

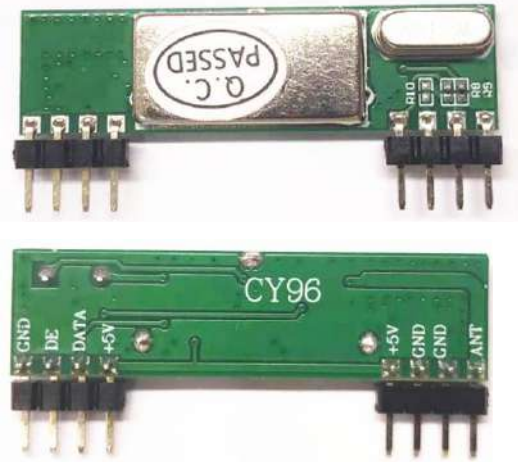


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY96-XXX

Description:

The CY96 is a super heterodyne wireless receiving module. This module adopts the highly integrated RF wireless data transmission receiving chip, which is a high cost performance of the receiving module of ISM frequency band. It has higher receiver sensitivity and better interference performance. Any circuit that can be done without additional wireless signal input to the data signal output. Users only need to plus simple data decoding circuit, can easily achieve the development of wireless products.



Order Information:

Model NO.	Freq.
CY96-315	315MHz
CY96-433	433.92MHz

Features:

- High sensitivity: -112dBm;
- Frequency: 315M/433.92MHz (custom frequency is available) ;
- Low operation voltage: VCC= 3.6-5.5 V;
- Low Current: 5V @ 433.92MHz, 6.0mA/5V @315MHz, 3.9mA;
- Good selectivity and stray radiation inhibition ability, easy to get CE/FCC 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;
- Operating Temperature: -20°C~+70°C;

Application

- Car remote Control Door Switch (RKE);
- Remote Control Door Opener;
- Wireless Security Alarm;
- Remote Control Curtain Machine;
- Wireless Industrial Controller;
- Wireless Data Transmission;

Pin Description

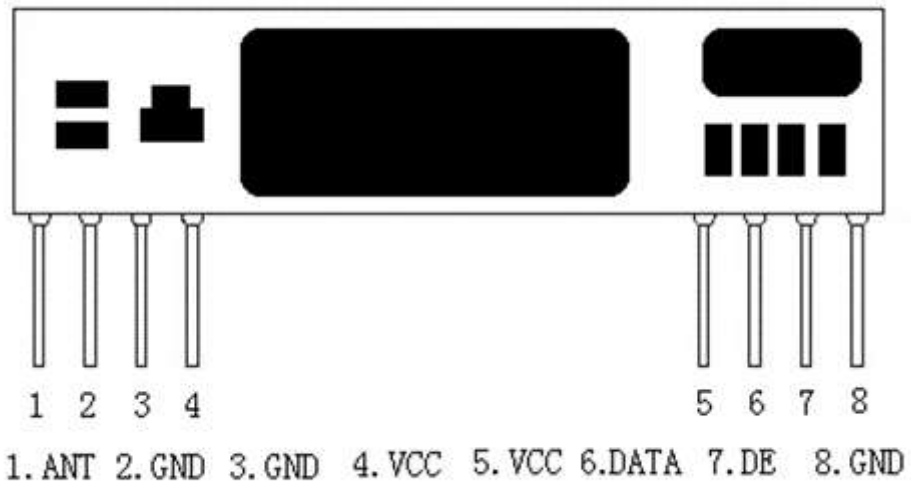


Figure1 CY96 Shape & Pins

Pin Name	Pin Definition
ANT	RF signal input pin, connect antenna outside(Note1)
GND	Connect to negative power supply
GND	Connect to negative power supply
VCC	Connect to positive power supply
VCC	Connect to positive power supply
DATA	Data output pin, connect to MCU or decoder's input pin
D/E	Optional output:



	1, DATA output(default setting) 2, Battery Saving Mode: (Working mode in High level input) (Sleeping mode in Low level input)
GND	Connect to negative power supply

Note1: ANT pin is a 50 ohm antenna input. The length is about:
23cm for 315MHz
17cm for 433.92MHz

Electrical Characteristics:

Condition: Ta=25°C Vcc=5.0V Frequency=315MHz

Parameter	Specification			Unit	Condition
	Min	Typ.	Max		
Frequency range	314.90	315	315.10	MHz	Other freq. available
Receiver sensitivity		-112		dBm	50 ohm antenna direct input /1K Kbps
Receiving Band Width		200		KHz	
Working Current	3.6	3.9	4.2	mA	
Decode output max. voltage	2.8			V	RL=500K
Decode output mini. voltage			0.5	V	
Receiving Start Time			5	ms	
Operation temperature	-20		+70	°C	



Condition: Ta=25 °C Vcc=5.0V Frequency=433.92MHz

Parameter	Specification			Unit	Condition
	Min	Typ.	Max		
Frequency range	433.82	433.92	434.02	MHz	Other freq. available
Receiver sensitivity		-112		dBm	50 ohm antenna direct input /1K Kbps
Receiving Band Width		200		KHz	
Working Current	5.8	6.0	6.2	mA	
Decode output max. voltage	2.8			V	RL=500K
Decode output mini. voltage			0.5	V	
Receiving Start Time			5	ms	
Operation temperature	-20		+70	°C	

Mechanical Size: (Unit: MM)

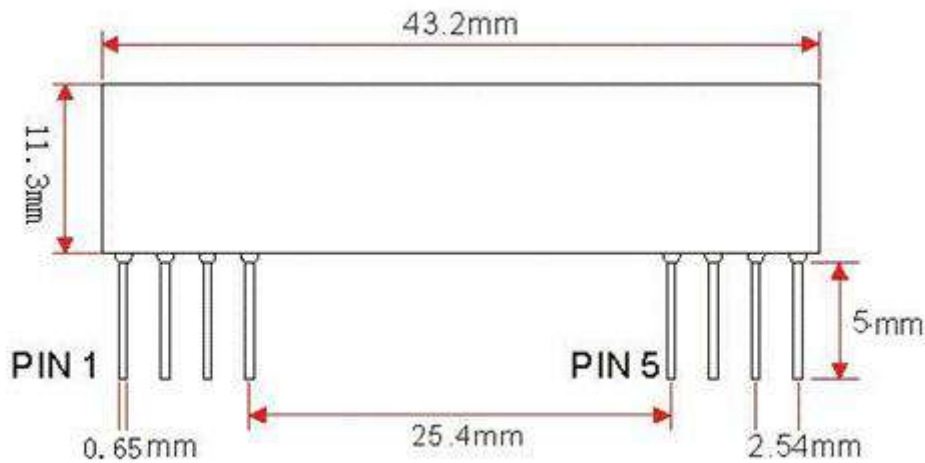


Figure2 CY96 Dimension



PRE-CAUTION:

The driven current of CY96 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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