Subject: Re: SE 300B Project, Part 13 - The finished amp
Posted by Damir on Mon, 10 Jul 2006 12:08:46 GMT
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Hi, thanks, and welcome to the forum!We need about 50Vrms (70Vp) to "drive" 300B to the full power. With CCS-ed driver triode (and high impedance 300B grid choke as a load), we have the "driver" amplification practically equal to the μ, or theoretical amplification factor (very close).In the case of E180F in triode - A = μ ~ 50, or input sensitivity for the full power is 1 Vrms. Although C3g specs said μ~40, my "Siemens" tubes have μ~50, again - input sens. is 1Vrms. (If we`d have a tube with "right" μ=40 spec, then sens. would be 50/40= 1,25Vrms).D3a has larger amplification, A=μ~75, and then input sensitivity is about 0,7Vrms.Unfortunately, I have no EC8010, and didn`t try them. But, (based on its data) I expect it to be the similar like other high-gm "candidates" above, and others I tried (6C45Pi, E280F trioded).If you have some EC8010 on hands, the best you can do is to try it for yourself. Use CCS, Ia~10mA, Rk=220-250 Ohms bypassed with 220μF (MKP of 100μF at least reccomended) - like your starting point. Beware that this tube has g1 connected on five pins... I`d use grid-stop resistor (say 100...220 Ohms, CC) on every input pin. Based on the specs, you can expect A=μ=60 times, or input sensitivity of 50/60 = 0,83Vrms. Adjust Ia (or Rk if necessary) to have Ua about 200V. Seriously, only you`d can say about "sound" in your system, and like/dislike factors :-).You can expect rel. large input capacitance, unfortunately.Do you have some parts (tubes, transformers, etc.), or you are still in "various schematics" phase?