Subject: Re: Damping factor - SE vs. PP Posted by Damir on Wed, 12 Oct 2005 20:39:07 GMT View Forum Message <> Reply to Message

Well, I simplified very complex tube(s)/transformer/speaker case. Although it is true that internal anode impedance of our output triode (say 300B) is not a constant resistor, and that our Zout is not constant, especially on the frequency extremes vs. mid frequencies, and that those changes are probably little larger in SE then PP case - we can't say that rp (and Zout) of SE amp vary wildly like in your example. Measuring the Zout of SE amps showed relatively constant value throughout the frequency and power output magnitudes. The change in rp is not large, and for most practical purposes we can model our triode like voltage source (generator) with its (constant) internal resistance rp in series. Definition of DF like I explained it is correct, it is a ratio of primary (reflected) resistance and tube internal resistance, or ratio of speaker resistance and rp reffered at the secondary - rp divided with OPT impedance ratio. PP amp (class A) has two tubes in series. Then we can add complexity in our model (Rw, Lp, Lsp, Cw, Zsp...)... http://usuarios.uninet.com.br/~edelima/

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