

### **OSY5XNE1E1S**

Emitter

MCPCB

Cathode • 🖌 🖌 Anode

#### **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 •
- Indoor / Outdoor Commercial lights
- Automotive Ext

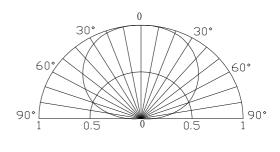
## ■Absolute Maximum Rating

	0		
Item	Symbol	Value	Unit
DC Forward Current	$\mathbf{I}_{\mathrm{F}}$	400	mA
Pulse Forward Current#	$\mathbf{I}_{\mathrm{FP}}$	500	mA
Reverse Voltage	V <sub>R</sub>	5	V
Power Dissipation	PD	1200	mW
Operating Temperature	Topr	-30 ~ +85	°C
Storage Temperature	Tstg	-40~ +100	°C
Lead Soldering Temperature	Tsol	260°C /5sec	-

### Directivity

6x3.2

Tolerances are for reference only



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

## **Electrical -Optical Characteristics**

Item	Symbol	Condition	Min.	Тур.	Max.	Unit
DC Forward Voltage*	$V_{\mathrm{F}}$	I <sub>F</sub> =350mA	2.0	2.5	3.0	V
DC Reverse Current	IR	V <sub>R</sub> =5V	-	-	10	μΑ
Domi. Wavelength*	$\lambda_{\rm D}$	IF=350mA	585	590	595	nm
Luminous Flux*	Φv	I <sub>F</sub> =350mA	40	50	-	lm
50% Power Angle	201/2	I <sub>F</sub> =350mA	-	140	-	deg

\*1 Tolerance of measurements of dominant wavelength is +1nm

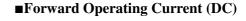
\*2 Tolerance of measurements of luminous flux is +15%

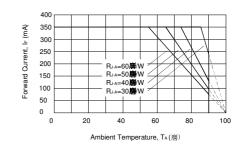
\*3 Tolerance of measurements of forward voltage is±0.1VNote:

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

# **LED & Application Technologies**









(Ta=25℃)

**•**Outline Dimension

21.13

-19.9

Unit:mm

(Ta=25℃)

Tolerance:±0.30mm



**OSY5XNE1E1S** 

### ■ Soldering Heat Reliability :

Reflow soldering Profile

- $\cdot$  Reflow soldering should not be done more than two times.
- $\cdot$  When soldering, do not put stress on the LEDs during heating.
- $\cdot$  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 = $6^{\circ}$ C/sec. max.		
Peak temperature = $220^{\circ}$ C max.		
Time within 3°C of actual		
peak temperature = 25 sec. max.		
Duration above 200°C is 40 sec. max.		

