

QT-Brightek Chip LED Series

SMD 0402 Yellow LED

Part No.: QBLP595-Y5-2897

5: 5mA

2897: High Brightness Version



Table of Contents:

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

Introduction

Feature:

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

Application:

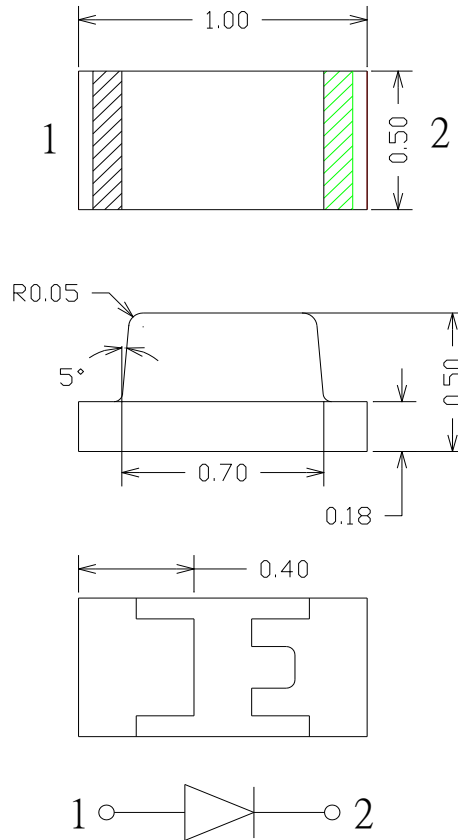
- Status indication
- Back lighting application

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-Y5-2897	Yellow	5	1.9	2.3	585	590	595	594	50	95

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°C)**
AllnGaP	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

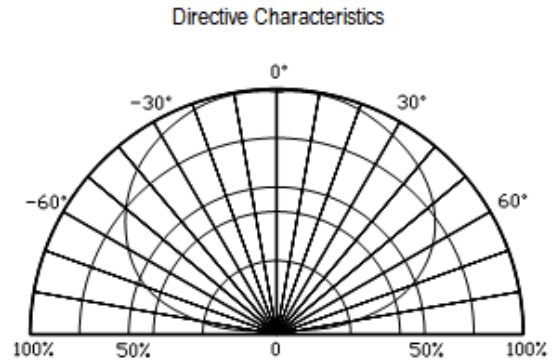
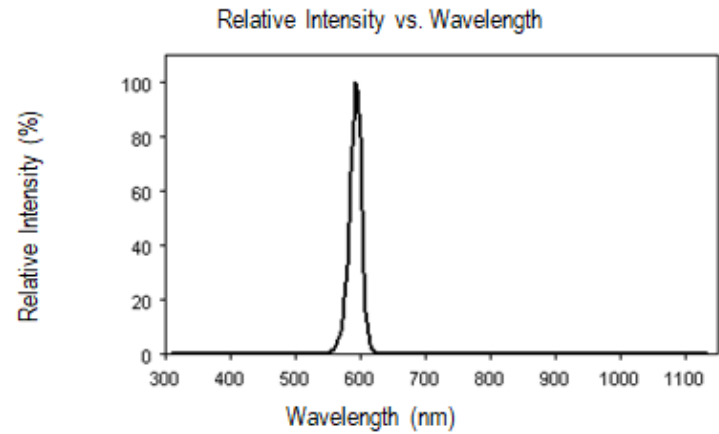
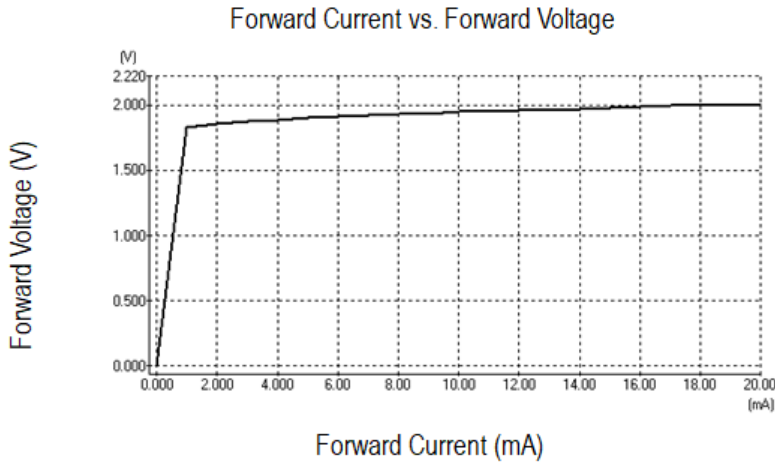
Luminous Intensity I_V @ I_F=5mA

Bin	Min.	Max.	Unit
G	50	63	mcd
H	63	80	
I	80	100	
J	100	125	
K	125	160	

Dominant Wavelength λ_D @ I_F=5mA

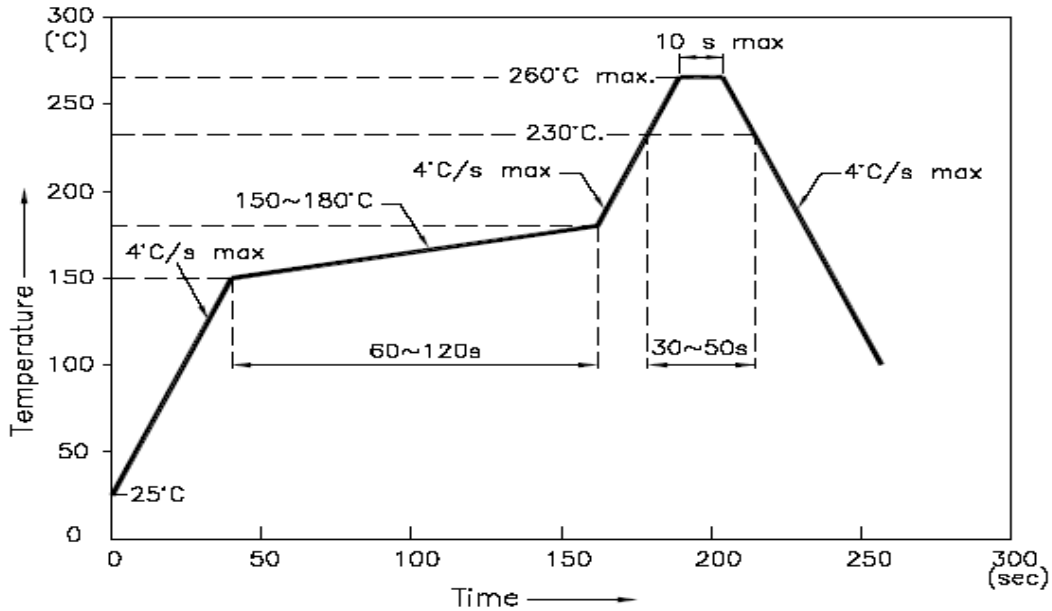
Bin	Min.	Max.	Unit
m	585	590	nm
n	590	595	

Characteristic Curves

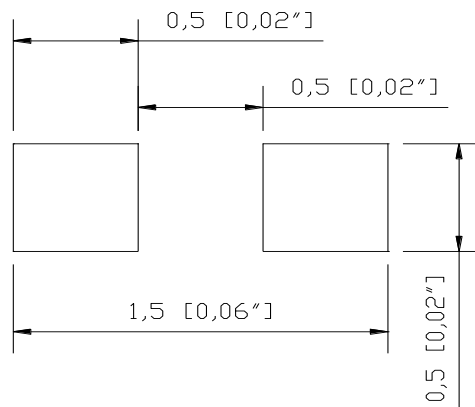


Solder Profile & Footprint

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



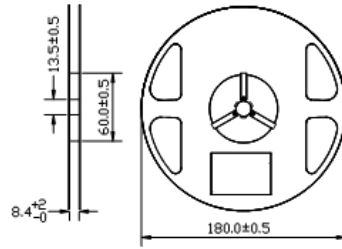
Recommended Pad Layout



Units: mm

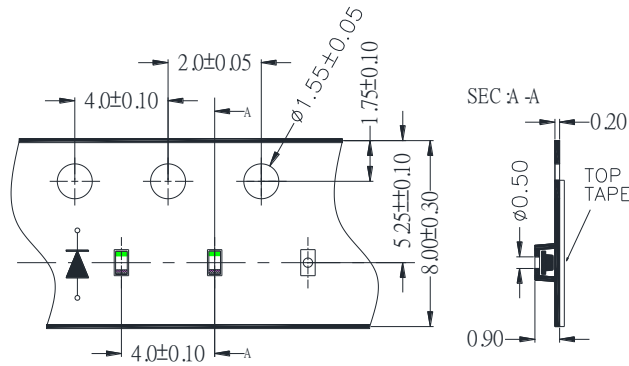
Packing

Reel Dimension:



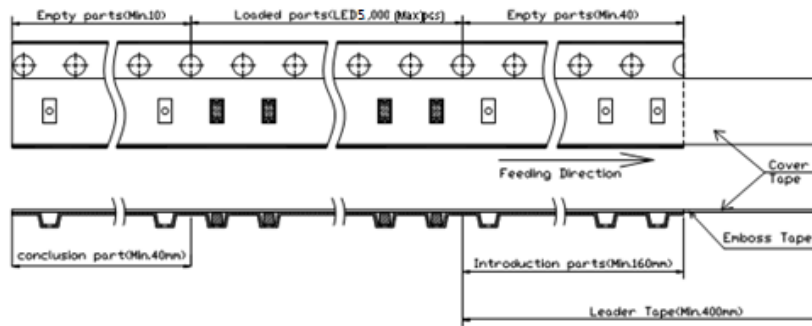
Unit: mm

Tape Dimension:

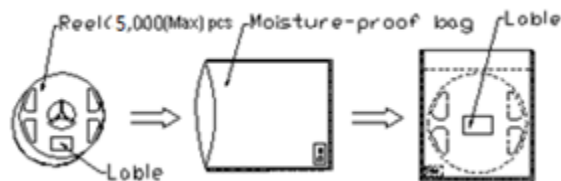


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Labeling



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-Y5-2897	Iv=95mcd typ. @ I _F =5mA / Color=585 to 590nm	5,000 units



Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-Y5-2897	V1.0	08/04/2022
Add peak wavelength	V1.1	03/05/2025

Disclaimer

QT-BRIGHTTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTTEK 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-BRIGHTTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTTEK. 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.