

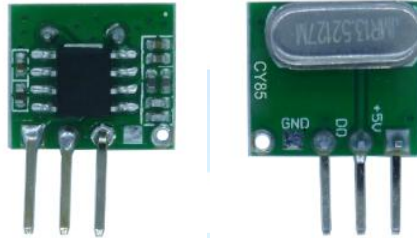


Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY85

1. Description:

The CY85 is an ASK/OOK compatible super heterodyne wireless receiving module with high performance for ISM frequency band. With the adoption of European brand RF wireless data transferring/receiver chipsets, the module has advantages at high receiving sensitivity, small size and low cost. It solves the problem on space for the small-sized product. From wireless signal input to data output can be done without any electrical circuit. User only use extra simple data decode circuit can achieve wireless products development.



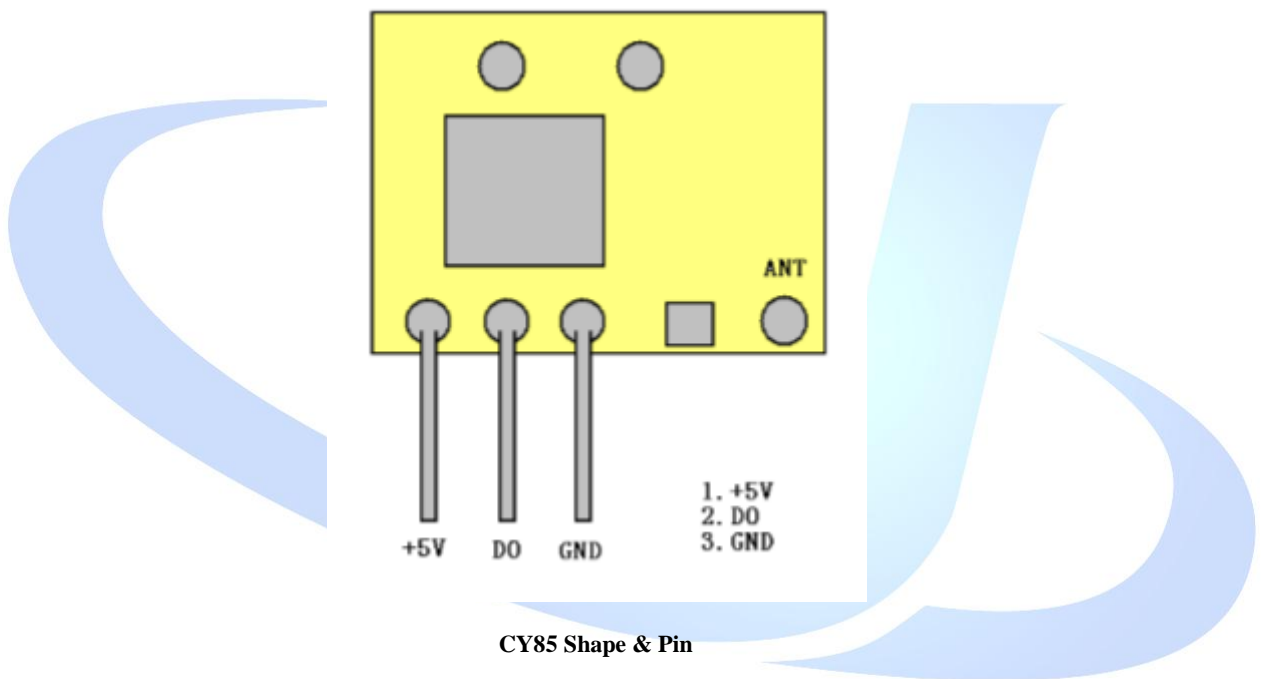
2. Features:

- Frequency: 315MHz/433.92MHz (custom frequency is available);
- High sensitivity -110dBm;
- Supply voltage: 3.6V – 5.5V;
- Low power consumption: 5V @ 315MHz, 4.8mA; 5V @ 433.92MHz, 6.8mA;
- Data Rate: 2.4Kbps (Manchester Code)
- Operating temperature: -20°C ~ 70°C, work normally even in the severe temperature environment;
- Excellent inhibiting ability for local oscillator radiation: multiple receivers receive signals from one transmitter simultaneously without any mutual interference and influence on range;
- Favorable selectivity and inhibiting ability for stray radiation; image rejection is up to 20dBm;
- Dimension: 12*10.5*5mm

3. Application

- Remote door openers
- Remote keyless entry
- Wireless security systems
- Remote control
- Wireless door ring
- Wireless data transmission

4. Pin Description



| Pin | Pin Name | Pin Definition |
|-----|----------|----------------------------------|
| 1 | +5V | Connect to positive power supply |
| 2 | DO | Data Output |
| 3 | GND | Ground |

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



5. Electrical Characteristics:

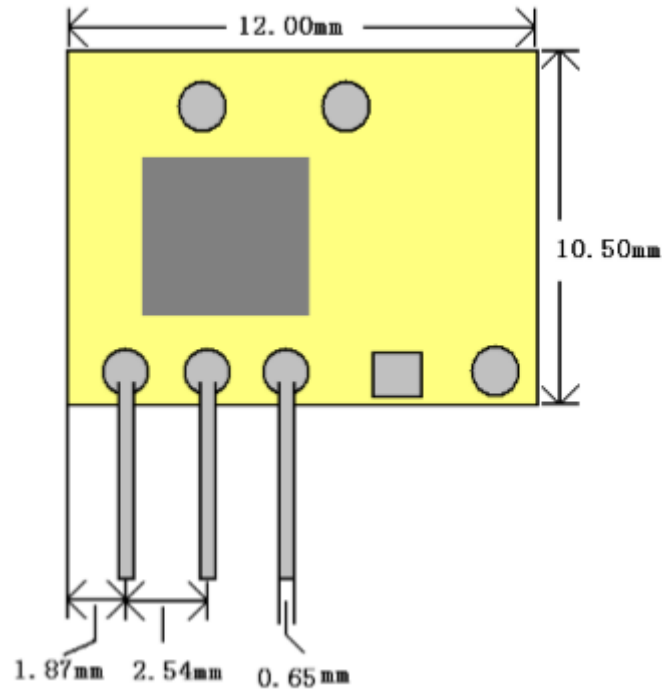
Condition: Ta=25°C Vcc=5V Frequency=315MHz

| Characteristics | Specification | | | Unit | Note |
|------------------------------|---------------|------|-------|------|--------------------------------------|
| | Min. | Typ. | Max. | | |
| Frequency Range | 314.9 | 315 | 315.1 | MHz | |
| Modulation | ASK | | | | |
| RF Sensitivity | | -111 | | dBm | 50Ohm antenna input directly/1K Kbps |
| Receiving Bandwidth | | 200 | | KHz | |
| Supply Voltage, VDD | 3.6 | 5 | 5.5 | V | |
| Current | 4.6 | 4.8 | 5 | mA | |
| Decoding output max. voltage | 3.5 | | 5 | V | RL=500K |
| Decoding output min. voltage | | | 0.5 | V | |
| Operating Temperature | -20 | | 70 | °C | |

Condition: Ta=25°C Vcc=5V Frequency=433.92MHz

| Characteristics | Specification | | | Unit | Note |
|------------------------------|---------------|--------|--------|------|--------------------------------------|
| | Min. | Typ. | Max. | | |
| Frequency Range | 433.82 | 433.92 | 434.02 | MHz | |
| Modulation | ASK | | | | |
| RF Sensitivity | | -110 | | dBm | 50Ohm antenna input directly/1K Kbps |
| Receiving Bandwidth | | 200 | | KHz | |
| Start-up Time | | | 5 | ms | |
| Supply Voltage, VDD | 3.6 | 5 | 5.5 | V | |
| Current | 6.5 | 6.8 | 7.0 | mA | |
| Decoding output max. voltage | 3.5 | 5 | 5 | V | RL=500K |
| Decoding output min. voltage | | | 0.5 | V | |
| Operating Temperature | -20 | | 70 | °C | |

6. Mechanical Size: (Unit: MM)



CY85 Dimension

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

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