

QT-Brightek PLCC2 Series

PLCC2 White LED

Part No.: QBLP673-IWK-CW80

K: 60mA
CW80: (CCT: 7800K Typ.)

Table of Contents:

Introduction	3
Electrical / Optical Characteristic (Ta=25 °C)	4
Absolute Maximum Rating	4
Correlated Color Temperature Chart	5
Characteristic Curves.....	6
Solder Profile & Footprint.....	7
Packing	8
Ordering Information	9
Disclaimer	10

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:

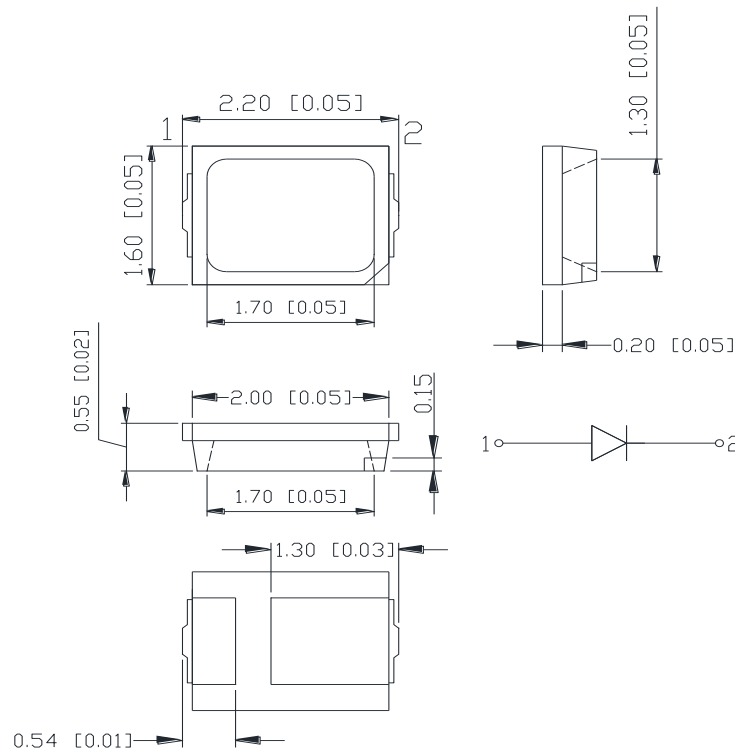
- Status indication
- Industrial equipment backlighting
- Architecture lighting

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		CIE Coordinate	I _V (mcd)			Φ _V (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 _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°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

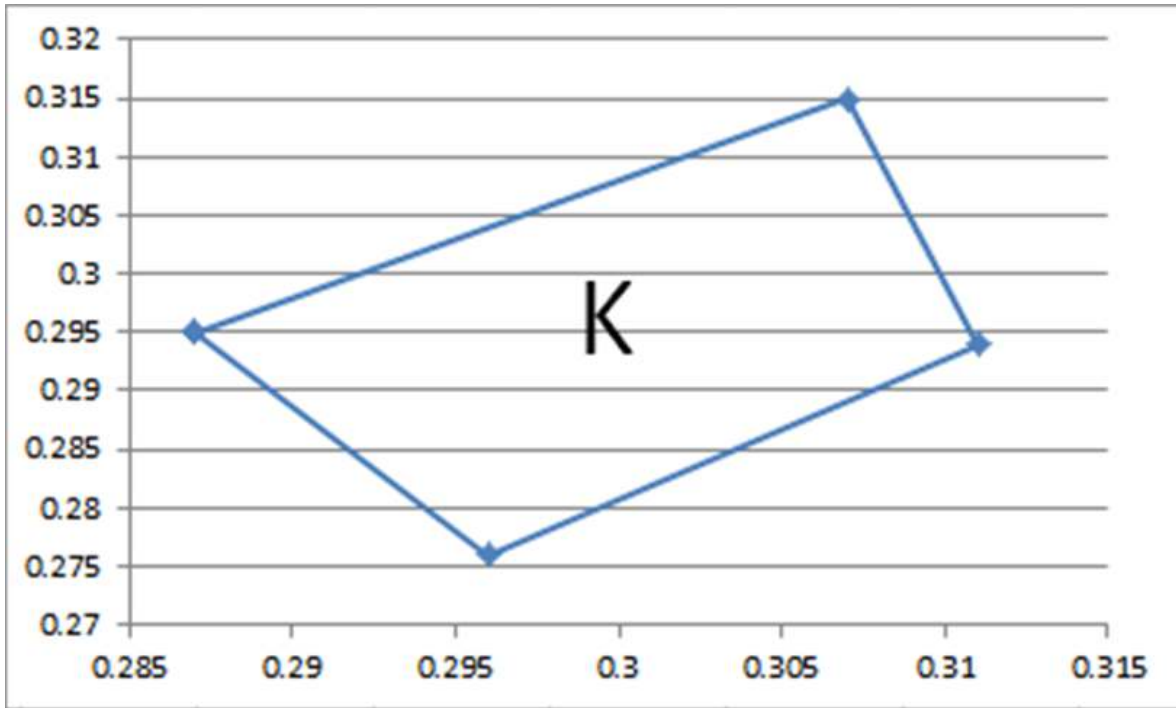
Forward Voltage V_F @ I_F=60mA

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

Luminous Intensity I_V @ I_F=60mA

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

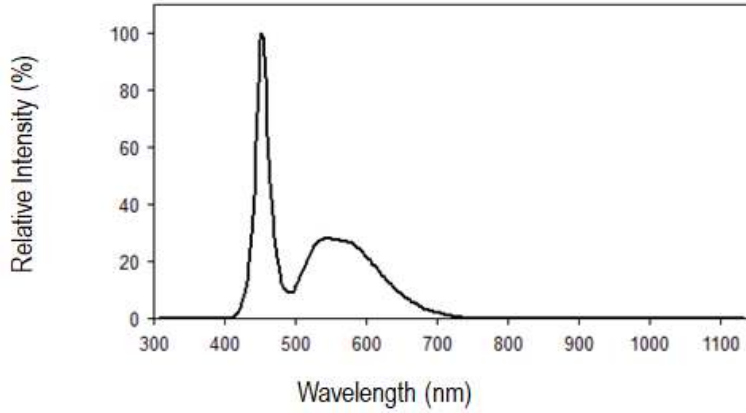
Correlated Color Temperature Chart



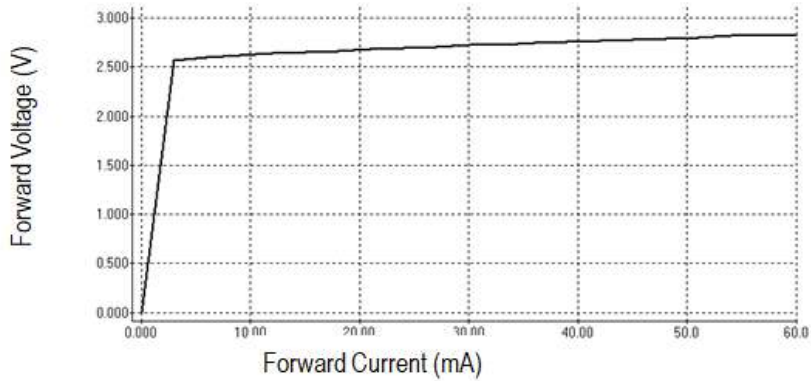
Rank	Chromaticity coordinates				
	K	X	0.287	0.307	0.311
	Y	0.295	0.315	0.294	0.276

Characteristic Curves

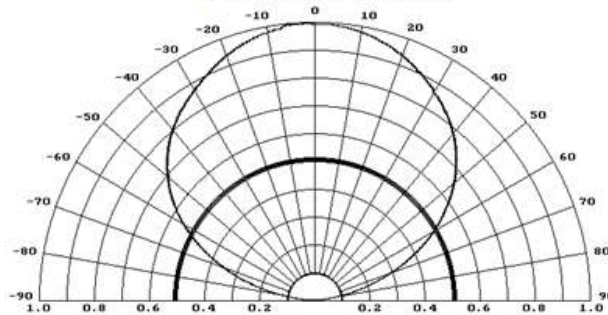
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

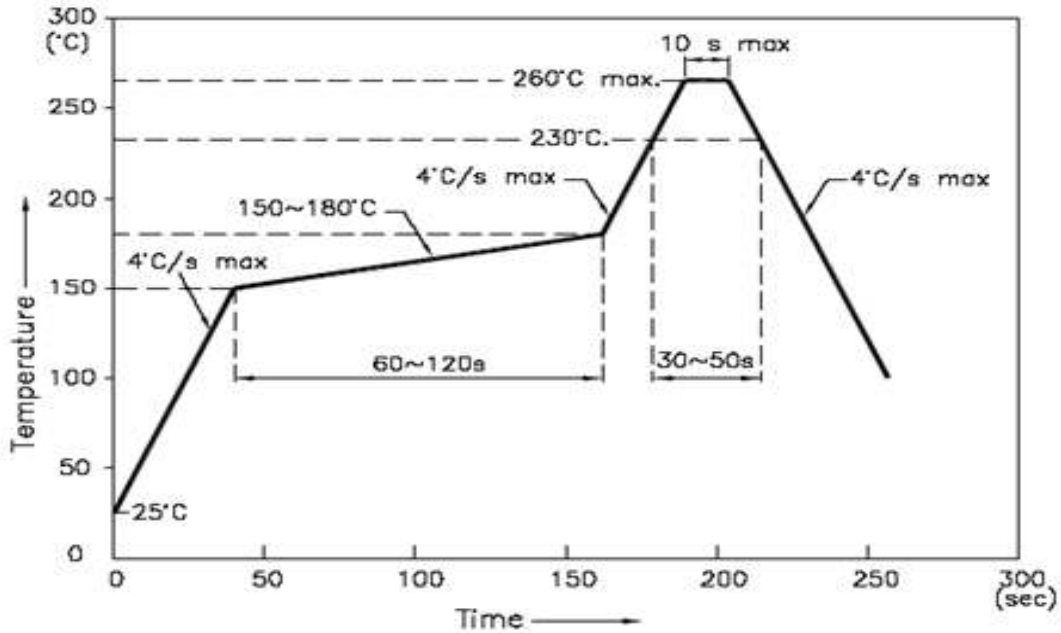


Directive Characteristics

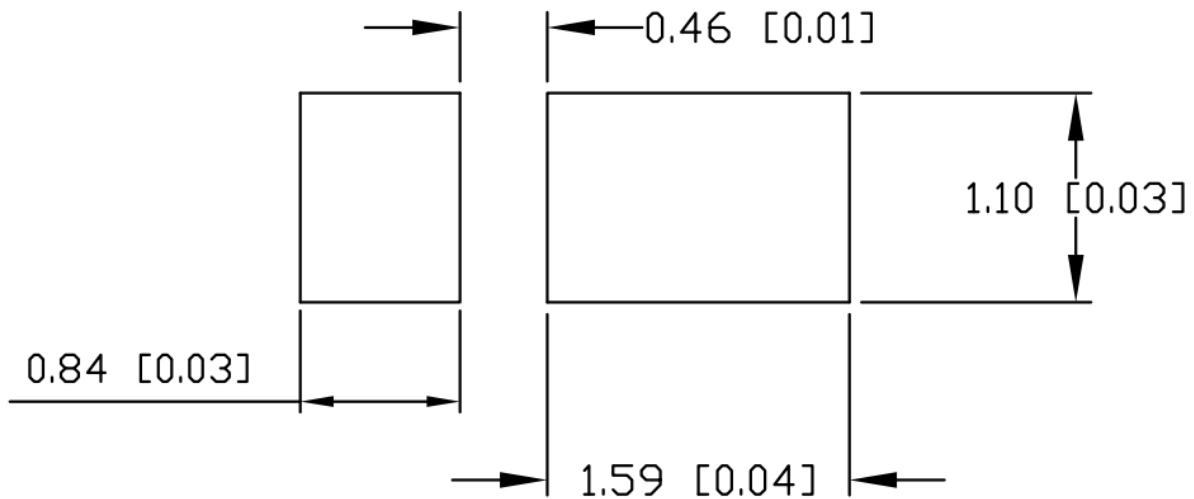


Solder Profile & Footprint

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



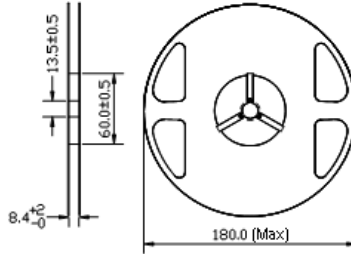
Recommended Pad Layout



Units: mm [inch]

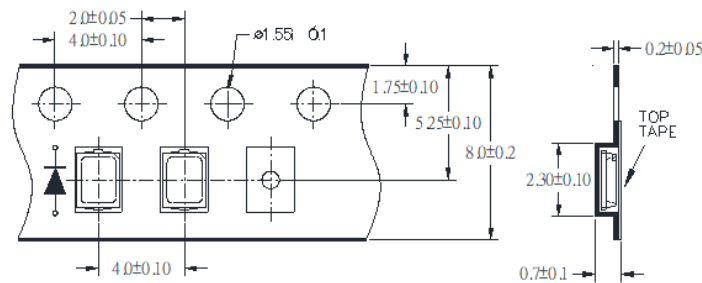
Packing

Reel Dimension:



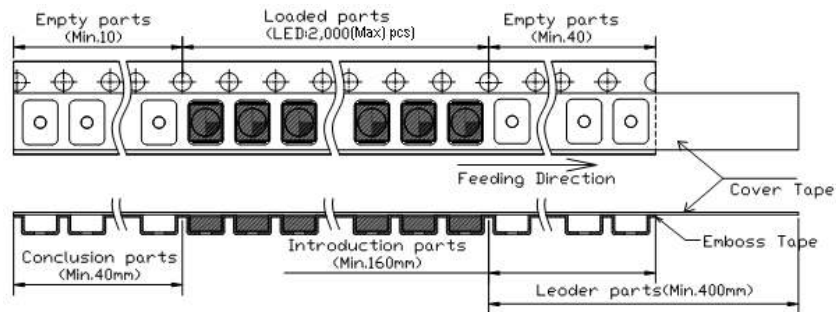
Unit: mm

Tape Dimension:

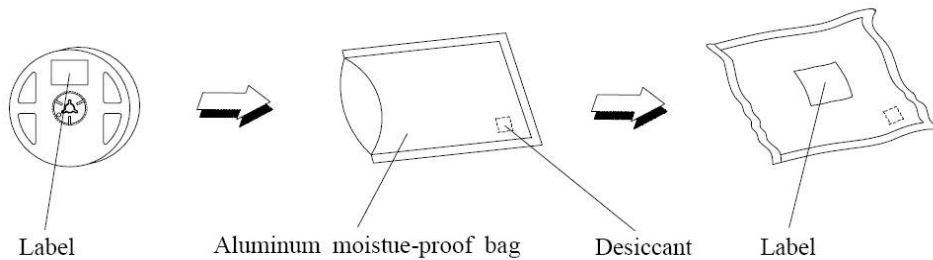


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Product: QBLP673-IWK-CW80	Date: December 14, 2021	Page 8 of 10
	Version# 1.0	



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

Revision History

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

Disclaimer

QT-BRIGHTTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTTEK does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

Life Support Policy

QT-BRIGHTTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTTEK. As used herein:

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.