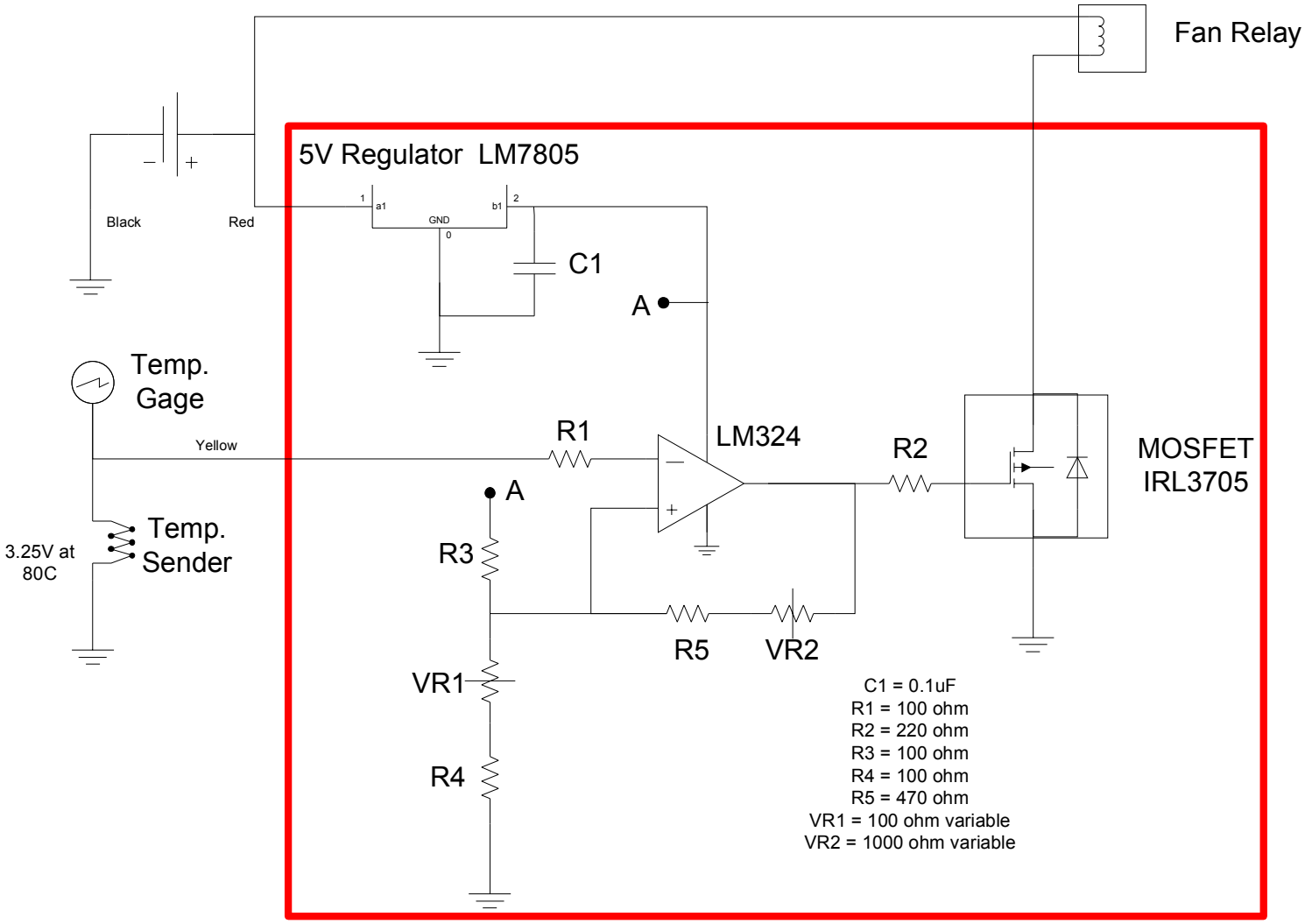
KZ1300 FAN CONTROL



In a perfect world, the voltage at the temperature sender at 80C would be 3.25 volts.
This calculation is determined from: Constant Voltage Regulator = 7V, Temperature Gage = 60ohms, and Temperature Sender = 52ohms.

The world is not perfect so we build in adjustments to calibrate the circuit.
VR1 is adjusted to set when the fan turns on and VR2 is adjusted to set when the fan turns off.

The components I used for the circuit are just ones that I already had. The 5V regulator will keep the circuit stable over the vehicle voltage from 9 to 16 volts. I used matting connectors so I could tap into the gage circuit where the temp gage plugs into the vehicle harness. This gave me power, ground, and sender voltage. I just need to disconnect the fan switch wire and connect that wire to the MOSFET.

I used the temperature gage as my reference range to adjust the circuit when the fan turns on and off. With my vehicle the thermostat opens just as the temperature gage enters the “normal” range so I set the fan to come on in the middle this range (when the needle just touches “P” of the TEMP) and the fan turns off when the needle is on the left side of “M”.