

QT-Brightek Chip LED Series

SMD 0603 Green LED

Part No.: QBLP601-YG1

Product: QBLP601-YG1	Date: July 19, 2023	Page 1 of 9
	Version# 1.0	

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	9
Disclaimer	9

Introduction

Feature:

- Clear lens
- Color: Green
- Package in tape and reel
- Ultra bright 0603 LED package
- GaP technology
- Viewing angle: 140 deg typ.

Description:

These ultra bright 0603 LEDs have a height profile of 0.60mm. Combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

Application:

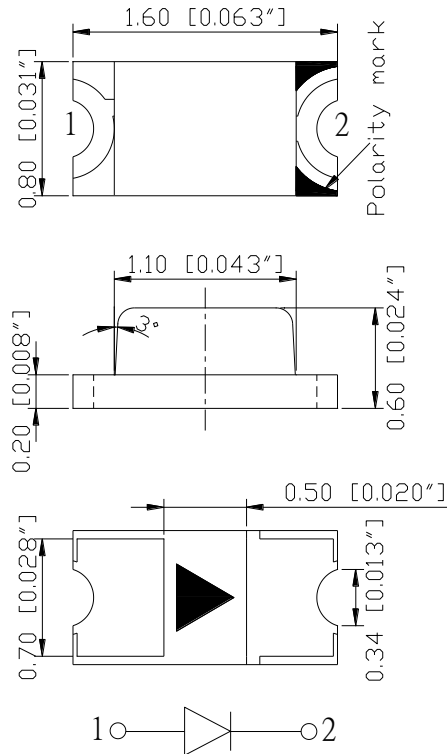
- Status indication
- Back lighting application

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

Electrical / Optical Characteristic (Ta=25 °C)

Product	Color	I _F (mA)	V _F (V)		λ _D (nm)			λ _p (nm)	I _v (mcd)	
			Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.
QBLP601-YG1	Green	20	2.0	2.5	566	572	575	565	3.2	18

Absolute Maximum Rating

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	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 @ I_F=20mA

Bin	Min.	Max.	Unit
b	1.6	1.9	V
c	1.9	2.2	
d	2.2	2.5	

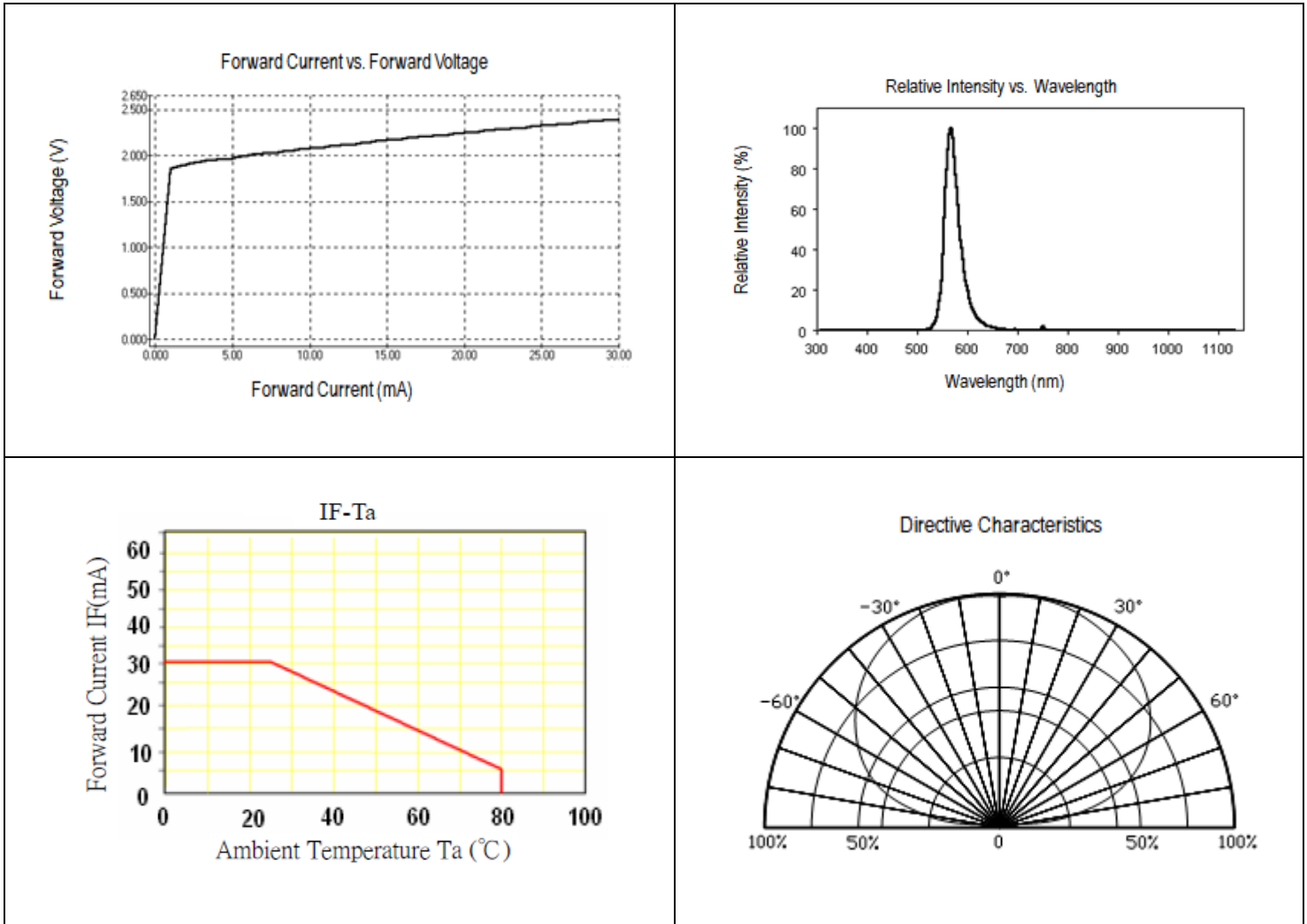
Luminous Intensity I_v @ I_F=20mA

Bin	Min.	Max.	Unit
7	3.2	5.0	mcd
8	5.0	8.0	
9	8.0	12.5	
A	12.5	16	
B	16	20	
C	20	25	
D	25	32	

Dominant Wavelength λ_D @ I_F=20mA

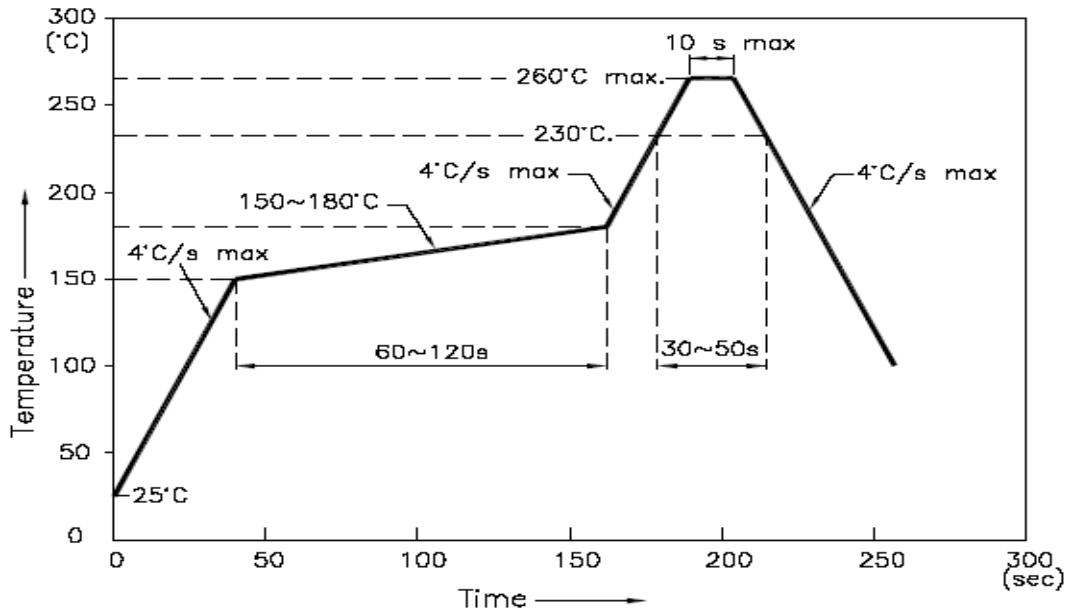
Bin	Min.	Max.	Unit
H	566	569	nm
I	569	572	
J	572	575	

Characteristic Curves

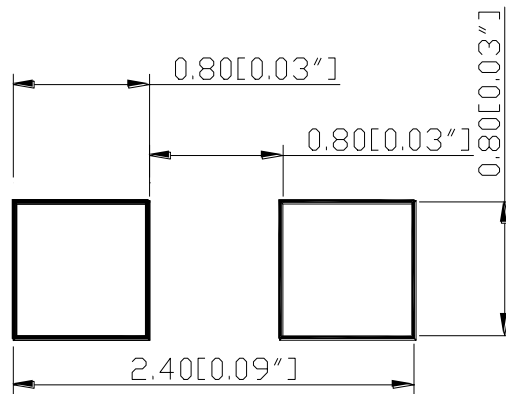


Solder Profile & Footprint

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



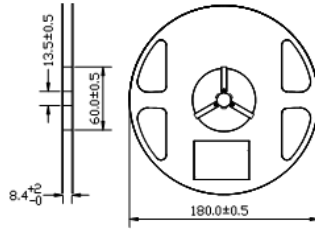
Recommended Pad Layout



Units: mm

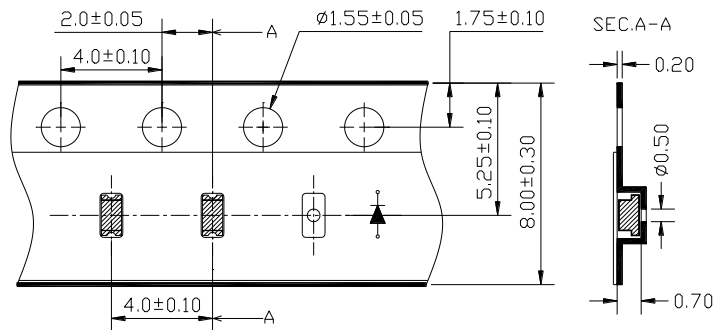
Packing

Reel Dimension:



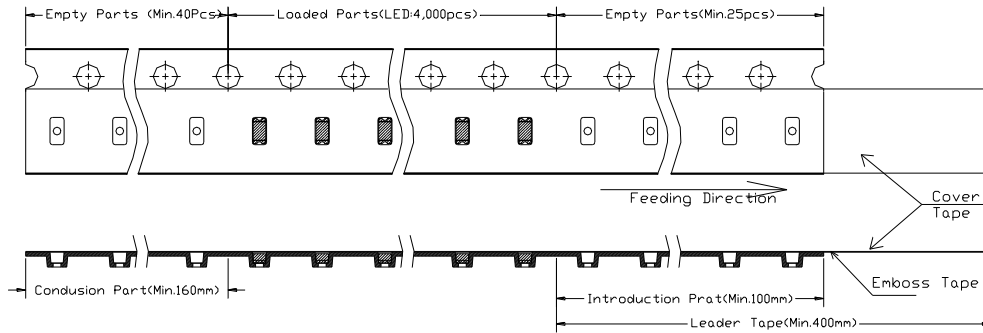
Unit: mm

Tape Dimension:

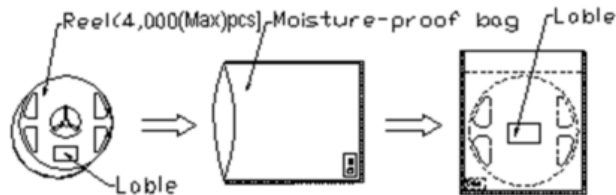


Unit: mm

Arrangement of Tape:



Packaging Specifications:





QBLP601-YG1

0603 LED

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP601-YG1	Iv=18mcd typ. @ I _F =20mA / Color=566 to 575nm	4,000 units

Product: QBLP601-YG1	Date: July 19, 2023	Page 8 of 9
	Version# 1.0	

Revision History

Description:	Revision #	Revision Date
New Release of QBLP601-YG1	V1.0	07/19/2023

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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.