



**OptoSupply**

*Light It Up*

**5.3\*3.8\*1.7mm Rectangular 660nm Red & 905nm IR**

**Oximeter LED**

**OSIRRR54X3A**

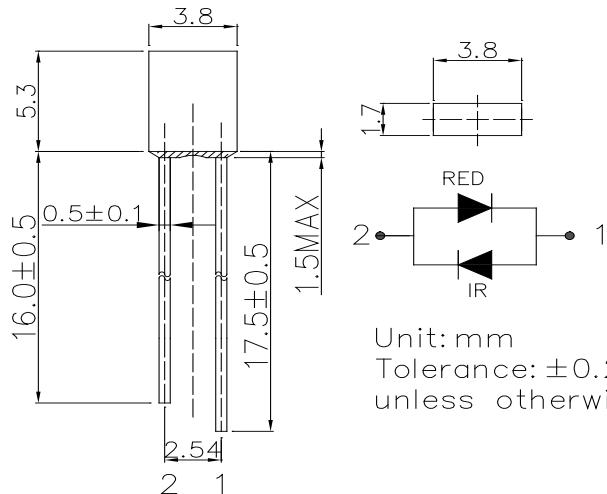
## ■Features

- High Radiant Power LED
- 5.3x3.8x1.7mm Rectangular Standard Directivity
- UV Resistant Epoxy
- Water Clear Type
- Side View

## ■Applications

- SPO<sub>2</sub>
- Medical Instrumentation
- Radiometric Instruments

## ■Outline Dimension



Unit: mm  
Tolerance: ±0.20mm unless otherwise noted

## ■Absolute Maximum Rating (Ta=25°C)

Item	Symbol	Value		Unit
		IR	Red	
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>	85	72	mW
Operating Temperature	T <sub>opr</sub>	-30 ~ +85		°C
Storage Temperature	T <sub>stg</sub>	-40 ~ +100		°C
Lead Soldering Temperature	T <sub>sol</sub>	260°C/5sec		-

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

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

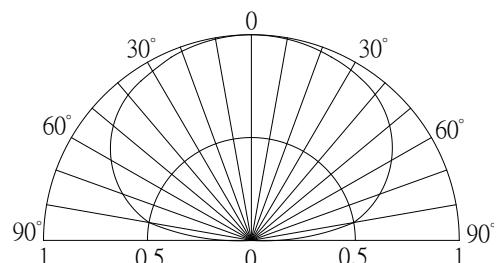
Item	Color.	Symbol	Condition	Min.	Typ.	Max.	Unit
DC Forward Voltage*1	Red	V <sub>F</sub>	I <sub>F1</sub> =20mA	-	2.0	2.4	V
	Infrared	V <sub>F</sub>	I <sub>F2</sub> =20mA	-	1.3	1.7	V
DC Reverse Current	Red	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	10	µA
	Infrared	I <sub>R</sub>	V <sub>R</sub> =5V	-	-	10	µA
Peak Wavelength*2	Red	λ <sub>p</sub>	I <sub>F1</sub> =20mA	-	660	-	nm
	Infrared	λ <sub>p</sub>	I <sub>F1</sub> =20mA	-	905	-	nm
Radiant Power*3	Red	Po	I <sub>F2</sub> =20mA	9	-	11	mW
	Infrared		IF=20mA	1.5	-	2.5	mW
50% Power Angle	Infrared	201/2	I <sub>F1</sub> =20mA	-	-	-	deg
	Red	201/2	I <sub>F2</sub> =20mA	-	-	-	deg

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

\*2 Tolerance of measurements of peak wavelength is ±1nm

\*3 Tolerance of measurements of radiant power is +15%

## ■Directivity



## LED & Application Technologies

