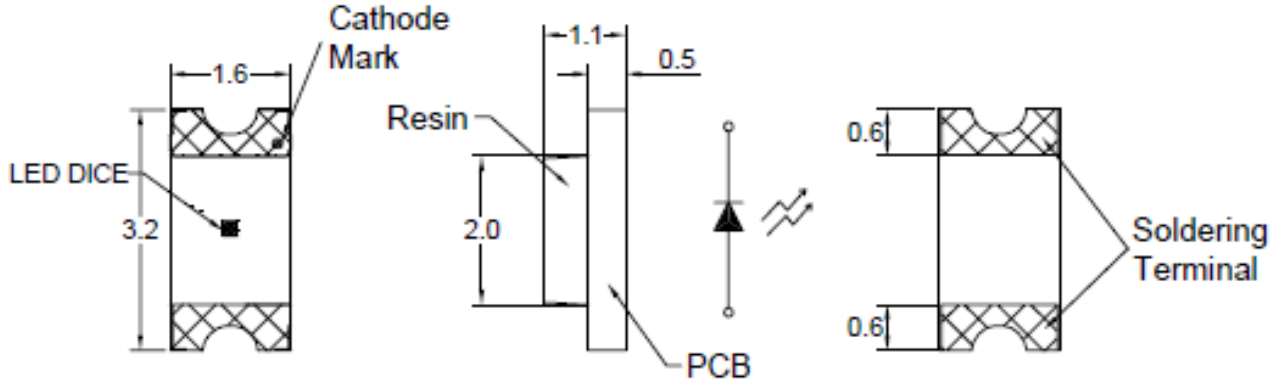


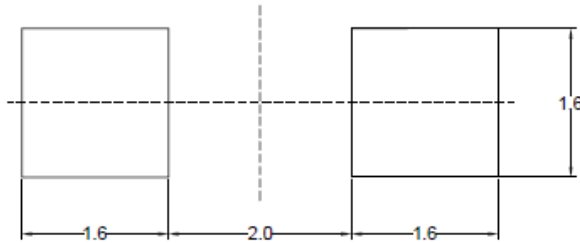
**SPECIFICATIONS** **CS126AB1C**

**PACKAGE OUTLINES**



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

**Recommended Solder Pad**



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

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CS126AB1C	InGaN/GaN	Blue	Water Clear	140°



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: [www.chromeled.com](http://www.chromeled.com)

**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>opr</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)**

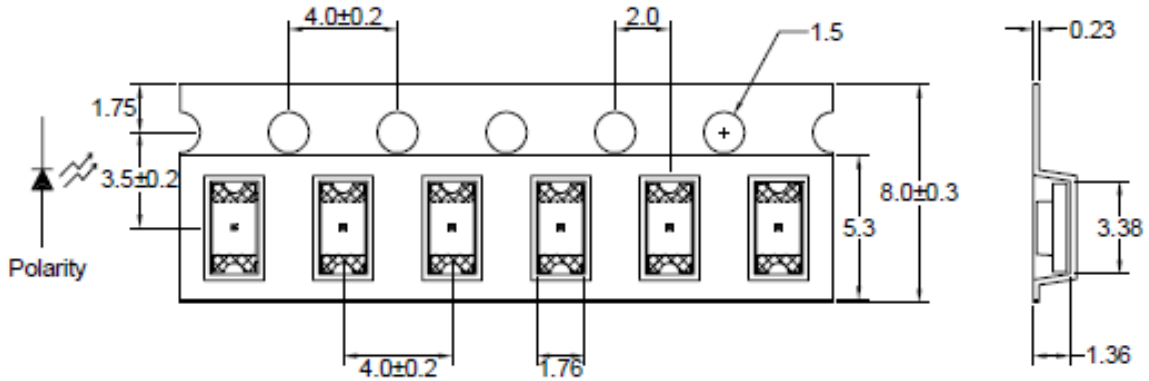
Parameter	Symbol	Test Condition	Value			Unit
			Min	Typ	Max	
Wavelength at peak emission	λ <sub>peak</sub>	I <sub>F</sub> = 20mA	-	465	-	nm
Spectral half bandwidth	Δλ	I <sub>F</sub> = 20mA	-	30	-	nm
Dominant wavelength	λ <sub>D</sub>	I <sub>F</sub> = 20mA	-	470	-	nm
Forward Voltage	V <sub>f</sub>	I <sub>F</sub> = 20mA	-	3.5	4.0	V
Luminous intensity	I <sub>v</sub>	I <sub>F</sub> = 20mA	50	100	-	mcd
Viewing angle at 50% I <sub>v</sub>	2θ ½	I <sub>F</sub> = 20mA	-	140		Deg

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



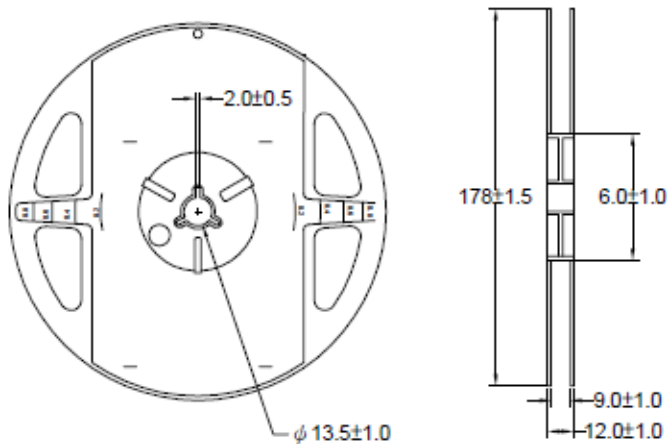
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: [www.chromeled.com](http://www.chromeled.com)

## DIMENSIONS OF TAPE (Unit: mm)



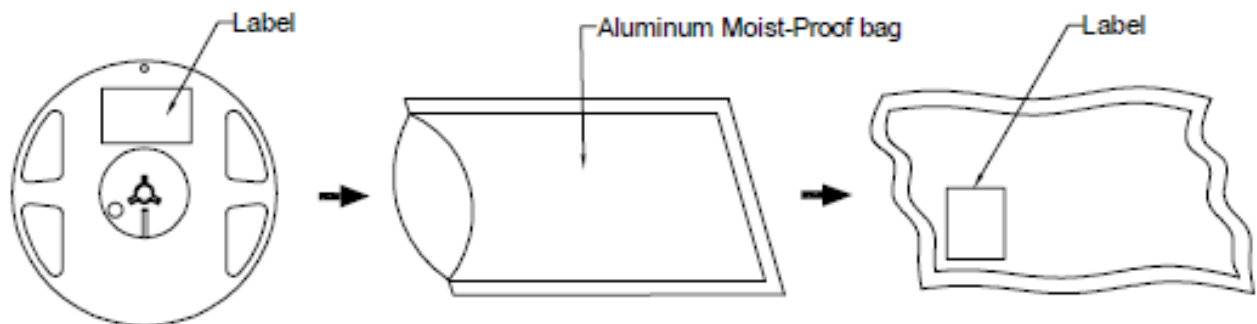
NOTE: The tolerances unless mentioned is  $\pm 0.1$ mm, Angle  $\pm 0.5$ . Unit = mm.

## 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



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: [www.chromeled.com](http://www.chromeled.com)

## OPTICAL CHARACTERISTIC CURVES

Fig.1 Forward current vs. Forward Voltage

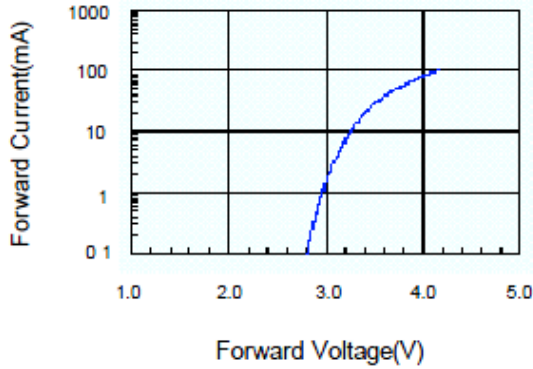


Fig.2 Relative Intensity vs. Forward Current

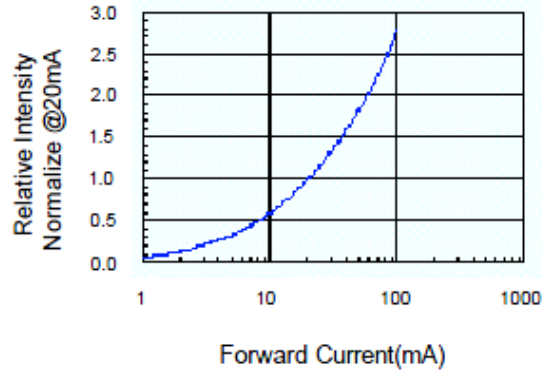


Fig.3 Forward Voltage vs. Temperature

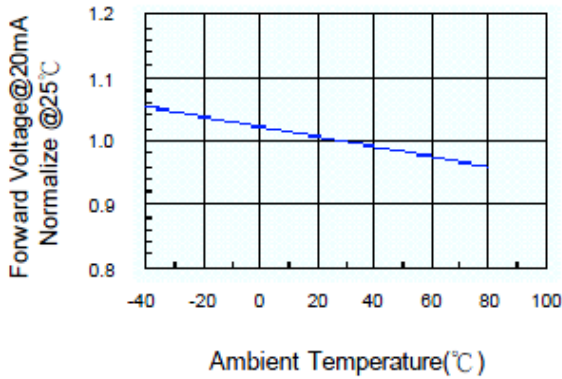


Fig.4 Relative Intensity vs. Temperature

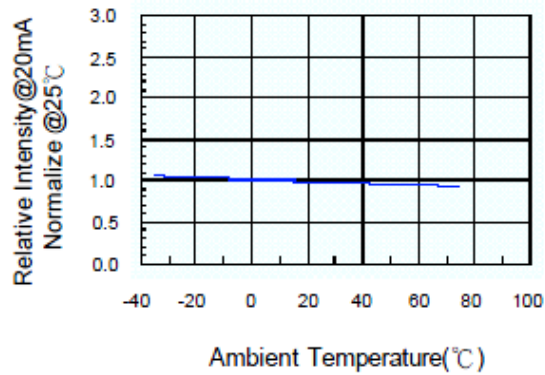


Fig.5 Relative Intensity vs. Wavelength

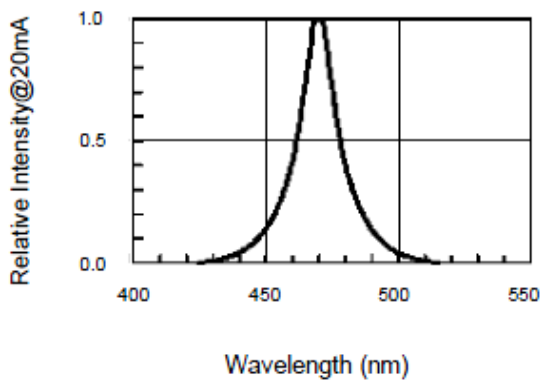
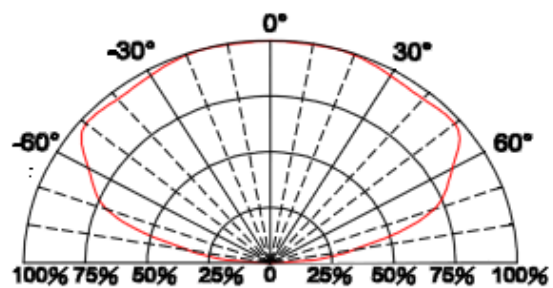


Fig.6 Directive Radiation



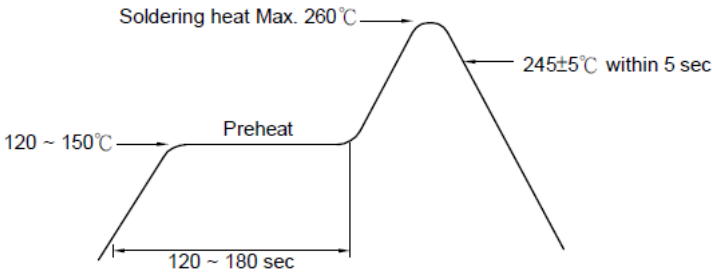
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: [www.chromeled.com](http://www.chromeled.com)

## SOLDERING CONDITIONS – LAMP TYPE LED

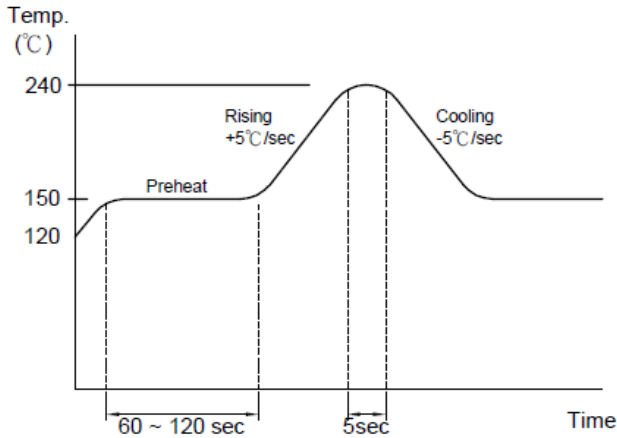
### 1. Hand Solder

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

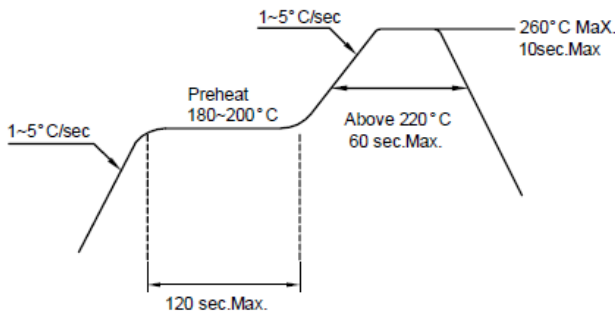
### 2. Wave Solder



### 3-1. LEAD Reflow Solder



### 3-2 PB-Free Reflow Solder



Reflow Soldering should not be done more than two times.

## LUMINOUS INTENSITY CLASSIFICATION

BIN CODE	Iv(mcd) at 20mA	
	Min.	Max.
P	50	80
Q	80	125
R	125	200
S	200	320
T	320	500

## DOMINANT WAVELENGTH CLASSIFICATION

BIN CODE	$\lambda D(\text{nm})$ at 20mA	
	Min.	Max.
0D	465	468
0C	468	471
0B	471	474
0A	474	477

## FORWARD VOLTAGE CLASSIFICATION

BIN CODE	Vf(v) at 20mA	
	Min.	Max.
1	2.8	3.0
2	3.0	3.2
3	3.2	3.4
4	3.4	3.6
5	3.6	3.8
6	3.8	4.0



ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: [www.chromeled.com](http://www.chromeled.com)