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Light It Up

Xeon 1 Power Yellow LED

OSY5XNE1C1E

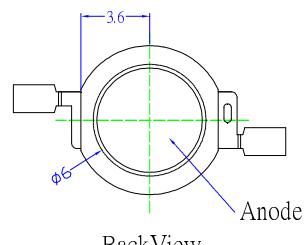
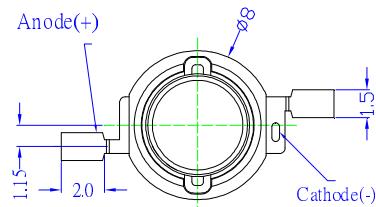
■Features

- Highest Luminous Flux
- Super Energy Efficiency
- Long Lifetime Operation
- Superior UV Resistance

■Applications

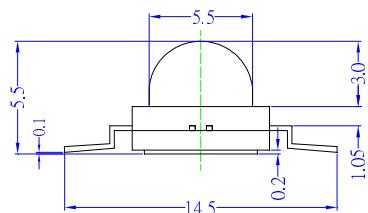
- Read lights (car, bus, aircraft)
- Portable (flashlight, bicycle)
- Bollards / Security / Garden
- Traffic signaling / Beacons
- In door / Out door Commercial lights
- Automotive Ext

■Outline Dimension



Anode —► Cathode

Unit:mm
Tolerance: $\pm 0.20\text{mm}$
unless otherwise noted



■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value	Unit
DC Forward Current	I _F	400	mA
Pulse Forward Current#	I _{FP}	500	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P _D	1200	mW
Operating Temperature	T _{opr}	-30 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Lead Soldering Temperature	T _{sol}	260°C/5sec	-

#Pulse width Max.10ms Duty ratio max 1/10

■Electrical -Optical Characteristics

(Ta=25°C)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
DC Forward Voltage*1	V _F	I _F =350mA	2.0	2.5	3.0	V
DC Reverse Current	I _R	V _R =5V	-	-	10	μA
Domi. Wavelength*2	λ _D	I _F =350mA	585	590	595	nm
Luminous Flux*3	Φ _v	I _F =350mA	40	50	-	lm
50% Power Angle	2θ _{1/2}	I _F =350mA	-	120	-	deg

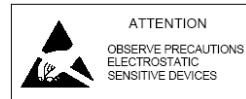
*1 Tolerance of measurements of forward voltage is $\pm 0.1\text{V}$

*2 Tolerance of measurements of dominant wavelength is $\pm 1\text{nm}$

*3 Tolerance of measurements of luminous Flux is $\pm 15\%$

Note: Don't drive at rated current more than 5s without heat sink for Xeon 1 emitter series.

LED & Application Technologies





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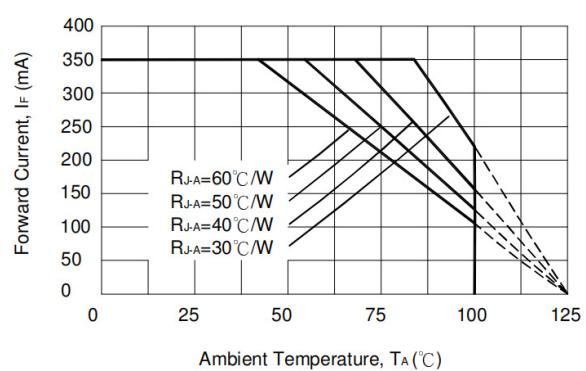
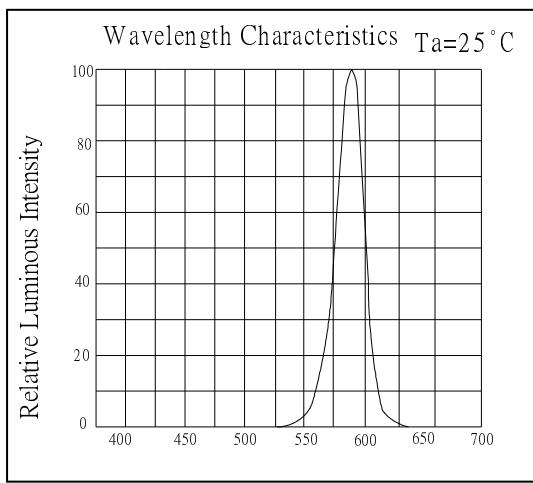
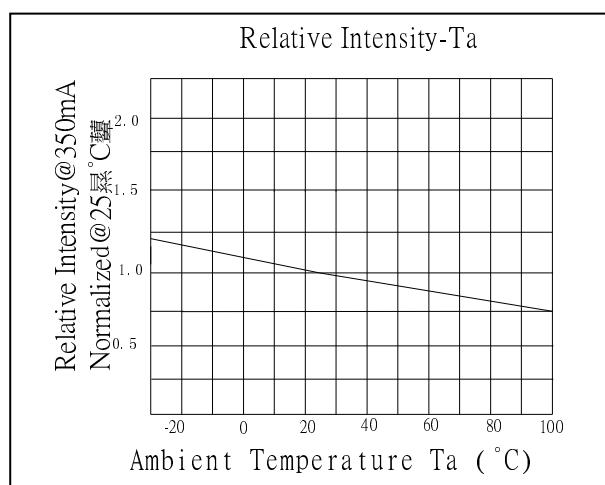
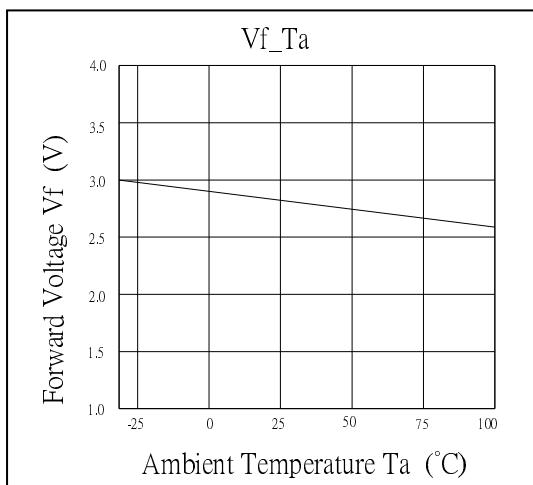
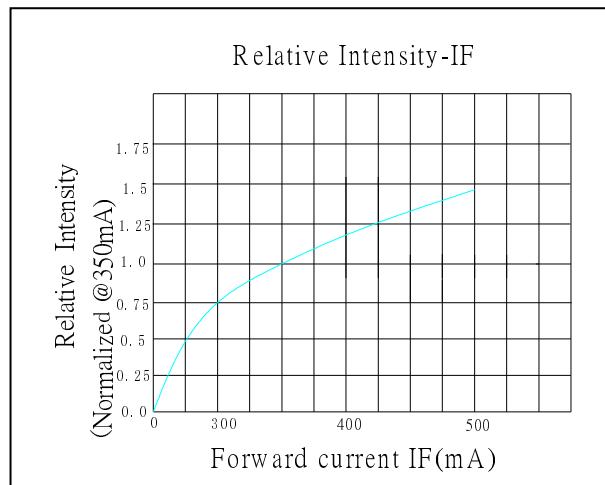
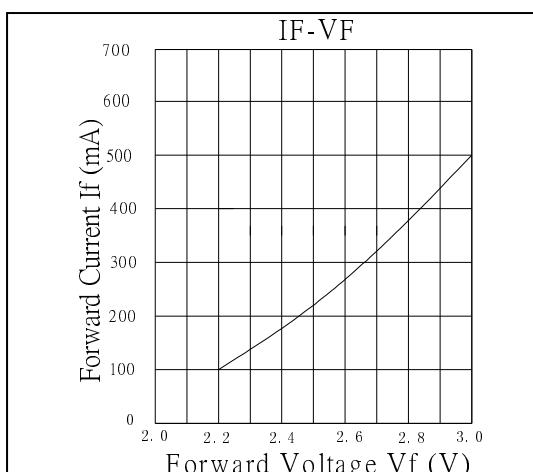
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AlGaInP LED

TYPICAL ELECTRICAL/OPTICAL CHARACTERISTIC CURVES



LED & Application Technologies



REACH
The new EU chemicals legislation



Soldering Heat Reliability :

Reflow soldering Profile

- Reflow soldering should not be done more than two times.
- When soldering, do not put stress on the LEDs during heating.
- After soldering, do not warp the circuit board.
- Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used. It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.

Solder
Average ramp-up rate = 3°C/sec. max.
Preheat temperature: 150°~180°C
Preheat time = 120 sec. max.
Ramp-down rate = 6°C/sec. max.
Peak temperature = 220°C max.
Time within 3°C of actual peak temperature = 25 sec. max.
Duration above 200°C is 40 sec. max.

