QT-Brightek Chip LED Series

SMD 0805 LED

Part No.: QBLP631-YG

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 9
Revision History 10
Disclaimer 10

Introduction

Feature:

- Water clear lens (except white color)
- Package in tape and reel
- Bright 0805 LED package
- GaP Technology

Description:

These ultra bright 0805 LEDs have a height profile of 0.8mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

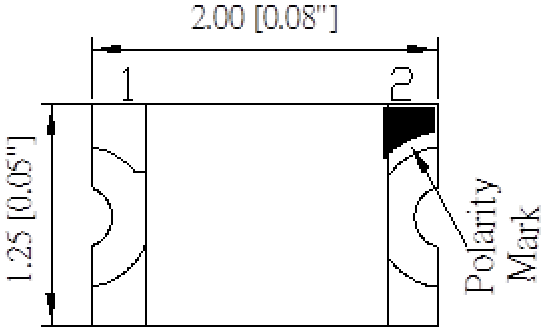
Application:

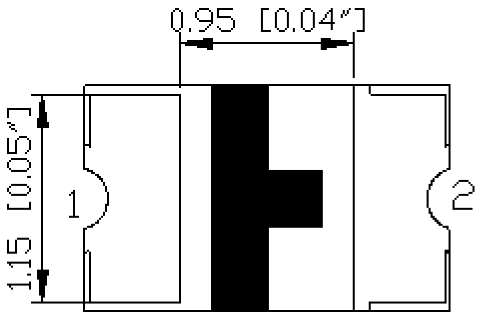
- Status indication
- Back lighting application

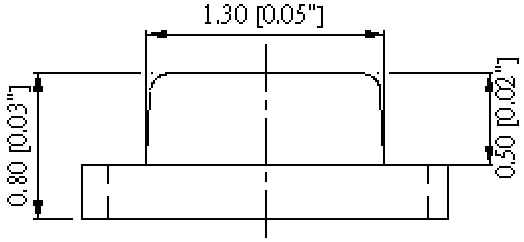
Certification & Compliance:

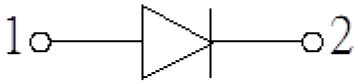
- TS16949
- ISO9001
- RoHS Compliant

Dimension:









Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I_F (mA)	V_F (V)		λ_D (nm)			I_V (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.
QBLP631-YG	Yellow Green	20	2.0	2.5	565	570	576	5.0	15

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)**
GaP	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_F for GaP @ I_F=20mA

Bin	Min.	Max.	Unit
☐	1.7	2.5	V

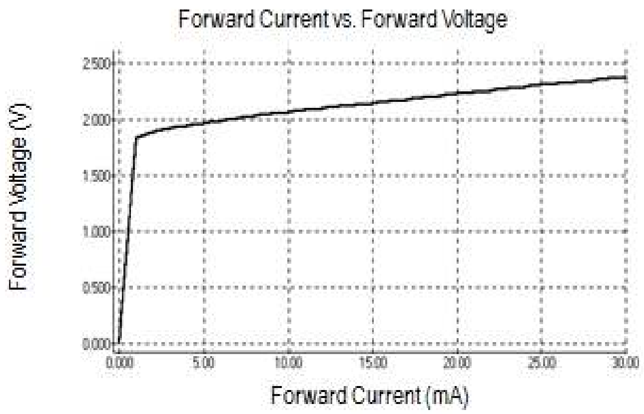
Luminous Intensity I_V @ I_F=20mA

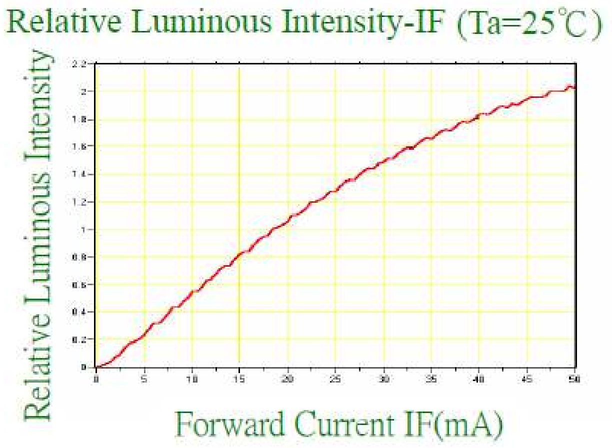
Bin	Min.	Max.	Unit
8	5.0	8.0	mcd
9	8.0	12.5	
A	12.5	16	
B	16	20	
C	20	25	

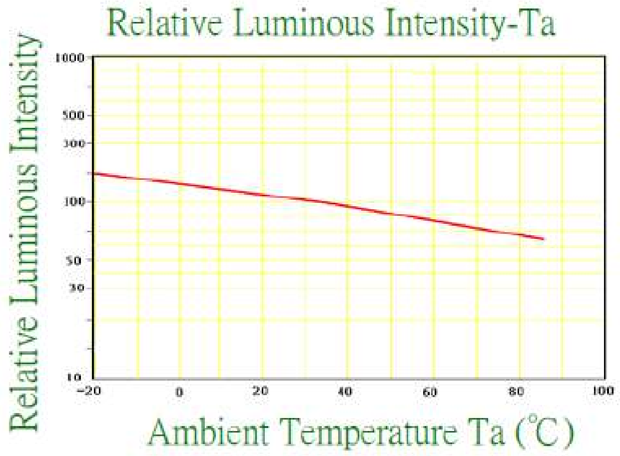
Dominant Wavelength λ_D for Yellow Green @ I_F=20mA

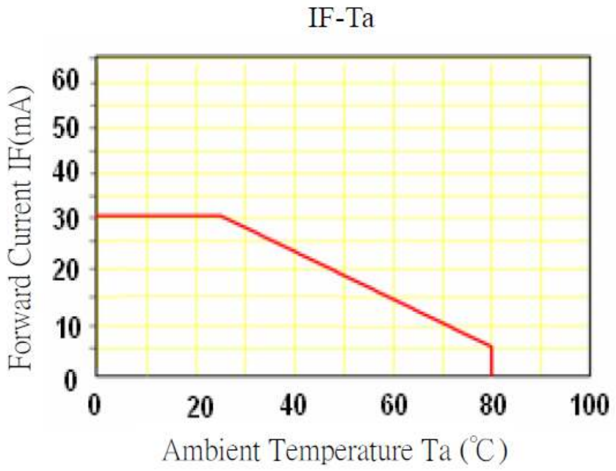
Bin	Min.	Max.	Unit
h	565	568	nm
i	568	572	
j	572	576	

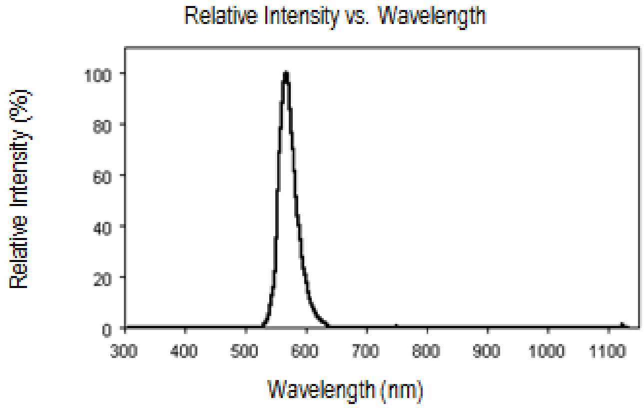
Characteristic Curves

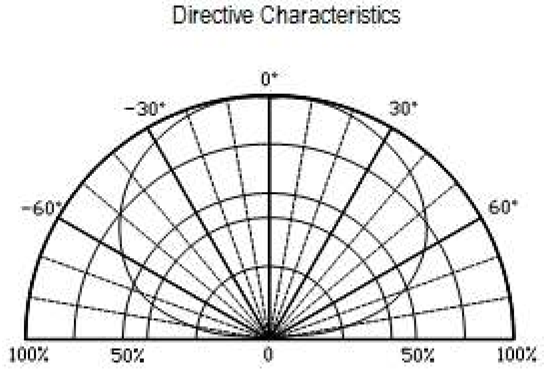

Forward Current vs. Forward Voltage


Relative Luminous Intensity-IF (Ta=25℃)


Relative Luminous Intensity-Ta

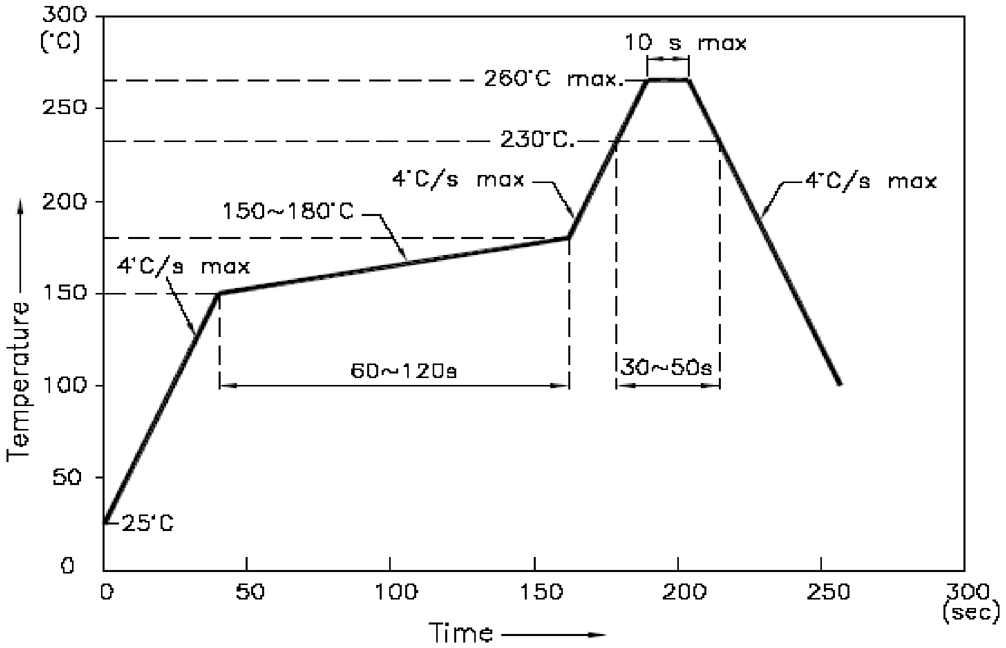

IF-Ta


Relative Intensity vs. Wavelength

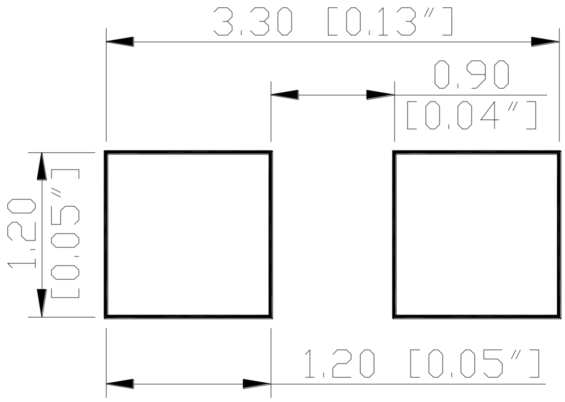

Directive Characteristics

Solder Profile & Footprint

-Recommended tin solder specifications: melting temperature in the range of 178~192 °C
-The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):



Recommended Pad Layout

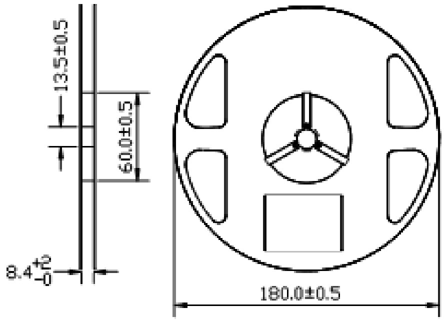


Units: mm

Tolerance: ± 0.1mm

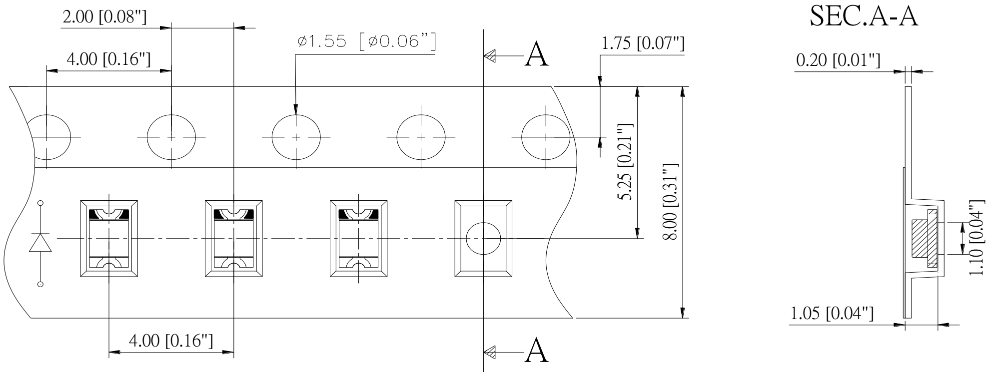
Packing

Reel Dimension:



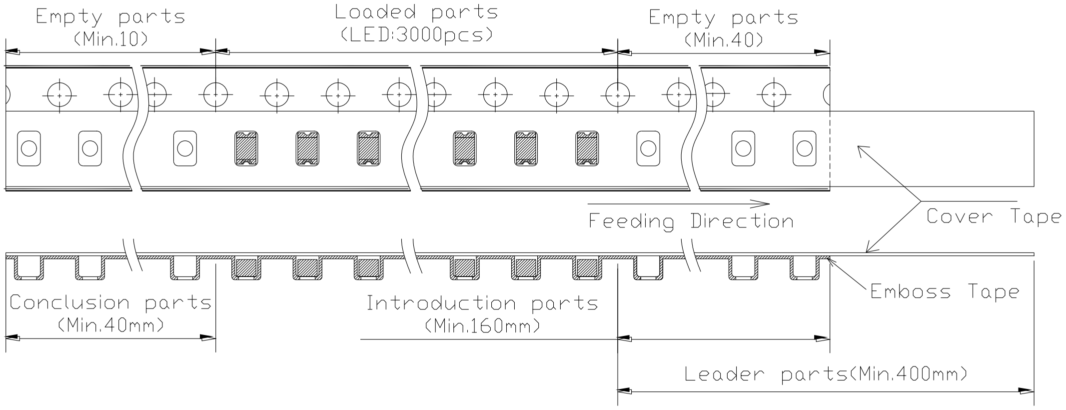
(Unit: mm)

Tape Dimension:

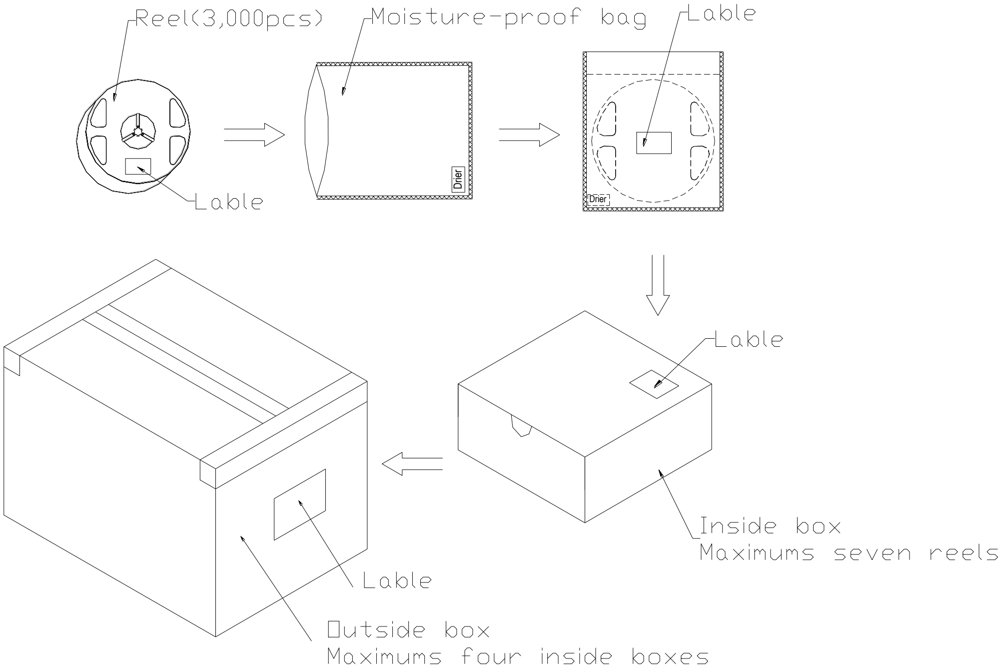


(Unit: mm)

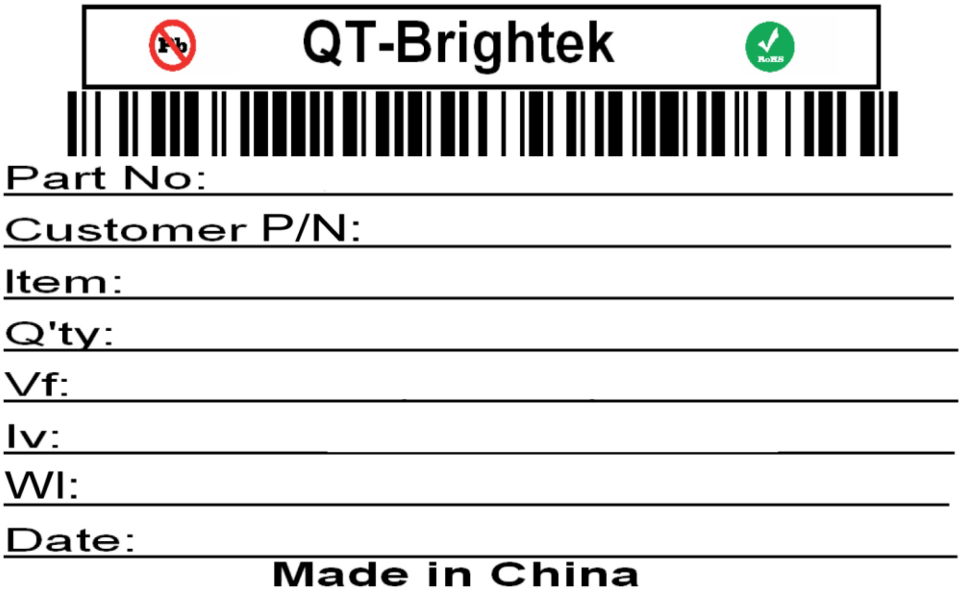
Arrangement of Tape:



Packaging Specifications:



Labeling



QT-Brightek

Part No:

Customer P/N:

Item:

Q'ty:

Vf:

Iv:

Wl:

Date:

Made in China

Ordering Information

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP631-YG	QBLP631-YG	Iv=15mcd typ. @ I_F=20mA, λ_D =565nm to 576nm	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP631-YG	V1.0	09/16/2014

Disclaimer

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1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.

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.