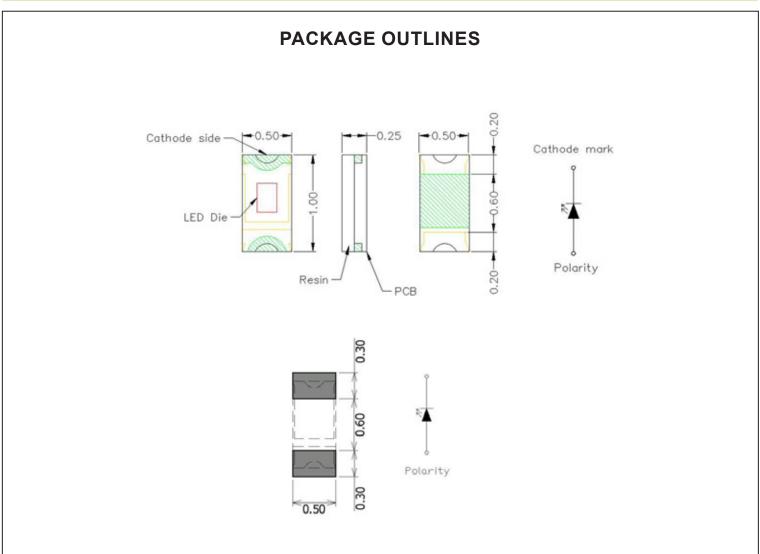


SPECIFICATION CS42EB2C



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 |
|-------------|---------------|-------------------|-------------|---------------|
| CS42EB2C | InGaN | Blue | Water Clear | 130° |





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)

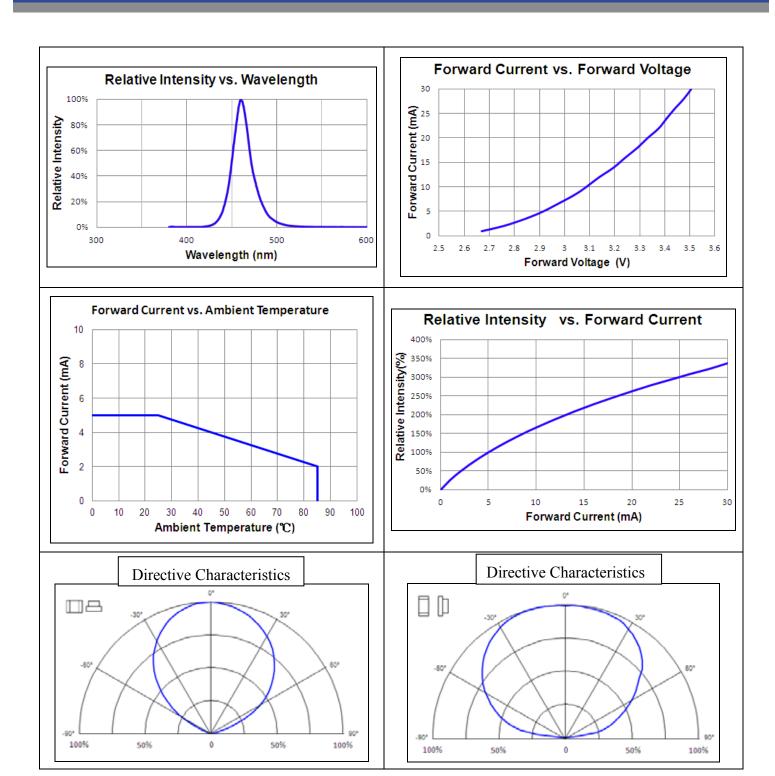
| Darameter | Symbol | Test Condition | Value | | | Lloit |
|-------------------------|--------|----------------|-------|-----|------|-------|
| Parameter | | | Min | Тур | Max | Unit |
| Luminous Intensity | lv | IF = 5mA | - | 30 | - | mcd |
| Forward Voltage | VF | IF = 5mA | - | 2.8 | 3.15 | V |
| 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 | - | 460 | - | nm |
| Dominant Wavelength | λD | IF = 5mA | - | 465 | - | nm |

^{*}Tolerance of viewing angle: -10 / +5 deg.





OPTICAL CHARACTERISTIC CURVES

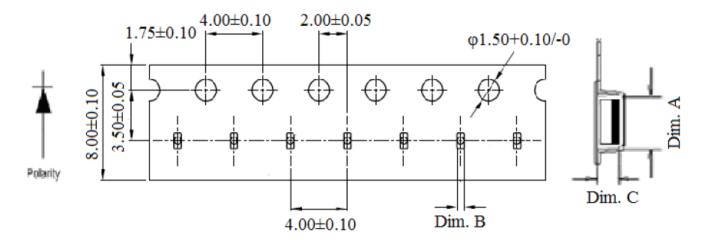






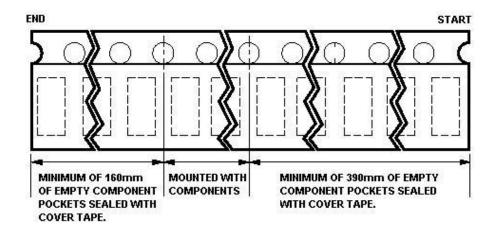
PACKAGING SPECIFICATION

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







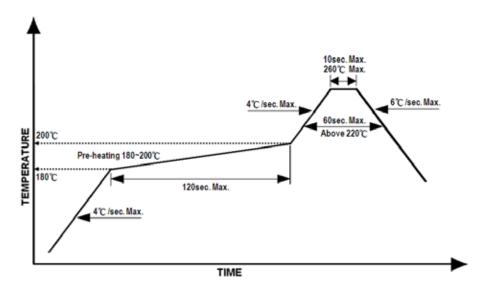
SOLDERING CONDITIONS

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
- Curing: 100 °C max, <3min

