

Circuit Setup

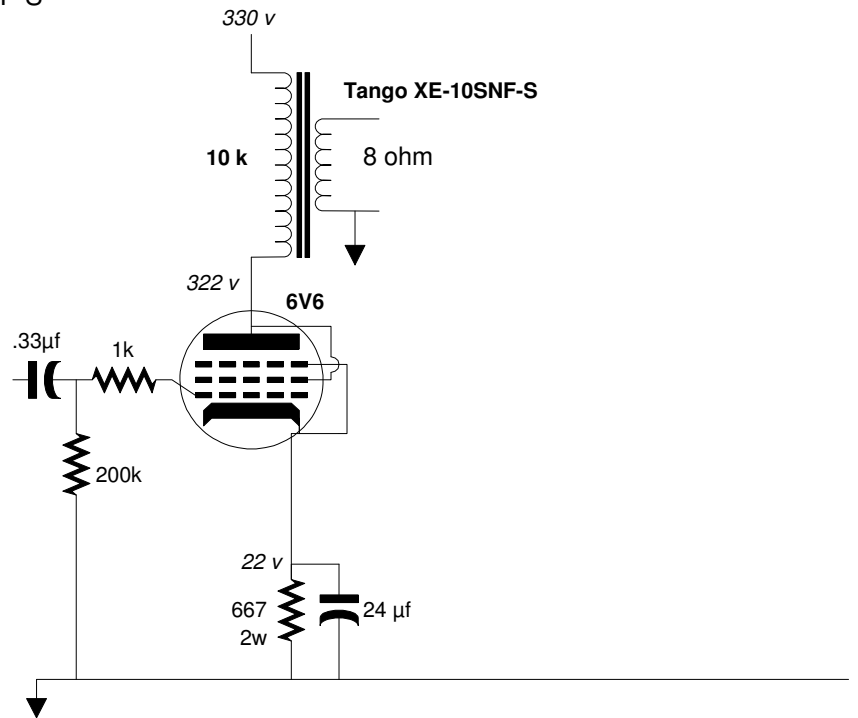
Output Tube Type	6V6 X 1
Output Transformer	Tango XE-10SNF-S
Bias Method	Cathode
Plate Load Resistance	10.2 k
Plate Idle Current	33 mA
B+ Voltage	330 v
Peak Input Voltage	22 v
Tran. Primary Resistance	228 ohm

Tube Data

Amplification Factor (μ)	9.05
Transconductance (G_p)	.39 mA/v
Transconductance (G_m)	3.5 mA/v
Plate Resistance (r_p)	2.59 k
Max Plate Voltage	250 v
Max Plate Current	105 mA
Max Plate Dissipation	12.0 W

Transformer Data

Heat Dissipation	251 mW
Winding Ratio	35.8 : 1
Winding Ratio I	1278.5
Primary Inductance	40 H
Efficiency	92.1%



Output Stage

Plate Dissipation @ Idle	9.97 W
Average Plate Dissipation	8.76 W
Max Plate Dissipation Ratio	83%
Output Impedance	2.07 k
Gain	7.22
PSRR	-2 dB
Rectification	.19 mA
Slew Rate of Input	2.76 v/µs
Plate Efficiency	12%
Stage Efficiency	11%

IV Dynamics: Rectification Effect Included

V_p Max = 450 v	V_g Max = -44 v	I_p Min = 18.5 mA
Delta = 150 v	Delta = 22 v	Delta = 14.7 mA
V_p Avg = 300 v	V_g Avg = -22 v	I_p Avg = 33.2 mA
Delta = 167 v	Delta = 22 v	Delta = 16.4 mA
V_p Min = 133 v	V_g Min = -30 mv	I_p Max = 49.5 mA

Cathode Resistor

Resistor Value	667 ohm
Heat Dissipation	735 mW
Bypass Capacitor Value	24 µf

Output Into Load

Power (RMS)	1.21 W
Voltage (RMS)	3.11 v
Current (RMS)	388 mA
Output Impedance	2.12 ohm
Damping Factor	3.78
Distortion 2nd	2.7 %
2nd Harmonic In -Db	-31.4 dB
Distortion 3rd	0 %
3rd Harmonic In -Db	-70.7 dB

