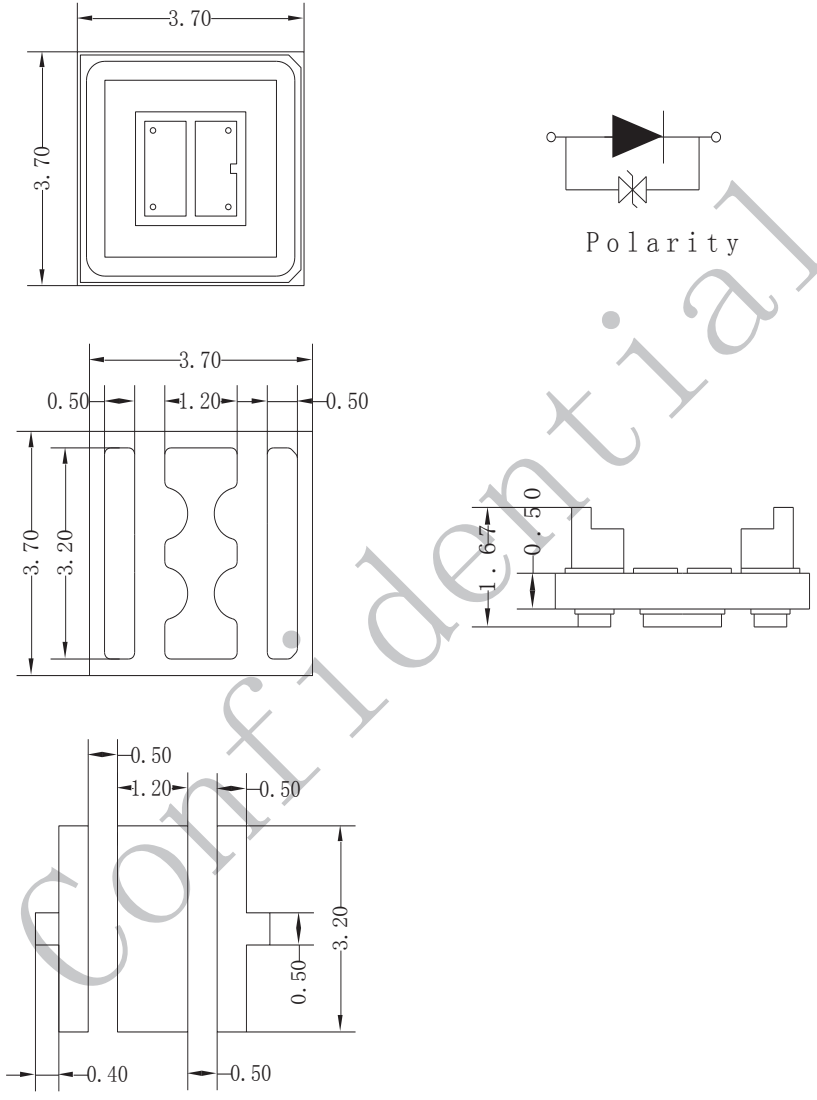


SPECIFICATION **CSF1414UV278C**
PACKAGE OUTLINES


- 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 |
|---------------|---------------|-------------------|-------------|---------------|
| CSF1414UV278C | InGaN | UltraViolet | Water Clear | 120° |



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ABSOLUTE MAXIMUM RATINGS
(TA=25°C)

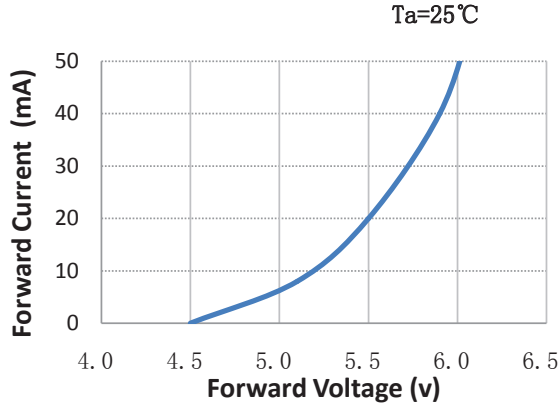
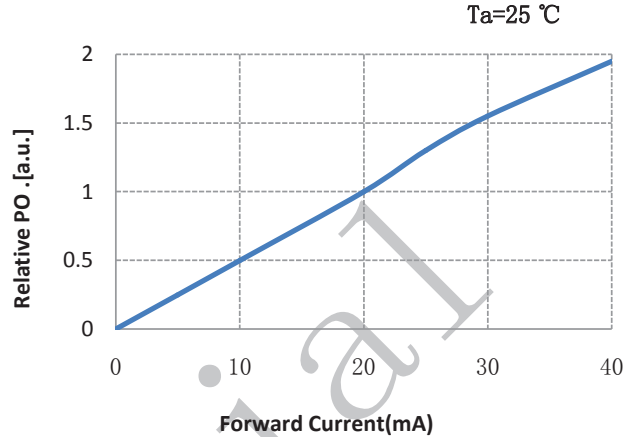
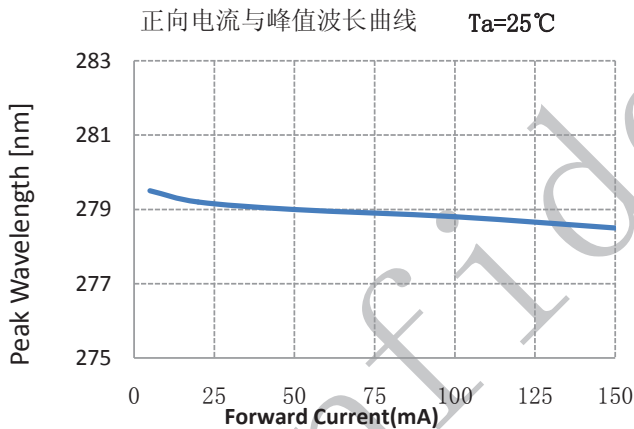
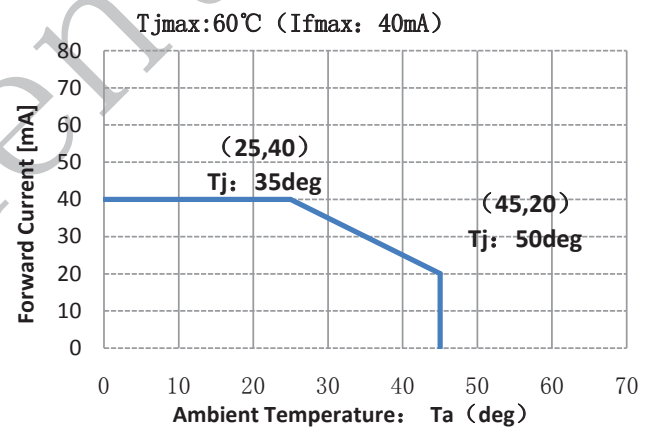
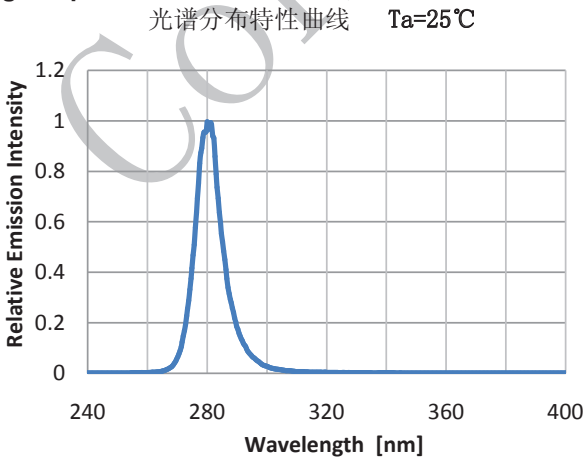
| Parameter | Symbol | Max Rating | Unit |
|--|--------|--------------------------|------|
| Forward Current | IF | 60 | mA |
| Reverse Current @ 5V | IR | 10 | μA |
| Power Dissipation | Pd | 420 | mW |
| Operating Temperature Range | TOP | -40~+85 | °C |
| Storage Temperature Range | TSTG | -40~+100 | °C |
| Peak Pulsing Current (1/10 duty f = 10KHz) | IFP | 60 | mA |
| Soldering Temperature | TSOL | Max 260°C for 10 sec Max | |

OPTICAL-ELECTRICAL CHARACTERISTICS
(TA=25°C)

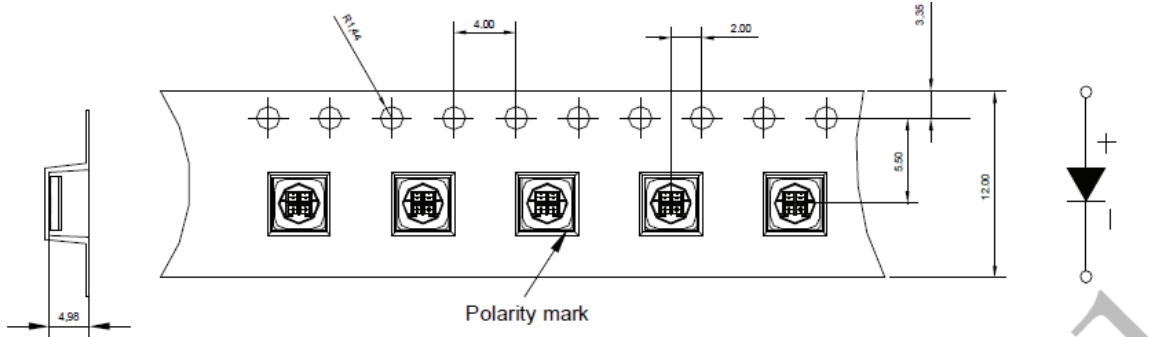
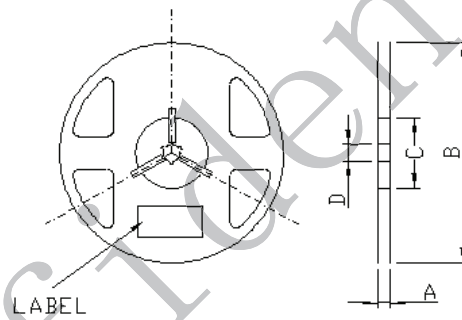
| Parameter | Symbol | Test Condition | Value | | | Unit |
|-------------------------|--------|----------------|-------|-----|-----|------|
| | | | Min | Typ | Max | |
| Radiant Flux | Iv | IF = 20mA | 1 | 2.1 | - | mW |
| | | IF = 30mA | 2 | 3.5 | - | mW |
| | | IF = 40mA | 4 | 5.2 | - | mW |
| Forward Voltage | VF | IF = 20mA | - | 5.5 | 6.5 | V |
| Reverse Leakage Current | IR | VR = 5V | - | 5 | - | μA |
| Viewing Angle at 50% Iv | 2θ1/2 | IF = 20mA | - | 120 | - | Deg |
| Peak Wavelength | nm | IF = 20mA | 270 | 278 | 285 | nm |

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


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OPTICAL CHARACTERISTIC CURVES
Fig.1-Forward Voltage Vs. Forward Current
 伏安特性曲线

Fig.2-Forward Current Vs. Relative Intensity
 正向电流与相对光强特性

Fig.3-Peak Wavelength Vs. Forward Current
 正向电流与峰值波长曲线

Fig.4-Ambient Temperature vs. Allowable Forward Current

Fig.5- Spectrum Distribution
 光谱分布特性曲线



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PACKAGING SPECIFICATION
■ Tape Dimensions 载体尺寸

■ Reel Dimensions 卷盘尺寸


Note:注意

The tolerances unless mentioned ± 0.1 mm. Unit : mm 注：标注公差为 ± 0.1 毫米，尺寸单位：毫米。

■ Label Form Specification 标签规格

| | |
|---|---|
| PART NO. |  |
| SPEC NO. | |
| LOT NO. | |
| <hr/> | |
| BIN CODE | |
| Φ_e : | Wlp: |
| V: | |
|  | QTY: |
| | DATE: |

| | |
|----------|----------------------|
| PART NO. | Part Number |
| SPEC NO. | Spec Number |
| LOT NO. | Lot Number |
| BIN CODE | Bin Code |
| Φ_e | Total radiation flux |
| Wlp | Peak Wavelength |
| VF | Forward Voltage |
| QTY | Packing Quantity |
| DATE | Made Date |



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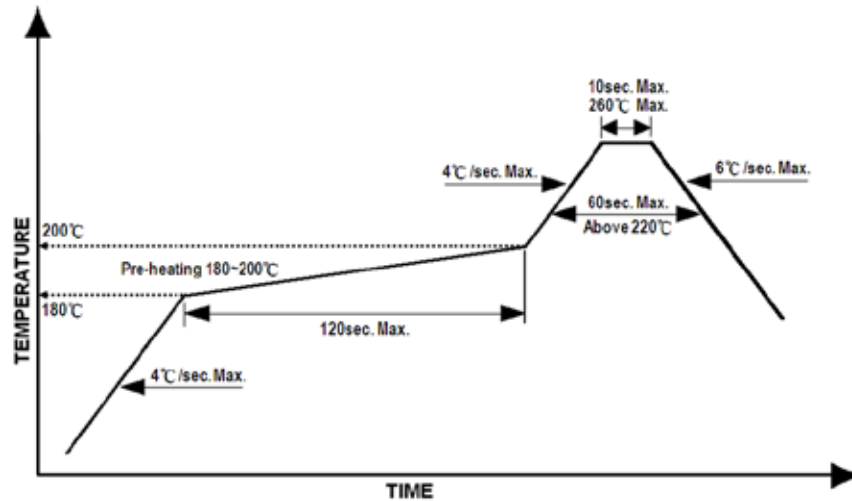
SOLDERING CONDITIONS

Reflow Soldering

Recommend soldering paste specifications:

1. Operating temp.: Above 220°C ,60sec
2. Peak temp.:260°C Max.,10sec Max.
3. Reflow soldering should not be done more than two times.
4. Never take next process until the component is cooled down to room temperature after reflow.
5. The recommended reflow soldering profile (measuring on the surface of the LED terminal) is 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
- Ultra sonic cleaning: < 15W/ bath; bath volume ≤ 1liter
- Curing: 100°C max, <3min



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