

OSR5XNE1E1E VER C.3

■Features

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

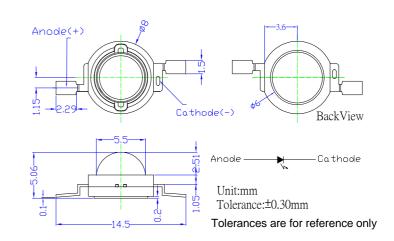
■Applications

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

Outline Dimension

(Ta=25°C)

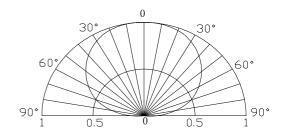
(Ta=25°C)



■Absolute Maximum Rating

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	Topr	-30 ~ +85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tstg	-40~ +100	$^{\circ}\!\mathbb{C}$
Lead Soldering Temperature	Tsol	260°C/5sec	-

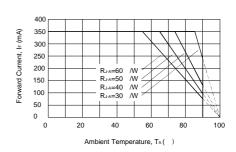
■Directivity



■Electrical -Optical Characteristics

Item	Symbol	Condition	Min.	Тур.	Max.	Unit
DC Forward Voltage	V_{F}	I _F =350mA	2.0	2.5	3.0	V
DC Reverse Current	I_R	V _R =5V	-	-	10	μΑ
Domi. Wavelength	λ_{D}	I _F =350mA	620	625	630	nm
Luminous Flux	Фи	I _F =350mA	40	50	-	lm
50% Power Angle	201/2	I _F =350mA	-	140	-	deg

■Forward Operating Current (DC)



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

LED & Application Technologies











VER C.3

http://www.optosupply.com

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

^{*1} Tolerance of measurements of dominant wavelength is ± 1 nm

^{*2} Tolerance of measurements of luminous flux is $\pm 15\%$

^{*3} Tolerance of measurements of forward voltage is±0.1V



Xeon 1 Power Red LED

OSR5XNE1E1E VER C.3

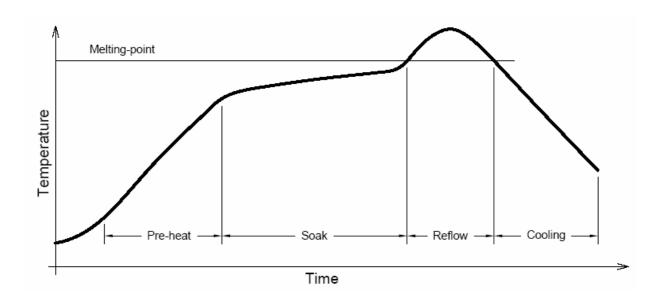
■ Soldering Heat Reliability:

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,

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.			



LED & Application Technologies









http://www.optosupply.com VER C.3