

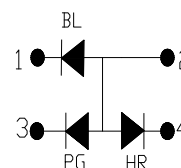
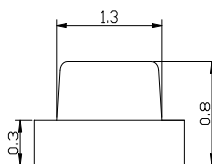
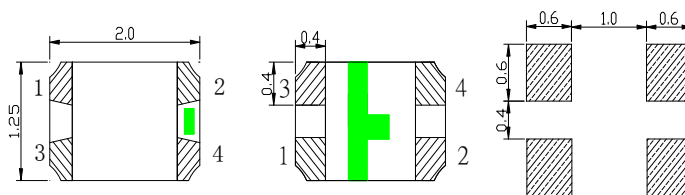
■Features

- Full-Color
- Super high brightness of surface mount LED
- Water Clear Flat Mold
- Compact package outline
(LxWxT) of 2.0mm x 1.25mm x 0.8mm
- Compatible to IR reflow soldering.

■Applications

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

■Outline Dimension



Notes:
1. All dimensions are in millimeters;
2. Tolerance is ± 0.10 mm unless otherwise noted.

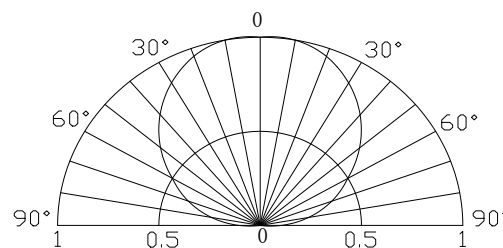
■Absolute Maximum Rating

($T_a=25^\circ\text{C}$)

Item	Symbo	Value		Unit
		1	2	
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	78	108	mW
Operating Temperature	T_{opr}	-40 ~ +85		$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ +85		$^\circ\text{C}$
Lead Soldering Temperature	T_{sol}	260 $^\circ\text{C}$ /5sec		-




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

■Directivity



■Electrical -Optical Characteristics

($T_a=25^\circ\text{C}$)

Part Number	Color			V_F (V)			I_R (μA)	I_v (mcd)			λ_D (nm)			2 $\theta_{1/2}$ (deg)
				Min.	Typ.	Max.	Max.	Min.	Typ.	Max.	Min.	Typ.	Max.	Typ.
				$I_F=20\text{mA}$			$V_R=5\text{V}$			$I_F=20\text{mA}$				
OSTB0805C1E-A-0.8T	Blue	BL		2.8	3.0	3.6	10	100	150		460	465	475	120
	Pure Green	PG		2.8	3.0	3.6	10	300	450	-	520	525	530	120
	Red	HR		1.8	2.0	2.6	10	80	150	-	617	625	630	120

*1 Tolerance of measurements of dominant wavelength is $\pm 1\text{nm}$

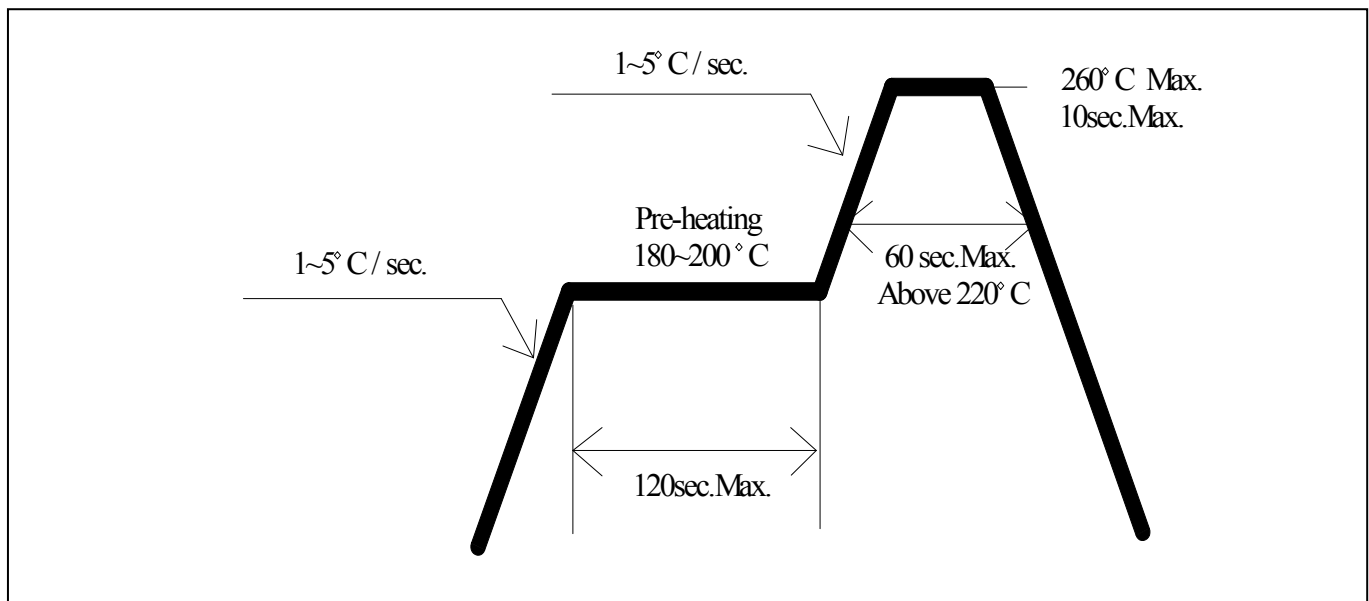
*2 Tolerance of measurements of luminous intensity is $\pm 15\%$

*3 Tolerance of measurements of forward voltage is $\pm 0.1\text{V}$

■ **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.