

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.

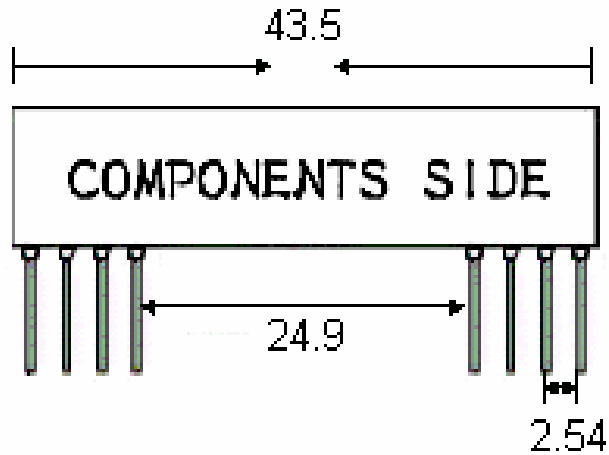
| Item No. | Parameter | Description | Value | | | UNIT |
|----------|---------------------------|------------------------------|-------------|------|------|------|
| | | | MIN | TYP | MAX | |
| 1. | Operating Radio Frequency | | 280` 433.92 | | | MHz |
| 2. | Sensitivity | Vcc 5.0, AT25C BER= 3/100 | | -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

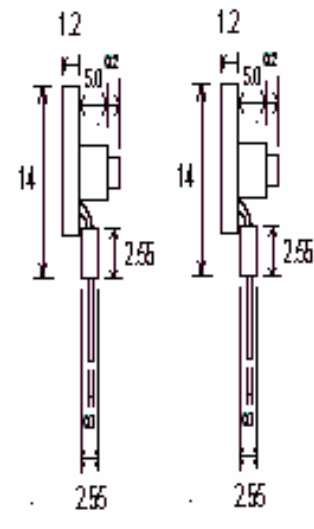
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|-------------------------------|------------|---------|
| Created By | TJ Everett | 1/20/07 |
| Engineering Review | | |
| Marketing Review | | |
| Approved - Engineering | | |
| Approved - Marketing | | |

Revision History

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



Pinout Diagram

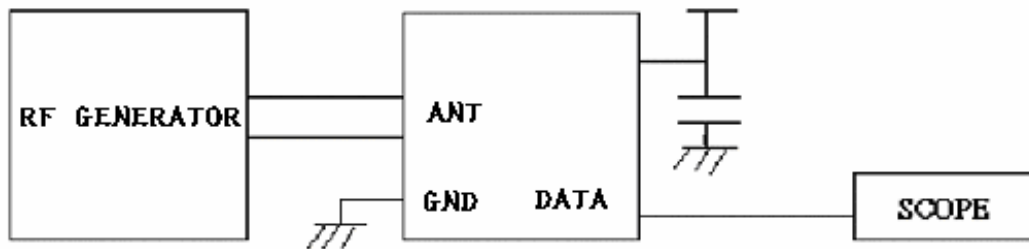
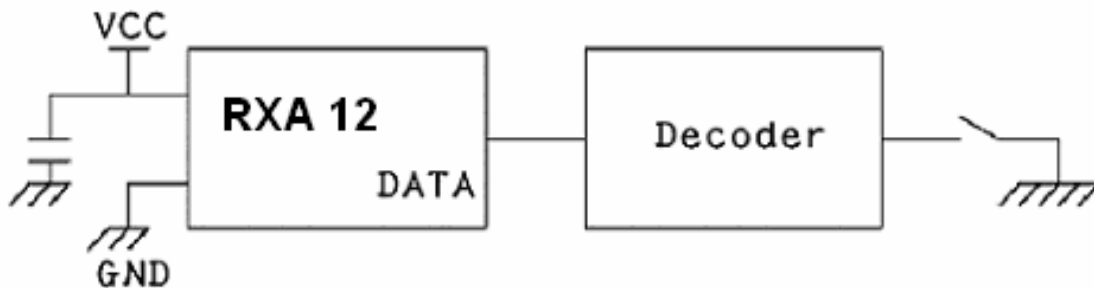
Absolute Maximum Ratings

| 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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