

RFM220LS/B/D ASK/OOK Receiver Module

1. Product Overview

RFM220LS/B/D is a low-cost ASK/OOK receiver module based on a high-performance CMT2220LS chip. Its operating frequency is 315MHz or 433.92MHz (the operating frequency can be customized in the range of 300MHz-480MHz). Its operating voltage is 3.0V-5.5V. The receiver module has stable performance, low power consumption, high sensitivity and high cost-effectiveness, and can be widely used in all kinds of data transmission systems.

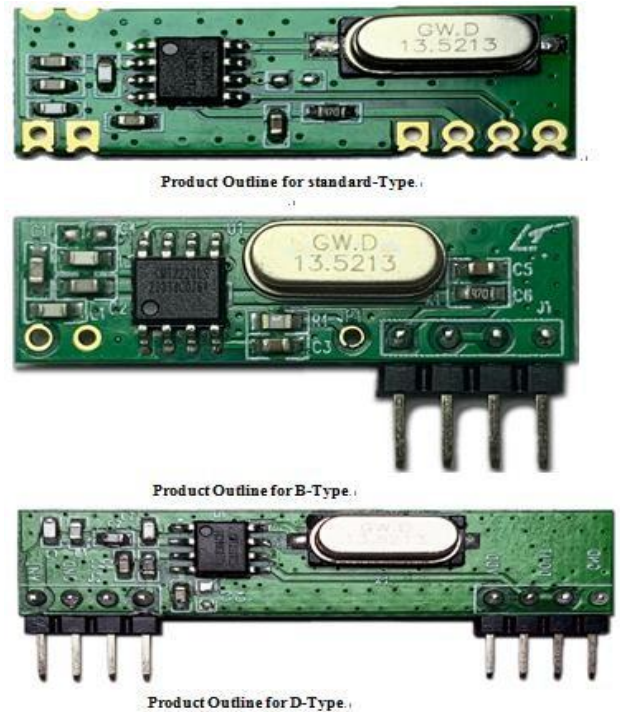
This specification only describes the basic functions and performance parameters for this receiver module, and for further information, please refer to the CMT2220LS chip datasheet.

2. Key Feature

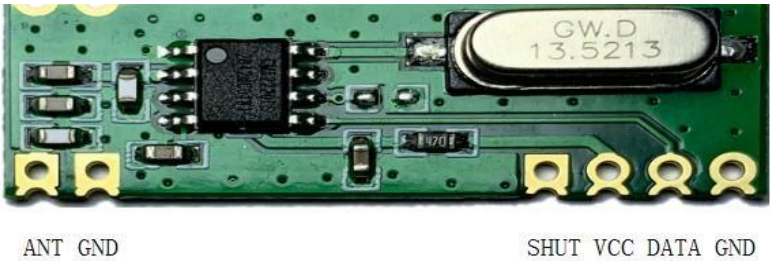
- Low cost, low power consumption and cost-effective
- Data rate: 1-5Kbps
- Working voltage: 3.0V-5.5V
- Working current: 5.3mA @315MHz
- Receiving sensitivity: -108dBm @3kbps,433.92MHz
- Working frequency: 315MHz, 404MHz, 433.92MHz

3. Typical Application

- Automatic control of homes and buildings
- Replacement for infrared receiver
- Industrial monitoring and control
- Wireless metering
- Wireless lighting control system
- Wireless alarm and safety system
- Remote access system



4. Pin Definition



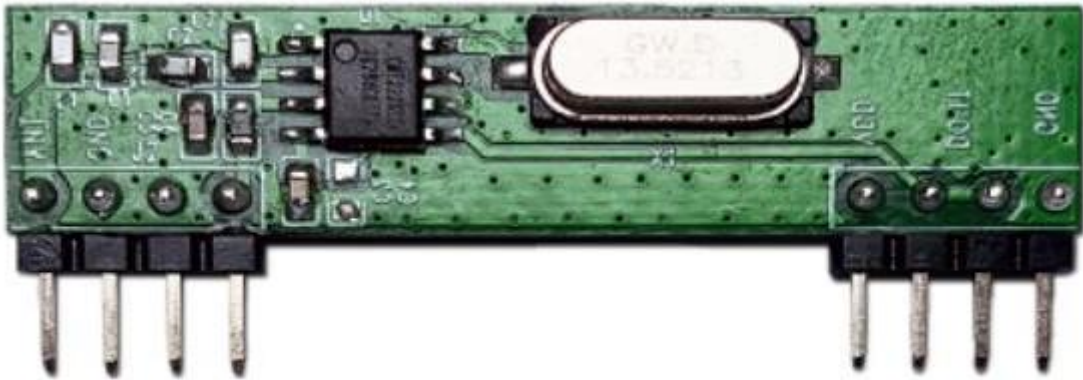
Product Outline for standard-Type

脚位	名称	功能说明
1	ANT	Antenna Input
2	GND	Ground
3	SHUT	Enable (Low Active)
4	VCC	Positive Power
5	DATA	Data Out
6	GND	Ground



Product Outline for B-Type

脚位	名称	功能说明
1	ANT	Antenna Input
2	GND	Ground
3	VCC	Positive Power
4	DATA	Data Out
5	DATA	Data Out
6	GND	Ground



ANT GND GND VDD

VCC DOUT DOUT GND

Product Outline for D-Type

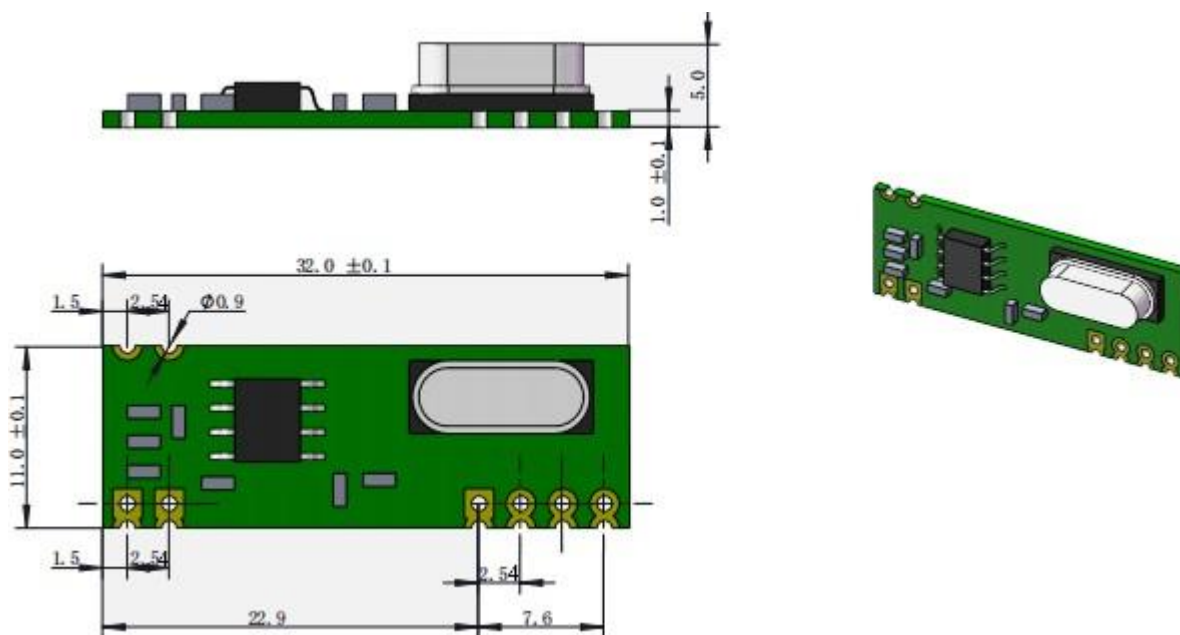
脚位	名称	功能说明
1	ANT	Antenna Input
2	GND	Ground
3	GND	Ground
4	VDD	Positive Power
5	VDD	Positive Power
6	DOUT	Data Out
7	DOUT	Data Out
8	GND	Ground

5. Performance Parameters

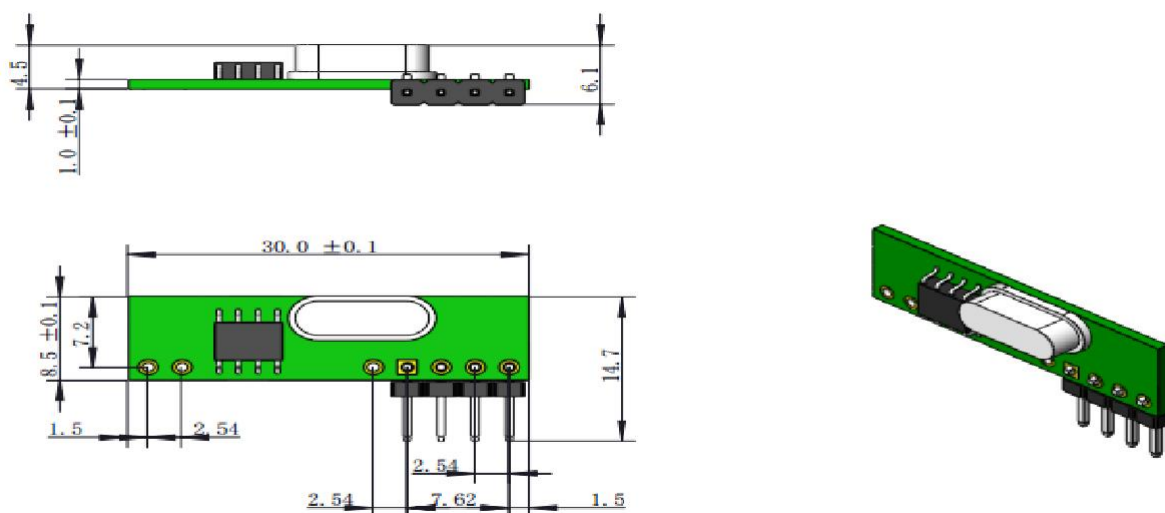
Parameter	Condition	Min	Typ	Max	Unit
Working Voltage	RFM220LS/B/D	3.0	5	5.5	V
Working Current	RFM220LS/B/D -315 RFM220LS/B/D -404 RFM220LS/B/D -433		5.5	6	mA
Crystal Frequency	RFM220LS/B/D -315		9.81563		MHz
	RFM220LS/B/D -404		12.58894		MHz
	RFM220LS/B/D -433		13.52127		MHz
Working Frequency	RFM220LS/B/D -315		315		MHz
	RFM220LS/B/D -404		404		MHz
	RFM220LS/B/D -433		433.92		MHz
Sensitivity	315MHz @3Kbps		-109		dBm
	404MHz @3Kbps		-108		dBm
	433.92MHz @3Kbps		-108		dBm
Receiving Bandwidth	315MHz		370		KHz
	404MHz		474		KHz
	433.92MHz		510		KHz
Data Rate		1		5	Kbps
Working Temperature		-40		+85	°C

6. Mechanical Dimension (Unit: mm)

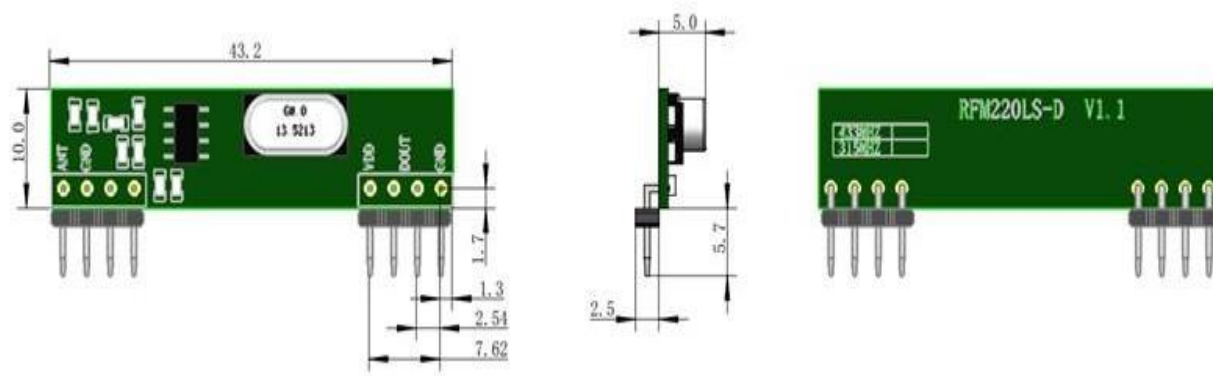
Product Outline for B-Type



Product Outline for standard-T



Product Outline for D-Type



7. Contact Information

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