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Subject: what tube are you using?

Posted by [MQracing](#) on Tue, 20 Dec 2005 14:13:48 GMT

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Hi Damir:What tube are you using that has such a high Rout? I'm curious because I would like to run it through a program of mine and see what numbers I come up with. 14K output impedance is probably one of the worst cases.... take the same Cw numbers and check it out if you were using say a 6C45pi or a 5687 tube as just two examples. Perhaps moreso in the case where you have an exceptionally high output impedance... you might need to concern yourself with Cw... but there are probably other factors in a trans design (i.e., a grid choke) that might be even moreso a limiting factor than the Cw. All other things being equal.... your going to need much more L to support that output impedance of 14 or 15K... as a general rule of thumb... the more L you need the more turns you need and the larger the core size you might need (core area contributes to L)... and all of these will contribute to having greater Cw.... but what choice do you have... if you skimp on L to keep the Cw low.... then the L will come and bite you in the butt performance wise... so it is always a trade off of factors that goes into a design.... not just simply some mantra of "keep Cw low"...As a bit of practical advice... correspond with and communicate with the magnetics provider of your choice... tell him your application... and ask him for his advice...as an example.... if you asked me if your application would be a good mate with our CT choke... I'd say no.... and NOT because the Cw is too high (it isn't) but because our design does not have enough L to provide a good loadline for a 14 or 15K impedance. So even though I might not disclose what our Cw is... I would know enough to recommend to you that you not use the particular part that we make.again... hopefully, this provides a richer and deeper context of circuit engineering than simply looking at just one variable and basing all notions of "goodness" on just a singular parameter.msl

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