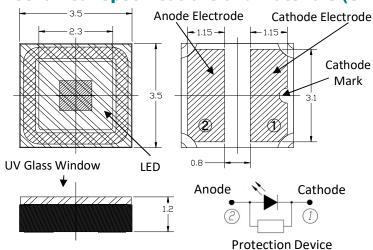
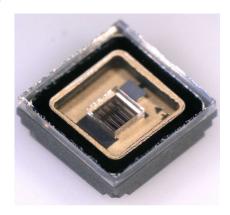


# MODEL 310-FL-02-U05 3.5 x 3.5mm Metal Sealed SMD Flat Top Type

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





## **Typical Optical-Electrical Characteristics**

 $(I_F=350mA, T_a=25^{\circ}C)$ 

| ltem                       | Symbol             | Unit | 310-FL-02-U05 |     |     |
|----------------------------|--------------------|------|---------------|-----|-----|
|                            |                    |      | Min           | Тур | Max |
| Peak Wavelength(*)         | $\lambda_{p}$      | nm   | 305           | 310 | 315 |
| Radiant Flux(**)           | Po                 | mW   | 36            | 50  | -   |
| Full Width at Half Maximum | ⊿λ                 | nm   | -             | 15  | 20  |
| Forward voltage            | $V_{F}$            | V    | -             | 5.5 | 1   |
| Viewing Half Angle         | 2 <sub>0 1/2</sub> | deg. | -             | 120 | -   |

(\*)Peak Wavelength Measurement tolerance is ±3nm.

(\*\*)Radiant Flux Measurement tolerance is ±10%.

(\*\*\*)Junction-ambient

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

Binning is available.



### 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.

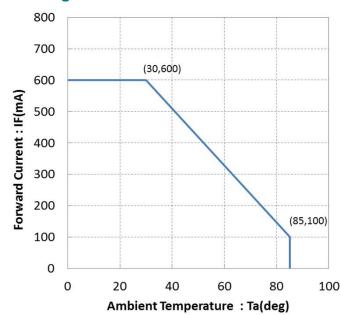


# MODEL 310-FL-02-U05 3.5 x 3.5mm Metal Sealed SMD Flat Top Type

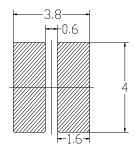
## **Absolute Maximum Ratings**

| ltem                  | Symbol           | Unit | Value                       |  |  |  |
|-----------------------|------------------|------|-----------------------------|--|--|--|
| Forward Current       | IF               | mA   | 600                         |  |  |  |
| Junction Temperature  | $T_J$            | °C   | 100                         |  |  |  |
| Operating Temperature | T <sub>OPR</sub> | οຶ   | -30 <b>~</b> +85            |  |  |  |
| Storage Temperature   | T <sub>STR</sub> | °C   | -40 ∼ +85 (No condensation) |  |  |  |

### **Derating Curve**

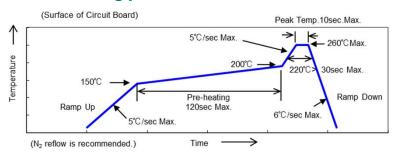


### **Recommended solder pad**



Unit : mm

### **Reflow soldering profile**



This soldering profile is according to JEDEC-J-STD-020D.





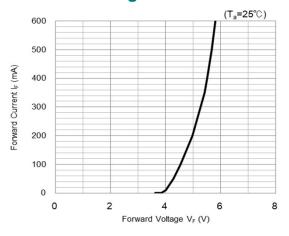


# **MODEL 310-FL-02-U05**

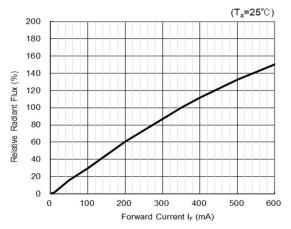
# 3.5 x 3.5mm Metal Sealed SMD Flat Top Type

## **Reference Data(1)**

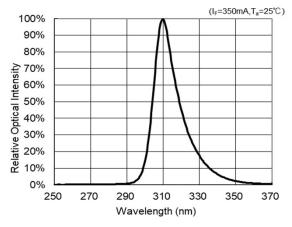
# **Forward Voltage vs Forward Current**



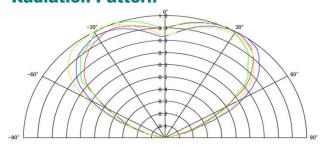
#### **Forward Current vs Radiant Flux**

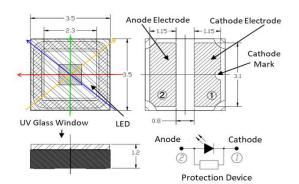


## **Spectrum**



#### **Radiation Pattern**









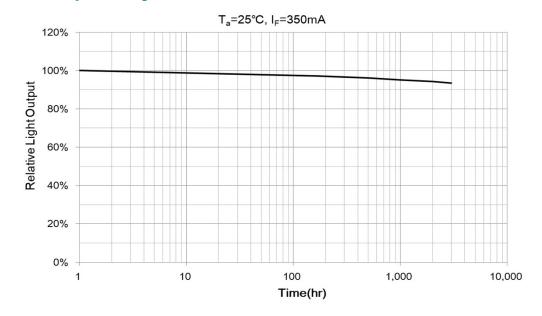
DOWA SUPERB UV LED SOLUTIONS

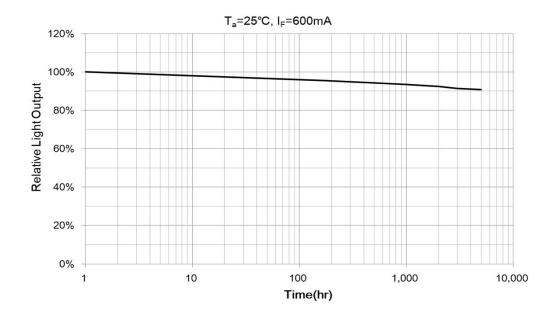
# **MODEL 310-FL-02-U05**

# 3.5 x 3.5mm Metal Sealed SMD Flat Top Type

## Reference Data(2)

# **Life Expectancy Data**





These data as on the page 1 to 4 were determined with Al-substrate on a heat sink and fan.