

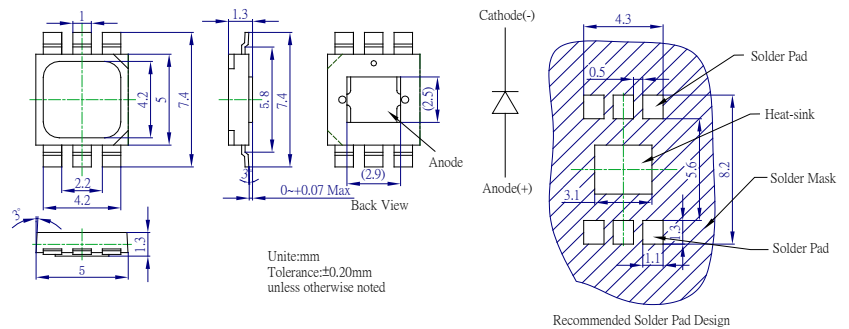
## ■Features

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

## ■Applications

- Night Vision
- Camera
- Outdoor/Indoor applications

## ■Outline Dimension



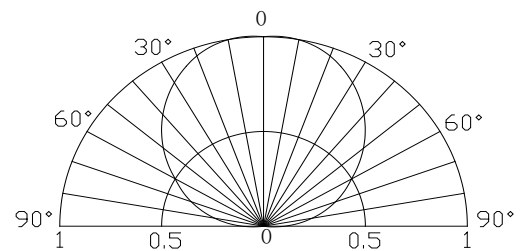
## ■Absolute Maximum Rating

(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

## ■Directivity



## ■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	$\lambda_P$	$I_F=700mA$	800	805	810	nm
Radiant Power*3	$P_o$	$I_F=700mA$	500	600	-	mW
50% Power Angle	$2\theta_{1/2}$	$I_F=700mA$	-	120	-	deg

\*1 Tolerance of measurements of forward voltage is  $\pm 0.1V$

\*2 Tolerance of measurements of peak wavelength is  $\pm 1nm$

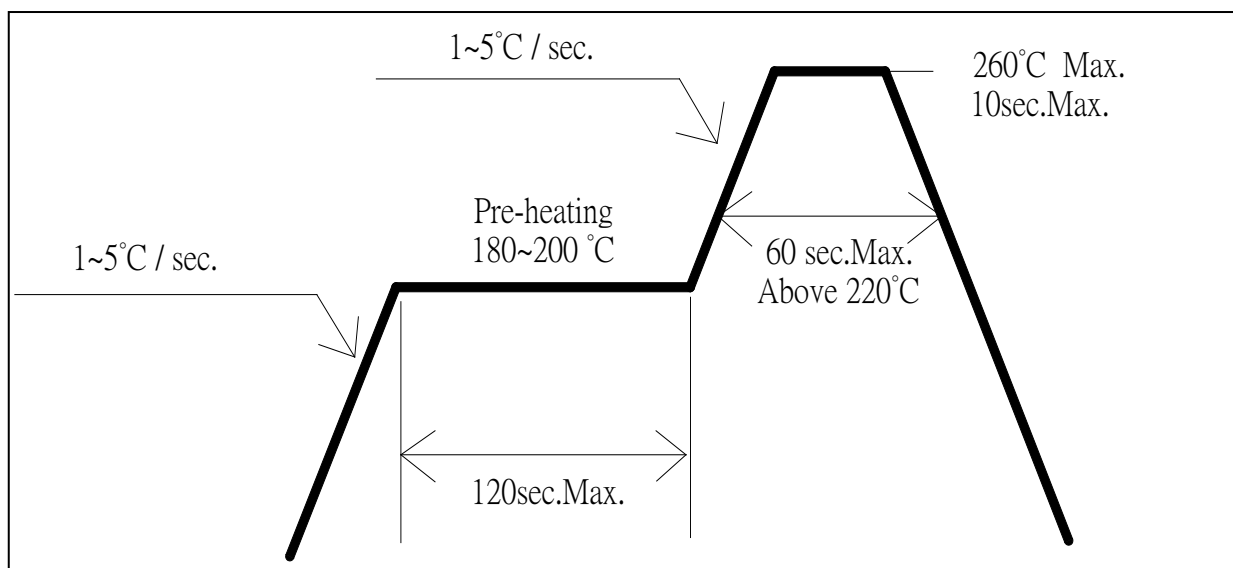
\*3 Tolerance of measurements of radiant power is  $\pm 15\%$

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

■ **Soldering Conditions**

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

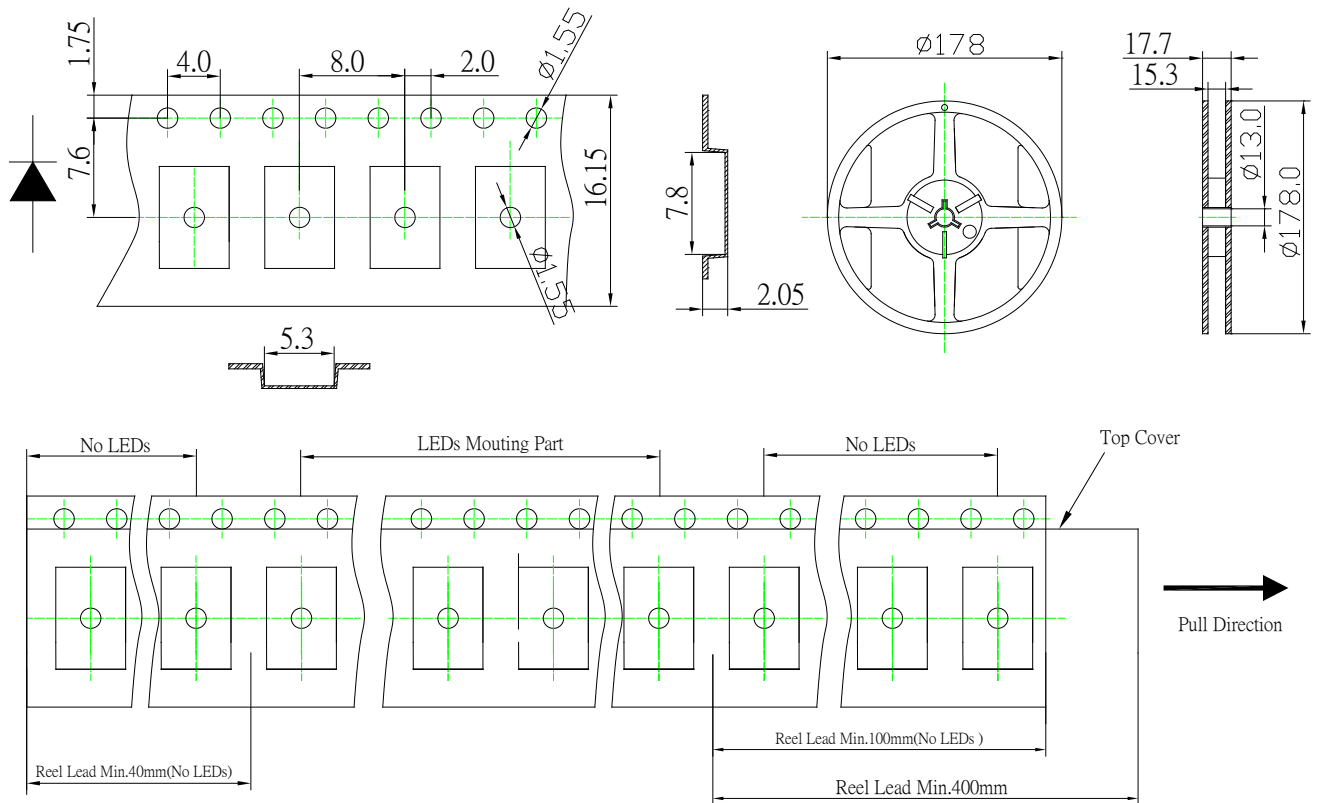
• Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable a double-head soldering iron should be used. It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.

• 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.

## ■Packaging Dimension



Remarks: 1000pcs /Reel