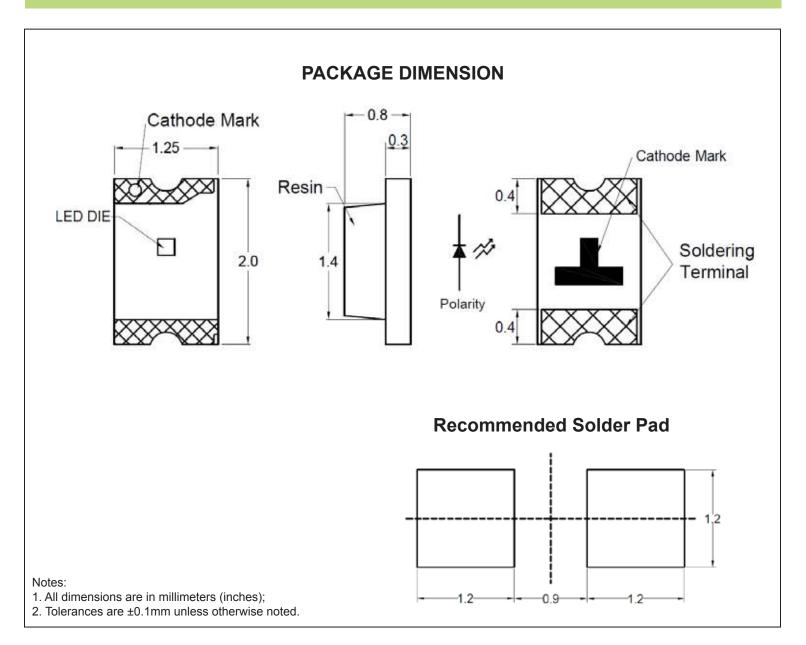


# SPECIFICATIONS CS85BB1C



Part Number	Chip Material	Color of Emission Lens Type		Viewing Angle	
CS85BB1C	InGaN	Blue	Water Clear	140°	

Chip Material InGaN

Chip Emitted
Blue





## **ABSOLUTE MAXIMUM RATINGS**

 $(TA=25^{\circ}C)$ 

Parameter	Symbol	Value	Unit	
Forward current	If	<b>2</b> 0	mA	
Reverse current @ 5V	lr	50	μA	
Power dissipation	₽d	80	mW	
Operating temperature range	Тор	-40~+85	°C	
Storage temperature range	Tstg	-40 <b>~</b> +90	<sup>⊕</sup> C	
Peak pulsing current (1/10 duty f= 10KHz)	Ifp	100	mA	
Soldering Temperature	T <sub>SOL</sub>	Max 260°C for 5 sec Max		

# OPTICAL-ELECTRICAL CHARACTERISTICS

(TA=25°C)

Description	Symbol	Test Condition	Value			11. 1
Parameter			Min	Тур	Max	Unit
Wavelength at peak emission	λpeak	I <sub>F</sub> = 20mA	-	465	=	nm
Spectral half bandwidth	Δλ	I <sub>F</sub> = 20mA		30	=	nm
Dominant wavelength	λdom	I <sub>F</sub> = 20mA	=	470	=	nm
Forward Voltage	Vf	I <sub>F</sub> = 20mA	2.8	3.3	3.8	٧
Luminous intensity	lv	I <sub>F</sub> = 20mA	50	150		mcd
Viewing angle at 50% lv	20 1/2	I <sub>F</sub> = 20mA	=	140	=	Deg

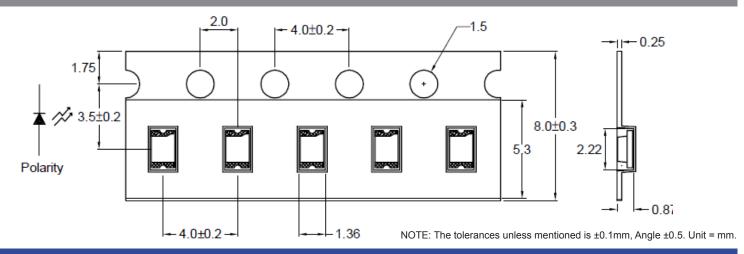
<sup>\*</sup>NOTE: 1. The forward voltage data did not including ±0.1V tolerance 2. The luminous intensity data did not including ±15% tolerance



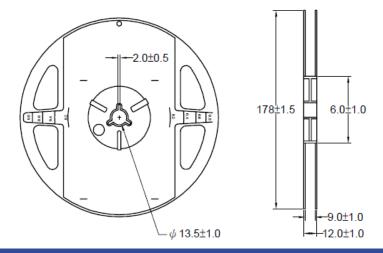
ChromeLED Corp. reserves the right to make changes at any time in order to supply the best product possible. The most current version of this document will always be available at: www.chromeled.com



# **DIMENSIONS OF TAPE (Unit: mm)**



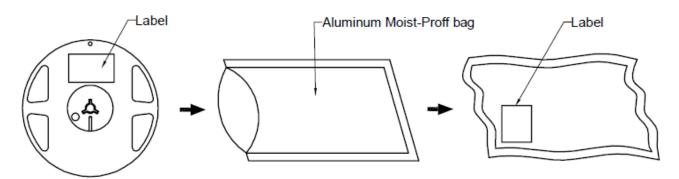
## **REEL DIMENSIONS**



#### 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. 4,000pcs/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



### **OPTICAL CHARACTERISTIC CURVES**

Fig.1 Forward current vs. Forward Voltage

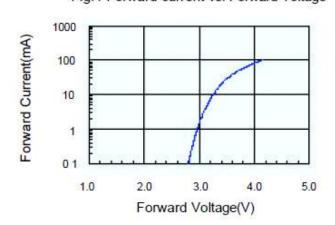


Fig.2 Relative Intensity vs. Forward Current

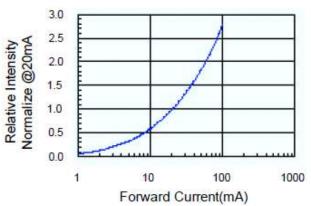


Fig.3 Forward Voltage vs. Temperature

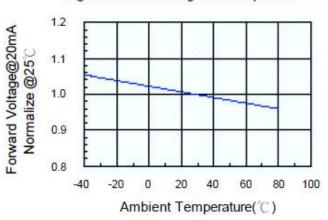


Fig.4 Relative Intensity vs. Temperature

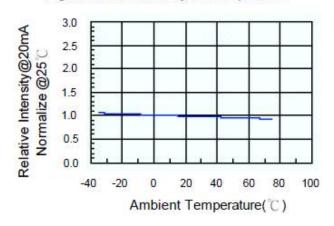


Fig.5 Relative Intensity vs. Wavelength

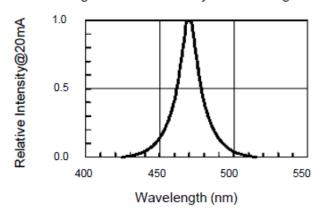
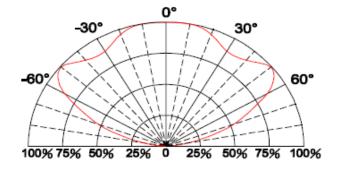


Fig.6 Directive Radiation





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

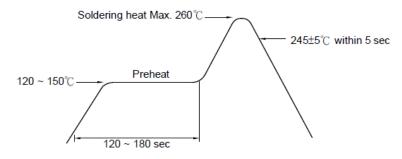


## **SOLDERING CONDITIONS – LAMP TYPE LED**

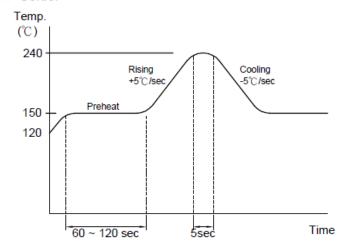
#### Hand Solder

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

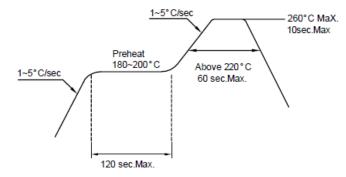
#### 2. Wave Solder



#### 3-1. LEAD Reflow Solder



#### 3-2 PB-Free Reflow Solder



Reflow Soldering should not be done more than two times.



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