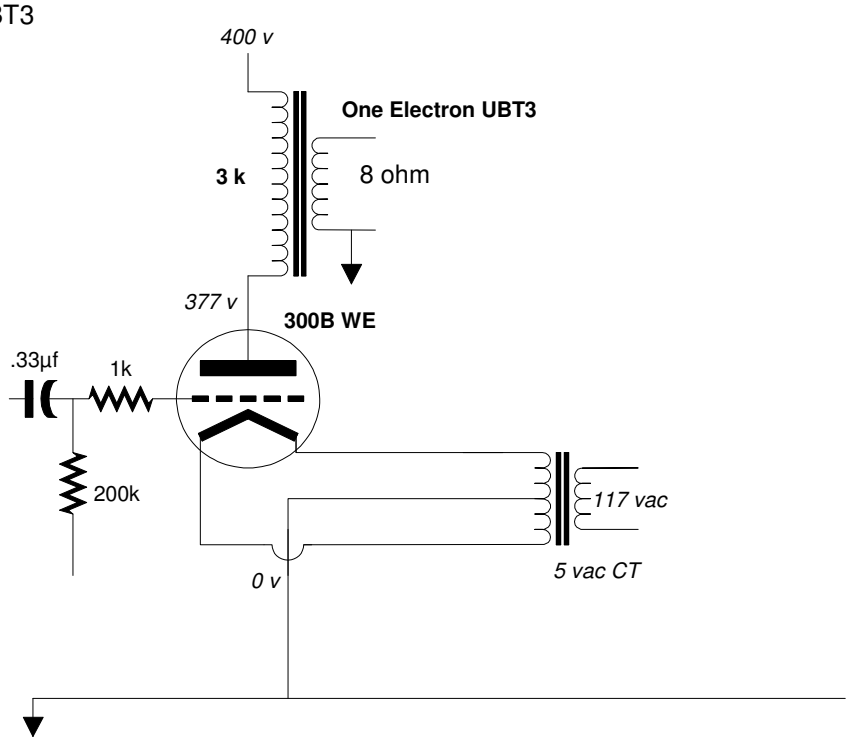
Circuit Setup

Output Tube Type	300B WE X 1
Output Transformer	One Electron UBT3
Bias Method	Fixed
Plate Load Resistance	3.26 k
Plate Idle Current	90 mA
B+ Voltage	400 v
Peak Input Voltage	75 v
Tran. Primary Resistance	255 ohm



Tube Data

Amplification Factor (µ)	3.89
Transconductance (Gp)	1.38 mA/v
Transconductance (Gm)	5.36 mA/v
Plate Resistance (rp)	725 ohm
Max Plate Voltage	450 v
Max Plate Current	100 mA
Max Plate Dissipation	40.0 W

Transformer Data

Heat Dissipation	2.20 W
Winding Ratio	20.2 : 1
Winding RatioI	406.88
Primary Inductance	25 H
Efficiency	86.3%

Output Stage

Plate Dissipation @ Idle	34.9 W
Average Plate Dissipation	27.0 W
Max Plate Dissipation Ratio	87%
Output Impedance	593 ohm
Gain	3.14
PSRR	-2 dB
Rectification	2.78 mA
Slew Rate of Input	9.42 v/µs
Plate Efficiency	23%
Stage Efficiency	21%

Output Into Load

Power (RMS)	7.96 W
Voltage (RMS)	7.98 v
Current (RMS)	998 mA
Output Impedance	2.06 ohm
Damping Factor	3.89
Distortion 2nd	3.4 %
2nd Harmonic In -Db	-29.3 dB
Distortion 3rd	0.4 %
3rd Harmonic In -Db	-48.2 dB

IV Dynamics: Rectification Effect Included

Vp Max	= 596 v	Vg Max	= -150 v	Ip Min	= 25.3 mA
Delta	= 220 v	Delta	= 75 v	Delta	= 67.5 mA
Vp Avg	= 376 v	Vg Avg	= -75.3 v	Ip Avg	= 92.8 mA
Delta	= 252 v	Delta	= 75 v	Delta	= 77.4 mA
Vp Min	= 124 v	Vg Min	= -0.28 v	Ip Max	= 170 mA