

Xeon 3 Power Blue LED

OSB4XNE3E1E

VER C.3

■Features

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

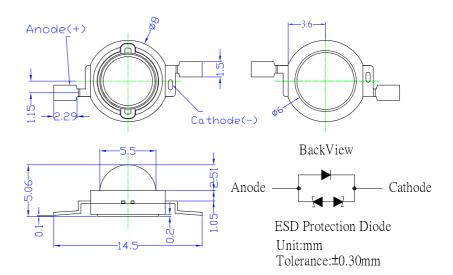
■Applications

- 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)

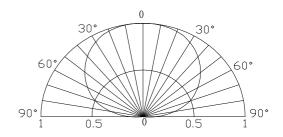
(Ta=25°C)



■Absolute Maximum Rating

Item	Symbol	Value	Unit
DC Forward Current	I_{F}	800	mA
Pulse Forward Current*	I_{FP}	1000	mA
Reverse Voltage	V _R	5	V
Power Dissipation	P_{D}	3200	mW
Operating Temperature	Topr	-30 ~ +85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tstg	-40~ +100	$^{\circ}\!\mathbb{C}$
Lead Soldering Temperature	Tsol	260°€/5sec	-

■Directivity



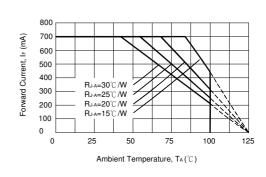
■Electrical -Optical Characteristics

Item	Symbol	Condition	Min.	Тур.	Max.	Unit
DC Forward Voltage V _F	37	I _F =350mA	3.0	3.3	4.0	V
	VF	I _F =700mA	3.5	3.8	4.5	V
DC Reverse Current	I_R	V _R =5V	-	-	10	μA
Domi. Wavelength	λ_{D}	I _F =700mA	455	460	465	nm
Luminous Flux	Фи	I _F =700mA	30	40	-	lm
50% Power Angle	2θ1/2	I _F =700mA	-	140	-	deg

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

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

■Forward Operating Current (DC)



LED & Application Technologies









http://www.optosupply.com VER C.0

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

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

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



Xeon 3 Power Blue LED

OSB4XNE3E1E VER C.3

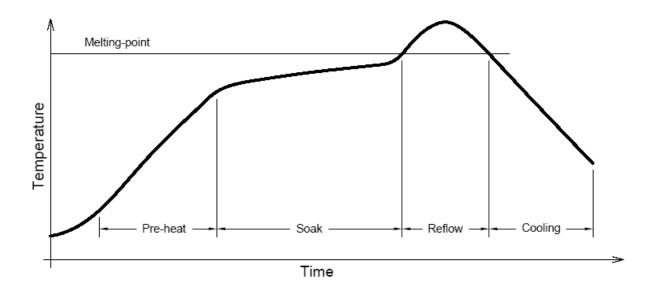
■ Soldering Heat Reliability (DIP):

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.0