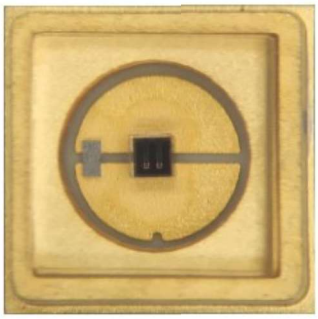
DUV UV LED
U535C2F29Z4

Under Development	
Mass Production	●

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES



Features

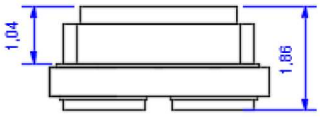
- UVC LED with quartz glass lens
- Dimension 3.70mmx3.70mmx1.86mm
- Long operating life
- Deep ultraviolet
- High reliability
- Superior ESD protection
- RoHS compliant

Applications

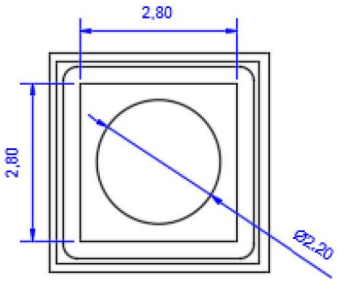
- Sterilization and disinfection
- Fluorescent spectroscopy
- Water purification
- Air purification

Package Dimensions（Unit: mm）

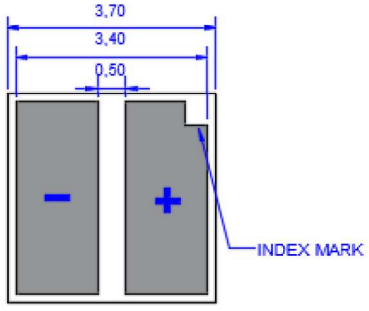
Side View



Top View



Bottom View



Tolerance： ± 0.20mm

Product ID:

U535C2F29Z4

Where,

U: Packaging technology，silicone dispensing

5:radiation angle,120°

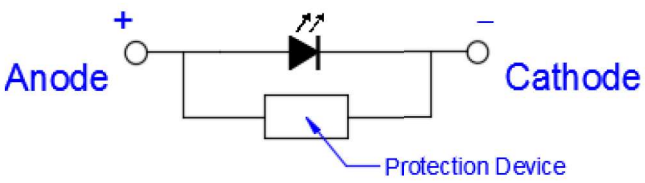
35: package size,3.5mm*3.5mm

C2: peak wavelength,270~280nm

F29: LED chip code, flip chip

Z4: Zener chip code.

Circuit:



COVEL

Characteristics of UV LED

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

Parameter	Symbol	Units	Value(Continuous current IF=80mA)	Value(Intermittent current IF=100mA)
Peak Wavelength [1]	λ_p	nm	270-280	270-280
Radiant Flux [2]	Φ_e [3]	mW	6-12	8-14
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	10
View Angle	$2\theta_{1/2}$	deg	120	120

Notes:

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

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

[3].Φ_e is the total radiant flux as measured with an integrated sphere

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

[5].R_{th} is the thermal resistance between junction to substrate.

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

Parameter	Symbol	Units	Value
Maximum Rating Forward Current	I_{Fmax}	mA	100
Maximum Rating Junction Temperature	T_{jmax}	°C	80
Operating Temperature Range	T_{opr}	°C	-10 ~ +85
Storage Temperature Range	T_{stg}	°C	-40 ~ +100

Notes:

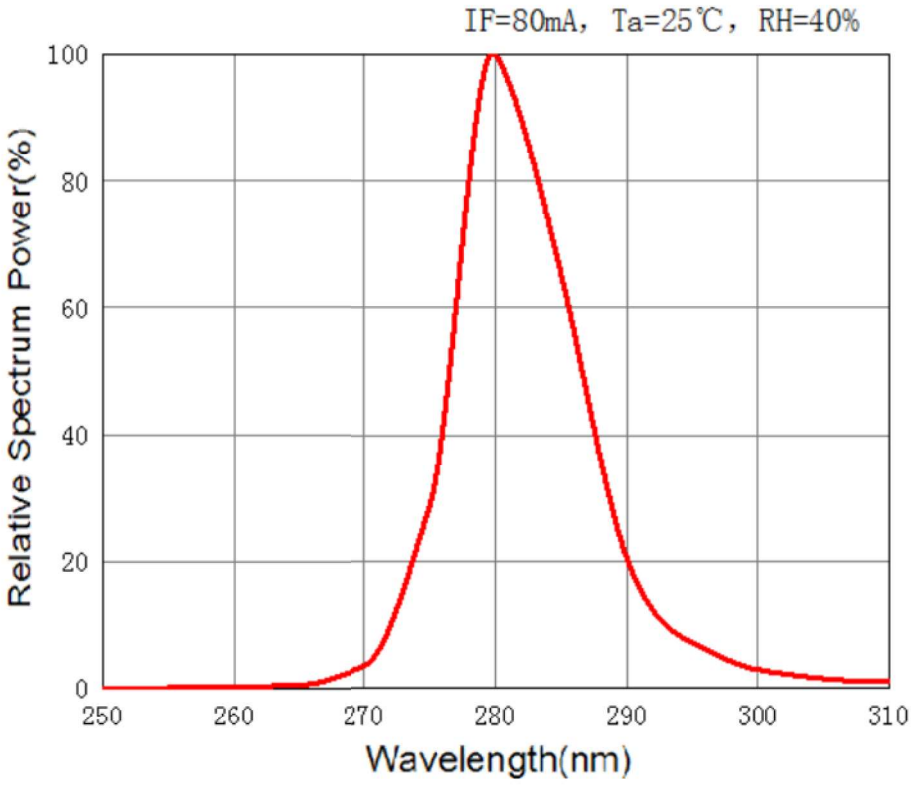
Operating the LED beyond the listed maximum ratings may affect device's reliability and cause permanent damage.

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

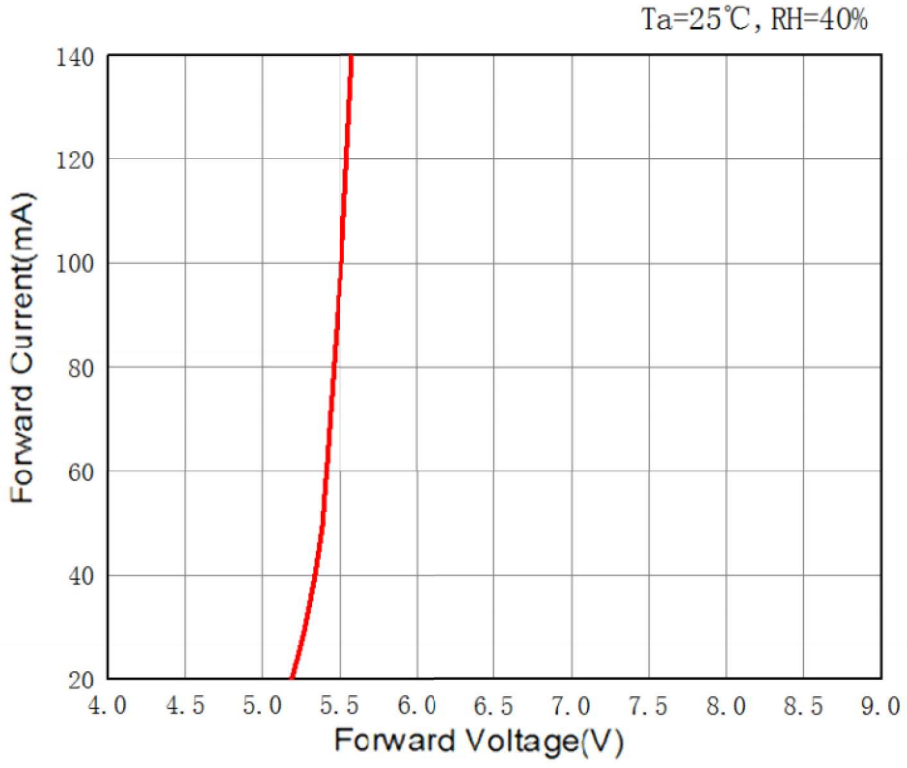
The exposure to the absolute maximum rated conditions may affect device reliability.

Characteristics Diagrams

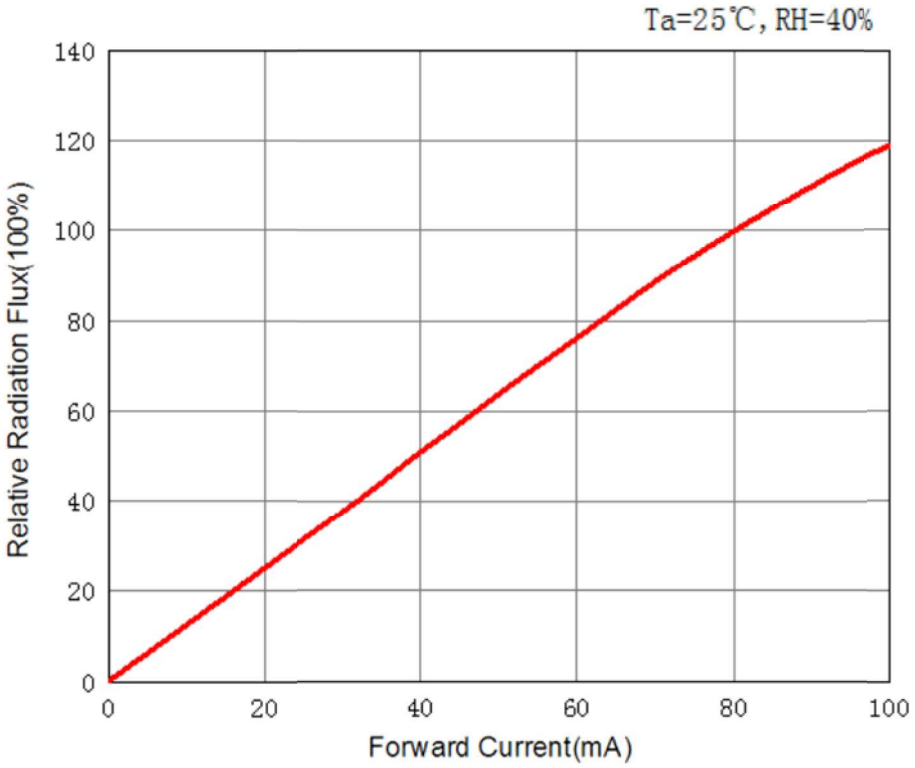
1.Relative Spectrum Power Distribution



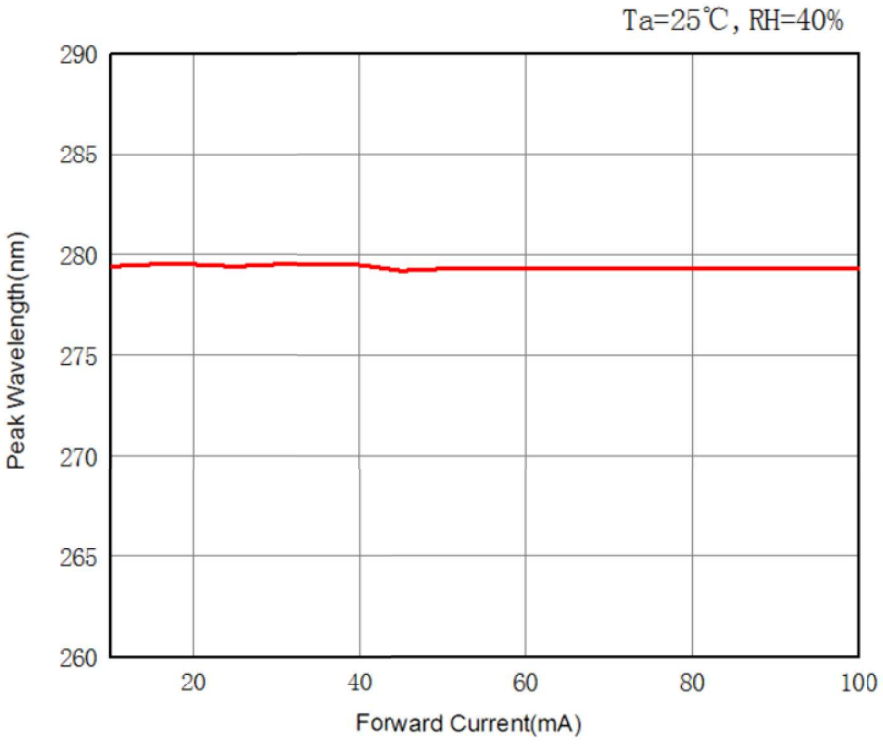
2.Forward Voltage vs Forward Current



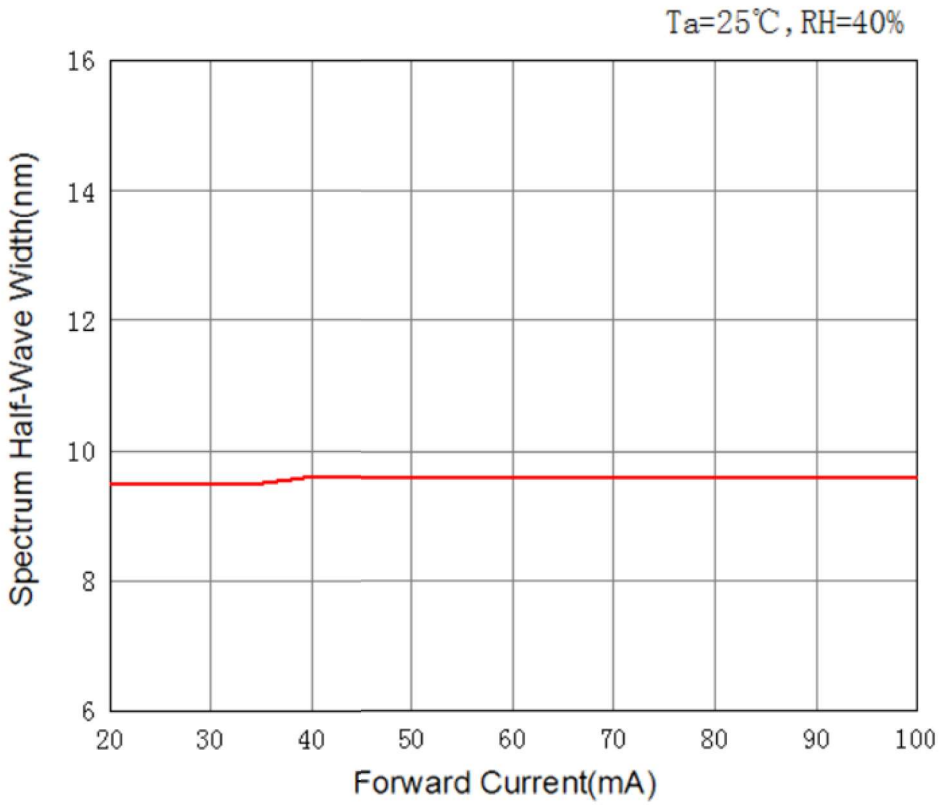
3.Relative Radiation Flux vs Forward Current



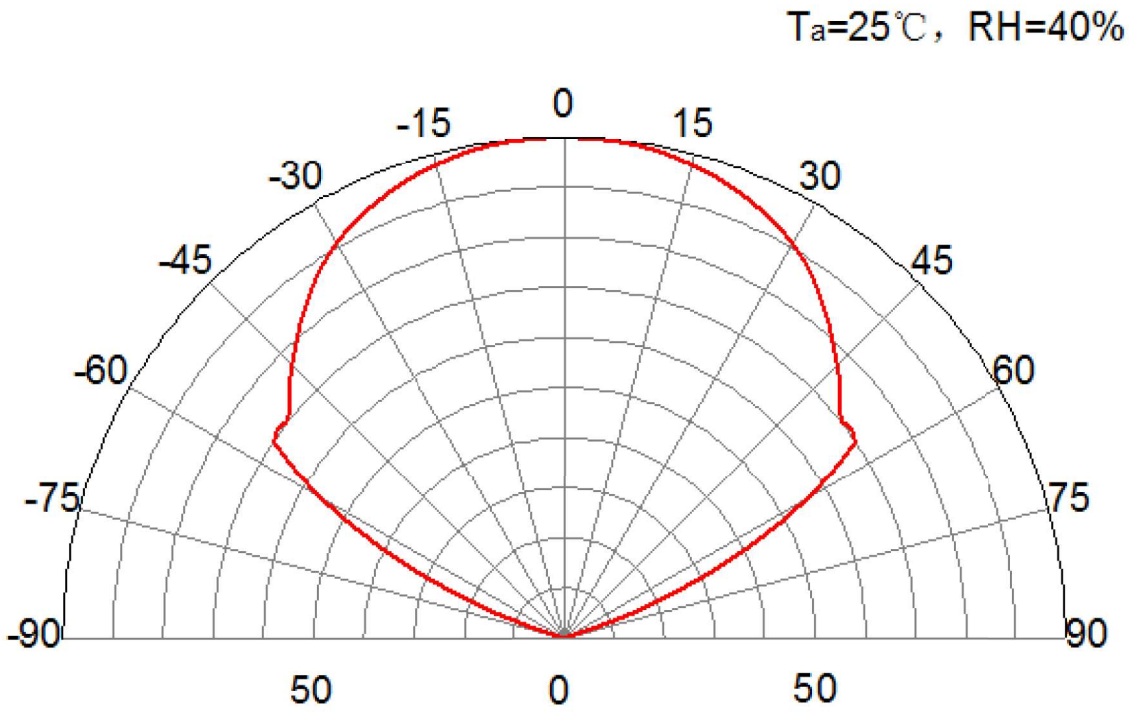
4.Peak Wavelength vs Forward Current



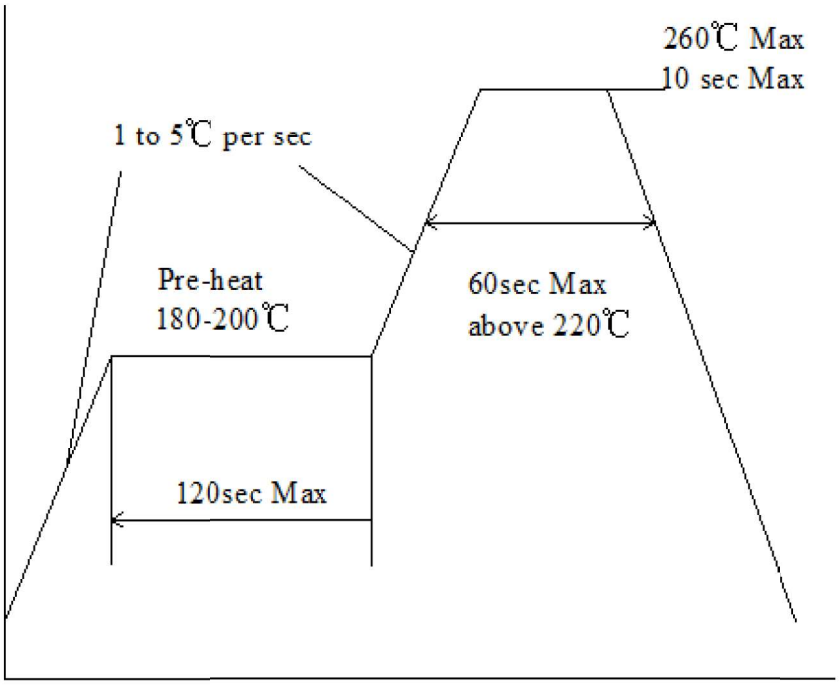
5.Spectrum Half-Wave Width vs Forward Current



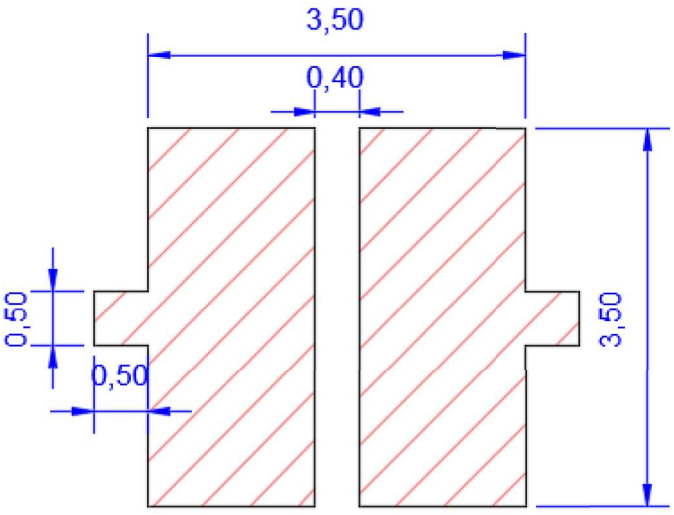
6.Spatial Distribution Graph



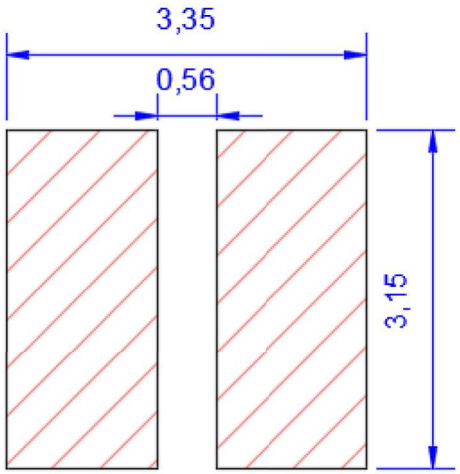
Product Application Information



Recommended Reflow Soldering Condition
（Lead-free solder）



Recommended Soldering pad Layout
（Unit: mm）



Recommended Soldering Mask Layout
（Unit: mm）