### **Reed Switch Module**

#### **DESCRIPTION:**

Reed switch is a kind of passive electronic switching component with contacts with a simple structure, small size and easy to control. It consists of a sealed glass envelope where there are two ferrous elastic reeds and is filled with inert gas called rhodium. Normally, the two reeds are separated in the envelope. When a magnetic substance approaches to the glass envelope, the reeds will come together due to the magnetic field thus completing an electric circuit. When the external magnetic field disappears, two reeds will be separated because of their elasticity, the circuit is also disconnected. Therefore, as a circuit switching device controlled by magnetic field signals, reed switch can also be used as a sensor for counting and limiting, etc. ( applied in the security systems, mainly used for production of door and window magnets), and it is also widely used in a variety of communications devices. In practice, it is common to use the two permanent magnets to control connection of two metal sheets, thus it is also called a "magnetron".



# Specification:

Operation voltage: 5V

Both digital and analog output pin

Adjustable sensitive

Size: 42.5\*15mmWeight: 2.964g

#### **PIN CONFIGURATION:**

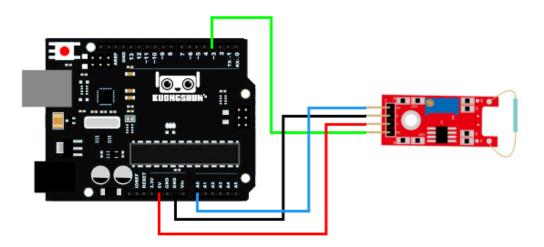
1、 "A0": Analog output pin,real-time output voltage signal

2 "G": GND

3、 "+" :Power(5V/DC)4、 "D0" : Digital output pin

## Example:

The example show that Reed module and the interface comes with digital 13 LED build a simple circuit to produce a Reed warning lamp 13 comes with digital interfaces of the LED, the Reed sensor access number 3 interface, when Reed sensors Sensed a key signal, LED lights, otherwise off.



### Code:

```
int Led = 13 ; // define LED Interface
int Sensor = 3; // define the Reed sensor interfaces
int val; // define numeric variables val
void setup ()
{
    pinMode (Led, OUTPUT) ; // define LED as output interface
    pinMode (Sensor, INPUT) ; // output interface as defined Reed sensor
}
void loop ()
{
val = digitalRead (Sensor) ; // digital interface will be assigned a value of 3 to read val
```

```
if (val == HIGH) // When the Reed sensor detects a signal, LED flashes
{
    digitalWrite (Led, HIGH);
}
else
{
    digitalWrite (Led, LOW);
}
```