Subject: Re: OEM bobbins for AMCC 8 core assembly
Posted by MQracing on Tue, 20 Dec 2005 13:53:00 GMT
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Hi Damir:Maybee they have something up their sleeves (i.e., a good "trick") re: use of the bobbin with much of the core area unfilled. Like I said... it caught my eye only because after 17 years of building and being around transformers I've never seen this done before...and... say it is something really trick... they may choose to come back and just say "we feel this is an advantage" and they may not want to offer any in depth explanation for their choice of designing on a physically larger bobbin than the core area itself requires.... if they do... again, in my opinion, we all must respect this decision if they consider their method or their design choices to be proprietary.though by conventional theory... they have made the "plate area" of the capacitors much larger with that extra mean length of turn that is not required by the core assembly. So my guess is that using the recommended AMCC 8 bobbin and keeping everything else the same would result in less winding resistance (dcr) and less capacitance (less surface area btwn the windings)...About mounting... your arrangement doesn't (on first blush) look like it would impart any unnecessary mechanical strain or stress on the core... when you house a unit this is one of the paramount considerations in choosing a mounting method. Your improvised mounting appears fine from this singular vantage point.you mention "low price"... this depends on a very wide range of factors... volume being often one of the key factors... take the alternative design I offered above... have Hammond build it in sufficiently large volumes and I'd bet that on M6 they would be less than $15 each. And for your $15 you'd get a method of mounting your transformer. In small volumes I would guess that the price would be some two to three times higher than the guess I've made above. Price also depends on a range of other factors... what materials are inside the transformer... what insulations (if any), what kind of magnet wire is being used, what kind of solder is being used to make internal connections... there are many other variables which could be juggled... to meet a low price point or a high performance level... it's the customers choice... msl