

FEATURES

- COMPACT HYBRID MODULE.
- VERY HIGH FREQUENCY STABILITY (with no adjustable components).
- RECEIVING RANGE UP TO 45 METRES.
- CMOS/TTL COMPATIBLE OUTPUT.
- CURRENT CONSUMPTION 2.5mA .
- SINGLE SUPPLY VOLTAGE 5V.
- COMPATIBLE WITH R.F. SOLUTIONS AM TRANSMITTERS.
- PATENTED LASER TRIMMED INDUCTOR.
- FREQUENCY 418MHz
- COMPLIANT TO ETSI 300-339 (CE).
- REQUIRES NO RADIO LICENCE TO OPERATE.

This picture has been deliberately omitted to reduce file size for the benefit of customers retrieving this data sheet from our web site.

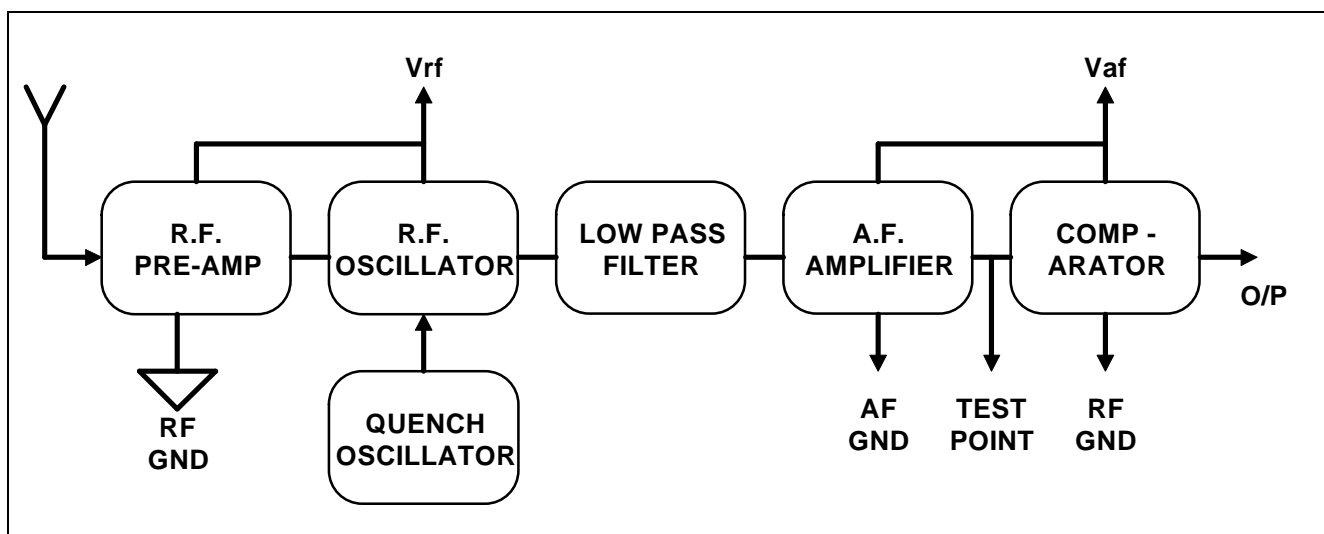
DESCRIPTION

The R.F. Solutions AM Receiver module offers a compact modular RF receiver, which can be used to capture undecoded data from any 418MHz AM Transmitter, such as CR91Y, CR72P, CR73Q, CR74R

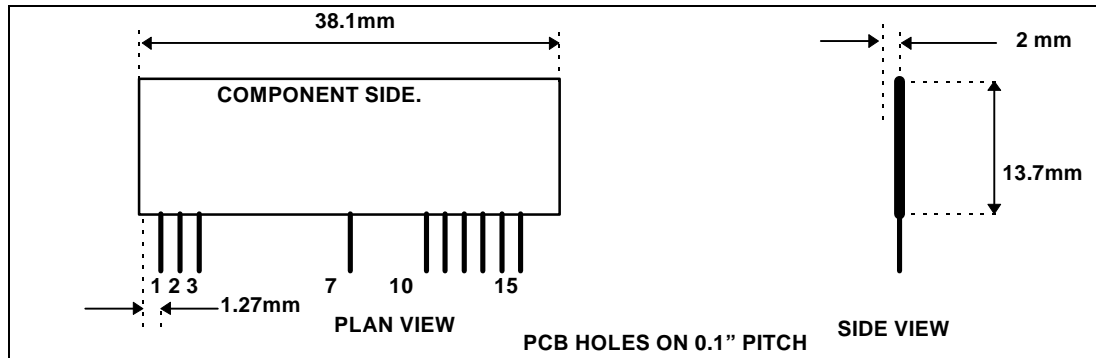
The module shows a very high frequency stability even in the presence of mechanical vibrations, manual handling and within a wide temperature range. A unique laser trimming process which has been patented gives a very accurate on board inductor, removing the need for any adjustable components.

Custom solutions may be supplied to meet customer specific requirements. Please contact R.F. Solutions for further information

BLOCK DIAGRAM



MECHANICAL DETAILS



PIN DESCRIPTION

| Pin No | Pin Name | Pin No | Pin Name |
|--------|----------|--------|------------|
| 1 | RF +Vcc | 9 | NC |
| 2 | RF GND | 10 | AF +VCC |
| 3 | DATA IN | 11 | AF GND |
| 4 | NC | 12 | AF +VCC |
| 5 | NC | 13 | TEST POINT |
| 6 | NC | 14 | DATA OUT |
| 7 | RF GND | 15 | AF +VCC |
| 8 | NC | | |

Ambient temperature = 25° Celcius.

| ELECTRICAL CHARACTERISTICS | MIN | TYPICAL | MAX | DIMENSION |
|-----------------------------|------|---------|---------|-----------|
| Storage Temperature Range | -30 | | +85 | °C |
| Operating Temperature Range | -25 | | +85 | °C |
| RF Supply Voltage (RF+Vcc) | 4.5 | 5 | 5.5 | V |
| AF Supply Voltage (AF+Vcc) | 4.5 | 5 | 5.5 | V |
| Supply Current | | 2.5 | 3 | mA |
| Working Frequency | 200 | | 450 | MHz |
| Tuning Tolerance | | +/- 0.2 | +/- 0.5 | MHz |
| -3dB Bandwidth | | +/- 2 | +/- 3 | MHz |
| Max Data Rate | | | 2 | KHz |
| R.F Sensitivity (100% AM) | -100 | -105 | | dBm |
| Level of Emitted Spectrum | | -65 | -60 | dBm |
| Low Level Output Voltage | | | 0.6 | V |
| High Level Output Voltage | 4.5 | | | V |

| ORDERING INFORMATION | |
|----------------------|------------------------|
| CR75S | Receiver Module 418MHz |

Should you require further assistance, please contact;

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