

# **QT-Brightek Chip LED Series**

## **SMD 0402 Green LED**

**Part No.: QBLP595-AG1**

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## Introduction

### Feature:

- Water clear lens
- Color: Green
- Package in tape and reel
- Compact 0402 package
- AlInGaP technology
- Viewing angle: 140° typ.

### Description:

These ultra bright 0402 LEDs have a height profile of 0.50mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

### Application:

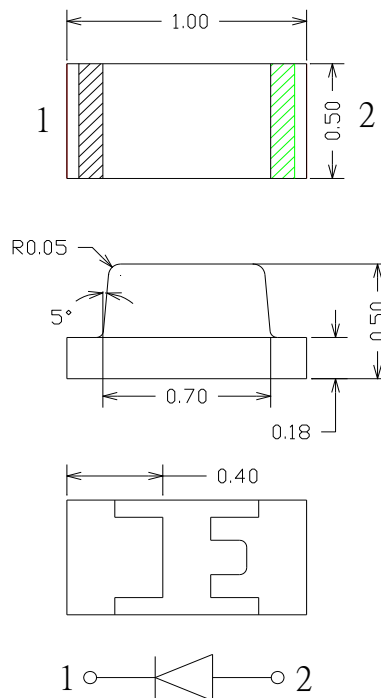
- Status indication
- Back lighting application

### 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)			I <sub>V</sub> (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP595-AG1	Green	20	2.0	2.5	566	570	575	20	35

**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>SOL</sub> (°C)**
AllnGaP	75	30	125	5	-40 ~ +80	-40 ~ +85	260

\*Duty 1/8 @ 1KHz

\*\*IR Reflow for no more than 10 sec @ 260 °C

**Forward Voltage V<sub>F</sub> @ I<sub>F</sub>=20mA**

Bin	Min.	Max.	Unit
□	1.7	2.5	V

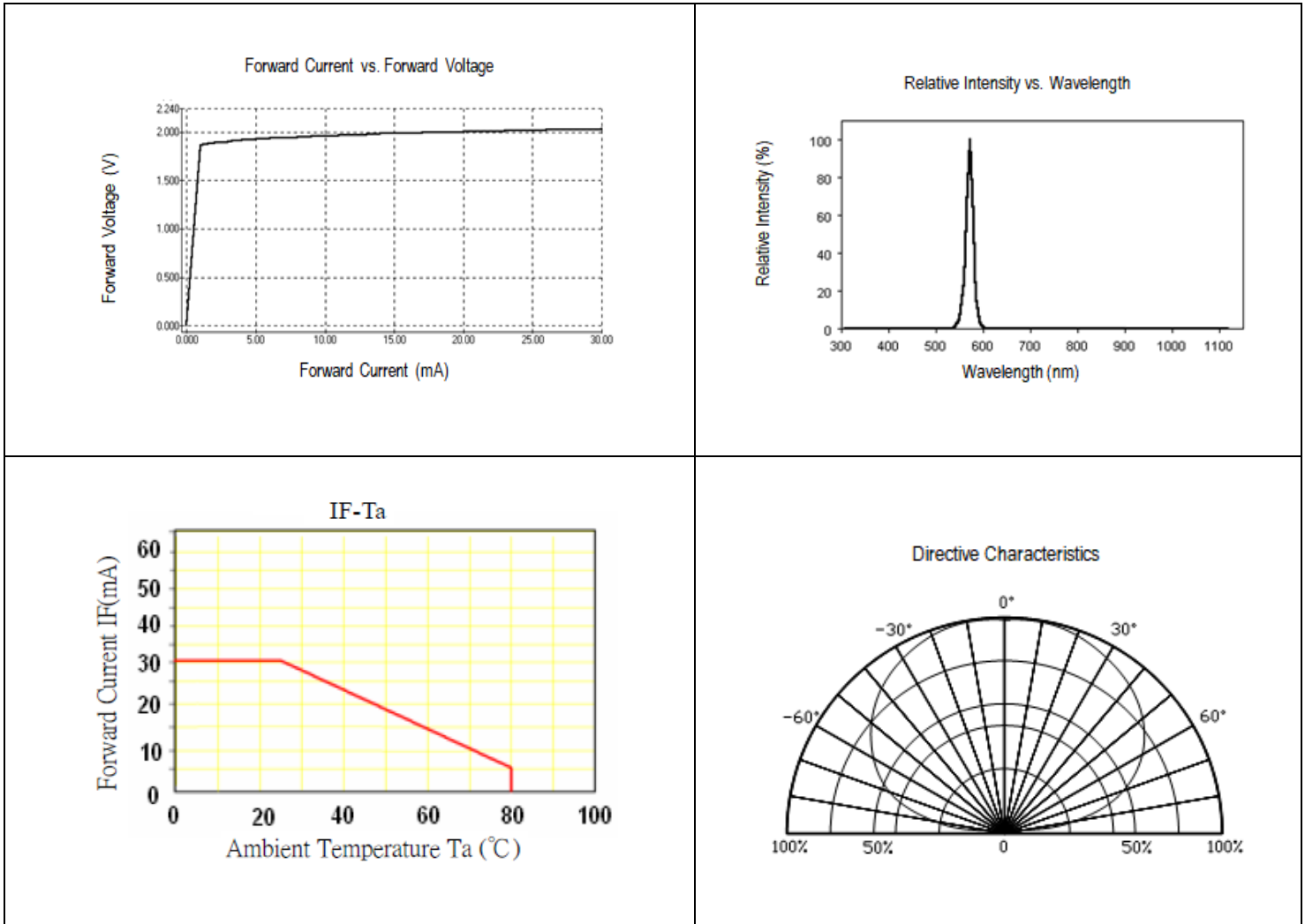
**Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=20mA**

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

**Dominant Wavelength λ<sub>D</sub> @ I<sub>F</sub>=20mA**

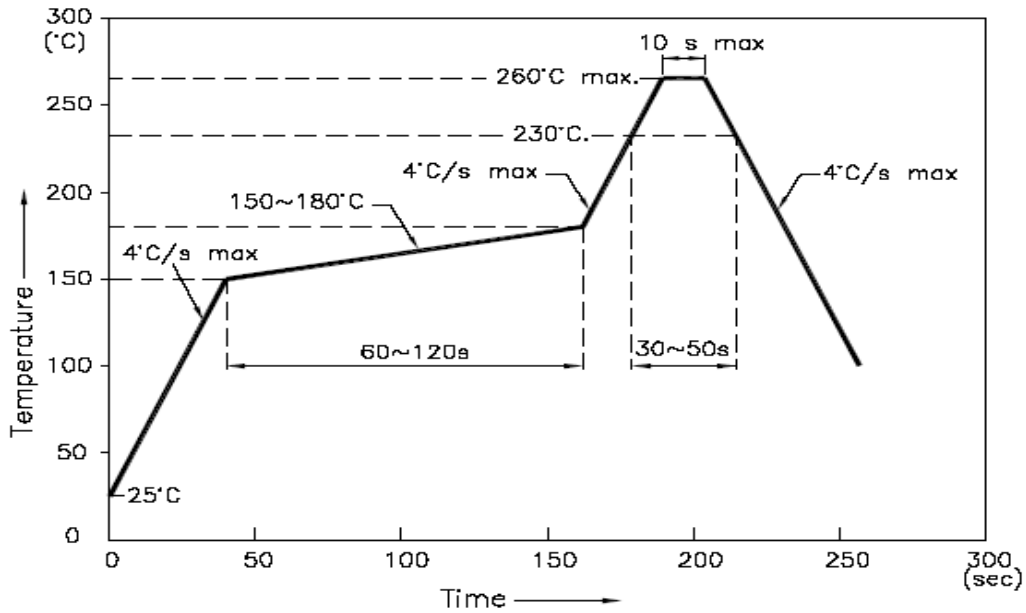
Bin	Min.	Max.	Unit
H	566	569	nm
I	569	572	
J	572	575	

## Characteristic Curves

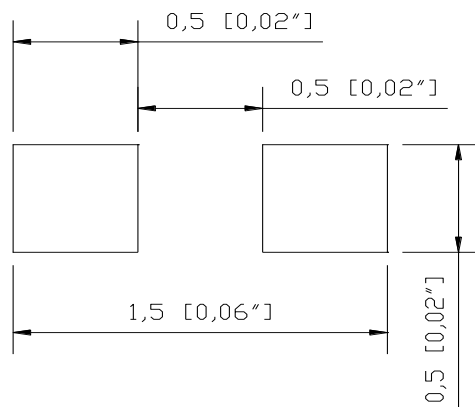


## Solder Profile & Footprint

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



### Recommended Pad Layout

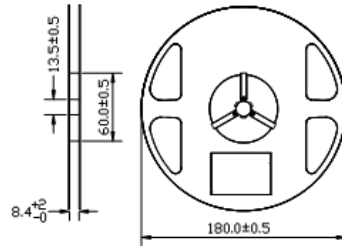


Units: mm

Tolerance: ±0.1mm

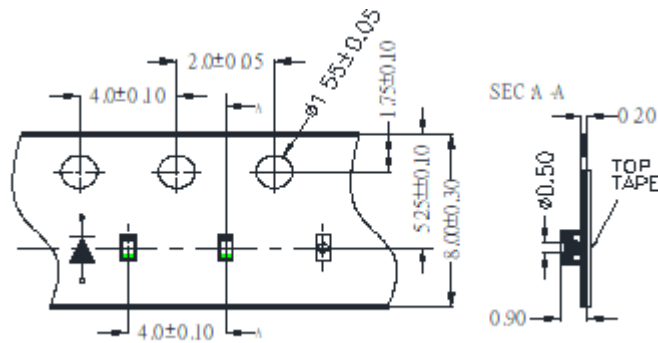
## Packing

### Reel Dimension:



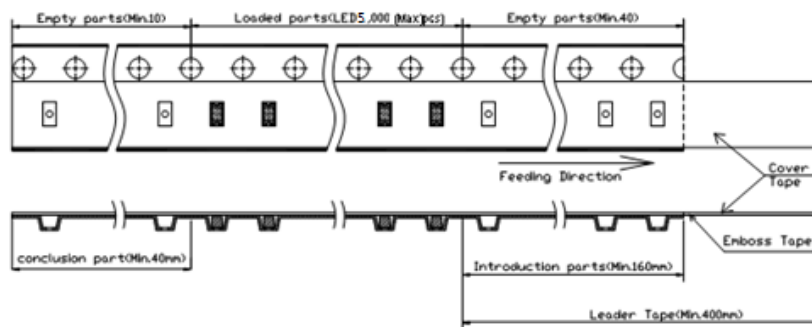
Unit: mm

### Tape Dimension:

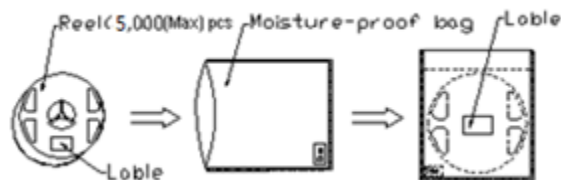


Unit: mm

### Arrangement of Tape:



### Packaging Specifications:





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**Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP595-AG1	QBLP595-AG1	Iv=35mcd typ. @ I <sub>F</sub> =20mA / Color=566 to 575nm	5,000 units

Product: QBLP595-AG1	Date: February 25, 2021	Page 8 of 9
	Version# 1.0	



**Revision History**

Description:	Revision #	Revision Date
New Release of QBLP595-AG1	V1.0	02/25/2021

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