

# PRODUCT SPECIFICATION



**Part No.: WL-P100EP4242IR140-750**  
**High Power LED**

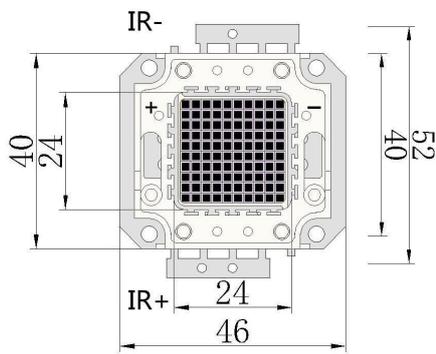
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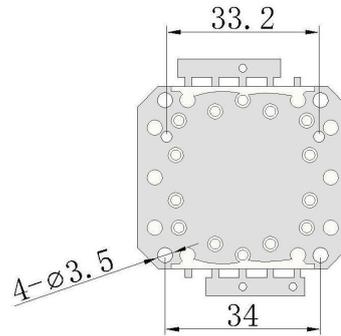
## 1.Product Features

- High Brightness IR LED Oval Package
- Viewing Angle 140 Degree
- Transparent Silicone
- Chip Material: AlGaAs
- RoHS Compliant

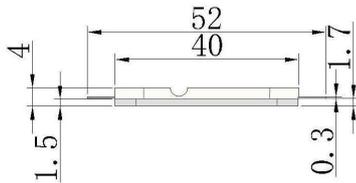
## 2.Dimensions



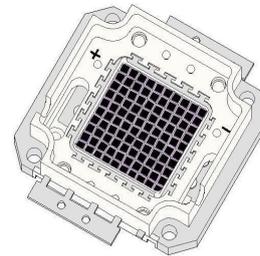
Top view



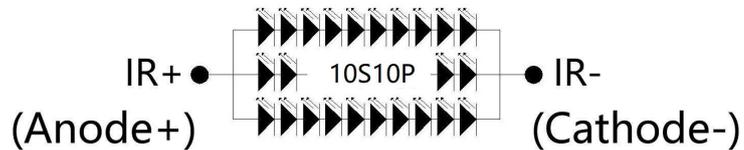
Bottom view



Side view



Perspective 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	3500	mA
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse Width)	IFp	3800	mA
Reverse Voltage	VR	22	V
Power Dissipation	PD	70	W
Electrostatic Discharge	ESD	1000	V
Operating Temperature Range	TOPR	-25°C to +60°C	
Storage Temperature Range	TSTG	-35°C to +80°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	18	19	20	V	I <sub>F</sub> =3500mA
Radiant Power	PO	IR	20000	25000	30000	mW	I <sub>F</sub> =3500mA
Peak Wavelength	WP	IR	750	752.5	755	nm	I <sub>F</sub> =3500mA
Reverse Current	IR		0		10	μA	V <sub>R</sub> =13V
Viewing Angle	2θ <sub>1/2</sub>				140	deg	I <sub>F</sub> =3500mA
Recommend Forward Current	IF(rec)	IR			3500	mA	

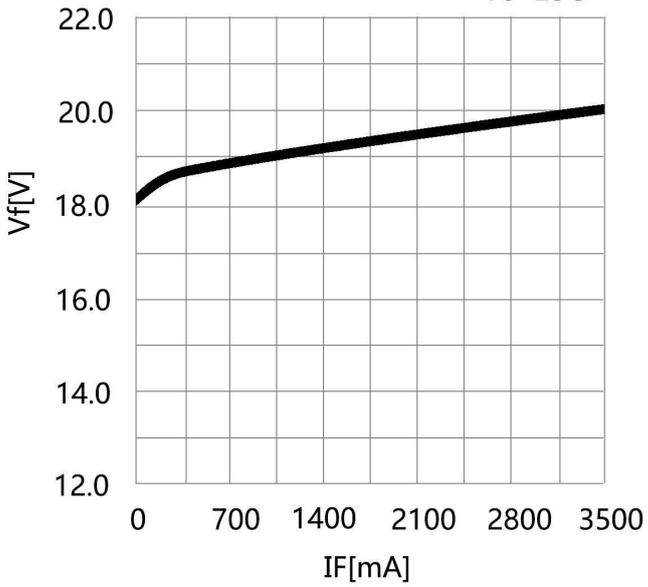
#### Notes:

Measurement tolerance of forward voltage ±0.1V

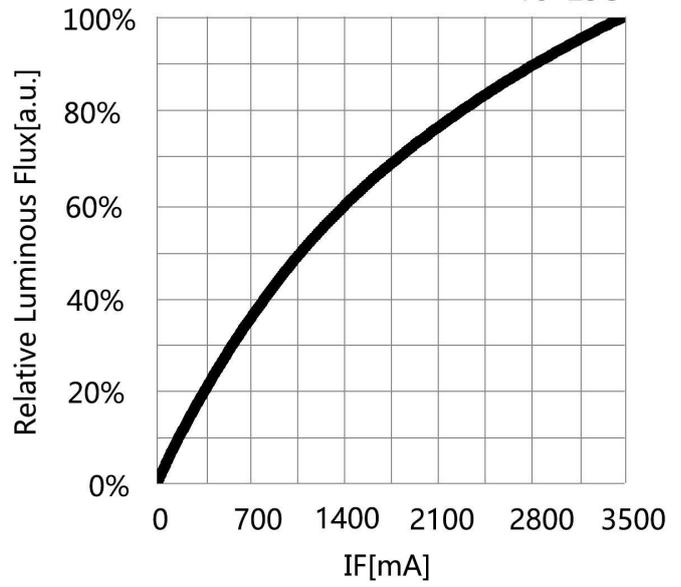
## 5. Optical Character Curves

( 25 ° Ambient Temperature Unless Otherwise Noted )

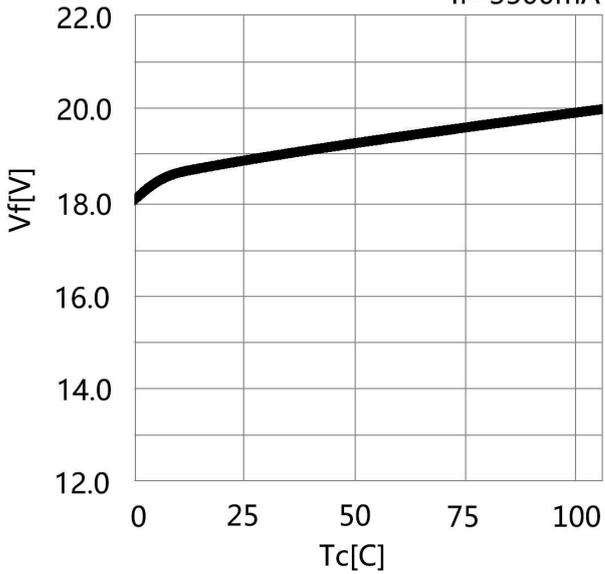
Forward Current vs. Forward Voltage  
Tc=25C



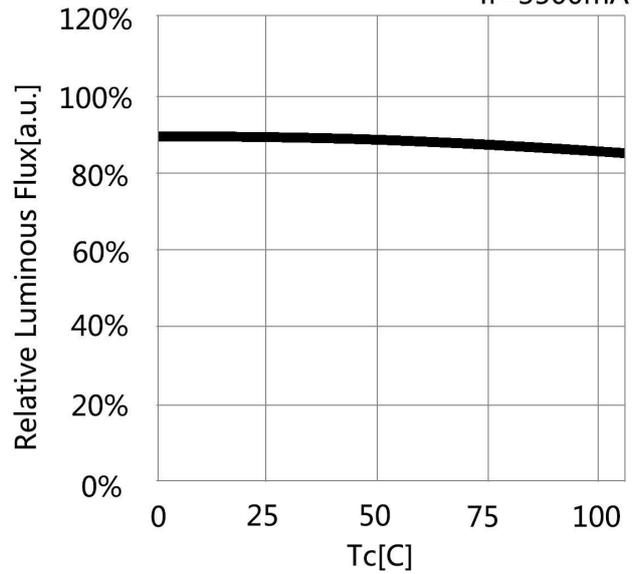
Forward Current vs. Relative Luminous Flux  
Tc=25C



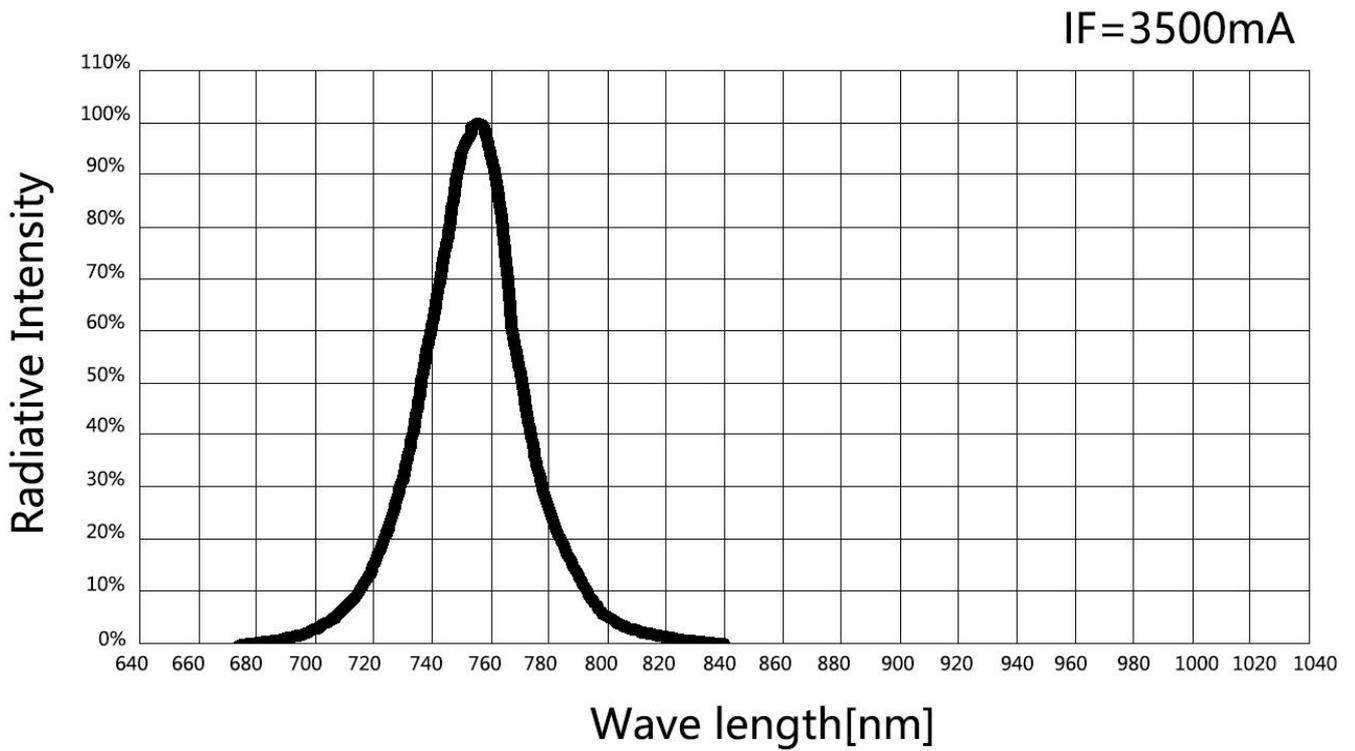
Case Temperature vs. Forward Voltage  
If=3500mA



Case Temperature vs. Relative Luminous Flux  
If=3500mA



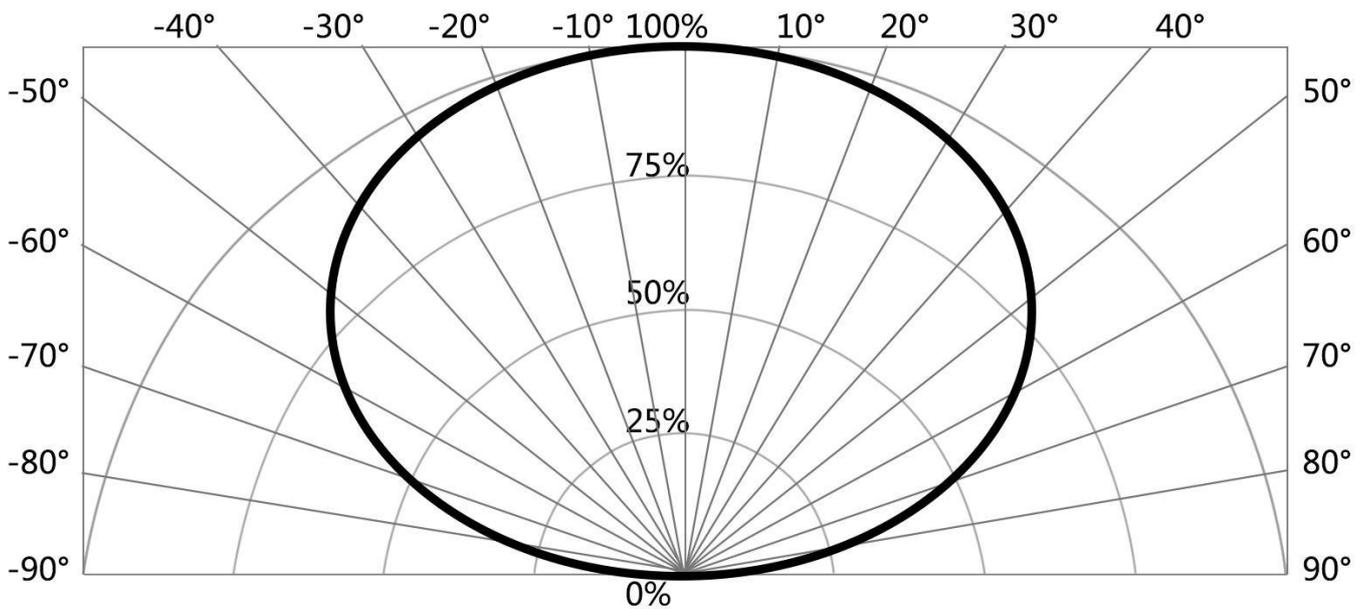
## 6. Spectrum Curves



## 7. Viewing Angle Curves

Radiation Characteristic

IF=3500mA



## 8.Cautions

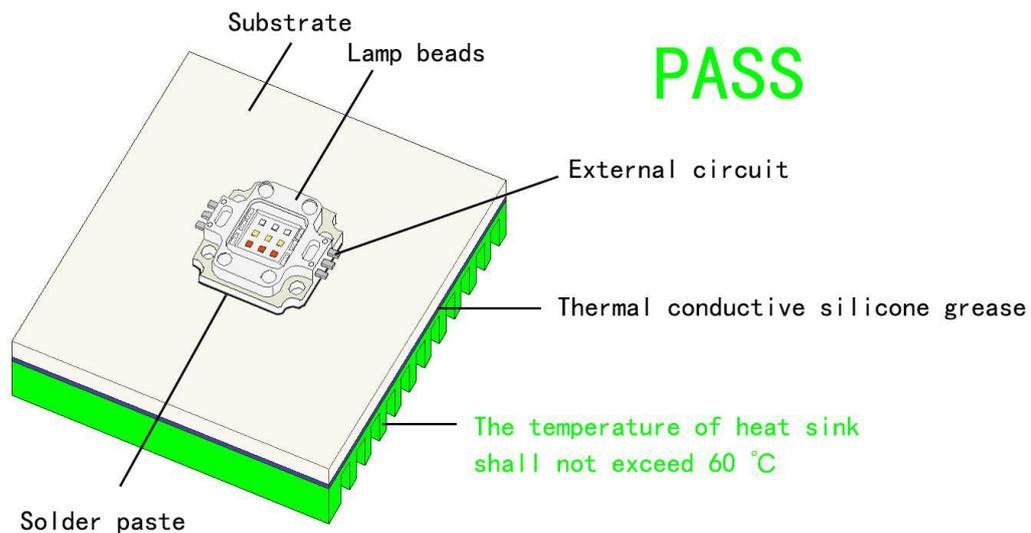
### 1. Electrostatic Treatment

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**

