



# QT-Brightek PLCC Series PLCC2 High Bright Red LED

Part No.: QBLP669-R5

5: 5mA

Product: QBLP669-R5	Date: June 6, 2022	Page 1 of 9
	Version# 1.0	



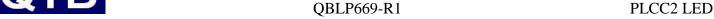
## QBLP669-R1

## PLCC2 LED

Table of Contents:	
Introduction	3
Electrical / Optical Characteristic (Ta=25 °C)	4
Absolute Maximum Rating	4
Characteristic Curves	5
Solder Profile & Footprint	6
Packing	
Labeling	
Ordering Information	8
Revision History	
Disclaimer	
	_

Product: QBLP669-R5	Date: June 6, 2022	Page 2 of 9
	Version# 1.0	





## Introduction

#### Feature:

- Package in tape and reel
- Clear lens
- Ultra bright reflector type PLCC2 LED
- AlInGaP technology
- Viewing angle 120 degree typ.

#### **Description:**

These ultra bright reflector type PLCC2 LEDs have a height profile of 1.90mm. Combination of high brightness output and robust package, these LEDs are ideal for architecture lighting, status indication, and industrial equipment lighting applications.

## **Application:**

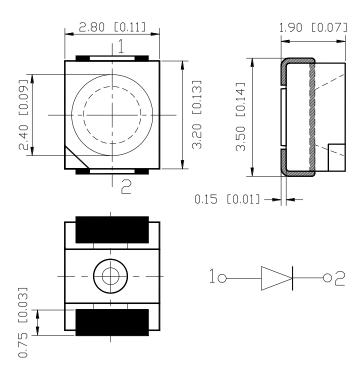
- Status indication
- Industrial equipment backlighting
- Architecture lighting

## **Certification & Compliance:**

- TS16949
- ISO9001
- **RoHS Compliant**



#### **Dimension:**



Units: mm / tolerance = +/-0.2mm

Product: QBLP669-R5	Date: June 6, 2022	Page 3 of 9
	Version# 1.0	



QBLP669-R1 PLCC2 LED

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I <sub>F</sub> (mA)	$V_F(V)$ $\lambda_D(nm)$		I <sub>V</sub> (m	ncd)			
	Coloi	COIOI IF (IIIA)	Тур.	Max.	Min.	Тур.	Max.	Min.	Тур.
QBLP669-R1	Red	5	1.9	2.3	618	620	630	25	42

**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>SOL</sub> (°C)**
AllnGaP	69	30	125	5	-40 to +105	-40 to +105	260

<sup>\*</sup>Duty 1/8 @ 1KHz

Forward Voltage V<sub>F</sub> @ I<sub>F</sub>=5mA

Bin	Min.	Max.	Unit
	1.7	2.3	V

Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=5mA

Bin	Min.	Max.	Unit
D	25	32	
E	32	40	mad
F	40	50	mcd
G	50	63	

Dominant Wavelength  $\lambda_D$  @  $I_F=5mA$ 

Bin	Min.	Max.	Unit
1	618	622	
2	622	626	nm
3	626	630	

Product: QBLP669-R5	Date: June 6, 2022	Page 4 of 9
	Version# 1.0	

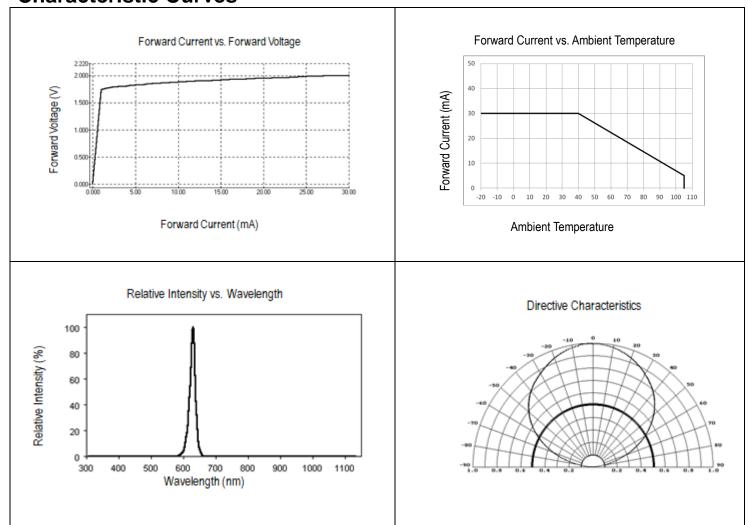
<sup>\*\*</sup>IR Reflow for no more than 10 sec @ 260 °C





# QBLP669-R1

## **Characteristic Curves**



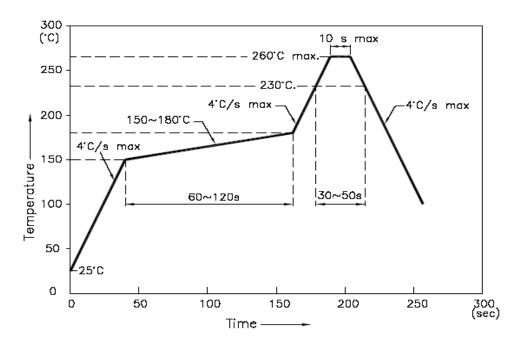
Product: QBLP669-R5	Date: June 6, 2022	Page 5 of 9
	Version# 1.0	

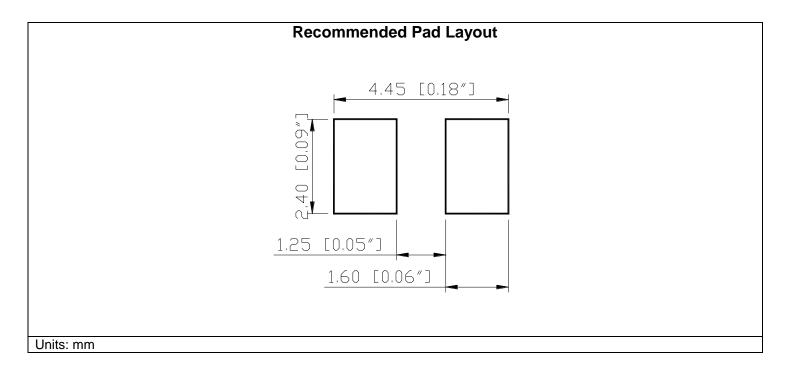




## **Solder Profile & Footprint**

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





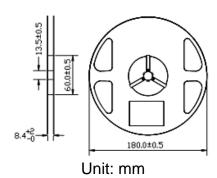
Product: QBLP669-R5	Date: June 6, 2022	Page 6 of 9
	Version# 1.0	



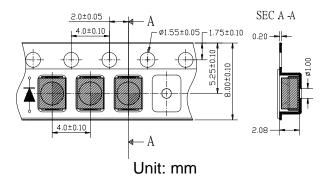
QBLP669-R1 PLCC2 LED

## **Packing**

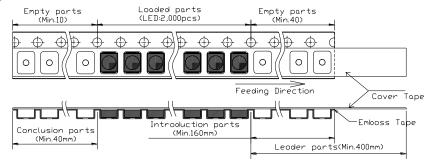
#### **Reel Dimension:**



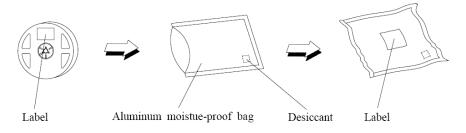
## **Tape Dimension:**



## **Arrangement of Tape:**

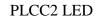


## **Packaging Specifications:**



Product: QBLP669-R5	Date: June 6, 2022	Page 7 of 9
	Version# 1.0	







# Labeling

Part No:
Customer P/N:
ltem:
Q'ty:
Vf:
lv:
WI:
Date:

# **Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP669-R5	QBLP669-R5	Iv=42mcd typ. @ 5mA / Color=618nm to 630nm	2,000 units

Product: QBLP669-R5	Date: June 6, 2022	Page 8 of 9
	Version# 1.0	



QBLP669-R1 PLCC2 LED

**Revision History** 

Description:	Revision #	Revision Date
New Release of QBLP669-R5	V1.0	06/06/2022

## **Disclaimer**

QT-BRIGHTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTEK 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-BRIGHTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTEK. 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.

Product: QBLP669-R5	Date: June 6, 2022	Page 9 of 9
	Version# 1.0	