

QT-Brightek Chip LED Series

SMD 0603 LED

Part No.: QBLP601-IW-2897

2897: High Brightness Version

Product: QBLP601-IW-2897	Date: December 16, 2019	Page 1 of 10
	Version# 1.0	

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Introduction

Feature:

- Yellow diffused lens
- Package in tape and reel
- Ultra bright 0603 LED package
- InGaN technology
- Viewing angle: 140° typ.

Description:

These ultra bright 0603 LEDs have a height profile of 0.60mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

Application:

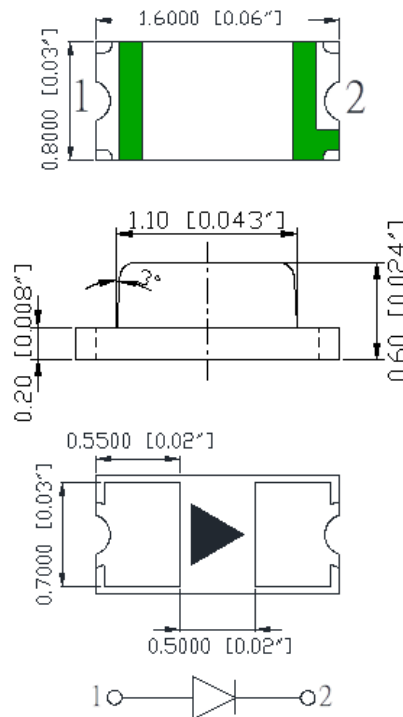
- Status indication
- Back lighting application

Certification & Compliance:

- TS16949
- 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.
QBLP601-IW-2897	White	20	2.8	3.0	3.4	X=0.298 Y=0.305	560	900	1400

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

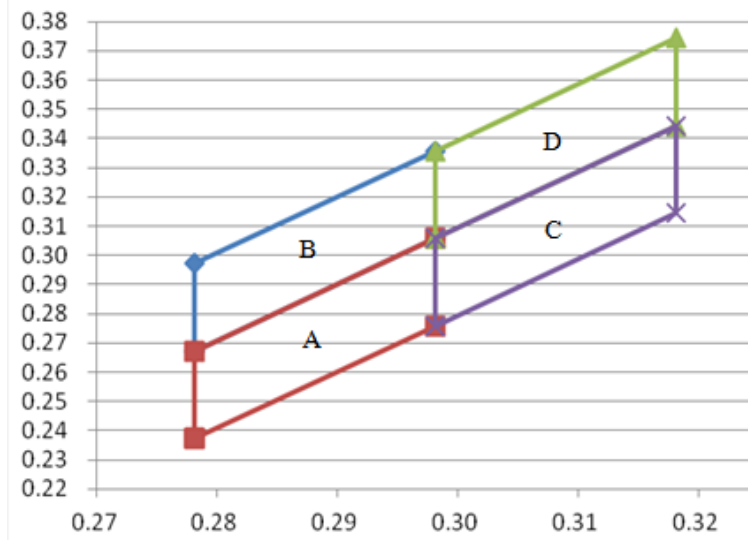
Forward Voltage V_F @ I_F=20mA

Bin	Min.	Max.	Unit
E	2.8	3.0	V
F	3.0	3.2	
G	3.2	3.4	

Luminous Intensity I_V @ I_F=20mA

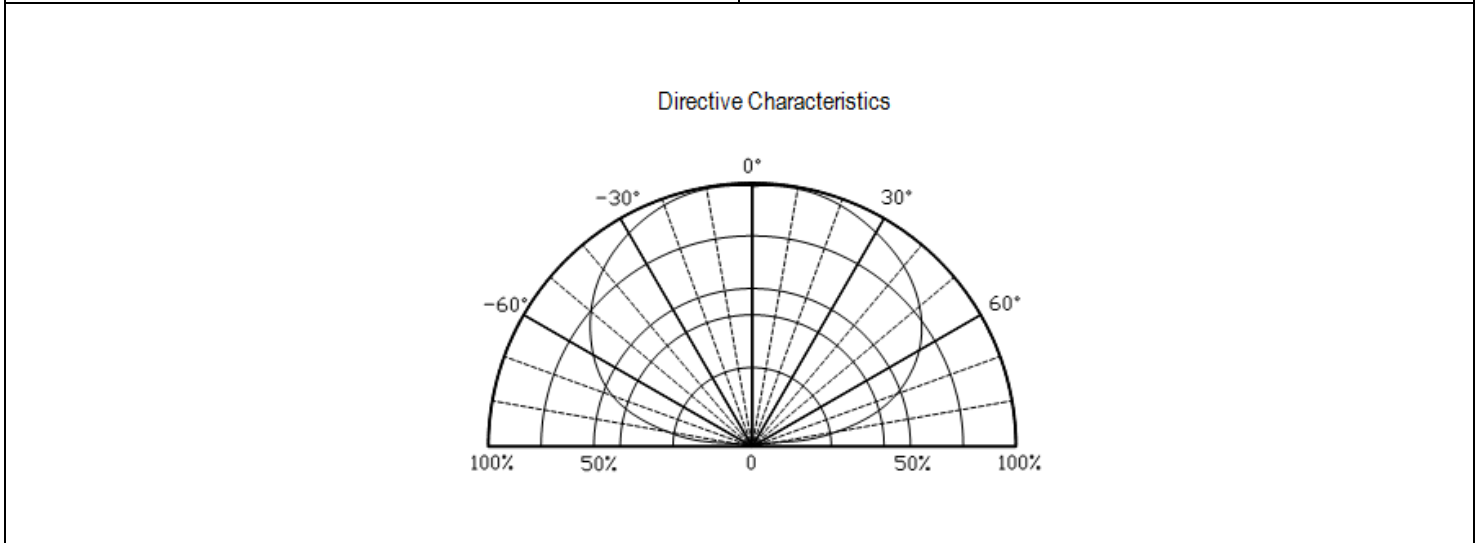
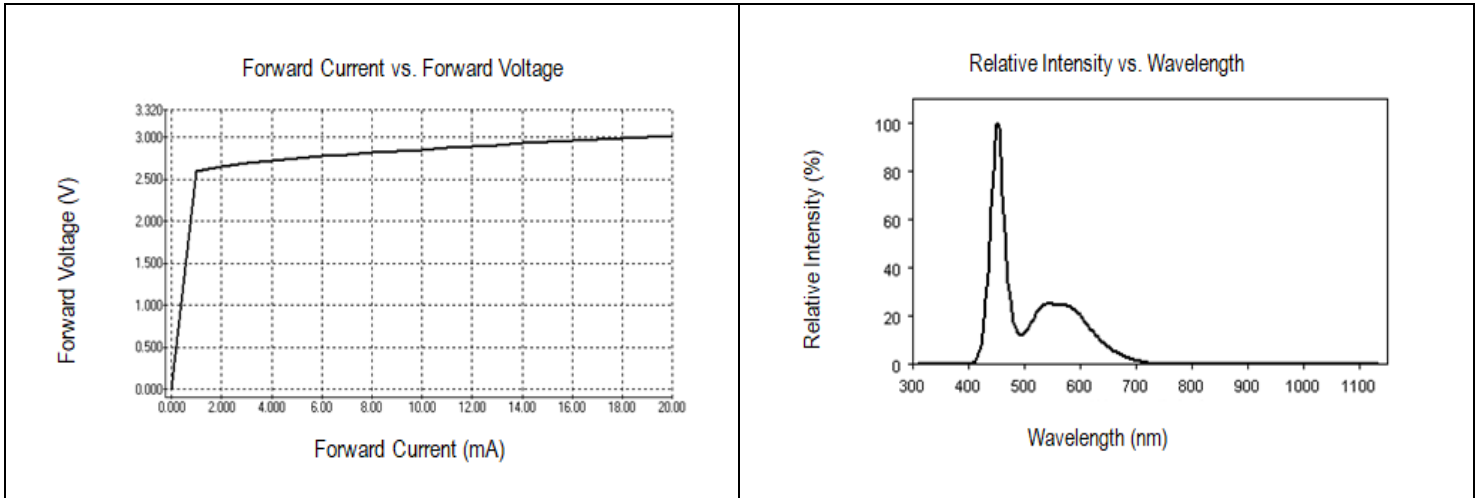
Bin	Min.	Max.	Unit
5	560	710	mcd
6	710	900	
7	900	1120	
8	1120	1400	

CIE Chromaticity Diagram



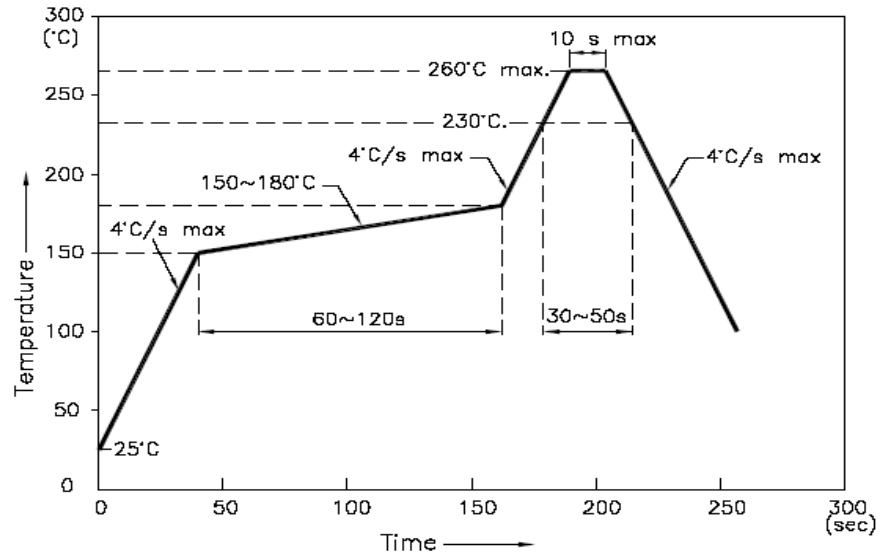
Rank	Chromaticity coordinates				
A	X	0.278	0.278	0.298	0.298
	Y	0.267	0.297	0.336	0.306
B	X	0.278	0.278	0.298	0.298
	Y	0.237	0.267	0.306	0.276
C	X	0.298	0.298	0.318	0.318
	Y	0.306	0.336	0.374	0.344
D	X	0.298	0.298	0.318	0.318
	Y	0.276	0.306	0.344	0.314

Characteristic Curves

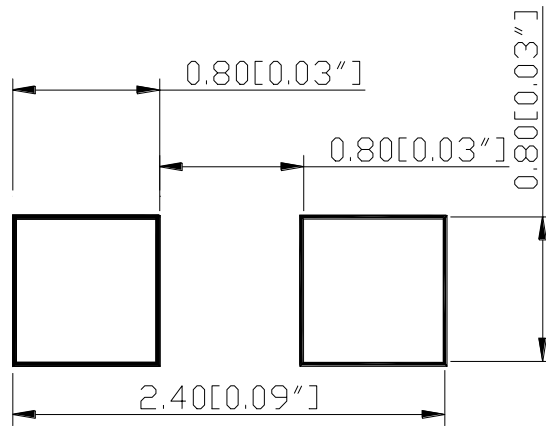


Solder Profile & Footprint

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



Recommended Pad Layout

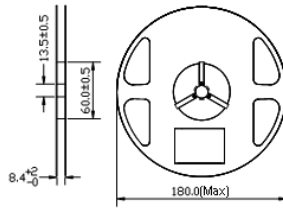


Units: mm

Tolerance: ± 0.1mm

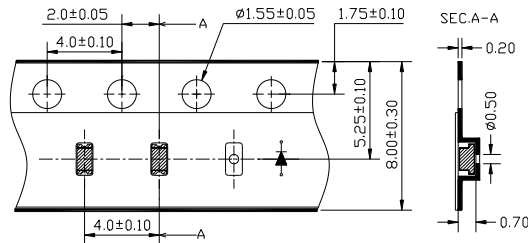
Packing

Reel Dimension:



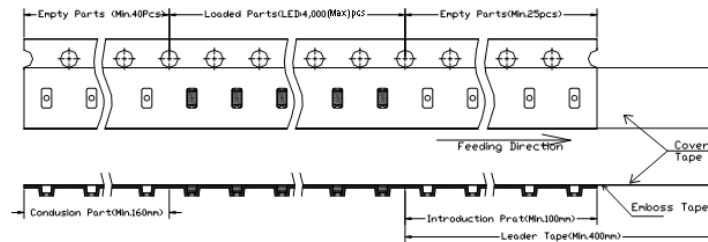
Unit: mm

Tape Dimension:

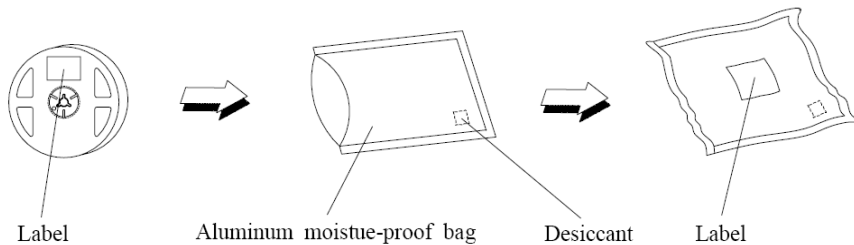


Unit: mm

Arrangement of Tape:



Packaging Specifications:





Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP601-IW-2897	QBLP601-IW-2897	Iv=900mcd typ. @ I _f =20mA / CIE Coordinate: (X=0.298, Y=0.305) typ.	4,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-IW-2897	V1.0	12/16/2020

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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.