

# **QT-Brightek Chip LED Series**

## **SMD 0603 LED**

**Part No.: QBLP601-IG5-2897**

**5: 5mA**

**2897: High Brightness Version**

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## Introduction

### Feature:

- Water clear lens
- Package in tape and reel
- Ultra bright 0603 LED package
- InGaN technology
- Beam angle: 140 degree typ.
- Height profile: 0.6mm

### Application:

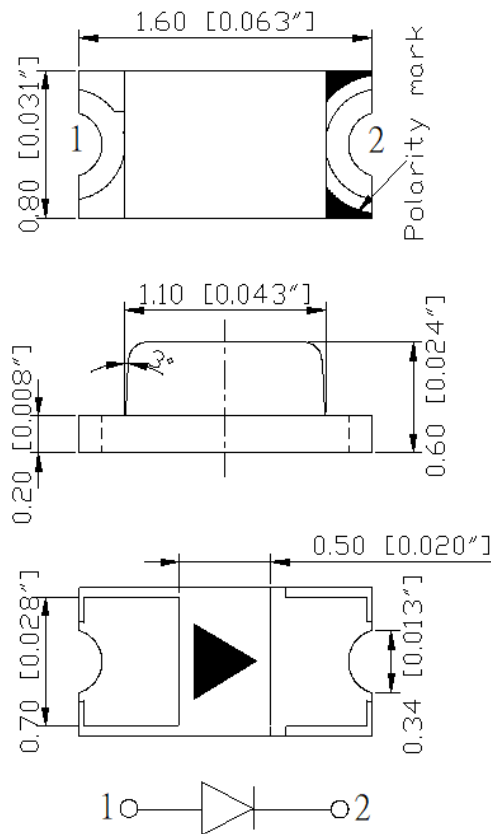
- Status indication
- Back lighting application

### 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-IG5-2897	Green	5	2.4	3.1	525	530	535	525	200	350

## 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>SOL</sub> (°C)**
InGaN	93	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<sub>F</sub> @ I<sub>F</sub>=5mA

Bin	Min.	Max.	Unit
d	2.2	2.5	V
e	2.5	2.8	
f	2.8	3.1	

## Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=5mA

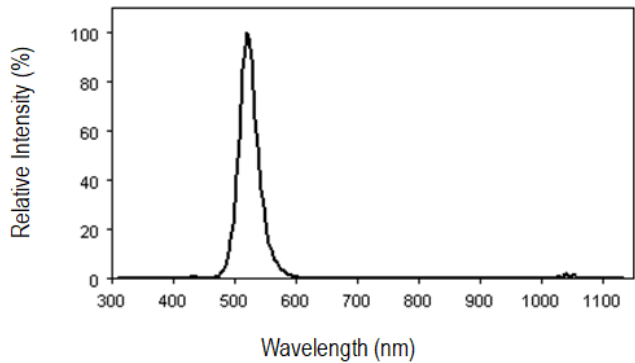
Bin	Min.	Max.	Unit
M	200	250	mcd
N	250	320	
O	320	400	
P	400	500	
Q	500	630	

## Dominant Wavelength λ<sub>D</sub> @ I<sub>F</sub>=5mA

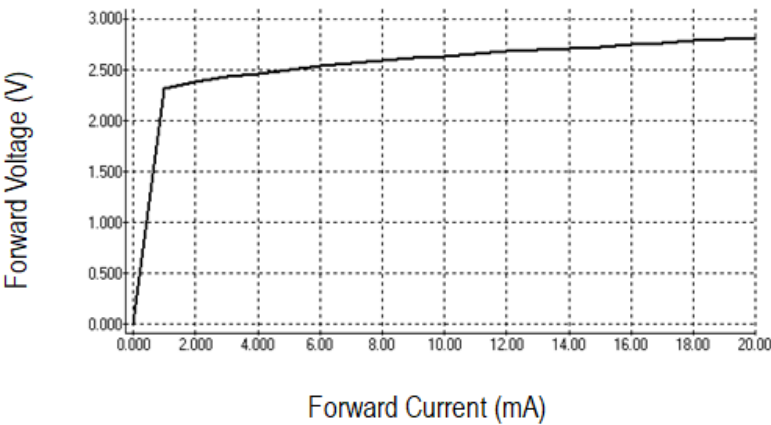
Bin	Min.	Max.	Unit
W	525	527.5	nm
X	527.5	530	
Y	530	532.5	
Z	532.5	535	

Characteristic Curves

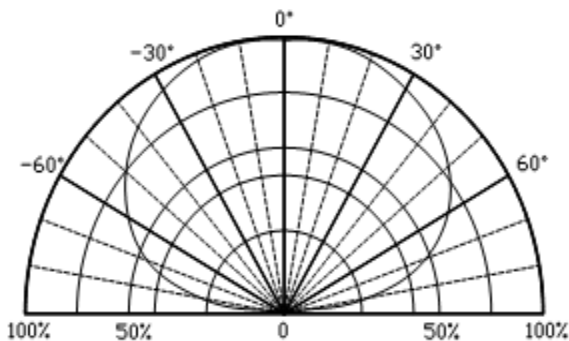
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

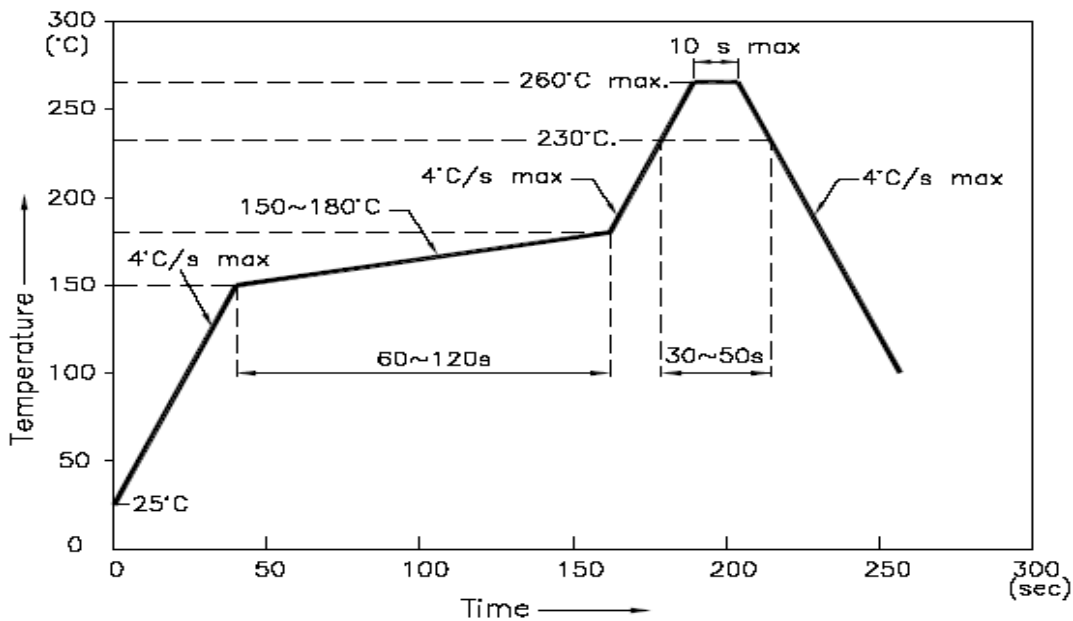


Directive Characteristics

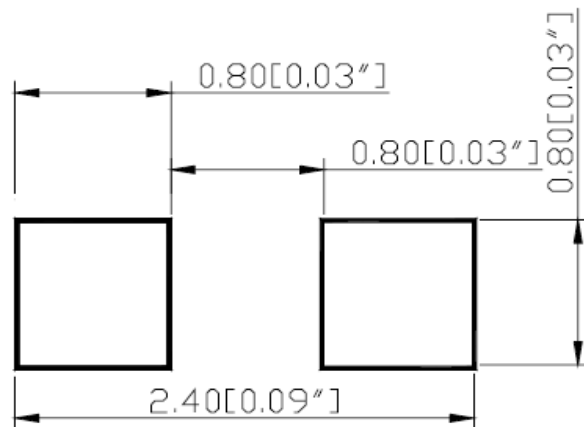


## Solder Profile & Footprint

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



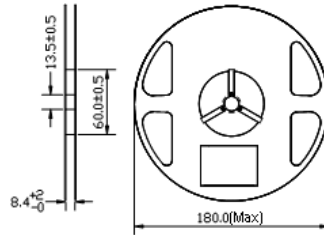
### RECOMMEND PAD LAYOUT



Units: mm

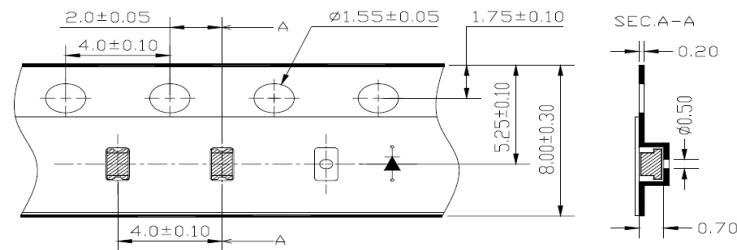
## Packing

### Reel Dimension:



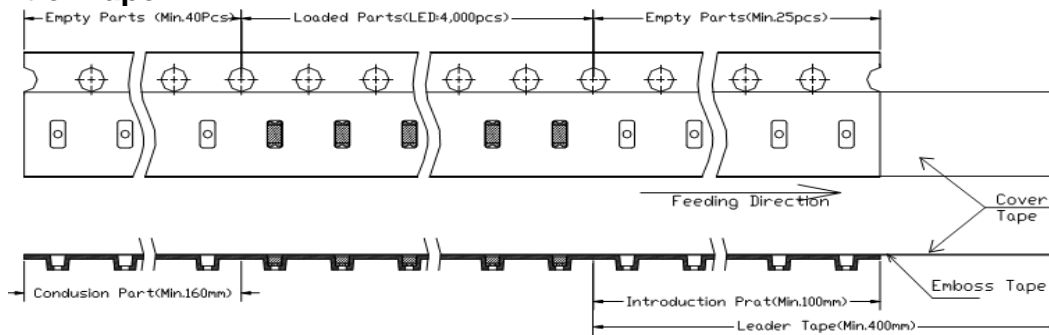
Unit: mm

### Tape Dimension:

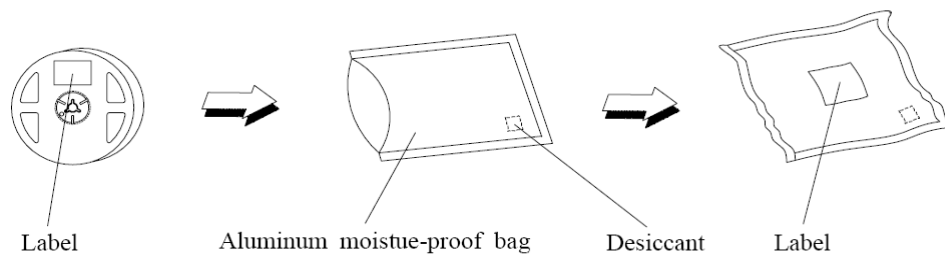


Unit: mm

### Arrangement of Tape:



### Packaging Specifications:





Date: \_\_\_\_\_

**Made in China**

## Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP601-IG5-2897	Iv=350mcd typ. @ I <sub>F</sub> =5mA / λ <sub>D</sub> =525nm to 535nm	4,000 units





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## Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-IG5-2897	V1.0	10/27/2023

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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.