

■Features

- Bi-Color
- Super high brightness of surface mount LED
- Water Clear Flat Mold
- Compact package outline (LxWxT) of 1.6mm x 1.5mm x 0.6mm
- Compatible to Reflow soldering.

■Applications

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

■Absolute Maximum Rating



(Ta=25°C)

| Item | Symbo | Value | | Unit |
|----------------------------|------------------|-------------|-----|------|
| | | Red | YG | |
| DC Forward Current | I _F | 30 | 30 | mA |
| Pulse Forward Current* | I _{FP} | 100 | 100 | mA |
| Reverse Voltage | V _R | 5 | 5 | V |
| Power Dissipation | P _D | 72 | 72 | mW |
| Operating Temperature | T _{opr} | -40 ~ +85 | | °C |
| Storage Temperature | T _{stg} | -40~ +85 | | °C |
| Lead Soldering Temperature | T _{sol} | 260°C/10sec | | - |

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

■Electrical -Optical Characteristics

(Ta=25°C)

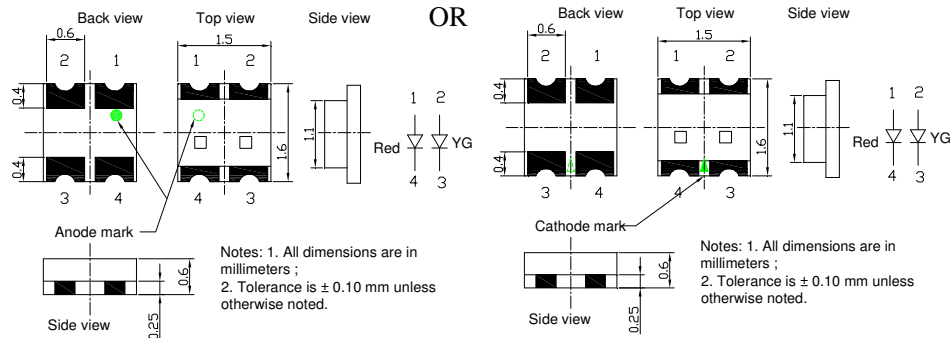
| Part Number | Color | | | V _F (V) | | | I _R (μA) | I _v (mcd) | | | λD(nm) | | | 2θ1/2(deg) |
|-------------|--------------|----|---|---------------------|------|------|---------------------|----------------------|------|---------------------|--------|------|------|------------|
| | | | | Min. | Typ. | Max. | Max. | Min. | Typ. | Max. | Min. | Typ. | Max. | Typ. |
| | | | | I _F =5mA | | | V _R =5V | | | I _F =5mA | | | | |
| OSRG0603C1C | Red | HR |  | 1.6 | 2.0 | 2.4 | 10 | - | 30 | - | 620 | 631 | 640 | 120 |
| | Yellow green | YG |  | 1.6 | 2.0 | 2.4 | 10 | - | 20 | - | 565 | 570 | 575 | 120 |

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

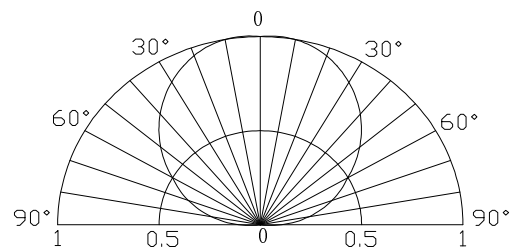
*2 Tolerance of measurements of luminous intensity is ±15%

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

■Outline Dimension



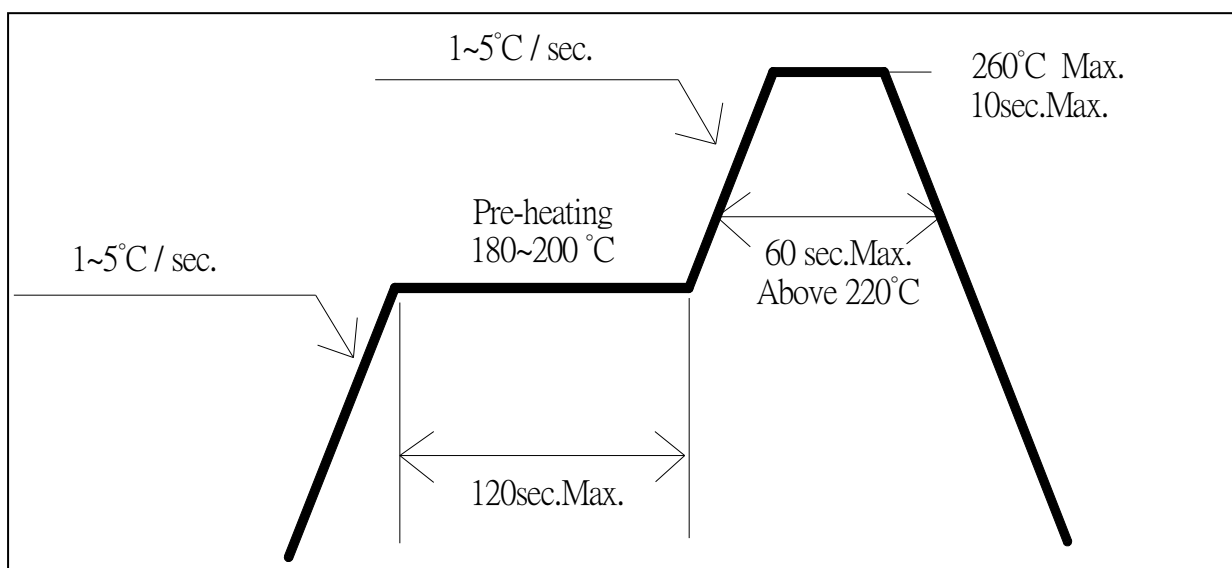
■Directivity



■ 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.