

QT-Brightek PLCC Series

PLCC6 LED

Part No.: QBLP679-OK (High Bright)

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	Version# 2.0	

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Introduction

Feature:

- Package in tape and reel
- Ultra bright PLCC6
- High Bright
- AllInGaP technology
- 120 degree viewing angle

Description:

This PLCC6 LEDs have a height profile of 1.60mm. Combination of high brightness output and robust package, this LED is ideal for architecture lighting, status indication, and general application.

Application:

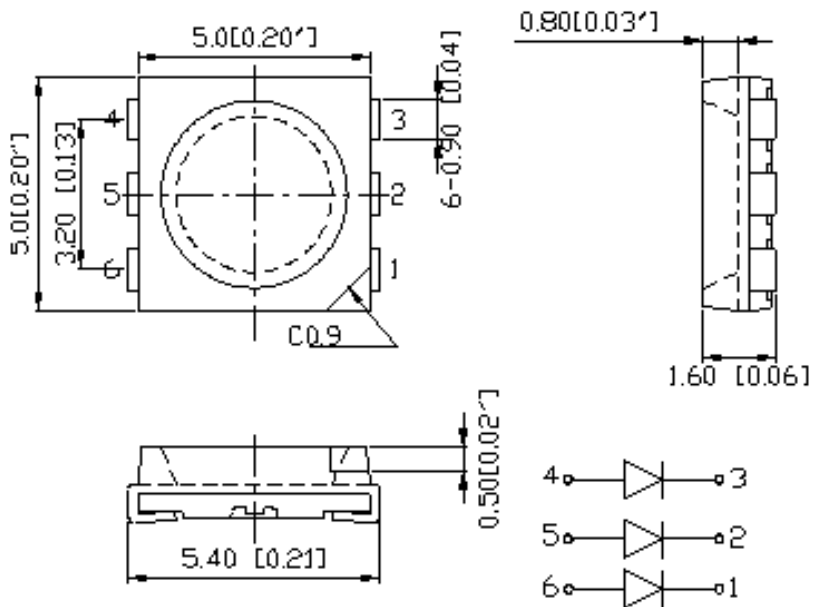
- Status indication
- Industrial equipment backlighting
- Architecture lighting

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.
QBLP679-OK(High Bright)	Orange	60	2.0	2.5	600	605	610	1600	2000

*Total forward current for three dies

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)**	ESD (V)
AllnGaP	225	90	125	5	-40 ~ +80	-40 ~ +85	260	HBM 8000

*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
□	1.7	2.5	V

Dominant Wavelength λ_D for Orange @ I_F=60mA

Bin	Min.	Max.	Unit
p	600	605	nm
q	605	610	

Luminous Intensity I_V for Orange @ I_F=60mA

Bin	Min.	Max.	Unit
V	1600	2000	mcd
W	2000	2500	
X	2500	3200	

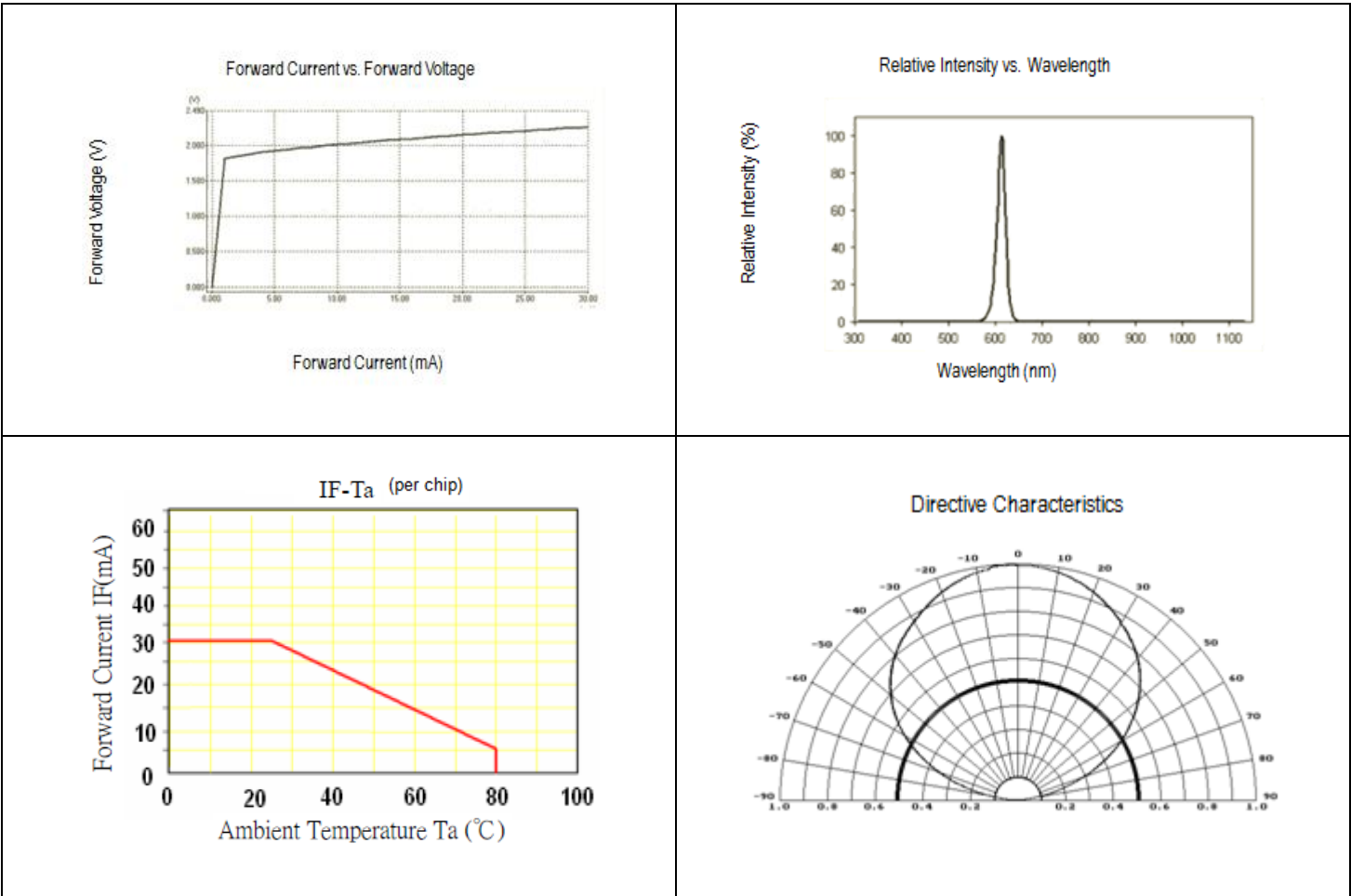
Note:

Tolerance of measurement of forward voltage: ±0.05V

Tolerance of measurement of luminous intensity: ±15%

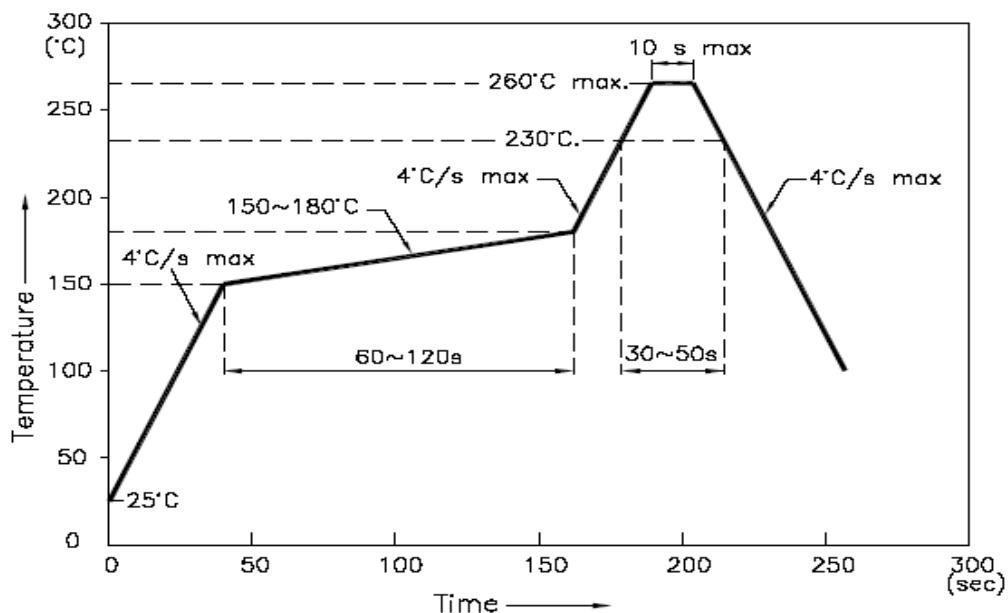
Tolerance of measurement of dominant wavelength: ±1nm

Characteristic Curves

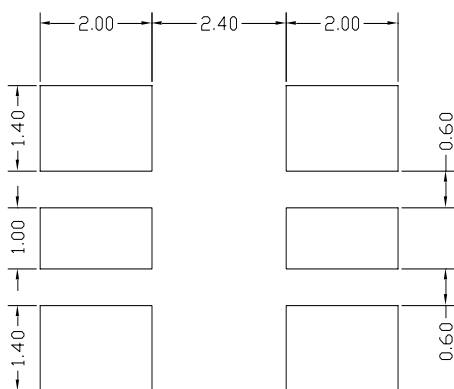


Solder Profile & Footprint

- Recommended tin solder specifications: melting temperature in the range of 178~192 °C
- The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



RECOMMEND PAD LAYOUT



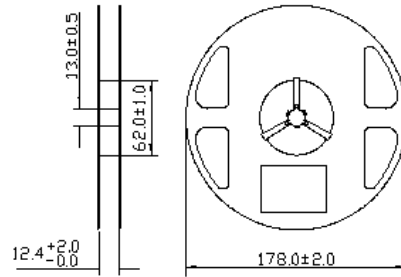
Units: mm

tolerance: +/- 0.2mm

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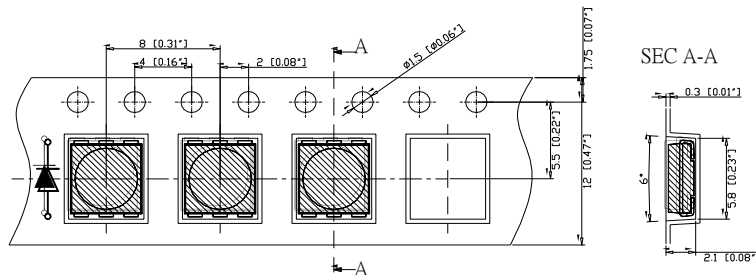
Packing

Reel Dimension:



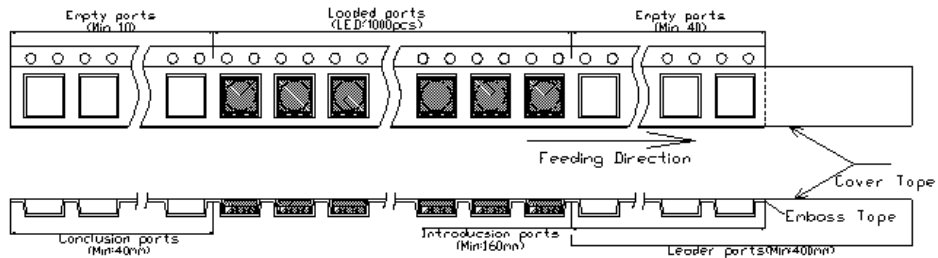
Unit: mm

Tape Dimension:

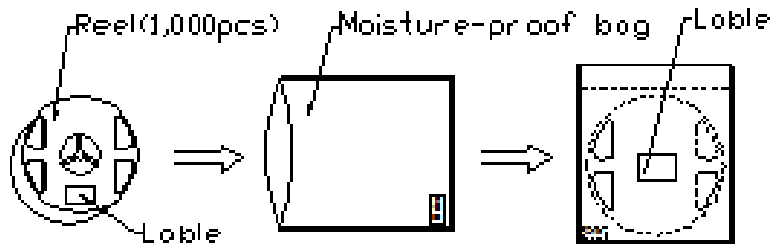


Unit: mm

Arrangement of Tape:



Packaging Specifications:



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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
QBLP679-OK (High Bright)	QBLP679-OK (High Bright)	Iv=2000mcd typ. @ 60mA/ Color=600-610nm	1,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP679-OK (High Bright)	V1.0	06/25/2013
Add ESD HBM information	V1.1	08/12/2013
Update package dimension drawing / update luminous intensity	V2.0	03/27/2014

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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.