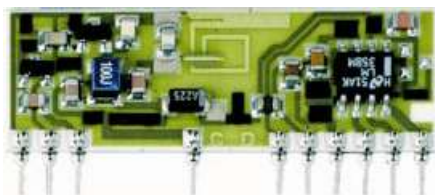


## RR3-XXX

### Super Regenerative Radio Receiver With Laser Trimmed Inductor



#### General description

The RR3-XXX is a super regenerative data receiver. Sensitivity typically exceeds  $-100\text{dBm}$  ( $2.2\mu\text{Vrms}$ ) when matched to  $50\ \Omega$ .

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.

**I-ETS 300-220 Compliance (RR3-418, RR3-433.92)**  
**FCC 15/C Compliance (RR3-315)**

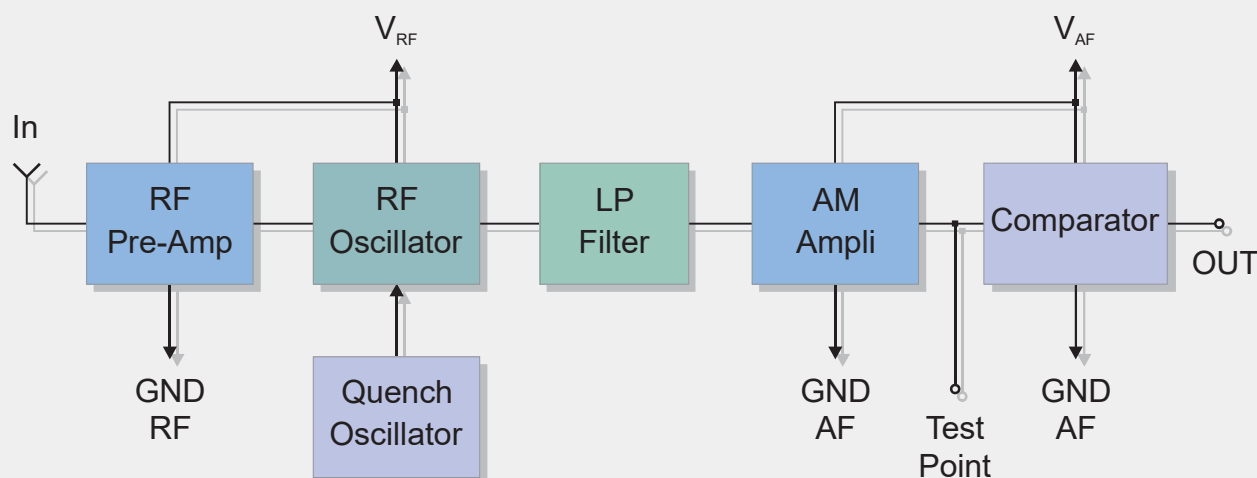
**XXX:** custom-specified working frequency  
 ( $200 \div 450\ \text{MHz}$ )

Standard European and U.S. frequencies ( $315\text{MHz}$ ,  $418\text{MHz}$ ,  $433.92\text{MHz}$ ) are readily available from stock.

#### Applications

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

#### BLOCK DIAGRAM



## Electrical Characteristics

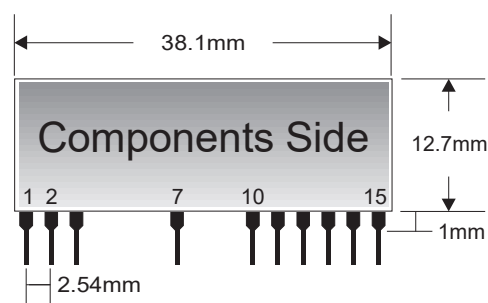
Ta = 25°C unless otherwise specified

CHARACTERISTICS		MIN	TYP	MAX	UNIT
V <sub>RF</sub>	RF Supply Voltage	4.5	5	5.5	VDC
V <sub>AF</sub>	AF Supply Voltage	4.5	5	5.5	VDC
I <sub>s</sub>	Supply Current		2.5	3	mA
F <sub>w</sub>	Working Frequency	200		450	MHz
	Tuning Tolerance		±0.2	±0.5	MHz
B <sub>w</sub>	-3dB Bandwidth		±2	±3	MHz
	Max Data Rate			2	KHz
	RF Sensitivity (100% AM)	-100	-105		dBm
	Level of Emitted Spectrum		-65	-60	dBm
V <sub>ol</sub>	Low-Level Output Voltage			0.6	V
V <sub>oh</sub>	High-Level Output Voltage	3.6			V
T <sub>OP</sub>	Operating Temperature Range	-25		+80	°C

## Pin Description

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 <sub>CC</sub>
5	NC	13	Test Point
6	NC	14	OUT
7	RF GND	15	AF +V <sub>CC</sub>
8	NC		

## Mechanical Dimensions



## TYPICAL APPLICATION

