

Magnetic Reed Switch Door Sensor with Wire BC-38 (Normal Open)

The **Magnetic Reed Switch Door Sensor BC-38** is a reliable and practical component widely used in **security systems, automation, and DIY electronics projects**. Its small size, durable design, and ease of installation make it an excellent choice for anyone looking to detect door or window movement without the need for complex sensors or expensive equipment.

With a **Normal Open (NO) contact configuration**, this sensor remains open under normal conditions. The circuit only closes when the magnet is brought close to the reed switch, ensuring accurate detection with minimal energy consumption. This makes the BC-38 an efficient and dependable solution for home security alarms, access control, smart home automation, and industrial monitoring.



Key Features of the BC-38 Reed Switch Door Sensor

- **Normal Open (NO) Contact Type** – The circuit activates only when the magnet aligns with the reed switch, making it energy-efficient and reliable.
- **Durable Housing** – Built with high-quality ABS material that resists wear, ensuring long-lasting performance.
- **Magnetic Operation** – Works without physical contact, which reduces mechanical failure and extends lifespan.
- **Easy to Install** – Compact design with pre-wired leads allows quick integration into existing systems.
- **Versatile Applications** – Ideal for security systems, access detection, robotics, smart homes, and more.



Technical Specifications:

- **Model:** BC-38
- **Contact Form:** Normal Open (NO)
- **Housing Material:** ABS plastic
- **Wire Leads:** Pre-attached insulated wires for easy installation
- **Mounting Style:** Surface mount with screws or adhesive tape
- **Applications:** Security alarms, access control, DIY electronics, automation projects, robotics

MC38 Door Windows Sensor For Security Alarm System



Applications and Use Cases

The BC-38 reed switch sensor is highly versatile and can be integrated into a wide variety of projects and systems:

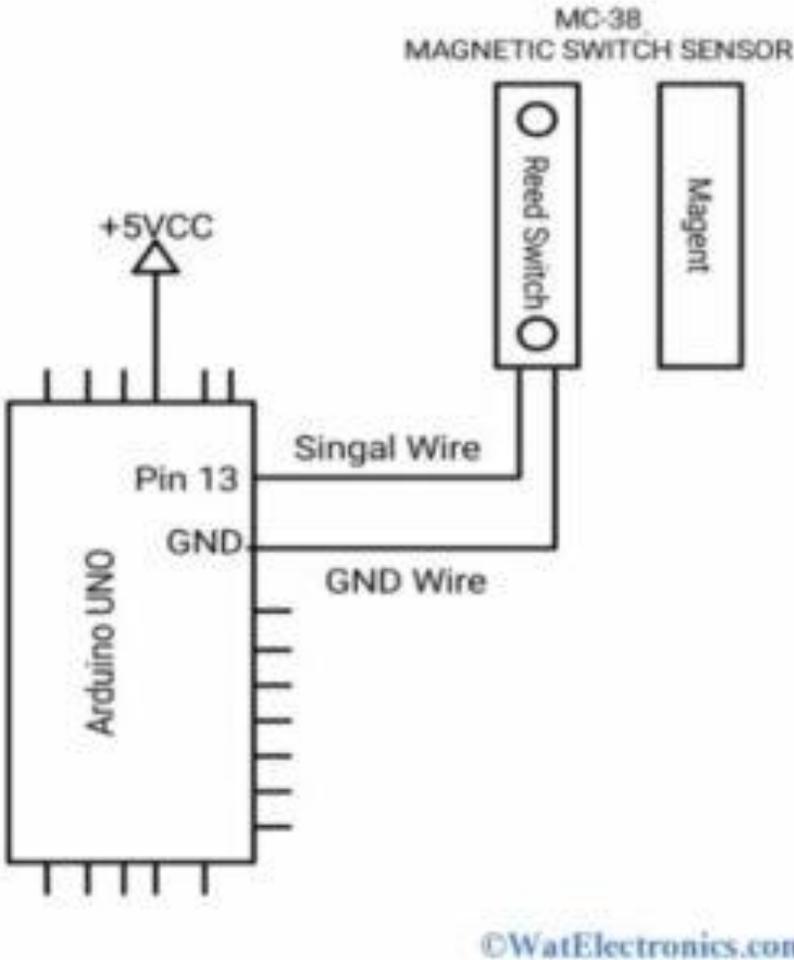
- 1. Home Security Systems**
This sensor is commonly used in **alarm systems** to detect unauthorized entry through doors or windows. When the door or window is opened, the magnetic field is interrupted, and the alarm is triggered.
- 2. Smart Home Automation**
Integrate the BC-38 with **smart home controllers** like Arduino, Raspberry Pi, or ESP8266/ESP32 boards to automate lighting, sound alarms, or send notifications when a door is opened.
- 3. Access Control Systems**
In commercial buildings and offices, the BC-38 is an affordable way to ensure that restricted areas remain secure. It provides instant feedback when doors or cabinets are opened.

4. Industrial Applications

The sensor can be used in **industrial automation** to detect machine doors, sliding panels, or cabinets, improving workplace safety and monitoring.

5. DIY Projects & Robotics

Makers and hobbyists often use reed switches for **custom IoT projects**, smart lockers, or robots that detect contact with obstacles.



Advantages of Using the BC-38 Reed Switch

- **Low Power Consumption** – Since the circuit only closes when triggered, it consumes very little energy.
- **Silent Operation** – Unlike mechanical switches, the reed sensor operates quietly, making it perfect for home environments.
- **Long Lifespan** – With no moving parts, it has less wear and tear, ensuring reliable operation for years.
- **Compact & Lightweight** – Easy to integrate into small devices or hidden installations for security.

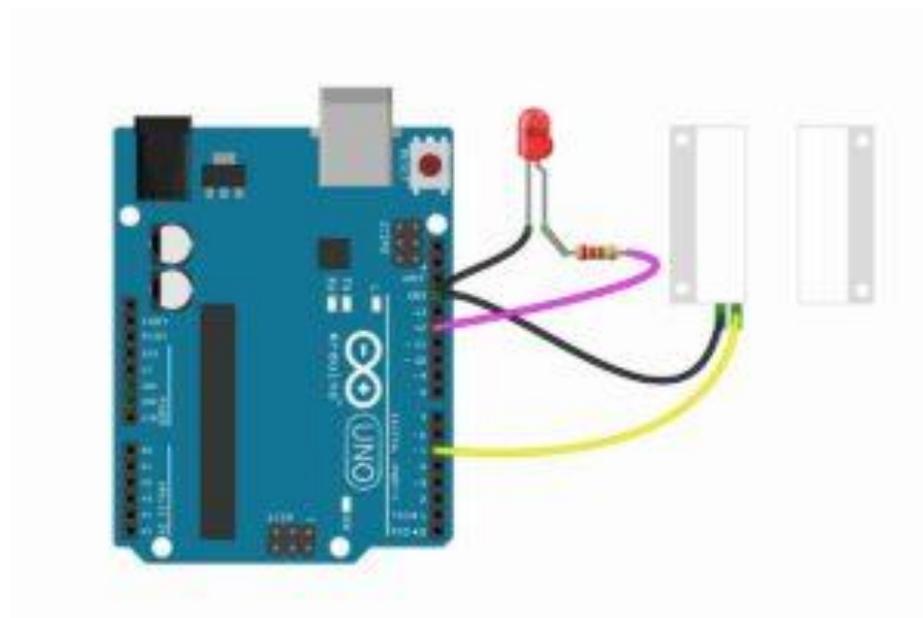
- **Affordable Solution** – Provides high functionality at a very low cost compared to advanced motion sensors.

Installation Tips

Installing the **Magnetic Reed Switch BC-38** is simple and requires minimal effort:

1. Mount the reed switch on the **door frame or fixed surface**.
2. Place the magnet on the **moving part** (e.g., the door or window).
3. Ensure proper alignment between the switch and the magnet for accurate detection.
4. Connect the pre-wired leads to your alarm circuit, microcontroller, or automation system.

For added reliability, it is recommended to use screws for permanent mounting, though strong adhesive tape may be used for temporary installations.



Why Choose the BC-38 Reed Switch?

The **Magnetic Reed Switch Door Sensor BC-38 (NO)** is the perfect balance of **simplicity, reliability, and affordability**. Whether you are building a **professional security system** or experimenting with **DIY smart projects**, this sensor provides consistent performance with minimal setup. Its compatibility with a wide range of controllers and alarm systems makes it one of the most popular and widely used magnetic sensors in the market.

