

QT-Brightek Chip LED Series

SMD 1205 LED

Part No.: QBLP655R-IB-S2897

655R: Reverse Mount
S2897: Ultra High Bright

Product: QBLP655R-IB-S2897	Date: January 30, 2026	Page 1 of 9
	Version# 1.0	

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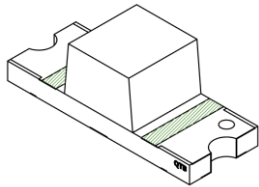
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Introduction

Feature:

- Clear lens
- Package in tape and reel
- Ultra bright blue
- Viewing angle: 140 degrees typ.
- Reverse mount
- Height profile: 1.1mm



Application:

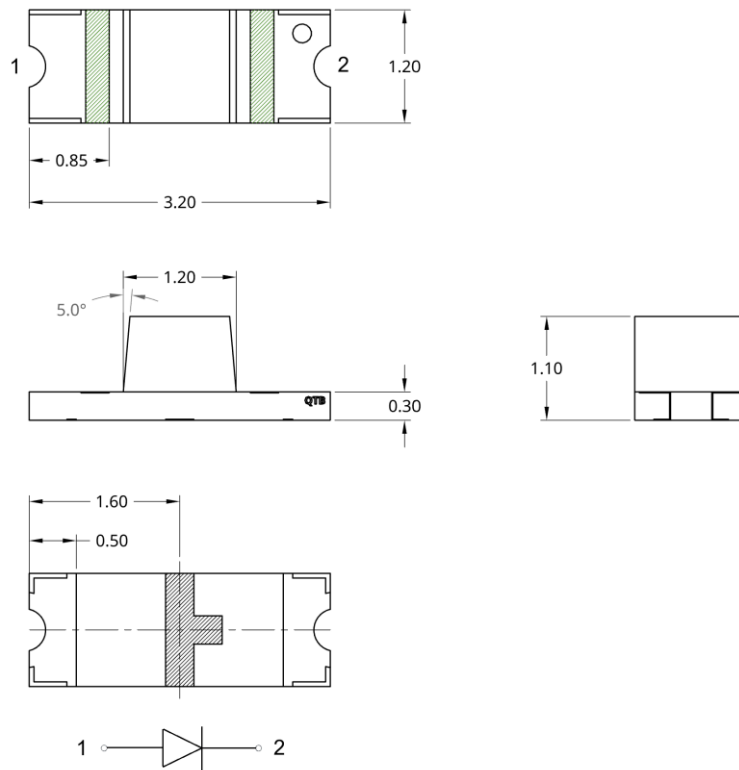
- Status indication
- Back lighting application

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.
QBLP655R-IB-S2897	Blue	20	3.1	3.7	465	470	475	465	105	200

Absolute Maximum Rating

Chip Material	P _d (mW)	I _F (mA)	I _{FP} (mA)*	V _R (V)	T _{OP} (°C)	T _{ST} (°C)	T _{SOL} (°C)**
InGaN	111	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
f	2.8	3.1	V
g	3.1	3.4	
h	3.4	3.7	

Luminous Intensity I_v @ I_F=20mA

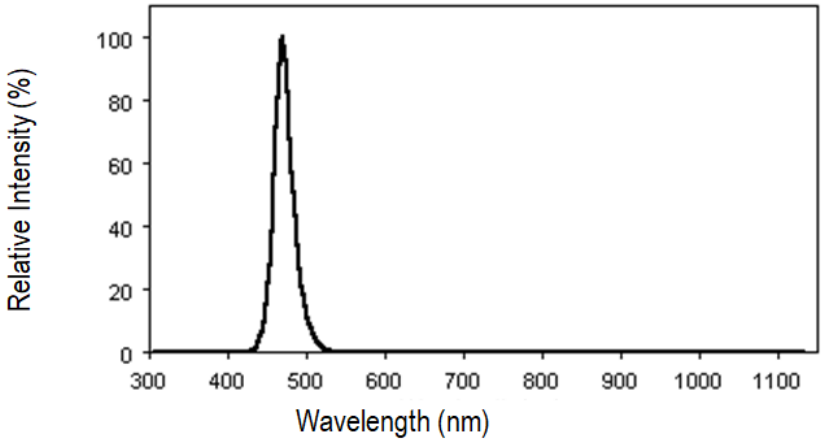
Bin	Min.	Max.	Unit
2J	105	131	mcd
2K	131	168	
2L	168	210	
2M	210	263	
2N	263	337	

Dominant Wavelength λ_D @ I_F=20mA

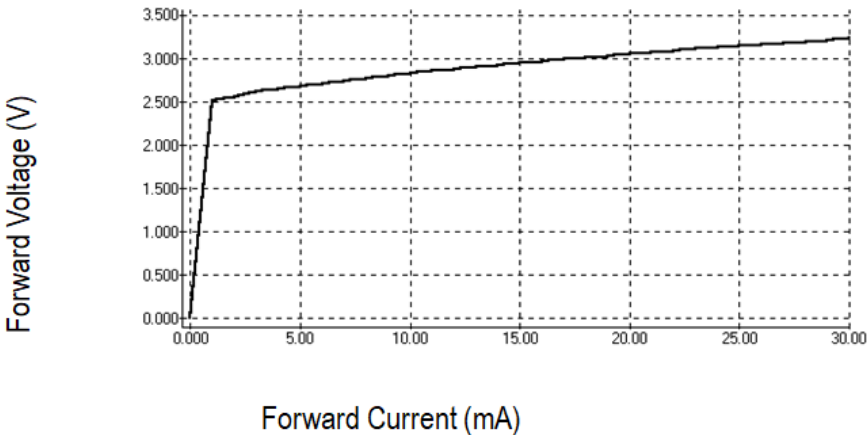
Bin	Min.	Max.	Unit
G	465	467.5	nm
H	467.5	470	
I	470	472.5	
J	472.5	475	

Characteristic Curves

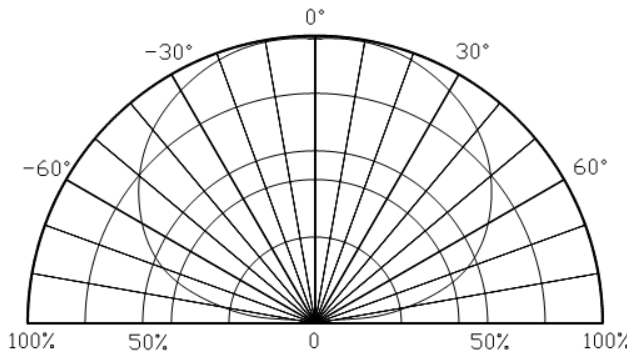
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

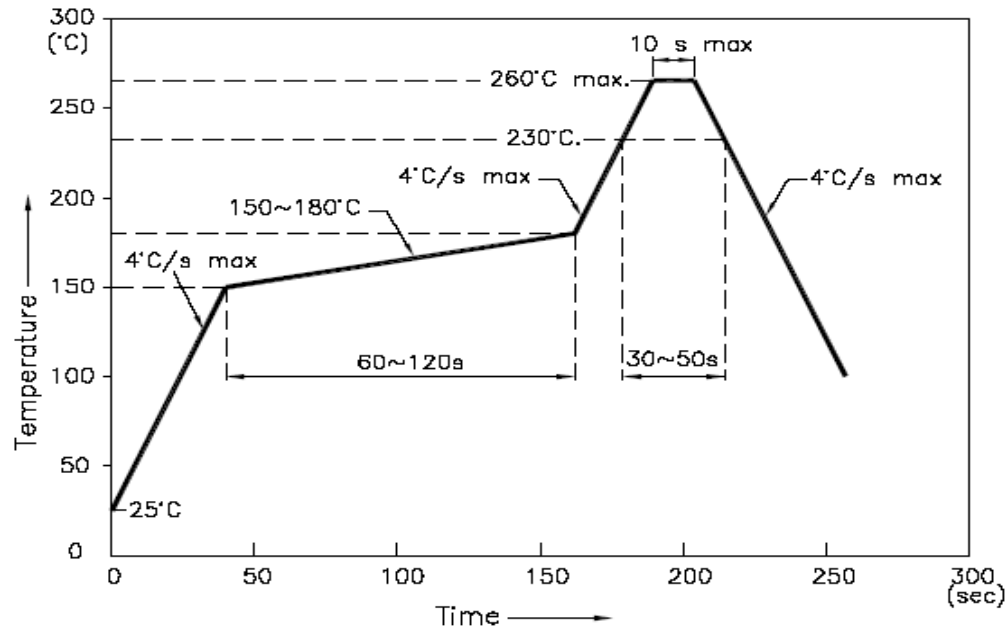


Directive Characteristics

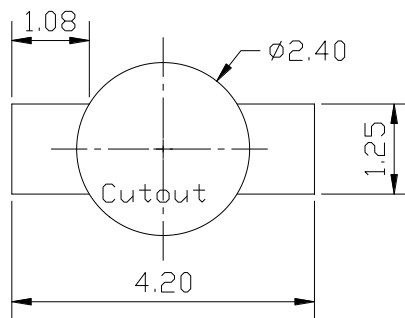


Solder Profile & Footprint

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



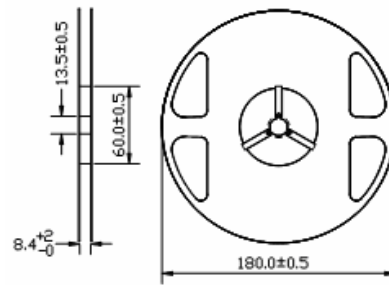
Recommended Pad Layout



Units: mm

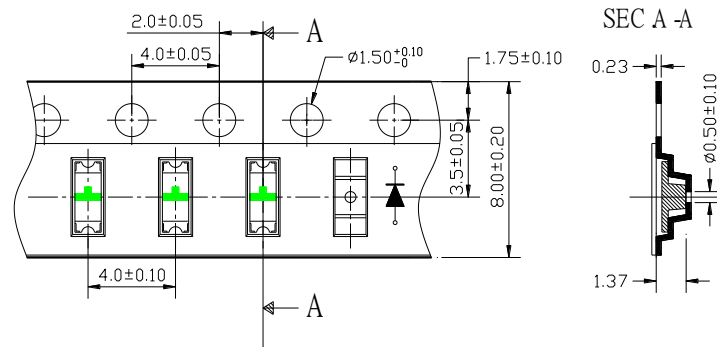
Packing

Reel Dimension:



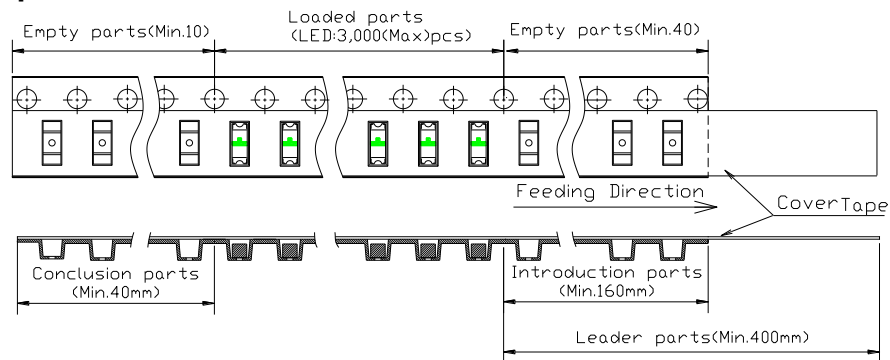
Unit: mm

Tape Dimension:

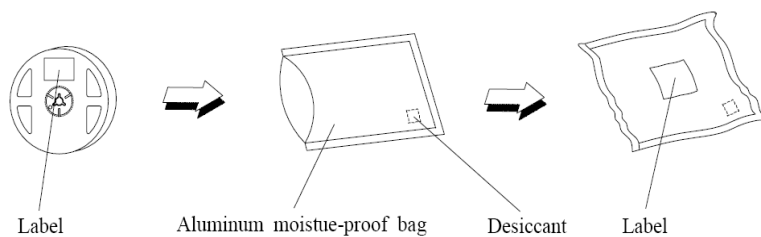


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Labeling



QT-Brightek





Part No:

Customer P/N:

Item:

Q'ty:

Vf:

Iv:

WI:

Date:

Made in China

Ordering Information

Orderable Part #	Spec Range	Quantity per reel
QBLP655R-IB-S2897	Iv=200mcd typ. @ If=20mA / λD=465-475nm	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP655R-IB-S2897	V1.0	01/30/2026

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.