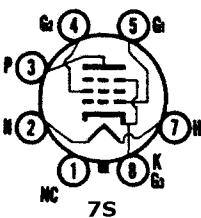


AUDIO POWER AMPLIFIER

6L6GC

Beam Power Pentode

ConstructionOctal T-12
Base6 or 7 Pin, B6-122, B6-148
 B7-12, B7-111 or B7-119
Basing.....7S
Outline12-15
Maximum Diameter1.562 In.
Maximum Seated Height3.688 In.
Maximum Overall Height4.250 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	900 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 (Unshielded)

Grid No. 1 to Plate	0.6 Pf
Input	10 Pf
Output	6.5 Pf

RATINGS (Design Maximum Rating System)

Class AB1 Pentode Operation

	Triode Conn.	Pentode Conn.
Plate Voltage (Max.)	450	500 Volts
Grid No. 2 Voltage (Max.)	—	450 ⁽¹⁾ Volts
Plate Dissipation (Max.)	30	30 Watts
Grid No. 2 Dissipation (Max.)	—	5.0 Watts
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.1	0.1 Megohm
Cathode Bias (Max.)	0.5	0.5 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

Pentode Operation (Class A1 Amp.)

	Single Tube			Push-Pull	
Plate Voltage	250	300	250	250	270 Volts
Grid No. 2 Voltage	250	200	250	250	270 Volts
Grid No. 1 Voltage	-14	-12.5	-18	-16	-17.5 Volts
Peak AF Grid Voltage	14	12.5	18	16	17.5 Volts
Zero Signal Plate Current	72	48	54	120	134 Ma
Maximum Signal Plate Current	79	55	66	140	155 Ma
Zero Signal Grid No. 2 Current	5.0	2.5	2.5	10	11 Ma
Maximum Signal Grid No. 2 Current	7.3	4.7	7.0	16	17 Ma
Transconductance	6K	5.3K	5.2K	—	— μ mhos
Plate Resistance (Approx.)	22.5K	35K	33K	—	— Ohms
Load Resistance	2.5K	4.5K	4.2K	—	— Ohms
Load Resistance (PL to PL)	—	—	—	5K	5K Ohms
Power Output	6.5	6.5	10.8	14.5	17.5 Watts
Total Harmonic Distortion	10	11	15	2	2 Percent

Pentode Operation

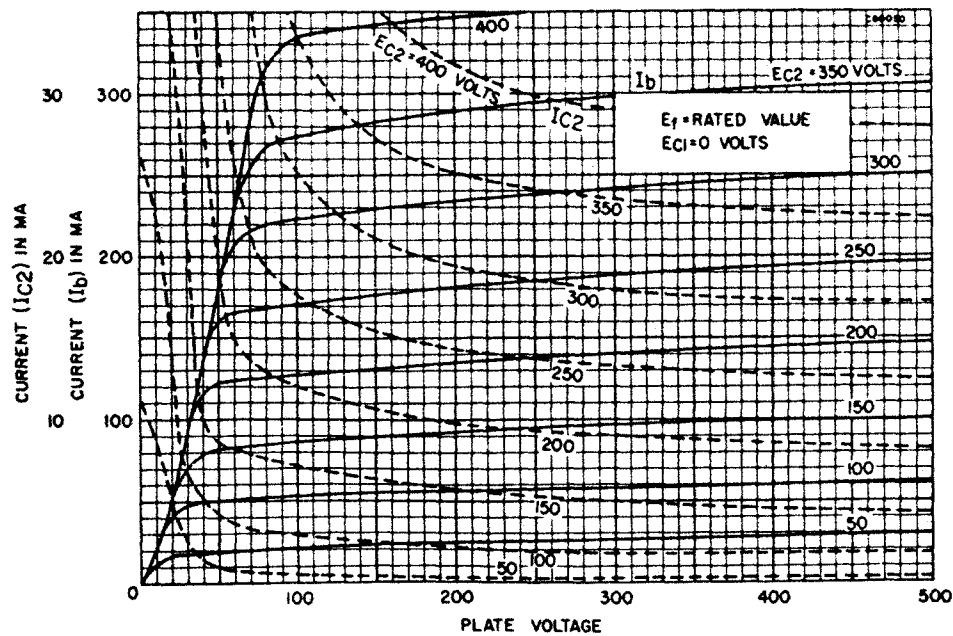
	Class AB2 Push-Pull		Class AB1 Push-Pull	
Plate Voltage	360	360	360	450 Volts
Grid No. 2 Voltage	225	270	270	400 Volts
Grid No. 1 Voltage	-18	-22.5	-22.5	-37 Volts
Peak AF Grid Voltage	26	36	22.5	35 Volts
Zero Signal Plate Current	78	88	88	116 Ma
Maximum Signal Plate Current	142	205	132	210 Ma
Zero Signal Grid No. 2 Current	3.5	5.0	5.0	5.6 Ma
Maximum Signal Grid No. 2 Current	11	16	15	22 Ma
Load Resistance (PL to PL)	6000	3800	6600	5600 Ohms
Power Output	31	47	26.5	55 Watts
Total Harmonic Distortion	2	2	2	1.8 Percent

Triode Operation

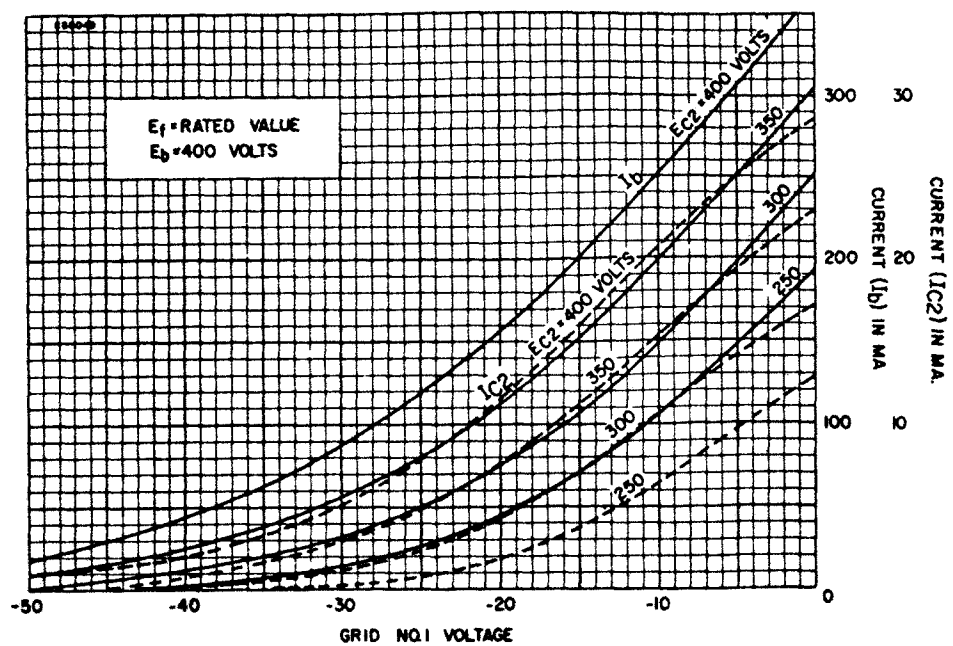
	Class A1 Amp. Single Tube	Class AB1 Amp. Push-Pull
Plate Voltage	250	400 Volts
Grid No. 1 Voltage	-20	-40 Volts
Peak AF Grid No. 1 Voltage	20	40 Volts
Zero Signal Plate Current	40	95 Ma
Maximum Signal Plate Current	44	140 Ma
Transconductance	4700	— μ mhos
Amplification Factor	8	—
Plate Resistance.....	1700	— Ohms
Load Resistance	5000	— Ohms
Load Resistance (PL to PL)	—	4500 Ohms
Power Output	1.4	12.5 Watts
Total Harmonic Distortion	5	3.5 Percent

NOTE:
(1) The maximum Grid No. 2 voltage rating is 500 volts in push-pull circuits where Grid No. 2 of each tube is connected to a tap on the plate winding of the output transformer.

AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS

