



## RTFQ2 Crystal Controlled PLL FM Transmitter Modules

- FSK Transmitter Module
- 433MHz Operation
- Transmit Range Up To 700ft
- Miniature Single Inline Package
- Data Rate up to 9.6Kbps
- No Adjustable Components
- Very Stable Operating Frequency
- Operates from  $-25$  to  $+80^{\circ}\text{C}$
- 2.4V-3.6Vdc Operation



### Applications

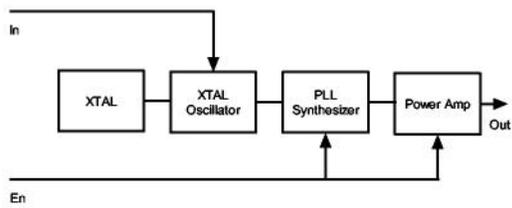
- Wireless Security Systems
- Home and Building Automation
- Car Alarms
- Remote Gate Controls
- Remote Sensing
- Data Capture
- Sensor Reporting

### Description

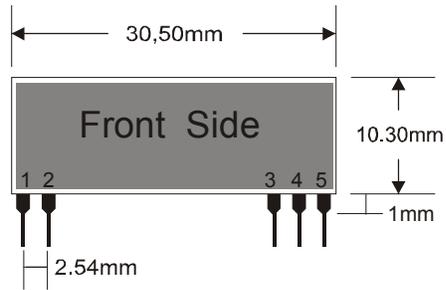
These miniature RF modules provide a cost effective high performance FSK Radio data link, at 433.92 MHz. The hybrid technology uses no adjustable components and ensures very reliable operation. This transmitter and companion receiver pair enables the simple implementation of a data link at distances up to 200ft in-building and 700ft open ground.

These RF modules will suit one-to-one and multi-node wireless links in applications including car and building security, EPOS and inventory tracking, remote industrial process monitoring and computer networking. Because of their small size and low power requirements, both modules are ideal for use in portable, battery powered applications such as hand-held terminals.

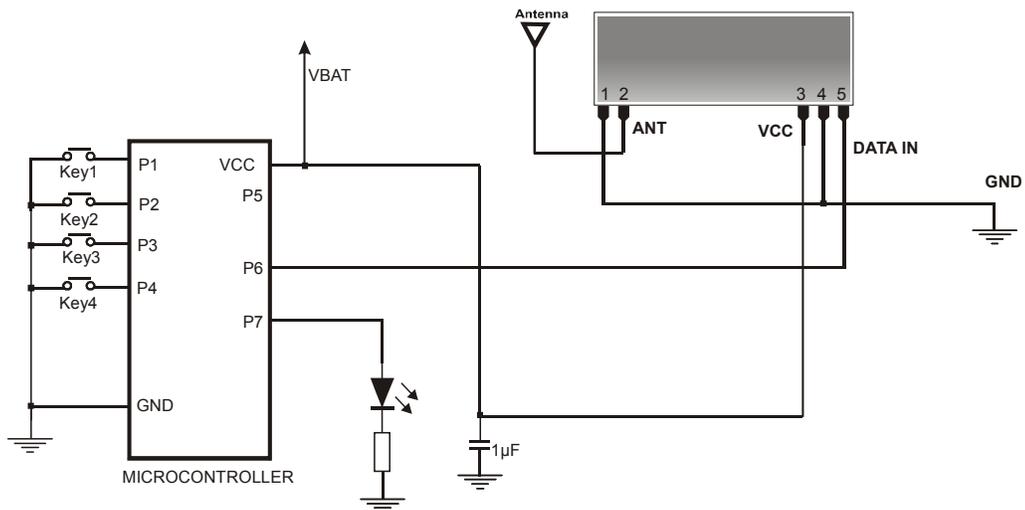
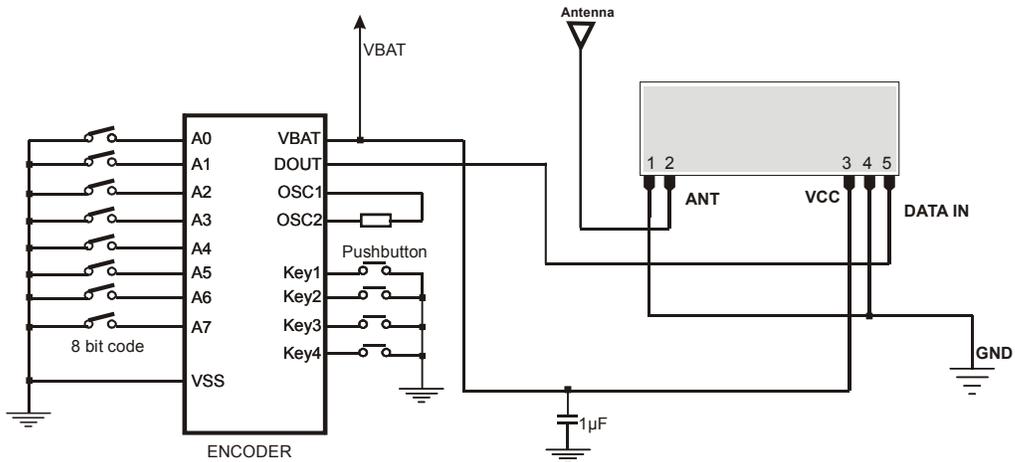
## Transmitter Block Diagram



## Mechanical Dimensions



## Typical Applications



## Pin Description

| RTFQ2 | Name | Description      |
|-------|------|------------------|
| 1     | GND  | Ground           |
| 2     | ANT  | External Antenna |
| 3     | Vcc  | Supply Voltage   |
| 4     | GND  | Ground           |
| 5     | IN   | Data In          |

## Specifications

| Electrical Characteristics          | MIN | TYPICAL | MAX  | DIMENSION |
|-------------------------------------|-----|---------|------|-----------|
| Supply Voltage RTFQ2                | 2.5 |         | 3.6  | V         |
| Supply Current                      |     | 14.5    | 15.5 | mA        |
| Standby Current (IN = EN = Low)     |     |         | 100  | nA        |
| Frequency                           |     | 433.92  |      | MHz       |
| RF Output Power                     | 8   | 10      |      | dBm       |
| Initial Frequency Accuracy          | -35 |         | +35  | KHz       |
| FM Deviation                        | 25  | 30      | 35   | KHz       |
| Power up Time (Power on to full RF) |     |         | 5    | mS        |
| Max Data Rate                       |     |         | 40   | Kbits/s   |
| Operating Temperature               | -25 |         | +80  | °C        |