Subject: Transformer Potting Cans, Anyone? Posted by Thermionic on Wed, 09 Feb 2005 00:22:19 GMT

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I'm contemplating having some tranformer covers made for my personal use. I'm posting this on the various tube audio forums, so see if I can get any interest among DIY amp builders for a group buy to lower the prices. Knowing there are lots of serious DIYers who are also nice guys here at ART, it was the first forum I thought of. As you probably know, these drawn metal shielding cans are practically impossible to find, and transformer manufacturers will not sell them stand-alone. One tube amp transformer maker told me that they are so expensive to stock in all the sizes he'd need that he doesn't even offer potted transformers. Indeed, there's a reason that potted output transformers cost anywhere from \$60 to \$100 more. The drawn metal cans are incredibly expensive, and the potting epoxy is around \$120 a gallon. I have some estimates here for what I can get two sizes of the cans for in quantities of 30 or so. In progressively smaller lots, the prices double and eventually more than triple.(1.) 3" x 3" x 3.125" inside dimensions, with .250" side and top corner inside radii, drawn from .063" aluminum. These can be used to encase small SE OPTs. interstage transformers, plate load chokes, up to a C6 size Hammond filter choke, filament, or bias transformer, or up to a size C14 by cutting the sheet metal mounting ears off and standing them on end. That way, they take up less chassis space, and can easily be oriented at the desired angle to adjacently placed devices to prevent magnetic interactions. (2.) 5" x 5" x 6" inside dimensions, with .437" side and top corner inside radii, drawn from .050" aluminum. These are seamless, with a very clean, smooth finish. The sides are perfectly smooth and straight, and the open end is trimmed exactly straight and square to the sides. Mouser Electronics carries epoxy potting compound in a 12 oz. bottle for \$20.55, which will do several chokes or small OPTs, or a pair of large OPTs in the larger size cans. For just gluing it on as a cover, squirt a shot of Great Stuff foam sealer from the hardware store in the cover, center it up on the transformer, and let it dry. Then, shoot a LITTLE bit of Great Stuff in the top of the can around the sides of the transformer to add strength. Don't use too much, Great Stuff expands as it sets! For any who are interested, the small size is \$16 and the large \$23, plus shipping. As I had said, these are the per piece price quoted for a 30 piece lot, and to have just a few pieces made triples these "per piece" prices. These babies are mighty expensive, unless you buy a hundred. For a few bucks, I'll be glad to prime them with a special self-etching aluminum primer and finish them in a commercial bake-on wrinkle finish black or mirror gloss black for you, satisfaction guaranteed. I also have access to anodizing locally and will charge you my actual fees only. I just need some group buy interest to help get the costs down. If any are interested, I can provide full contact info and even give you a phone call if you wish. Thermionic