

QT-Brightek Chip LED Series

0402 SMD Red LED

Part No.: QBLP595-R-2897

2897: High Brightness Version

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Introduction

Feature:

- Water clear lens
- Package in tape and reel
- Color: red
- Compact 0402 package
- AlInGaP technology
- Viewing angle: 140 deg typ.
- Height profile: 0.5mm

Application:

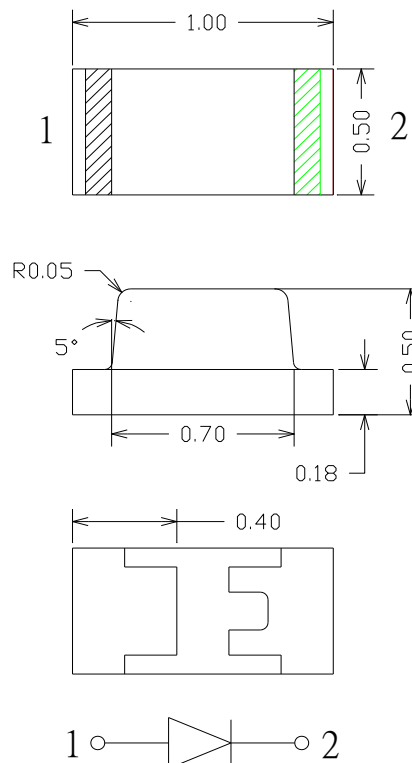
- Status indication
- Back lighting application

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.	Max.
QBLP595-R-2897	Red	20	2.1	2.5	615	620	630	630	250	330	800

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)**
AlInGaP	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=20mA

Bin	Min.	Max.	Unit
□	1.7	2.5	V

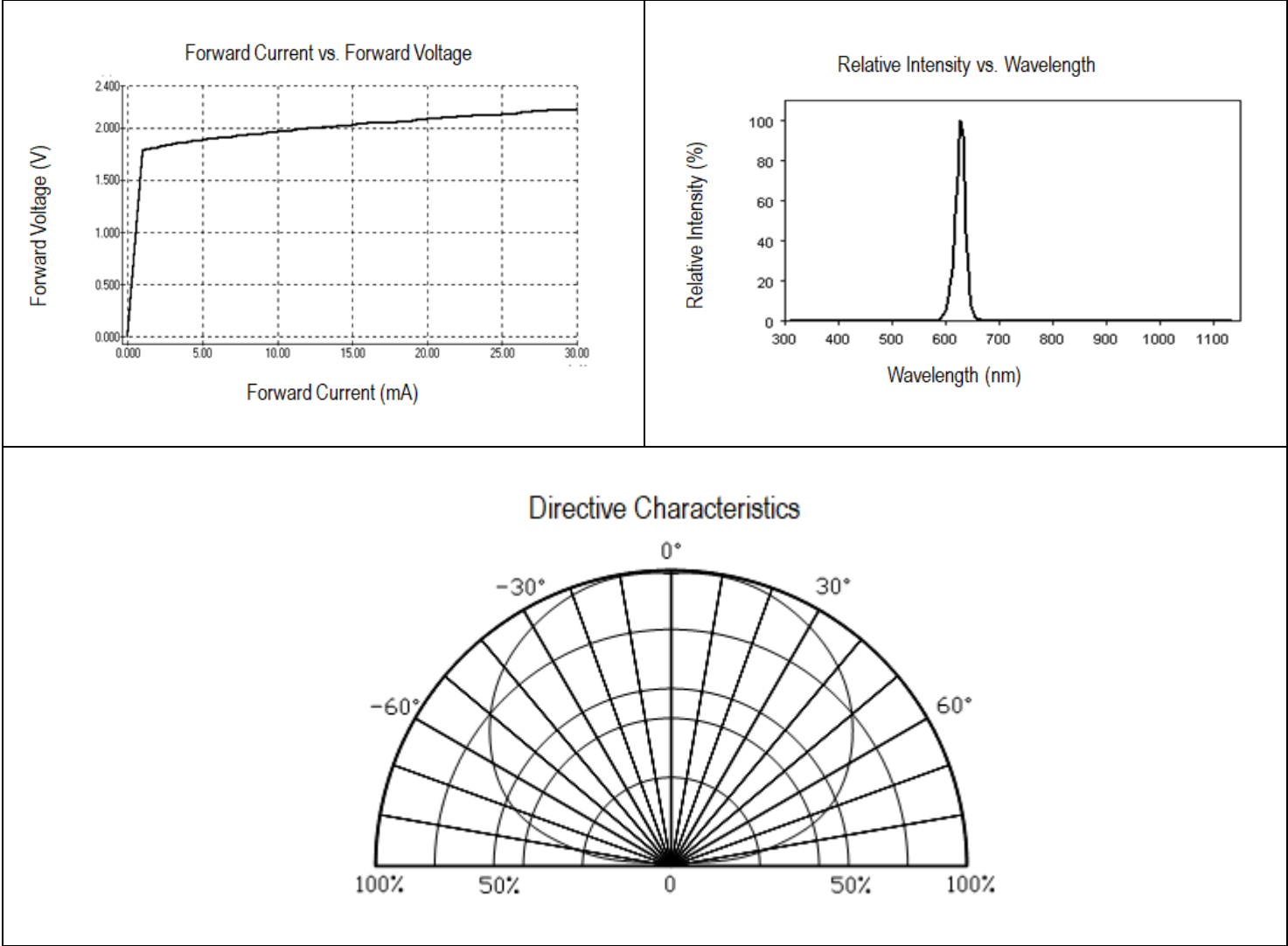
Luminous Intensity I_V @ I_F=20mA

Bin	Min.	Max.	Unit
N	250	320	mcd
O	320	400	
P	400	500	
Q	500	630	
R	630	800	

Dominant Wavelength λ_D @ I_F=20mA

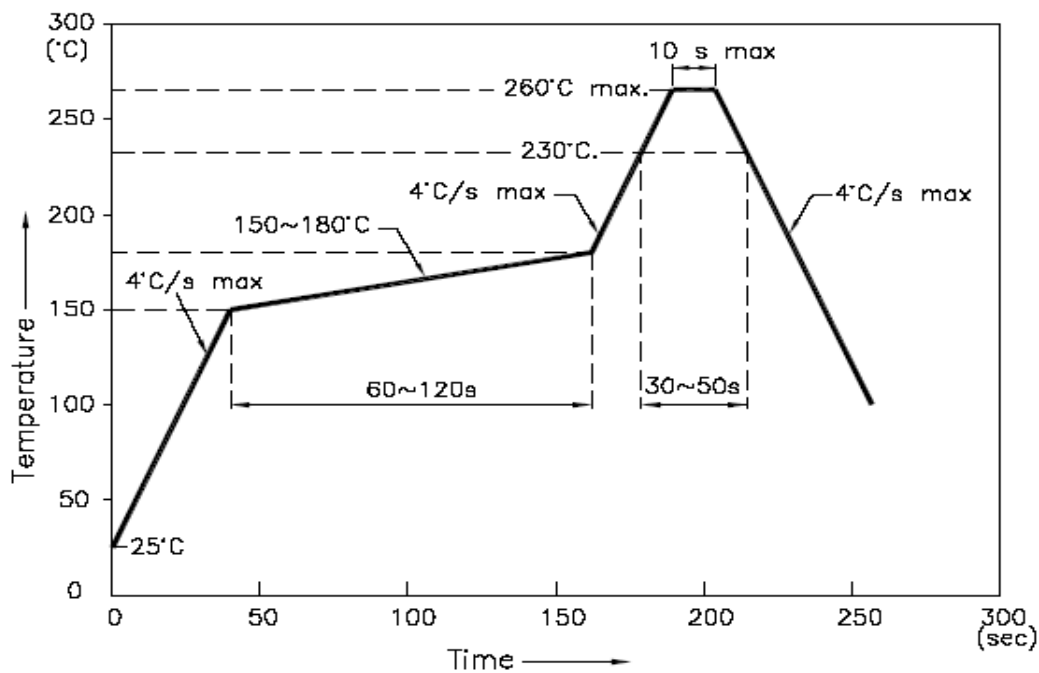
Bin	Min.	Max.	Unit
s	615	620	nm
t	620	625	
u	625	630	

Characteristic Curves

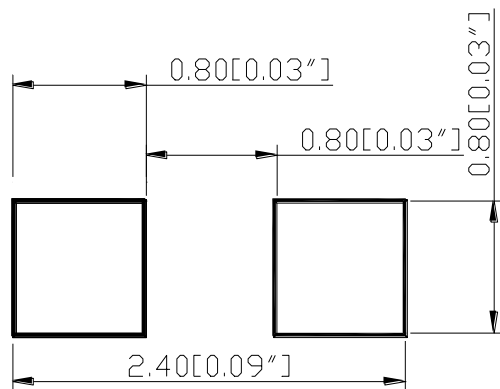


Solder Profile & Footprint

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



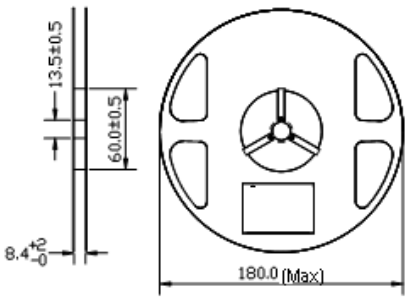
Recommended Pad Layout



Units: mm

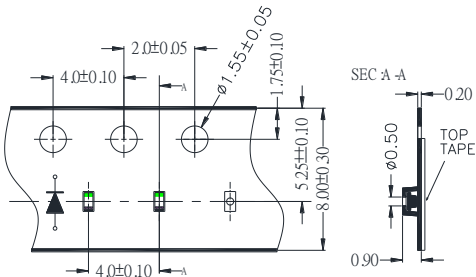
Packing

Reel Dimension:



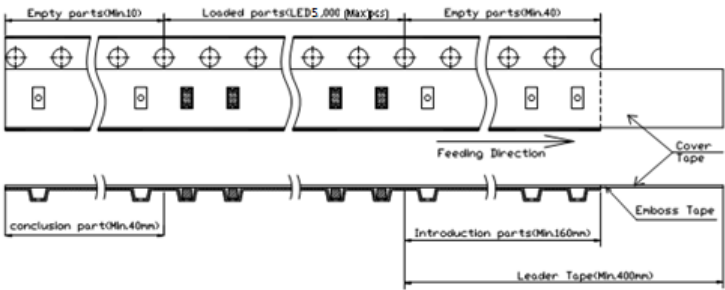
(Unit: mm)

Tape Dimension:

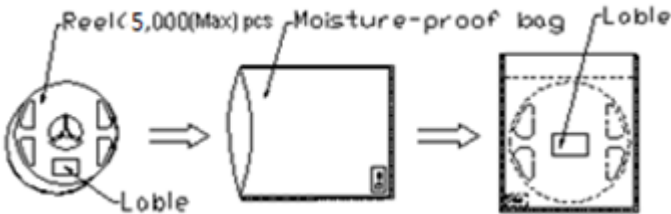


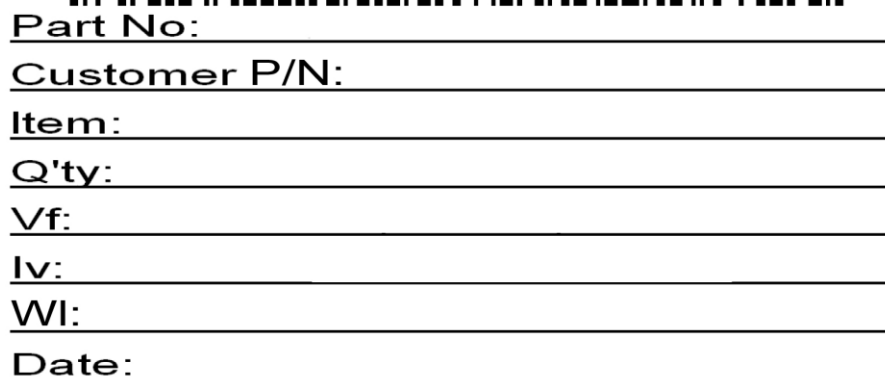
(Unit: mm)

Arrangement of Tape:



Packaging Specifications:





Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP595-R-2897	Iv=330mcd typ. λ_D =615nm to 630nm	5,000 units

Product: QBLP595-R-2897	Date: April 02, 2025	Page 8 of 9
	Version# 1.3	

Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-R (High Bright)	V1.0	06/10/2016
Amend part number to QBLP595-R-2897	V1.1	08/19/2019
Update typical mcd value	V1.2	12/17/2019
Add peak wavelength value	V1.3	04/02/2025

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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.