

QT-Brightek PLCC Series

2014 PLCC2 LED

Part No.: QBLP675-IG-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:

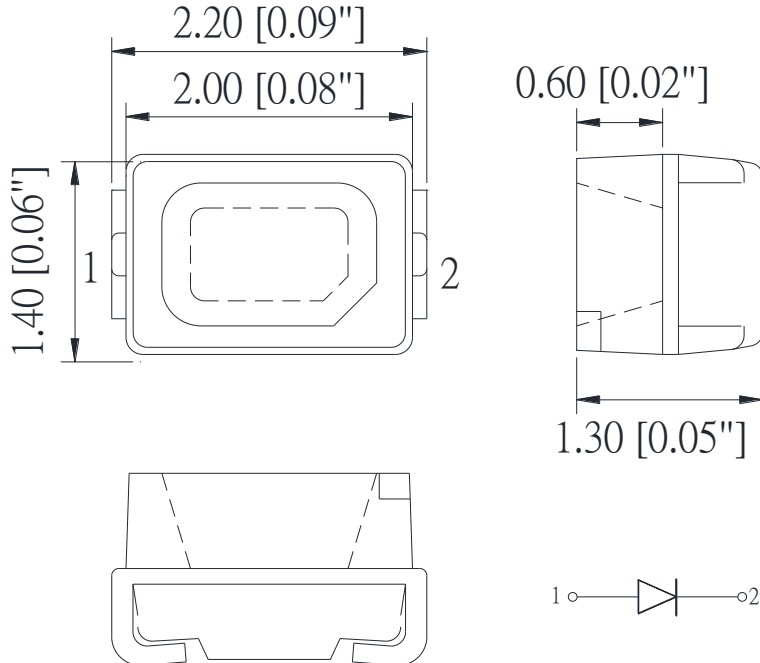
- Status indication
- Industrial equipment backlighting
- Architecture lighting

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

| Product | Color | I _F (mA) | V _F (V) | | λ _D (nm) | | | I _V (mcd) | |
|-----------------|------------|---------------------|--------------------|------|---------------------|------|------|----------------------|------|
| | | | Typ. | Max. | Min. | Typ. | Max. | Min. | Typ. |
| QBLP675-IG-2897 | True Green | 20 | 3.2 | 3.7 | 518 | 524 | 528 | 740 | 1120 |

Absolute Maximum Rating

| Material | P _d (mW) | I _F (mA) | I _{FP} (mA)* | V _R (V) | T _{OP} (°C) | T _{ST} (°C) | T _{SO L} (°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 |
|-----|------|------|------|
| f | 2.8 | 3.1 | V |
| g | 3.1 | 3.4 | |
| h | 3.4 | 3.7 | |

Dominant Wavelength λ_D @ I_F=20mA

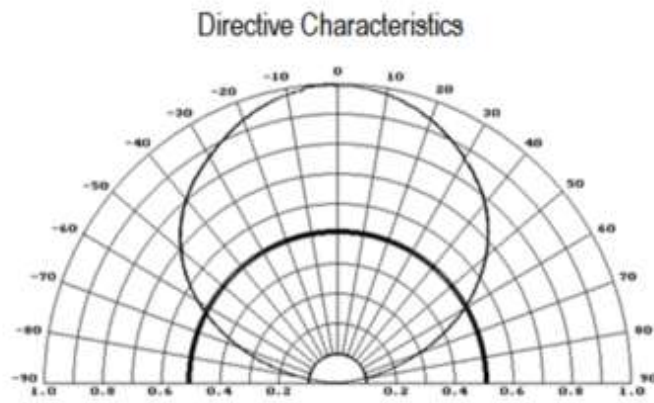
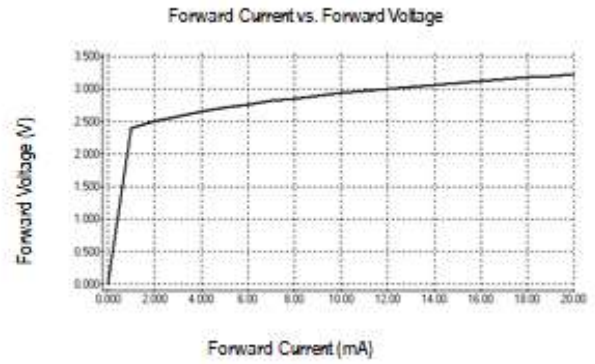
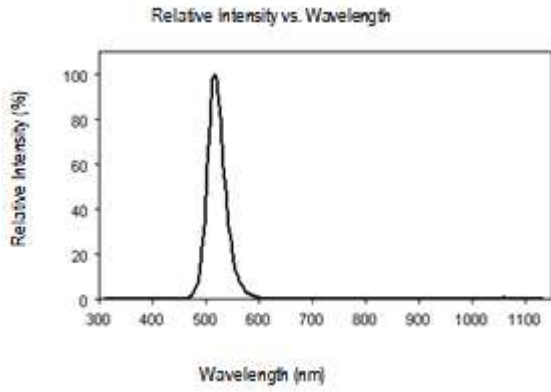
| Bin | Min. | Max. | Unit |
|-----|------|------|------|
| GF | 518 | 523 | nm |
| GG | 523 | 528 | |

Luminous Intensity I_V @ I_F=20mA

| Bin | Min. | Max. | Unit |
|-----|------|------|------|
| AY | 740 | 925 | mcd |
| AZ | 925 | 1160 | |
| BA | 1160 | 1450 | |
| BB | 1450 | 2000 | |

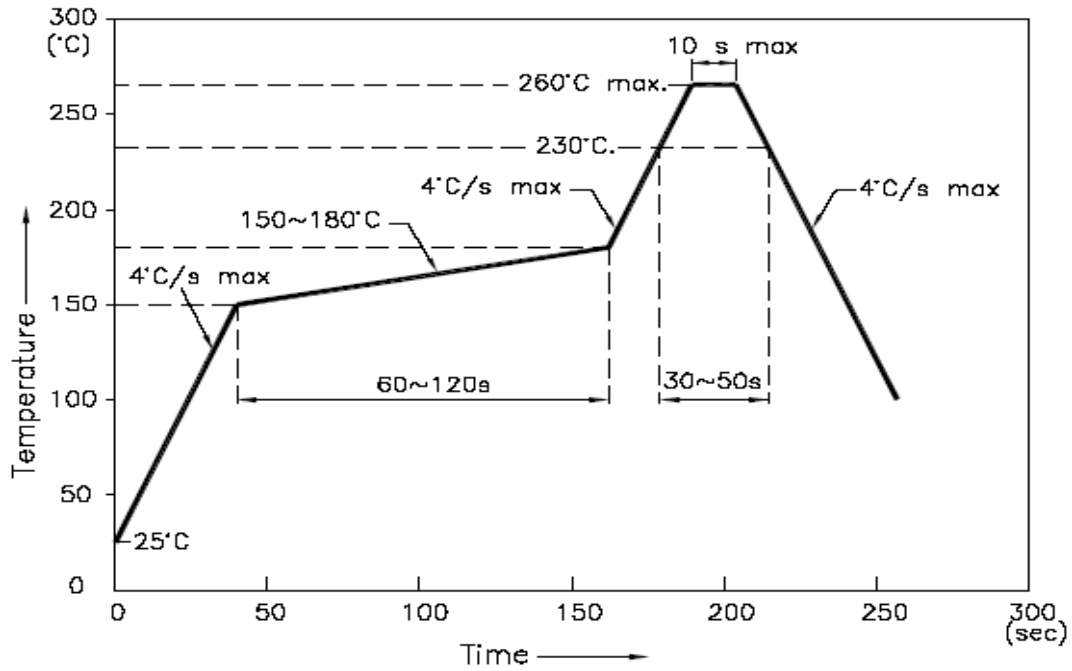
Characteristic Curves

InGaN

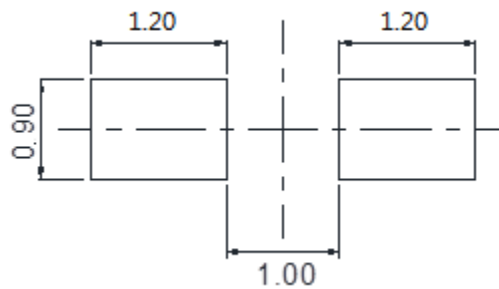


Solder Profile & Footprint

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



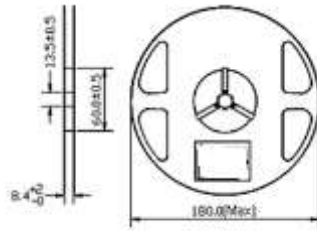
Recommended Pad Layout



Units: mm

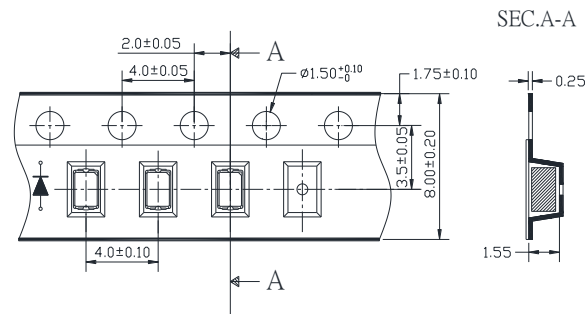
Packing

Reel Dimension:



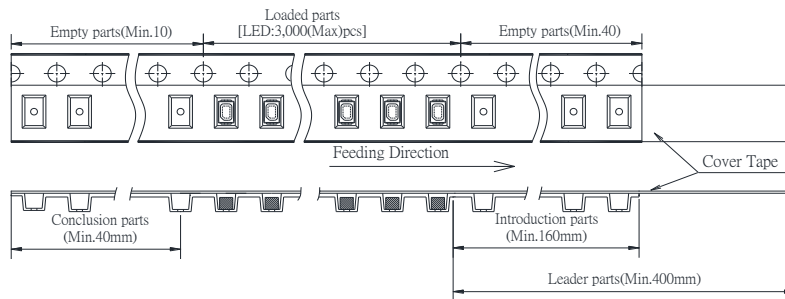
Unit: mm

Tape Dimension:

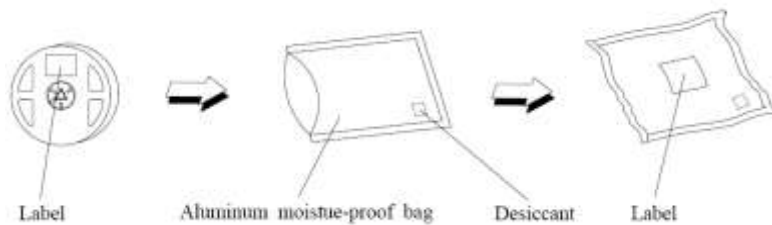


Unit: mm

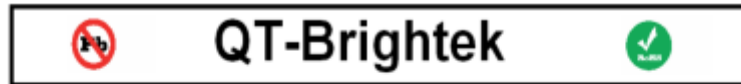
Arrangement of Tape:



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-IG-2897 | QBLP675-IG-2897 | Iv=1120mcd typ. @ 20mA / Color=518nm to 528nm | 3,000 units |

Revision History

| Description: | Revision # | Revision Date |
|--------------------------------|------------|---------------|
| New Release of QBLP675-IG-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.