



The Symmetrical Totem Pole amplifier. No coupling cap for the top triode's grid is needed as the plate resistor equals the cathode resistor. This results in a gain roughly equal to one half the mu of the triode.

Tube

Tube = 6DJ8
 Number = 1
 mu = 33
 gm = 11 ma/v
 rp = 3000 ohm
 I_{max} = 25 ma
 V_{max} = 130 v
 W_{max} = 1.8 w
 C_{gp} = 1.4 pf

Circuit Setup

R_k = 150 ohm
 R_k bypassed
 R_{in} = 25 k
 R_L = 47 k
 R_a = 150 ohm
 Cap = 1µf
 I = 15ma
 V B+ = 230v

AC Results

Gain = 23.21	Gain dB = 27.3 dB
Phase = inverts	PSRR = -11.3 dB
Z input = 245 k	Z output = 836 ohm
F -3dB low = 3.33 hz	F -3dB high = 196 khz

DC Results

V tube = 113 v	V _{Ra} = 2.25 v
V _{bias} = -2.19 v	V _{g2} = 115 v
V _{th} = 1.47 v	V _{max out} = -51/+50.8 v
Plate Dis. = 1.69 w	Total Dis. = 3.45 w
R _a Dis. = 34 mw	W R _k = 34 mw

Calculated Part Values

R _k = 147 ohm	Cap R _k = 141 µf
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