

PRODUCT SPECIFICATION



Part No.: WL-P3EP4545B140-480
High Power LED

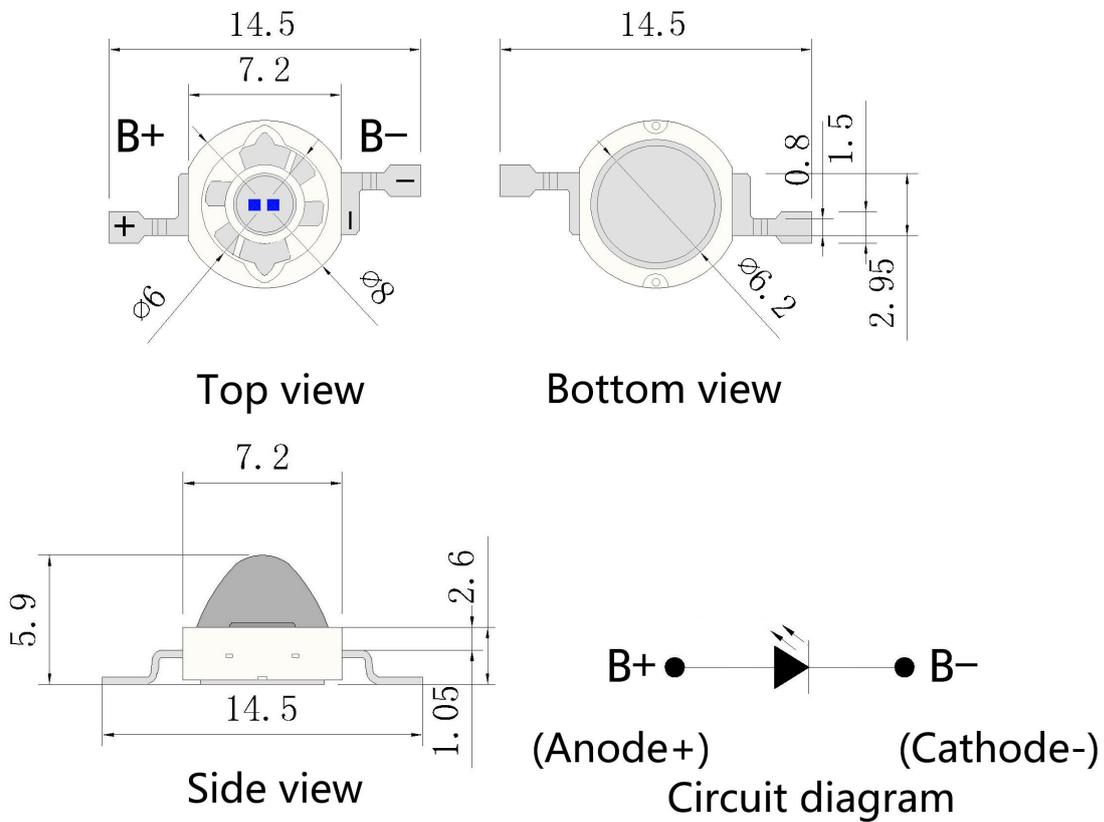
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1.Product Features

- High Brightness Blue LED
- Round Package
- Viewing Angle 60 Degree
- Transparent Silicone
- Chip Material: AlGaInP
- RoHS Compliant

2.Dimensions



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	1000	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFp	1200	mA
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.	Typ.	Max.	Unit	Test Condition
Forward Voltage	VF	B	3.2	3.4	3.6	V	IF=1000mA
Luminous Flux	Φ	B	160		200	Lm	IF=1000mA
Dominant Wavelength	Wld	B	480	483	485	nm	IF=1000mA
Reverse Current	IR		0		10	μA	VR=5V
Viewing Angle	2θ1/2				60	deg	IF=1000mA
Recommend Forward Current	IF(rec)	B			1000	mA	

Notes:

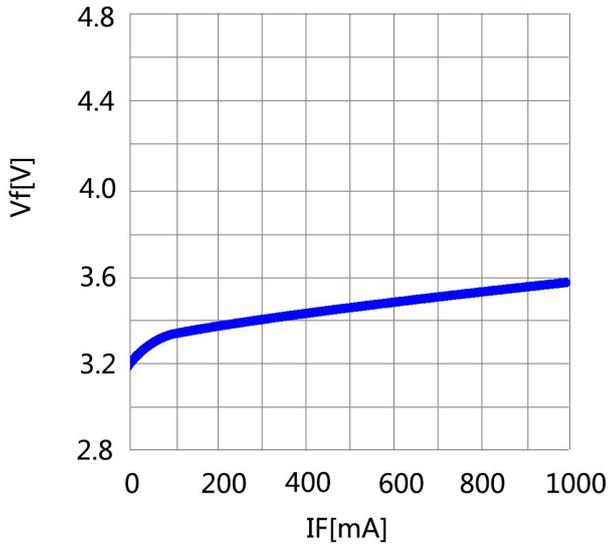
Measurement tolerance of forward voltage ±0.1V

5. Optical Character Curves

(25 ° Ambient Temperature Unless Otherwise Noted)

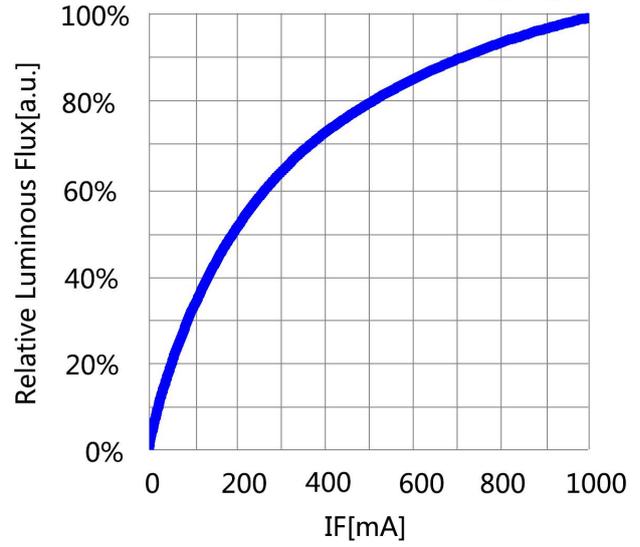
Forward Current vs. Forward Voltage

$T_c=25C$



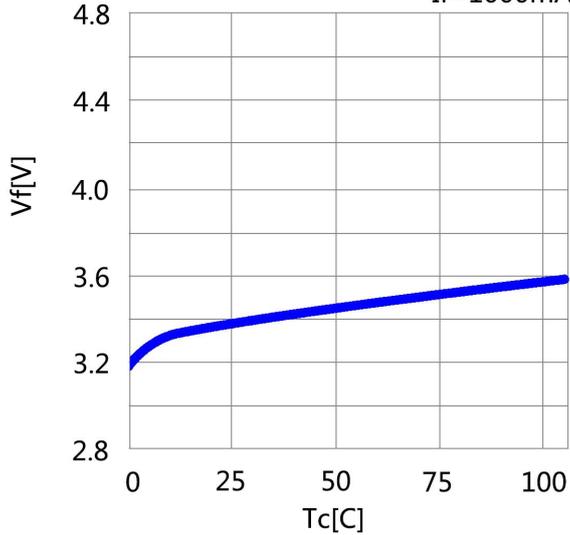
Forward Current vs. Relative Luminous Flux

$T_c=25C$



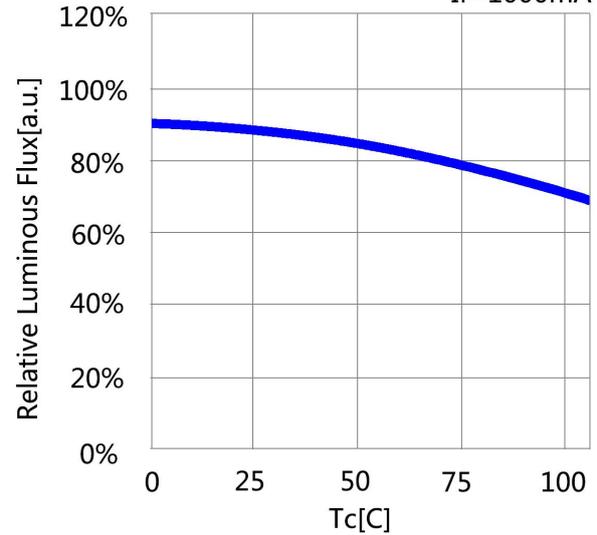
Case Temperature vs. Forward Voltage

$I_f=1000mA$

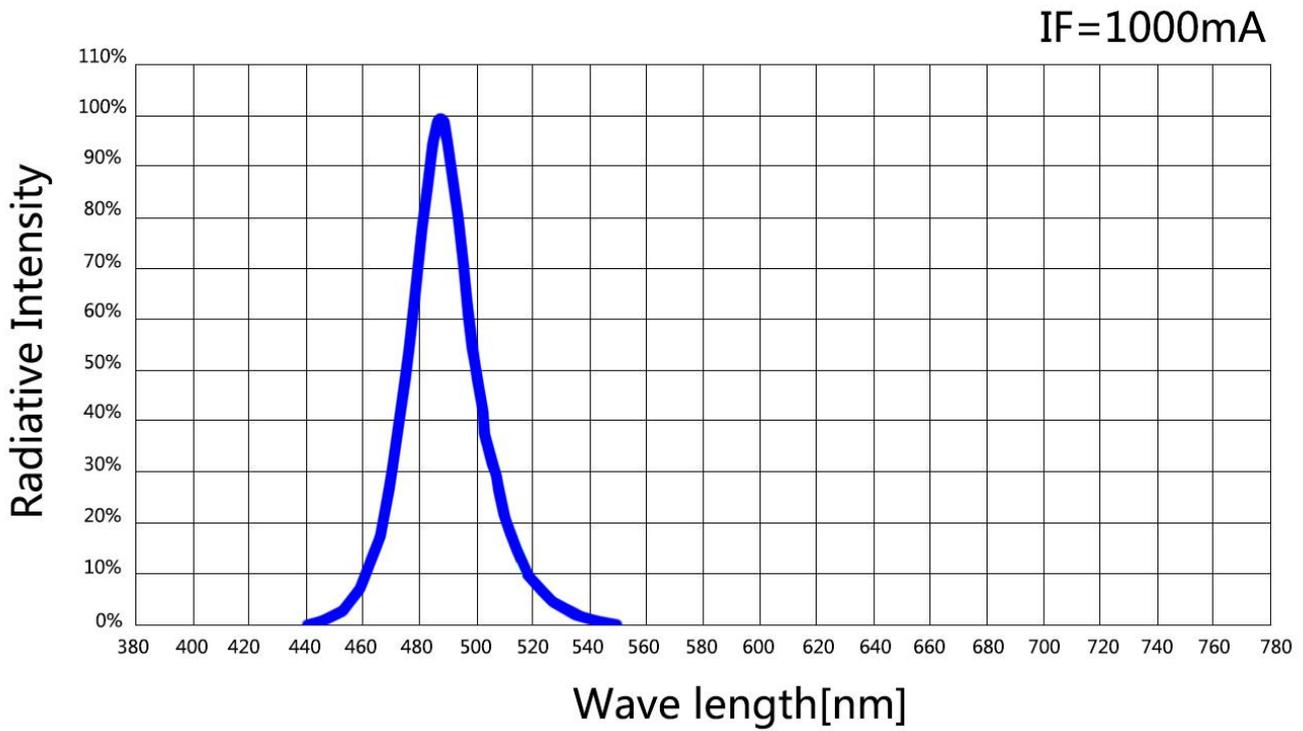


Case Temperature vs. Relative Luminous Flux

$I_f=1000mA$



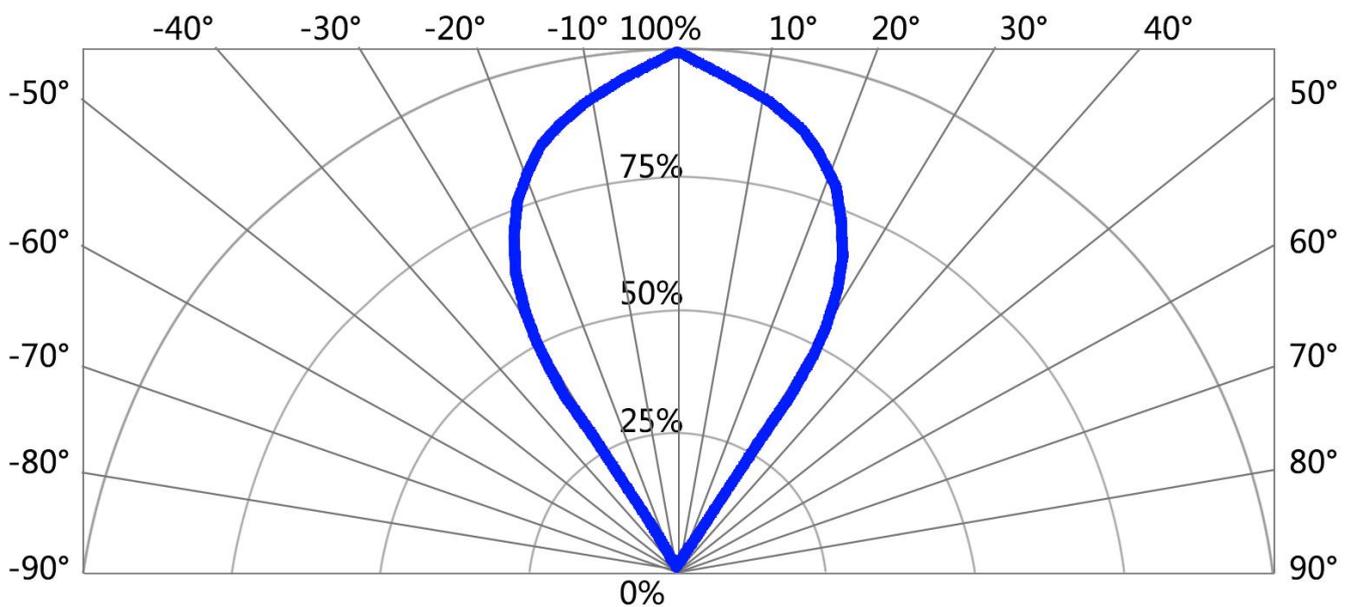
6. Spectrum Curves



7. Viewing Angle Curves

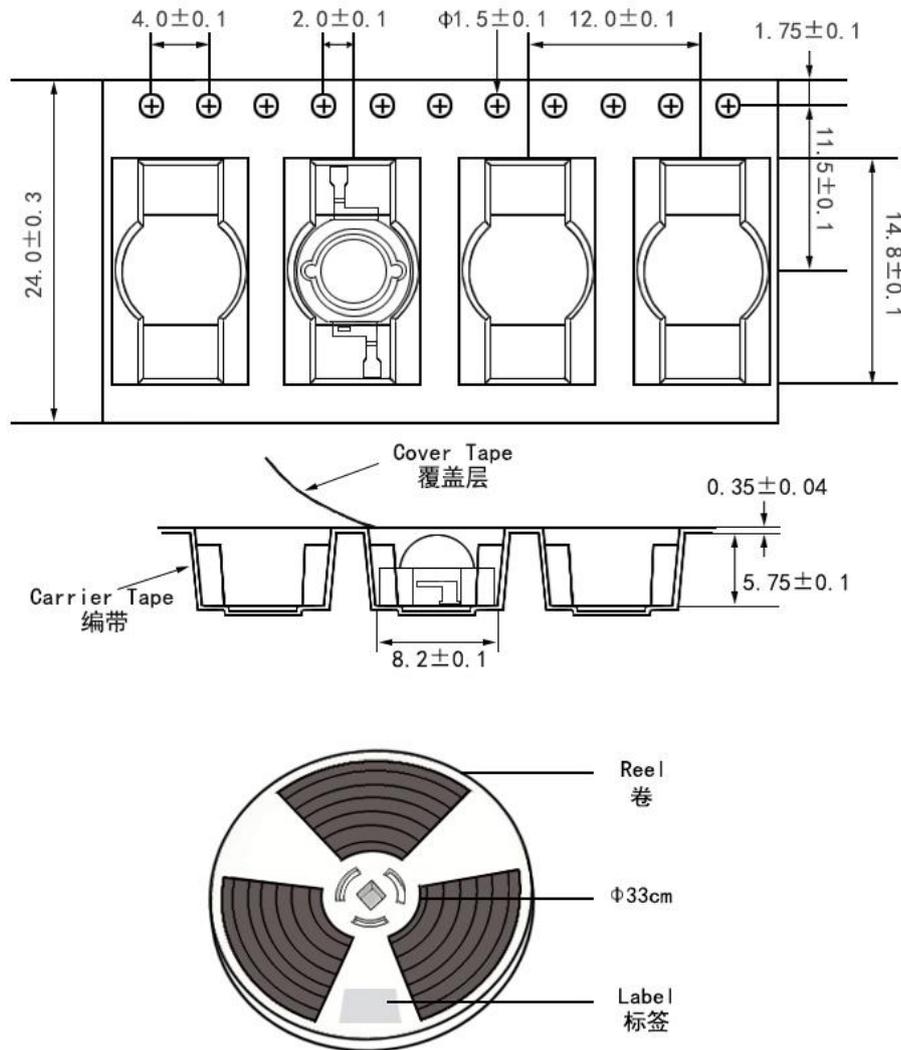
Radiation Characteristic

IF=1000mA



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 1 week, bake at 60±5°C for 10-12 hours before weld.



Notes:

1. QTY: 700pcs/Reel
2. Tolerance ±0.2mm.
3. Package: P/N

9. Cautions

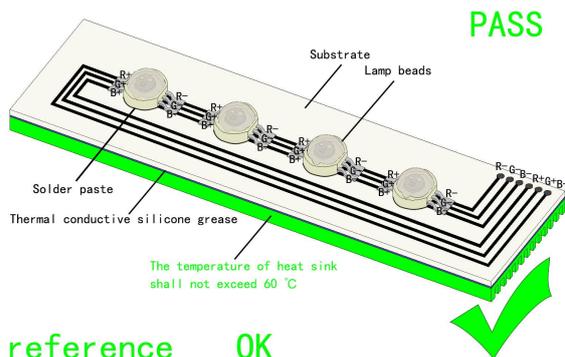
1. Electrostatic Treatment

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

- 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:

