

*21C Leader in Photonics Industry*

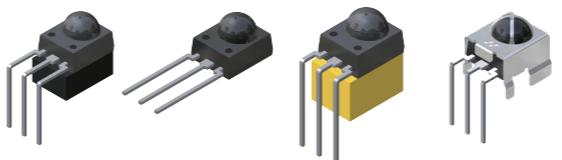
- Opto Sensors
- IR Receiver Module
- High power LED
- Fiber Optic Modules
- Lens
- LED Lighting

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



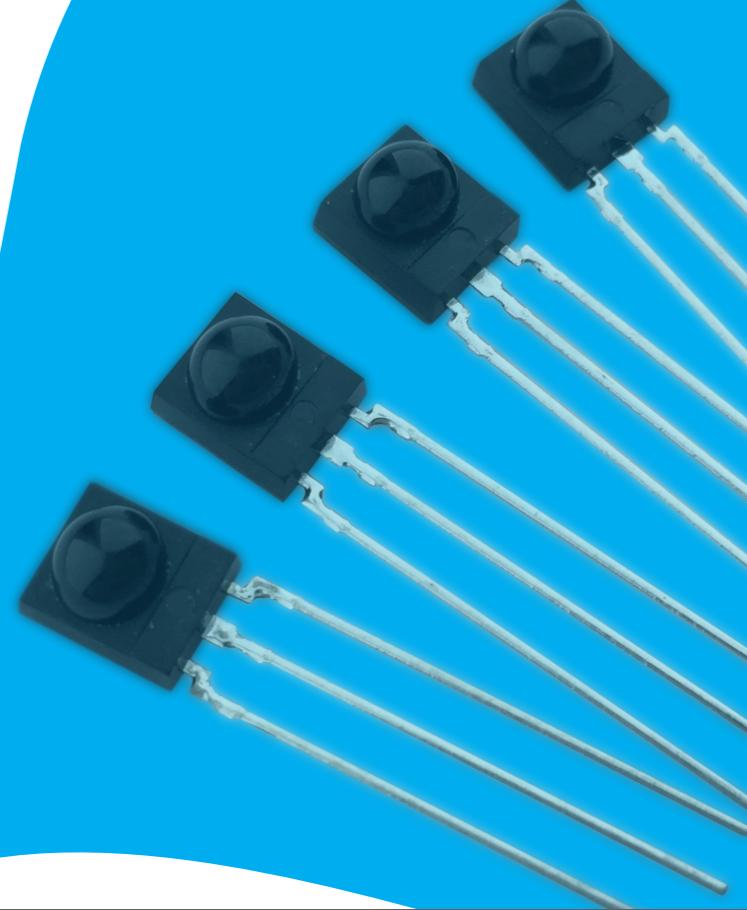
*21C Leader in*  
**Photonics  
Industry**

Create better future for all righteous and happy members  
by making profit through best service to each customer.



Luminous & Communication

46, Sangri 1-gil, Jeonju-si, Jeollabuk-do Korea.  
+82-63-211-3223   +82-63-211-3224

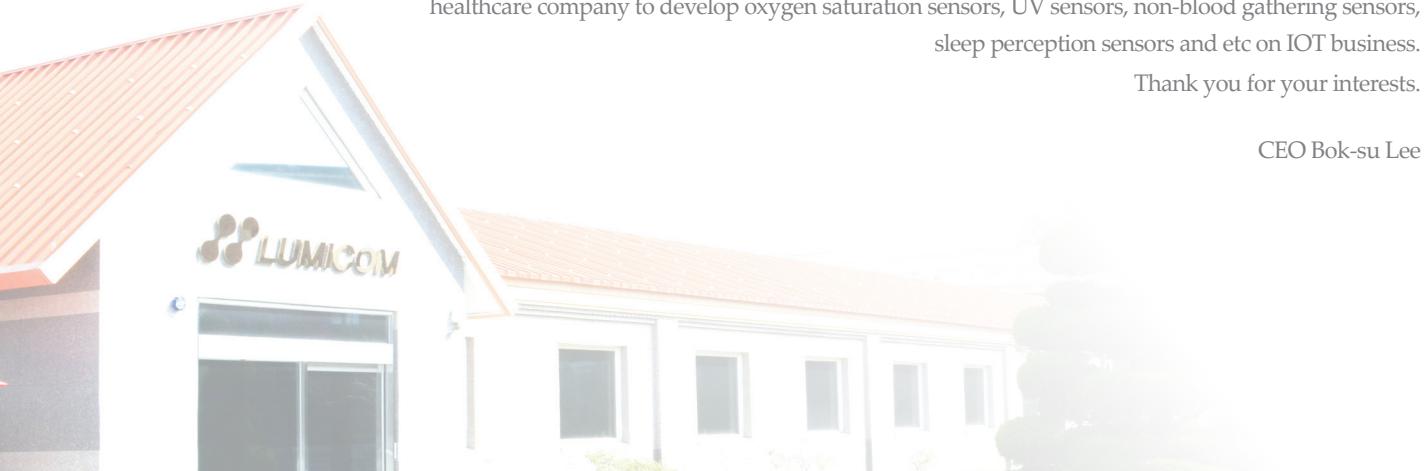


The motto of our company, Lumicomm Inc. is "Create the better future to make our profit with the best service for the customers by good and happy people". Under this motto, we all actively work with our own technology and its constant development. We mostly product and sell IR Receiver Modules, semiconductor devices and LED products.

We move forward for the healthcare business for the better future. We're focusing on R&D to be the leading healthcare company to develop oxygen saturation sensors, UV sensors, non-blood gathering sensors, sleep perception sensors and etc on IOT business.

Thank you for your interests.

CEO Bok-su Lee



## History

2004.03 Established Lumicomm Co.,Ltd	2006.11 Export and Investment Company of Merit Award (Million)	2007.02 Patent Application (IR RECEIVER MODULE, 10-0685117)	2008.05 Venture Company Certification
2009.12 INNO-BIZ Company Certification	2010.11 Export and Investment Company of Merit Award (3 Million)	2012.02 Obtained ISO9001, 14001 Certification	2015.05 Establishment of R&D Center

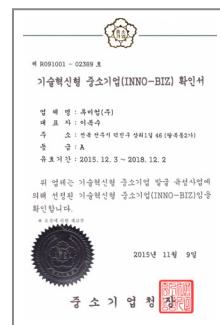
## Certificate



ISO 9001



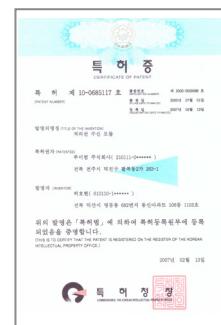
ISO 14001



INNO-BIZ



R&D Center



Certificate of patent

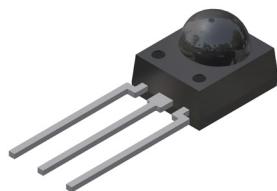
### Description

The feature of the Inner shield case is strong against the effect of EMI Noise and disturbance light.

The Noise component of electromagnetic waves from the Backlight Driver( Inverter) and etc. of the TV Set penetrates the Package, and it gives affect to the inner IC which causes the decrease of receiving distance, output of Noise Pulse and etc.

Our IR Receiver Module has the patent for Inner shield case to block exact noise. When comparing to those of other companies, we're leading the market with our superior performance and excellent quality.

### LUMICOM



- It doesn't need the Solder process due to inner case.  
( non-hazardous materials)
- Better production capacity because of no extra assembly process.

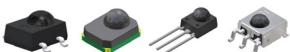
### The Internal structure



### OTHERS



### Application



#### Robot Cleaner



LR-S25X  
LR-S25CT

#### Lighting



LR-T15ELM  
LR-T15CLM

#### Slim TV



LR-MD4C

#### SET-TOP BOX



LR-T15CLM  
LR-T15CTM2  
LR-15CTM4  
LR-T15CLN-C

#### Physical treatment equipment



LR-T15CTM1  
LR-T15CTM4

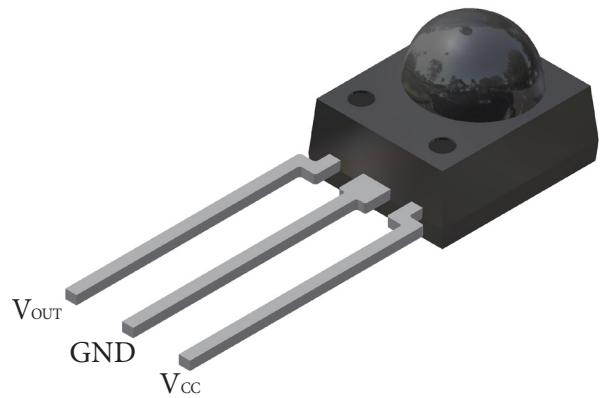
#### Air Conditioner



LR-15CLM  
LR-T15CTM2

## Description

The LR-T... series are infrared remote control receiver modules. They are transfer-molded, small size, light weight and low current consumption modules. The strong points of Lumicomm IR modules are reliable operation even under disturbing ambient light source, and the protection against uncontrolled output pulses.



## Application

AV equipment (TV, DVD Player, Audio, CD player, STB, etc)  
Home appliances (Computer, Air conditioner, Camera, etc)  
Infrared remote control Toys.

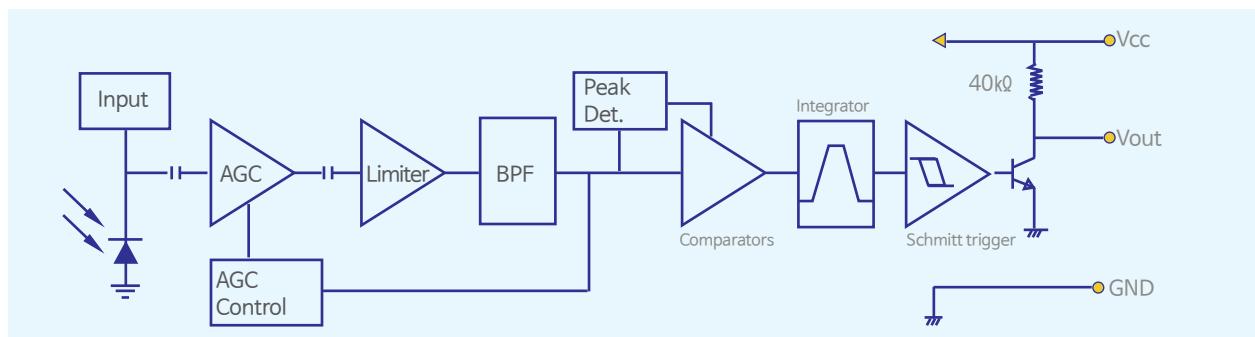
## Features

- Wide operating supply voltage between 2.4V to 6.5V
- Photo detector and preamplifier in one package
- Internal filter for PCM frequency
- Enhanced immunity against many different kinds of disturbance light sources.
- Low power consumption
- Output active low
- Operation with short burst possible
- Operation with data Rate (continuous data) possible

TYPE	PIN CONFIGURATION
LR-001000	Vout – Vcc – GND
LR-002000	Vcc – Vout – GND
LR-003000	GND – Vcc – Vout
LR-004000	GND – Vout – Vcc
LR-005000	Vout – GND – Vcc
LR-006000	Vcc – GND – Vout

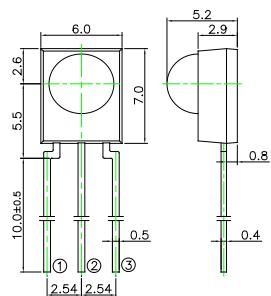
TYPE	CARRIER FREQUENCY
LR-000A00	32.7 kHz
LR-000B00	36.7 kHz
LR-000C00	37.9 kHz
LR-000D00	40.0 kHz
LR-000E00	56.7 kHz



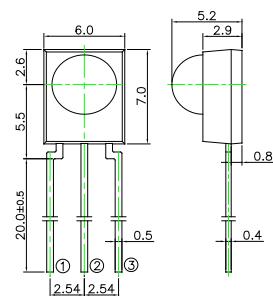
# IR Receiver Modules

LR-R Series

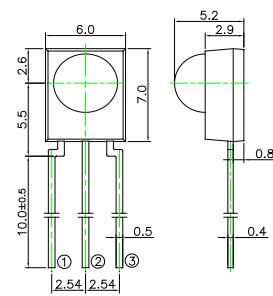
LR-T...SN



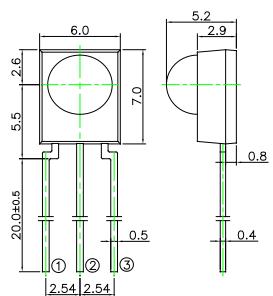
LR-T...N



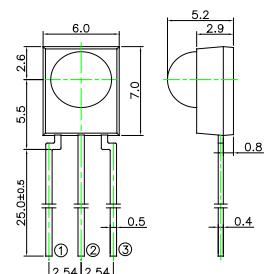
LR-T...SM



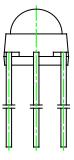
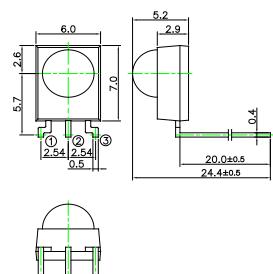
LR-T...M



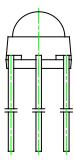
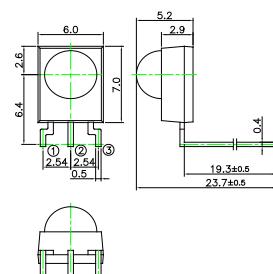
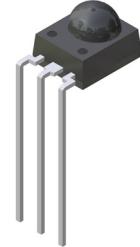
LR-T...LM



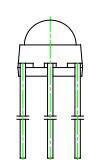
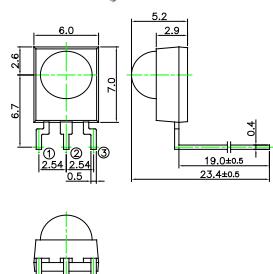
LR-T...TM1

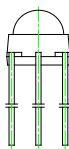
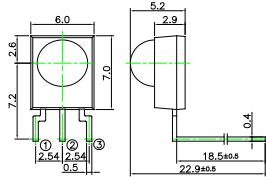
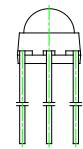
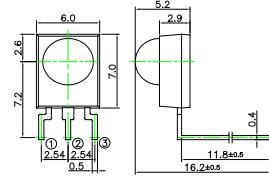
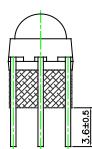
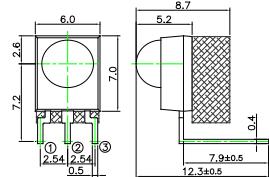
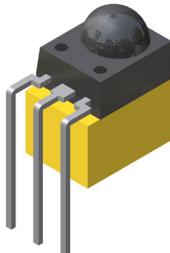
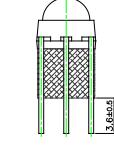
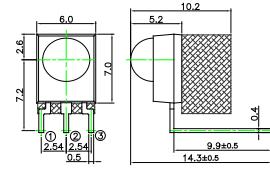
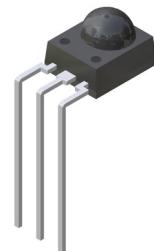
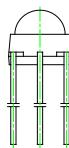
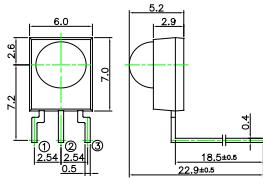
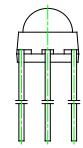
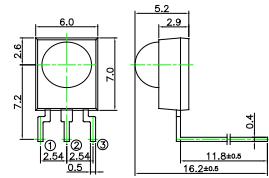
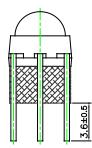
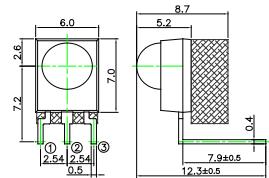
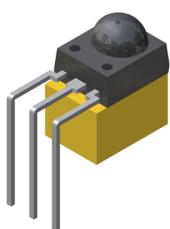
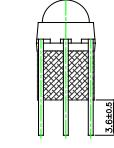
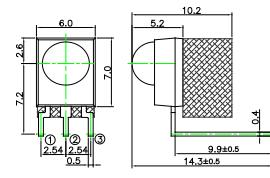
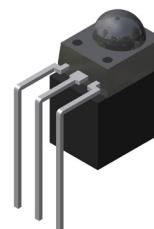


LR-T...TM2



LR-T...TM3

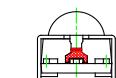
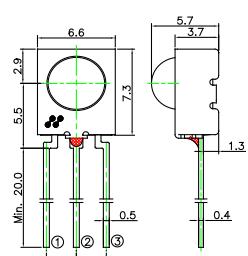


**LR-T...TM4**

**LR-T...TM4-S**

**LR-T...TM4AE**

**LR-T...TM4BE**

**LR-T...TM4CE**

**LR-T...TM6AE**

**LR-T...TM6BE**

**LR-T...TM6CE**


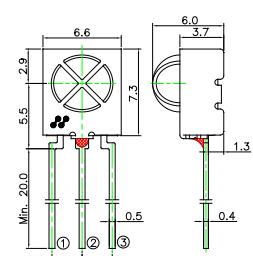
# IR Receiver Modules

LR-T Series

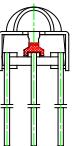
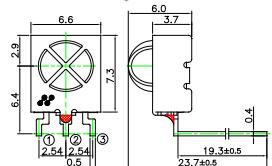
LR-T...N-A



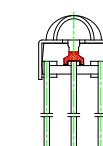
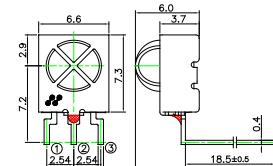
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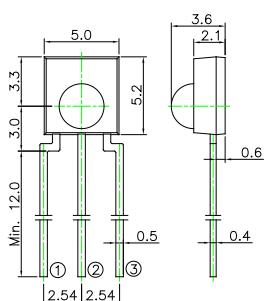
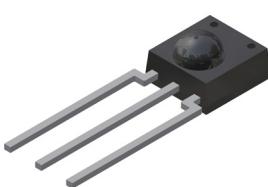
LR-T...TN2-C



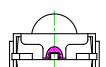
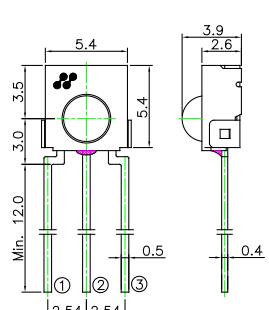
LR-T...TN4-C



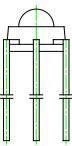
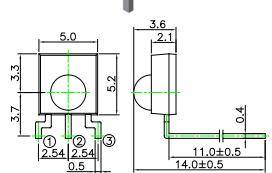
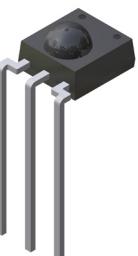
LR-S...SN



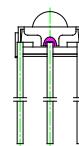
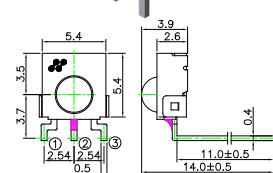
LR-S...

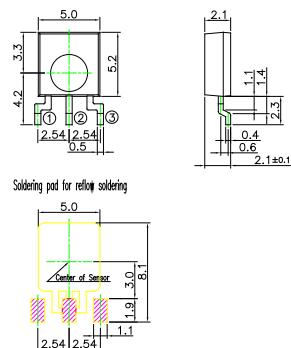
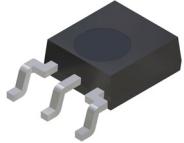
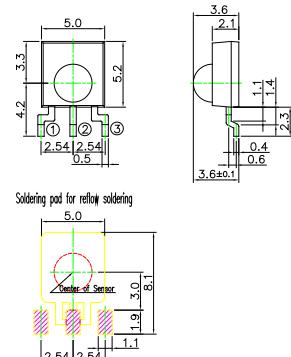
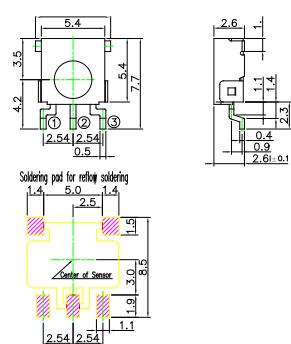
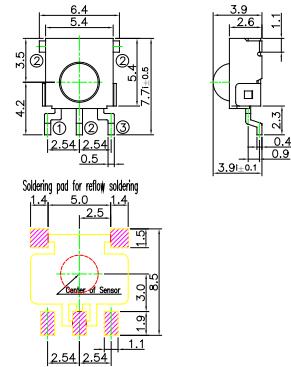
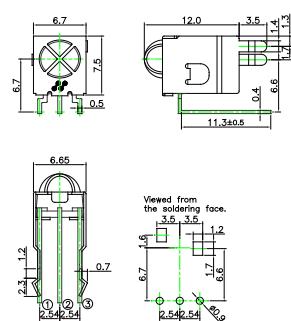
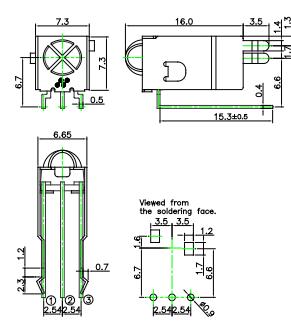
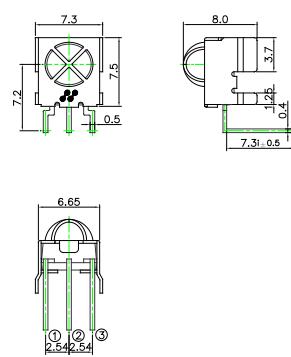
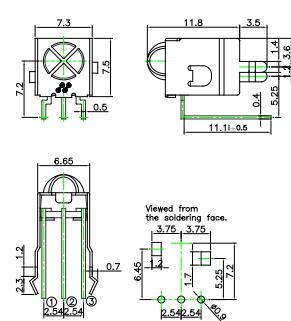


LR-S...TN



LR-T...S...T

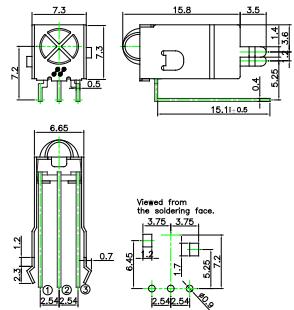


**LR-M...FN**

**LR-M...N**

**LR-M...F**

**LR-M...S**

**LR-T...TN3C-S**

**LR-T...TN3D-S**

**LR-T...TN4A-S**

**LR-T...TN4C-S**


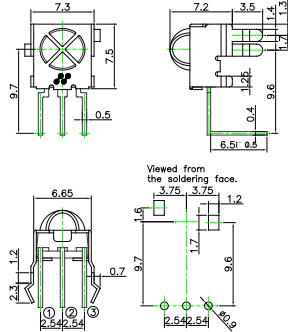
# IR Receiver Modules

LR-T/M Series

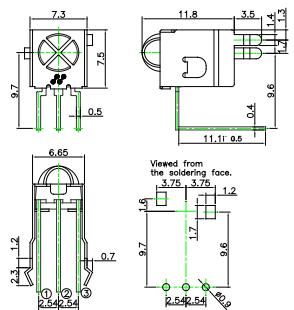
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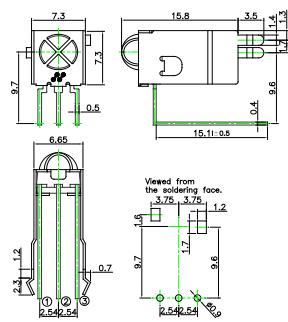
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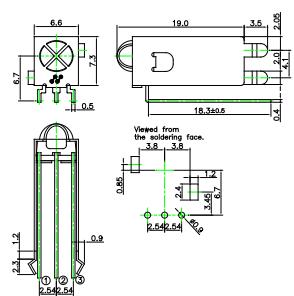
**LR-T...TN6C-S**



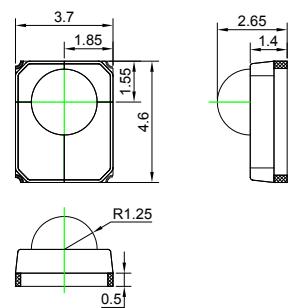
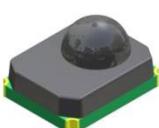
**LR-T...TN6D-S**



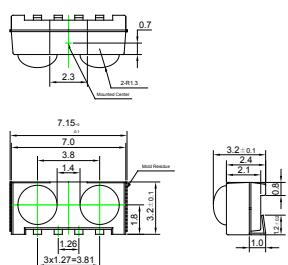
**LR-T...TN3E-S**



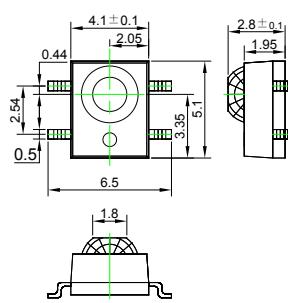
**LR-M56CRN-R**



**LR-MD4C**



**LR-MH4...HM-R**



## History

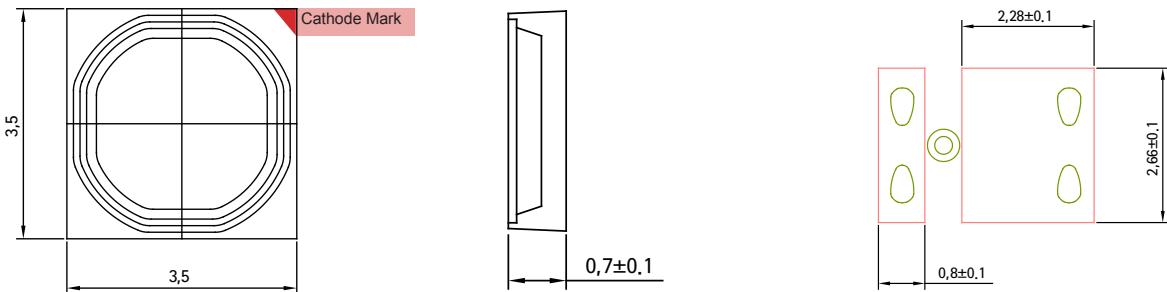
Wide range of UV LED

- UV-A (375nm)
- UV-B (310nm)
- UV-C (275nm)

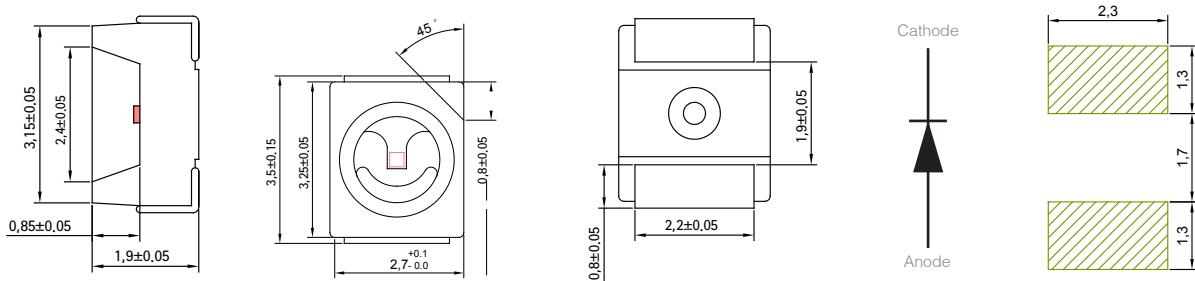
WWide used in medical applications, photolysis media reaction,  
UV air cleaners,  
high-resolution, UV glue curing,  
special lighting

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		-30°C~85°C	3.5×3.5 1.2t	100 °
COB 2218	5V	20mA	370-375nm	3.4V-3.8V	-30°C~85°C	2.4×1.8 1.0t	120 °
SMD 3535	5V	20mA	365-370nm		-30°C~85°C	3.5×2.8 1.9t	120 °

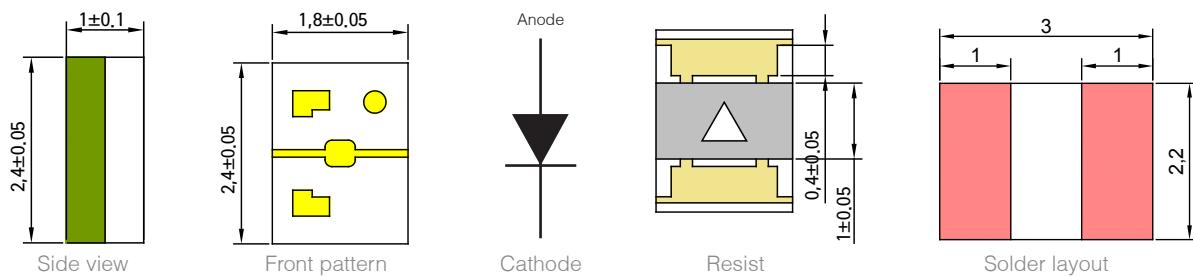
## SMD 3535



## SMD 3528



## COB 2418



# SpO<sub>2</sub> Sensor

## Description

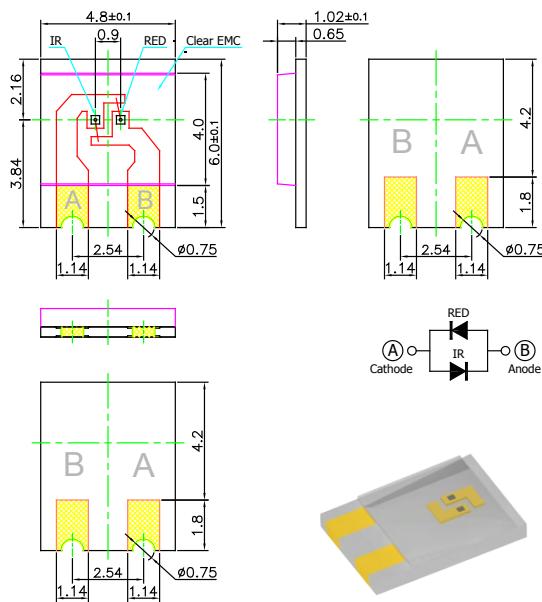
It has two basic LED's with a photo-diode to detect the intensity of light radiation. The sources of light are red(RED, 660nm) and infrared rays (IR, 940nm). The two LED's emit two separate kinds of light which are on parallel connections so if one has normal direction flow then the other will have a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

## Application

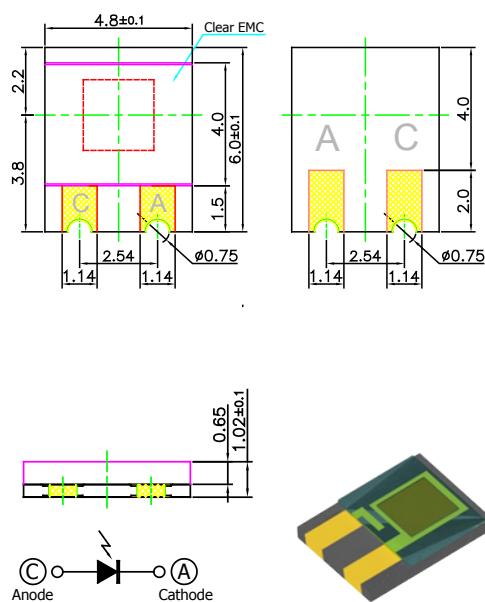


## SpO<sub>2</sub>

### DUAL Emitter



### PHOTO DIODE



Forward Voltage	Reverse current	Radiant Power	Peak wavelength sensitivity
VF[V]	IR[uA]	PO[mw]	$\lambda_p$ [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]	$\lambda$ [nm]	$\lambda_p$ [nm]
Typ.	Typ. @VR[V]		Typ.
0.32	1 10	450-1100	940