

QT-Brightek Chip LED Series

SMD 0805 Orange LED

Part No.: QBLP631-O-2

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	Version# 1.0	

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Introduction

Feature:

- Water clear lens
- Package in tap and reel
- 0805 LED package
- AllnGaP 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:

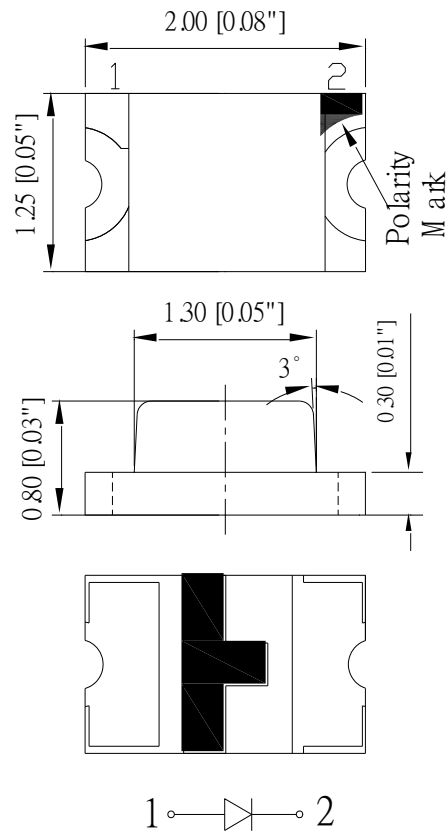
- Status indication
- Back lighting application

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			λ _P (nm)	I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP631-O-2	Orange	20	2.0	2.5	600	605	610	610	110	180

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)**
AllnGaP	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_F @ I_F=20mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

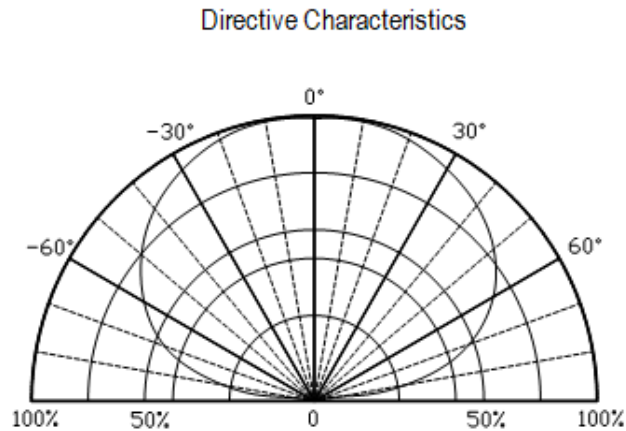
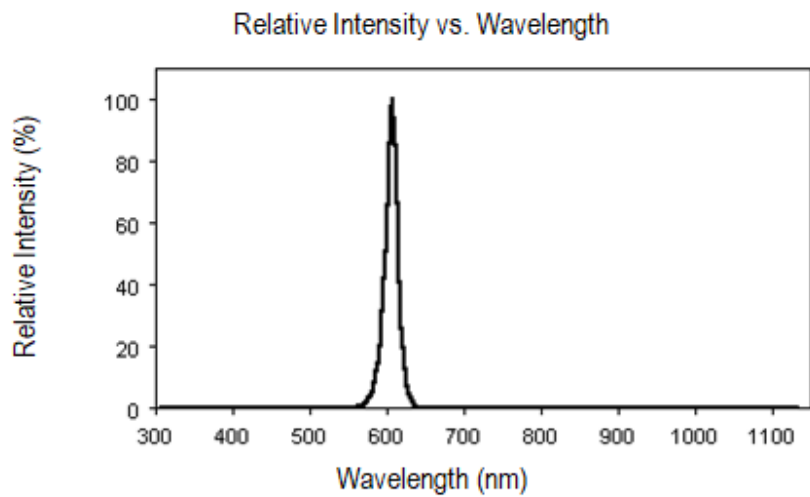
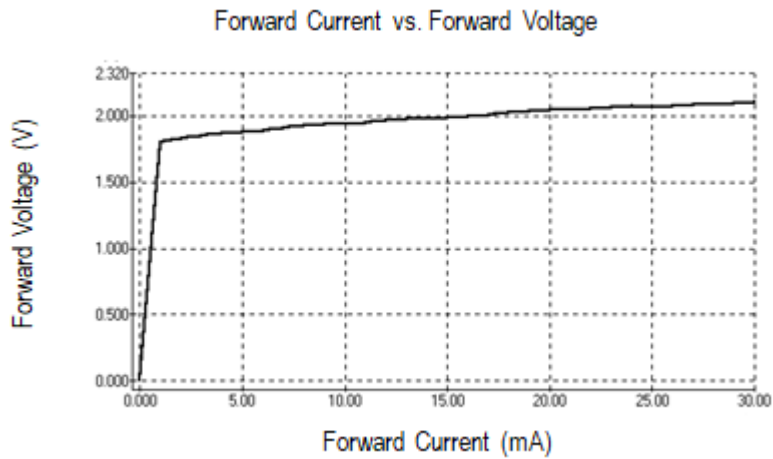
Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
2J	110	138	mcd
2K	138	173	
2L	173	217	
2M	217	272	

Dominant Wavelength λ_D @ I_F=20mA

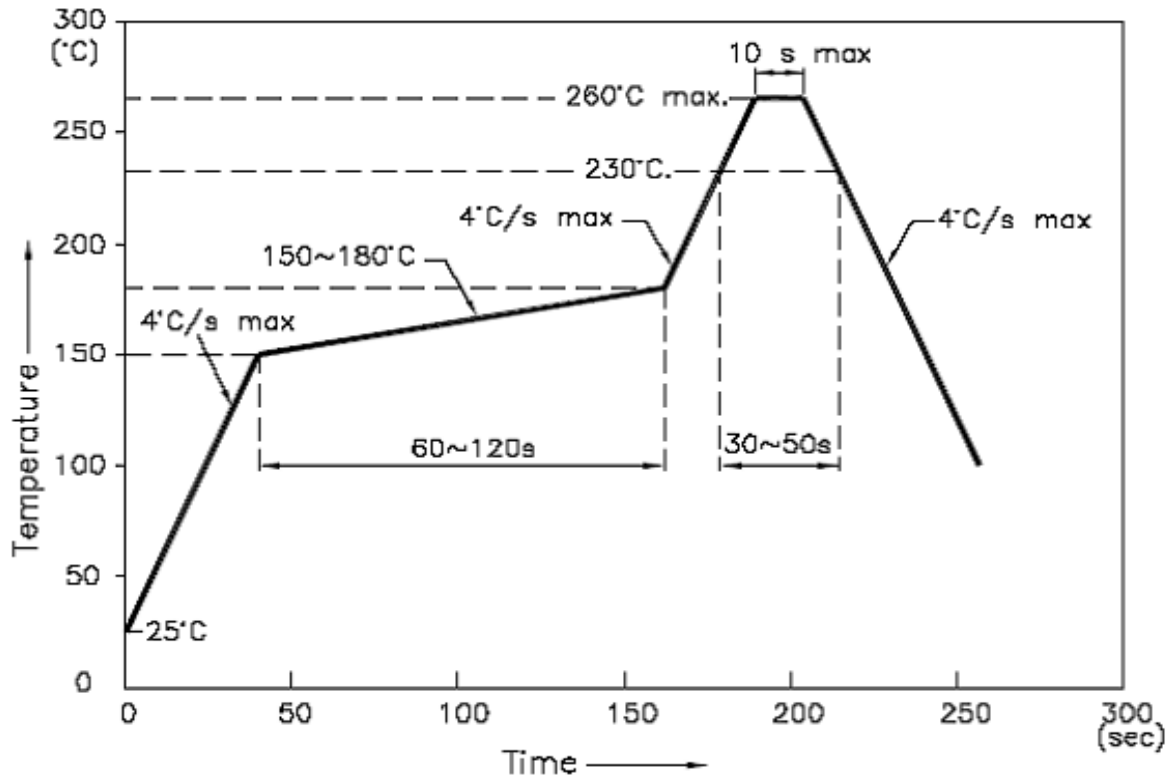
Bin	Min.	Max.	Unit
p	600	605	nm
q	605	610	

Characteristic Curves

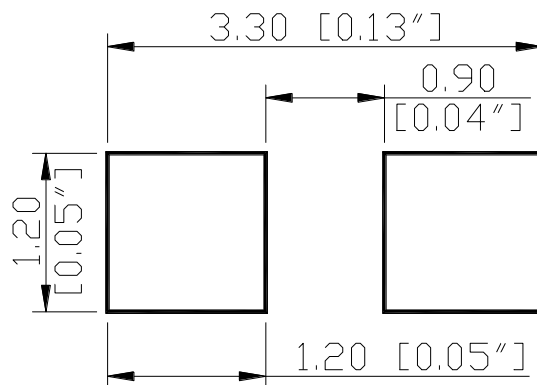


Solder Profile & Footprint

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



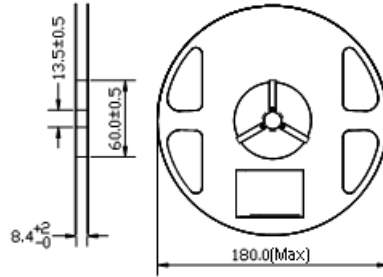
Recommended Pad Layout



Units: mm

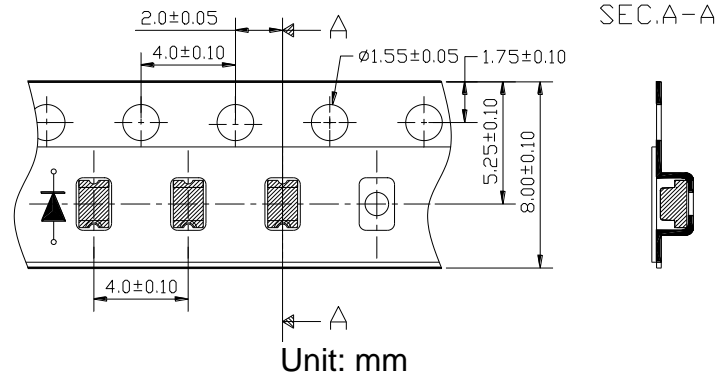
Packing

Reel Dimension:



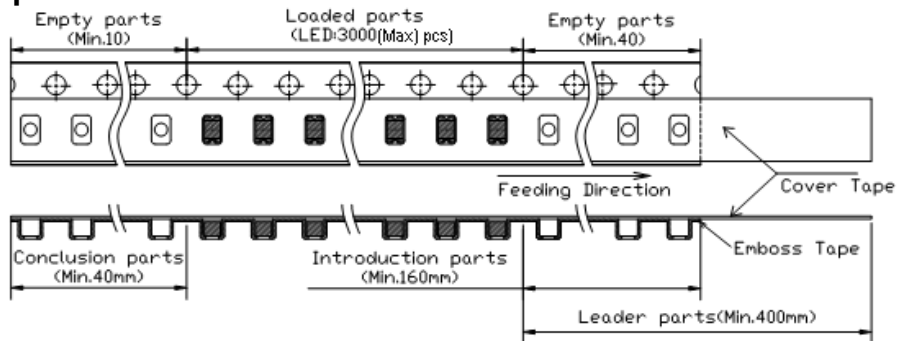
Unit: mm

Tape Dimension:

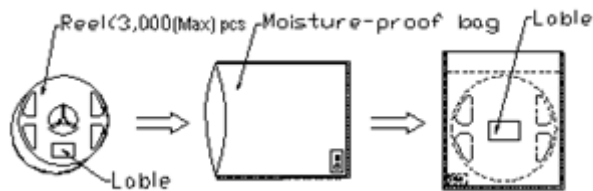


Unit: mm

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-O-2	Iv=180mcd typ. / $\lambda_D = 600\text{nm to } 610\text{nm @ } 20\text{mA}$	3000 units

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Revision History

Description:	Revision #	Revision Date
New Release of QBLP631-O-2	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.