

QT-Brightek Chip LED Series

0402 SMD Red LED

Part No.: QBLP595-2R5-2897

5: 5mA
2897: High Brightness Version

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Introduction

Feature:

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

Application:

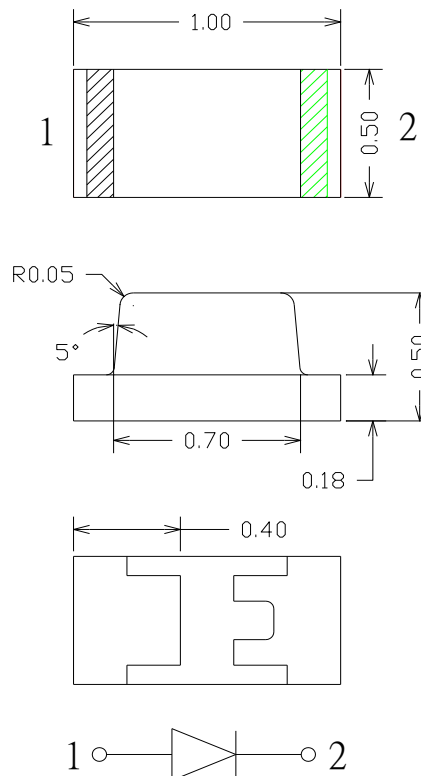
- Status indication
- Back lighting application

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.
QBLP595-2R5-2897	Red	5	1.9	2.3	615	620	630	630	58	140	184

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	69	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=5mA

Bin	Min.	Max.	Unit
□	1.7	2.3	V

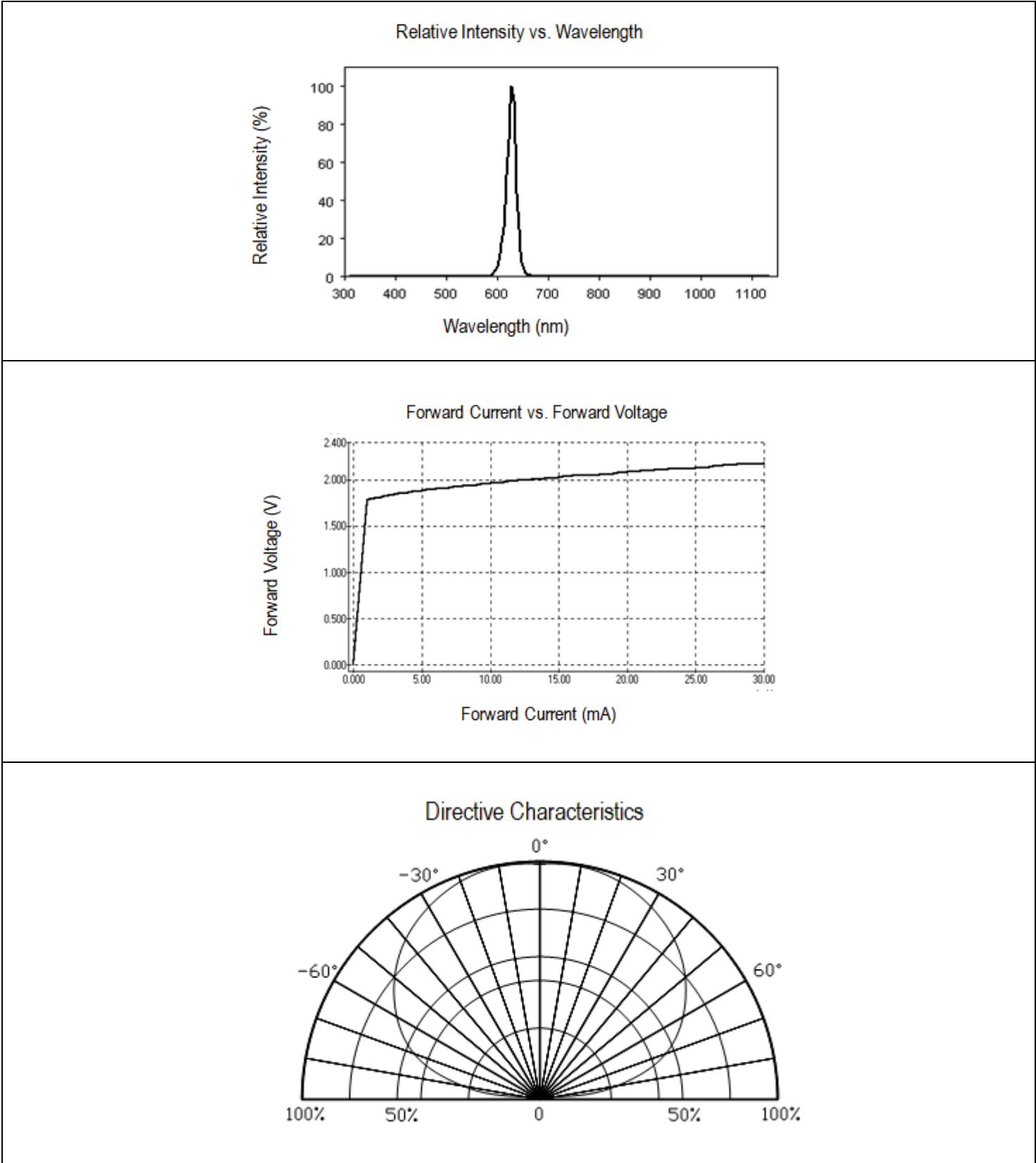
Luminous Intensity I_V @ I_F=5mA

Bin	Min.	Max.	Unit
A	58	73	mcd
B	73	92	
C	92	116	
D	116	146	
E	146	184	

Dominant Wavelength λ_D @ I_F=5mA

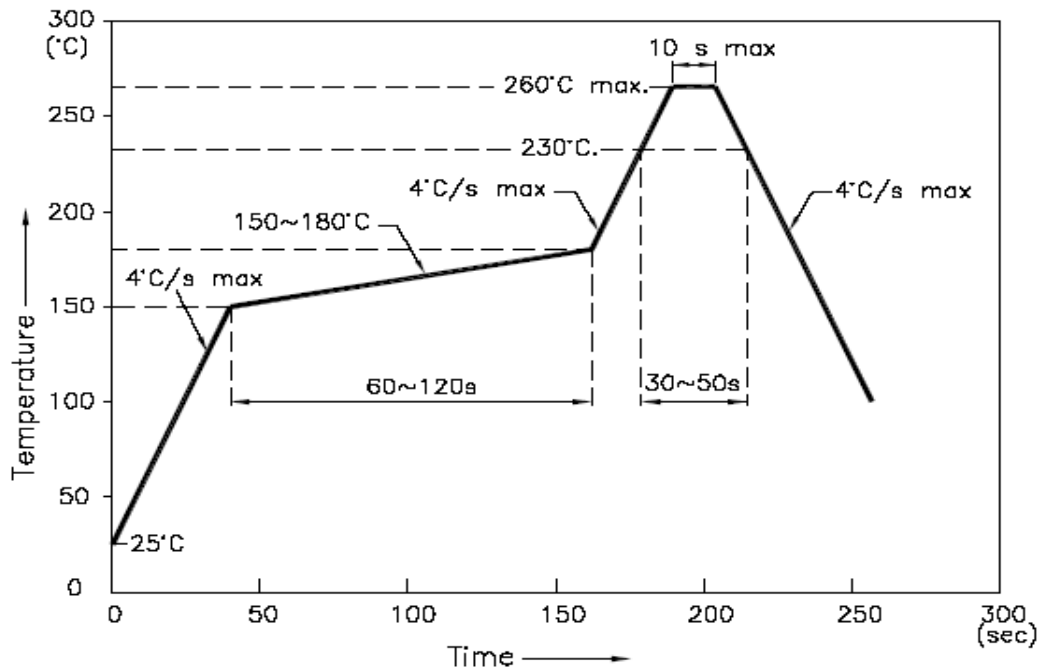
Bin	Min.	Max.	Unit
s	615	620	nm
t	620	625	
u	625	630	

Characteristic Curves

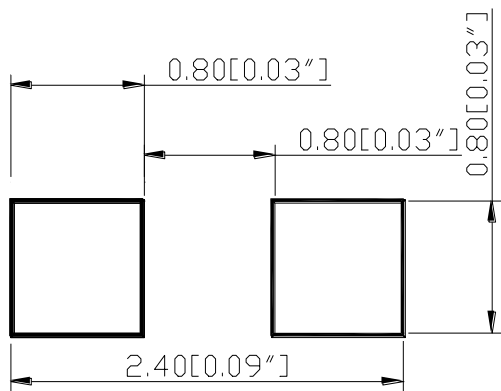


Solder Profile & Footprint

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



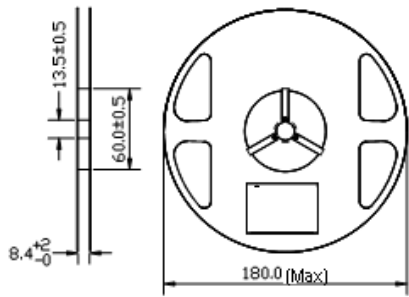
Recommended Pad Layout



Units: mm

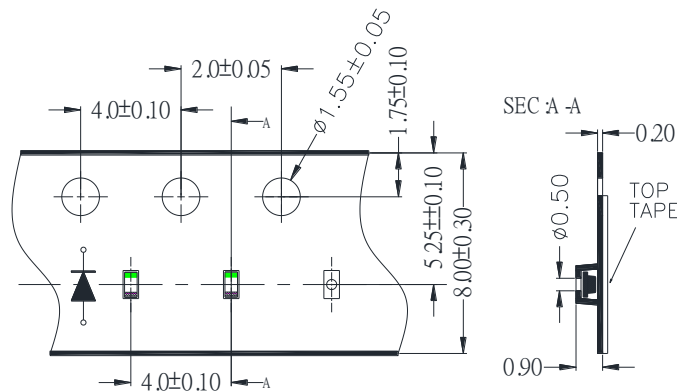
Packing

Reel Dimension:



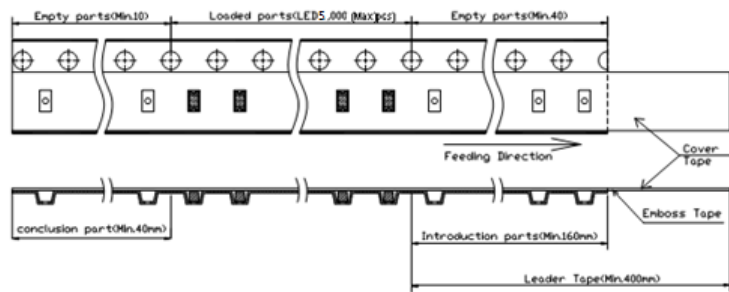
(Unit: mm)

Tape Dimension:

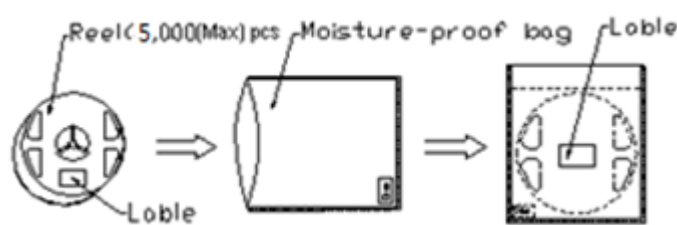


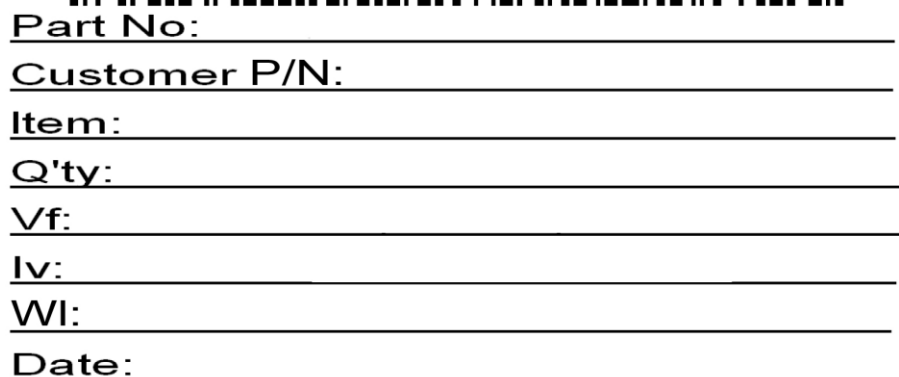
(Unit: mm)

Arrangement of Tape:



Packaging Specifications:





Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP595-2R5-2897	lv=140mcd typ. @ I _f =5mA, λ _D =615nm to 630nm	5,000 units

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Revision History

Description:	Revision #	Revision Date
New Release of QBLP595-2R5-2897	V1.0	04/14/2025

Disclaimer

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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.

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