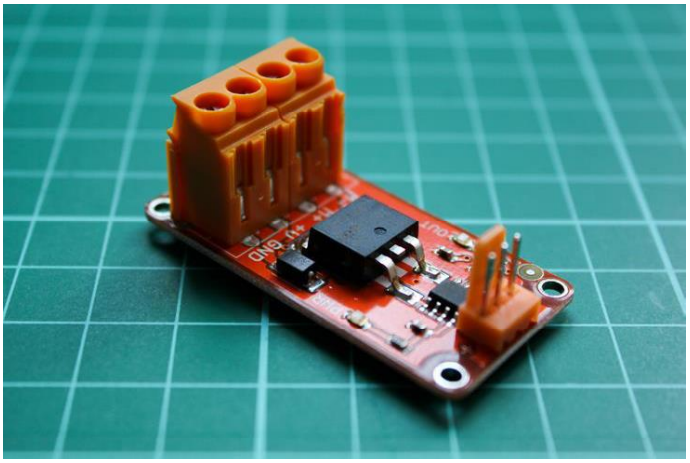
5.3 TinkerKit MOSFET module



This module switches a high current load using a high power transistor. Unlike a mechanical relay, this is capable of high speed switching for use with PWM.

Output: This module lets you control devices operating at a maximum of 24VDC with an Arduino pin. To wire the module, connect the power supply for your device (max 24 V) to the V+ and GND terminals. Connect the device to M+ and M-.

Be aware of your circuit's polarity, you could damage your components if it is not wired correctly.

Module Description: This module features a power MOSFET transistor (IRFS3806 from International Rectifier), a kick-back (free wheeling) diode, a standard TinkerKit 3pin connector, a signal amplifier (LMV358 from ST), a green LED that signals that the module is correctly powered and one yellow LED whose brightness depends on the input signal received by the module.

MOSFET Specifications (IRFS3806)	
Parameter	Value
Package	D2-Pak
Circuit	Discrete
VBRDSS (V)	60
VGs Max (V)	20
RDS(on) Max 10V (mOhms)	15.8
ID (drain current)@ TC = 25C (A)	43
ID (drain current) @ TC = 100C (A)	31
Tj Max	175
Power Dissipation @ TC = 25C (W)	71
Part Status	Active