

Description:

The RXB2 is a miniature receiver module that receives On-off keyed (OOK) modulation signal and demodulated to digital signal for the next decoder stage. The Receiver offers a high level of integration and needs only a few external components. The device contains a low noise amplifier (LNA), a double balanced mixer, a fully integrated VCO, a PLL synthesiser, a crystal oscillator, a limiter with RSSI generator, a data filter, a data comparator (slicer) and a peak detector. Additionally there is a power down feature to save battery life. The result is excellent performance in a simple-to-use ,with a low external component count. The RXB2 is designed specifically for remote-control and wireless security receiver operating at 315Mhz in the USA under FCC Part 15 regulation.



HOTO 1

Features:

- Low supply current (I_s = 4.6mA typ.)
- Supply voltage range 5V ±10%
- Power down mode with very low supply current (50nA typ)
- Fully integrated VCO and PLL Synthesiser
- RF input sensitivity < -110dBm
- Frequency ranges 315/433/868.35 MHz
- Selectable reference frequency
- Limiter with RSSI generation, operating at 10.7MHz
- 2nd order low pass data filter with external capacitors
- Data Slicer with self-adjusting threshold
- Data Rates to 4kbps(swp), 10kbps(fixed)
- Over specified temperature range (- 40 to +80°C)

APPLICATION:

- Car Alarm System
- Tyre Pressure Monitoring System
- Low Bit Rate Communication System
- Remote Control System
- Home Automotive System

Product Identification

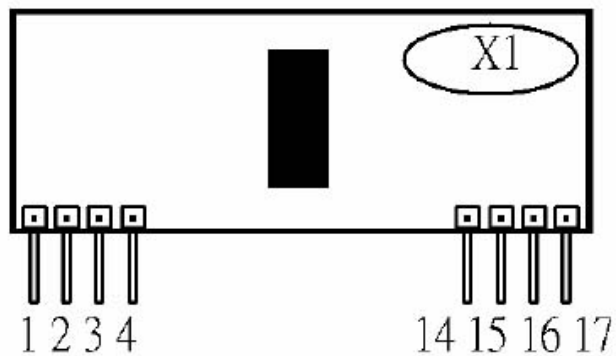
315MHZ	RXB2-315M
433.92MHZ	RXB2-434M

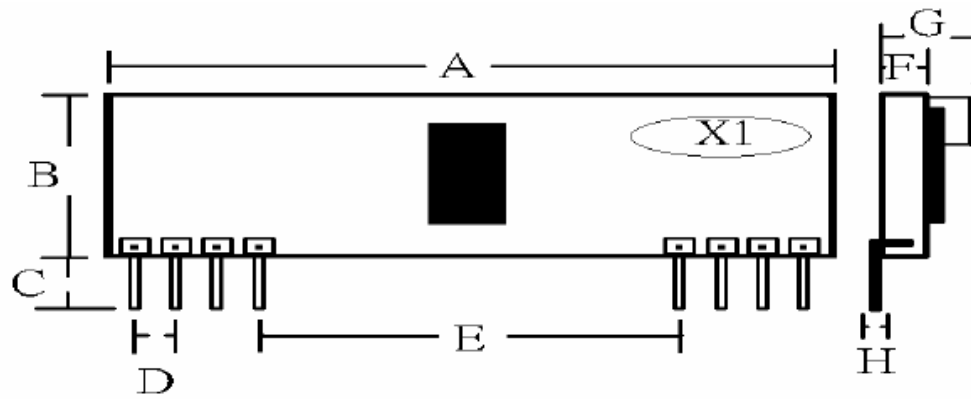
Electrical Characteristics :

Parameter	Specification			Unit	Condition
	Min	Typ	Max		
Frequency Range	300	315/433.92	450	MHz	
Receiver Sensitivity	-114	-109	-107	dBm	
Data Rate	0.058	4.8	10	KBaud	
Supply Voltage, VDD	4.5	5.0	5.5	V	DC
Current	4.0	4.6	5.3	mA	
Operating Temperature	-40		+85	°C	

Pin assignment

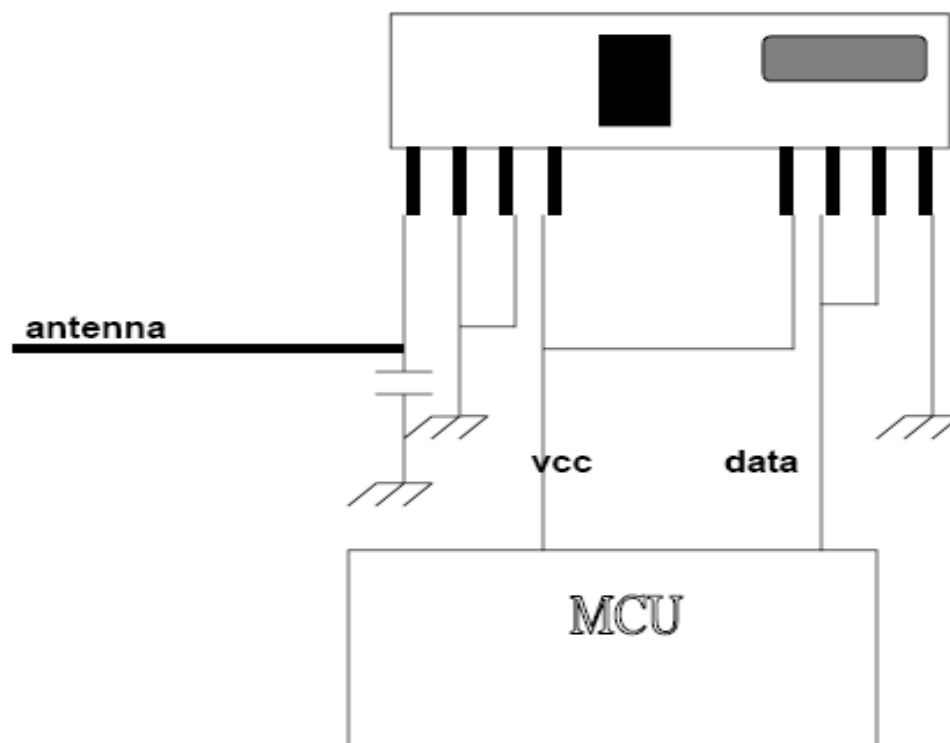
Pin	Connections
1	ANT
2	GND
3	GND
4	VCC
14	VCC
15	DATA
16	DATA SHUT
17	GND





Dimensions	Millimeters	Dimensions	Millimeters
A	43.0 +/- 0.25mm	F	1.2 (MAX)
B	11.5 +/- 0.25mm	G	5.2 +/- 0.15mm
C	5.9 +/- 0.1mm	H	0.095 (MAX)
D	2.54 (MAX)		
E	25.5 +/- 0.05mm		

Appication



Notes:

Antenna : Length = 22.6cm for 315MHz ; Length = 17.2 cm for 433.92MHz;
 Length = 8.7 cm for 868.35MHz; Length = 8.2 cm for 914.5MHz.