Type: ASK/OOK Super-Heterodyne Receiver Module

Model: CY38-V2-XXX

1. DESCRIPTION:

CY38-V2 is an ASK/OOK receiver super-heterodyne module, which is designed specifically for unlicensed remote-control and wireless security receiver operating at 315/433.92MHz under FCC Part 15 regulation or pass ETSI certification. The CY38-V2 is based 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.

CY38-V2 is a high performance module at a competitive cost and easily to design for your product. The CY38 module can be also a RoHS compliance product.



2. FEATURES:

- Frequency: 315M/433.92MHz (custom frequency is available)
- Low cost ASK/OOK radio superhet receiver
- High frequency stability (no adjust components) & coherence
- Very low RF re-radiation at the antenna
- Operation temperature: $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$ (It can custom to $-40 \sim 85^{\circ}\text{C}$ upon requests)
- Supply voltage: 2.0~5.5V
- Available frequency: 315/433.92MHz (other Frequency custom available)
- Compatible with most (ASK/OOK) transmitters

3. APPLICATION:

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

4. PIN DEFINITION:

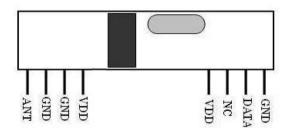


Figure 1 CY38-V2 Shape & Pins

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
NC	No connect
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

5. ELECTRICAL CHARACTERISTICS

Parameter	Specification			Unit	Condition
r ar ameter	Min	Тур	Max	UIII	Condition
Frequency range		315/433.92		MHz	
Receiver sensitivity		-112		dBm	
Data rata	0.58	1.2	4.8	Kbaud	
Supply voltage, VDD	2.0		5.5	V	DC
Current	5.0	5.9	7.0	mA	
Operation temperature	-20		+70	°C	

6. MECHANICAL SIZE: (UNIT: mm)

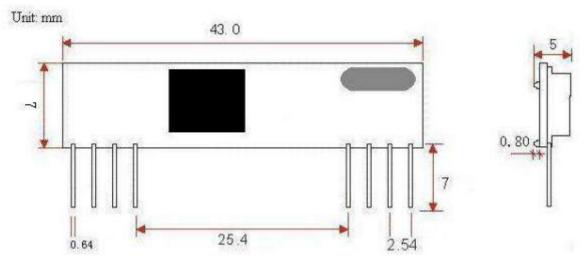


Figure 2CY38-V2 Dimension

7. ORDER INFORMATION:

CY38-V2-433.92

CY-BRAND NAME

38-MODEL NUMBER

V2 – Version Name

433.92—FREQUENCY 322.92MHZ