OptoSupply
Light It Up

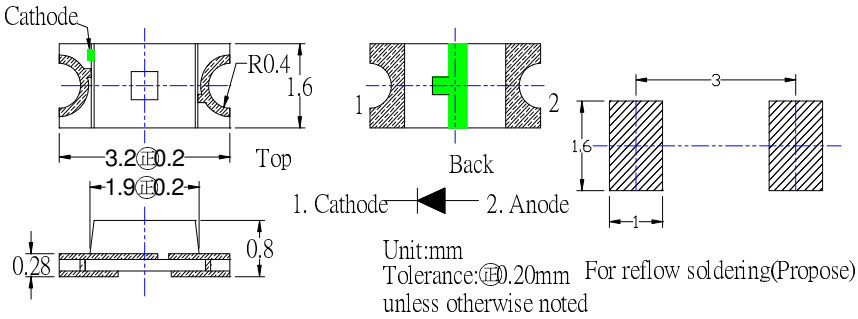
# 3.2x1.6 x0.8mm Reverse Mount Chip LED

## OSXX1206E1N-0.8T

## ▪Features

- Single chip
- Super high brightness of reverse mount LED
- Compact package outline
  (L x W x T) of 3.2mm x 1.6mm x 0.8mm
- Compatible to IR reflow soldering.
- Water Clear Type (Except White LED)

## ▪Outline Dimension




## ▪Applications

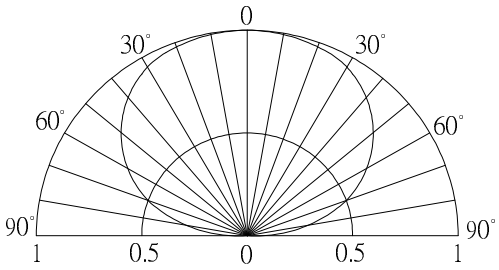
- Backlighting (switches, keys, etc.)
- Marker lights (e.g. steps, exit ways, etc.)

## ▪Absolute Maximum Rating (Ta=25℃)

| Item | Symbol | Value | | Unit |
|---|---|---|---|---|
| | | W5/M5/B5/G5 | G8/Y5//O5/R5 | |
| DC Forward Current | $I_F$ | 20 | 20 | mA |
| Pulse Forward Current# | $I_{FP}$ | 10 | 10 | mA |
| Reverse Voltage | $V_R$ | 5 | 5 | V |
| Power Dissipation | $P_D$ | 68 | 48 | mW |
| Operating Temperature | Topr | -40 ~ +85 | | ℃ |
| Storage Temperature | Tstg | -40~ +85 | | ℃ |
| Lead Soldering Temperature | Tsol | 260℃/10sec | | - |

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

## ▪Directivity




## ■Electrical -Optical Characteristics (Ta=25℃)

| Part Number | Color | | | $V_F$ (V) | | | $I_R$(μA) | Iv(mcd) | | | λD(nm) | | | 2θ1/2(deg) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Min. | Typ. | Max. | Max. | Min. | Typ. | Max. | Min. | Typ. | Max. | Typ. |
| | | | | $I_F$=10mA | | | $V_R$=5V | $I_F$=10mA | | | | | | |
| OSW51206E1N-0.8T | White | W5 | | - | 2.8 | 3.4 | 10 | 250 | 350 | - | 8000-18000K | | | 140 |
| OSM51206E1N-0.8T | Warm White | M5 | | - | 2.8 | 3.4 | 10 | 250 | 350 | - | 2700-3300K | | | 140 |
| OSB51206E1N-0.8T | Blue | B5 | | - | 2.8 | 3.4 | 10 | 60 | 70 | - | 460 | 465 | 475 | 140 |
| OSG51206E1N-0.8T | True Green | G5 | | - | 2.8 | 3.4 | 10 | 250 | 350 | - | 515 | 525 | 530 | 140 |
| OSG81206E1N-0.8T | Yellow Green | G8 | | - | 1.8 | 2.4 | 10 | 12 | 20 | - | 565 | 570 | 575 | 140 |
| OSY51206E1N-0.8T | Yellow | Y5 | | - | 1.8 | 2.4 | 10 | 50 | 60 | - | 585 | 590 | 595 | 140 |
| OSO51206E1N-0.8T | Orange | O5 | | - | 1.8 | 2.4 | 10 | 50 | 60 | - | 600 | 605 | 610 | 140 |
| OSR51206E1N-0.8T | Red | R5 | | - | 1.8 | 2.4 | 10 | 50 | 60 | - | 615 | 625 | 630 | 140 |

***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

ISO 9001: 2008

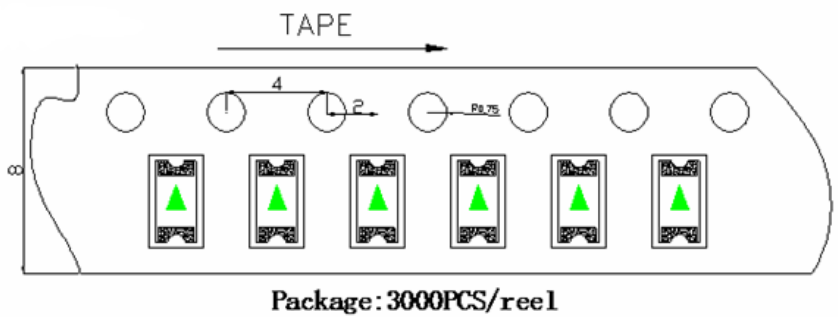
RoHS Compliant EU 2002/95/EC

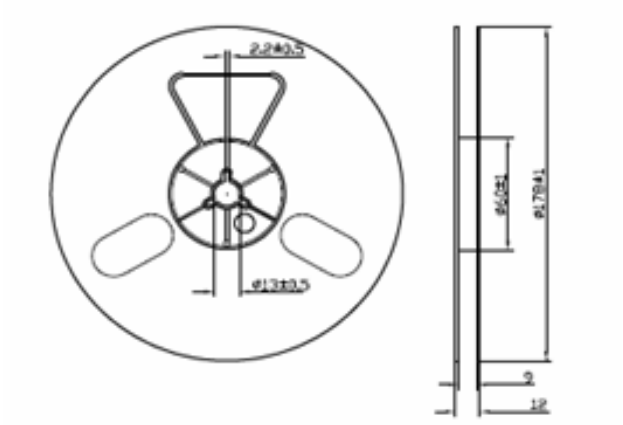
REACH The new EU chemicals legislation

ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES

## ■Reel & Tape Dimensions

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



## ■ Cautions:

1. After open the package, the LED´s floor life is 4 Weeks under 30℃ or less and 60%RH or less(MSL:2a).
2. Heat generation must be taken into design consideration when using the LED.
3. Power must be applied resistors for protection, over current would be caused the optic damage to the devices and wavelength shift.
4. 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)
5. All equipment and machinery must be properly grounded. It is recommended to use a wristband or anti-electrostatic glove when handing the LED.
6. 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.
7. 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.