

QT-Brightek PLCC Series

2014 PLCC2 LED

Part No.: QBLP675-IB-2897

2897: High Brightness Version

Product: QBLP675-IB-2897	Date: July 17 th , 2019	Page 1 of 9
	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:

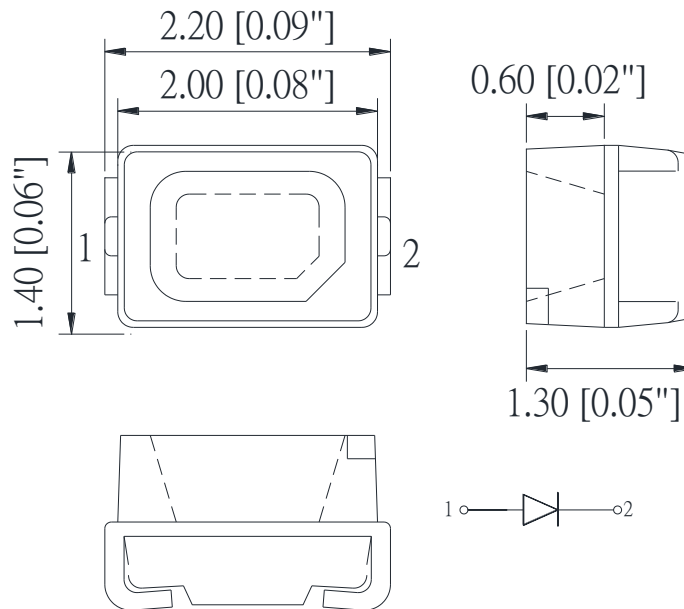
- Status indication
- Industrial equipment backlighting
- Architecture lighting

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			I _V (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 _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°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_F @ I_F=20mA

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

Dominant Wavelength λ_D @ I_F=20mA

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

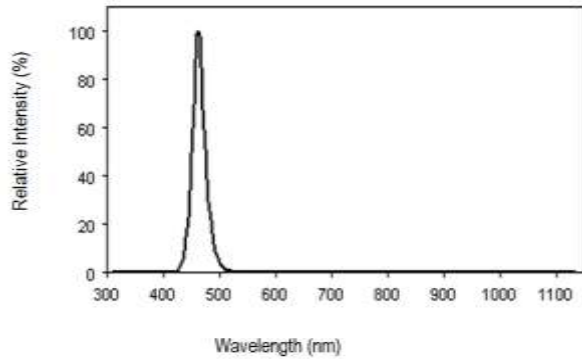
Luminous Intensity I_V @ I_F=20mA

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

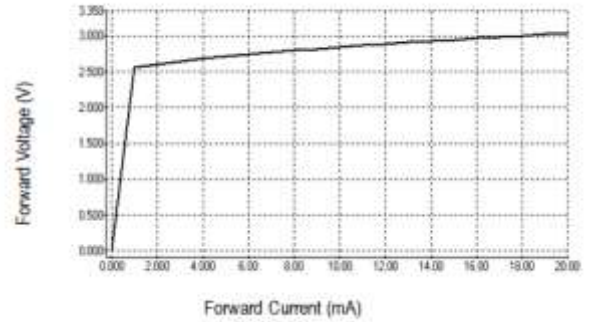
Characteristic Curves

InGaN

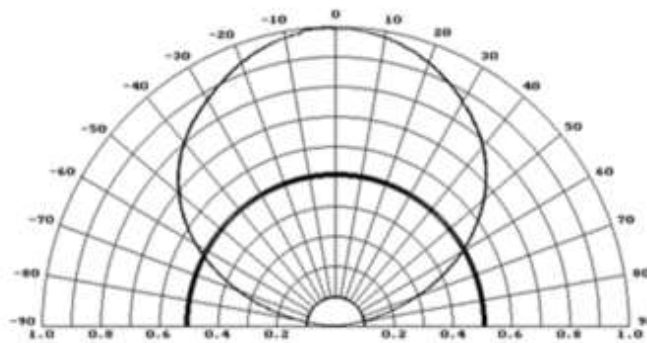
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

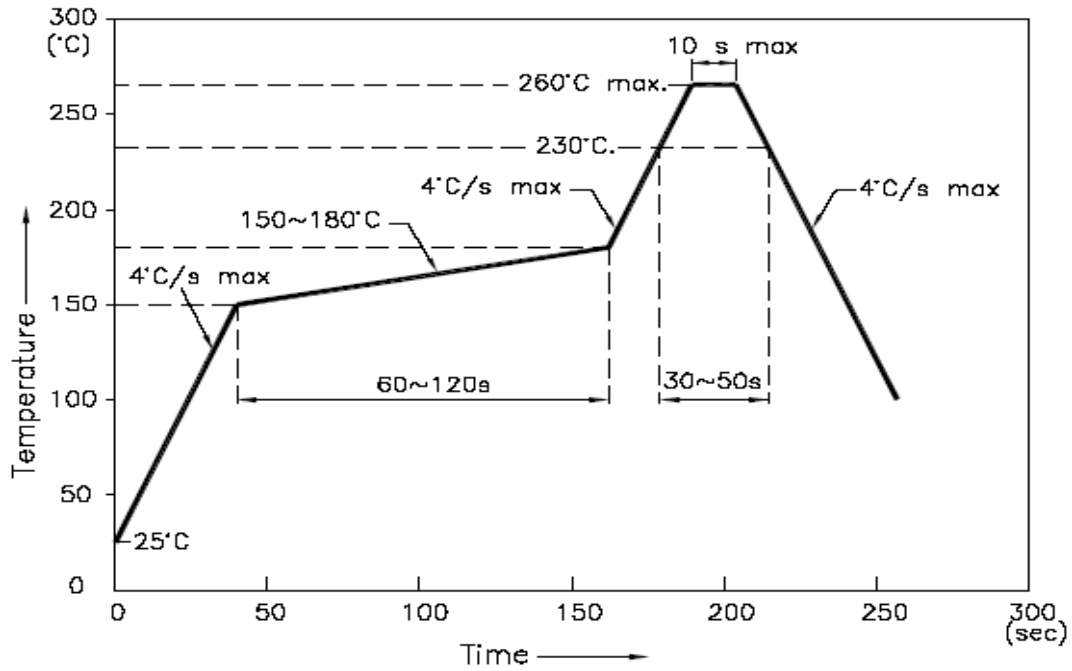


Directive Characteristics

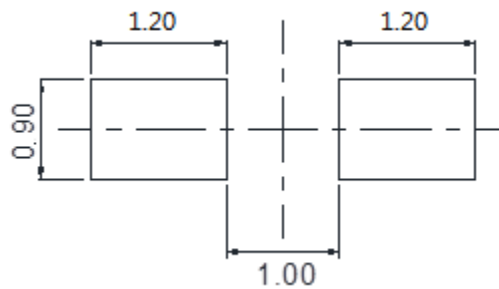


Solder Profile & Footprint

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



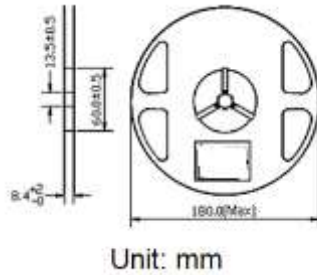
Recommended Pad Layout



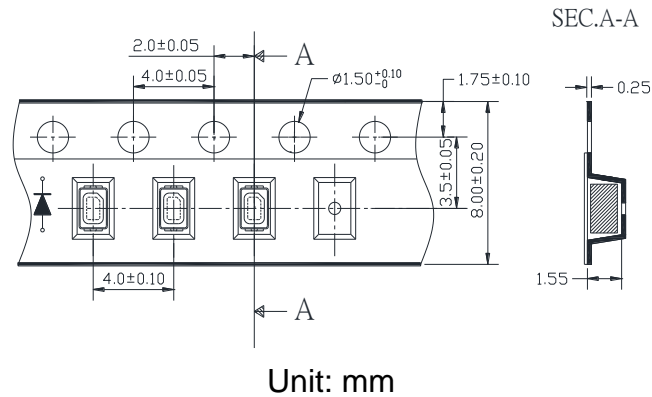
Units: mm

Packing

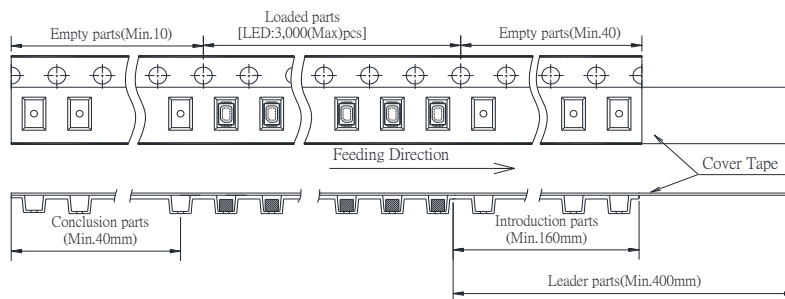
Reel Dimension:



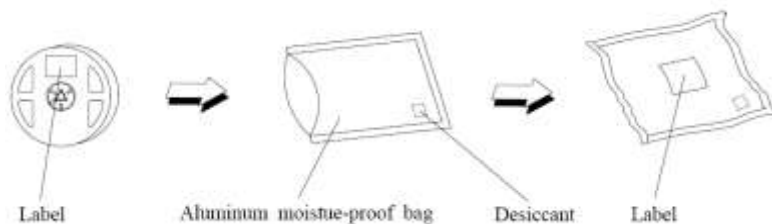
Tape Dimension:

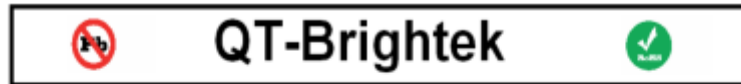


Arrangement of Tape:



Packaging Specification:



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

Revision History

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

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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.