



FSK RECEIVER MODULE

Description

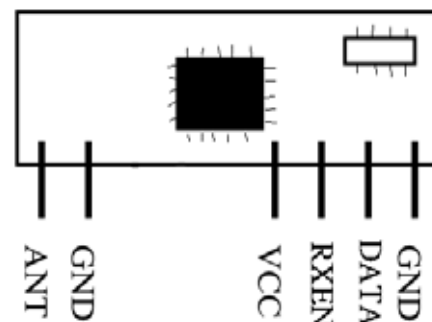
315/434/ 868/914.5 MHz FSK RECEIVER

MO-RX3930-FS is an FSK receiver module. The MO-RX3930-FS 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 use in OOK / HCS / PWM modulation signal and demodulate to digital signal. MO-RX3930-FS had a high performance and easily to design your product.

It can be used on wireless security system or specific remote-control function and others wireless system

Features

- Low power consumption.
- Easy for application.
- On-Chip VCO with integrated PLL using crystal oscillator reference.
- Integrated IF and data filters.
- Operation temperature range : - 20°C ~ +85°C
- Operation voltage : 2.4~ 5 Volts.
- Available frequency at :ISM Band 315/434/ 868 / 914MHz



Applications

- Car security system
- Remote keyless entry
- Garage door controller
- Home security
- Wireless mouse
- Automation system

Product Identification

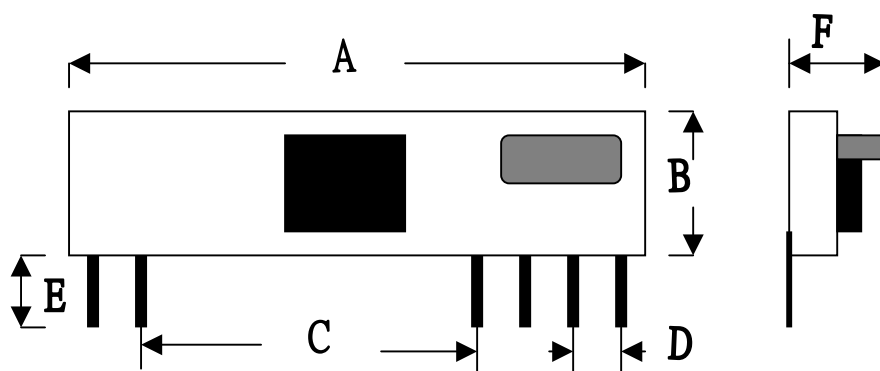
315MHz	MO-RX3930-FS315M
433.92MHz	MO-RX3930-FS434M
868.35MHz	MO-RX3930-FS868M
914.5MHz	MO-RX3930-FS914M

Absolute Maximum Ratings

Parameter	Rating	Units
Supply Voltage	5.0	V DC
Operating Temperature	-20 to +85	°C

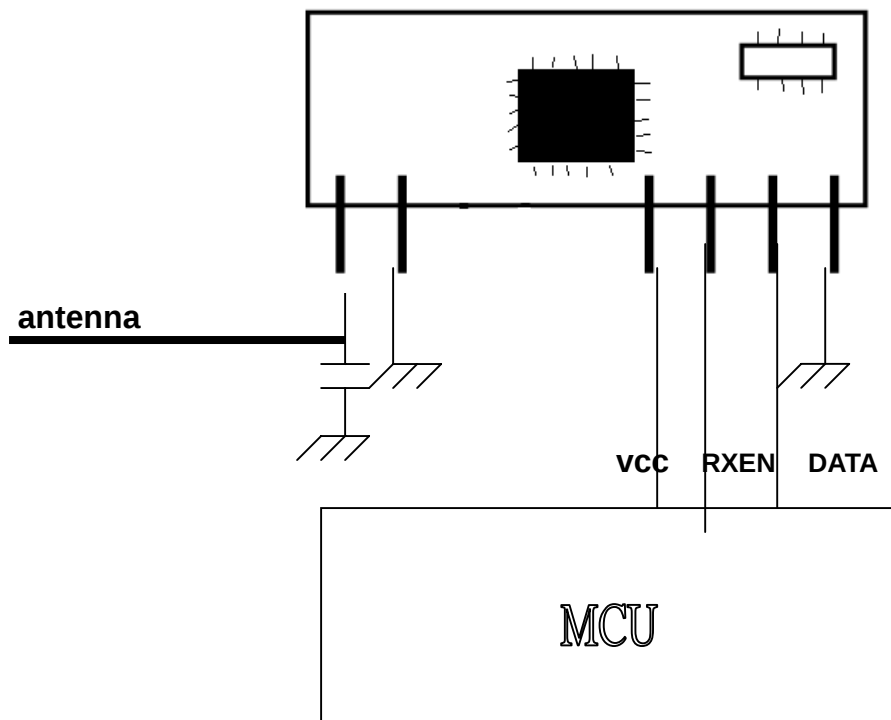
Electronical Characteristics

Parameter	Symbol	Condition	Specification			Unit
			Min.	Typical	Max.	
Operation Voltage			2.4	3.6	5.0	V
Sensitivity	Psens	Vcc=3.0V, 1Kbps Data Rate	315MHz			
			434MHz			
			868MHz	-104	-102	dBm
			914MHz	-104	-102	dBm
ASK out logic HIGH	VOH	Iload = 10 μ A		0.7*Vcc		V DC
ASK out logic LOW	VOL	Iload = 10 μ A			0.3*vcc	V DC
Supply current	Icc			8	10	mA
Standby current		Rx enable is Lo		0.6		mA
Tune on Time	Ton	Rx enable Off- turn on		6		ms
Data Rate			300	-	8k	bps
Output duty		Vcc=5V; 1kbps data rate	40		60	%

Pin Dimension

Name	Dimension	Name	Dimension
A	43mm $\pm$ 0.5mm	D	2.54mm $\pm$ 0.3mm
B	12.4mm $\pm$ 0.5mm	E	5mm $\pm$ 0.5mm
C	25.4mm $\pm$ 0.3mm	F	6mm (Max)

Appication



Mark:

1. Antenna length about : 22.5cm for 315MHz
17.5cm for 434MHz
8.5cm for 868MHz
7.5cm for 914MHz
2. Receiver range about 100m with MO-TX4915-F315M (or MO-TX4915-F434M/INF-TX4915-868M/ MO-TX4915-F914M) Module.
(Tested in open space)