# 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.

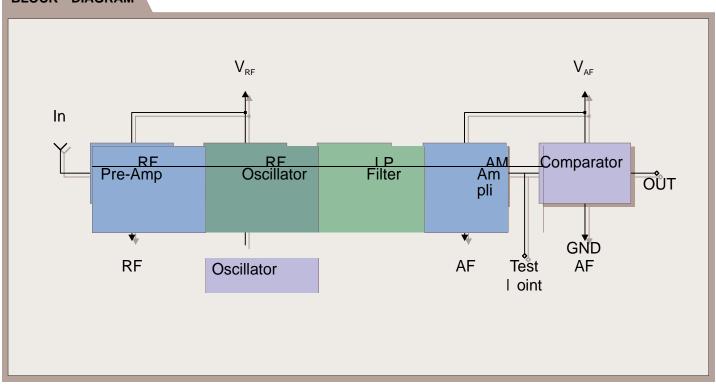
**XXX:** custom-specified working frequency  $(200 \div 450 \text{ MHz})$ 

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**

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$Ta = 25^{\circ}C$ unless	otherwise	specified

	CHARACTERISTICS	MIN	TYP	MAX	UNIT
$V_{RF}$ , $V_{AF}$	Supply Voltage	4.5	5	5.5	VDC
Is	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)		-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**

# **Mechanical Dimensions**

1	RF +V <sub>cc</sub>	9	NC
2	RF GND	10	AF +V <sub>cc</sub>
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		

