

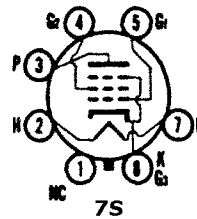
AUDIO POWER AMPLIFIER or VOLTAGE REGULATOR

8417

Beam Power Pentode

ConstructionOctal T-12
 BaseOctal 6 Pin, B6-22
 Basing.....7S
 Outline

Maximum Diameter1.562 In.
 Maximum Seated Height3.875 In.
 Maximum Overall Height4.500 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	1600 Ma
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	
Total DC and Peak.....	200 Volts
Heater Positive with Respect to Cathode	
DC	100 Volts
Total DC and Peak.....	200 Volts

DIRECT INTERELECTRODE CAPACITANCES

Grid No. 1 to Plate	0.9 Pf
Input	22 Pf
Output	9.0 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)	660 Volts
Grid No. 2 Voltage (Max.)	500 Volts
Plate Dissipation (Max.) ⁽¹⁾	35 Watts
Grid No. 2 Dissipation (Max.) ⁽²⁾	5 Watts
Cathode Current (Max.).....	200 Ma
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.1 Megohm
Cathode Bias (Max.)	0.25 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	300 Volts
Grid No. 2 Voltage	300 Volts
Grid No. 1 Voltage	-12 Volts
Plate Current	100 Ma
Grid No. 2 Current	5.5 Ma
Transconductance	23,000 μ mhos
Plate Resistance.....	16,000 Ohms
Amplification Factor (Triode Connected)	16.5
Grid Voltage for $I_b = 1$ Ma.....	-37 Volts

Class AB1 Ultra-Linear Push-Pull⁽³⁾

		Values for 2 Tubes
Plate Supply Voltage.....		445 Volts
Grid No. 1 Voltage		-25 Volts
Peak AF Grid to Grid Voltage		45 Volts
Zero Signal Plate Current		146 Ma
Maximum Load (Plate to Plate)		3500 Ohms
Total Harmonic Distortion		2.5 Percent
Maximum Signal Power Output		70 Watts

Class AB1 Pentode Connected

		Values for 2 Tubes
Plate Supply Voltage.....	400	560 Volts
Grid No. 2 Supply Voltage.....	275	300 Volts
Grid No. 1 Voltage	-13	-15 Volts
Peak AF Grid to Grid Voltage	24	29 Volts
Zero Signal Plate Current	150	124 Ma
Maximum Signal Plate Current	294	290 Ma
Zero Signal Screen Current	4.4	3.6 Ma
Maximum Signal Screen Current	34	39 Ma
Effective Load (Plate to Plate)	2800	4200 Ohms
Total Harmonic Distortion	2.5	2.5 Percent
Maximum Signal Power Output	65	100 Watts

NOTES:

- (1) It is essential to maintain free circulation of air around the tube for proper cooling.
- (2) Grid No. 2 dissipation may reach 8 watts during intervals of maximum speech and music signals.
- (3) Screen tapped at 40% of primary turns. Plate current includes screen current.

AVERAGE PLATE CHARACTERISTICS

