

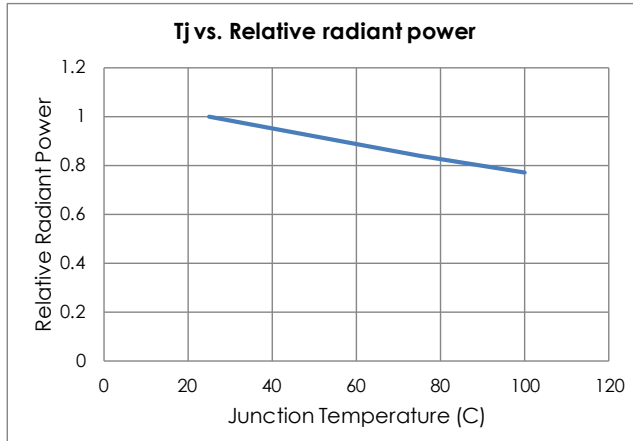
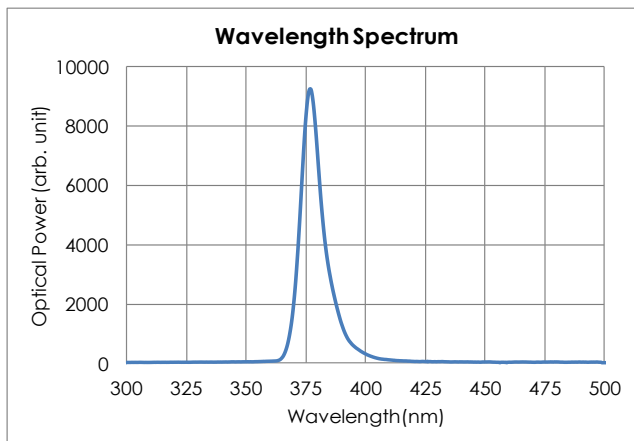
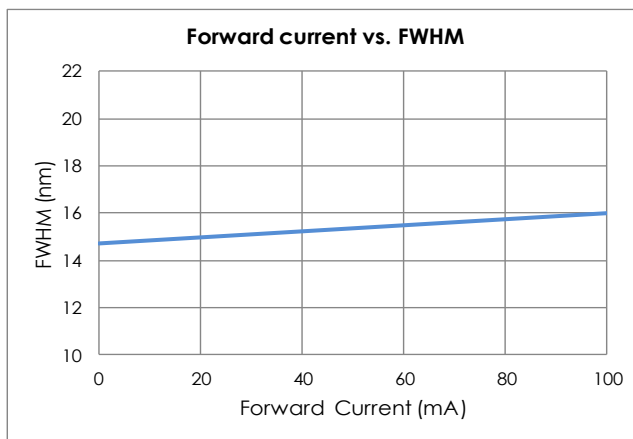
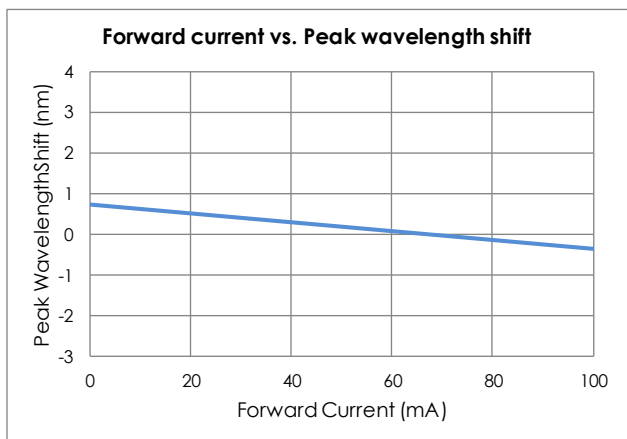
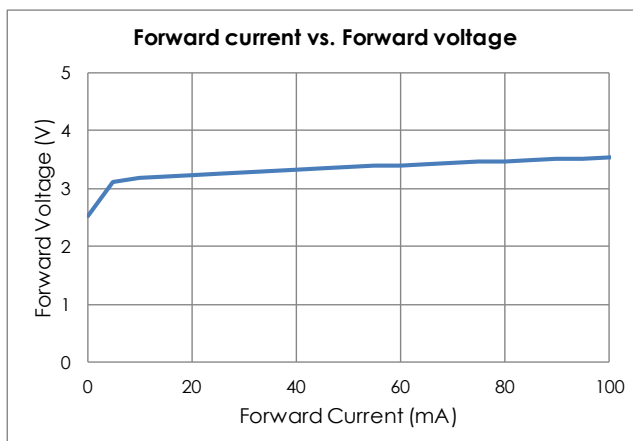
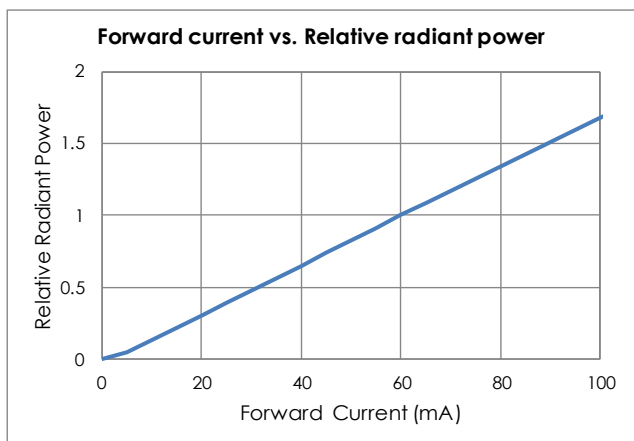
# Specification Sheet: Ultra Violet LED Package

Model: UP5050E1F-S4P03

Type: L4020C1S3

## 1) Optical and Electrical Characteristics (Ta=25°C)

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	If=60mA	3.2	3.5	3.8	V
Reverse Voltage	Vr	Ir=-5mA	-	-	7	V
Peak Wavelength	Wp	If=60mA	370	-	380	nm
Optical Power	$\Phi_e$	If=60mA	Refer to Rank Information			mW
View Angle	$2\theta_{1/2}$	If=60mA		120	-	Deg.



## 2) Rank Information (Bin Table)

Wp (Peak wavelength)	
BIN	nm
UE	370-375
UF	375-380
UG	380-385
UH	385-390
UJ	390-395
UK	395-400
UL	400-405
UM	405-410

Po (Optical Power)	
BIN	mW
10	10-20
20	20-30
30	30-40
40	40-50

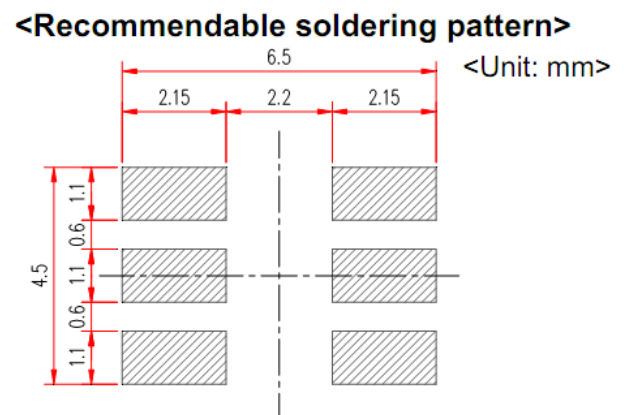
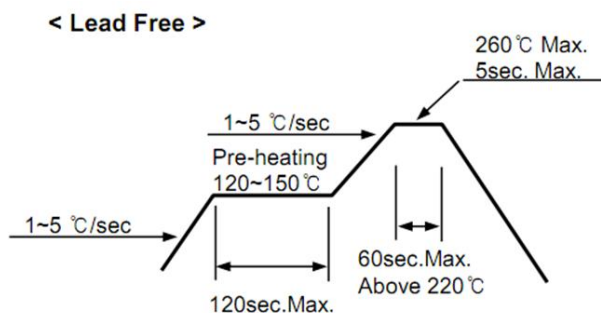
Vf (Voltage)	
BIN	V
Va	3.0-3.2
Vb	3.2-3.4
Vc	3.4-3.6
Vd	3.6-3.8

\*The above value of optical power (mW) is not calibrated. This value is depends on the measurement equipment.  
The bin table could be changed.

## 3) Absolute Maximum Ratings (Ta=25°C)

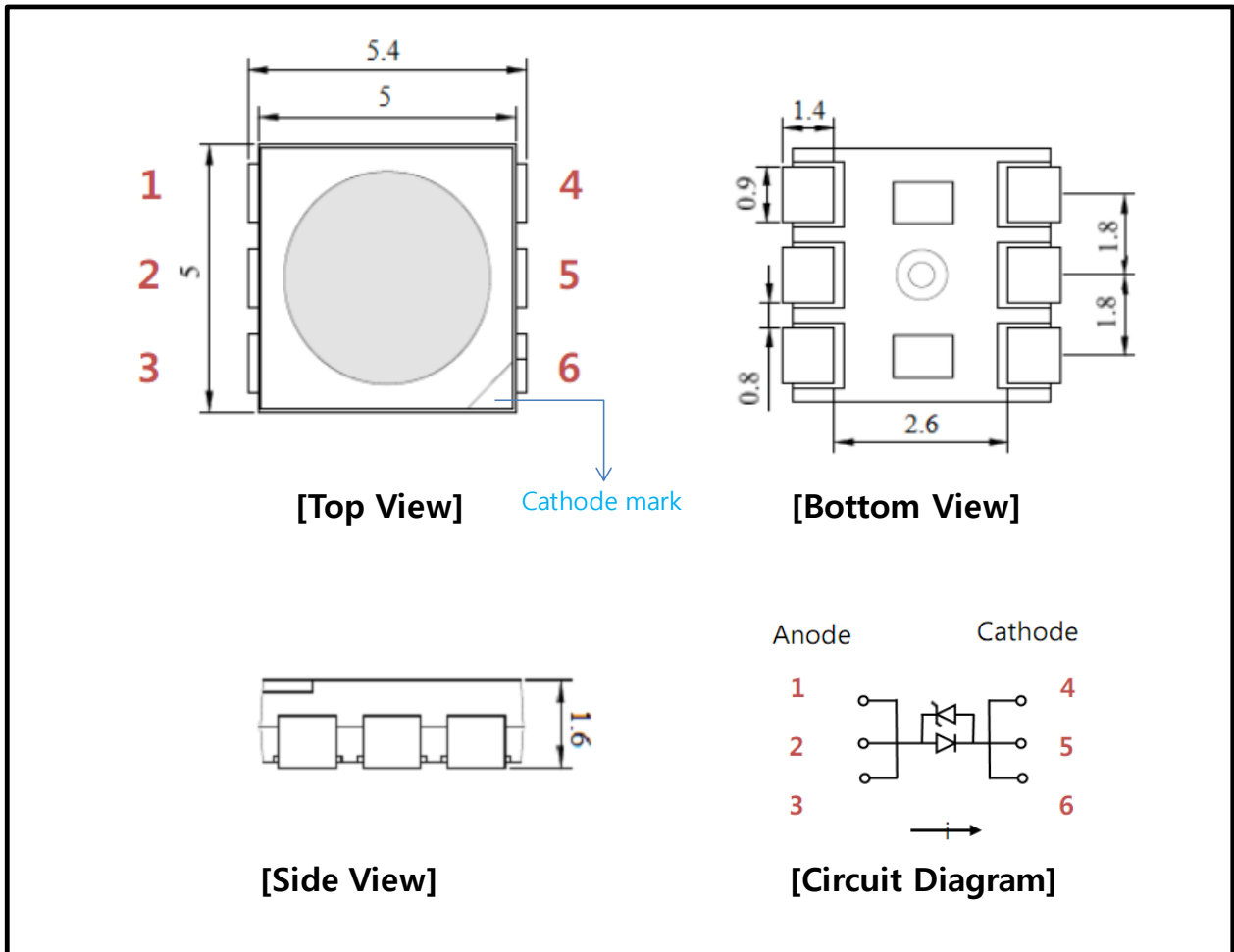
Parameters	Symbol	Maximum Value	Unit
Power dissipation (at room temperature)	$P_D$	0.3	W
DC forward current	$I_F$	90	mA
Pulse current ; (1/10 duty ratio@1khz)	$I_{Fp}$	150	mA
Reverse current	$I_r(\text{Max})$	10	$\mu\text{A}$
Operating temperature	$T_{\text{Opr}}$	-20 ~ +80	°C
Storage temperature	$T_{\text{Stg}}$	-30 ~ +90	°C
Soldering temperature	$T_{\text{Sol}}$	Reflow Soldering : 260°C /5s	°C
Chip junction temperature	$T_j$	115	°C

- Soldering conditions



#### 4) Description

Dimension (LxWxH): 5.4 x 5.0 x 1.6 mm ( $\pm 0.15$ )



#### 5) Caution

- 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.



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