

Type: ASK/OOK Super-Heterodyne Receiver Module Model: CY11-XXX

1. DESCRIPTION:

CY11 is a high quality super-heterodyne receiver module with VHF/UHF. The module is designed based upon markets' feedback and a lot of customers' advice. It has shocked in the electronic products market. The module adopting LSI circuit with high frequency



and low noise which is imported from famous company of Europe. It has strong anti- static protection, high reliability and competitive price. Its widely used in remote GDO(garage door opener), auto-gates as retract type, brakes, GSM/GPS system, factory automatic, communication and security system etc.

2. FEATURES:

- Frequency: 315M/433.92MHz (custom frequency is available)
- Compact hybrid modules
- Single conversion superhet
- 10.7 MHz high rejection IF filter
- Receiving range up to 600 meters.
- CMOS/TTL compatible output.
- Supply voltage 4.5-5.5V.
- Higher receiver sensitivity down to -114dBm.
- LO is determined by the SAW.
- Excellent ability of noise immunity against interfering source
- A high degree of suppress assemble or scatter radiation
- Can easy pass kinds of certification
- Temperature Range: -40-85°C

3. APPLICATION:

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



• Alarm and security system

4. PIN DEFINITION:



Figure1 CY11 Shape & Pins

| Pin Name | Pin Definition |
|----------|----------------------------------|
| ANT | Antenna In |
| GND | Connect to negative power supply |
| GND | Connect to negative power supply |
| DATA | Data Output |
| VCC | Connect to positive power supply |

Note1: 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=5.0V Frequency=315MHz

| Parameter | Specification | | | Unit | Condition |
|-----------------------|---------------|--------|--------|------|-----------------------|
| | Min | Тур | Max | Unit | Condition |
| Frequency Range | 314.90 | 315.00 | 315.10 | MHz | Other freq. available |
| Receiver Sensitivity | | -114 | | dBm | |
| Data Rate | 0.58 | | 4.8 | Kbps | Manchester code |
| Supply Voltage, VDD | 4.5 | 5.0 | 5.5 | V | DC |
| Current | | | 12 | mA | DC |
| Operating Temperature | -40 | | +85 | Ĉ | |



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

| Parameter | Specification | | | | |
|-----------------------|---------------|--------|--------|------|----------------------|
| | Min | Тур | Max | Unit | Condition |
| Frequency Range | 433.82 | 433.92 | 434.02 | MHz | Other freq available |
| Receiver Sensitivity | | -114 | | dBm | |
| Data Rate | 0.58 | | 4.8 | Kbps | Manchester code |
| Supply Voltage, VDD | 4.5 | 5.0 | 5.5 | V | DC |
| Current | | | 12 | mA | DC |
| Operating Temperature | -40 | | +85 | °C | |

6.MECHANICAL SIZE: (UNIT: mm)



front view

Figure2 CY11 Dimension



7. ORDER INFORMATION:



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: <u>www.rficy.com</u>

Email: info@rficy.com