

Xeon 1 Power Red Star LED

OSR5XNE1E1S

■Features

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

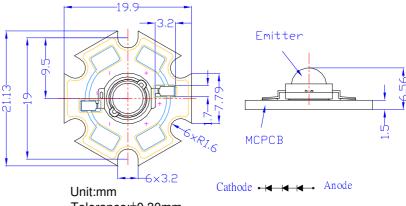
■Applications

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

Outline Dimension

(Ta=25°C)

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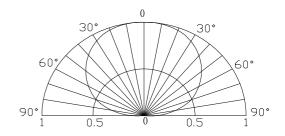
Tolerance:±0.30mm

Tolerances are for reference only

■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

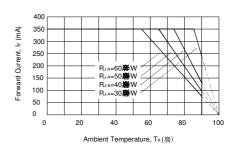


#Pulse width Max.10ms Duty ratio max 1/10

■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	2θ1/2	I _F =350mA	-	140	-	deg

■Forward Operating Current (DC)



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

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^{*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:



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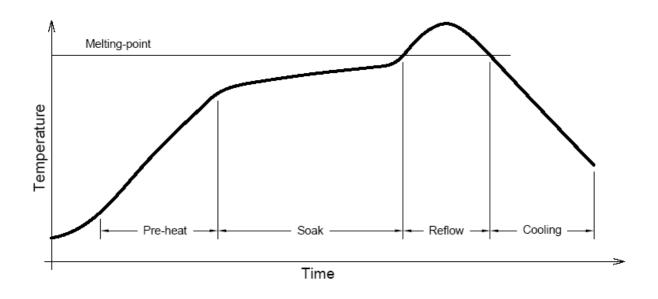
■ Soldering Heat Reliability:

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.				



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