

## RRQ9-XXX

AM Superhet Receiver with Crystal Oscillator ,  
SAW Filter input and Squelch Circuit

### General description

The RRQ9-XXX is an AM superhet data receiver with PLL synthesizer and crystal oscillator.

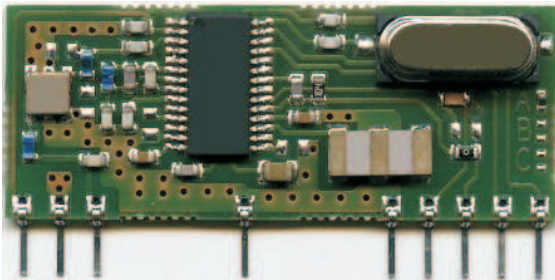
A squelch function is implemented to reduce output "noise" when no transmitter is active.

Receiver Frequency: 315 / 433.92 / 868.35 MHz

IF Frequency: 10.7MHz

Typical sensitivity: -107 dBm

Supply current: 5 mA (typ)

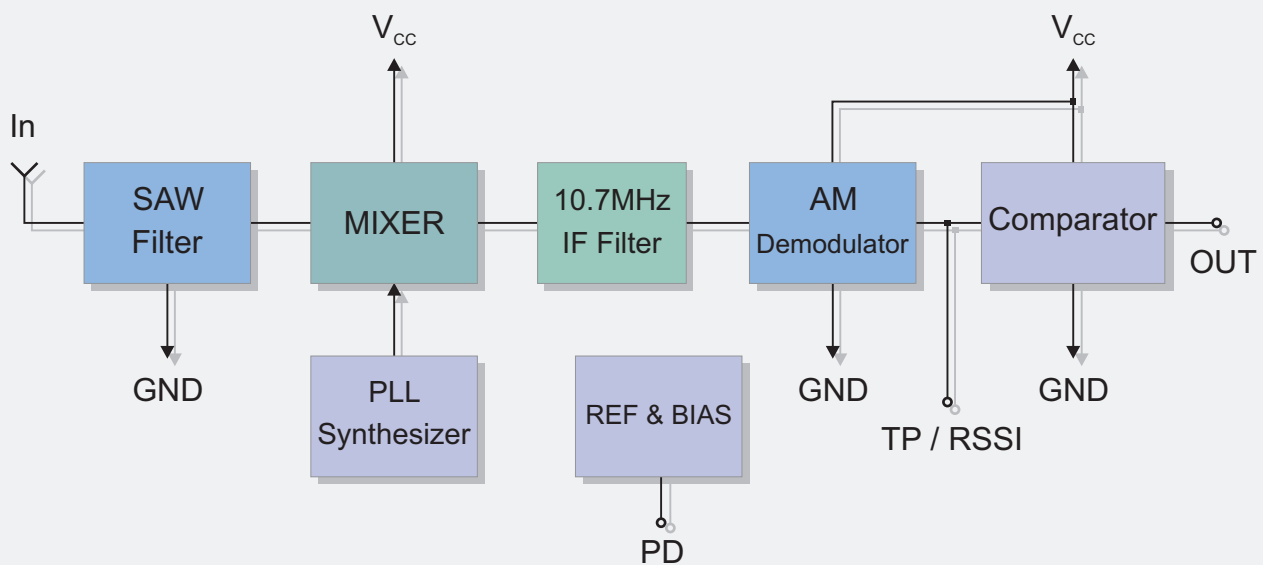


**XXX:** custom-specified working frequency  
( 433.42, 434.42, 868.30, 868.95 Mhz)

### 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 <sub>cc</sub>	Supply Voltage	4.5	5	5.5	VDC
I <sub>s</sub>	Supply Current		5	6	mA
F <sub>R</sub>	Receiver Frequency		315/433.92/868.35		MHz
	RF Sensitivity (100% AM)		-107 / -107 / -103		dBm
B <sub>w</sub>	-3dB IF Bandwidth		280		KHz
B <sub>w</sub>	-3dB RF Bandwidth		720		KHz
	Max Data Rate			4.8	Kbit/s
	Level of Emitted Spectrum			-70	dBm
V <sub>ol</sub>	Low-Level Output Voltage (I=10uA)			0.8	V
V <sub>oh</sub>	High-Level Output Voltage (I=-200uA)	V <sub>cc</sub> - 1			V
	Time RX OFF to RX ON ( TP / RSSI )		2	20	msec
	Time RX OFF to RX ON ( OUT ) @ RF > - 65dBm		100	200	msec
T <sub>OP</sub>	Operating Temperature Range	-25		+80	°C

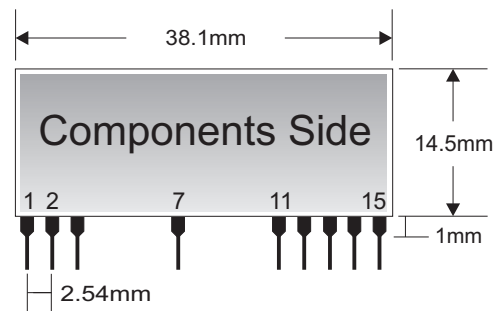
## Pin Description

1	V <sub>cc</sub>	12	V <sub>cc</sub>
2	GND	13	TP / RSSI
3	IN	14	OUT
7	GND	15	PD (Power Down)
11	GND		

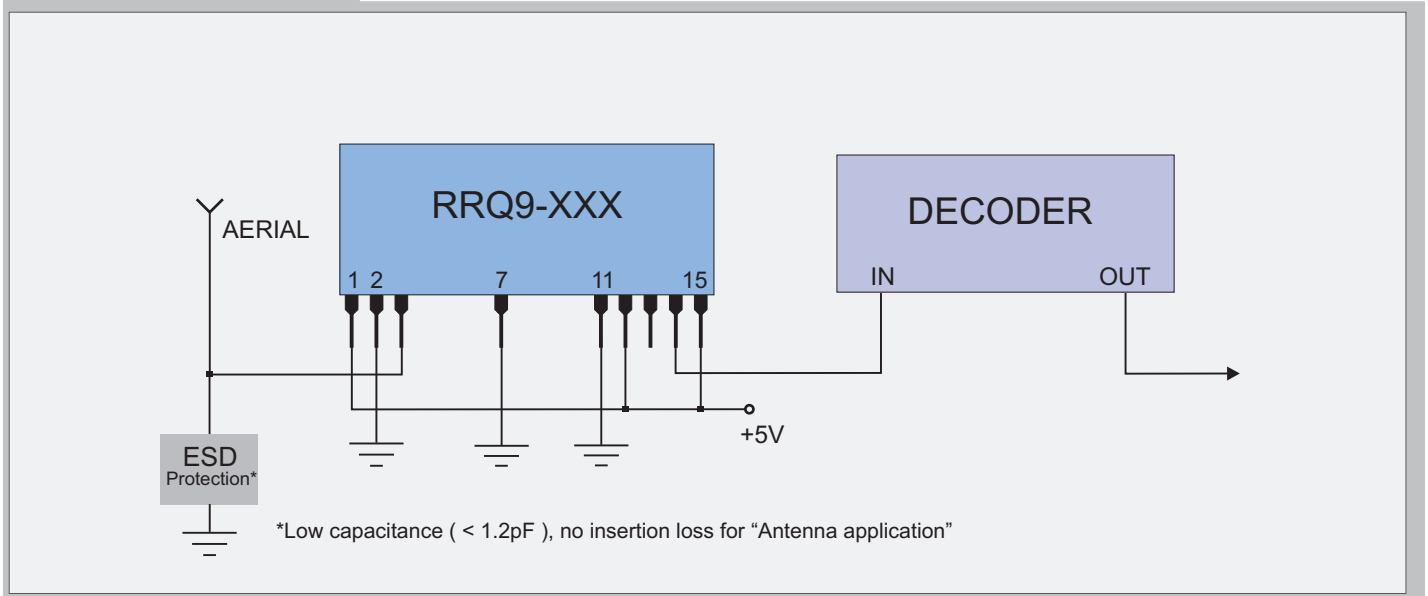
PD = 0V ---> RX OFF (I<sub>Standby</sub> = 100nA max)

PD = 5V ---> RX ON

## Mechanical Dimensions



## TYPICAL APPLICATION



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