

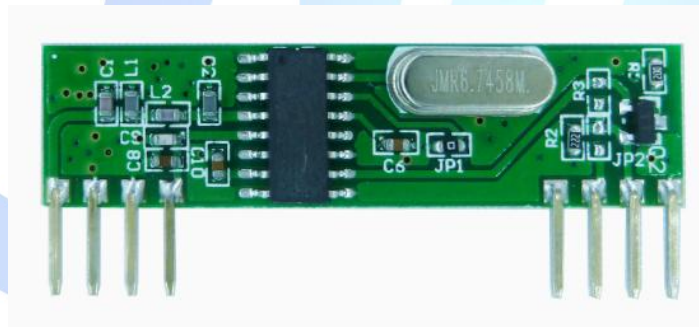


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY01-XXX

1. Description:

CY01 is an ASK/OOK receiver super-heterodyne module adopted high integrated RF IC chips, which is designed specifically for unlicensed remote-control and wireless security receiver operating at 315 or 433.92MHz(custom frequency is available). We also can customize other frequency from 300MHz to 450MHz in USA under FCC Part 15 regulation or Europe under R&TTE 330-200 regulation. The CY01 is base on a single-conversion, super-heterodyne receiver architecture and incorporates an entire Phase-Locked Loop (PLL) for precise local oscillator generation. It can be used in OOK/ HCS/ PWM modulation signal and demodulate to digital signal. CY01 have a high performance at a competitive cost and easily to design your product.



2. Features:

- Frequency: 315M/433.92MHz (custom frequency is available)
- Low power consumption and low cost
- Higher stability (no adjust components) & coherence
- Very low RF re-radiation at the antenna;
- Higher sensitivity: -107dBm
- Operation temperature: -20°C ~70°C (It can custom to -40°C ~ 85°C upon requests)
- Supply voltage: 3.0 ~ 5.5V
- Low current: 2.8mA(5V, 315MHz)
- Be compatible with most (ASK/OOK) transmitters

3. Application

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

4. Pin Description

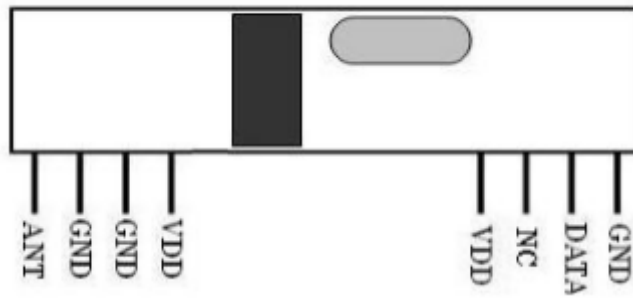


Figure1 CY01 Shape & Pins

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
GND	Connect to negative power supply
VDD	Connect to positive power supply
VDD	Connect to positive power supply
NC	No connect
DATA	Data output pin, connect to MCU or decoder's input pin
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

5. Electrical Characteristics:

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

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range		315		MHz	Other freq. available
Receiver Sensitivity		-107		dBm	BER=10E-2
Data Rate	0.58	2.4	4.8	Kbps	Manchester code
Supply Voltage, VDD	3.0	5.0	5.5	V	DC
Current	2.8			mA	DC
Operating Temperature	-20/-40		70/85	°C	

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

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range		433.92		MHz	Other freq. available
Receiver Sensitivity		-107		dBm	BER=10E-2
Data Rate	0.58	2.4	4.8	Kbps	Manchester code
Supply Voltage, VDD	3.0	5.0	5.5	V	DC
Current	4.0			mA	DC
Operating Temperature	-20/-40		70/85	°C	

6. Mechanical Size: (Unit: MM)

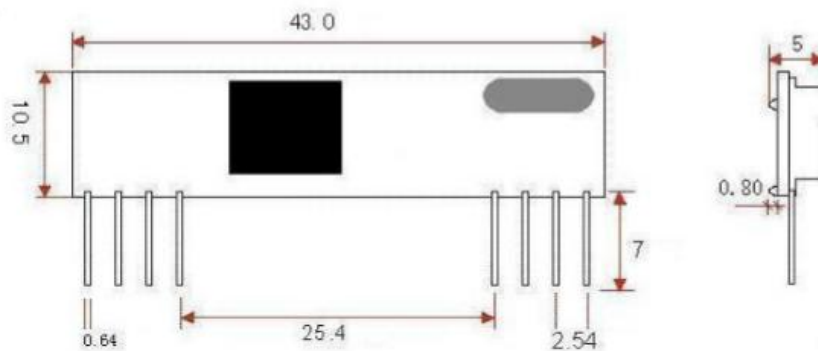
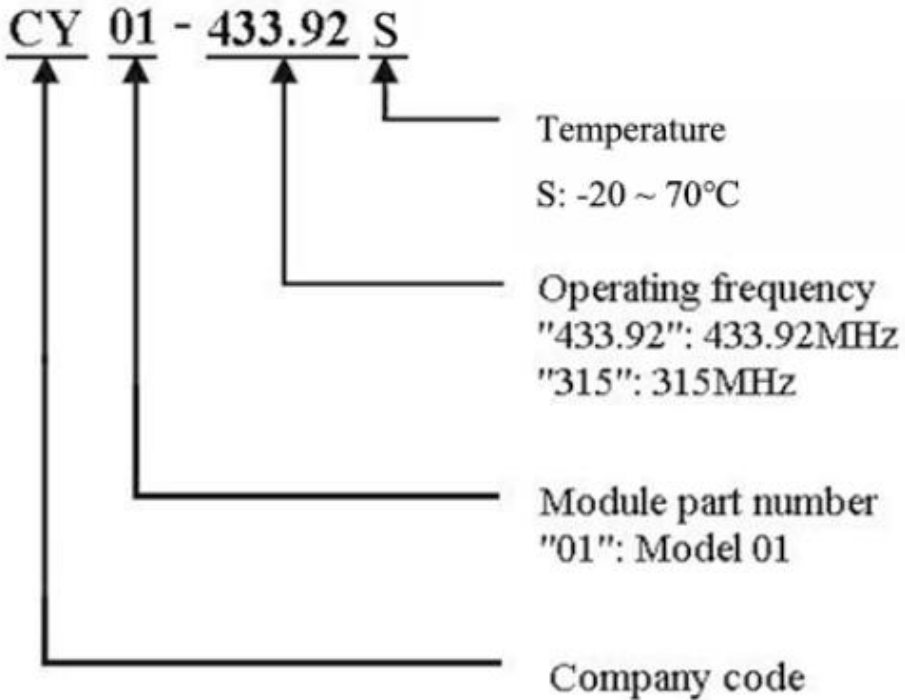
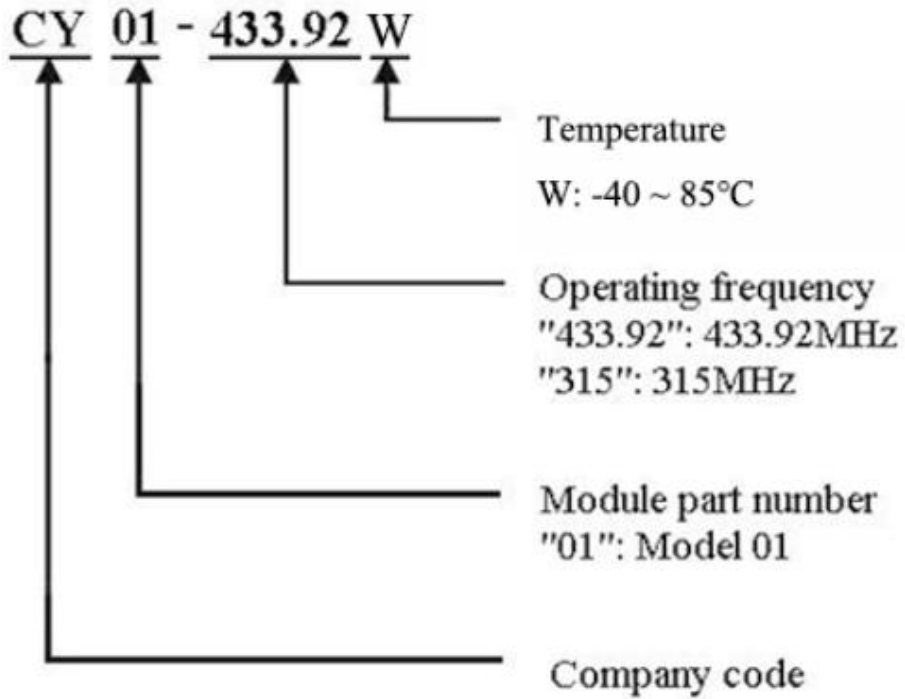


Figure2 CY01 Dimension



7. Order Information:





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

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