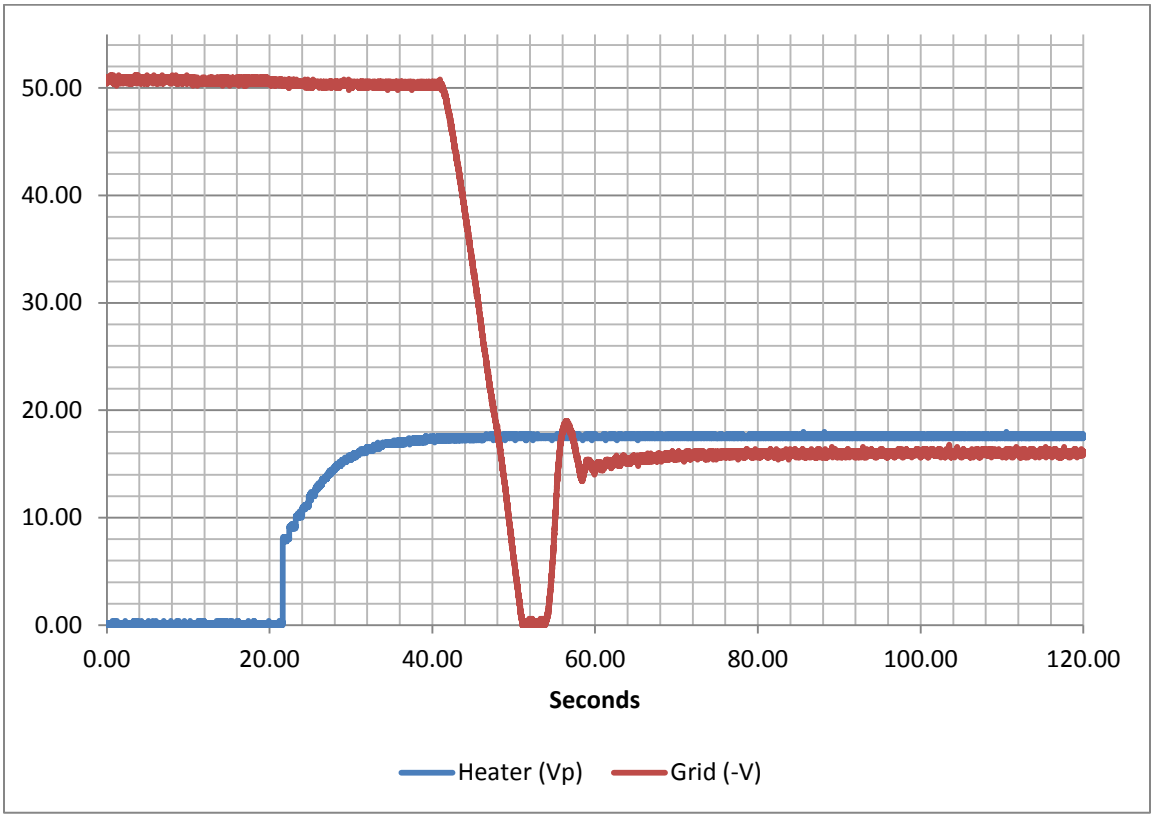
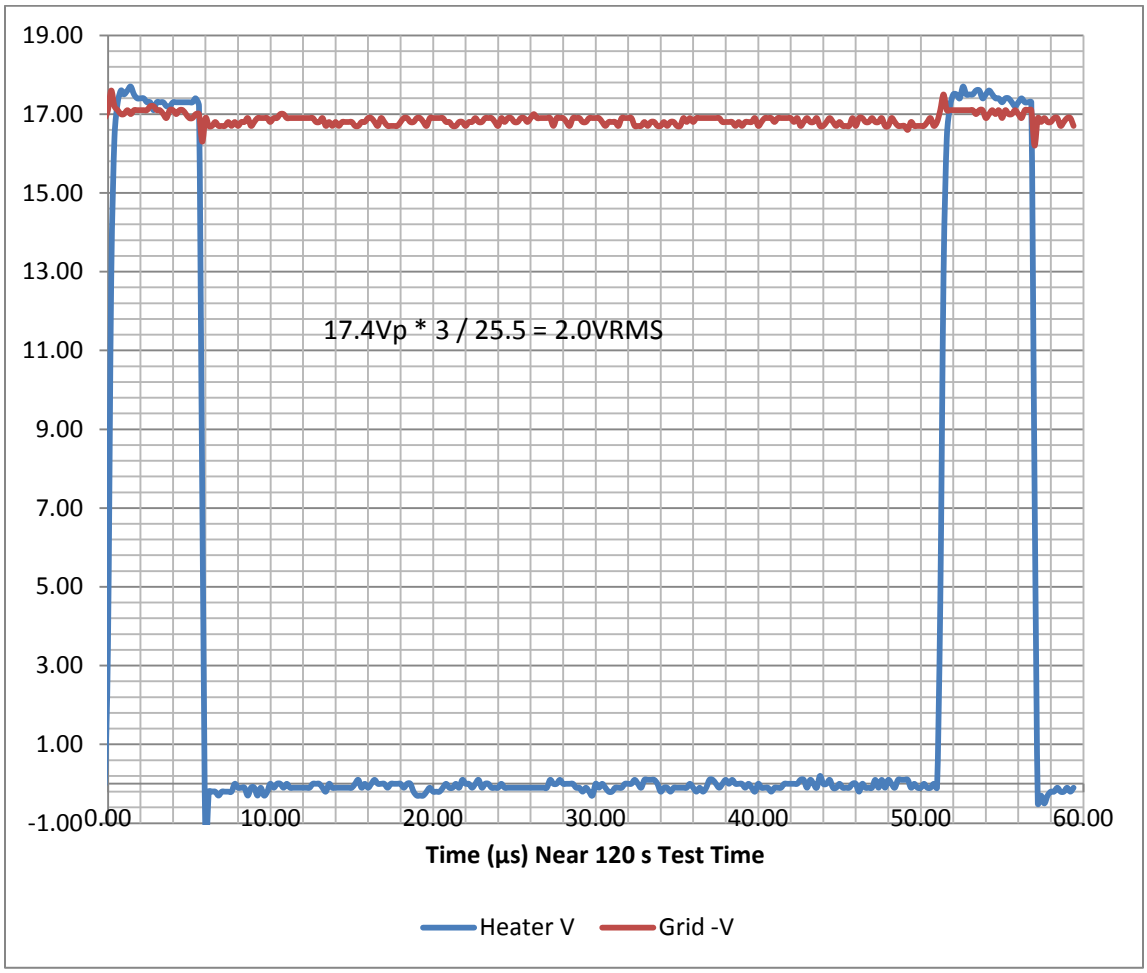
JJ EL34 – Rated 10 by VT1000 (Rates 8 without 10 MΩ scope probe loading grid-cathode)

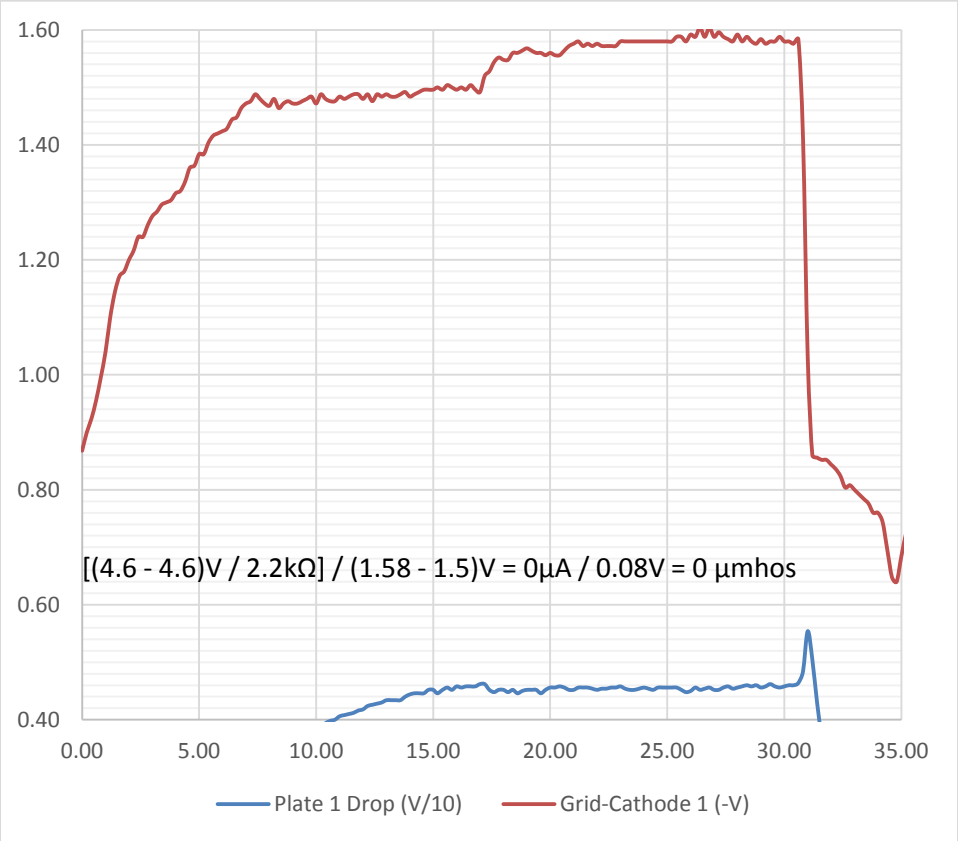


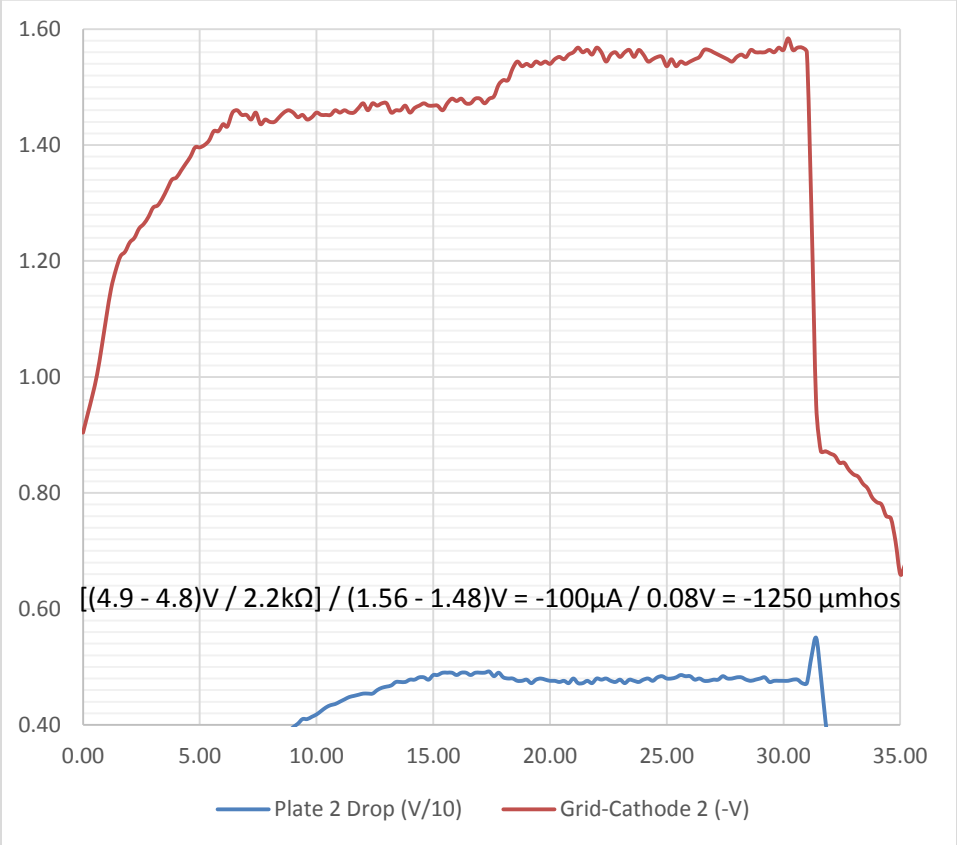


12AX7 Transconductance (amplification, gain, etc.) Test?

12AX7 Rated 9 & 9 by VT1000 (Time 0 is actually ~35 seconds after test begins)

Plate Drops = Voltage drops across the VT1000's 2.2kΩ plate series resistor

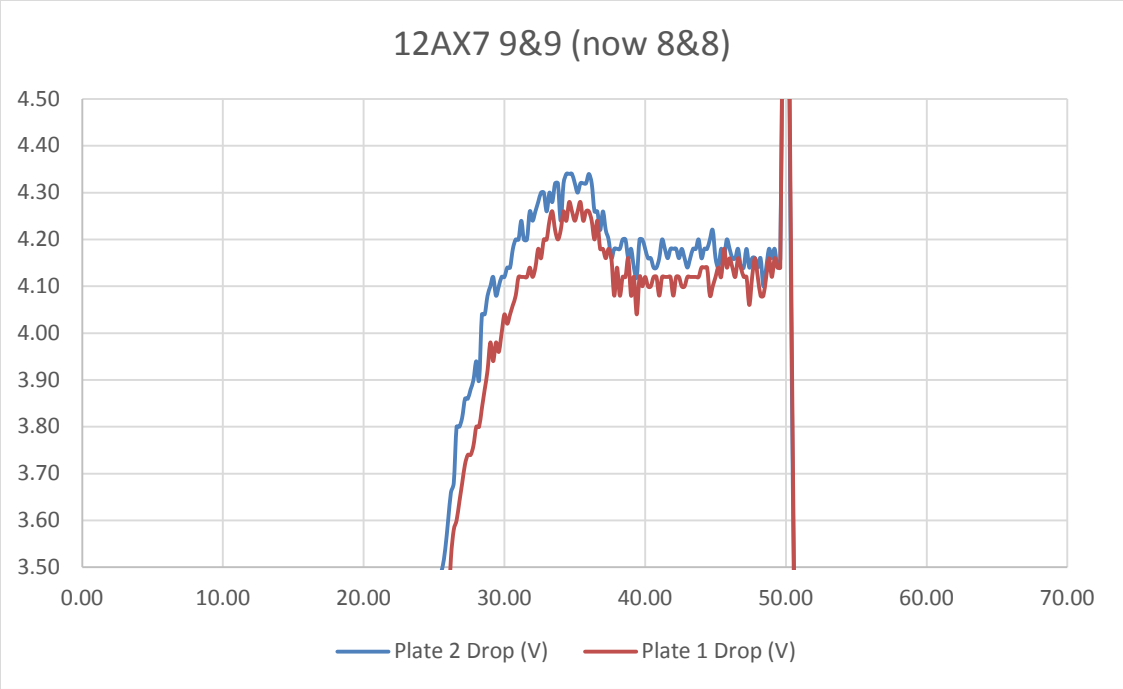


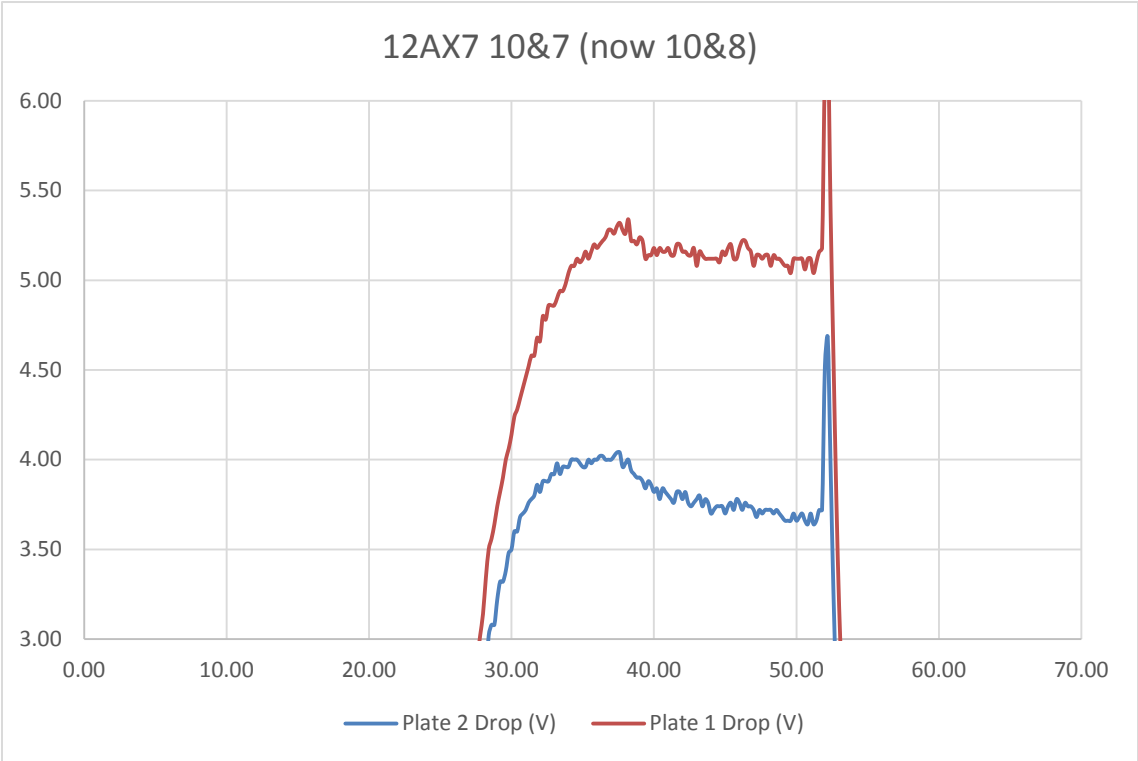


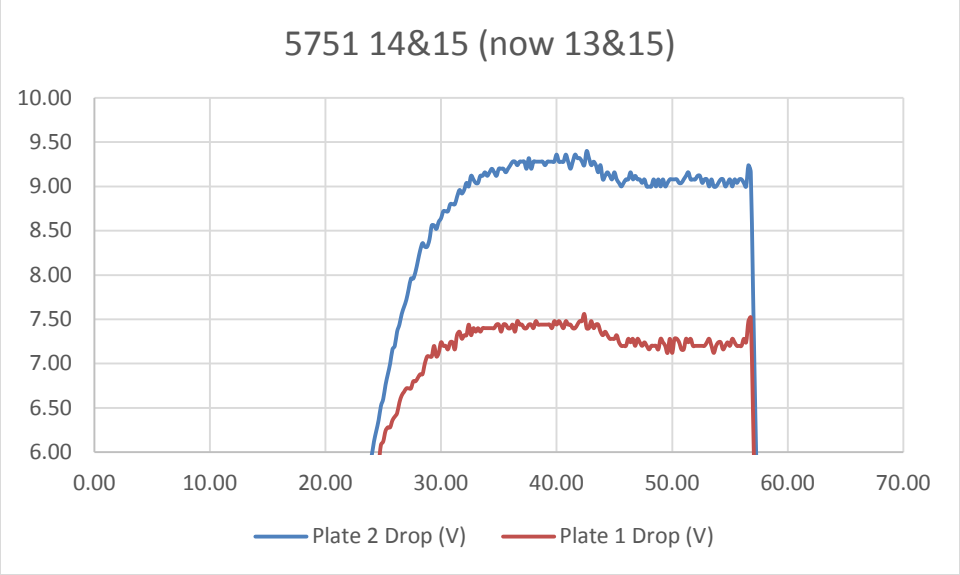
VT1000's Apparent Rating and Pass/Fail Criteria

12AX7 Tests

Set both Grid voltages to -0.9V with respect to ground (the low side of the 19VDC power supply) and use the magnitude of plate current flow to assign ratings. (The diodes between the cathodes and ground forces the grid to cathode voltages approximately ~0.5 – 0.7V higher when plate/cathode current flows.) The (now *&*) ratings are apparently due to the loading caused by the 10MΩ scope probes.







It's interesting that although plate currents of 7.25V / 2.2kΩ = 3.3mA and 9V / 2.2kΩ = 4.1 mA are appropriate for 5751s with -1.5V grid to cathode and 250V plate voltages they're "off the charts" for 12AX7s (albeit with 6.3 VRMS heaters)!