Subject: more ov the Cascode...
Posted by PakProtector on Sun, 18 Sep 2005 17:06:46 GMT
View Forum Message <> Reply to Message

Hey-Hey!!!,I tried a triode-MOSFET cascode as the voltage amp section in my prototype Merlin amp. It did quite well. There is a warning which I did not heed when I first assembled and tested the circuit. Thou shalt protect the small gate-source voltage limit with a Zener clamp!!!I installed 18V/500 mW Zener clamps on the good channel, and installed the same when I rebuilt the other channel this morning.The cascode turns the amplifier triode into something with horizontal plate lines at the Ec2 voltage. Take the triode plate curves, draw a vertical line where the upper gate voltage is set, and at the grid line intersection with this vertical, draw horizontal lines out to the maximum Drain-Source voltage. It is a whole lot easier than accounting for the curve of a triode's plate characteristics when drawing the composite cascode curves.It also leaves a maximum fraction of high Z operating window. It approaches B+ - Ec2, instead of B+ - 2*Ec2 for equal triode sections on a more traditional cascode.cheeers,Douglas

Subject: Re: more ov the Cascode...
Posted by Wayne Parham on Mon, 19 Sep 2005 10:37:04 GMT
View Forum Message <> Reply to Message

I'm realy eager to see how this one progresses. My time is extremely limited, but this is one I'll definitely try to make time to build.

Subject: amp exercises
Posted by PakProtector on Mon, 19 Sep 2005 19:47:09 GMT
View Forum Message <> Reply to Message

as much as I hate the idea, I am going to run this one through the Bean Counter process and see how it shakes out with a good choke input PS, valve rectifier and top plate.It is an interesting exercise in economics, and worth it for purposes of entertainment for sure. To top it all off, depending on which Peerless output I decide to replicate, it can be entertaining on so many levels. This process also offers the chance to develope a proper BoM for later build exercises.cheers,Douglas