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RRQ4-XXX- V

AM Superhet Receiver with Crystal Oscillator
50 dB RF Image Rejection

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

V: available supply voltage 3.3V or 5V

General description

The RRQ4-XXX is an AM superhet data receiver with PLL synthesizer and crystal oscillator.

A squelch function is implemented to reduce output "noise" when no transmitter is active.

Receiver Frequency: 315 / 433.92 MHz

IF Frequency: 10.7MHz

Typical sensitivity: -107 dBm

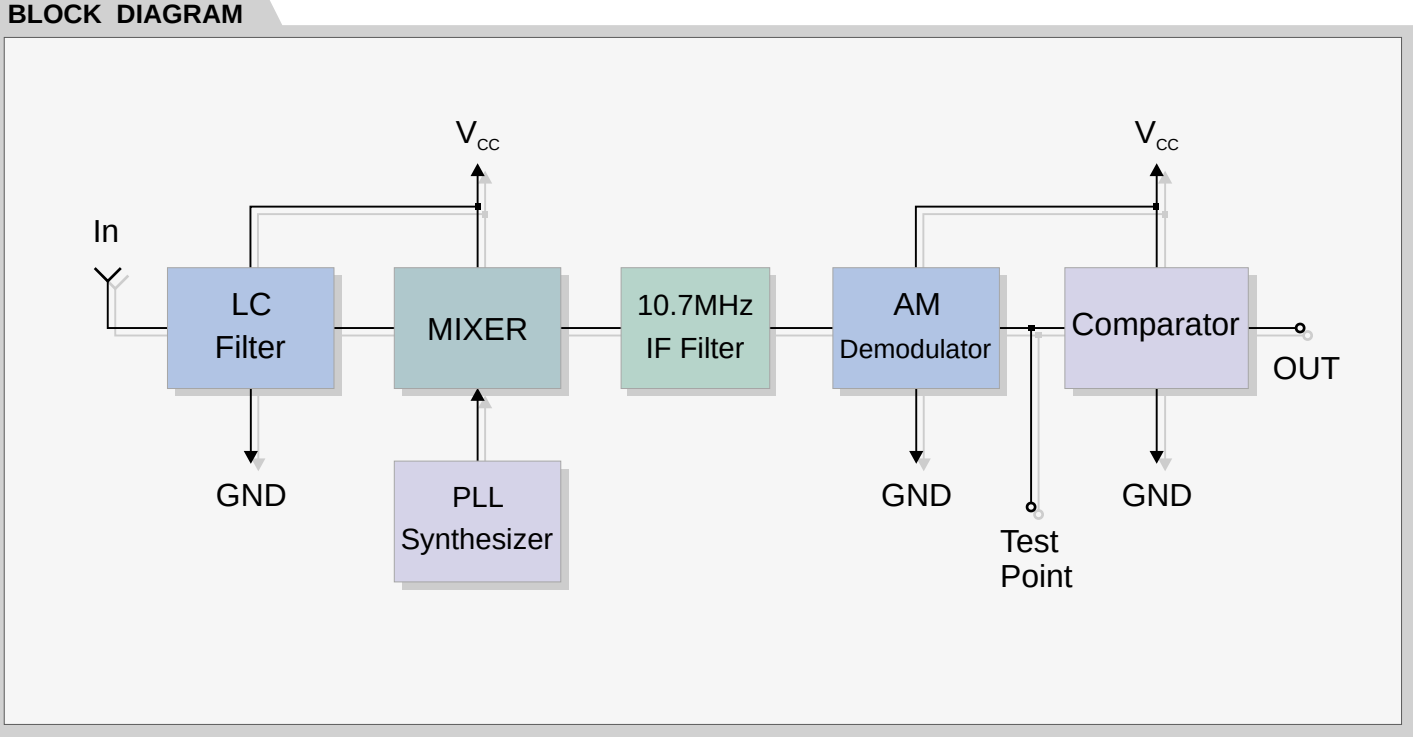
RF Image Rejection: 50 dB

Supply current: 6 mA (typ)

Applications

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

BLOCK DIAGRAM



Electrical Characteristics

Ta = 25°C unless otherwise specified

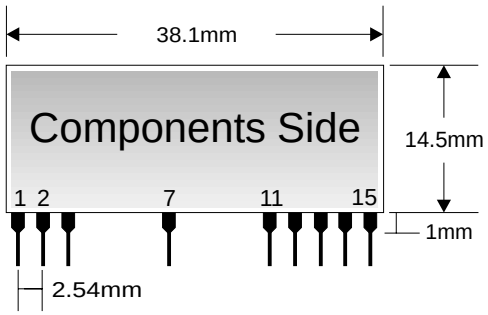
	CHARACTERISTICS	MIN	TYP	MAX	UNIT
V_{CC}	Supply Voltage (5V model)	4.5	5	5.5	VDC
	Supply Voltage (3.3V model)	3.0	3.3	3.6	VDC
I_S	Supply Current		6	7	mA
F_R	Receiver Frequency		315/433.9		MHz
	RF Sensitivity (100% AM)		-107		dBm
B_w	-3dB Bandwidth		±150		KHz
	Max Data Rate			4.8	Kbit/s
	Level of Emitted Spectrum			-70	dBm
V_{ol}	Low-Level Output Voltage (RL = 5K)			0.4	V
V_{oh}	High-Level Output Voltage (RL = 5K)	V_{CC}- 0.4			V
T_{OP}	Operating Temperature Range	-25		+80	°C

Pin Description

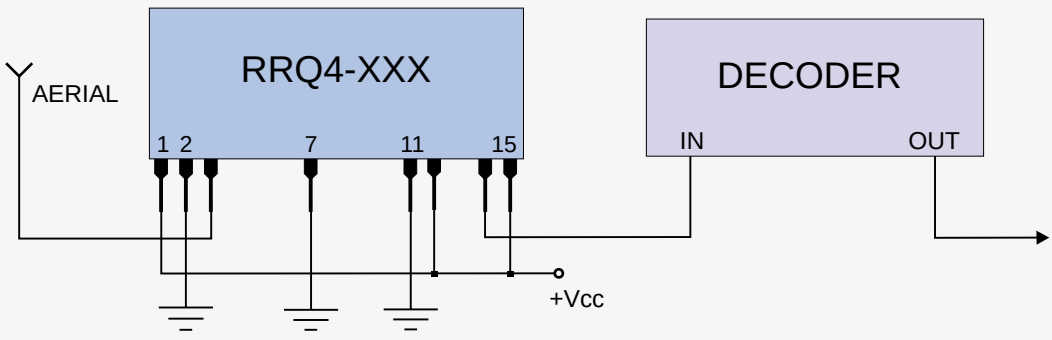
1	V_{CC}	12	V_{CC}
2	GND	13	Test Point
3	IN	14	OUT
7	GND	15	PD (Power Down)
11	GND		

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

Mechanical Dimensions



TYPICAL APPLICATION



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