

# **QT-Brightek Chip LED Series**

## **SMD 0603 LED**

**Part No.: QBLP601-Y-2897**

**2897: High Brightness Version**

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## Introduction

### Feature:

- Water clear lens
- Package in tape and reel
- Ultra bright 0603 LED package
- AllnGaP technology

### Description:

These ultra bright 0603 LEDs have a height profile of 0.60mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

### Application:

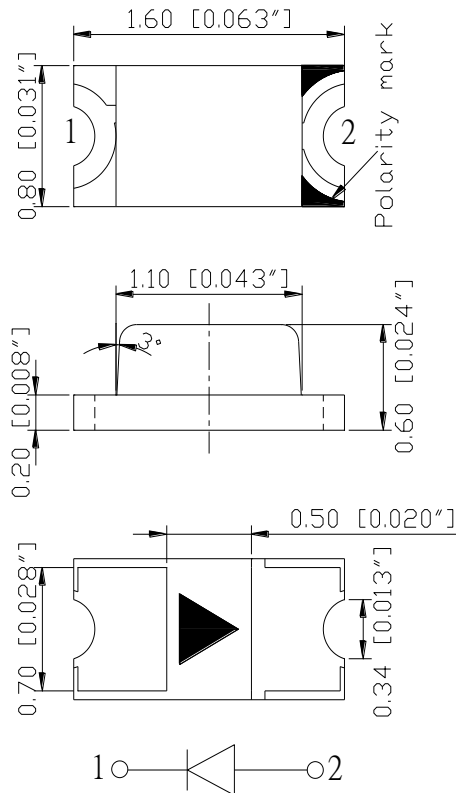
- Status indication
- Back lighting application

### Certification & Compliance:

- ISO9001
- RoHS Compliant



## Dimension:



Units: mm / tolerance = +/-0.1mm

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

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		λ <sub>D</sub> (nm)			λ <sub>P</sub> (nm)	I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP601-Y-2897	Yellow	20	2.0	2.5	585	590	595	592	250	380

**Absolute Maximum Rating**

Material	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SO L</sub> (°C)**
AllInGaP	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<sub>F</sub> @ I<sub>F</sub>=20 mA**

Bin	Min.	Max.	Unit
b	1.6	1.9	V
c	1.9	2.2	
d	2.2	2.5	

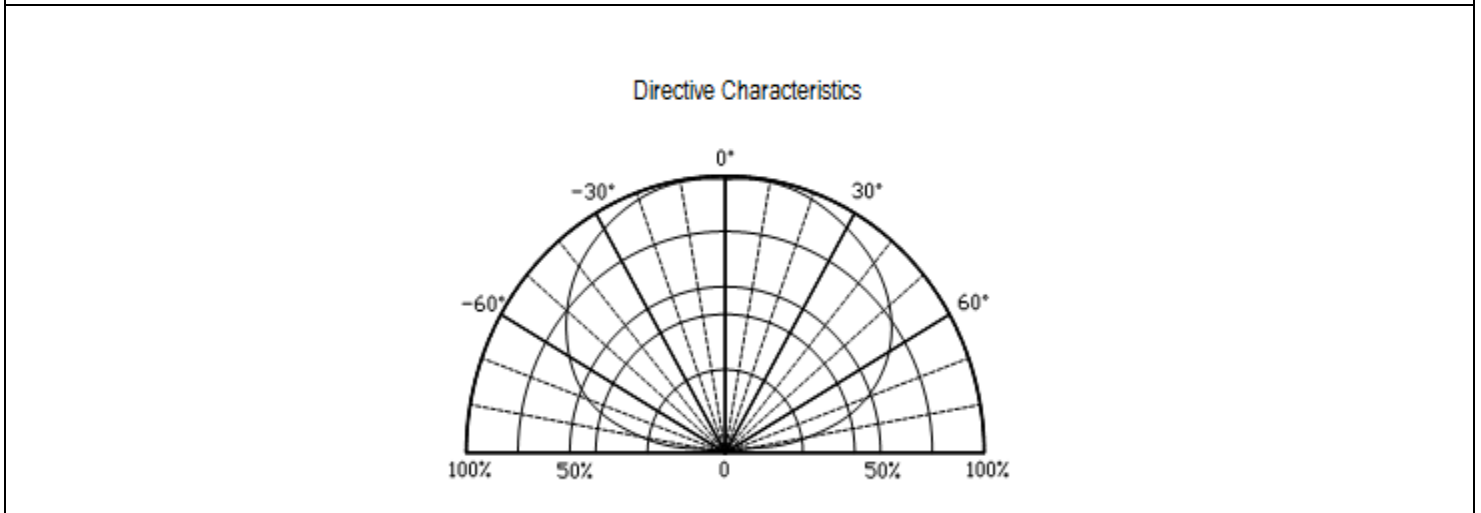
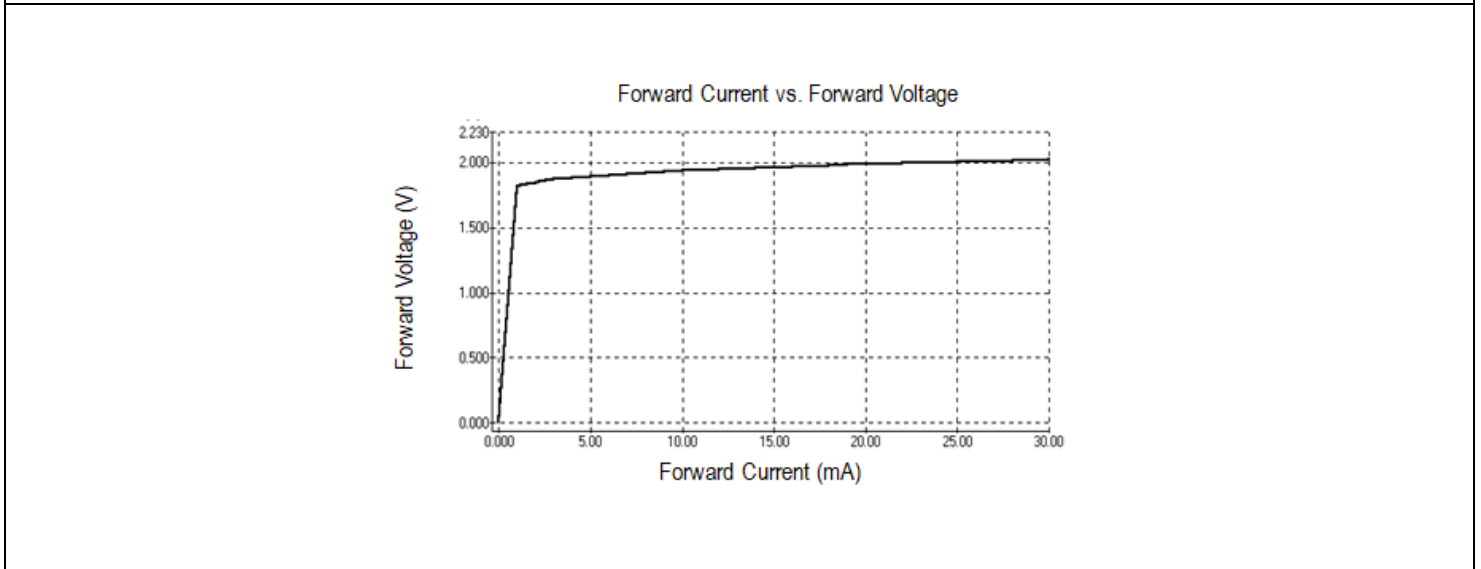
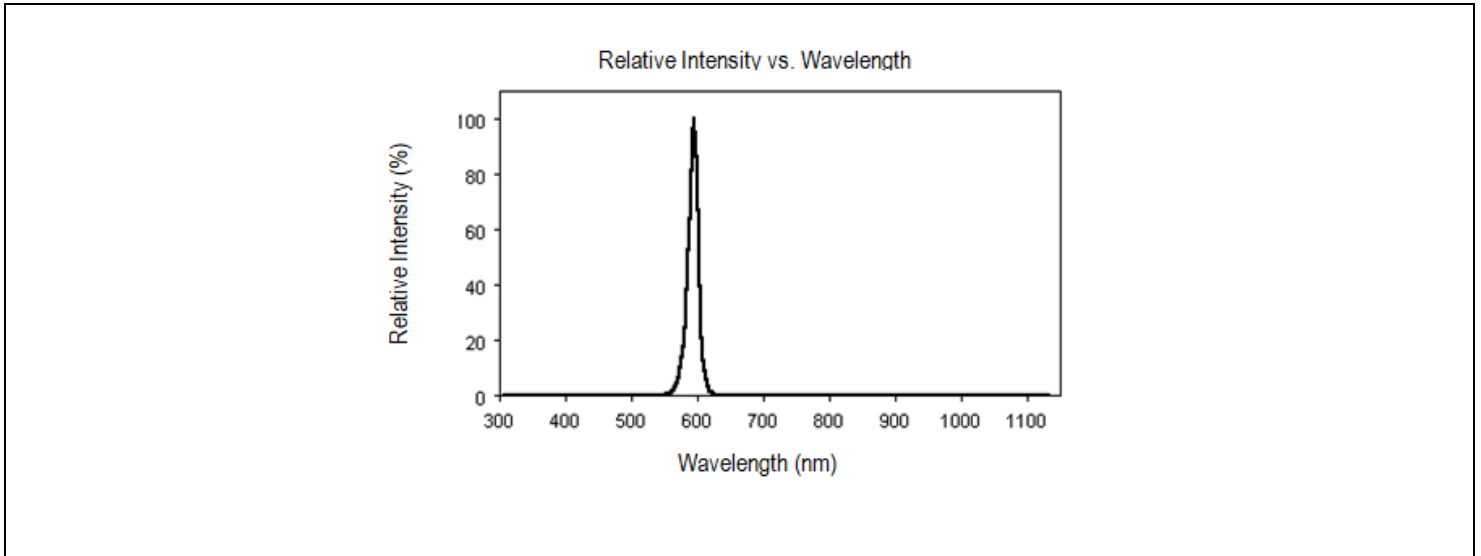
**Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=20mA**

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

**Dominant Wavelength λ<sub>D</sub> @ I<sub>F</sub>=20mA**

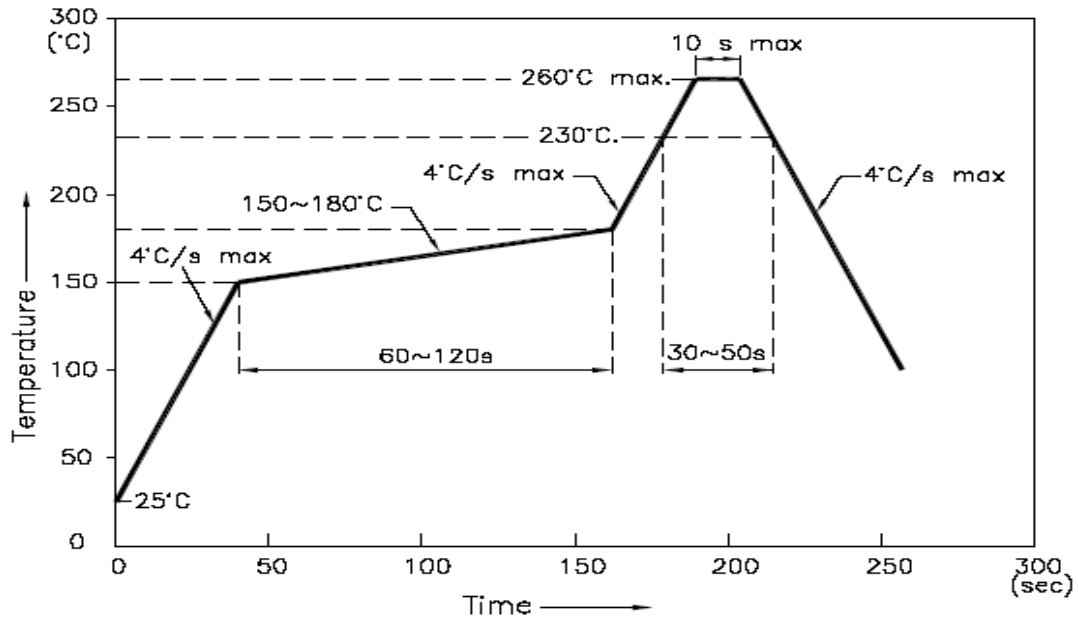
Bin	Min.	Max.	Unit
m	585	590	nm
n	590	595	

**Characteristic Curves**

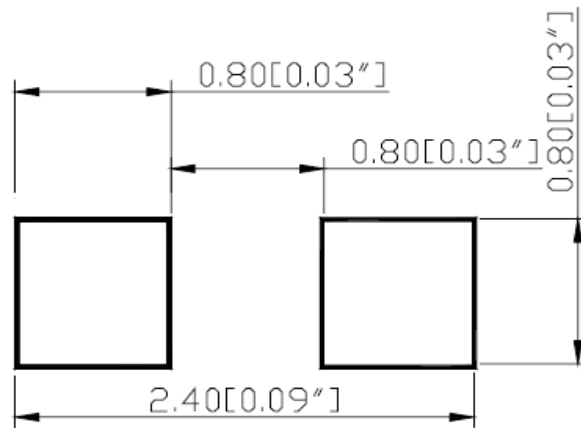


## Solder Profile & Footprint

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



### RECOMMEND PAD LAYOUT



Units: mm



**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
QBLP601-Y-2897	Iv=380mcd typ. @ I <sub>F</sub> =20mA / λ <sub>D</sub> =585nm to 595nm	4,000 units



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## Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-Y High Bright	V1.0	07/29/2011
Update format, drawing and spec	V2.0	01/19/2015
Update p/n from High Bright to 2897	V2.1	03/23/2020

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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.