

**■Features**

- Single chip
- Super high brightness of surface mount LED
- Compact package outline  
(L x W x T) of 3.2mm x 1.6mm x 1.8mm
- Compatible to IR reflow soldering.

**■Applications**

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

**■Absolute Maximum Rating**







(Ta=25°C)

Item	Symbol	Value		Unit
		B5/G5	G8/Y5/O5/R5	
DC Forward Current	I <sub>F</sub>	30	30	mA
Pulse Forward Current*	I <sub>FP</sub>	100	100	mA
Reverse Voltage	V <sub>R</sub>	5	5	V
Power Dissipation	P <sub>D</sub>	108	78	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

**■Electrical -Optical Characteristics**

(Ta=25°C)

Part Number	Color			V <sub>F</sub> (V)			I <sub>R</sub> (μA)	I <sub>v</sub> (mcd)			λD (nm)			2θ1/2(deg)
				Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
				I <sub>F</sub> =20mA			V <sub>R</sub> =5V		I <sub>F</sub> =20mA					
OSB5120641E	Blue	B5		2.8	-	3.6	10	650	850	-	460	465	475	35
OSG5120641E	True Green	G5		2.8	-	3.6	10	2000	2500	-	515	520	530	35
OSG8120641E	Yellow Green	G8		1.8	-	2.6	10	100	150	-	565	570	575	35
OSY5120641E	Yellow	Y5		1.8	-	2.6	10	300	500	-	585	590	595	35
OSO5120641E	Orange	O5		1.8	-	2.6	10	300	400	-	600	605	610	35
OSR5120641E	Red	R5		1.8	-	2.6	10	650	850	-	615	620	630	35

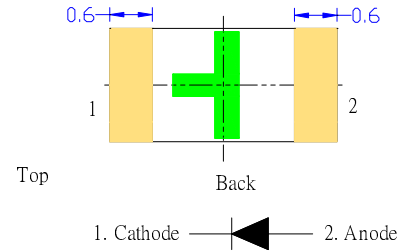
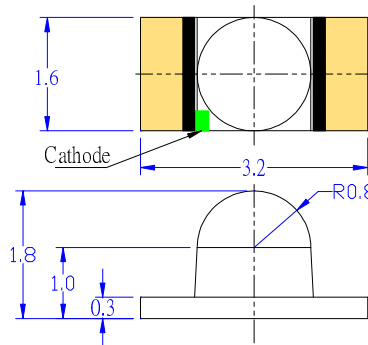
\*1 Tolerance of measurements of chromaticity coordinate is ±10%

\*2 Tolerance of measurements of dominant wavelength is ±1nm

\*3 Tolerance of measurements of luminous intensity is ±15%

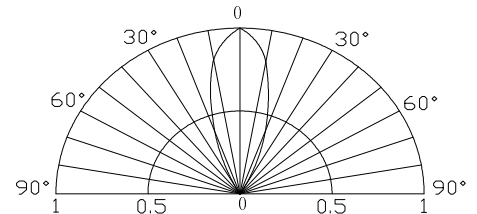
\*4 Tolerance of measurements of forward voltage is ±0.1V

**■Outline Dimension**



Unit:mm  
Tolerance:±0.10mm  
unless otherwise noted

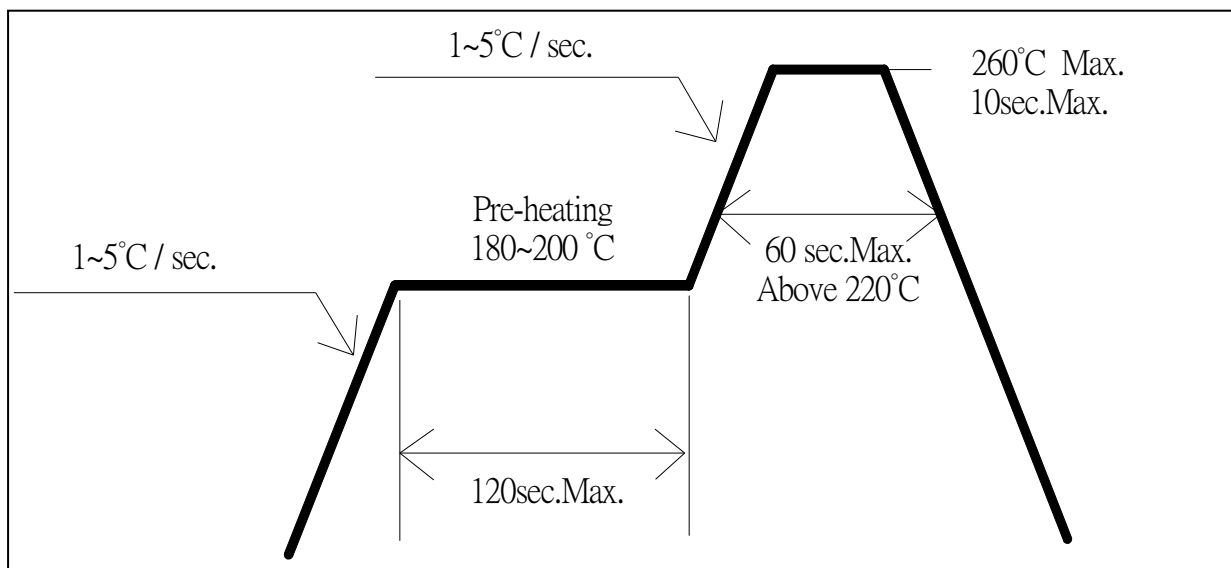
**■Directivity**



■ **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	<b>10 sec. Max.</b>		
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.



**OptoSupply**

Light It Up

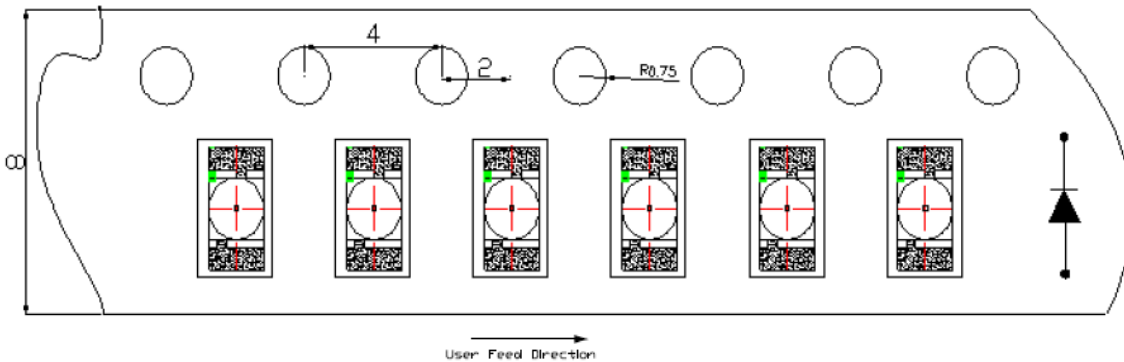
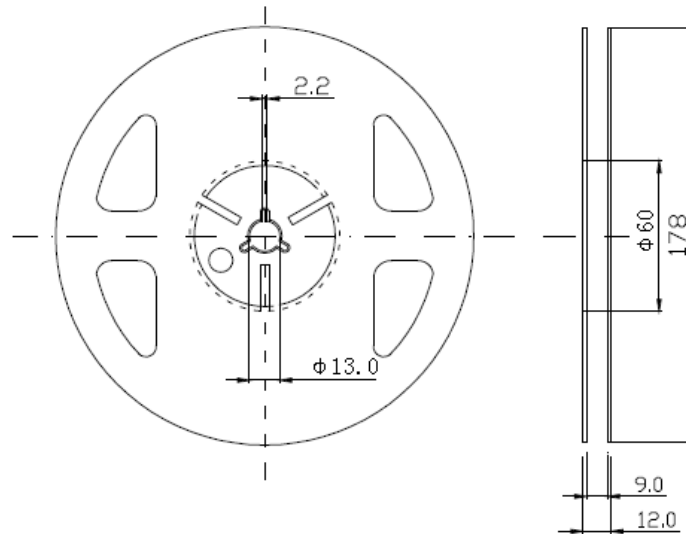
**3.2x1.6 x1.8mm Dome Lens Chip LED**

**OSXX120641E**

**Ver.A.7**

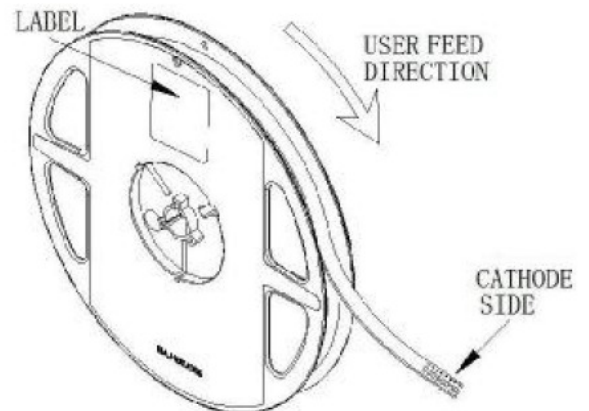
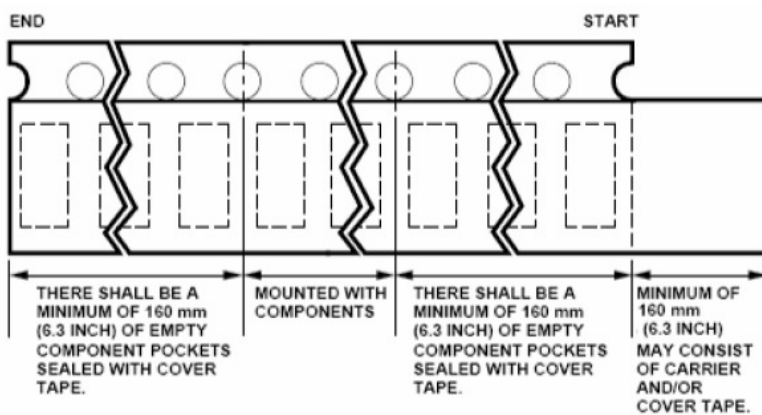
■Packaging

**1. Reel & Tape Dimensions (2000PCS/Reel)**



Notes: All dimensions are in millimeters

**2. Tape leader & Trailer Dimensions & Reel**



### 3. Bag packaging

