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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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QT-Brightek PLCC2 Series

PLCC2 Reverse Mount Red LED

Part No.: QBLP670R-R

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Introduction

Feature:

- Clear lens
- Package in tape and reel
- Ultra bright reflector type PLCC2 LED
- AlInGaP technology for Red
- 120 degree viewing angle
- Reverse Mountable

Description:

These ultra bright reflector type PLCC2 LEDs have a height profile of 1.85mm. 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:

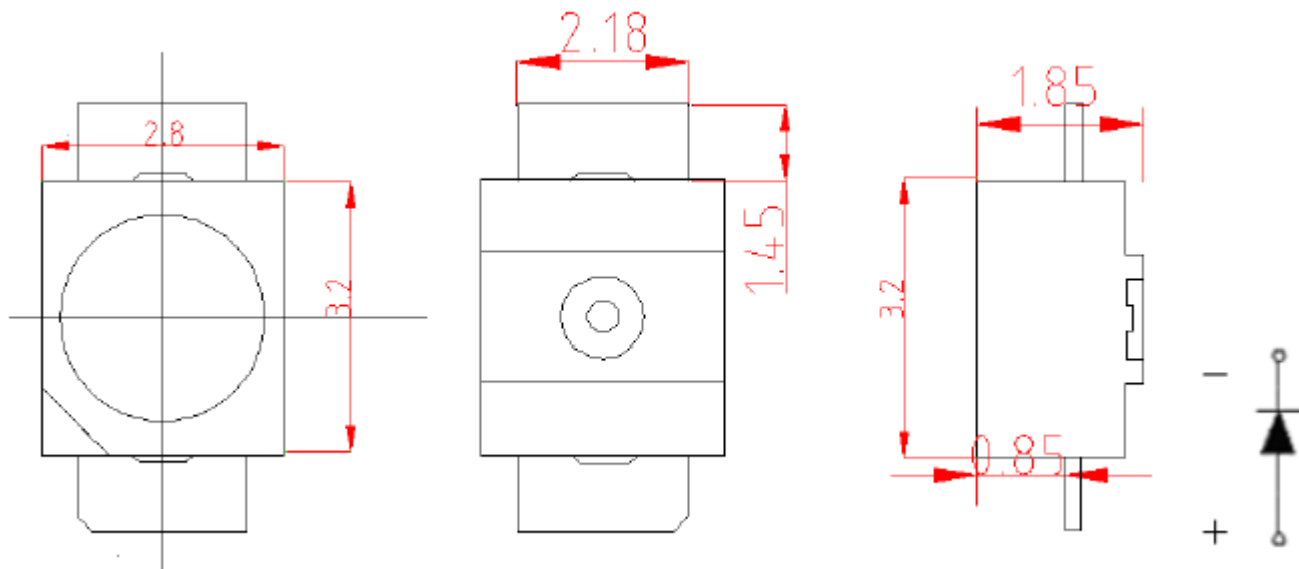
- Status indication
- Industrial equipment backlighting
- Architecture lighting

Certification & Compliance:

- TS16949
- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.2mm

Electrical / Optical Characteristic (T=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP670R-R	Red	20	2.0	2.4	615	623	630	490	760

Absolute Maximum Rating

Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
AlInGaP	72	30	125	5	-40 ~ +85	-40 ~ +100	260

*Duty 1/10 @ 1KHz

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

Forward Voltage V_F @ I_F=20mA

Bin	Min.	Max.	Unit
V1B	1.5	1.8	V
V1C	1.8	2.1	
V2A	2.1	2.4	

Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
25	490	640	mcd
26	640	830	
27	830	1080	

Dominant Wavelength λ_D for Red @ I_F=20mA

Bin	Min.	Max.	Unit
A5	615	620	nm
R1	620	625	
R2	625	630	

Note:

Tolerance of measurement of forward voltage: ±0.1V

Tolerance of measurement of luminous intensity: ±15%

Tolerance of measurement of dominant wavelength: ±2nm

Characteristic Curves (Ta=25°C)

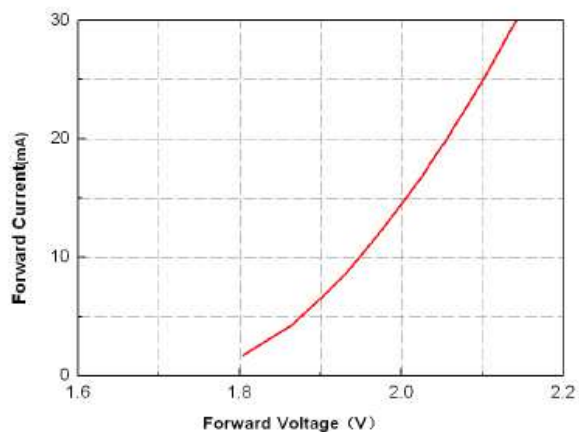


Figure1. Forward Current VS. Forward Voltage

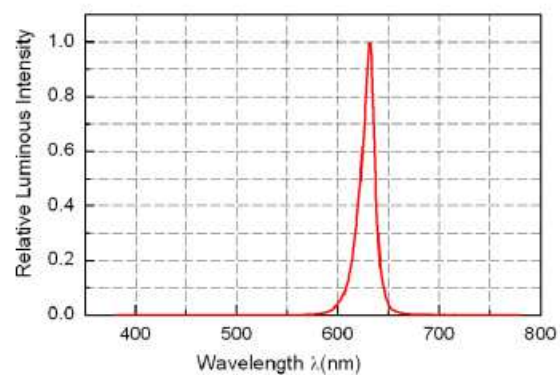


Figure2. Spectral Power Distribution vs. Wavelength

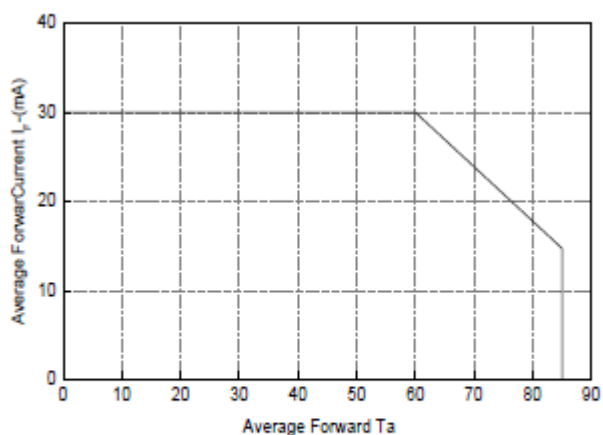


Figure3. Forward Current vs. Ambient Temperature

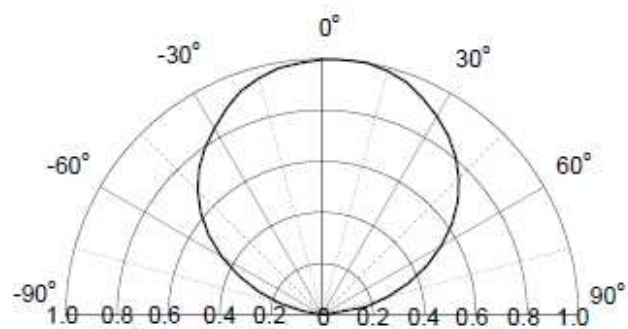
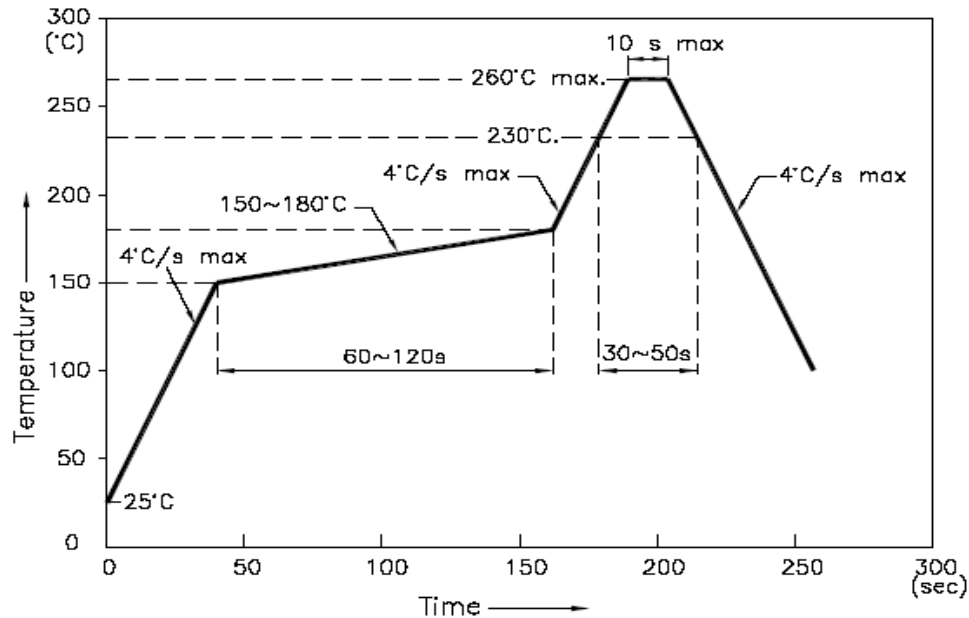


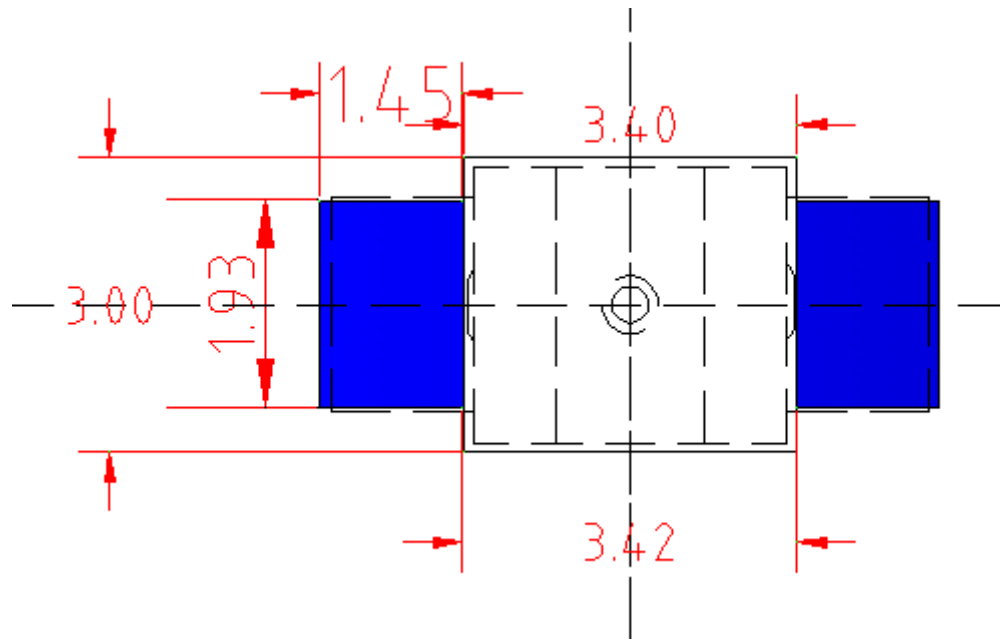
Figure4. Relative Luminosity VS. Radiation Angle

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

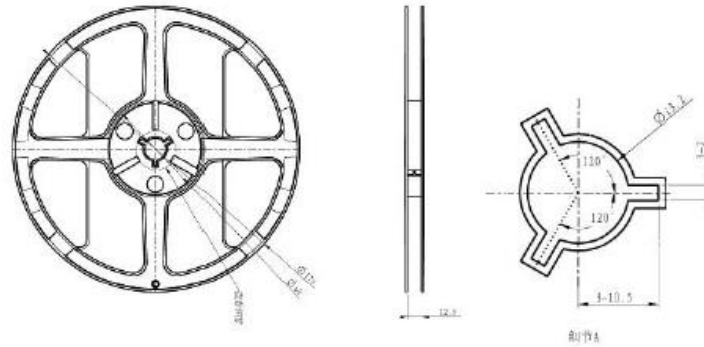


Units: mm

Tolerance: $\pm 0.2\text{mm}$

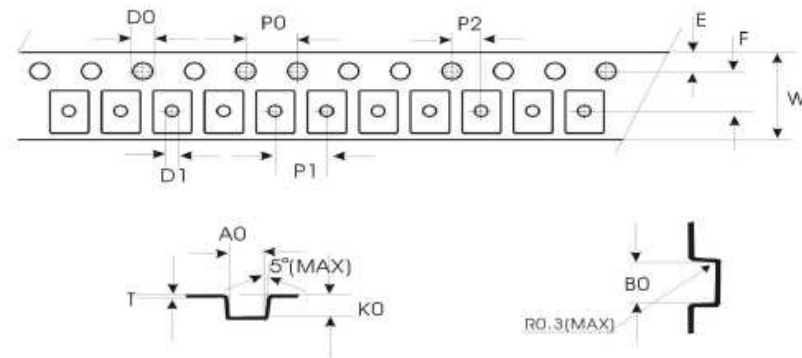
Packing

Reel Dimension:



Unit: mm

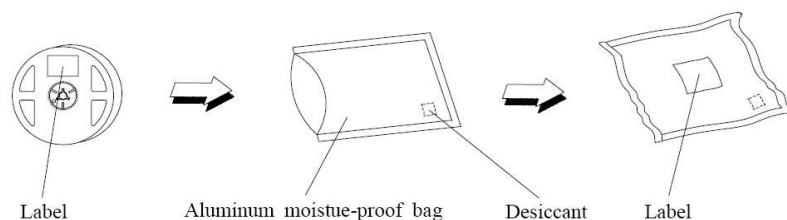
Tape Dimension:



Symbol	A0	B0	K0	P0	P1	P2	T
Spec	3.07±0.1	5.80±0.1	2.42±0.1	4.0±0.1	4.0±0.1	2.00±0.1	0.25±0.05
Symbol	E	F	D0	D1	W	10P0	
Spec	1.75±0.10	5.5±0.05	1.55±0.1	1.50±0.1	12±0.1	40.0±0.2	

Unit: mm

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
QBLP670R-R	QBLP670R-R	Iv=490mcd min. @ 20mA, λd=615 to 630nm	2,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP670R-R	V1.0	06/13/2017
Update QTB logo	V1.1	05/02/2018

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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.