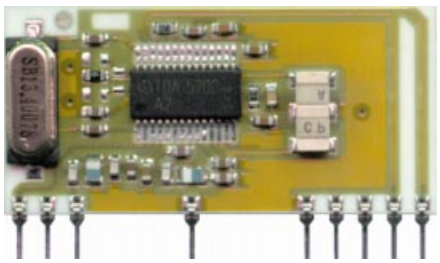
Superheterodyne Receiver

telecontrolli

RRFQ1-XXX

FSK Superhet Receiver with Crystal Oscillator



General description

The RRFQ1-XXX is a FSK superhet data receiver with PLL synthesizer and cristal oscillator.

Receiver Frequency: 315 , 433.9 , 868.35 MHz

IF Frequency: 10.7MHz

Typical sensitivity: -102 dBm

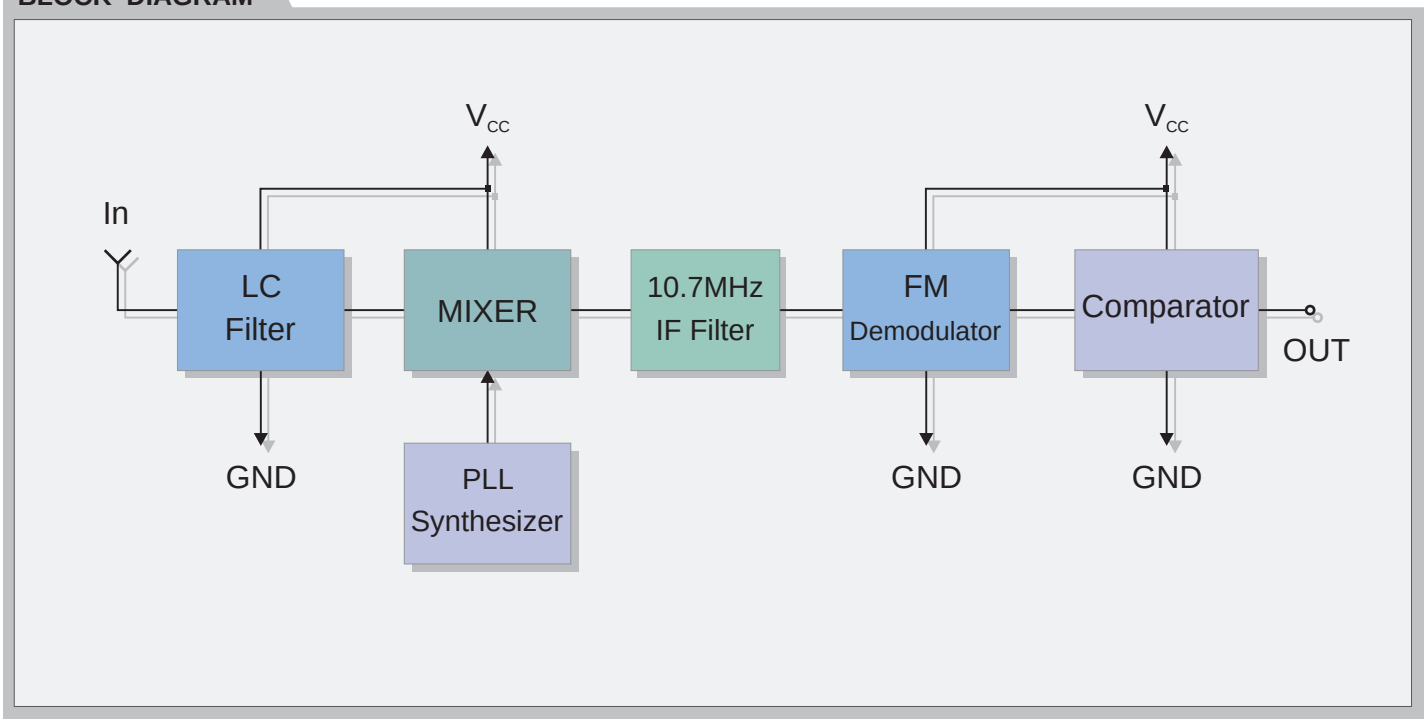
Supply current: 5.7 mA (typ)

XXX: custom-specified working frequency (315, 433.92, 868.35 MHz)

Applications

- Wireless security systems
- Car Alarm systems
- Remote gate controls
- Sensor reporting

BLOCK DIAGRAM



Electrical Characteristics

Ta = 25°C unless otherwise specified

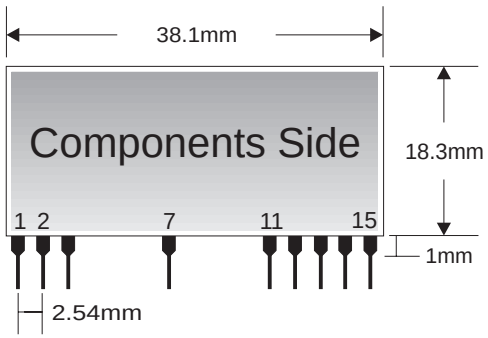
	CHARACTERISTICS	MIN	TYP	MAX	UNIT
V_{CC}	Supply Voltage	4.5	5	5.5	VDC
I_S	Supply Current		5.7	6.8	mA
$I_{STANDBY}$	Standby Supply Current (PD = Low)			100	nA
F_R	Receiver Frequency		433.92		MHz
	RF Sensitivity (100% AM)		-102		dBm
B_w	-3dB Bandwidth		±200		KHz
	Max Data Rate			4.8	Kbit/s
	Level of Emitted Spectrum			-70	dBm
	Turn on Time (PD → Stable Data)			5	msec
V_{ol}	Low-Level Output Voltage (I=10uA)			0.8	V
V_{oh}	High-Level Output Voltage (I=-200uA)	V_{CC}- 1			V
T_{OP}	Operating Temperature Range	-25		+80	°C

Pin Description

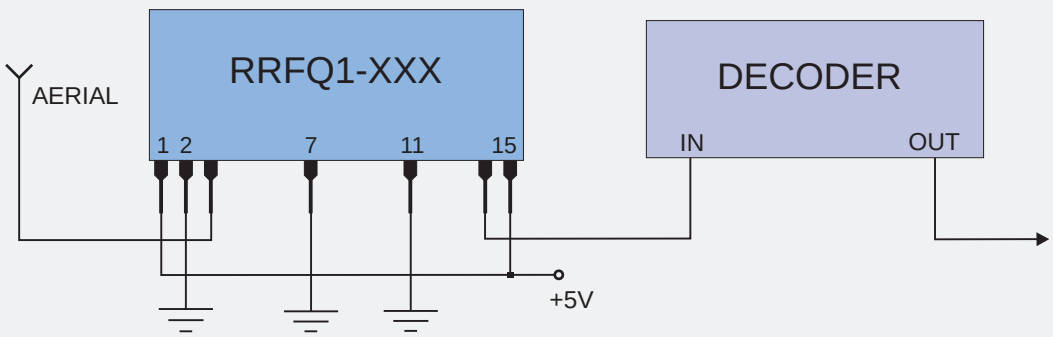
1	V_{CC}	12	NC
2	GND	13	NC
3	IN	14	OUT
7	GND	15	PD (Power Down)
11	GND		

PD = 0V ---> RX OFF ($I_{Standby}$ = 100nA max)
PD = 5V ---> RX ON

Mechanical Dimensions



TYPICAL APPLICATION



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