
E	18	24	

### Dominant Wavelength λ<sub>D</sub> @ I<sub>F</sub>=20mA

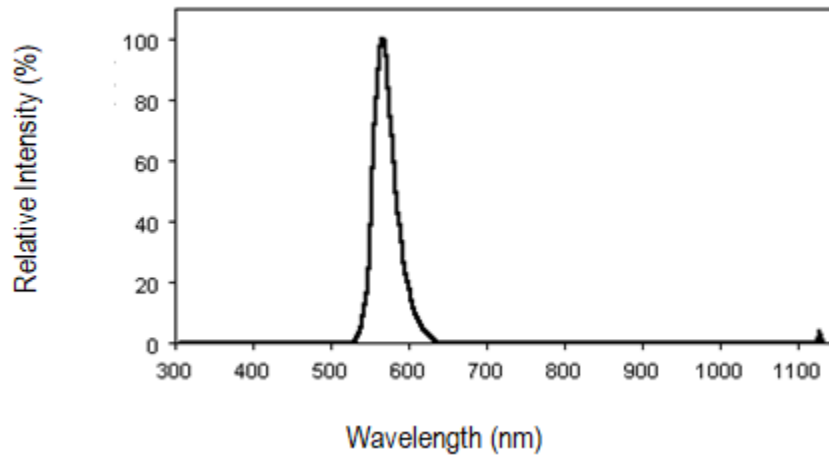
Bin	Min.	Max.	Unit
H	566	569	nm
I	569	572	
J	572	575	

**Characteristic Curves**

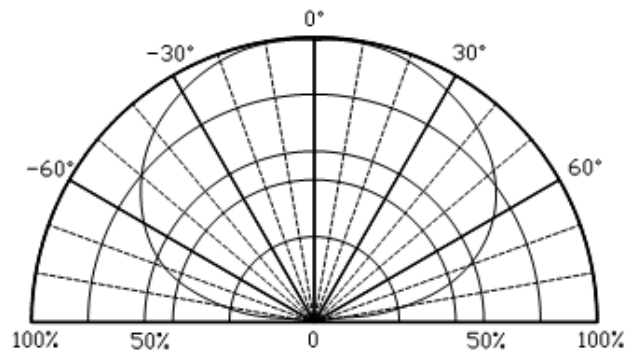
Forward Current vs. Forward Voltage



Relative Intensity vs. Wavelength

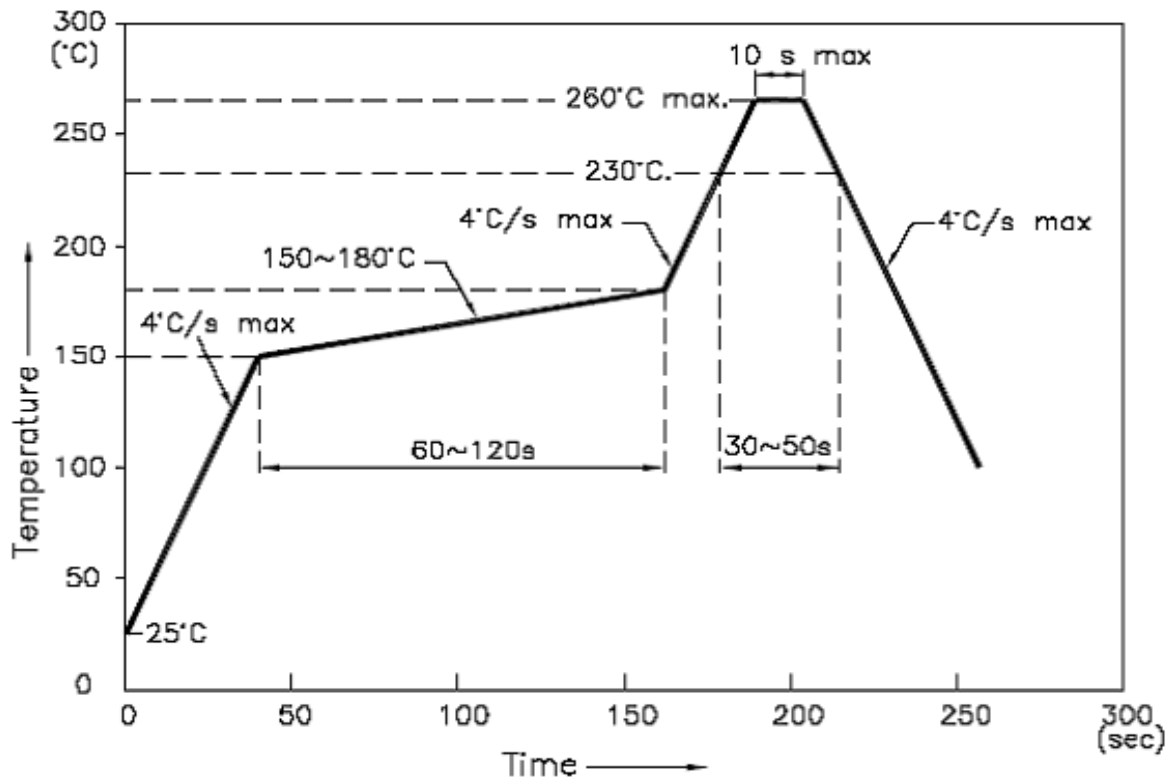


Directive Characteristics

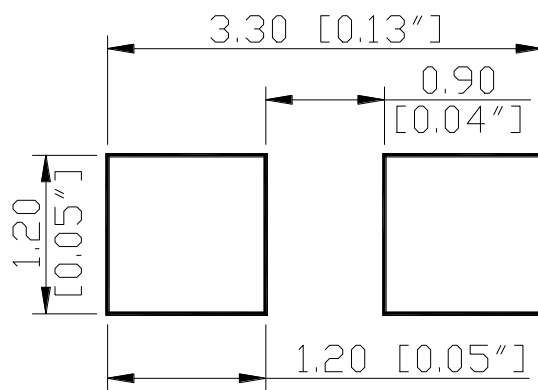


## Solder Profile & Footprint

-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



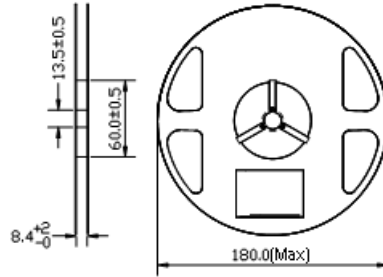
### Recommended Pad Layout



Units: mm

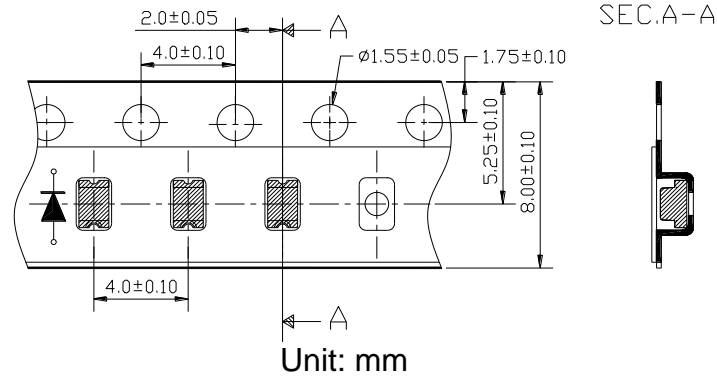
## Packing

### Reel Dimension:



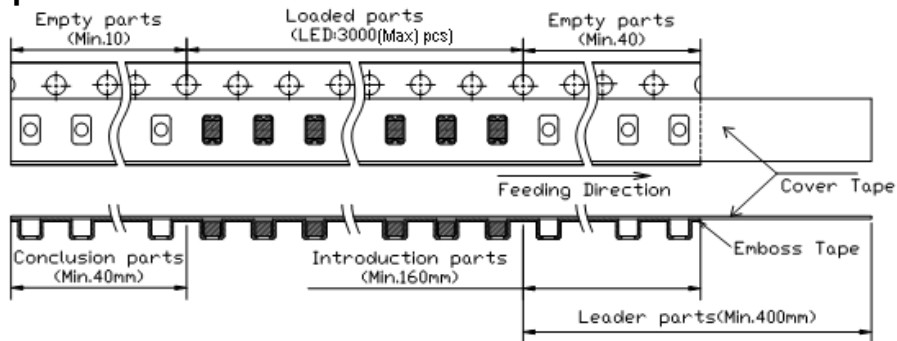
Unit: mm

### Tape Dimension:

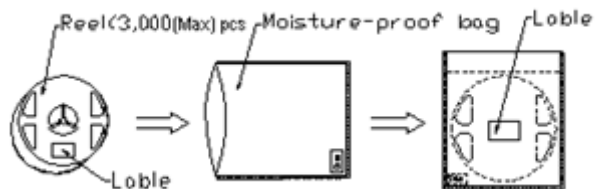


Unit: mm

### Arrangement of Tape:



### Packaging Specification:



## Labeling



Part No: \_\_\_\_\_

Customer P/N: \_\_\_\_\_

Item: \_\_\_\_\_

Q'ty: \_\_\_\_\_

Vf: \_\_\_\_\_

Iv: \_\_\_\_\_

VI: \_\_\_\_\_

Date: \_\_\_\_\_

**Made in China**

## Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP631-YG1	Iv=12mcd typ. / $\lambda_D = 566\text{nm to } 575\text{nm @ } 20\text{mA}$	3000 units

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## Revision History

Description:	Revision #	Revision Date
New Release of QBLP631-YG1	V1.0	03/27/2024

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2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.