MODEL UF3V series

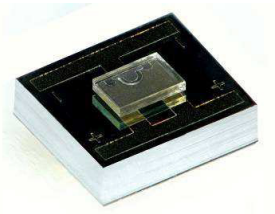
325nm Naked Bare Die (Flip chip form)

APPLICATIONS

- Analytical instruments
  -Bio chemical, medical, and scientific analysis
- Photo Catalyst
- Medical Phototherapy
- UV Curing
  -Spot bonding, printing, film coating, and general purpose

OPTION

- On Low Profile Silicon Submount
- On Large Silicon Submount



View of "Die on Silicon Submount(Large)"

Typical Optical-Electrical Characteristics (I_F=20mA, T_a=25℃) Note 1

Item	Symbol	Unit	Min	Typ	Max
Peak Wavelength	λ_p	nm	320	(325)*	330
Radient Flux	P_o	mW	1.0	1.5	-
Full Width at Half Maximum	$\Delta\lambda$	nm	-	9	-
Forward voltage	V_F	V	-	5.0	5.5
Reverse Current (V_R = 5V)	I_R	μA	-	-	1
Viewing Half Angle	$2\theta_{1/2}$	deg.	-	144	-

*Nominal value

Absolute Maximum Ratings (T_a=25℃) Note 2

Item	Symbol	Unit	
Forward Current	I_{Fmax}	mA	40
Reverse Voltage	V_{Rmax}	V	5
Operating Temperature	T_{OPR}	℃	-30 ~ +80
Storage Temperature	T_{STG}	℃	-40 ~ +100

Note:

1. Typical values given are within the range of average expected by the manufacturer in large quantities and are provided for information only. All measurements were made using a Au-plated TO5 header without an encapsulant. Optical characteristics measured in an integrating sphere using radiant flux P_o.
2. Maximum ratings are package-dependent. The above ratings were determined using a Au-plated TO5 header without an encapsulant for characterization. Ratings for other packages may differ. Assembly processing temperature must not exceed 300℃ (< 5 seconds).

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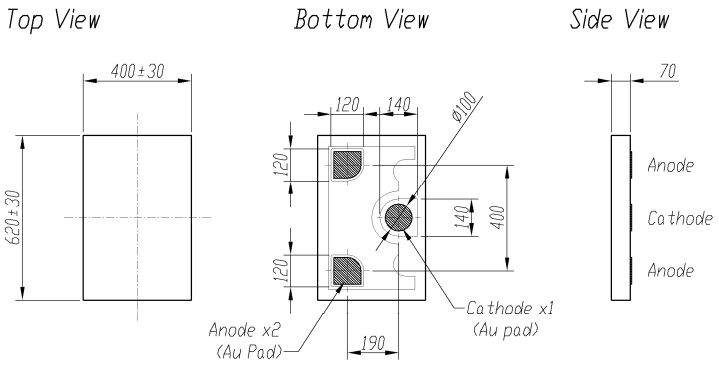
Part Number and Chip Outlines (Unit: µm)

UF3VC-00001

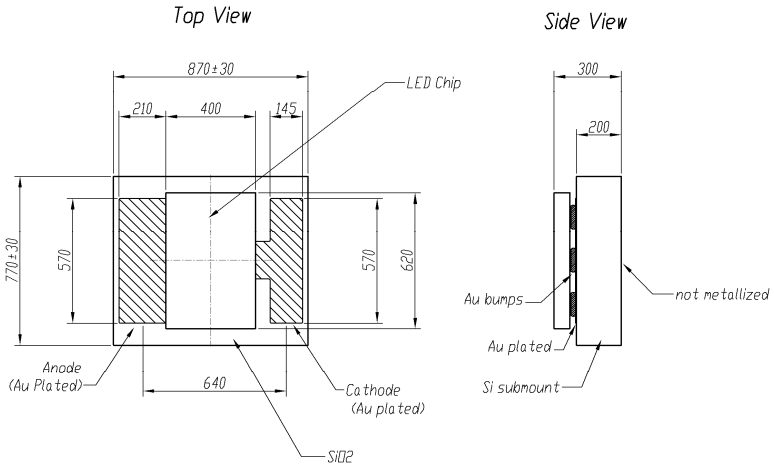
With no submount



UF3VS-20001

With Silicon submount 2

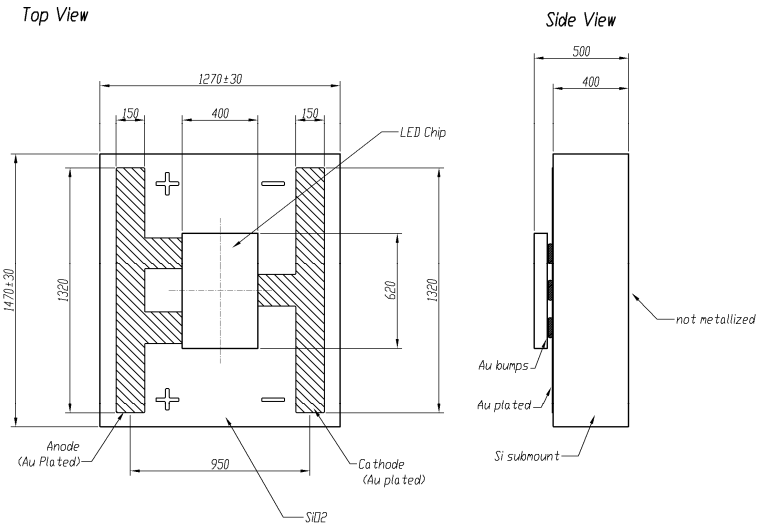
Low Profile (Standard)



UF3VS-10001

With Silicon submount 1

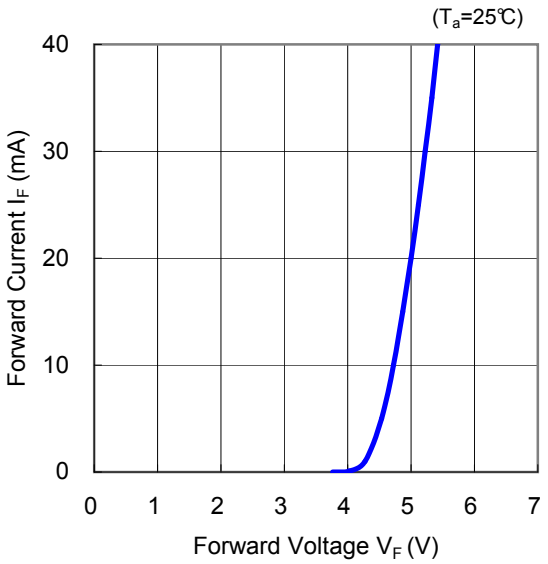
Large Format (Option)



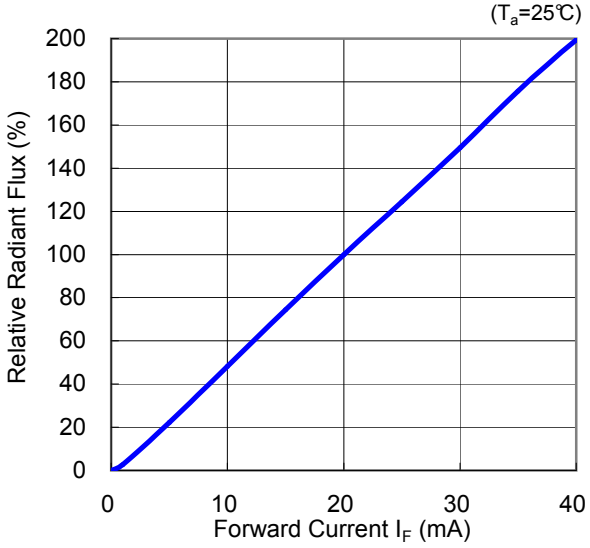
Characteristic Curves

These are representative measurements for this LED product. Actual curves will vary slightly for the various radiant flux.

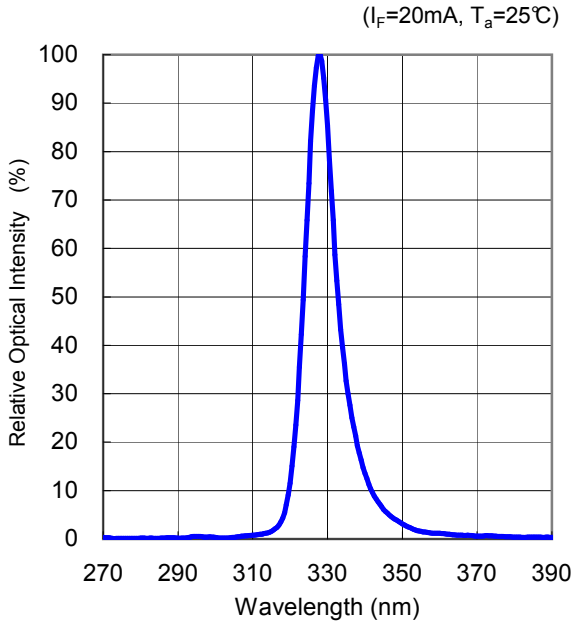
Forward Current vs Forward Voltage



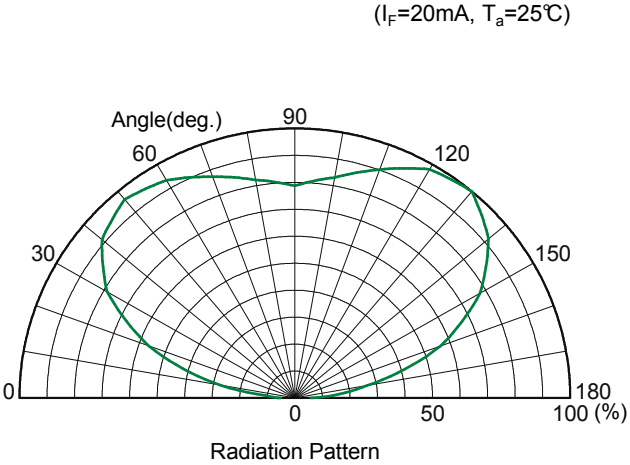
Forward Current vs Radient Flux



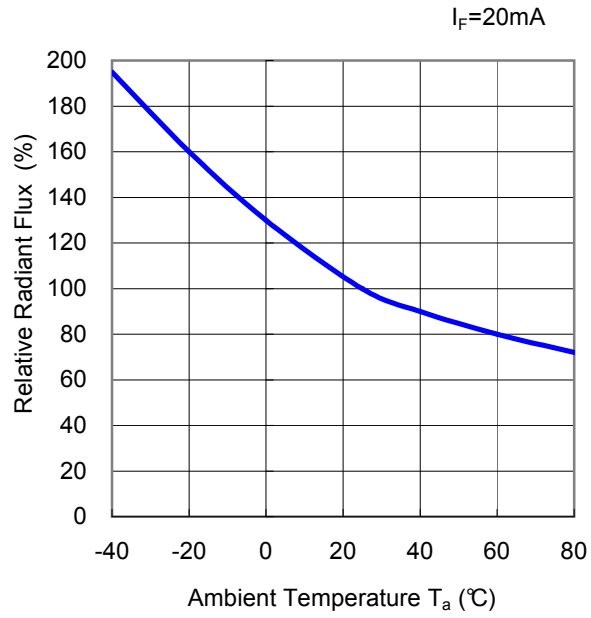
Relative Intensity vs Peak Wavelength



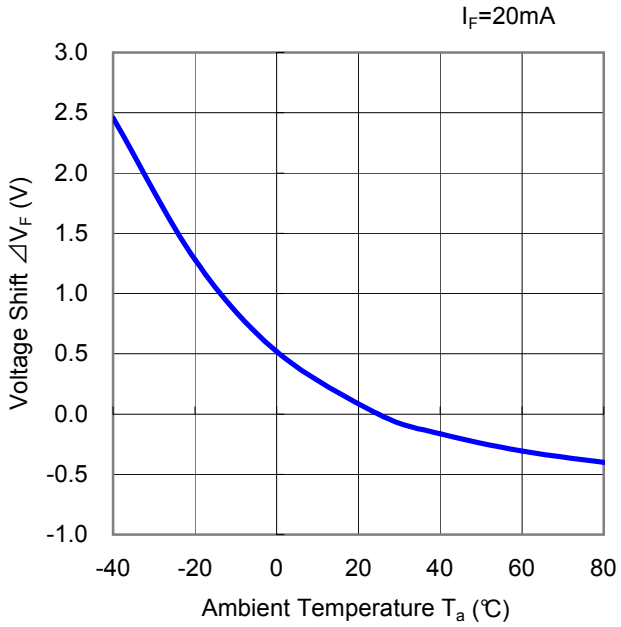
Radiation Pattern



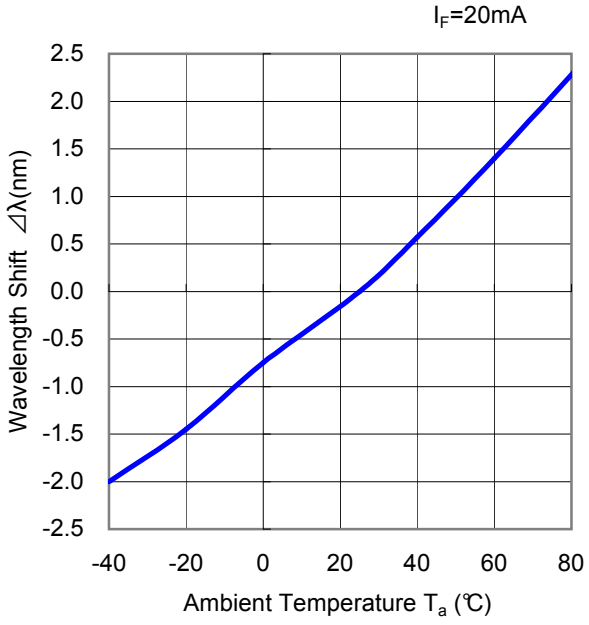
Radient Flux vs Ambient Temperature



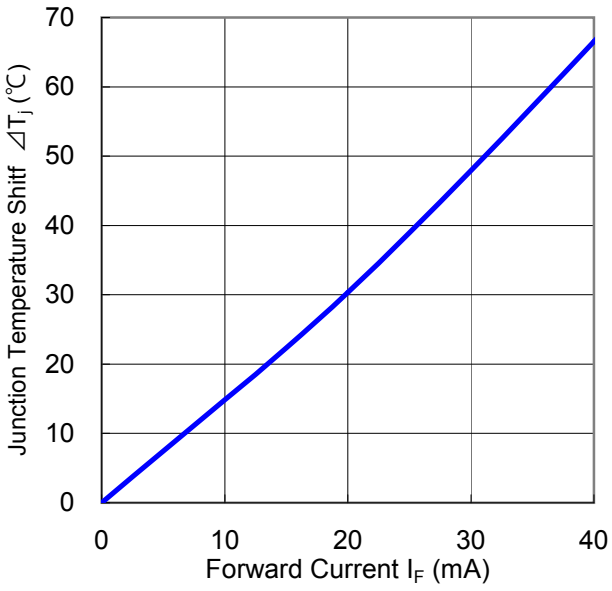
Voltage Shift vs Ambient Temperature



Wavelength Shift vs Ambient Temperature



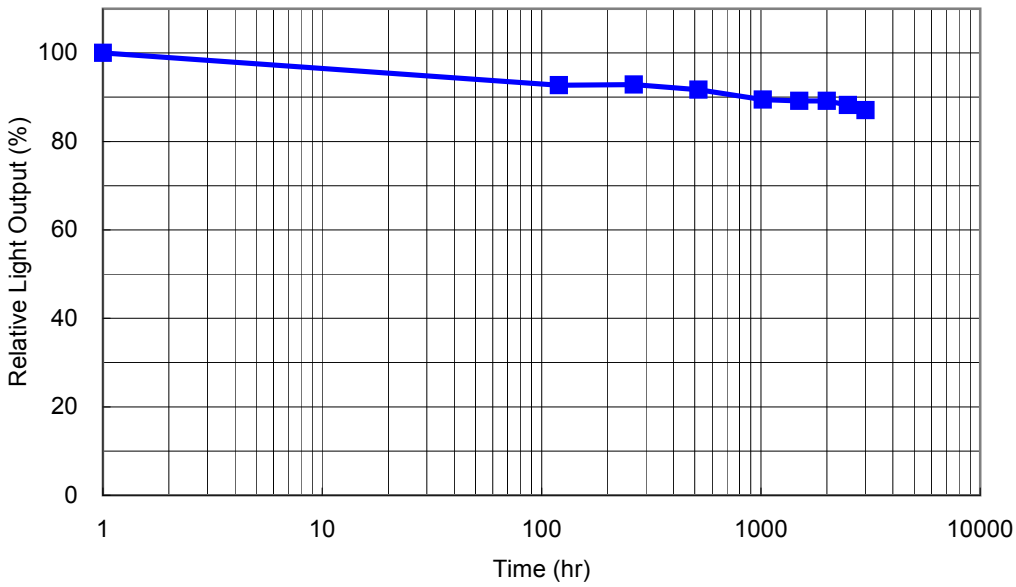
Junction Temperature vs Forward Current



Reliability prospect

Just on TO5 header, without any types of encapsulation.

T_a=25℃, I_F=40mA



Important Notices:

This is just a reference; reliability performance may change in the condition for purposes and applications.

Issued June 2014.

SPEC informaition (included design, dimension, and typical data) would be changed without prior notice.

CAUTION

- **LEDs emit very strong UV radiation.**
- **Don't look directly into the LED light.**
  UV radiation can harm your eyes.
- **To prevent even inadequate exposure, wear protective eyewear.**
- **If LEDs are embedded in devices, please indicate warning labels against the UV light LED used.**
- **Keep out of reach of children.**
- **Specification and dimension are subject to change for improvement without notice.**

Lead (Pb) Free Product – RoHS Compliant