

MODEL xFxVL-1F131 series

TO5 Flat Can Type



Mechanical Specifications and Materials (Unit: mm)

Product ID

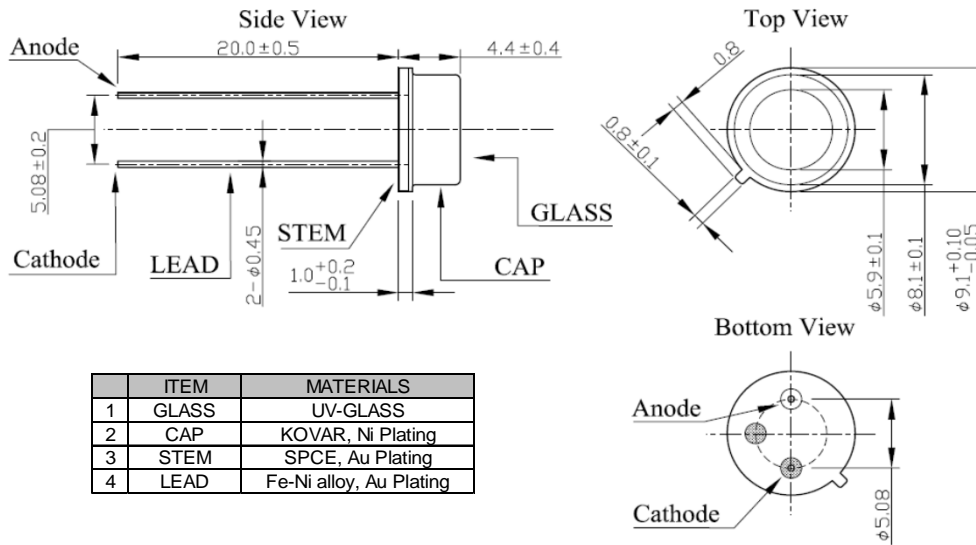
265nm: DF7VL-1F131

280nm: DF8VL-1F131

310nm: UF1VL-1F131

325nm: UF3VL-1F131

340nm: UF4VL-1F131



| ITEM | GLASS | 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_F=20mA, T_a=25°C)

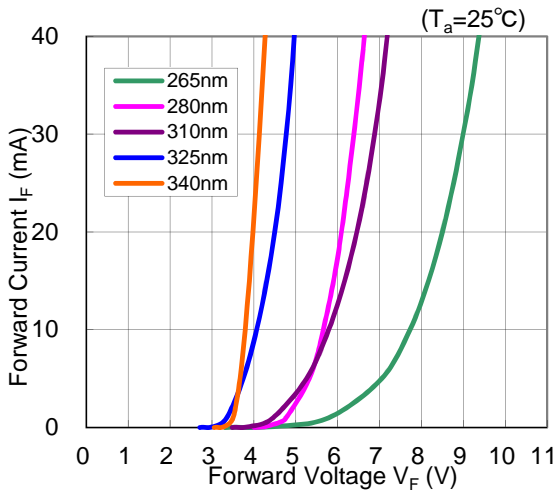
| Item | Symbol | Unit | DF7VL | DF8VL | UF1VL | UF3VL | UF4VL |
|----------------------------|-------------------|----------------|-------|--------|-------|-------|-------|
| Peak Wavelength | λ_p | nm | 265±5 | 280±10 | 310±5 | 325±5 | 340±5 |
| Radiant Flux | P _o | mW | 1.0 | 1.5 | 0.8 | 1.2 | 1.3 |
| 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 | - | - | 16 | 20 | 12 |
| | fall time | t _f | - | - | 8 | 9 | 8 |
| Viewing Half Angle | 2θ _{1/2} | deg. | 114 | 114 | 114 | 114 | 114 |

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

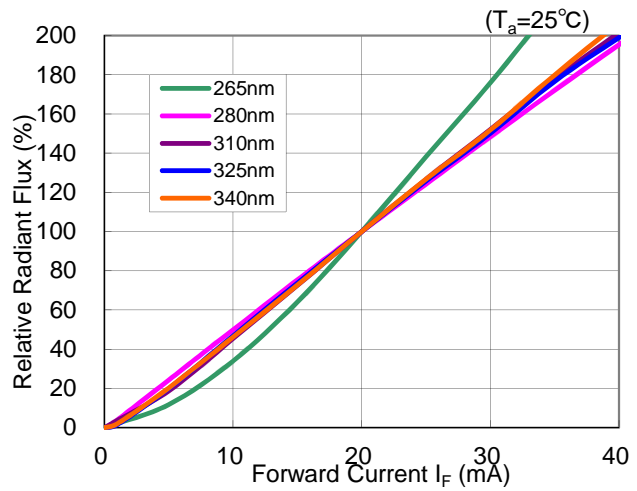
Absolute Maximum Ratings

| 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 |

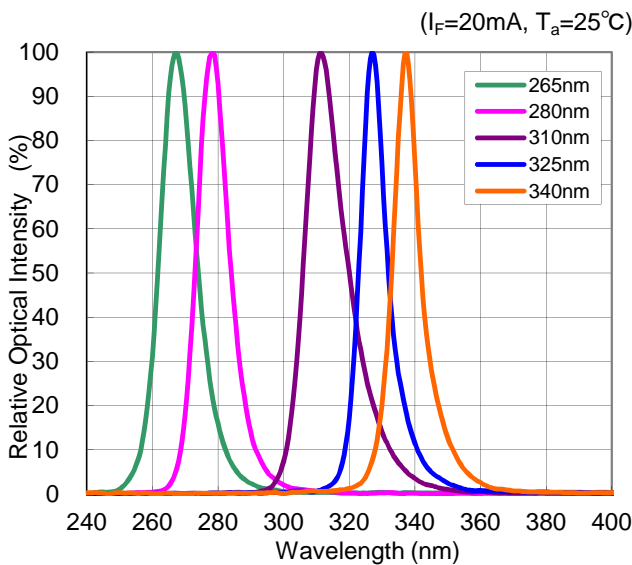
Forward Voltage vs Forward Current



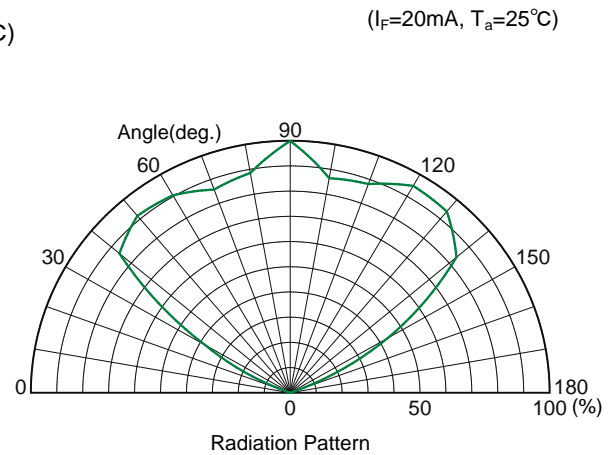
Forward Current vs Radiant Flux




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. |