

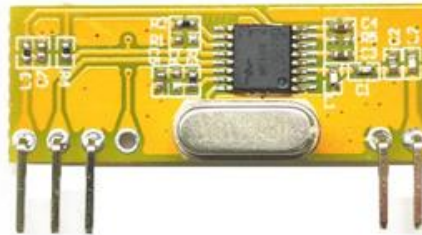


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY51-XXX

Description:

The CY51 is an ASK/OOK compatible super heterodyne wireless receiving module with high performance for ISM frequency band. With the adoption of high-quality RF wireless data transferring/receiver chipset, the module has advantages at high receiving sensitivity and strong interference performance. From wireless signal input to data output can be done without any electrical circuit. User only use extra simple data decode circuit can achieve wireless products development.



Order Information:

Model NO.	Frequency
CY51-315	315 MHz
CY51-433	433.92 MHz

Features:

- Receive sensitivity reaches -114dBm;
- Working frequency: 315 MHz; 433.92 MHz; (Special frequency can be customized according to customer requirements);
- Power supply voltage input range: 1.8V-5.5V;
- Low power consumption, 5.0V @ 315MHz, 4.3mA; 5.0V @ 433.92MHz, 4.6mA
- Good selectivity and stray radiation suppression ability, easy to pass CE / FCC international certification
- Good local oscillation radiation suppression ability, can work with multiple receiving modules (single transmission and multiple reception) without interference with each other, use together without Affect the receiving distance.
- Temperature range: -20-70 °C, it can work normally even in harsh ambient temperature.

Application

- Car remote control door switch (RKE)
- Remote door opener
- Wireless security alarm
- Wireless door bell
- Drying racks, garbage disposals and other products with motor interference

Pin Description

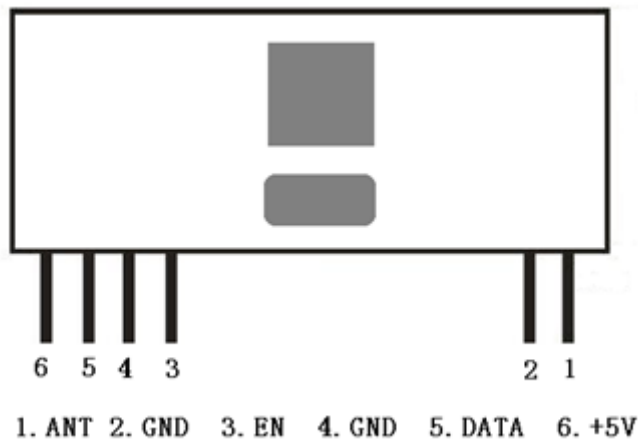


Figure1 CY51 Shape & Pins

Pin-out as showed in figure 1 above

Pin Name	Pin Definition
ANT	RF signal input pin, connect antenna outside(Note1)
GND	Connect to negative power supply
EN	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
+5V	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

Electrical Characteristics:

Condition: Ta=25°C Vcc=5V Frequency=315MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Frequency Range	314.9	315	315.1	MHz	
Modulation	ASK				
RF Sensitivity		-114		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		KHz	
Working Current	3.6	4.3	5.0	mA	
Decoding output max. voltage	2.4	3.75	5	V	RL=500K
Decoding output min. voltage			0.5	V	
Operating Temperature	-20		70	°C	

Condition: Ta=25°C Vcc=5V Frequency=433.92MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Frequency Range	433.82	433.92	434.02	MHz	
Modulation	ASK				
RF Sensitivity		-114		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		KHz	
Current	3.9	4.6	5.3	mA	
Decoding output max. voltage	2.4	3.75	5	V	RL=500K
Decoding output min. voltage			0.5	V	
Operating Temperature	-20		70	°C	

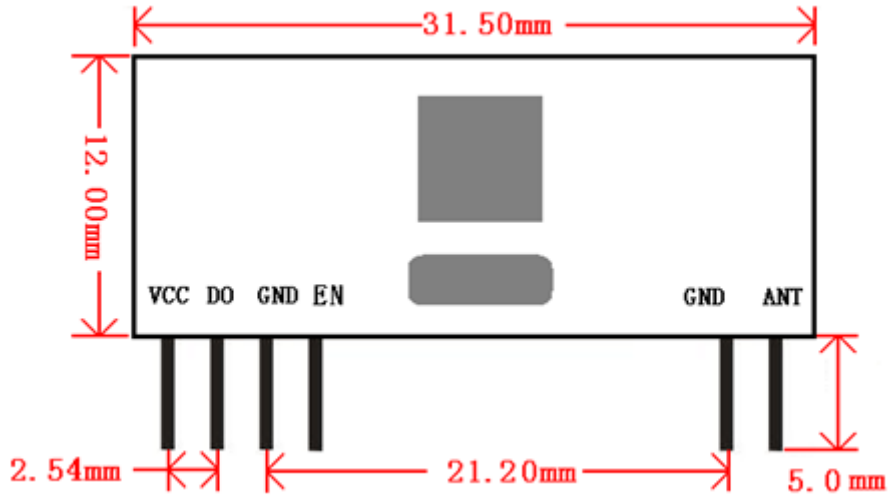
Mechanical Size: (Unit: MM)

Figure2 CY51 Dimension

Cautions:

The drive current of the data output pin is relatively weak. If the MCU is directly driven, the I/O port must not be connected to the pull-up or pull-down resistor, and the inside pull-up or pull-down resistor must be set in the disabled state.

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

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