QT-Brightek Chip LED Series

0402 SMD Chip LED

Part No.: QBLP595-IG5

5: 5mA

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Introduction

Feature:

- Water clear lens
- Package in tape and reel
- Compact 0402 package
- InGaN technology
- Viewing angle: 140° typ.
- Height profile: 0.5mm

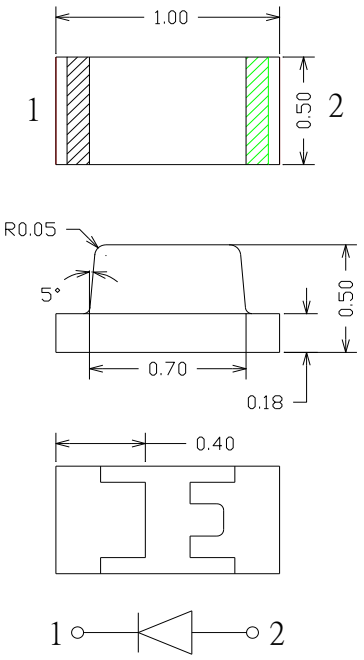
Application:

- 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.
QBLP595-IG5	True Green	5	2.65	3.4	520	525	530	522	160	280

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	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	
g	3.1	3.4	

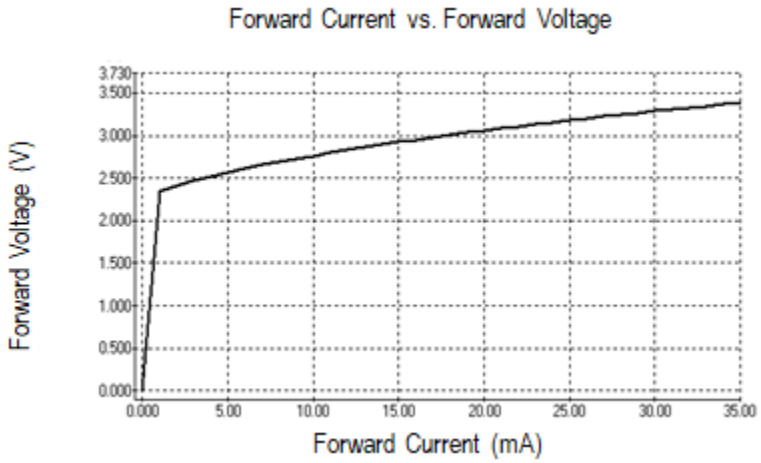
Luminous Intensity I_V @ I_F=5mA

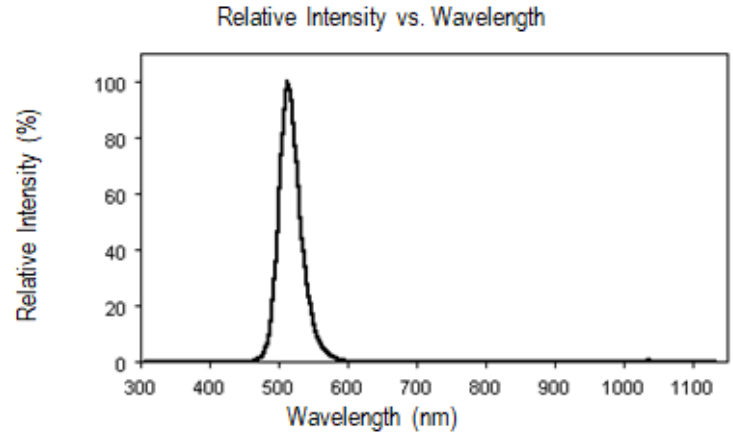
Bin	Min.	Max.	Unit
L	160	200	mcd
M	200	250	
N	250	320	
O	320	400	

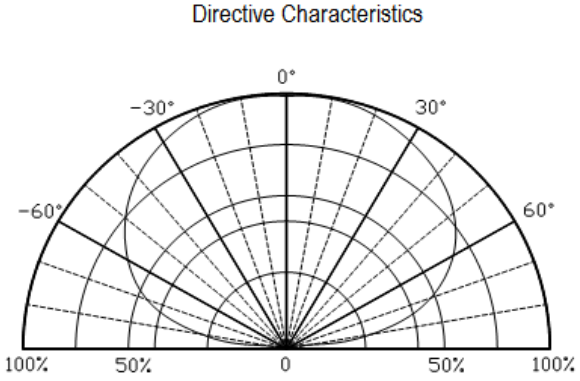
Dominant Wavelength λ_D @ I_F=5mA

Bin	Min.	Max.	Unit
U	520	522.5	nm
V	522.5	525	
W	525	527.5	
X	527.5	530	

Characteristic Curves

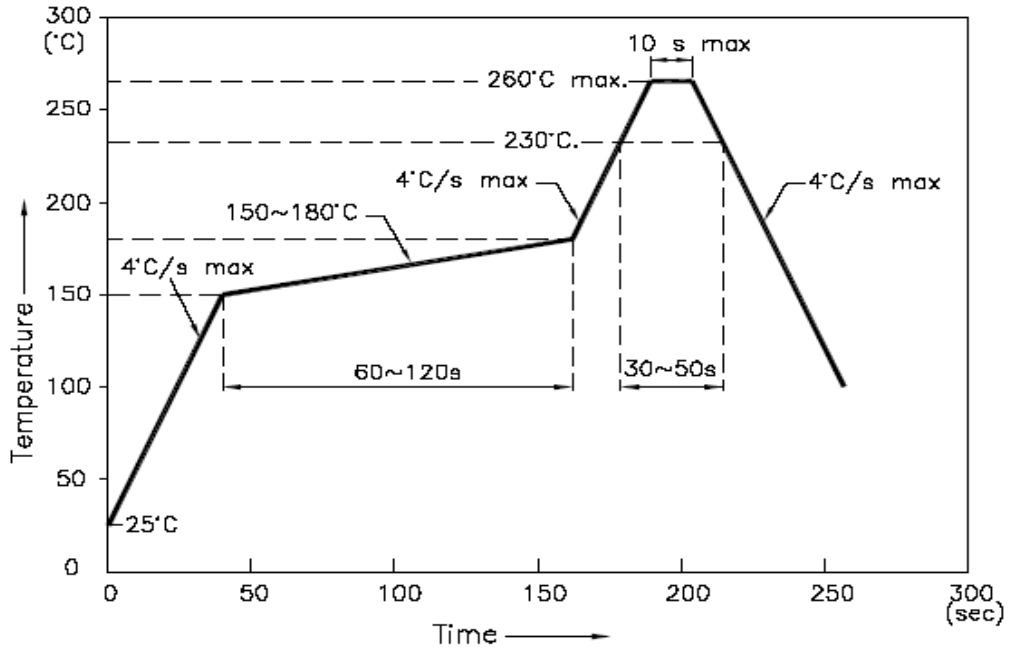




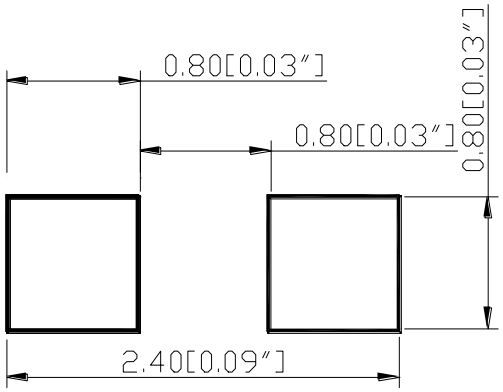


Solder Profile & Footprint

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



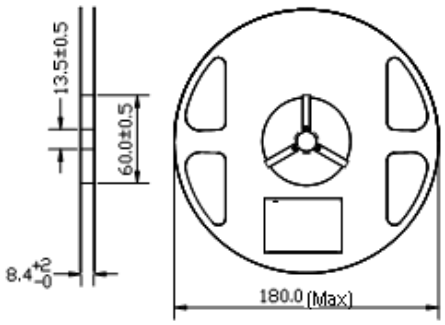
Recommended Pad Layout



Units: mm

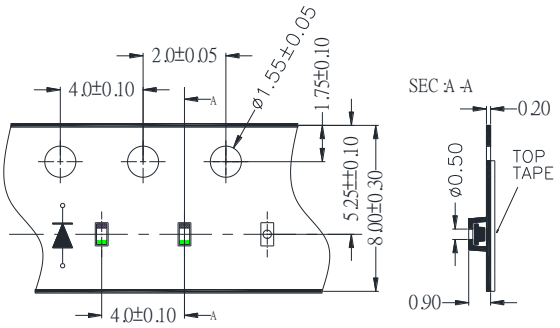
Packing

Reel Dimension:



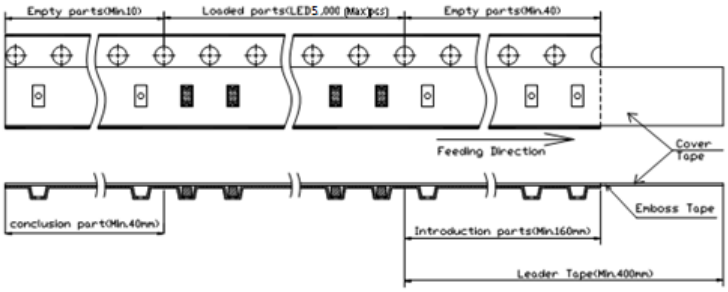
(Unit: mm)

Tape Dimension:

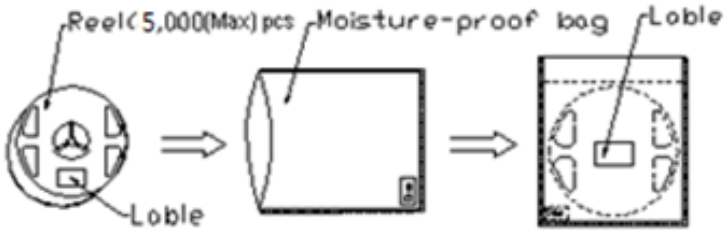


(Unit: mm)

Arrangement of Tape:



Packaging Specifications:



Labeling

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP595-IG5	Iv=280mcd typ. @ 5mA, λ_D=520nm to 530nm	5,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-IG5	V1.0	10/04/2022
Add WLP typical value, update I_V typical value	V1.1	02/21/2025

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.