

QT-Brightek Chip LED Series

0402 SMD Blue LED

Part No.: QBLP595-IB-2

Table of Contents:

Introduction 3

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

Absolute Maximum Rating 4

Characteristic Curves..... 5

Solder Profile & Footprint..... 6

Packing 7

Labeling 8

Ordering Information 8

Revision History 9

Disclaimer 9

Introduction

Feature:

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

Application:

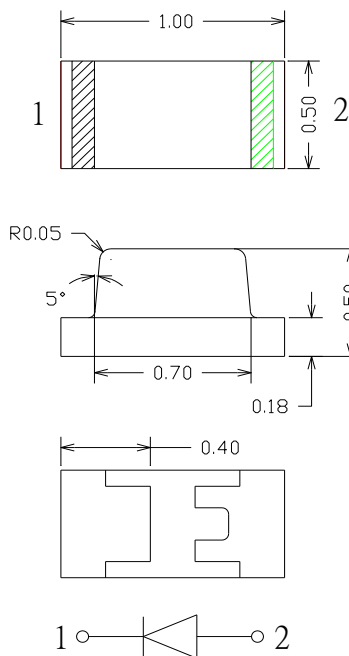
- Status indication
- Back lighting application

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-IB-2	Blue	20	3.1	3.7	460	466	470	468	55	104

Absolute Maximum Rating

Chip Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
InGaN	111	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=20mA

Bin	Min.	Max.	Unit
f	2.8	3.1	V
g	3.1	3.4	
h	3.4	3.7	

Luminous Intensity I_V @ I_F=20mA

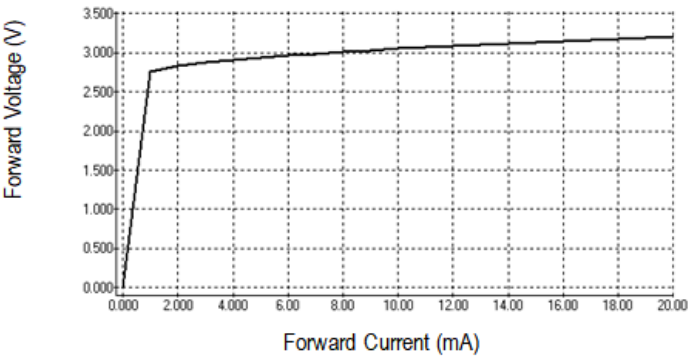
Bin	Min.	Max.	Unit
2G	55	69	mcd
2H	69	87	
2I	87	110	
2J	110	139	
2K	19	175	

Dominant Wavelength λ_D @ I_F=20mA

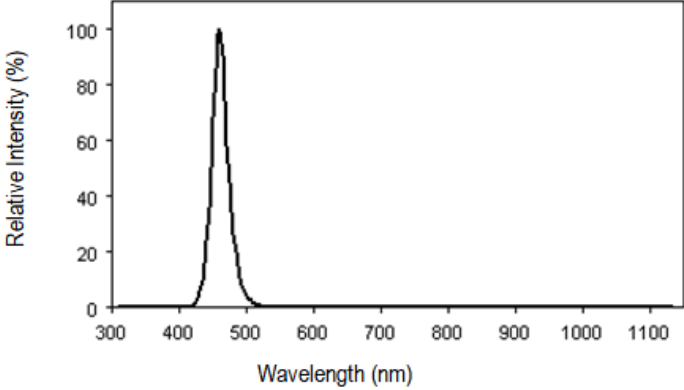
Bin	Min.	Max.	Unit
E	460	462.5	nm
F	462.5	465	
G	465	467.5	
H	467.5	470	

Characteristic Curves

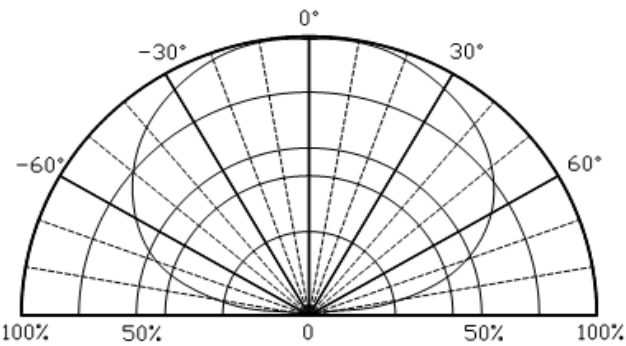
Forward Current vs. Forward Voltage



Relative Intensity vs. Wavelength

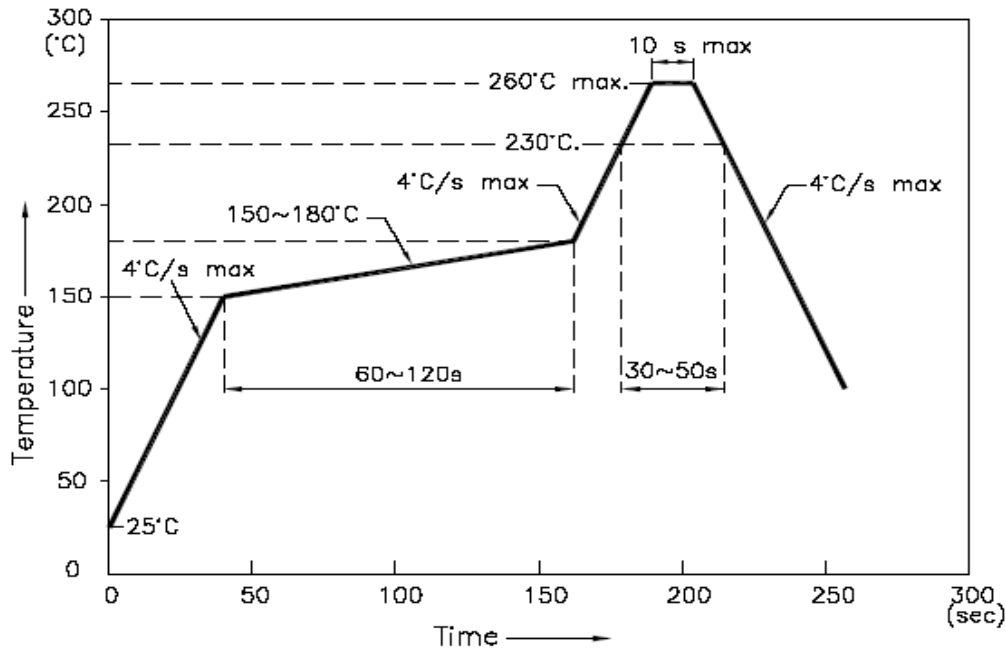


Directive Characteristics

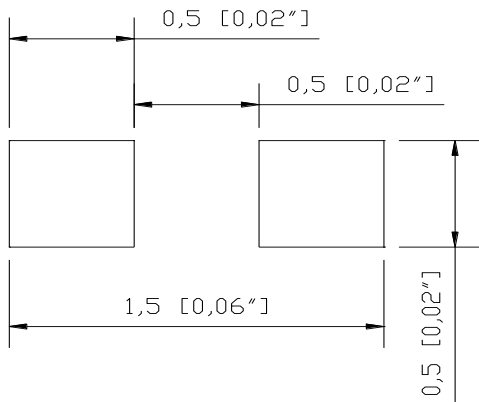


Solder Profile & Footprint

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



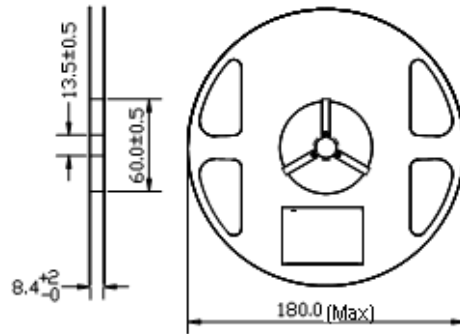
Recommended Pad Layout



Units: mm

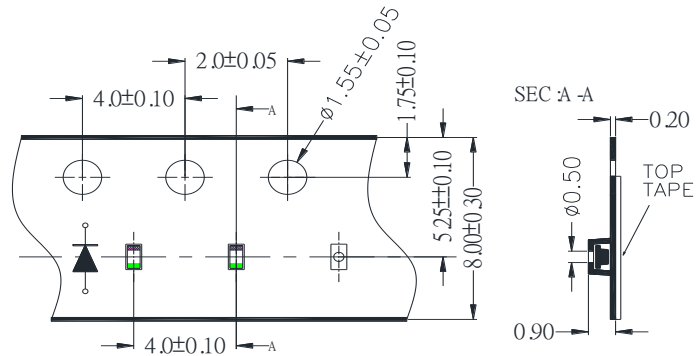
Packing

Reel Dimension:



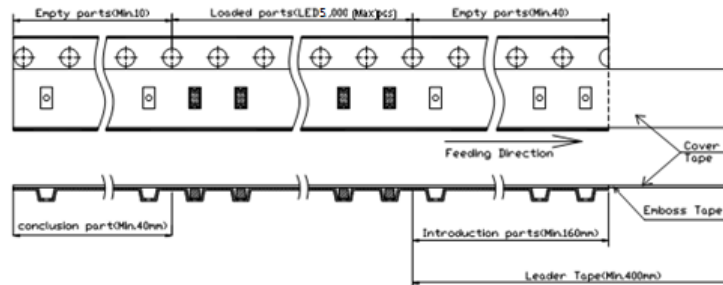
(Unit: mm)

Tape Dimension:

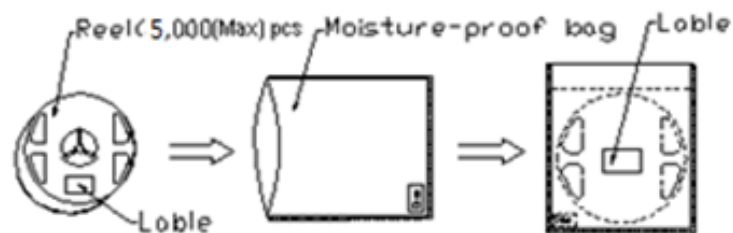


(Unit: mm)

Arrangement of Tape:



Packaging Specifications:



Labeling



Part No:

Customer P/N:

Item:

Q'ty:

Vf:

iv:

WI:

Date:

Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP595-IB-2	Iv=104mcd typ. @ 20mA, λ_D =460nm to 470nm	5,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-IB-2	V1.0	04/11/2025



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.