



Type: ASK/OOK Super-Heterodyne Receiver Module**Model: CY09-XXX**

Description:

CY09 is a superior performance receiver module for ISM band. With the adoption of UHF technology of wireless communication, low noise large scale integrated circuit. It has cost effective, perfect ability of ESD and high reliability. Its superior performance makes rolling codec remote control and electric door-controller adopt this module. This module is widely applied in Remote control garage door, Retractable door, Barrier and so on. Used for the GSM / GPS car system supporting, Industrial control, communications and security fields, Used in complex systems environment requires by this receiving system is good choice. It can do wireless signal input to the data signal output without any external circuit. Users only need to decode the data plus a simple circuit and then any wireless products development can be easily achieved. Easy to pass CE/ FCC.

**Order Information:**

Model NO.	Frequency
CY09-315	315 MHz
CY09-433	433.92 MHz

Features:

- Receiver sensitivity to -114dBm;
- Frequency: 315M/433.92MHz (custom frequency is available);
- Voltage input range: 4.5V-5.5V;
- Low power consumption: 5.0 V/12mA;
- Good selectivity and inhibition of stray radiation
- Temperature Range: -30℃ ~ 85℃

Application

- RKE/PKE;
- Remote control door opener, Barrier;
- Wireless alarm and security system;
- Remote control curtains;
- Wireless industrial controllers;
- Wireless data transmission;

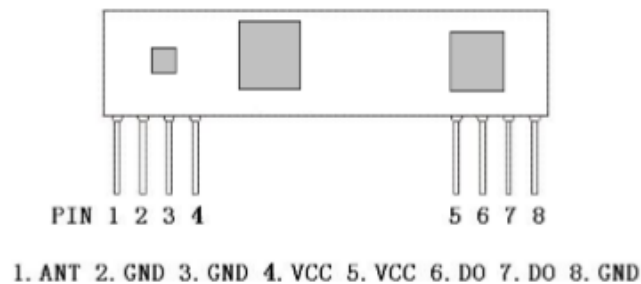
Pin Description

Figure1 CY09 Shape & Pins

Pin Name	Pin Definition
ANT	RF signal input pin, connect antenna outside (Note 1)
GND	Connect to negative power supply
GND	Connect to negative power supply
VCC	Connect to positive power supply
VCC	Connect to positive power supply
DO	Data Output



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DO	Data Output
GND	Connect to negative power supply

Note 1: 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.		
Working Frequency	314.90	315	315.10	MHz	
Modulation	ASK				
Receiver Sensitivity		-114		dBm	500ohm antenna input /1K Kbps
Receiving Bandwidth		200		KHz	
Working Voltage	3.6	5.0	5.5	V	
Working Current			12	mA	
Image Rejection		20		dB	293.6MHz
Decoding output maximum voltage	2.8	3.75	5	V	RL=500K
Decoding output minimum voltage			0.5	V	
Working Temperature	-30		85	°C	
Data Rate		2.4		Kbps	

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

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Working Frequency	433.82	433.92	434.02	MHz	
Modulation	ASK				
Receiver Sensitivity		-114		dBm	500ohm antenna input /1K Kbps
Receiving Bandwidth		200		KHz	
Working Voltage	3.6	5.0	5.5	V	
Working Current			12	mA	
Image Rejection		20		dB	412.52MHz



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Decoding output maximum voltage	2.8	3.75	5	V	RL=500K
Decoding output minimum voltage			0.5	V	
Working Temperature	-30		85	°C	
Data Rate		2.4		Kbps	

Mechanical Size: (Unit: MM)

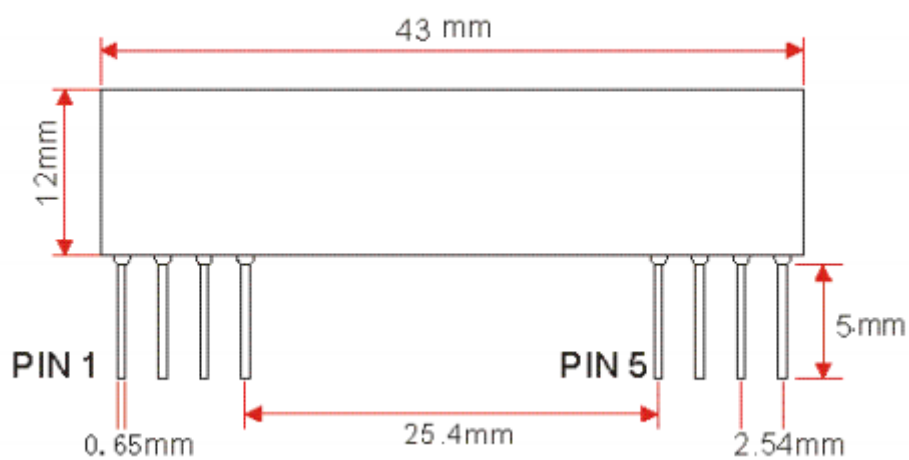


Figure2 CY09 Dimension

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

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