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Light It Up

Tops 2 Power 805nm Infrared Emitter LED

OSI4XAT3C1E

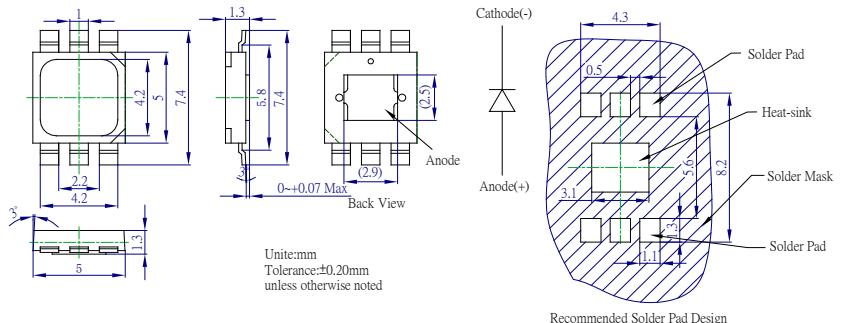
■Features

- High radiant power
- Super energy efficiency
- Superior ESD protection

■Applications

- Night Vision
- Camera
- Outdoor/Indoor applications

■Outline Dimension



■Absolute Maximum Rating (Ta=25°C)

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	2200	mW
Operating Temperature	T _{opr}	-30 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C
Lead Soldering Temperature	T _{sol}	260°C/10sec	-

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

■Electrical -Optical Characteristics (Ta=25°C)

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
DC Forward Voltage* ₁	V _F	I _F =700mA	-	1.8	2.2	V
DC Reverse Current	I _R	V _R =5V	-	-	10	µA
Peak Wavelength* ₂	λ _P	I _F =700mA	800	805	810	nm
Radiant Power* ₃	P _O	I _F =700mA	500	600	-	mW
50% Power Angle	2θ _{1/2}	I _F =700mA	-	120	-	deg

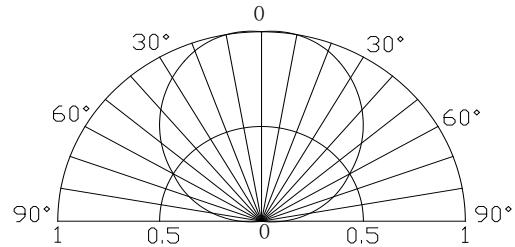
*₁ Tolerance of measurements of forward voltage is ±0.1V

*₂ Tolerance of measurements of peak wavelength is ±1nm

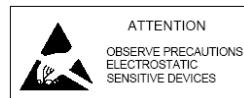
*₃ Tolerance of measurements of radiant power is ±15%

Note: Don't drive at rated current more than 5s without heat sink for Xeon 2 emitter series.

■Directivity



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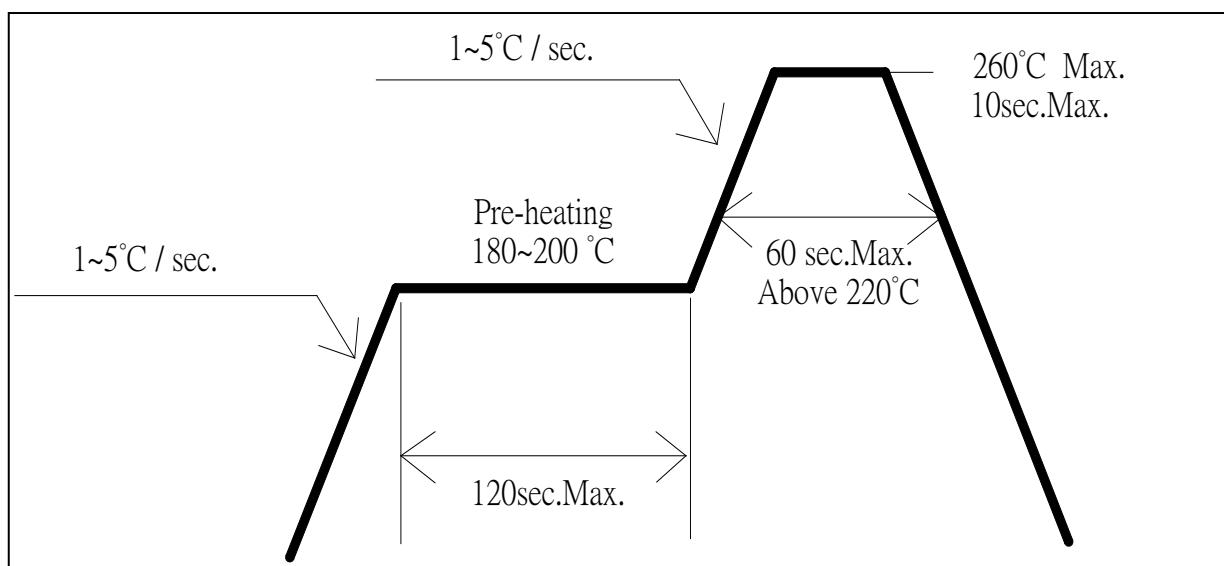
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■ **Soldering Conditions**

Reflow Soldering		Hand Soldering	
Pre-Heat	180 ~ 200°C		
Pre-Heat Time	120 sec. Max.		
Peak Temperature	260°C Max.	Temperature	350°C Max.
Dipping Time	10 sec. Max.	Soldering time	3 sec. Max. (one time only)
Condition	Refer to Temperature-profile		

• **Reflow Soldering Condition(Lead-free Solder)**



*Recommended soldering conditions vary according to the type of LED

*Although the recommended soldering conditions are specified in the above table, reflow, or hand soldering at the lowest possible temperature is desirable for the LEDs.

*A rapid-rate process is not recommended for cooling the LEDs down from the peak temperature.

• All SMD LED products are pb-free soldering available.

• Occasionally there is a brightness decrease caused by the influence of heat or ambient atmosphere during air reflow. It is recommended that the User use the nitrogen reflow method.

• 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.

• Reflow soldering should not be done more than two times.

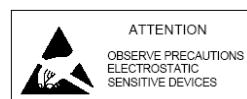
• When soldering, do not put stress on the LEDs during heating.

• After soldering, do not warp the circuit board.

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REACH
The new EU chemicals legislation





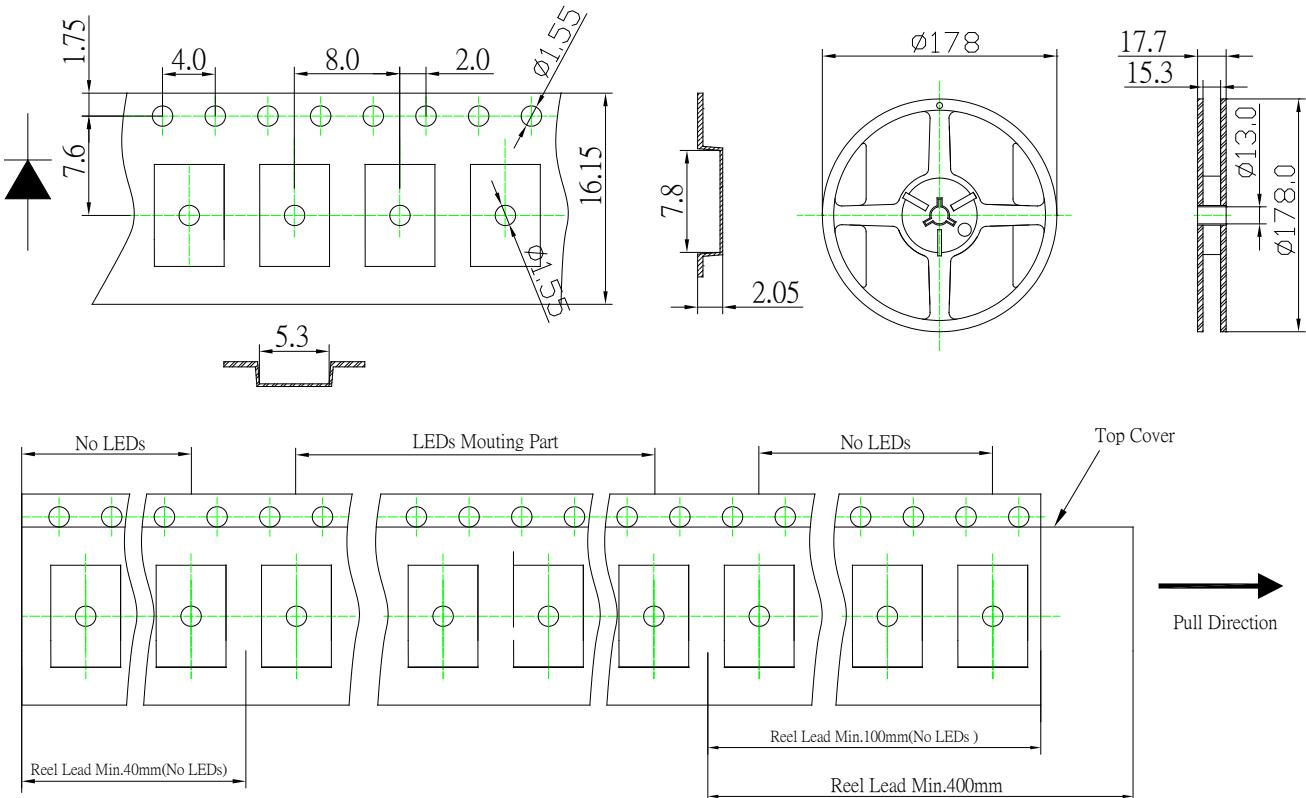
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■Packaging Dimension



Remarks: 1000pcs /Reel

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