

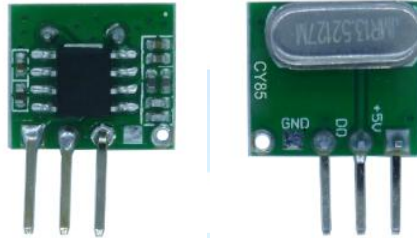


## Type: ASK/OOK Super-Heterodyne Receiver Module

### Model: CY85

#### 1. Description:

The CY85 is an ASK/OOK compatible super heterodyne wireless receiving module with high performance for ISM frequency band. With the adoption of European brand RF wireless data transferring/receiver chipsets, the module has advantages at high receiving sensitivity, small size and low cost. It solves the problem on space for the small-sized product. 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.



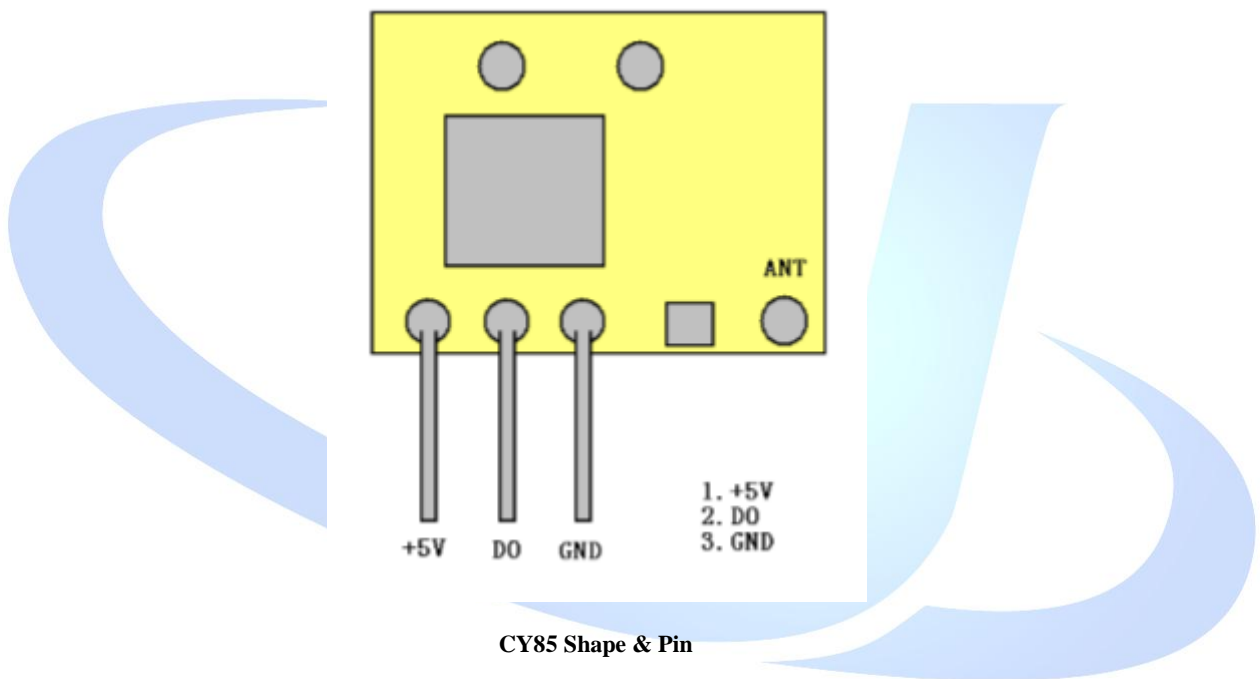
#### 2. Features:

- Frequency: 315MHz/433.92MHz (custom frequency is available);
- High sensitivity -110dBm;
- Supply voltage: 3.6V – 5.5V;
- Low power consumption: 5V @ 315MHz, 4.8mA; 5V @ 433.92MHz, 6.8mA;
- Data Rate: 2.4Kbps (Manchester Code)
- Operating temperature: -20°C ~ 70°C, work normally even in the severe temperature environment;
- Excellent inhibiting ability for local oscillator radiation: multiple receivers receive signals from one transmitter simultaneously without any mutual interference and influence on range;
- Favorable selectivity and inhibiting ability for stray radiation; image rejection is up to 20dBm;
- Dimension: 12\*10.5\*5mm

### 3. Application

- Remote door openers
- Remote keyless entry
- Wireless security systems
- Remote control
- Wireless door ring
- Wireless data transmission

### 4. Pin Description



Pin	Pin Name	Pin Definition
1	+5V	Connect to positive power supply
2	DO	Data Output
3	GND	Ground

**Note 1:** ANT pin is a 50 ohm antenna input. The length is about:  
 23cm for 315MHz  
 17cm for 433.92MHz



### 5. Electrical Characteristics:

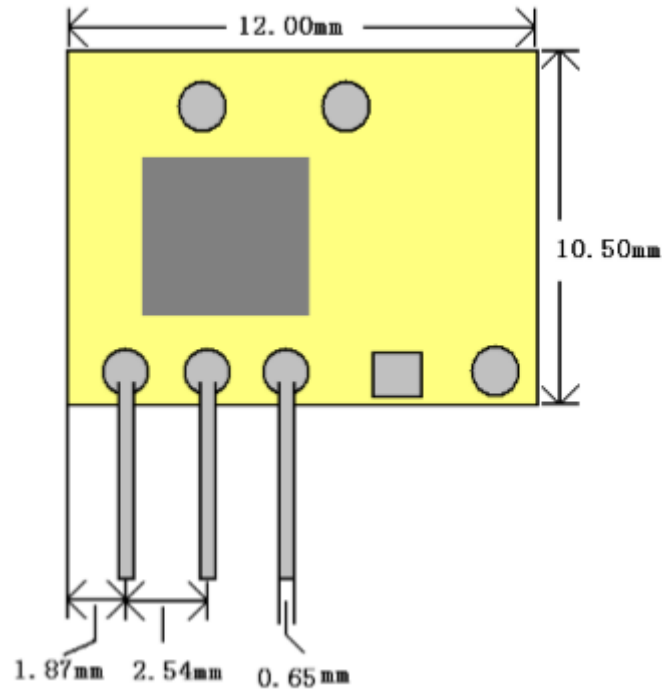
Condition: Ta=25°C Vcc=5V Frequency=315MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Frequency Range	314.9	315	315.1	MHz	
Modulation	ASK				
RF Sensitivity		-111		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		KHz	
Supply Voltage, VDD	3.6	5	5.5	V	
Current	4.6	4.8	5	mA	
Decoding output max. voltage	3.5		5	V	RL=500K
Decoding output min. voltage			0.5	V	
Operating Temperature	-20		70	°C	

Condition: Ta=25°C Vcc=5V Frequency=433.92MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Frequency Range	433.82	433.92	434.02	MHz	
Modulation	ASK				
RF Sensitivity		-110		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		KHz	
Start-up Time			5	ms	
Supply Voltage, VDD	3.6	5	5.5	V	
Current	6.5	6.8	7.0	mA	
Decoding output max. voltage	3.5	5	5	V	RL=500K
Decoding output min. voltage			0.5	V	
Operating Temperature	-20		70	°C	

## 6. Mechanical Size: (Unit: MM)



CY85 Dimension

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

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