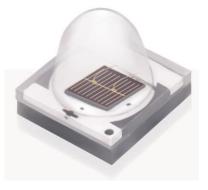


PRODUCT SPECIFICATION



Part No.: JH-3535IR6G42-T8A-850 High Power LED

Catalog **1.Product Features** P2 2.Dimensions P2 3.Absolute Maximum Rating **P**3 4.Optical Character **P**3 5.Optical Character Curves P4 6.Spectrum Curves **P**5 7.Viewing Angle Curves P5 8.Tape&Reel Packing P6 9.Soldering Advice **P7** 10.Cautions **P8**

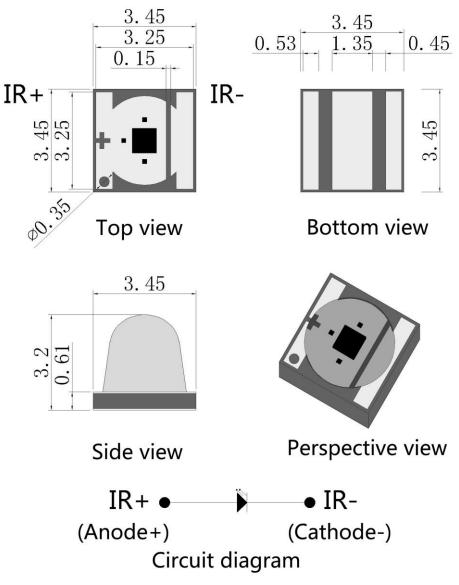


1.Product Features

- High Brightness IR LED
- Ceramic LED Package
- Viewing Angle 60 Degree
- Transparent Silicone

- Chip Material: AlGaAs
- RoHS Compliant

2.Dimensions



Notes:

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



3.Absolute Maximum Rating @ Ta=25℃

| Parameter | Symbol | Maximum Rating | Unit |
|--|--------|----------------|------|
| Continuous Forward Current | IF | 700 | mA |
| Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width) | IFp | 1000 | mA |
| Reverse Voltage | VR | 5 | V |
| Power Dissipation | PD | 3 | W |
| Electrostatic Discharge | ESD | 1000 | V |
| Operating Temperature Range | TOPR | -25°C to +60°C | |
| Storage Temperature Range | TSTG | -35°C to +80°C | |
| Lead Soldering Temperature | TSOL | 260°C | |

4.Optical Character @ Ta=25℃

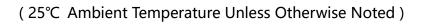
| Parameter | Symbol | Color | Min. | Тур. | Max. | Unit | Test Condition |
|------------------------------|---------|-------|------|------|------|------|-----------------------|
| Forward Voltage | VF | IR | 1.4 | 1.6 | 1.8 | V | I _F =700mA |
| power dissipation | PO | IR | 845 | 847 | 850 | nm | I _F =700mA |
| Dominant Wavelength | Wld | IR | 300 | 400 | 500 | mW | I _F =700mA |
| Reverse Current | IR | | 0 | | 10 | μA | V _R =5V |
| Viewing Angle | 201/2 | | | | 60 | deg | I _F =700mA |
| Recommend Forward Current | IF(rec) | IR | | | 700 | mA | |

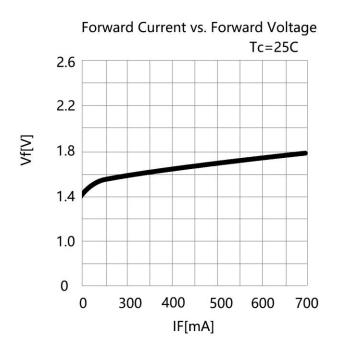
Notes:

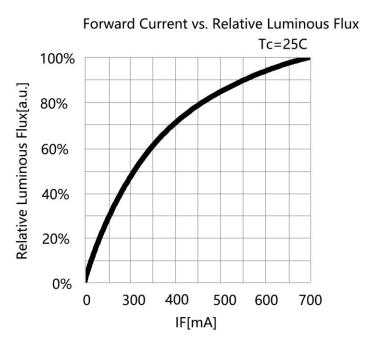
Measurement tolerance of forward voltage $\pm 0.1V$

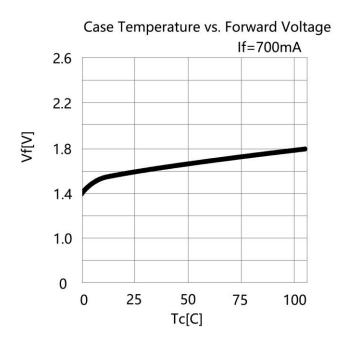


5. Optical Character Curves

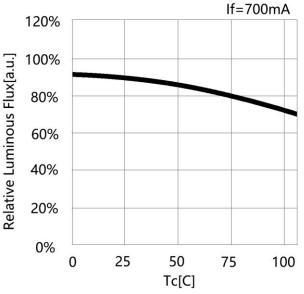






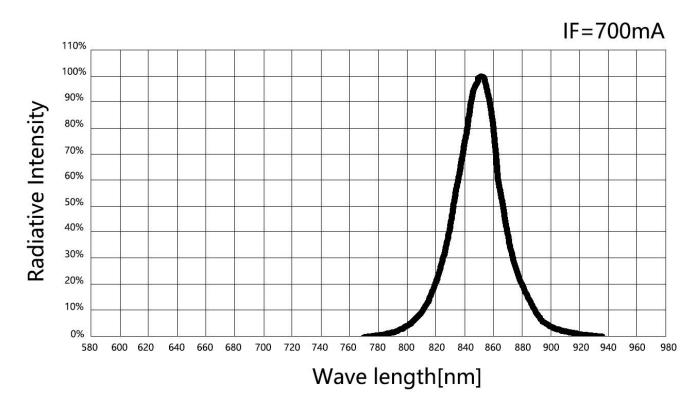


Case Temperature vs. Relative Luminous Flux

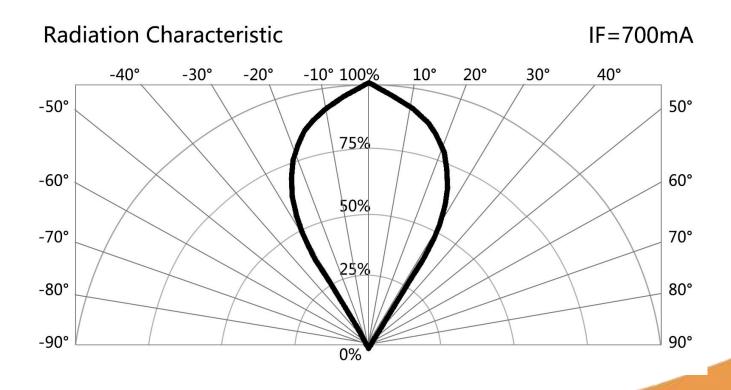




6. Spectrum Curves



7. Viewing Angle Curves

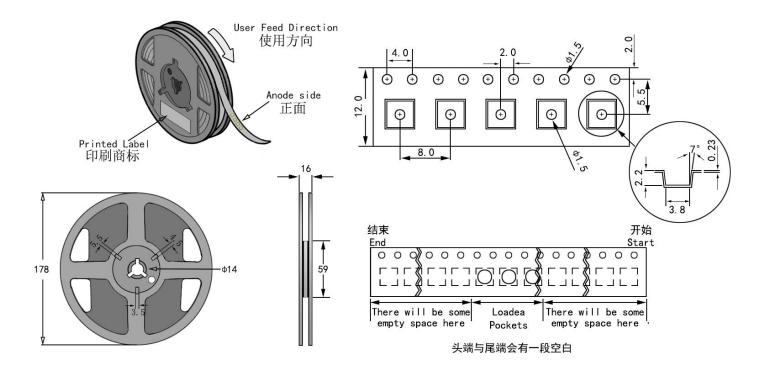


5/8



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 $25^{\circ}C \pm 3^{\circ}C$, humidity 50-60%. If unpacked above 1 week, bake at $60\pm5^{\circ}C$ for 10-12 hours before weld.



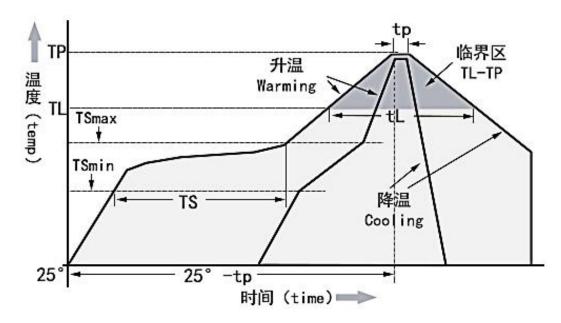
Notes:

- 1. QTY: 700pcs/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. Molding 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 °C / 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℃ | | | |
| 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℃ | 8 minutes Max | | | |



10.Cautions

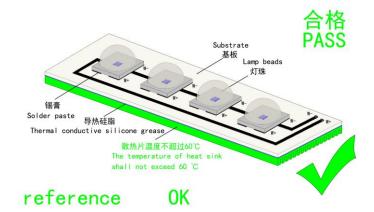
1. Electrostatic Treatment

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

the working temperature of the product within a reasonable range.



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:

