RR11-XXX

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



The RR11-XXX is a super regenerative data receiver.

Sensitivity typically exceedes -95dBm when matched to 50 ohm.

Typical current consumption is 300 uA

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.



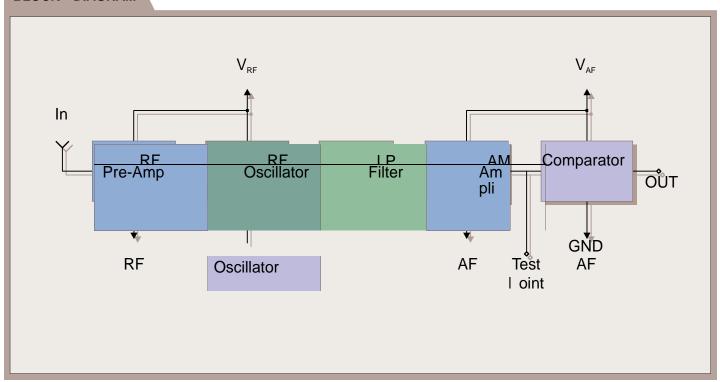
XXX: custom-specified working frequency $(200 \div 450 \text{ MHz})$

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

T 0500 I		
$Ta = 25^{\circ}C$ unless	otherwise	specified

	CHARACTERISTICS	MIN	TYP	MAX	UNIT
V_{RF} , V_{AF}	Supply Voltage	4.5	5	5.5	VDC
Is	Supply Current		300		uA
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 _{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		

