



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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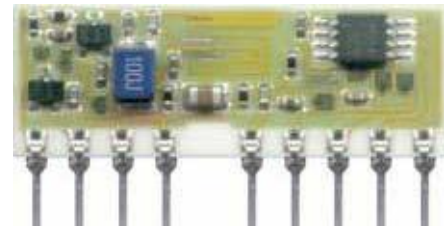
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



Miniature AM Super-Regen Receiver

Features

- 50% smaller than standard hybrid modules.
- Standard Frequencies; 315, 433MHz
- Frequencies Available: 300-450MHz
- Very High Frequency Stability (No Adjustable Components).
- Receiving Range Up To 50 Metres.
- CMOS/TTL Compatible Output.
- Compatible With R.F. Solutions AM Transmitters.
- Patented Laser Trimmed Inductor.
- Compliant To ETSI300-220.
- Requires No Radio Licence To Operate.



Description

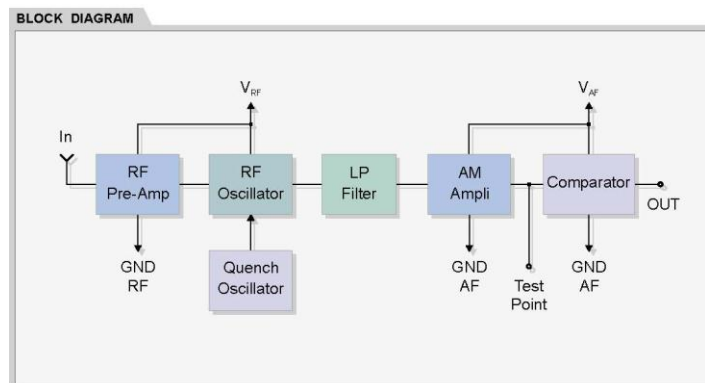
The R.F. Solutions Miniature AM 'Super Regen' Receiver module is an extremely compact hybrid RF receiver, which can be used to capture undecoded data from any AM Transmitter, such as R.F. Solutions AM-RT4 / 5 range of transmitters. (See AM Transmitter datasheet DS013).

These modules show a very high frequency stability over a wide operating temperature even when subjected to mechanical vibrations or manual handling. A unique laser trimming process which has been patented gives a very accurate on board inductor, removing the need for any adjustable components.

All receivers are compatible, producing a CMOS/TTL output, and require connections to power and antenna only.

RF Solutions also offer a range of Super Heterodyne Receivers, for data on these products (please see Datasheet DS017).

Block Diagram

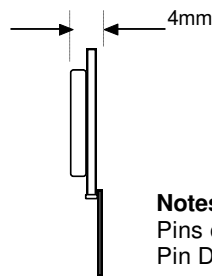
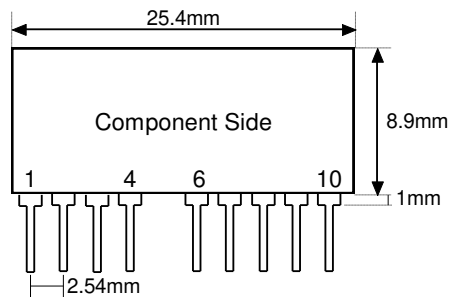


Part Numbers

The following modules are available from stock although any frequency between 300-450MHz is available upon request.

Part Number	Description
AM-HRR30-433	Compact Hybrid Receiver Module, 433MHz
AM-HRR60-433	Compact Hybrid Receiver Module, 433MHz

Mechanical Details



Notes
 Pins on 0.1" pitch
 Pin Dims :0.25 x 0.50mm

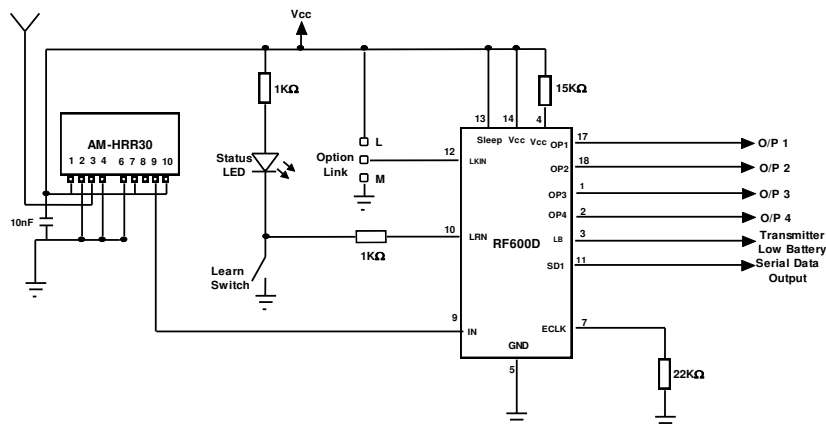
Pin	Pin Name
1	RF +Vcc
2	RF GND
3	DATA IN (Ant)
4	RF GND
6	AF GND
7	AF +VCC
8	TEST POINT
9	DATA OUT
10	AF +VCC

Electrical Characteristics

Ambient temperature = 25° Celsius

ELECTRICAL CHARACTERISTICS	MIN	TYPICAL	MAX	DIMENSION
Operating Temperature Range	-25		+80	°C
Tuning Tolerance		± 0.2	± 0.5	MHz
Receiver Frequency (315 MHz versions)		315		MHz
Receiver Frequency (433 MHz versions)		433.92		MHz
Supply Voltage	4.5	5	5.5	V
Supply Current		2.5	3	mA
Data Rate	50		4800	bits/Sec
R.F Sensitivity 100% AM	-100	-105		dBm
-3dB Bandwidth		± 2	± 3	MHz
Conducted Spurious Emissions			-60	dBm
High Level Output Voltage	3.6			V
Low Level Output Voltage			0.6	V

Application Circuit



RF Solutions Ltd. Recycling Notice

Meets the following EC Directives:

DO NOT

Discard with normal waste, please recycle.



ROHS Directive 2002/95/EC

Specifies certain limits for hazardous substances.

WEEE Directive 2002/96/EC

Waste electrical & electronic equipment. This product must be disposed of through a licensed WEEE collection point. RF Solutions Ltd., fulfills its WEEE obligations by membership of an approved compliance scheme.



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Waste Batteries and Accumulators Directive 2006/66/EC

Where batteries are fitted, before recycling the product, the batteries must be removed and disposed of at a licensed collection point.

Environment Agency producer registration number:
WEE/JB0104WV.