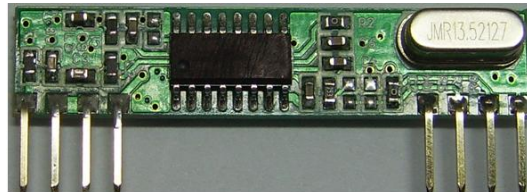

Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY39-XXX

Description:

The CY39 is a ASK/OOK compatible super heterodyne receiver module. CY39 is a superior performance receiver for ISM band. With the adoption of branded industrial RF wireless data receiver chip, CY39 has the high receiving sensitivity and strong anti-interference ability. It can do wireless signal input to the data signal output without any external circuit. Users only need to decode the data plus a simple circuit and then any wireless products development can be easily achieved.



Order Information:

Model NO.	Freq.
CY39-315	315MHz
CY39-433	433.92MHz

Features:

- Frequency: 315MHz/433.92MHz(custom frequency is available)
- High sensitivity -112dBm
- Power down mode with very low supply current (50nA typ)
- Operation temperature: -20°C ~70°C
- Supply voltage: 3.3V - 5V
- Low power consumption: 6.8mA 5V@ 433.92MHz/ 4.8mA 5V @ 315MHz
- Data rate: Max. 10Kbps
- Support RSSI function
- Excellent inhibiting ability for local oscillator radiation: multiple receivers receive signals from one transmitter simultaneously without any mutual interference and influence on range;
- Good selectivity and stray radiation suppression ability. Easy to pass CE/FCC certificates.

Application

- TPMS/RKE/PKE
- Wireless Industrial remote controls
- Remote control curtain
- Garage door and gate openers
- Alarm and security system
- Wireless data transmission

Pin Description

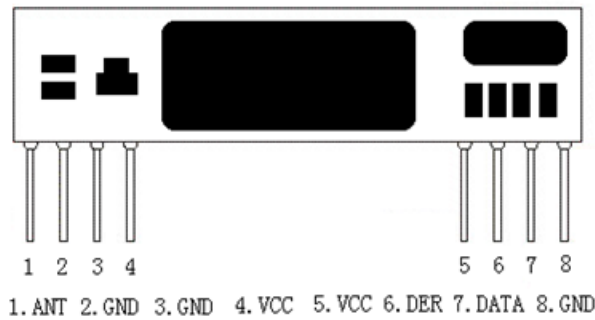


Figure1 CY39 Shape & Pins

Pin	PIN NAME	PIN DEFINITION
1	ANT	RF signal input pin, connect antenna outside(Note1)
2	GND	Connect to negative power supply
3	GND	Connect to negative power supply
4	VDD	Connect to positive power supply
5	VDD	Connect to positive power supply
6	R/E/D	Options: 1. R-RSSI 2. E- Energy saving mode 3. D- Data output
7	DATA	Data output
8	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 Freq.=315MHz

Specification	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range	314.90	315.00	315.10	MHz	Other freq. available
Receiver Sensitivity		-110		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		kHz	
Data Rate			9.6	Kbps	Manchester code
Supply Voltage	3.3	5	5.5	V	
Voltage as decoding	0.5		2.8	V	RL=500K
Current	4.6	4.8	5.0	mA	
Start Time			5	ms	
Operating Temperature	-20		70	°C	

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

Specification	Specification			Unit	Condition
	Min.	Typ.	Max.		
Frequency Range	433.82	433.92	434.02	MHz	Other freq. available
Receiver Sensitivity		-112		dBm	50Ohm antenna input directly/1K Kbps
Receiving Bandwidth		200		kHz	
Data Rate			9.6	Kbps	Manchester code
Supply Voltage	3.3	5	5.5	V	
Voltage as decoding	0.5		2.8	V	RL=500K
Current	4.6	4.8	5.0	mA	
Start time			5	ms	
Operating Temperature	-20		70	°C	

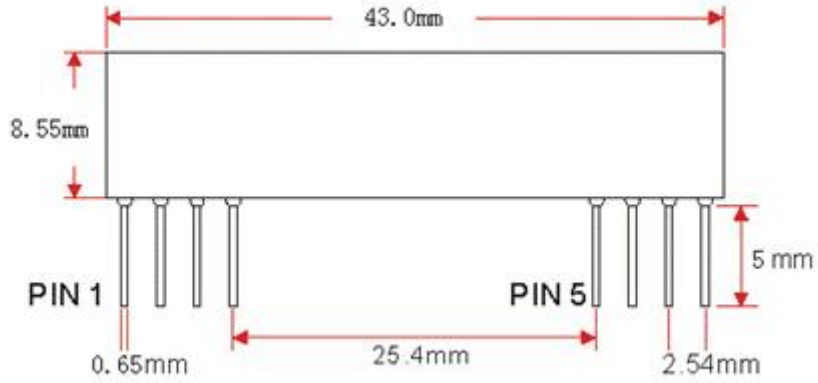
Mechanical Size: (Unit: MM)

Figure2 CY39 Dimension

Note:

Because of the weak current of CY39 data output pin, I/O port on the single chip cannot connect pull-up or pull-down resistor and these resistors inside single chip must be set as disable state if it is needed to directly drive the single chip.

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

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