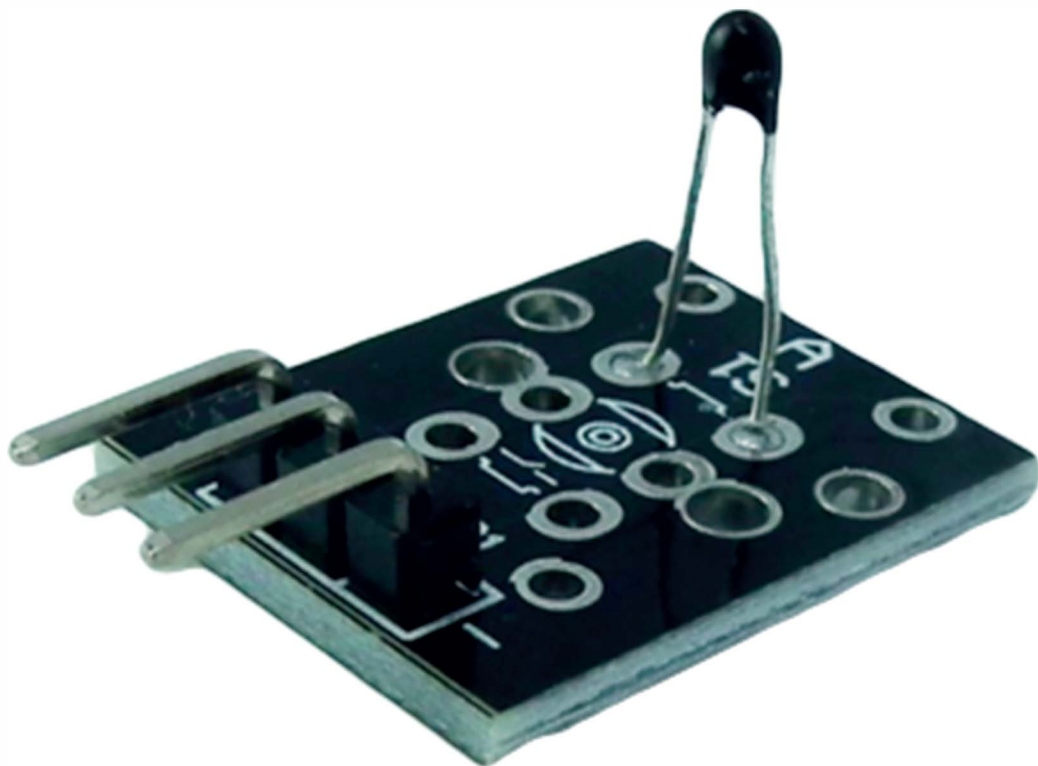


## KY-013 Thermistor Sensor Modul Datenblatt



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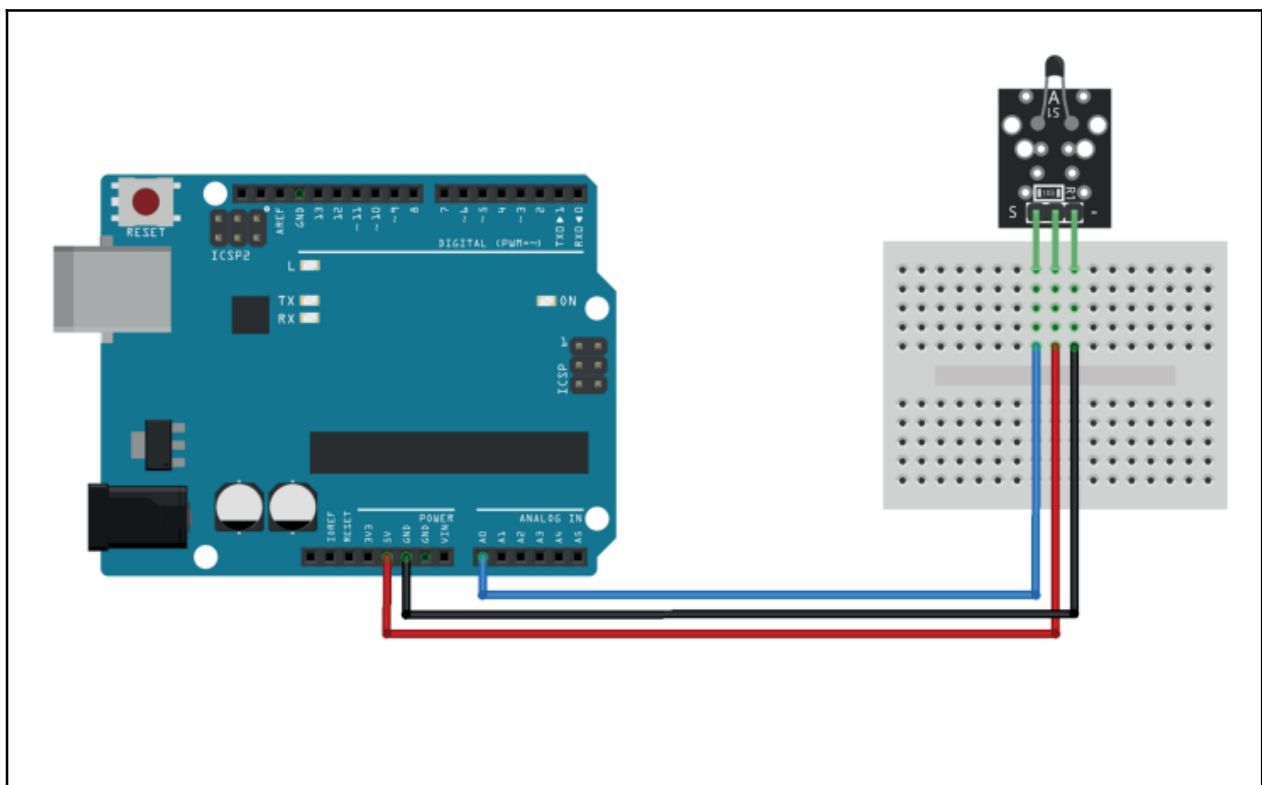
## 1. Specifications

The KY-013 Analog Temperature Sensor module consist of a NTC thermistor and a 10 kΩ resistor. The resistance of the thermistor varies with surrounding temperature, we'll use the Steinhart–Hart equation to derive precise temperature of the thermistor.

Operating Voltage	5V
Temperature measurement range	-55°C to 125°C [-67°F to 257°F]
Measurement Accuracy	±0.5°C

## 2. Connection Diagram

Connect board's power line (middle) and ground (-) to 5V and GND respectively.  
Connect signal (S) to pin A0 on the Arduino.



### 3. Example Code

```
1  #include <math.h>
2
3  double Thermister(int RawADC) {
4      double Temp;
5      Temp = log(((1024000/RawADC) - 10000));
6      Temp = 1 / (0.001129148 + (0.000234125 + (0.0000000876741 * Temp * Temp ))* T
7      Temp = Temp - 273.15; // Convert Kelvin to Celcius
8      return Temp;
9  }
10
11 void setup() {
12     Serial.begin(9600);
13 }
14
15 void loop() {
16     Serial.print(Thermister(analogRead(0))); //read pin A0
17     Serial.println("c");
18     delay(500);
19 }
```