

## Typical Applications

- Home Security Systems
- Remote Lighting Controls
- Remote Gate Controls
- Asset Tracking
- Sensor Monitoring



## Features

- The Module's Frequency is from UHF (ASK) 280~433.92 MHz
- High Sensitivity Passive Design
- 4800 B/S Baseboard Data Rate.
- Simple to apply with Low External Parts count
- Low Supply Voltage: VCC= 5 Vdc
- ASK Data Shaping Comparator Included

## Description

The RCR-433-MPR is a miniature receiver module that receives On-off keyed (OOK) modulation signal and demodulated to digital signal for the next decoder stage. Local Oscillator is made of L/C structure. The result is excellent performance in simple-to-use. The RCR-433-MPR is designed specifically for unlicensed remote control and wireless security receiver operating at 433 MHz in the USA under FCC Part 15 regulation.

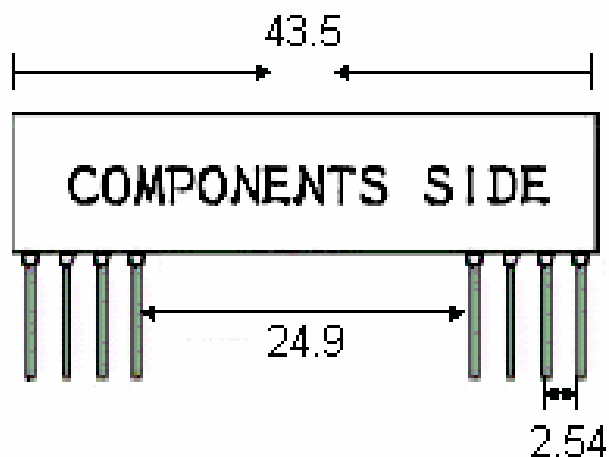
| Item No. | Parameter                 | Description                  | Value      |      |      |      |
|----------|---------------------------|------------------------------|------------|------|------|------|
|          |                           |                              | MIN        | TYP  | MAX  | UNIT |
| 1.       | Operating Radio Frequency |                              | 280~433.92 |      |      | MHz  |
| 2.       | Sensitivity               | Vcc 5.0, AT25C<br>BER= 3/100 |            | -105 |      | dBm  |
| 3.       | Modulation                |                              |            | ASK  |      |      |
| 4.       | Power Supply              |                              | 4.75       | 5    | 5.25 | v    |
| 5.       | Supply Count              |                              |            | 4    | 5    | mA   |
| 6.       | Data Rate                 |                              |            | 3    |      |      |
| 7.       | Operating Temperature     |                              | -40        |      | +85  | °C   |
| 8.       | RF Bandwidth – 3dB        |                              |            | 4    |      | MHz  |

***Document Control***

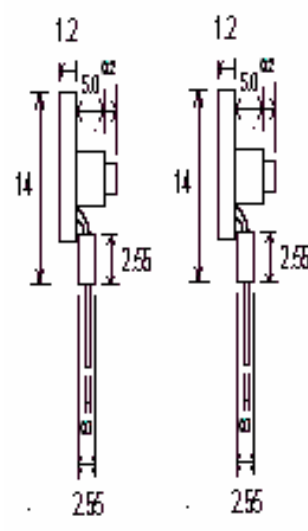
|                        |            |         |
|------------------------|------------|---------|
| Created By             | TJ Everett | 1/20/07 |
| Engineering Review     |            |         |
| Marketing Review       |            |         |
| Approved - Engineering |            |         |
| Approved - Marketing   |            |         |

***Revision History***

| Revision | Author | Date    | Description      |
|----------|--------|---------|------------------|
| 1.0      | TJE    | 1/20/07 | Document Created |
|          |        |         |                  |
|          |        |         |                  |
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Mechanical Drawing



Pinout Diagram

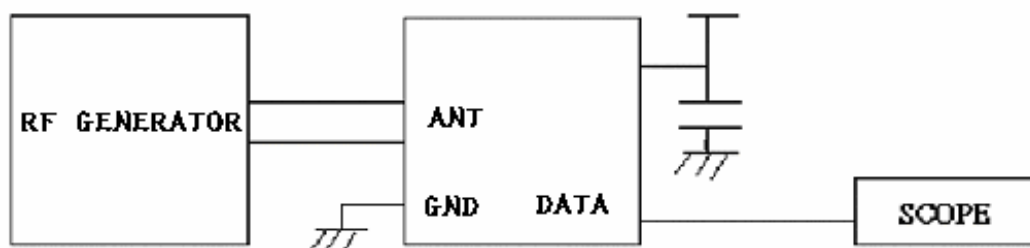
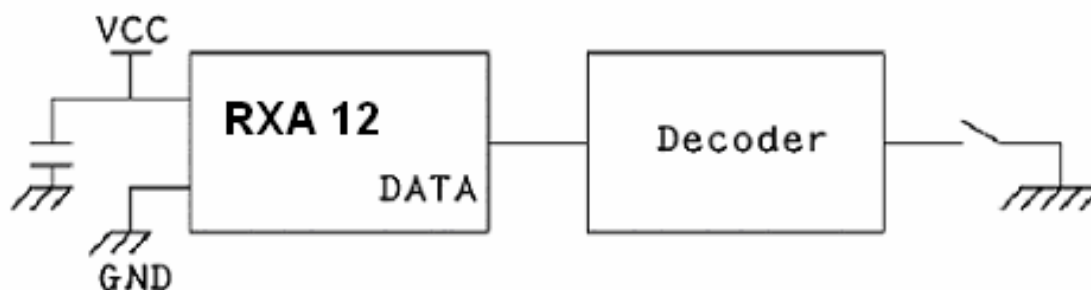
### Absolute Maximum Ratings

| Rating                          | Value       | Units |
|---------------------------------|-------------|-------|
| Power Supply and All Input Pins | -0.3 to +12 | VDC   |
| Storage Temperature             | -50 to +100 | °C    |
| Soldering Temperature (10 sec)  | 350         | °C    |
| Industrial Temperature          | -40 to +85  | °C    |

### Pin Description

| Pin | Name           |
|-----|----------------|
| 1   | GND            |
| 2   | DIGITAL OUTPUT |
| 3   | LINEAR OUTPUT  |
| 4   | VCC            |
| 5   | VCC            |
| 6   | GND            |
| 7   | GND            |
| 8   | ANT            |



**Typing Test Circuit****Typical Receiver Application**

Notes:

1. Encoder : HT12D/F , PTC ( 2262 )
2. Antenna : Length = 22.6cm for 315MHz

**Ordering Information**

| PRODUCT     | ORDER CODE  |
|-------------|-------------|
| RCR-433-MPR | RCR-433-MPR |

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