

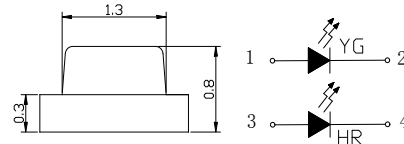
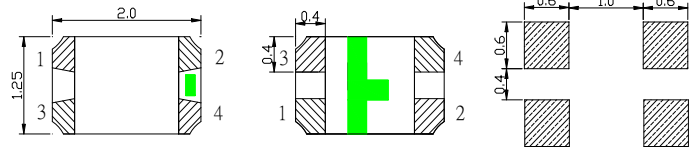
**■Features**

- Bi-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  $\pm 0.10$  mm unless otherwise noted.

**■Absolute Maximum Rating**

(Ta=25°C)

| Item                       | Symbol           | Value       |     | Unit |
|----------------------------|------------------|-------------|-----|------|
|                            |                  | Red         | YG  |      |
| 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>   | 78          | 78  | mW   |
| Operating Temperature      | T <sub>opr</sub> | -40 ~ +85   |     | °C   |
| Storage Temperature        | T <sub>stg</sub> | -40 ~ +85   |     | °C   |
| Lead Soldering Temperature | T <sub>sol</sub> | 260°C/10sec |     | -    |

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

**■Electrical -Optical Characteristics**

(Ta=25°C)

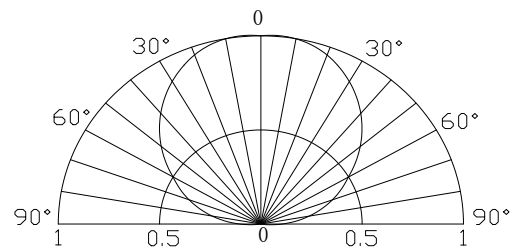
| Part Number      | Color        |    |   | V <sub>F</sub> (V)   |      |      | I <sub>R</sub> (μA) | I <sub>v</sub> (mcd) |      |      | λD (nm) |      |      | 2θ1/2 (deg) |
|------------------|--------------|----|---|----------------------|------|------|---------------------|----------------------|------|------|---------|------|------|-------------|
|                  |              |    |   | 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 |      |      |         |      |      |             |
| OSRB0805C1E-0.8T | Red          | R  | ■ | 1.8                  | 2.1  | 2.6  | 10                  | 80                   | 150  | -    | 617     | 625  | 630  | 120         |
|                  | Yellow Green | YG | ■ | 1.8                  | 2.1  | 2.6  | 10                  | 30                   | 50   | -    | 565     | 570  | 575  | 120         |

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

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

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

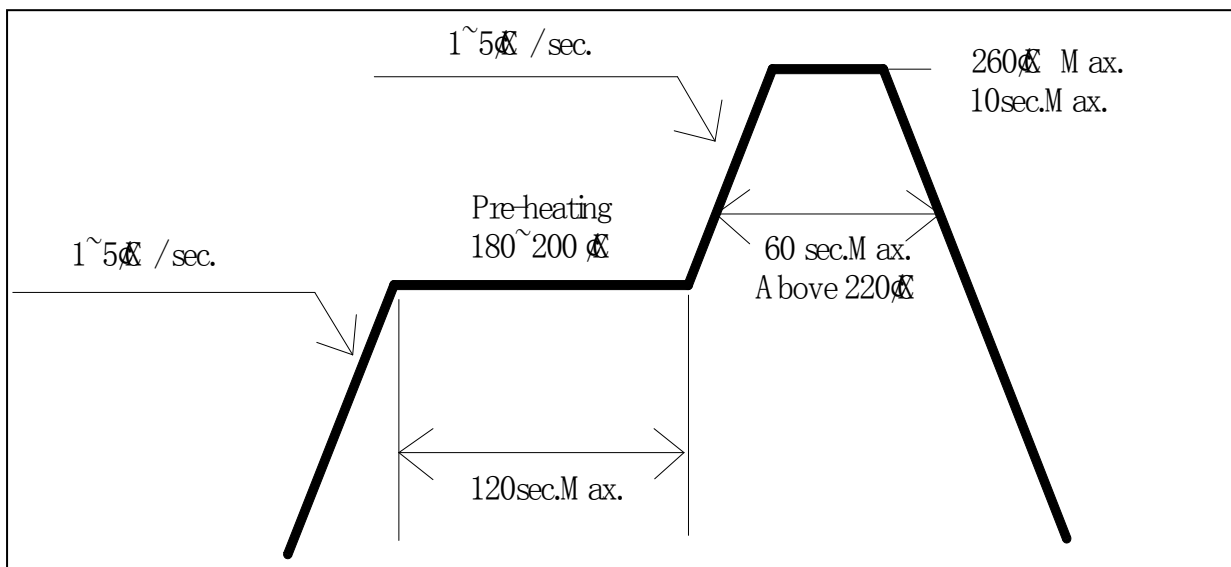
**■Directivity**



■ Soldering Conditions

| Reflow Soldering |                              | Hand Soldering             |  |
|------------------|------------------------------|----------------------------|--|
| Pre-Heat         | 180 ~ 200°C                  | Temperature Soldering time | 350°C Max.<br>3 sec. Max.<br>(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.

