

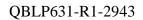
# QT-Brightek Chip LED Series SMD 0805 LED

Part No.: QBLP631-R1-2943

2943: Diffused Lens Version

R1: GaAsP Red

Product: QBLP631-R1-2943	Date: October 11, 2021	Page 1 of 9
	Version# 1.0	





## **Table of Contents:**

Introduction	
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	

Product: QBLP631-R1-2943	Date: October 11, 2021	Page 2 of 9
	Version# 1.0	



### 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:**

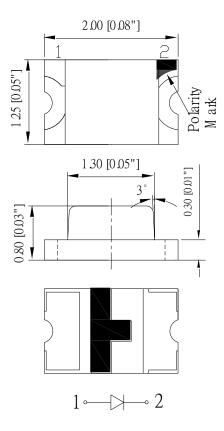
- Status indication
- Back lighting application

#### **Certification & Compliance:**

- ISO9001
- RoHS Compliant



#### **Dimension:**



Units: mm / tolerance = +/-0.1mm

Product: QBLP631-R1-2943	Date: October 11, 2021	Page 3 of 9
	Version# 1.0	



Electrical / Optical Characteristic (Ta=25 °C)

Product	ct Color I <sub>F</sub> (mA)			V <sub>F</sub> (V)		7	\ <sub>D</sub> (nm	)	λ <sub>P</sub> (nm)	I	<sub>v</sub> (mc	d)
Product	COIOI	I <sub>F</sub> (mA)	Min.	Тур.	Max.	Min.	Тур.	Max.	Тур.	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 <sub>d</sub> (mW)	I <sub>F</sub> (mA)	I <sub>FP</sub> (mA)*	<b>V</b> <sub>R</sub> <b>(V)</b>	T <sub>OP</sub> (°C)	T <sub>ST</sub> (°C)	T <sub>SOL</sub> (°C)**
GaAsP	75	30	125	5	-40 ~ +80	-40 ~ +85	260

<sup>\*</sup>Duty 1/8 @ 1KHz

Forward Voltage V<sub>F</sub> @ I<sub>F</sub>=20mA

Bin	Min.	Max.	Unit
	1.7	2.5	V

Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=20mA

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Bin	Min.	Max.	Unit	
7	3.20	5.0		
8	5.0	8.0		
9	8.0	12.5	mcd	
Α	12.5	16		
В	16	20		

Dominant Wavelength  $\lambda_D$  @  $I_F=20mA$ 

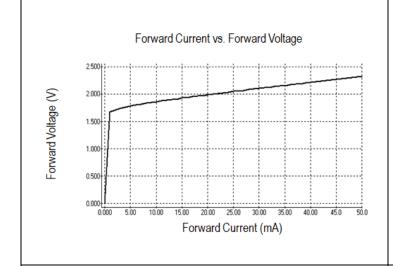
		-	
Bin	Min.	Max.	Unit
S	615	620	
t	620	625	nm
u	625	630	

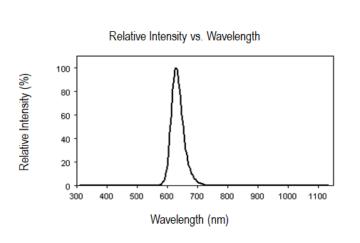
Product: QBLP631-R1-2943	Date: October 11, 2021	Page 4 of 9
	Version# 1.0	

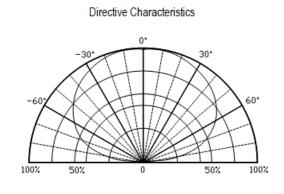
<sup>\*\*</sup>IR Reflow for no more than 10 sec @ 260 °C

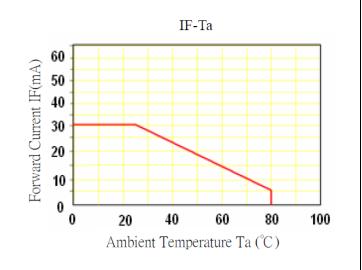


## **Characteristic Curves**







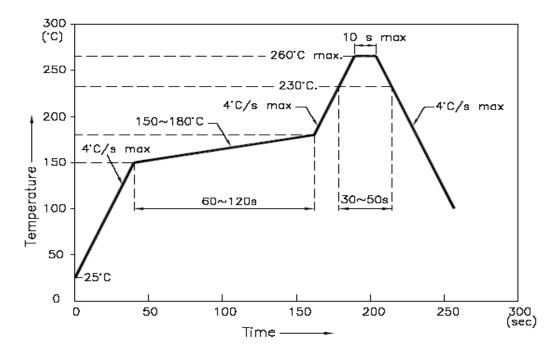


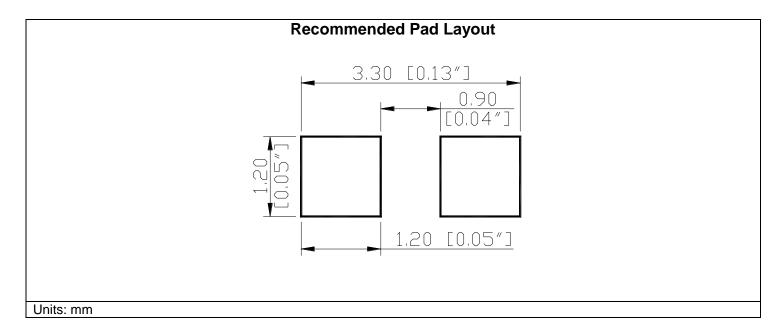
Product: QBLP631-R1-2943	Date: October 11, 2021	Page 5 of 9
	Version# 1.0	



## **Solder Profile & Footprint**

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



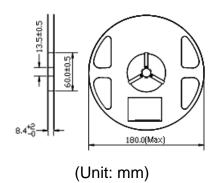


Product: QBLP631-R1-2943	Date: October 11, 2021	Page 6 of 9
	Version# 1.0	

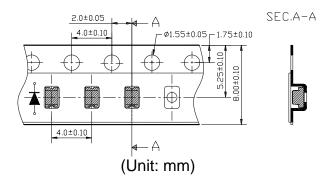


## **Packing**

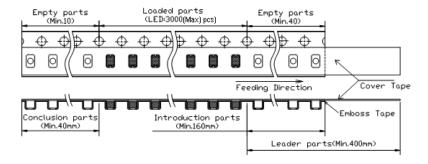
Reel Dimension:



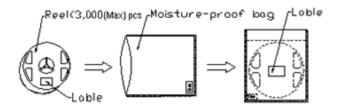
Tape Dimension:



## Arrangement of Tape:



## Packaging Specifications:



Product: QBLP631-R1-2943	Date: October 11, 2021	Page 7 of 9
	Version# 1.0	



# Labeling

😥 QT-Brightek 🙆
Part No:
Customer P/N:
ltem:
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 <sub>F</sub> =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

## **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.

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