

QT-Brightek PLCC LED Series
SMD 1608 (0603) PLCC-2 LEDs

Part No.: QBLP661-IW5-CW

CW: Cool White
5: 5mA Sorting

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Introduction

Feature:

- Yellow diffused lens
- Package in tape and reel
- 1608 (0603) PLCC-2 Package
- 1608 Metric (0603) PLCC-2 Package
- Compatible with 0603 SMD form factor
- Sorted @ 5mA
- Viewing angle: 120deg typ.
- InGaN technology
- 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:

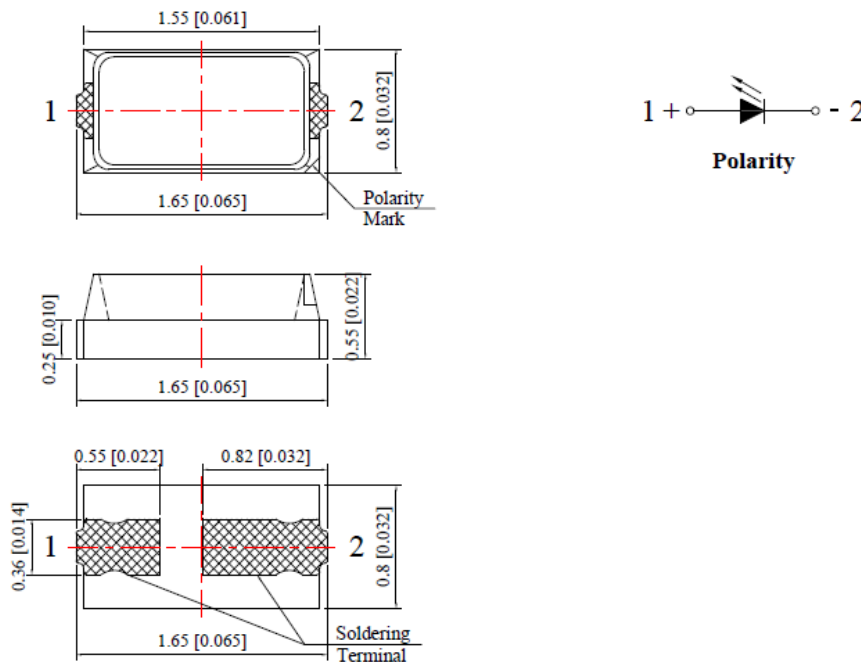
- Status indication
- Back lighting application

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)			Chromaticity Coordinate	I _v (mcd)		
			Min.	Typ.	Max.	Typ.	Min.	Typ.	Max.
QBLP661-IW5-CW	Cool White	5	2.5	2.8	3.1	X=0.277, Y=0.280 CCT: 11000K	100	350	900
		10*	-	2.9	-		-	700	-
		20*	2.8	3.2	3.6		-	1500	-

*V_F and I_v values are provided for reference

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)**
InGaN	90	25	100	5	-40 ~ +85	-40 ~ +90	260

*Duty 1/8 @ 1KHz

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

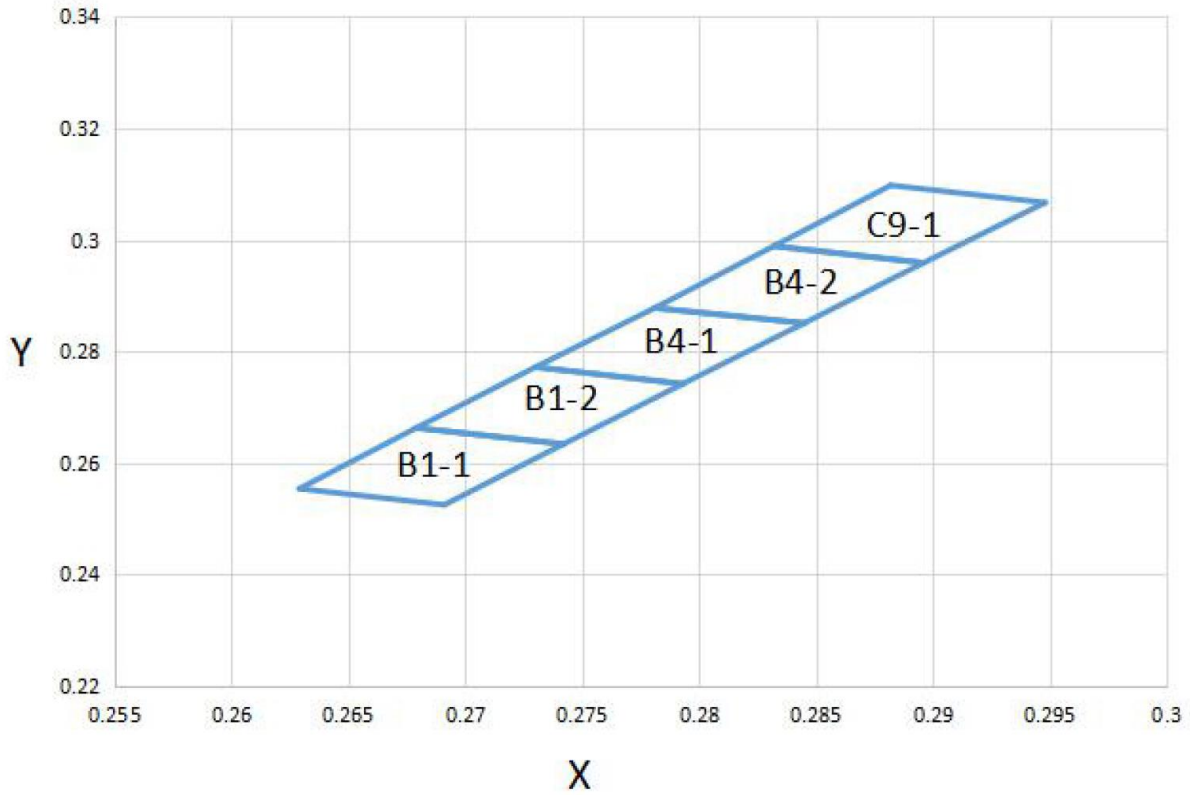
Forward Voltage V_F @ I_F=5mA

Bin	Min.	Max.	Unit
f	2.5	2.7	V
g	2.7	2.9	
h	2.9	3.1	

Luminous Intensity I_v @ I_F=5mA

Bin	Min.	Max.	Unit
1	100	300	mcd
2	300	500	
3	500	900	

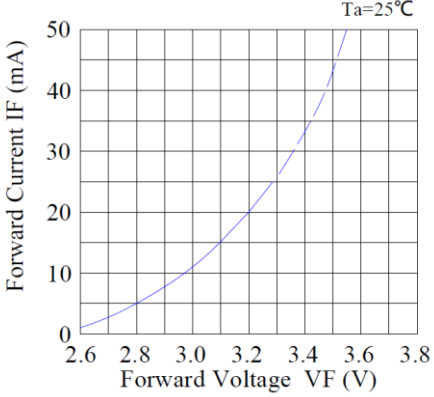
CIE Chromaticity Diagram



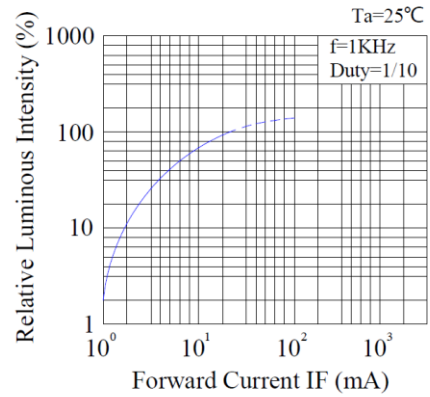
Bin	X1	Y1	X2	Y2	X3	Y3	X4	Y4
B1-1	0.2691	0.2525	0.2629	0.2554	0.2679	0.2663	0.2742	0.2634
B1-2	0.2742	0.2634	0.2679	0.2663	0.2730	0.2772	0.2793	0.2742
B4-1	0.2793	0.2742	0.2730	0.2772	0.2781	0.2878	0.2845	0.2851
B4-2	0.2845	0.2851	0.2781	0.2878	0.2832	0.2989	0.2896	0.2959
C9-1	0.2896	0.2959	0.2832	0.2989	0.2882	0.3098	0.2948	0.3067

Characteristic Curves

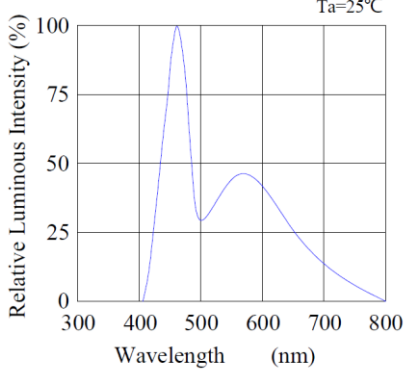
Forward Current & Forward Voltage



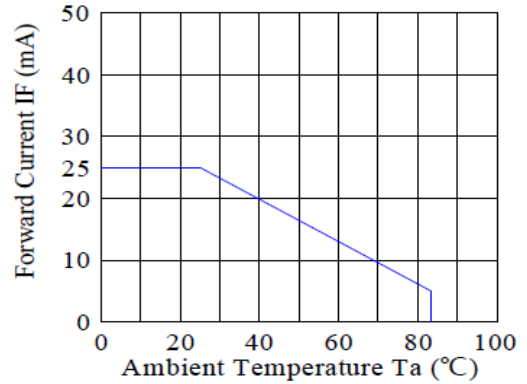
Luminous Intensity & Forward Current



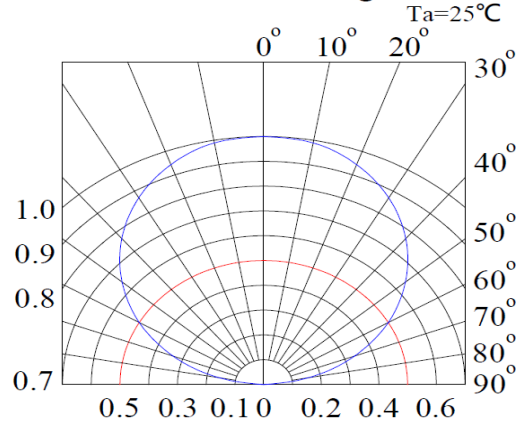
Spectrum Distribution



Forward Current Derating Curve



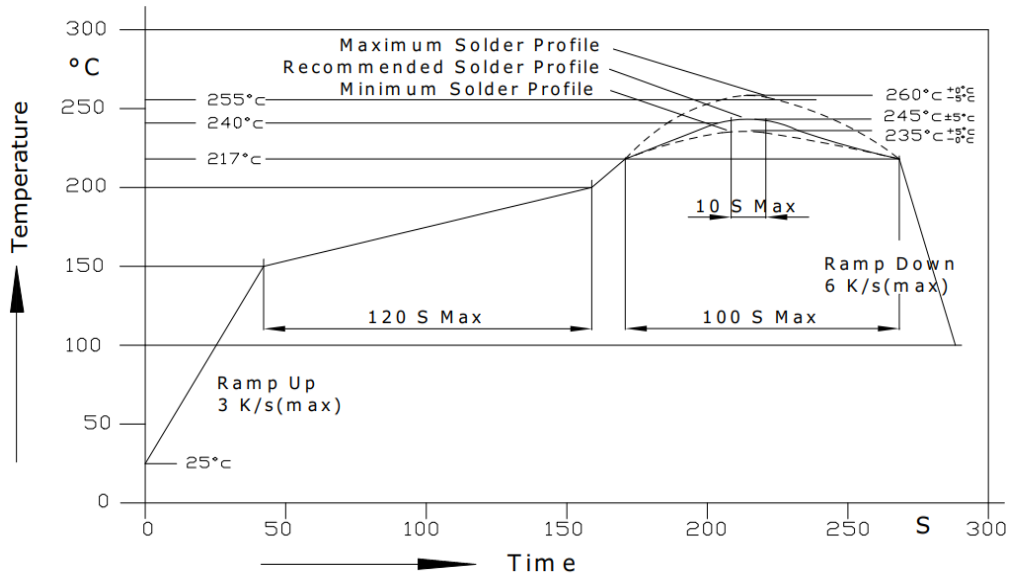
Radiation Diagram



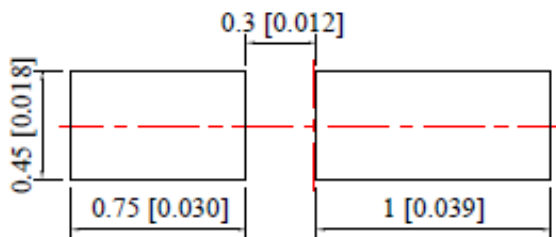
Solder Profile & Footprint

-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.



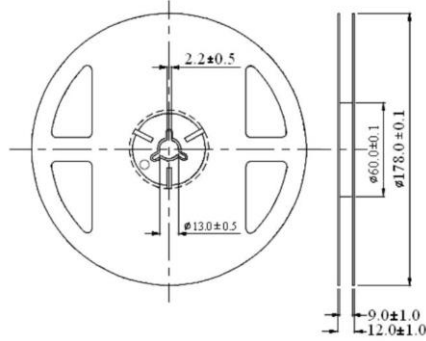
Recommended Pad Layout



Units: mm

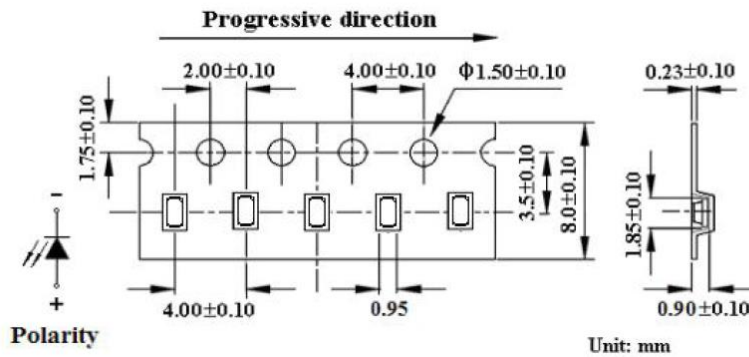
Packing

Reel Dimension:



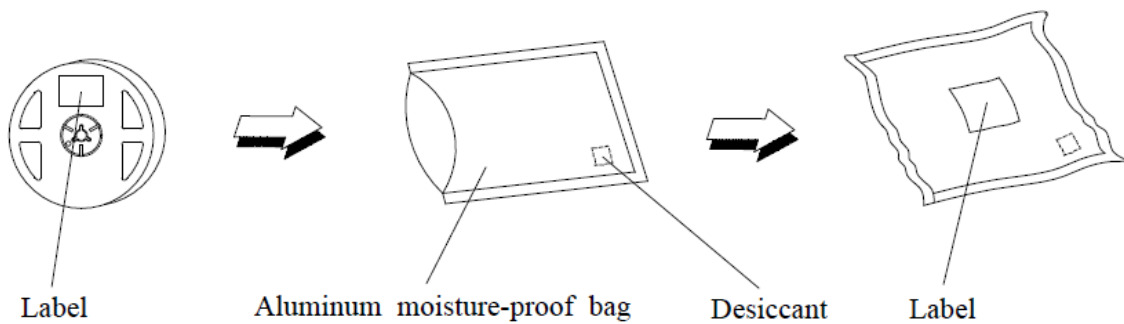
Unit: mm

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-IW5-CW	QBLP661-IW5-CW	Iv=350mcd Typ. @ If=5mA / Chromaticity Coordinate: (0.277, 0.280) typ.	4,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP661-IW5-CW	V1.0	12/01/2020

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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.