

PRODUCT SPECIFICATION



Part No.: WL-P50EP4242FR140-730
High Power LED

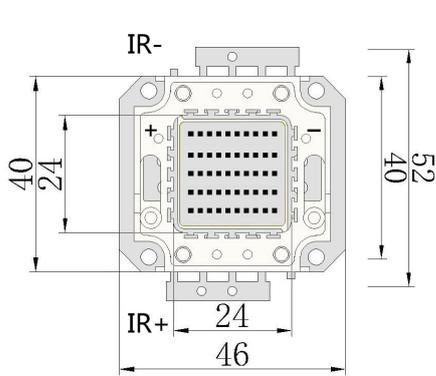
Catalog

1.Product Features	P2
2.Dimensions	P2
3.Absolute Maximum Rating	P3
4.Optical Character	P3
5.Optical Character Curves	P4
6.Spectrum Curves	P5
7.Viewing Angle Curves	P5
8.Cautions	P6

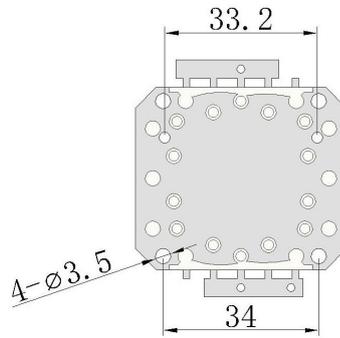
1.Product Features

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

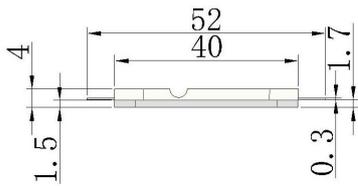
2.Dimensions



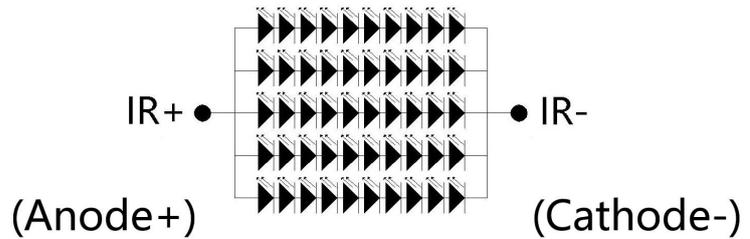
Top view



Bottom view



Side view



Circuit diagram

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	1750	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFp	2000	mA
Reverse Voltage	VR	16	V
Power Dissipation	PD	35	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	18	19	20	V	IF=1750mA
Radiant Power	PO	IR	12000	13000	14000	mW	IF=1750mA
Peak Wavelength	WIP	IR	730	733	735	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	

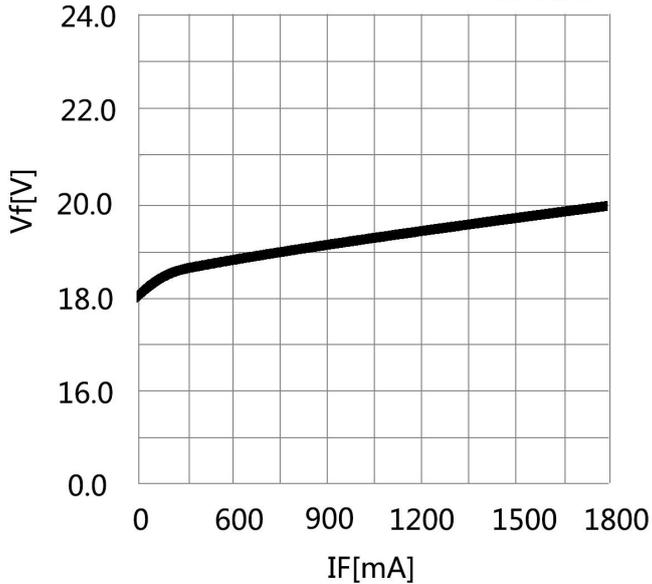
Notes:

Measurement tolerance of forward voltage ±0.1V

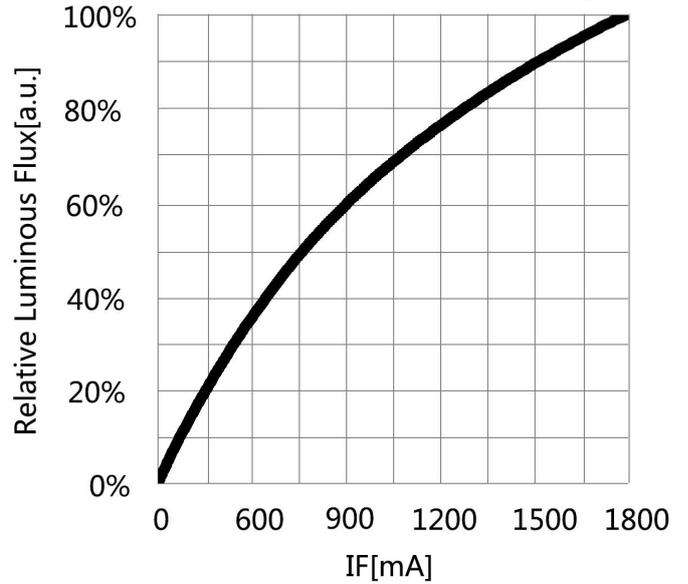
5. Optical Character Curves

(25 ° Ambient Temperature Unless Otherwise Noted)

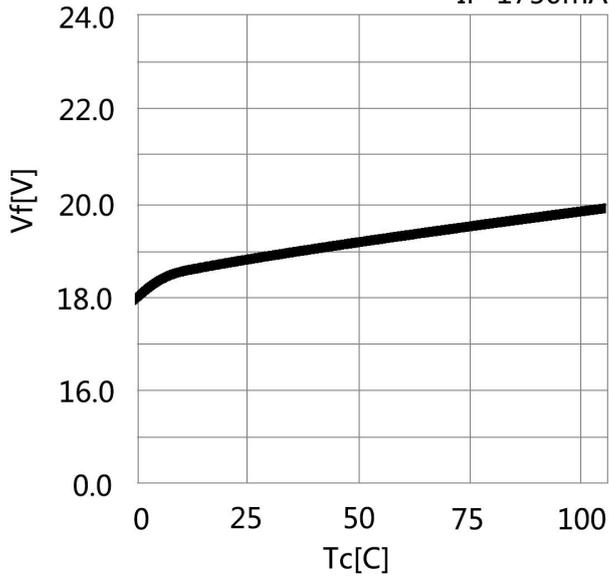
Forward Current vs. Forward Voltage
T_c=25C



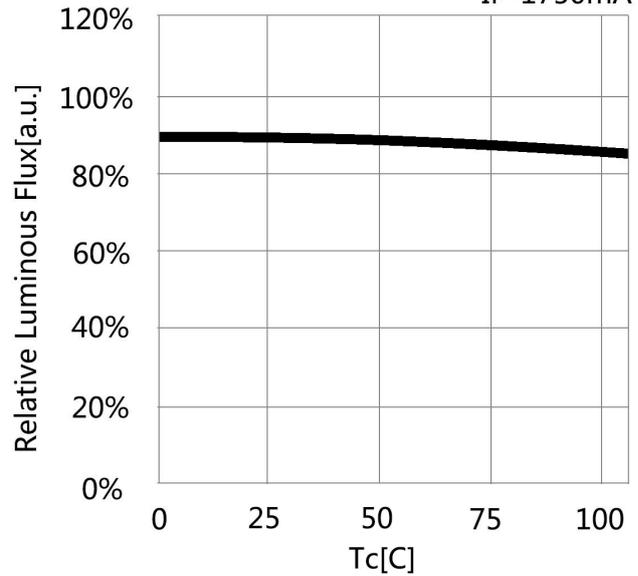
Forward Current vs. Relative Luminous Flux
T_c=25C



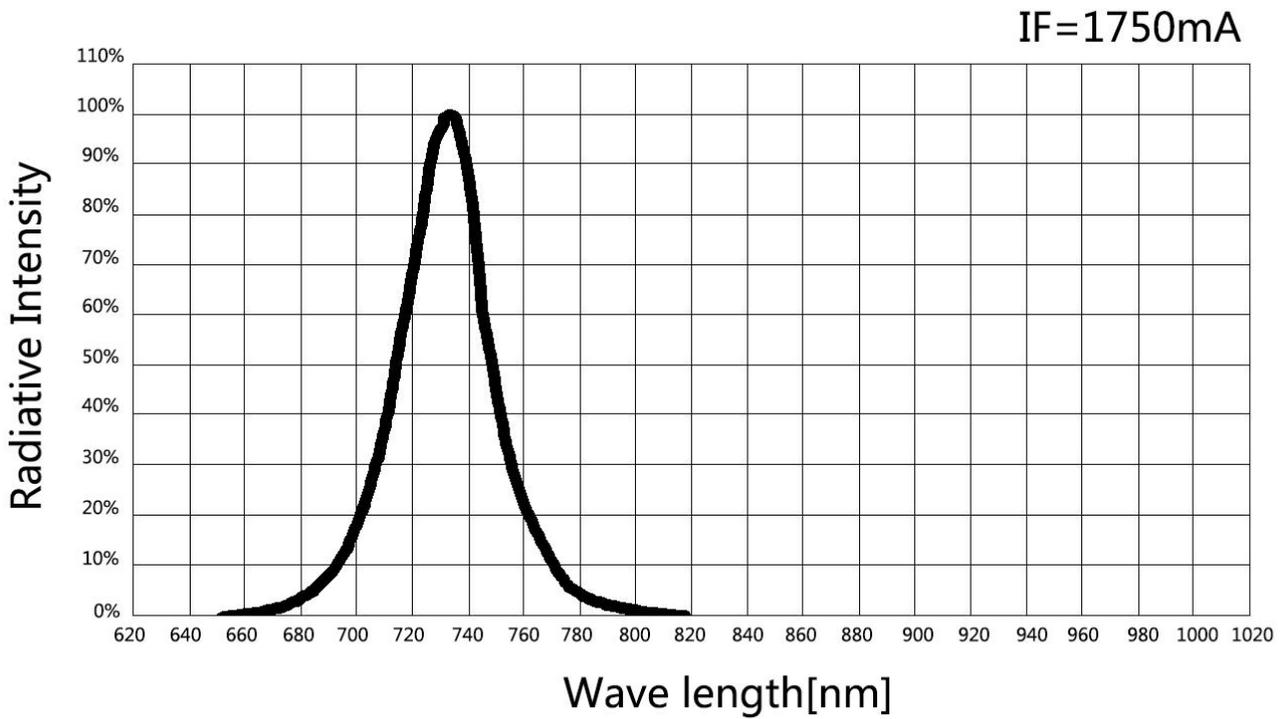
Case Temperature vs. Forward Voltage
I_f=1750mA



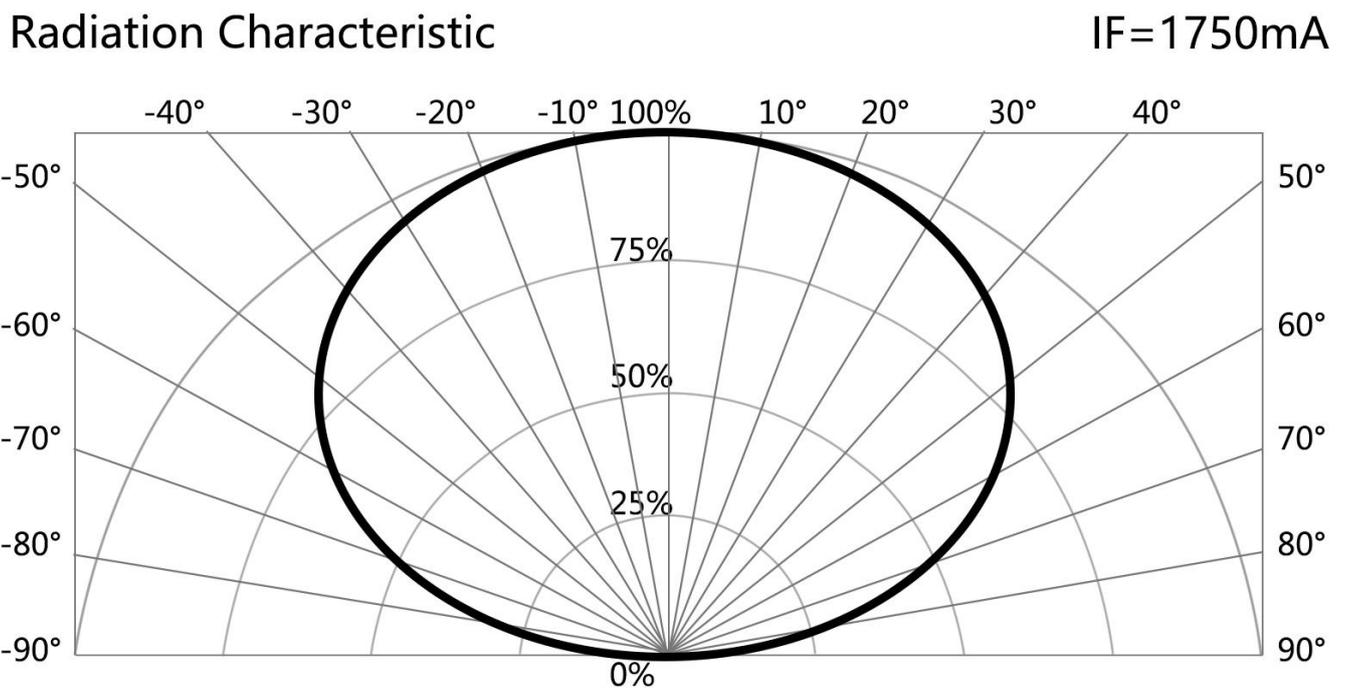
Case Temperature vs. Relative Luminous Flux
I_f=1750mA



6. Spectrum Curves



7. Viewing Angle Curves



8.Cautions

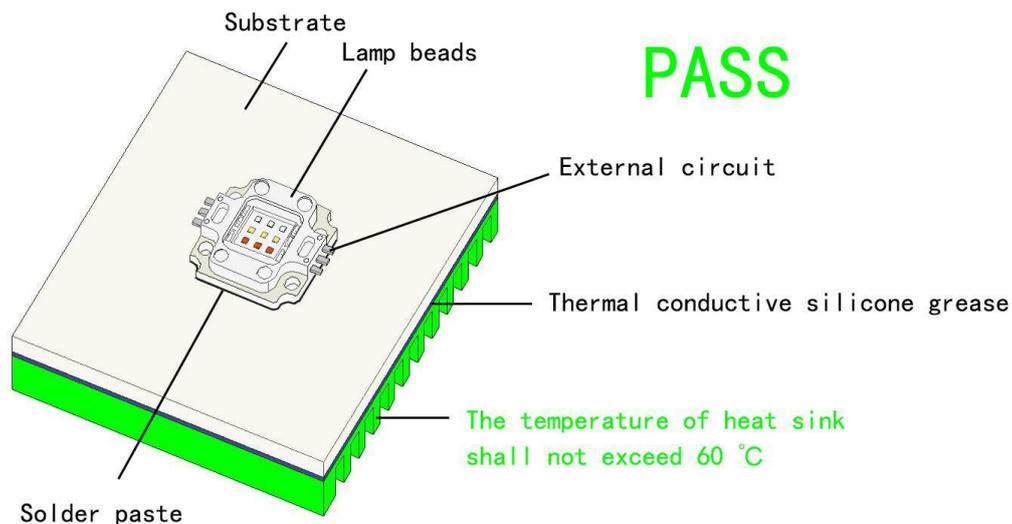
1. Electrostatic Treatment

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.



PASS

OK

