

# 3.2x1.0 x1.5mm Red & Pure Green Chip LED

#### **OSRP1204C1E**

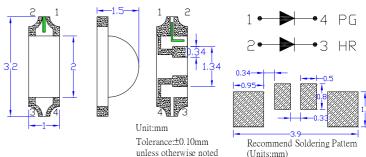
#### **■**Features

- · Bi-Color
- Super high brightness of surface mount LED
- Compact package outline
   (L x W x T) of 3.2mm x 1.0mm x1.5mm
- · Compatible to IR reflow soldering.
- · Water Clear Flat Mold

### Applications

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

# **Outline Dimension**



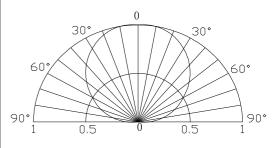
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# ■Absolute Maximum Rating

# ing (Ta=25°C)

Item	Cromb of	Val	ue	Unit	
nem	Symbol	HR	PG		
DC Forward Current	$I_F$	20	20	mA	
Pulse Forward Current#	${ m I}_{ m FP}$	100	100	mA	
Reverse Voltage	$V_R$	5	5	V	
Power Dissipation	$P_D$	46	66	mW	
Operating Temperature	Topr	-40 ~	$^{\circ}\! \mathbb{C}$		
Storage Temperature	Tstg	-40~	$^{\circ}\! C$		
Lead Soldering Temperature	Tsol	260°C≀	-		

## **■**Directivity



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

#### **■**Electrical -Optical Characteristics

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		$V_{F}(V)$		$I_R(\mu A)$	Iv(mcd)		λD(nm)			2θ1/2(deg)				
Part Number	Color		Min.	Тур.	Max.	Max.	Min.	Тур.	Max.	Min.	Тур.	Max.	Тур.	
				I <sub>F</sub> =5mA V <sub>R</sub> =5V			I <sub>F</sub> =5mA							
OSRP1204C1E	Red	HR		-	1.7	2.3	10	-	30	-	620	625	630	120
OSRP1204CIE	Pure Green	PG		-	1.7	3.3	10	-	100	-	515	525	530	120

<sup>\*1</sup> Tolerance of measurements of dominant wavelength is ±1nm

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http://www.optosupply.com VER A.2

<sup>\*2</sup> Tolerance of measurements of luminous intensity is ±15%

<sup>\*3</sup> Tolerance of measurements of forward voltage is  $\pm 0.1$ V



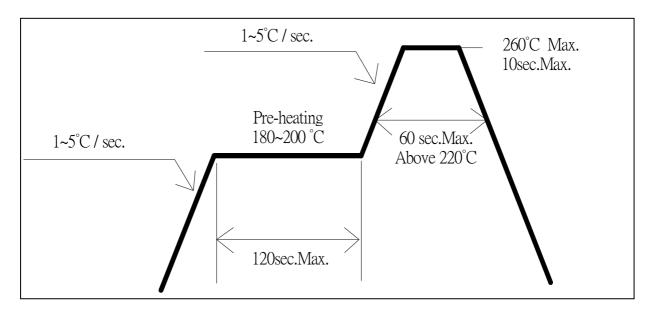
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#### OSRP1204C1E

#### **■ Soldering Conditions**

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

#### • 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.









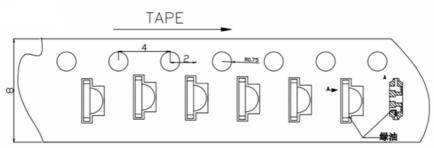


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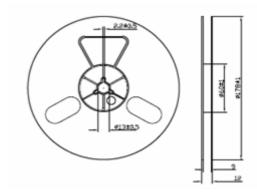
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### **■**Packaging

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

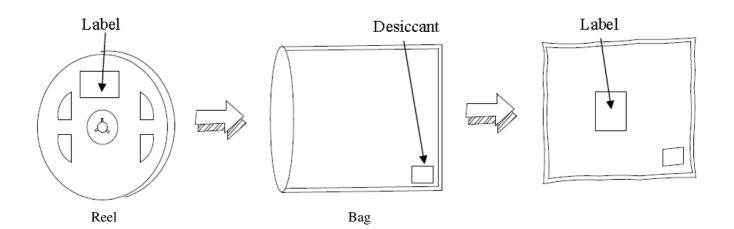


Package:3000PCS/reel



Notes: All dimensions are in millimeters

# 2. Bag packaging



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