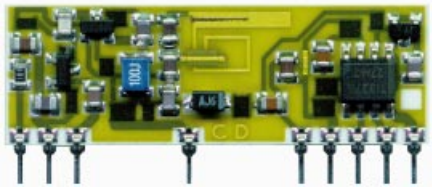
telecontrolli

RR8-XXX

3V Supply Voltage - Very Low Consumption Super Regenerative Radio Receiver



General description

The RR8-XXX is a super regenerative data receiver.

Sensitivity typically exceedes -90dBm when matched to 50 ohm.

Typical current consumption is 0.5 mA.

Low Turn-on Time (150 msec).

It shows high frequency stability also in presence of mechanical vibrations, manual handling and in a wide range of temperature.

The frequency accuracy is very high thanks to laser trimming process. PATENTED.

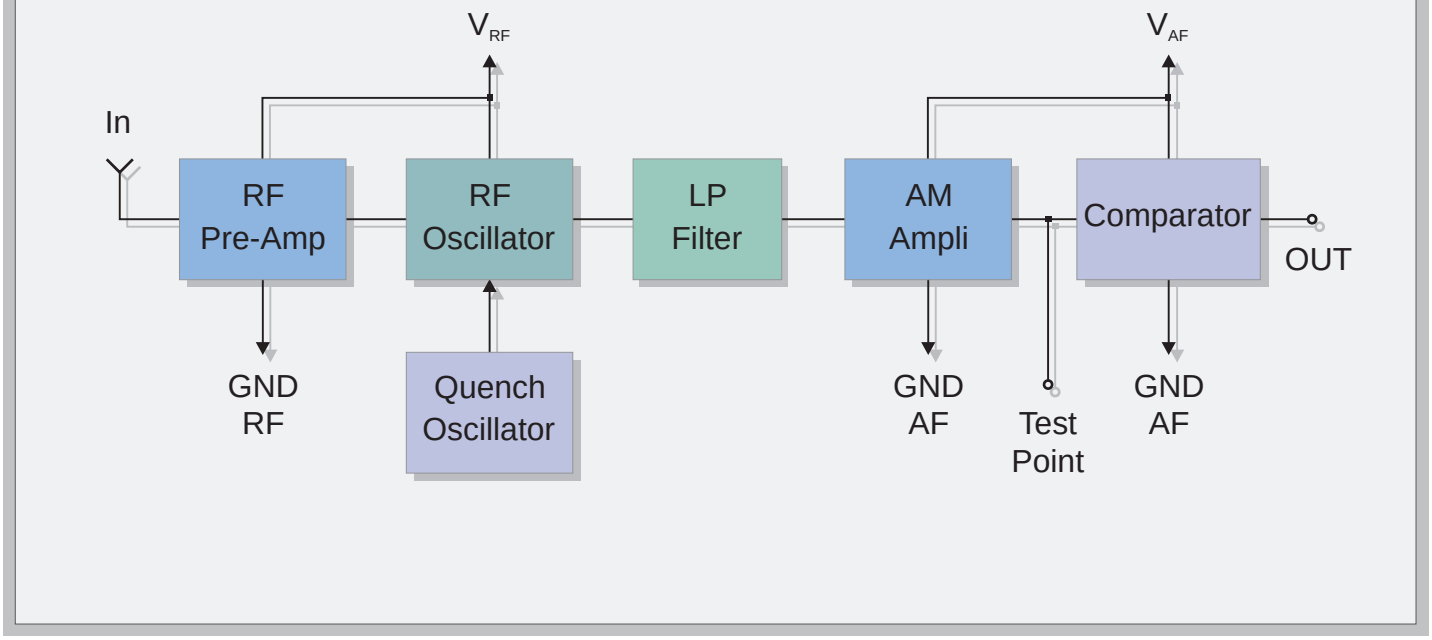
XXX: custom-specified working frequency (200 ÷ 450 MHz)

Standard European and U.S. frequencies (315MHz, 418MHz, 433.92MHz) are readly available from stock.

Applications

- Battery powered portable devices
- Home security systems
- Car Alarm systems
- Remote gate controls
- Sensor reporting

BLOCK DIAGRAM



Electrical Characteristics

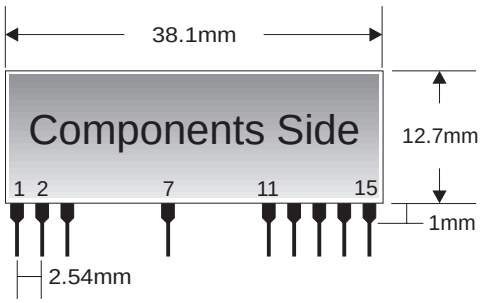
Ta = 25°C unless otherwise specified

	CHARACTERISTICS	MIN	TYP	MAX	UNIT
V_{RF},V_{AF}	Supply Voltage	2.7	3	3.3	VDC
I_S	Supply Current		0.5		mA
F_W	Working Frequency	280		450	MHz
	Tuning Tolerance		±0.2	±0.5	MHz
B_W	-3dB Bandwidth		±2	±3	MHz
	Max Data Rate			2	KHz
	RF Sensitivity (100% AM)		-90		dBm
	Level of Emitted Spectrum		-65	-60	dBm
T_{ON}	Turn-on Time		150		msec
T_{OP}	Operating Temperature Range	-25		+80	°C

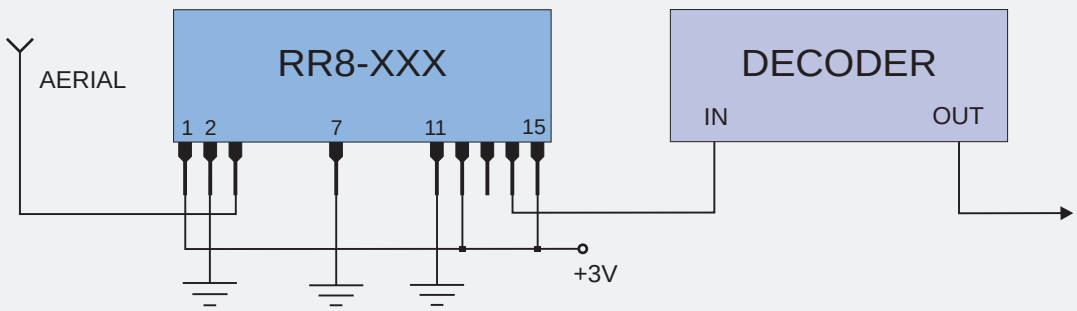
Pin Description

1	RF +V_{CC}	9	NC
2	RF GND	10	NC
3	IN	11	AF GND
4	NC	12	AF +V_{CC}
5	NC	13	Test Point
6	NC	14	OUT
7	RF GND	15	AF +V_{CC}
8	NC		

Mechanical Dimensions



TYPICAL APPLICATION



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