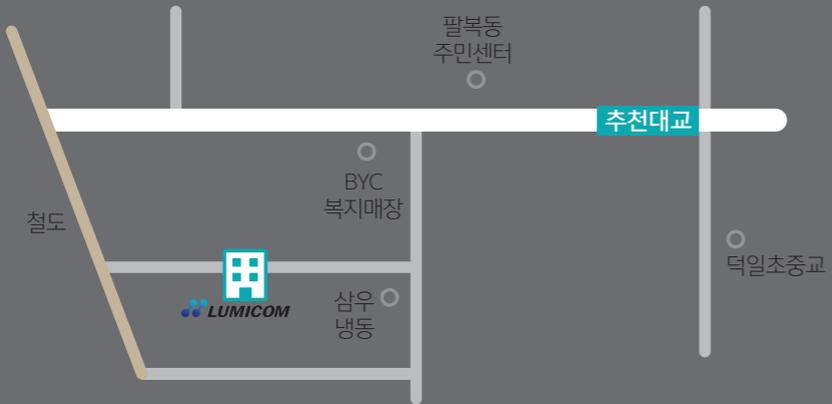


Location



전라북도 전주시 덕진구 상리1길 46

Tel\_063-211-3223 Fax\_063-211-3224

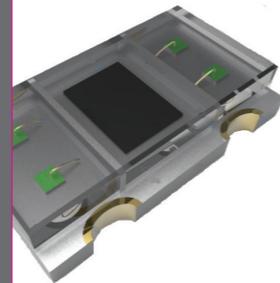
46, Sangri 1gil, Deokjin-gu, Jeonju-si,  
Jeollabuk-do, Korea

Tel\_+82.63.211.3223 Fax\_+82.63.211.3224

[www.lumicom.co.kr](http://www.lumicom.co.kr)

# Biomedical & Health care

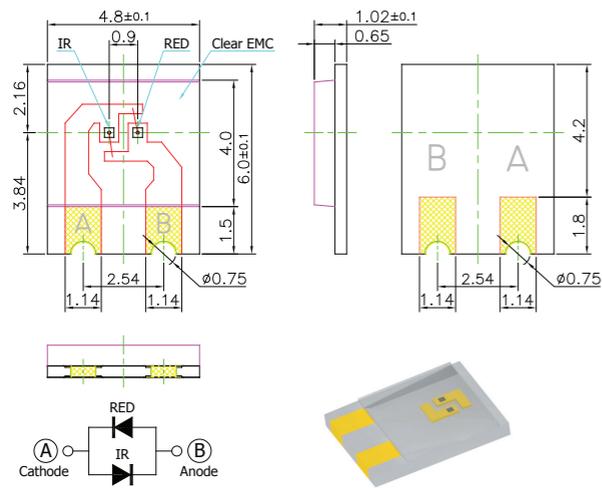
Luminous & Communication



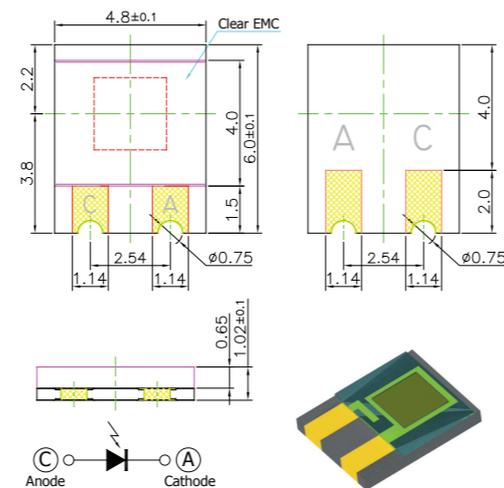
# SpO<sub>2</sub>

It has two basic LED's with a photo-diode to detect the intensity of light radiation. The sources of light are red(RED, 660nm) and infrared rays (IR, 940nm). The two LED's emit two separate kinds of light which are on parallel connections so if one has normal direction flow then the other will have a reverse current. The voltage of the reverse current is 5V at this time and the maximum current of the normal flow is 40mA.

## Dual Emitter



## Photo diode



Forward Voltage		Reverse current		Radiant Power		Peak wavelength sensitivity	
VF[V]		IR[μA]		PO[mw]		λp[nm]	
RED	IR	RED	IR	RED	IR	RED	IR
1.8	1.3	10	10	3.0	1.5	660	905

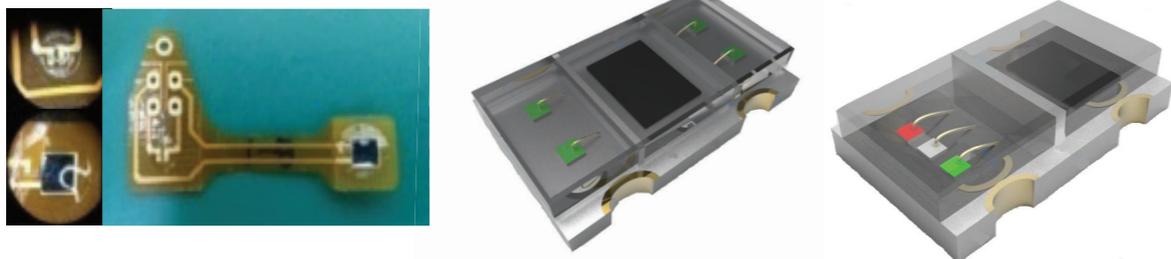
Open circuit Voltage * 1	Dark current	Spectral sensitivity	Peak wavelength
VOC [V]	ID[nA]	λ[nm]	λp[nm]
Typ.	Typ. @VR[V]		Typ.
0.32	1	450-1100	940

## Wearable Application



Dual Emitter

Photo diode

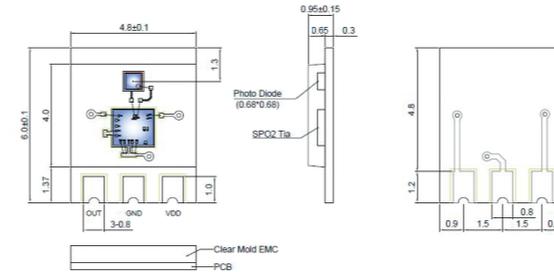


# Light-Frequency converter

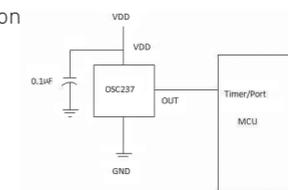


Package Type

- ★ Photodiode size : 1X1mm
- ★ Irradiance responsivity : 3.6KHz (uW/c m<sup>2</sup>) @660nm
- ★ Single supply range: 2.5-5.5V
- ★ Low Power: 1.25mA at 3.3V power supply



Application Diagram



# UV LED

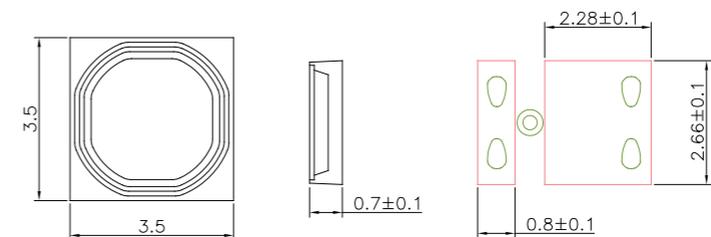
Wide used in medical applications, photolysis media reaction, UV air cleaners, high-resolution, UV glue curing, special lighting

Wide range of UV LED  
UV-A (375nm), UV-B (310nm), UV-C (275nm)

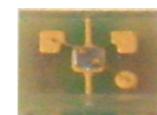
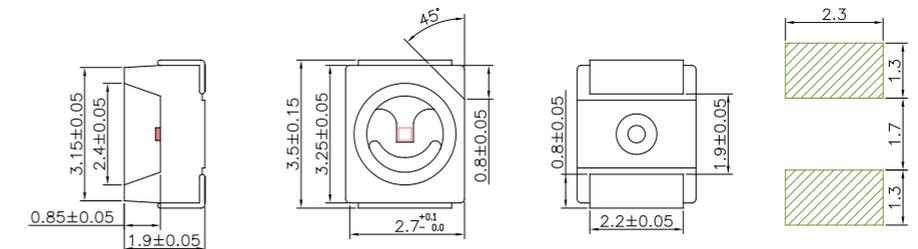
Package	Reverse Voltage (V <sub>r</sub> )	Forward Current (I <sub>f</sub> )	Wavelength (λ)	Forward Voltage (V <sub>f</sub> )	Operating Temperature (T <sub>op</sub> )	Size (mm)	Viewing Angle (deg)
SMD 3528	5V	20mA	375-380nm	3.4V-3.8V	-30°C--85°C	3.5X2.8, 1.9t	100°
COB 2418	5V	20mA	370-375nm		-30°C--85°C	2.4X1.8, 1.0t	120°
SMD 3535	5V	20mA	365-370nm		-30°C--85°C	3.5X3.5, 1.2t	120°



SMD 3535



SMD 3528



COB 2418

