

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 constrains.

Sensitivity typically exceedes -100dBm (2.2uVrms) when matched to 50 ohm.

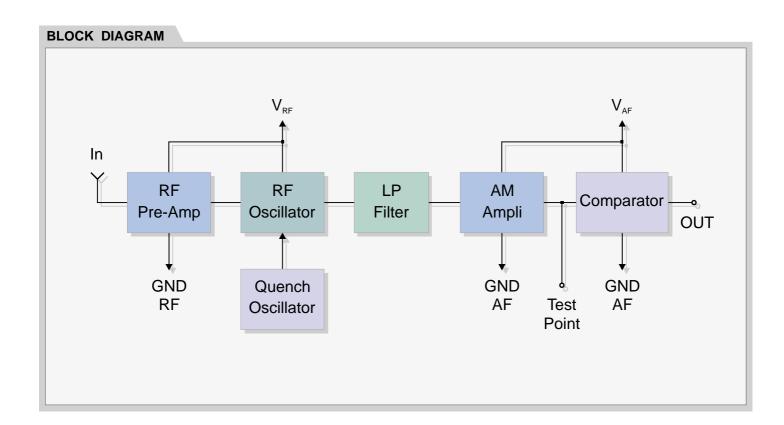
It shows high frequency stability also in presence of mechanical vibrations, manual handling and in a wide range of temperature.

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

XXX: custom-specified working frequency (300 ÷ 450 MHz)

Applications

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



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
Is	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

