QT-Brightek Chip LED Series

SMD 0805 Green LED

Part No.: QBLP631-2YG1-2943

2YG1: GaP Green (566 to 575nm)
2943: White Diffused Lens

Table of Contents:

Introduction

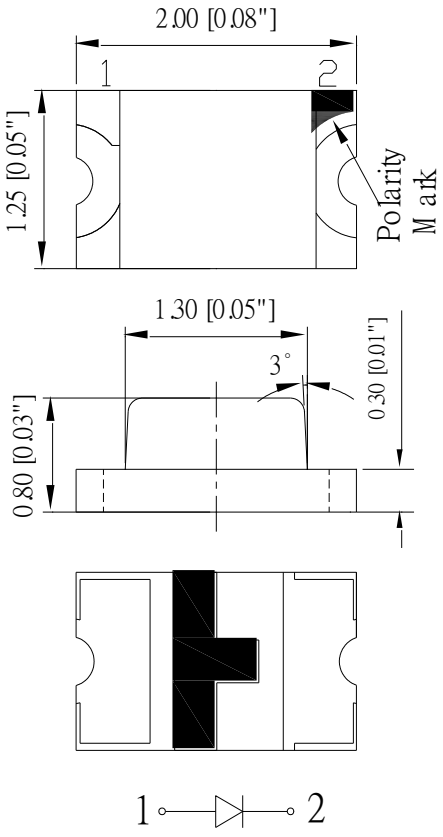
Feature:
- White diffused lens
- Package in tap and reel
- 0805 LED package
- GaP technology
- Viewing angle: 140 deg typ.

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:
- 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.
QBLP631-2YG1-2943	Green	20	2.0	2.5	566	570	575	565	5.0	11

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 @ I_F=20mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

Luminous Intensity I_V @ I_F=20mA

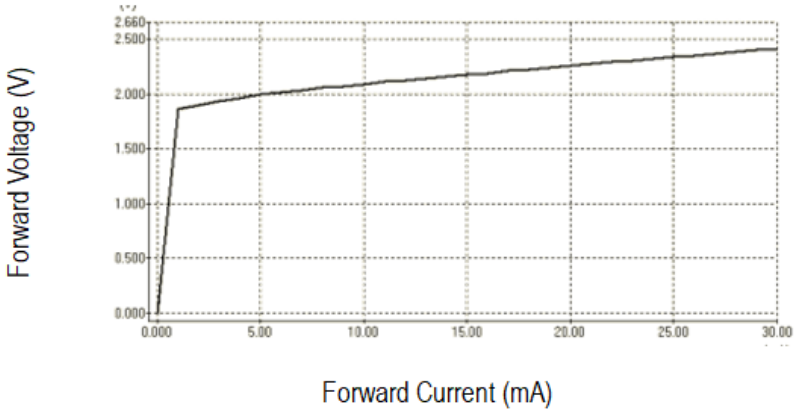
Bin	Min.	Max.	Unit
A	5.0	8.0	mcd
B	8.0	10.5	
C	10.5	14	
D	14	18	
E	18	24	

Dominant Wavelength λ_D @ I_F=20mA

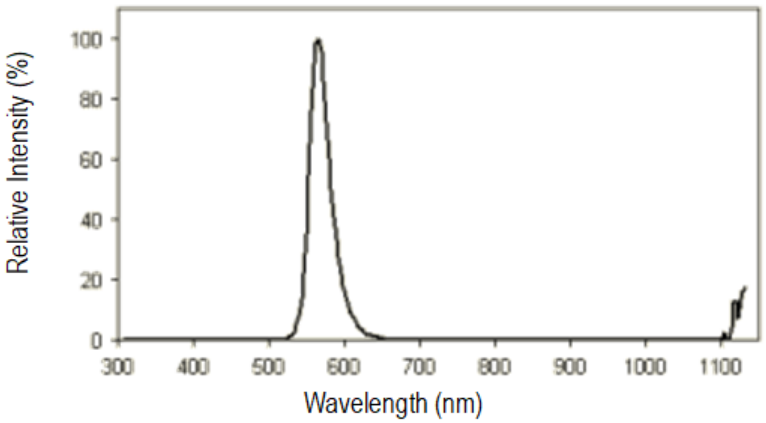
Bin	Min.	Max.	Unit
H	566	569	nm
I	569	572	
J	572	575	

Characteristic Curves

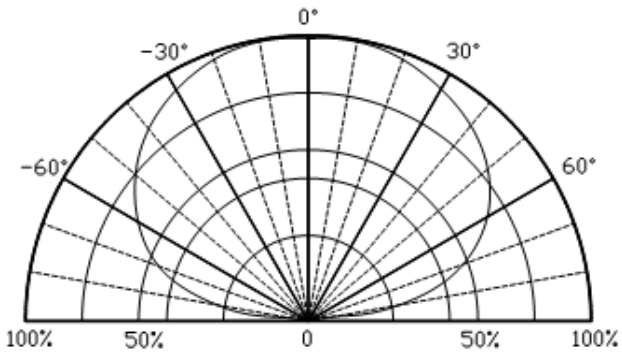
Forward Current vs. Forward Voltage



Relative Intensity vs. Wavelength

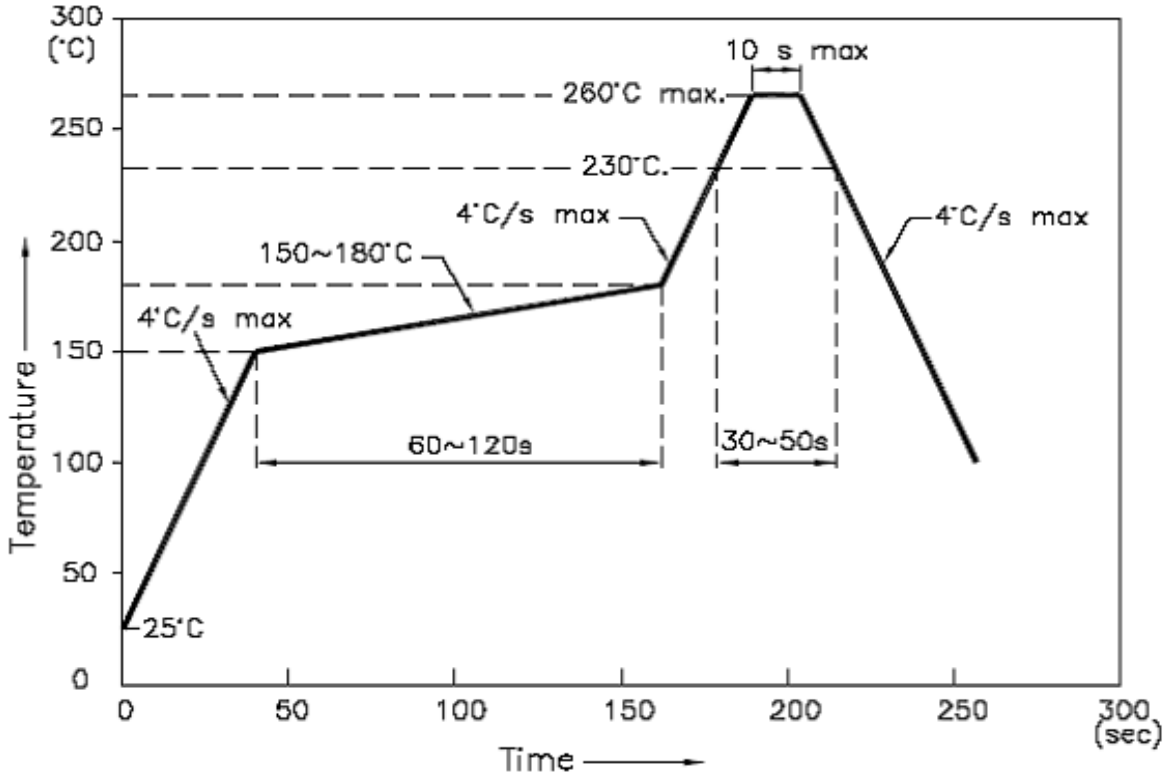


Directive Characteristics

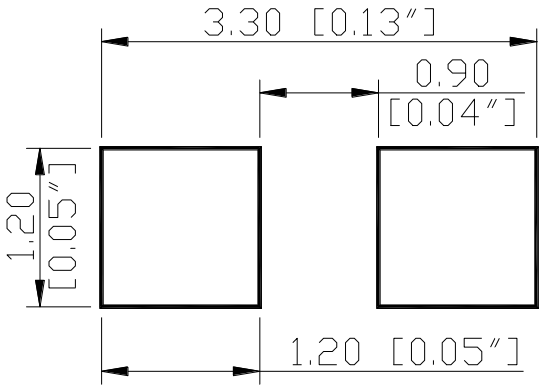


Solder Profile & Footprint

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



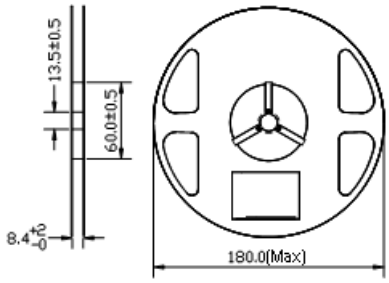
Recommended Pad Layout



Units: mm

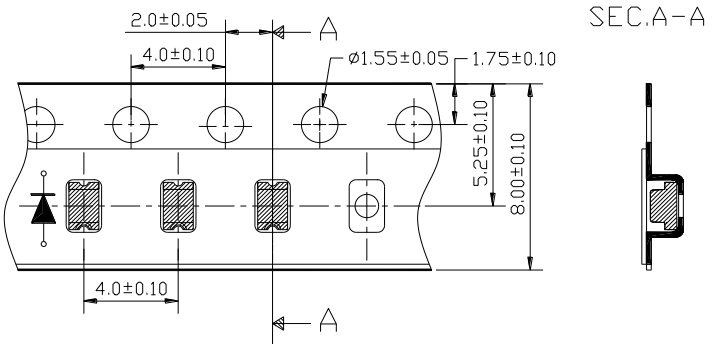
Packing

Reel Dimension:



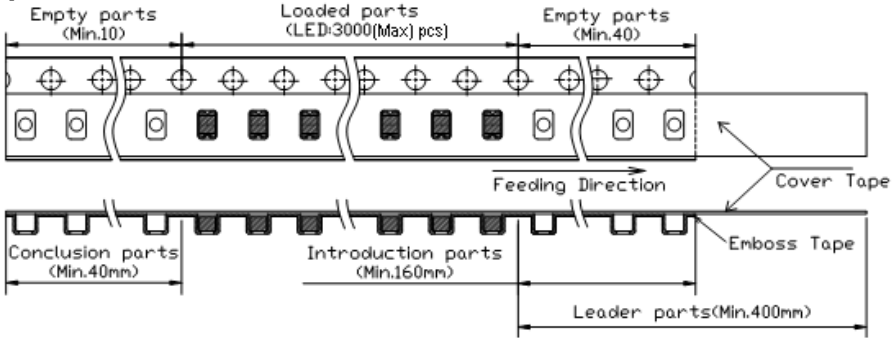
Unit: mm

Tape Dimension:

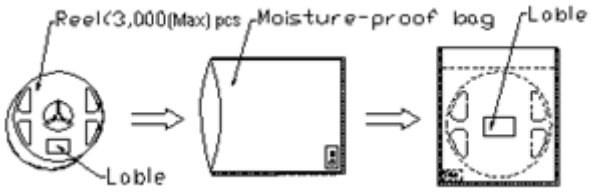


Unit: mm

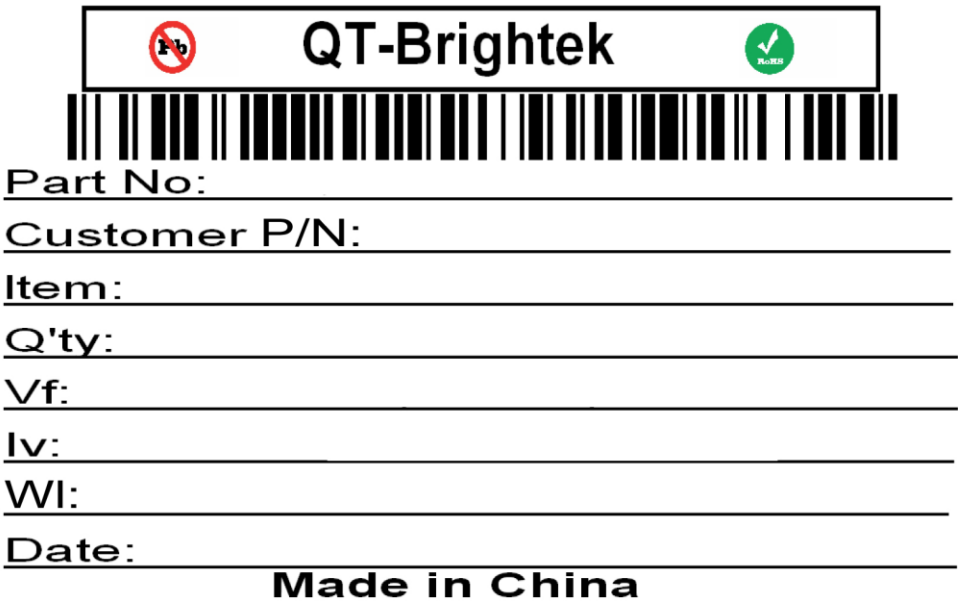
Arrangement of Tape:



Packaging Specification:



Labeling



Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP631-2YG1-2943	Iv=11mcd typ. / λ_D = 566nm to 575nm @ 20mA	3000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP631-2YG1-2943	V1.0	03/27/2024

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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.