

**QT-Brightek PLCC Series**

**PLCC4 LED**

**Part No.: QBLP677A-IBD-2897**

**A: Common Anode  
D: 50mA Testing Current  
2897: High Bright**



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## Introduction

### Feature:

- Water Clear lens
- Ultra bright PLCC4 LED
- Common anode
- Viewing Angle: 120° typ.
- MSL 3
- Height profile: 1.85mm

### Application:

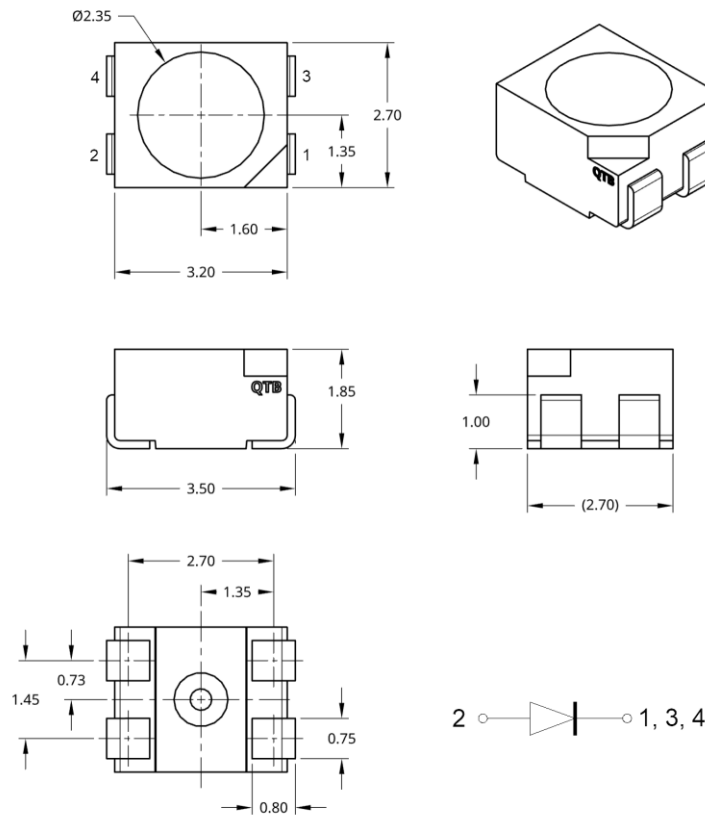
- Warning light
- Emergency light
- Architecture lighting

### Certification & Compliance:

- 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)			λ <sub>P</sub> (nm)	I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP677A-IBD-2897	Blue	50	2.8	3.6	465	470	475	465	850	1680

## Absolute Maximum Rating

Chip 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	340	100	350	5	-40 ~ +85	-40 t~ +90	240

\*Duty 1/10 @ 1KHz

\*\*IR Reflow for no more than 8 sec @ 240 °C

## Forward Voltage V<sub>F</sub> @ I<sub>F</sub>=50mA

Bin	Min.	Max.	Unit
1	2.7	3.0	V
2	3.0	3.3	
3	3.3	3.6	

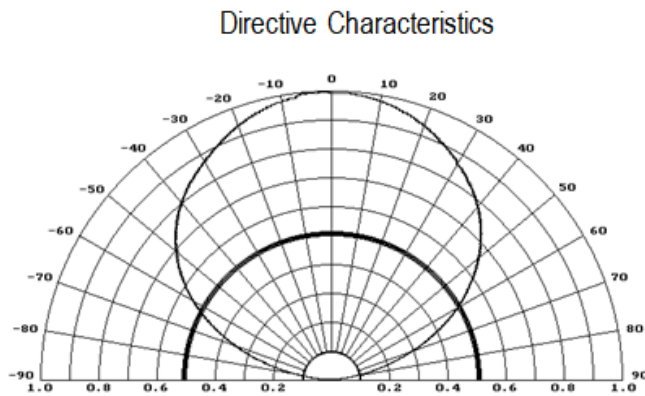
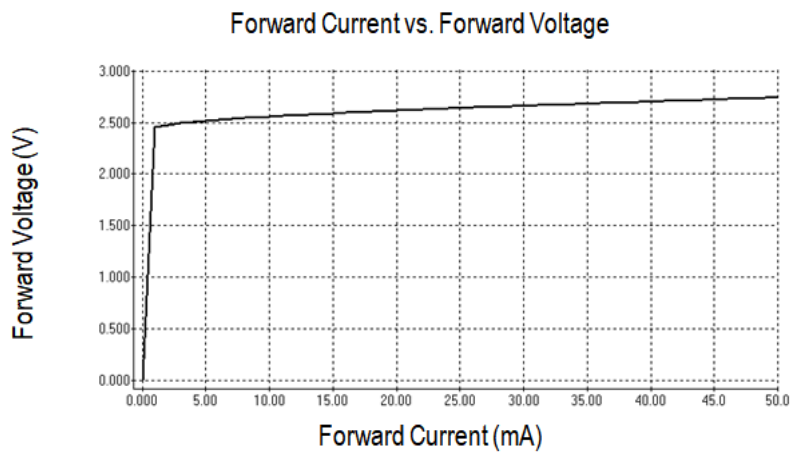
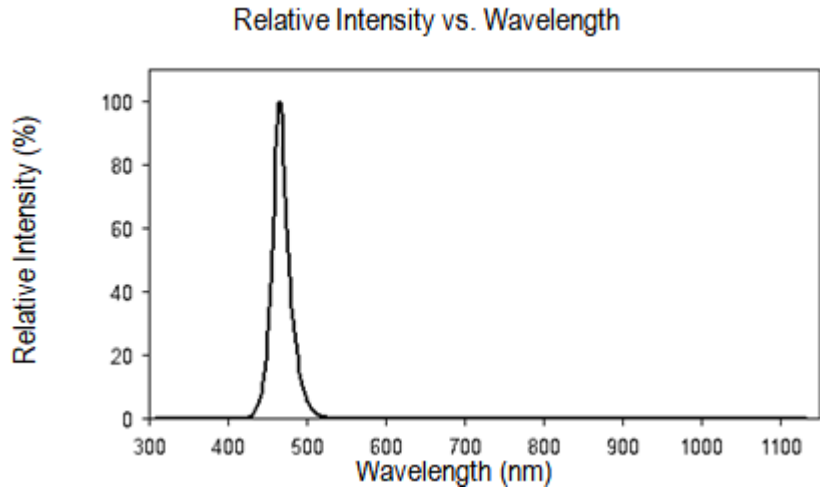
## Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=50mA

Bin	Min.	Max.	Unit
R	850	1080	mcd
S	1080	1350	
T	1350	1688	
U	1688	2161	
V	2161	2702	

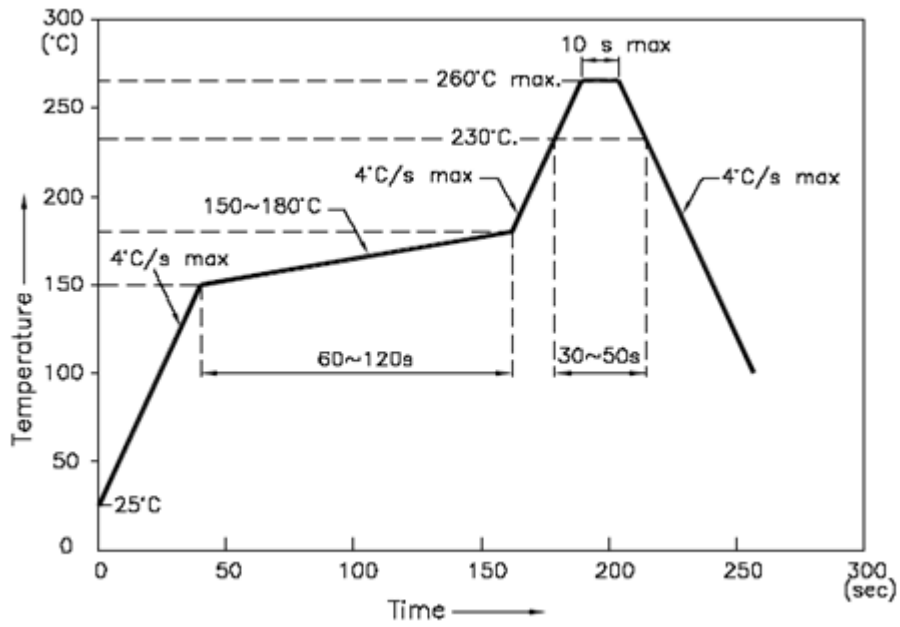
## Dominant Wavelength λ<sub>D</sub> @ I<sub>F</sub>=50mA

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

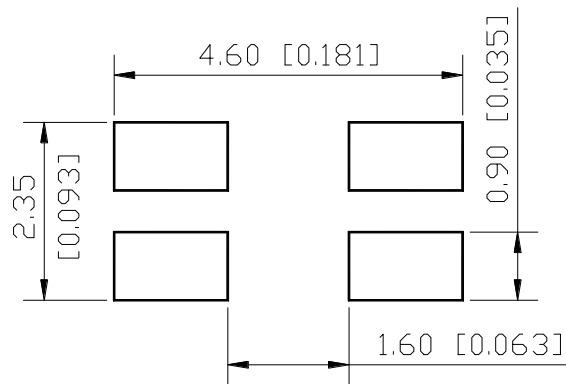
## Characteristic Curves



## Solder Profile & Footprint



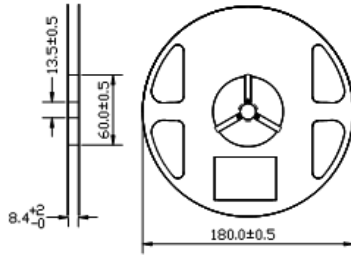
### Recommend Pad Layout



Units: mm

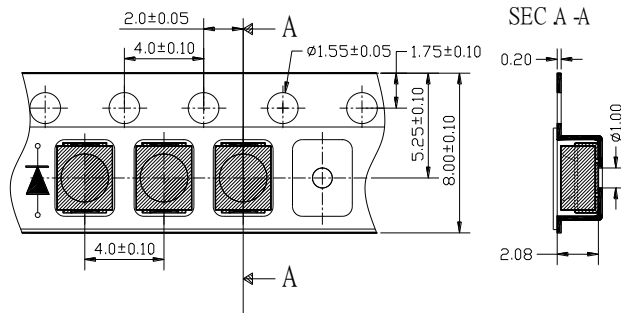
## Packing

### Reel Dimension:



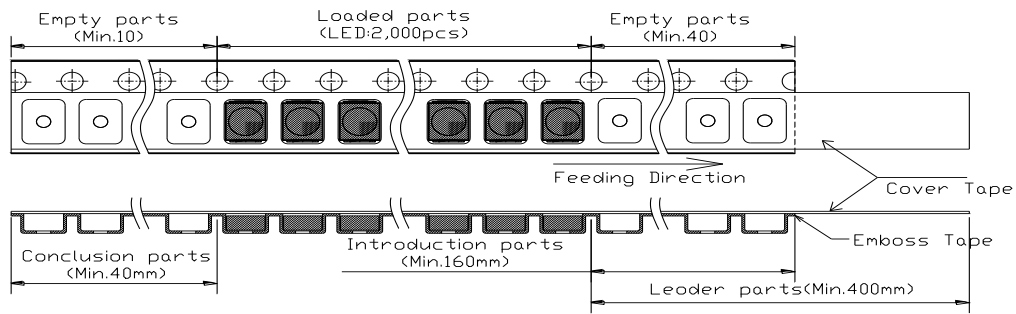
Unit: mm

### Dimensions of Tape:

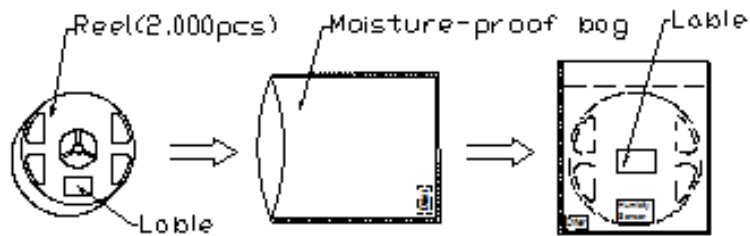


Unit: mm

### Arrangement of Tape:



### Packaging Specifications:



## 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
QBLP677A-IBD-2897	Iv=1680mcd typ., λD=465nm to 475nm @ IF=50mA	2000 units



## Revision History

Description:	Revision #	Revision Date
New Release of QBLP677A-IBD-2897	V1.0	07/07/2025

## Disclaimer

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1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.
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.

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