OptoSupply
Light It Up

Xeon 1 Power Pure Green LED

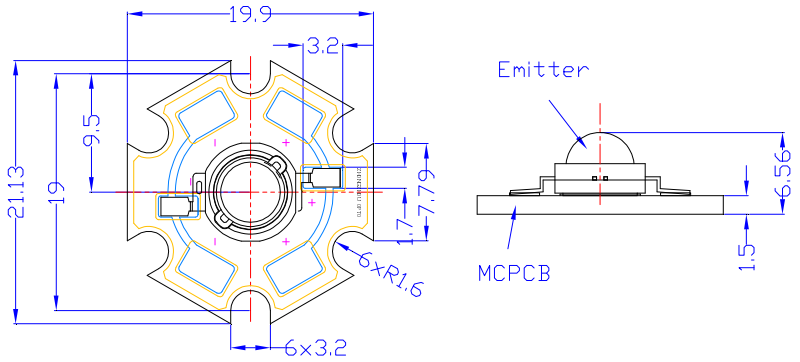
OSG5XNE1E1S

VER C.2

■Features

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

■Outline Dimension



Unit:mm
Tolerances are for reference only

■Applications

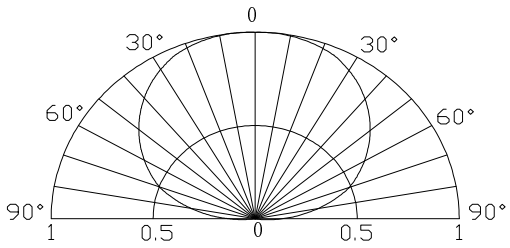
- Read lights (car, bus, aircraft)
- Portable (flashlight, bicycle)
- Bollards / Security / Garden
- Traffic signaling / Beacons
- In door / Out door Commercial lights
- Automotive Ext

■Absolute Maximum Rating (Ta=25℃)

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	1600	mW
Operating Temperature	Topr	-30 ~ +85	℃
Storage Temperature	Tstg	-40~ +100	℃
Lead Soldering Temperature	Tsol	260℃/5sec	-

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

■Directivity



■Electrical -Optical Characteristics (Ta=25℃)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
DC Forward Voltage	V_F	I_F=350mA	3.0	3.3	4.0	V
DC Reverse Current	I_R	V_R=5V	-	-	10	μA
Domi. Wavelength	λ_D	I_F=350mA	520	525	530	nm
Luminous Flux	Φ_V	I_F=350mA	80	95	-	lm
50% Power Angle	$2\theta_{1/2}$	I_F=350mA	-	140	-	deg

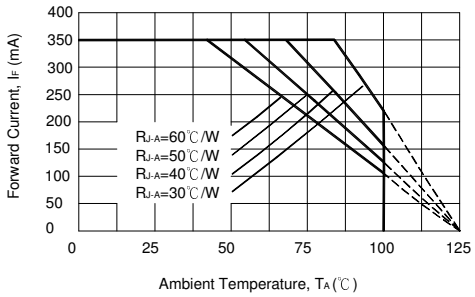
*1 Tolerance of measurements of dominant wavelength is ±1nm

*2 Tolerance of measurements of luminous intensity is ±15%

*3 Tolerance of measurements of forward voltage is±0.1V

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

■Forward Operating Current (DC)



■ **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 = 3ºC/sec. max.
Preheat temperature: 150º~180ºC
Preheat time = 120 sec. max.
Ramp-down rate = 6ºC/sec. max.
Peak temperature = 220ºC max.
Time within 3ºC of actual peak temperature = 25 sec. max.
Duration above 200ºC is 40 sec. max.