



OptoSupply

Light It Up

3mm 850nm Infrared LED

OSI3CA3131A

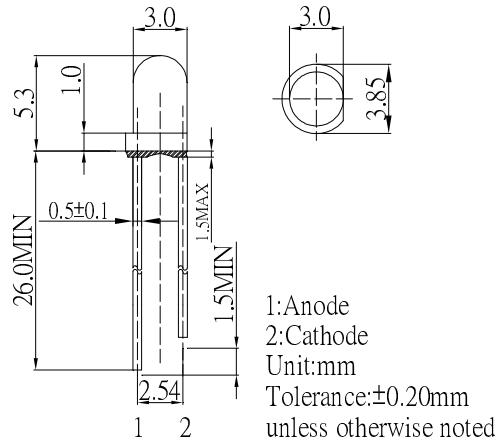
■Features

- High Radiant Power LEDs
- 3mm Standard Directivity
- UV Resistant Epoxy
- Water Clear Type

■Applications

- IrDA
- Encoder
- Data Communication
- IR camera

■Outline Dimension



■Absolute Maximum Rating

(Ta=25°C)

| Item | Symbol | Value | Unit |
|----------------------------|------------------|-------------|------|
| DC Forward Current | I _F | 70 | mA |
| Pulse Forward Current# | I _{FP} | 700 | mA |
| Reverse Voltage | V _R | 5 | V |
| Power Dissipation | P _D | 126 | mW |
| Operating Temperature | T _{opr} | -30 ~ +85 | °C |
| Storage Temperature | T _{tsg} | -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)

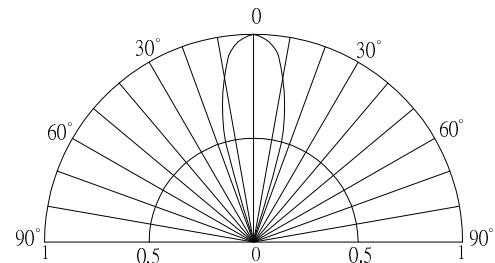
| Item | Symbol | Condition | Min. | Typ. | Max. | Unit |
|--------------------|-------------------|----------------------|------|------|------|-------|
| DC Forward Voltage | V _F | I _F =50mA | - | 1.6 | 1.8 | V |
| DC Reverse Current | I _R | V _R =5V | - | - | 10 | µA |
| Peak Wavelength | λ _p | I _F =50mA | - | 850 | - | nm |
| Radiant Power | P _O | I _F =50mA | 15 | 20 | - | mW |
| Radiant Intensity | I _e | I _F =50mA | 30 | 50 | - | mW/Sr |
| 50% Power Angle | 2θ _{1/2} | I _F =50mA | - | 30 | - | deg |

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

*2 Tolerance of measurements of Radiant Intensity is $\pm 15\%$

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

■Directivity



LED & Application Technologies

