
Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY53-XXX

Description:

The CY53 is a ASK compatible superhet receiver, which is designed with high sensitivity, long distance and easy to adapt when designing various applications.



Order Information:

Model NO.	Freq.
CY53-315	315MHz
CY53-433	433.92MHz

Features:

- Frequency: 315/433.92MHz (custom frequency is available)
- Low power consumption
- Higher stability
- Higher sensitivity: -112dBm
- Wide operating temperature: -40~85 °C
- Supply voltage: 2.4~ 5.8V
- Low current: 2.7mA(5V, 315MHz)
- Be compatible with most (ASK/OOK) transmitters

Application

- Smart home system
- Remote controls
- Remote fan and light control
- Garage door and gate openers
- Alarm and security system

Pin Description

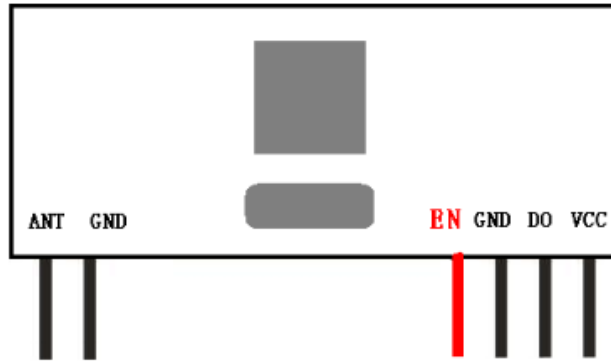


Figure1 CY53 Shape & Pins

Please note: CY53 is come with standard 5 PINs (without the red colored EN pin). Please notify us if you would like 6 PINs.

Pin Name	Pin Definition
ANT	RF signal input pin, connect antenna outside(Note1)
GND	Connect to negative power supply
EN	Optional output: 1.Empty(Default as empty pin); 2.Battery saving mode(shut down) (Working mode in High level input) (Sleeping mode in Low level input)
GND	Connect to negative power supply
DATA	Data output pin, connect to MCU or decoder's input pin
VCC	Connect to positive 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	BER=10E-2
Data Rate	0.58	1.2	4.8	Kbps	Manchester code
Supply Voltage, VDD	3.6	5.0	5.5	V	DC
Current	2.6	2.7	2.8	mA	DC
Operating Temperature	-40		+85	°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	BER=10E-2
Data Rate	0.58	1.2	4.8	Kbps	Manchester code
Supply Voltage, VDD	3.6	5.0	5.5	V	DC
Current	2.9	3.0	3.1	mA	DC
Operating Temperature	-40		+85	°C	

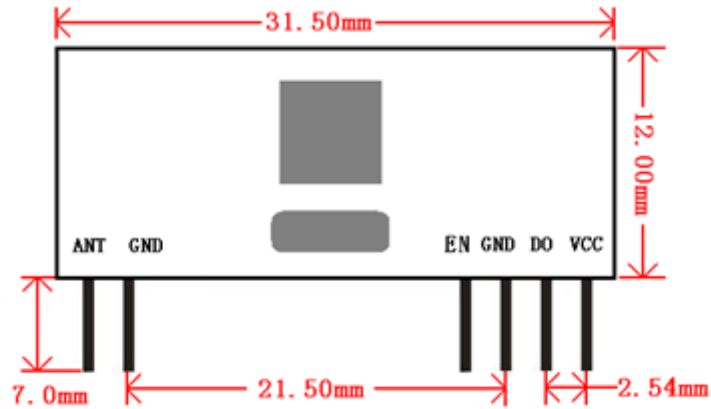
Mechanical Size: (Unit: MM)

Figure2 CY53 Dimension

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

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