

PRODUCT SPECIFICATION



Part No. : JH-1WB14G30-F2 High Power LED

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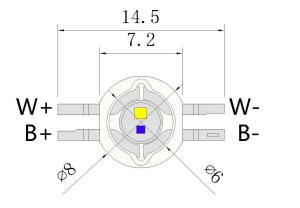


1.Product Features

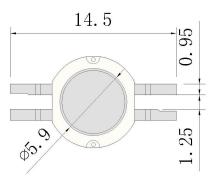
- High Brightness WB LED Round
 - Package
- Viewing Angle 140 Degree
- Transparent Silicone

2.Dimensions

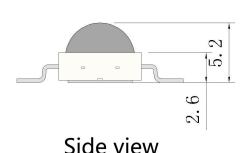
- Chip Material: InGaN AIGaInP
- RoHS Compliant

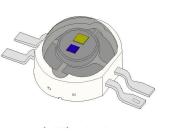


Top view

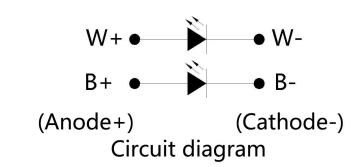


Bottom view





Perspective view



Notes:

- 1. All dimensions are in millimeters.
- 2. Tolerance is ± 0.1 mm unless otherwise noted.



3.Absolute Maximum Rating @ Ta=25° C

| Parameter | Symbol | Maximum Rating | Unit | |
|--------------------------------------|--------|-----------------|------|--|
| Continuous Forward Current | IF | 350 | mA | |
| Peak Forward Current | IFp | 500 | mA | |
| (1/10 Duty Cycle, 0.1ms Pulse Width) | | | | |
| Reverse Voltage | VR | 5 | V | |
| Power Dissipation | PD | 1 | W | |
| Electrostatic Discharge | ESD | 1000 | V | |
| Operating Temperature Range | TOPR | -25°C to +80°C | | |
| Storage Temperature Range | TSTG | -35°C to +100°C | | |
| Lead Soldering Temperature | TSOL | 260°C | | |

4.Optical Character @ Ta=25° C

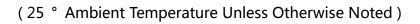
| Parameter | Symbol | Color | Min. | Тур. | Max. | Unit | Test Condition |
|------------------------------|---------|-------|------|------|------|-----------------------|-----------------------|
| Forward Voltage VF | W | 3.0 | 3.2 | 3.4 | V | I _F =350mA | |
| | В | 3.0 | 3.2 | 3.4 | V | I _F =350mA | |
| Luminous Flux | Φ | W | 90 | 95 | 100 | Lm | I _F =350mA |
| | Ψ | В | 15 | 20 | 25 | Lm | I _F =350mA |
| Dominant Wavelength | Wld | В | 460 | 462 | 465 | nm | I _F =350mA |
| Colour temperature | Тс | W | 6000 | 7000 | 8000 | К | I _F =350mA |
| Reverse Current | IR | | | | 10 | μA | V _R =5V |
| Viewing Angle | 201/2 | | | | 140 | deg | I _F =350mA |
| Recommend Forward Current | IF(rec) | WB | | | 350 | mA | |

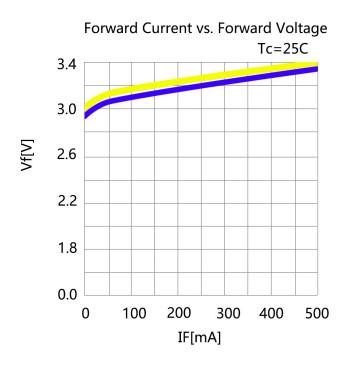
Notes:

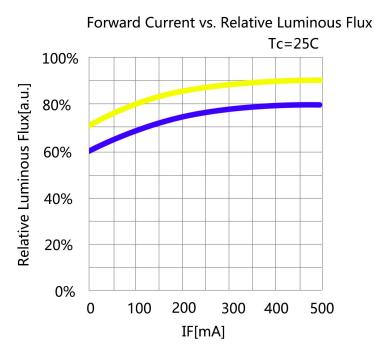
Measurement tolerance of forward voltage $\pm 0.1V$

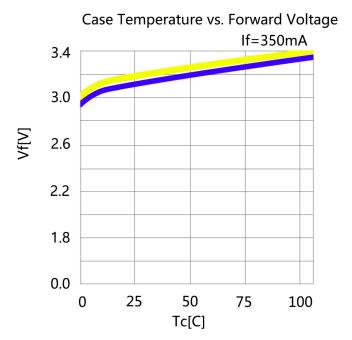


5. Optical Character Curves

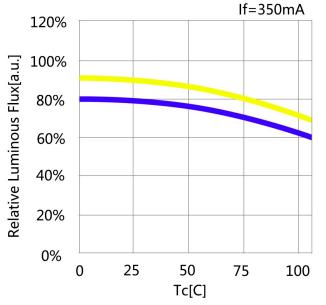








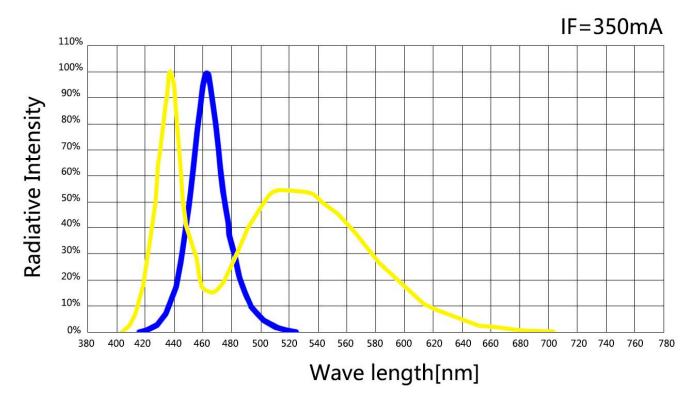
Case Temperature vs. Relative Luminous Flux



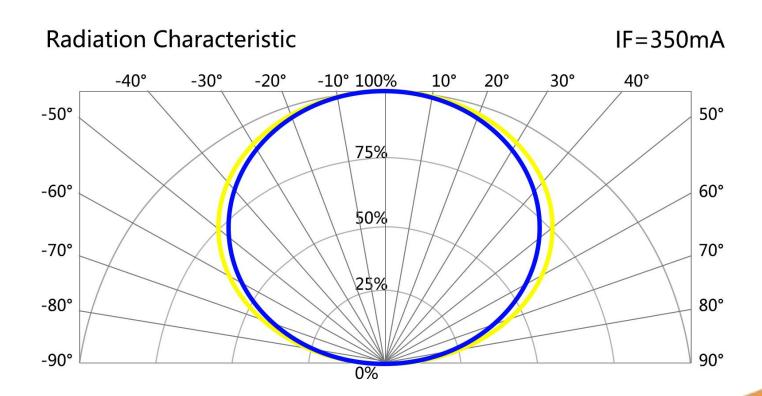
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6. Spectrum Curves



7. Viewing Angle Curves

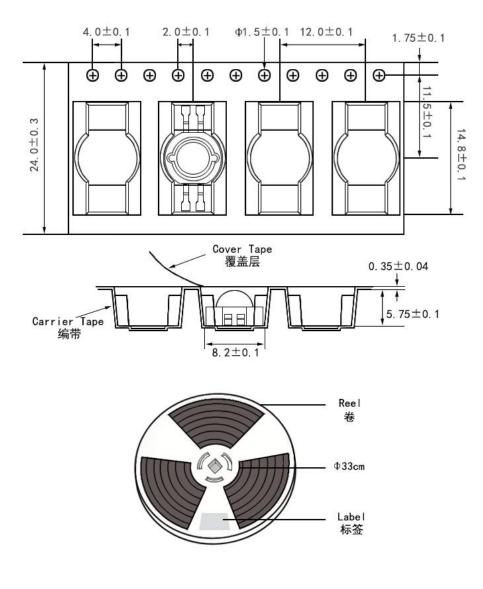


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8.Tape&Reel Packing

1. Recommend unpacked LED beads be welded within one day, if not, please vacuumize again and store in an environment of 20-35°C and 30-60% humidity. If can't vacuumize, please store LED beads in moisture proof box, control at 25°C±3°C, humidity 50-60%. If unpacked above 1week, bake at 60±5°C for 10-12 hours before weld.



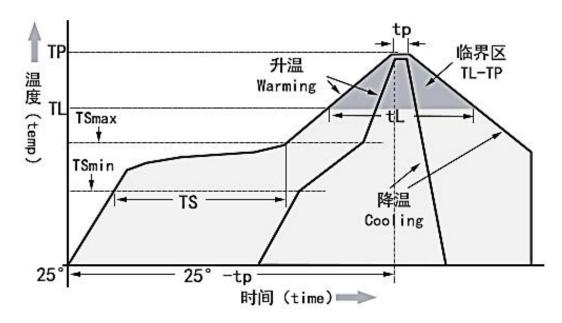
Notes:

- 1. QTY: 1000pcs/Reel
- 2. Tolerance ±0.2mm.
- 3. Package: P/N



9.Soldering Advice

1. When soldering,don't touch the LED appearance gel during,this bad operation will destroy the LED.Moding LED usually use reflow soldering, please refer to the following reflow temperature curve , and recommend the user follow the soldering temperature curve of the solder paste.



| Temperature Curve Character | Lead-free solder | | | |
|---|------------------------------|--|--|--|
| Average heating rate(TSmin to Tp) | 最高 3℃/秒 | | | |
| | Top 3 ℃ / s | | | |
| Preheating: Minimum temperature (TSmin) | 90°C | | | |
| Preheating: Maximum temperature (TSmax) | 200°C | | | |
| Preheating: Time (TSmin to TSmax) | 60-180 s | | | |
| Duration above temperature: Temperature TL | 240°C | | | |
| Duration above temperature: Time tL | 60-150 s | | | |
| Peak/classification temperature (Tp) | 260°C | | | |
| Time within 5°C of actual peak temperature (tp) | 20-40 s | | | |
| | 最高 6℃/秒 | | | |
| Cooling speed | The highest 6 $^\circ C$ / s | | | |
| | 最多8分钟 | | | |
| Time to reach peak temperature at 25°C | 8 minutes Max | | | |



10.Cautions

1. Electrostatic Treatment

Do a full range of anti-static measures (such as: anti-static ring, anti-static clothes, machine, equipment grounding wire, etc.)

2. Heat Dissipation

- A、 It is recommend to configure reasonable heat dissipation device for the product.
- B. The best working temperature range of the product is 40-60°. It is recommended to control

the working temperature of the product within a reasonable range.

PASS Solution of the temperature of heat sink shall not exceed 60 °C

3. Installation Conditions

A、Do not exert any pressure on the LED area during the use of the led beads. If the machine is

used to take materials, select a suction nozzle of reasonable size, such as below:



