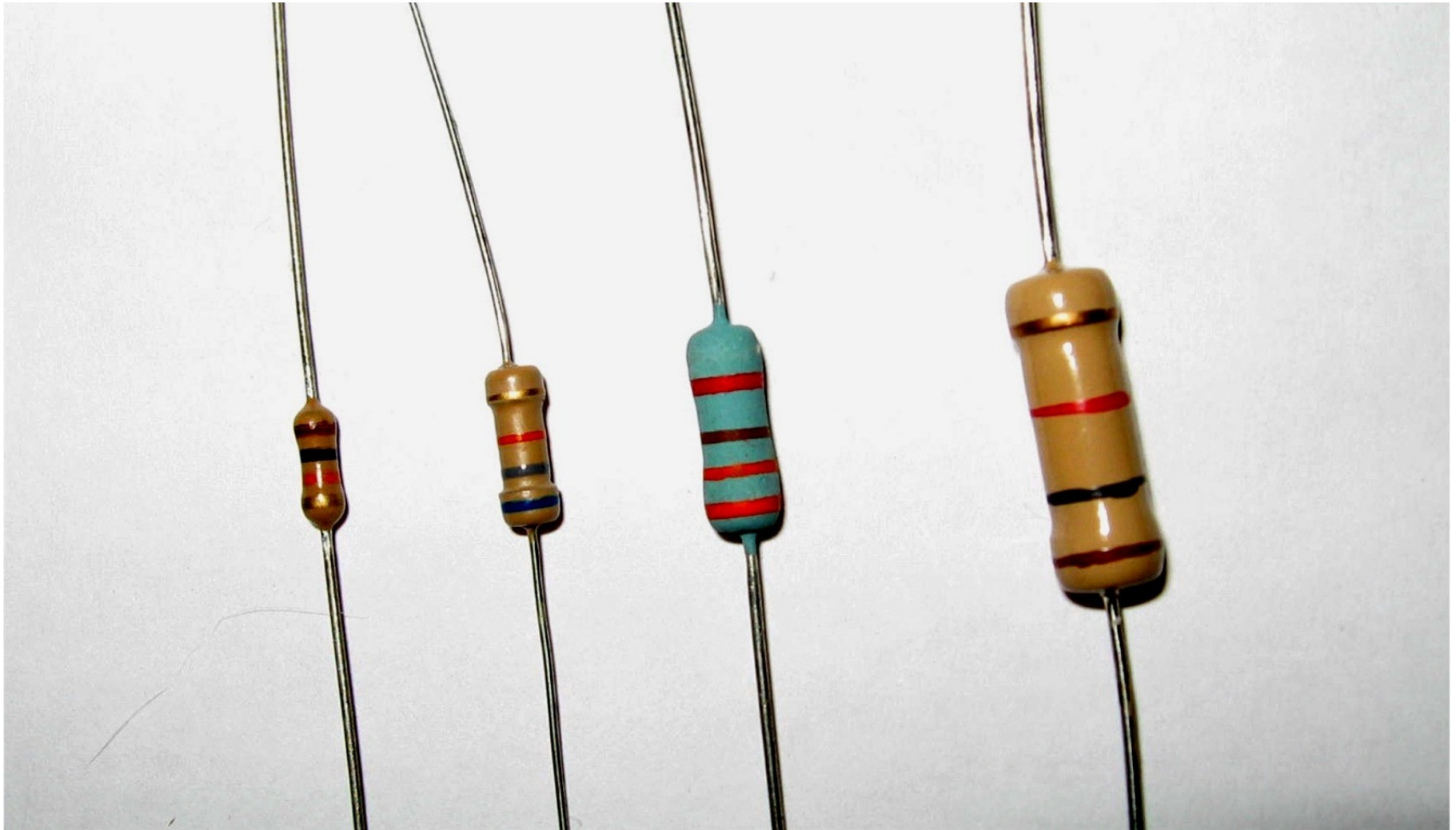


Basic electronics

Components

- How do they look
- What do they do
 - Hydraulic/pneumatic analogies
 - Common uses

Resistor



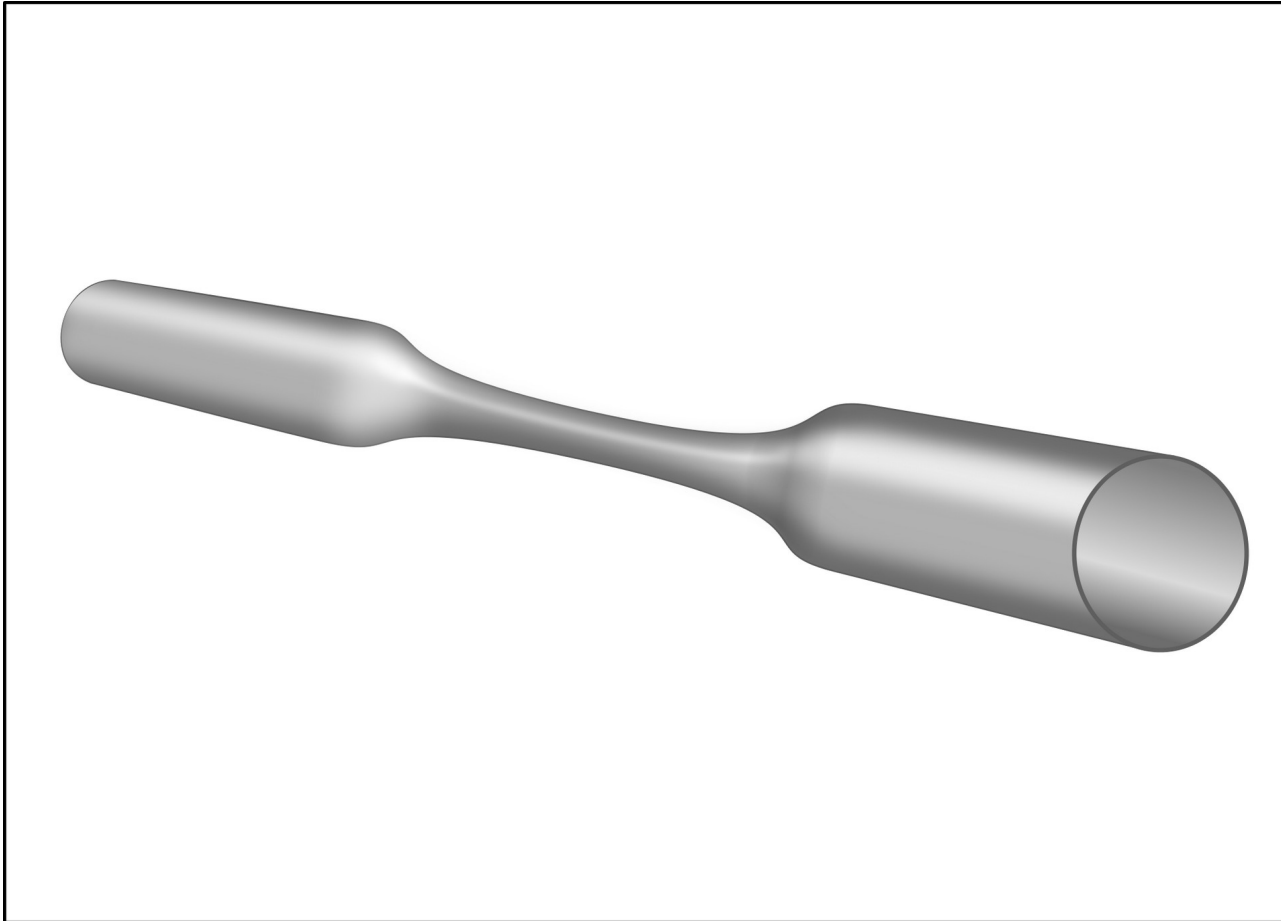
<http://sonnywalton.com/>

Resistor



<http://eeweb.com/>

Resistor



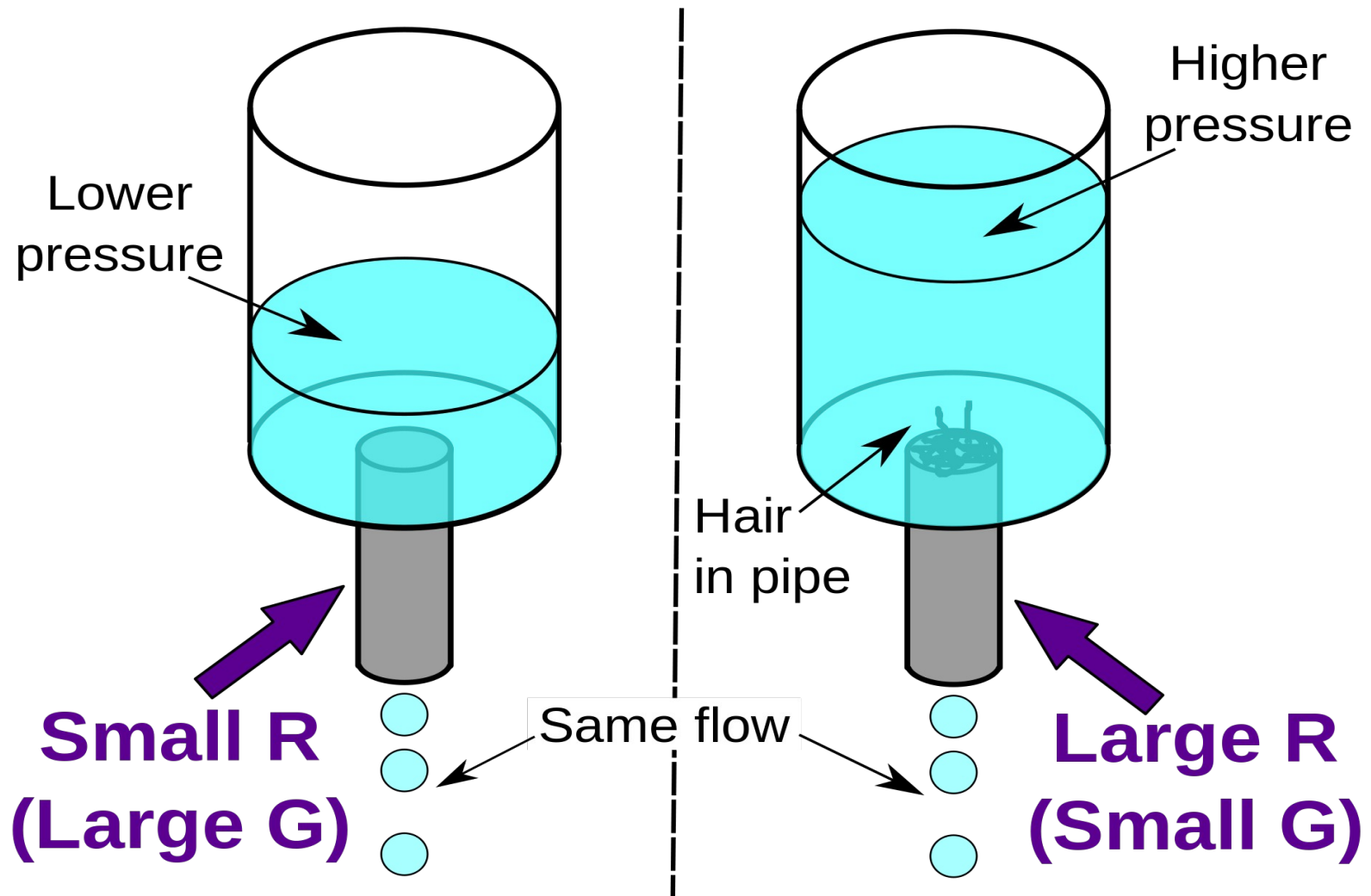
<http://digitalaudioconcepts.com/>

Resistor

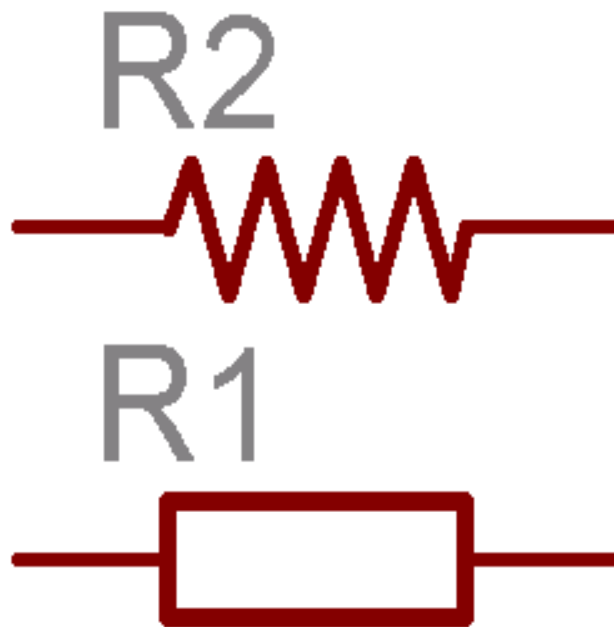


<http://www.spatiegebruik.nl/>

Resistor

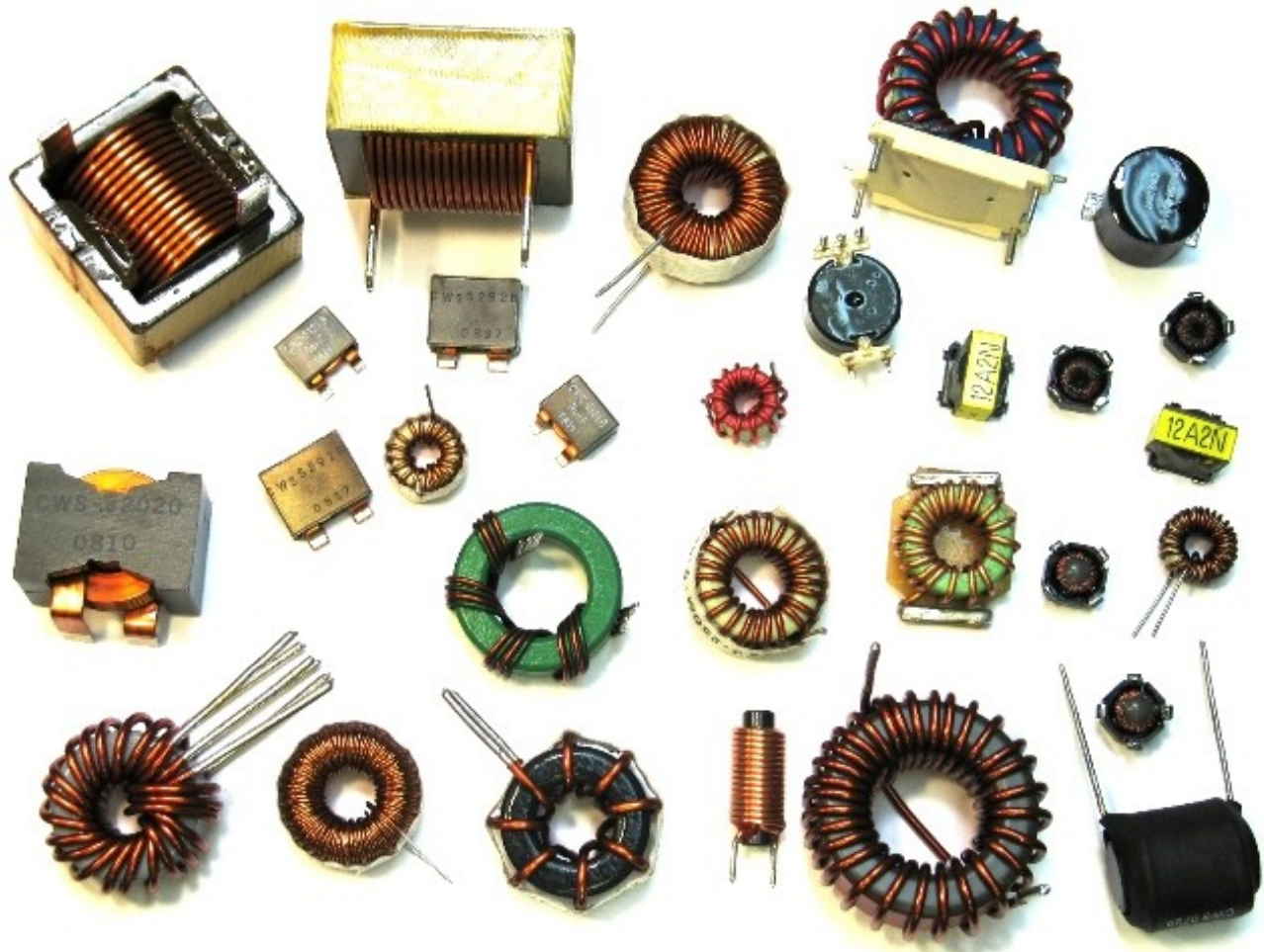


Resistor



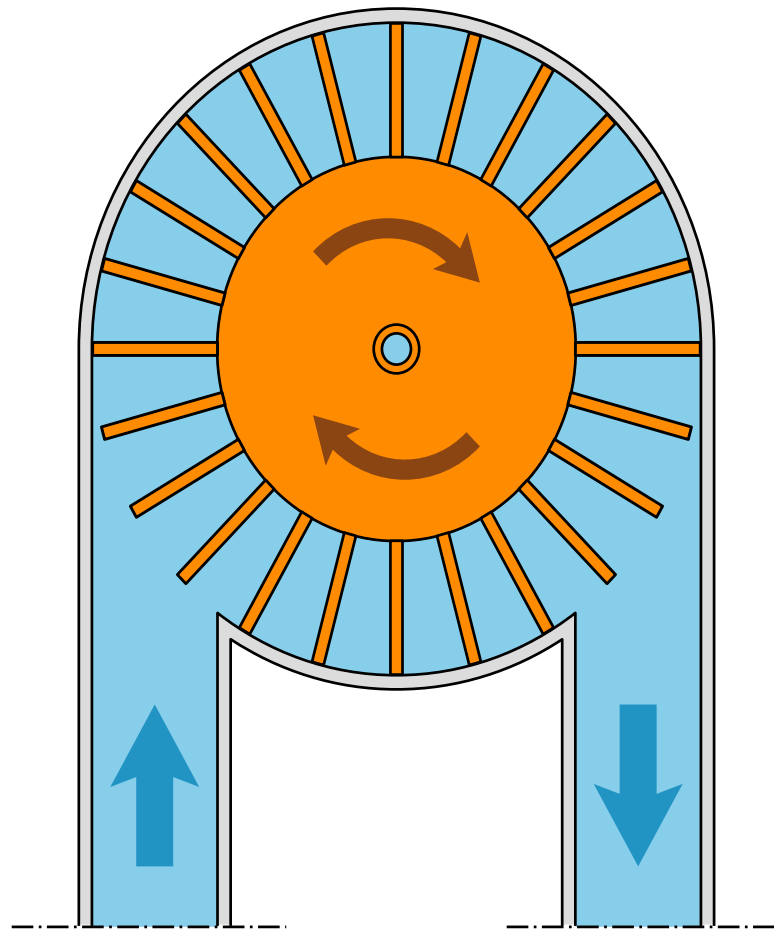
<http://gaussmarkov.net/>

Inductor



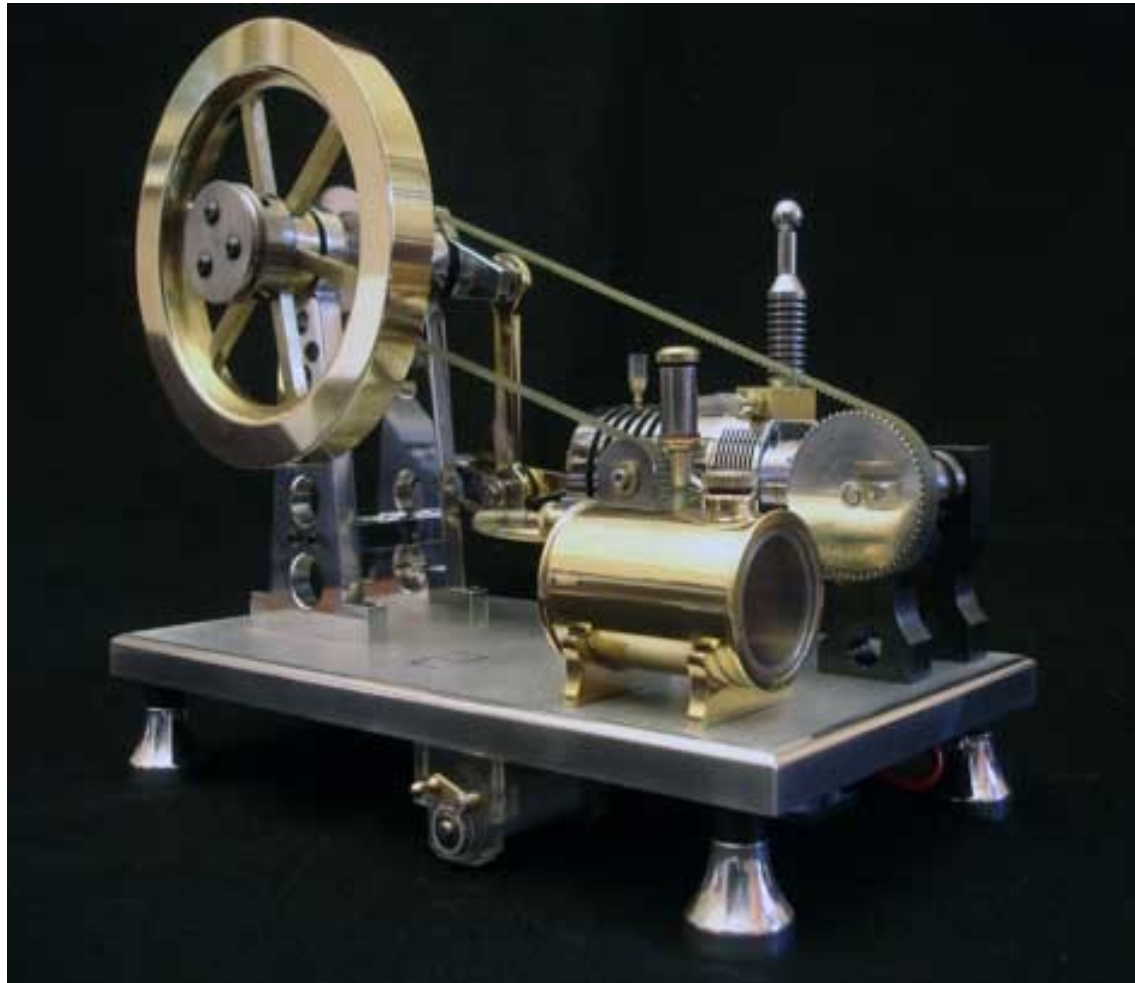
<http://e101.webs.com/inductors.htm>

Inductor



<http://en.wikipedia.org/wiki/User:Jocajo>

Inductor



<http://ridders.nu/>

Inductor

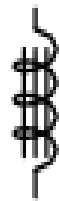
Inductor symbols



generic, or air-core



iron core



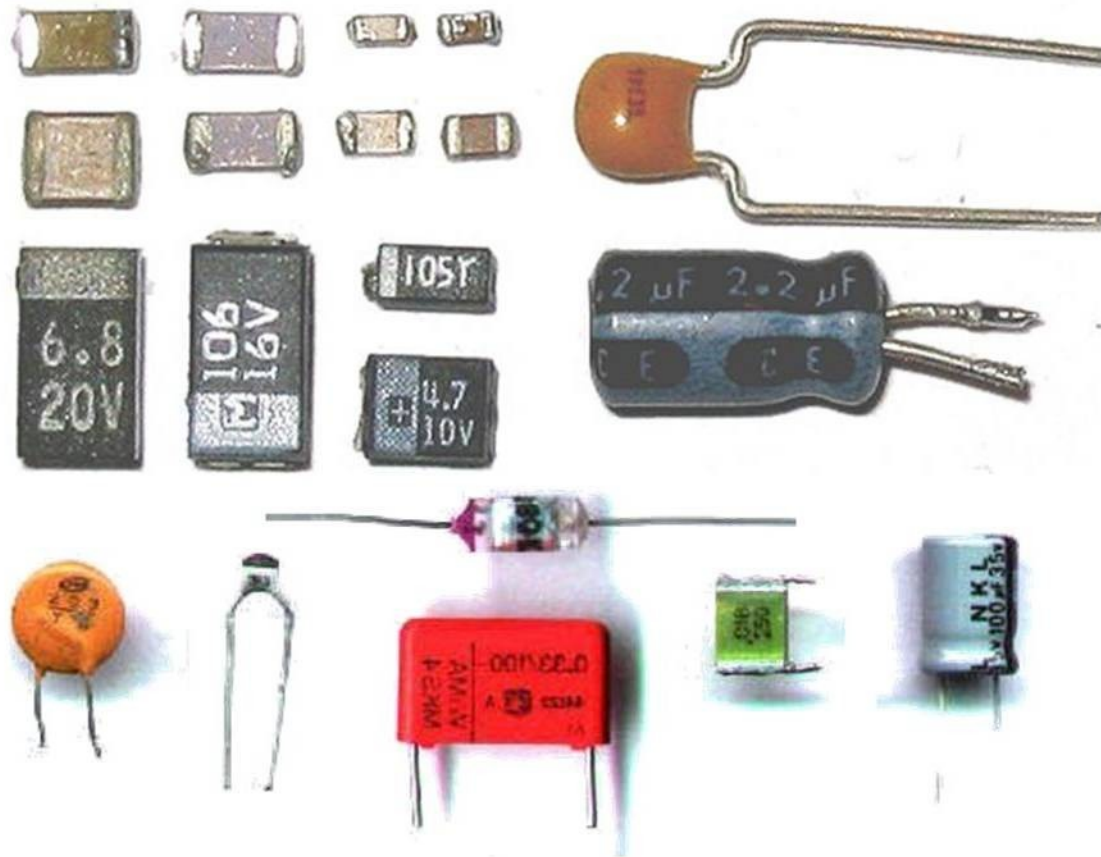
iron core
(alternative)



generic
(newer symbol)

<http://www.allaboutcircuits.com/>

Capacitor



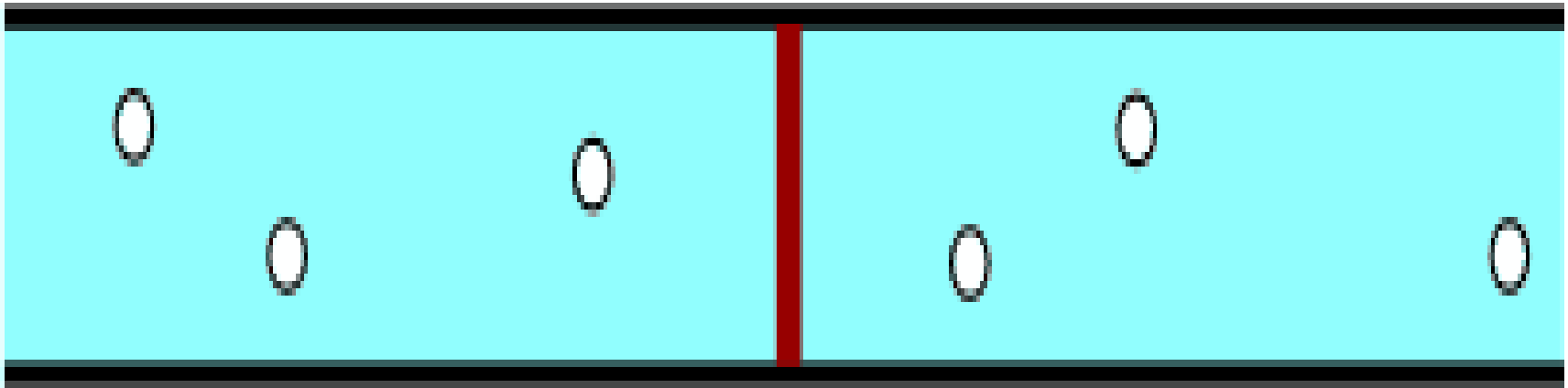
<http://www.mp-estore.com/>

Capacitor



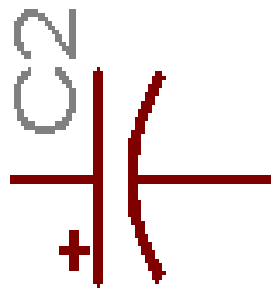
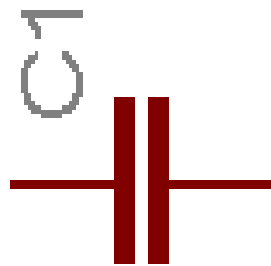
<http://www.kdiballoon.com/>

Capacitor



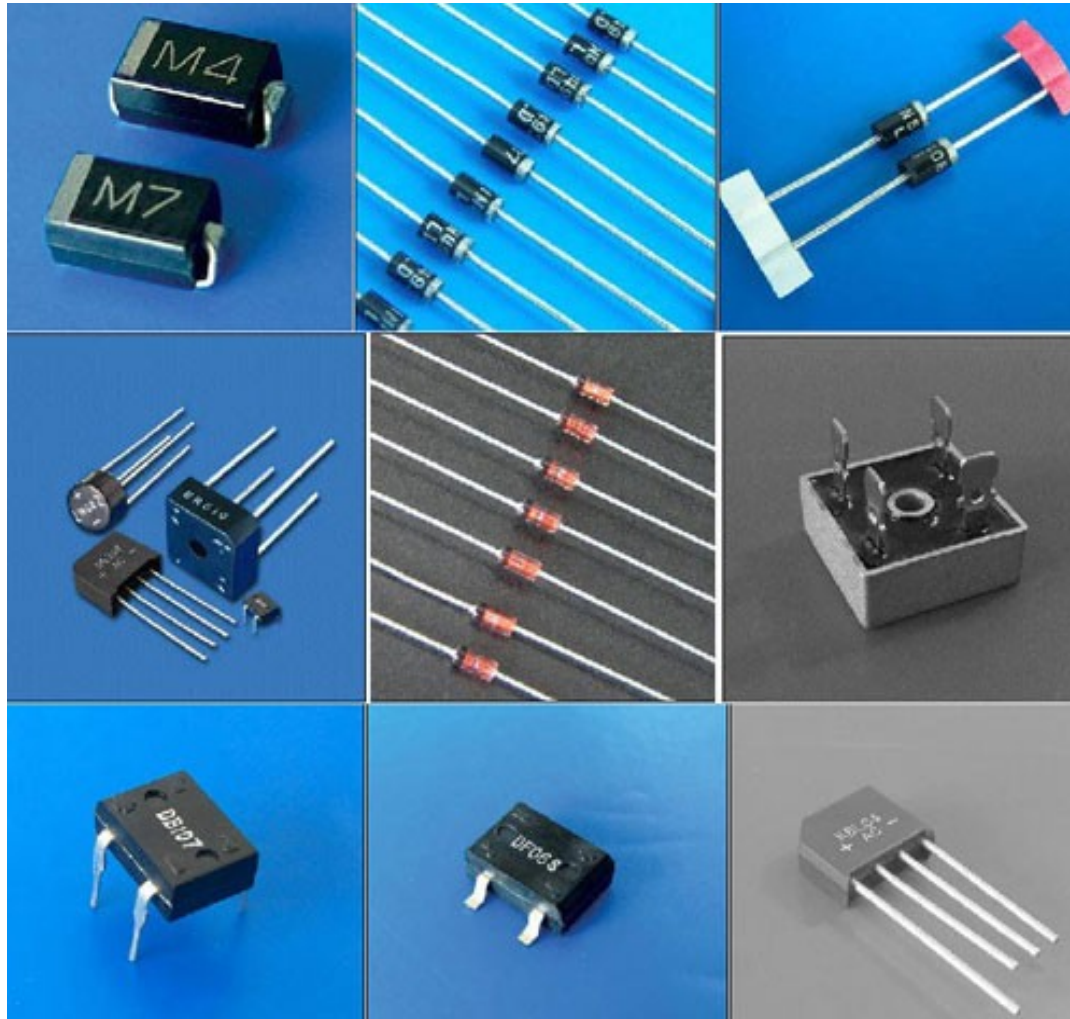
<http://en.wikipedia.org/wiki/User:Sbyrnes321>

Capacitor



<http://gaussmarkov.net/>

Diode



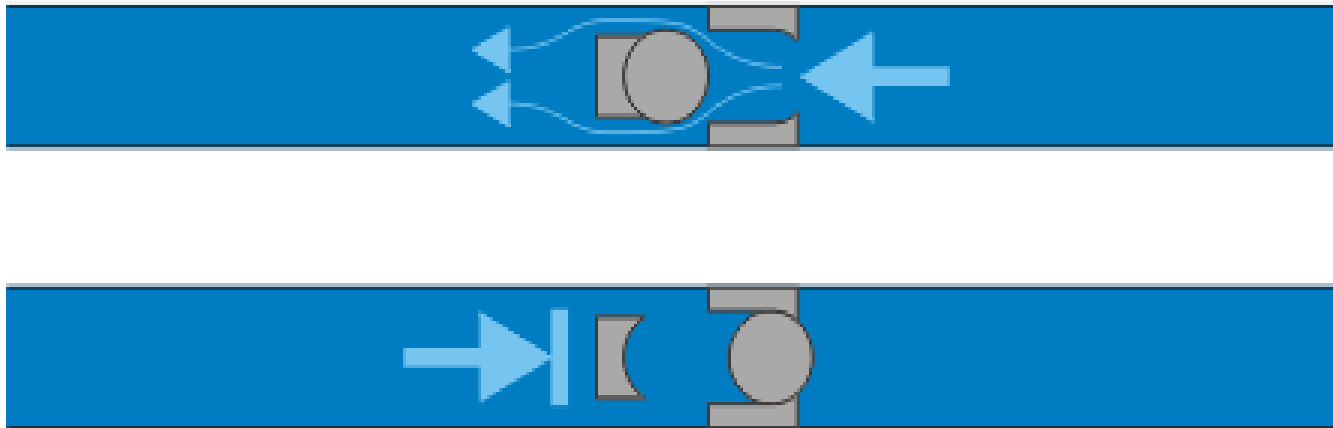
<http://adamsun.en.made-in-china.com/>

Diode



<http://www.rijksoverheid.nl/ministeries/ienm/>

Diode



<https://ece.uwaterloo.ca/~dwharder/>

Diode

Valve

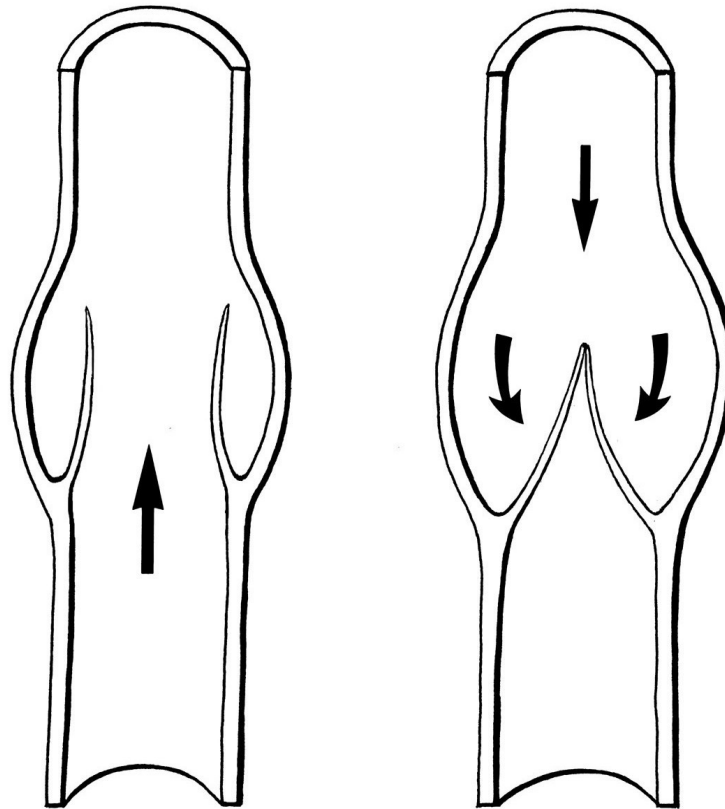
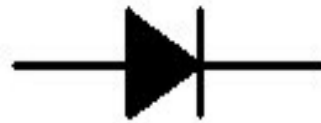


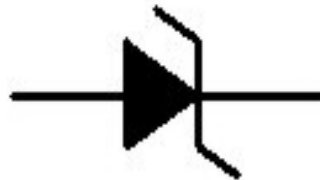
Diagram 1

<http://www.wsiat.on.ca/english/mlo/venous.htm>

Diode



Diode

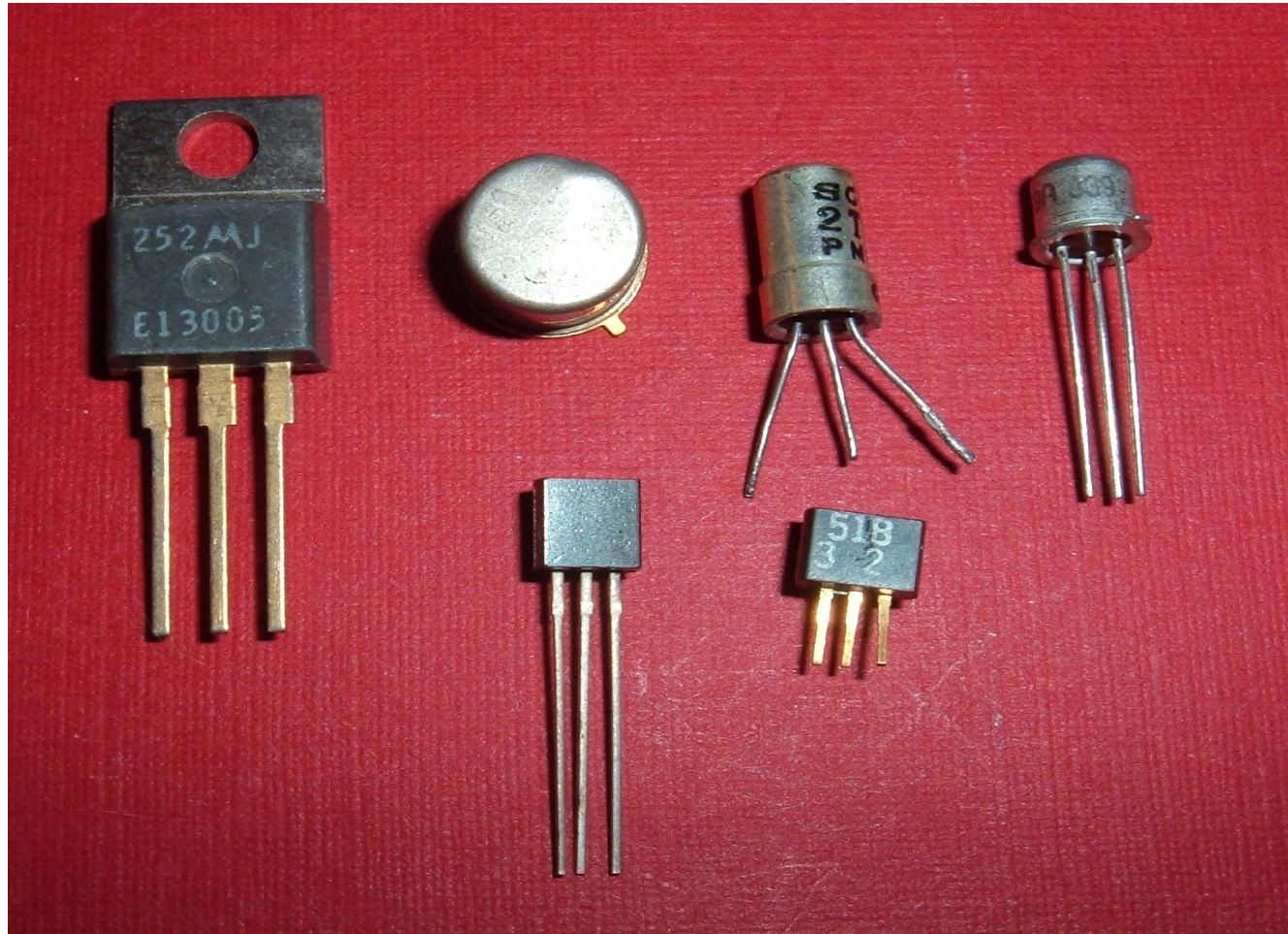


Zener Diode



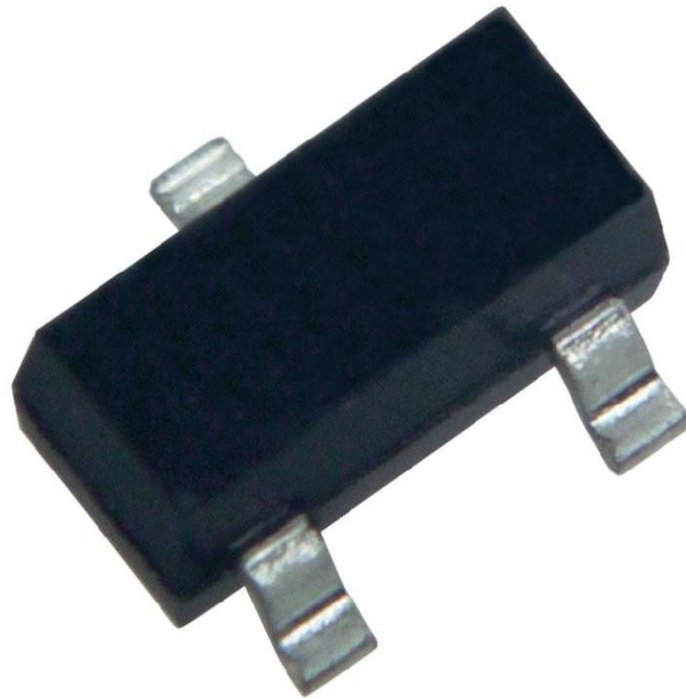
Light Emitting Diode - LED

Transistor



<http://www.std.com/~reinhold/>

Transistor



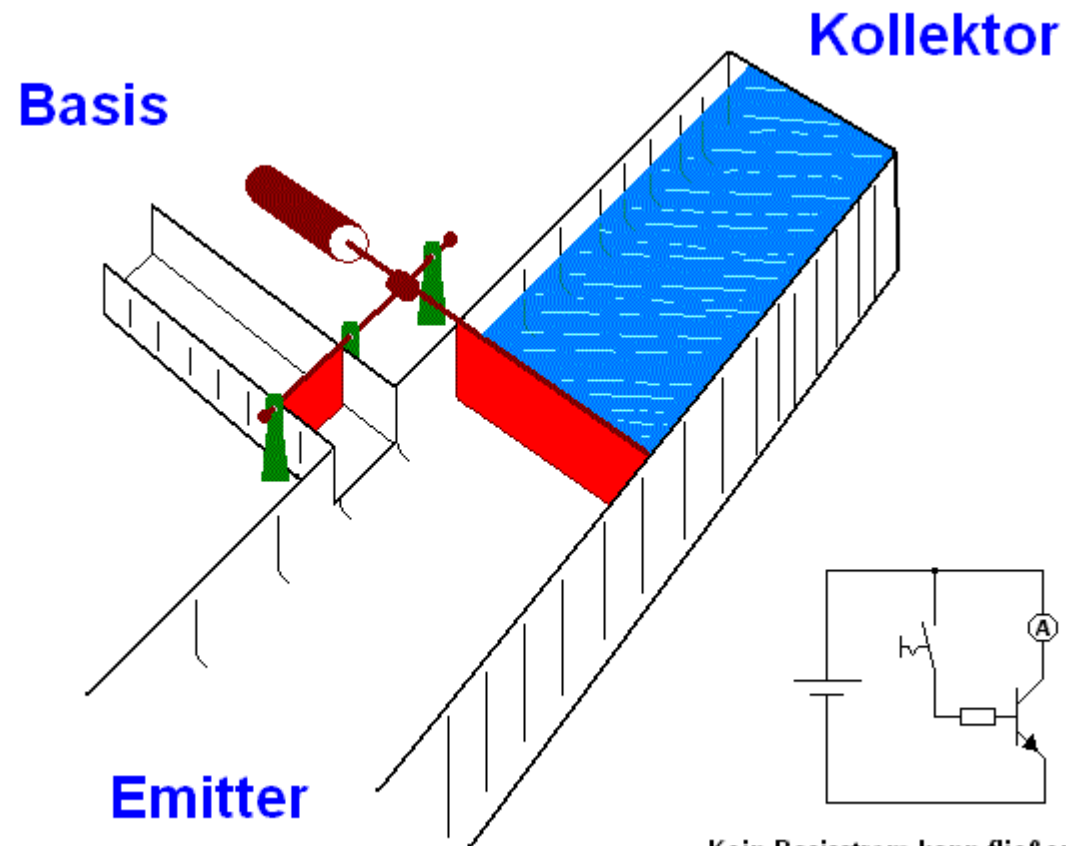
<http://www.conrad.com/ce/en/product/150901/>

Transistor



<http://www.robkomen.nl/>

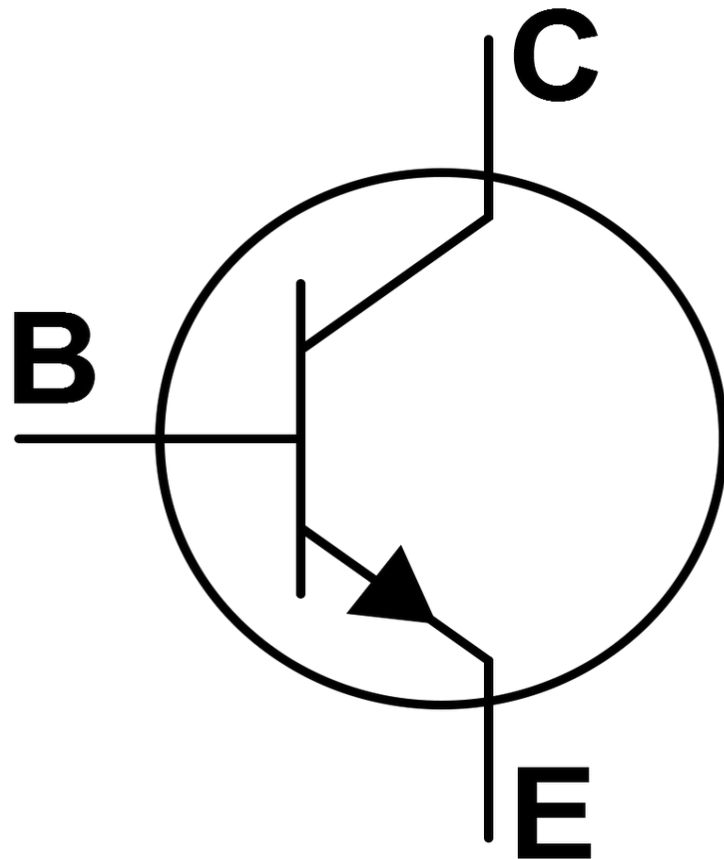
Transistor



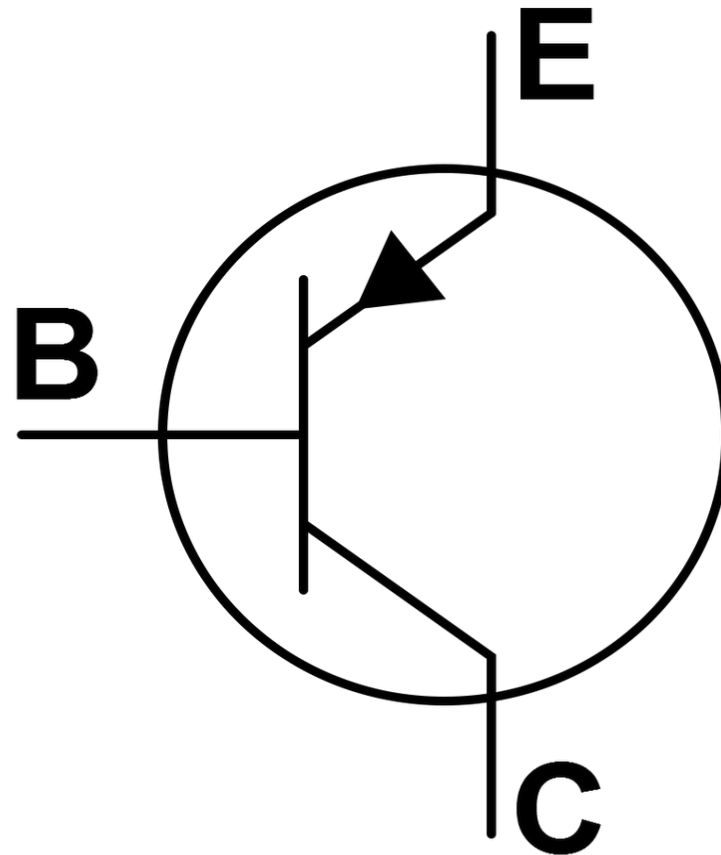
Kein Basisstrom kann fließen;
Der Transistor ist gesperrt.

<http://de.wikipedia.org/wiki/Benutzer:Quark48>

Transistor



NPN



PNP

<http://salvusrobot.blogspot.nl/>

Questions?

2013 Anne Jan Brouwer