

PRODUCT SPECIFICATION



Part No. : JH-3535GRBWZ12ZC14-T10A
High Power LED

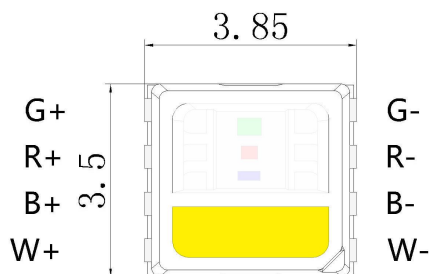
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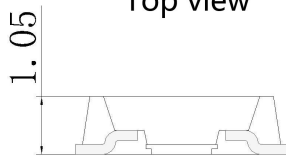
1.Product Features

- High Brightness GRBW LED Plane Package
- Viewing Angle 120 Degree
- Chip Material: AlGaInP
- RoHS Compliant

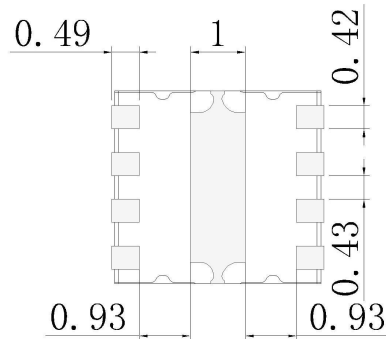
2.Dimensions



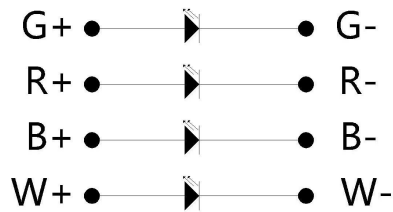
Top view



Side view



Bottom view



(Anode+) (Cathode-)
Circuit diagram

Notes:

1. All dimensions are in millimeters.
2. Tolerance is $\pm 0.1\text{mm}$ unless otherwise noted.

3. Absolute Maximum Rating @ Ta=25° C

Parameter	Symbol	Maximum Rating	Unit
Continuous Forward Current	IF	50	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFp	60	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	0.05	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.	Typ.	Max.	Unit	Test Condition
Forward Voltage	VF	R	2.0	2.2	2.4	V	IF=50mA
		G	3.0	3.2	3.4	V	IF=50mA
		B/W	3.0	3.2	3.4	V	IF=50mA
Luminous Flux	Φ	R	6	8	10	Lm	IF=50mA
		G	14	17	19	Lm	IF=50mA
		B	2	3	4	Lm	IF=50mA
		W	15	20	25	Lm	IF=50mA
Dominant Wavelength	Wld	R	620	622.5	625	nm	IF=50mA
		G	520	523	525	nm	IF=50mA
		B	455	458	460	nm	IF=50mA
Color Temperature	Tc	W	6000	6500	7000	K	IF=50mA
Reverse Current	IR				10	μA	VR=5V
Viewing Angle	2θ1/2				120	deg	IF=50mA
Recommend Forward Current	IF(rec)	GRBW			50	mA	

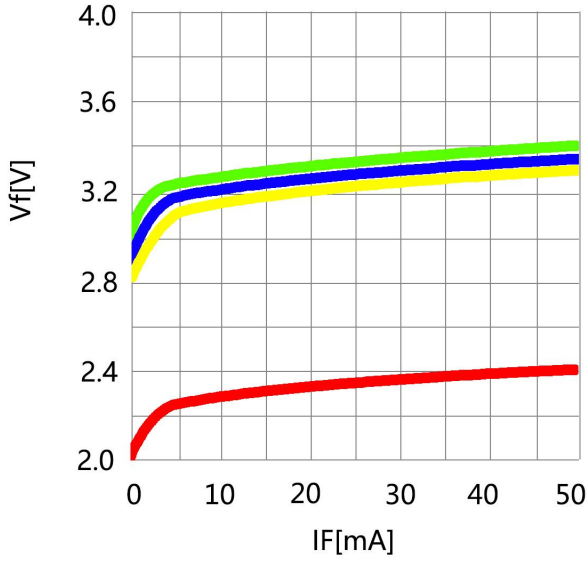
Notes:

Measurement tolerance of forward voltage ±0.1V

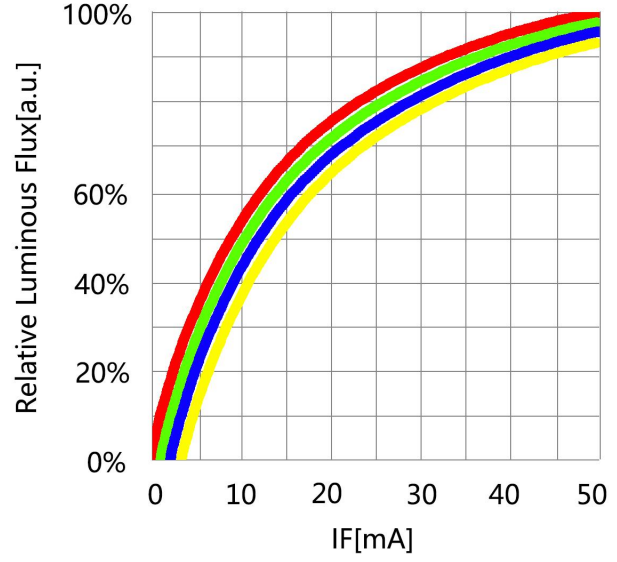
5. Optical Character Curves

(25 ° Ambient Temperature Unless Otherwise Noted)

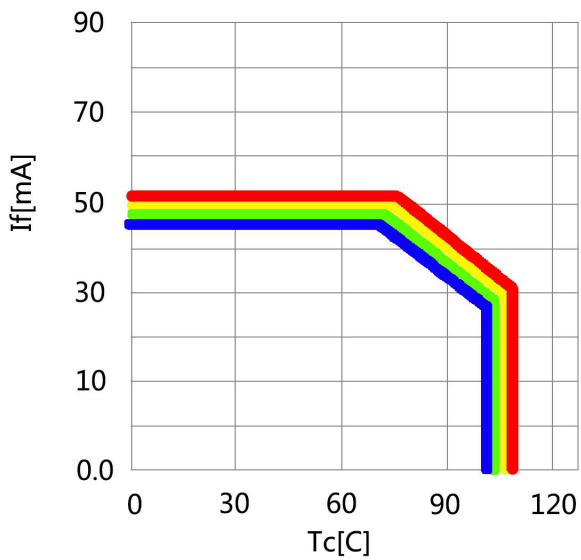
Forward Current vs. Forward Voltage
Tc=25C



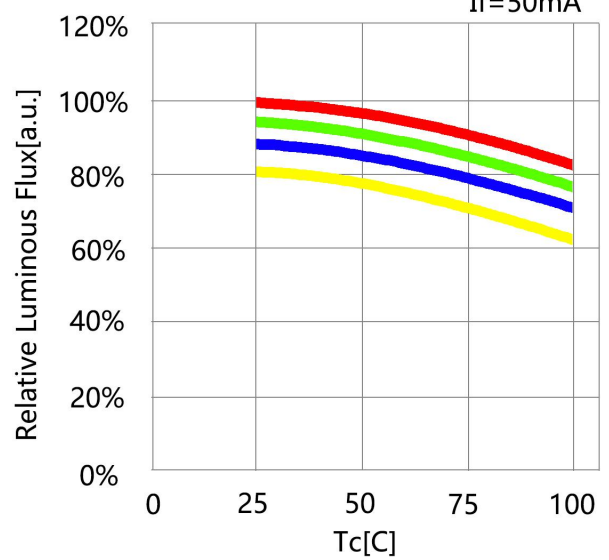
Forward Current vs. Relative Luminous Flux
Tc=25C



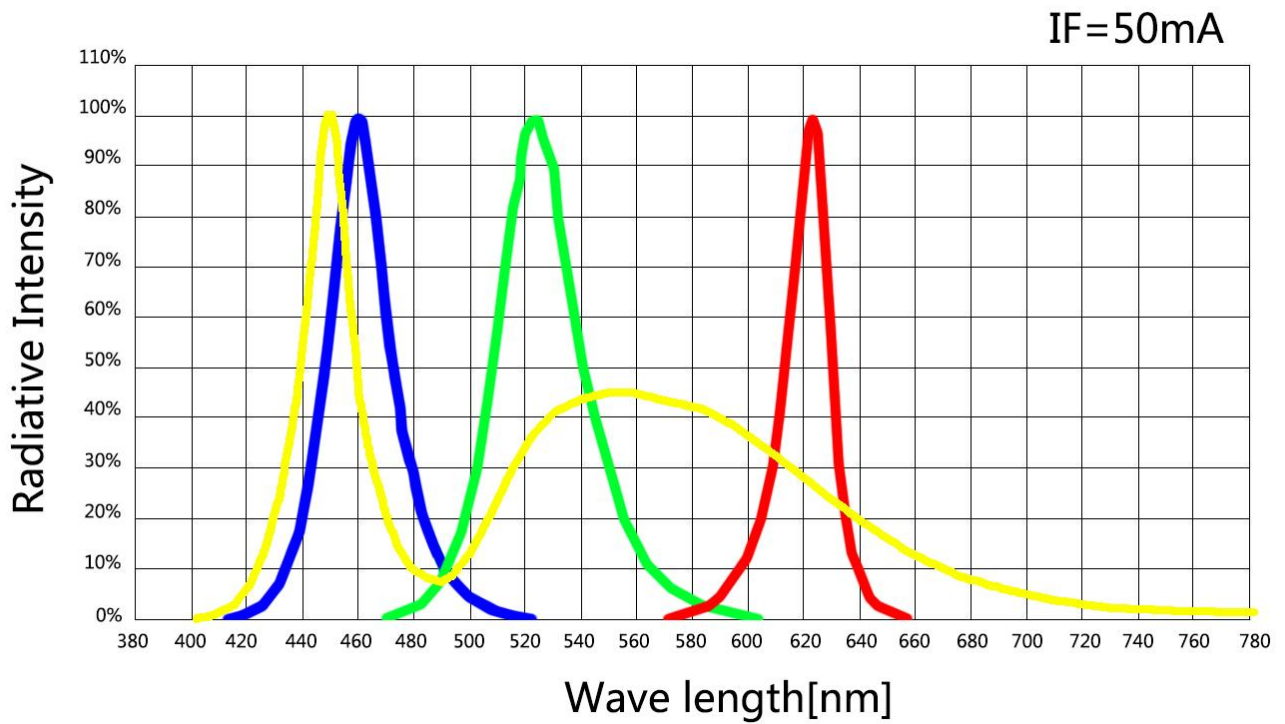
Case Temperature vs. Forward Current



Case Temperature vs. Relative Luminous Flux
If=50mA



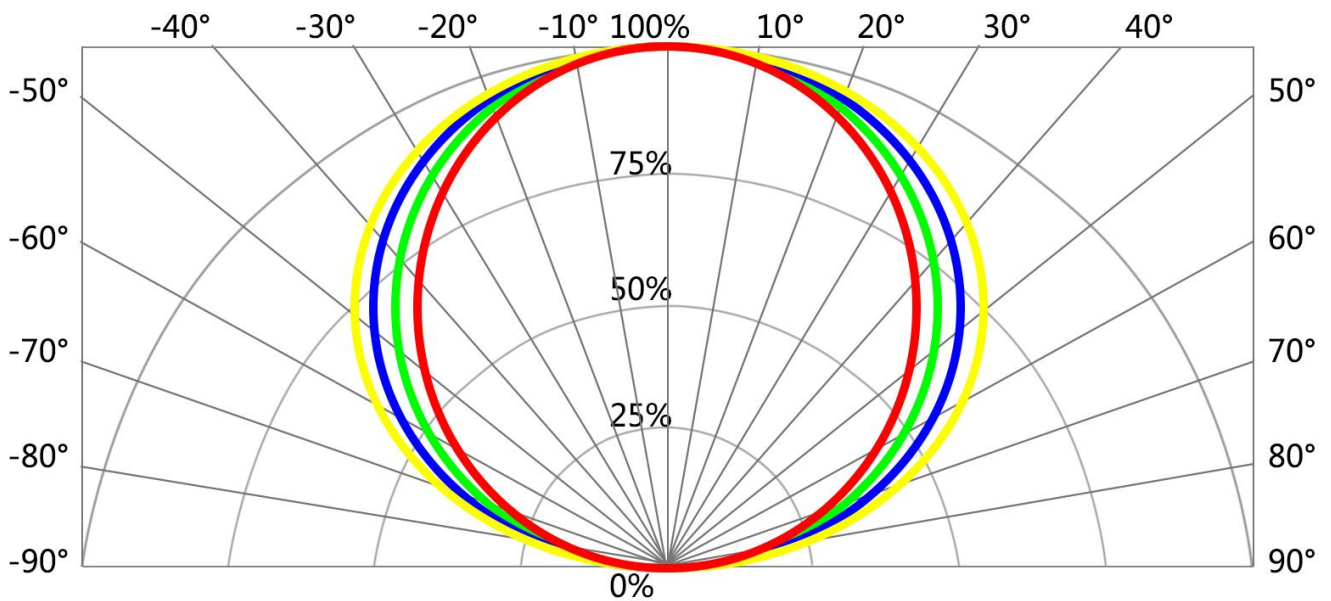
6. Spectrum Curves



7. Viewing Angle Curves

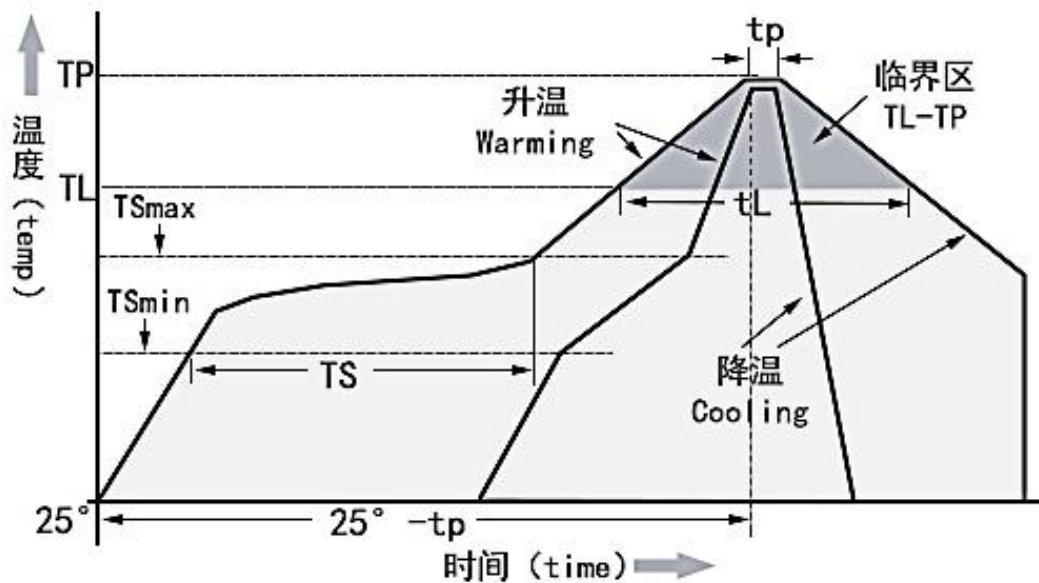
Radiation Characteristic

IF=50mA



8.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°C/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°C
Time within 5°C of actual peak temperature (tp)	20-40 s
Cooling speed	最高 6°C/秒 The highest 6 °C / s
Time to reach peak temperature at 25°C	最多 8 分钟 8 minutes Max

9. Cautions

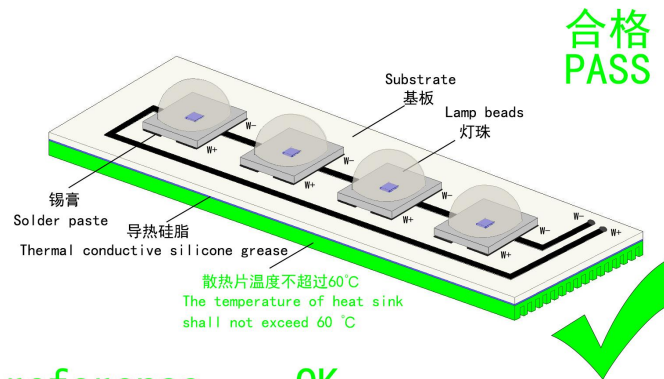
1. Electrostatic Treatment

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.



3. Installation Conditions

reference OK

- 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:

