

QT-Brightek Chip LED Series

SMD 1205 LED

Part No.: QBLP655R-IB-2

655R: Reverse Mount

Product: QBLP655R-IB-2	Date: January 30, 2026	Page 1 of 9
	Version# 1.0	

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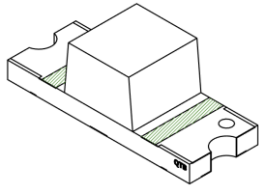
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Introduction

Feature:

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



Application:

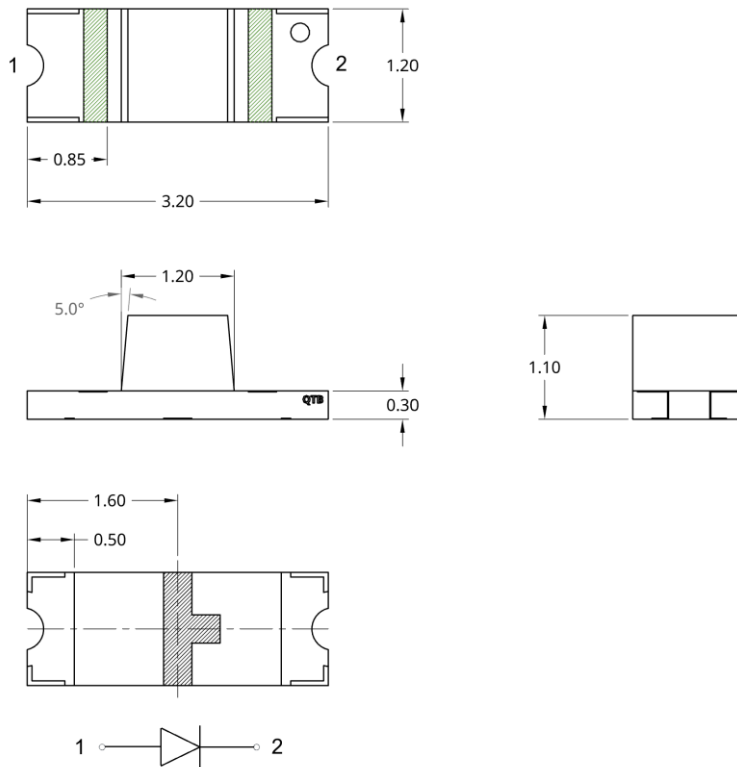
- Status indication
- Back lighting application

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-2	Blue	20	3.1	3.7	465	470	475	465	42	80

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

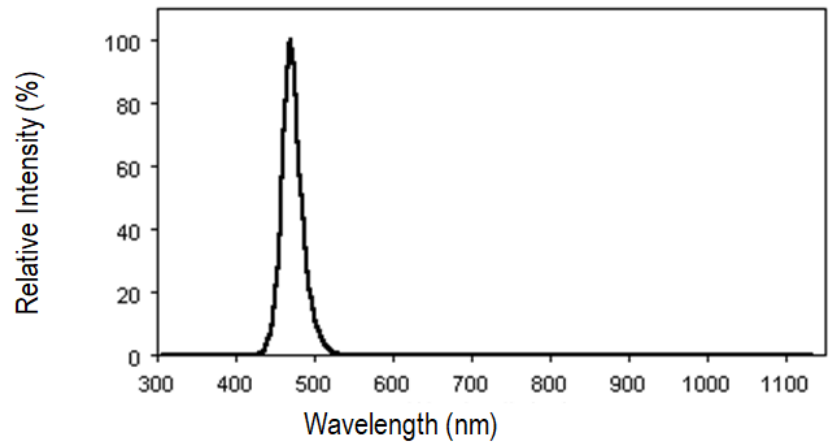
Bin	Min.	Max.	Unit
2E	42	52	mcd
2F	52	65	
2G	65	82	
2H	82	105	
2I	105	131	

Dominant Wavelength λ_D @ I_F=20mA

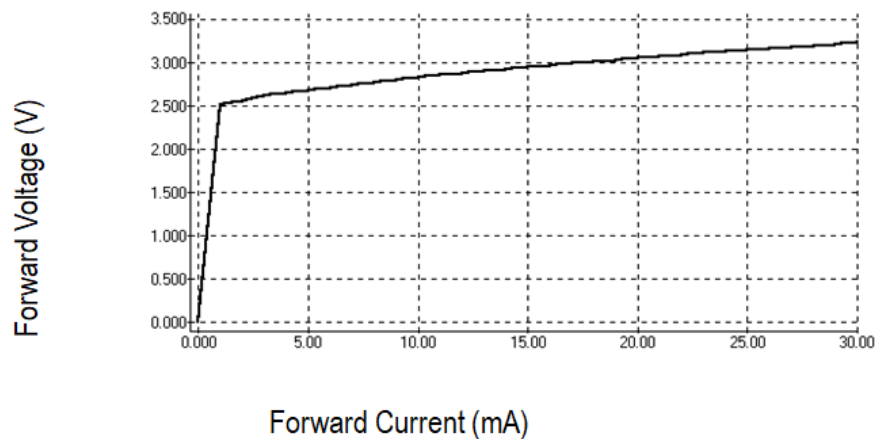
Bin	Min.	Max.	Unit
G	465	467.5	nm
H	467.5	470	
I	470	472.5	
J	472.5	475	

Characteristic Curves

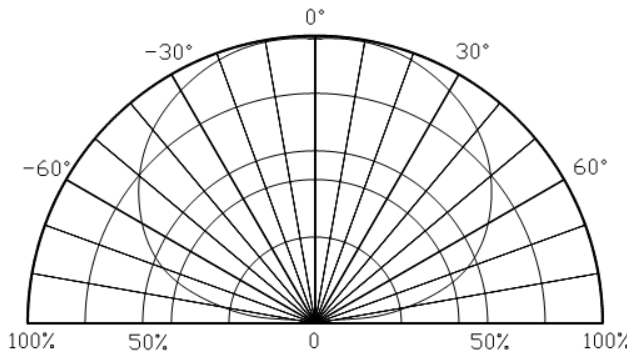
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

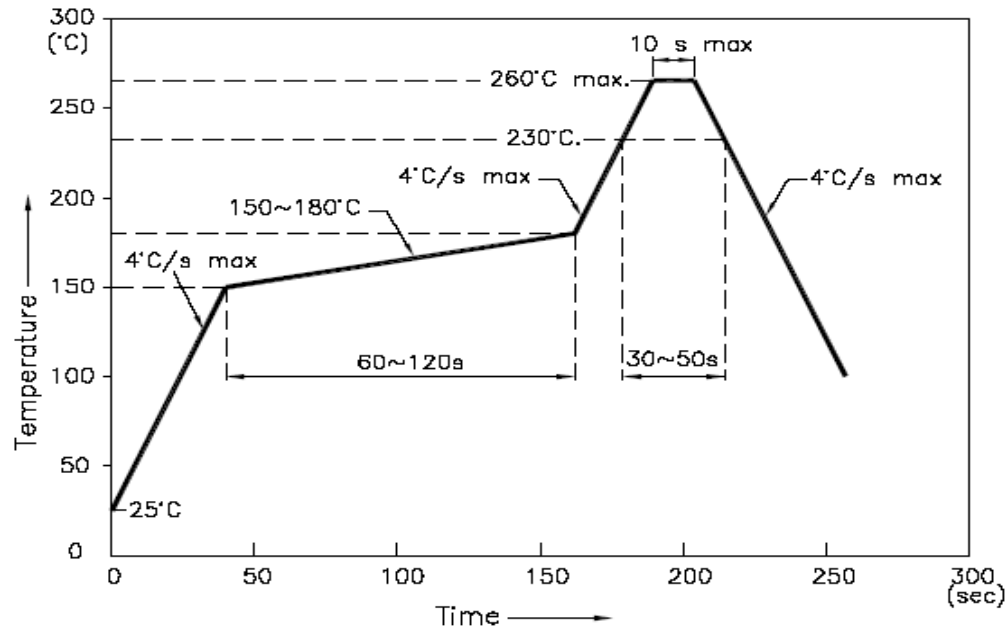


Directive Characteristics

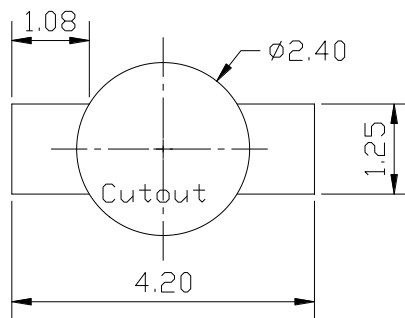


Solder Profile & Footprint

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



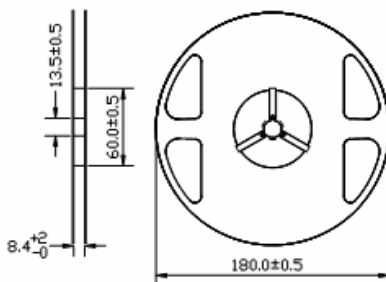
Recommended Pad Layout



Units: mm

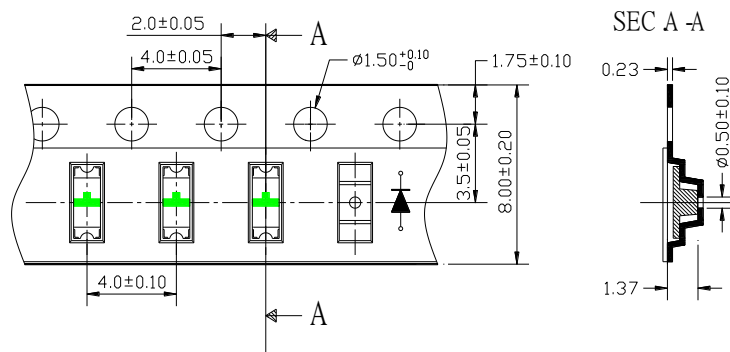
Packing

Reel Dimension:



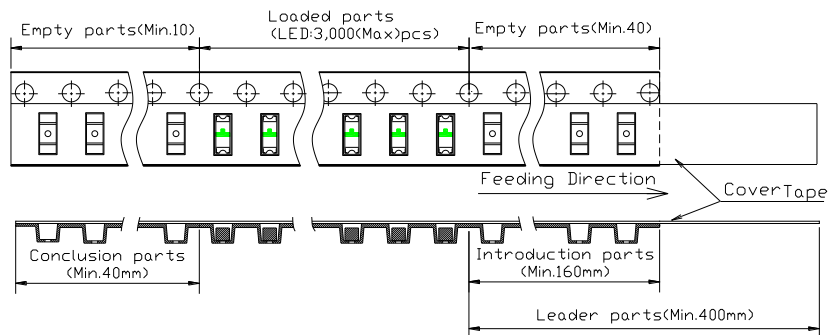
Unit: mm

Tape Dimension:

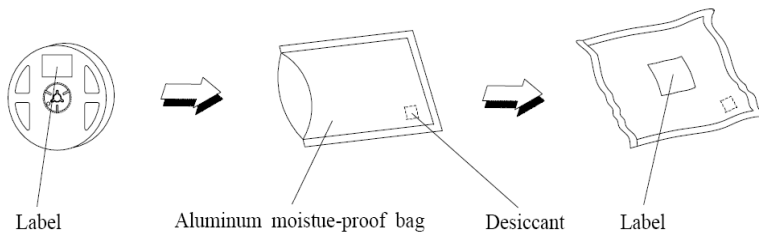


Unit: mm

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-2	Iv=80mcd typ. @ IF=20mA / λD=465-475nm	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP655R-IB-2	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.