

Low latency and fast response  
Superheterodyne reception

## Product Specification



## Catalogue

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### Note: Revision History

Revision	Date	Comment
V1.0	2021-4	First release
V1.1	2021-11	Add some parameters

## 1. Overview

SRX883Pro is a superheterodyne receiver module with low latency, fast response and micro power consumption. It can be used with our STX series ASK transmitter module. It has high stability, anti-interference and low cost performance, and also has a super driving force, which can pass ROHS, CE and other certifications. The data port can be directly connected to the microcomputer, making the development more convenient and faster.

Module	Frequency Band	CE	Shield
SRX883PRO	Center 433MHz	Yes	Yes

## 2. Features

- Low latency and fast response
- Frequency range: 433/315 MHz
- Superheterodyne reception
- Low-power consumption
- Stable and reliable frequency
- Can pass various international testing standards
- Small size
- Weight: 2.0 g

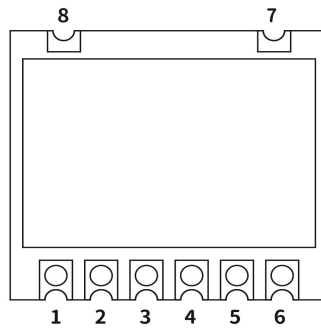
## 3. Applications

- Remote control door
- Wireless security alarm
- Wireless consumption products
- Wireless data transmission

## 4. Electrical Characteristics

Parameter	Min.	Typ.	Max.	Unit	Condition
Operation Conditions					
Working voltage range	2.0	3.3	5.5	V	
Temperature voltage	-30		80	°C	
Receive open time		3		ms	@Power on VDD to receive data
		2.3		ms	@Change from high to low in CS to receive data
Current Consumption					
Working current		<3		mA	@CS=0 times
		<0.1		uA	@CS=1 times
RF Parameter					
Frequency range	433.72	433.92	434.12	MHz	@433MHz
	314.8	315	315.2	MHz	@315MHz
Sensitivity		-111		dBm	@1Kbps
Data rate	0.1		5	Kbps	
Receive bandwidth		400		KHz	

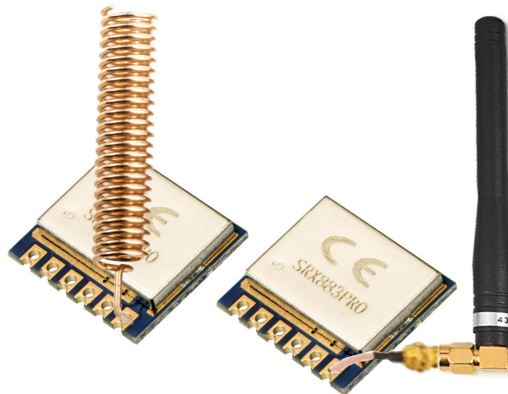
## 5. Pin definition



Pin NO.	Pin name	Description
1	VCC	Connect the power supply positive (2-5.5V)
2	CS	Module enable pin H: sleep L: working
3	DATA	Data output pin
4,5,7,8	GND	Power ground
6	ANT	Connect 50 ohm antenna

## 6. Peripheral accessories

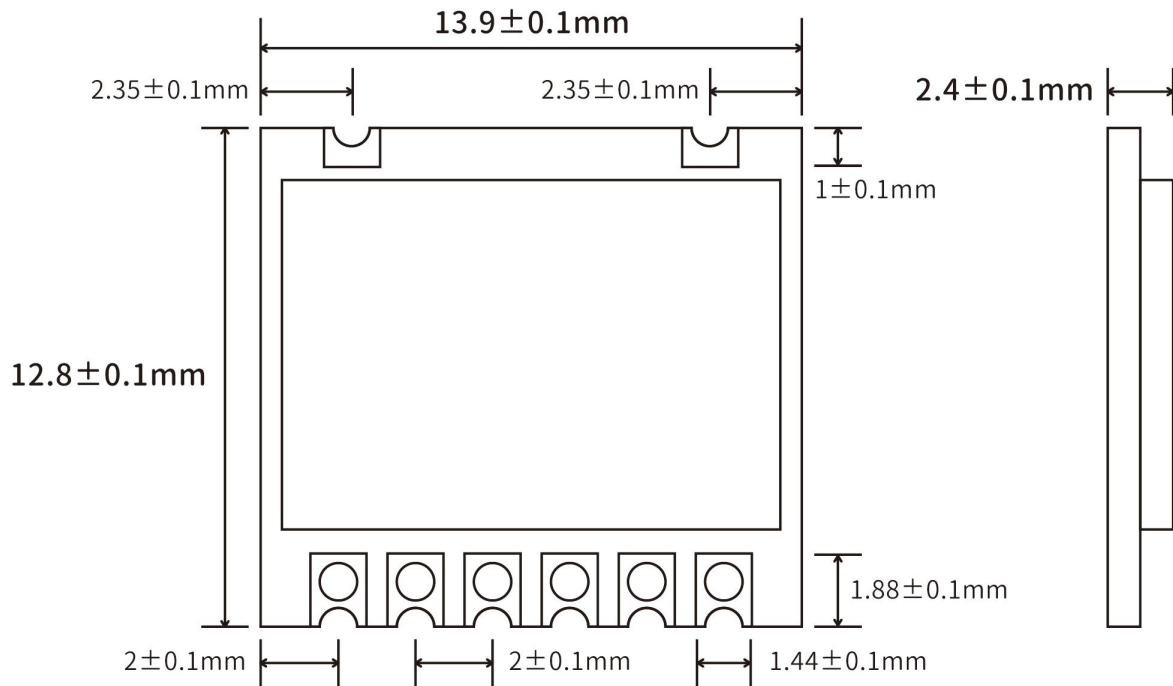
The antenna is an important part of the communication system, and its performance directly affects the indicators of the communication system. The antenna impedance required by the module is 50 ohms. Common antennas include spring antennas, and can also be transferred to straight/elbow/folded rods, small suction cups, etc. through SMA. Users can choose antennas according to their own application environment. In order to keep the module in the best working condition, it is recommended to use this The antenna provided by the company.



★ During the use of the antenna, the following principles should be followed to ensure the best communication distance of the module:

- The antenna should not be close to the ground surface as much as possible, and the surrounding area should be kept away from obstacles.
- If you purchase a suction cup antenna, straighten the lead as much as possible, and the suction cup base must be attached to a metal object.

## 7. Mechanical size (unit: mm)

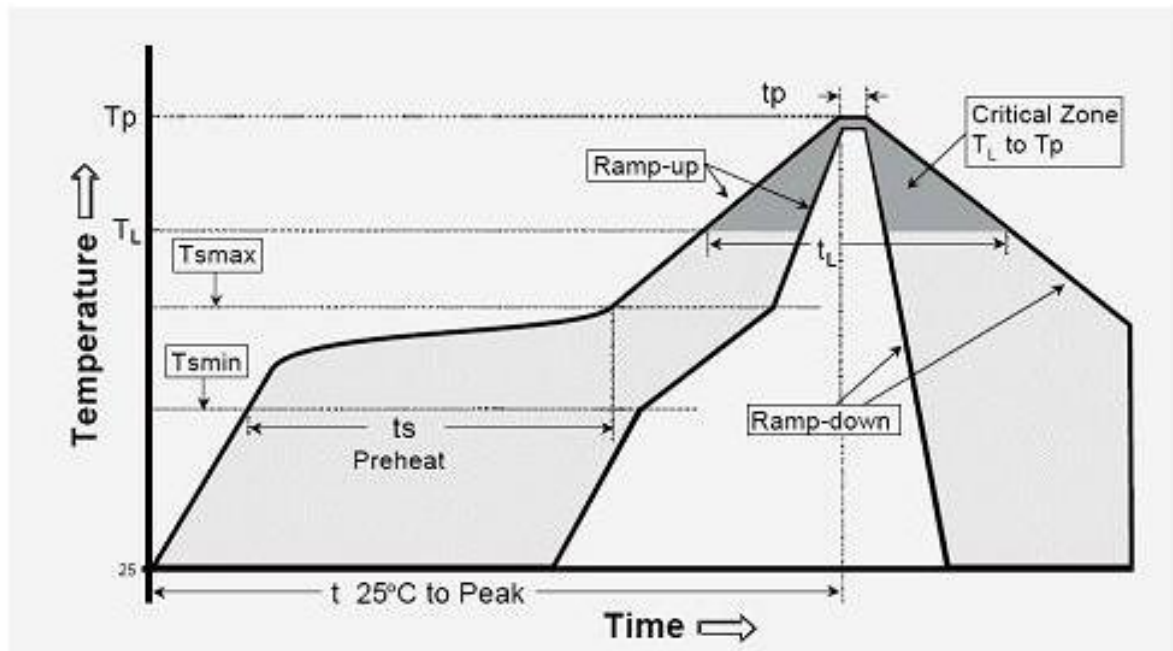


## 8. Product order information

The product models are as follows:

Order model	Product type
SRX883Pro-433	The working frequency band of the product is 433 MHz
SRX883Pro-315	The working frequency band of the product is 315 MHz

## Appendix: Furnace temperature curve diagram



IPC/JEDEC J-STD-020B the condition for lead-free reflow soldering	big size components (thickness $\geq 2.5\text{mm}$ )
The ramp-up rate (Tl to Tp)	3°C/s (max.)
preheat temperature	
- Temperature minimum (Tsmin)	150°C
- Temperature maximum (Tsmax)	200°C
- preheat time (ts)	60~180s
Average ramp-up rate(Tsmax to Tp)	3°C/s (Max.)
- Liquidous temperature(TL)	217°C
- Time at liquidous(tL)	60~150 second
peak temperature(Tp)	245+/-5°C