

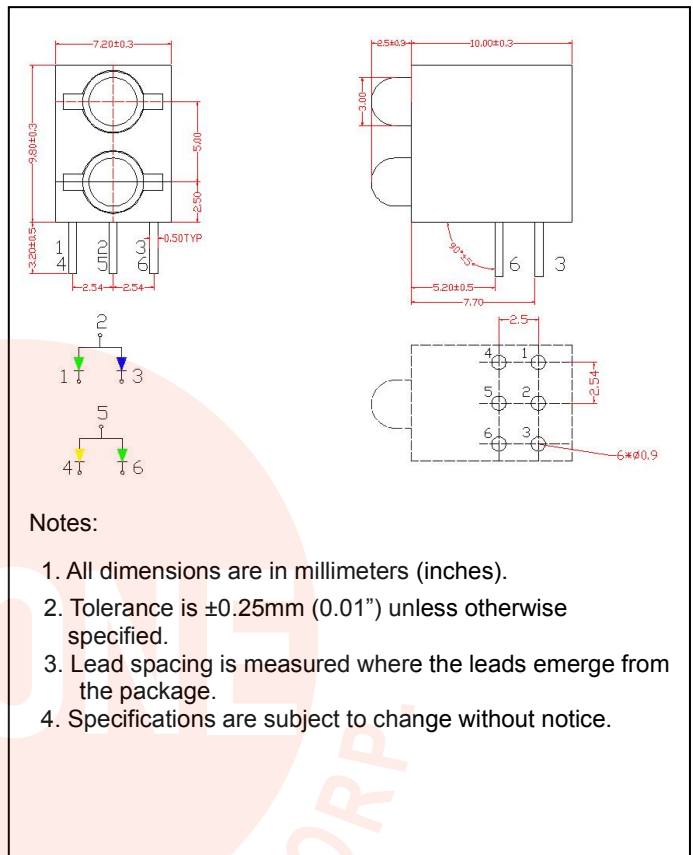
● Features:

1. Chip material: GaN / AlGaInp (Green/Blue)
AlGaInp / AlGaInp
(Yellow / Green)
2. Emitted color : Green/Blue and Yellow /Green
3. Lens Appearance : White Diffused
4. Designed for ease in circuit board assembly.
5. Black case enhance contrast ratio.
6. Solid state light source.
7. Reliable and rugged.
8. 3mm diameter package.
9. This product don't contained restriction substance, compliance ROHS standard.

● Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

● Package dimensions



● Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Green	Blue	Yellow	Unit
Power Dissipation	P_d	70	100	70	mW
Forward Current	I_F	30	30	30	mA
Peak Forward Current* ¹	I_{FP}	100	60	100	mA
Reverse Voltage	V_R	5			V
Operating Temperature	T_{opr}	$-40^\circ\text{C} \sim 80^\circ\text{C}$			
Storage Temperature	T_{stg}	$-40^\circ\text{C} \sim 85^\circ\text{C}$			
Soldering Temperature	T_{sol}	260°C (for 5 seconds)			

*¹Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.



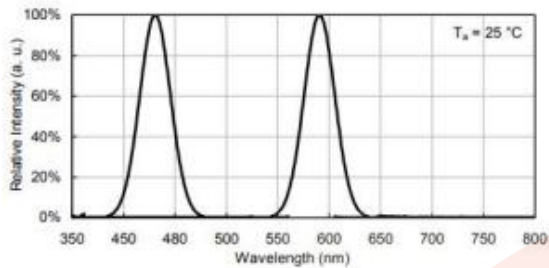
● Electrical and optical characteristics(Ta=25°C)

Parameter	Symbol	Condition	Color	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =20mA	Green Blue Yellow	1.8 2.8 1.8	- - -	2.4 3.4 2.4	V
Luminous Intensity	I _v	I _F =20mA	Green Blue Yellow	15 90 40	30 180 80	60 270 160	mcd
Reverse Current	I _R	V _R =5V	Green Blue Yellow	- - -	- - -	5 5 5	μA
Dominant Wave Length	λ _d	I _F =20mA	Green Blue Yellow	566 460 586	570 465 590	574 470 594	nm
Spectral Line Half-width	Δλ	I _F =20mA	Green Blue Yellow	- - -	30 30 30	- - -	nm
Viewing Angle	2θ _{1/2}	I _F =20mA	Green Blue Yellow	- - -	80 120 80	- - -	deg

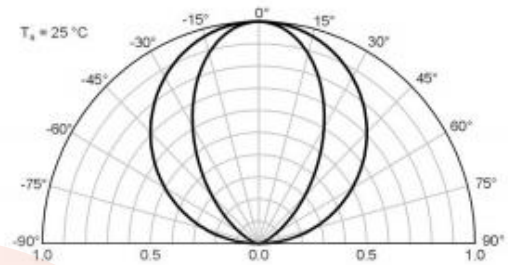
● Typical Electro-Optical Characteristics Curves
Green/Blue

TECHNICAL DATA

RELATIVE INTENSITY vs. WAVELENGTH

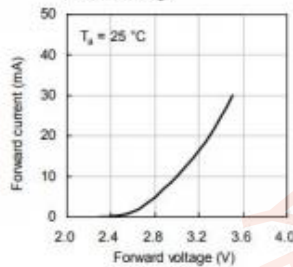


SPATIAL DISTRIBUTION

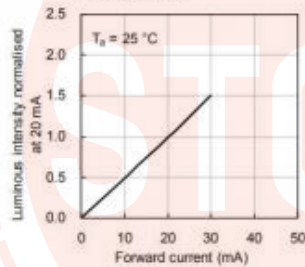


BLUE

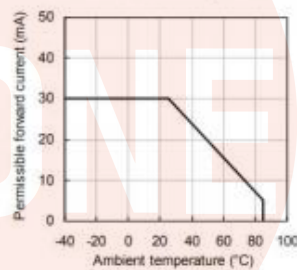
Forward Current vs. Forward Voltage



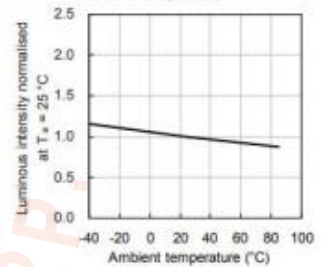
Luminous Intensity vs. Forward Current



Forward Current Derating Curve

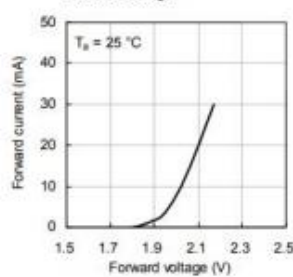


Luminous Intensity vs. Ambient Temperature

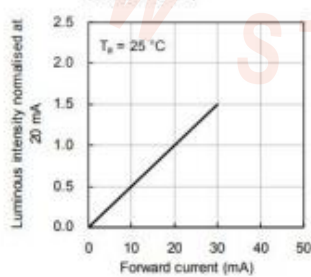


GREEN

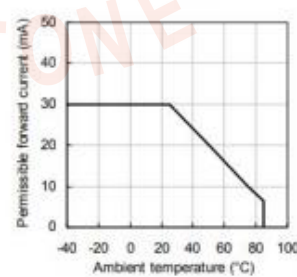
Forward Current vs. Forward Voltage



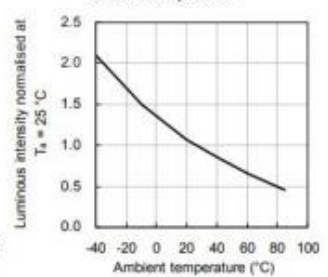
Luminous Intensity vs. Forward Current



Forward Current Derating Curve



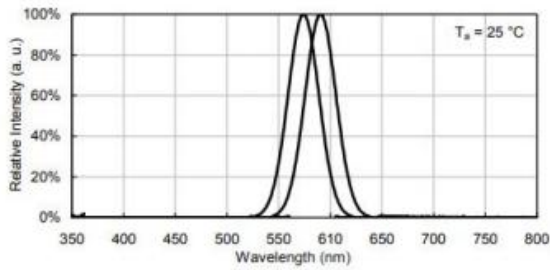
Luminous Intensity vs. Ambient Temperature



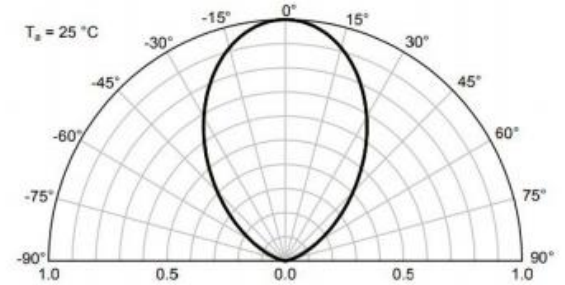
Yellow / Green

TECHNICAL DATA

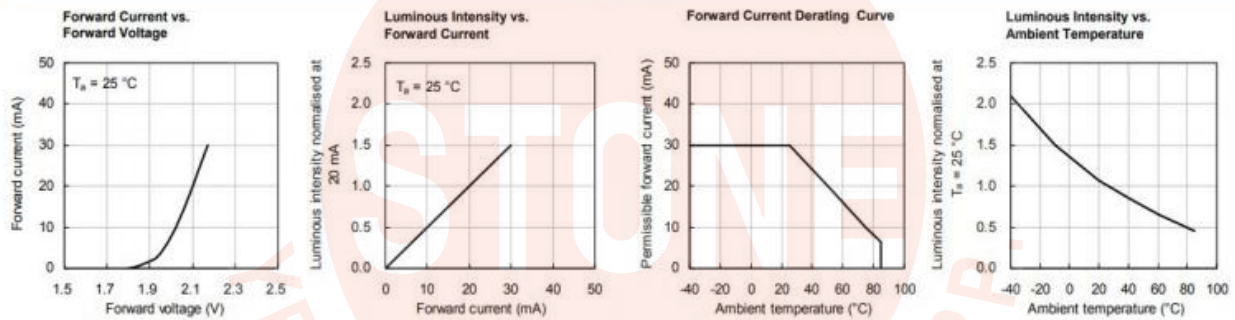
RELATIVE INTENSITY vs. WAVELENGTH



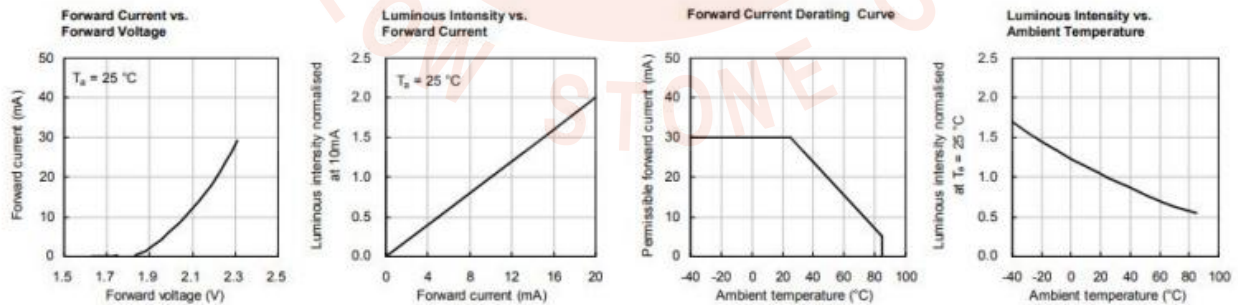
SPATIAL DISTRIBUTION



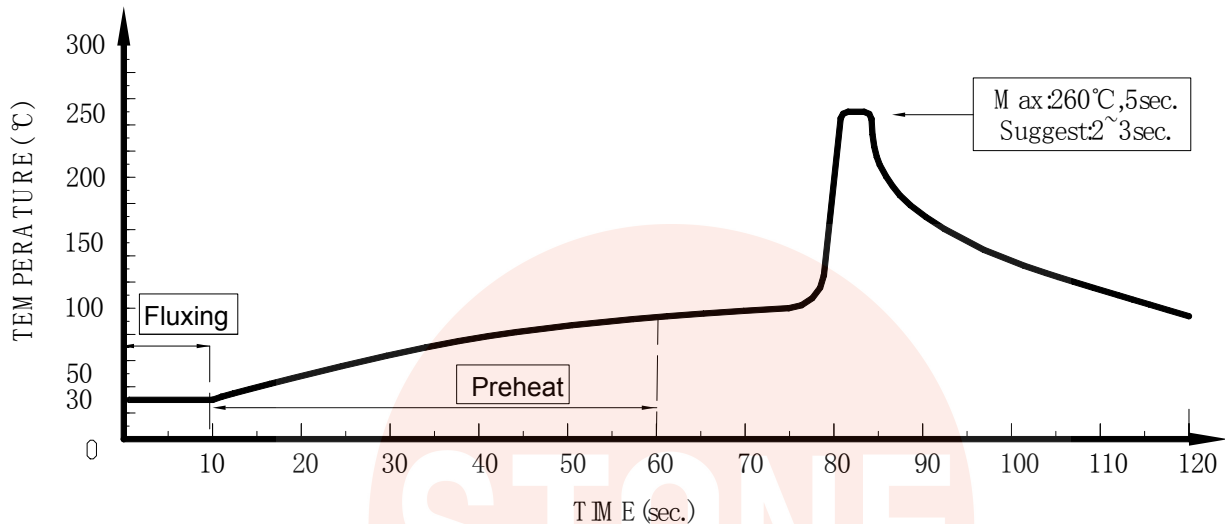
GREEN



Yellow



●Dip Soldering



1. Please avoid any external stress applied to the lead-frames and epoxy while the LEDs are at high temperature, especially during soldering
2. DIP soldering and hand soldering should not be done more than one time.
3. After soldering, avoid the epoxy lens from mechanical shock or vibration until the LEDs are back to room temperature.
4. Avoid rapid cooling during temperature ramp-down process
5. Although the soldering condition is recommended above,
soldering at the lowest possible temperature is feasible for the LEDs

●IRON Soldering

A : Max : 350°C Within 3 sec. One time only.

B : The products of 3mm without flange, welding condition of flat plate PCB Max : 350°C
Within 2 sec. One time only

