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Xeon 3 Power 850nm Infrared Emitter LED

OSI3XNE3E1E

VER C.0

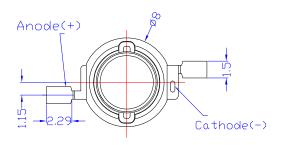
■Features

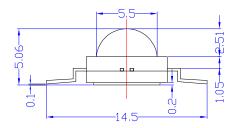
- Highest luminous flux
- Super energy efficiency
- Very long operating life
- Superior ESD protection

Applications

- · Night Vision
- Camera
- Outdoor./Indoor applications

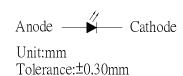
Outline Dimension





(Ta=25℃)

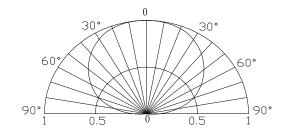
(Ta=25℃)



■Absolute Maximum Rating

Item	Symbol	Value	Unit
DC Forward Current	I_{F}	1000	mA
Pulse Forward Current*	I_{FP}	2000	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_{D}	2000	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

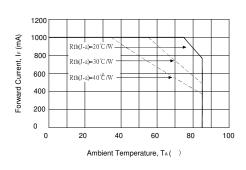


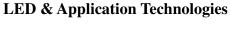
■Electrical -Optical Characteristics

Item	Symbol	Condition	Min.	Тур.	Max.	Unit
DC Forward Voltage	V_F	I _F =700mA	-	1.7	2.0	V
DC Reverse Current	I_R	V _R =5V	-	-	10	μΑ
Peak Wavelength	λ_{P}	I _F =700mA	-	850	-	nm
Radiant Power	Po	I _F =700mA	200	250	-	mW
50% Power Angle	2θ1/2	I _F =700mA	-	140	-	deg

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

■Forward Operating Current (DC)













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



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■ 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.		

