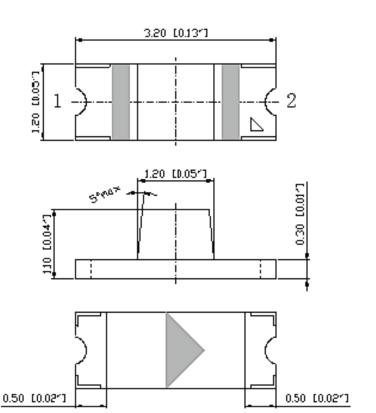
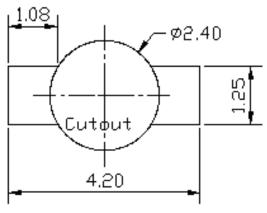


SPECIFICATION CS124AW2C-R

PACKAGE OUTLINES



RECOMMENDED SOLDER PAD



| ITEM | MATERIALS | | |
|---------------|-----------|--|--|
| Resin (Mold) | Ероху | | |
| Lens Color | Yellow | | |
| Dice | InGaN | | |
| Emitted Color | White | | |

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 | |
|-------------|---------------|-------------------|-----------------|---------------|--|
| CS124AW2C-R | InGaN | White | Yellow Diffused | 140° | |





ABSOLUTE MAXIMUM RATINGS

(TA=25°C)

| Parameter | Symbol | Max Rating | Unit | |
|--|--------|-------------------------|------|--|
| Forward Current | lF | 30 | mA | |
| Reverse Current @ 5V | lR | 10 | μΑ | |
| Power Dissipation | Pd | 111 | mW | |
| Operating Temperature Range | Тор | -40~+85 | °C | |
| Storage Temperature Range | Тѕтс | -40~+85 | °C | |
| Peak Pulsing Current (1/10 duty f = 10KHz) | lFP | 125 | mA | |
| Soldering Temperature | TsoL | Max 260°C for 5 sec Max | | |

OPTICAL-ELECTRICAL CHARACTERISTICS

(TA=25°C)

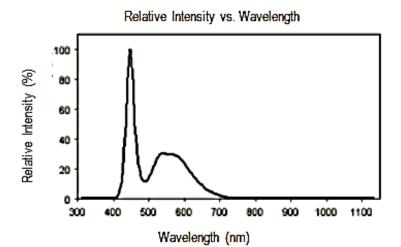
| Parameter | Symbol | Test Condition | Value | | | Lloit |
|-------------------------|--------|----------------|-------|-------|-----|-------|
| | | | Min | Тур | Max | Unit |
| Luminous Intensity | lv | IF = 20mA | 250 | 460 | 1 | mcd |
| Forward Voltage | VF | IF = 20mA | - | 3.1 | 3.7 | V |
| Reverse Leakage Current | lR | VR = 5V | - | - | 10 | μΑ |
| Viewing Angle at 50% Iv | 201/2 | IF = 20mA | 1 | 140 | ı | Deg |
| CIE Coordinates | X | IF = 20mA | 1 | 0.308 | - | - |
| | Υ | IF = 20mA | 1 | 0.312 | ı | - |

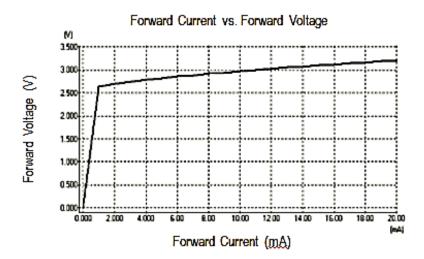
^{*}Tolerance of viewing angle: -10 / +5 deg.



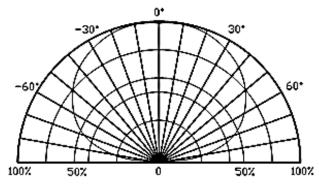


OPTICAL CHARACTERISTIC CURVES







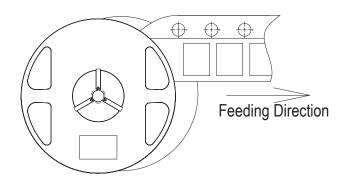




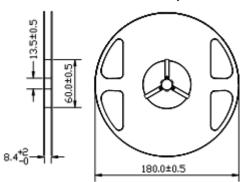


PACKAGING SPECIFICATION

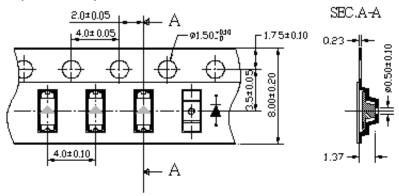
Feeding Direction



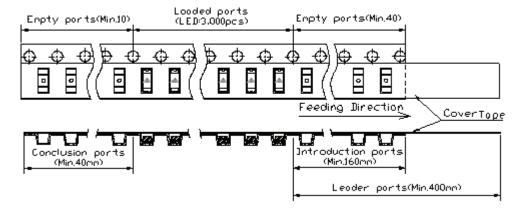
Dimensions of Reel (Unit: mm)



Dimensions of Tape (Unit: mm)



Arrangement of Tape



Notes:

- 1. Empty component pockets are sealed with top cover tape
- 2. Maximum number of missing lamp is two
- 3. Cathode is oriented towards the tape sprocket hole
- 4. 3000 pcs/Reel

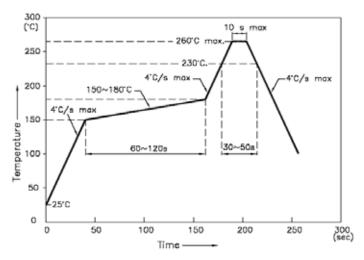




SOLDERING CONDITIONS

SOLDERING PROFILE

Reflow Temp/Time



- We recommend the reflow temperature 245°C (±5 °C) & the maximum soldering temperature should be limited to 260 °C.
- Do not cause stress to the epoxy resin while it is exposed to high temperature.
- Number of reflow process should be 2 times or less.
- Soldering Iron:
 - Basic spec is ≤ 5 sec when 260 °C. If the temperature is higher, time should be shorter (+10 °C → -1 sec). Power dissipation of iron should be smaller than 20W and temperature should be controllable. Surface temperature of the device should be under 230 °C.
- Rework:
 - Customer must finish rework within 5 sec under 260 °C
 - The head of iron cannot touch copper foil
 - Twin-head type is preferred

