

**Type: ASK/OOK Super-Heterodyne Receiver Module**

**Model: CY03-XXX**

## 1. DESCRIPTION:

CY03 is an ASK/OOK receiver super-heterodyne module, which is designed specifically for unlicensed remote-control and wireless security receiver operating at 315/433.92MHz under FCC Part 15 regulation or pass ETSI certification. The CY03 is based 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. CY03 is a high performance module at a competitive cost and easily to design for your product. The CY03 module can be also a RoHS compliance product.



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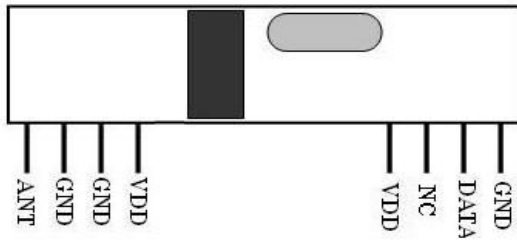
## 2. FEATURES:

- Frequency: 315M/433.92MHz (custom frequency is available)
- Low cost ASK/OOK radio superhet receiver
- High frequency stability (no adjust components) & coherence
- Very low RF re-radiation at the antenna
- Operation temperature: -20°C ~70°C ( It can custom to -40~85°C upon requests)
- Supply voltage: 3.0~5.5V
- Available frequency: 315/433.92MHz (other Frequency customer selectable)
- 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 DEFINITION:



**Figure1 CY03 Shape & Pins**

Pin Name	Pin Definition
ANT	RF signal input pin, connect antenna outside( <b>Note1</b> )
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

**Note1:** ANT pin is a 50 ohm antenna input. The length is about:  
 23cm for 315MHz  
 17cm for 433.92MHz

#### 5. ELECTRICAL CHARACTERISTICS

Parameter	Specification			Unit	Condition
	Min	Typ	Max		
Frequency range		315/433.92		MHz	
Receiver sensitivity		-107		dBm	
Data rata	0.58	1.2	4.8	Kbaud	
Supply voltage, VDD	3.0		5.5	V	DC
Current	2.7		4.1	mA	
Operation temperature	-20		+70	°C	

6. MECHANICAL SIZE: (UNIT: mm)

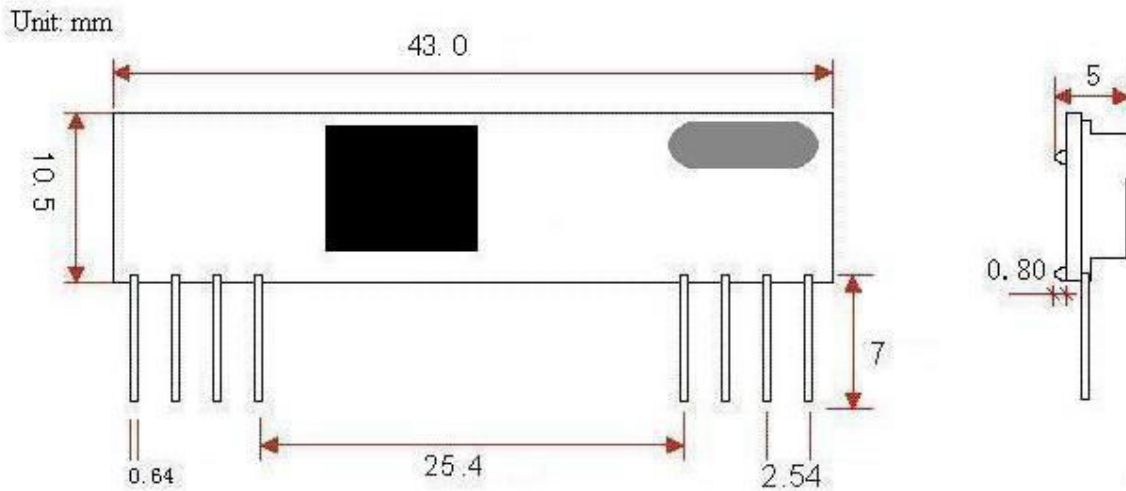
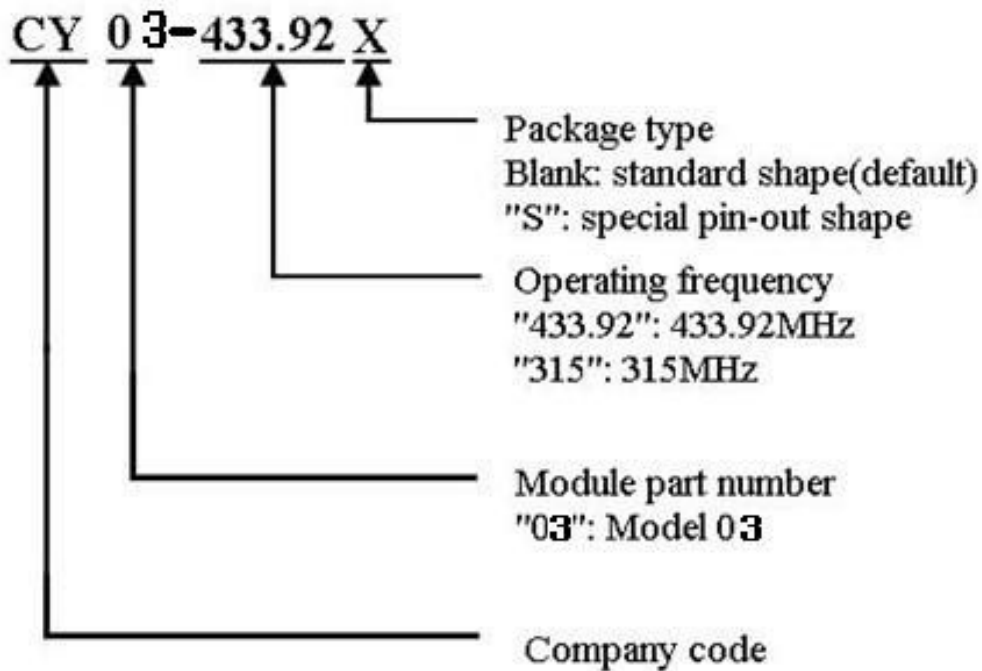


Figure2 CY03 Dimension

7. ORDER INFORMATION:



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

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