

# **AM SUPER HETERODYNE RECEIVER**

QAM-RX4

#### **Features**

- Super Heterodyne Radio Receiver
- High Sensitivity -106dBm
- CMOS / TTL Output
- Stable Operating Frequency
- Low Current Consumption
- 3-5Vdc Operating Voltage
- ASK Demodulation
- Available as 315 or 433 MHz

#### **Applications**

- Wireless Security Systems
- Garage Door controller
- Remote Gate Controls
- Remote Sensing
- Data Capture
- Sensor Reporting



#### **Description**

The Quasar UK AM receiver module provides a complete Radio receiver which can be used to receive undecoded data from the range of Quasar (UK) transmitter modules.

The module is very simple to operate and offers a low current consumption, allowing for extended battery life when used in mobile applications.

Data can be fed directly into a microprocessor or decoding device, thus keeping the component count down and ensuring a low hardware cost.

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

#### **Part Numbers**

| Part Number | Description                            |  |  |  |
|-------------|--|--|--|--|
| QAM-RX4-433 | AM Super Regen Receiver Module, 433MHz |  |  |  |
| QAM-RX4-315 | AM Super Regen Receiver Module, 315MHz |  |  |  |



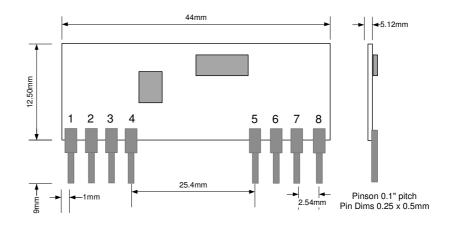
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## **Technical Specifications**

### **Pin Descriptions**

| Pin     | Description      |  |  |  |
|---------|------------------|--|--|--|
| 1       | External Antenna |  |  |  |
| 2, 3, 8 | Ground           |  |  |  |
| 6, 7    | Data input       |  |  |  |
| 4,5     | Supply Voltage   |  |  |  |



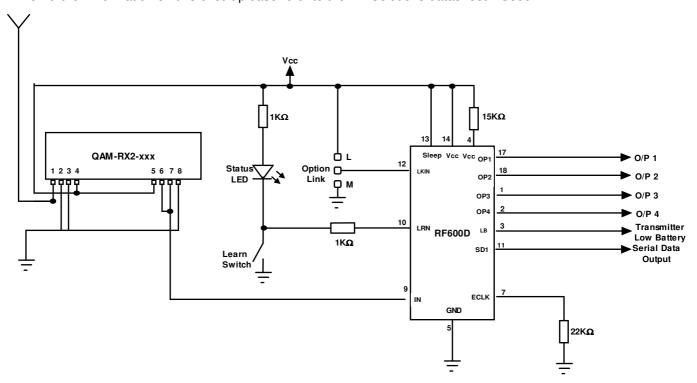
#### **Electrical Characteristics**

Ambient temp = 25 ℃ unless otherwise stated. Vcc=5V 1KB/s AM99% Square Wave Modulation

| Characteristic    | Min.   | Тур.         | Max.   | Dimensions |
|-------------------|--------|--------------|--------|------------|
| Supply Voltage    | 2.5    | 5            | 5.5    | Vdc        |
| Supply Current    |        | 4.7          |        | mA         |
| RF Sensitivity    |        | -106         |        | dBm        |
| Working Frequency |        | 315 / 433.92 |        | MHz        |
| High Level Output | 0.7Vcc |              |        | Vdc        |
| Low Level Output  |        |              | 0.3Vcc | Vdc        |
| Turn On Time      |        | 25           |        | Ms         |
| Data Rate         | 200    | 1,000        | 3,000  | Hz         |
| Bandwidth         |        | 800          |        | KHz        |

## **Typical Application**

For further information on this circuit please refer to the RF Solutions datasheet DS600



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