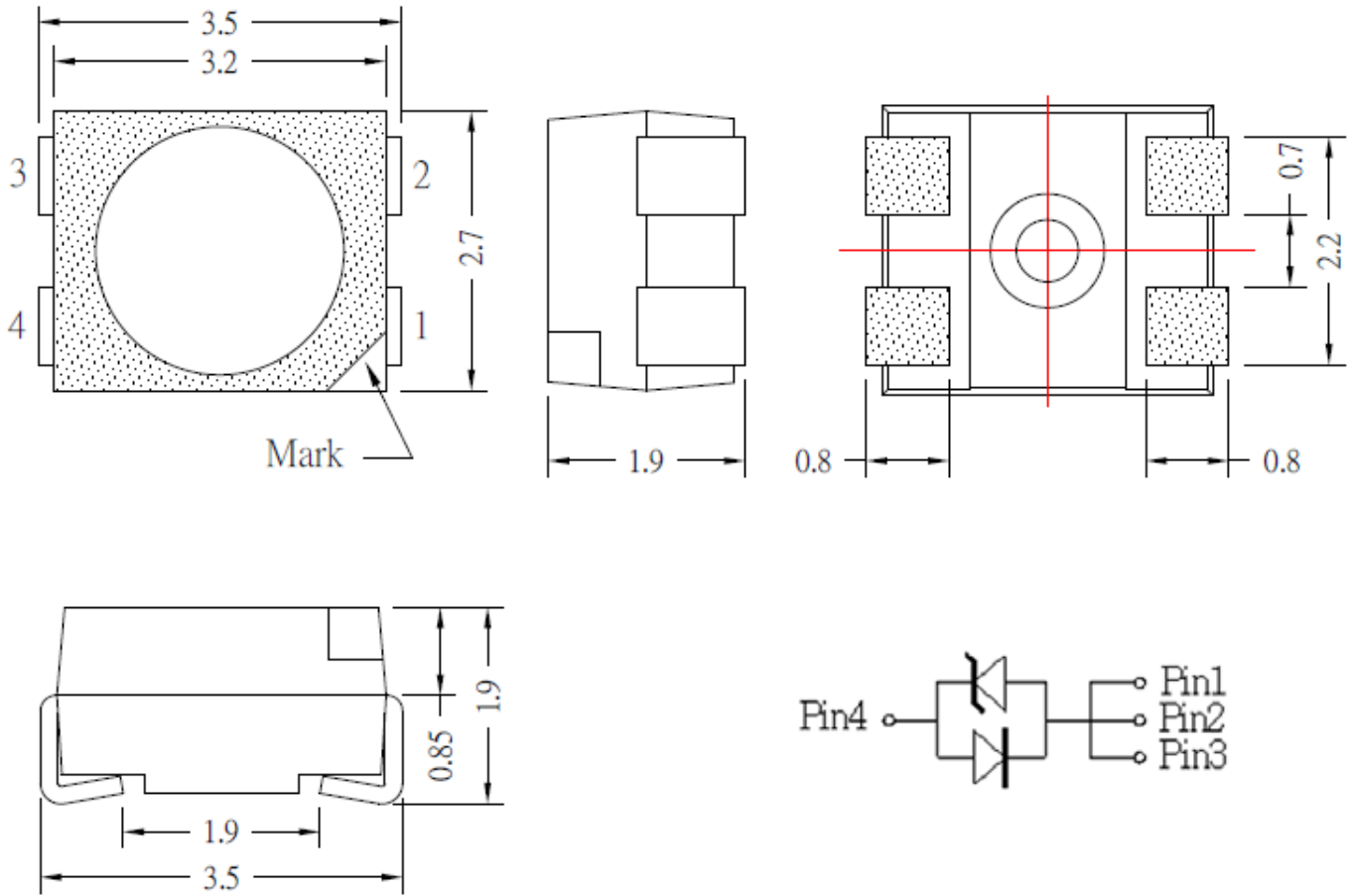


SPECIFICATION
CSP1311W2ZC-4
PACKAGE OUTLINES

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 |
|---------------|---------------|-------------------|-------------|---------------|
| CSP1311W2ZC-4 | InGaN | White | Water Clear | 120° |



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

| Parameter | Symbol | Max Rating | Unit |
|--|--------|--------------------------|------|
| Forward Current | IF | 100 | mA |
| Reverse Voltage | VR | 5 | V |
| Operating Temperature Range | TOP | -30~+100 | °C |
| Storage Temperature Range | TSTG | -40~+100 | °C |
| Peak Pulsing Current (1/8 duty f = 1KHz) | IFP | 150 | mA |
| Soldering Temperature | TSOL | Max 265°C for 10 sec Max | |

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

| Parameter | Symbol | Test Condition | Value | | | Unit |
|-------------------------|--------|----------------|-------|------|-----|------|
| | | | Min | Typ | Max | |
| Luminous Intensity | Iv | IF = 30mA | 2500 | 3200 | - | Mcd |
| Forward Voltage | VF | IF = 30mA | - | 2.8 | 3.3 | V |
| Viewing Angle at 50% Iv | 2θ1/2 | IF = 30mA | - | 120 | - | Deg |
| Chromaticity Coordinate | X | IF = 30mA | - | 0.31 | - | - |
| Chromaticity Coordinate | Y | IF = 30mA | - | 0.32 | - | - |
| Luminous Flux | ∅V | IF = 30mA | 7.0 | 9.0 | - | lm |

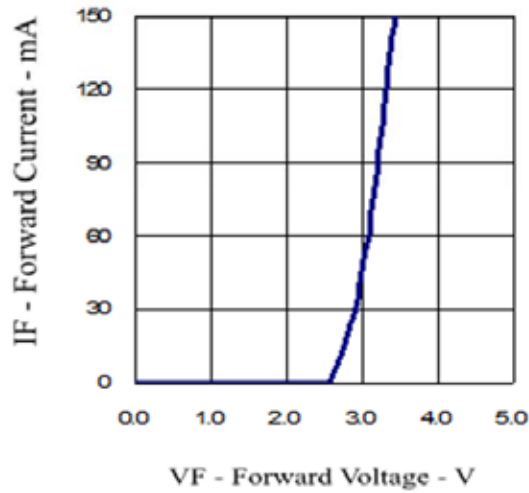
*Tolerance of viewing angle: -10 / +5 deg.



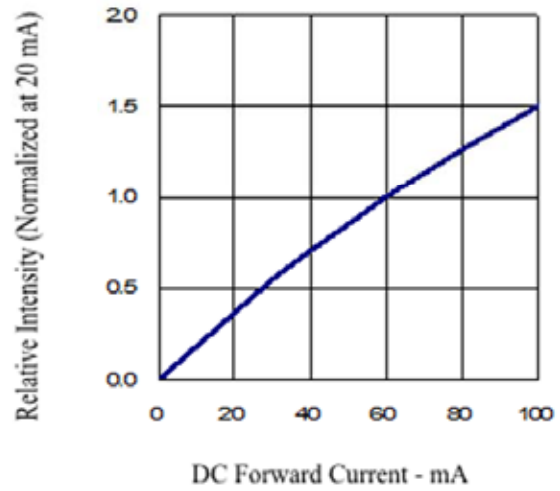
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OPTICAL CHARACTERISTIC CURVES

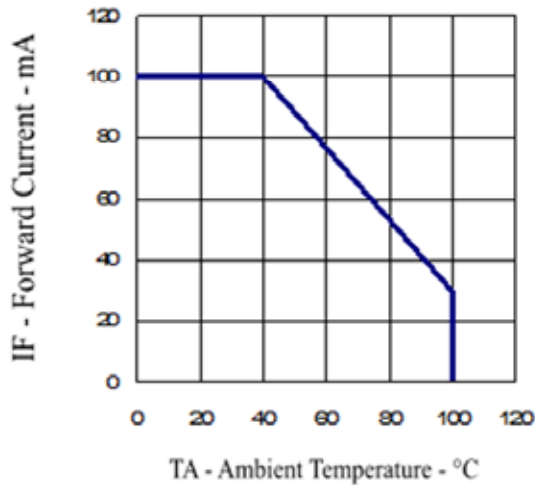
Forward Current vs. Forward Voltage



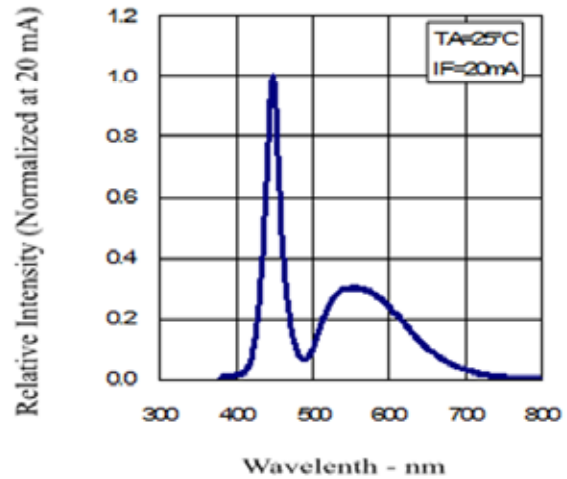
Relative Intensity vs. Forward Current



Forward Current vs. Ambient Temperature



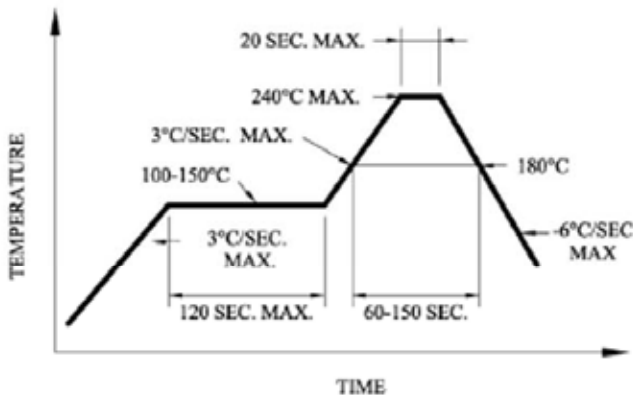
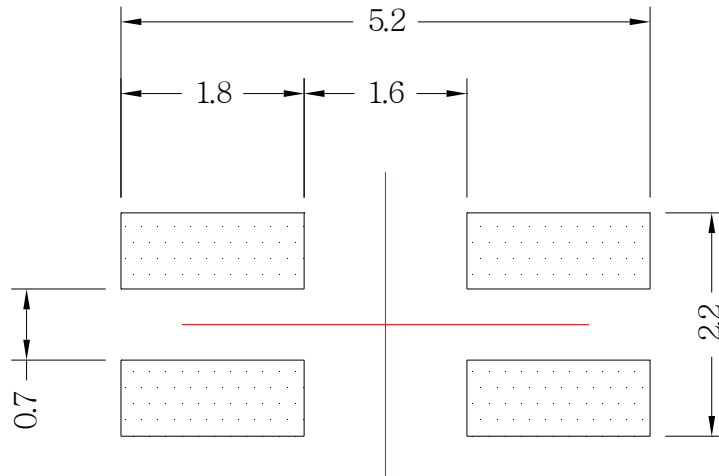
Relative Intensity vs. Wavelength



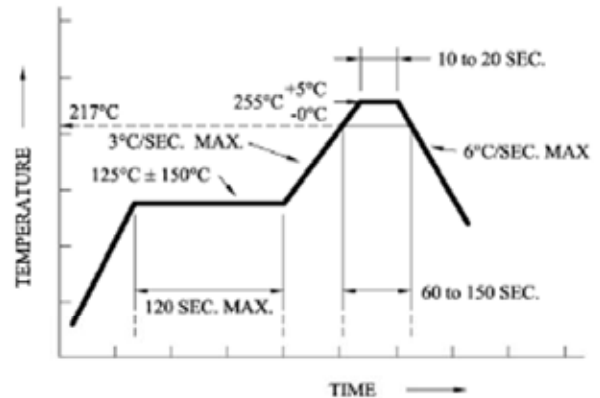
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SOLDERING CONDITIONS

Recommended Soldering Pad Pattern



Recommended reflow soldering profile



Recommended Pb-free reflow soldering profile.

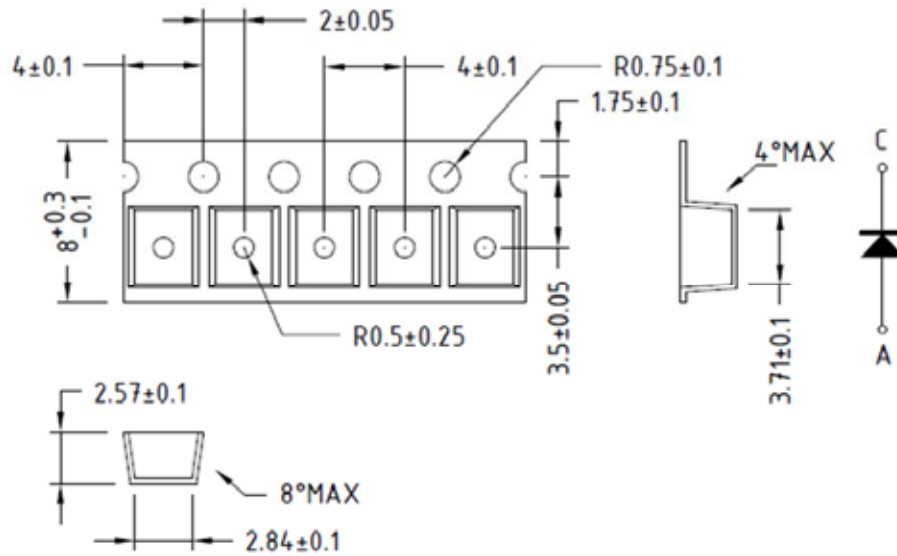
- Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used. It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.
- Reflow soldering should not be done more than two times.
- When soldering, do not put stress on the LEDs during heating.
- After soldering, do not warp the circuit board.



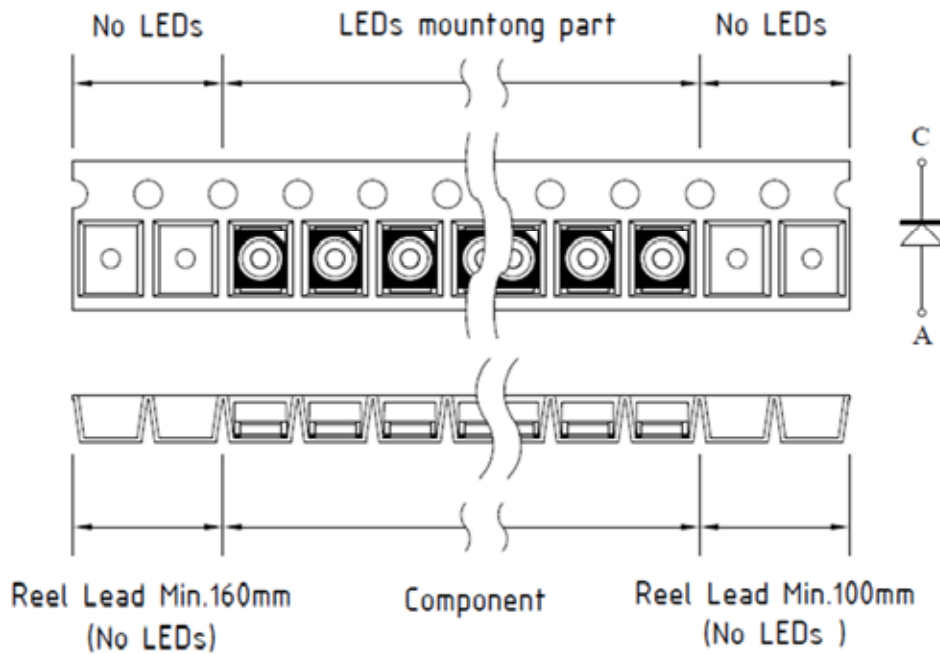
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PACKAGING SPECIFICATION

Tape Dimension



Tape Leader and Trailer Dimension



USER FEED DIRECTION →



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