Subject: Re: Boomtoobz
Posted by Martin on Fri, 19 Mar 2004 00:08:58 GMT
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Hi Lon,About two years ago I bought 10 of the RS 1197 drivers when Radio Shack started dumping them at about $5 each. All of my drivers are the older purple and blue box models. I measured the T/S parameters for all 10 and got the following average values.fd (Hz) = 84.2Qed = 0.419Qmd = 3.578Qtd = 0.375Re (ohms) = 7.59Vad (liters) = 4.87Sd = 49.5 cm^2BL (T-m) = 4.95SPL (dB) = 90.2I came up with a whole directory full of interesting MathCad designs for the drivers but never got around to building anything. I still have all ten drivers stored in my workshop for a time when I want to experiment.So if we assume your drivers are similar to mine, then I don't see any reason why a sewer pipe speaker would not be a nice design. Since this is a constant area line I would tune the length to the driver fd.L = 344 / (4 x 84.2 Hz) = 3 ft 4 inchesFor a 3/4 wavelength pipe tuned to the driver fdL = 3 x (3 ft 4 inches) = 10 ftand the fundamental tuning frequency would be 28 Hz. Your pipe is very long! I have never tried a longer pipe like this so I am not sure what to expect. Interesting experiment. What is the inside diameter of the pipe?I don't see any problem bending it like you did and I also don't see any issue with have the driver in front of the open end or the other way around. At low frequencies these types of separation distances are not important.Martin