

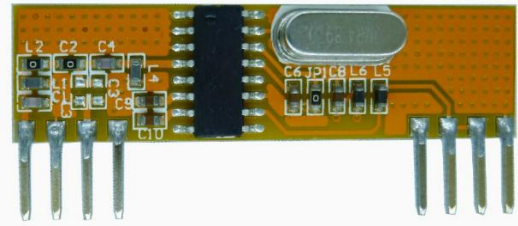


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY16-XXX

Description:

CY16 is an ASK/OOK receiver super-heterodyne module adopted highly integrated RF IC chips, which is designed specifically for unlicensed remote-control and wireless security receiver operating at 315/433.92Mhz in USA under FCC Part 15 regulation. The CY16 is base on a single-conversion, super-heterodyne receiver architecture and incorporates 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. CY16 have a high performance at a competitive cost and easily to design your product.



Order Information:

Model NO.	Frequency
CY16-315	315 MHz
CY16-433	433.92 MHz

Features:

- Low power consumption and low cost
- High frequency stability (no adjust components) & coherence
- Very low RF re-radiation at the antenna
- Higher sensitivity: -107dBm
- Operation temperature: -20°C ~70°C (It can custom to -40~85°C upon requests)
- Supply voltage: 3.3 ~ 5.5V
- Low current: 2.8mA(5V)@315MHZ
- Compatible with most AM (ASK/OOK) transmitters

Application

- Smart home system
- Remote controls
- Remote fan and light control
- Garage door and gate openers
- Alarm and security system

Pin Description

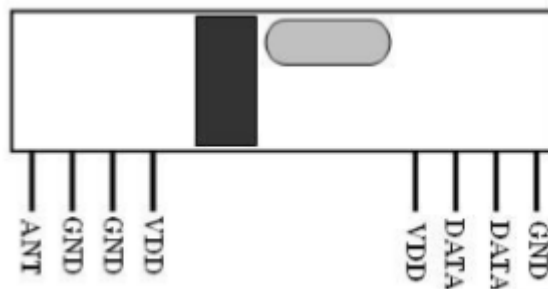


Figure1 CY16 Shape & Pins

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
DATA	Data output pin, connect to MCU or decoder's input pin
DATA	Data output pin, connect to MCU or decoder's input pin
GND	Connect to negative power supply

Note1: 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.	Typ.	Max.		
Frequency Range		315		MHz	Other freq. available
Receiver Sensitivity		-107		dBm	BER=10E-2
Data Rate	0.58	2.4	4.8	Kbps	Manchester code
Supply Voltage, VDD	3.3	5.0	5.5	V	DC
Current		2.8		mA	DC
Working Temperature	-20		70	°C	

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

Parameter	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range		433.92		MHz	Other freq. available
Receiver Sensitivity		-107		dBm	BER=10E-2
Data Rate	0.58	2.4	4.8	Kbps	Manchester code
Supply Voltage, VDD	3.3	5.0	5.5	V	DC
Current		4.1		mA	DC
Working Temperature	-20		70	°C	

Mechanical Size: (Unit: MM)

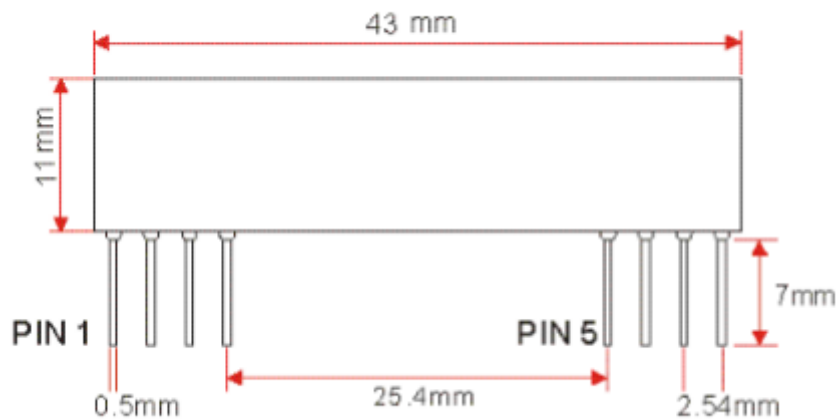


Figure2 CY16 Dimension



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

CY WIRELESS TECHNOLOGY LIMITED

Add: 1407, Block C, Tairan Building, 8th Tairan Road, Futian District,

Shenzhen, Guangdong Province, China

Website: www.rficy.com

Email: info@rficy.com