Subject: Thiel-Small Parameter Search
Posted by Spinjack on Thu, 01 Sep 2005 12:15:42 GMT
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I have two Radio Shack 40-1034 drivers that I'd like to use to build a subwoofer but I'm not having any luck finding the T-S parameters for it. Any suggestions on where to look? Also, any hints as to how make these sound good? I've read that they can be a bit sloppy. I don't need them to be "audiophile" quality since they will be used in a furnished breezeway to supplement some homemade bookshelf speakers that the 7pi's will be replacing.My plan is to go the Isobaric (sp?) route and I thought about matching them to one of those subwoofer amps available from Parts Express (either that or an older NAD amp I bought on eBay). I don't want to go horn because of size contraints, but I though about a tower configuration to minimize footprint if the required box volume was too high.Any thoughts?

Subject: Re: Thiel-Small Parameter Search
Posted by Wayne Parham on Thu, 01 Sep 2005 12:24:31 GMT
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You probably already know about this website but just in case, did you check ThieleSmall.com?

Subject: Re: Thiel-Small Parameter Search
Posted by Spinjack on Thu, 01 Sep 2005 13:58:50 GMT
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Actually, I didn't know about it. I had been using Google with little success. Thanks for the link.

Subject: Nothing
Posted by Spinjack on Thu, 01 Sep 2005 15:45:41 GMT
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There doesn't appear to be any info about RatShack drivers on the T-S site. Any other suggestions?

Subject: Re: Nothing

Posted by Matts on Thu, 01 Sep 2005 16:09:28 GMT
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you could try to find out who made them for R.S.- may be a clue in a part # or something, then look up equivalent model.  Fostex made some of their smaller full-range speakers.

Subject: Re: Nothing
Posted by Spinjack on Thu, 01 Sep 2005 16:31:25 GMT
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I thought of that, I'll have to take a close look at any labelling on the drivers.

Subject: Re: Nothing
Posted by Wayne Parham on Thu, 01 Sep 2005 21:17:43 GMT
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You could also have a go at measuring the T/S parameters.  You don't need specializd test equipment and can obtain reasonably good data with your PC (as a signal generator) and a good DVM.  See the post called "T/S Measurements" for a write up on this process.

Subject: Re: Nothing
Posted by Spinjack on Fri, 02 Sep 2005 12:13:11 GMT
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Yeah, that was the direction I was going to go. I'm not sure how I will do Vas, though. I'm not sure I want to build an extra enclosure. If I did build it, I'd want to do it such that I can mount anything from a 6.5" up to an 18" driver.Can you recommend some signal generation software for the PC? I don't have an oscilloscope, so I'll be restricted to an RMS DMM, but from the research I've done it appears that I should be able to get pretty close.

Subject: Re: Nothing
Posted by Wayne Parham on Fri, 02 Sep 2005 12:15:41 GMT
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I forgot where I got my signal generator, but I'll E-Mail it to you if you like.  You can probably search the internet and find several.

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Subject: Re: Thiel-Small Parameter Search
Posted by GM on Sat, 03 Sep 2005 03:29:44 GMT
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Greets!These are car audio 'IB' sub drivers so OB, very large sealed, or aperiodic is best, with the latter yielding the highest SQ. It's specs are ideal for a 'classic' stuffed TQWT and going isobaric will keep the line's CSA reasonable, so 12" square (inside dims) should work fine and a ~93.63" pathlength will tune it to ~30 Hz if stuffed along its length with ~48 oz of R-19 fiberglass. The beauty of this design is that the specs can be off quite a bit and still perform well by adjusting the amount of stuffing.Catalog specs:Fs = 30 HzVas = 6.83 ft^3Qts  = 1.04Pe (RMS/max) = 75/150 Wsens = 88dB/W/m (+/- 2 dB)nominal 8 ohmsGM

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