# DUV LED
## U535C2F41Z4

| | |
|---|---|
| Under Development | |
| Mass Production | ● |

**ATTENTION**
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

## Features

- UVC LED with quartz glass lens
- Dimension 3.70mm×3.70mm×1.49mm
- Long operating life
- Deep ultraviolet
- High reliability
- Superior ESD protection
- RoHS compliant

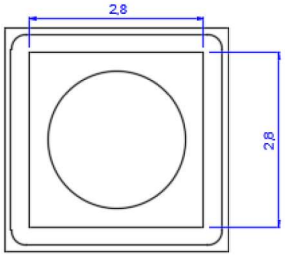
## Applications

- Sterilization and disinfection
- Fluorescent spectroscopy
- Water purification
- Air purification

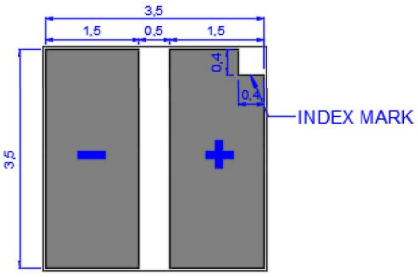
## Package Dimensions（Unit: mm）

Side View


Top View




Bottom View




Tolerance： ± 0.20mm

## Product ID:

**U535C2F41Z4**

**Where,**

**U: Packaging technology，silicone dispensing;**

**5: radiation angle,120°;**

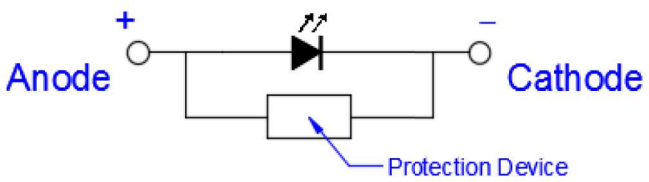
**35: package size,3.5mm*3.5mm;**

**C2: peak wavelength,270~280nm;**

**F41: LED chip code, flip chip;**

**Z4: Zener chip code.**

## Circuit:




COVEL

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# Characteristics of UV LED

## 1. Electrical / Optical Characteristics (Ta=25℃,RH=40%)

| Parameter | Symbol | Units | Value(Continuous current IF=40mA) | Value(Intermittent current IF=60mA) |
|---|---|---|---|---|
| Peak Wavelength [1] | $\lambda_p$ | nm | 270~280 | 270~280 |
| Radiant Flux [2] | $\Phi_e$ [3] | mW | 4~6 | 6~8 |
| Forward Voltage [4] | VF | V | 5~9 | 5.5~9 |
| Thermal Resistance [5] | $R_{th}$ | °C/W | ≦20 | ≦20 |
| Spectrum Half Width | Δλ | nm | 9.5 | 9.7 |
| View Angle | $2\theta_{1/2}$ | deg | 120 | 120 |

**Notes:**

[1].Peak wavelength measurement tolerance:±3nm

[2].Radiant flux measurement tolerance:±10%

[3].$\Phi_e$ is the total radiant flux as measured with an integrated sphere

[4].Forward voltage measurement tolerance:±3%

## 2. Absolute Maximum Ratings ($T_a$=25°C,RH=40%)

| Parameter | Symbol | Units | Value |
|---|---|---|---|
| Maximum Rating Forward Current | $I_{Fmax}$ | mA | 60 |
| Maximum Rating Junction Temperature | $T_{jmax}$ | °C | 80 |
| Operating Temperature Range | $T_{opr}$ | °C | -40 ~ +60 |
| Storage Temperature Range | $T_{stg}$ | °C | -40 ~ +85 |

**Notes:**

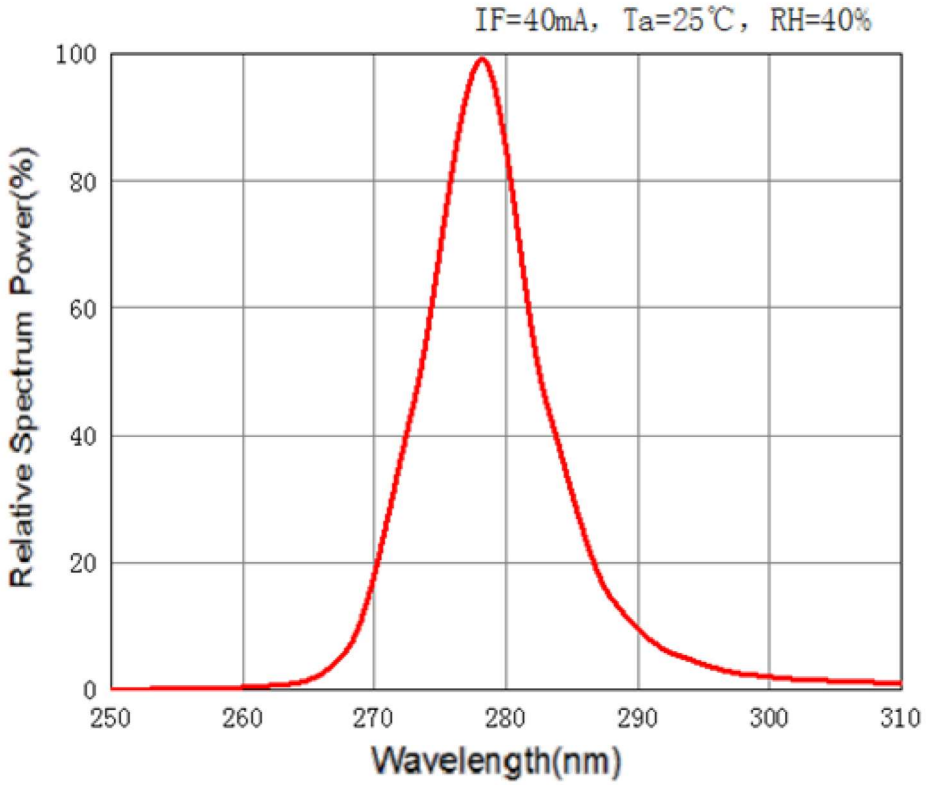
Operating the LED beyond the listed maximum ratings may affect device's reliability and cause permanent damage.

These or any other conditions beyond those indicated under recommended operating conditions are not implied.

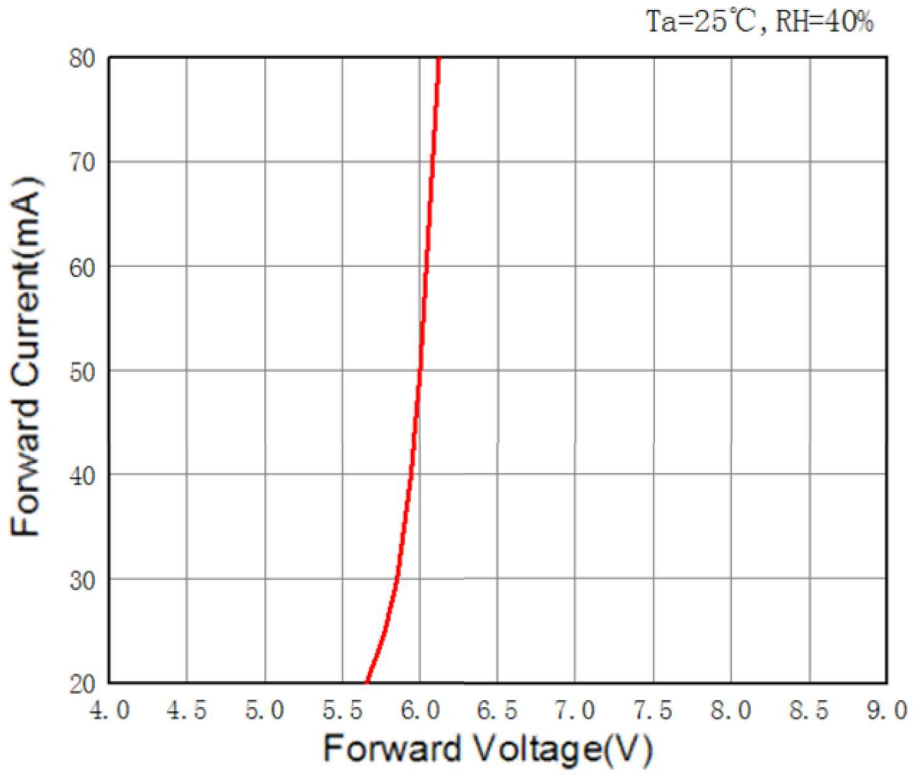
The exposure to the absolute maximum rated conditions may affect device reliability.

# Characteristics Diagrams

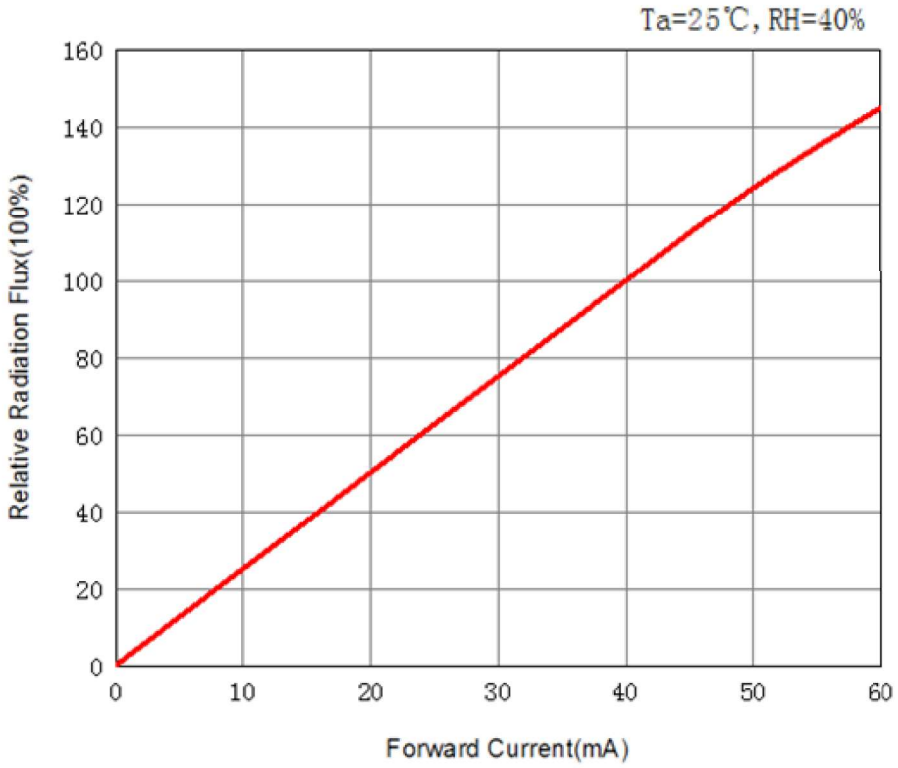
## 1.Relative Spectrum Power Distribution



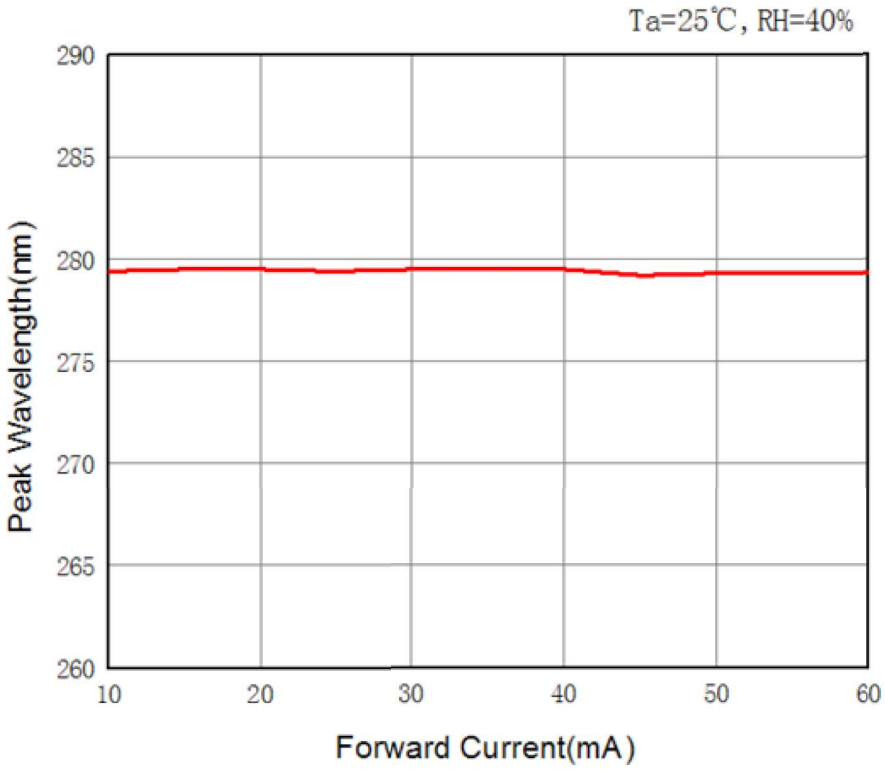

## 2.Forward Voltage vs Forward Current



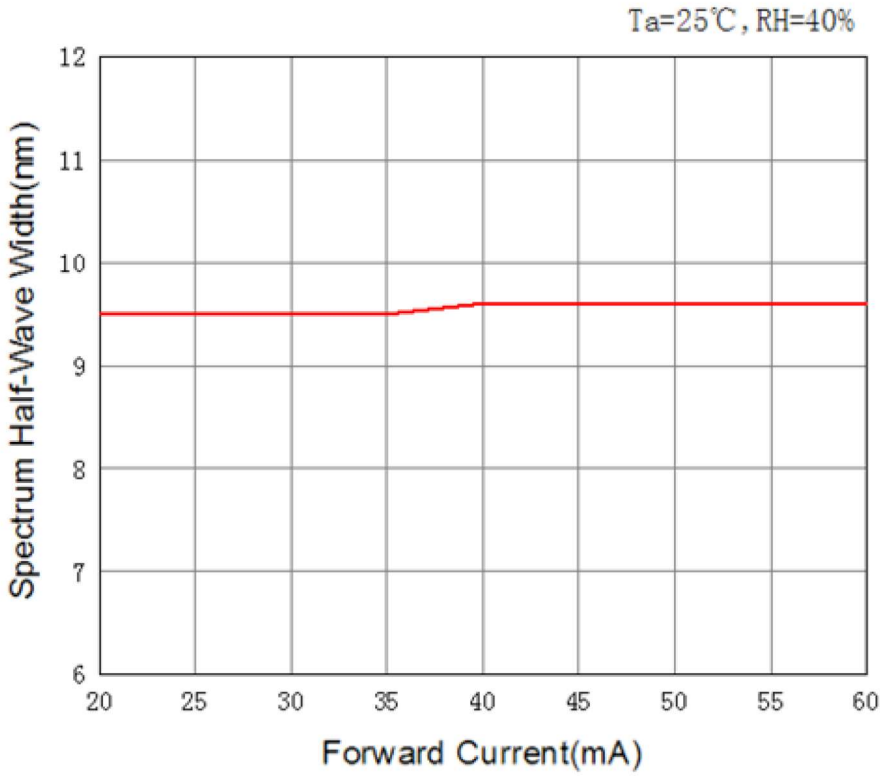
## 3.Relative Radiation Flux vs Forward Current



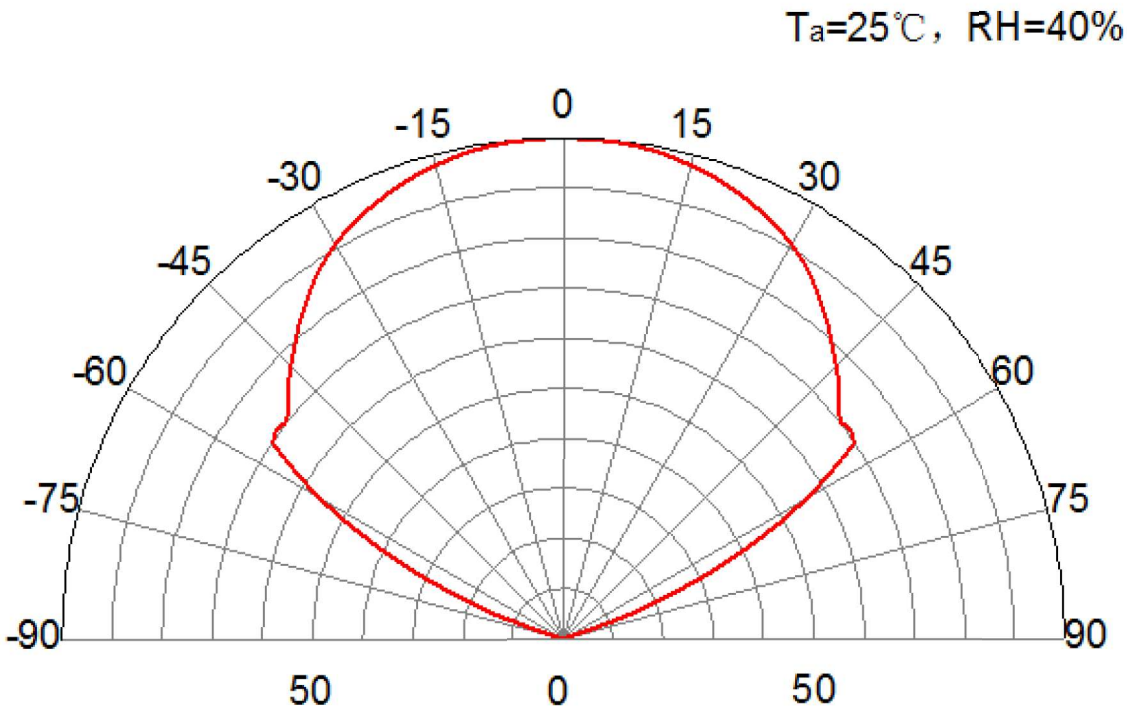

## 4.Peak Wavelength vs Forward Current



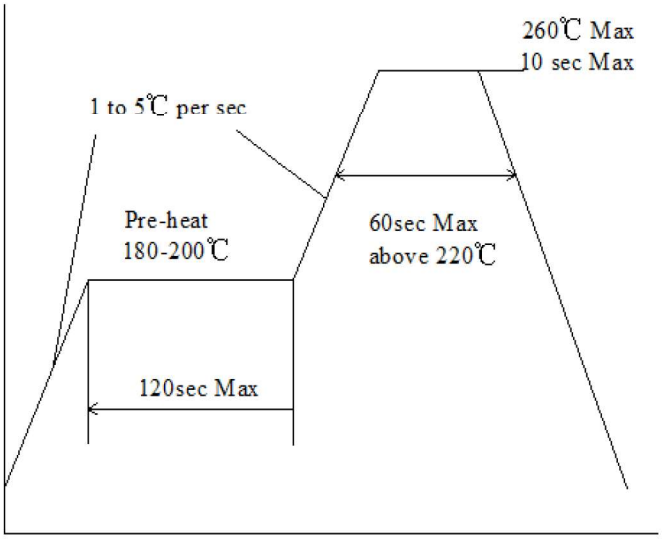
## 5.Spectrum Half-Wave Width vs Forward Current



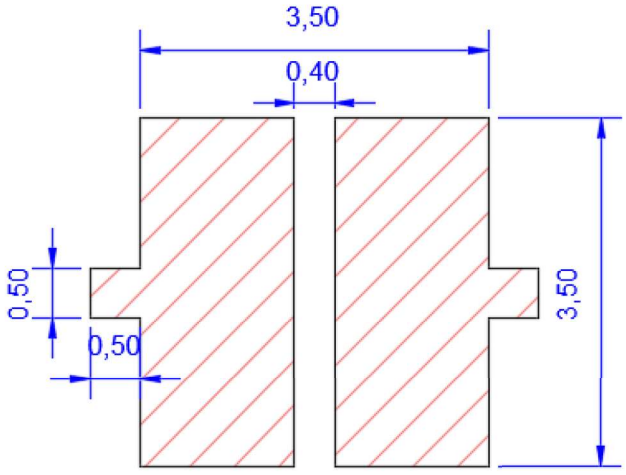

## 6.Spatial Distribution Graph



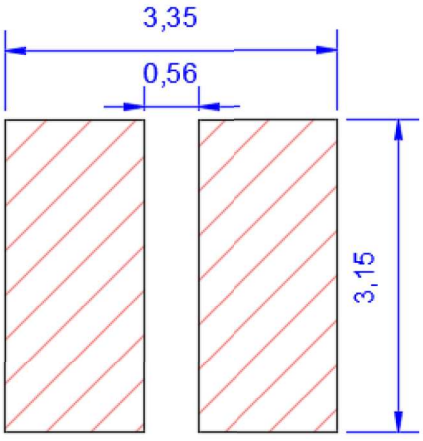
# Product Application Information




**Recommended Reflow Soldering Condition**
**（Lead-free solder）**




**Recommended Soldering pad Layout**
**（Unit: mm）**




**Recommended Soldering Mask Layout**
**（Unit: mm）**