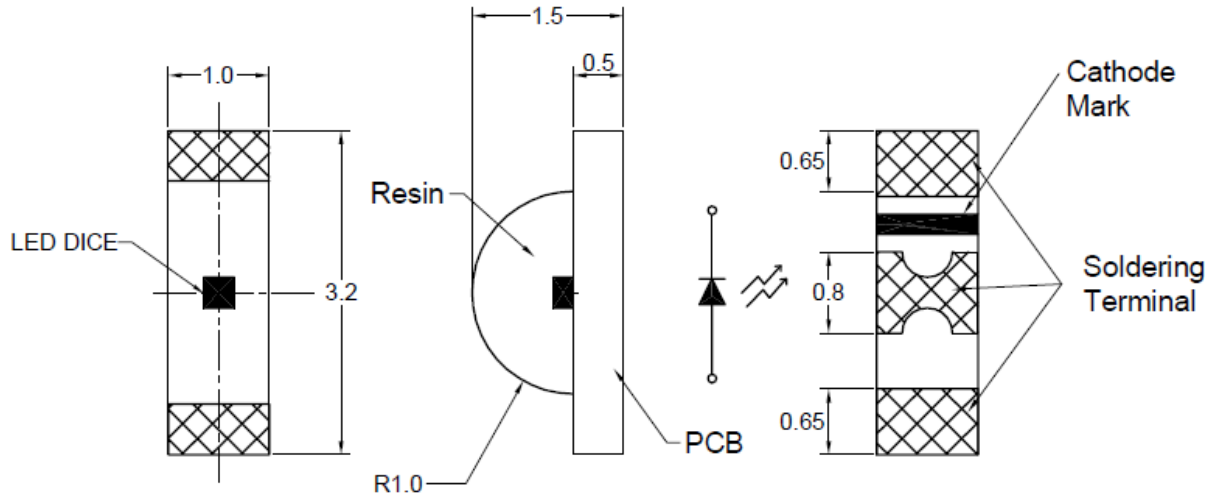
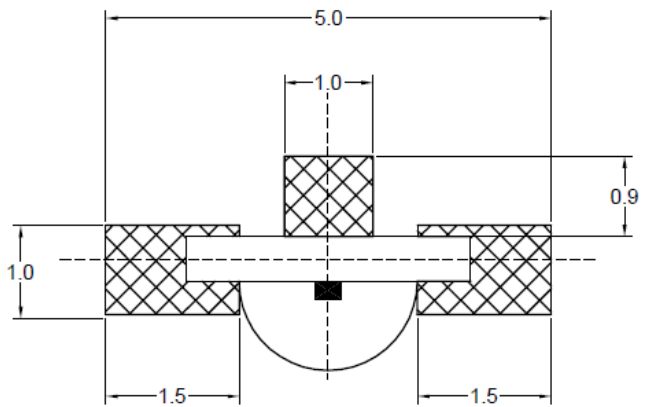


**SPECIFICATIONS** **CSR125B1C**

**PACKAGE OUTLINES**



**Recommended Solder Pad**



Notes:  
 1. All dimensions are in millimeters (inches);  
 2. Tolerances are  $\pm 0.1$ mm unless otherwise noted.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CSR125B1C	InGaN	Blue	Water Clear	130°



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**ABSOLUTE MAXIMUM RATINGS**
**(TA=25°C)**

Parameter	Symbol	Value	Unit
Forward current	I <sub>f</sub>	20	mA
Reverse current @ 5V	I <sub>r</sub>	50	μA
Power dissipation	P <sub>d</sub>	80	mW
Operating temperature range	T <sub>op</sub>	-40~+85	°C
Storage temperature range	T <sub>stg</sub>	-40~+90	°C
Peak pulsing current (1/10 duty f= 10KHz)	I <sub>fp</sub>	100	mA
Soldering Temperature	T <sub>SOL</sub>	Max 260°C for 5 sec Max	

**OPTICAL-ELECTRICAL CHARACTERISTICS**
**(TA=25°C)**

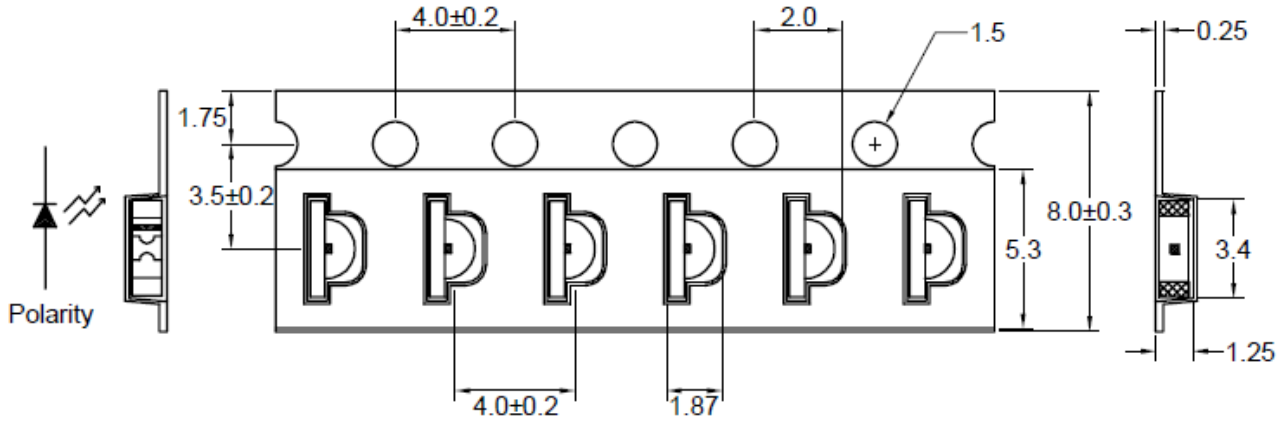
Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Wavelength at peak emission	λ <sub>peak</sub>	I <sub>F</sub> = 20mA	-	465	-	nm
Spectral half bandwidth	Δλ	I <sub>F</sub> = 20mA	-	30	-	nm
Dominant wavelength	λ <sub>dom</sub>	I <sub>F</sub> = 20mA	-	470	-	Nm
Forward Voltage	V <sub>f</sub>	I <sub>F</sub> = 20mA	-	3.5	4.0	V
Luminous intensity	I <sub>v</sub>	I <sub>F</sub> = 20mA	32	60	-	mcd
Viewing angle at 50% I <sub>v</sub>	2Θ ½	I <sub>F</sub> = 20mA	-	130	-	Deg

\*NOTE: 1. The forward voltage data did not including ±0.1V tolerance 2. The luminous intensity data did not including ±15% tolerance



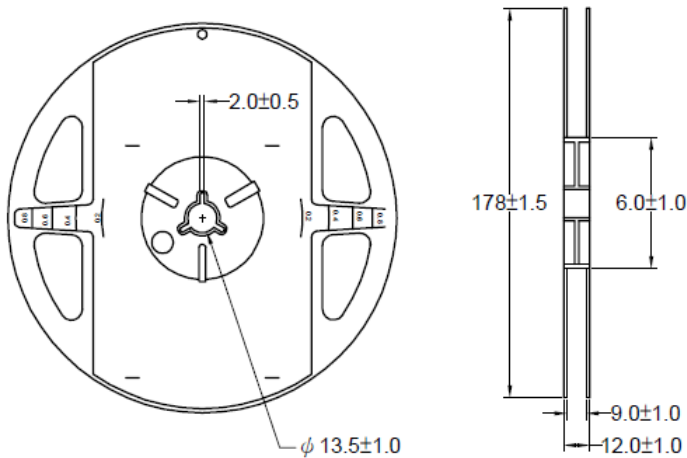
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## DIMENSIONS OF TAPE (Unit: mm)



NOTE: The tolerances unless mentioned is  $\pm 0.1$ mm, Angle  $\pm 0.5$ . Unit = mm.

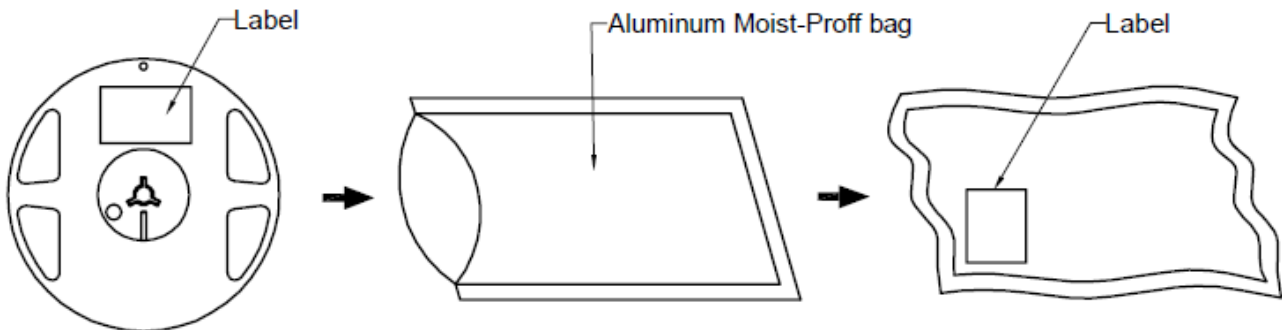
## REEL DIMENSIONS



### NOTES:

1. Empty component pockets are sealed with top cover tape;
2. The maximum number of missing lamps is two;
3. The cathode is oriented towards the tape sprocket hole.
4. 3,000pcs/Reel

## PACKAGING SPECIFICATION



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## OPTICAL CHARACTERISTIC CURVES

Fig.1 Forward current vs. Forward Voltage

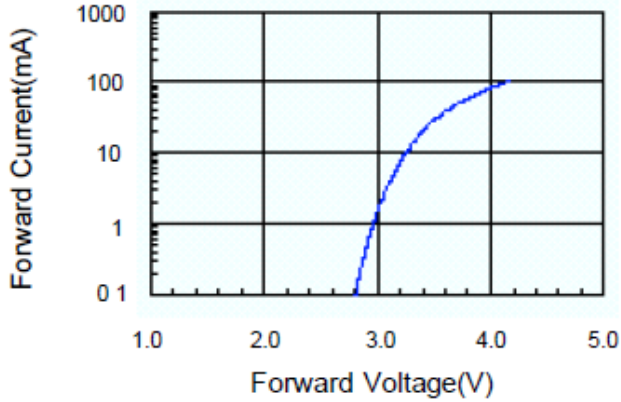


Fig.2 Relative Intensity vs. Forward Current

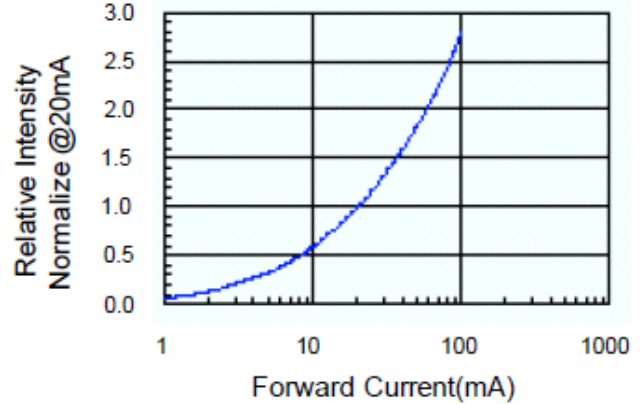


Fig.3 Forward Voltage vs. Temperature

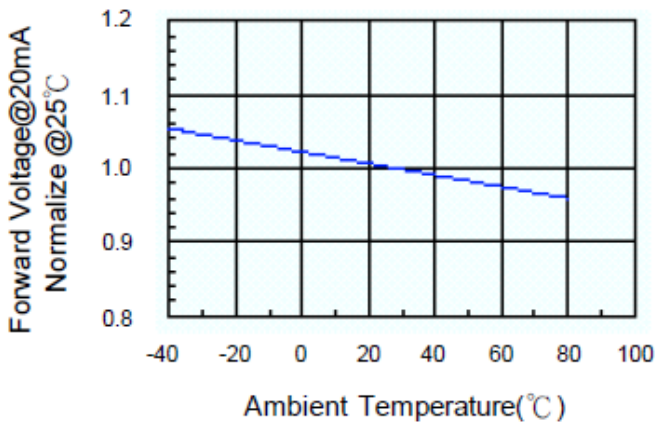
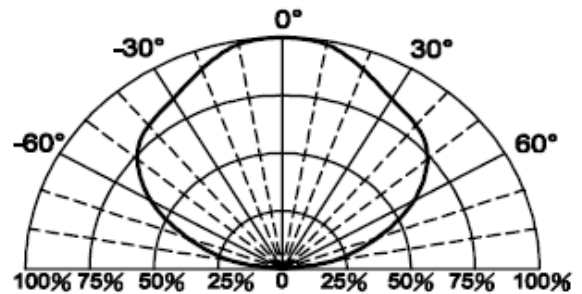
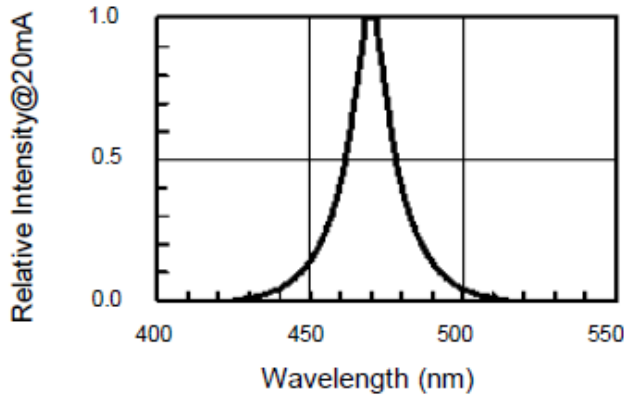
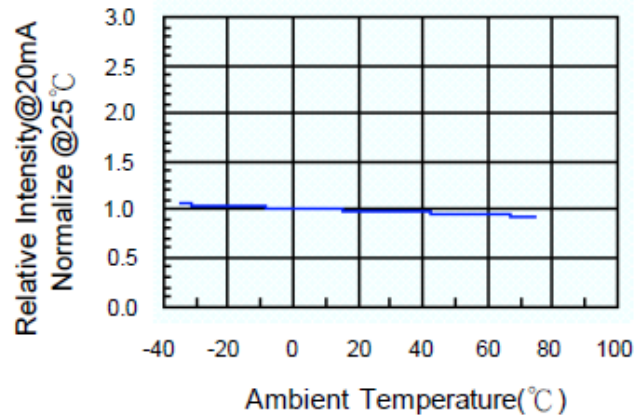


Fig.4 Relative Intensity vs. Temperature



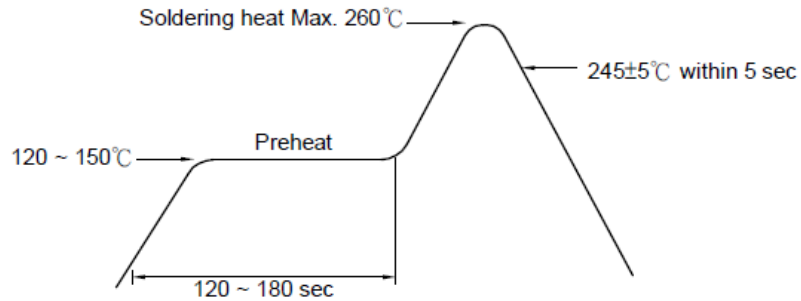
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## SOLDERING CONDITIONS – LAMP TYPE LED

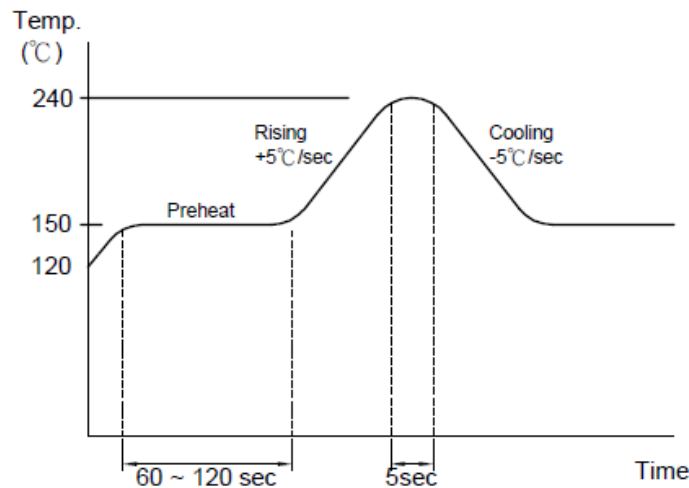
### 1. Hand Solder

Basic spec is  $\leq 280^{\circ}\text{C}$  3 sec one time only.

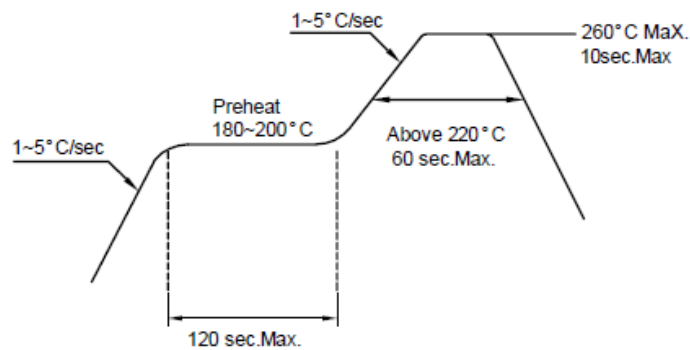
### 2. Wave Solder



### 3-1. LEAD Reflow Solder



### 3-2 PB-Free Reflow Solder



Reflow Soldering should not be done more than two times.



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