

Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY20-XXX

Description:

CY20 is a high quality superhet receiver with ISM band wireless data transmission. With the adoption of super high frequency wireless communications technology and low noise large scale integrated circuit, this module is highly cost effective with perfect anti-static protection and high reliability. It is the best choice of rolling remote controls, electric door control system and long-distance transmission. It can be heavily used in garage door and gate controls, retractile door, brake, industrial controls, communications and security system and GSM/GPS car kit. This receiving system is ideal for the application in demanding and complex environment. Wireless signal input and output without any added circuits. 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. | Frequency | | | |
|-----------|------------|--|--|--|
| CY20-315 | 315 MHz | | | |
| CY20-433 | 433.92 MHz | | | |

Features:

- Super anti-jamming;
- Sensitivity up to -116dBm;
- Working frequency: 315 MHz; 433MHz;
- Power supply input voltage range: 3V-5.5V;
- Low power consumption: 5.0 V/12mA;

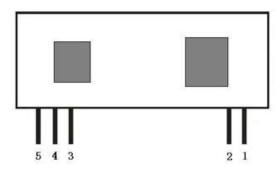


- Good selectivity and spurious radiation suppression capability;
- Temperature range: $-30^{\circ}C^{\sim} + 85^{\circ}C$;
- Perfect noise suppression

Application

- Remote keyless entry (RKE);
- Remote controls;
- Wireless security alarms;
- Remote curtains motor;
- Wireless industrial controls;
- Wireless parking lock;
- Strong interference occasion;
- DC motor controller

Pin Description



1. ANT 2. GND 3. GND 4. DATA 5. VCC

Figure1 CY20 Shape & Pins

| PIN | PIN NAME | PIN DEFINITION |
|-----|----------|----------------------------------|
| 1 | ANT | Antenna input |
| 2 | GND | Ground |
| 3 | GND | Ground |
| 4 | DATA | Data output |
| 5 | VDD | Connect to positive power supply |



Electrical Characteristics:

Condition: Ta=25°C Vcc=5.0V Freq.=315MHz

| Crecification | State | Ref. Value | | | 11 |
|--------------------------------|-------------------------------|------------|--------|--------|------|
| Specification | | Min | Тур. | Max | Unit |
| Frequency Range | | 314.90 | 315.00 | 315.10 | MHz |
| Modulation | | | ASK | | |
| Receiver Sensitivity | 50Ωantenna direct input/1K | | -116 | | dBm |
| | Kbps | | | | |
| Receiver Bandwidth | | | 200 | | KHz |
| Operating Voltage | | 3.6 | 5.0 | 5.5 | V |
| Operating Current | | | | 12 | mA |
| Data Rate | | | 2.4 | | Kbps |
| Image Rejection | 293.6MHz | | 20 | | dB |
| Max decoding output Voltage | RL=500K | 2.8 | 3.75 | 5 | V |
| Min decoding output Voltage | | | | 0.5 | V |
| Operating Temperature | | -30 | | +85 | °C |

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

| Specification | State | Ref. Value | | | Linit |
|----------------------|-----------------|------------|--------|--------|-------|
| | | Min | Тур. | Max | Unit |
| Frequency Range | | 433.82 | 433.92 | 434.02 | MHz |
| Modulation | | | ASK | | |
| | 50Ωantenna | | | | |
| Receiver Sensitivity | direct input/1K | | -116 | | dBm |
| | Kbps | | | | |
| Receiver Bandwidth | | | 200 | | KHz |
| Operating Voltage | | 3.6 | 5.0 | 5.5 | V |
| Operating Current | | | | 12 | mA |
| Data Rate | | | 2.4 | | Kbps |
| Image Rejection | 412.52MHz | | 20 | | dB |
| Max decoding output | RL=500K | 2.8 | 3.75 | 5 | V |

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CY20

| Voltage | | | |
|--------------------------------|-----|-----|----|
| Min decoding output Voltage | | 0.5 | V |
| Operating Temperature | -30 | +85 | °C |

Mechanical Size: (Unit: MM)

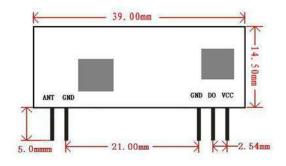


Figure2 CY20 Dimension

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

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