

PRODUCT SPECIFICATION



Part No. : JH-7070B12S38-T7A-DYA455 High Power LED

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1.Product Features

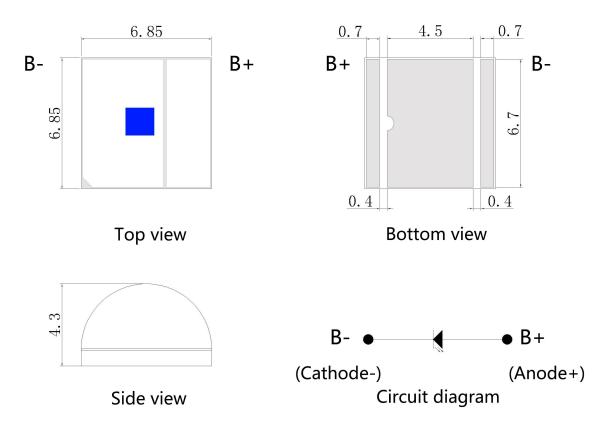
High Brightness B LED Round

Package

• Viewing Angle 120 Degree

2.Dimensions

- Chip Material: AlGaInP
- RoHS Compliant



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	700	mA
Peak Forward Current	IFp	1000	mA
(1/10 Duty Cycle, 0.1ms Pulse Width) Reverse Voltage	VR	5	V
Power Dissipation	PD	3	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	В	3.0	3.2	3.4	V	I _F =700mA
Luminous flux	Φ	В	40	45	50	Lm	I _F =700mA
Wavelength	Wld	В	450	453	455	nm	I _F =700mA
Reverse Current	IR		0		10	μA	V _R =5V
Viewing Angle	201/2				120	deg	I _F =700mA
Recommend Forward Current	IF(rec)	В			700	mA	

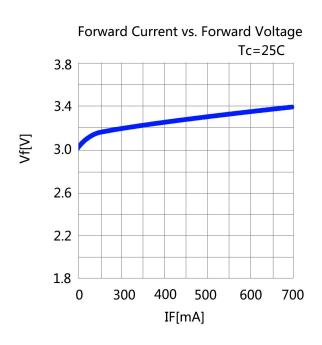
Notes:

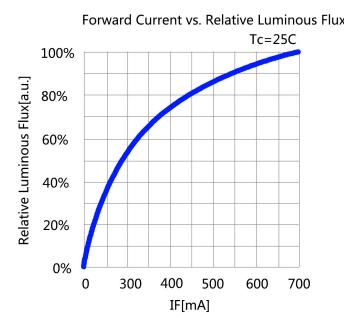
Measurement tolerance of forward voltage $\pm 0.1V$

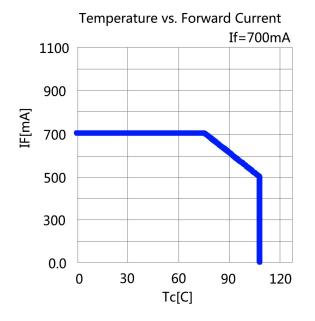


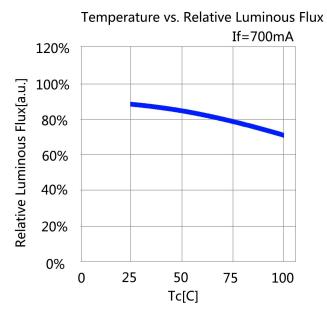
5. Optical Character Curves

(25 ° Ambient Temperature Unless Otherwise Noted)



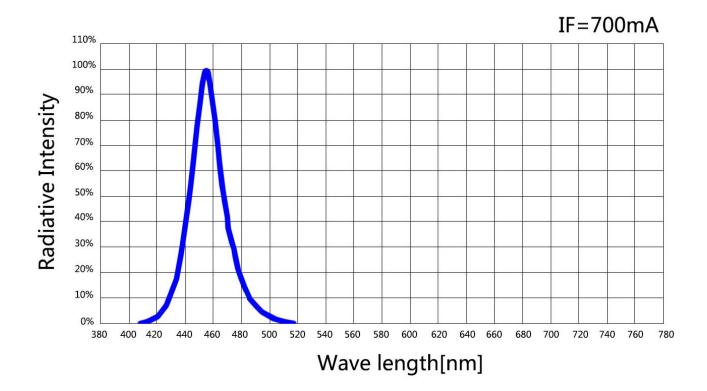




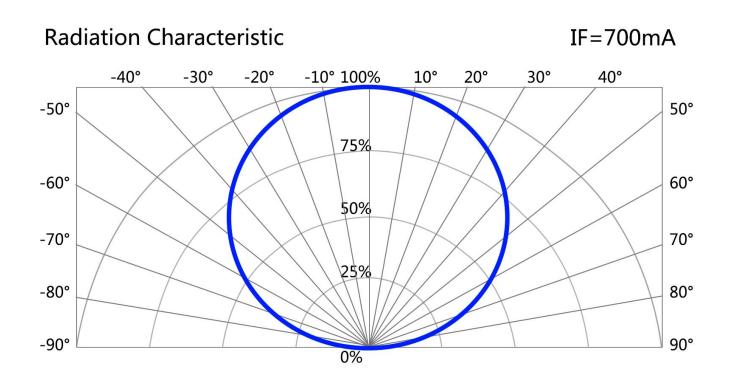




6. Spectrum Curves



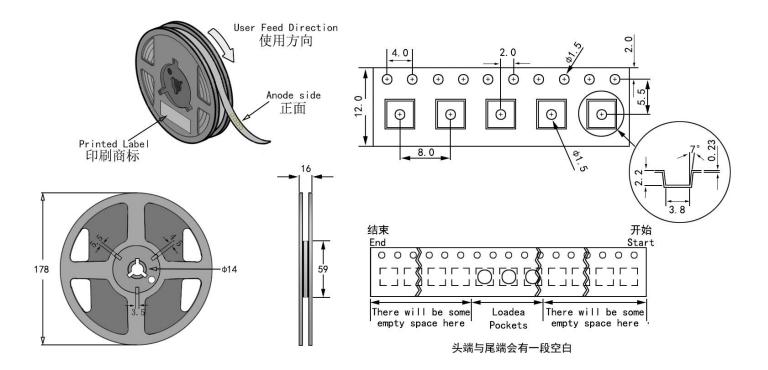
7. Viewing Angle Curves





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.



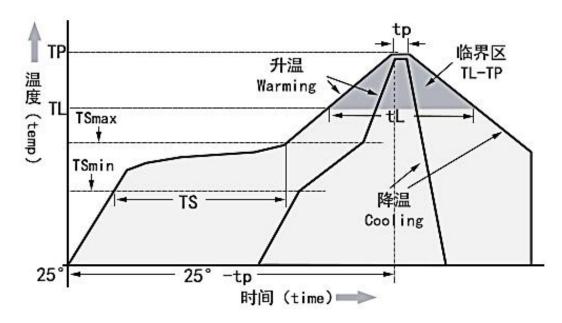
Notes:

- 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			
Cooling speed	最高 6℃/秒			
	The highest 6 $^\circ C$ / s			
	最多8分钟			
Time to reach peak temperature at 25°C	8 minutes Max			



10.Cautions

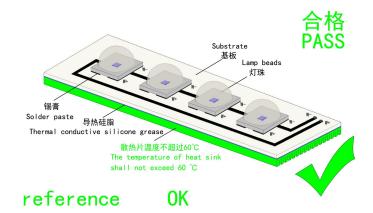
1. Electrostatic Treatment

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.



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:



