

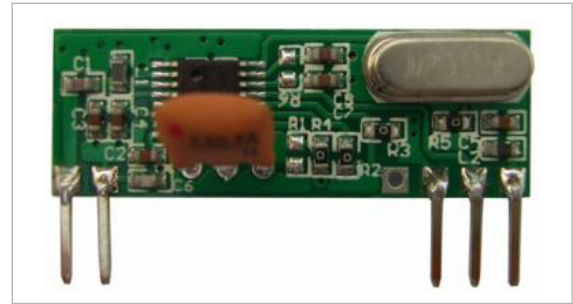


**DESCRIPTION**

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

**FEATURES**

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

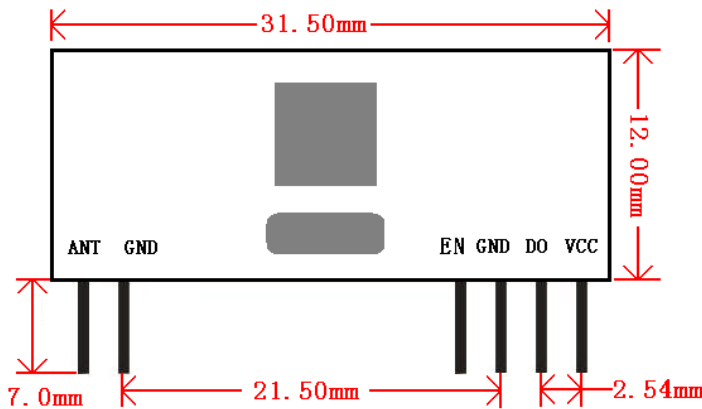


**APPLICATION**

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

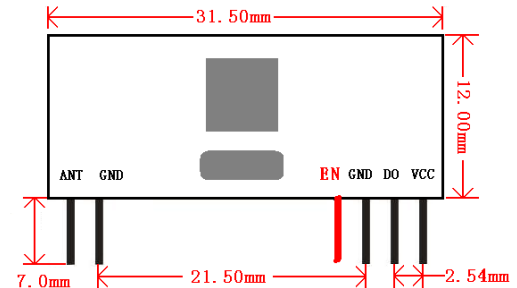
**MECHANICAL DIMENSION**

Figure 2 CY53 Dimension



**PIN DEFINITION**

Figure 1 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 4PINs.

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

Note 1: ANT pin is a 50 Ohm antenna input. The length is about: 23cm for 315MHz - 17cm for 433.92MHz

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

ELECTRICAL CHARACTERISTICS		Reference Value			Unit
Parameters	Condition	Min	Typ	Max.	
Frequency Range	other freq. available	314.90	315.00	315.10	MHz
Receiver Sensitivity	BER=10E-2		-112		dBm
Data Rate	Manchester Code	0.58	1.2	4.8	Kbaud
Supply Voltage VDD	DC	3.6	5.0	5.5	V
Current	DC	2.6	2.7	2.8	mA
Operating Temperature		-40		+85	°C

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

ELECTRICAL CHARACTERISTICS		Reference Value			Unit
Parameters	Condition	Min	Typ	Max.	
Frequency Range	other freq. available	433.82	433.92	434.02	MHz
Receiver Sensitivity	BER=10E-2		-112		dBm
Data Rate	Manchester Code	0.58	1.2	4.8	Kbaud
Supply Voltage VDD	DC	3.6	5.0	5.5	V
Current	DC	2.9	3.0	3.1	mA
Operating Temperature		-40		+85	°C

**ORDER INFORMATION:**

**CY 53 - 433.92 X**

