

DOWA SUPERBUV LED SOLUTIONS

# Model 310-FF-02 series Bare Die (Flip chip form, Au Pad)

#### **Typical Optical-Electrical Characteristics**

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

Item	Symbol	Unit	310-FF-02-C		
			Min	Тур	Max
Peak Wavelength	$\lambda_{p}$	nm	305	310	315
Radiant Flux	Po	mW	-	4.8	-
Full Width at Half Maximum	⊿λ	nm	-	15	-
Forward Voltage	$V_{F}$	V	-	5.0	-

<sup>(\*)</sup>Peak Wavelength Measurement tolerance is ±3nm.

Binning is available.

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

 $(I_E=50mA, T_a=25^{\circ}C)$ 

<u>(F</u> , a,							
Item	Symbol	Unit	310-FF-02-C				
			Min		Max		
Peak Wavelength	$\lambda_{p}$	nm	305	310	315		
Radiant Flux	Po	mW	-	12	-		
Full Width at Half Maximum	⊿λ	nm	-	15	-		
Forward Voltage	V <sub>F</sub>	V	-	5.6	-		

<sup>(\*)</sup>Peak Wavelength Measurement tolerance is ±3nm.

Binning is available.

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

#### **⚠ 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.

<sup>(\*\*)</sup>Radiant Flux Measurement tolerance is ±10%.

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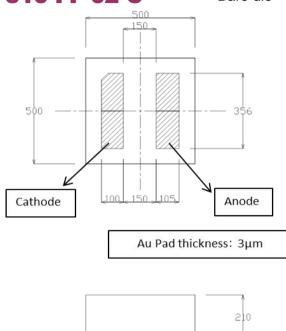


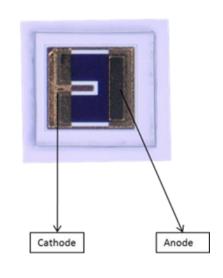
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### **Product ID, Physical dimensions and Sample photo**



Bare die





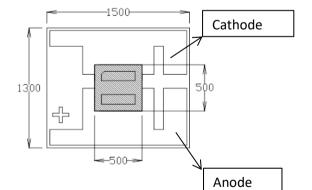
### 310-FF-02-S0A

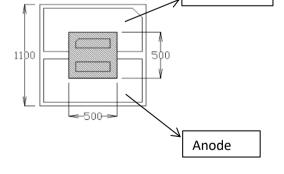
### 310-FF-02-S0B

-1100-

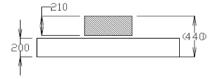
With AIN submount2

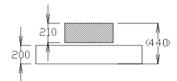
With AIN submount1





Cathode





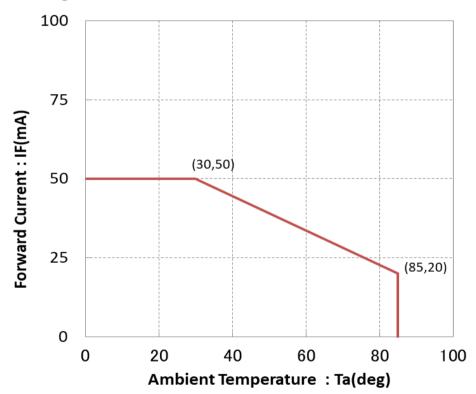


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#### **Absolute Maximum Ratings**

ltem	Symbol	Unit	Value
Forward Current	IF	mΑ	50
Junction Temperature	$T_J$	οຶ	90
Operating Temperature	$T_OPR$	Ω°	-30 <b>~</b> +85
Storage Temperature	T <sub>STR</sub>	°C	-40 ~ +85 (No condensation)

#### **Derating Curve**



#### Notes:

Maximum ratings and derating curve strongly depend on assembly materials.

The above ratings and derating curve were determined using AIN submount ,AI substrate and heatsink. Ratings may be different for other materials and environment.

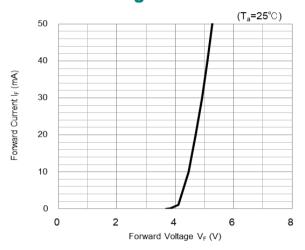




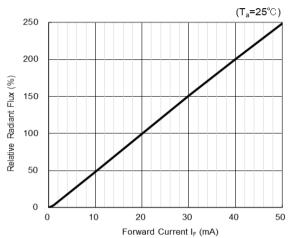
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#### **Reference Data(1)**

#### **Forward Voltage vs Forward Current**



#### **Forward Current vs Radiated Flux**



#### **Spectrum**

