QT-Brightek Chip LED Series

SMD 0603 Blue LED

Part No.: QBLP601-2IB5

2IB: Blue 460 to 470nm
5: 5mA

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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

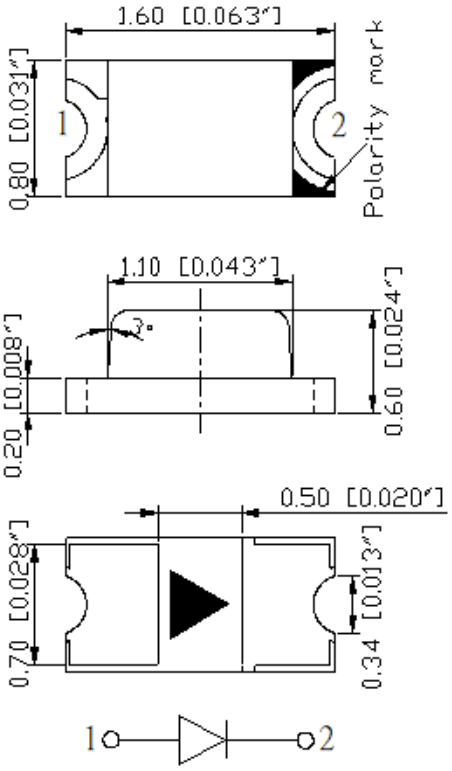
Application:

- 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.
QBLP601-2IB5	Blue	5	2.7	3.1	460	465	470	460	20	35

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	

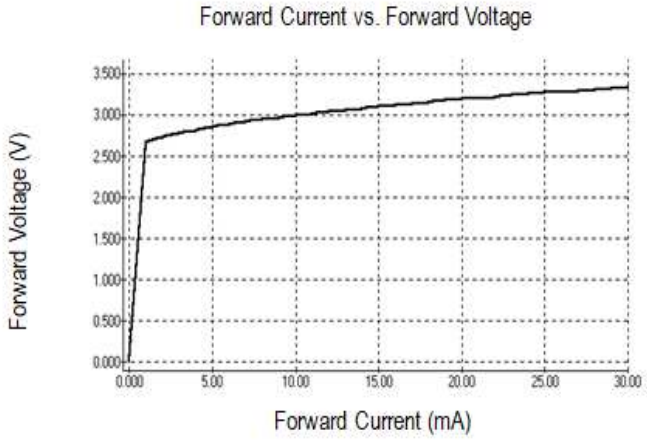
Luminous Intensity I_V @ I_F=5mA

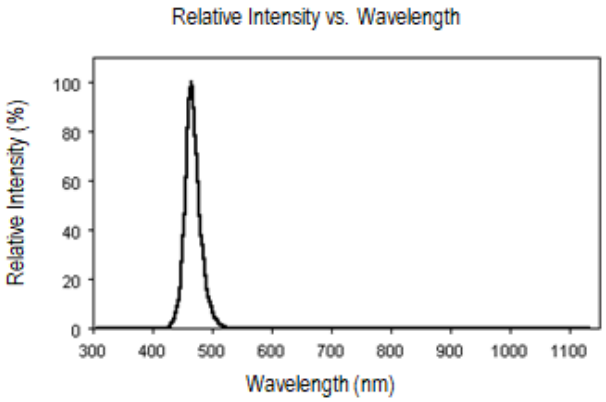
Bin	Min.	Max.	Unit
C	20	25	mcd
D	25	32	
E	32	40	
F	40	50	
G	50	63	

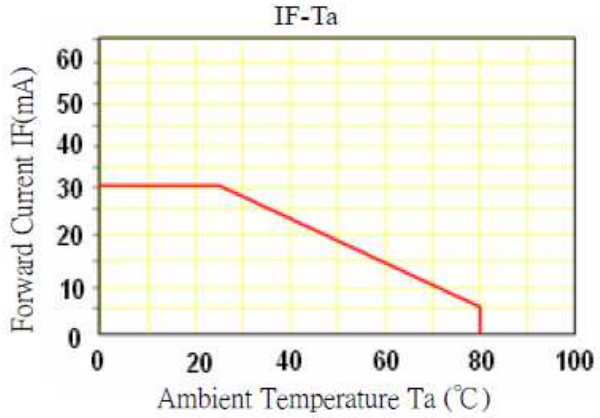
Dominant Wavelength λ_D @ I_F=5mA

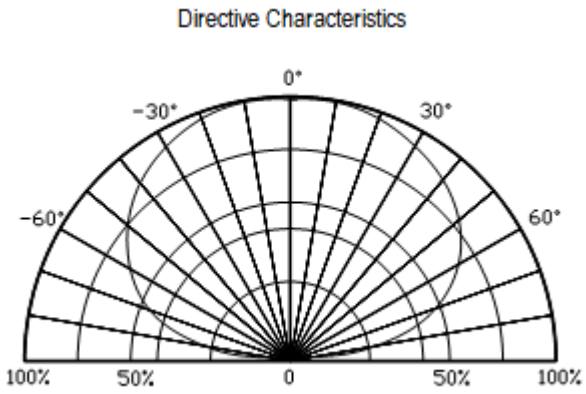
Bin	Min.	Max.	Unit
B0	460	465	nm
B1	465	470	

Characteristic Curves



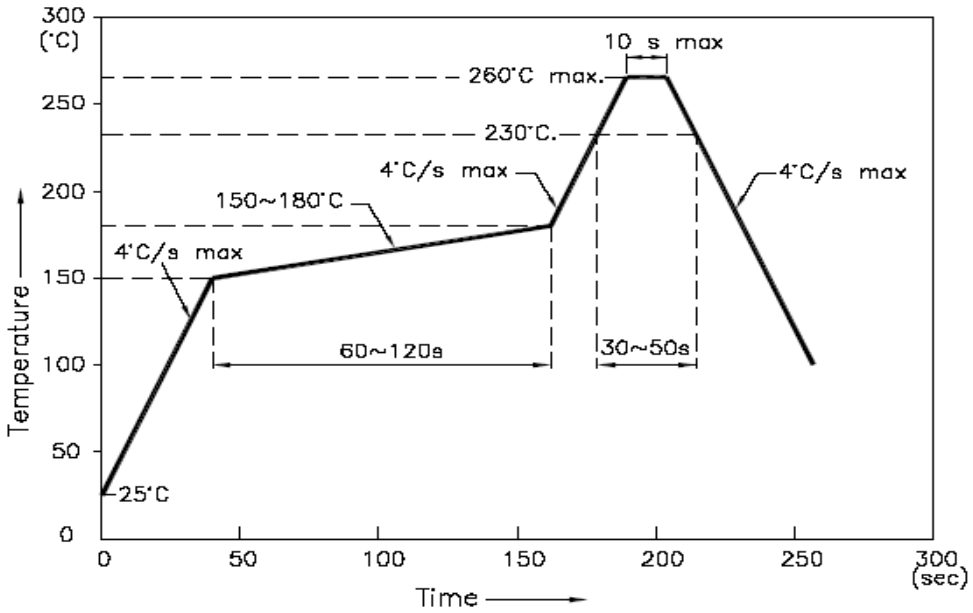




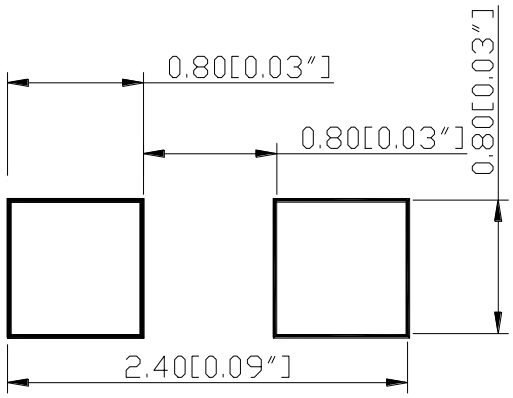


Solder Profile & Footprint

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



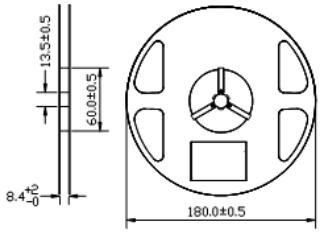
Recommended Pad Layout



Units: mm Tolerance: ±0.1mm

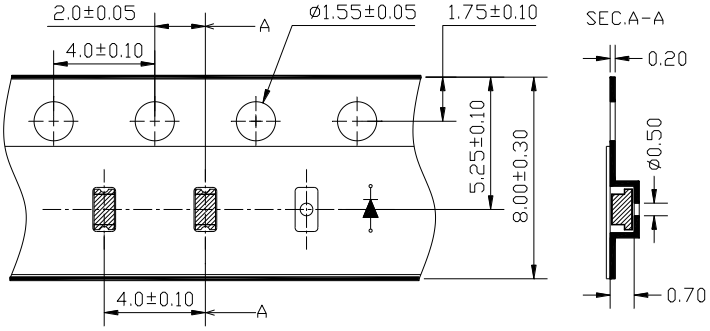
Packing

Reel Dimension:



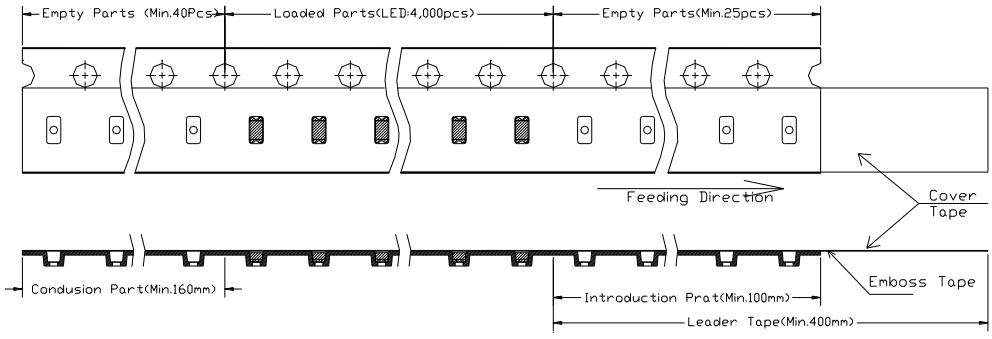
Unit: mm

Tape Dimension:

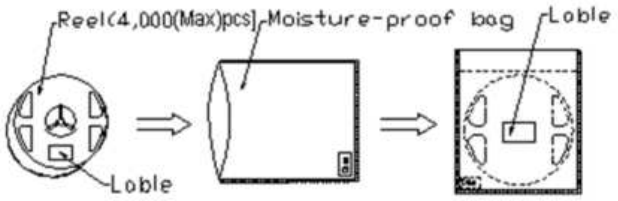


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP601-2IB5	Iv=35mcd typ. @ I_F=5mA / Color=460 to 470nm	4,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-2IB5	V1.0	09/01/2021
Add peak wavelength info	V1.1	01/25/2025

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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.