Subject: Re: New Toroid Output Transformer Marketed?
Posted by positron on Fri, 22 Mar 2024 15:53:34 GMT
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Pos: I put in the paragraphs for easier reading.

gofar99 wrote on Thu, 21 March 2024 21:56Hi Pos, hummm. 200KHZ , 150, 100 why and I really would rather audio trannies in my designs not reach that far. As is most seem to hit about 70K at only a minor drop from pass band.

I actually design into the amps a frequency limiting measure to prevent them form going past about 35K. IMO only noise and possible EMI out above that. When I order custom trannies (most of my projects have them) I specify flat pass band from 20HZ to 25KHZ with a smooth roll off one octave on either end. Must be able to handle that at the full output that I specify and not saturate at the currents I plan on using.

Thus far this has been a successful concept as the amps using them measure to those limits. To be sure the math and design issues are better left to the pros. Also the trannies I get this way are significantly larger, heavier and to a certain extent more costly. The weight and size are roughly double a typical off the shelf trannies. I do not use toroids for outputs, only standard designed ones.
Hi Go,

I just mention the high frequency response (FR) because of the extremely tight coupling/low leakage reactance toroids are known for.

As you have, one could certainly limit the high frequency response (FR) other ways, such as a simple low pass filter, and yet allow for other who wish the higher FR as well.

Tighter coupling, higher FR means more inner detail. I can't remember how much, but back in the 1980s when I worked in the -1db at 200khz vs -1db at 150khz range, and there was definitely a sonic difference.

I don't think there would be any problem making the toroid outputs double the weight of typical toroids I have seen. I wanted better low end anyway, and a larger core would be nice.

It is just a thought, and would appreciate more input from anyone.

cheers and thanks Go.

pos