

# SPECIFICATION

Product : UV CoB Module

Part No. : IWC-C64R2-V3X-1604W

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**Comment**

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# UV CoB Module

## IWC-C64R2-V3X-1604W

*Tentative*

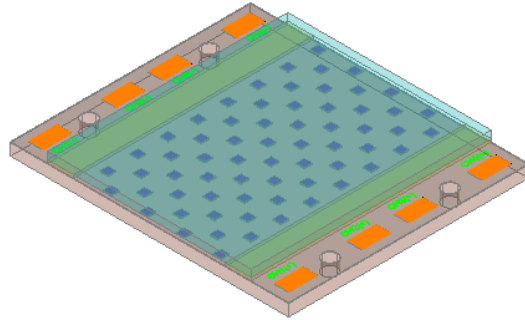


### 1. Features

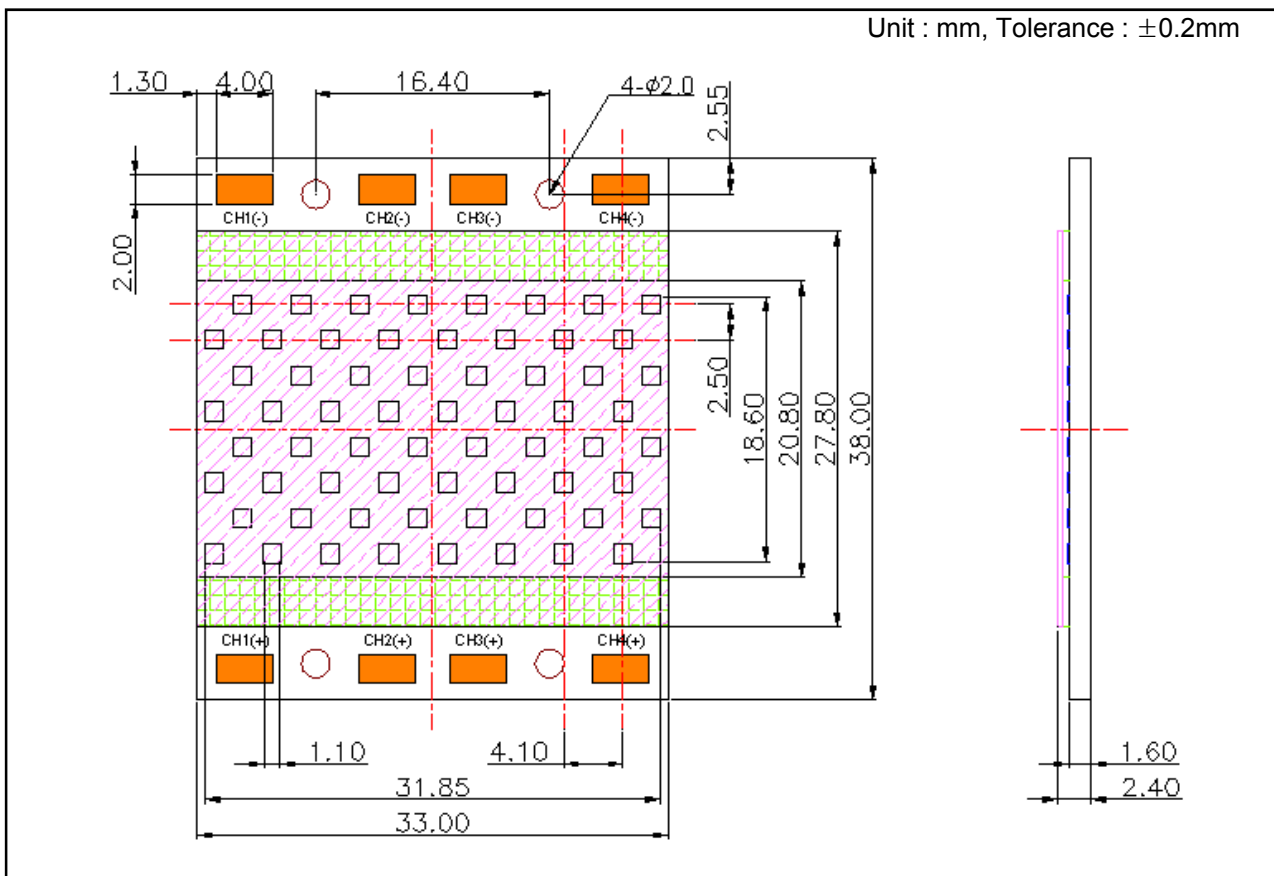
- High Power UV CoB Module
- High-flux Module : 23.0 x 38.0 x 2.4 mm
- Wide Viewing Angle : 120°

### 2. Applications

- Lithography
- UV Curing
- Phototherapy
- Air / Water Purification
- Analytical Instruments
- Tanning



### 3. Outline Drawing and Dimension



**Note**

1. All dimensions are in millimeters
2. All dimensions without tolerances are for reference only

**4. Absolute Maximum Ratings(  $T_a = 25\text{ }^\circ\text{C}$  )**

Parameter	Symbol	Value	Unit
Power Dissipation	$P_d$	128	W
Continuous Forward Current	$I_F$	2,000	mA
Peak Forward Current *1	$I_{FP}$	4,000	mA
Operating Temperature	$T_{opr}$	-30 ~ 85	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-40 ~ 85	$^\circ\text{C}$
Soldering Temperature	$T_{sol}$	260 (5sec)	$^\circ\text{C}$

\*1 Duty ratio = 1/10, Pulse width = 0.1ms

**5. Electro-optical Characteristics(  $T_a = 25\text{ }^\circ\text{C}$  )**

Parameter	Symbol	Item	Conditions	Min.	Typ.	Max.	Unit.
Forward Voltage *2	$V_F$	C64R2-V3X	$I_F = 2,000\text{ mA}$	55.0	-	64.0	V
Radiant Flux *3	$\Phi_E$	C64R2-V36	$I_F = 2,000\text{ mA}$	24.0	-	35.0	W
		C64R2-V38	$I_F = 2,000\text{ mA}$	35.0	-	50.0	
		C64R2-V39	$I_F = 2,000\text{ mA}$	35.0	-	50.0	
Peak Wavelength *4	$W_P$	C64R2-V36	$I_F = 2,000\text{ mA}$	360	-	370	nm
		C64R2-V38	$I_F = 2,000\text{ mA}$	380	-	390	
		C64R2-V39	$I_F = 2,000\text{ mA}$	390	-	400	
Viewing Angle *5	$2\theta_{1/2}$	CXXR2	$I_F = 2,000\text{ mA}$	-	120	-	deg.

\*2 Forward Voltage has a tolerance of  $\pm 0.05\text{ V}$ .

\*3 Radiant Flux is tested by a tester calibrated by CAS 140B(CIE LED\_B) and has an accuracy of 10%

\*4 Peak Wavelength has an accuracy of  $\pm 2\text{ nm}$

\*5 Viewing Angle is the angle until 50% of brightness measured from the front part of LED.

**5.1 Radiant Flux Rank**

Rank	Radiant Flux (W)	Item
H	24.0 ~ 29.0	C64R2-V36
J	29.0 ~ 35.0	
K	35.0 ~ 42.0	C64R2-V38
L	42.0 ~ 50.0	C64R2-V39

**5.3 Peak Wavelength Rank**

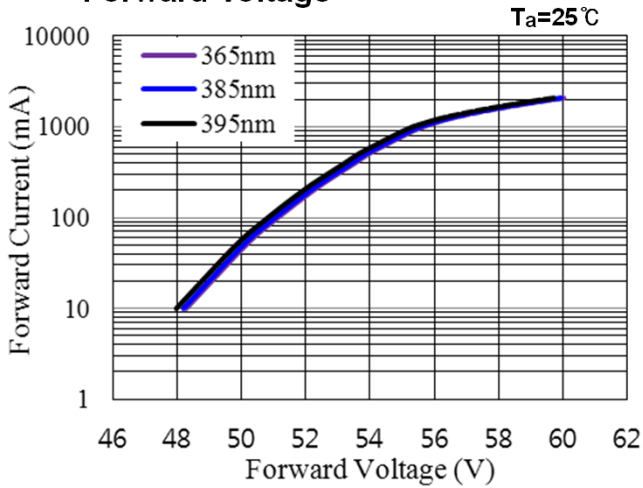
Rank	Peak Wavelength (nm)	Item
A	360 ~ 370	C64R2-V36
B	380 ~ 390	C64R2-V38
C	390 ~ 400	C64R2-V39

**5.2 Forward Voltage Rank**

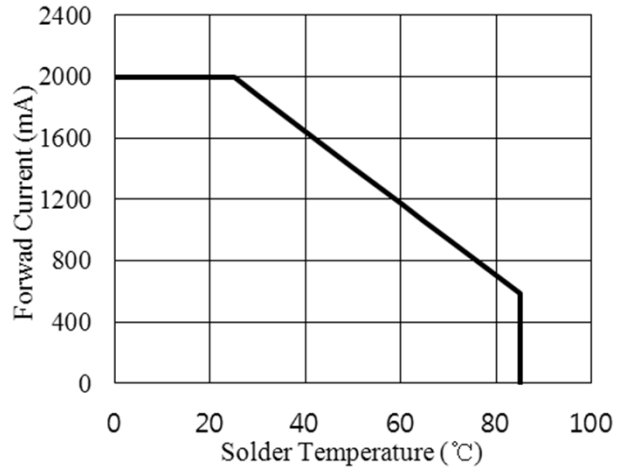
Rank	Forward Voltage (V)	Item
1	55.0 ~ 58.0	C64R2
2	58.0 ~ 61.0	
3	61.0 ~ 64.0	

**6. Typical Characteristics Curves**

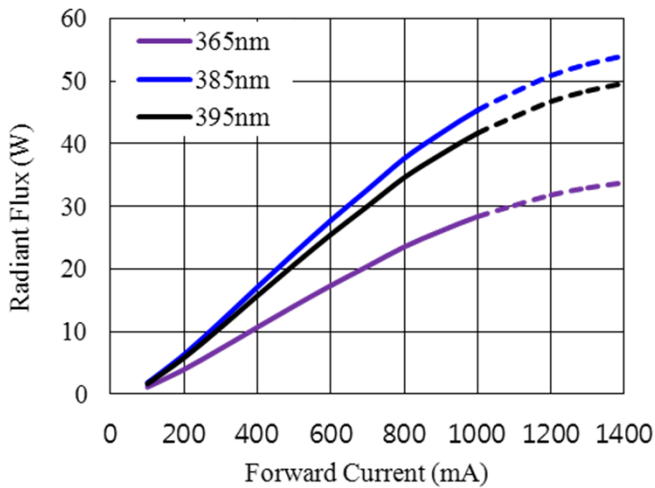
**Forward Current vs. Forward Voltage**



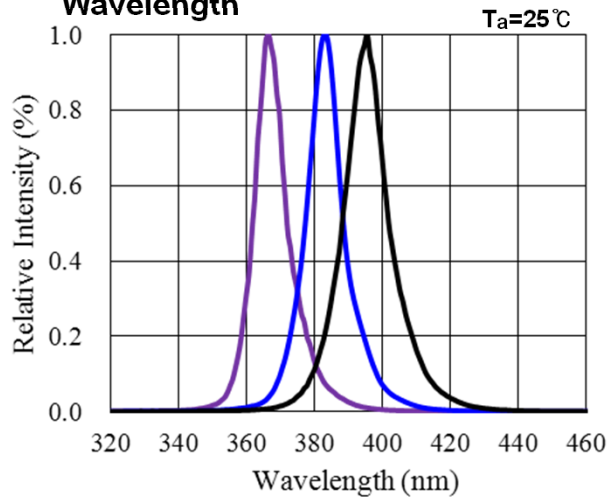
**Forward Current vs. Solder Temperature**



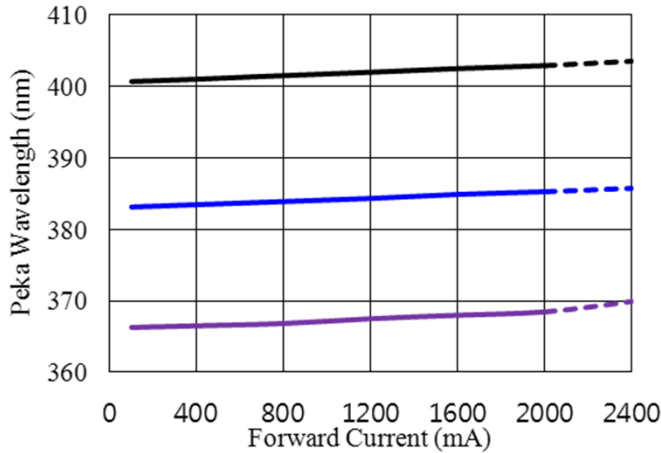
**Radiant Flux vs. Forward Current**



**Relative Intensity vs. Wavelength**



**Relative Peak Wavelength vs. Forward Current**



**Radiation Diagram**

