

QT-Brightek Chip LED Series

SMD 0603 Green LED

Part No.: QBLP601-YG1A

A: 10mA



Table of Contents:

Introduction 3
Electrical / Optical Characteristic (Ta=25 °C) 4
Absolute Maximum Rating 4
Solder Profile & Footprint 6
Packing 7
Ordering Information 8
Revision History 8
Disclaimer 8

Introduction

Feature:

- Clear lens
- Color: Green
- Package in tape and reel
- 0603 LED package
- Viewing angle: 140 deg typ.
- Height profile: 0.6mm

Application:

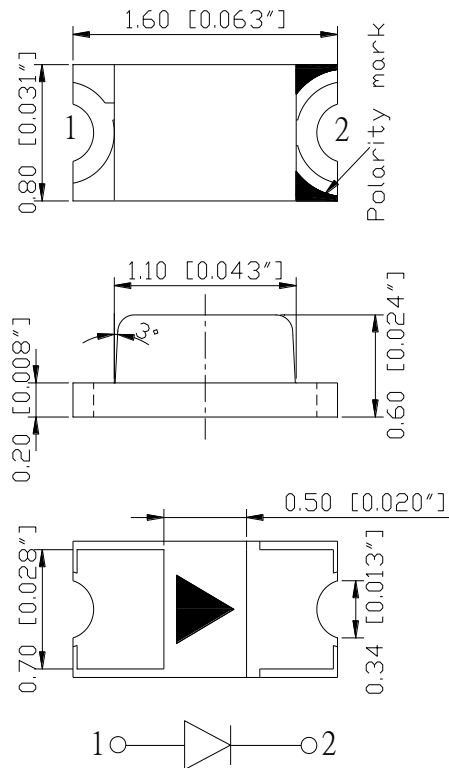
- Status indication
- Back lighting application

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-YG1A	Green	10	2.0	2.3	566	569	575	565	3.1	12

Absolute Maximum Rating

Chip Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SO L} (°C)**
GaP	75	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=10mA

Bin	Min.	Max.	Unit
A	1.7	2.0	V
B	2.0	2.3	

Luminous Intensity I_v @ I_F=10mA

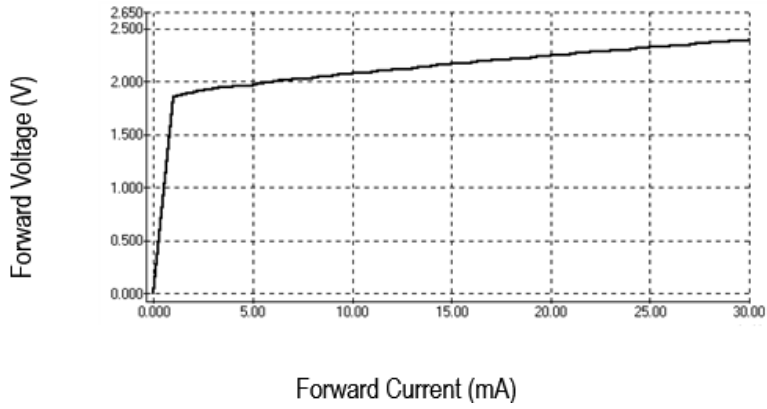
Bin	Min.	Max.	Unit
6	3.1	4.9	mcd
7	4.9	7.6	
8	7.6	12.2	
9	12.2	19	
A	19	24.3	

Dominant Wavelength λ_D @ I_F=10mA

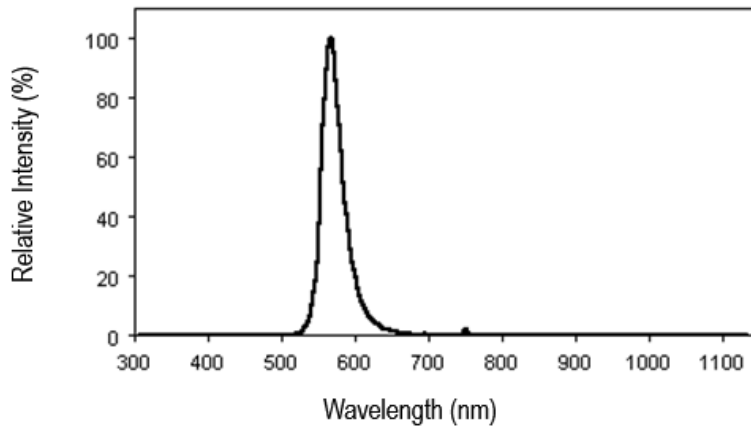
Bin	Min.	Max.	Unit
H	566	569	nm
I	569	572	
J	572	575	

Characteristic Curves

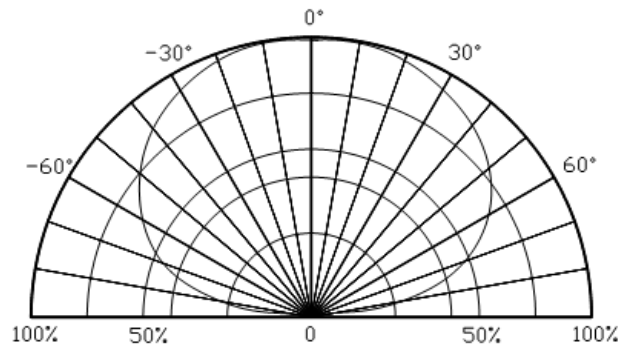
Forward Current vs. Forward Voltage



Relative Intensity vs. Wavelength

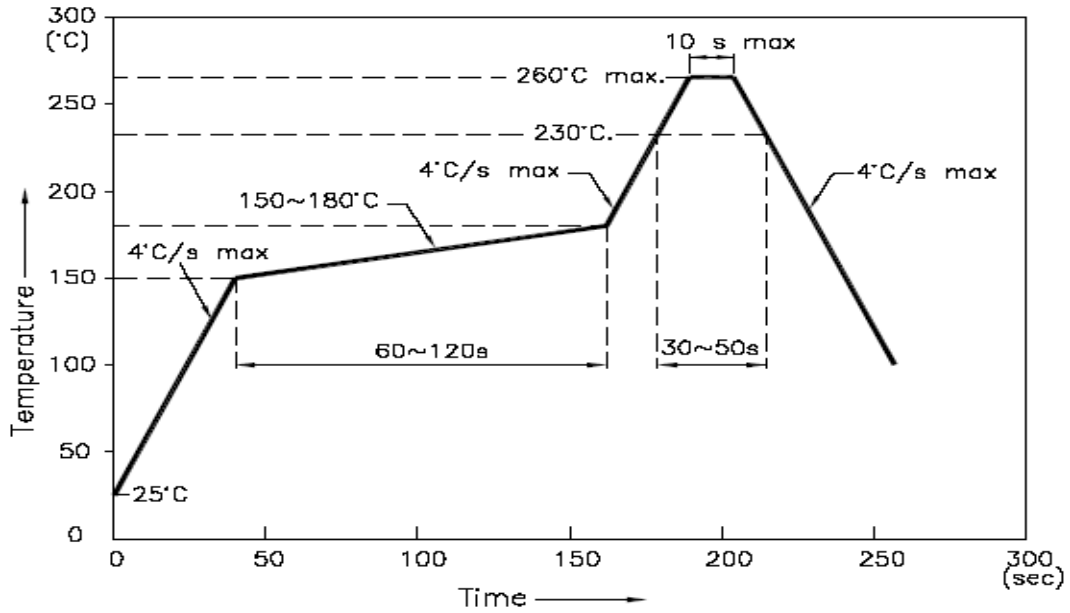


Directive Characteristics

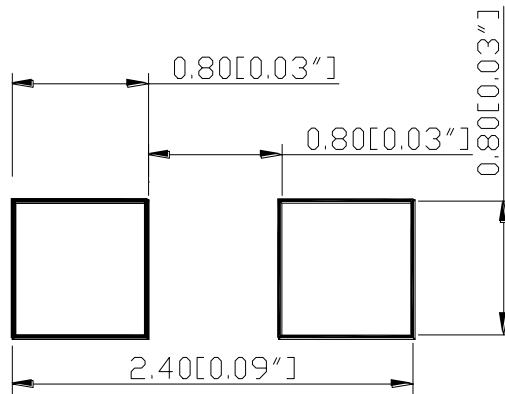


Solder Profile & Footprint

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



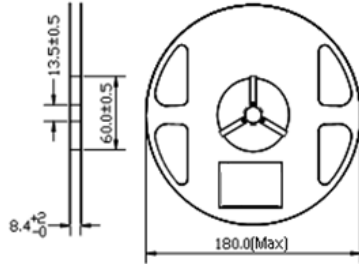
Recommended Pad Layout



Units: mm

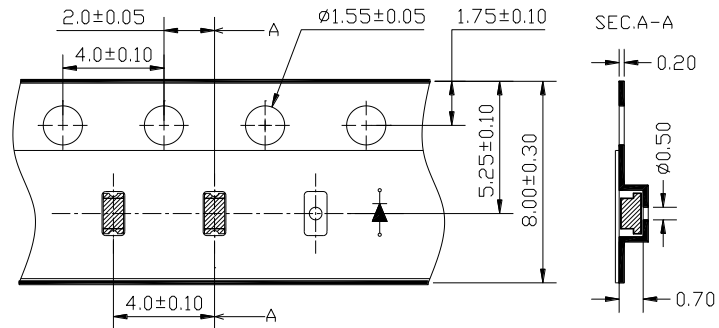
Packing

Reel Dimension:



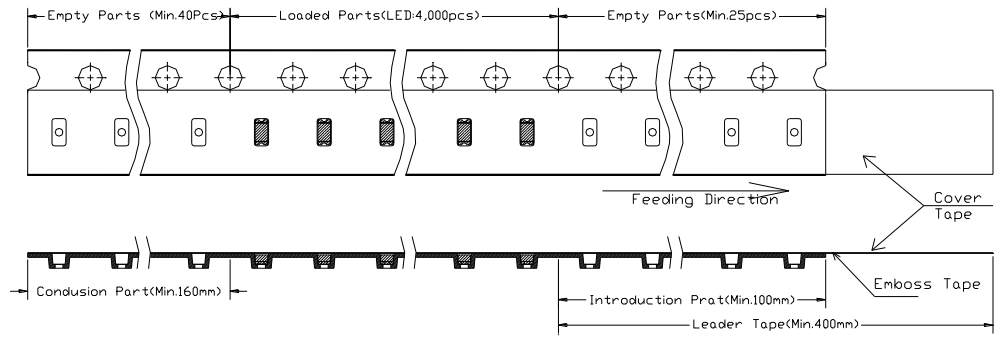
Unit: mm

Tape Dimension:

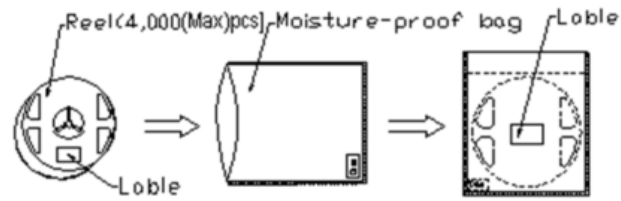


Unit: mm

Arrangement of Tape:



Packaging Specifications:





Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP601-YG1A	Iv=12mcd typ. @ I _F =20mA / Color=566 to 575nm	4,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-YG1A	V1.0	10/28/2025

Disclaimer

QT-BRIGHTTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTTEK does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

Life Support Policy

QT-BRIGHTTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTTEK. As used herein:

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.

Product: QBLP601-YG1A	Date: October 28, 2025	Page 8 of 8
	Version# 1.0	