

QT-Brightek Side View LED Series

0602 Side View LED

Part No.: QBLP617-IG5-2897

5: 5mA

2897: High Brightness Version

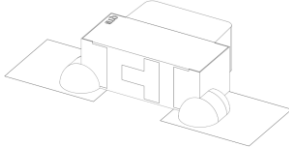
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Introduction

Feature:

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



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:

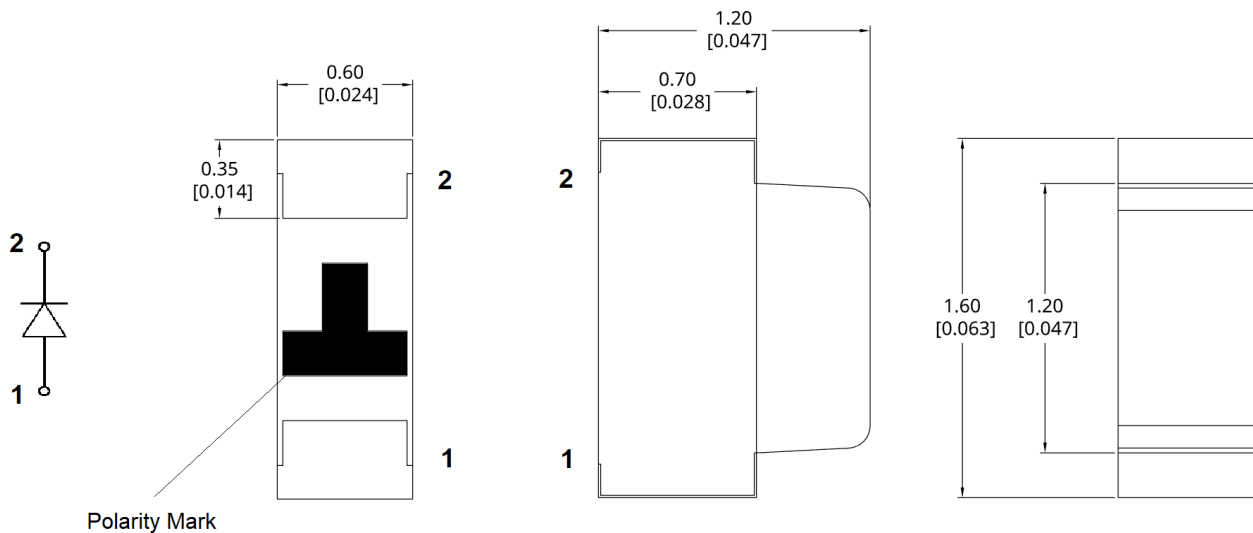
- Status indication
- Back lighting application
- General Use

Certification & Compliance:

- ISO9001
- RoHS Compliant



Dimension:



Units: mm / tolerance = +/-0.1mm

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. | Max. |
| QBLP617-IG5-2897 | Green | 5 | 2.9 | 3.4 | 525 | 530 | 535 | 525 | 200 | 350 | 630 |

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)** |
|----------|---------------------|---------------------|-----------------------|--------------------|----------------------|----------------------|-------------------------|
| InGaN | 93 | 30 | 125 | 5 | -40 to +80 | -40 to +85 | 260 |

*Duty 1/8 @ 1kHz

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

Forward Voltage V_F @ I_F=5mA

| Bin | Min. | Max. | Unit |
|-----|------|------|------|
| d | 2.2 | 2.5 | V |
| e | 2.5 | 2.8 | |
| f | 2.8 | 3.1 | |

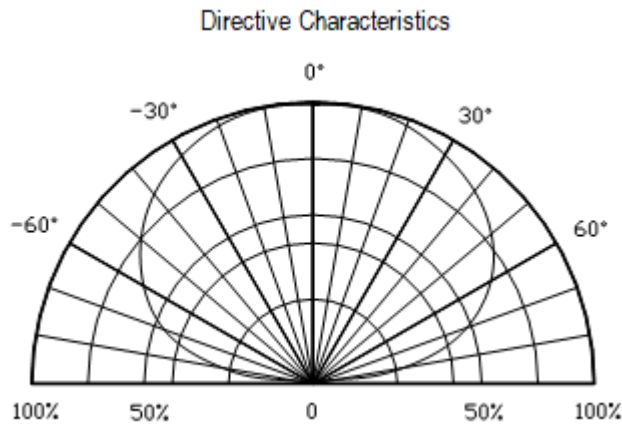
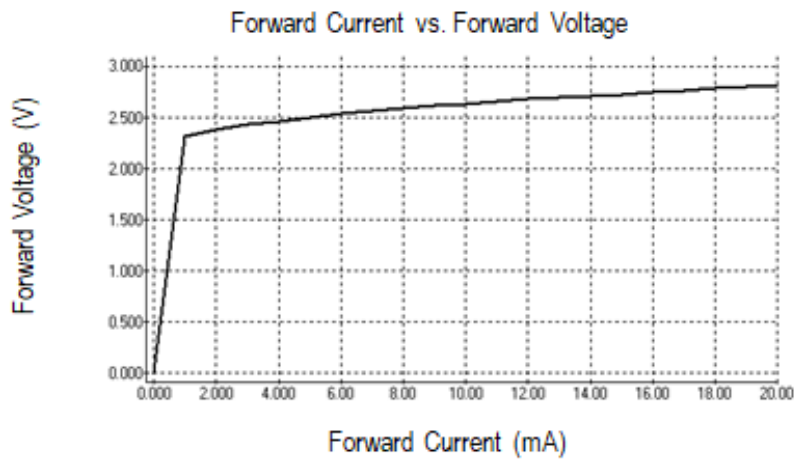
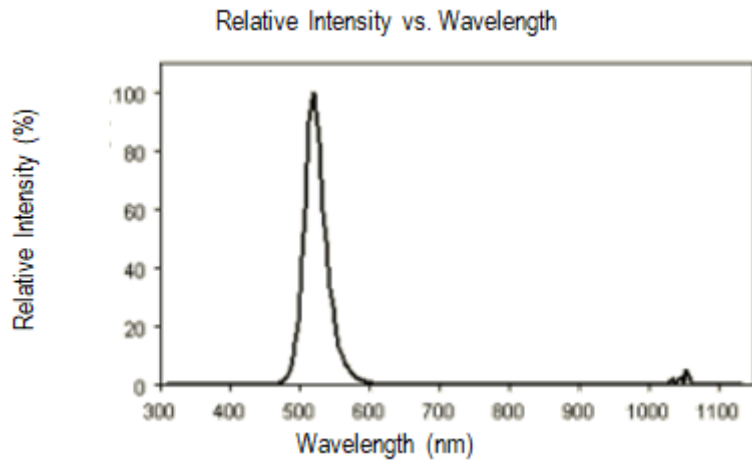
Luminous Intensity I_V @ I_F=5mA

| Bin | Min. | Max. | Unit |
|-----|------|------|------|
| M | 200 | 250 | mcd |
| N | 250 | 320 | |
| O | 320 | 400 | |
| P | 400 | 500 | |
| Q | 500 | 630 | |

Dominant Wavelength λ_D for Green @ I_F=5mA

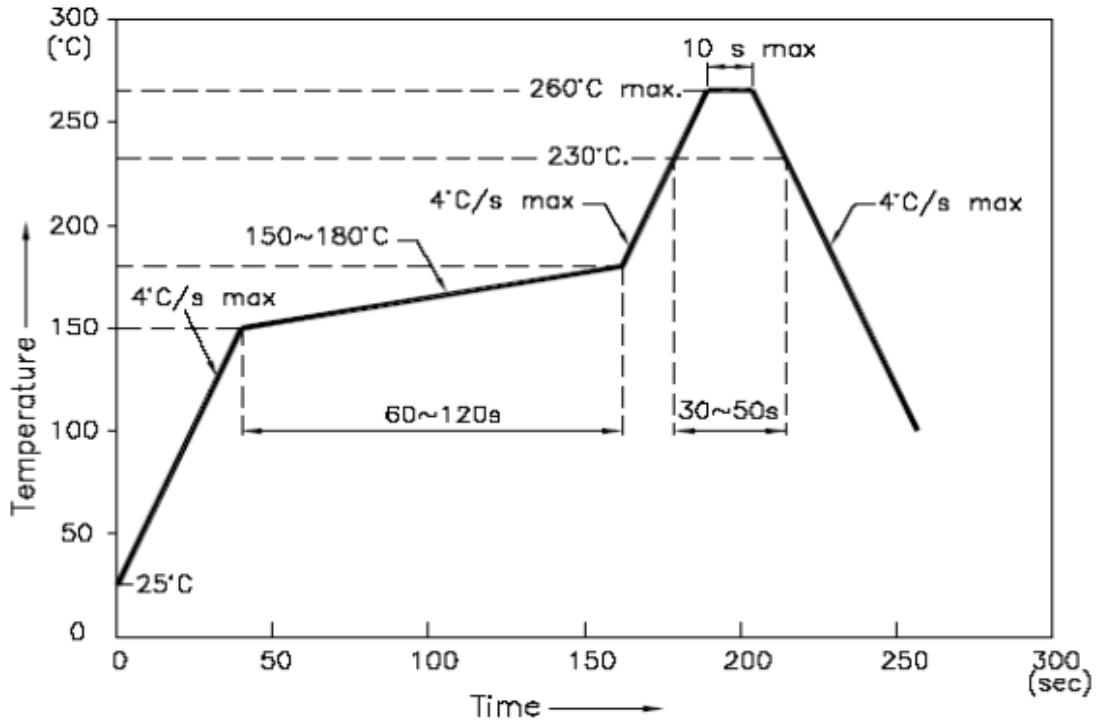
| Bin | Min. | Max. | Unit |
|-----|-------|-------|------|
| W | 525 | 527.5 | nm |
| X | 527.5 | 530 | |
| Y | 530 | 532.5 | |
| Z | 532.5 | 535 | |

Characteristic Curves

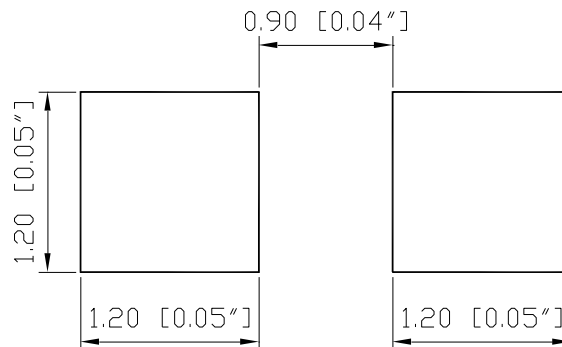


Solder Profile & Footprint

- Recommended tin solder specifications: melting temperature in the range of 178~192 °C
- The recommended reflow soldering profile is as follows (temperatures indicated are as measured on the surface of the LED resin):

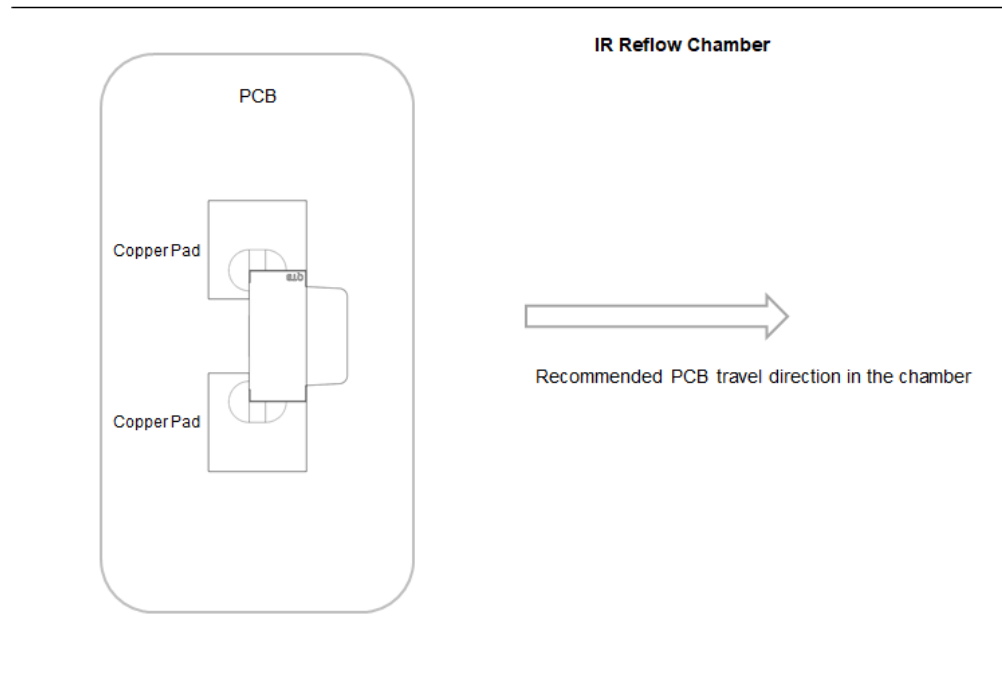


Recommended Pad Layout



Units: mm

- 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

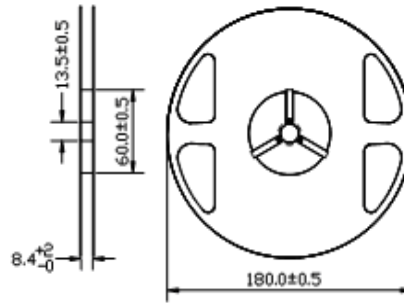


Note: The amount of solder paste applied as shown in the picture is just for illustration purpose only. When mounting and soldering the LEDs, avoid excess solder paste from overflowing onto or near the epoxy lens.

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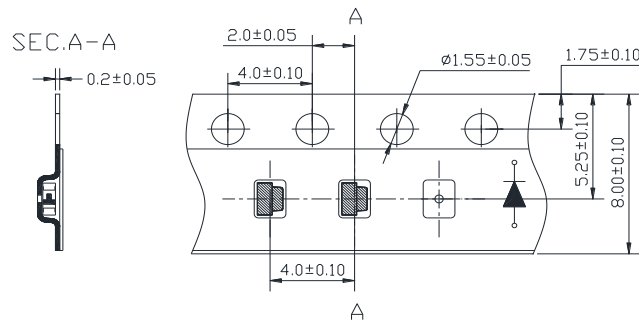
Packing

Reel Dimension:



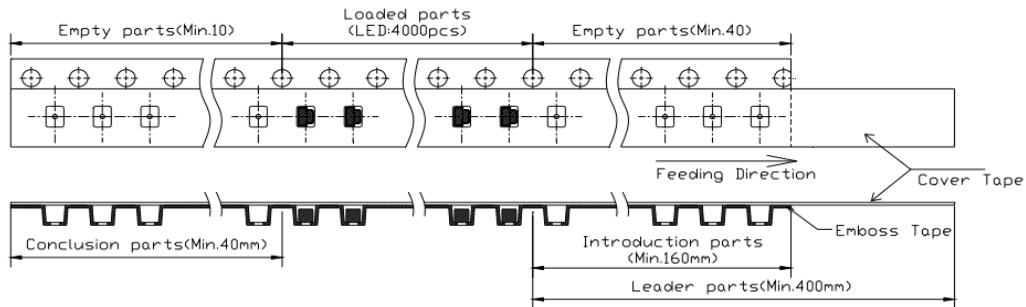
Unit: mm

Tape Dimension:

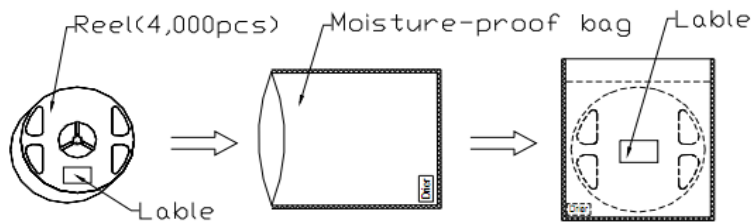


Unit: mm

Arrangement of Tape:



Packaging Specifications:



Labeling



Part No: _____

Customer P/N: _____

Item: _____

Q'ty: _____

Vf: _____

Iv: _____

WI: _____

Date: _____

Made in China

Ordering Information

| Orderable Part # | Spec Range | Quantity per reel |
|------------------|--|-------------------|
| QBLP617-IG5-2897 | Iv=350mcd typ. @ 5mA / Color=525nm ~ 535nm | 4,000 units |

Revision History

| Description: | Revision # | Revision Date |
|---------------------------------|------------|---------------|
| New Release of QBLP617-IG5-2897 | V1.0 | 10/23/2023 |
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