

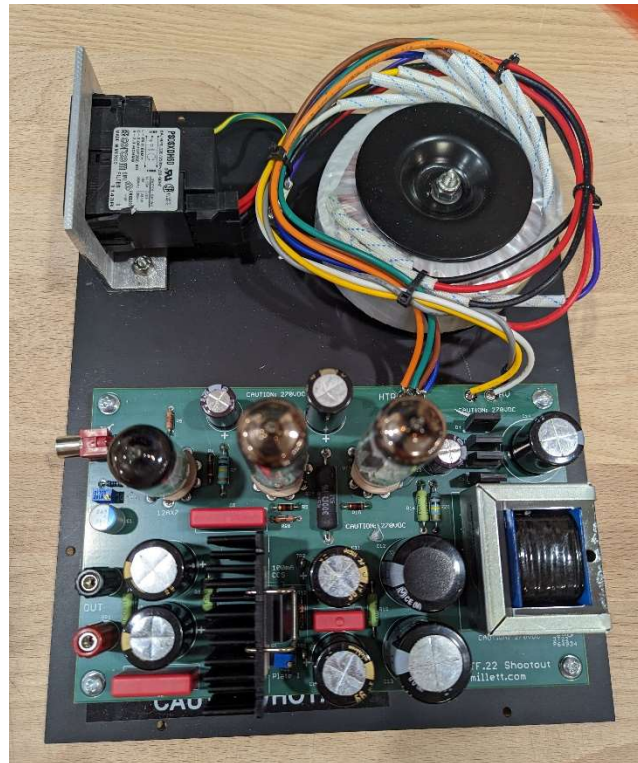
## Pete Millett ETF.22 shootout amp

The amp is a 2-stage OTL amp with a capacitor coupled output.

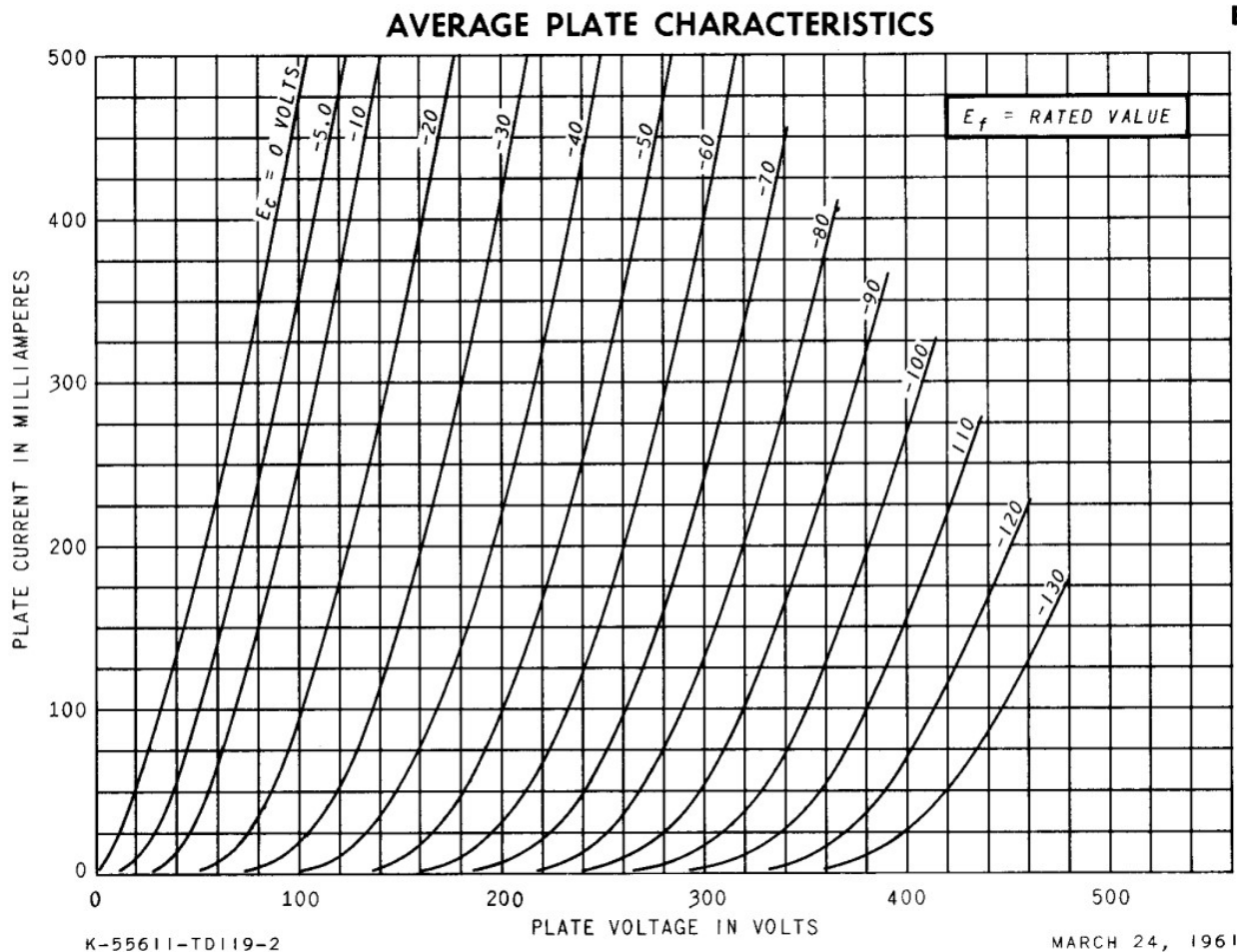
The first stage is a 12AX7 or 12AY7 resistive loaded stage with both triodes in parallel. It is capacitor coupled to the second stage that uses two 7233 triodes connected in parallel with cathode bias. The 7233 tubes are plate loaded with a depletion mode MOSFET CCS. The output is taken from the source terminal of the MOSFET and coupled to the output. The stage current is set at 100mA.

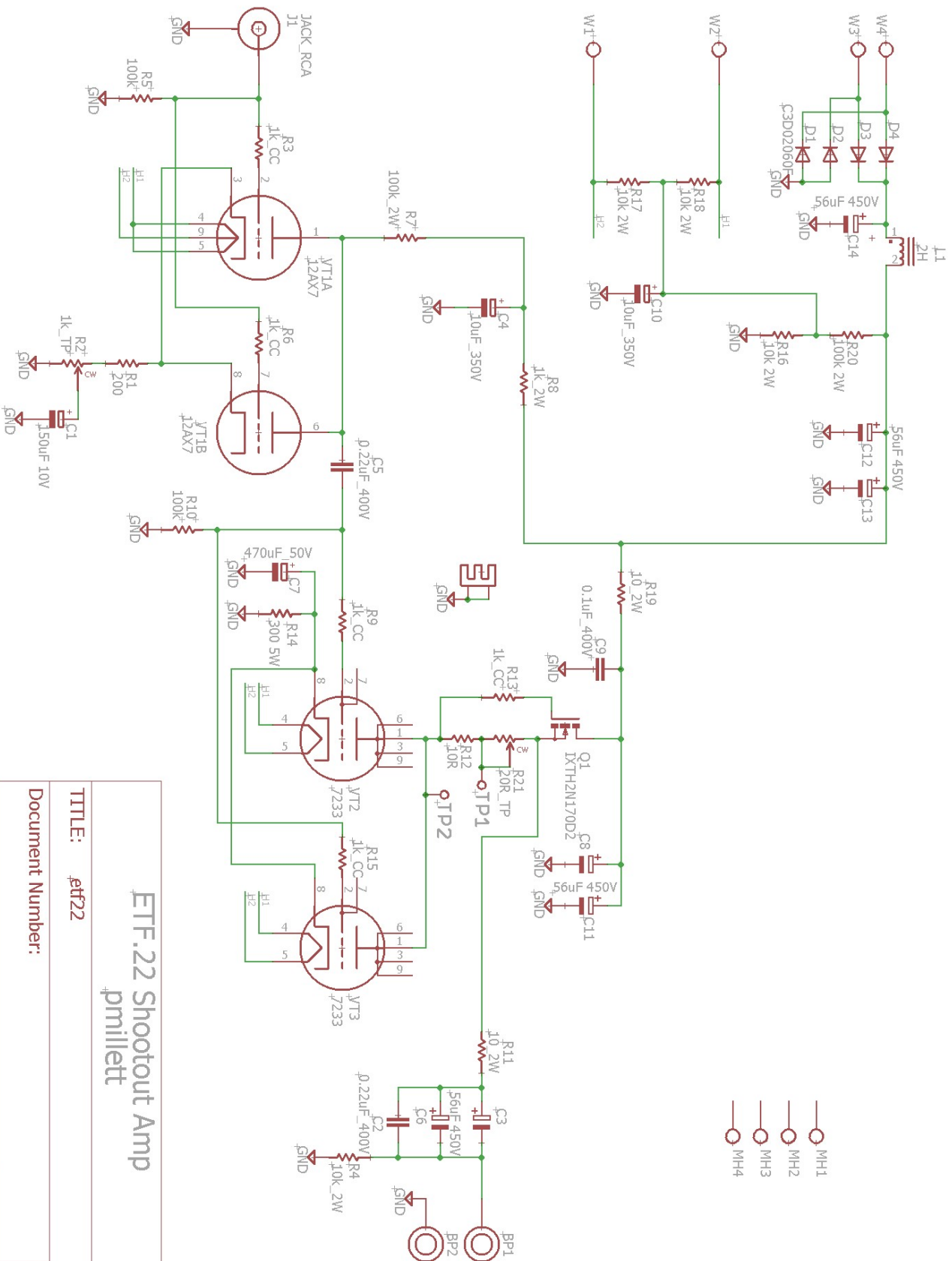
The 7233 tube is a single triode designed primarily for voltage regulator pass tube service. It has high  $G_m$  (17 mA/V) and low  $\mu$  (4).

Power is a normal SiC bridge rectifier followed by a CLC filter to deliver about 240VDC.



**7233**  
**ET-T1622A**  
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# ETF.22 Shootout Amp

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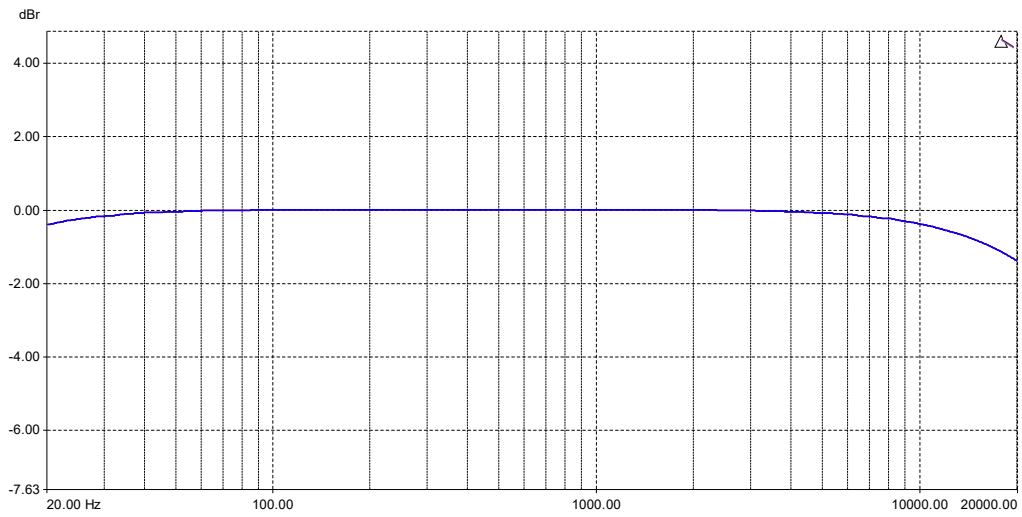
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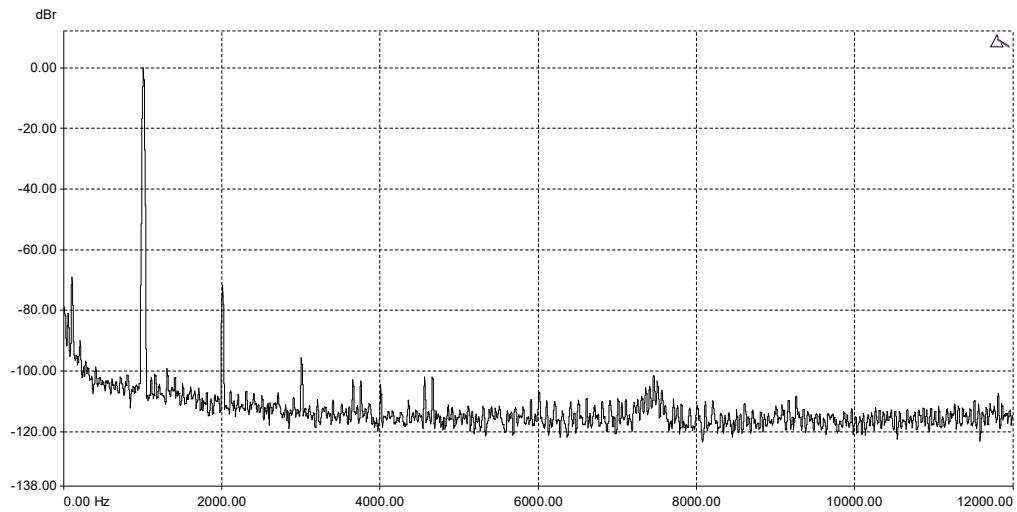
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ETF.22 Shootout Freq Response



ETF.22 Shootout FFT (2V Out, 0.04% THD)



ETF.22 Shootout FFT (20V Out, 0.26% THD)

