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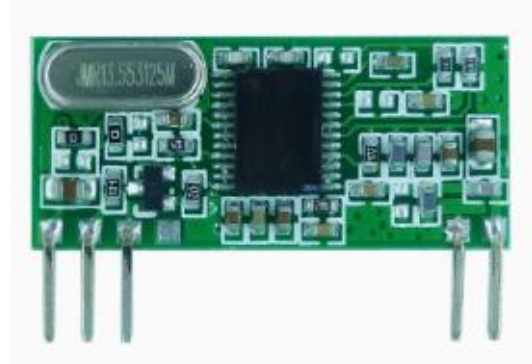
**Type: ASK/OOK/FSK Super-Heterodyne Receiver Module**

**Model: CY05-XXX**

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### Description:

CY05 is ASK and FSK universal wireless receiver module, the use of foreign automotive-grade wireless data radio receiver chip, with high receiver sensitivity and superior anti-interference ability. Without external circuitry, CY05 can do the wireless signal input to the data signal output. Due to the superior performance, CY05 has become favorable choices as receiver module for the application of RKE and BCM for many car manufacturers. It can easily achieve the development of wireless product simply by adding data decoding circuit.



### Order Information:

Model NO.	Frequency	Modulation
CY05-315-ASK	315 MHz	ASK
CY05-433-FSK	433.92 MHz	FSK

### Features:

- High sensitivity -115dBm;
- Frequency: 315MHz/433.92MHz (custom frequency is available)
- Modulation: ASK/OOK/FSK;
- Low operation voltage: VCC= 3.6-5.5 V;
- Low Current: 6mA
- Consumption Current during Battery saving mode: 10mA
- Operating Temperature: -40°C ~ +85°C;

## Application

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

## Pin Description

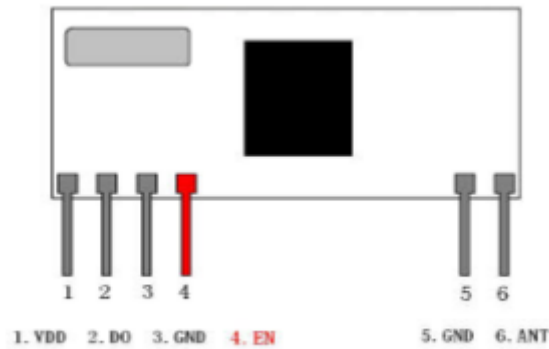


Figure1 CY05 Shape & Pins

**Please note:** CY05 is come with standard 5 PINs (without the red colored pin). Please notify us if you would like 6 PINs

Pin Name	Pin Definition
<b>VDD</b>	Connect to positive power supply
<b>DO</b>	Data
<b>GND</b>	Connect to negative power supply
<b>EN</b>	Optional output: 1.Empty(default setting); 2.Battery saving mode(shut down): (Working mode in High level input) (Sleeping mode in Low level input )
<b>GND</b>	Connect to negative power supply
<b>ANT</b>	Antenna In



**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

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Carrier Range	310	314.98	316	MHz	IF=220kHz
Supply Voltage	3.0	5.0	5.5	V	5.0v at default
Supply Current	4.3	5.7	7.1	mA	ASK
	4.5	5.9	7.3		FSK
Modulation	ASK/FSK				
RF Sensitivity		-115	-118	dBm	600bps(Manchester) , dev=±40kHz
Frequency Deviation		±40		KHz	
-3dB Bandwidth		250		KHz	
Data rate		1.2	9.6	Kbps	
Turn on time from sleep			3	ms	
“L” level input/output level	0		0.2	mA	
“H” level input/output level	2.0		5.5	V	
Output leak current (H level)		0	2	μA	
Output voltage (L level)			0.4	V	I <sub>DATAL</sub> = 200μA
Wave shaping output duty ratio	45	50	55	%	V <sub>IN</sub> (MIX) = 60dBmVEMFF or single tone IRR
Image Suppression Ratio		35		dB	
Operating Temperature Range	-40		85	°C	

Condition: Ta=25°C Vcc=5.0V Frequency=433.92MHz

Characteristics	Specification			Unit	Note
	Min.	Typ.	Max.		
Carrier Range	430	433.92	435	MHz	IF=220kHz
Supply Voltage	3.0	5.0	5.5	V	5.0v at default



CY05

Supply Current	4.6	6.1	7.6	mA	ASK
	4.7	6.3	7.9		FSK
Modulation	ASK/FSK				
RF Sensitivity		-116	-118	dBm	600bps(Manchester) , dev=±40kHz
Frequency Deviation		±40		KHz	
-3dB Bandwidth		250		KHz	
Data rate		2.4	9.6	Kbps	At default
Turn on time from sleep			3	ms	
“L” level input/output level	0		0.2	mA	
“H” level input/output level	2.0		5.5	V	
Output leak current (H level)		0	2	μA	
Output voltage (L level)			0.4	V	I <sub>DATAL</sub> = 200μA
Wave shaping output duty ratio	45	50	55	%	V <sub>IN</sub> (MIX) = 60dBmVEMFF or single tone IRR
Image Suppression Ratio		35		dB	
Operating Temperature Range	-40		85	°C	

**Mechanical Size: (Unit: MM)**

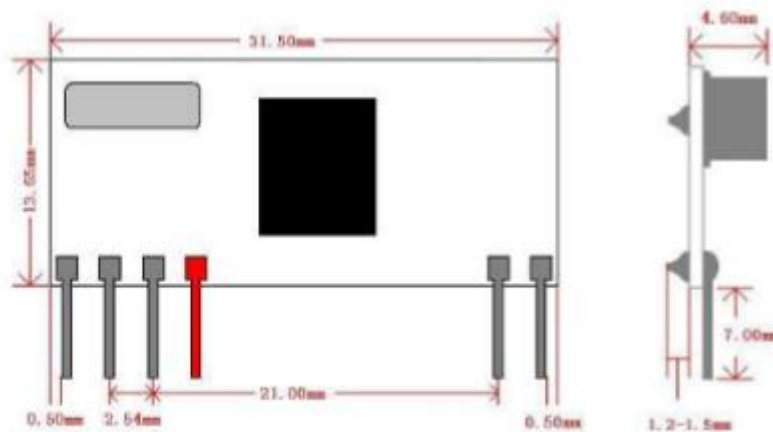


Figure2 CY05 Dimension



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

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