



DoUVLEDs

DOWA SUPERB UV LED SOLUTIONS

# MODEL xFxVL-1F131 series

## T05 Flat Can Type



### Mechanical Specifications and Materials (Unit: mm)

#### Product ID

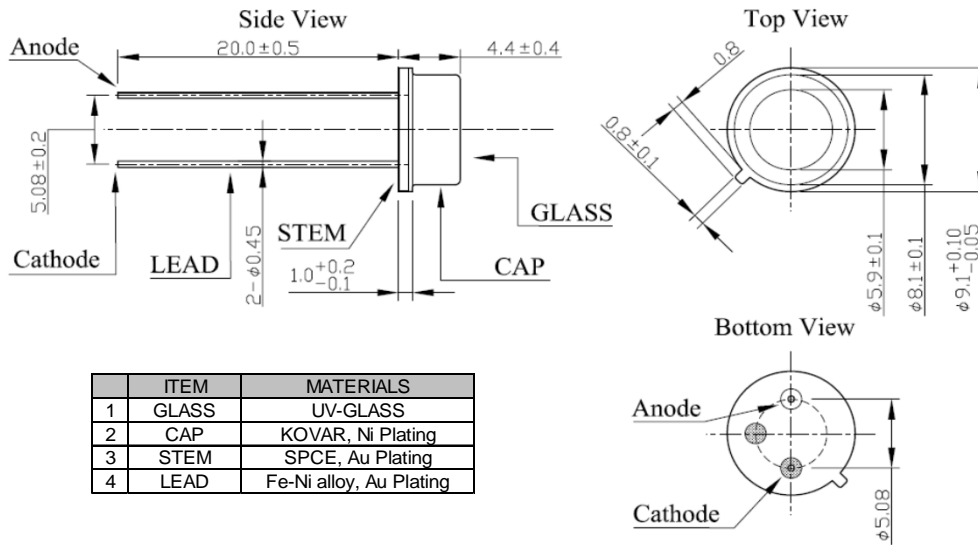
265nm: DF7VL-1F131

280nm: DF8VL-1F131

310nm: UF1VL-1F131

325nm: UF3VL-1F131

340nm: UF4VL-1F131



ITEM	MATERIALS
1	GLASS UV-GLASS
2	CAP KOVAR, Ni Plating
3	STEM SPCE, Au Plating
4	LEAD Fe-Ni alloy, Au Plating

### Typical Optical-Electrical Characteristics (I<sub>F</sub>=20mA, T<sub>a</sub>=25°C)

Item	Symbol	Unit	DF7VL	DF8VL	UF1VL	UF3VL	UF4VL
Peak Wavelength	$\lambda_p$	nm	265±5	280±10	310±5	325±5	340±5
Radiant Flux	P <sub>o</sub>	mW	1.0	1.5	0.8	1.2	1.3
Full Width at Half Maximum	$\Delta$	nm	13	12	15	11	9
Forward Voltage	V <sub>F</sub>	V	8-9	6.5	6-7	4.5	4.0
Response*	rise time	t <sub>r</sub>	-	-	16	20	12
	fall time	t <sub>f</sub>	-	-	8	9	8
Viewing Half Angle	2θ <sub>1/2</sub>	deg.	114	114	114	114	114

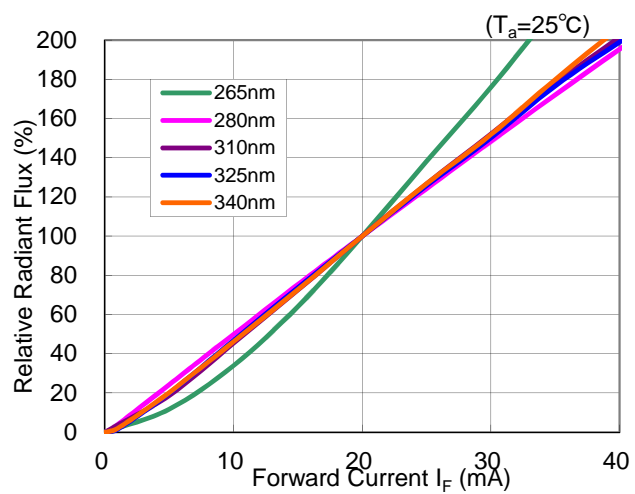
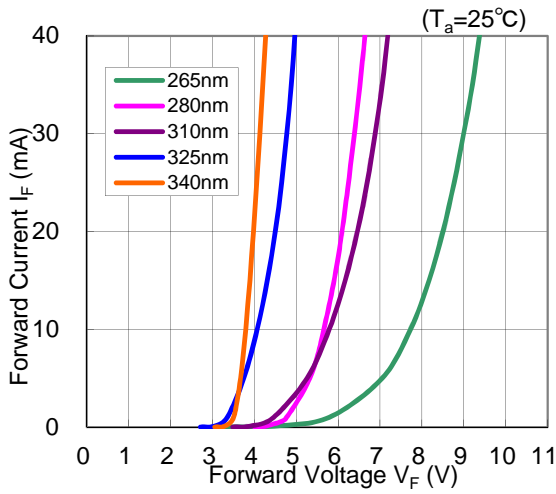
\*Test condition : Frequency=100kHz, duty=1%, I<sub>p</sub>=200mA

### Absolute Maximum Ratings

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

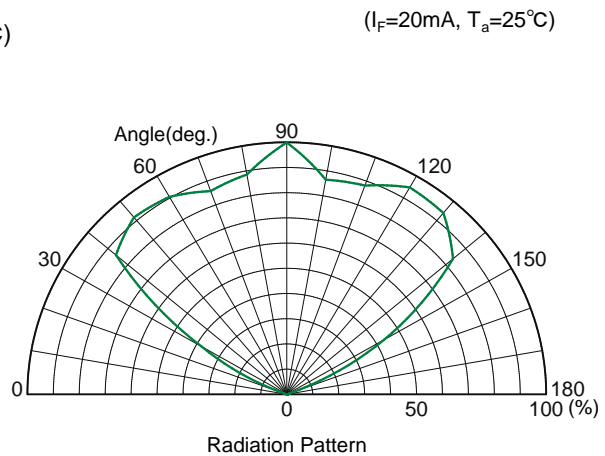
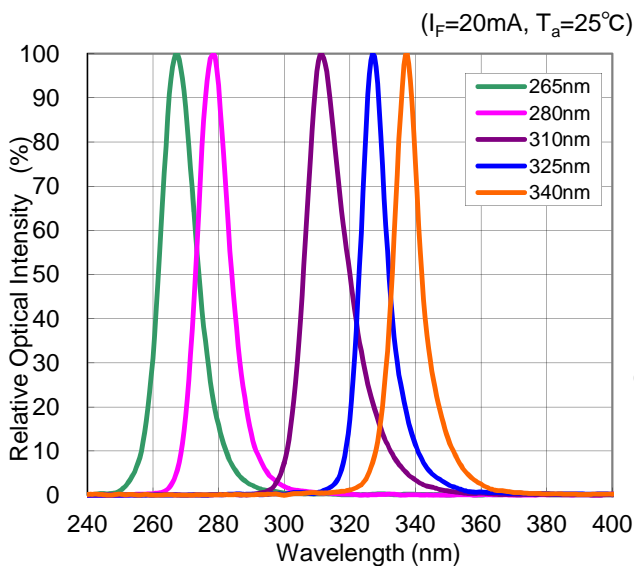
**Forward Voltage vs Forward Current**


**Forward Current vs Radiant Flux**



**Peak Wavelength vs Relative Intensity**

**Radiation Pattern**



	<b>WARNING</b>
	<ul style="list-style-type: none"> <li>• LEDs emit very strong UV radiation.</li> <li>• Don't look directly into the LED light. UV radiation can harm your eyes.</li> <li>• To prevent even inadequate exposure, wear protective eyewear.</li> <li>• If LEDs are embedded in devices, please indicate warning labels against the UV light LED used.</li> <li>• Keep out of reach of children.</li> <li>• Specification and dimension are subject to change for improvement without notice.</li> </ul>

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