

**QT-Brightek Chip LED Series**

**SMD 0603 Yellow LED**

**Part No.: QBLP601-Y5**

**5: 5mA**

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## Introduction

### Feature:

- Water clear lens
- Color: Yellow
- Package in tape and reel
- Ultra bright 0603 LED package
- AllnGaP technology
- Viewing angle: 140 deg typ.

### Application:

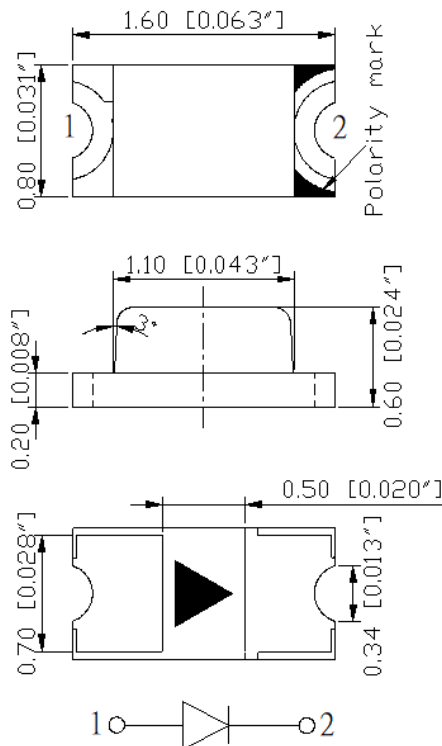
- Status indication
- Back lighting application

### Certification & Compliance:

- ISO9001
- RoHS Compliant



### Dimension:



Units: mm / tolerance = +/-0.1mm

## Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I <sub>F</sub> (mA)	V <sub>F</sub> (V)		λ <sub>D</sub> (nm)			λ <sub>P</sub> (nm)	I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP601-Y5	Yellow	5	2.0	2.3	585	590	595	590	16	33

## Absolute Maximum Rating

Material	P <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	V <sub>R</sub> (V)	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SO L</sub> (°C)**
AllnGaP	69	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<sub>F</sub> @ I<sub>F</sub>=5mA

Bin	Min.	Max.	Unit
A	1.7	2.0	V
B	2.0	2.3	

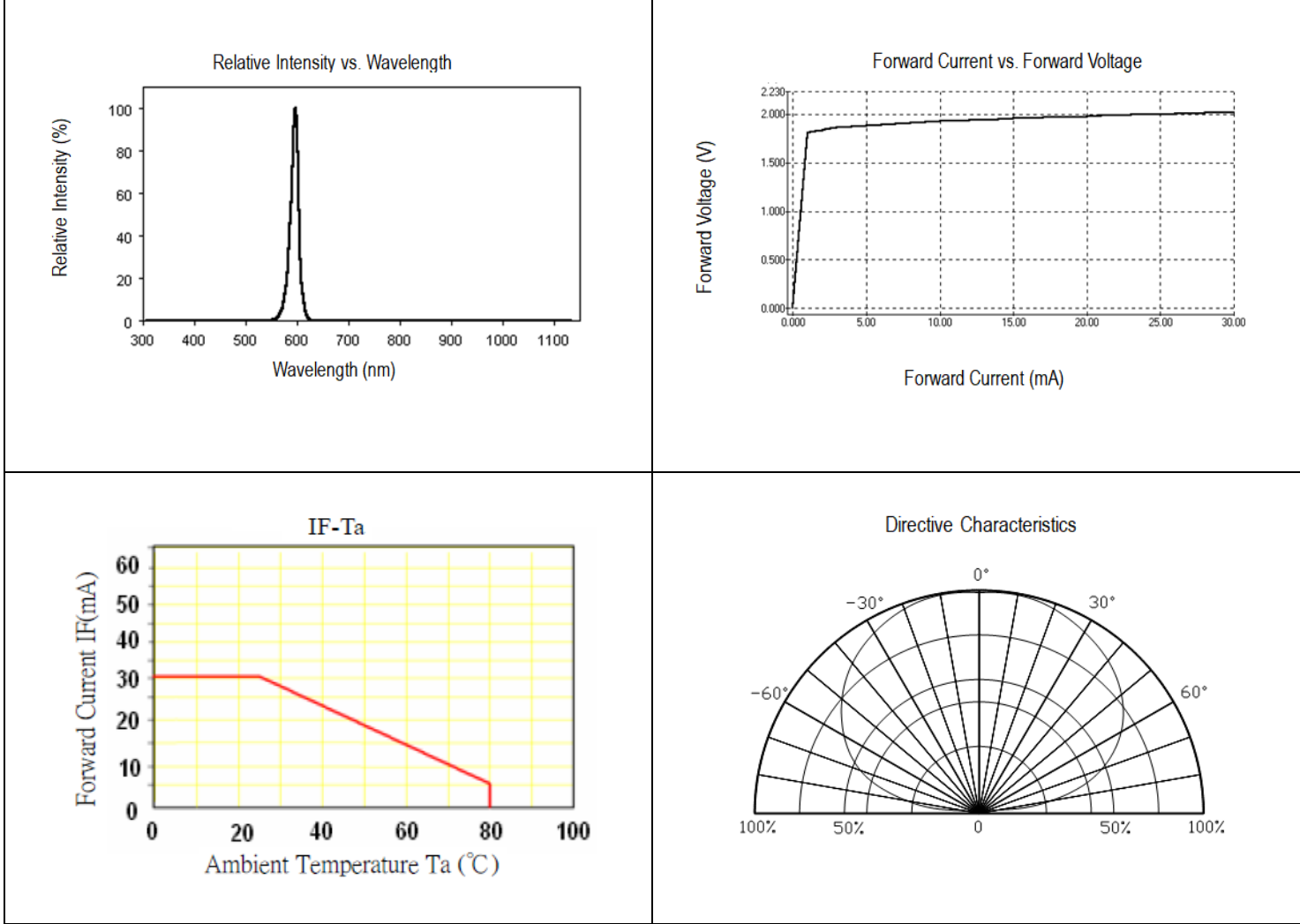
## Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=5mA

Bin	Min.	Max.	Unit
B	16	20	mcd
C	20	25	
D	25	32	
E	32	40	
F	40	50	

## Dominant Wavelength λ<sub>D</sub> @ I<sub>F</sub>=5mA

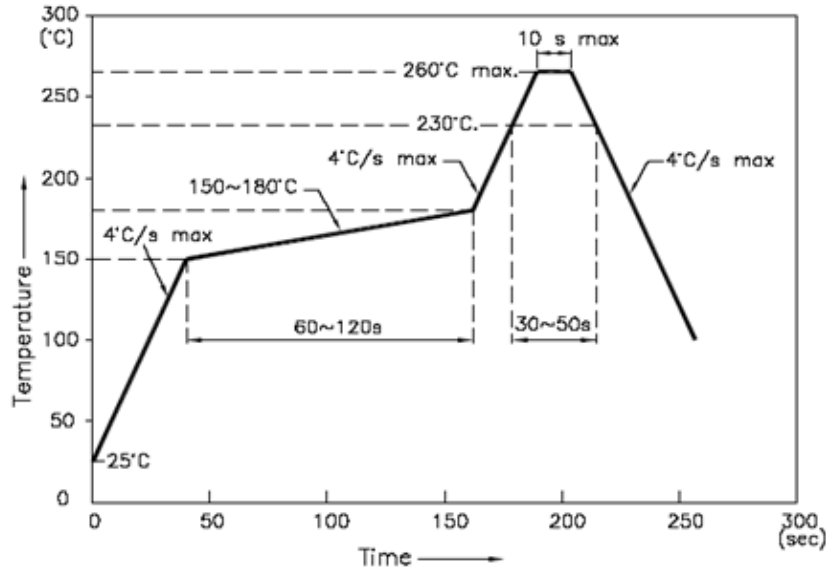
Bin	Min.	Max.	Unit
m	585	590	nm
n	590	595	

## Characteristic Curves

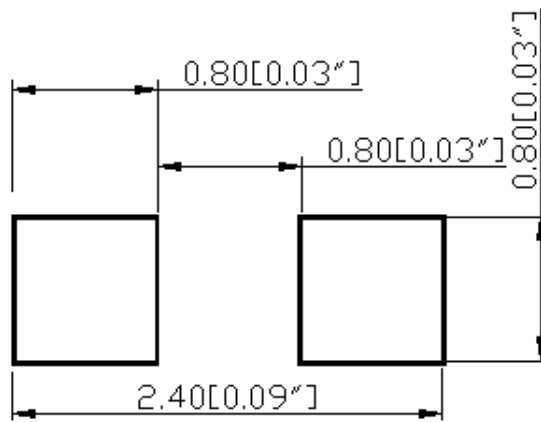


## Solder Profile & Footprint

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



### Recommended Pad Layout

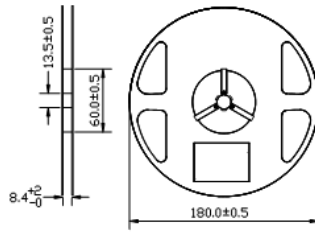


Units: mm

Tolerance: ±0.1mm

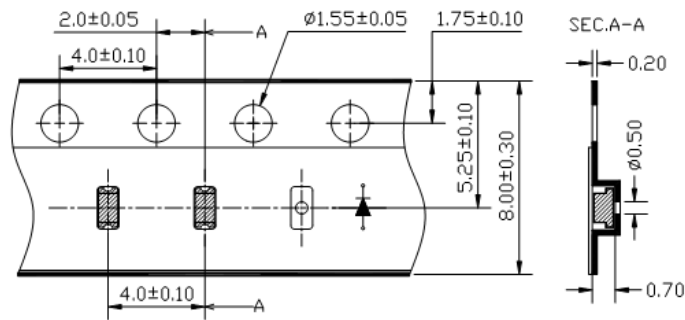
## Packing

### Reel Dimension:



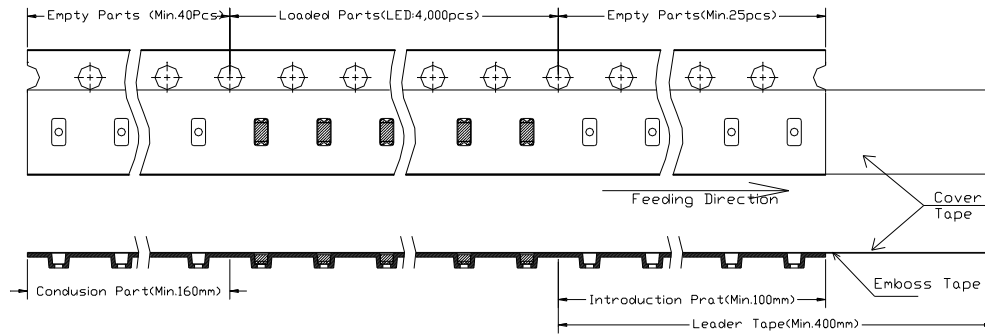
Unit: mm

### Tape Dimension:

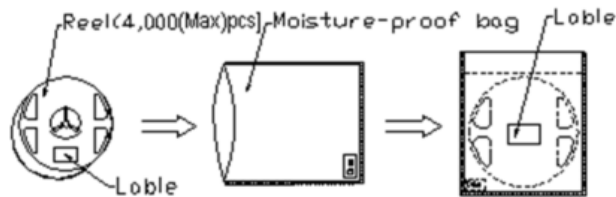


Unit: mm

### Arrangement of Tape:



### Packaging Specifications:





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## Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP601-Y5	Iv=33mcd typ. @ I <sub>F</sub> =5mA / Color=585 to 595nm	4,000 units

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## Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-Y5	V1.0	09/30/2021
Update typical Iv, add peak wavelength	V1.1	01/27/2025

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## Disclaimer

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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.