

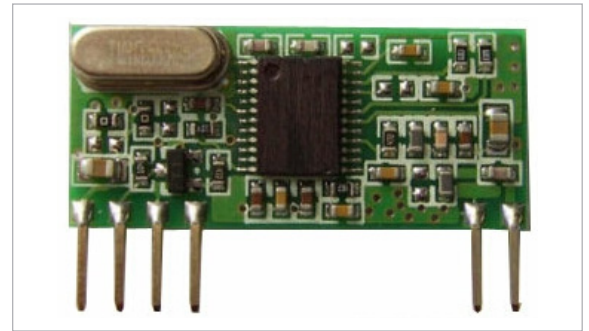


DESCRIPTION

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.

FEATURES

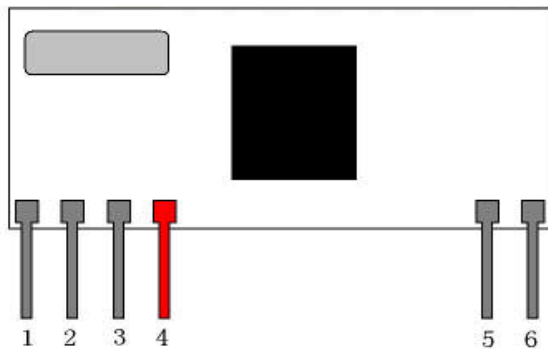
- High Sensitivity -116dBm;
- Frequency: 315MHz/433.92MHz (custom frequency is available)
- Modulation: ASK/OOK/FSK;
- Low operation voltage: VCC= 3.6-5.5 V;
- Low Current: 6mA
- Consumption Current during Battery saving mode:10nA
- Operating Temperature: -40° ~ +85°;



APPLICATION

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

PIN DEFINITION



1. VDD 2. DO 3. GND 4. EN 5. GND 6. ANT

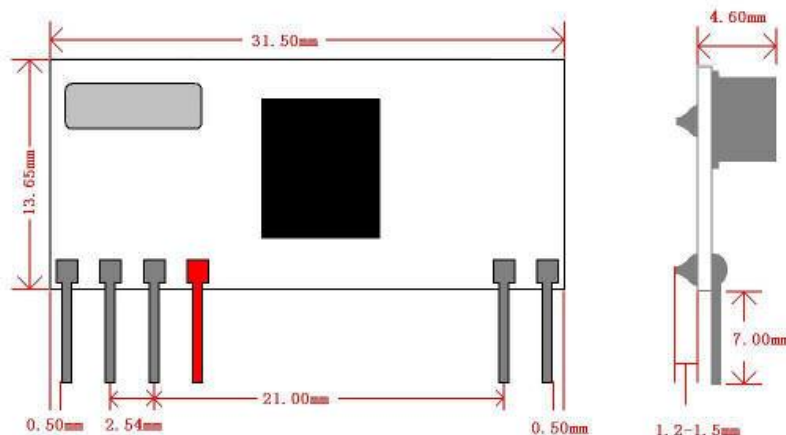
Please Note: CY05 is come with standard 5 PINs (without the red colored pin). Please notify us if you would like 6PINs.

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

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

MECHANICAL DIMENSION

Figure 2 CY05 Dimension



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

ELECTRICAL CHARACTERISTICS			Reference Value			Unit
Parameters		Note	Min	Typ	Max.	
Carrier Frequency	F _c	IF=220kHz	310	314.98	316	MHz
Supply Voltage	V _{cc}	5.0V at default	3.0	5.0	5.5	V
Supply current	I _s	ASK	4.3	5.7	7.1	mA
		FSK	4.5	5.9	7.3	
Modulation Mode	ASK / FSK					
RF sensitivity		600bps (Manchester) dev=±40kHz		-115		dBm
Frequency Deviation	F _{dev}			±40kHz		
-3dB Bandwidth	B _w			250		kHz
Data Rate				1.2	9.6	Kbps
Turn on time from sleep	T _{on}				3	ms
“L” level input/output level	V _{IL}		0		0.2	mA
“H” level input/output level	V _{IH}		2.0		5.5	V
Output leak current (H level)				0	2	µA
Output voltage (L level)	V _{DATAL}	I _{DATAL} = 200µA			0.4	V
Wave shaping output duty ratio	DR	V _{in} (MIX) = 60dBmVEMFF or single tone	45	50	55	%
Image Suppression Ratio	I _{RR}			35		dB
Operating Temperature Range	T _{OP}		-40		+85	°C

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

ELECTRICAL CHARACTERISTICS			Reference Value			Unit
Parameters		Note	Min	Typ	Max.	
Carrier Frequency	F _c	IF=220kHz	430	433.92	435	MHz
Supply Voltage	V _{cc}	5.0V at default	3.0	5.0	5.5	V
Supply current	I _s	ASK	4.6	6.1	7.6	mA
		FSK	4.7	6.3	7.9	
Modulation Mode	ASK / FSK					
RF sensitivity		600bps (Manchester) dev=±40kHz		-116		dBm
Frequency Deviation	F _{dev}			±40kHz		
-3dB Bandwidth	B _w			250		kHz
Data Rate		at default		2.4	9.6	Kbps
Turn on time from sleep	T _{on}				3	ms
“L” level input/output level	V _{IL}		0		0.2	mA
“H” level input/output level	V _{IH}		2.0		5.5	V
Output leak current (H level)				0	2	µA
Output voltage (L level)	V _{DATAL}	I _{DATAL} = 200µA			0.4	V
Wave shaping output duty ratio	DR	V _{in} (MIX) = 60dBmVEMFF or single tone	45	50	55	%
Image Suppression Ratio	I _{RR}			35		dB
Operating Temperature Range	T _{OP}		-40		+85	°C

ORDER INFORMATION:

CY 05 - 433.92 X

