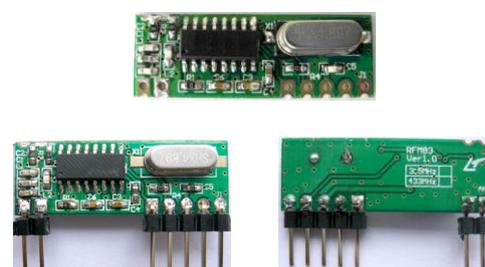


## 1. General

RFM83 series is a low cost, high performance ASK/OOK receiver module with operating at 315/433.92MHz. It is Customizable for special operation frequency. It features high reliability, low power consumption, high sensitivity, high performance. It provides two additional; (1) a shutdown pin, which may be used the device off for duty-cycled operation, and (2) a wake-up output, which provides an output flag indicating when an RF signal is present. It is your ideal choice for designing wireless data transmission products which can be widely used on wireless data transmission field.

## 2. Features

- Low cost, high performance
- Data rate range is 0.1-10KHz
- Power Supply =5V
- Operating Current =3.0mA@315MHZ
- Sensitivity = -110dBm
- ISM Frequency band
- ASK/OOK receive modulation
- Operation frequency 315MHz,433.92MHz
- SMD and DIP Package

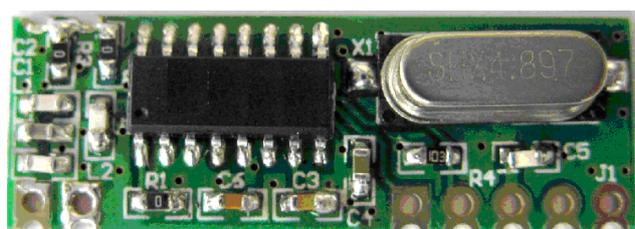


## 3. Application

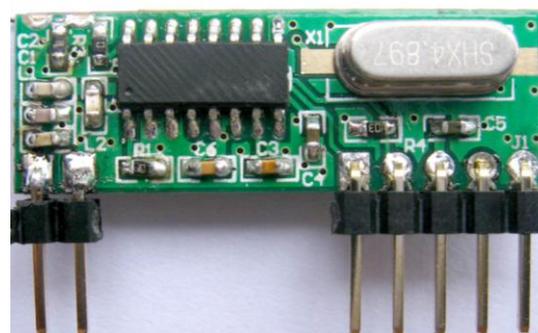
- Wireless data transmission
- Household automatization
- Remote system for alarm

## RFM83

## 4. Pin Description



1 2 3 4 5 6 7



1 2 3 4 5 6 7

PIN	Name	Define
1	RF IN	RF signal input
2	GND	Ground, connect to GND
3	WRC	Wakeup (Digital Output)
4	SHUT	Shutdown (Digital Input, High active)
5	VCC	Power supply , connect to Vcc+
6	DATA	Data output
7	GND	Ground, connect to GND

## 5. Parameter

Parameter	Condition	Min	Typical	Max	Unit
Power supply (VCC)	DC	3.6	5	5.5	V
Current	5V, 315MHZ		3	4	mA
	5V, 433.92MHz		5	6	mA
Sleep Current			1		uA
Operation frequency	RFM83X-315		315		MHz
	RFM83X-433.92		433.92		MHz
Sensitivity	@315MHz Rate=1.2Kbps		-110		dBm
	@434MHz Rate=1.2Kbps		-110		dBm
Bandwidth			300		KHz
Modulate data rate		0.6		10	KHz
Operate temperature		-35		+85	°C

## 6. Mechanical Dimension (unit: mm)

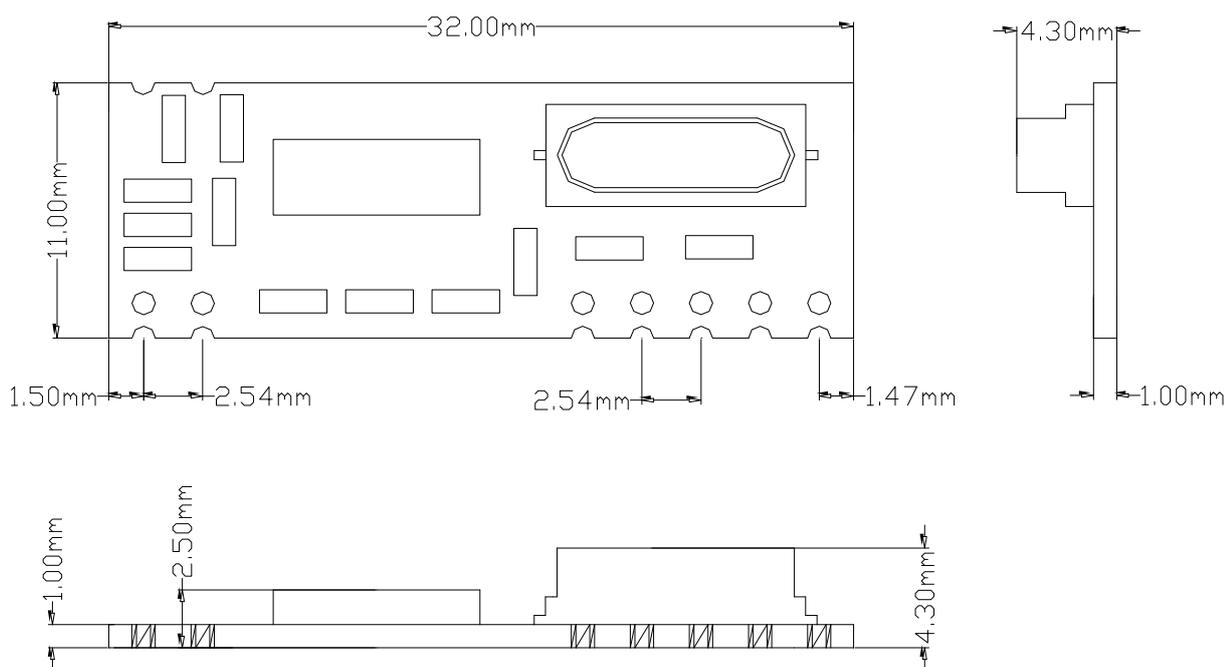
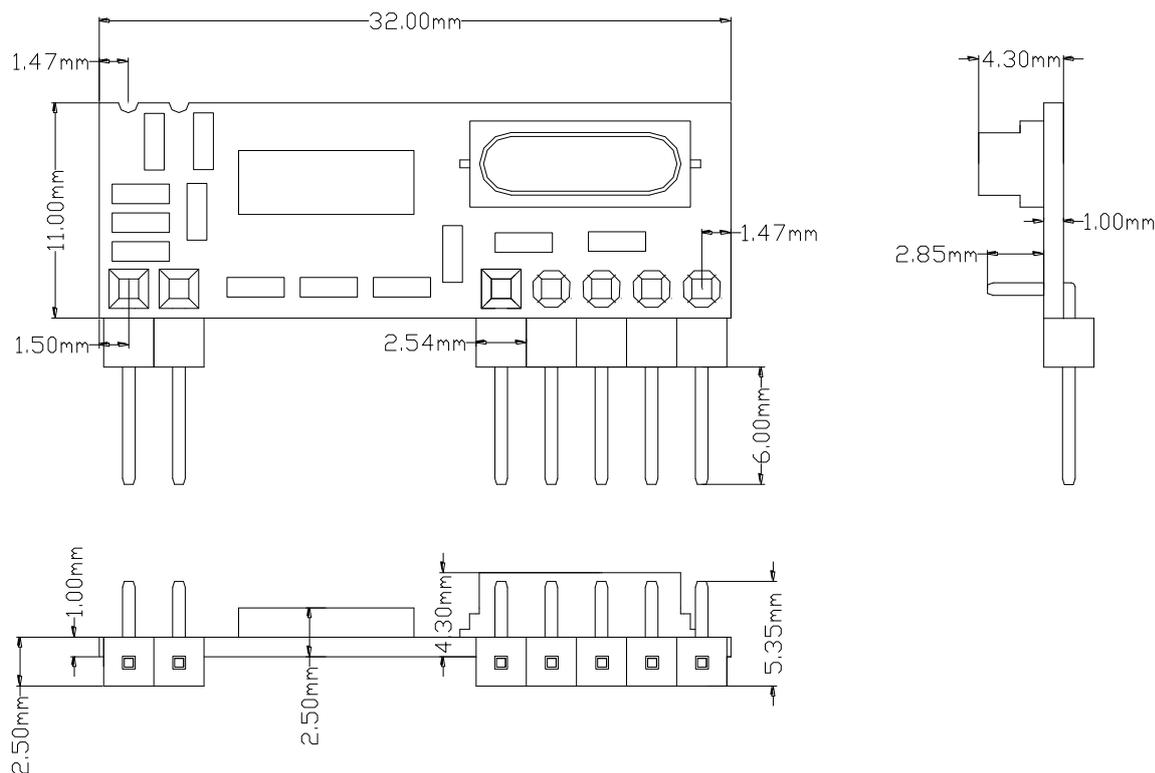


Figure 1: RFM83 SMD mechanical dimension

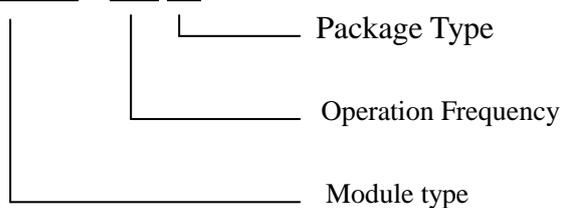


**Figure 2: RFM83 DIP mechanical dimension**

## 7. Ordering Information

**Part Number=Module type + Operation Frequency +Package Type**

RFM83 – 315 S1



For example:

1. RFM83-315S1: ASK Receiver Module, Operation Frequency is 315MHz , Package Type is SMD.
2. RFM83-433D: ASK Receiver Module, Operation Frequency is 433.92MHz , Package Type is DIP.

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