

Transistors

Equivalence et caractéristiques des transistors et Mosfet

2N2222 Datasheet,

Type Designator: 2N2222

SMD Transistor Code: 1B

Material of Transistor: Si

Polarity: NPN

Maximum Collector Power Dissipation (P_c): 0.5 W

Maximum Collector-Base Voltage $|V_{cb}|$: 60 V

Maximum Collector-Emitter Voltage $|V_{ce}|$: 30 V

Maximum Emitter-Base Voltage $|V_{eb}|$: 5 V

Maximum Collector Current $|I_{c \text{ max}}|$: 0.8 A

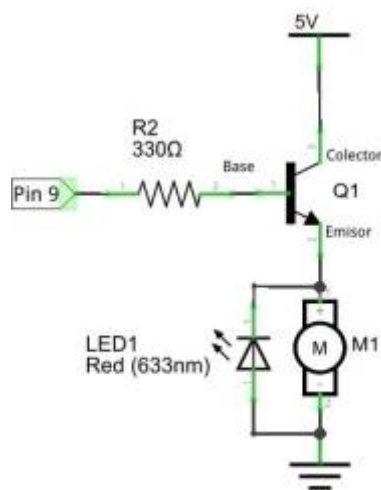
Max. Operating Junction Temperature (T_j): 175 °C

Transition Frequency (f_t): 250 MHz

Collector Capacitance (C_c): 8 pF

Forward Current Transfer Ratio (h_{FE}), MIN: 100

<https://image.tubefr.com/upload/9/f4/9f433f5812b393aa56a96a086ef19d25.jpg>



BD139 Datasheet,

Type Designator: BD139

Material of Transistor: Si

Polarity: NPN

Maximum Collector Power Dissipation (Pc): 12 W

Maximum Collector-Base Voltage |Vcb|: 80 V

Maximum Collector-Emitter Voltage |Vce|: 80 V

Maximum Emitter-Base Voltage |Veb|: 5 V

Maximum Collector Current |Ic max|: 1 A

Max. Operating Junction Temperature (Tj): 150 °C

Transition Frequency (ft): 50 MHz

Forward Current Transfer Ratio (hFE), MIN: 40

Noise Figure, dB: -

Package: TO126

Mosfet

IRF520N MOSFET.

Type Designator: IRF520N

Type of Transistor: MOSFET

Type of Control Channel: N -Channel

Maximum Power Dissipation (Pd): 48 W

Maximum Drain-Source Voltage |Vds|: 100 V

Maximum Gate-Source Voltage |Vgs|: 10 V

Maximum Gate-Threshold Voltage |Vgs(th)|: 4 V

Maximum Drain Current |Id|: 9.7 A

Maximum Junction Temperature (Tj): 150 °C

Total Gate Charge (Qg): 16.7 nC

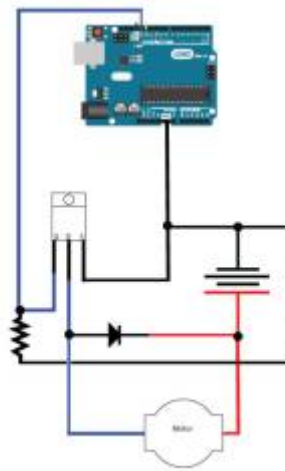
Maximum Drain-Source On-State Resistance (Rds): 0.2 Ohm

Package: TO220AB

http://wiki.mchobby.be/index.php?title=Mini_Kit_Moteur_Hobbyiste

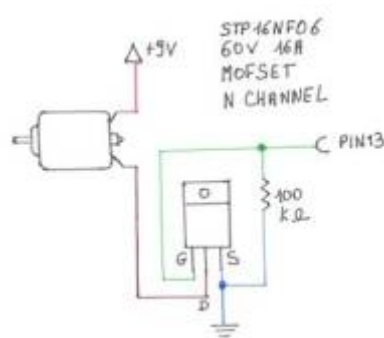
Déclenchement pompe avec transistor mosfelt

<https://www.instructables.com/id/ArduinoMicrocontroller-MOSFET/>



Picture of Wire Up the MOSFET

DC motor driven by MOSFET



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