

RR30-XXX

Super Regenerative Radio Receiver With Laser Trimmed Inductor



General description

Very small super regenerative data receiver: dimensions are 50% smaller than RR3 model.

Designed for application with space constraints.

Sensitivity typically exceeds -100dBm ($2.2\mu\text{Vrms}$) 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.

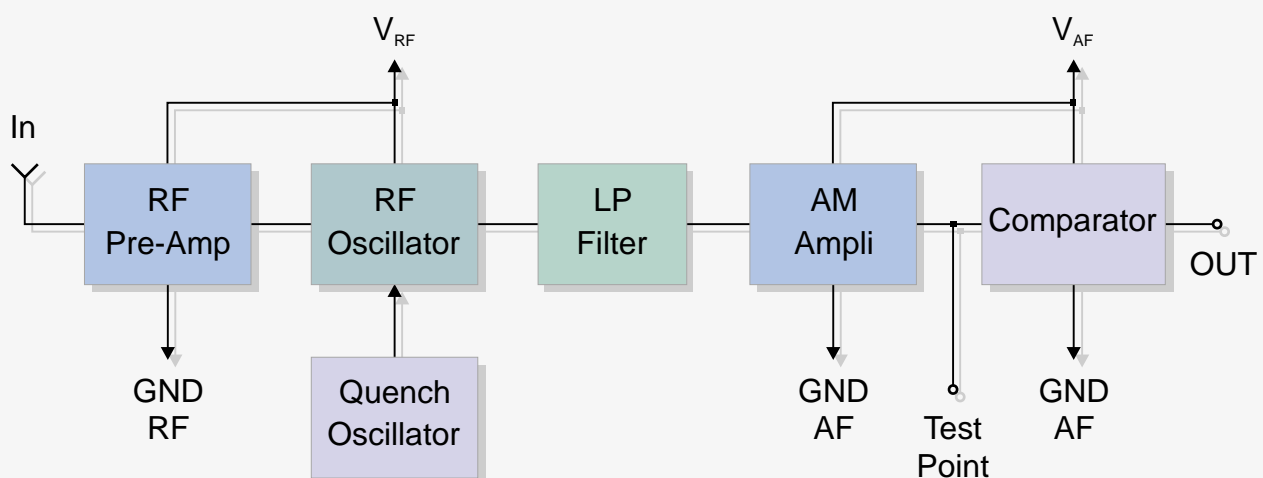
The frequency accuracy is very high thanks to laser trimming process. **PATENTED.**

XXX: custom-specified working frequency
($300 \div 450\ \text{MHz}$)

Applications

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

BLOCK DIAGRAM



Electrical Characteristics

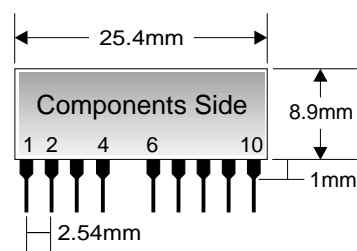
Ta = 25°C unless otherwise specified

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		2.5	3	mA
F _W	Working Frequency	300		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)	-100	-105		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}
- 2 RF GND
- 3 IN
- 4 RF GND
- 6 AF GND
- 7 AF +V_{CC}
- 8 Test Point
- 9 OUT
- 10 AF +V_{CC}

Mechanical Dimensions



TYPICAL APPLICATION

