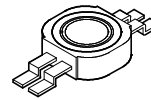


# shadow

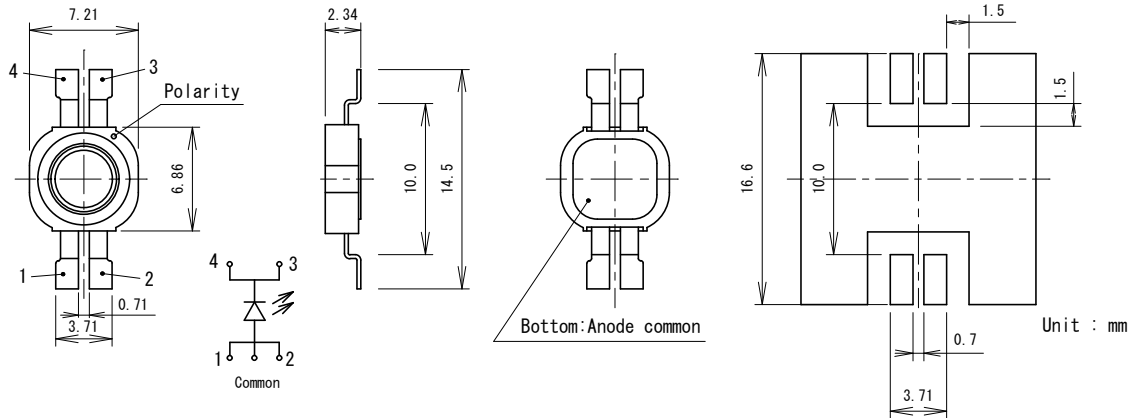


RoHS Compliant

1. Part Number: YBBC14NU-420

Wavelength: 415-420nm

2. Outer Dimensions / LED wiring diagram / Recommended pattern for SMD



3. Absolute Maximum Rating

(Ta=25°C)

Items	Symbol	Rating/Substrate			Unit
		FR-4 PCB	Metal PCB		
Power Dissipation	P <sub>D</sub>	1.7	1.9		W
Forward Current	I <sub>F</sub>	300	500		mA

Items	Symbol	Rating	Unit
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature Range (*1)	T <sub>opr</sub>	-40 - +90	°C
Storage Temperature Range (*1)	T <sub>stg</sub>	-40 - +100	°C
Soldering Temperature (*2)	T <sub>sol</sub>	260	°C

(\*1) Non-condensing humidity.

(\*2) Solder within 3 seconds and do not exceed maximum allowable soldering temperature.

4. Electrical and Optical Characteristics

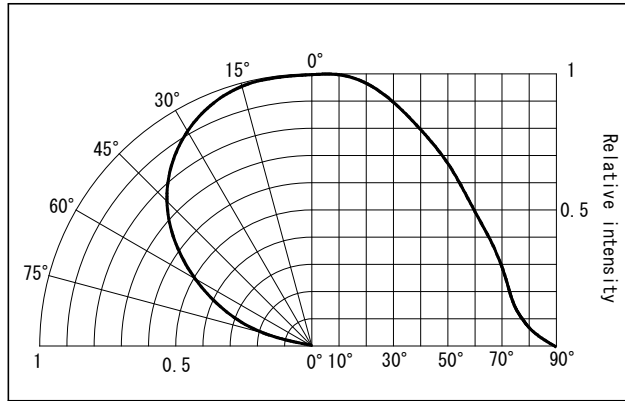
(Ta=25°C)

Items	Substrate Condition	FR-4 PCB			Metal PCB							Unit	
		I <sub>F</sub> = 300 mA			I <sub>F</sub> = 500 mA								
		Symbol	Min.	Typ.	Max.	Min.	Typ.	Max.					
Forward Voltage	V <sub>F</sub>	3.4	3.6	3.8	3.7	3.8	3.9						V
Optical Power Output (*3)	P <sub>o</sub>	240	255	270	400	420	440						mW

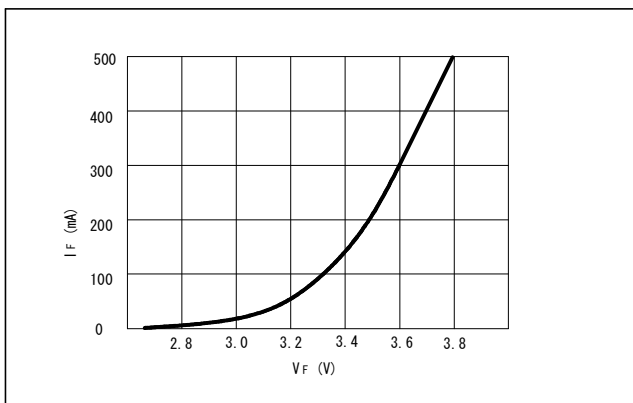
Items	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak Wavelength	λ <sub>p</sub>	I <sub>F</sub> = 350mA	416	418	420	nm
Viewing Angle	2θ 1/2		140			deg
Reverse Current	I <sub>R</sub>	V <sub>R</sub> = 5V	—	—	10	μA

(\*3) Measurement tolerance: ± 15 %

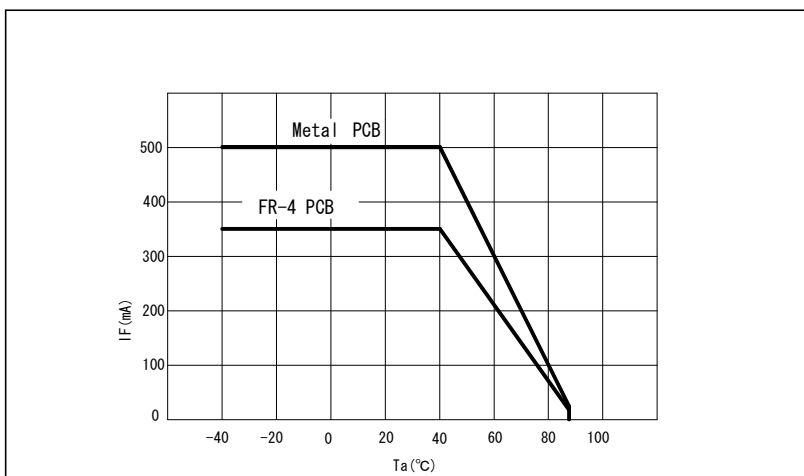
5. Viewing angle



6. Voltage & Current characteristics



7. Ambient temperature & Forward current reduction rate characteristics



Measured values are for reference only.

YEL reserves the right to change specifications at anytime without notice.