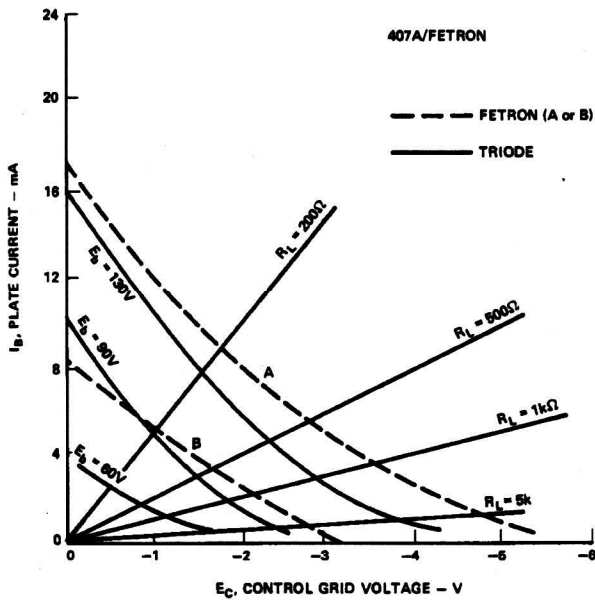
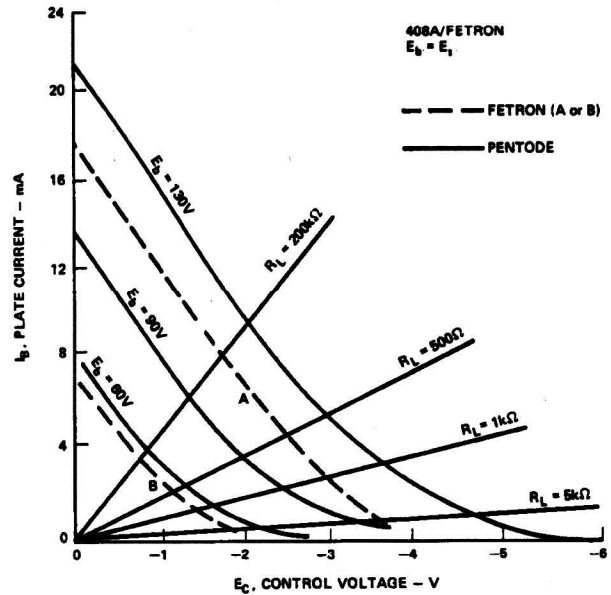


**Figure 7. FETRON Compared with Vacuum Pentode.** The FETRON is most like a pentode, but provides a superior plate current/voltage curve. The transconductance at the pentode is nearly independent of plate voltage, but depends on screen to plate voltage. The FETRON is independent of both. A plate voltage change from 130V to 60V causes a pentode plate current change from 10mA to 4mA. The corresponding FETRON current change is negligible.



**Figure 8. Transfer Characteristic, FETRON vs. Vacuum Triode.** By JFET selection and trimming, any triode function can be generated. A load line analysis is conducted by Teledyne to prevent saturation when the FETRON is plugged into the tube socket. A 50kΩ load would saturate FETRON A, but not FETRON B.



**Figure 9. Transfer Characteristic, FETRON vs. Vacuum Pentode.** Most vacuum pentode functions can be generated with a FETRON. The FETRON is less dependent on circuit voltage and generates less noise and microphonics.