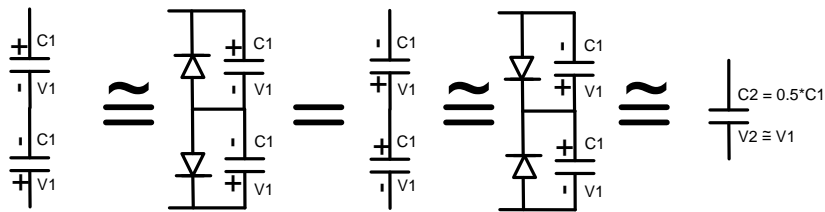


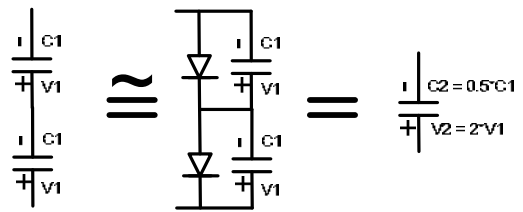
How to make a Non-Polar Capacitor for AC use out of two identical Electrolytic Capacitors.

By wiring the two electrolytics in series as show below, you get 1/2 the capacitance rating at the voltage rating of each cap, providing they both are the same C and V values. When in use the electrolytic capacitor that receives the reverse voltage will break down and conduct to some degree. This makes a pore diode in that it conducts one way and blocks the other way. So that the equivalent circuit is shown below with diodes in parallel, such that they conduct when the polarity is revised on the electrolytic. Thus the overall voltage rating is no more than that of one of the individual capacitor. The Non-polar can be used with AC.



Non-Polar Result

The following use of two series connected electrolytic capacitors can be used to end up with a polar result with doubling of working voltage that can be used only with DC.



Polar Result