

QT-Brightek Chip LED Series

SMD 0402 Orange LED

Part No.: QBLP595-2O5

5: 5mA



Table of Contents:

Introduction3

Electrical / Optical Characteristic (Ta=25 °C)4

Absolute Maximum Rating4

Solder Profile & Footprint.....6

Packing7

Labeling8

Ordering Information8

Revision History9

Disclaimer9

Introduction

Feature:

- Water clear lens
- Color: orange
- Package in tape and reel
- Compact 0402 package
- AlInGaP technology
- Viewing angle: 140° typ.
- Height profile: 0.5mm

Application:

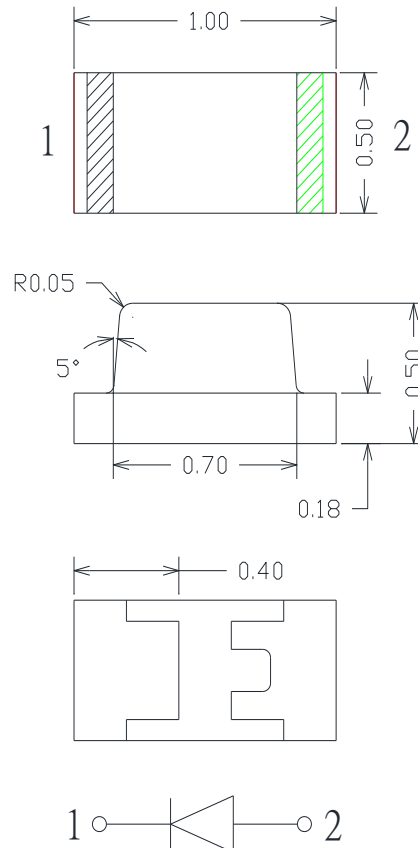
- Status indication
- Back lighting application

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.
QBLP595-2O5	Orange	5	2.0	2.3	601	605	609	610	26	50

Absolute Maximum Rating

Chip Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
AlInGaP	69	30	100	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/10 @ 1KHz

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

Forward Voltage V_F @ I_F=5mA

Bin	Min.	Max.	Unit
□	1.7	2.3	V

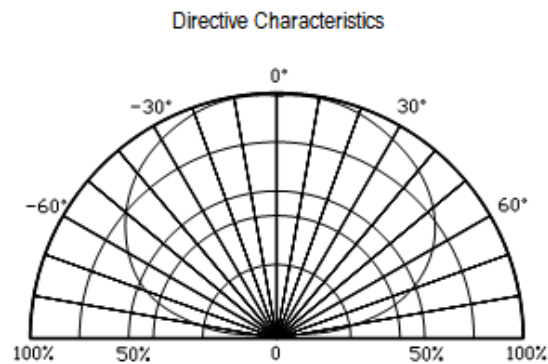
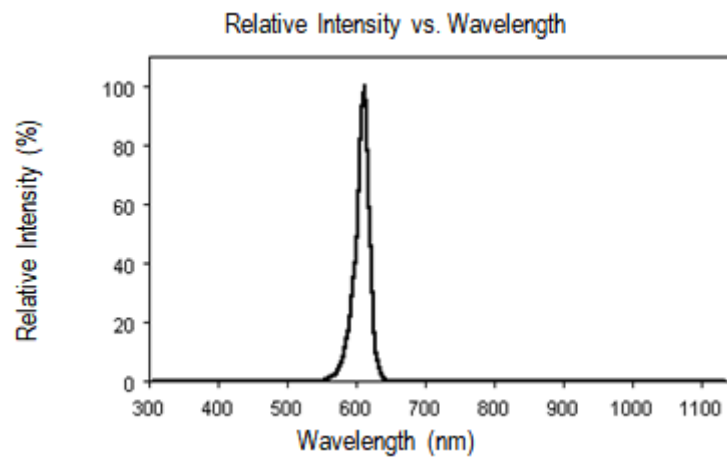
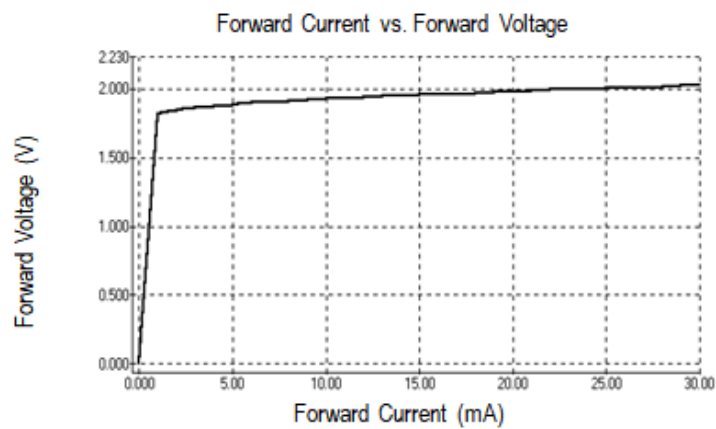
Luminous Intensity I_V @ I_F=5mA

Bin	Min.	Max.	Unit
2B	26	33	mcd
2C	33	41	
2D	41	51	
2E	51	64	
2F	64	80	

Dominant Wavelength λ_D @ I_F=5mA

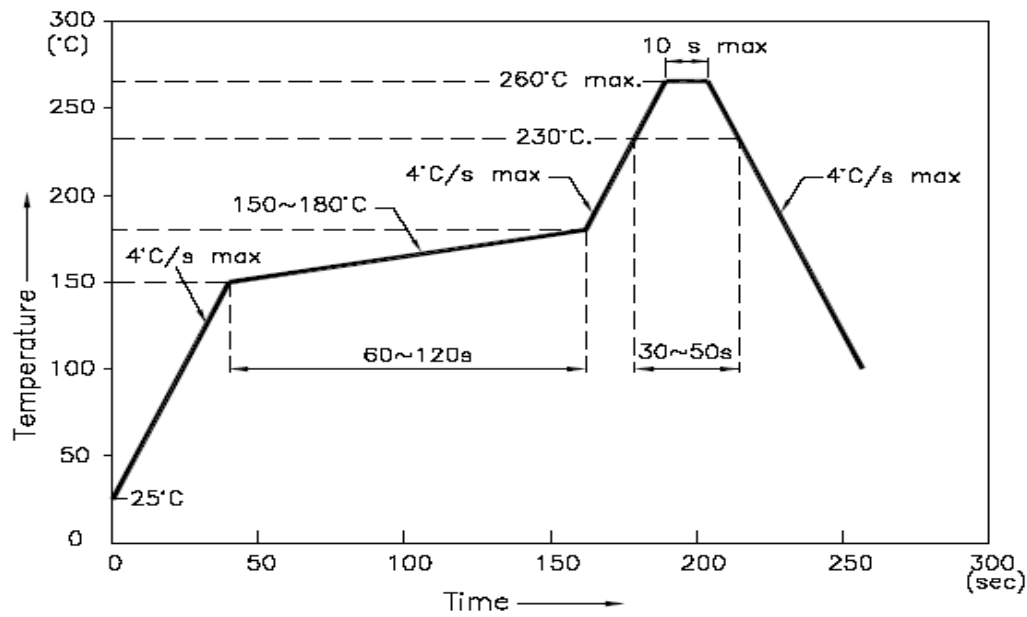
Bin	Min.	Max.	Unit
2p	601	605	nm
2q	605	609	

Characteristic Curves

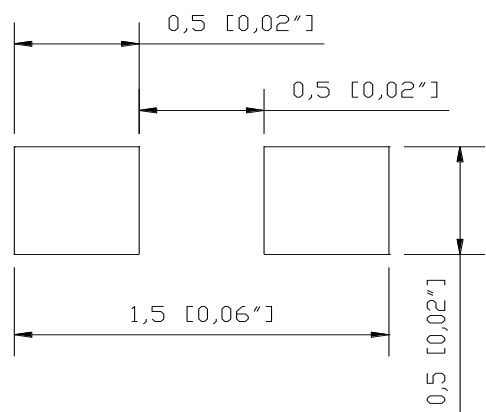


Solder Profile & Footprint

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



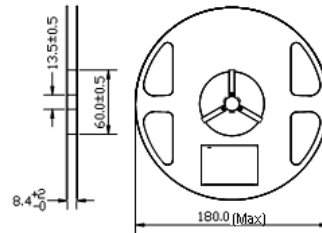
Recommended Pad Layout



Units: mm

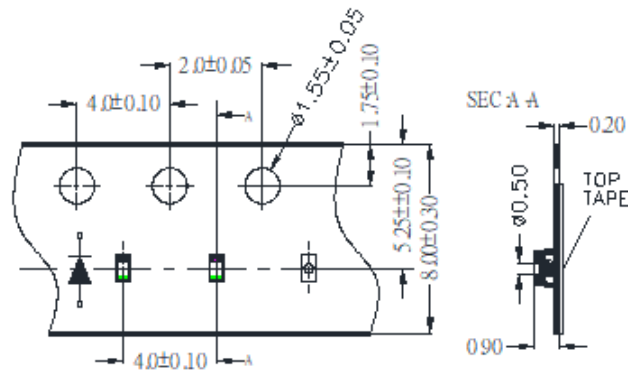
Packing

Reel Dimension:



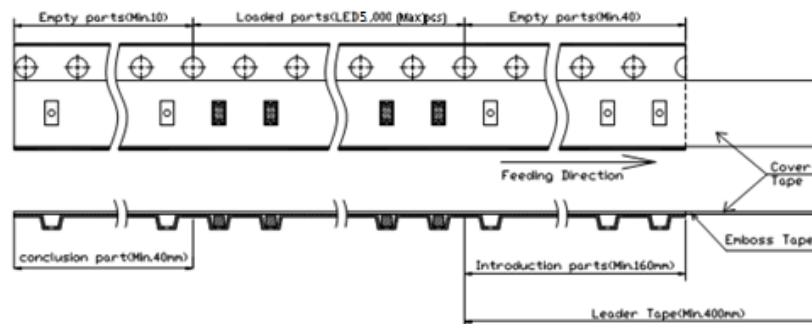
Unit: mm

Tape Dimension:

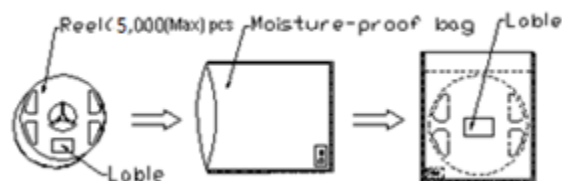


Unit: mm

Arrangement of Tape:



Packaging Specifications:





Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-2O5	V1.0	04/14/2025

Disclaimer

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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.