

QT-Brightek PLCC LED Series
SMD 1608 (0603) PLCC-2 LEDs
Part No.: QBLP661-XX Series
XX: Color Code

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Introduction

Feature:

- Water clear lens
- Package in tape and reel
- 1608 (0603) PLCC-2 Package
- Viewing angle: 120deg typ.
- AlInGaP technology for O/Y
- MSL 5A

Description:

These ultrabright 0603 PLCC-2 LEDs have a height profile of 0.55mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

Application:

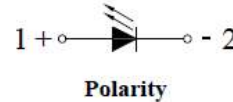
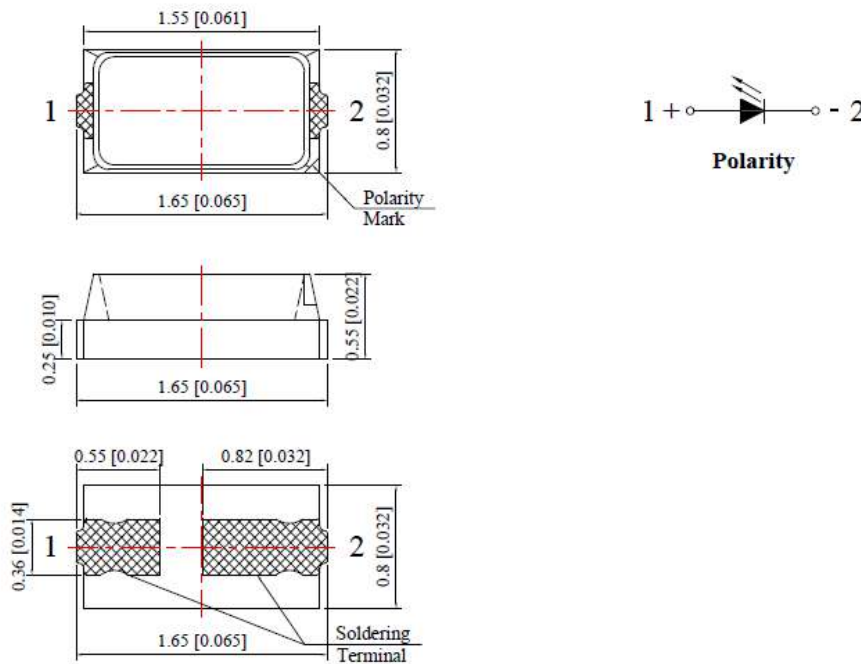
- Status indication
- Back lighting application

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)			λ _D (nm)			I _V (mcd)		
			Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.
QBLP661-O	Orange	20	1.6	2.0	2.4	600	605	610	100	200	400
QBLP661-Y	Yellow	20	1.6	2.0	2.4	585	590	595	100	250	400

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 (O/Y)	60	25	100	5	-40 ~ +85	-40 ~ +90	260

*Duty 1/8 @ 1KHz

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

Forward Voltage V_F @ I_F=20 mA

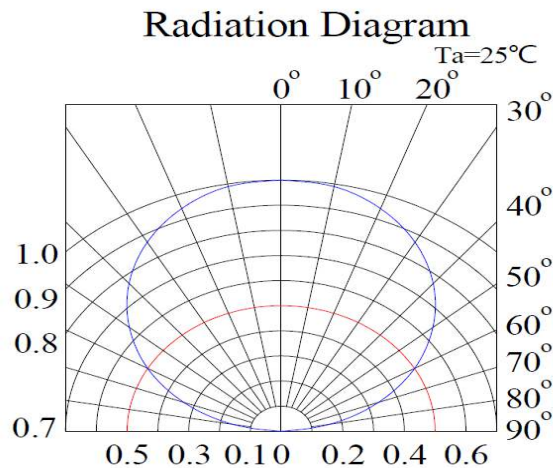
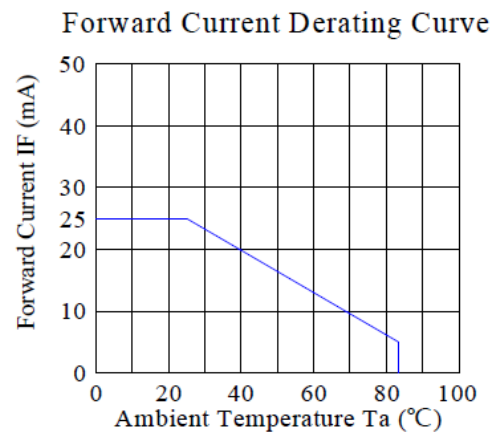
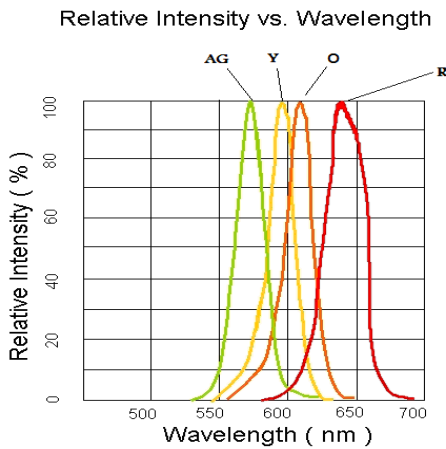
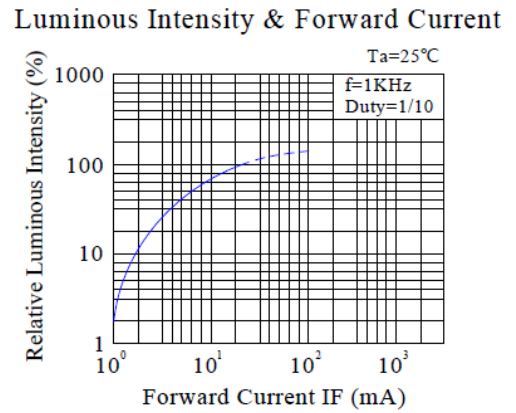
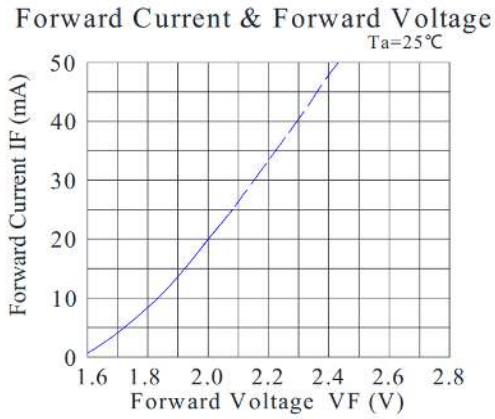
Bin	Min.	Max.	Unit
a	1.6	1.8	V
b	1.8	2.0	
c	2.0	2.2	
d	2.2	2.4	

Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
1	100	200	mcd
2	200	300	
3	300	400	

Characteristic Curves

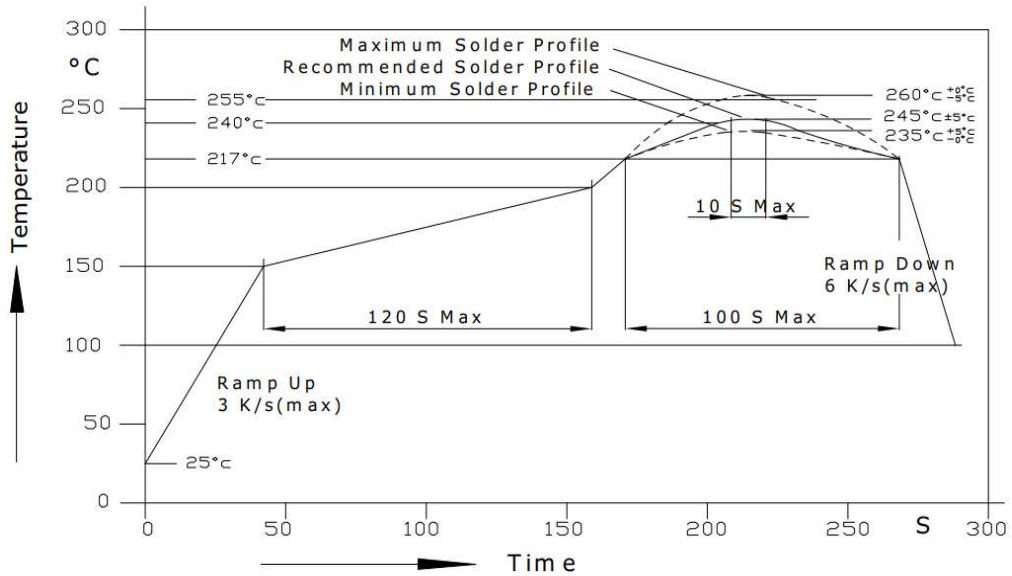
AllInGaP (O/Y)



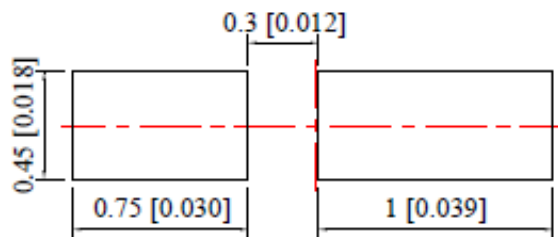
Solder Profile & Footprint

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

Pb-free solder temperature profile.



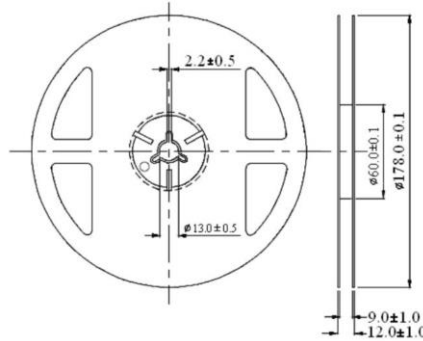
Recommended Pad Layout



Units: mm

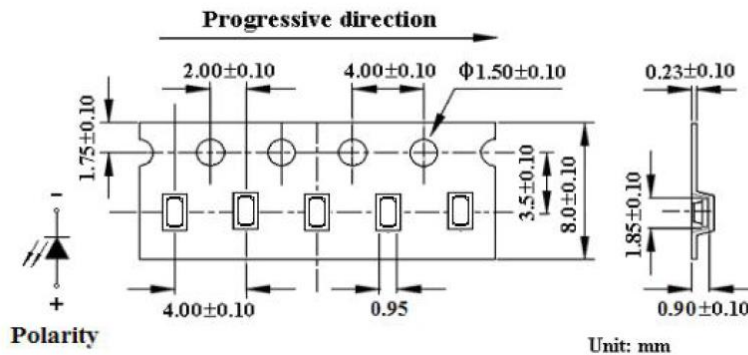
Packing

Reel Dimension:



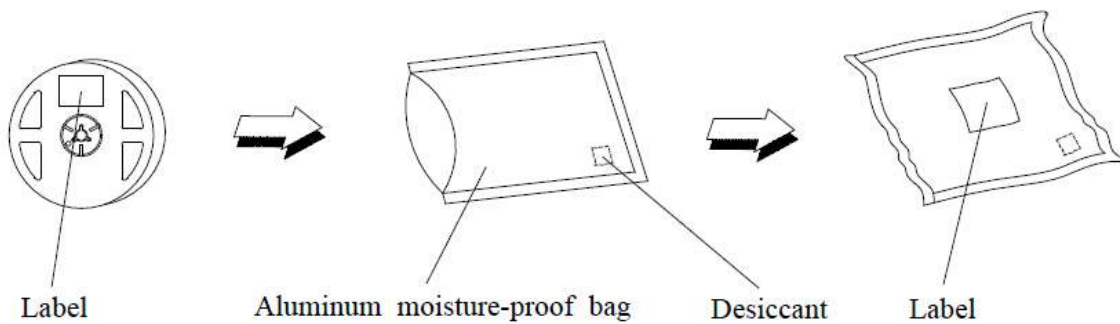
Unit: mm

Tape Dimension:



Unit: mm

Packing & Label 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
QBLP661-O	QBLP661-O	Iv=150mcd Typ. @ I _F =20mA / Color=600nm-610nm	4,000 units
QBLP661-Y	QBLP661-Y	Iv=250mcd Typ. @ I _F =20mA / Color=585nm-595nm	4,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP661-XX series	V1.0	5/27/2020

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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.