



Type: ASK/OOK Super-Heterodyne Receiver Module**Model: CY42-XXX**

Description:

The CY42 is ASK/OOK Super Heterodyne receiver module, which can be used to receive un-decoded data from the range of CY's Transmitter modules. The module is very simple to operate and offer a low current consumption. Data can be transmitted directly into a microprocessor or decoding device. All receivers are compatible, producing CMOS/TTL Output, and only require connections to Power & Antenna.

**Order Information:**

Model NO.	Freq.
CY42-315	315MHz
CY42-433	433.92MHz

Features:

- Frequency: 315M/433.92MHz (custom frequency is available)
- ASK/OOK Demodulation
- Stable operating frequency
- Low current consumption
- Wide operating voltage: 2.4 ~ 5.5V DC
- High sensitivity: -110dBm

Application

- Wireless Security Systems
- Garage Door Controller
- Remote Gate Controls
- Data Communications
- Sensor Reporting

Pin Description

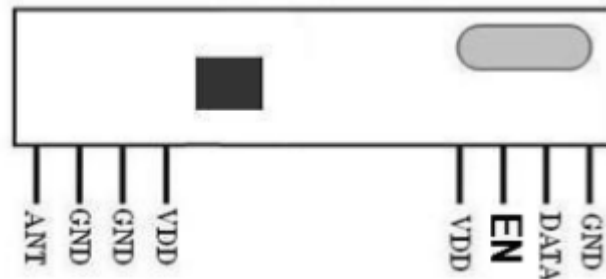


Figure1 CY42 Shape & Pins

Pin Name	Pin Definition
ANT	RF signal input pin
GND	Connect to negative power supply
GND	Connect to negative power supply
VDD	Connect to positive power supply
VDD	Connect to positive power supply
EN	Optional output: 1.DATA output(default setting) 2.Battery saving mode(shut down): (Working mode in High level input) (Sleeping mode in Low level input)
DATA	Data output pin
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 Freq.=315MHz

Parameter	Specification			Unit	Condition
	Min	Typ.	Max		
Frequency range	314.90	315	315.10	MHz	Other freq. available
Receiver sensitivity		-110		dBm	
Data rata		5	9.6	Kbps	Manchester code
Receiving start time			9	ms	
Image Rejection		30		dB	304.3MHz
Receiving Bandwidth		200		kHz	
Supply voltage, VDD	2.4	5.0	5.5	V	
Current	2.6	2.7	2.8	mA	
Voltage as decoding	0.5		5.5	V	RL=500K
Operation temperature	-40		+85	°C	

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

Parameter	Specification			Unit	Condition
	Min	Typ.	Max		
Frequency range	433.82	433.92	434.02	MHz	Other freq. available
Receiver sensitivity		-110		dBm	
Data rata		5	9.6	Kbps	Manchester code
Receiving start time			9	ms	
Image Rejection		30		dB	304.3MHz
Receiving Bandwidth		200		kHz	
Supply voltage, VDD	2.4	5.0	5.5	V	
Current	2.9	3.0	3.1	mA	
Voltage as decoding	0.5		5.5	V	RL=500K
Operation temperature	-40		+85	°C	

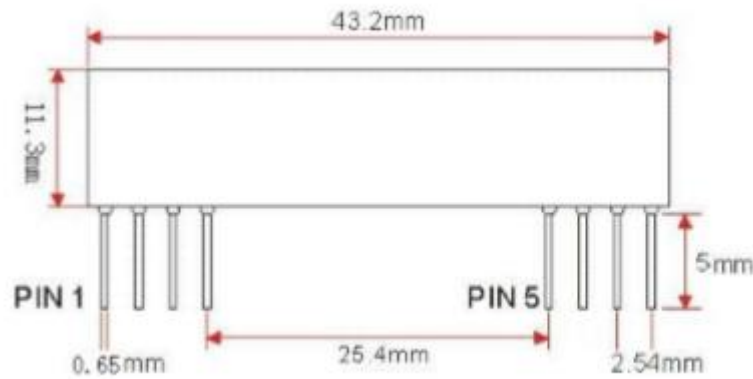
**Mechanical Size: (Unit: MM)**

Figure2 CY42 Dimension

Note:

Because of the weak current of CY42 data output pin, I/O port on the single chip cannot connect pull-up or pull-down resistor and these resistors inside single chip must be set as disable state if it is needed to directly drive the single chip.

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

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