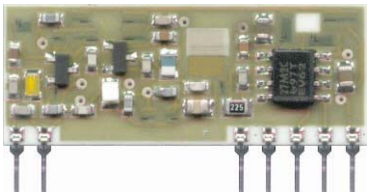
Radio Receiver

RR13-868.35

868.350 MHz Super Regenerative Radio Receiver With Laser Trimmed Capacitor



General description

The RR13 is a super regenerative UHF radio receiver with minimum power consumption and good sensitiity.

The RR13 is ideally designed to a variety of remote alarm, control or monitoring battery opearted applications.

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

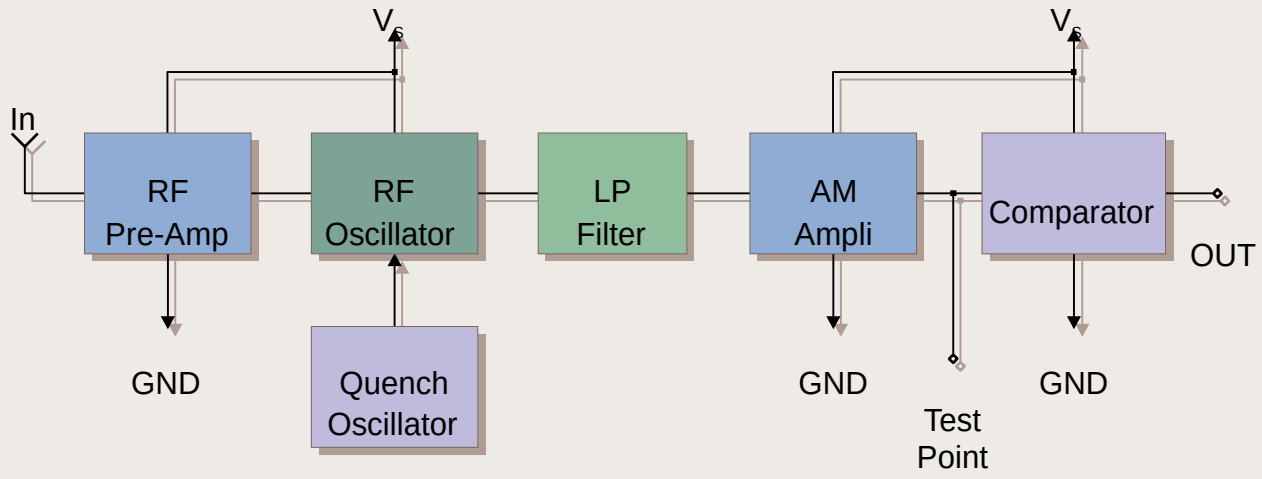
Typical Sensitivity: -90dBm

Current consumption: 500uA

Applications

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

BLOCK DIAGRAM



Electrical Characteristics

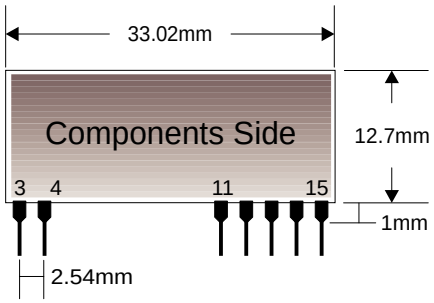
Ta = 25°C unless otherwise specified

	CHARACTERISTICS	MIN	TYP	MAX	UNIT
V_S	Supply Voltage	4.5	5	5.5	VDC
I_S	Supply Current		500		uA
F_W	Receiver Frequency		868.350		MHz
	Tuning Tolerance		±0.2	±0.5	MHz
B_W	-3dB Bandwidth		±2		MHz
	Data Rate	50		4800	bit/sec
	RF Sensitivity (100% AM)		-90		dBm
	Start-Up Time		100		msec
	Conducted Spurious Emissions			-60	dBm
V_{ol}	Low-Level Output Voltage				V
V_{oh}	High-Level Output Voltage	3.5			V
T_{OP}	Operating Temperature Range	-25			°C

Pin Description

3	IN
4	GND
11	GND
12	NC
13	Test Point
14	Output
15	$+V_{CC}$

Mechanical Dimensions



TYPICAL APPLICATION