

MODEL xFxVL-1H211 Series

T018 Hemispherical Can Type

Mechanical Specifications and Materials (Unit:mm)

Part Number

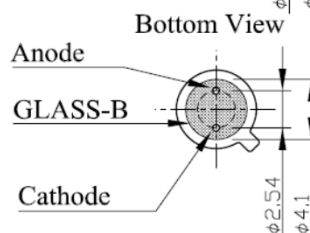
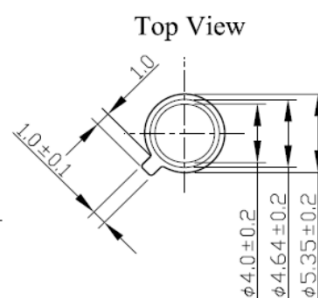
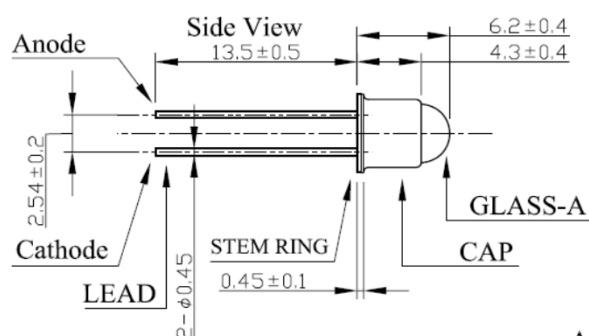
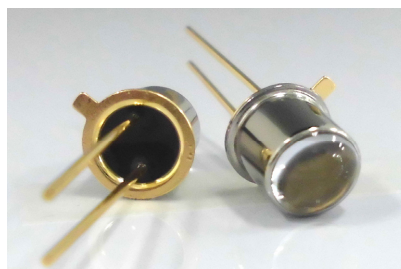
265nm: DF7VL-1H211

280nm: DF8VL-1H211

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 ($I_F=20\text{mA}$, $T_a=25^\circ\text{C}$)

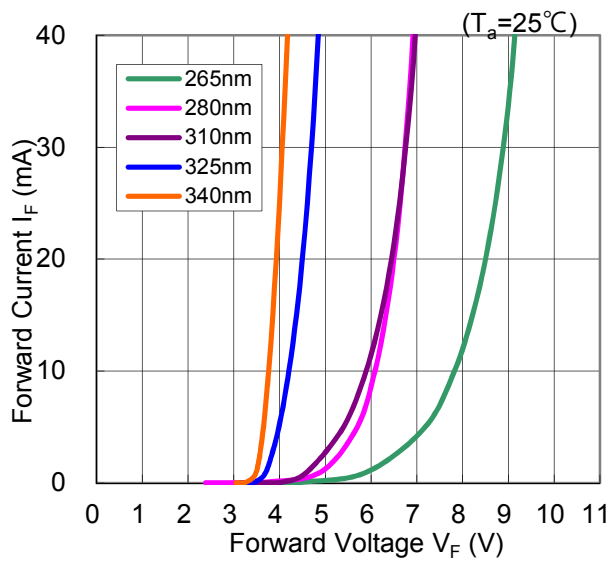
Item	Symbol	Unit	DF7VL	DF8VL	UF1VL	UF3VL	UF4VL
Peak Wavelength	λ_p	nm	265±5	280±10	310±5	325±5	340±5
Radiant Flux	P_o	mW	0.7	1.3	0.6	1.1	1.1
Full Width at Half Maximum	$\Delta\lambda$	nm	13	12	15	11	9
Forward Voltage	V_F	V	8-9	6.5	6-7	4.5	4
Response*	rise time	tr	ns	-	16	20	12
	fall time	tf	ns	-	8	9	8
Viewing Half Angle	$2\theta_{1/2}$	deg.	24	24	24	24	24

*Test condition : Frequency=100kHz, duty=1%, $I_{fp}=200\text{mA}$

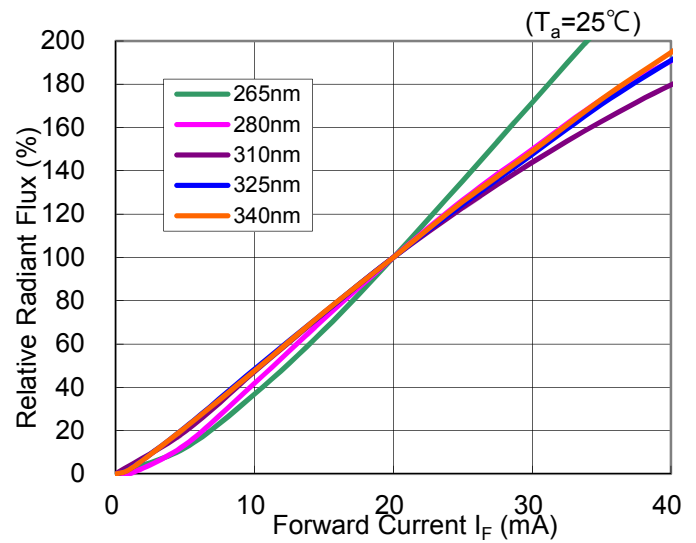
Absolute Maximum Ratings

Item	Symbol	Unit	Ambient Temperature	
Forward Current	I_{Fmax}	mA	40	$T_a=25^\circ\text{C}$
Operating Temperature	T_{OPR}	$^\circ\text{C}$	-30 ~ +80	
Storage Temperature	T_{STG}	$^\circ\text{C}$	-40 ~ +100	
Soldering Temperature	T_{SOL}	$^\circ\text{C}$	350 (within 3sec) 250 (within 5sec)	Manual Soldering Process Flow Soldering Process

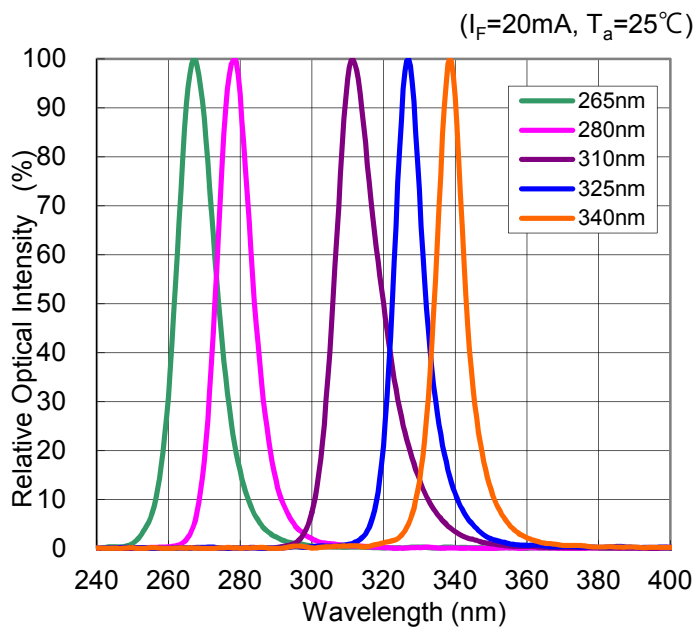
Forward Current vs Forward Voltage



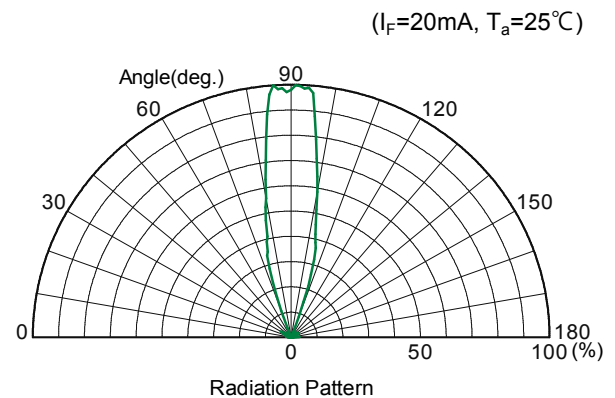
Forward Current vs Radiant Flux



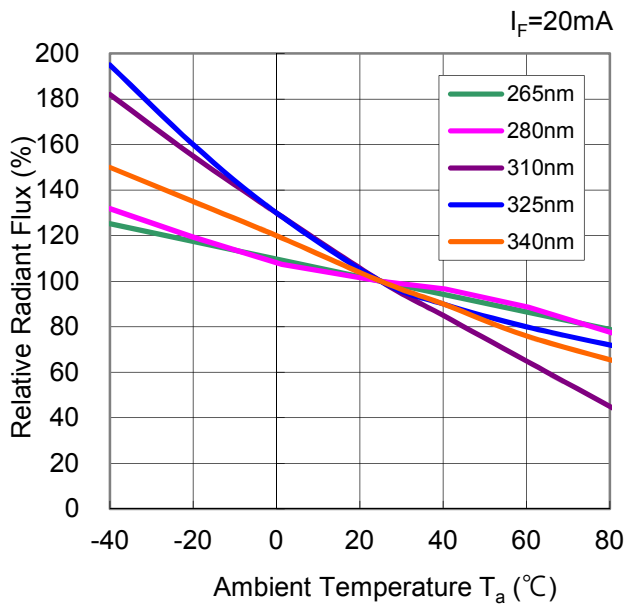
Relative Intensity vs Peak Wavelength



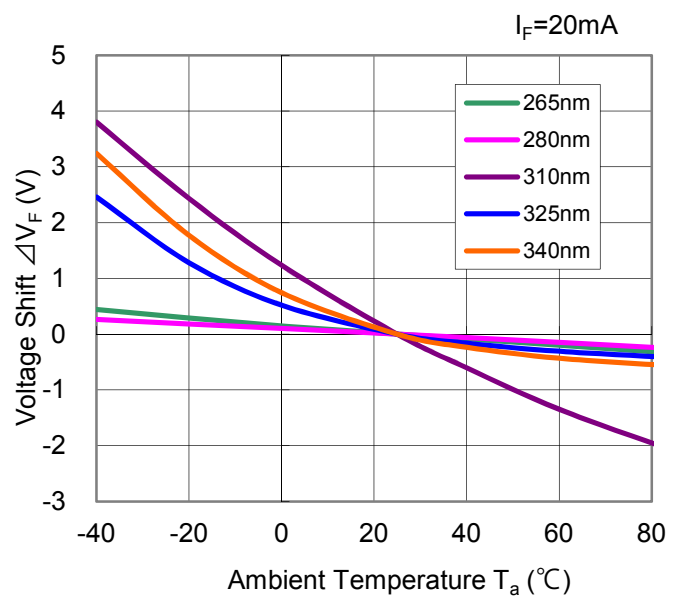
Radiation Pattern



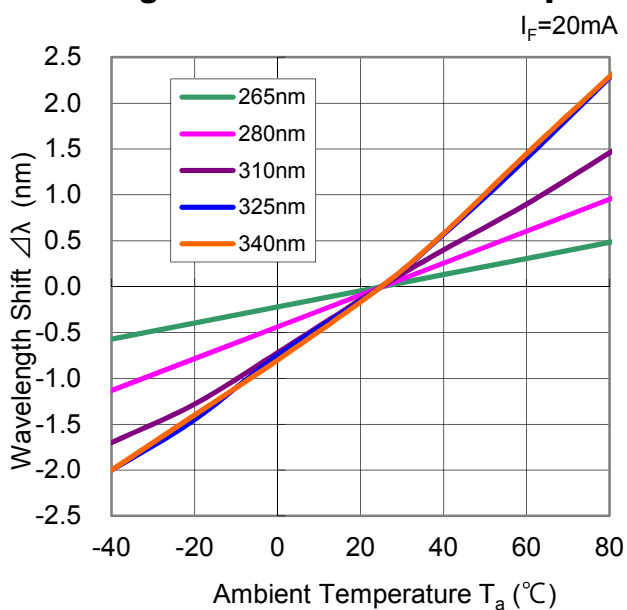
Radiant Flux vs Ambient Temperature



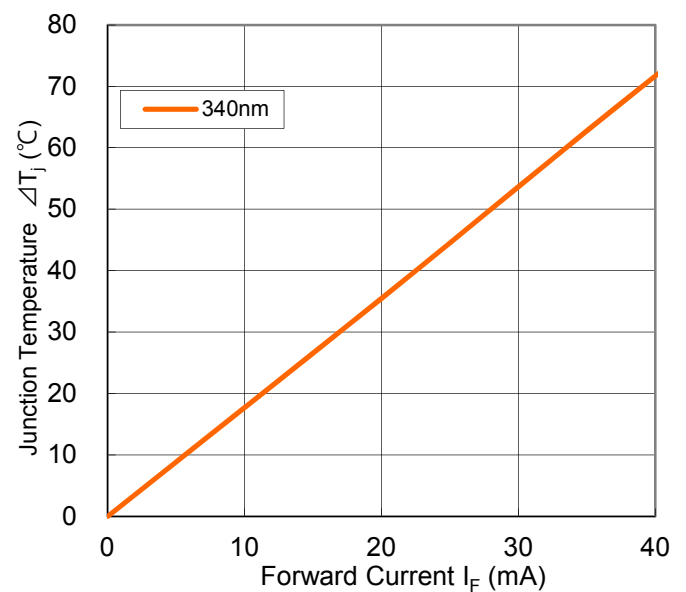
Voltage Shift vs Ambient Temperature



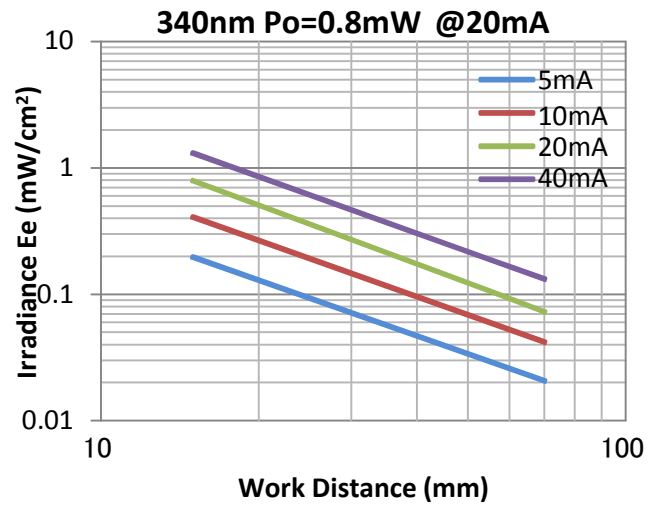
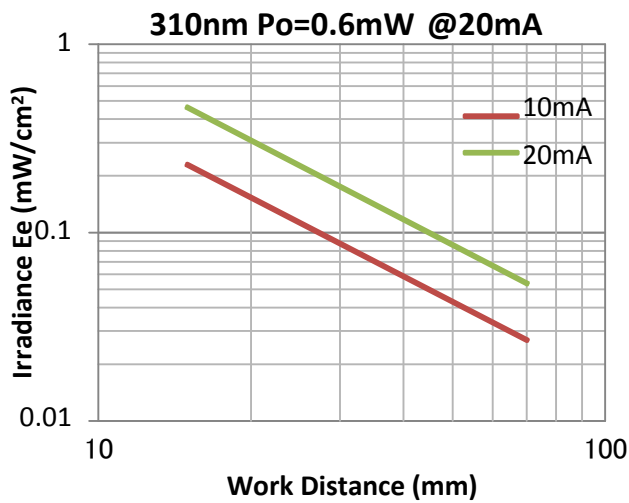
Wavelength Shift vs Ambient Temperature



Junction Temperature vs Forward Current



Irradiance vs Work Distance



	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.

Issued January 2016.

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