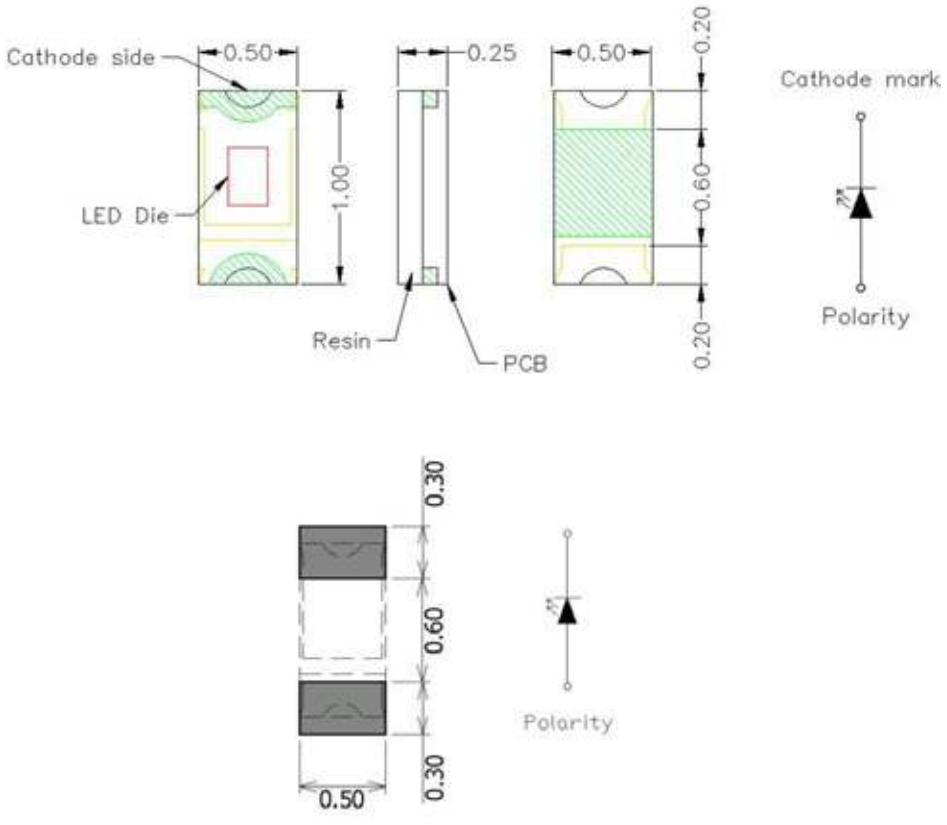


SPECIFICATION **CS42EGT2C**
PACKAGE OUTLINES


- Notes:
1. All dimensions are in millimeters (inches).
 2. Tolerance is $\pm 0.25\text{mm}$ (0.01") unless otherwise 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° |



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

| Parameter | Symbol | Max Rating | Unit |
|--|--------|--------------------------|------|
| Forward Current | IF | 20 | mA |
| Reverse Current @ 5V | IR | 10 | μA |
| Power Dissipation | Pd | 80 | mW |
| Operating Temperature Range | TOP | -40~+85 | °C |
| Storage Temperature Range | TSTG | -40~+100 | °C |
| Peak Pulsing Current (1/10 duty f = 10KHz) | IFP | 30 | mA |
| Soldering Temperature | TSOL | Max 260°C for 10 sec Max | |

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

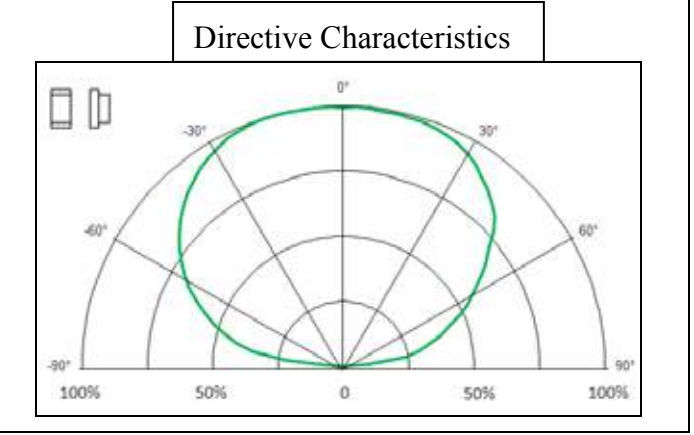
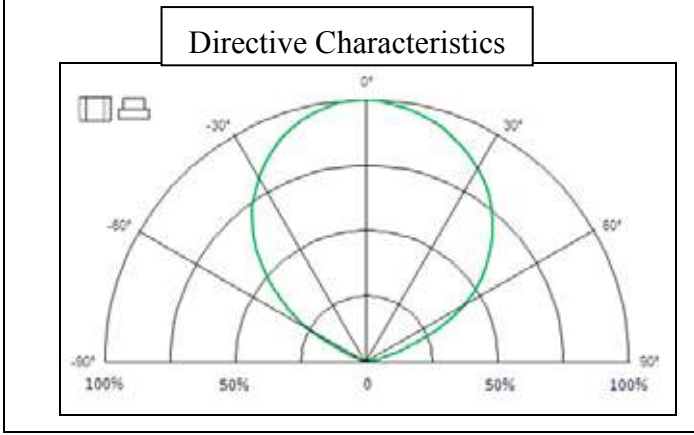
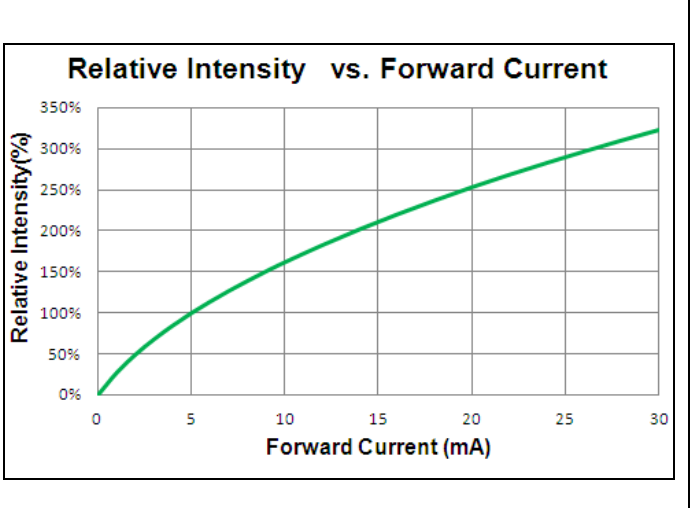
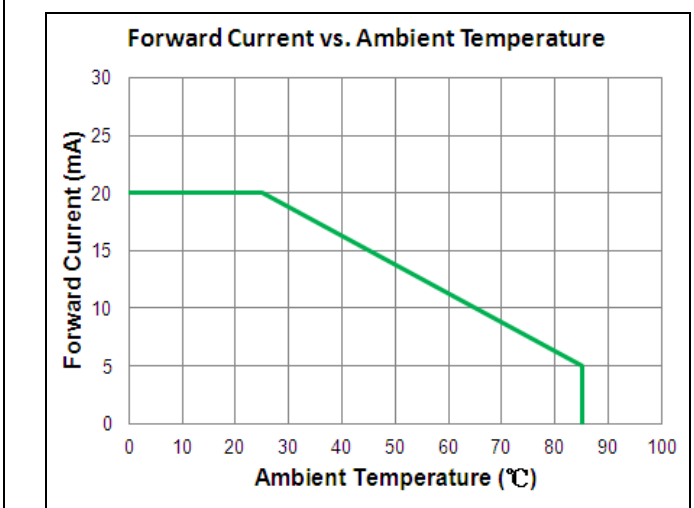
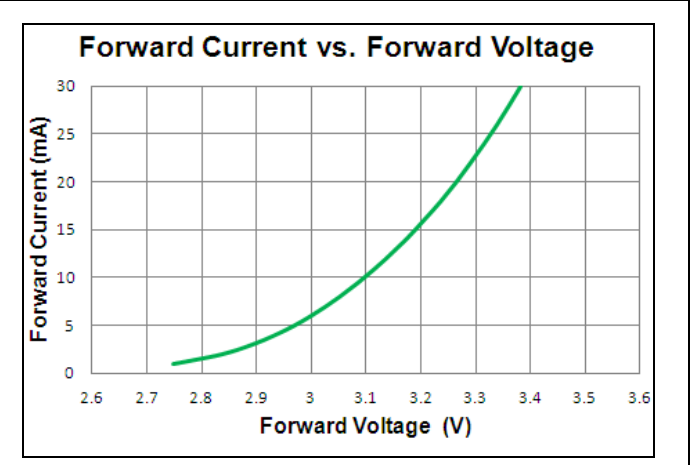
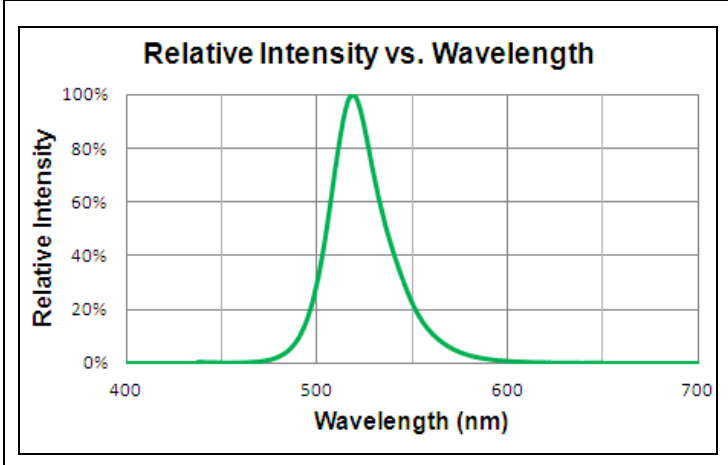
| Parameter | Symbol | Test Condition | Value | | | Unit |
|-------------------------|--------|----------------|-------|-----|------|------|
| | | | Min | Typ | Max | |
| Luminous Intensity | Iv | IF = 5mA | - | 200 | - | mcd |
| Forward Voltage | VF | IF = 5mA | - | 3.0 | 3.25 | V |
| Reverse Leakage Current | IR | VR = 5V | - | 10 | - | μA |
| Viewing Angle at 50% Iv | 2θ1/2 | IF = 5mA | - | 130 | - | Deg |
| Peak Wavelength | λP | IF = 5mA | - | 520 | - | nm |
| Dominant Wavelength | λD | IF = 5mA | - | 525 | - | nm |

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



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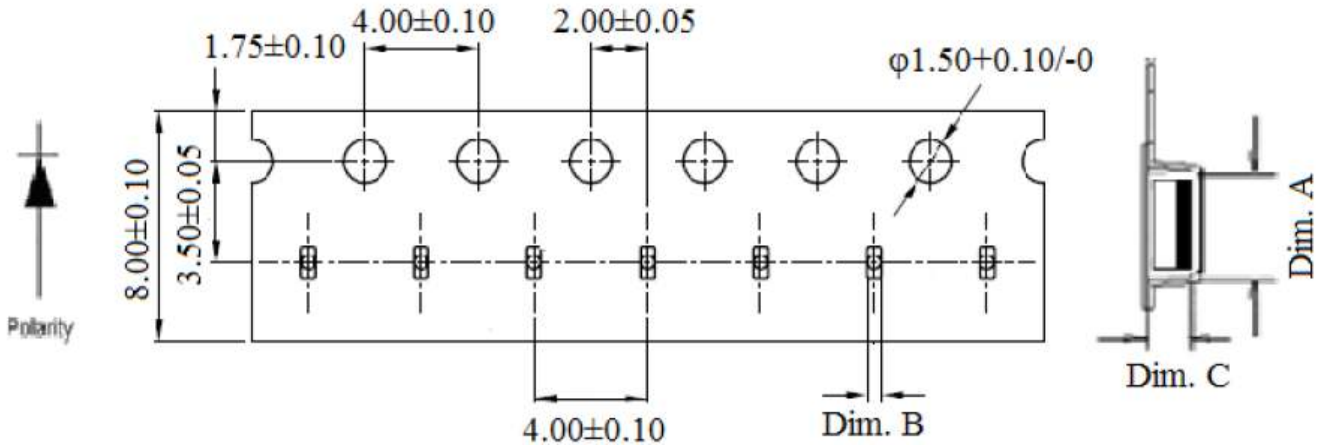
OPTICAL CHARACTERISTIC CURVES



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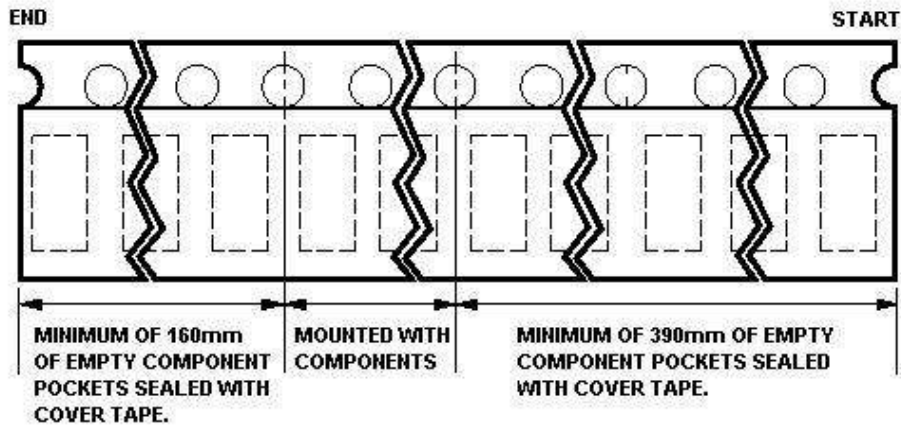
PACKAGING SPECIFICATION

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



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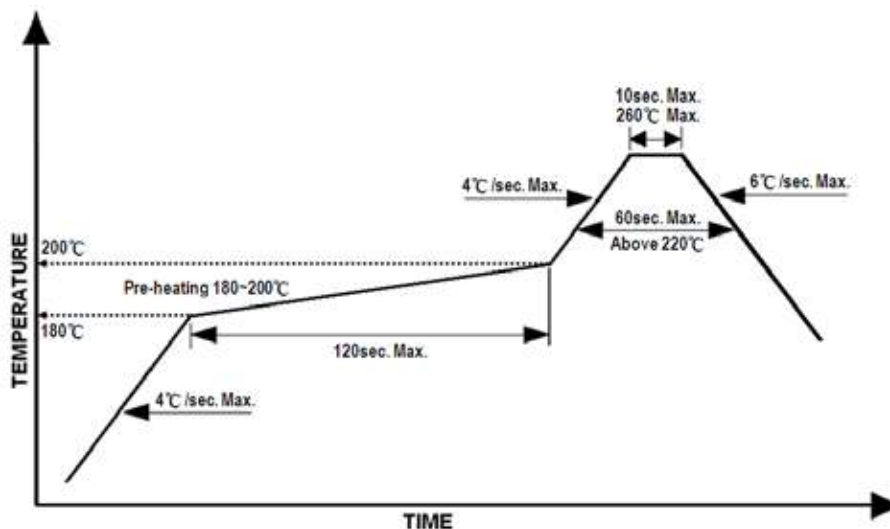
SOLDERING CONDITIONS

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.
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°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



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