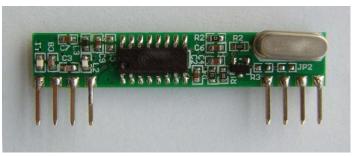


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY02-XXX

### 1. DESCRIPTION:

CY02 is an ASK/OOK compatible super-heterodyne receiver, which is designed with high sensitivity, long distance, easy use for designing. The CY02 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. CY02 have a high performance at a competitive cost and easily to design your product.

#### 2. FEATURES:

- Frequency: 315M/433.92MHz (custom frequency is available);
- High sensitivity -110dBm@433.92 1kbps BER10E-2;
- Supply voltage: VCC= 3.6 to 5.5 V;
- IF band: 230KHz(integrated in chip);
- Low power consumption: 4.8mA@315M,6mA@433.92 MHz;
- Excellent selectivity and noise rejection;
- Easy for using

#### 3. APPLICATION:

- Remote gate controls
- Remote keyless entry
- Car alarm systems
- Wireless security systems
- Automation systems



# 4. PIN DEFINITION:

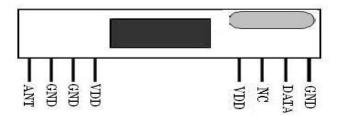


Figure 1 CY02 Shape & Pins

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

Note1: Antenna Length about: 23cm for 315 MHz

17cm for 433.92 MHz

# 5. ELECTRICAL CHARACTERISTICS:

Condition: Ta=25 ℃ Vcc=5.0V Frequency=315 MHz

Parameter	Specification				
	Min	Тур	Max	Unit	Condition
Frequency Range		315		MHz	Others available
Receiver Sensitivity		-110		dBm	BER=10E-2

Page 2



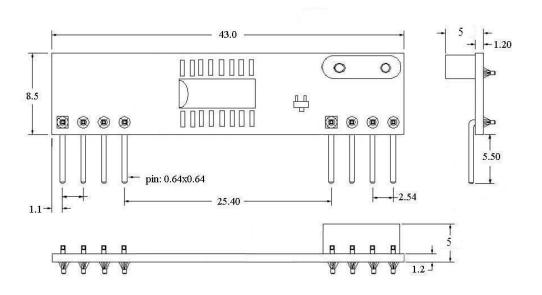
CY02

Data Rate	0.58	2.4	4.8	KBaud	Manchester code
Supply Voltage, VDD	3.6		5.5	V	DC
Current		4.6		mA	
Operating Temperature	-20		+70	$^{\circ}$ C	

Condition: Ta=25  $^{\circ}$ C Vcc=5.0V Frequency=433.92MHz

Parameter	Specification				
	Min	Тур	Max	Unit	Condition
Frequency Range		433.92		MHz	Others available
Receiver Sensitivity		-110		dBm	BER=10E-2
Data Rate	0.58	2.4	4.8	KBaud	Manchester code
Supply Voltage, VDD	3.6		5.5	V	DC
Current		6.0		mA	
Operating Temperature	-20		+70	${\mathbb C}$	

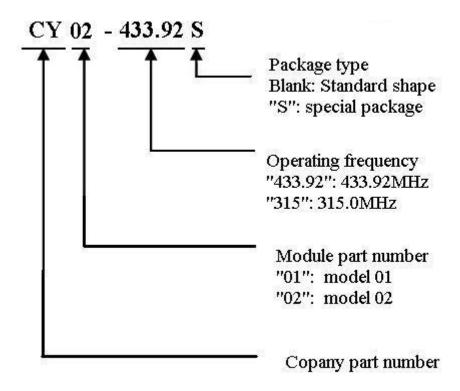
# 6. Mechanical Size: (unit: mm)



**Figure 2CY02 Dimension** 



### 7. ORDER INFORMATION:



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

#### CY WIRELESS TECHNOLOGY LIMITED

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