

PRODUCT SPECIFICATION



Part No.: WL-P50EP4242IR140-810
High Power LED

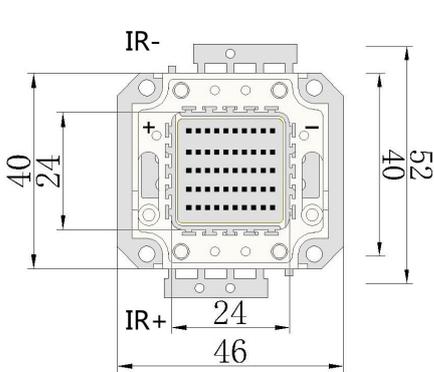
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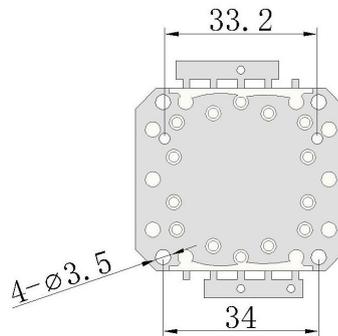
1.Product Features

- High Brightness IR LED Plane
- Chip Material: AlGaInP
- Package
- RoHS Compliant
- Viewing Angle 140 Degree

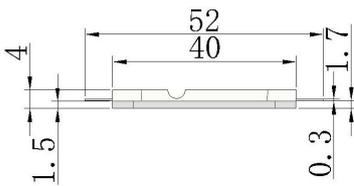
2.Dimensions



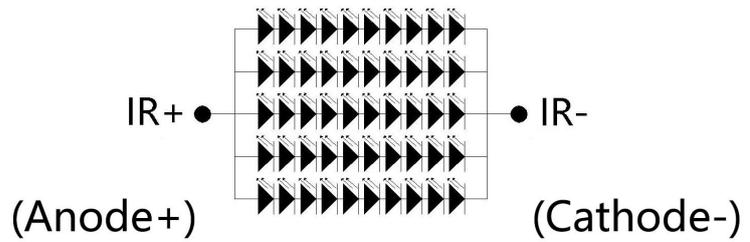
Top view



Bottom view



Side view



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	1750	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFp	2000	mA
Reverse Voltage	VR	16	V
Power Dissipation	PD	50	W
Electrostatic Discharge	ESD	1000	V
Operating Temperature Range	TOPR	-25°C to +80°C	
Storage Temperature Range	TSTG	-35°C to +100°C	
Soldering iron welding temperature (non-reflow soldering)	TSOL	350°C	

4. Optical Character @ Ta=25° C

Parameter	Symbol	Color	Min.	Typ.	Max.	Unit	Test Condition
Forward Voltage	VF	IR	15	16	17	V	IF=1750mA
Radiant Power	PO	IR	11000	12000	13000	mW	IF=1750mA
Peak Wavelength	WIP	IR	805	807	810	nm	IF=1750mA
Reverse Current	IR		0		10	μA	VR=16V
Viewing Angle	2θ1/2				140	deg	IF=1750mA
Recommend Forward Current	IF(rec)	IR			1750	mA	

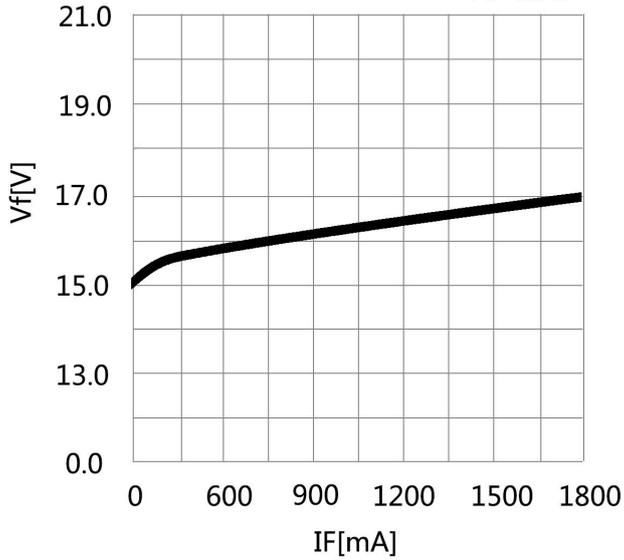
Notes:

Measurement tolerance of forward voltage ±0.1V

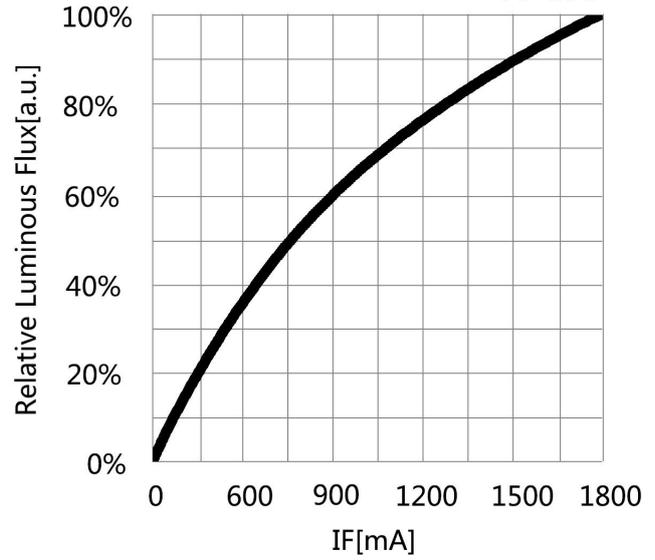
5. Optical Character Curves

(25 ° Ambient Temperature Unless Otherwise Noted)

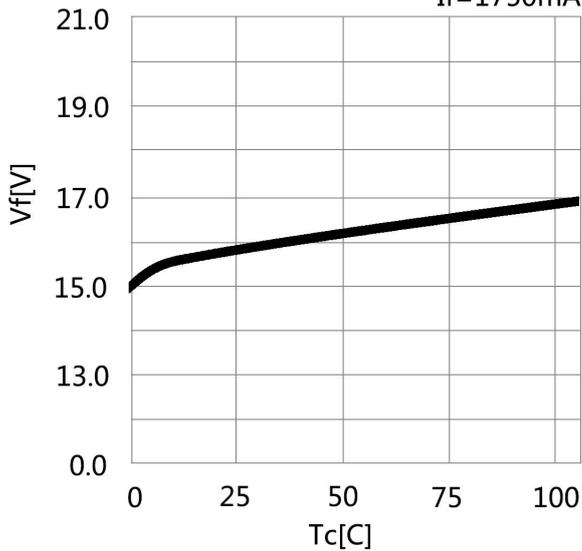
Forward Current vs. Forward Voltage
Tc=25C



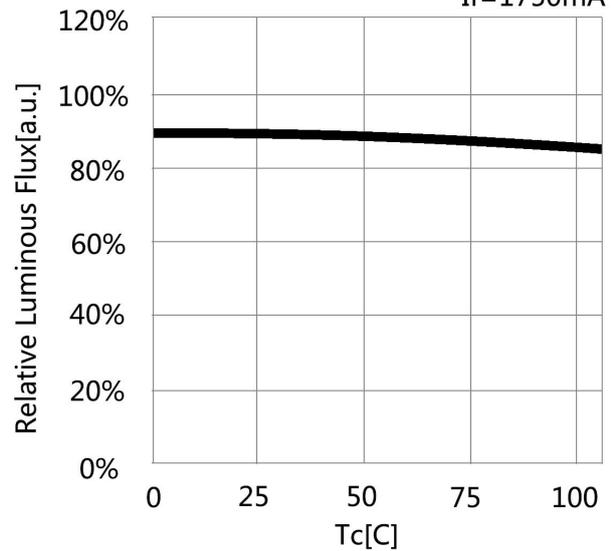
Forward Current vs. Relative Luminous Flux
Tc=25C



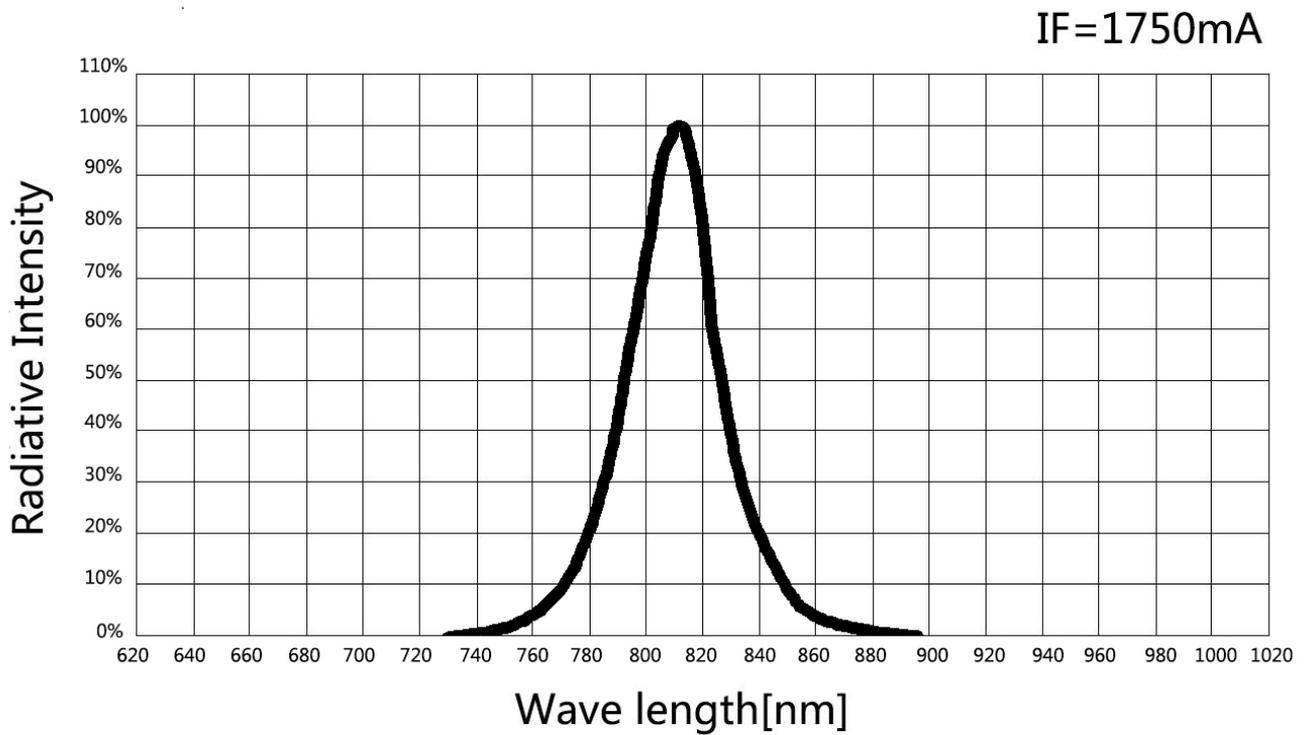
Case Temperature vs. Forward Voltage
If=1750mA



Case Temperature vs. Relative Luminous Flux
If=1750mA



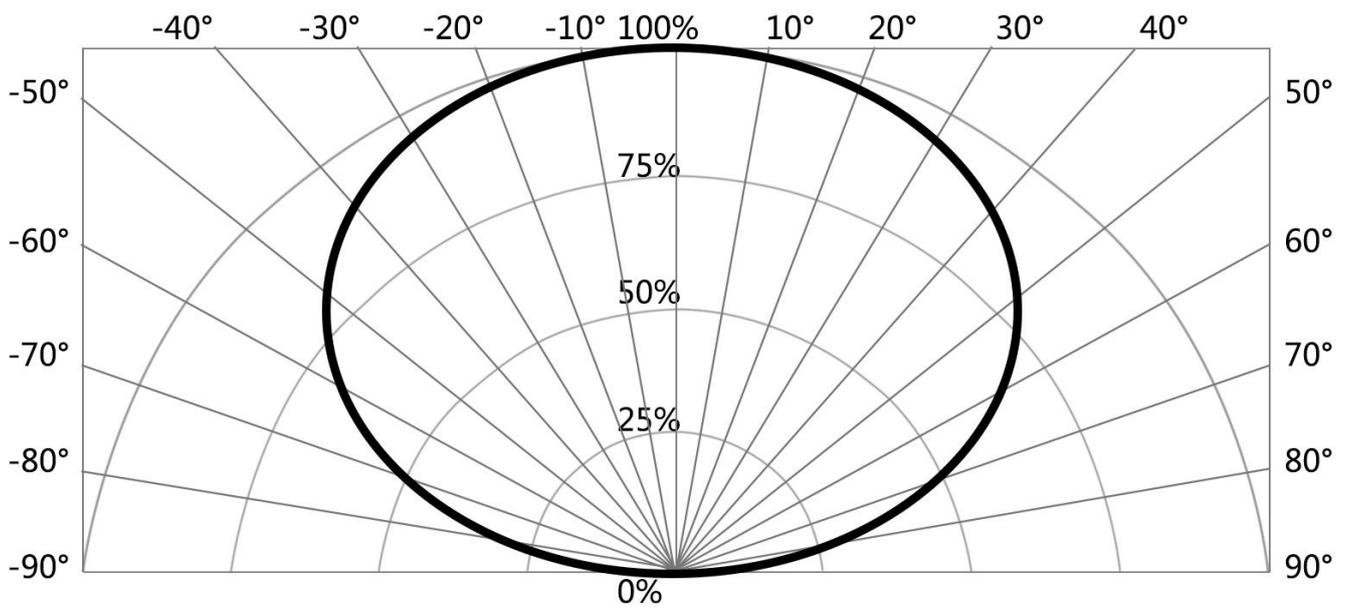
6. Spectrum Curves



7. Viewing Angle Curves

Radiation Characteristic

IF=1750mA



8.Cautions

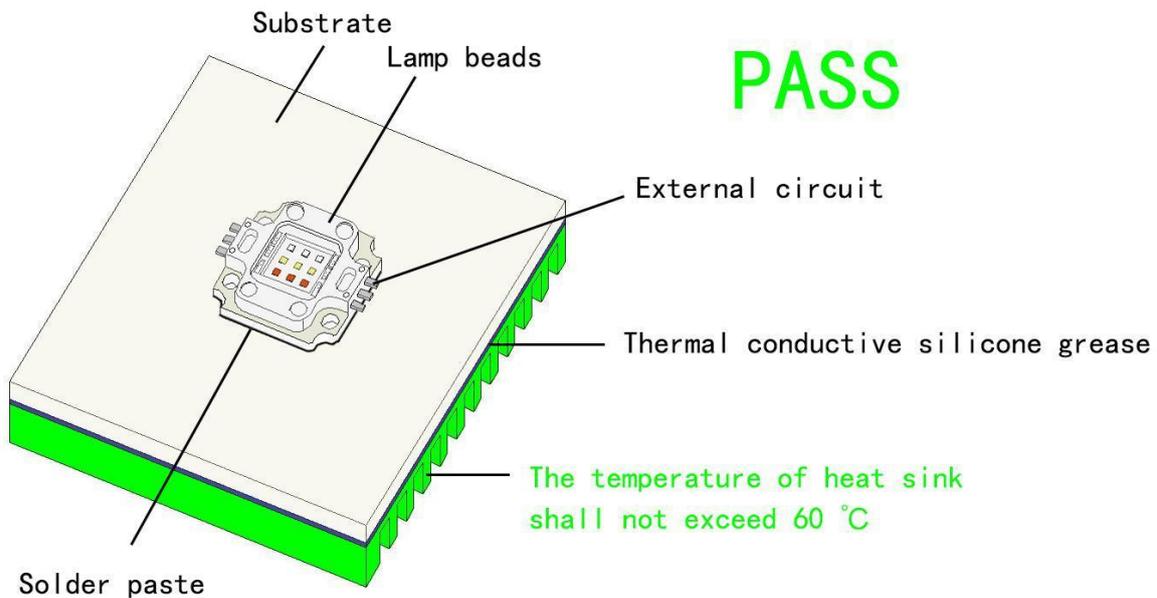
1. Electrostatic Treatment

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.



OK

