



OptoSupply

Light It Up

3mm Round Red & Blue LED

OSRBPA3131A

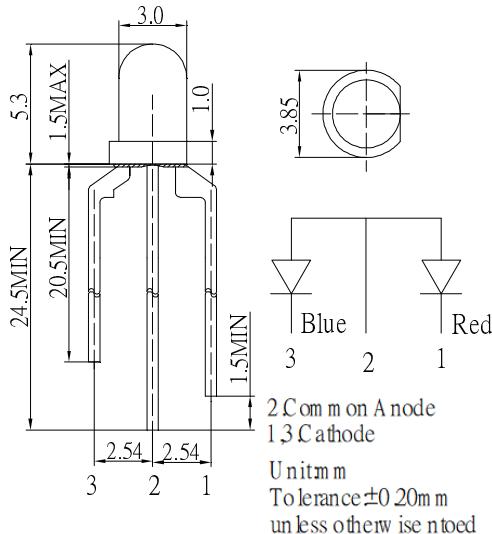
■Features

- High Luminous LEDs
- 3mm Round Standard Directivity
- UV Resistant Epoxy
- Water Clear Type

■Applications

- Toys
- Games
- Audio
- Other Lighting

■Outline Dimension



■Absolute Maximum Rating (Ta=25°C)

(Ta=25°C)

| Item | Symbol | Value | | Unit |
|----------------------------|------------------|------------|------|------|
| | | Red | Blue | |
| DC Forward Current | I _F | 50 | 30 | mA |
| Pulse Forward Current# | I _{FP} | 130 | 100 | mA |
| Reverse Voltage | V _R | 5 | 5 | V |
| Power Dissipation | P _D | 130 | 108 | mW |
| Operating Temperature | T _{opr} | -30~+85 | | °C |
| Storage Temperature | T _{stg} | -40~+100 | | °C |
| Lead Soldering Temperature | T _{sol} | 260°C/5sec | | - |

#Pulse width Max.10ms Duty ratio max 1/10

■Electrical -Optical Characteristics (Ta=25°C)

(Ta=25°C)

| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|----------------------|-----------------------|----------------------|------|------|------|------|
| DC Forward Voltage*1 | V _F (Red) | I _F =20mA | - | 2.1 | 2.6 | V |
| | V _F (Blue) | I _F =20mA | - | 3.1 | 3.6 | V |
| DC Reverse Current | I _R | V _R =5V | - | - | 10 | μA |
| Domi. Wavelength*2 | λ _D (Red) | I _F =20mA | 620 | 625 | 630 | nm |
| | λ _D (Blue) | I _F =20mA | 465 | 470 | 475 | nm |
| Luminous Intensity*3 | I _v (Red) | I _F =20mA | 3000 | 4200 | - | mcd |
| | I _v (Blue) | I _F =20mA | 3000 | 4200 | - | mcd |
| 50% Power Angle | 2θ _{1/2} | I _F =20mA | - | 30 | - | deg |

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

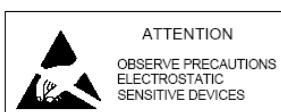
*2 Tolerance of measurements of dominant wavelength is ±1nm

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

LED & Application Technologies



REACH
The new EU chemicals legislation



ATTENTION
OBSERVE PRECAUTIONS
ELECTROSTATIC
SENSITIVE DEVICES