

QT-Brightek Chip LED Series

SMD 0603 Blue LED

Part No.: QBLP601-IB5

5: 5mA

Product: QBLP601-IB5	Date: January 26, 2025	Page 1 of 9
	Version# 1.1	

Table of Contents:

Introduction3

Electrical / Optical Characteristic (Ta=25 °C)4

Absolute Maximum Rating4

Solder Profile & Footprint.....6

Packing7

Ordering Information8

Revision History9

Disclaimer9

Introduction

Feature:

- Water clear lens
- Color: Blue
- Package in tape and reel
- Ultra bright 0603 LED package
- InGaN technology
- Viewing angle: 140 deg typ.
- Height profile: 0.6mm

Application:

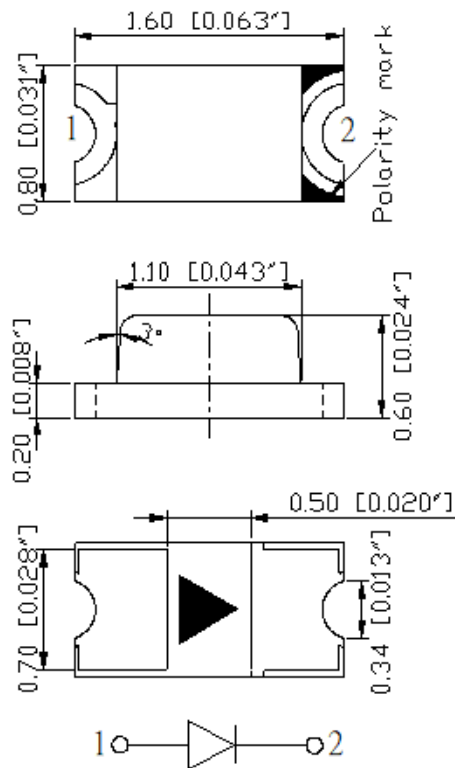
- Status indication
- Back lighting application

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)		λ _D (nm)			λ _P (nm)	I _V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP601-IB5	Blue	5	2.9	3.1	465	470	475	468	10	20

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	93	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	

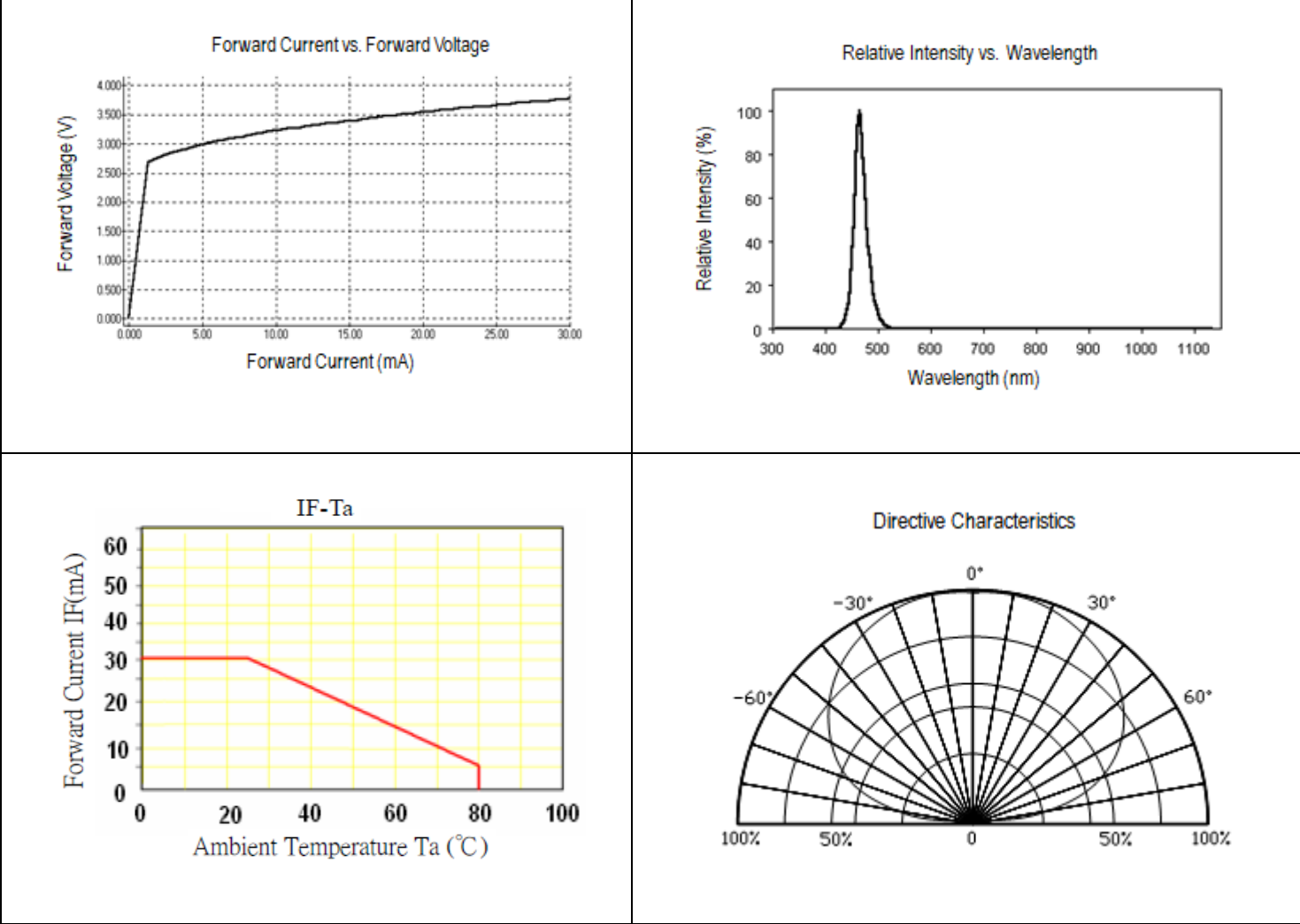
Luminous Intensity I_V @ I_F=5mA

Bin	Min.	Max.	Unit
A1	10	14	mcd
A2	14	19	
B1	19	24	
B2	24	31	
C	31	39	

Dominant Wavelength λ_D @ I_F=5mA

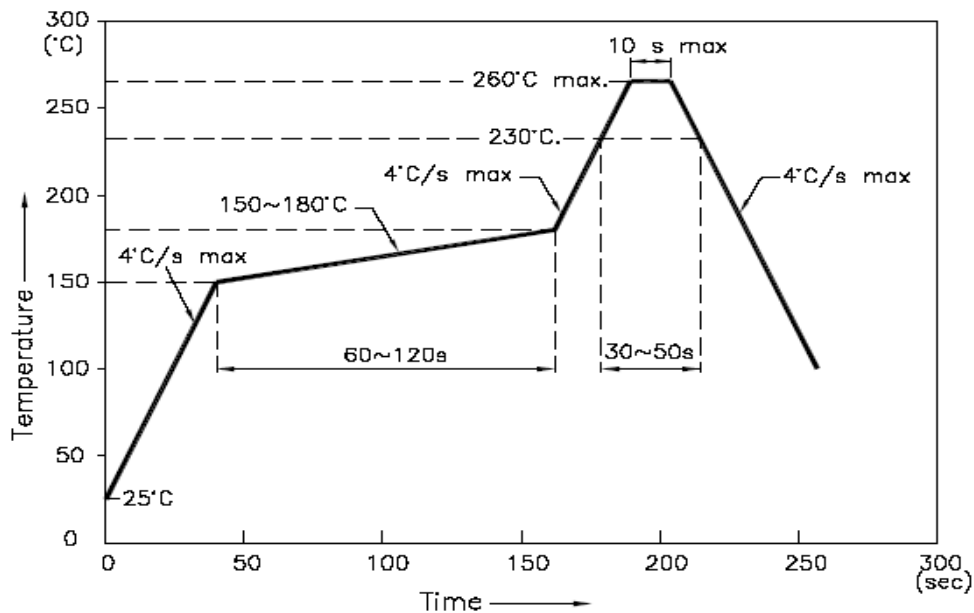
Bin	Min.	Max.	Unit
B1	465	470	nm
B2	470	475	

Characteristic Curves

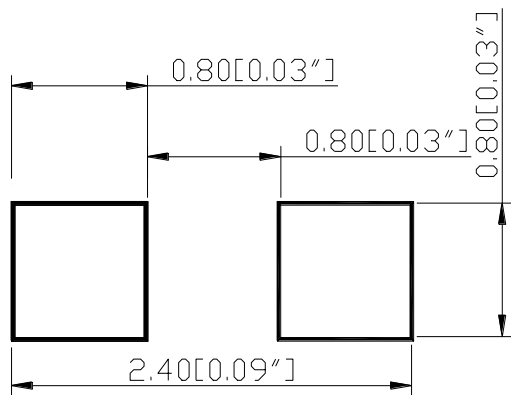


Solder Profile & Footprint

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



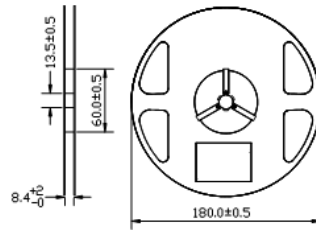
Recommended Pad Layout



Units: mm

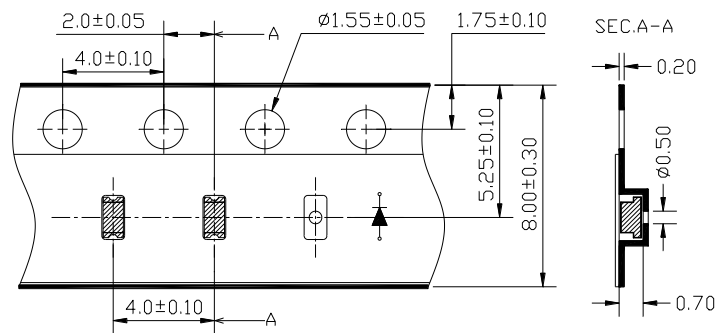
Packing

Reel Dimension:



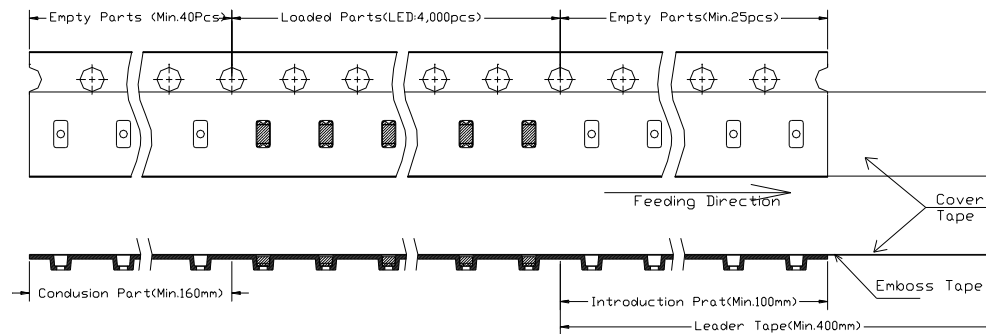
Unit: mm

Tape Dimension:

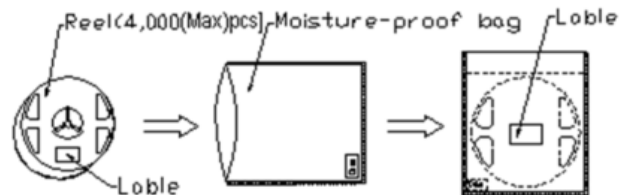


Unit: mm

Arrangement of Tape:



Packaging Specifications:





Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP601-IB5	Iv=20mcd typ. @ I _F =5mA / Color=465 to 475nm	4,000 units

Product: QBLP601-IB5	Date: January 26, 2025	Page 8 of 9
	Version# 1.1	



Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-IB5	V1.0	08/19/2021
Add peak wavelength and update typical Iv value	V1.1	01/26/2025

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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.