

QT-Brightek Chip LED Series

SMD 0402 Orange LED

Part No.: QBLP595-O-2897

2897: High Bright

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:

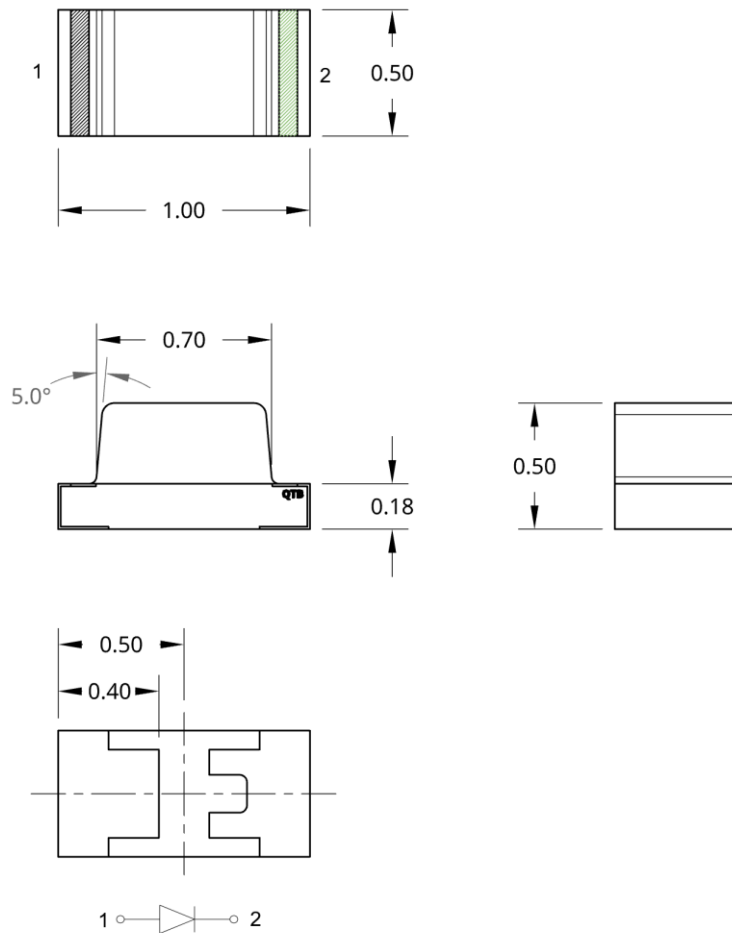
- Status indication
- Back lighting application

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-O-2897	Orange	20	2.0	2.5	600	605	610	610	200	390

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	75	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=20mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

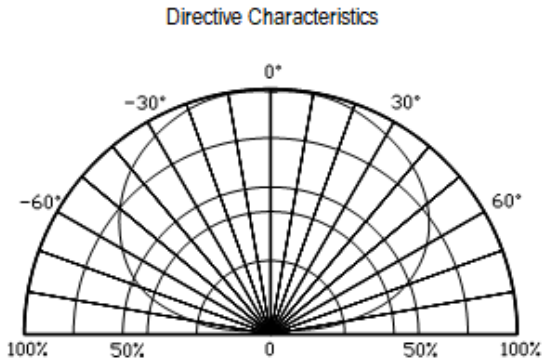
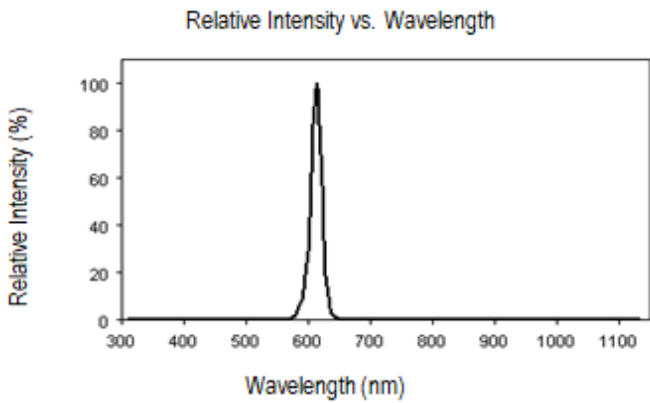
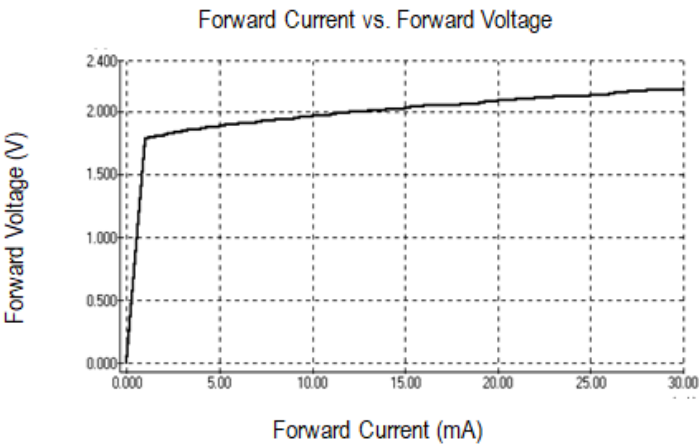
Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
M	200	250	mcd
N	250	320	
O	320	400	
P	400	500	
Q	500	630	

Dominant Wavelength λ_D @ I_F=20mA

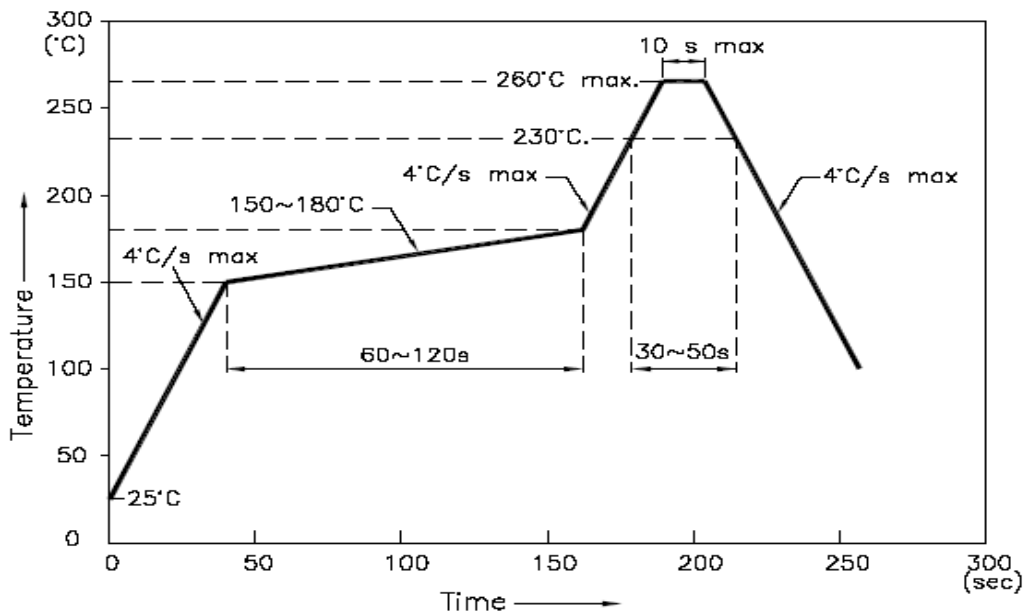
Bin	Min.	Max.	Unit
p	600	605	nm
q	605	610	

Characteristic Curves

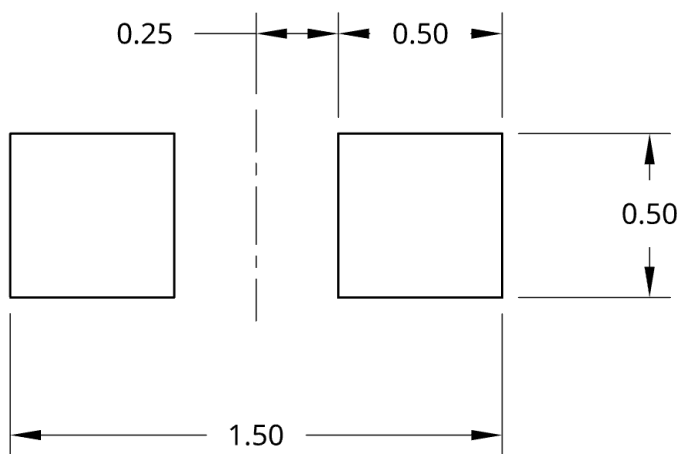


Solder Profile & Footprint

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



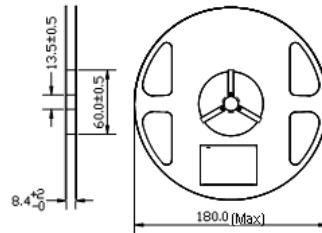
Recommended Pad Layout



Units: mm

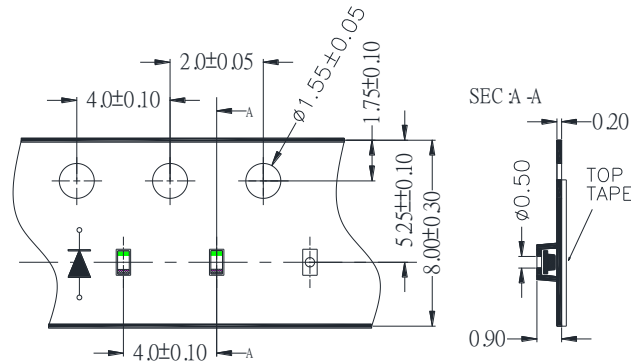
Packing

Reel Dimension:



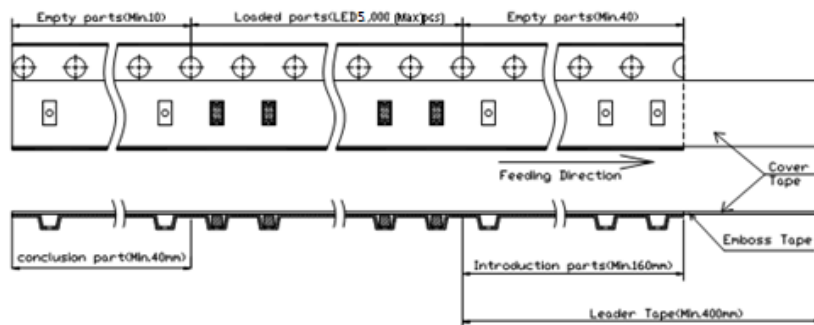
Unit: mm

Tape Dimension:

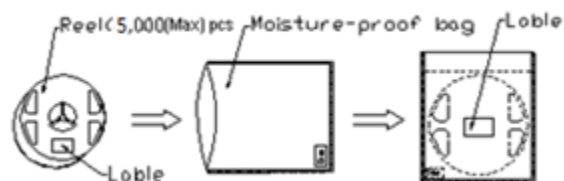


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Labeling



QT-Brightek





Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

WI: _____

Date: _____

Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP595-O-2897	Iv=390mcd typ. @ If=20mA / Color=600 to 610nm	5,000 units



Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-O-2897	V1.0	04/11/2025
Drawing redrafted for clarity and documentation consistency; no changes to form, fit, or function.	V1.1	02/13/2026



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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.