



QT-Brightek Chip LED Series

SMD 0805 Green LED

Part No.: QBLP631-YG15

YG1: GaP Green (566 to 575nm)

5: 5mA

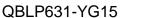
Product: QBLP631-YG15	Date: March 27, 2024	Page 1 of 9
	Version# 1.0	





Table of Contents:	3
Electrical / Optical Characteristic (Ta=25 °C)	4
Absolute Maximum Rating	4
Characteristic Curves	
Solder Profile & Footprint	6
Packing	
Labeling	8
Ordering Information	8
Revision History	g
Disclaimer	

Product: QBLP631-YG15	Date: March 27, 2024	Page 2 of 9
	Version# 1.0	





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:

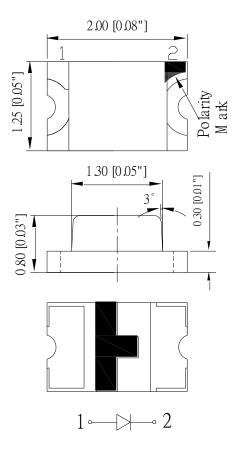
- Status indication
- Back lighting application

Certification & Compliance:

- ISO9001
- RoHS Compliant

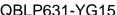


Dimension:



Units: mm / tolerance = +/-0.1mm

Product: QBLP631-YG15	Date: March 27, 2024	Page 3 of 9
	Version# 1.0	





Electrical / Optical Characteristic (Ta=25 °C)

Product Color I _F (mA)		V _F	(V)		λ _D (nm))	λ _P (nm)	I _V (n	ncd)	
Product	Color	Typ.	Max.	Min.	Тур.	Max.	Тур.	Min.	Тур.	
QBLP631-YG15	Green	10	2.0	2.3	566	569	575	565	1.25	4

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
GaP	72	30	125	5	-40 ~ +80	-40 ~ +85	260

^{*}Duty 1/8 @ 1KHz

Forward Voltage V_F @ I_F=5mA

Bin	Min.	Max.	Unit
	1.7	2.3	V

Luminous Intensity I_V @ I_F=5mA

	<i>y</i>		
Bin	Min.	Max.	Unit
5	1.25	2.0	
6	2.0	3.2	mod
7	3.20	5.0	— mcd
8	5.0	8.0	

Dominant Wavelength λ_D @ $I_F=5mA$

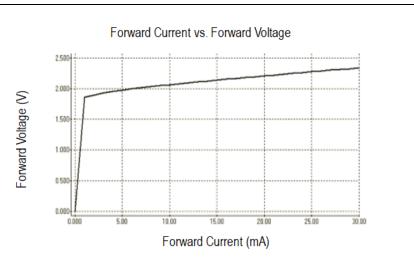
Bin	Min.	Max.	Unit
Н	566	569	
1	569	572	nm
J	572	575	

Product: QBLP631-YG15	Date: March 27, 2024	Page 4 of 9
	Version# 1.0	

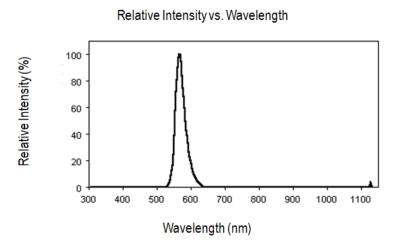
^{**}IR Reflow for no more than 10 sec @ 260 °C

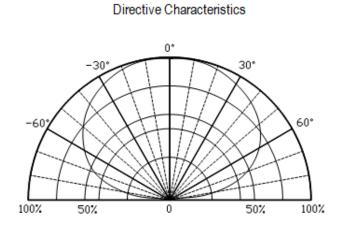


Characteristic Curves



QBLP631-YG15



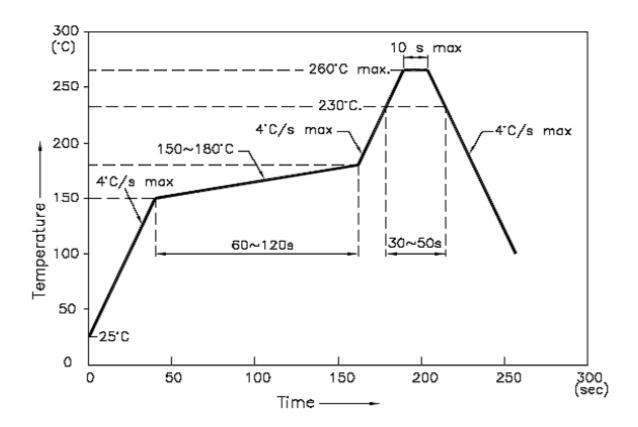


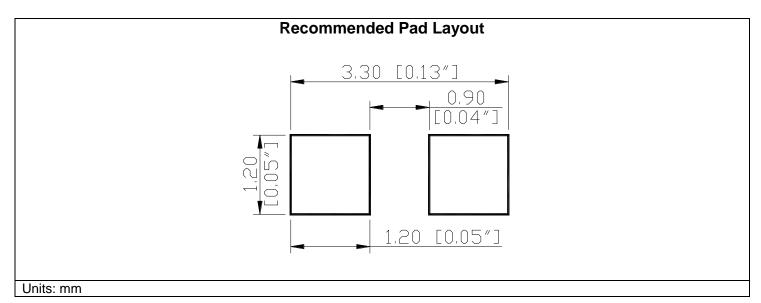
Product: QBLP631-YG15	Date: March 27, 2024	Page 5 of 9
	Version# 1.0	



Solder Profile & Footprint

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



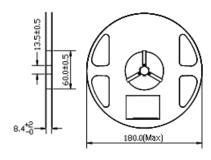


Product: QBLP631-YG15	Date: March 27, 2024	Page 6 of 9
	Version# 1.0	



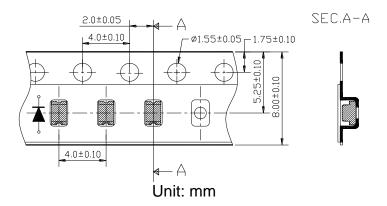
Packing

Reel Dimension:

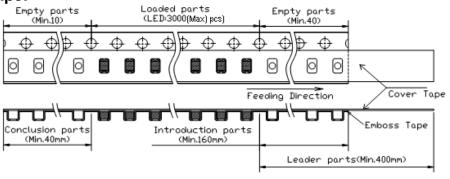


Unit: mm

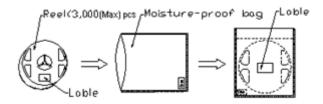
Tape Dimension:



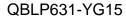
Arrangement of Tape:



Packaging Specification:



Product: QBLP631-YG15	Date: March 27, 2024	Page 7 of 9
	Version# 1.0	





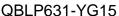
Labeling

Part No:
Customer P/N:
ltem:
Q'ty:
Vf:
Iv:
WI:
Date: Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP631-YG15	Iv=4mcd typ. / λ_D = 566nm to 575nm @ 5mA	3000 units

Product: QBLP631-YG15	Date: March 27, 2024	Page 8 of 9
	Version# 1.0	



0805 LED

Revision History

Description:	Revision #	Revision Date
New Release of QBLP631-YG15	V1.0	03/27/2024

Disclaimer

QT-BRIGHTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design, QT-BRIGHTEK does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

Life Support Policy

QT-BRIGHTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTEK. As used herein:

- 1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
- 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.

Product: QBLP631-YG15	Date: March 27, 2024	Page 9 of 9
	Version# 1.0	