

QT-Brightek Chip LED Series

SMD 0805 LED

Part No.: QBLP631-IW5-2897

5: 5mA

2897: High Brightness Version

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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:

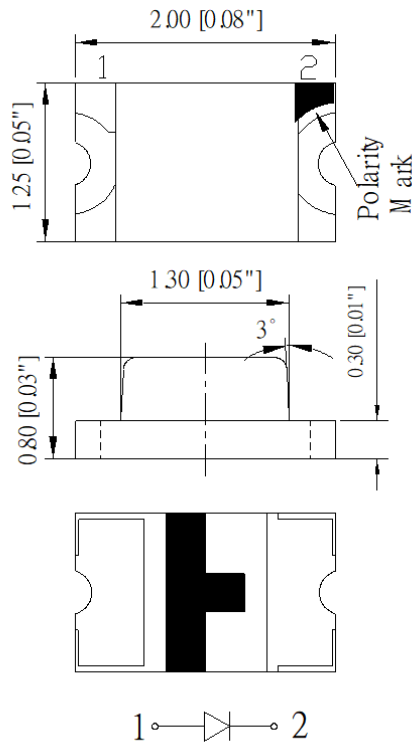
- Status indication
- Back lighting application

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-IW5-2897	White	5	2.5	2.8	3.4	X=0.298 Y=0.311	125	240	400

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

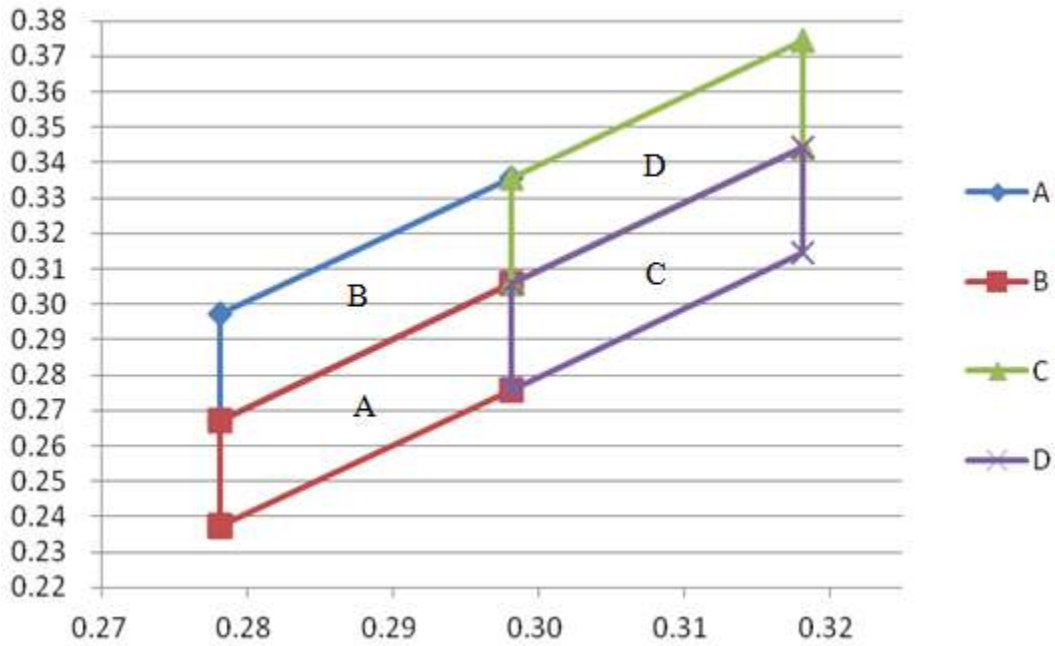
Forward Voltage V_F @ I_F=5mA

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

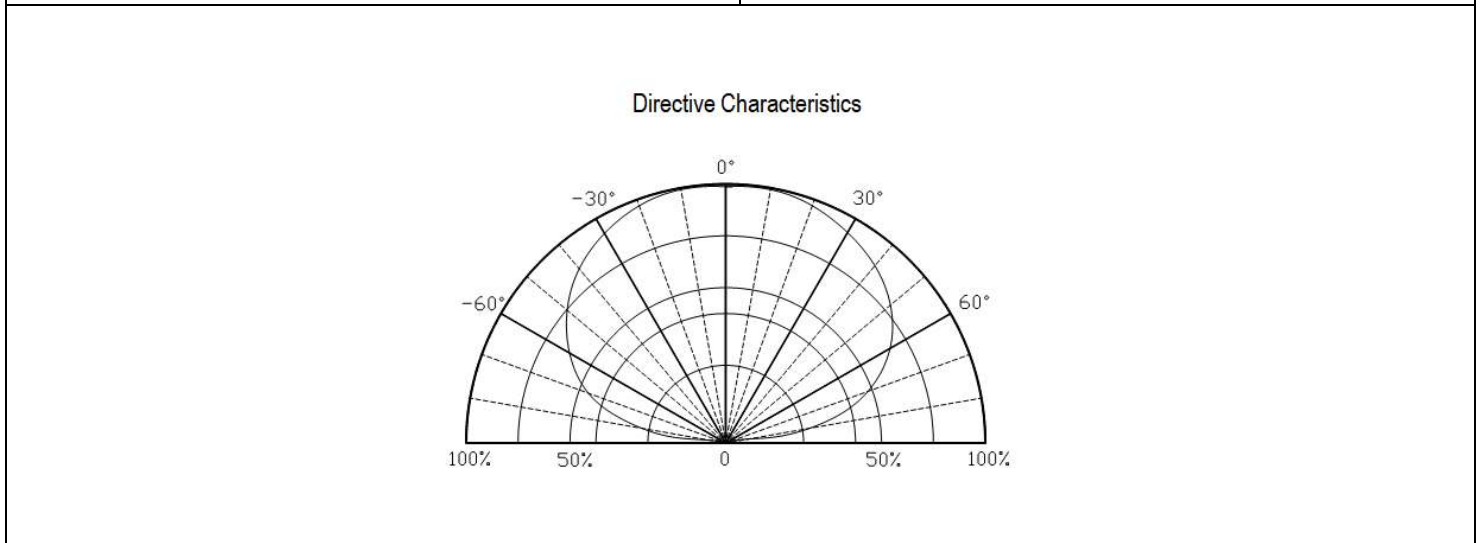
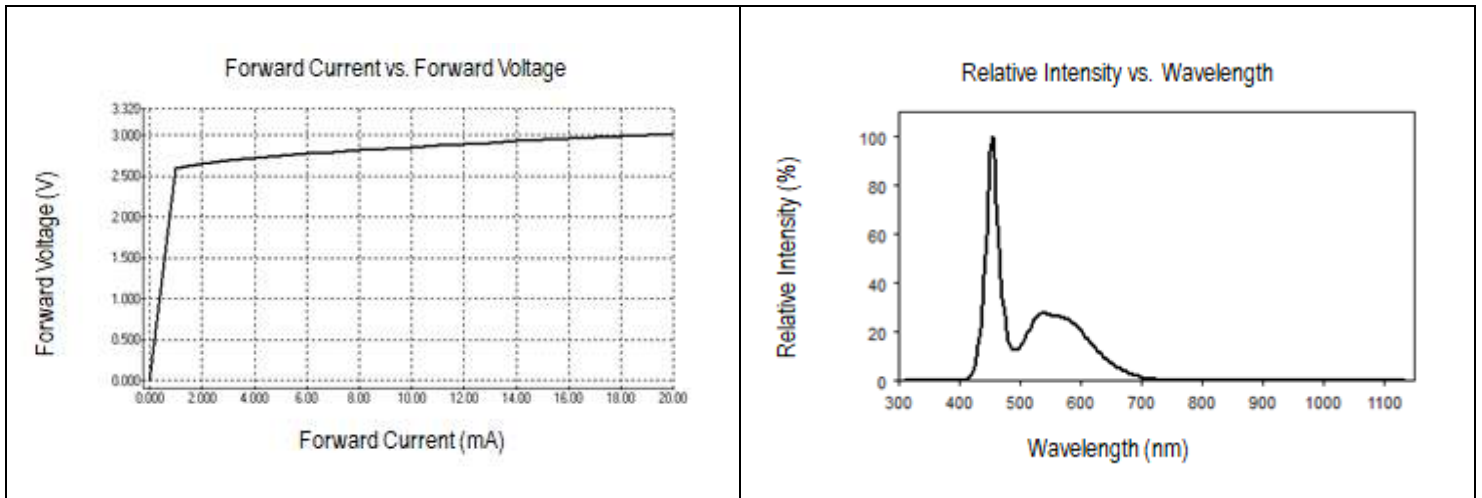
Bin	Min.	Max.	Unit
K	125	160	mcd
L	160	200	
M	200	250	
N	250	320	
O	320	400	

CIE Chromaticity Diagram



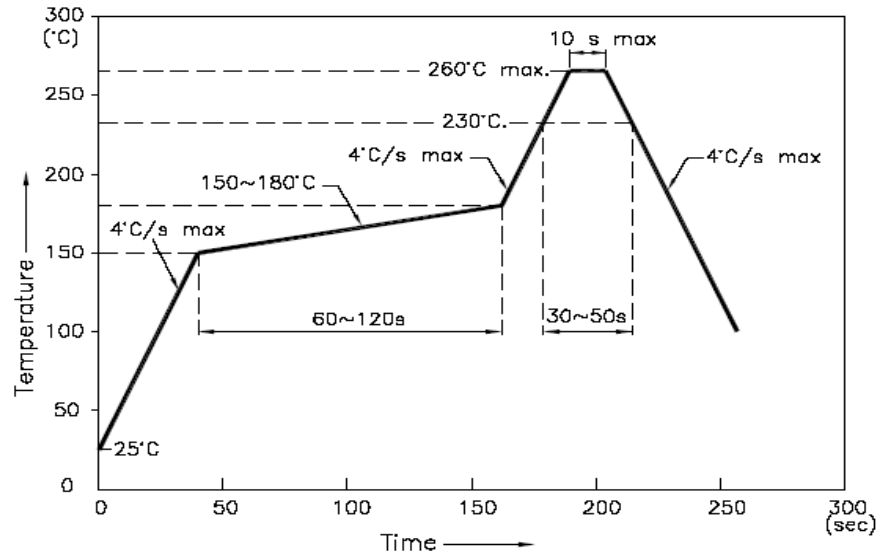
Rank	Chromaticity coordinates				
		X	Y	X	Y
A	X	0.278	0.298	0.278	0.298
	Y	0.267	0.306	0.297	0.336
B	X	0.278	0.298	0.278	0.298
	Y	0.237	0.276	0.267	0.306
C	X	0.298	0.318	0.298	0.318
	Y	0.306	0.344	0.336	0.374
D	X	0.298	0.318	0.298	0.318
	Y	0.276	0.314	0.306	0.344

Characteristic Curves

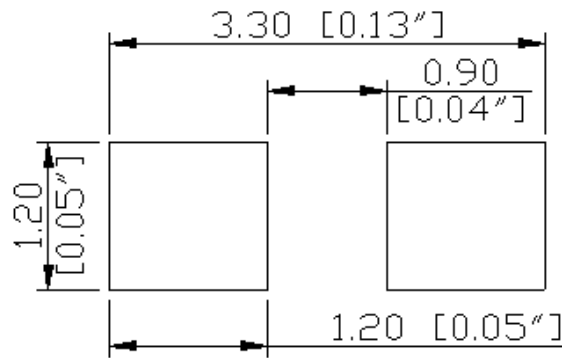


Solder Profile & Footprint

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



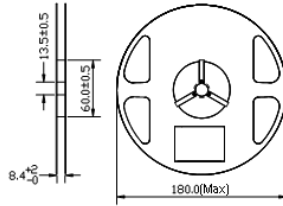
Recommended Pad Layout



Units: mm

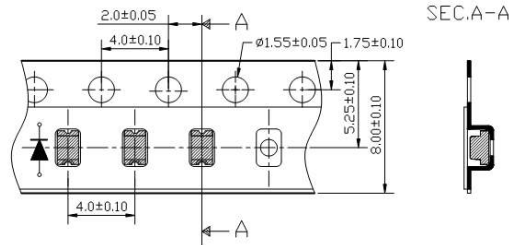
Packing

Reel Dimension:



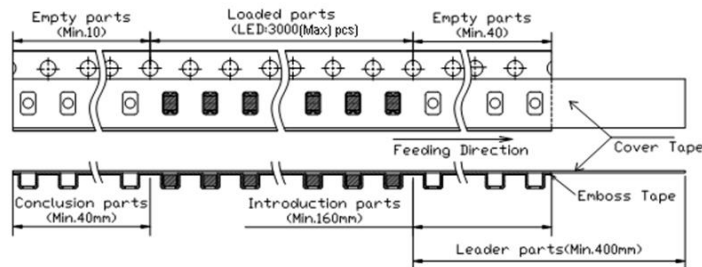
Unit: mm

Tape Dimension:

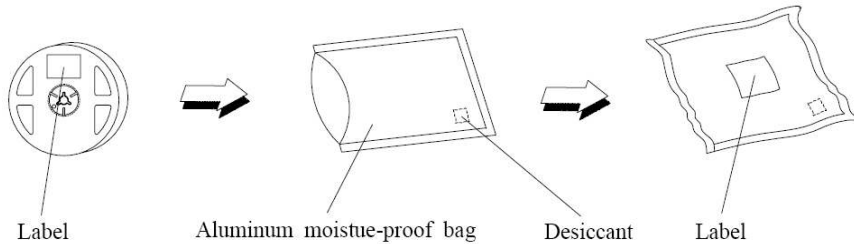


Unit: mm

Arrangement of Tape:



Packaging Specifications:



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Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP631-IW5-2897	QBLP631-IW5-2897	Iv=240mcd typ. @ I _F =5mA / CIE Coordinate: (X=0.298, Y=0.311) typ.	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP631-IW5-2897	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.