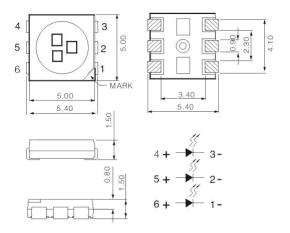


- 5mmx5mm SMD LED, 1.5mm THICKNESS. (5mmx5mm SMD)
  - WIDE SIDE VIEWING ANGLE.
  - LOWPOWER CONSUMPTION. Package Dimensions



- 1. All dimensions are in millimeters (inches).
- 2. Tolerance is  $\pm$  0.25mm (.010") unless otherwise noted.
- 3. Specifications are subject to change without notice.

## Absolute Maximum Ratings at TA=25°C

Parameter	Maximum Rating	Unit			
Power Dissipation	200	mW			
Peak Forward Current (1/10 Duty Cycle, 0.1ms Pulse width	150	mA			
Continuous Forward Current	150	mA			
Derating Linear From 50°C	0. 4	mA /°C			
Operation Temperature Range	-40°C to +80°C				
Storage Temperature Range	-40°C to +80°C				
Lead Soldering Temperature [4mm (.157") From Body]	260°C for 5 Seconds				

## Electrical / Optical Characteristics at TA=25°C

Parameter	Symbol	Min.	Тур.	Max.	Unit	Test Condition	
Luminous Intendity(IV)	IV	12		16	Mw	IF=60mA	
Viewing Angle	201/2		120		deg	Note 2	
Forward Voltage	VF	3.2		3.8	V	IF=60mA	
Wavelength	wl	380		385	nm	IF=60mA	
Reverse Current	IR	-	-	2	μΑ	VR=-5V	

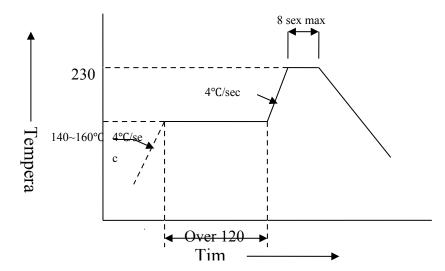
**Note:** 1.The dominant Wavelength,  $\lambda$ dom is derived from the CIE chromaticity diagram and

represents the single wavelength which define the color of the device.

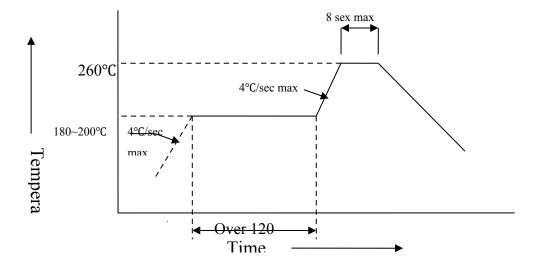
- 2.201/2 is the off-axis angle where the luminous intensity is one half the on-axis intensity.
- 3.Luninous intensity is measured by SEALAND equipment on Top LED in the same lot.

## **Reflow Soldering Instructions**

Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and Second soldering process. 1>Lead Solder

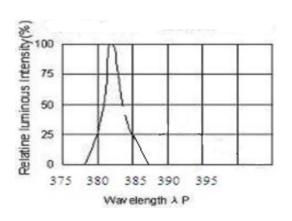


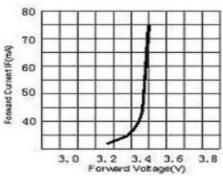
2>Lead-Free Solder



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

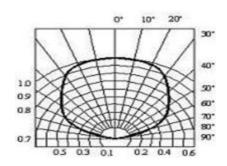
Spectrum Distribution TA=25°C Forward Current Vs Forward Voltage





Relative Luminous Intensity vs Forward Current

Radiation Diagrm



**Specification for Approval** 

Reliability performance Test items and result

	items and result	I		T
Test item	Test condionts		1 -	AC/RE
		duration	size	
Room	Ta=25±5°C	1000hrs	30pcs	0/1
temperature	IF=60mA			
DC operating life				
test				
Thermal shock	-	50cysles	30pcs	0/1
Test	10±5°C←→+100			
	±5°C			
	5min 10sec 5min			
High temperature	Ta=85±5°C	1000hrs	30pcs	0/1
&	RH=85%±0.5%R			
High humidity	Н			
test				
High temperature	Ta =100±5 °C	1000hrs	30pcs	0/1
storage				
Low temperture	Ta =-55±5°C	1000hrs	30pcs	0/1
_			1	
	-	50cysles	50cysles	0/1
cycle test	40±5°C←→+85±			
	5°C			
	30min 5sec			
	30min			
Resistance to	Ta =230±5°C	5sec	30pcs	0/1
soldering heat			1	
	Load	3times	30pcs	0/1
			1	
	0°C			
	temperature DC operating life test Thermal shock Test  High temperature & High humidity test High temperature storage Low temperture storage Temperature cycle test	Room temperature DC operating life test  Thermal shock Test $10\pm5^{\circ}\text{C}\longleftrightarrow+100$ $\pm5^{\circ}\text{C}$ $5\text{min 10sec 5min}$ High temperature & High humidity test  High temperature storage  Low temperture storage  Temperature cycle test  Resistance to soldering heat  Lead integrity $10\pm5^{\circ}\text{C}\longleftrightarrow+100$ $\pm5^{\circ}\text{C}\longleftrightarrow+100$ $\pm5^{\circ}\text{C}$ $10\pm5^{\circ}\text{C}\longleftrightarrow+100$ $\pm5^{\circ}\text{C}\longleftrightarrow+100$ $\pm5^{\circ}\text{C}\longleftrightarrow+100$ $\pm5^{\circ}\text{C}\longleftrightarrow+100$ $\pm5^{\circ}\text{C}\longleftrightarrow+100$ $\pm5^{\circ}\text{C}\longleftrightarrow+100$ $\pm5^{\circ}\text{C}$ $10\pm5^{\circ}\text{C}\longleftrightarrow+100$ $10\pm5^{\circ}\text{C}\longleftrightarrow+$	Room temperature DC operating life test $IS^{\circ}C$ Thermal shock Test $IO\pm 5^{\circ}C \leftarrow \rightarrow +100$ $\pm 5^{\circ}C$ Smin l0sec 5min $IOOOhrs$ High temperature & $IO\pm 5^{\circ}C \leftarrow \rightarrow +100$ $IOOOhrs$ High temperature & $IO\pm 5^{\circ}C \leftarrow \rightarrow +100$ $IOOOhrs$ High temperature storage $IOOOOhrs$ The storage $IOOOOOhrs$ The storage $IOOOOOhrs$ The storage $IOOOOOhrs$ The storage $IOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOOO$	Room temperature DC operating life test $10\pm5^{\circ}\text{C}$ $1000\text{hrs}$ $30\text{pcs}$ $10\pm5^{\circ}\text{C}$ $10\pm5^{\circ}\text{C}$ $10\pm5^{\circ}\text{C}$ $10\pm5^{\circ}\text{C}$ $10\pm5^{\circ}\text{C}$ $10\pm5^{\circ}\text{C}$ $10\pm5^{\circ}\text{C}$ $1000\text{hrs}$