

Datasheet:



MONKMAKES SSR

V1A - 2020-07-30

This relay can be used to switch low voltage devices such as light bulbs, a motor, a small heating element or even a string of 12V LED lighting. The voltage needs to be kept under 16V, but the relay will automatically protect itself against too much current.

- Solid-state relay up to 2 Amp
Peak 1A continuous AC/DC
- Active LED indicator
- Resettable 'polyfuse' to protect against over-current
- Great for Arduino and Raspberry Pi
- Suitable for low frequency PWM



Absolute Maximum Ratings

| | | Units |
|------------------------------------|----|-------|
| Max. switched current (< 1 min) | 1 | A |
| Max. switched current (continuous) | 2 | A |
| Peak switched voltage | 16 | V |
| Max. switching voltage | 12 | V |

Electrical Characteristic

| | | Units |
|--|------|-------|
| Typical input switching current at 3V | 2 | mA |
| Typical input switching current at 12V | 10 | mA |
| Input switching voltage range | 3-12 | V |
| Max switching frequency at 2A load | 50 | Hz |

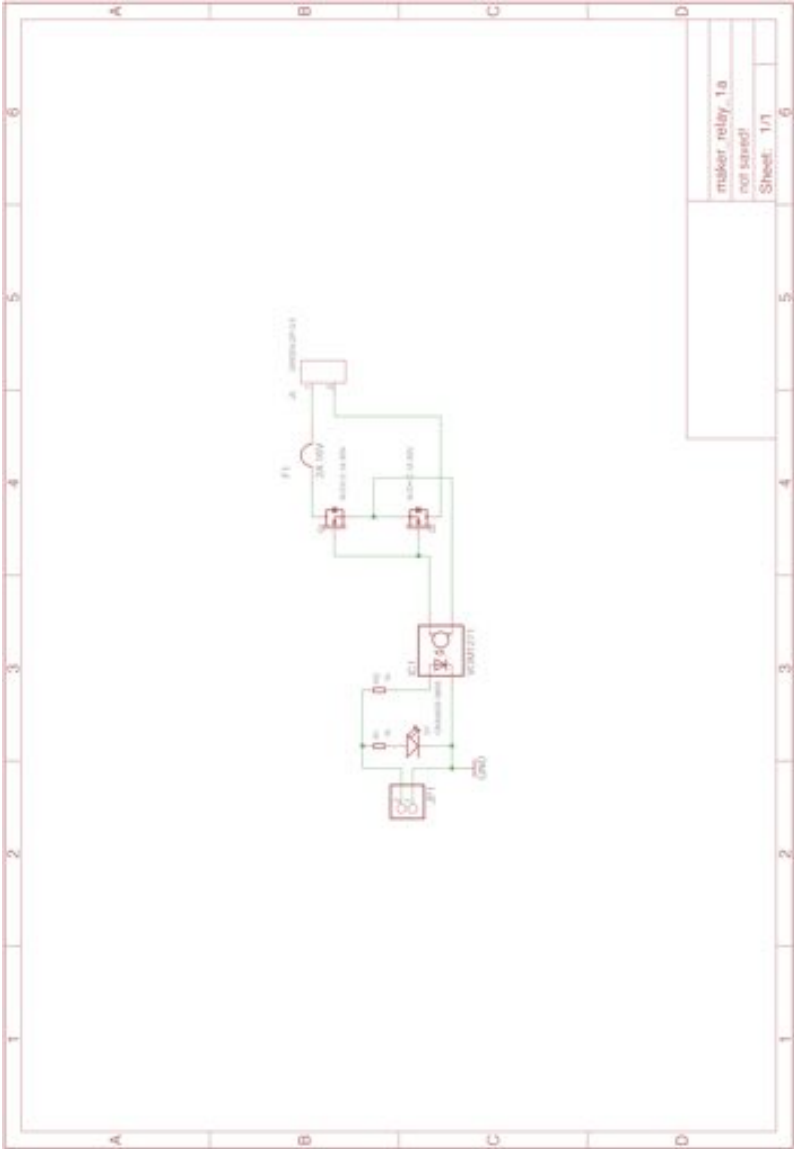


Typical Usage (Raspberry Pi Controlled Low Voltage Pump)



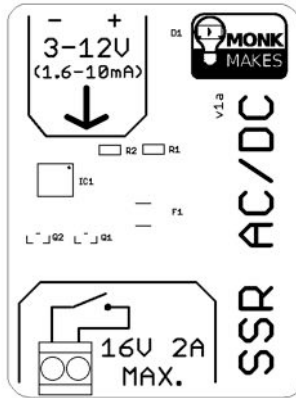
In this scenario, a GPIO pin of the Raspberry Pi is directly used to control the SSR switching a water pump powered from a 4xAA battery pack.

Schematic



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Board Outline (Actual Size)



Switching Test Results

Top: control signal 3V, 50%

Bottom: Load voltage at 1A (average) – 5V into 2.35Ω (2.1A instantaneous)

