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Subject: more ov the Cascode...

Posted by [PakProtector](#) on Sun, 18 Sep 2005 17:06:46 GMT

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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  $E_{c2}$  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  $B+ - E_{c2}$ , instead of  $B+ - 2 * E_{c2}$  for equal triode sections on a more traditional cascode.cheeers,Douglas

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