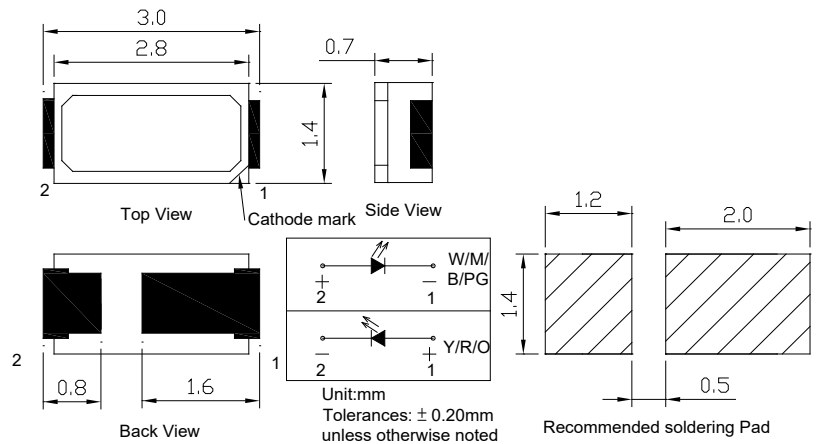


■Features

- Top view LED (3.0 x 1.4 x 0.7mm)
- Super high brightness of surface mount LED
- Lead frame package with individual 2 pins
- Compatible to IR reflow soldering.

■Outline Dimension



■Applications

- General lighting
- Decoration lighting
- Indicator

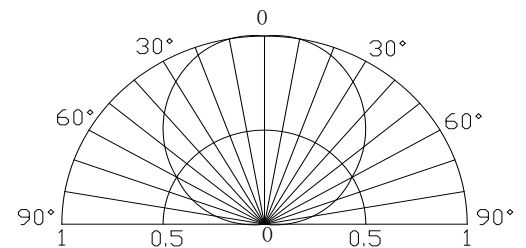
■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value		Unit
		W/M/B/PG	Y/R	
DC Forward Current	I _F	35	35	mA
Pulse Forward Current#	I _{FP}	100	100	mA
Reverse Voltage	V _R	5	5	V
Power Dissipation	P _D	126	91	mW
Operating Temperature	Topr	-30 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +100		°C
Lead Soldering Temperature	Tsol	260°C/10sec		-

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

■Directivity



■Electrical -Optical Characteristics

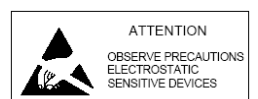
(Ta=25°C)

Part Number	Color	W	V _F (V)			I _R (μA)	Φ _v (lm)			I _v (mcd)			WD (nm)/CCT (K)			2θ1/2 (deg)	
			Min.	Typ.	Max.		Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Min.	Typ.		Max.
			I _F =30mA				V _R =5V			I _F =30mA							
OSW53014C1A-30MA	Cool White	W	2.8	3.1	3.6	10	8	9	-	3000	3500	-	9000K	-	15000K	120	
OSWA3014C1A-30MA	Pure White	W	2.8	3.1	3.6	10	8	9	-	3000	3500	-	7500K	-	8500K	120	
OSW43014C1A-30MA	White	W	2.8	3.1	3.6	10	8	9	-	3000	3500	-	5500K	-	6500K	120	
OSM53014C1A-30MA	Warm White	M	2.8	3.1	3.6	10	8	9	-	3000	3500	-	2800K	-	3200K	120	
OSB43014C1A-30MA	Blue	B	2.8	3.1	3.6	10	1.5	2	-	300	400	-	455	460	465	120	
OSG53014C1A-30MA	Pure Green	PG	2.8	3.1	3.6	10	5	6	-	1600	2000	-	520	525	530	120	
OSY53014C1A-30MA	Yellow	Y	1.8	2.1	2.6	10	2.5	3.5	-	800	1000	-	585	590	595	120	
OSR53014C1A-30MA	Red	R	1.8	2.1	2.6	10	2.5	3.5	-	800	1000	-	620	625	630	120	

*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

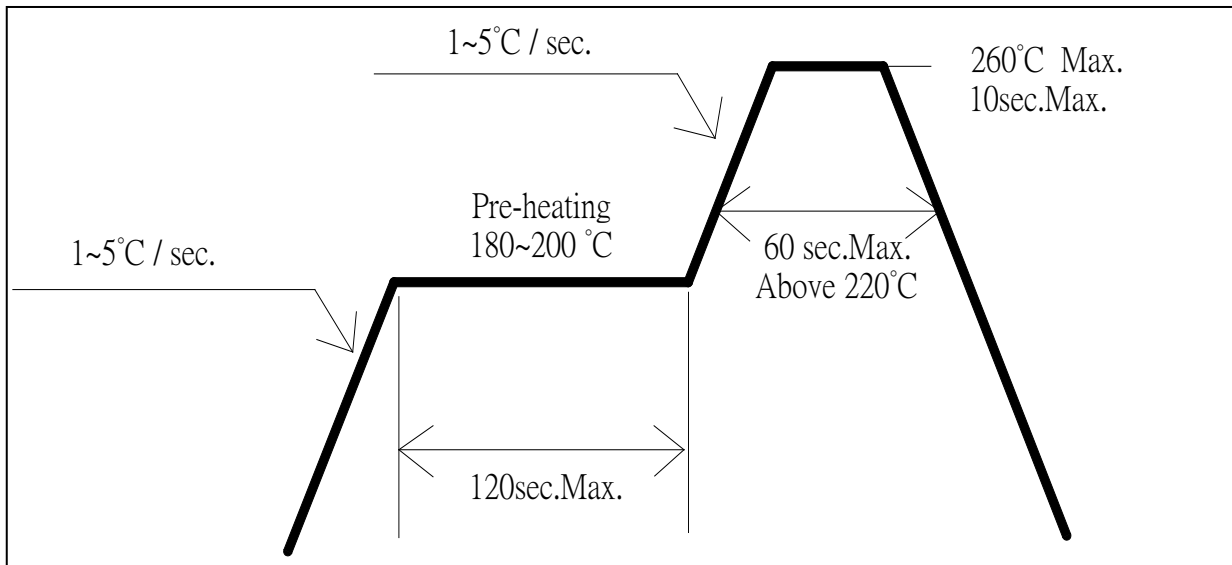
LED & Application Technologies



■ **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

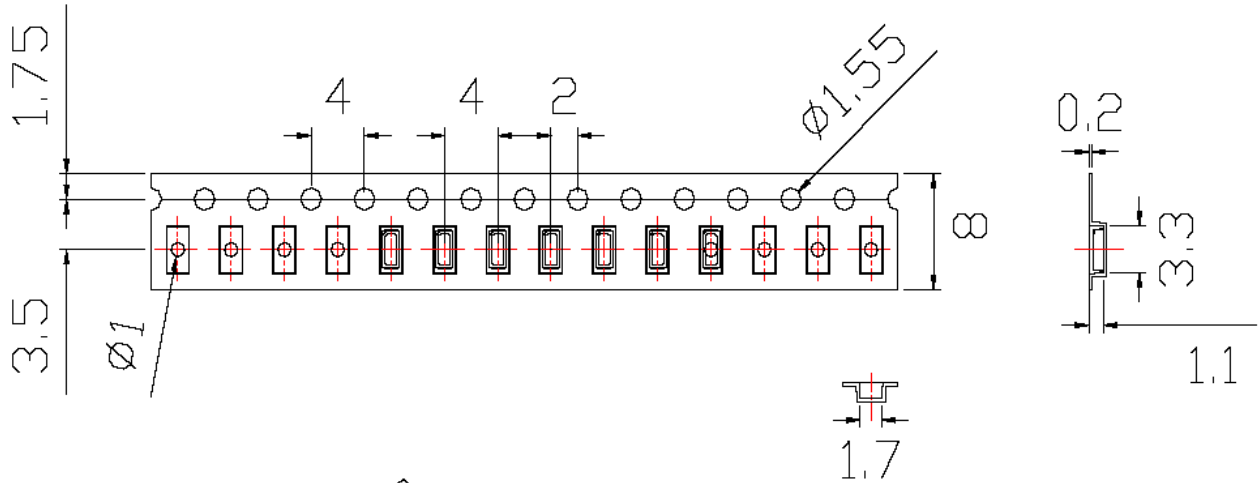
*Although the recommended soldering conditions are specified in the above table, reflow, or hand soldering at the lowest possible temperature is desirable for the LEDs.

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

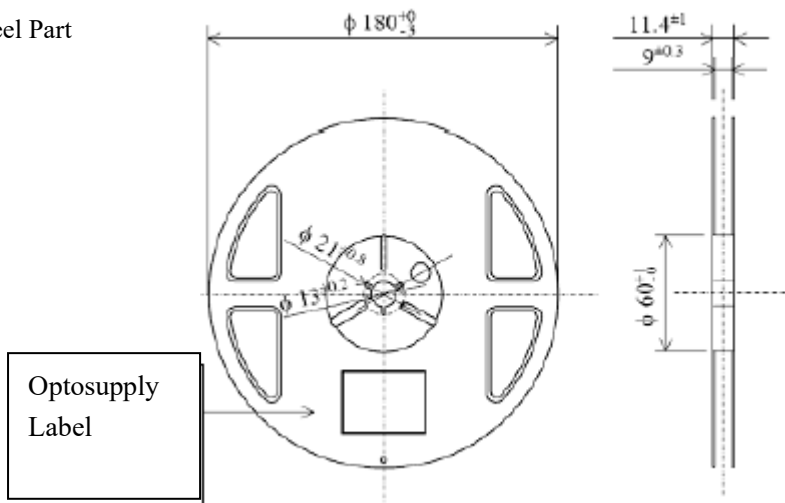
- All SMD LED products are pb-free soldering available.
- Occasionally there is a brightness decrease caused by the influence of heat or ambient atmosphere during air reflow. It is recommended that the User use the nitrogen reflow method.
- Repairing should not be done after the LEDs have been soldered. 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.

■ Taping Information

Loaded Quantity: 4000pcs/Reel



Reel Part



Precautions in Use for Surface Mount Diode

■ Storage

· Storage Conditions

Before opening the package:

The LEDs should be kept at 30°C or less and 60%RH or less. The LEDs should be used within a year. When storing the LEDs, moisture proof packaging with absorbent material (silica gel) is recommended.

· After opening the package:

Soldering should be done right after opening the package (within 24hrs).

Keeping of a fraction, sealing and Temperature: 5~30°C Humidity: Less than 30%.

If the package has been opened more than 24 Hours, components should be dried for 12hrs, at 60±5°C.

· Optosupply LED electrode sections are comprised of a silver plated copper alloy. The silver surface may be affected by environments which contain corrosive gases and so on. Please avoid conditions which may cause the LED to corrode, tarnish or discolor. This corrosion or discoloration may cause difficulty during soldering operations. It is recommended that the User use the LEDs as soon as possible.

· Please avoid rapid transitions in ambient temperature, especially in high humidity environments where condensation can occur.