

**QT-Brightek Chip LED Series**  
**SMD 1205 Reverse Mount Green LED**  
**Part No.: QBLP655R-AG1**

|                       |                        |             |
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## Introduction

**Feature:**

- Package in tape and reel
- Ultra bright 1205 package
- Clear lens
- AllInGaP technology
- Viewing angle: 140 deg typ.
- Reverse Mountable

**Description:**

These ultra-bright 655R LEDs have a height profile of 1.10mm. With a combination of high brightness output and small footprint, these LEDs are ideal for keypad backlighting and status indication.

**Application:**

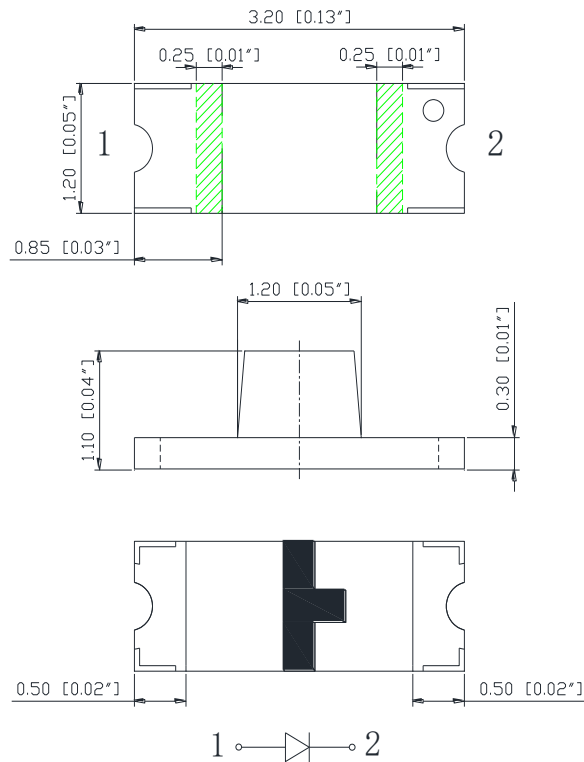
- Status indication
- Back lighting application

**Certification & Compliance:**

- ISO9001
- RoHS Compliant



**Dimension:**



Units: mm / tolerance = +/-0.1mm

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

| Product      | Color | I <sub>F</sub> (mA) | V <sub>F</sub> (V) |      | λ <sub>D</sub> (nm) |      |      | I <sub>V</sub> (mcd) |      |
|--------------|-------|---------------------|--------------------|------|---------------------|------|------|----------------------|------|
|              |       |                     | Typ.               | Max. | Min.                | Typ. | Max. | Min.                 | Typ. |
| QBLP655R-AG1 | Green | 20                  | 2.0                | 2.5  | 566                 | 570  | 575  | 20                   | 35   |

### Absolute Maximum Rating

| Material | P <sub>d</sub> (mW) | I <sub>F</sub> (mA) | I <sub>FP</sub> (mA)* | V <sub>R</sub> (V) | T <sub>OP</sub> (°C) | T <sub>ST</sub> (°C) | T <sub>SOL</sub> (°C)** |
|----------|---------------------|---------------------|-----------------------|--------------------|----------------------|----------------------|-------------------------|
| AllnGaP  | 120                 | 30                  | 125                   | 5                  | -40 ~ +80            | -40 ~ +85            | 260                     |

\*Duty 1/8 @ 1kHz

\*\*IR Reflow for no more than 10 sec @ 260 °C

### Forward Voltage V<sub>F</sub> @ I<sub>F</sub>=20mA

| Bin | Min. | Max. | Unit |
|-----|------|------|------|
| □   | 1.7  | 2.5  | V    |

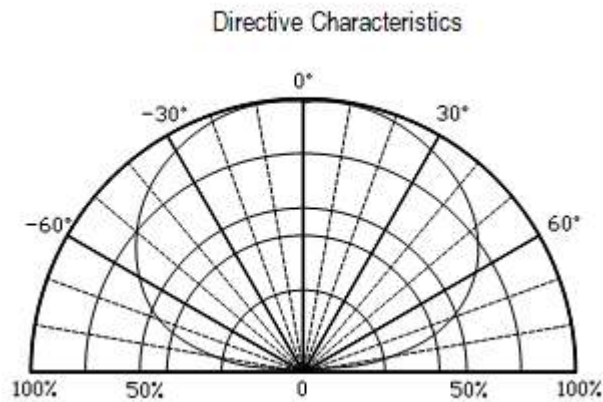
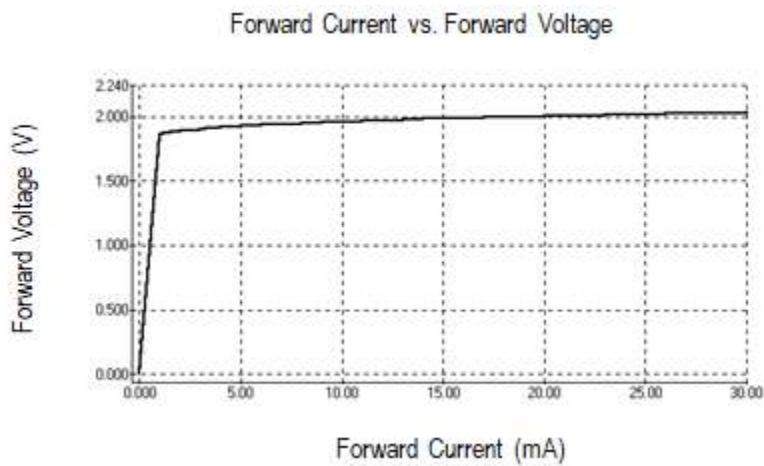
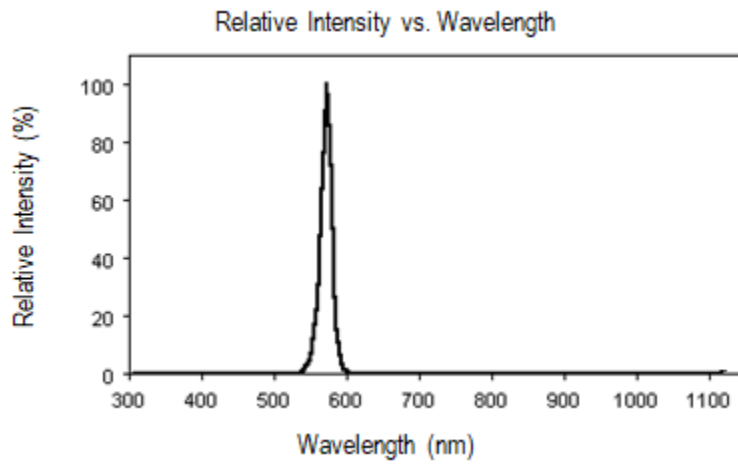
### Luminous Intensity I<sub>V</sub> @ I<sub>F</sub>=20mA

| Bin | Min. | Max. | Unit |
|-----|------|------|------|
| C   | 20   | 25   | mcd  |
| D   | 25   | 32   |      |
| E   | 32   | 40   |      |
| F   | 40   | 50   |      |

### Dominant Wavelength λ<sub>D</sub> @ I<sub>F</sub>=20mA

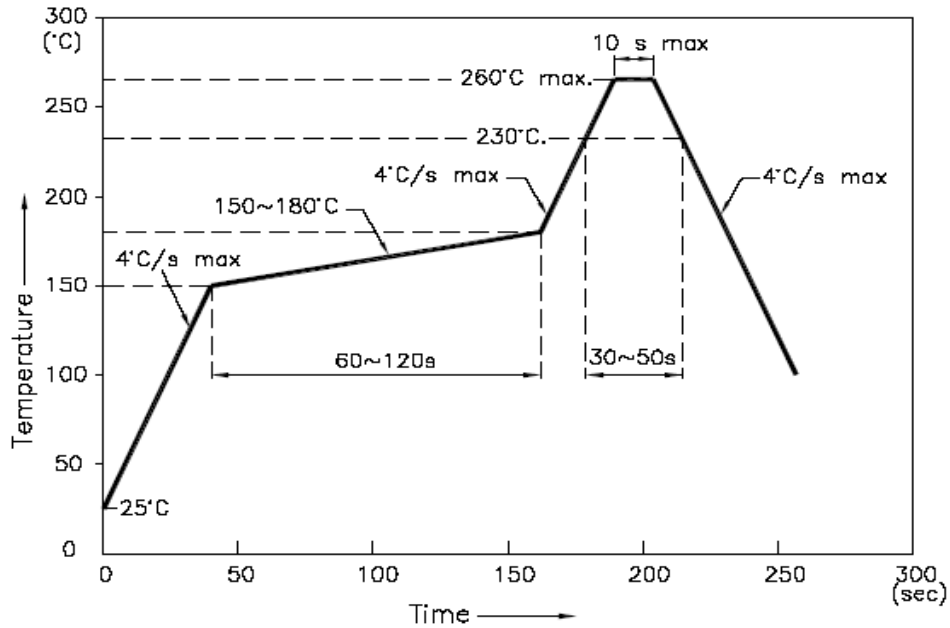
| Bin | Min. | Max. | Unit |
|-----|------|------|------|
| H   | 566  | 569  | nm   |
| I   | 569  | 572  |      |
| J   | 572  | 575  |      |

### Characteristic Curves

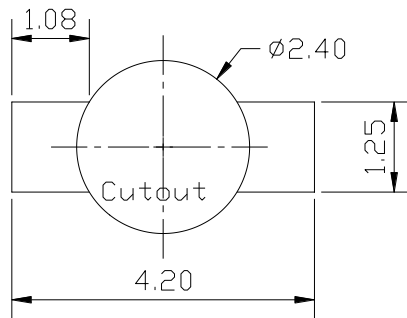


## Solder Profile & Footprint

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



### Recommended Pad Layout



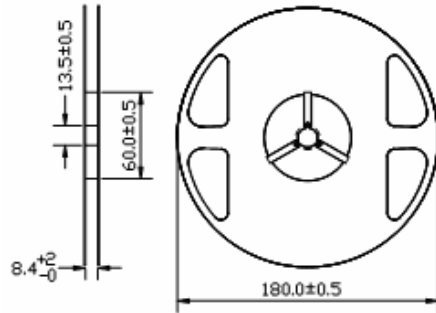
Units: mm

tolerance: +/- 0.1mm

|                       |                         |             |
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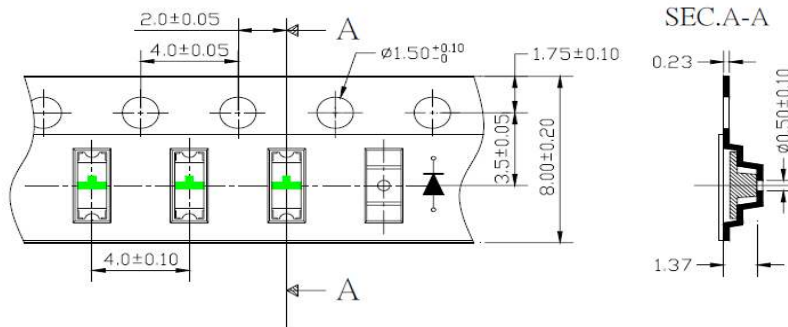
## Packing

### Reel Dimension:



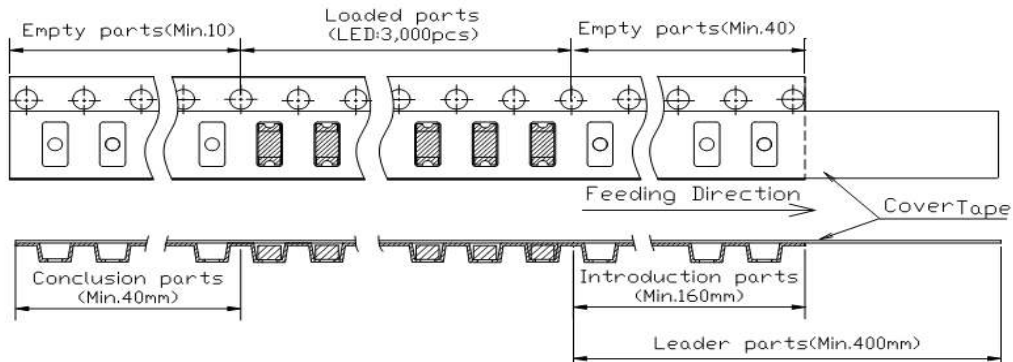
Unit: mm

### Tape Dimension:

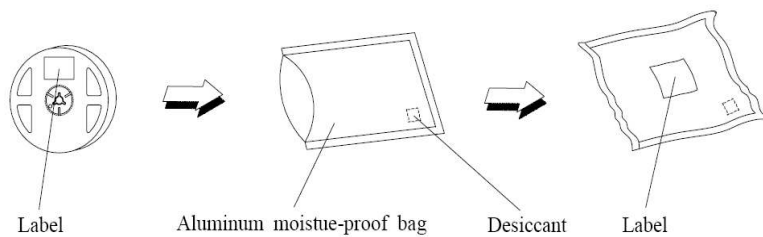


Unit: mm

### Arrangement of Tape:



### Packaging Specifications:



|                       |                         |             |
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**Labeling**

Part No: \_\_\_\_\_

Customer P/N: \_\_\_\_\_

Item: \_\_\_\_\_

Q'ty: \_\_\_\_\_

Vf: \_\_\_\_\_

Iv: \_\_\_\_\_

Wl: \_\_\_\_\_

Date: \_\_\_\_\_

**Made in China****Ordering Information**

| Part #       | Orderable Part # | Spec Range  | Quantity per reel |
|--------------|------------------|---|-------------------|
| QBLP655R-AG1 | QBLP655R-AG1     | Iv=35mcd typ. @ I <sub>F</sub> =20mA / λ <sub>D</sub> =566 to 575nm | 3,000 units       |

|                       |                        |             |
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**Revision History**

| Description:                | Revision # | Revision Date |
|-----------------------------|------------|---------------|
| New Release of QBLP655R-AG1 | V1.0       | 02/18/2022    |
|                             |            |               |
|                             |            |               |
|                             |            |               |

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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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