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Subject: SPICE and Piezo Answers

Posted by [Wayne Parham](#) on Sat, 28 Sep 2002 17:27:56 GMT

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If you put resistance in series with a primarily capacitive load such as a piezoelectric tweeter, the resistance will definitely have an effect on the AC behavior of the circuit. It forms a low-pass filter that will show up in Spice in the AC analysis. To make the model even more complete, you might want to add tank circuits that emulate its resonances. You'll notice one at 5khz, for example. About the source voltage and impedance in Spice models, you can set this to whatever values you prefer. Source voltage is whatever you want it to be, and source impedance can be is 4.5ft3 and the Helmholtz frequency is 40Hz.