OptoSupply
Light It Up

3.2 x 1.6 x 0.9mm Red & Pure green SMD

OSRP1206C1F

VER.A.2.1

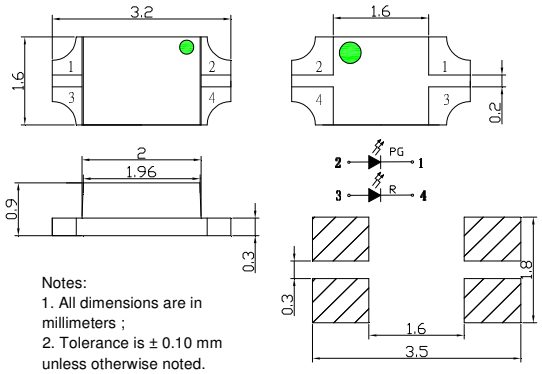
■Features

- Bi-Color
- Super high brightness of surface mount LED
- Water Clear Flat Mold
- Compact package outline (LxWxT) of 3.2mm x 1.6mm x 0.9mm
- Compatible to IR reflow soldering.

■Applications

- Backlighting (switches, keys, etc.)
- Marker lights (e.g. steps, exit ways, etc.)

■Outline Dimension



Notes:
1. All dimensions are in millimeters ;
2. Tolerance is ± 0.10 mm unless otherwise noted.

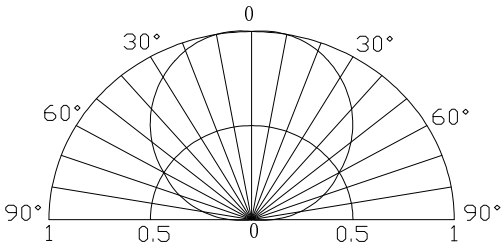
Recommended Soldering Pattern (Units : mm)

■Absolute Maximum Rating (Ta=25℃)

Item	Symbol	Value		Unit
		Red	PG	
DC Forward Current	I_F	30	30	mA
Pulse Forward Current*	I_{FP}	100	100	mA
Reverse Voltage	V_R	5	5	V
Power Dissipation	P_D	78	108	mW
Operating Temperature	Topr	-40 ~ +85		℃
Storage Temperature	Tstg	-40~ +85		℃
Lead Soldering Temperature	Tsol	260℃/10sec		-

*Pulse width Max 0.1ms, Duty ratio max 1/10

■Directivity



■Electrical -Optical Characteristics (Ta=25℃)

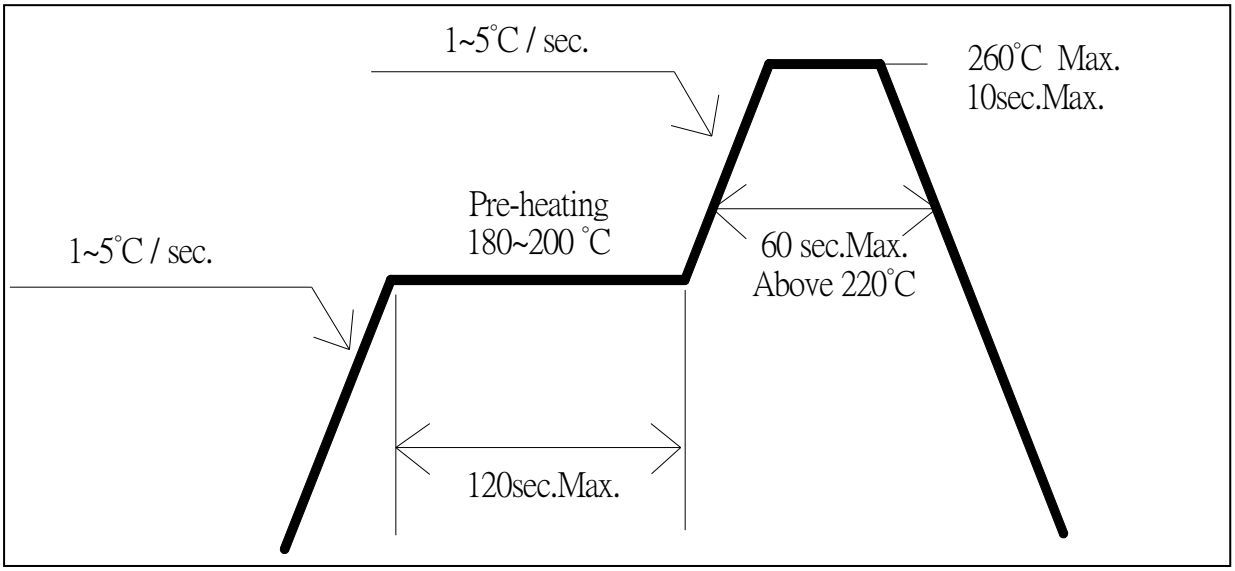
Part Number	Color			V_F (V)			I_R(μA)	Iv(mcd)			λD(nm)			2θ1/2(deg)
				Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
				I_F=20mA			V_R=5V	I_F=20mA						
OSRG1206C1F	Red	HR	■	1.8	2.1	2.6	10	-	100	-	620	625	630	120
	Pure green	PG	■	2.6	3.1	3.6	10	-	350	-	515	525	530	120

*1 Tolerance of measurements of dominant wavelength is ±1nm
*2 Tolerance of measurements of luminous intensity is ±15%
*3 Tolerance of measurements of forward voltage is ±0.1V

■ **Soldering Conditions**

Reflow Soldering		Hand Soldering	
Pre-Heat	180 ~ 200°C	Temperature Soldering time	350°C Max. 3 sec. Max. (one time only)
Pre-Heat Time	120 sec. Max.		
Peak temperature	260°C Max.		
Dipping Time	**10 sec. Max.**		
Condition	Refer to Temperature-profile		

• Reflow Soldering Condition(Lead-free Solder)



*Recommended soldering conditions vary according to the type of LED

*Although the recommended soldering conditions are specified in the above table, reflow, or hand soldering at the lowest possible temperature is desirable for the LEDs.

*A rapid-rate process is not recommended for cooling the LEDs down from the peak temperature.

•All SMD LED products are pb-free soldering available.

• Occasionally there is a brightness decrease caused by the influence of heat or ambient atmosphere during air reflow. It is recommended that the User use the nitrogen reflow method.

• Repairing should not be done after the LEDs have been soldered. When repairing is unavoidable a double-head soldering iron should be used. It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.

• Reflow soldering should not be done more than two times.

• When soldering, do not put stress on the LEDs during heating.

• After soldering, do not warp the circuit board.