OptoSupply
Light It Up

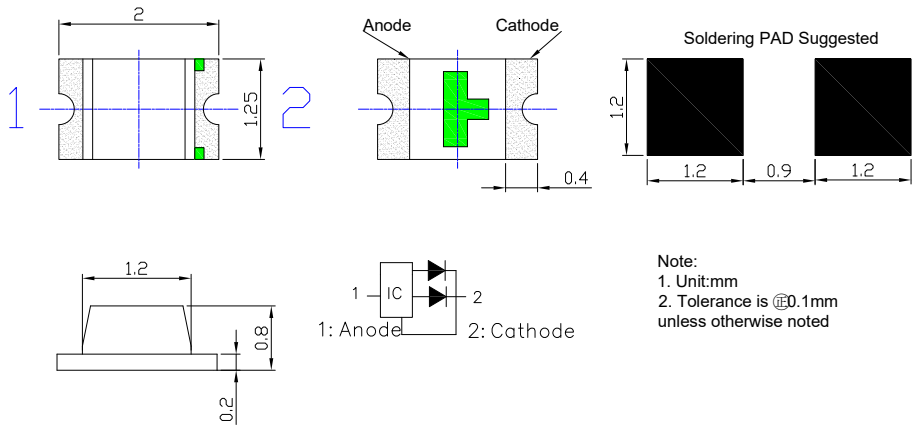
2.0x1.25x0.8mm Bi-Color Flashing Chip LED
1.5Hz 1/2 Duty Cycle

OSXX0805C1S

■Features

- Bi-Color Flashing Type
- 2.0x1.25x0.8mm(0805) standard package.
- Suitable for all SMT assembly methods.
- Compatible with infrared and vapor phase reflow solder process.
- This product doesn't contain restriction Substance, comply ROHS standard.
- Compatible with automatic placement equipment.

■Outline Dimension



Note:
1. Unit:mm
2. Tolerance is ㊣0.1mm unless otherwise noted

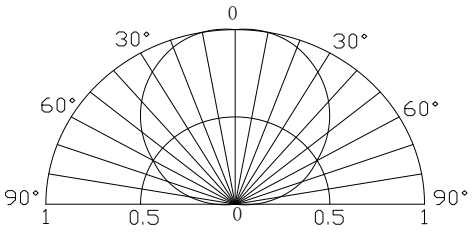
■Applications

- Automotive : Dashboards, stop lamps, turn signals.
- Backlighting : LCDs, Key pads advertising.

■Absolute Maximum Rating (Ta=25℃)

Item	Symbol	Value	Unit
Power Supply	Voltage	5	V
Duty Cycle	Duty	1/2	-
Operating Temperature	Topr	-40 ~ +85	℃
Storage Temperature	Tstg	-40~ +85	℃
Lead Soldering Temperature	Tsol	260℃/10sec	-

■Directivity



■Electrical -Optical Characteristics (Ta=25℃)

Emitting Color	V_F (V)			Fled (Hz)	Iv(mcd)			λD(nm)/CCT(K)			2θ1/2(deg)
	Min.	Typ.	Max.	Typ.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
	I_F=20mA										
Red	3.0	3.5	5.0	1.5	-	100	-	620	625	630	120
Yellow	3.0	3.5	5.0	1.5	-	100	-	585	590	595	120
Blue	3.0	3.5	5.0	1.5	-	100	-	460	465	470	120
Pure Green	3.0	3.5	5.0	1.5	-	400	-	520	525	530	120
Cool White	3.0	3.5	5.0	1.5	-	330	-	CCT: 7000-20000K			120

■Part Number

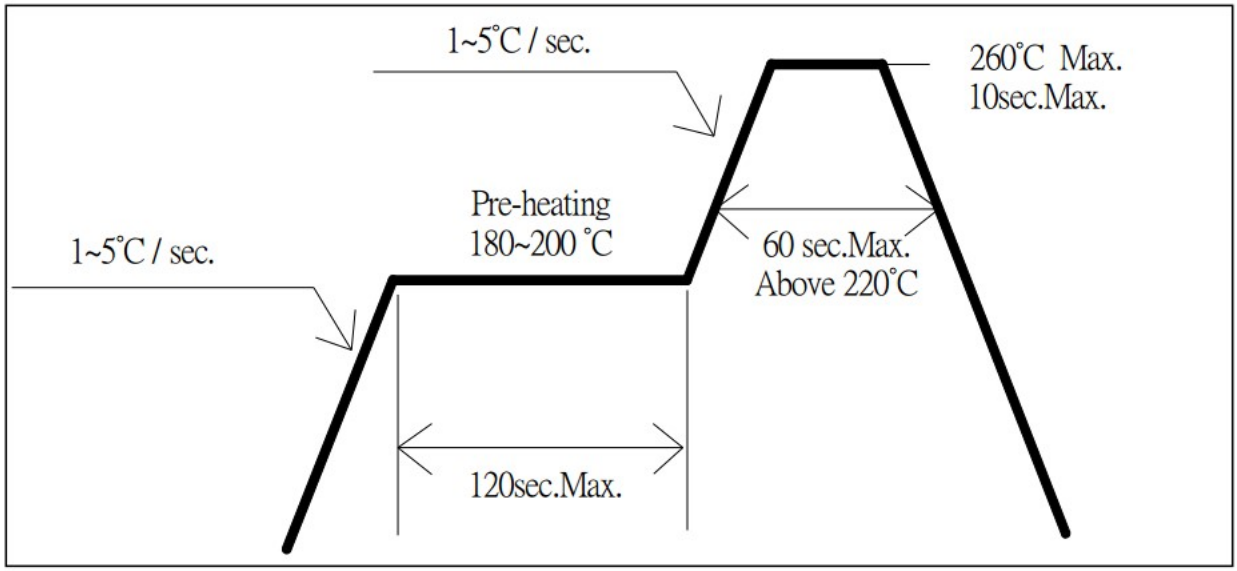
Emitting Color	Red	Yellow	Pure Green	Blue	Cool White
Red	OSRR0805C1S	OSRY0805C1S	OSRP0805C1S	OSRB0805C1S	OSRW0805C1S
Yellow	OSRY0805C1S	OSYY0805C1S	OSYP0805C1S	OSYB0805C1S	OSYW0805C1S
Pure Green	OSRP0805C1S	OSYP0805C1S	OSPP0805C1S	OSPB0805C1S	OSPW0805C1S
Blue	OSRB0805C1S	OSYB0805C1S	OSPB0805C1S	OSBB0805C1S	--
Cool White	OSRW0805C1S	OSYW0805C1S	OSPW0805C1S	--	OSWW0805C1S

*1 Tolerance of measurements of forward voltage is ±0.1V
*2 Tolerance of measurements of Frequency is ±20%
*3 Tolerance of measurements of dominant wavelength is ±1nm
*4 Tolerance of measurements of luminous intensity is ±15%

■ Soldering Conditions

Reflow Soldering		Hand Soldering	
Pre-Heat	180 ~ 200°C	Temperature	350°C Max.
Pre-Heat Time	120 sec. Max.	Soldering time	3 sec. Max.
Peak temperature	260°C Max.		(one time only)
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.

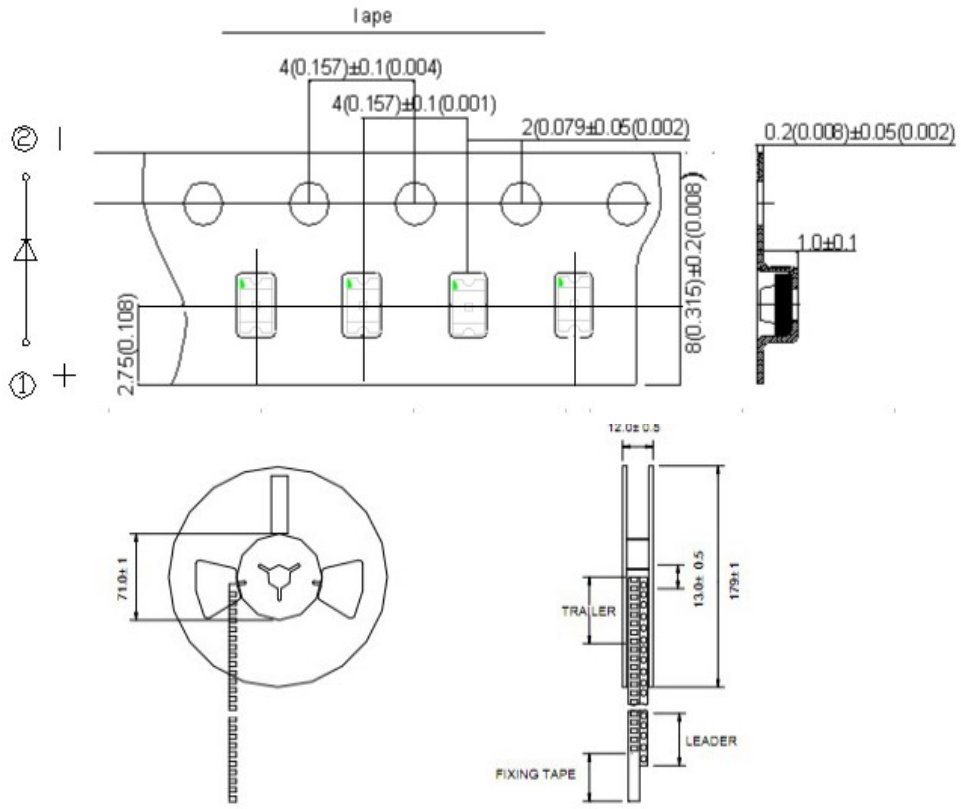
• Reflow soldering should not be done more than two times.

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

• After soldering, do not warp the circuit board.

■ Taping and Orientation

1. Quantity:3000pcs/Reel
2. Note: The tolerances unless mentioned is ±0.1mm, Unit: mm



■ Cautions:

1. After open the package, the LED´s floor life is 4 Weeks under 30℃ or less and 60%RH or less(MSL:2a).
2. Heat generation must be taken into design consideration when using the LED.
3. Power must be applied resistors for protection, over current would be caused the optic damage to the devices and wavelength shift.
4. Manual tip solder may cause the damage to Chip devices, so advised that heat of iron should be lower than 15W with temperature control under 5 seconds at 230-260 deg. C. (The device would be got damage in re working process, recommended under 5 seconds at 230-260 deg. C)
5. All equipment and machinery must be properly grounded. It is recommended to use a wristband or anti-electrostatic glove when handing the LED.
6. Use IPA as a solvent for cleaning the LED. The other solvent may dissolve the LED package and the epoxy, Ultrasonic cleaning should not be done.
7. Damaged LED will show unusual characteristics such as leak current remarkably increase, turn-on voltage becomes lower and the LED get unlight at low current.