

# **QT-Brightek PLCC2 Series**

## **PLCC2 White LED**

**Part No.: QBLP673-IWK-CW80**

**K: 60mA**

**CW80: (CCT: 7800K Typ.)**



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## Introduction

**Feature:**

- White LED
- Yellow diffused lens
- Package in tape and reel
- Compact 2016 PLCC-2 LED
- InGaN
- Viewing angle: 120 deg typ.

**Description:**

These ultra bright reflector type PLCC2 LEDs have a height profile of 0.55mm. With a combination of high brightness output and robust package, these LEDs are ideal for architecture lighting, status indication, and industrial equipment lighting applications.

**Application:**

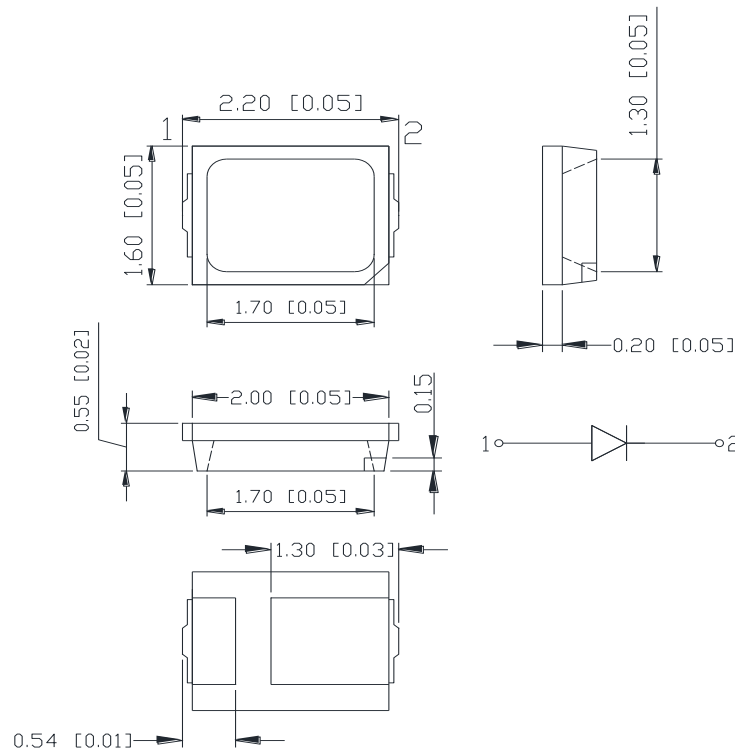
- Status indication
- Industrial equipment backlighting
- Architecture lighting

**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)		CIE Coordinate	I <sub>V</sub> (mcd)			Φ <sub>V</sub> (lm)*
			Typ.	Max.	Typ.	Min.	Typ.	Max.	Typ.
QBLP673-IWK-CW80	White	60	2.9	3.4	X=0.3 Y=0.295	3400	5100	8000	25
					CCT: 7800K				

\*For reference only

### 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>SO L</sub> (°C)**
InGaN	238	70	125	5	-40 to +85	-40 to +90	260

\*Duty 1/8 @ 1KHz

\*\*IR Reflow for no more than 10 sec @ 260 °C

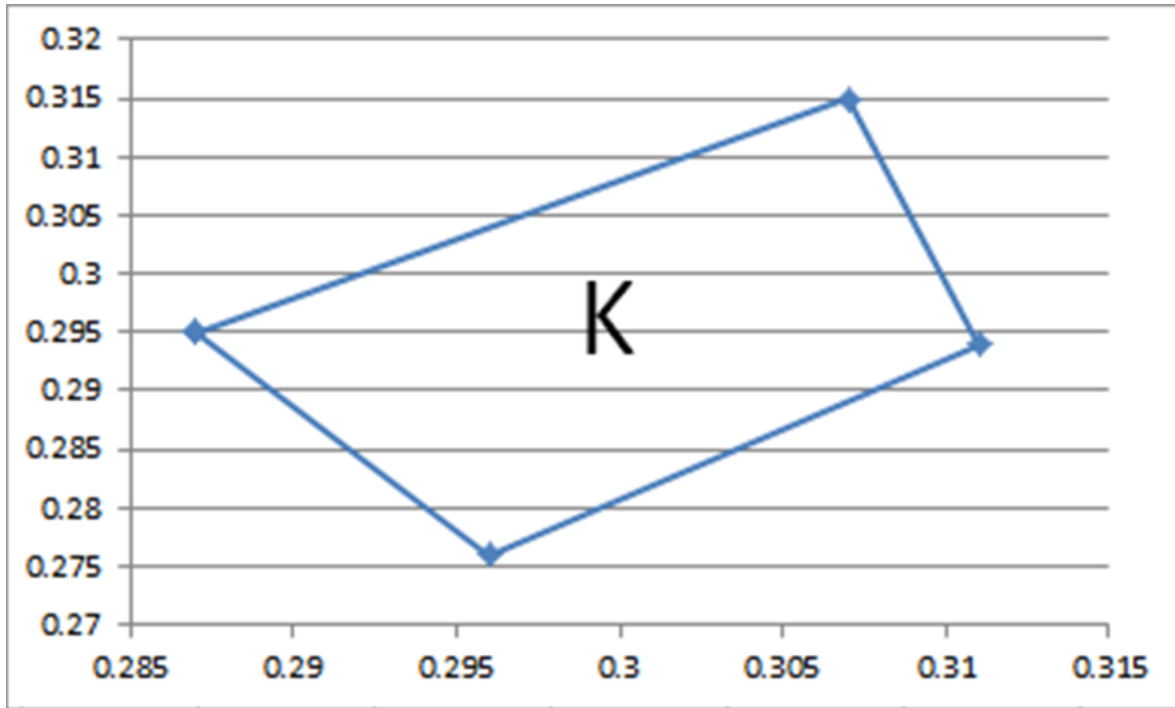
### Forward Voltage V<sub>F</sub> @ I<sub>F</sub>=60mA

Bin	Min.	Max.	Unit
H	2.8	3.0	V
J	3.0	3.2	
K	3.2	3.4	

### Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=60mA

Bin	Min.	Max.	Unit
M1	3400	4500	mcd
M2	4500	5500	
M3	5500	6600	
M4	6600	8000	

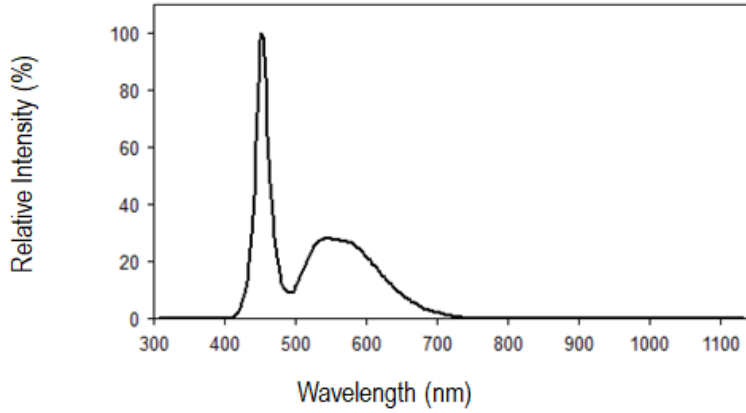
**Correlated Color Temperature Chart**



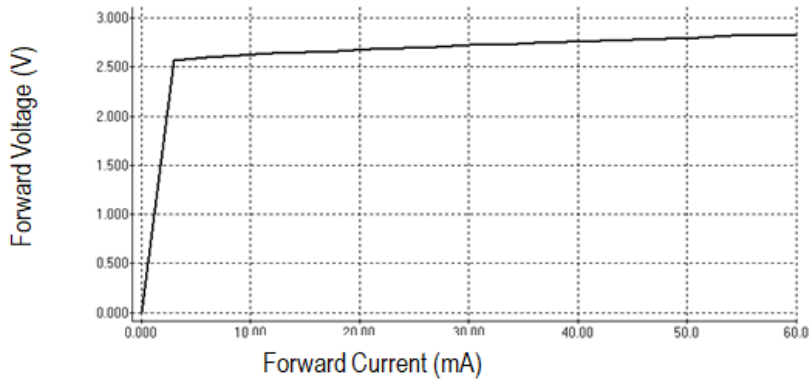
Rank	Chromaticity coordinates				
	K	X	0.287	0.307	0.311
	Y	0.295	0.315	0.294	0.276

### Characteristic Curves

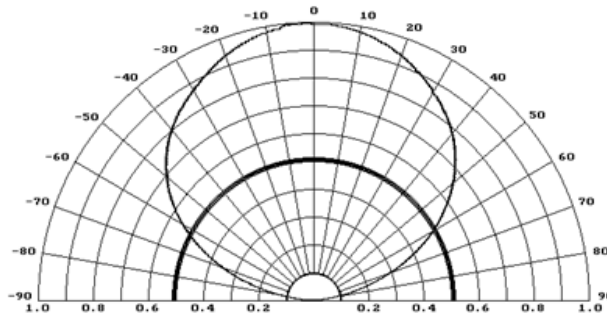
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

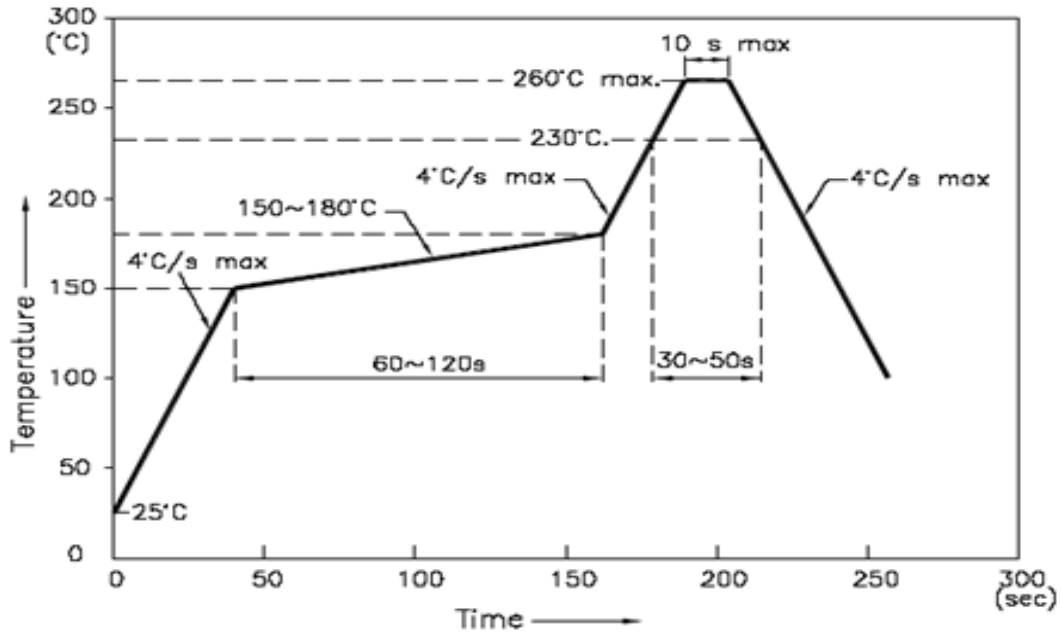


Directive Characteristics

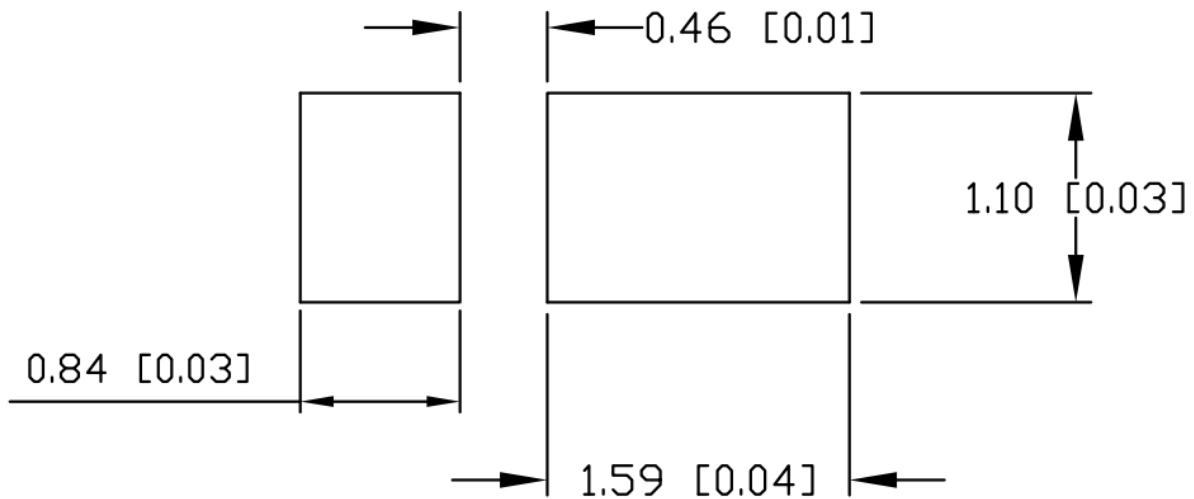


## Solder Profile & Footprint

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



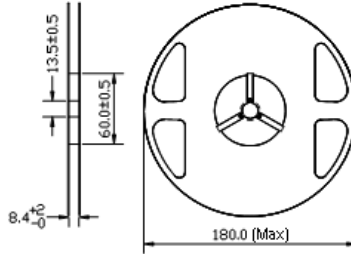
### Recommended Pad Layout



Units: mm [inch]

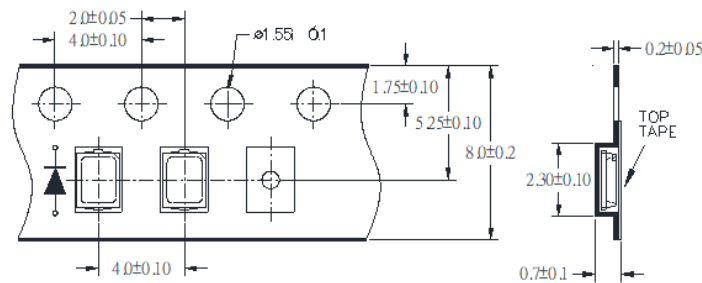
## Packing

Reel Dimension:



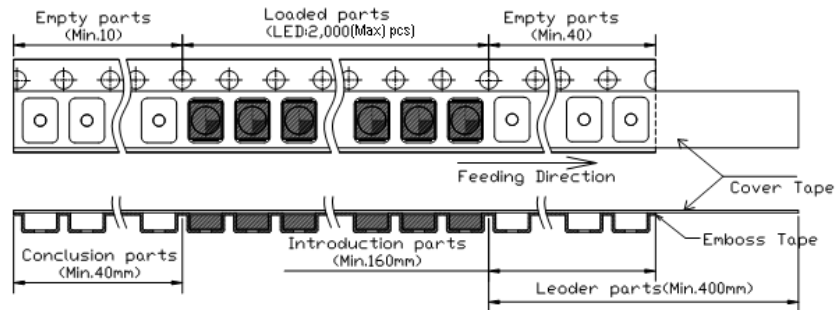
Unit: mm

Tape Dimension:

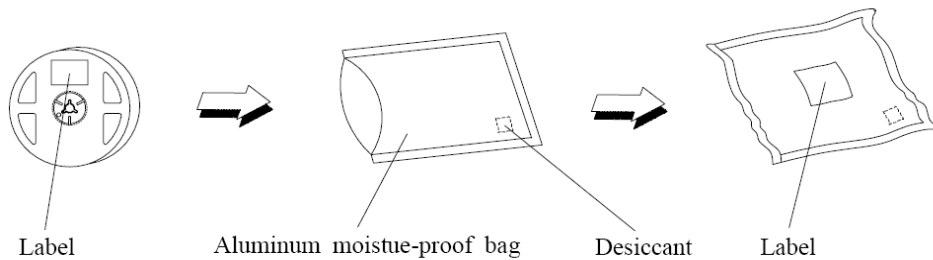


Unit: mm

Arrangement of Tape:



Packaging Specifications:



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### Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP673-IWK-CW80	QBLP673-IWK-CW80	Iv=5200 mcd typ. @ 60mA / Chromaticity Coordinate (X=0.3, Y=0.295) typ.	4,000 units

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## Revision History

Description:	Revision #	Revision Date
New Release of QBLP673-IWK-CW80	V1.0	12/14/2021

## 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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