Electronics Foundations: Semiconductor Devices

with Barron Stone



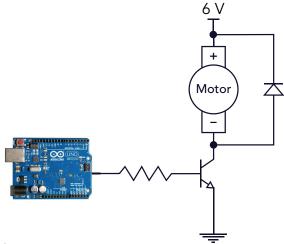
BJT Switch Circuit

This circuit uses a NPN bipolar junction transistor as a high-side switch to control whether a motor is turned on or off using the digital output from an Arduino microcontroller.

Components:

- 6V power source
- Arduino microcontroller
- 6 VDC motor
- 2N3904 NPN transistor
- 1N4148 diode
- 1 kΩ resistor

Schematic:



Circuit:

