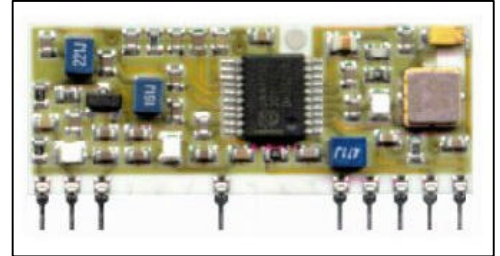


- COMPACT HYBRID MODULE
- VERY HIGH FREQUENCY STABILITY (with no adjustable components).
- RECEIVING RANGE UP TO 250 METRES.
- CMOS/TTL COMPATIBLE OUTPUT.
- LOW CURRENT CONSUMPTION (Typ 5.5mA)
- SINGLE SUPPLY VOLTAGE 5V.
- COMPATIBLE WITH R.F. SOLUTIONS FM TRANSMITTERS.
- AVAILABLE AS 315, 418 OR 433 MHz
- COMPLIANT TO ETSI 300-220.
- REQUIRES NO RADIO LICENCE TO OPERATE.



Description

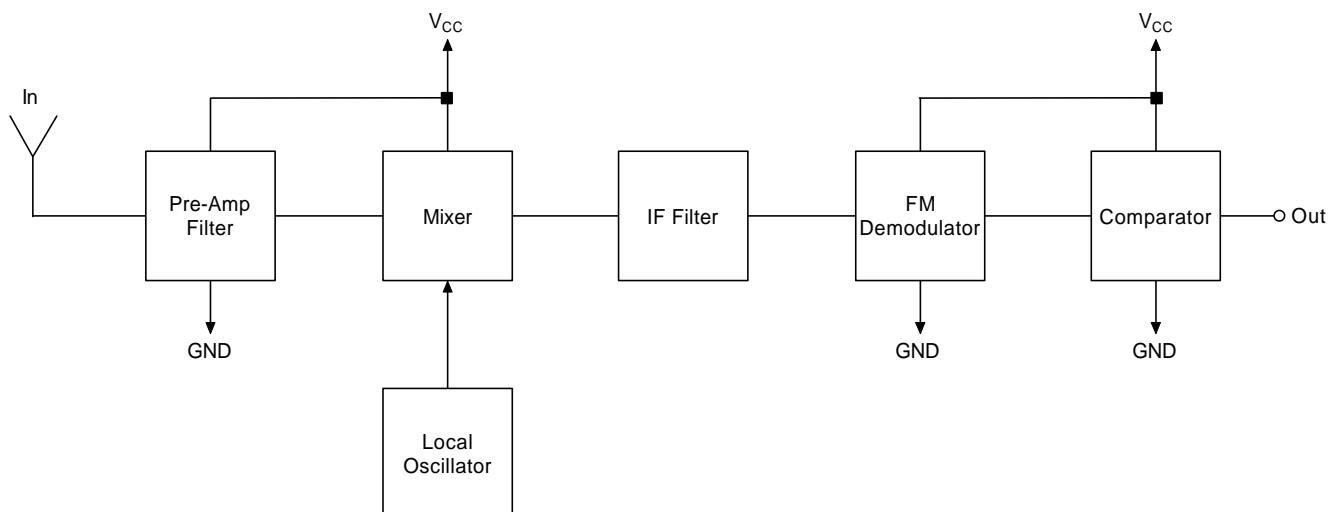
The R F Solutions Ltd. FM hybrid receiver module provides a complete RF receiver which can be used to receive data at up to 9.6 Kbps.

The module is very simple to operate and offers low current consumption (typ. 5.5 mA). The TTL/CMOS data output can be interfaced directly to a microprocessor or decoding device, thus keeping the component count down and ensuring a low hardware cost.

The module exhibits extremely stable electronic characteristics due to the use of 'Thick-Film' hybrid technology, which uses no adjustable components and ensures very reliable operation.

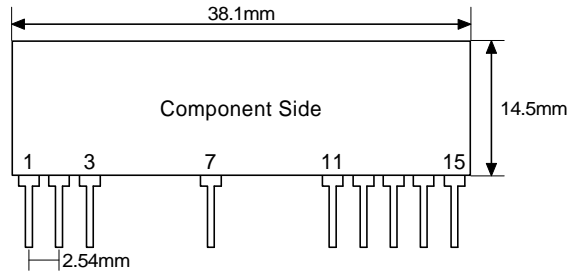
The module is compatible with R F solutions Ltd. range of FM transmitters to provide a complete solution.

Block Diagram





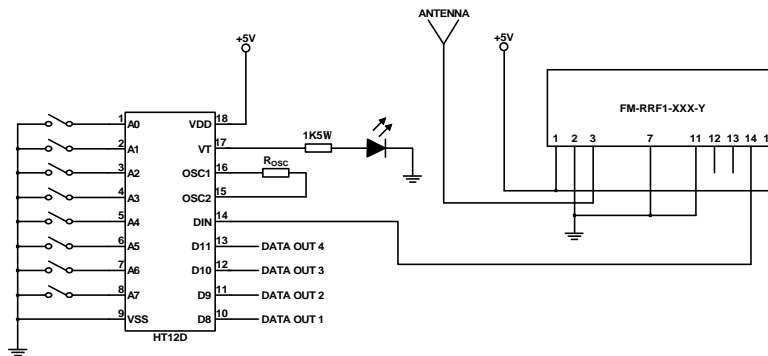
Mechanical Dimensions



Pin Description

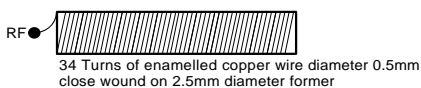
Pin Number	Name	Description
1	Vcc	Supply Voltage
2	GND	Ground, Connect to RF earth return path
3	IN	External Antenna
7	GND	Ground, Connect to RF earth return path
11	GND	Ground, Connect to RF earth return path
12	NC	No Connection
13	NC	No Connection
14	OUT	Data output
15	Vcc	Supply Voltage

Typical Application

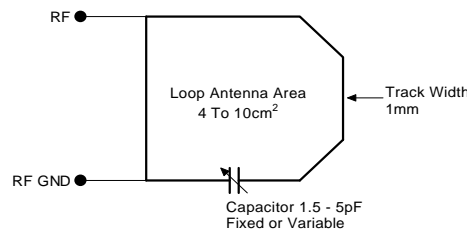


Antenna Configuration

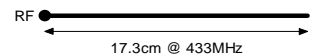
Helical Coil Antenna



Loop Antenna



Whip Antenna





Technical Specifications

ELECTRICAL CHARACTERISTICS	MIN	TYPICAL	MAX	DIMENSION
Supply Voltage	3.5	5	5.5	Vdc
Supply Current		5.5		mA
RF Sensitivity		-94 -90 -87		dBm
		A version: 2.4 Kbps B version: 4.8 Kbps C version: 9.6 Kbps		
Frequency Deviation		±25		KHz
-3dB Bandwidth		±400		KHz
Level of Emitted Spectrum		-70	-65	dBm
Low-Level Output Voltage			0.6	V
High-Level Output Voltage	Vcc-0.5			V
Operating Temperature	-25		+80	°C

Part Numbering

Part Number	Description
FM-RRF1-315A	FM Receiver Module 2.4Kbps 315MHz
FM-RRF1-315B	FM Receiver Module 4.8Kbps 315MHz
FM-RRF1-315C	FM Receiver Module 9.6Kbps 315MHz
FM-RRF1-433A	FM Receiver Module 2.4Kbps 433MHz
FM-RRF1-433B	FM Receiver Module 4.8Kbps 433MHz
FM-RRF1-433C	FM Receiver Module 9.6Kbps 433MHz

For more information or general enquiries, please contact our official UK distributor;

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