

Thermistor

Intro

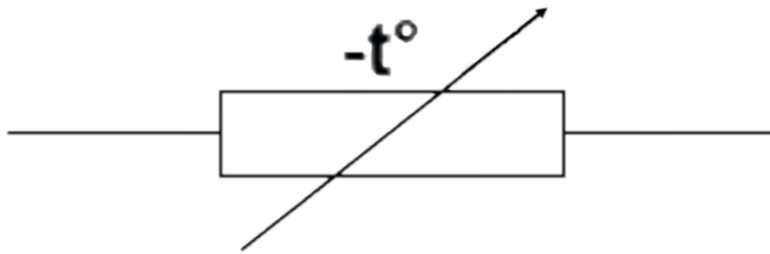
→ So, in this video, we will see LDR following the four-step process on which I have already created a video, so let's start.

Thermistor

- A thermistor is a type of variable resistor whose resistance is controlled by the temperature.
- When the temperature of the thermistor increases the resistance decreases and the current flowing through the circuit will be high the LED will glow brightly whereas if the temperature of the thermistor decreases the resistance will go high and that will lower the current flowing through the circuit and the LED will glow dully.

Circuit Symbol

- The circuit symbol of the Thermistor is very similar to the symbol of LDR.
- We just have to replace the lambda symbol with a $-t$ degree symbol which represents temperature.



Real-Time Application

- *Hair dryer*
- *Coffee maker*
- *Thermometer*

Online Circuit Simulation

→ *Sorry guys tinker cad software does not consist of a thermistor.*

Practical Experimentation

→ *Required components:*

- *A Bread Board*
- *A Thermistor*
- *A Battery*
- *A LED*
- *Some jumper wires*

→ *Now let's do the connections, so we will connect the battery terminals to their respective power rails in the Bread Board, then*

we will connect the Thermistor to any random strip of the Bread Board, then we will connect the LED's positive filament to the 2nd terminal of the Thermistor then we will connect the negative filament of the LED to the negative power rail, and then we will simply connect the positive power rail to the 1st terminal of the Thermistor.

→ *Now what we will do is we will light a wooden match and bring it near to the thermistor, then you can see your LED will start going bright.*

Note: - *don't touch the thermistor for a while after doing this experiment.*

Circuit Diagram

→ *First, we will draw the battery, a LED, and a Thermistor then we will connect the negative line of the battery to the negative Line of the LED, then we will connect the positive line of the battery to the 1st line of the Thermistor and then we'll connect the 2nd line of the Thermistor to the positive line of the LED and your circuit is completed.*

Outro

→ *That's all for this video and I will see you in this next one until then
BYE BYE!*