



DoUVLEDs

DOWA SUPERB UV LED SOLUTIONS

MODEL xFxVL-1F111 series

T018 Flat Can Type



Mechanical Specifications and Materials (Unit: mm)

Product ID

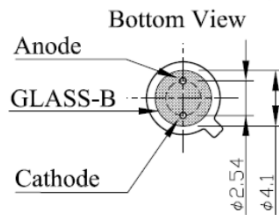
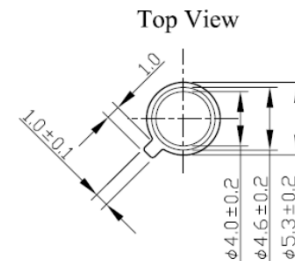
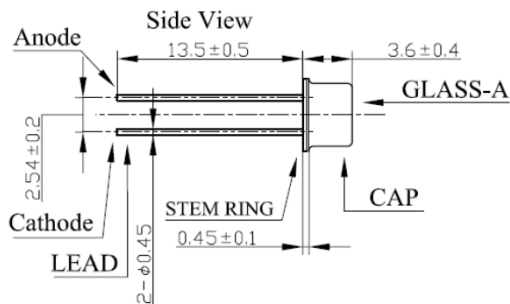
265nm: DF7VL-1F111

280nm: DF8VL-1F111

310nm: UF1VL-1F111

325nm: UF3VL-1F111

340nm: UF4VL-1F111



	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°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	0.7	1.1	1.1
Full Width at Half Maximum	Δ	nm	13	12	15	11	9
Forward Voltage	V _F	V	8-9	6.5	6-7	4.5	4.0
Response*	rise time	t _r	ns	-	16	20	12
	fall time	t _f	ns	-	8	9	8
Viewing Half Angle	2θ _{1/2}	deg.	113	113	113	113	113

*Test condition : Frequency=100kHz, duty=1%, I_p=200mA

Absolute Maximum Ratings

Item	Symbol	Unit	Ambient Temperature	
Forward Current	I _{Fmax}	mA	40	T _a =25°C
Operating Temperature	T _{OPR}	°C	-30 ~ +80	
Storage Temperature	T _{STG}	°C	-40 ~ +100	
Soldering Temperature	T _{SOL}	°C	350 (within 3sec)	Manual soldering process
			250 (within 5sec)	Flow soldering process

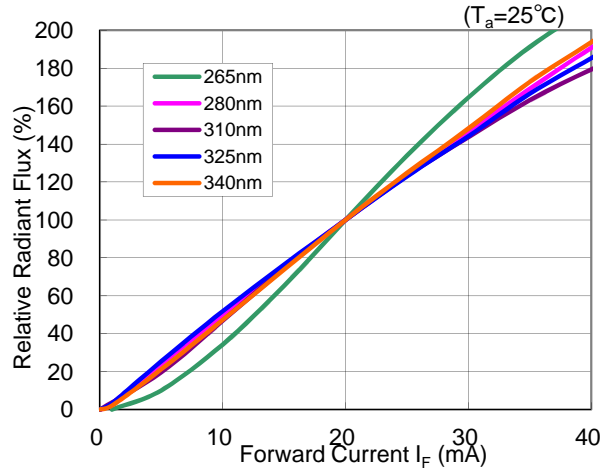
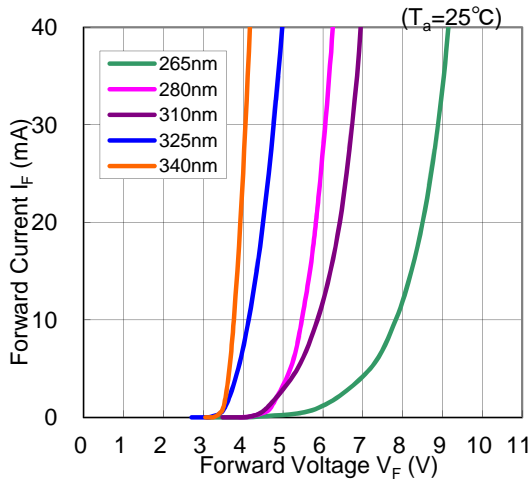


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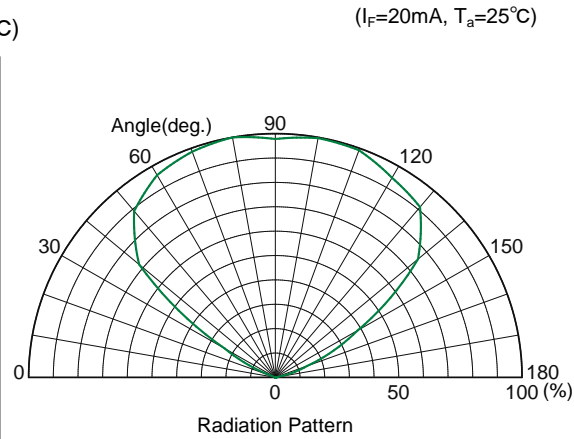
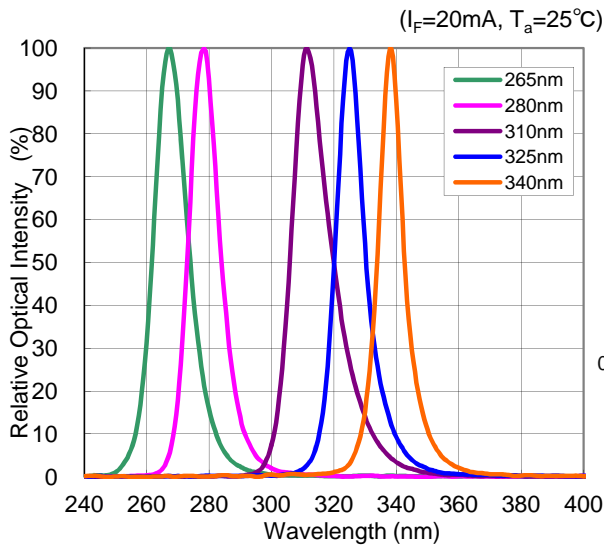
Forward Voltage vs Forward Current


Forward Current vs Radiant Flux



Peak Wavelength vs Relative Intensity

Radiation Pattern



	⚠ WARNING
	<ul style="list-style-type: none"> • 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.

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

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