

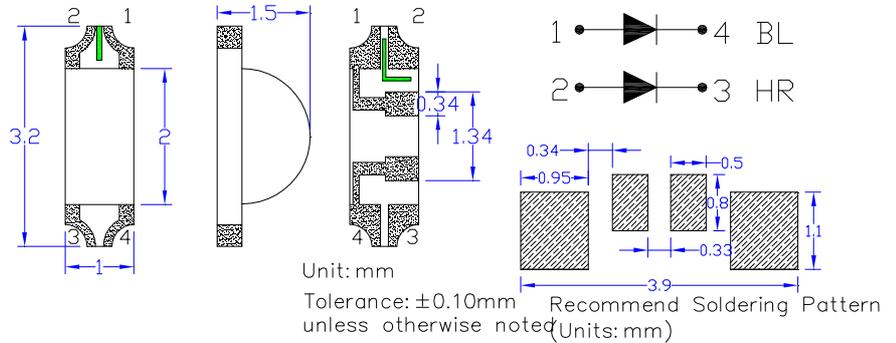
■Features

- Bi-Color
- Super high brightness of surface mount LED
- Compact package outline
(L x W x T) of 3.2mm x 1.0mm x 1.5mm
- Compatible to IR reflow soldering.
- Water Clear Flat Mold

■Applications

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

■Outline Dimension



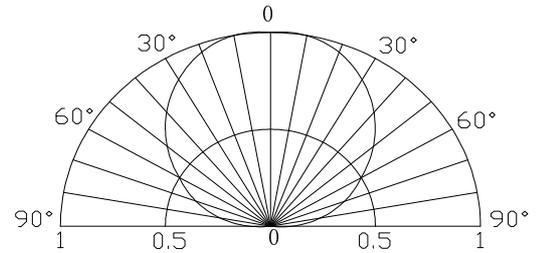
■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value		Unit
		HR	BL	
DC Forward Current	I _F	20	20	mA
Pulse Forward Current#	I _{FP}	100	100	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	46	66	mW
Operating Temperature	Topr	-40 ~ +85		°C
Storage Temperature	Tstg	-40~ +85		°C
Lead Soldering Temperature	Tsol	260°C/10sec		-

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

■Directivity



■Electrical -Optical Characteristics

(Ta=25°C)

Part Number	Color			V _F (V)			I _R (μA)	I _v (mcd)			λD (nm)			2θ1/2 (deg)
				Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
				I _F =5mA			V _R =5V			I _F =5mA				
OSRB1204C1E	Red	HR		-	1.7	2.3	10	-	30	-	620	625	630	120
	Blue	BL		-	1.7	3.3	10	-	50	-	460	465	475	120

*1 Tolerance of measurements of dominant wavelength is ±1nm

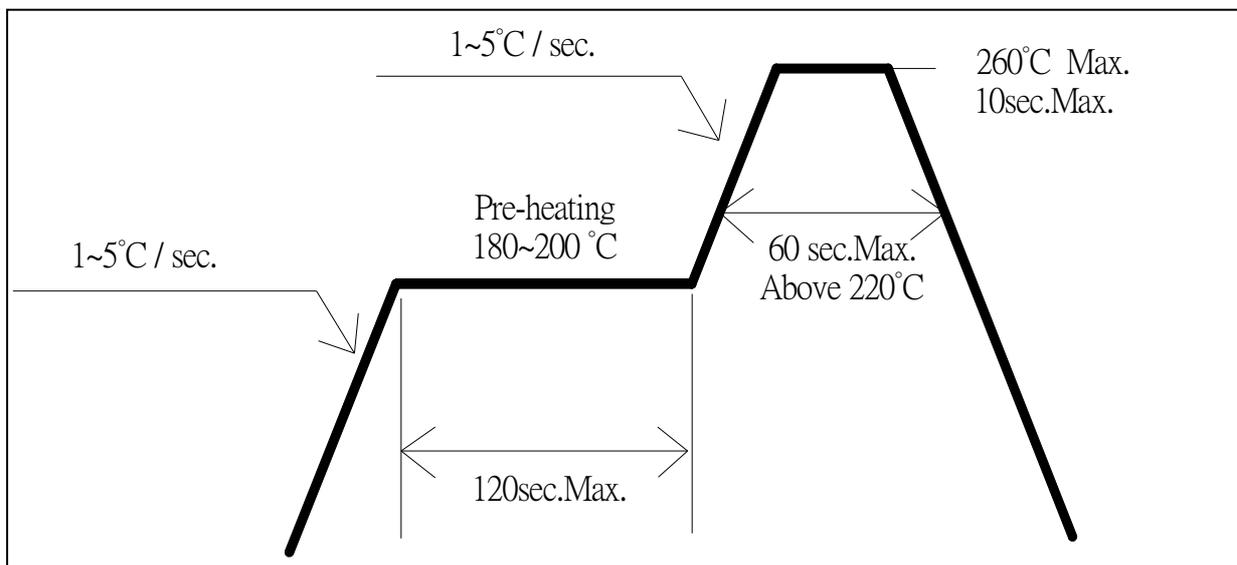
*2 Tolerance of measurements of luminous intensity is ±15%

*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.

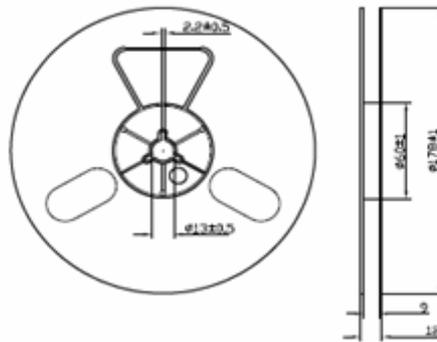
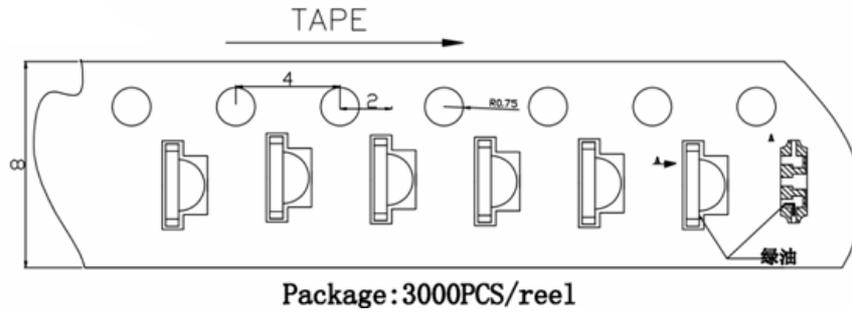
• Reflow soldering should not be done more than two times.

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

• After soldering, do not warp the circuit board.

■Packaging

1. Reel & Tape Dimensions (3000PCS/Reel)



Notes: All dimensions are in millimeters

2. Bag packaging

