

# Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY02R-XXX

### **Description:**

CY02R is an ASK/OOK compatible super-heterodyne receiver, which is designed with high sensitivity, long distance, easy use for designing. The CY02R is base on a single-conversion, super-heterodyne receiver architecture incorporates and 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. CY02R have a high performance at a competitive cost and easily to design your product.



## Order Information:

Model NO.	Frequency		
CY02R-315	315 MHz		
CY02R-433	433.92 MHz		

### 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



## Application

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

# **Pin Description**

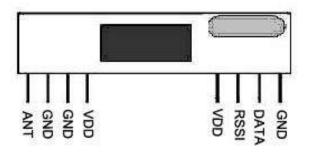


Figure1 CY02R Shape & Pins

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			
RSSI	Received Signal Strength Indication			
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



# **Electrical Characteristics:**

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

Parameter	Specification			Unit	Condition
	Min.	Тур.	Max.	Unit	Condition
Frequency Range		315		MHz	Others available
Receiver Sensitivity		-110		dBm	BER=10E-2
Data Rate	0.58	2.4	4.8	Kbps	Manchester code
Supply Voltage, VDD	3.6		5.5	V	DC
Current		4.6		mA	
Operating Temperature	-20		+70	°C	

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

Parameter	Specification			Unit	Condition
	Min.	Тур.	Max.	Onit	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	°C	



# Mechanical Size: (Unit: MM)

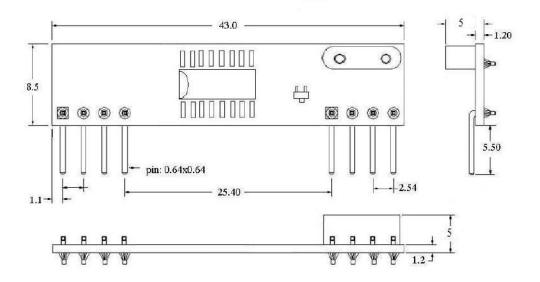


Figure2 CY02R Dimension

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

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