Subject: Merlin's grid Iron
Posted by PakProtector on Fri, 18 Nov 2005 22:54:56 GMT
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Hey-Hey!!!,I have discovered a general trend in the behaviour of the amps with different grid chokes. First, all have had the same bobbin. Two bay bobbin with one reverse wound w.r.t. the other so the turns near the CT are also next to the core. With balanced drive this distinctly sounds best.I have tried them with varied gaps, from .001" to .005". The bigger gaps have a more natural sound but they lack enough inductance to deliver proper LF response. Get one parameter better, and it is directly opposing the value of the other...so how to fix it. Nickel core with a gap would do, but that's ridiculously 'spensive. Amorphous and Nanocrystaline materials offer similar benefits with similar price tags.So, I am taking one experiment further, .004" thick lamination in a tape wound cut core. A bit more core area, and room to increase the number of turns. Say up by 60% maybe? Pie wind the coils and put one half on each side of the roughly rectangular coil. Sources for reasonable C-cores? not too many. Some have over run stock in small qty, so it pays to ask and see what is laying about. I got a nice pair of cores for $50. I'd bet that there are other similar sizes laying around waiting for an offer. Usual practice is to wind to customer specification with particular window, build up thickness and material thickness and type.They ought to do better than EI core(not that the EI sounded anything close to poor). I am going to examine the possibility to shrink wire size and increase turns count on the existing easy EI design. Made from .007" SuPerOrthoSil they do sound quite good.cheers,Douglas