

QT-Brightek Chip LED Series

SMD 0805 LED

Part No.: QBLP631-IW5

5: 5mA

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	Version# 1.0	

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Introduction

Feature:

- Yellow diffused lens
- Package in tape and reel
- Ultra bright 0805 LED package
- InGaN technology
- Viewing angle: 140° typ.

Description:

These ultra bright 0805 LEDs have a height profile of 0.80mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

Application:

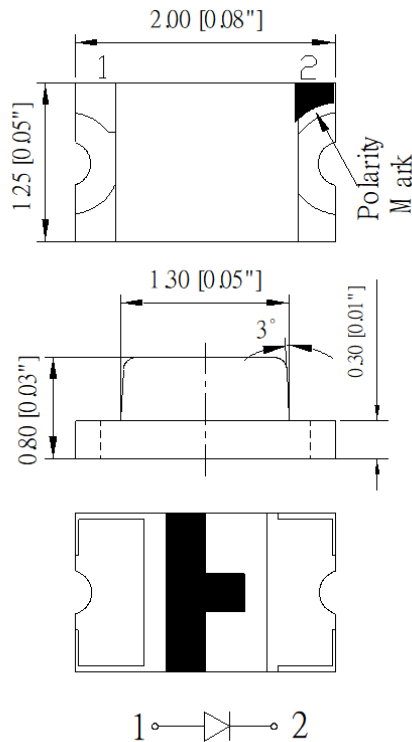
- Status indication
- Back lighting application

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)			CIE Coordinate	I _V (mcd)		
			Min.	Typ.	Max.	Typ.	Min.	Typ.	Max.
QBLP631-IW5	White	5	2.5	2.9	3.4	X=0.28 Y=0.29	50	85	160

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)**
InGaN	102	30	125	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/8 @ 1kHz

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

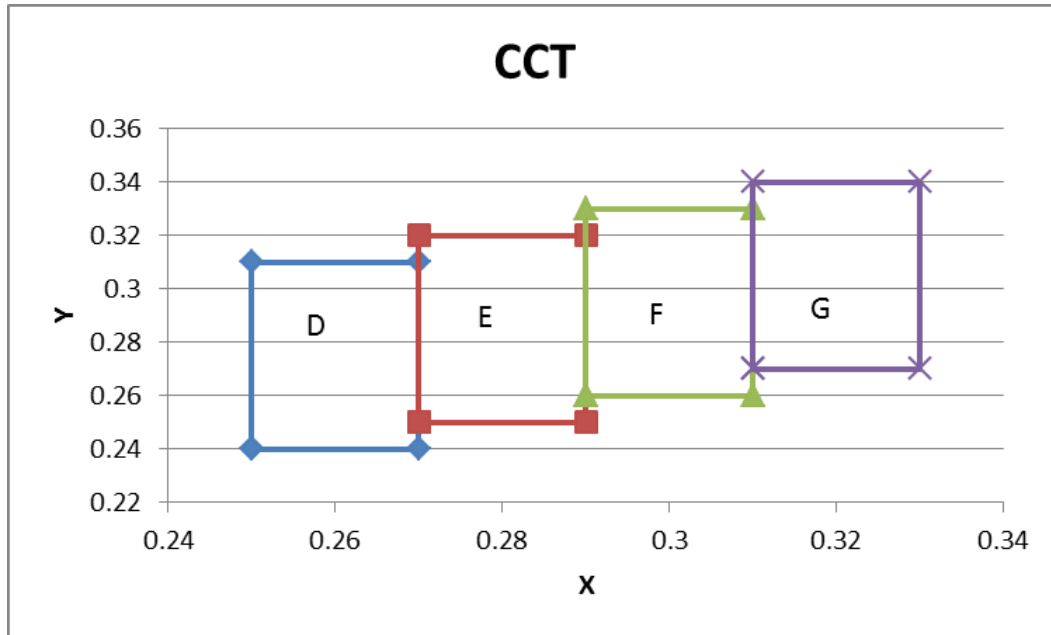
Forward Voltage V_F @ I_F=5mA

Bin	Min.	Max.	Unit
e	2.5	2.8	V
f	2.8	3.1	
g	3.1	3.4	

Luminous Intensity I_V @ I_F=5mA

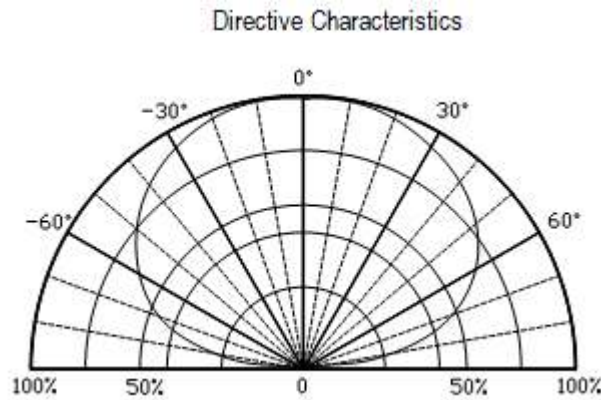
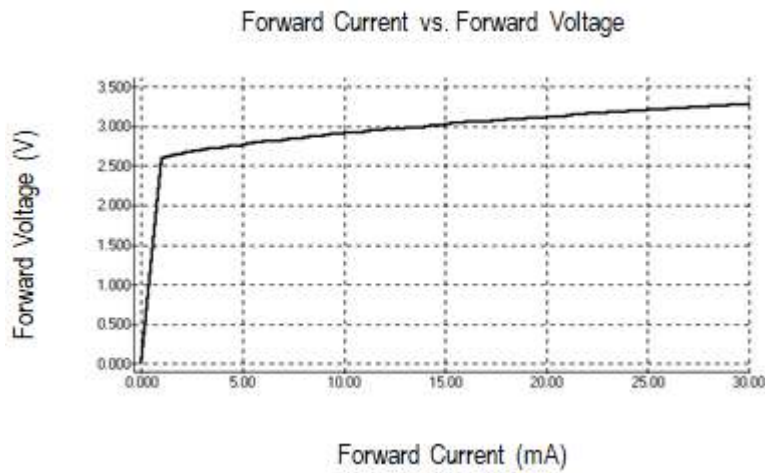
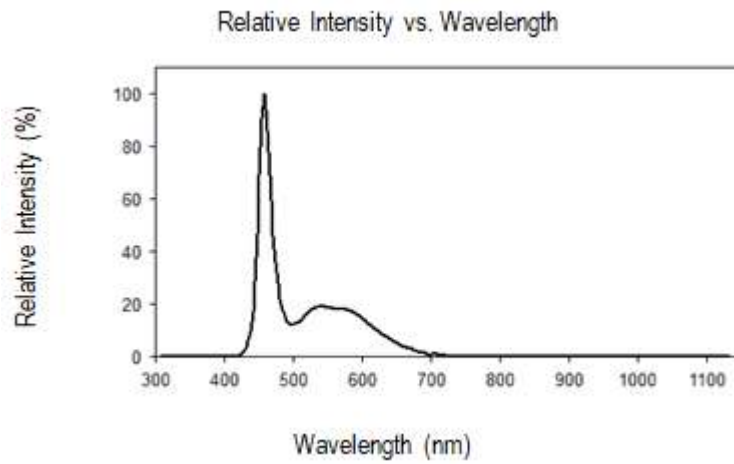
Bin	Min.	Max.	Unit
G	50	63	mcd
H	63	80	
I	80	100	
J	100	125	
K	125	160	

CIE Chromaticity Diagram



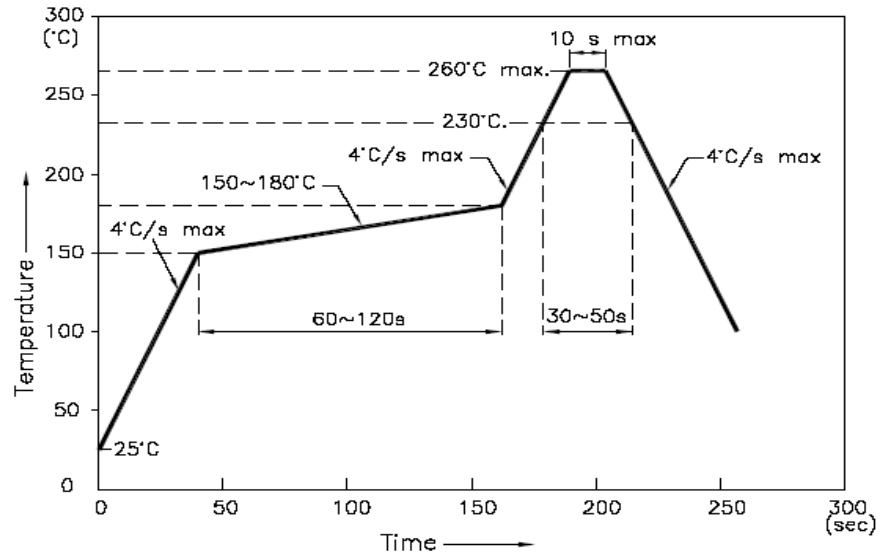
D		E		F		G	
X	Y	X	Y	X	Y	X	Y
0.25	0.24	0.27	0.25	0.29	0.26	0.31	0.27
0.25	0.31	0.27	0.32	0.29	0.33	0.31	0.34
0.27	0.31	0.29	0.32	0.31	0.33	0.33	0.34
0.27	0.24	0.29	0.25	0.31	0.26	0.33	0.27
0.25	0.24	0.27	0.25	0.29	0.26	0.31	0.27

Characteristic Curves

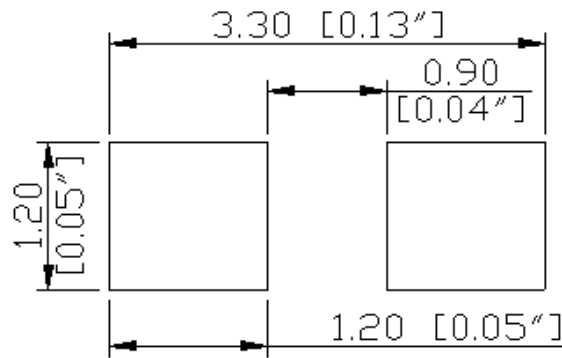


Solder Profile & Footprint

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



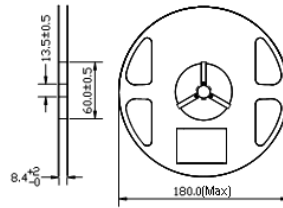
Recommended Pad Layout



Units: mm

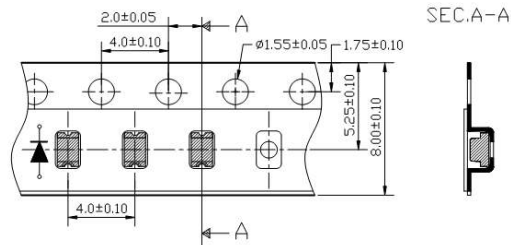
Packing

Reel Dimension:



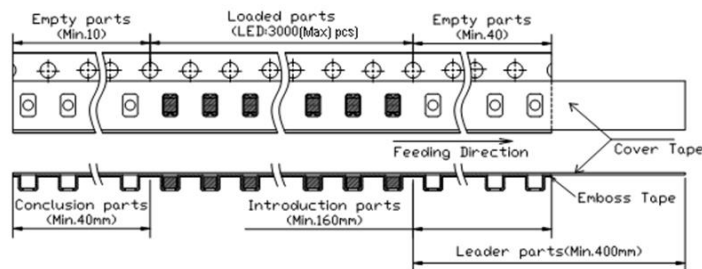
Unit: mm

Tape Dimension:

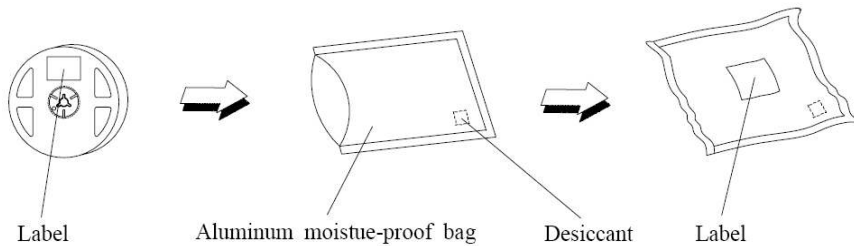


Unit: mm

Arrangement of Tape:



Packaging Specifications:



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Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP631-IW5	QBLP631-IW5	Iv=85mcd typ. @ I _F =5mA / CIE Coordinate: (X=0.28, Y=0.29) typ.	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP631-IW5	V1.0	02/16/2022

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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.