FSK/ASK RECEIVER MODULE

General Description:

The RXB16 is an FSK/ASK receiver module, which is based on a single-conversion super-heterodyne receiver

architecture and incorporates an entire Phase-Locked Loop (PLL) for precise local oscillator generation.

Frequency available: 434/868 MHz

In Fsk mode Sensitivity: -106dBm for 434MHz and -105dBm for 868MHz

Supply Current: 5.7mA for 434MHz and 7mA for 868MHz

In Ask mode Sensitivity: -112dBm for 434MHz and -108dBm for 868MHz

Supply Current: 4.6mA for 434MHz and 5.2mA for 868MHz

Features:

Easy for application.

Operation temperature range : $-20^{\circ}\text{C} \sim +85^{\circ}\text{C}$

Lower power consumption.

Operation voltage: 5Volts.

Available frequency at: 315/434/868 MHz

Applications

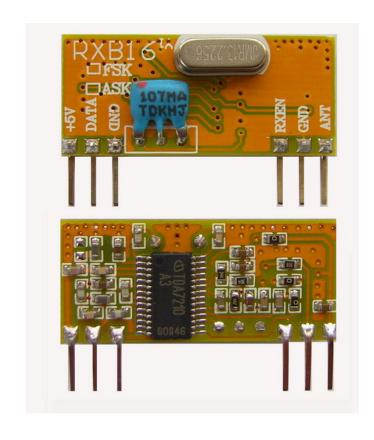
Car security system

Wireless security systems

Sensor reporting

Automation system

Remote Keyless entry



Product Identification

| FSK 433.92MHZ | FSK RXB16-434M |
|---------------|----------------|
| FSK 868MHZ | FSK RXB16-868M |
| ASK 433.92MHZ | ASK RXB16-434M |
| ASK 868MHZ | ASK RXB16-868M |

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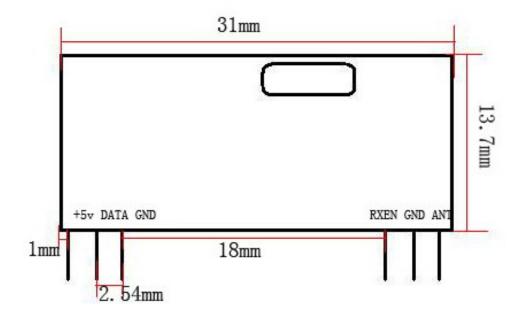
Absolute Maximum Ratings

| Parameter | Rating | Units | |
|-----------------------|------------|-------|--|
| Supply Voltage | 5.5 | V DC | |
| Operating Temperature | -20 to +85 | ℃ | |

Electrical Characteristics:

| CHARACTERISTIC | | | MIN | ТҮР | MAX | UNIT | | |
|---------------------------------|-----------------------|--------------|---------------------------------|-----|---------------|------|--|--|
| Vcc | Supply Voltage | | 4.5 5.0 5.5 | | | VDC | | |
| ls | | FSK | 5.7(434MHz) 7.0(868MHz) | | | | | |
| | Supply Current | ASK | 6.6(434MHz) | | | mA | | |
| | | | 5.2(868MHz) | | | | | |
| | | | 12.1/2.12 | | | | | |
| FR | Receiver Freque | ncy | 434/868 | | | MHz | | |
| | | | -106(433.92MHz) | | | | | |
| RF Sensitivity(Vcc=5V) FSK | | -105(868MHz) | | | dBm | | | |
| ASK | | | -112(433.92MHz) -108(868MHz) | | | | | |
| Data Rate | a Rate 4.8k 20k | | | | bps | | | |
| Turn On Time(Vcc o | off-Turn on) | | 2 | | ms | | | |
| TOP Operating Temperature Range | | -20 | | +85 | ${\mathbb C}$ | | | |
| Output Duty | | | 40 | | 60 | % | | |

Mechanical Dimension:



PIN:

| PIN | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------|-------|--------------|-----|------|--------------|----------|
| NAME | +5V | DATA | GND | RXEN | GND | ANT |
| Description | RF | Power Supply | RF | DATA | Digital data | RF Input |
| | Input | GND | GND | SHUT | output | |

Notes:

Antenna : Length = 17.2cm for 433.92MHz ; Length = 8.7 cm for 868.35MHz.

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