

Circuit Setup

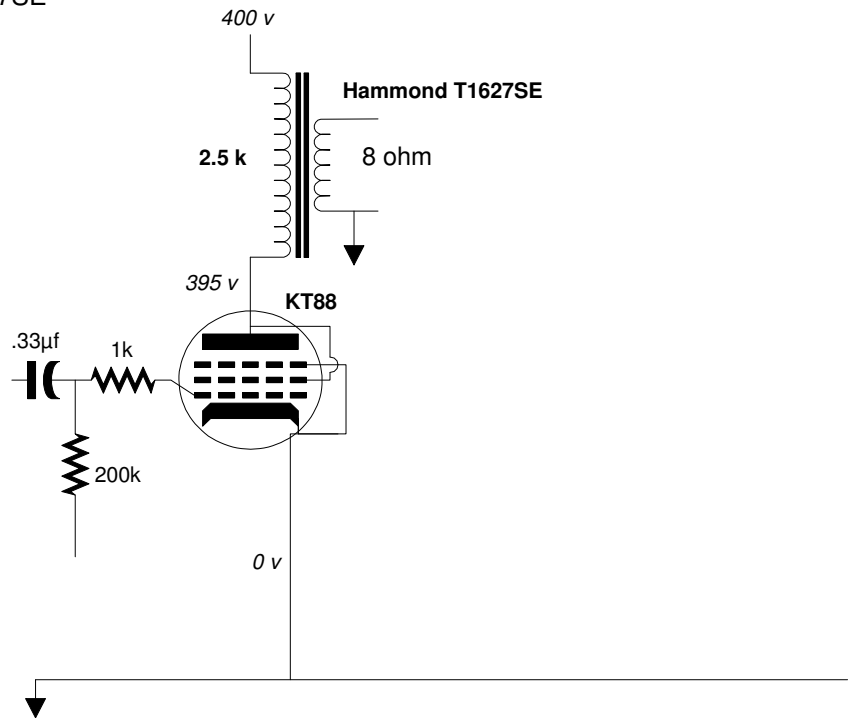
Output Tube Type	KT88 X 1
Output Transformer	Hammond T1627SE
Bias Method	Fixed
Plate Load Resistance	2.56 k
Plate Idle Current	80 mA
B+ Voltage	400 v
Peak Input Voltage	40 v
Tran. Primary Resistance	62 ohm

Tube Data

Amplification Factor (μ)	7.3
Transconductance (G_p)	.89 mA/v
Transconductance (G_m)	6.52 mA/v
Plate Resistance (r_p)	1.12 k
Max Plate Voltage	450 v
Max Plate Current	175 mA
Max Plate Dissipation	40.0 W

Transformer Data

Heat Dissipation	474 mW
Winding Ratio	17.9 : 1
Winding Ratio I	320.25
Primary Inductance	13.3 H
Efficiency	91.9%



Output Stage

Plate Dissipation @ Idle	34.5 W
Average Plate Dissipation	26.5 W
Max Plate Dissipation Ratio	86%
Output Impedance	779 ohm
Gain	5.11
PSRR	-3 dB
Rectification	7.45 mA
Slew Rate of Input	5.02 v/μs
Plate Efficiency	23%
Stage Efficiency	23%

IV Dynamics: Rectification Effect Included

Vp Max = 567 v	Vg Max = -80 v	Ip Min = 20.1 mA
Delta = 173 v	Delta = 40 v	Delta = 67.3 mA
Vp Avg = 395 v	Vg Avg = -40 v	Ip Avg = 87.4 mA
Delta = 236 v	Delta = 40 v	Delta = 92.2 mA
Vp Min = 158 v	Vg Min = -40 mv	Ip Max = 180 mA

Output Into Load

Power (RMS)	7.97 W
Voltage (RMS)	7.98 v
Current (RMS)	998 mA
Output Impedance	2.93 ohm
Damping Factor	2.73
Distortion 2nd	7.8 %
2nd Harmonic In -Db	-22.2 dB
Distortion 3rd	0.1 %
3rd Harmonic In -Db	-56.6 dB

