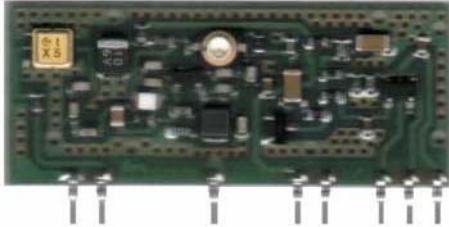


RR18-XXX

Very Low Consumption Super Regenerative Receiver
with Front End SAW Filter - Optional Metal
Shield

General description

The RR18-XXX is a very low consumption super regenerative data receiver with front end SAW filter.

EMI immunity improved by a metal shield
(**RR18-XXX-S** model)

Typical current consumption: 70 uA

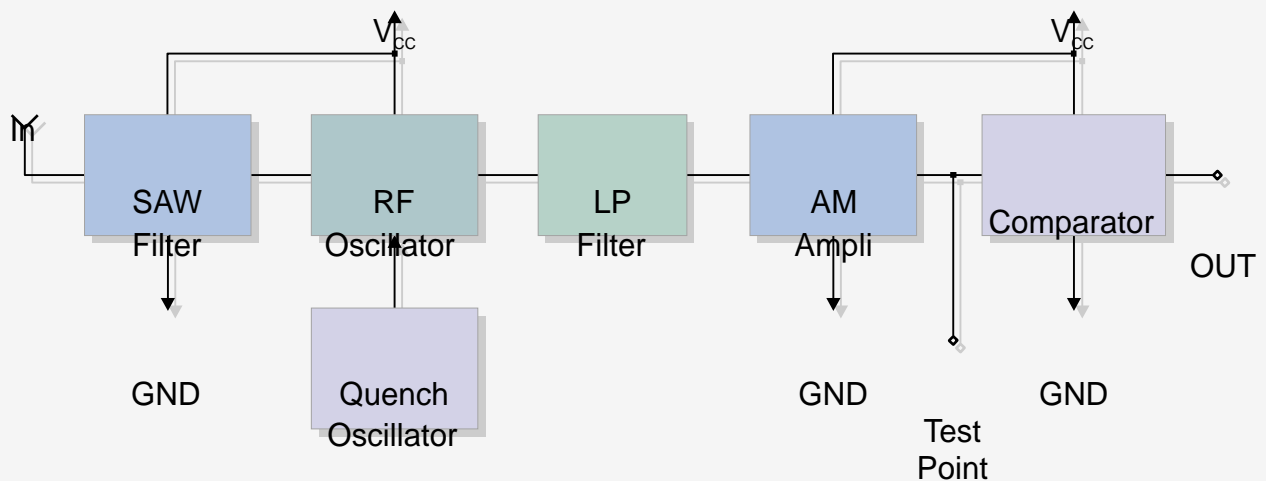
Sensitivity typically exceeds -96dBm when matched to 50 ohm.

Narrow Bandwidth: +/- 300 KHz

XXX: custom-specified working frequency

Applications

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

BLOCK DIAGRAM

Electrical Characteristics

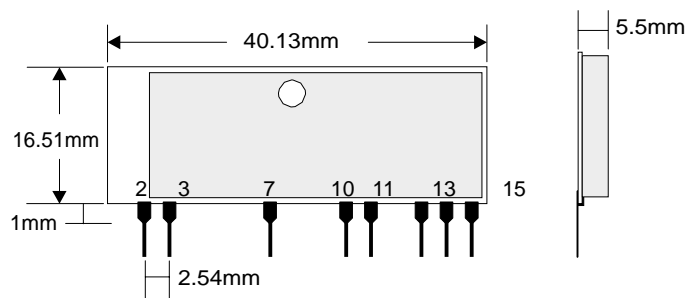
Ta = 25°C unless otherwise specified

CHARACTERISTICS		MIN	TYP	MAX	UNIT
V _{CC}	Supply Voltage	2.75	3	3.25	VDC
I _S	Supply Current		70		uA
F _W	Working Frequency		433.92		MHz
B _W	-3dB Bandwidth		+/-300		KHz
	RF Sensitivity (100% AM)	-94	-96		dBm
	Data Rate		4.8		Kbit/s
	Level of Emitted Spectrum		-65	-60	dBm
V _{ol}	Low-Level Output Voltage			0.4	V
V _{oh}	High-Level Output Voltage	V _{CC} - 0.4			V
T _{OP}	Operating Temperature Range	-25		+80	°C

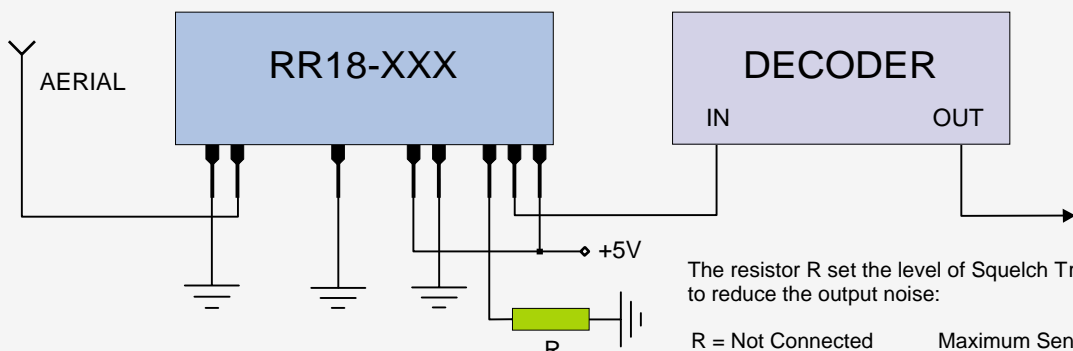
Pin Description

2	GND	11	GND
3	IN	13	Test Point
7	GND	14	OUT
10	+V _{CC}	15	+V _{CC}

Mechanical Dimensions



TYPICAL APPLICATION



The resistor R set the level of Squelch Treshold to reduce the output noise:

R = Not Connected	Maximum Sensitivity
R = 10 Mohm	Sensitivity Loss -
1dB R = 5.6Mohm	Sensitivity Loss -
	3dB