Subject: AIM-Spice
Posted by dbeardsl on Wed, 27 Feb 2002 06:05:08 GMT
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Trying to get those crossover models to work on AIM spice...(The ones in Waynes Document). I've never used any kind of circuit design software... on which nodes do I put the VIN?without it I get a flat reading at -300V on the AC analysis(trying to reproduce your graphs)I got bored in my physics class so I read ahead, and whadaya know I stumbled on capacitive reactance. I messed around with some equations and finally understand how a first-order crossover works, yippee!! though its not exactly 6db slope... 6.03 or something I don't remember.I'm starting to make a VB app to visualize the design of simple AIM-Spice models... I'll let anybody know when I'm finished.

Subject: nm I got it
Posted by dbeardsl on Wed, 27 Feb 2002 07:54:13 GMT
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Duh, you use a Constant current device... measure the voltage, which is proportional to resistance. DOH!

Subject: Wayne Question
Posted by dbeardsl on Wed, 27 Feb 2002 16:34:44 GMT
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Oh Wise Wayne, how dost therefore come thee up with thee Spice Models for Thine given Drivers your Crossover Document. For instance in the Alpha 8, those three parallel components... Was it just trial and error and a lot of experience or did you calculate some of those values? Also, is it reasonable to assume that I could add to the circuit in an attempt to make the model even closer to the actual thing? Or is it a lost cause?

Subject: Speaker motor models in Spice
Posted by Wayne Parham on Wed, 27 Feb 2002 17:27:42 GMT
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The values Re and Le are taken directly from manufacturer's specifications. The mechanical reactance values are those that are equivalent to the driver's mechanical Q.