

■Features

- Full-Color chip LED
- Super high brightness of reverse mount LED
- Compact package outline
(L x W x T) of 3.2mm x 1.25mm x 1.1mm
- Compatible to IR reflow soldering.
- Water Clear Type
- Common Anode Type

■Applications

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

■Absolute Maximum Rating

(Ta=25°C)

Item	Symbol	Value		Unit
		BL/PG	R	
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	66	46	mW
Operating Temperature	Topr	-40 ~ +85		°C
Storage Temperature	Tstg	-40 ~ +85		°C
Lead Soldering Temperature	Tsol	260°C/5sec		-

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

■Electrical -Optical Characteristics

(Ta=25°C)

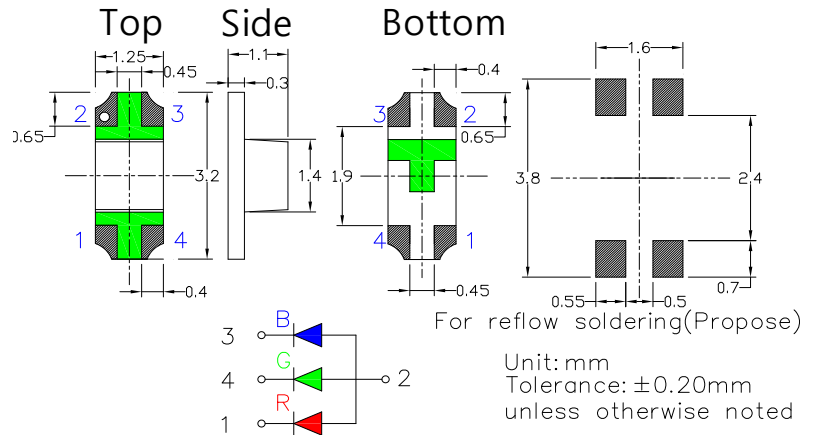
Part Number	Color	V _F (V)			I _R (μA)	I _v (mcd)			λ _D (nm)			2θ1/2(deg)
		Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
		I _F =5mA			V _R =5V	I _F =5mA						
OSTB1205C1N-A	Blue	-	2.7	3.3	10	30	50	-	460	465	475	120
	Pure Green	-	2.7	3.3	10	150	200	-	515	520	530	120
	Red	-	1.7	2.3	10	30	50	-	620	625	630	120

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

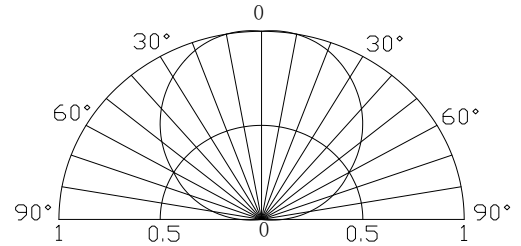
*2 Tolerance of measurements of luminous intensity is ±15%

*3 Tolerance of measurements of forward voltage is ±0.1V

■Outline Dimension



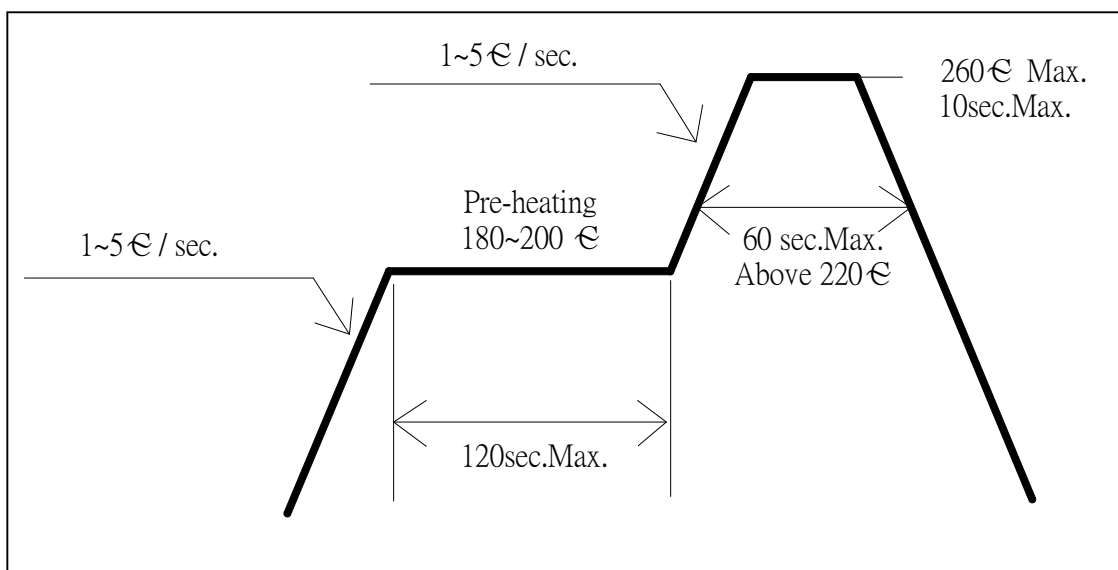
■Directivity



■ **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	10 sec. Max.		
Condition	Refer to Temperature-profile		

• **Reflow Soldering Condition(Lead-free Solder)**



*Recommended soldering conditions vary according to the type of LED

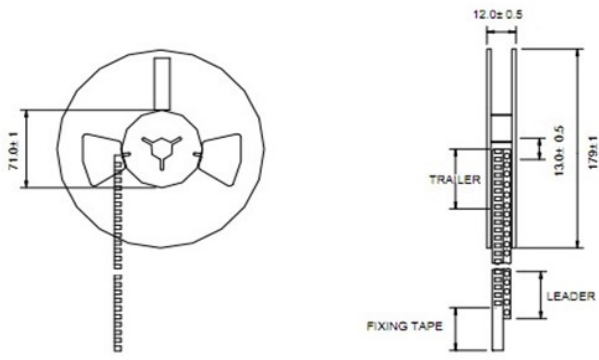
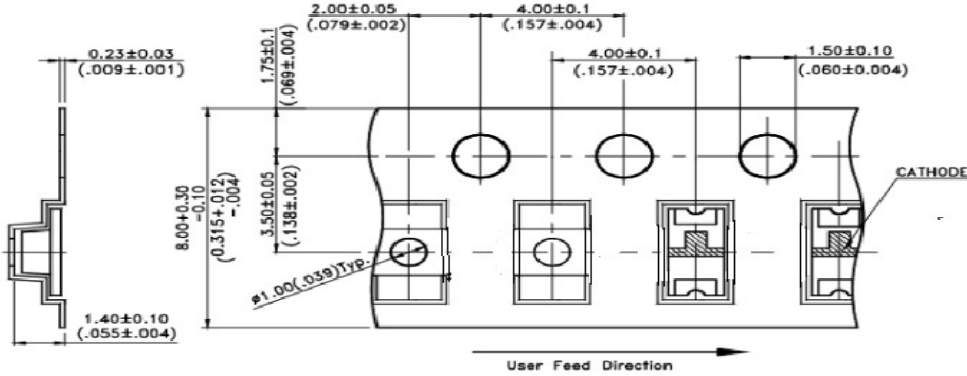
*Although the recommended soldering conditions are specified in the above table, reflow, or hand soldering at the lowest possible temperature is desirable for the LEDs.

*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.

■ Reel & Tape Dimensions

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



■ Cautions

- After open the package, the LED's floor life is 4 Weeks under 30°C or less and 60%RH or less(MSL:2a).
- Heat generation must be taken into design consideration when using the LED.
- Power must be applied resistors for protection, over current would be caused the optic damage to the devices and wavelength shift.
- 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)
- All equipment and machinery must be properly grounded. It is recommended to use a wristband or anti-electrostatic glove when handing the LED.
- 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.
- 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.