QT-Brightek Chip LED Series

SMD 0402 Orange LED

Part No.: QBLP595-O5

5: 5mA

Table of Contents:

Introduction 3
Electrical / Optical Characteristic (Ta=25 ^{o}C) 4
Absolute Maximum Rating 4
Solder Profile & Footprint 6
Packing 7
Ordering Information 8
Revision History 9
Disclaimer 9

Introduction

Feature:

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

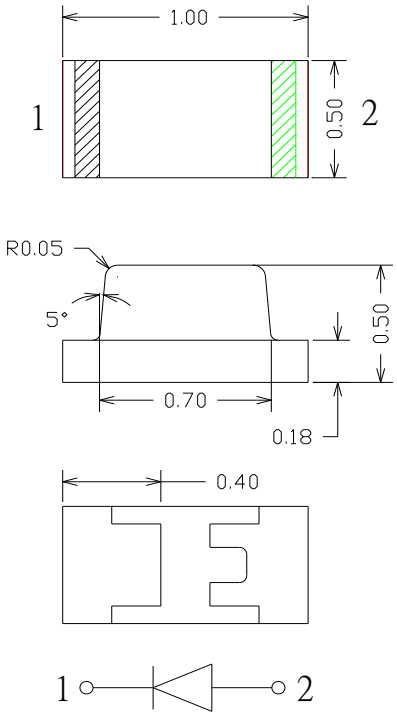
Application:

- 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-O5	Orange	5	1.85	2.3	600	605	610	615	16	30

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)**
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

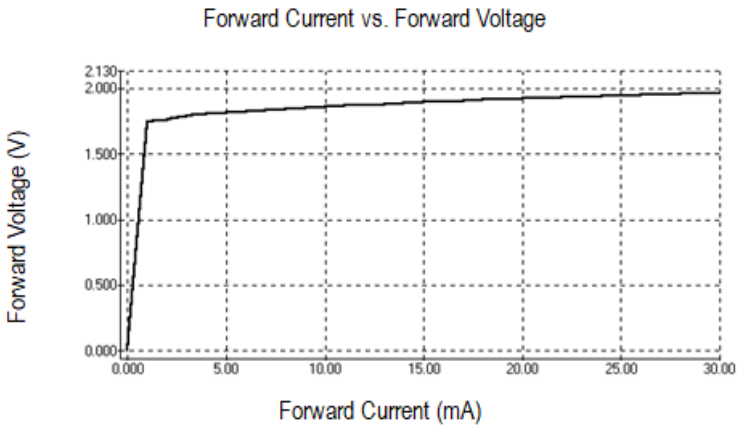
Luminous Intensity I_V @ I_F=5mA

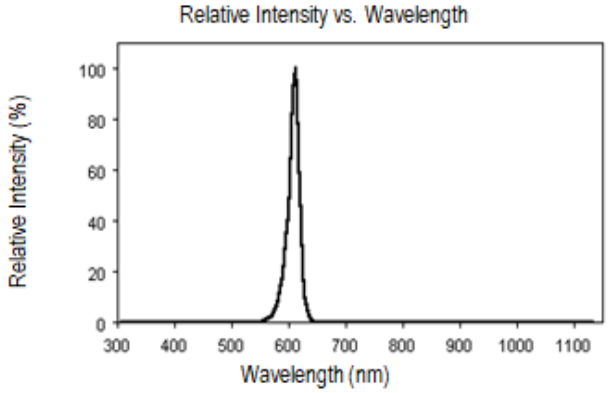
Bin	Min.	Max.	Unit
B	16	20	mcd
C	20	25	
D	25	32	
E	32	40	
F	40	50	

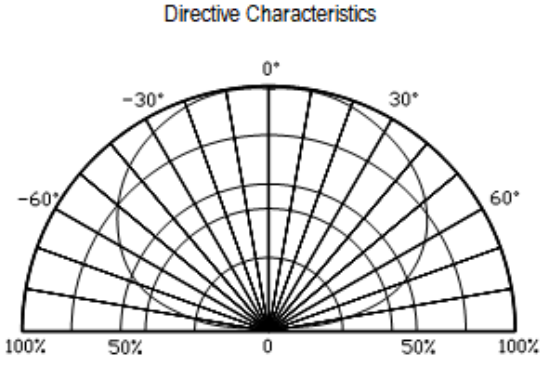
Dominant Wavelength λ_D @ I_F=5mA

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

Characteristic Curves

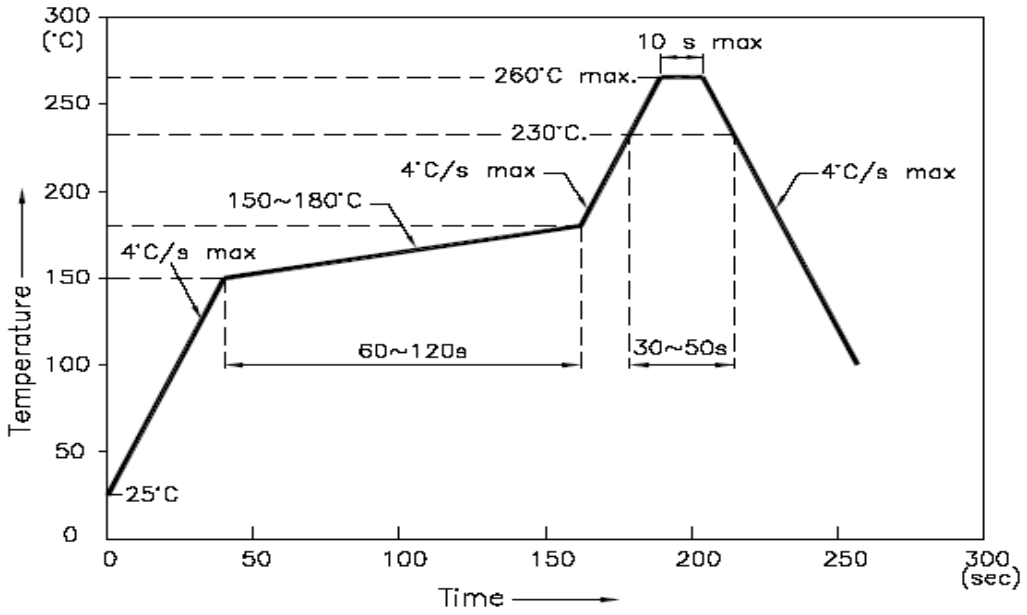




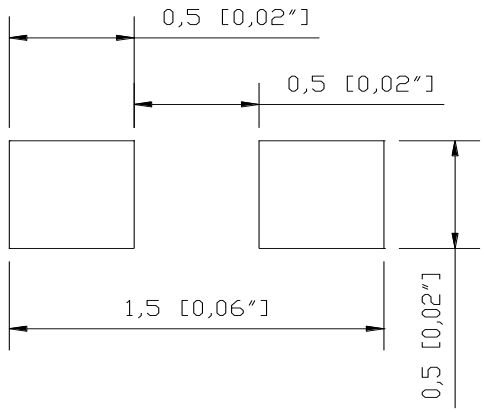


Solder Profile & Footprint

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



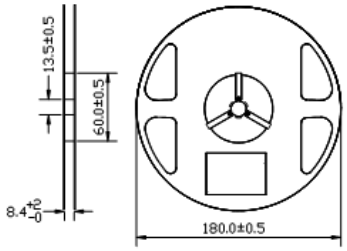
Recommended Pad Layout



Units: mm

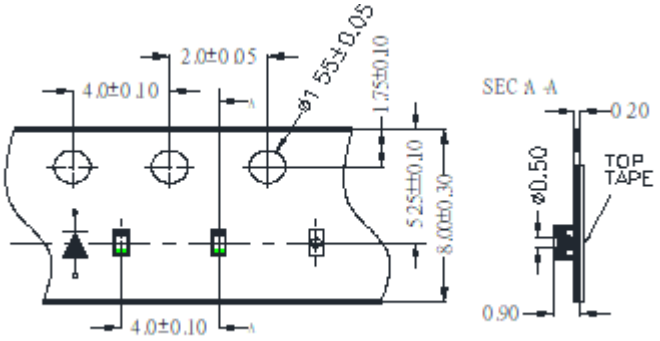
Packing

Reel Dimension:



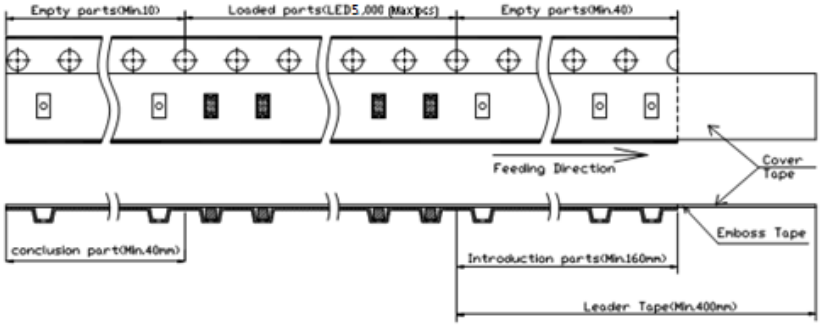
Unit: mm

Tape Dimension:

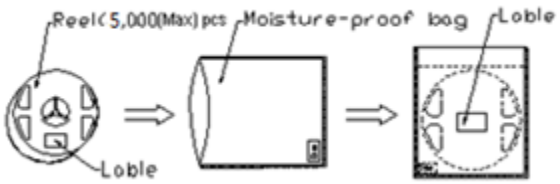


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP595-O5	Iv=30mcd typ. @ I_F=5mA / Color=600 to 610nm	5,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-O5	V1.0	07/20/2022
Add WLP typical value	V1.1	02/21/2025

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.