Capacitors

DC Electric Circuits

1. Identify some of the different types of capacitors, and their characteristics.

1. How are *electrolytic* capacitors constructed, and what is particularly noteworthy about their use?

1. A capacitor has a label on it saying, “100 WVDC”. What does this label mean? What is the consequence of exceeding this rating?

1. Capacitors may pose an electric shock hazard, even in unpowered circuits. Explain why.

1. *Very* large capacitors (typically in excess of 1 Farad!) are often used in the DC power wiring of high-power audio amplifier systems installed in automobiles. The capacitors are connected in parallel with the amplifier’s DC power terminals, as close to the amplifier as possible, like this:



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What is the purpose of having a capacitor connected in parallel with the amplifier’s power terminals? What benefit does this give to the audio system, overall?

1. What does the abbreviation D.C. stand for in regards to Physics?
2. What is the schematic symbol for a capacitor?