# Electronics Indentifying Capacitor Polarity

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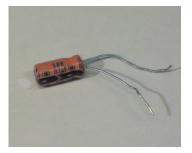
(indicated by a "+" sign at one end.)

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- Some capacitors are unpolarized (like resistors);
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- Other types, (such as many "electrolytics"), must be placed in a particular direction

(indicated by a "+" sign at one end.)

• Big capacitors ( $\gtrsim 1\mu F$ ) are usually electrolytic.



### Small electrolytic capacitor

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Big electrolytic capacitor

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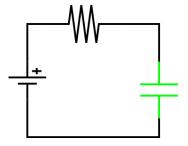
## Big electrolytic capacitor (top view)

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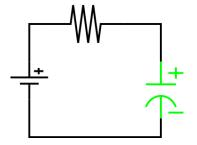
#### Big electrolytic capacitor label

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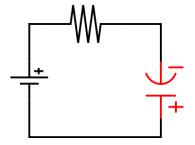
Non-polarized capacitor

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Polarized capacitor connected the right way

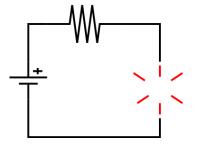
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Polarized capacitor connected the wrong way

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## Don't do this!!!

## Capacitor Labeling

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## Capacitor Labeling

There are a few different ways to identify the polarity of a capacitor.

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## Capacitor Labeling

There are a few different ways to identify the polarity of a capacitor.

Some non-polarized capacitors are identified as either BP (bipolar) or NP (non-polar).

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### On a big capacitor, the label can go next to the pin.

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On a big capacitor, the label can go next to the pin. (Note the "+" sign.)

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Here's a capacitor.



### Here's a capacitor. It is *bipolar*, meaning it's not polarized.

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Here's a capacitor.

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### Here's a capacitor. On this one, the negative pin is identified

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### This capacitor is axial.



### This capacitor is axial. It has the negative pin identified.

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