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## Motor Driver 15A IRF7862PBF

ROB-09107



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**Description:** The Pololu 15 Amp high-power motor driver is a discrete MOSFET H-bridge designed to drive one DC brushed motor. The H-bridge is made up of one N-channel MOSFET per leg, and most of the board's performance is determined by these MOSFETs (the rest of the board contains the circuitry to take user inputs and control the MOSFETs). The board supports a wide 5.5 to 24 V voltage range and is efficient enough to deliver a continuous 15 A without a heat sink, or 21 A with a heat sink.

With the PWM pin held low, both motor outputs will be held low (a brake operation). With PWM high, the motor outputs will be driven according to the DIR input. This allows two modes of operation: sign-magnitude, in which the PWM duty cycle controls the speed of the motor and DIR controls the direction, and locked-antiphase, in which a pulse-width-modulated signal is applied to the DIR pin with PWM held high.

The included axial capacitor should be mounted to the + and - holes in the middle of the PCB. Make sure the cap is connected with the correct orientation.

**Note:** Batteries that are nominally 24 V can be much higher than that when fully charged; this product is therefore not recommended for use with 24 V batteries unless appropriate measures are taken to limit the peak voltage.

### Features:

- IRF7862PBF MOSFETs Motor Driver
- 1 Motor Channel
- Operating Voltage: 5.5 - 24V
- Continuous output current: 15 Amps
- Peak output current: 170 Amps

- Max PWM frequency: 40kHz
- MOSFET on-resistance: 3.7mOhm

**Dimensions:** 1.3" x 0.8"