

QT-Brightek PLCC Series
PLCC2 High Bright Red LED
Part No.: QBLP669-R1

Product: QBLP669-R1	Date: June 6, 2022	Page 1 of 9
	Version# 1.0	

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Introduction

Feature:

- Package in tape and reel
- Clear lens
- Ultra bright reflector type PLCC2 LED
- GaAsP 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:

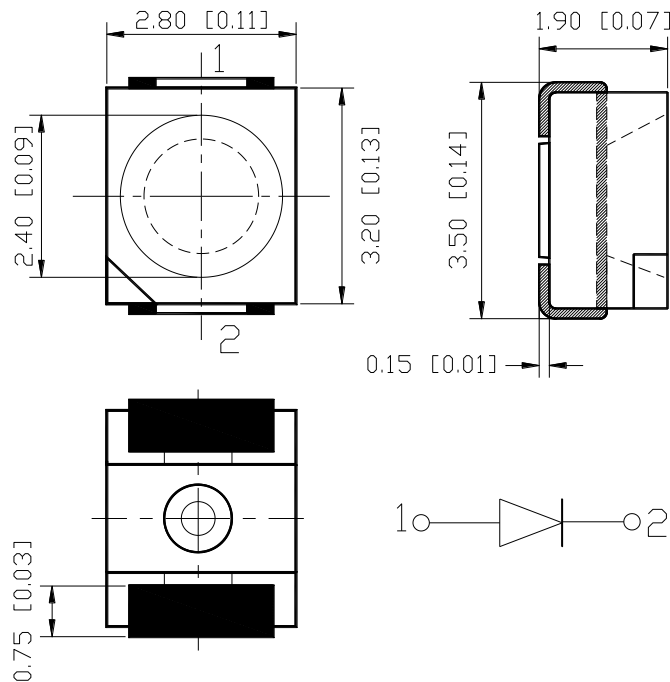
- Status indication
- Industrial equipment backlighting
- Architecture lighting

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

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.
QBLP669-R1	Red	20	2.0	2.3	618	620	630	3.2	12

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)**
AllnGaP	69	30	125	5	-40 to +105	-40 to +105	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
□	1.7	2.3	V

Luminous Intensity I_V @ I_F=20mA

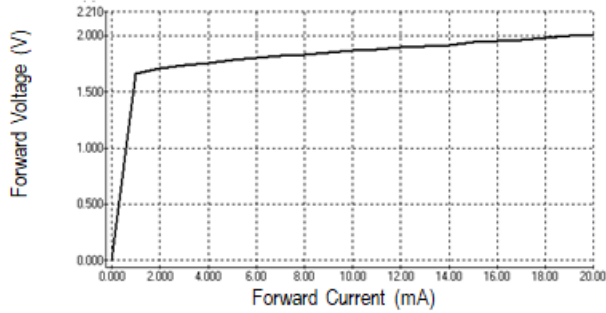
Bin	Min.	Max.	Unit
7	3.20	5.0	mcd
8	5.0	8.0	
9	8.0	12.5	
A	12.5	16	
B	16	20	

Dominant Wavelength λ_D @ I_F=20mA

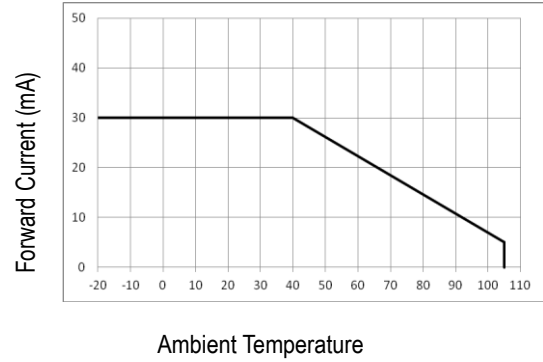
Bin	Min.	Max.	Unit
1	618	622	nm
2	622	626	
3	626	630	

Characteristic Curves

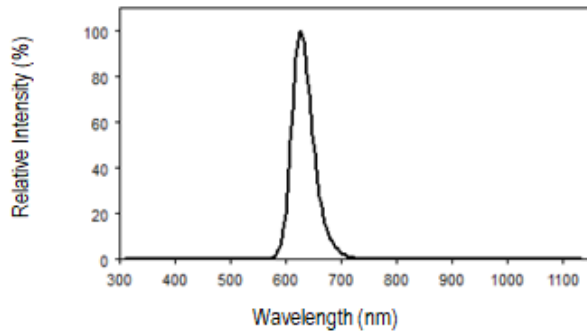
Forward Current vs. Forward Voltage



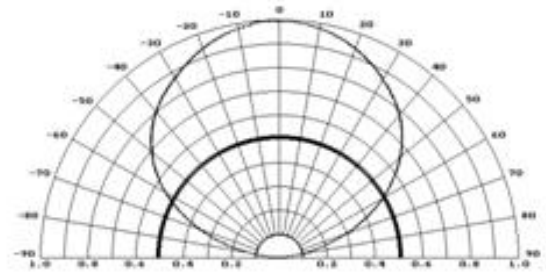
Forward Current vs. Ambient Temperature



Relative Intensity vs. Wavelength

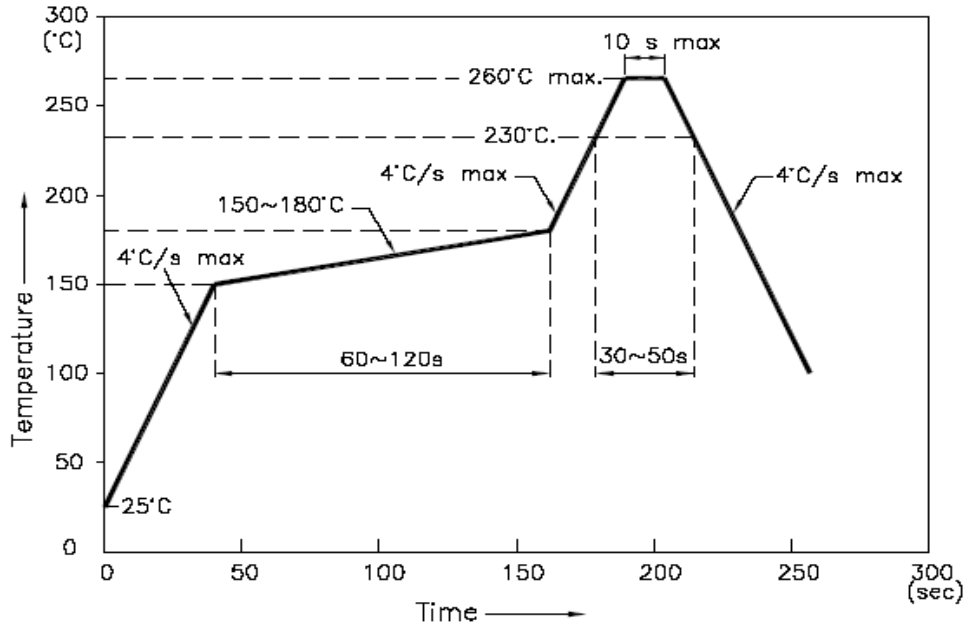


Directive Characteristics

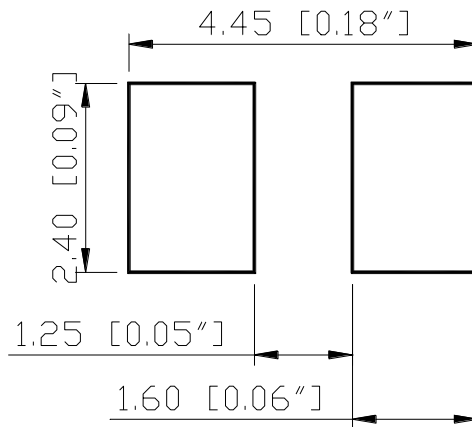


Solder Profile & Footprint

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



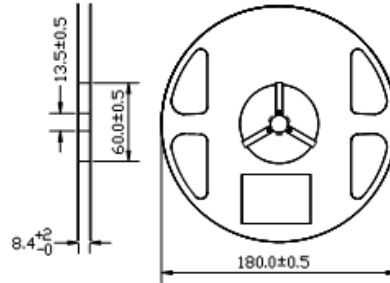
Recommended Pad Layout



Units: mm

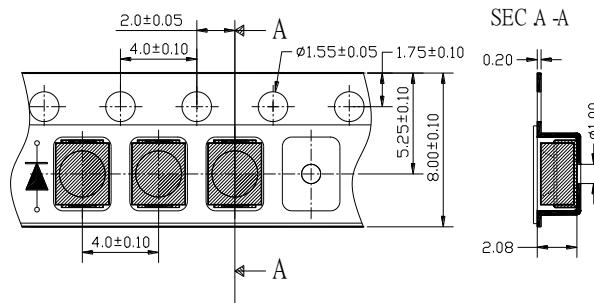
Packing

Reel Dimension:



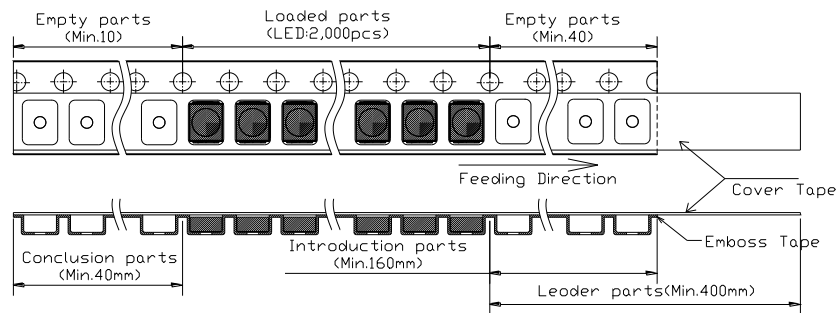
Unit: mm

Tape Dimension:

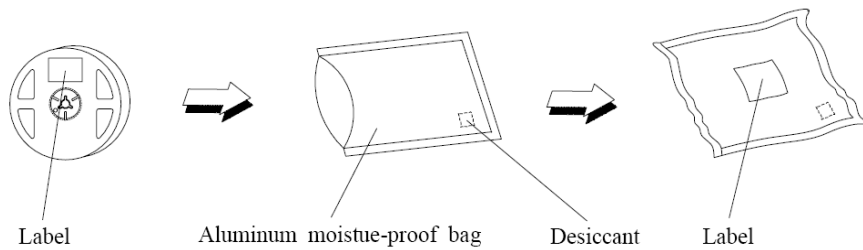


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Labeling

Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

WI: _____

Date: _____

Made in China**Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP669-R1	QBLP669-R1	Iv=12mcd typ. @ 20mA / Color=618nm to 630nm	2,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP669-R1	V1.0	06/06/2022

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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.