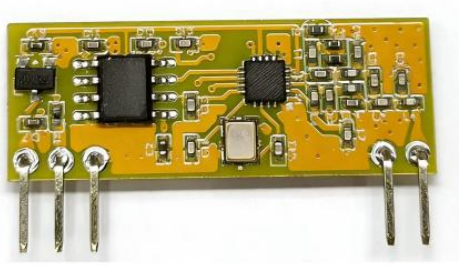
Type: ASK/OOK/FSK Super-Heterodyne Receiver Module

Model: CY24-XXX

Description:

CY24 is an ASK/OOK/FSK super-heterodyne receiver module operating at 315/433.92MHz in ISM frequency band. It has high receiving sensitivity and strong anti interference. Any circuit that can be done without additional wireless signal input to the data signal output. Users only need to add simple data decoding circuit and it can easily achieve the development of wireless products.



Features:

- Receiving Sensitivity: -118dBm
- Frequency: 315M/433.92MHz (customized frequency is available)
- Supply voltage: 3.6V~5.5V
- Low Power consumption, 5.0V@315Mhz, 7.8mA. 5.0V@433.92Mhz, 7.8mA.
- Good selectivity and stray radiation inhibition ability, it's easy to go through the CE/FCC international certification approval.
- Good capable of suppressing the vibration radiation, can work with multiple receiving module (such as one transmitter with multiple receivers) and they do not interfere with each other and there is no affection over the receiving distance.
- Operation temperature: -20℃ ~70℃

Application

- Automotive (RKE)
- Garage Door, Barrier, Roller shutter and gate openers
- Smart home system
- Wireless Door Bell
- Remote controls
- Wireless Controller
- Alarm and security system
- Wireless data transmission

Pin Description

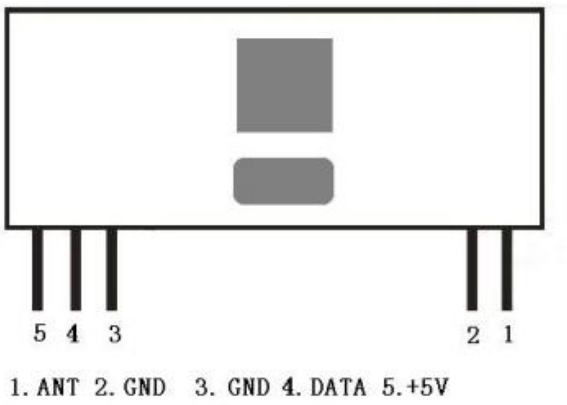


Figure1 CY24 Shape & Pins

Pin	Name	Pin Definition
1	**ANT**	RF signal input pin
2	**GND**	Connect to negative power supply
3	**GND**	Connect to negative power supply
4	**DATA**	Data output pin
5	**+5V**	Connect to positive power supply

Note: ANT pin is a 50 ohm antenna input. The length is about:
23cm for 315MHz; 17cm for 433.92MHz

Electrical Characteristics:

Condition: Ta=25℃ Vcc=5.0V Frequency=315MHz

Parameter	Specification			Unit	Condition
	Min	Typ.	Max		
Frequency range	314.90	315	315.10	MHz	
Modulation		ASK/FSK			
Receiver sensitivity		-118		dBm	50Ohm Antenna direct input/1K Kbps
Receiver Bandwidth		200		KHz	
Working Voltage	3.6	5.0	5.5	V	
Working Current	6.0	7.8	9.0	mA	
Working Temperature	-20		70	℃	

Condition: Ta=25℃ Vcc=5.0V Frequency=433.92MHz

Parameter	Specification			Unit	Condition
	Min	Typ.	Max		
Frequency range	433.82	433.92	434.02	MHz	
Modulation		ASK/FSK			
Receiver sensitivity		-118		dBm	50Ohm Antenna direct input/1K Kbps
Receiver Bandwidth		200		KHz	
Working Voltage	3.6	5.0	5.5	V	
Working Current	6.0	7.8	9.0	mA	
Working Temperature	-20		70	℃	

Mechanical Size: (Unit: MM)

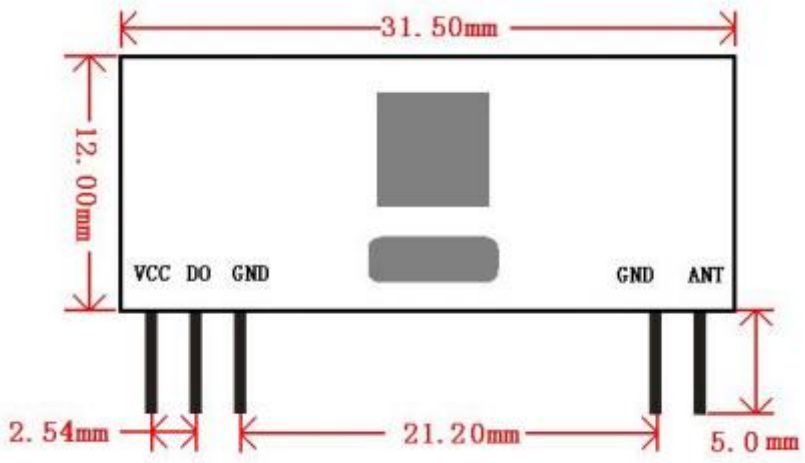


Figure2 CY24 Dimension

PRE-CAUTION:

The driven current of CY24 data output pin is weak, so if direct the single chip microcomputer, please don't add any pull up or pull down resistors on the MCU' I/O port. The MCU internal pull-up and pull down resistors need to be in disabled state too.

PCB dimension has tolerance of 3%.

For more information and assistance, please contact us as follows:

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