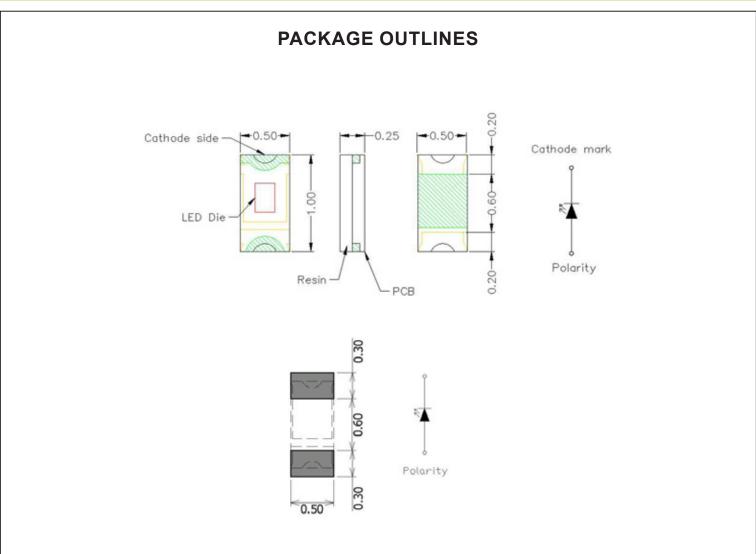


# SPECIFICATION CS42EGT2C



#### Notes:

- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm$  0.25mm (0.01") unless otherwised noted.
- 3. Specifications are subject to change without notice.

Part Number	Chip Material	Color of Emission	Lens Type	Viewing Angle
CS42EGT2C	InGaN	Green	Water Clear	130°



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



### **ABSOLUTE MAXIMUM RATINGS**

(TA=25°C)

Parameter	Symbol	Max Rating	Unit
Forward Current	lF	20	mA
Reverse Current @ 5V	lR	10	μΑ
Power Dissipation	Pd	80	mW
Operating Temperature Range	Тор	-40~+85	°C
Storage Temperature Range	Тѕтс	-40~+100	°C
Peak Pulsing Current (1/10 duty f = 10KHz)	lFP	30	mA
Soldering Temperature	TsoL	Max 260°C for 10 sec Max	

## **OPTICAL-ELECTRICAL CHARACTERISTICS**

(TA=25°C)

Darameter	Cymbol	Test Condition	Value			Lloit
Parameter	Symbol		Min	Тур	Max	Unit
Luminous Intensity	lv	IF = 5mA	1	200	-	mcd
Forward Voltage	VF	IF = 5mA	-	3.0	3.25	V
Reverse Leakage Current	lR	VR = 5V	-	10	-	μΑ
Viewing Angle at 50% Iv	201/2	IF = 5mA	ı	130	ı	Deg
Peak Wavelength	λР	IF = 5mA	-	520	-	nm
Dominant Wavelength	λD	IF = 5mA	1	525	-	nm

<sup>\*</sup>Tolerance of viewing angle: -10 / +5 deg.



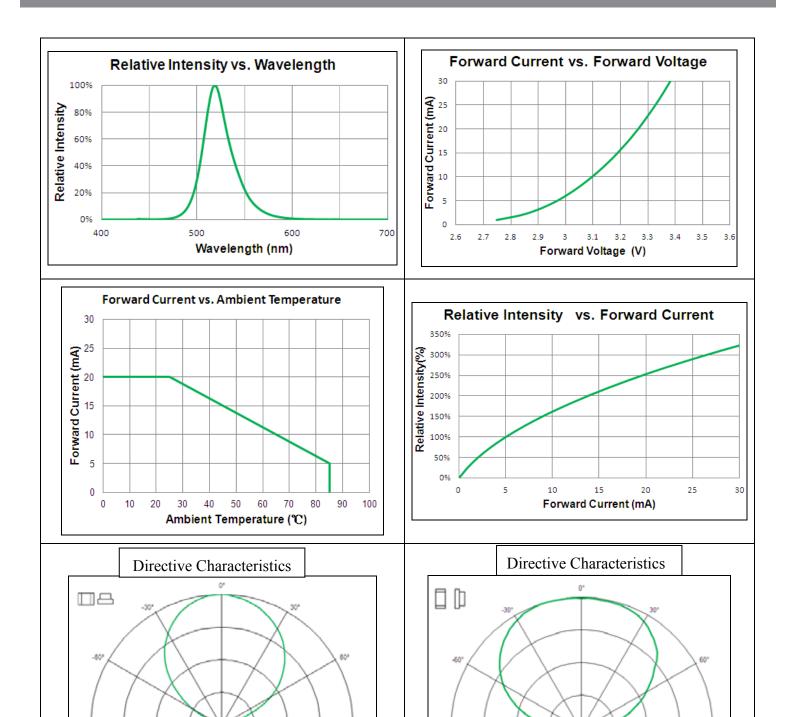
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100%

50%

### **OPTICAL CHARACTERISTIC CURVES**





100%

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100%

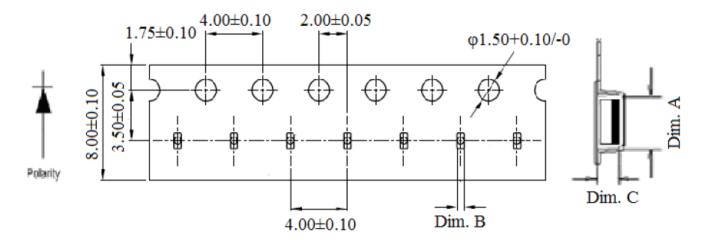
90/

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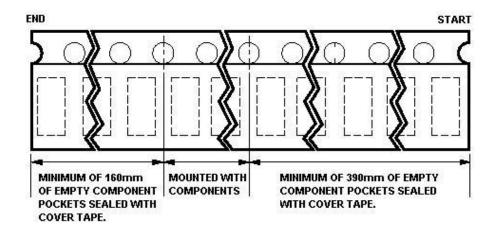
## **PACKAGING SPECIFICATION**

#### **Tape Dimension**



Dim. A	Dim. B	Dim. C	Q'ty/Reel
1.11±0.03	0.60±0.03	0.38±0.03	3K

Unit: mm







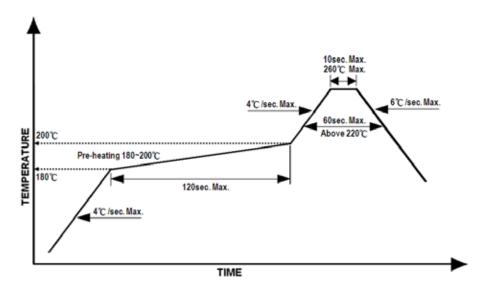
### **SOLDERING CONDITIONS**

#### **Reflow Soldering**

Recommend soldering paste specifications:

- 1. Operating temp.: Above 220°C ,60 sec.
- 2. Peak temp.:260°C Max.,10sec Max.
- 3. Reflow soldering should not be done more than two times.
- Never attempt next process until the component is cooled down to room temperature after reflow.
- 5. The recommended reflow soldering profile (measured on the surface of the LED terminal) is as following:

Lead-free Solder Profile



#### Reworking

- Rework should be completed within 5 seconds under 260°C.
- The iron tip must not come in contact with the copper foil.
- Twin-head type is preferred.

#### Cleaning

Following are cleaning procedures after soldering:

- An alcohol-based solvent such as isopropyl alcohol (IPA) is recommended.
- Temperature x Time should be 50°C x 30sec. or <30°C x 3min
- Ultrasonic cleaning: < 15W/ bath; bath volume ≤ 1liter</li>
- Curing: 100 °C max, <3min</li>



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