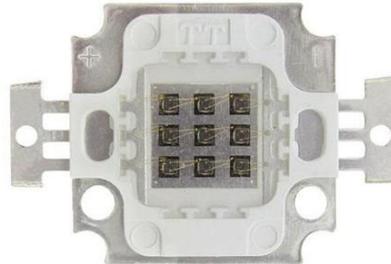


# PRODUCT SPECIFICATION



**Part No.: WL-P10EP4242IR140-850**  
**High Power LED**

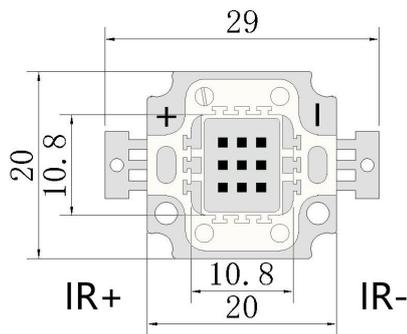
## Catalog

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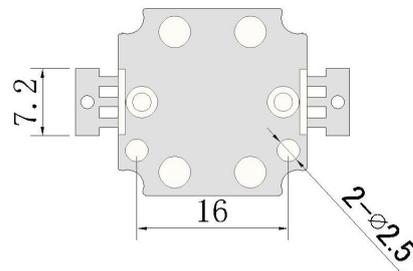
## 1.Product Features

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

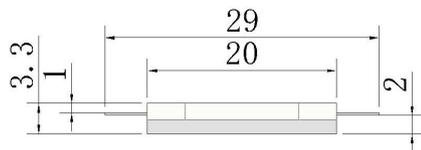
## 2.Dimensions



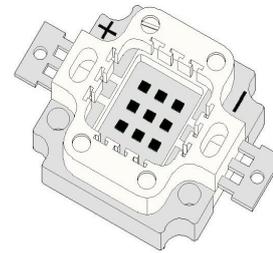
Top view



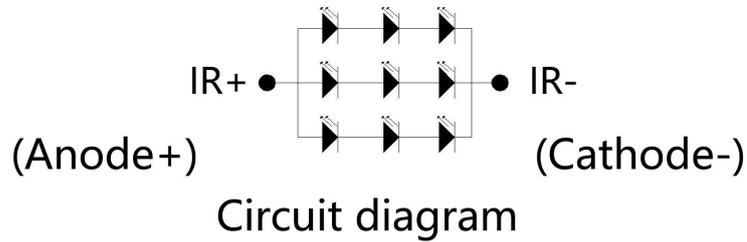
Bottom view



Side view



Perspective view



### 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	1050	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFp	1200	mA
Reverse Voltage	VR	5	V
Power Dissipation	PD	10	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	IR	4.0	4.5	5.0	V	IF=1050mA
Radiant Power	PO	IR	1400	1500	1600	mW	IF=1050mA
Peak Wavelength	WIP	IR	845	847.5	850	nm	IF=1050mA
Reverse Current	IR				10	μA	VR=5V
Viewing Angle	2θ1/2				140	deg	IF=1050mA
Recommend Forward Current	IF(rec)	IR			1050	mA	

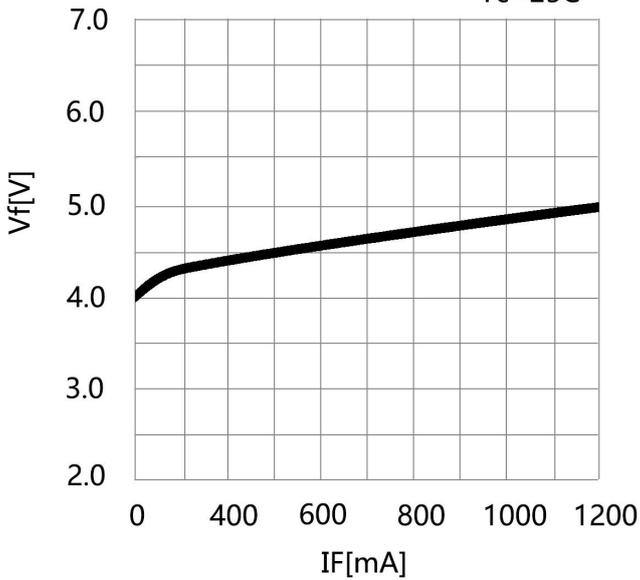
#### Notes:

Measurement tolerance of forward voltage ±0.1V

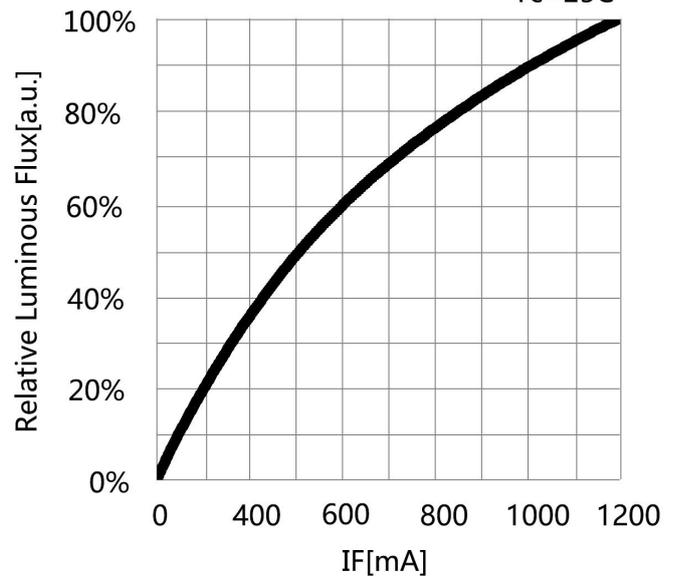
## 5. Optical Character Curves

( 25 ° Ambient Temperature Unless Otherwise Noted )

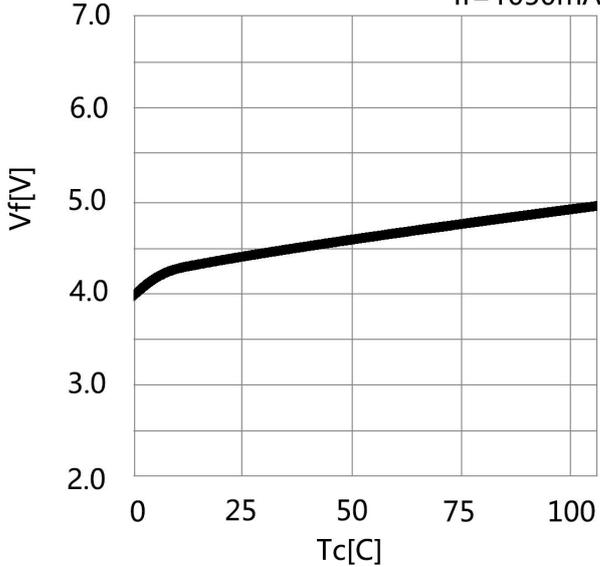
Forward Current vs. Forward Voltage  
Tc=25C



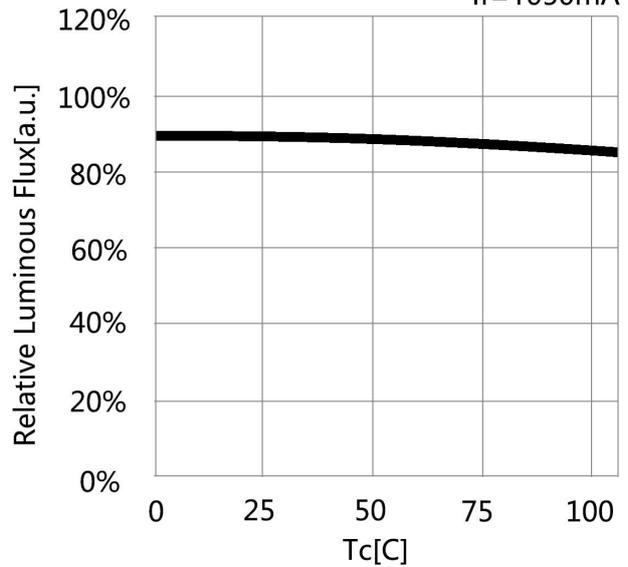
Forward Current vs. Relative Luminous Flux  
Tc=25C



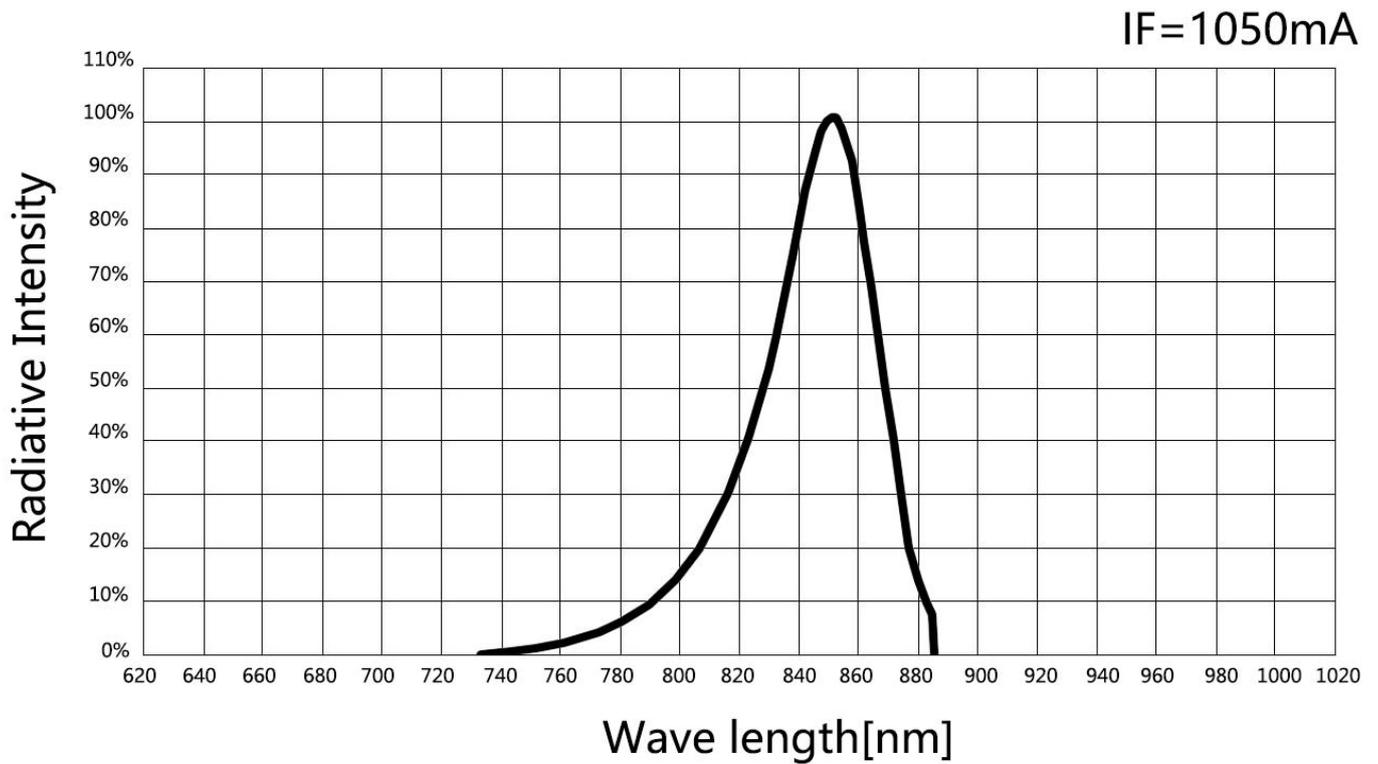
Case Temperature vs. Forward Voltage  
If=1050mA



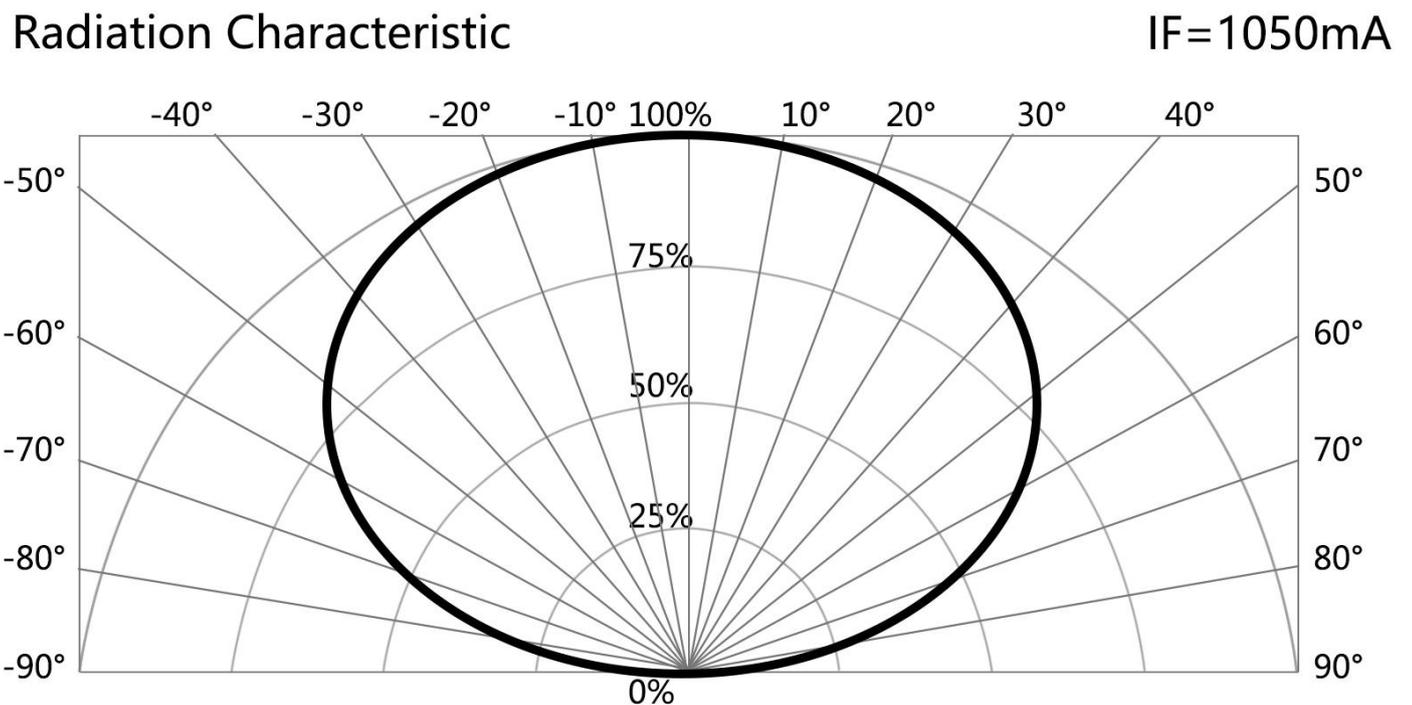
Case Temperature vs. Relative Luminous Flux  
If=1050mA



## 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.)

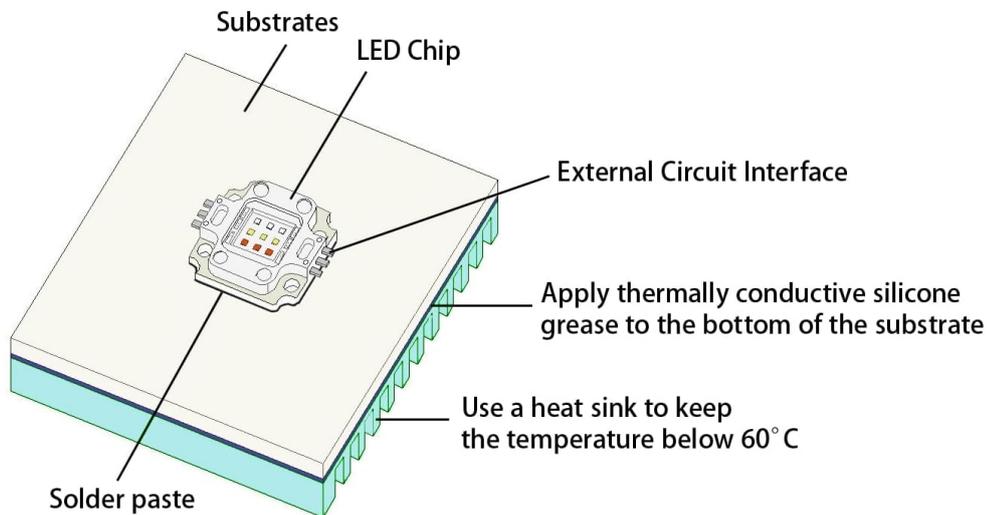


### 2. Heat Dissipation

- 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.

## COB LED Chip Instruction Manual

### Welding Reference Diagram



### Attention

- 1.It is recommended that anti-static measures be taken during soldering and use.
- 2.To minimize the loss of LED Chip, please equip the product with a suitable heat sink.
- 3.The optimum working temperature range of the product is 40-60° C.  
It is recommended that the working temperature of the product be controlled within a reasonable range.  
Please use constant current driver.