RR3-XXX

Super Regenerative Radio Receiver With Laser Trimmed Inductor



General description

The RR3-XXX is a super regenerative data receiver.

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.

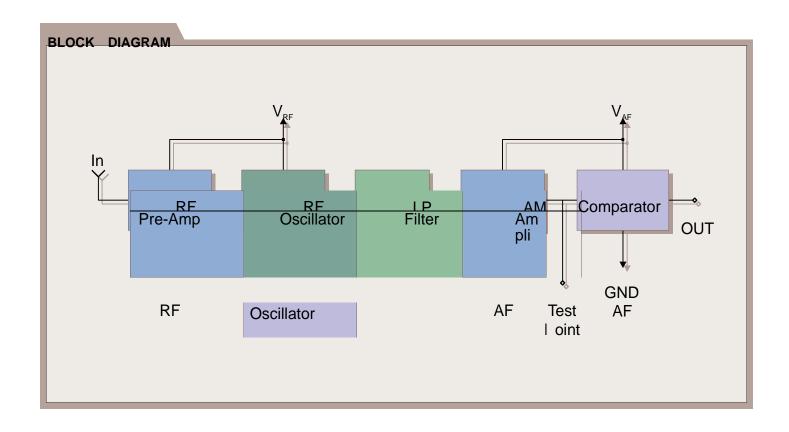
I-ETS 300-220 Compliance (RR3-418, RR3-433.92) FCC 15/C Compliance (RR3-315)

XXX: custom-specified working frequency (200 ÷ 450 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



Electrical Characteristics

Ta = 25°C unless otherwise specific	ed
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	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	200		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)	-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	$RF + V_{cc}$	9	NC
2	RF GND	10	$AF + V_{cc}$
3	IN	11	AF GND

GND NC 12 AF +V_{cc} 4 5 NC Test Point 13 6 14 OUT

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AF +V_{cc}

NC 7 RF GND

NC 8

Mechanical Dimensions

