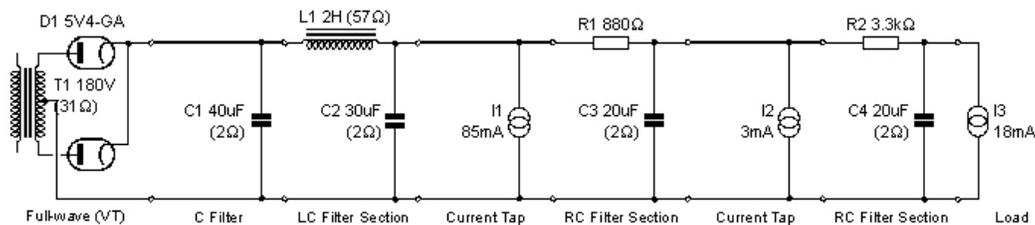


Power Source for 8W Parallel 6DG6GT Amp (alternate example)

7/08 D. Garmon

Here's an alternative power source for the 8W amp. This was designed in DuncanAmps PSUDII (PSU designer II.) It uses readily available components instead of my "found" transformer. I haven't built it, and based on experience, some of the values are probably incorrect (R2, for instance.) Despite the datasheets, the screens probably don't draw that much current (marked I3.)

This since this version uses a higher-voltage, center-tapped transformer, a tube rectifier is used in place of the solid-state bridge. It's lower efficiency help to keep the voltage down to a useful level.



Current Taps:

Above	Schematic	Description
I1	B.1	6DG6GT power stage / OT plate supply
I2	B.2	Preamp stage (12AX7) supply
I3	B.3	6DG6GT screen supply

Parts:

T1	Hammond 263CX Power Transformer 116VA, sec. 180-0-180, DC ma 250, Fil. #1(rectifier) 5.0v @ 3a ct.
L1	Hammond 157R Choke 2H, 200ma, 57 ohms, 400VDC.
C1,2,3,4	Any good 250V to 400V electrolytic capacitor
R1	5W power resistor
R2	3W power resistor— NOTE: this value may be anything from the specified 3.3K up to 18K. In fact, I would bet that It's a higher value than 3.3K.
D1	5V4-GA tube rectifier

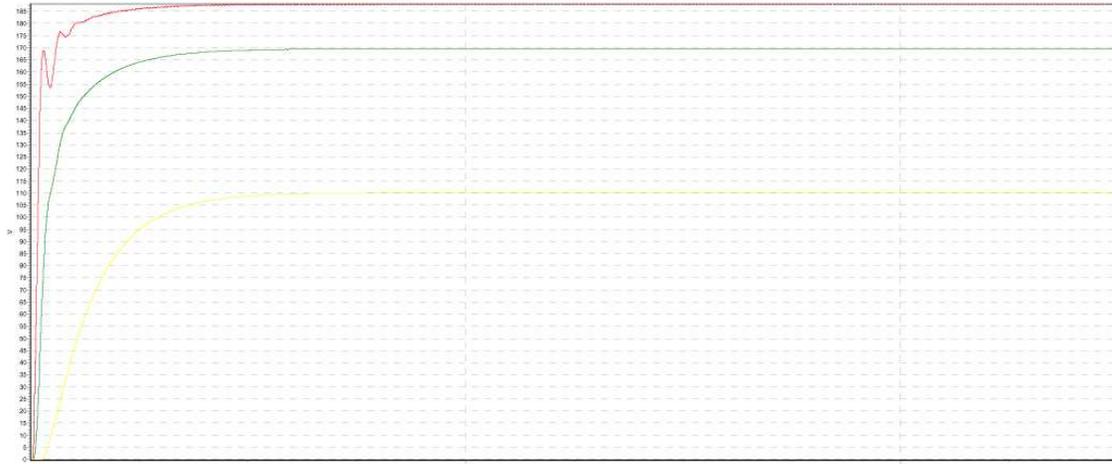
The Hammond PT has a 5V winding for the rectifier, but no source for the other filaments, so an additional transformer is necessary.

Some capacitor substitution is allowed, but C1 should not exceed 60uF. The values given would generally be minimums. The greatest potential benefit would be to increase C2.

Estimated Voltages

On the chart below, the tap colors and voltages are:

11	red	185V+
12	green	170V
13	yellow	110V



(Sorry, yellow is very difficult to see...)