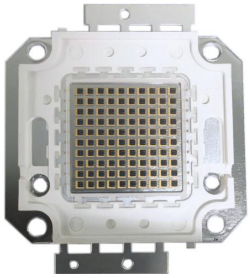
LUMIXTAR

PRODUCT SPECIFICATION



Part No.: WL-P100EP4242IR140-1050

High Power LED

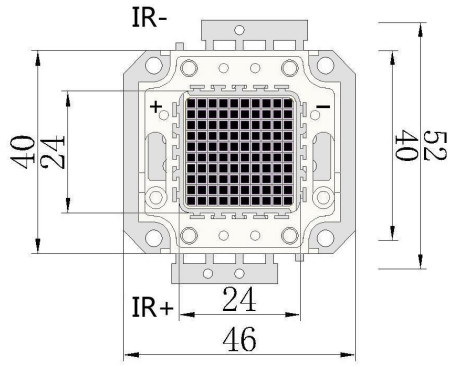
Catalog

LUMIXTAR

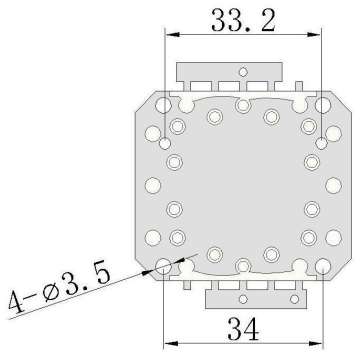
1.Product Features

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

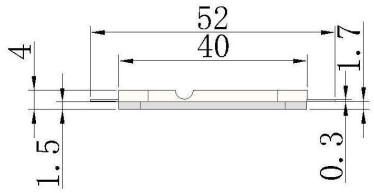
2.Dimensions



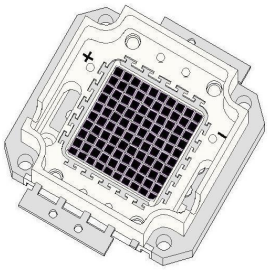
Top view



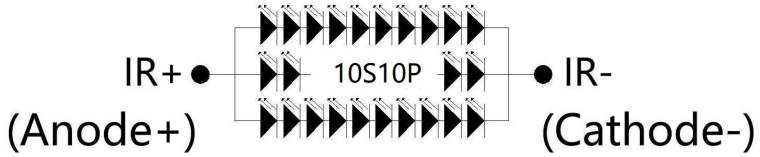
Bottom view



Side view



Perspective view



Circuit diagram

Notes:

1. All dimensions are in millimeters.

2. Tolerance is ±0.1mm unless otherwise noted.

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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	18	V
Power Dissipation	PD	100	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	14	15	16	V	I_F=3500mA
Radiant Power	PO	IR	3000	4000	5000	mW	I_F=3500mA
Peak Wavelength	WLP	IR	1040	1045	1050	nm	I_F=3500mA
Reverse Current	IR		0		10	μA	V_R=18V
Viewing Angle	2θ1/2				140	deg	I_F=3500mA
Recommend Forward Current	IF(rec)	IR			3500	mA	

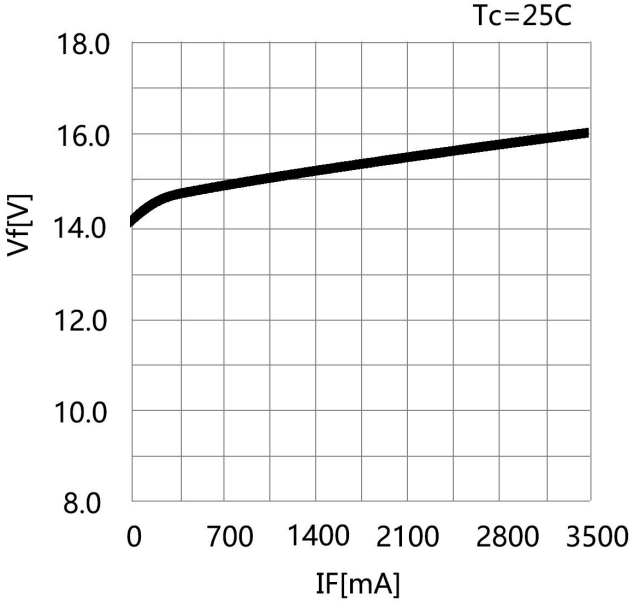
Notes:

Measurement tolerance of forward voltage±0.1V

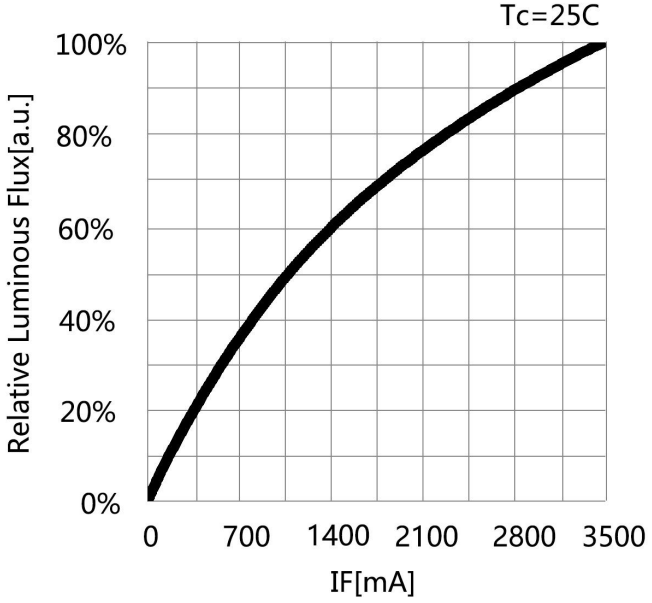
5. Optical Character Curves

(25 ° Ambient Temperature Unless Otherwise Noted)

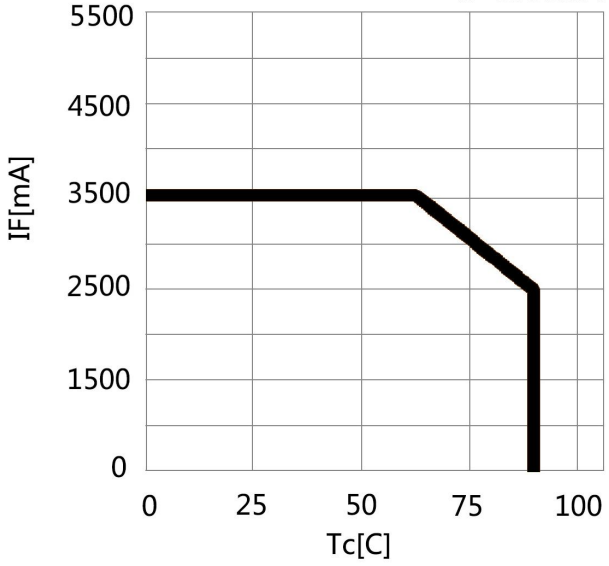
Forward Current vs. Forward Voltage



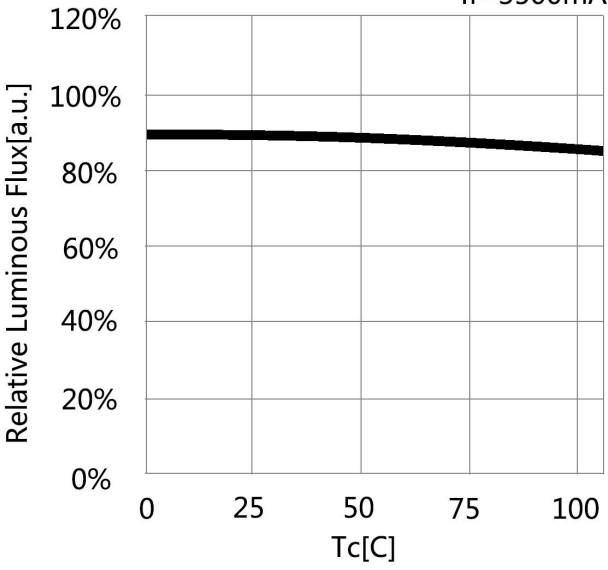
Forward Current vs. Relative Luminous Flux



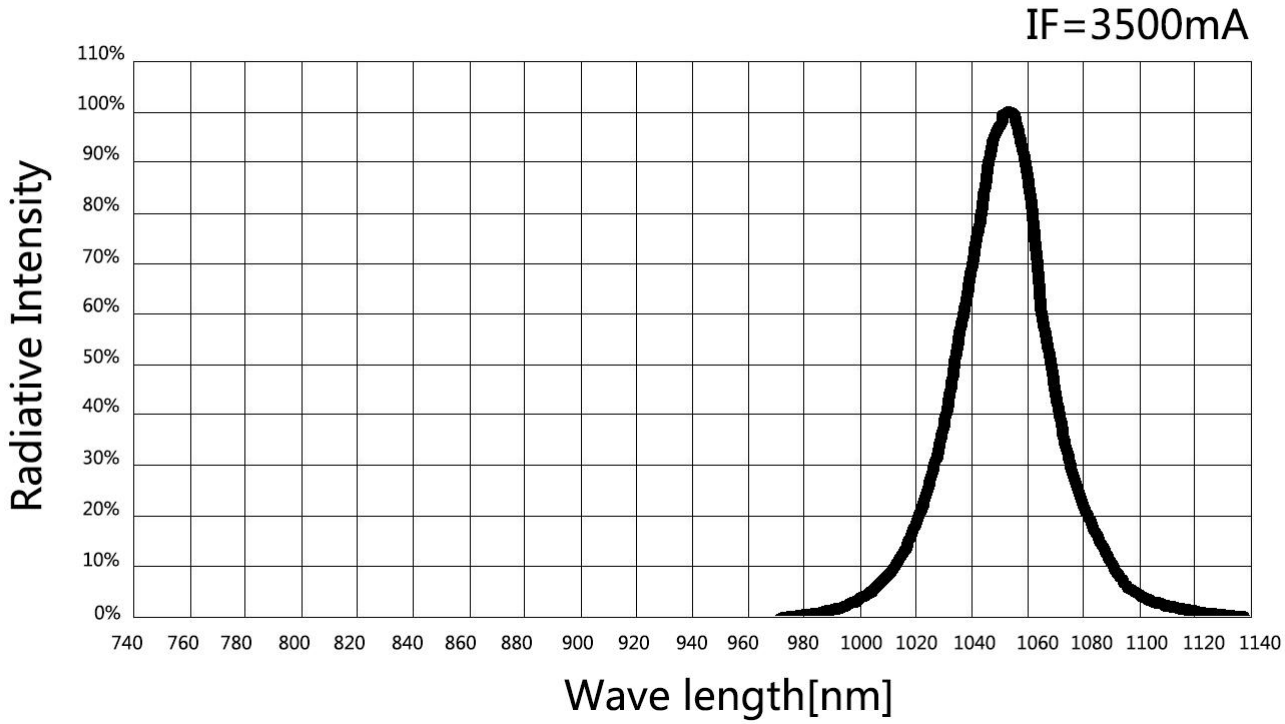
Case Temperature vs. Forward Current



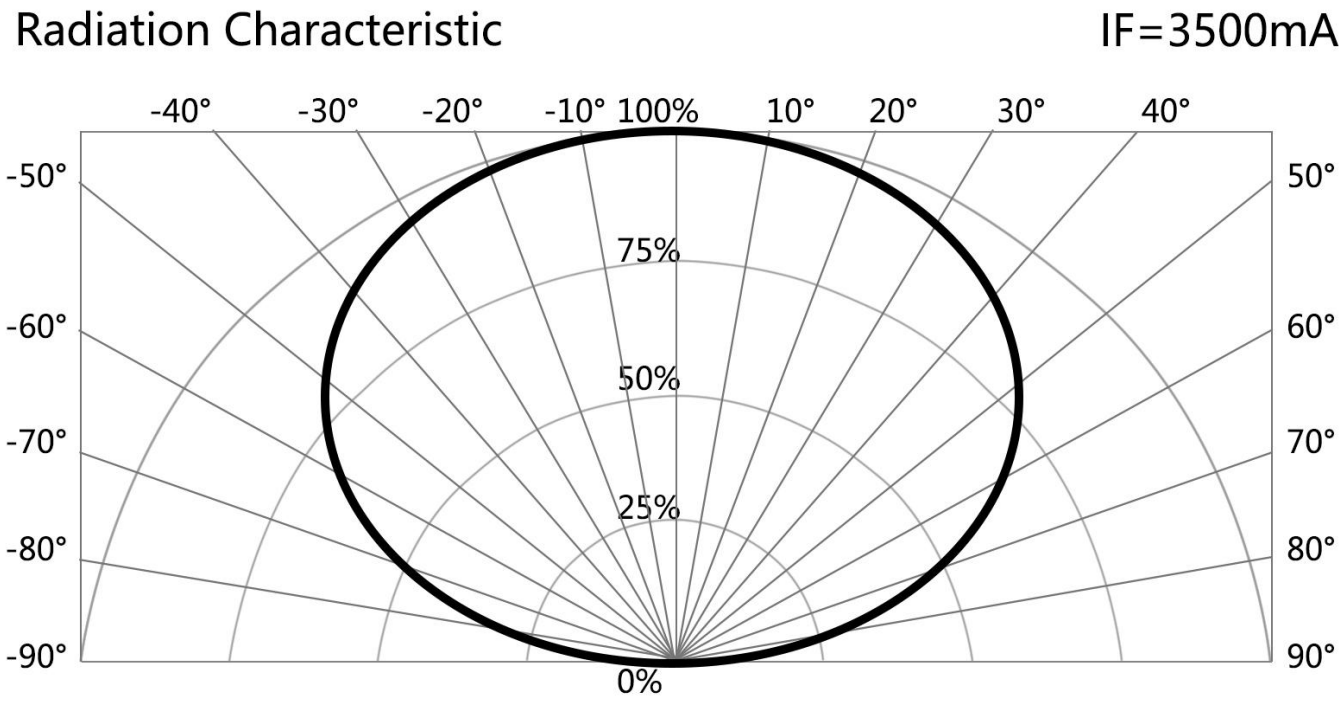
Case Temperature vs. Relative Luminous Flux



6. Spectrum Curves



7. Viewing Angle Curves



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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.