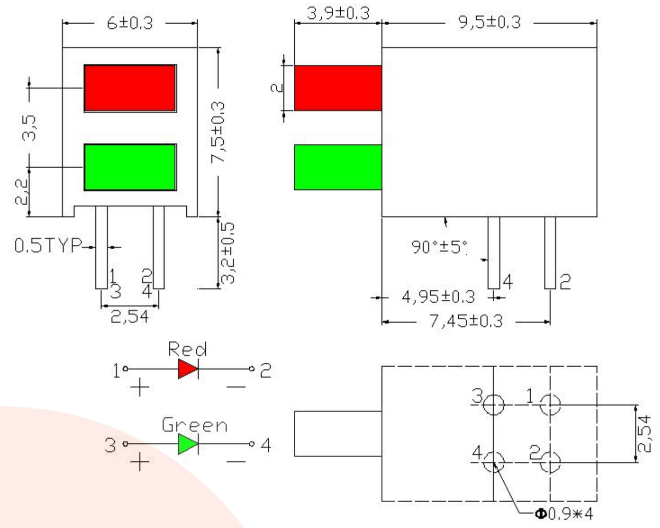
Features:

1. Chip material: Gap(Red)
2. Emitted color : Red and Green
3. Lens Appearance :Red Diffused
   and Green 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. This product don’t contained restriction substance, compliance RoHS standard.

Package dimensions



Notes:

1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25mm (0.01”) unless otherwise specified.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Applications:

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

Absolute Maximum Ratings(Ta=25℃)

Parameter	Symbol	Red	Green	Unit
Power Dissipation	Pd	70	80	mW
Forward Current	I_F	30	20	mA
Peak Forward Current*[1]	I_{FP}	110	150	mA
Reverse Voltage	V_R	5	5	V
Operating Temperature	Topr	-40℃~85℃	-40℃~80℃	
Storage Temperature	Tstg	-40℃~85℃		
Soldering Temperature	Tsol	260℃max (for 5 seconds)		
Hand Soldering Temperature	Tsol	350℃max(for 3 seconds)		

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

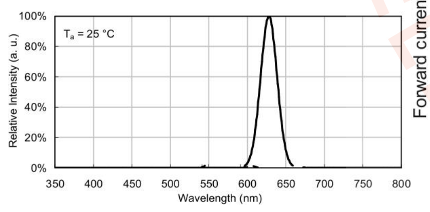
● Electrical and optical characteristics(Ta=25℃)

Parameter	Symbol	Condition	Color	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=20mA	Red Green	1.9 1.8	2.3 2.0	2.7 2.4	V
Luminous Intensity	Iv	I_F=20mA	Red Green	0.2 5	1.0 -	2.0 30	mcd
Reverse Current	I_R	V_R=5V	Red Green	-	-	10 10	μA
Peak Wave Length	λ p	I_F=20mA	Red Green	-	700 -	-	nm
Dominant Wave Length	λ d	I_F=20mA	Red Green	- 565	635 -	- 575	nm
Spectral Line Half-width	Δ λ	I_F=20mA	Red Green	-	30 20	-	nm
Viewing Angle	$2\theta_{1/2}$	I_F=20mA	Red Green	-	160 60	-	deg

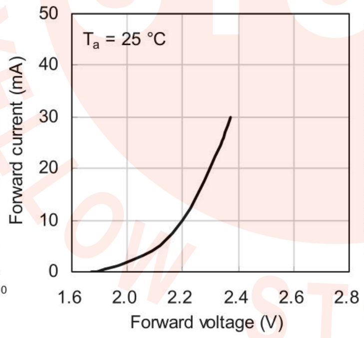
● Typical electro-optical characteristics curves

Red

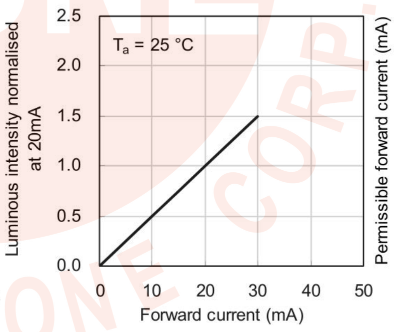
RELATIVE INTENSITY vs. WAVELENGTH



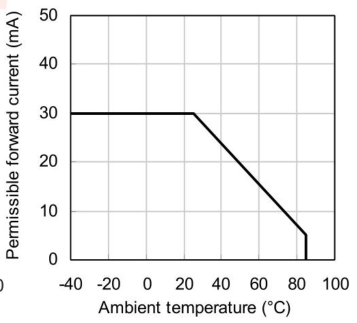
Forward Current vs. Forward Voltage



Luminous Intensity vs. Forward Current

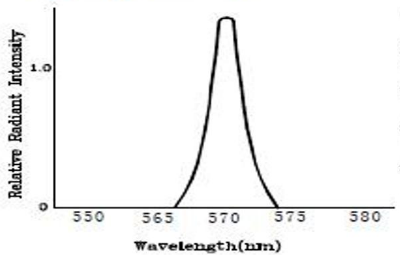


Forward Current Derating Curve

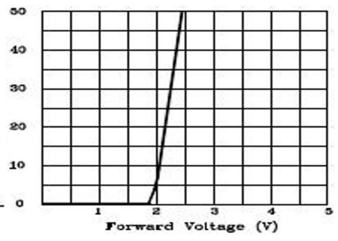


Green

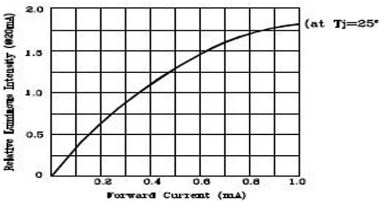
相对光谱分布特性曲线
Relative spectral emission



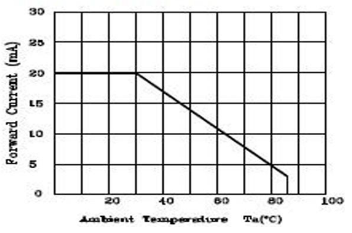
ward Voltage VS. Forward Current
]电压与正向电流特性曲线



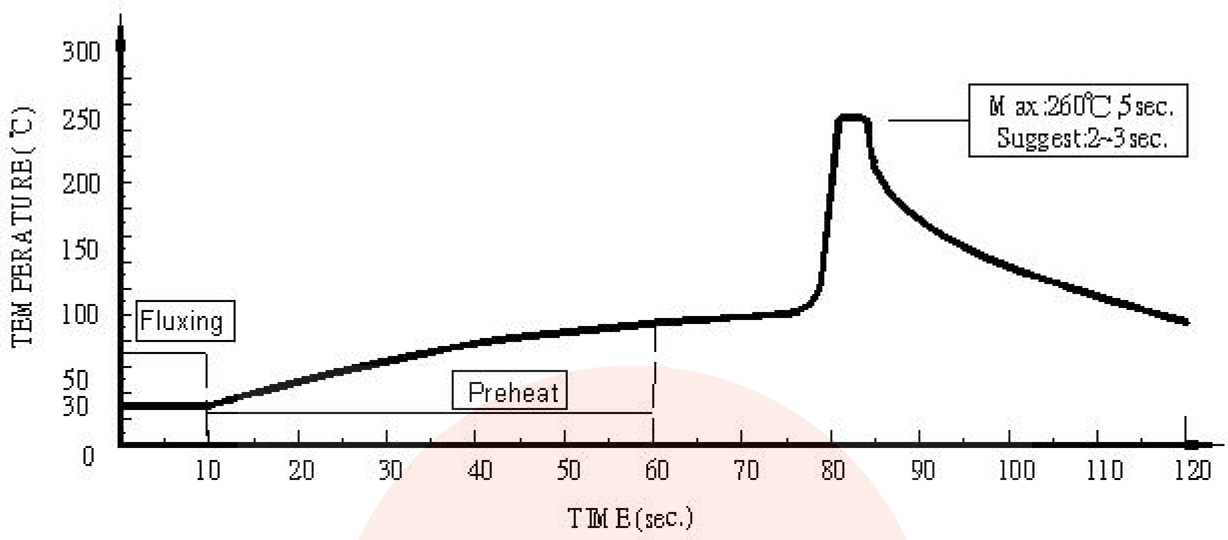
Forward Current VS. Relative Intensity
正向电流与相对光强特性曲线



Ambient Temperature vs. Forward Current
环境温度与正向电流特性曲线



● 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 temerature.
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℃ Within 3 sec. One time only.

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