

RR10-XXX

Narrow Bandwidth Super Regenerative Radio Receiver - Laser Trimmed Inductor

General description

The RR10-XXX is a super regenerative data receiver.

Sensitivity typically exceeds -100dBm ($2.2\mu\text{Vrms}$) when matched to 50ohm .

Narrow Bandwidth:

-3dB	+/-1.5MHz
-30dB	+/- 5MHz
-50dB	+/- 7MHz

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

I-ETS 300-220 Compliance

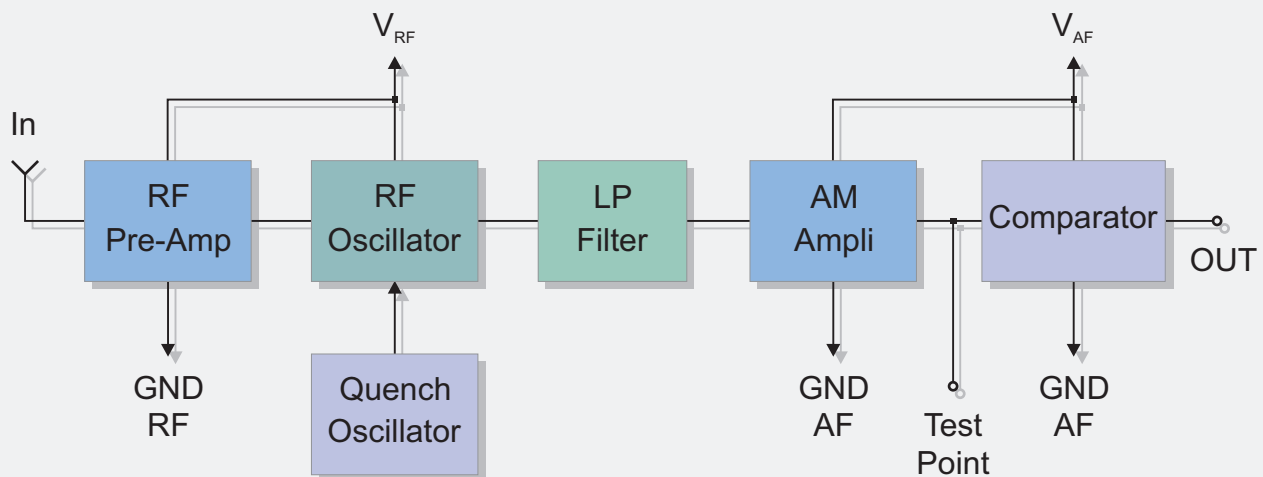
XXX: custom-specified working frequency
($200 \div 450\text{ MHz}$)

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

Applications

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

BLOCK DIAGRAM



Electrical Characteristics

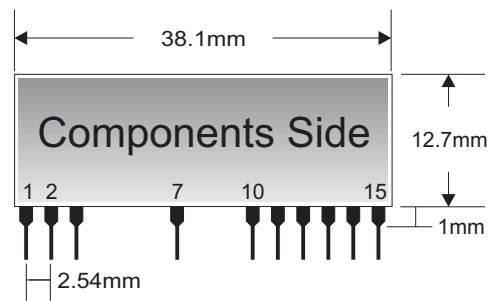
Ta = 25°C unless otherwise specified

CHARACTERISTICS		MIN	TYP	MAX	UNIT
V _{RF}	RF Supply Voltage	4.5	5	5.5	VDC
V _{AF}	AF Supply Voltage	4.5	5	5.5	VDC
I _S	Supply Current		1.2	1.5	mA
F _W	Working Frequency	200		450	MHz
	Tuning Tolerance		+/-0.2	+/-0.5	MHz
B _W	-3dB Bandwidth		+/-1.5	+/-2	MHz
	Max Data Rate			4.8	Kbit/s
	RF Sensitivity (100% AM)	-100	-102		dBm
	Level of Emitted Spectrum		-65	-60	dBm
V _{ol}	Low-Level Output Voltage			0.6	V
V _{oh}	High-Level Output Voltage	3.6			V
T _{OP}	Operating Temperature Range	-25		+80	°C

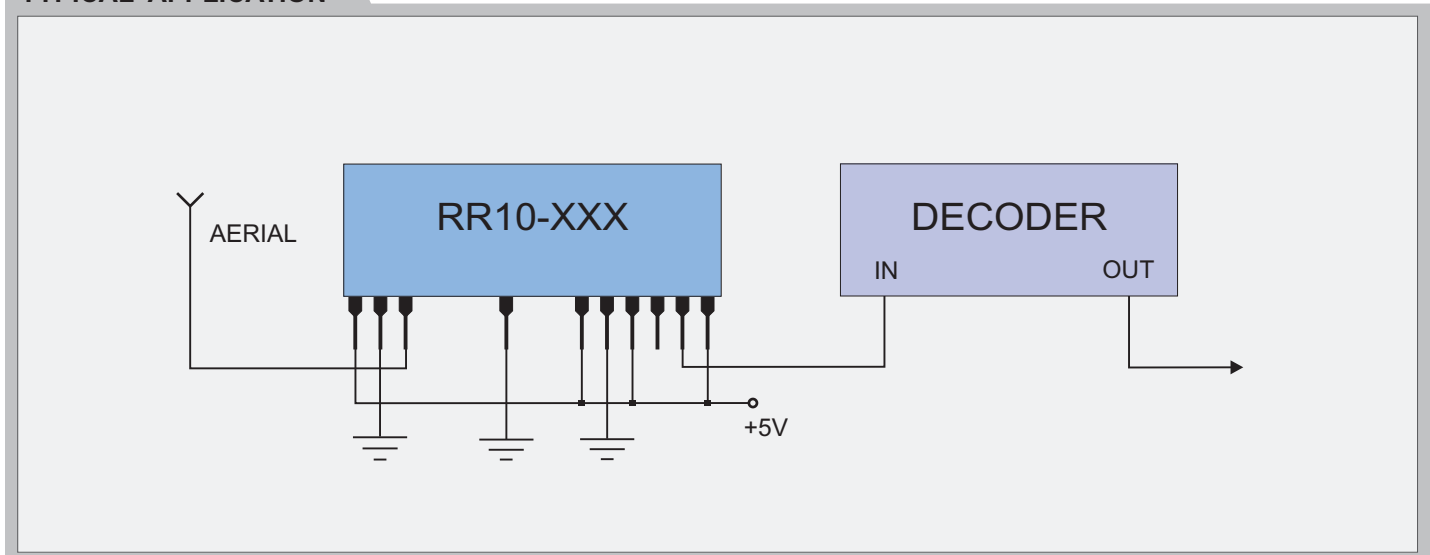
Pin Description

1	RF +V _{CC}	9	NC
2	RF GND	10	AF +V _{CC}
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



Telecontrolli Srl has an on going policy to improve the performance and reliability of their products; we therefore reserve the right to make changes without notice. The information contained in our data sheets is believed to be accurate, however we do not assume any liability arising from the application or use of any product or circuit.



Web Site: www.telecontrolli.com

HEAD OFFICE & PLANT

Via Nazionale delle Puglie, 177
80026 CASORIA (NA), Italy
Tel: +39 081 7599033
Fax: +39 081 7596494

SALES OFFICE

sales @ telecontrolli.com