
Subject: Re: Choke capacitance, round 2

Posted by [Damir](#) on Wed, 29 Mar 2006 11:01:11 GMT

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I posted about it in the "Tubes" section some time ago. If we have pentode or cascode stage with, say 15k load and internal resistance of 100k, then "effective" load is $15k // 100k = 13k$. If our driver has, say $S=4mA/V$ and grid choke as a load, then amplification on some higher frequencies, say 1kHz is $A = S * R_a = 13 * 4 = 52$ times. Choke impedance on 1kHz is theoretically $Z = 2\pi * f * L = 2\pi * 1000 * 650 = 4Meg \gg 13k\Omega$. But, on low frequencies, say 40Hz, our choke impedance is only 163,3k and our amplification is now: $A = S * (13 // 163,3) = 4 * 12 = 48$ times. Although it is only 0,7dB of difference, I'm pretty sure that it is audible. Plus falling of highest frequencies `cos of low pass filter formed with R_{out} of the driver and C_w . What you think about actual measurements of frequency response in real amp with real components (grid chokes) ?
