Heater with temperature and time dependent buzzer

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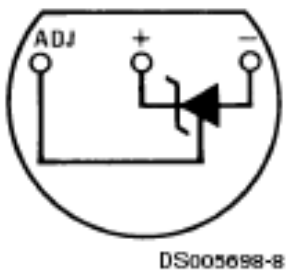
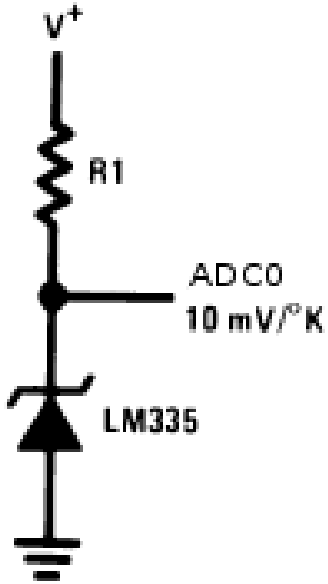
- Signal for heating to stop when temperature crosses a certain threshold specified by the user, or when the time elapsed has crossed the time threshold.
- Signal: buzzer!

What's used

- LM335Z is the temperature sensor. It senses the temperature through a circuit involving Zener. The input voltage is fed into the PHOENIX ADC0 port.
- The PHOENIX box (an electronic kit)
- Two 1 kΩ resistors.
- A buzzer.

Circuit





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... and we are done

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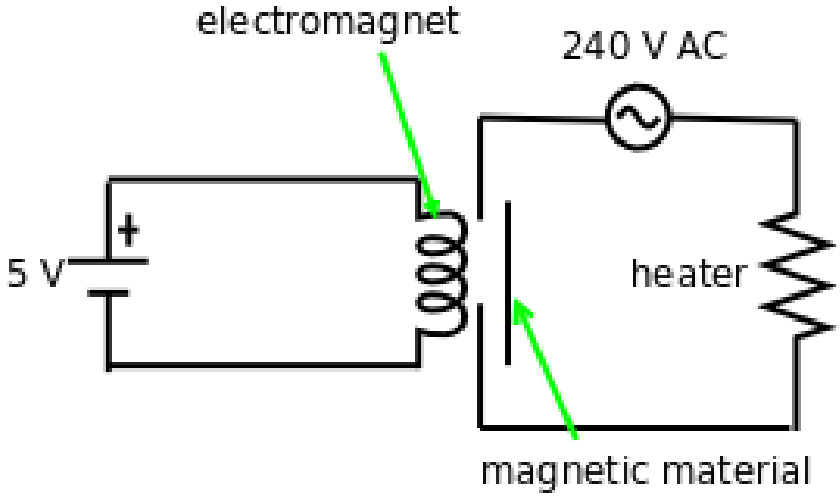
Extend

- Allow PHOENIX to automate heating (use relay switch).



- LED display with temperature

Acknowledgements

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Appendix
Schematic diagram of LM335Z