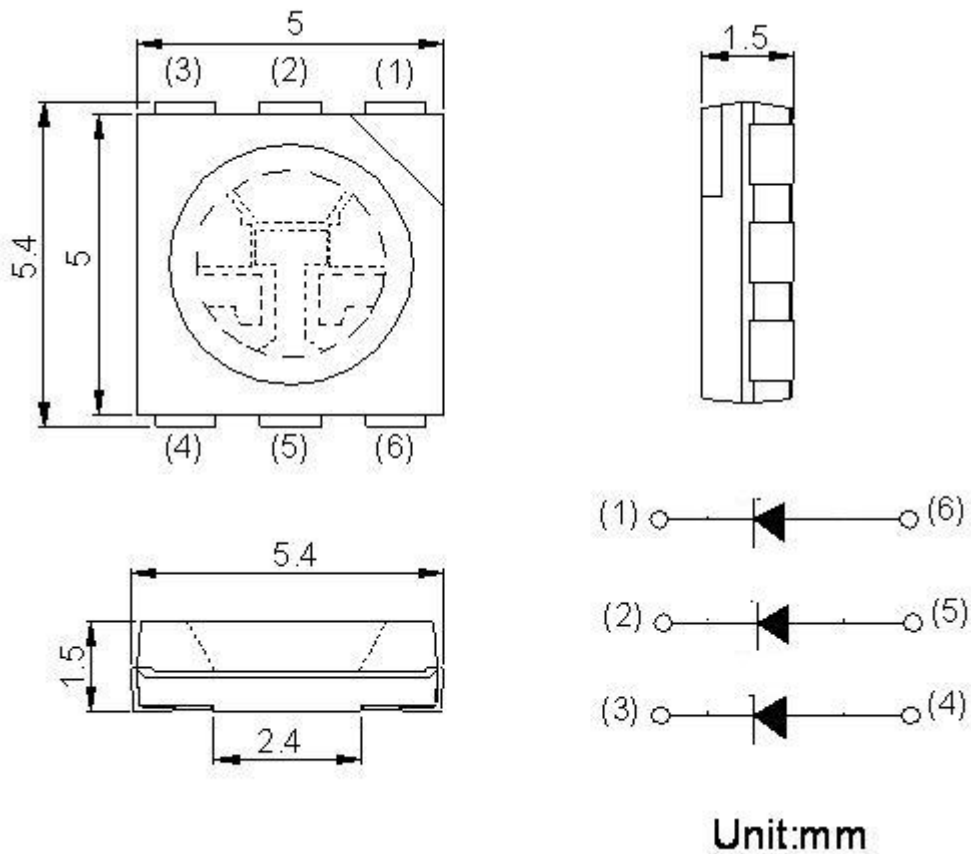


Specification for Approval

◆ Features

- * High brightness surface mount technology.
- * Emitting view angle 120°
- * Suitable for all SMT assembly method.
- * IR reflow soldering and vapor phase reflow soldering.

◆ Package Dimensions



Notes:

1. All dimensions are in mm.
2. Tolerance is ± 0.25 mm unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.

Specification for Approval

◆ Description

Model No.	Material	Emitted	Lens Color
XL5050UVC3C	InGaN/Sapphire	UV	Water clear

◆ Absolute Maximum Ratings (T_A=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	P _D	200	mW
Forward Current (DC)	I _F	60	mA
Peak Forward Current *	I _{FP}	200	mA
Reverse Voltage	V _R	5.0	V
Operation Temperature Range	T _{op}	-25to+85	°C
Storage Temperature Range	T _{stg}	-40to+100	°C
Soldering Temperature	260°C/5sec		

* Pulse width ≤ 0.1msec Duty Ratio ≤ 1/10

◆ Electrical and Optical Characteristics (T_A=25°C)

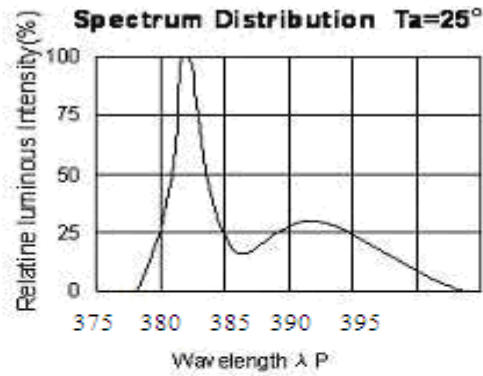
Parameter	Test Condition	Symbol	Min	Typ	Max	Unit
Forward Voltage (V _F)	I _F =60mA	V _F	3.2		3.8	V
View Angle	I _F =60mA	2 θ 1/2		120		deg
Reverse Current	V _R =-5V	I _R			2	μA
Wavelength	I _F =60mA	wl	380	----	385	nm
Luminous Intensity (I _v)	I _F =60mA	I _v	12		16	Mw

Notes:

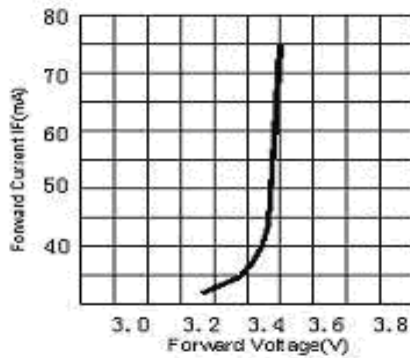
- 1.The dominant Wavelength, λ_{dom} is derived from the CIE chromaticity diagram and represents the single wavelength which define the color of the device.
2. 2 θ 1/2 is the off-axis angle where the luminous intensity is one half the on-axis intensity.
- 3.Luminous intensity is measured by SEALAND equipment on Top LED in the same lot.

Specification for Approval

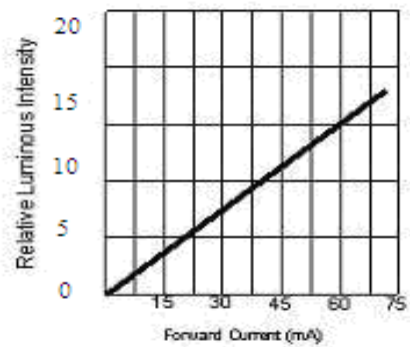
Typical Electrical/Optical Characteristic Curves (If=60mA; T_A=25°C)



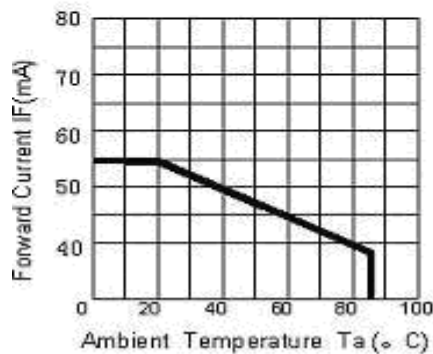
Forward Current vs. Forward Voltage



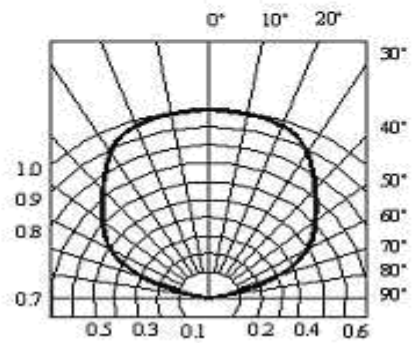
Relative Luminous Intensity vs. Forward Current



Ambient Temperature VS. Forward Current



Radiation Diagram



Specification for Approval

Reliability performance

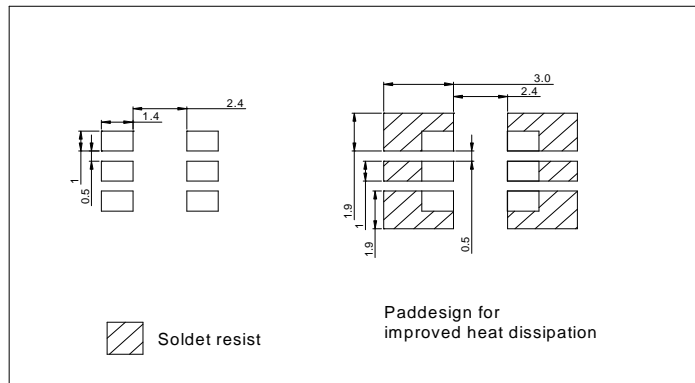
Test items and result

Test classification	Test item	Test condionts	Test duration	Sample size	AC/RE
Life test	Room temperature DC operating life test	Ta=25±5°C IF=60mA	1000hrs	30pcs	0/1
Environment test	Thermal shock Test	-10±5°C ← → +100±5°C 5min 10sec 5min	50cycles	30pcs	0/1
	Temperature cycle test	-40±5°C ← → +85±5°C 30min 5sec 30min	50cycles	30pcs	0/1
	High temperature & High humidity test	Ta=85±5°C RH=85%±0.5%RH	1000hrs	30pcs	0/1
	High temperature storage	Ta =100±5 °C	1000hrs	30pcs	0/1
	Low temperture storage	Ta =-55±5°C	1000hrs	30pcs	0/1
Mechanical test	Resistance to soldering heat	Ta =230±5°C	5sec	30pcs	0/1
	Lead integrity	Load 2.5N(0.25KGf) 0 °C ∞ 90 °C ∞ 0°C	3times	30pcs	0/1

Specification for Approval

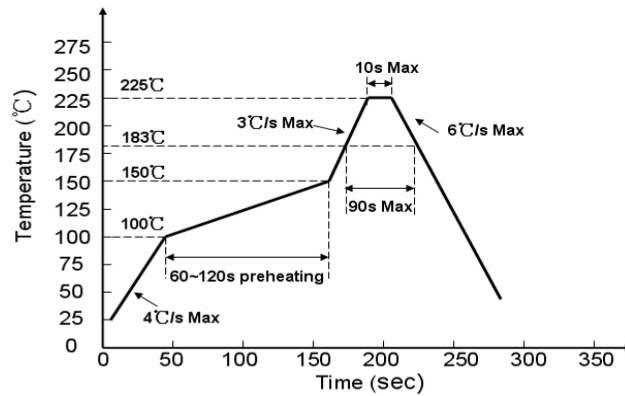
◆ PRECAUTION IN USE

Recommended solder pad:



Vapor Phase Reflow Soldering Profile:

For Lead Solder:



For Lead Free Solder:

