TeleControlli
Leader in Design & Manufacturing
of hybrid circuits

RR6-XXX

Very Low Consumption Super Regenerative
Radio Receiver - Fast Turn-On Time

General description

The RR6-XXX is a super regenerative data receiver.

Sensitivity typically exceedes -95dBm 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.
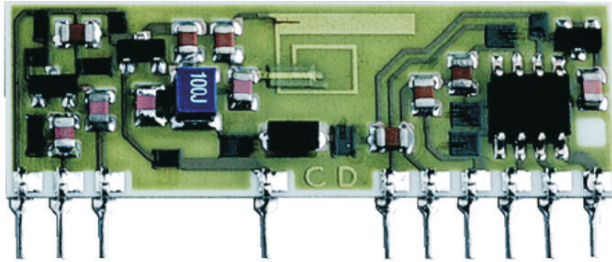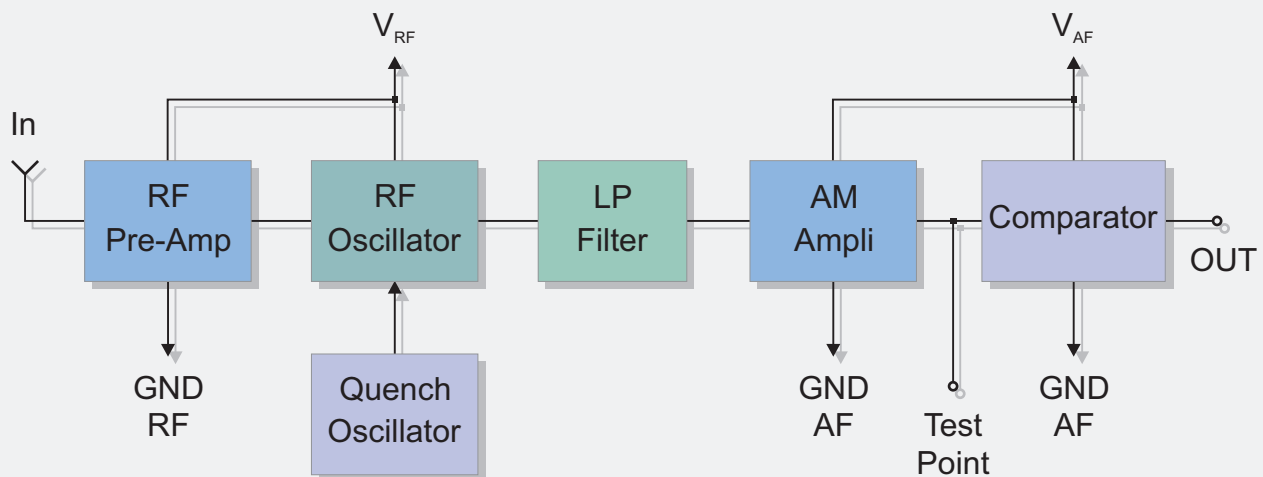
XXX: custom-specified working frequency
(200 ÷ 450 MHz)

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

Applications

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

BLOCK DIAGRAM

Electrical Characteristics

	CHARACTERISTICS	MIN	TYP	MAX	UNIT
V_{RF}, V_{AF}	Supply Voltage	4.5	5	5.5	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			4.8	Kbit/s
	RF Sensitivity (100% AM)		-95		dBm
	Level of Emitted Spectrum		-65	-60	dBm
T_{ON}	Turn-on Time		100	150	msec
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
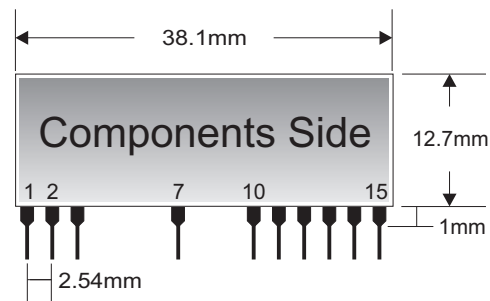
TYPICAL APPLICATION
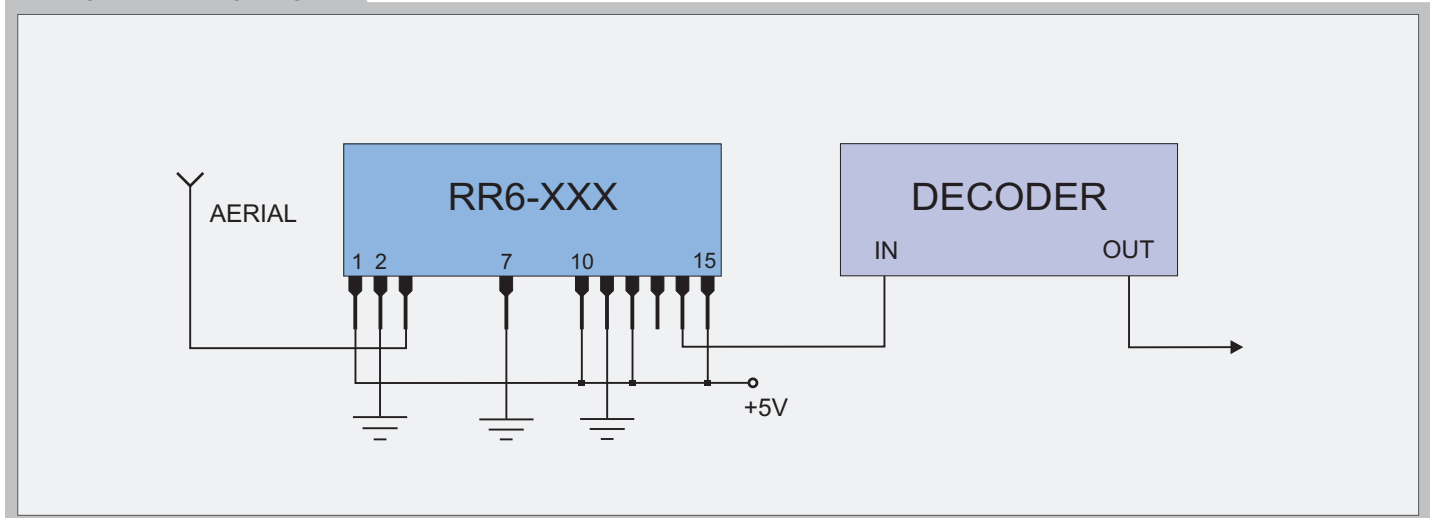
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