

QT-Brightek Chip LED Series

SMD 0805 LED

Part No.: QBLP631-R1-2943

2943: Diffused Lens Version

R1: GaAsP Red

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	8
Revision History	9
Disclaimer	9

Introduction

Feature:

- White diffused lens
- Package in tape and reel
- 0805 LED package
- AlGaAs 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:

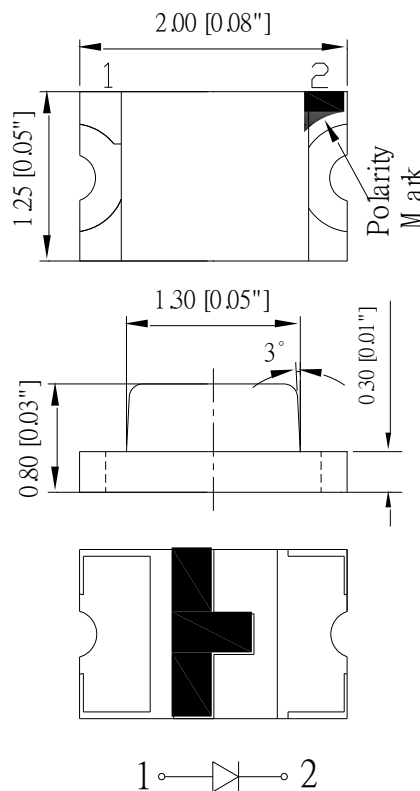
- Status indication
- Back lighting application

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)		
			Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.	Min.	Typ.	Max.
QBLP631-R1-2943	Red	20	1.7	2.0	2.5	615	624	630	628	3.2	9.0	20

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)**
GaAsP	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

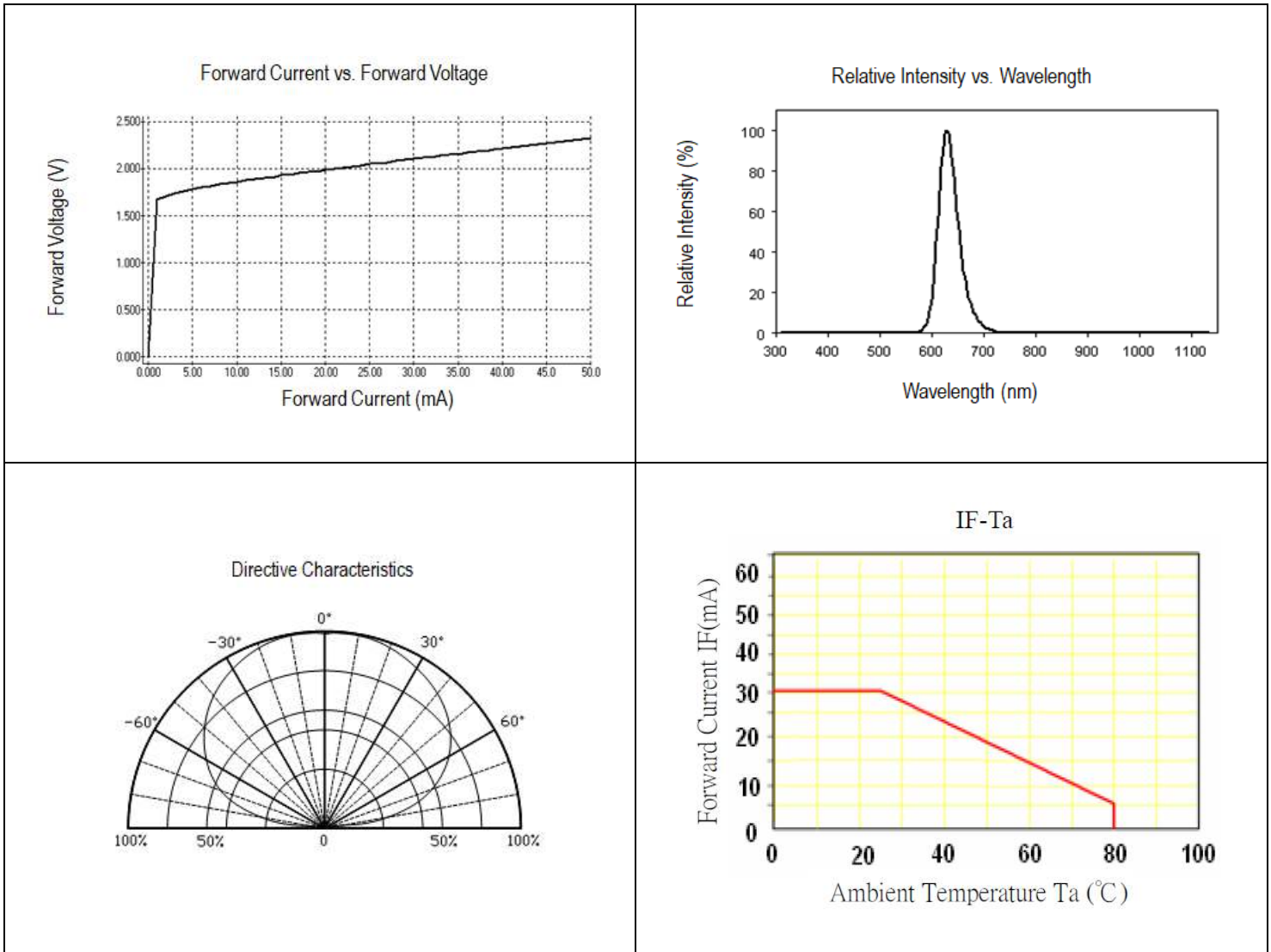
Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
7	3.20	5.0	mcd
8	5.0	8.0	
9	8.0	12.5	
A	12.5	16	
B	16	20	

Dominant Wavelength λ_D @ I_F=20mA

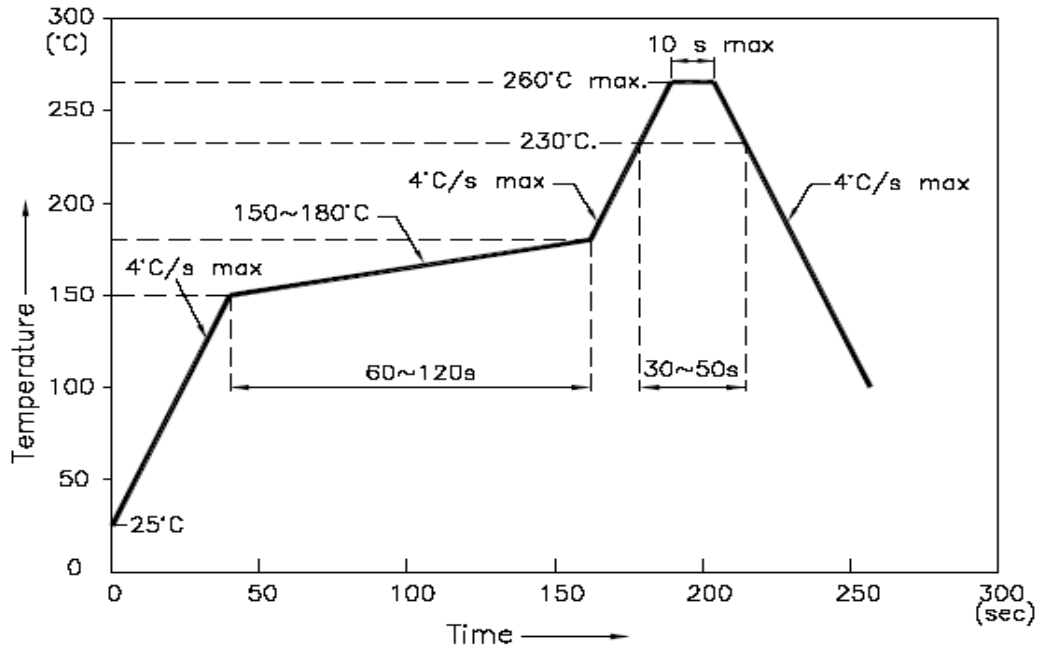
Bin	Min.	Max.	Unit
s	615	620	nm
t	620	625	
u	625	630	

Characteristic Curves

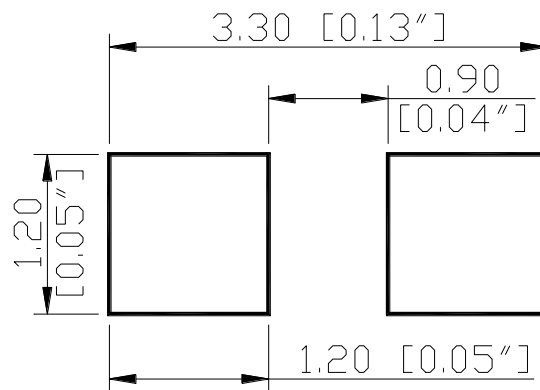


Solder Profile & Footprint

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



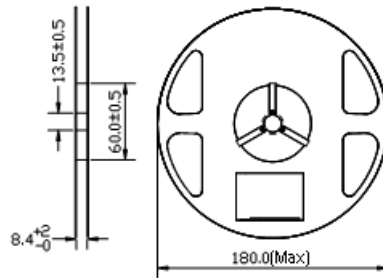
Recommended Pad Layout



Units: mm

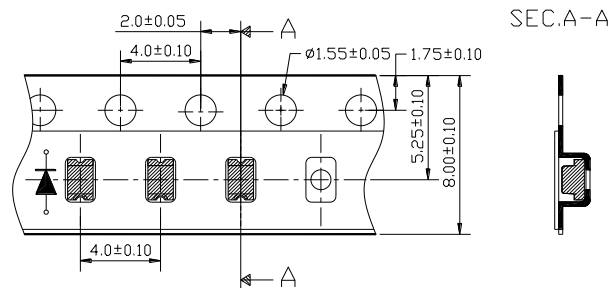
Packing

Reel Dimension:



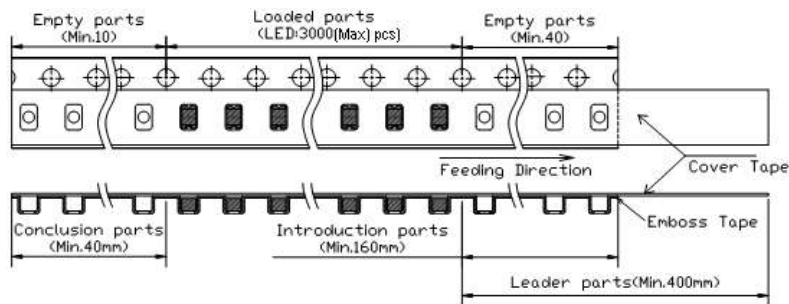
(Unit: mm)

Tape Dimension:

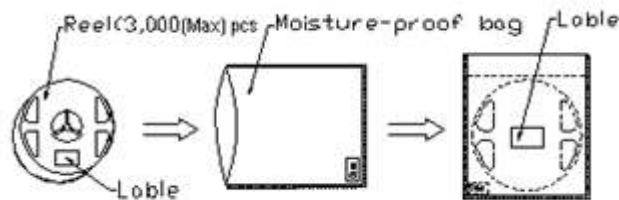


(Unit: mm)

Arrangement of Tape:



Packaging Specifications:



Labeling

Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

WI: _____

Date: _____

Made in China**Ordering Information**

Part #	Orderable Part #	Spec Range	Quantity per reel
QBLP631-R1-2943	QBLP631-R1-2943	Iv=9.0mcd typ. @ I _F =20mA / Color=615nm to 630nm	3,000 units

Product: QBLP631-R1-2943	Date: October 11, 2021	Page 8 of 9
	Version# 1.0	

Revision History

Description:	Revision #	Revision Date
New Release of QBLP631-R1-2943	V1.0	10/11/2021



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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.