

QT-Brightek Chip LED Series

SMD 0603 LED

Part No.: QBLP601-IW5

5: 5mA



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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.
- Height profile: 0.6mm

Application:

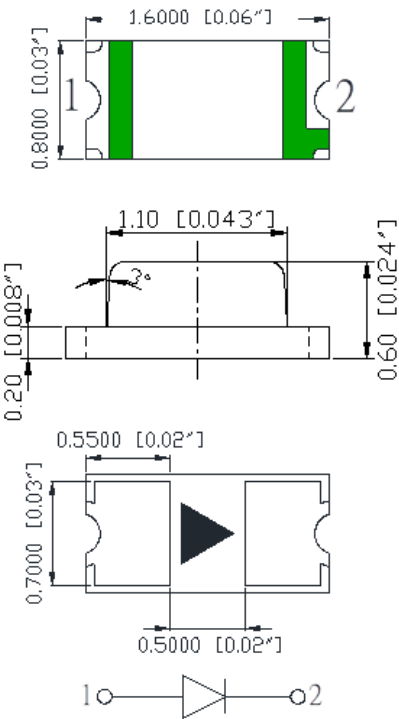
- Status indication
- Back lighting application

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.		Min.	Typ.	Max.
QBLP601-IW5	White	5	2.5	2.8	3.1	X=0.295 Y=0.285	40	81	125

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	95	30	100	5	-40 ~ +80	-40 ~ +85	260

*Duty 1/10@ 1kHz

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

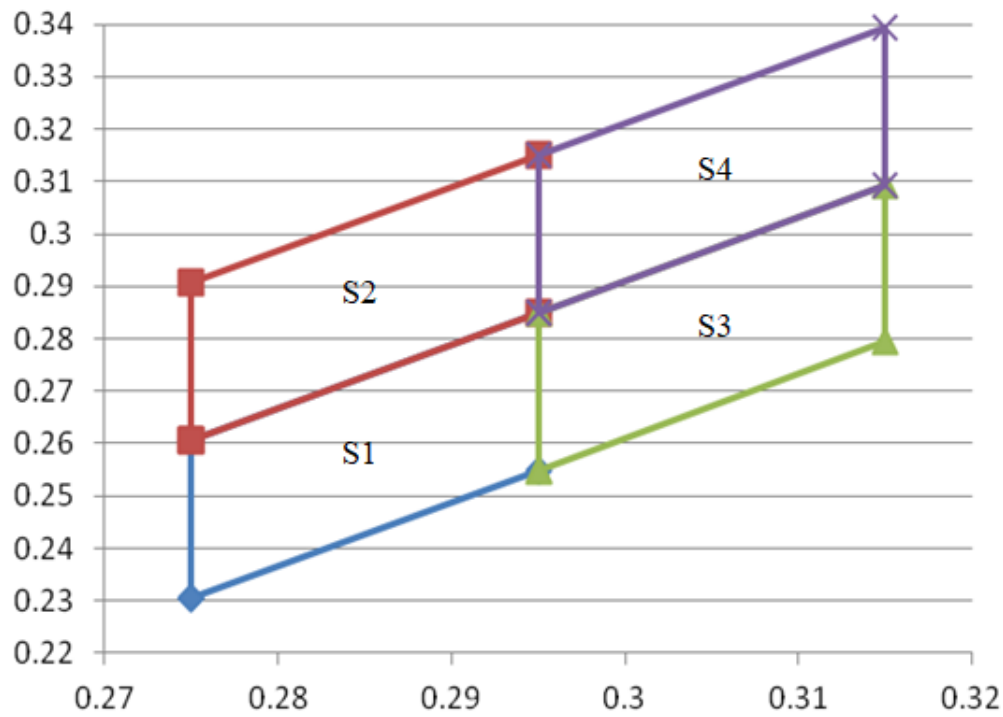
Forward Voltage V_F @ I_F=5mA

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

Luminous Intensity I_V @ I_F=5mA

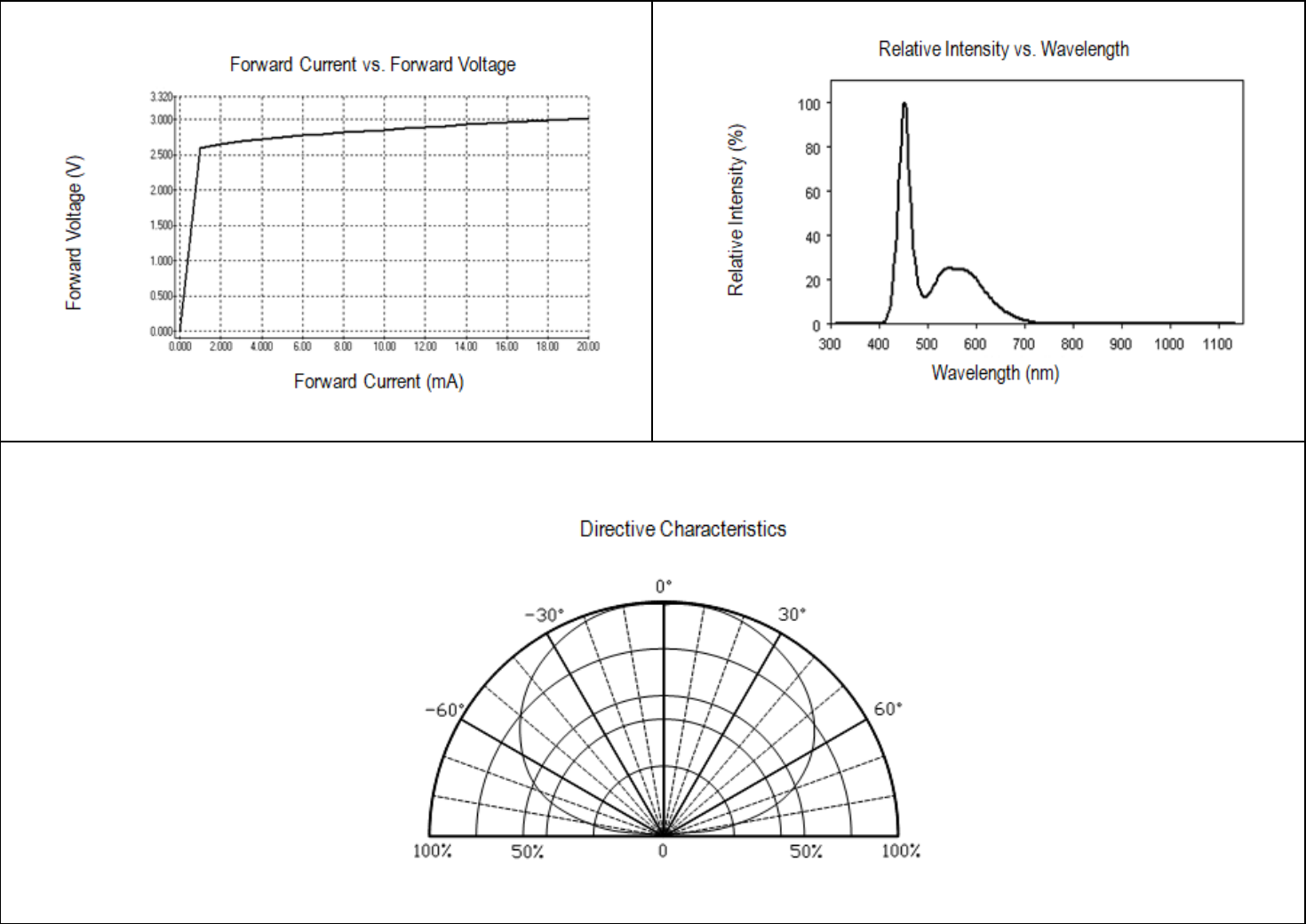
Bin	Min.	Max.	Unit
F	40	50	mcd
G	50	63	
H	63	80	
I	80	100	
J	100	125	

CIE Chromaticity Diagram



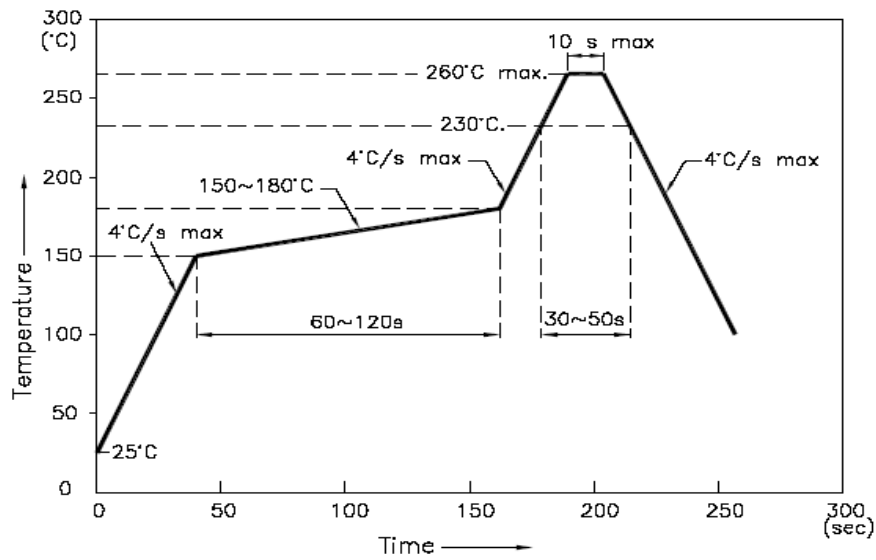
Rank	Chromaticity coordinates				
S1	X	0.275	0.275	0.295	0.295
	Y	0.231	0.261	0.285	0.255
S2	X	0.275	0.275	0.295	0.295
	Y	0.261	0.291	0.315	0.285
S3	X	0.295	0.295	0.315	0.315
	Y	0.255	0.285	0.309	0.279
S4	X	0.295	0.295	0.315	0.315
	Y	0.285	0.315	0.339	0.309

Characteristic Curves

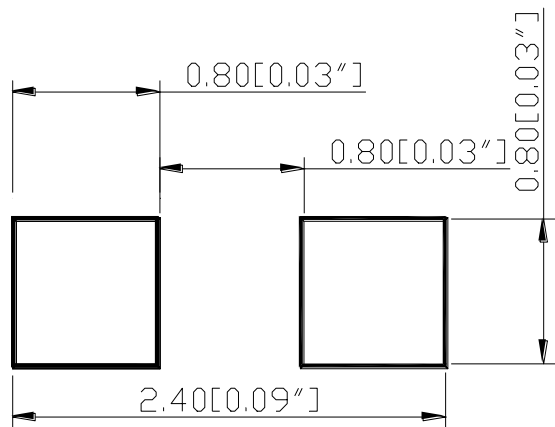


Solder Profile & Footprint

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



Recommended Pad Layout

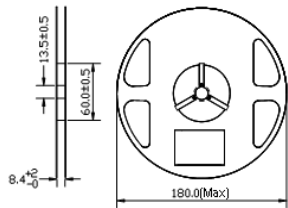


Units: mm

Tolerance: ± 0.1mm

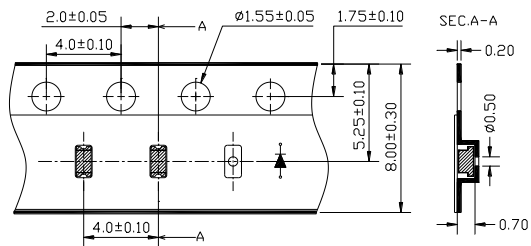
Packing

Reel Dimension:



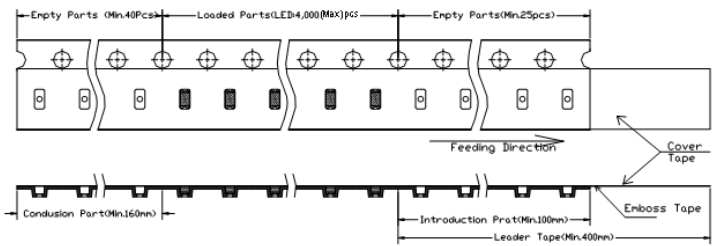
Unit: mm

Tape Dimension:

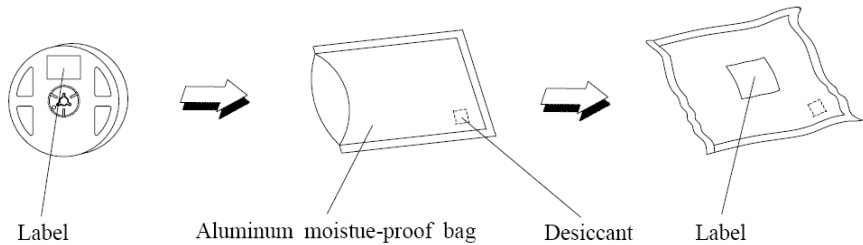


Unit: mm

Arrangement of Tape:



Packaging Specifications:





Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP601-IW5	Iv=81mcd typ. @ I _F =5mA / CIE Coordinate: (X=0.295, Y=0.285) typ.	4,000 units



Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-IW5	V1.0	10/06/2021
Update typical Iv value	V1.1	2/11/2025

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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.

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