Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY43-XXX

Description:

The CY43 is a ASK/OOK compatible super heterodyne wireless receiving module with high performance for ISM frequency band. High receiving sensitivity and strong ability of resisting. From wireless signal input to data output can be done without any electrical circuit. User only use extra simple data decode circuit can achieve wireless products development. CY43 is for commercial level version.

Order Information:

Model NO.	Frequency
CY43-315	315 MHz
CY43-433	433.92 MHz

Features:

- Frequency: 315MHz/433.92MHz (custom frequency is available);
- High sensitivity: -114dBm;
- Supply voltage: 2.4 to 5.5V;
- IF band: 230KHz @433.92M;
- Low power consumption: 4.3mA@315M, 4.6mA@433.92M;
- Good selectivity and stray radiation suppression ability, easy to pass CE / FCC international certification
- Good local oscillation radiation suppression ability, can work with multiple receiving modules (single transmission and multiple reception) without interference with each other, use together without Affect the receiving distance.

Application

- Car remote control door switch (RKE)
- Wireless industrial remote control
- Remote door opener
- Wireless security alarm
- Remote control curtain
- Drying racks, garbage disposals and other products with motor interference

Pin Description

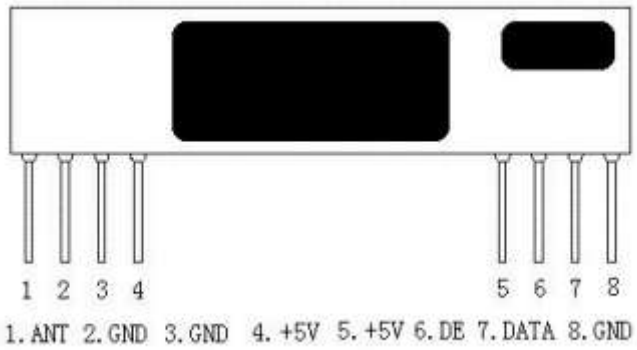

Figure1 CY43 Shape & Pins

Pin-out as showed in figure 1 above

Pin Name	Pin Definition
ANT	Antenna In
GND	Connect to negative power supply
GND	Connect to negative power supply
VCC	Connect to positive power supply
VCC	Connect to positive power supply
DE	Optional output: 1, DATA output(default setting) 2, Battery Saving Mode (Working mode in high level input) (Sleeping mode in low level input）

DATA	Data Output
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℃ Vcc=5.0V Frequency=315MHz

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range	314.90	315	315.10	MHz	Other freq. available
Receiver Sensitivity		-114		dBm	BER=10E-2
Receiving Bandwidth		200		kHz	
Decoding output max. voltage	2.4	3.75	5.0	V	DC
Decoding output max. voltage			0.5	V	
Current	3.6	4.3	5.0	mA	DC
Operating Temperature	-20		70	℃	

Condition: Ta=25℃ Vcc=5.0V Frequency=433.92MHz

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range	433.82	433.92	434.02	MHz	Other freq. available
Receiver Sensitivity		-114		dBm	BER=10E-2
Receiving Bandwidth		200		kHz	
Decoding output max. voltage	2.4	3.75	5	V	DC
Decoding output max. voltage			0.5	V	
Current	3.9	4.6	5.3	mA	DC
Operating Temperature	-20		70	℃	

Mechanical Size: (Unit: MM)

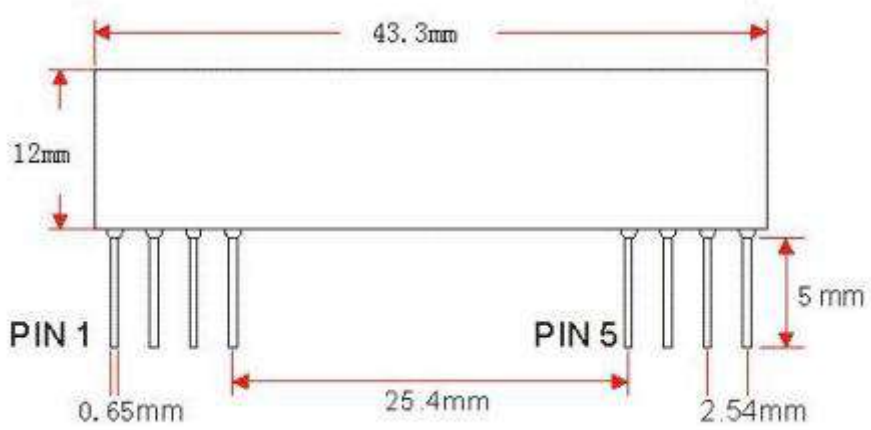

Figure2 CY43 Dimension

Cautions:

The drive current of the data output pin is relatively weak. If the MCU is directly driven, the I/O port must not be connected to the pull-up or pull-down resistor, and the inside pull-up or pull-down resistor must be set in the disabled state.

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

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