

QT-Brightek Chip LED Series

0402 SMD Chip LED

Part No.: QBLP595-R-2897

2897: High Brightness Version

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	Version# 1.2	

Introduction

Feature:

- Water clear lens
- Package in tape and reel
- Compact 0402 package
- AllnGaP technology
- Viewing angle: 120 deg typ.

Description:

These compact 0402 LEDs have a height profile of 0.5mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

Application:

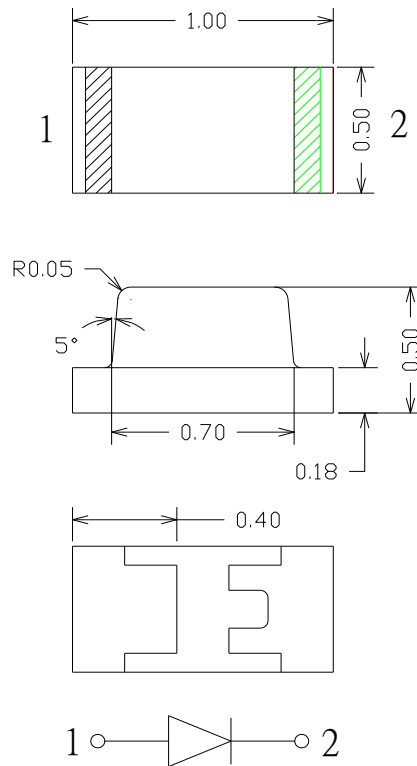
- Status indication
- Back lighting application

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)			I _V (mcd)		
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
QBLP595-R-2897	Red	20	2.1	2.5	615	620	630	250	330	800

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

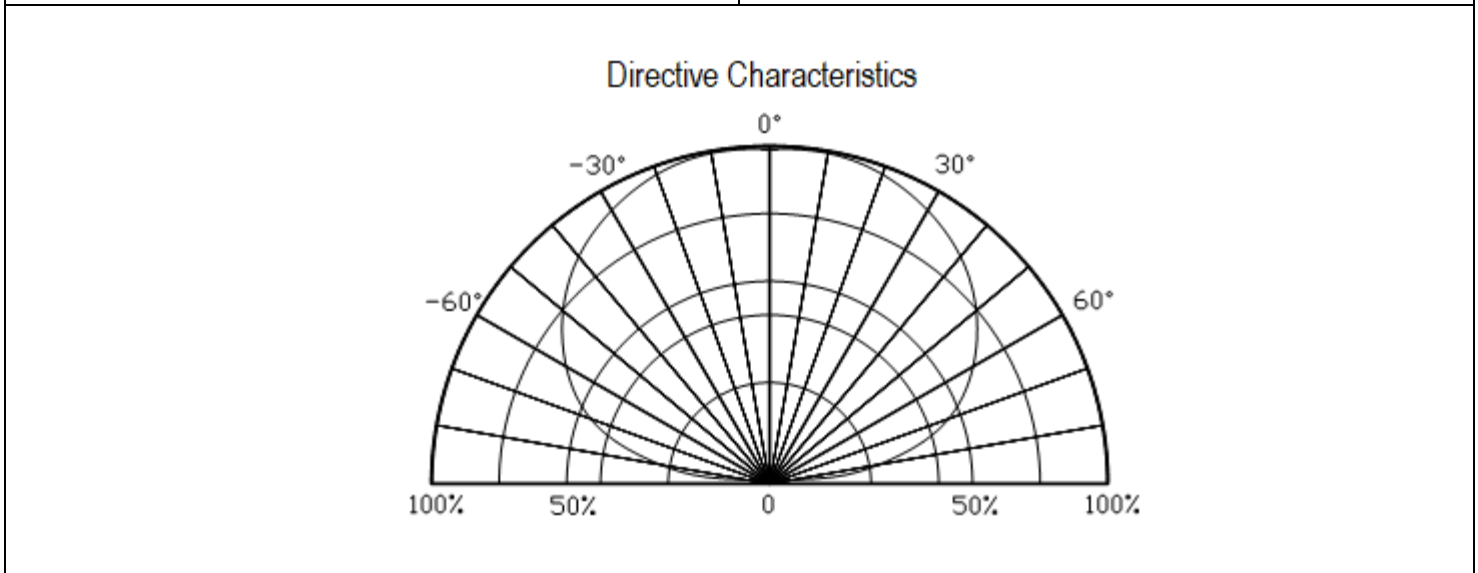
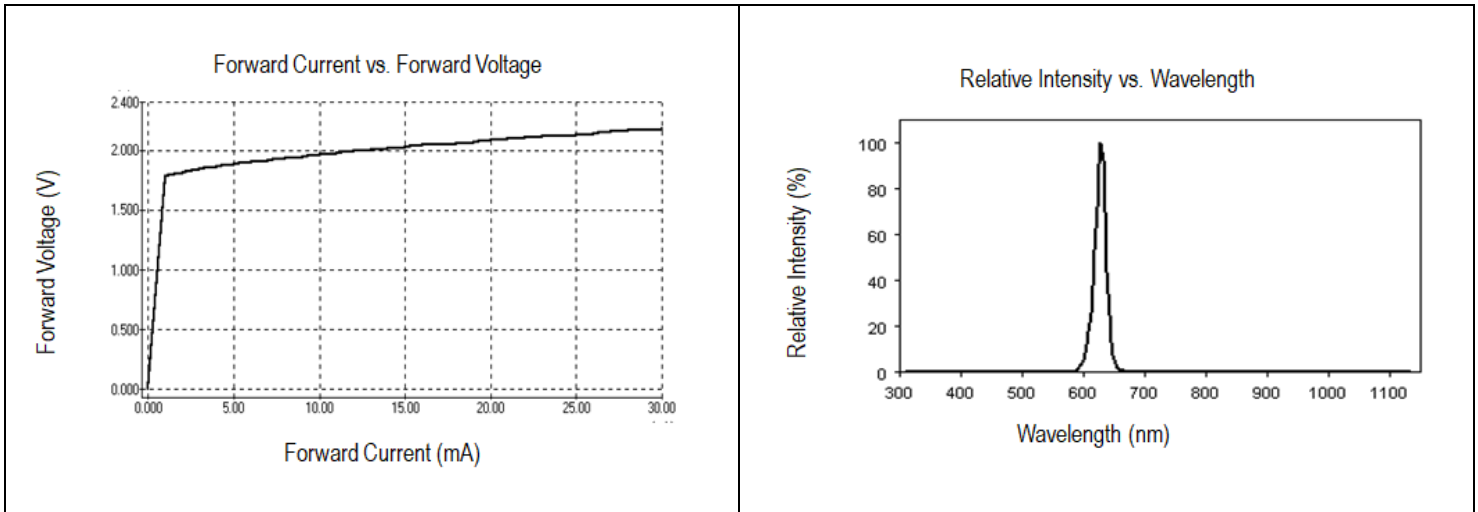
Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
N	250	320	mcd
O	320	400	
P	400	500	
Q	500	630	
R	630	800	

Dominant Wavelength λ_D @ I_F=20mA

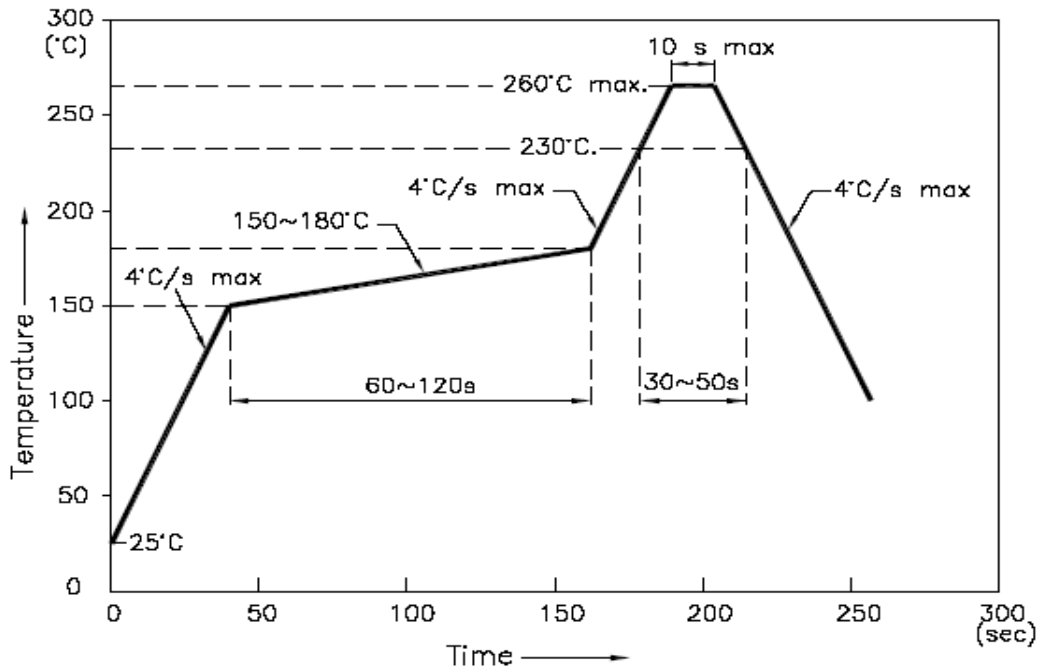
Bin	Min.	Max.	Unit
s	615	620	nm
t	620	625	
u	625	630	

Characteristic Curves

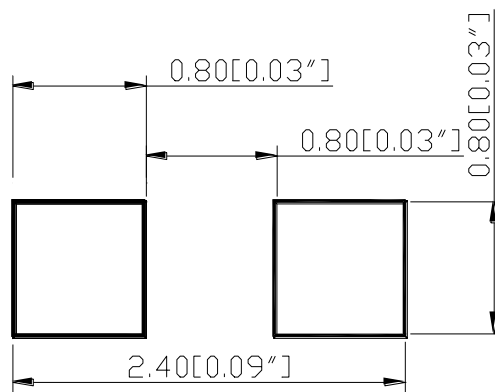


Solder Profile & Footprint

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



Recommended Pad Layout

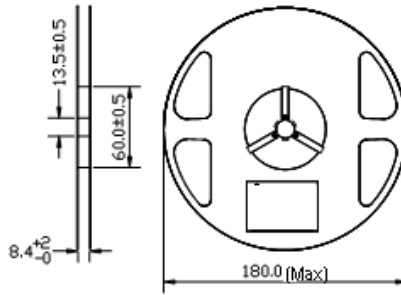


Units: mm

Tolerance: ± 0.1mm

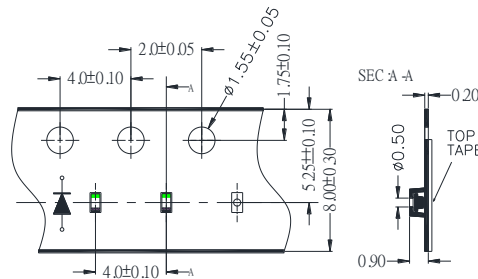
Packing

Reel Dimension:



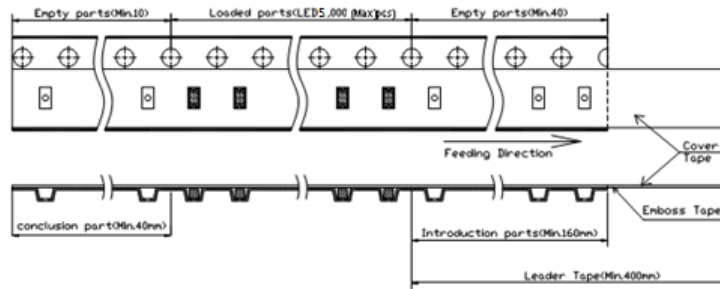
(Unit: mm)

Tape Dimension:

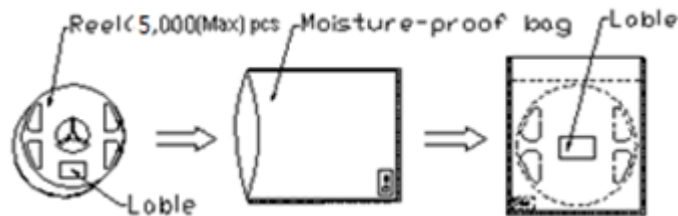


(Unit: mm)

Arrangement of Tape:



Packaging Specifications:



Labeling

Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

WI: _____

Date: _____

Made in China**Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP595-R-2897	QBLP595-R-2897	Iv=330mcd typ. $\lambda_D=615\text{nm}$ to 630nm	5,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-R (High Bright)	V1.0	06/10/2016
Amend part number to QBLP595-R-2897	V1.1	08/19/2019
Update typical mcd value	V1.2	12/17/2019

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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.