OptoSupply
Light It Up

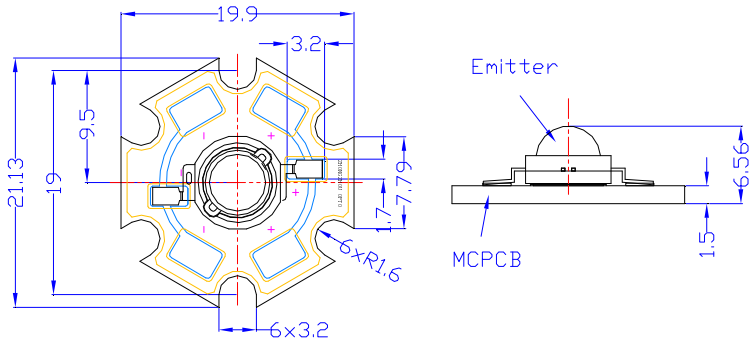
Xeon 3 Power Yellow Star LED

OSY5XNE3E1S

■Features

- Highest Luminous Flux
- Super energy efficiency
- Long Lifetime Operation
- Superior UV Resistance

■Outline Dimension



Unit:mm
Tolerance:±0.3mm
Tolerances are for reference only

■Applications

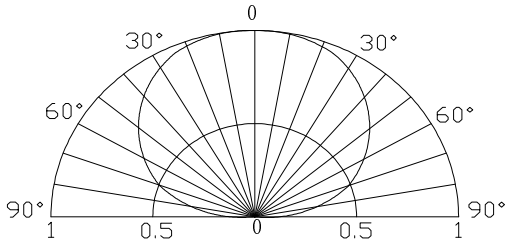
- Read lights (car, bus, aircraft)
- Portable (flashlight, bicycle)
- Bollards / Security / Garden
- Traffic signaling / Beacons
- In door / Out door Commercial lights
- Automotive Ext

■Absolute Maximum Rating (Ta=25℃)

Item	Symbol	Value	Unit
DC Forward Current	I_F	800	mA
Pulse Forward Current#	I_{FP}	1000	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	2400	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*1	V_F	I_F=350mA	2.0	2.3	3.0	V
		I_F=700mA	2.5	2.8	3.5	V
DC Reverse Current	I_R	V_R=5V	-	-	10	μA
Domi. Wavelength*2	λ_D	I_F=700mA	585	590	595	nm
Luminous Flux*3	Φ_V	I_F=700mA	70	80	-	lm
50% Power Angle	$2\theta_{1/2}$	I_F=700mA	-	140	-	deg

*1 Tolerance of measurements of forward voltage is ±0.1V
*2 Tolerance of measurements of dominant wavelength is ±1nm
*3 Tolerance of measurements of luminous Flux is ±15%

Note: Don't drive at rated current more than 5s without heat sink for Xeon 3 emitter series.

■ **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 =Low temperature + Lead Free
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.