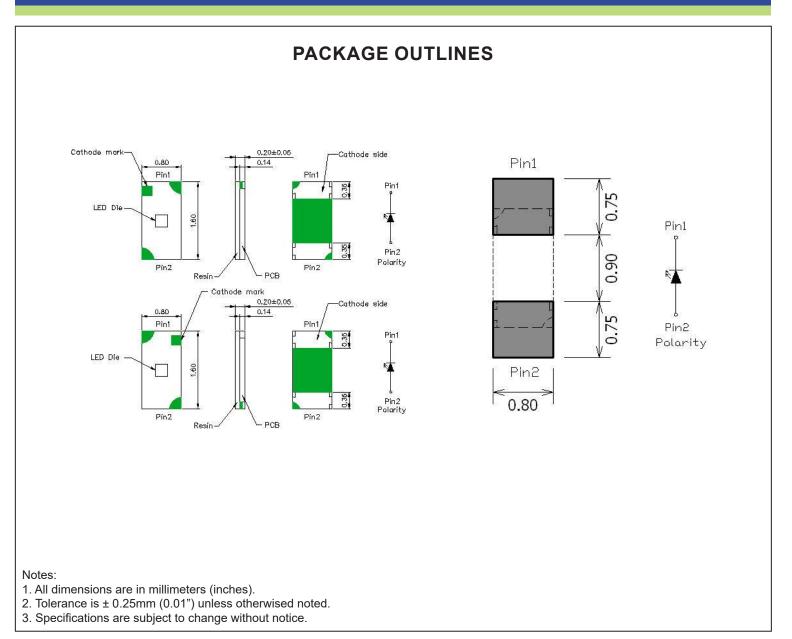


### **SPECIFICATION**



| Part Number | Chip Material | Color of Emission | Lens Type   | Viewing Angle |
|-------------|---------------|-------------------|-------------|---------------|
| CS63EB2C    | InGaN         | Blue              | Water Clear | 120°          |



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

CS63EB2C



## **ABSOLUTE MAXIMUM RATINGS**

### (TA=25°C)

| Parameter                                  | Symbol | Max Rating               | Unit |
|--|--------|--------------------------|------|
| Forward Current                            | lF     | 20                       | mA   |
| Reverse Current @ 5V                       | lR     | 10                       | μA   |
| Power Dissipation                          | Pd     | 78                       | 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)

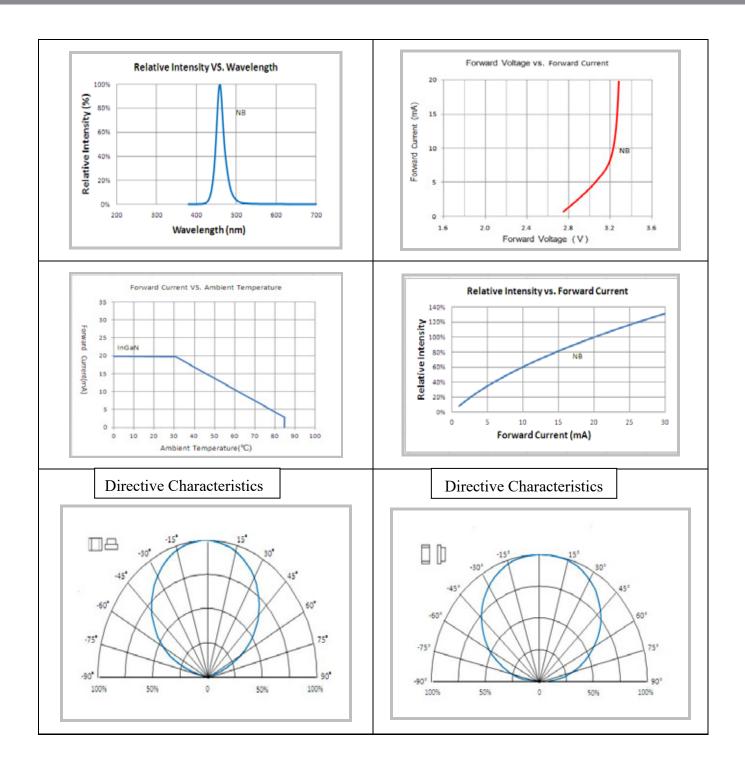
| Deremeter               | Symbol | Test Condition | Value |     |     | Linit |
|-------------------------|--------|----------------|-------|-----|-----|-------|
| Parameter               |        |                | Min   | Тур | Max | Unit  |
| Luminous Intensity      | ١v     | IF = 20mA      | -     | 100 | -   | mcd   |
| Forward Voltage         | Vf     | IF = 20mA      | -     | 3.3 | 39  | V     |
| Reverse Leakage Current | lr     | VR = 5V        | -     | 10  | -   | μA    |
| Viewing Angle at 50% Iv | 201/2  | IF = 20mA      | -     | 120 | -   | Deg   |
| Peak Wavelength         | λP     | IF = 20mA      | -     | 468 | -   | nm    |
| Dominant Wavelength     | λd     | IF = 20mA      | -     | 470 | -   | nm    |

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





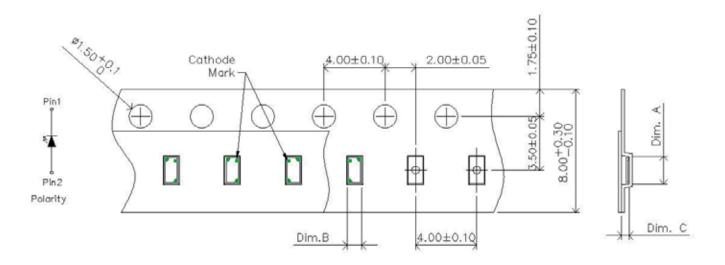
## **OPTICAL CHARACTERISTIC CURVES**



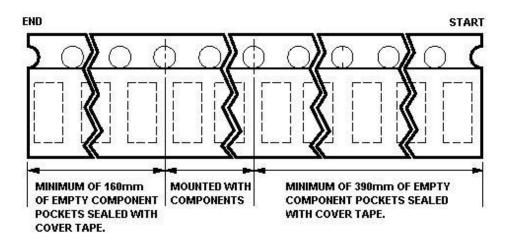




## PACKAGING SPECIFICATION



| Dim. A    | Dim. B    | Dim. C    | Q'ty/Reel |
|-----------|-----------|-----------|-----------|
| 1.77±0.05 | 0.97±0.05 | 0.51±0.05 | 3K        |





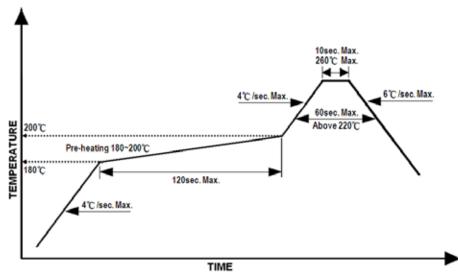


### SOLDERING CONDITIONS

#### **Reflow Soldering**

Recommend soldering paste specifications:

- 1. Operating temp.: Above 220 ℃ ,60 sec.
- 2. Peak temp.:260℃ Max.,10sec Max.
- 3. Reflow soldering should not be done more than two times.
- 4. 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℃.
- 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℃ x 30sec. or <30℃ x 3min
- Ultrasonic cleaning: < 15W/ bath; bath volume ≤ 1liter
- Curing: 100℃ max, <3min

