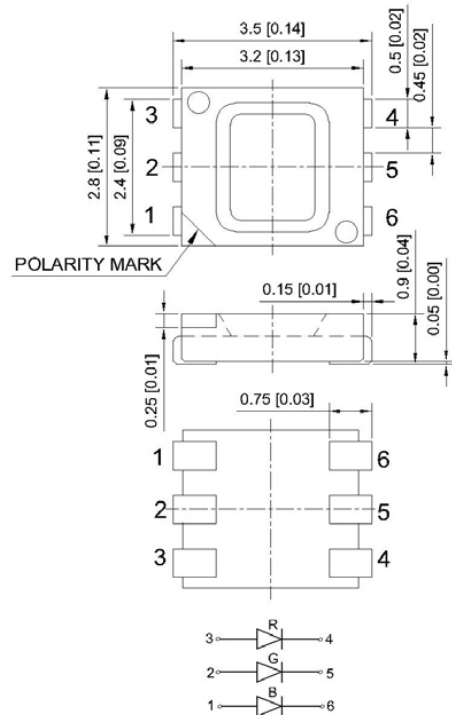




## ● Features:

1. Chip material: UE---AlGaInP/GaAs  
PG---InGaN  
UB---InGaN
2. Emitting color: Ultra Orange  
Pure Green  
Ultra Blue
3. Lens Appearance: Water Clear
4. Long life-solid state reliability
5. Compatible with automatic placement equipment
6. Compatible with reflow solder process
7. RoHS compliant

## ● Package dimensions



### Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is  $\pm 0.25\text{mm}$  ( $0.01''$ ) unless otherwise specified.
3. Specifications are subject to change without notice.



## ● Absolute maximum ratings ( $T_a=25^\circ\text{C}$ )

Characteristic	Test Condition	Symbol	UE	PG	UB	Units
Pulse Forward Current	1/10 duty cycle 0.1ms Pulse width	$I_{FP}$	100	80	80	mA
DC Forward Current		$I_F$	30	25	25	mA
Reverse Current	$V_R=5V$	$I_R$	10	10	10	$\mu A$
Power Dissipation		$P_D$	65	120	120	mW
Operating Temperature		$T_{OPR}$	-40 to +80			$^\circ\text{C}$
Storage Temperature		$T_{STG}$	-40 to +85			$^\circ\text{C}$
Lead Soldering Temperature	1.60mm from body maximum 3 seconds	$T_{SOL}$	260			$^\circ\text{C}$

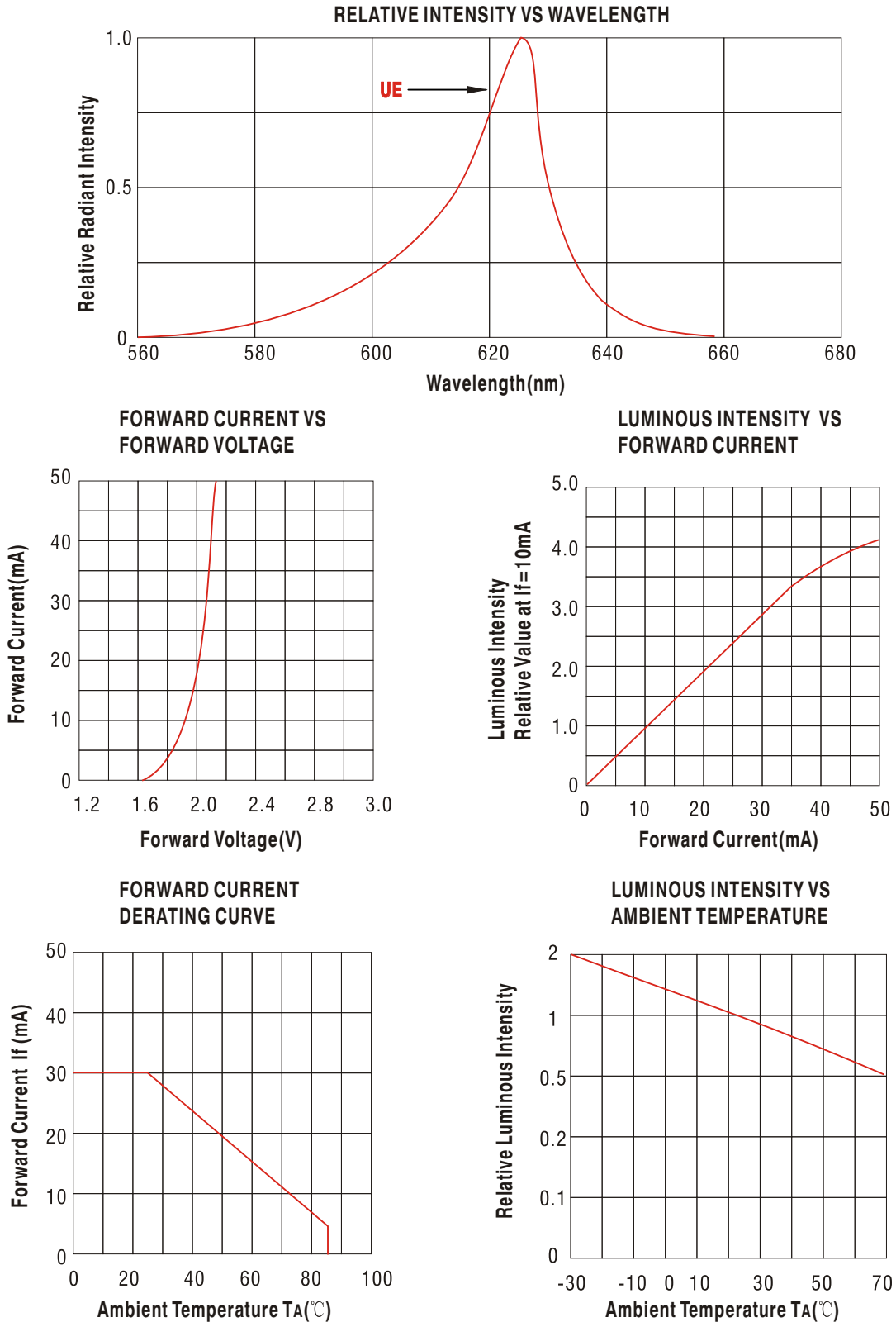


## ● Electrical And Optical Characteristics(Ta=25°C)

Parameter	Test Condition	Symbol	Colors	Typ.	Max.	Units
Forward Voltage	IF=20mA	V <sub>F</sub>	UE	2.00	2.50	V
Reverse Current	V <sub>R</sub> =5V	I <sub>R</sub>		---	10	μA
Peak Wavelength	IF=20mA	λ <sub>P</sub>		632	---	nm
Dominant Wavelength	IF=20mA	λ <sub>D</sub>		624	---	nm
Spectral Line Half-width	IF=20mA	Δλ		20	---	nm
Luminous Intensity	IF=20mA	I <sub>V</sub>		170	---	mcd
Forward Voltage	IF=20mA	V <sub>F</sub>	PG	3.30	4.00	V
Reverse Current	V <sub>R</sub> =5V	I <sub>R</sub>		---	10	μA
Peak Wavelength	IF=20mA	λ <sub>P</sub>		---	---	nm
Dominant Wavelength	IF=20mA	λ <sub>D</sub>		525	---	nm
Spectral Line Half-width	IF=20mA	Δλ		35	---	nm
Luminous Intensity	IF=20mA	I <sub>V</sub>		780	---	mcd
Forward Voltage	IF=20mA	V <sub>F</sub>	UB	3.30	4.00	V
Reverse Current	V <sub>R</sub> =5V	I <sub>R</sub>		---	10	μA
Peak Wavelength	IF=20mA	λ <sub>P</sub>		---	---	nm
Dominant Wavelength	IF=20mA	λ <sub>D</sub>		470	---	nm
Spectral Line Half-width	IF=20mA	Δλ		26	---	nm
Luminous Intensity	IF=20mA	I <sub>V</sub>		150	---	mcd
Viewing Angle	IF=20mA	2θ ½	UEPG UB	120	---	deg.

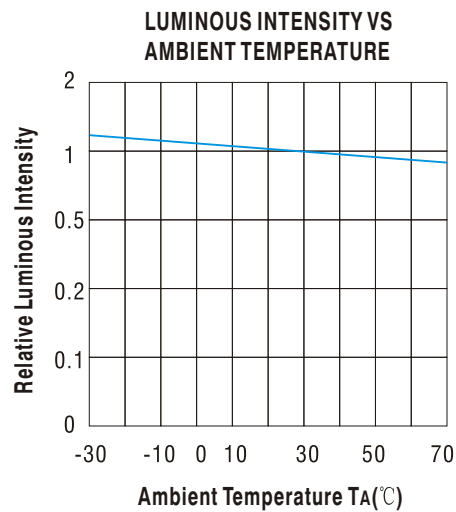
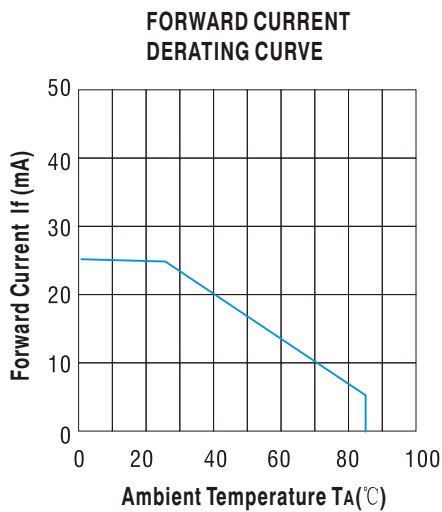
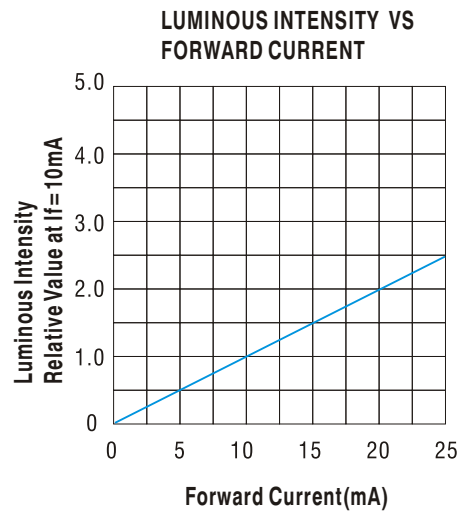
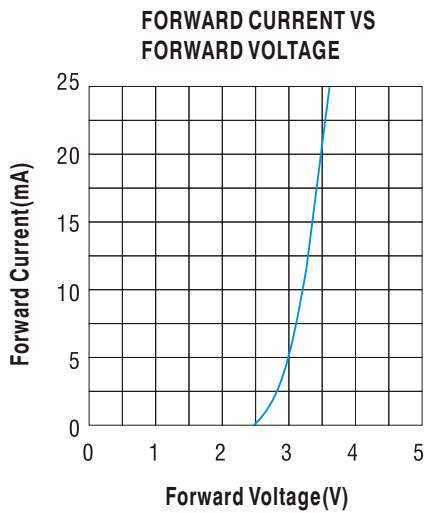
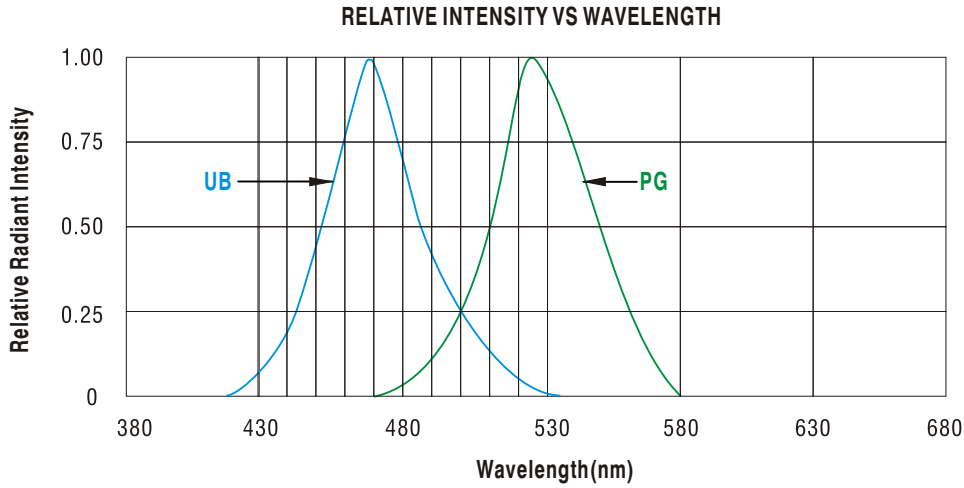


## ● Typical electro-optical characteristics curves



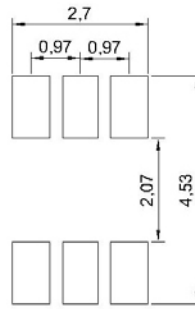


## ● Typical electro-optical characteristics curves





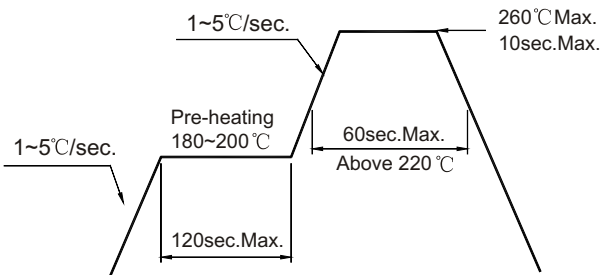
## ● Soldering Pad Dimensions:



## ● Soldering Conditions:

### 1.Reflow soldering profile

Lead-free solder



### 2.Soldering Iron

Power dissipation of iron should be smaller than 25W, and temperature should be controllable. The work must be finished within 3sec. under 300°C only once.

Do not stress its resin while soldering.

After soldering, do not warp the circuit board.

## ● Package Tape Specifications:(1000~2000pcs/Reel)

