

QT-Brightek Lamp Series
5mm Bi-Color Round Lamp

Part No.: QBL8RAG60D1

60: Viewing Angle 60 Deg Typical
D: White Diffused Lens
1: Common Cathode

| | | |
|----------------------|------------------------------------|-------------|
| Product: QBL8RAG60D1 | Date: June 24 th , 2022 | Page 1 of 8 |
| | Version# 1.3 | |

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Introduction

Feature:

- White diffused lens
- Bi-Color Red (R) 624nm + Green (AG) 570nm
- Package in bulk pack
- Super bright 5mm round lamp
- AllnGaP technology
- Viewing angle: 60° typ.
- 1: Common Cathode

Description:

These super bright 5mm round type lamps with 8.65mm lens height are suitable for all applications requiring higher brightness.

Application:

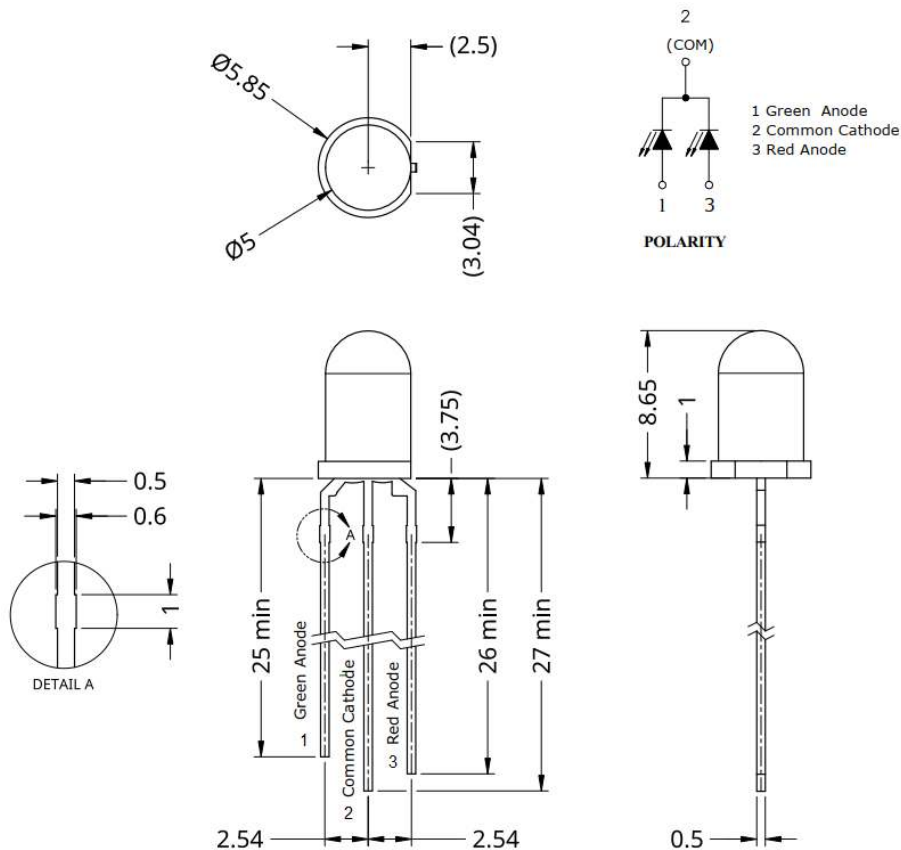
- General purpose indicator application
- Electronic signs and electronics board
- LED lighting

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / Unidentified tolerance = +/-0.25mm

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. | Typ. | Typ. | Min. | Typ. |
| QBL8RAG60D1 | Red | 20 | 2.0 | 2.4 | 624 | 632 | 110 | 260 |
| | Green | | 2.0 | 2.4 | 570 | 573 | 45 | 110 |

Absolute Maximum Rating

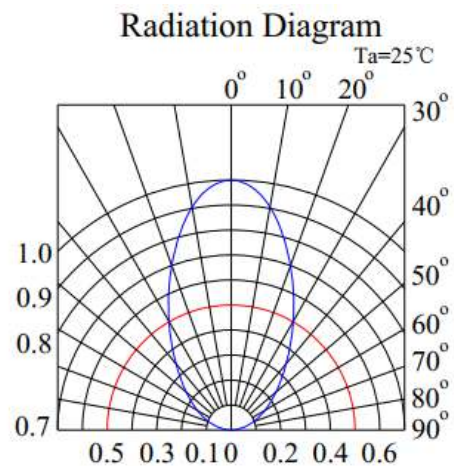
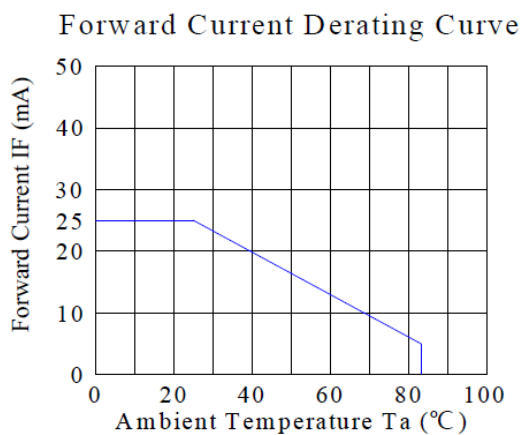
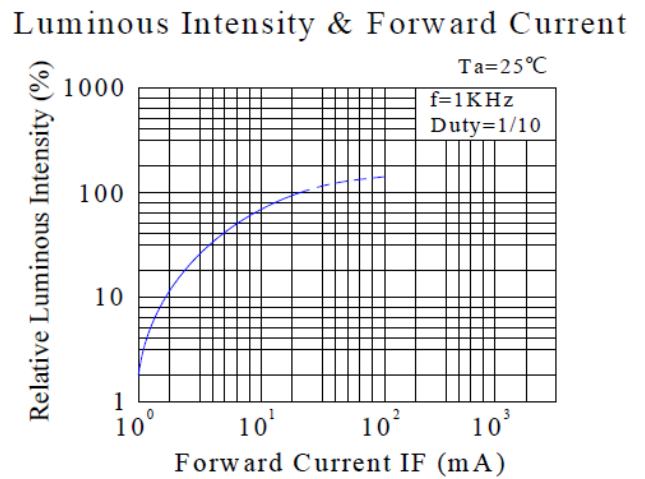
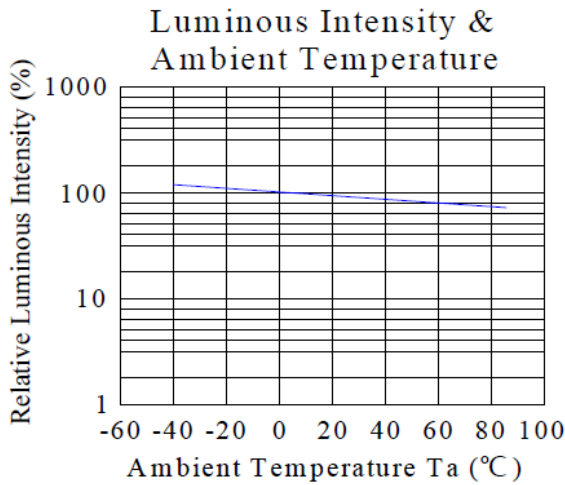
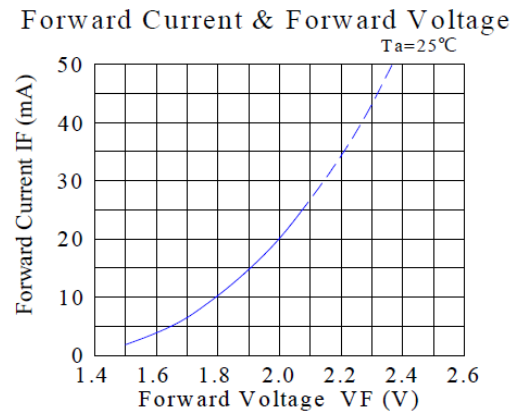
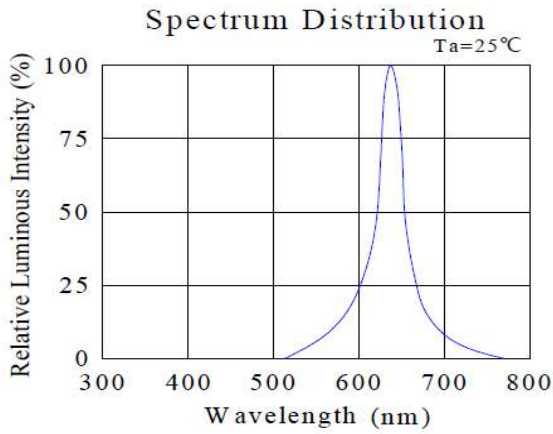
| Material | P _d (mW) | I _F (mA) | I _{FP} (mA)* | V _R (V) | T _{OP} (°C) | T _{ST} (°C) | T _{SO L} (°C)** |
|----------|---------------------|---------------------|-----------------------|--------------------|----------------------|----------------------|--------------------------|
| AllnGaP | 60 | 25 | 100 | 5 | -40 to +85 | -40 to +100 | 260 |

*Duty 1/10 @ 1KHz

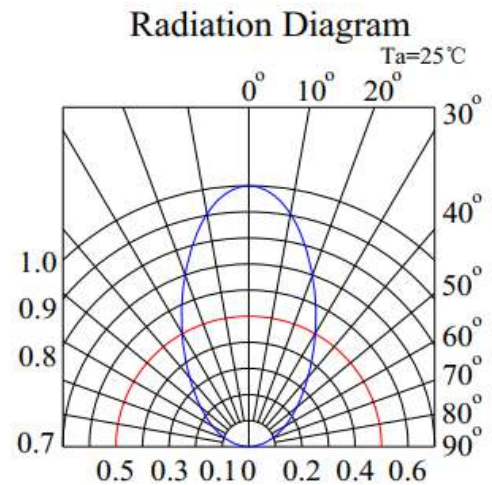
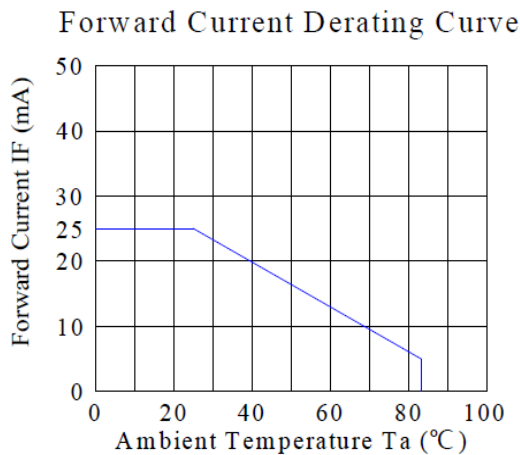
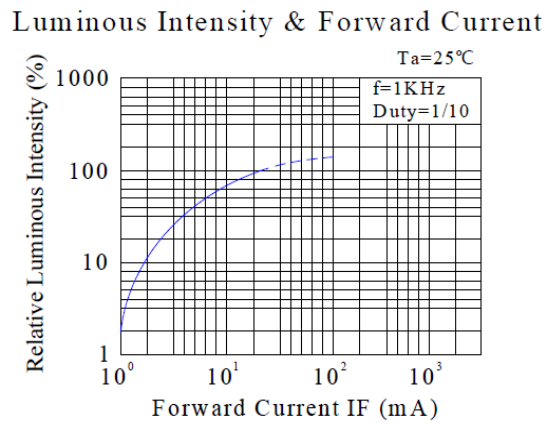
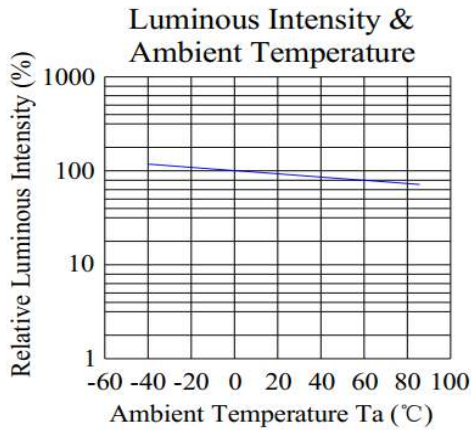
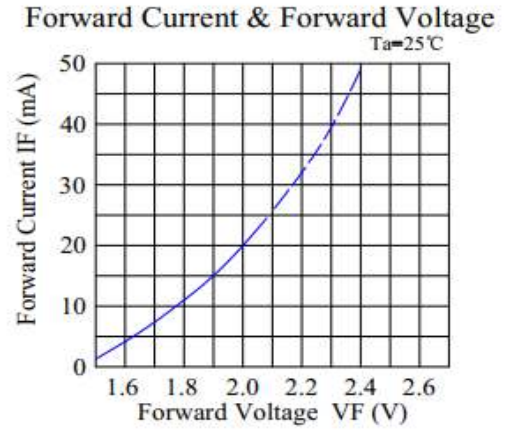
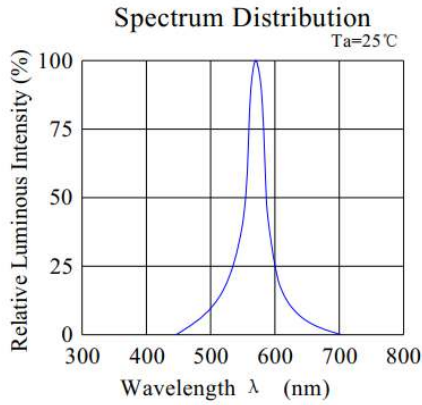
**Wave soldering for no more than 5 sec @ 260 °C

Characteristic Curves

Red (R)



Green (AG)





QBL8RAG60D1

5mm Bi-Color Round Lamp

Ordering Information

| Part # | Orderable Part # | Spec Range | Quantity per bag |
|-------------|------------------|---|------------------|
| QBL8RAG60D1 | QBL8RAG60D1 | Red: $I_v=260\text{mcd typ. @ } I_F=20\text{mA}, \lambda_D=624\text{nm typ.}$ | 500pcs |
| | | Green: $I_v=110\text{mcd typ. @ } I_F=20\text{mA}, \lambda_D=570\text{nm typ.}$ | |

Revision History

| Description: | Revision # | Revision Date |
|--|------------|---------------|
| New Release of QBL8RAG60D1 | V1.0 | 01/20/2020 |
| Update characteristic curve for AG | V1.1 | 04/16/2020 |
| Update typical brightness value for AG | V1.2 | 01/04/2022 |
| Drawing update | V1.3 | 06/24/2022 |
| | | |

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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.