

ASK / FSK Radio Receiver Module

RC-RFSK2-XXX is an ASK / FSK Radio Receiver Module with PLL Synthesizer and crystal oscillator. The RC-RFSK2 can demodulate ASK or FSK signals according to ASK/FSK pin selector. Single Line Package with power down mode and RSSI Output.



RF Sensitivity = 102dBm

Applications :

- Wireless security systems
- Home and building automation
- Automatic Measure Reading
- Wireless Sensor Network

XXX: 433.92MHz / 868.35MHz

Technical Characteristics

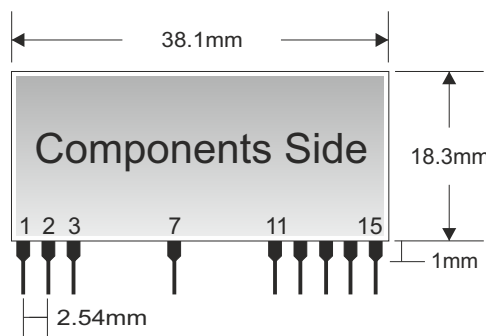
Characteristics		MIN	TYP	MAX	UNIT
V _{cc}	Supply Voltage	4.5		5.5	Vdc
I _s	Supply Current (Operation mode)		5.7	6.8	mA
I _s	Supply Current (Shut down mode)			100	nA
F	Frequency		433.92 / 868.35		MHz
D	Max Data Rate			4.8	Kbit/s
S	RF Sensitivity		102 / 100		dBm
B	3dB Bandwith		± 150		KHz
L	Level of emitted spectrum			70	dBm
T	Power Up Time (from Power to stable data)			8	ms
T1	Power Up Time1 (from PD to stable data)			5	ms
TE	Operating Temperature Range	-25		+80	°C

Pin Description

Pads	Name	Description
1	VCC	Vcc Power
2	GND	Ground
3	IN	Antenna
7	GND	Ground
11	GND	Ground
12	ASK /FSK	ASK (+5V) / FSK (0Volt)
13	RSSI	Received Signal Strenght Output
14	OUT	Data Out
15	PD	Power down

PD = LOW ----> RX OFF
 PD = HIGH ----> RX ON

Mechanical Dimensions

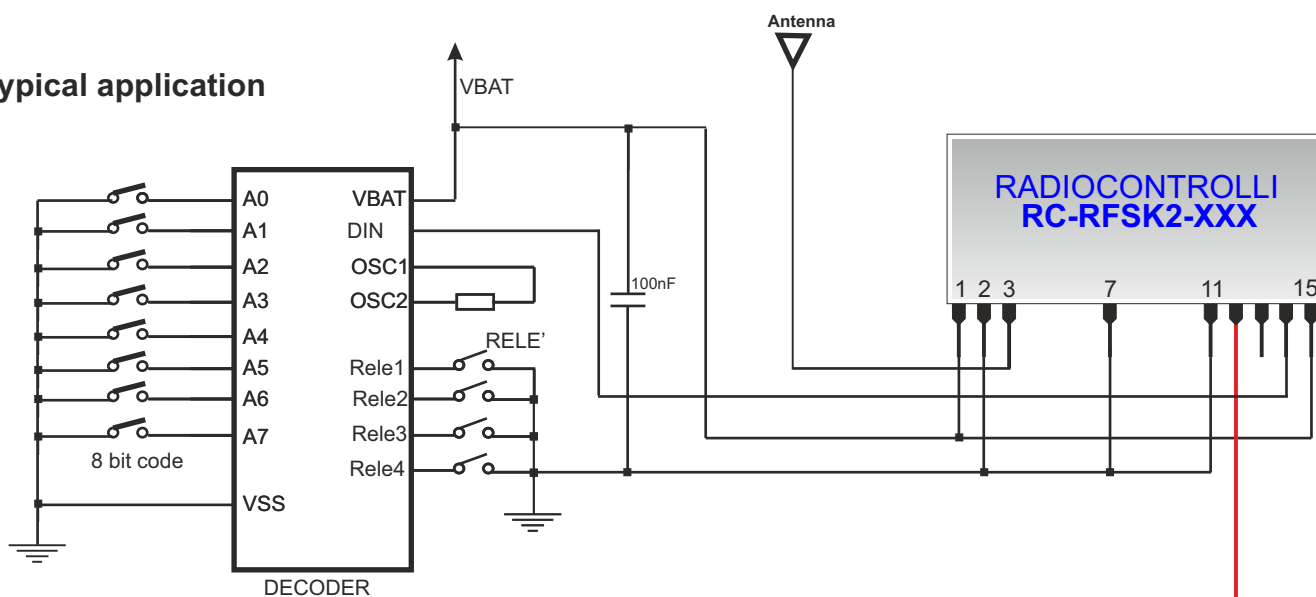


RSSI Output

The RSSI provides a DC Voltage proportional to the peak value of the receive data signal. This output can be used as an indicator for the received signal strength to use in wake-up circuits and other application.

RF IN (dBm)	RSSI (Volt)
- 120 dBm	1.20 Volt
- 110 dBm	1.32 Volt
- 100 dBm	1.50 Volt
- 90 dBm	1.78 Volt
- 80 dBm	2.06 Volt
- 70 dBm	2.35 Volt
- 60 dBm	2.62 Volt
- 50 dBm	2.72 Volt
- 40 dBm	2.75 Volt

Typical application



Pin selector ASK/FSK

ASK = +5Volt
FSK = 0Volt