

QT-Brightek Chip LED Series

SMD 1205 LED

Part No.: QBLP655R-Y3

**655R: Reverse Mount
3mA**

Product: QBLP655R-Y3	Date: March 2, 2026	Page 1 of 9
	Version# 1.0	

Table of Contents:

Introduction3

Electrical / Optical Characteristic (Ta=25 °C)4

Absolute Maximum Rating4

Characteristic Curves.....5

Solder Profile & Footprint.....6

Packing7

Labeling8

Ordering Information8

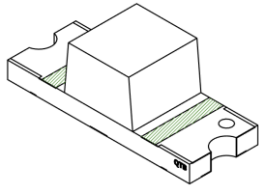
Revision History9

Disclaimer9

Introduction

Feature:

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



Application:

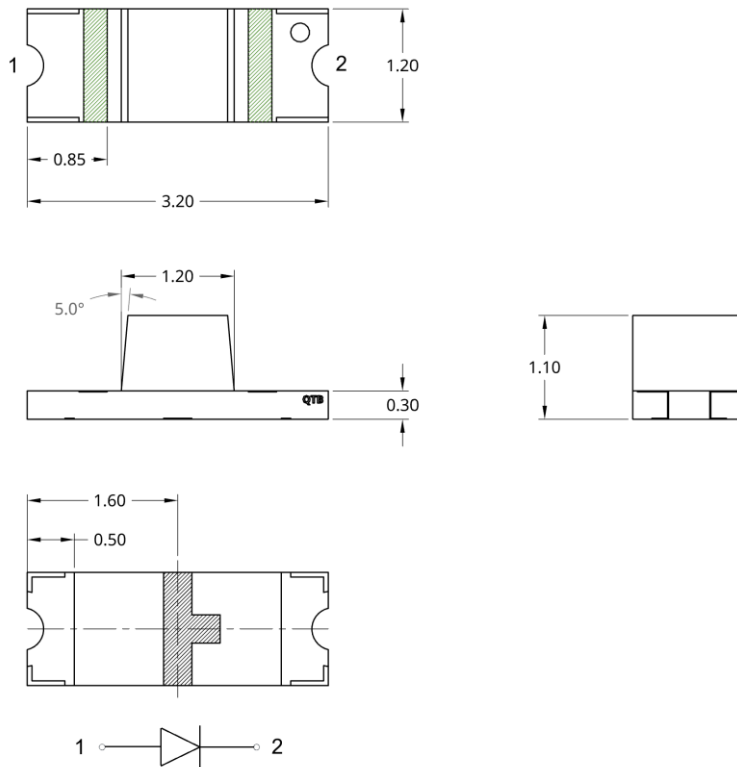
- Status indication
- Back lighting application

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-Y3	Yellow	3	1.8	2.2	585	588	595	592	8.0	16

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)**
AllnGaP	66	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=3mA

Bin	Min.	Max.	Unit
□	1.6	2.2	V

Luminous Intensity I_V @ I_F=3mA

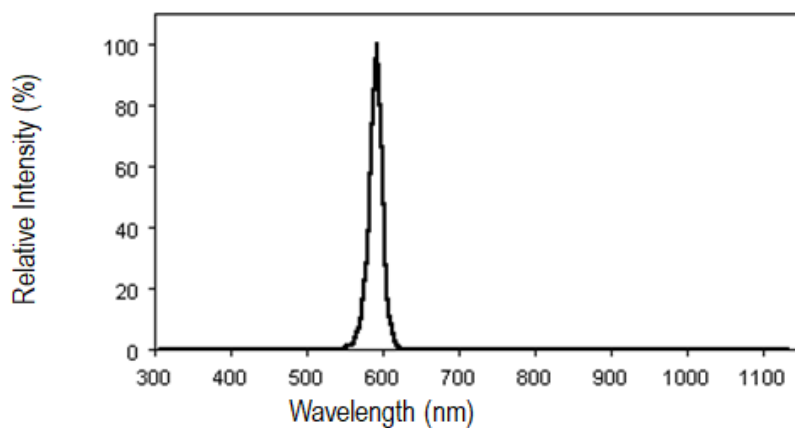
Bin	Min.	Max.	Unit
9	8.0	12.5	mcd
A	12.5	16	
B	16	20	
C	20	25	
D	25	32	

Dominant Wavelength λ_D @ I_F=3mA

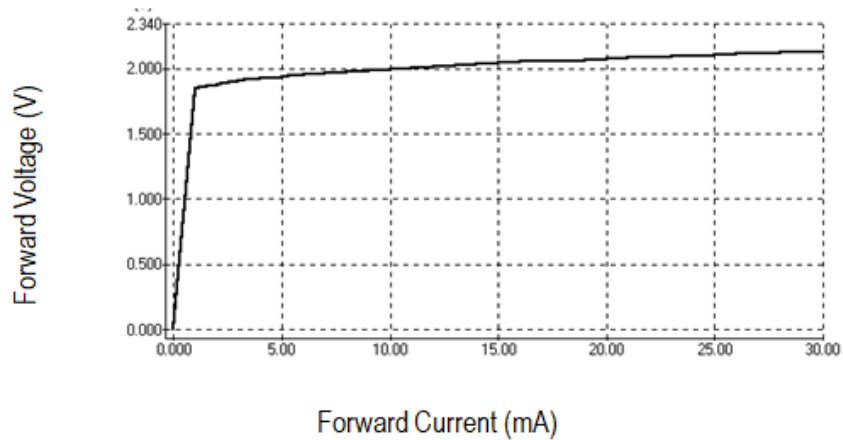
Bin	Min.	Max.	Unit
m	585	590	nm
n	590	595	

Characteristic Curves

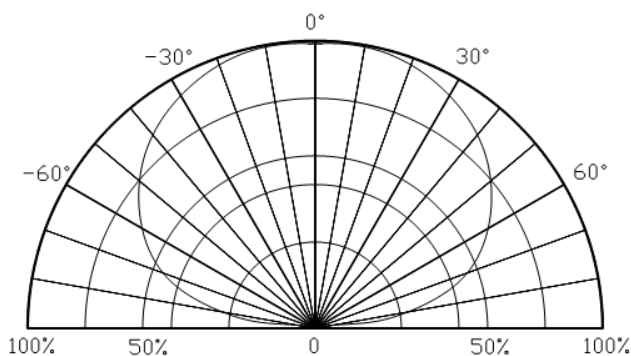
Relative Intensity vs. Wavelength



Forward Current vs. Forward Voltage

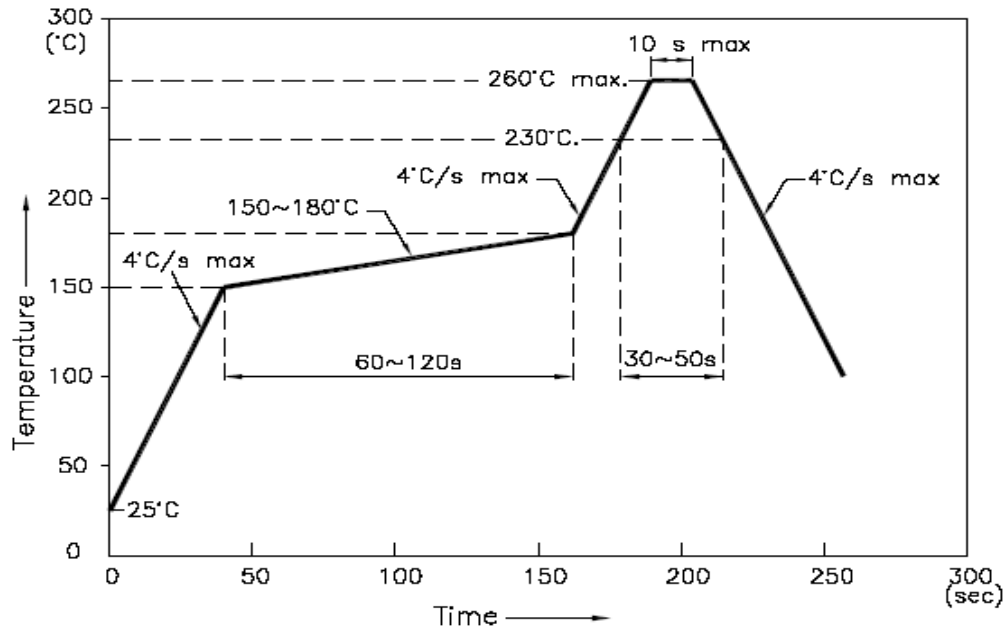


Directive Characteristics

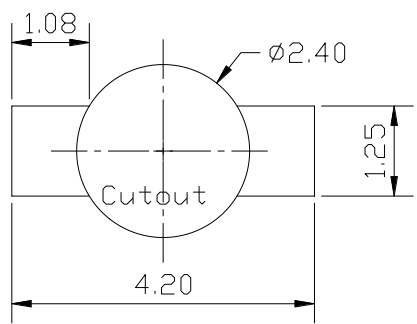


Solder Profile & Footprint

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



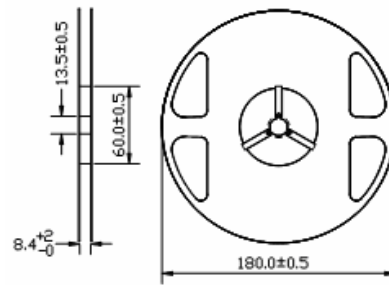
Recommended Pad Layout



Units: mm

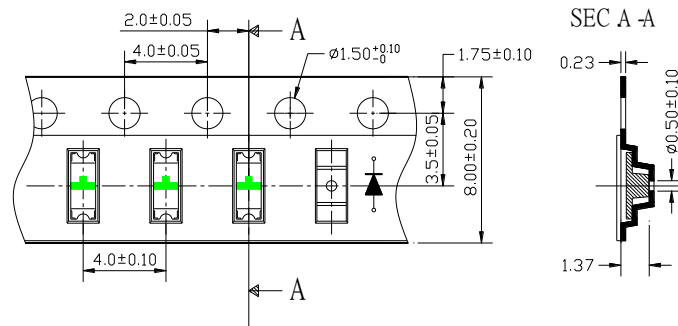
Packing

Reel Dimension:



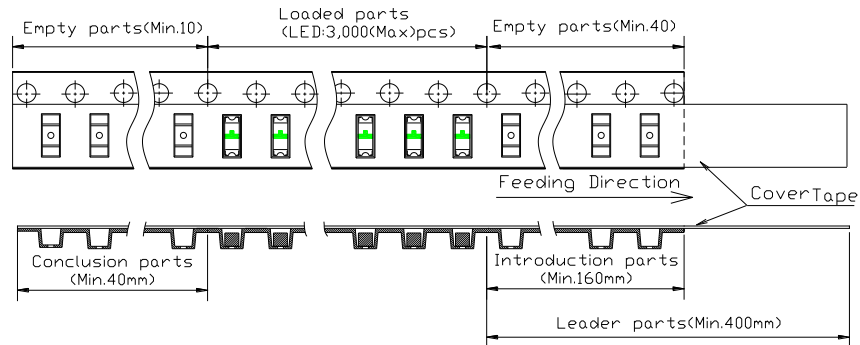
Unit: mm

Tape Dimension:

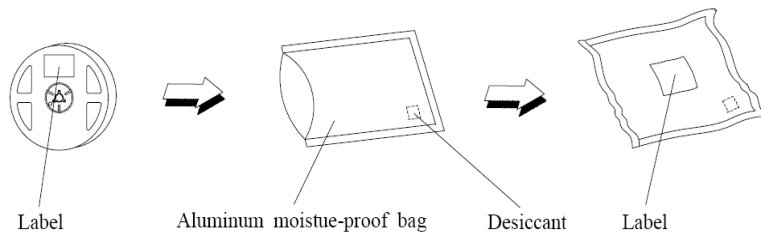


Unit: mm

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-Y3	Iv=16mcd typ. @ IF=3mA / λD=585-595nm	3,000 units

Revision History

Description:	Revision #	Revision Date
New Release of QBLP655R-Y3	V1.0	03/02/2026

Disclaimer

QT-BRIGHTEK reserves the right to make changes without further notice to any products herein to improve reliability, function or design. QT-BRIGHTEK does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

Life Support Policy

QT-BRIGHTEK's products are not authorized for use as critical components in life support devices or systems without the express written approval of QT-BRIGHTEK. As used herein:

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.