

GD Dongyi Optoelectronics Co.Ltd.

SPECIFICATION FOR APPROVAL

Customer	
Product Name	
Version number	
Dimension	
Texture of material	
Number	
Date	

Product confirm and sign

Engineering Department	Prepared Department	Quality Department	Checked	Signature

INSPECT RESULT

☐ ACCEPT☐ REJECT

Customer confirm and sign

Engineering Department	Quality Department	Checked	Approved	Signature

INSPECT RESULT

☐ ACCEPT☐ REJECT

REMARK:

 sample**Product Name :** _____ **Product Name :** _____**Quality :** _____ **Date :** _____

INFRARED RECEIVER MODULE

● Description

1. The IR Receiver is miniaturized infrared Receivers for remote control and other applications requiring improved ambient light rejection.
2. The separate PIN diode and preamplifier IC are assembled on a single lead frame.
3. The epoxy package contains a special IR filter.
4. This module has excellent performance even in disturbed ambient light applications and provides protection against uncontrolled output pulses.

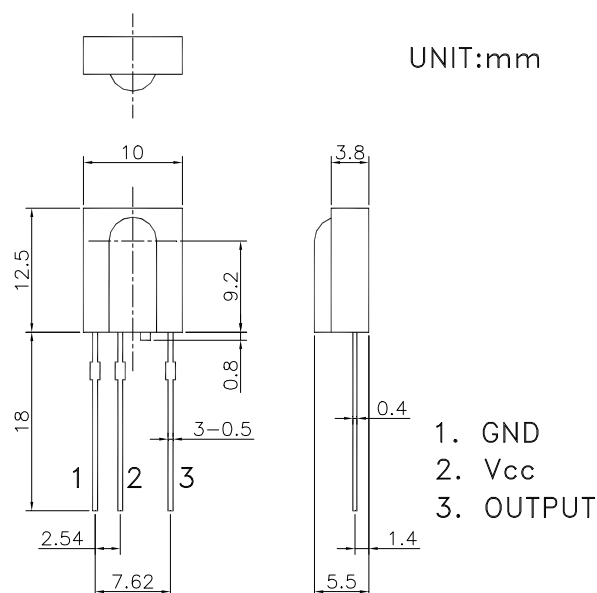
● Features

1. Photo detector and preamplifier in one package .
2. Internal filter for PCM frequency.
3. High immunity against ambient light.
4. Improved shielding against electric field disturbance.
5. 2.5V or 6.0V supply voltage; low power consumption.
6. TTL and CMOS compatibility.
7. Suitable transmission code: NEC code, RC5 code.

● Applications:

1. It can be used for TVs、VTRs、 audio equipment air conditioners、 car stereo radio、 toys、 home computers and all other equipment requiring remote control.

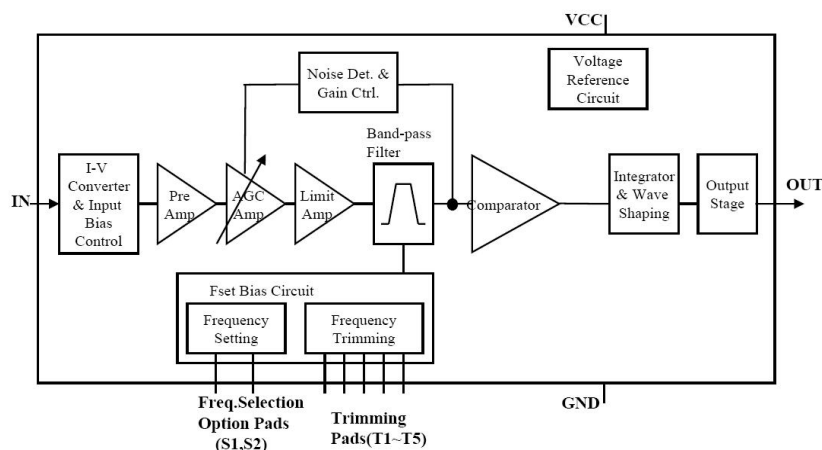
● Package Dimensions:



NOTES:

1. All dimensions are in millimeters.
2. Tolerance is $\pm 0.30\text{mm}$ unless otherwise specified.
3. Specifications are subject to change without notice.

● BLOCK DIAGRAM



● **Absolute Maximum Ratings**($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Ratings	Unit	Notice
Supply Voltage	Vcc	2.5-6.0	V	—
Operating Temperature	Topr	-30~+65	$^{\circ}\text{C}$	—
Storage Temperature	Tstg	-40~+85	$^{\circ}\text{C}$	—
Soldering Temperature	Tsol	260	$^{\circ}\text{C}$	4mm from mold body less than 5 sec

● **Electrical And Optical Characteristics**($T_a=25^{\circ}\text{C}$)

Parameter	Symbol	Condition	Ratings			Unit
			Min.	Typ.	Max.	
Supply Voltage	Vcc	DC voltage	2.5	—	6.0	V
Supply Current	Icc	No signal input	—	—	1.5	mA
Reception Distance	L	At the ray axis	12	—	—	m
		In the range of 45°cone	6	—	—	
B.P.F Center Frequency	f _o	—	—	38	—	KHz
Peak Wavelength	λ_p	—	—	940	—	nm
Half Angle	$\Delta \theta$	—	—	45	—	deg
High Level Pulse Width	TH	Specified by the output TH period within a range from 10cm to the arrival distance (average value of 50 pulses)	400	—	800	μs
Low Level Pulse Width	TL	Specified by the output TL period within a range from 10cm to the arrival distance (average value of 50 pulses)	400	—	800	μs
High Level Output Voltage	VH	10cm over the ray axis	4.5	—	—	V
Low Level Output Voltage	VL	10cm over the ray axis	—	—	0.5	V

●Application Circuit

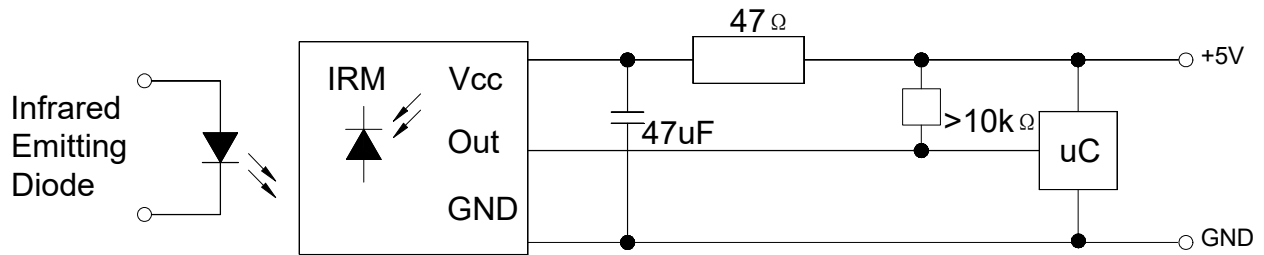


Fig.1 Transmitter Wave Form

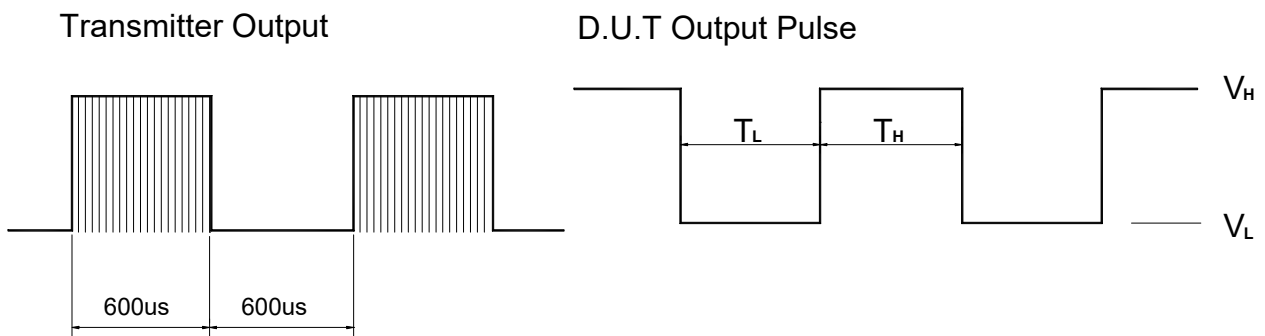


Fig.2 Measuring Method

Measuring Method

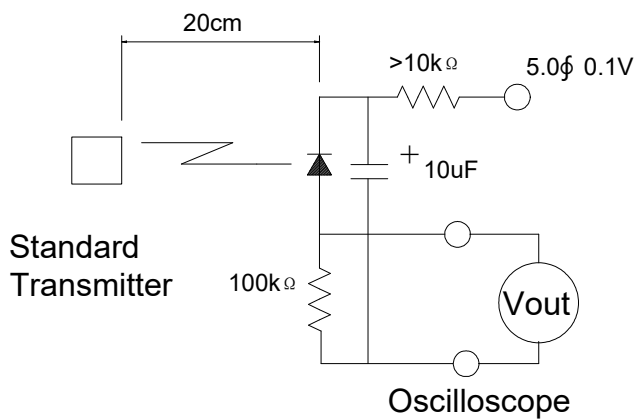
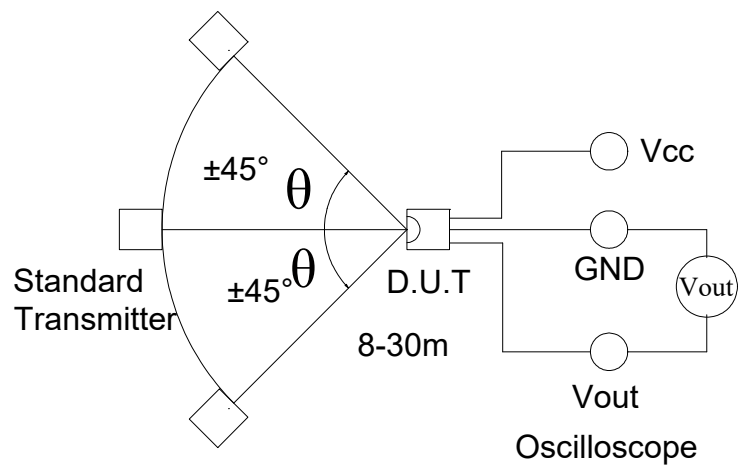


Fig.3 Measuring System



● Electrical And Optical Curves(Ta=25°C)

