

# **QT-Brightek PLCC Series**

## **2014 PLCC2 LED**

**Part No.: QBLP675-IB-2897**

**2897: High Brightness Version**

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	Version# 1.0	

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## Introduction

### Feature:

- Package in tape and reel
- Water clear lens
- Ultra bright reflector type 2014 PLCC2 LED
- InGaN technology
- Viewing angle: 120 deg. Typ.

### Description:

This ultra-bright 2014 LED has a height profile of 1.30mm. Combination of high brightness output and robust package, this LED is ideal for back lighting, architecture lighting, and industrial equipment lighting applications.

### Application:

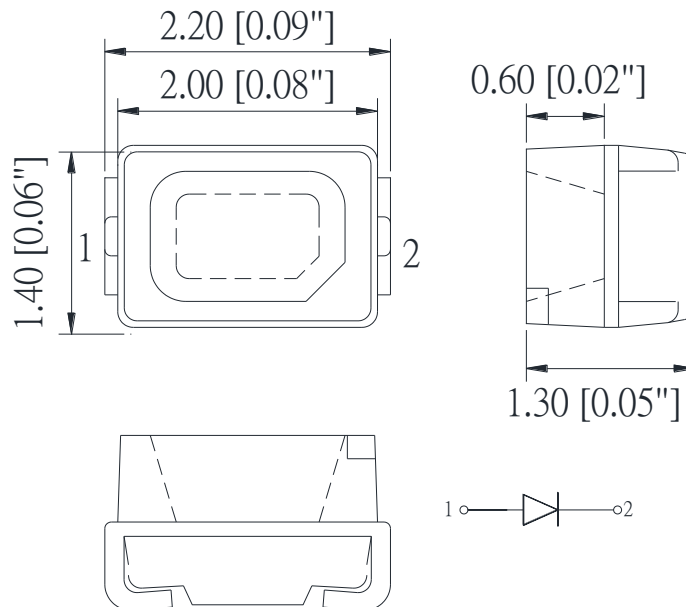
- Status indication
- Industrial equipment backlighting
- Architecture lighting

### Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



### Dimension:



Units: mm / tolerance = +/-0.2mm

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

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		λ <sub>D</sub> (nm)			I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP675-IB-2897	Blue	20	2.9	3.4	465	467	475	160	250

### 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	102	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>=20mA

Bin	Min.	Max.	Unit
e	2.5	2.8	V
f	2.8	3.1	
g	3.1	3.4	

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

Bin	Min.	Max.	Unit
G	465	467.5	nm
H	467.5	470	
I	470	472.5	
J	472.5	475	

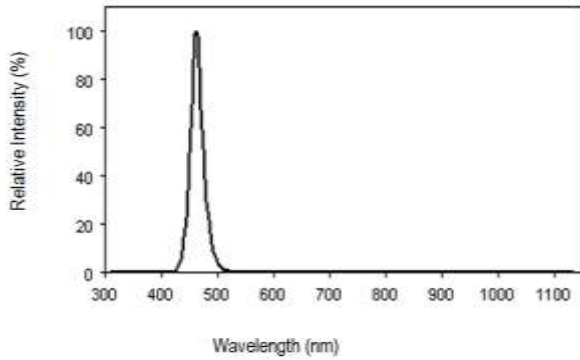
### Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=20mA

Bin	Min.	Max.	Unit
L	160	200	mcd
M	200	250	
N	250	320	

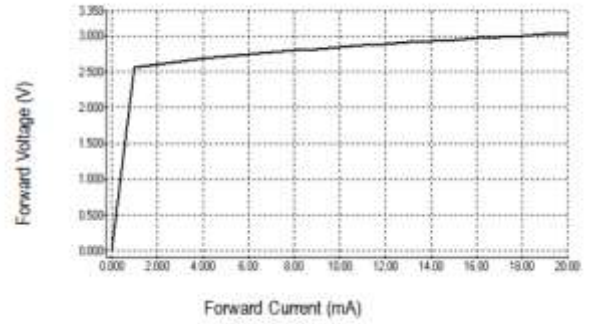
## Characteristic Curves

InGaN

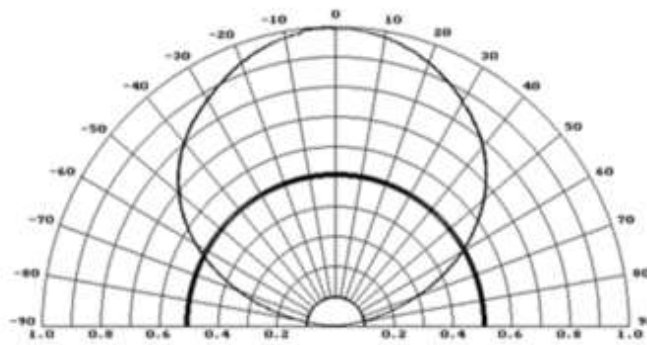
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

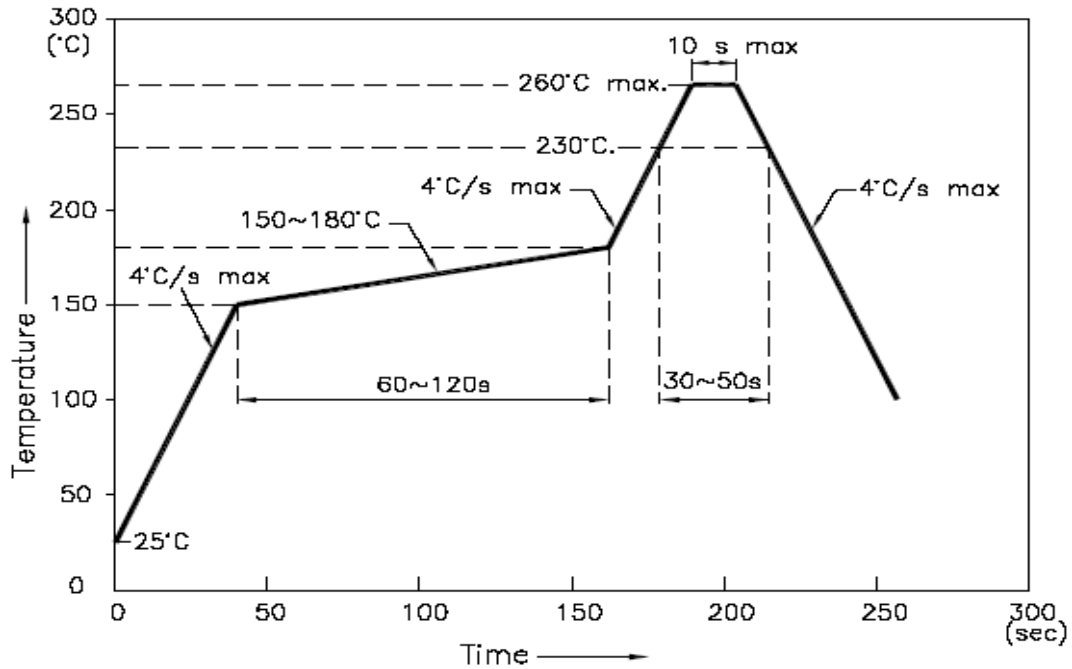


Directive Characteristics

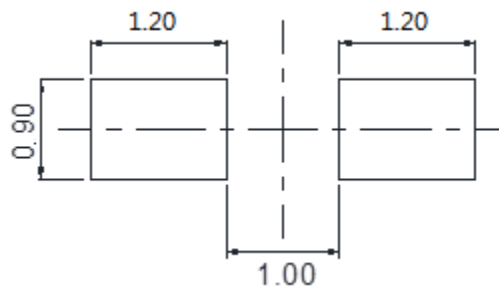


## Solder Profile & Footprint

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



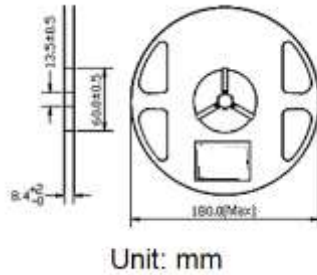
### Recommended Pad Layout



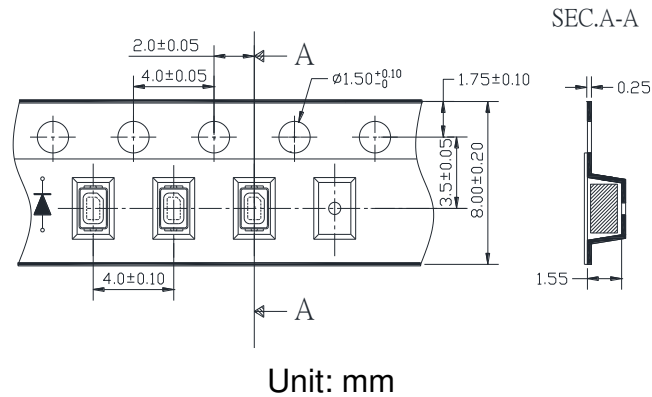
Units: mm

## Packing

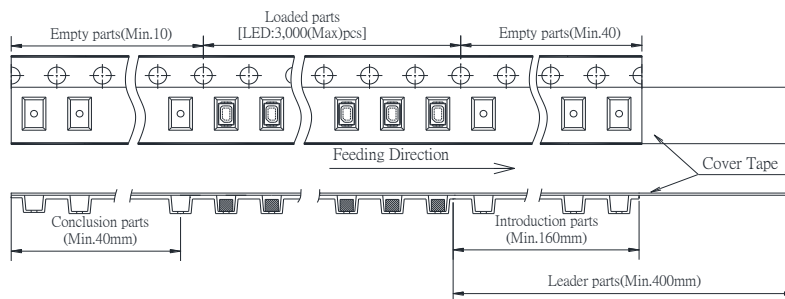
Reel Dimension:



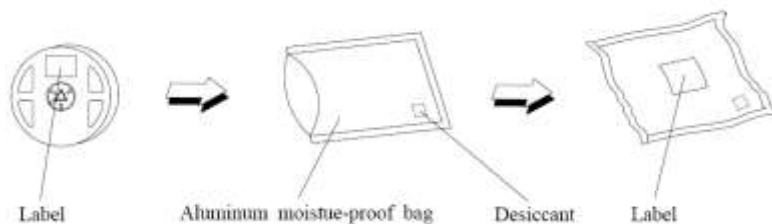
Tape Dimension:



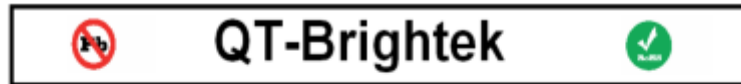
Arrangement of Tape:



Packaging Specification:



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**Labeling**

Part No: \_\_\_\_\_

Customer P/N: \_\_\_\_\_

Item: \_\_\_\_\_

Q'ty: \_\_\_\_\_

Vf: \_\_\_\_\_

Iv: \_\_\_\_\_

Wl: \_\_\_\_\_

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

**Made in China****Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP675-IB-2897	QBLP675-IB-2897	Iv=250mcd typ. @ 20mA / Color=465nm to 475nm	3,000 units



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## Revision History

Description:	Revision #	Revision Date
New Release of QBLP675-IB-2897	V1.0	07/17/2019



## Disclaimer

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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.