

QT-Brightek Side View LED Series SMD 0602 Side View Green LED

Part No.: QBLP617-AG1

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| | Version# 1.0 | |





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Introduction

Feature:

- Water clear lens
- Package in tape and reel
- AllnGaP technology
- Viewing Angle: 140° typ.
- Side view (right angle) 0602 LED package



Description:

These ultra bright side view 0602 LEDs have a height profile of 0.6mm. With higher packing density and smaller footprint, these LEDs are ideal for smaller equipment and miniature application.

Application:

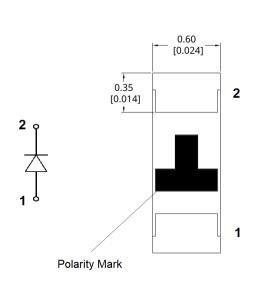
- Status indication
- Back lighting application
- General Use

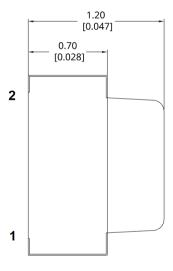
Certification & Compliance:

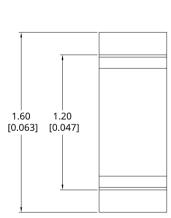
- ISO9001
- RoHS Compliant



Dimension:







Units: mm / tolerance = +/-0.1mm

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Electrical / Optical Characteristic (Ta=25 °C)

| Product | Color | I_ (m \(\) | V_{F} | (V) | | λ _D (nm) | | λ _P (nm) | I _V (n | ncd) |
|---------------|---------------------------|-------------|---------|------|------|---------------------|------|---------------------|-------------------|------|
| Product Color | Color I _F (mA) | Тур. | Max. | Min. | Тур. | Max. | Тур. | Min. | Тур. | |
| QBLP617-AG1 | Green | 20 | 2.0 | 2.5 | 566 | 570 | 575 | 573 | 32 | 45 |

Absolute Maximum Rating

| Material | P _d (mW) | I _F (mA) | I _{FP} (mA)* | V _R (V) | T _{OP} (°C) | T _{ST} (°C) | T _{SOL} (°C)** |
|----------|---------------------|---------------------|-----------------------|--------------------|----------------------|----------------------|-------------------------|
| AllnGaP | 75 | 30 | 125 | 5 | -40 to +80 | -40 to +85 | 260 |

^{*}Duty 1/8 @ 1kHz

Forward Voltage V_F @ I_F=20mA

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

Luminous Intensity I_V @ I_F=20mA

| Bin | Min. | Max. | Unit |
|-----|------|------|------|
| E | 32 | 40 | |
| F | 40 | 50 | mcd |
| G | 50 | 63 | |

Dominant Wavelength λ_D @ I_F =20mA

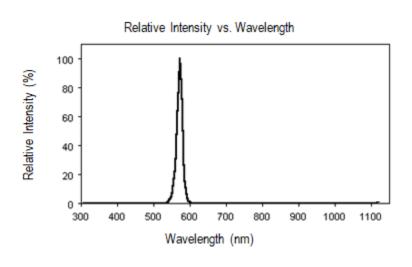
| Bin | Min. | Max. | Unit |
|-----|------|------|------|
| Н | 566 | 569 | |
| I | 569 | 572 | nm |
| J | 572 | 575 | |

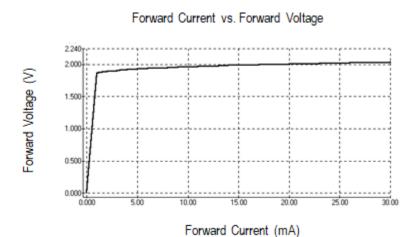
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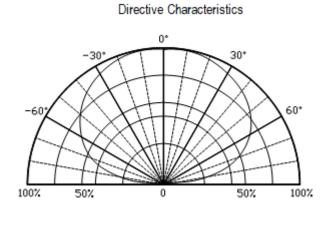
^{**}IR Reflow for no more than 10 sec @ 260 °C



Characteristic Curves





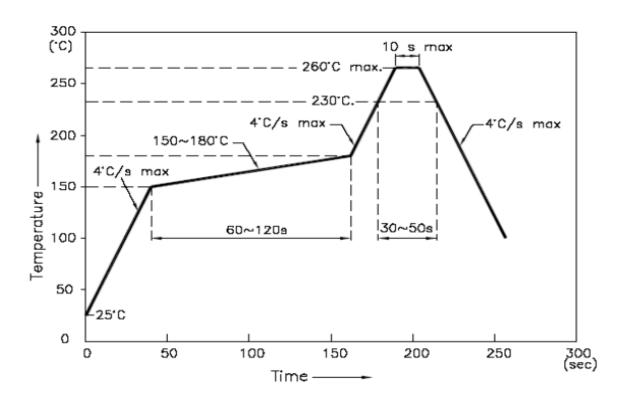


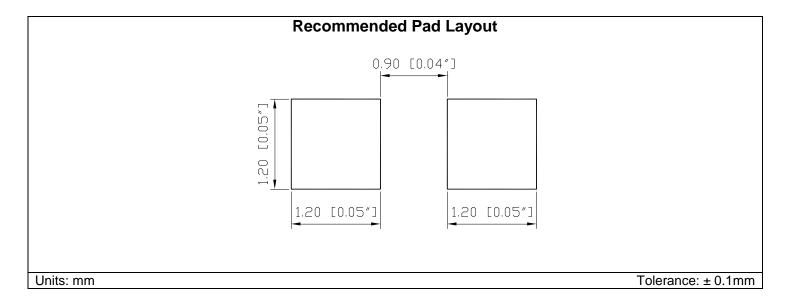
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Solder Profile & Footprint

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

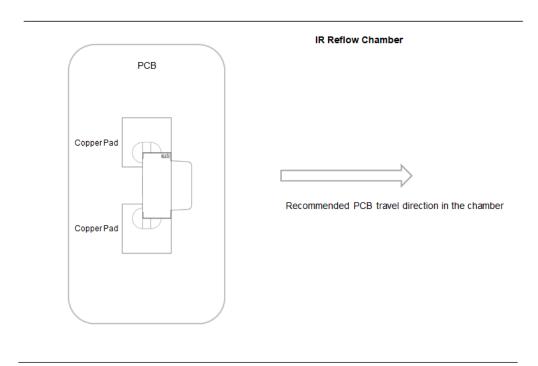




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- The recommended IR reflow direction for a right angle (side view) SMD led is illustrated below to insure the solder on each lead melts simultaneously during the SMT reflow soldering process.



Mounting the LED on PCB



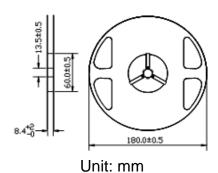
Note: The amount of solder paste applied as shown in the picture is just for illustration purpose only. When mounting and soldering the LEDs, avoid excess solder paste from overflowing onto or near the epoxy lens.

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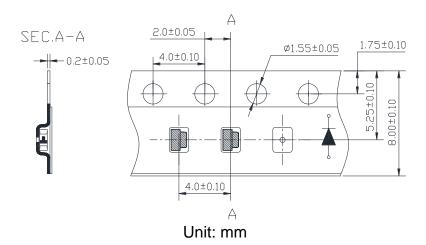


Packing

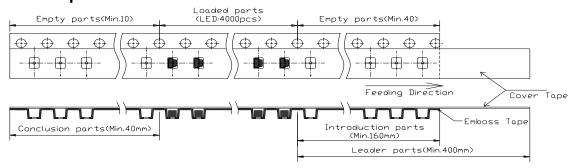
Reel Dimension:



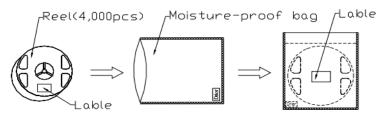
Tape Dimension:



Arrangement of Tape:



Packaging Specifications:



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Labeling

| Part No: |
|---------------|
| Customer P/N: |
| ltem: |
| Q'ty: |
| Vf: |
| lv: |
| WI: |
| Date: |
| Made in China |

Ordering Information

| Orderable Part # | Spec Range | Quantity per reel |
|------------------|---|-------------------|
| QBLP617-AG1 | Iv=45mcd typ. @ I_F =20mA, λ_D =566nm ~ 575nm | 4,000 units |

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Revision History

| Description: | Revision # | Revision Date |
|----------------------------|------------|---------------|
| New Release of QBLP617-AG1 | V1.0 | 02/17/2022 |
| | | |
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| | | |

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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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