



# Data Sheet

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**RXM490**

**ASK superheterodyne wireless band decoding receiver module**

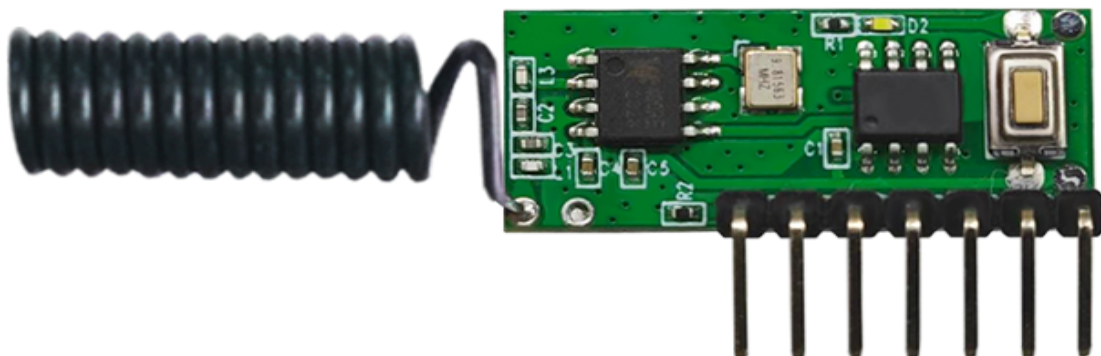
**Version 1.0**

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## 1.outline

RXM490 is a high-quality superheterodyne band decoding receiver module for ISM band wireless data transmission. The module adopts ultra high frequency wireless communication technology, low noise large scale integrated circuit, has high cost performance, has perfect anti static protection, and has high reliability; it is widely used in remote control garage doors, telescopic doors, barrier gates, etc.; for GSM / GPS vehicle system matching; industrial control, communication and security and other fields, this receiving system is an ideal choice for systems with high requirements in complex environments.

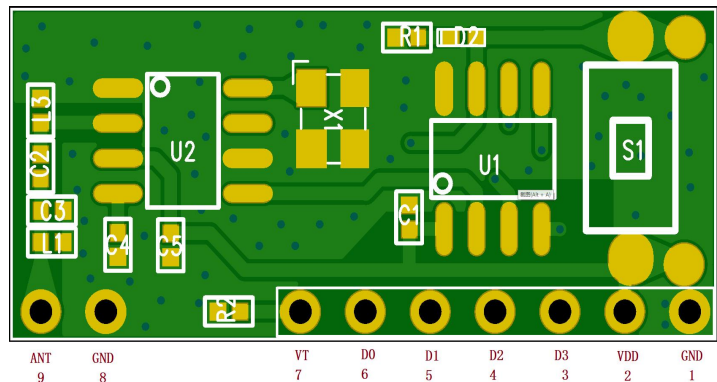


## 2. Product Features

- (1) The receiving sensitivity reaches -115dBm;
- (2) Working frequency: 315MHz; 433.92MHz; (special frequency can be customized according to customer requirements)
- (3) Power supply voltage input range: 3.0V-5.5V;
- (4) 4 outputs;
- (5) EV1527 (learning code) learning type receiving module with decoding;
- (6) The decoding decoder can support up to 7 encoders. When the encoder learning overflows (that is, when there are more than 7 encoders), the decoder will automatically cover and invalidate the earliest learned encoder from the beginning.
- (7) Low power consumption, 5.0V/7.5mA@433M, 5.0V/5.5mA@315M; continuous data rate up to 2.4kbps (Manchester encoding)
- (8) Good selectivity and stray radiation suppression ability;
- (9) Temperature range: -20-70 ° C can work normally even in harsh ambient temperatures;

### 3. Application scope

- (1) Automobile remote control door switch (RKE);
- (2) Remote control door opener and barrier gate;
- (3) Wireless security alarm;
- (4) Remote control curtain machine;
- (5) Wireless industrial controller;
- (6) Wireless parking lock;



### 4. Product pin description

Pin	Name	Functional Description
1	GND	POWER GROUND
2	VDD	power positive
3	D3	Normal low level, corresponding to key decoding output high level
4	D2	Normal low level, corresponding to key decoding output high level
5	D1	Normal low level, corresponding to key decoding output high level
6	D0	Normal low level, corresponding to key decoding output high level
7	VT	Normal low level, corresponding to key decoding output high level
8	GND	Antenna ground
9	ANT	Antenna

## 5. Electrical Data Sheet

Tested under power supply 5V temperature 25 frequency 315MHz test conditions

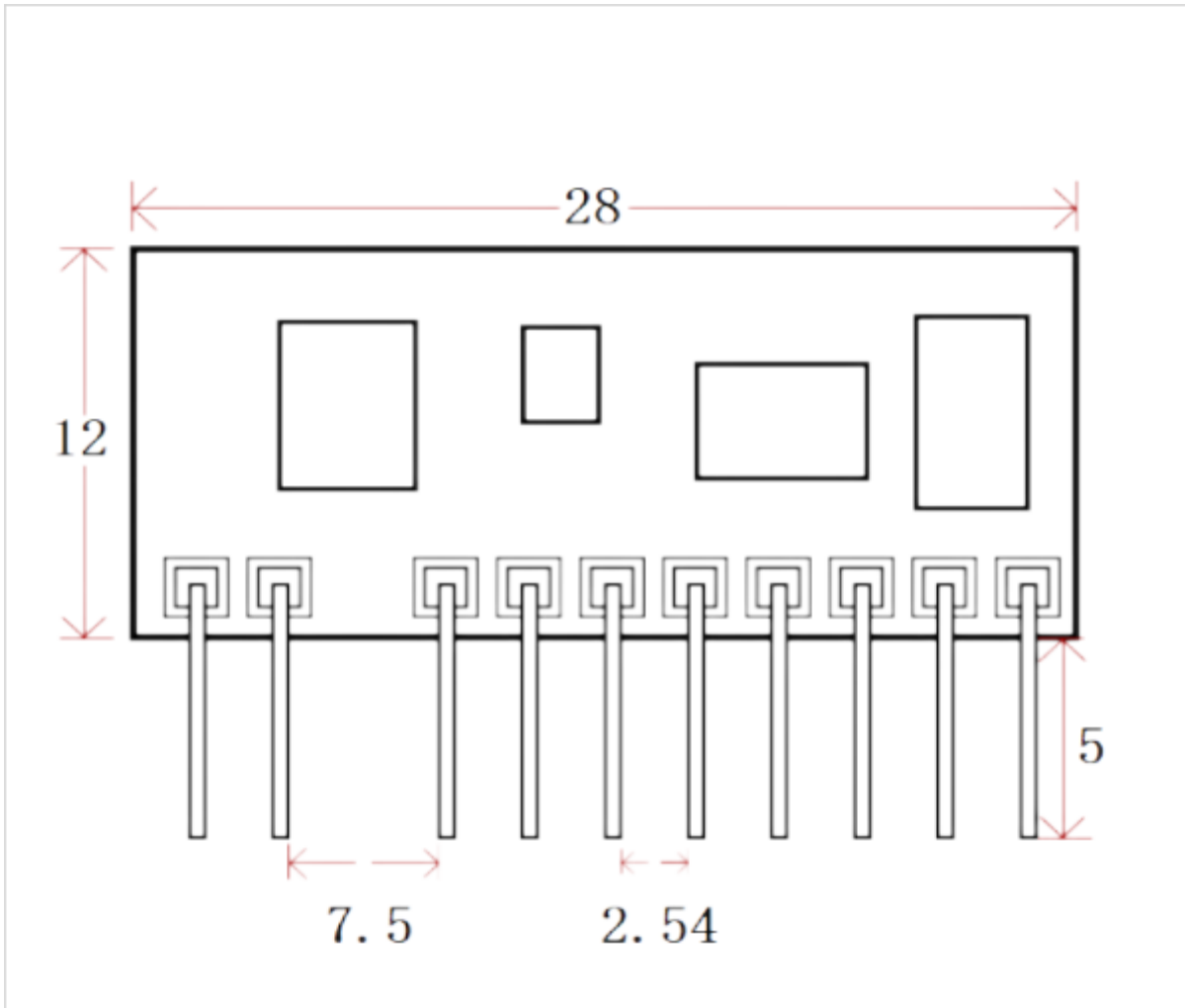
Parameters	Symbol	Status	Reference value			unit
			min	standard	max	
Operating frequency	Fc		314.90	315.00	315.10	MHz
Modulation method			ASK			
Receiver sensitivity		500hm antenna direct input/1K Kbps		-115		dBm
Receive bandwidth				200		KHz
Operating voltage			3.0	5.0	5.5	V
Operating current	IRC				5.5	mA
Decode output max. voltage		RL=500K	2.8	3.75	5	V
Decode Output Min Voltage					0.5	V
Operating temperature			-20		+70	°C

Parameters	Symbol	Status	Reference value			unit
			min	standard	max	
Operating frequency	Fc		433.82	433.92	434.02	MHz
Modulation method			ASK			
Receiver sensitivity		500hm antenna direct input/1K Kbps		-115		dBm
Receive bandwidth				200		KHz
Operating voltage			3.0	5.0	5.5	V
Operating current	IRC				7.5	mA
Decode output max. voltage		RL=500K	2.8	3.75	5	V
Decode Output Min Voltage					0.5	V
Operating temperature			-20		+70	°C

## 6. Instructions for use

1. DO-D3 output is low after power on;
2. When D0-D3 has output, VT output is high until the signal stops;
3. Press the learning button on the module once, and the learning LED is always on. At this time, press any key value of the remote control to learn the code. The learning LED flashes to indicate that the learning is successful  
The level of the output pin of this mode is in the jog state;
4. Press and hold the learning button, let go after 8 seconds, and at the same time, the learning light flashes 8 times and turns off, indicating that the code clearing is successful

## 7. Module size and shape marking



unit : mm