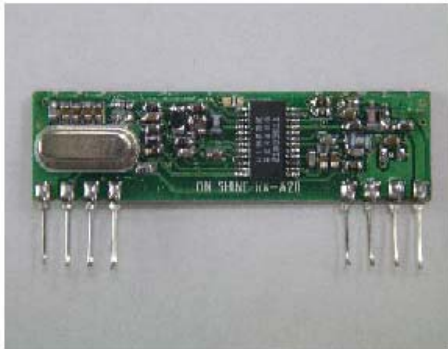


## Typical Applications

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

## Features

- Ideal for 315/ 433 MHz Remote Keyless Entry Receivers
- Phase-locked loop feature



## Description

The RCR-XXX-EPR 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-XXX-EPR is designed specifically for unlicensed remote control and wireless security receiver operating at 315/433 MHz in the USA under FCC Part 15 regulation.

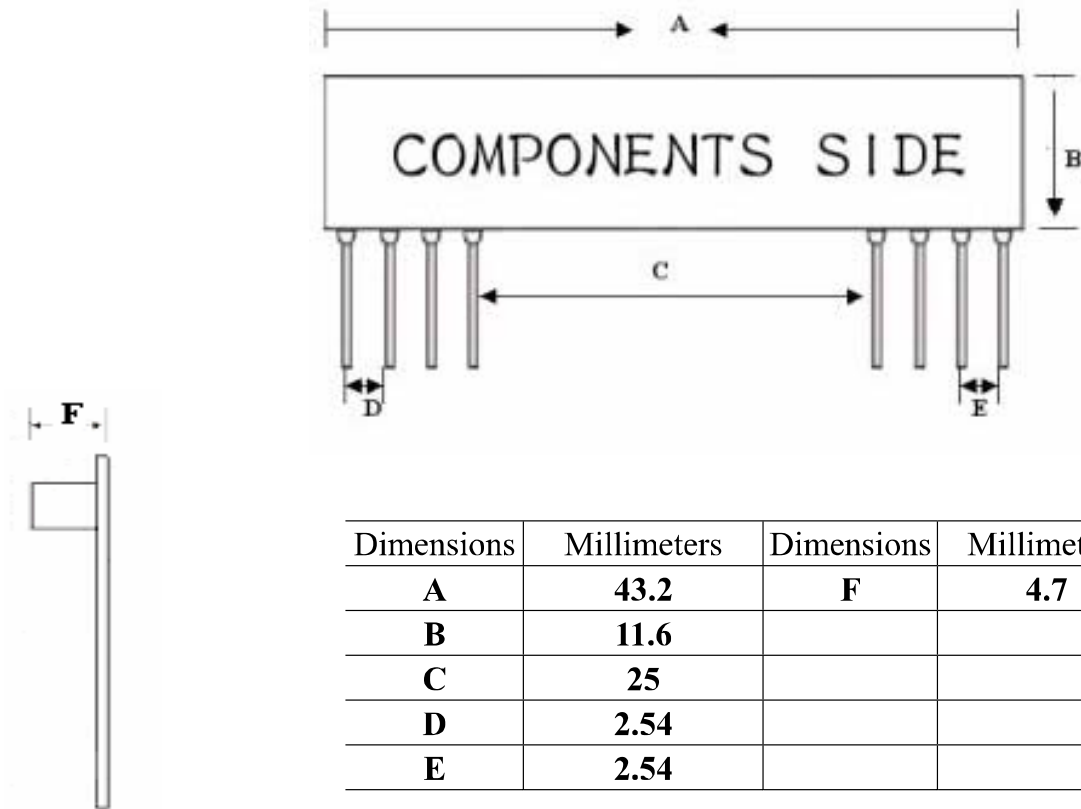
| Item No. | Parameter             | Description                             | Value |      |      |      |
|----------|-----------------------|-----------------------------------------|-------|------|------|------|
|          |                       |                                         | MIN   | TYP  | MAX  | UNIT |
| 1.       | Sensitivity (315 MHz) | Vcc 5.0, TA-27C<br>BER= 3/100,<br>1kbps |       | -105 |      | MHz  |
| 2.       | Sensitivity (433 MHz) | Vcc 5.0, TA-27C<br>BER= 3/100,<br>1kbps |       | -104 |      | MHz  |
| 3.       | Modulation            |                                         |       | ASK  |      |      |
| 4.       | Power Supply          |                                         | 4.75  | 5    | 5.25 | V    |
| 5.       | Supply Current        |                                         |       | 2.4  | 3    | mA   |
| 6.       | Data Rate             |                                         |       | 1    | 4.8  | Kbps |
| 7.       | Operating Temperature |                                         | -40   |      | +85  | °C   |

**Document Control**

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

**Revision History**

| <b>Revision</b> | <b>Author</b> | <b>Date</b> | <b>Description</b> |
|-----------------|---------------|-------------|--------------------|
| 1.0             | TJE           | 1/20/07     | Document Created.  |
|                 |               |             |                    |
|                 |               |             |                    |
|                 |               |             |                    |
|                 |               |             |                    |




Unit:mm

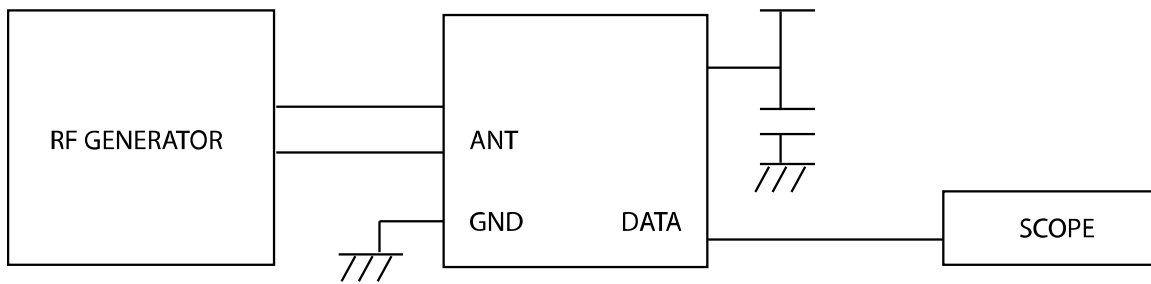
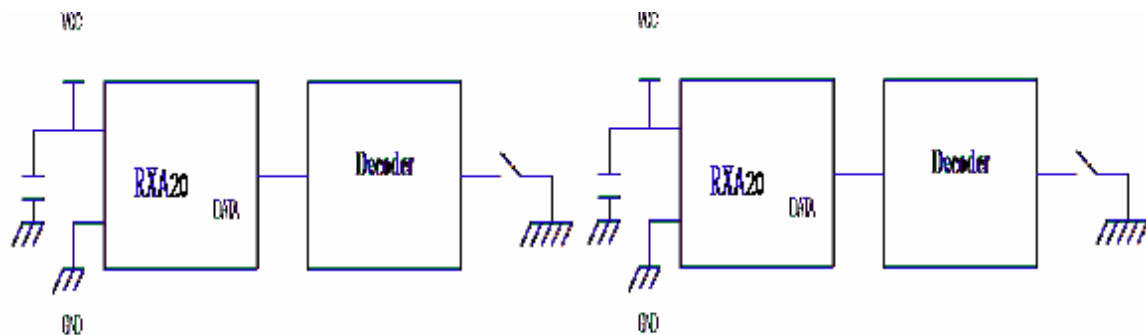
### Absolute Maximum Ratings

| 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   | OUT       |
| 3   | PD/ EMPTY |
| 4   | VDD       |
| 5   | VDD       |
| 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; Length = 17.2cm for 433MHz

**Ordering Information**

| PRODUCT     | ORDER CODE  |
|-------------|-------------|
| RCR-433-EPR | RCR-433-EPR |

**Radiotronics Inc.**

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