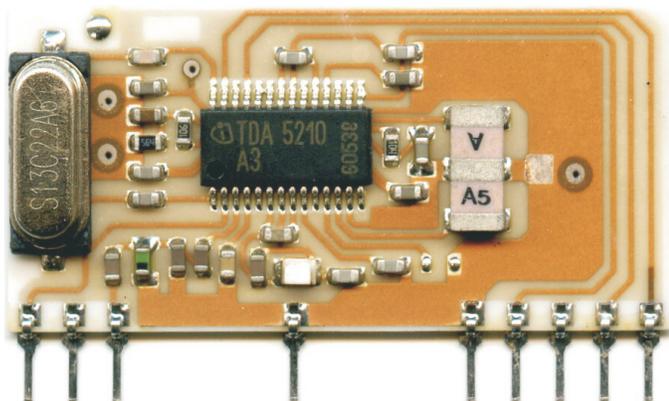


RRFQ3-XXX

ASK / FSK Superhet Receiver with Crystal Oscillator and Squelch Circuit



General description

The RRFQ3-XXX is an ASK / FSK superhet data receiver with PLL synthesizer and crystal oscillator.

The RRFQ3 can demodulate ASK or FSK signals according to ASK/FSK pin selector.

Receiver Frequency: 315 / 433.92 / 868.35 MHz

IF Frequency: 10.7MHz

Typical sensitivity: -102 dBm

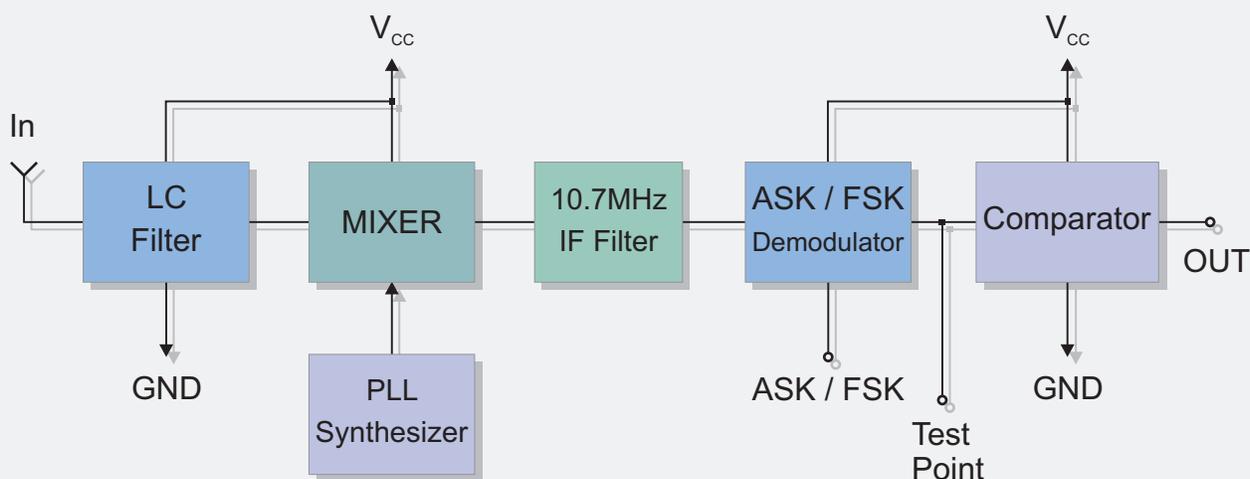
Supply current: 5.7 mA (typ)

Applications

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

XXX: custom-specified working frequency
 (315, 433.92, 868.35 MHz)

BLOCK DIAGRAM



Electrical Characteristics

Ta = 25°C unless otherwise specified

CHARACTERISTICS		MIN	TYP	MAX	UNIT
V _{CC}	Supply Voltage	4.5	5	5.5	VDC
I _S	Supply Current		5.7	6.8	mA
I _{STANDBY}	Standby Supply Current (PD = Low)			100	nA
F _R	Receiver Frequency		315/433.9/868.35		MHz
	RF Sensitivity		-102		dBm
B _w	-3dB Bandwidth		±150		KHz
	Data Rate ASK (FSK)	2 (8)		10 (12)	Kbit/s
	Level of Emitted Spectrum			-70	dBm
	Turn on Time (PD → Stable Data)			5	msec
V _{ol}	Low-Level Output Voltage (I=10uA)			0.8	V
V _{oh}	High-Level Output Voltage (I=-200uA)	V _{CC} - 1			V
T _{OP}	Operating Temperature Range	-25		+80	°C

Pin Description

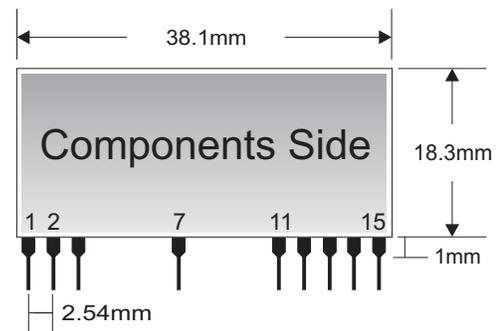
1	V _{CC}
2	GND
3	IN
7	GND
11	GND
12	ASK (+5V)/FSK (0V)
13	RSSI
14	OUT
15	PD (Power Down)

PD = 0V ----> RX OFF PD = 5V ----> RX ON

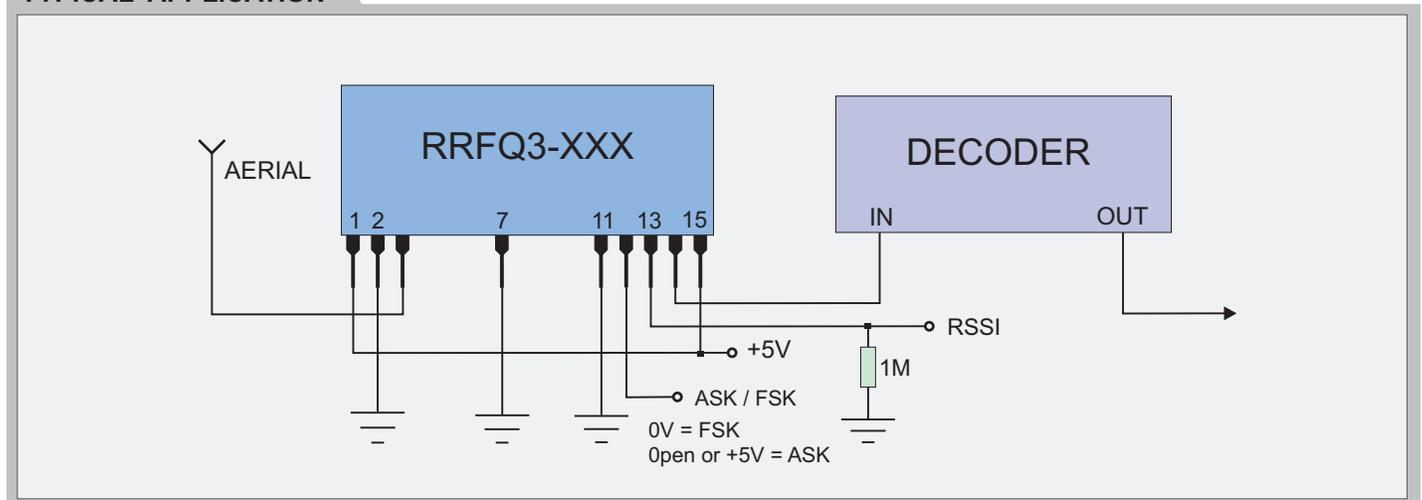
RSSI Value

RF IN (dBm)	RSSI (V)
-120	1.20
-110	1.32
-100	1.50
-90	1.78
-80	2.06
-70	2.35
-60	2.62
-50	2.72
-40	2.75

Mechanical Dimensions



TYPICAL APPLICATION



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