

## IR Receiver Modules for 3D TV Goggle & IR Repeater application

### General Description:

The SDR5601 is a two lens miniaturized SMD-IR receiver for infrared remote control systems. two PIN diodes and preamplifier are assembled on lead frame, the epoxy package is designed as IR filter. The modulated output signal, carrier out, can be used for code learning applications or as receiver for the synchronizing signals in active 3D goggles .

The SDR5601 for use in infrared remote Control system. It consist of automatic gain control amplifier, post amplifier, Low pass filter, automatic gain control circuit, signal shaping circuit, output driver .

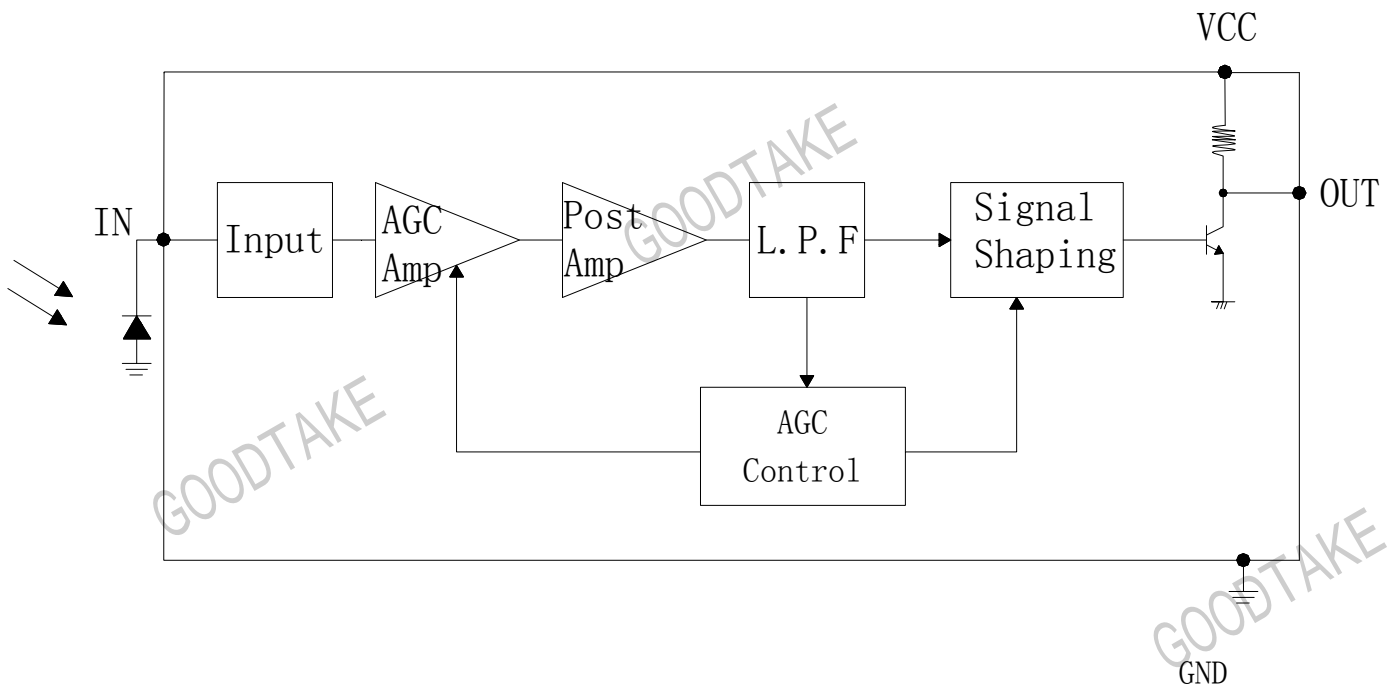
### Special Features:

- Dual lens Small size package
- Output active low
- Low power consumption
- Wide supply voltage(2.7~ 6 Volt)
- Low jitter characteristics
- Enhanced immunity against all kinds of disturbance light
- TTL and CMOS compatibility
- No occurrence of disturbance pulses at the output
- Other home appliances remote control systems
- AC coupled response from 20 ~ 40 kHz

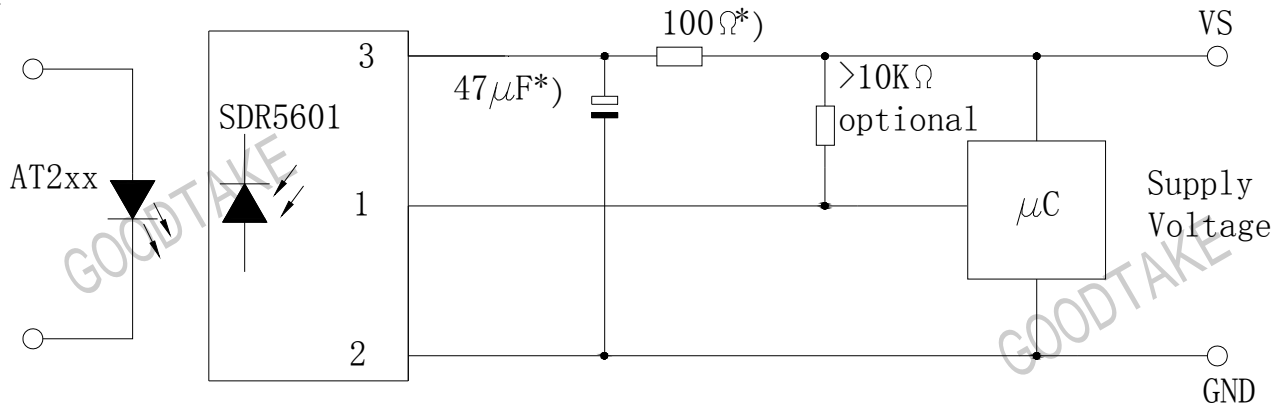
### Applications:

- 3D Display application
- Infrared signal repeater
- Toy application
- Code learning system

### Block Diagram



Application Circuit



\*) recommended to suppress power supply disturbance

Absolute Maximum Ratings

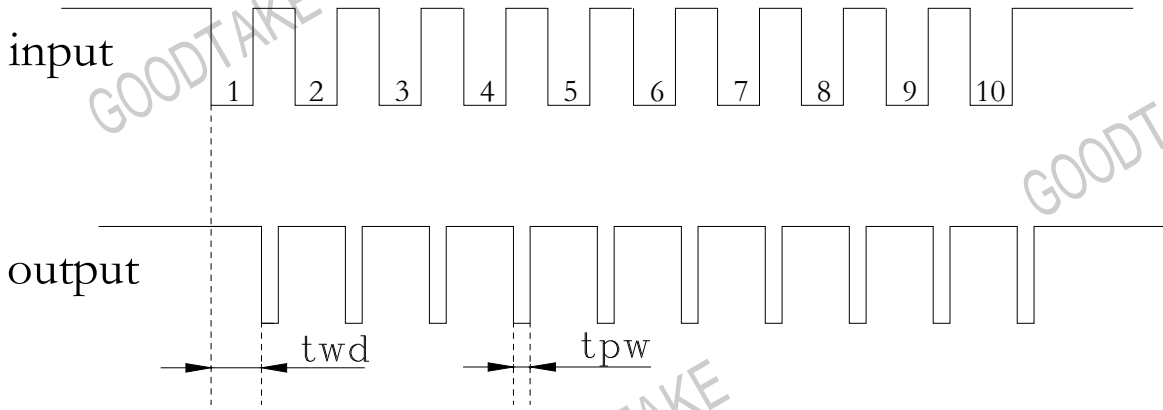
Parameter	Test Conditions	Symbol	Value	Unit
Supply Voltage	(Vs)	Vs	0...7.0	V
Supply Current	(Vs)	Is	3.0	mA
Output Voltage	(OUT)	Vo	0...7.0	V
Output Current	(OUT)	Io	2.5	mA
Storage Temperature Range		Tstg	-40...+125	°C
Operating Temperature Range		Tamb	-25...+85	°C
Power Consumption	( Tamb ≤85°C)	Ptot	25	mW
Soldering Temperature	t≤5s 1mm from case	Tsd	260	°C

Basic Characteristics

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Supply Voltage		Vs	2.7		5.5	V
Supply Current	Vs=5V Ev=40klx,sunlight	Is	0.25	0.36	0.5	mA
Transmission Distance	IR diode AT2xx, If=0.4A	d		20		m
Directivity	Angle of 1/2 transmission distance	θ		±45		deg
Carrier frequency		fo	20		40	kHz
Peak Wavelength		λ	750	850	940	nm
Output Voltage Low		VoSL			400	mV

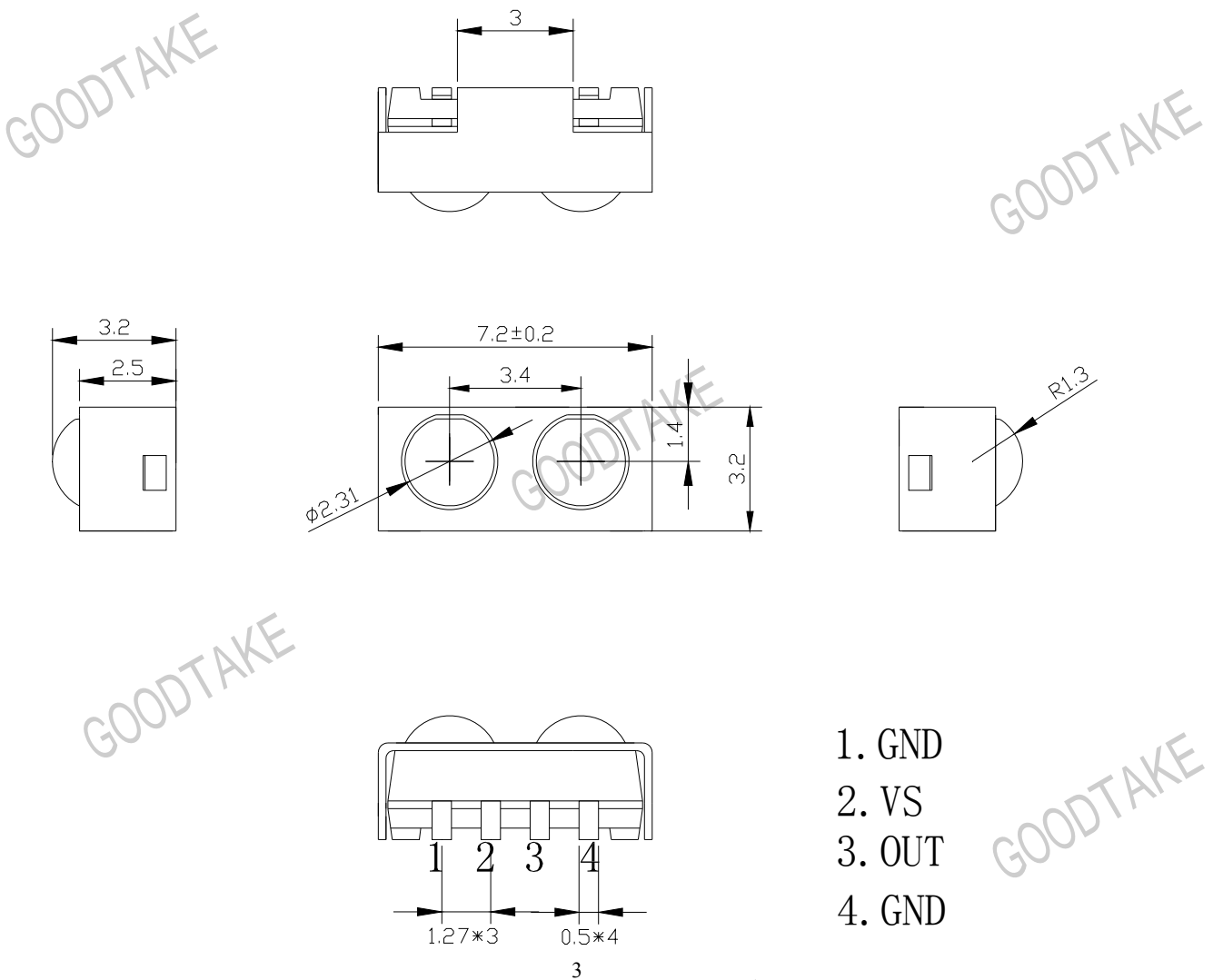
Typical Characteristics

F=25KHZ(duty ratio 50%),burst with 10 pulses



Package Outline

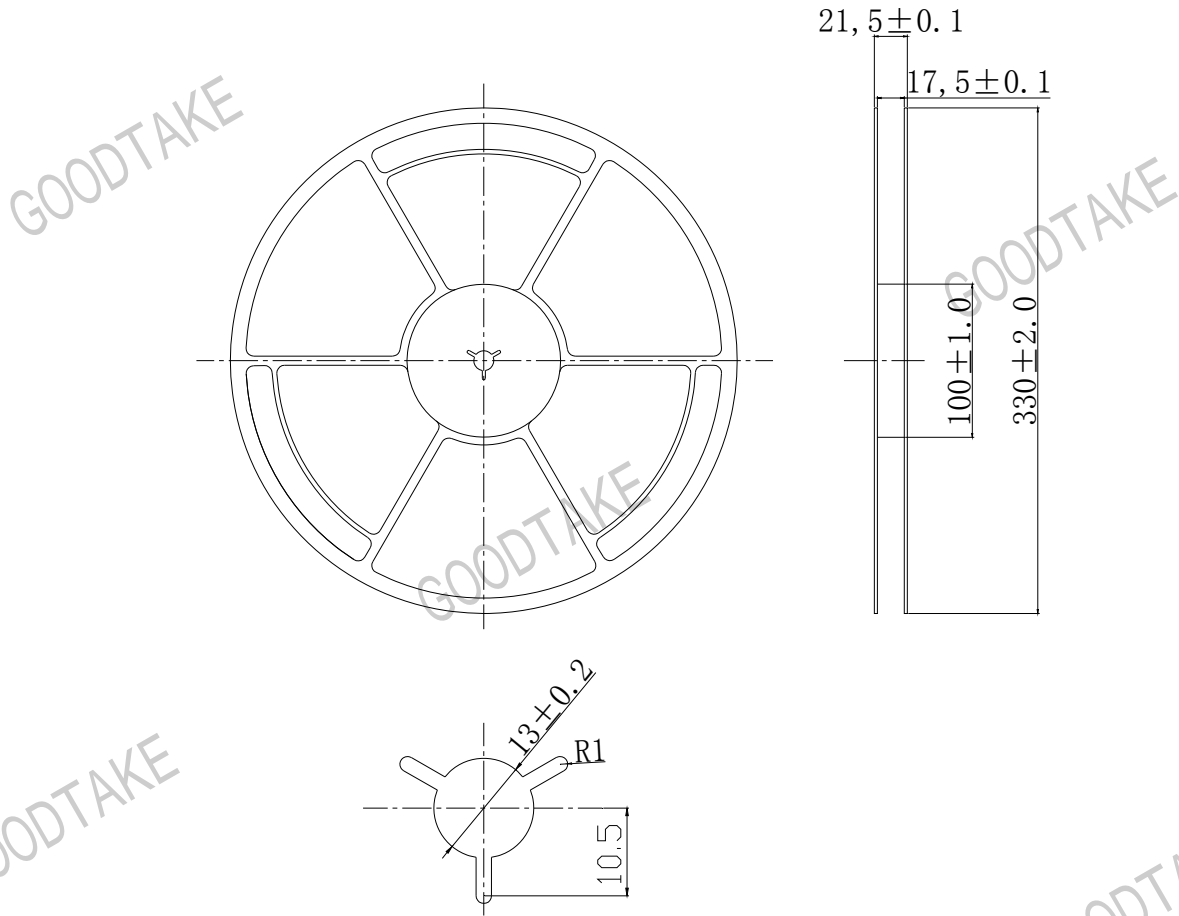
Dimensions in mm: tolerance  $\pm 0.15$ mm



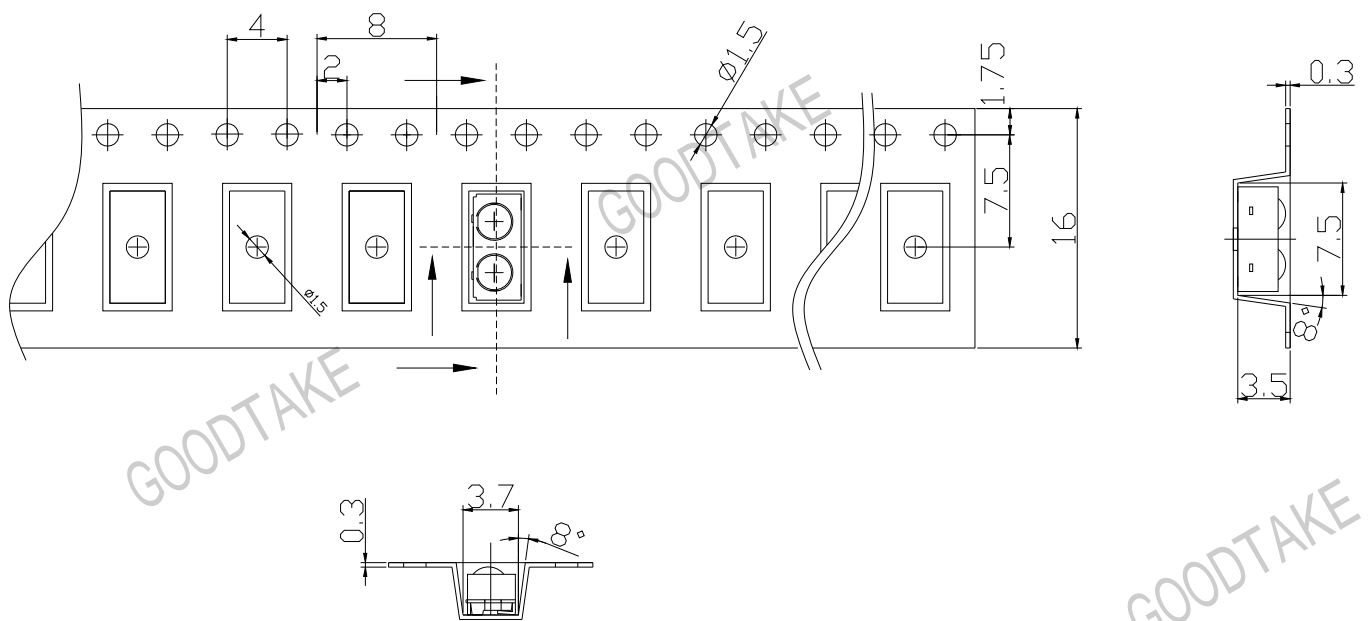
- 1. GND
- 2. VS
- 3. OUT
- 4. GND

Taping Specifications

Shape and dimensions of reels: unit in mm



Dimensions of tape



**Leader And Trailer Dimensions**

