DOWA

DoUVLEDs

DOWA SUPERB UV LED SOLUTIONS

MODEL xFxVL-1H211 series

TO-18 Hemispherical Can Type

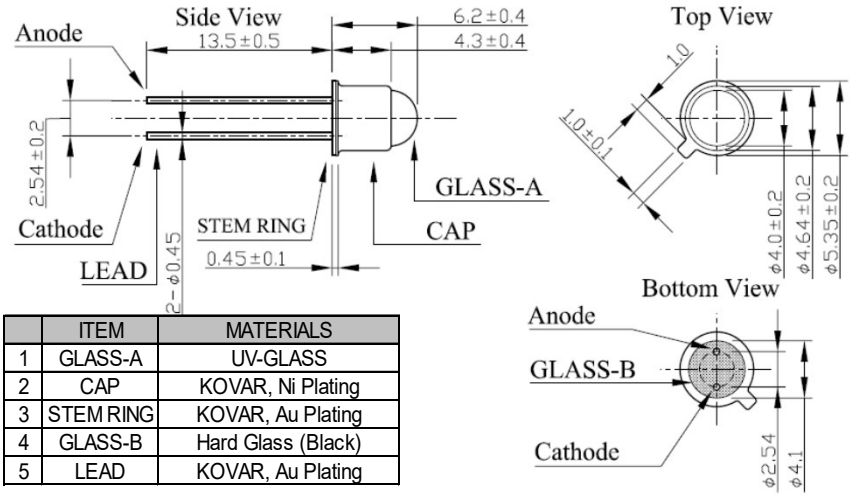
Mechanical Specifications and Materials (Unit: mm)

Product ID

310nm: UF1VL-1H211

325nm: UF3VL-1H211

340nm: UF4VL-1H211



	ITEM	MATERIALS
1	GLASS-A	UV-GLASS
2	CAP	KOVAR, Ni Plating
3	STEM RING	KOVAR, Au Plating
4	GLASS-B	Hard Glass (Black)
5	LEAD	KOVAR, Au Plating

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

Item		Symbol	Unit	UF1VL	UF3VL	UF4VL
Peak Wavelength	(*)	λ_p	nm	310±5	325±5	340±5
Radiant Flux	(**)	P_o	mW	1.2	1.5	1.3
Full Width at Half Maximum		$\Delta\lambda$	nm	15	11	9
Forward Voltage		V_F	V	5	4.5	4.0
Viewing Half Angle		$2\theta_{1/2}$	deg.	24	24	24

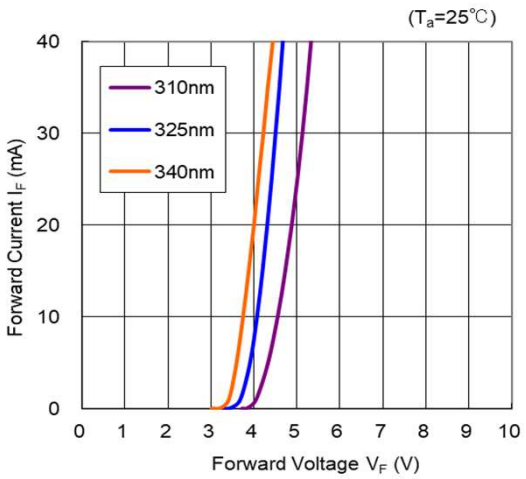
(*)Peak Wavelength Measurement tolerance is ±3nm. (**)Radiant Flux Measurement tolerance is ±10%.

Specification and dimension are subject to change for improvement without notice.

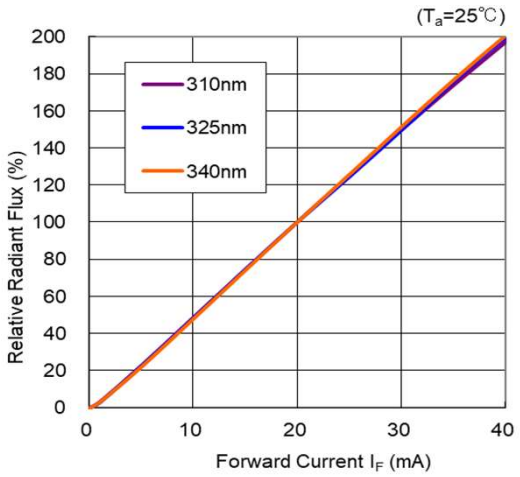
Absolute Maximum Ratings

Item	Symbol	Unit		Ambient Temperature
Forward Current	I_{Fmax}	mA	40	T_a=25℃
Operating Temperature	T_{OPR}	℃	-30 ~ +80	
Storage Temperature	T_{STG}	℃	-40 ~ +100	
Soldering Temperature	T_{SOL}	℃	350 (within 3sec)	Manual soldering process
			250 (within 5sec)	Flow soldering process

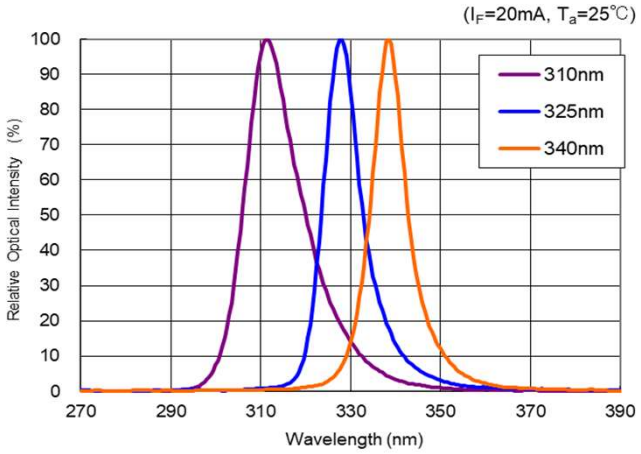
Forward Voltage vs Forward Current



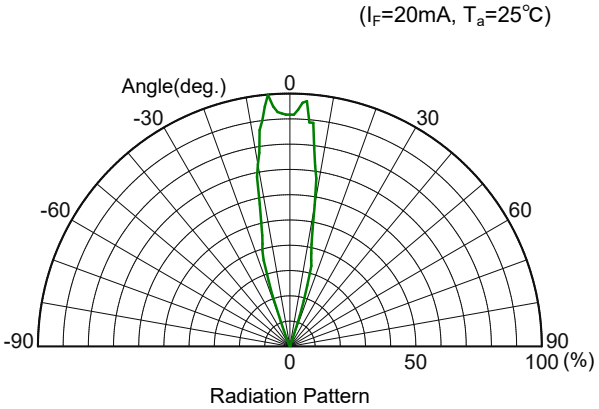
Forward Current vs Radiant Flux



Spectrum



Radiation Pattern



⚠ WARNING

- **LEDs emit very strong UV radiation.**
- **Do not look at the LED light with the naked eye or irradiate the skin.**
  UV radiation can harm your eyes and skin.
- **To prevent UV radiation exposure, wear protective eyewear and protective equipment.**
- **If LEDs are embedded in devices, please indicate warning labels against the UV light LED used.**
- **Keep out of reach of children.**