

RR16-XXX

Super Regenerative Radio Receiver with Front End SAW Filter - Optional Metal Shield



General description

The RR16-XXX is a super regenerative data receiver with a front end SAW filter to reduce RF Bandwidth.

EMI immunity improved by a metal shield (**RR16-XXX-S** model)

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

Narrow Bandwidth: +/- 250 KHz

XXX: custom-specified working frequency

Applications

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

BLOCK DIAGRAM V_{cc} V_{cc} In SAW RF LP AM Comparator Filter Oscillator **Ampli** Filter OUT Quench **GND GND GND** Test Oscillator **Point**

Electrical Characteristics

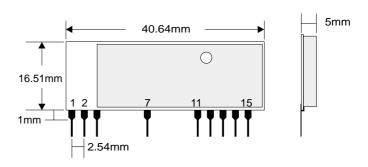
Ta = 25°C unless otherwise specified

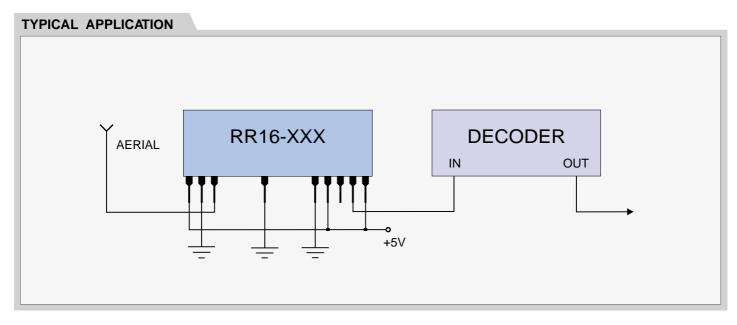
	CHARACTERISTICS	MIN	TYP	MAX	UNIT
V_{cc}	Supply Voltage	4.5	5	5.5	VDC
Is	Supply Current		4.0		mA
F_{w}	Working Frequency		433.9		MHz
	Tuning Tolerance			+/-75	KHz
B_w	-3dB Bandwidth		+/-250	+/-300	KHz
	Data Rate		4.8	9.6	Kbit/s
	RF Sensitivity (100% AM)	-98	-102		dBm
	Level of Emitted Spectrum		-75	-70	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

+V_{cc} 1 NC 12 **Test Point** 2 **GND** 13 OUT 3 IN 14 7 GND 15 $+V_{cc}$ 11 **GND**

Mechanical Dimensions







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