

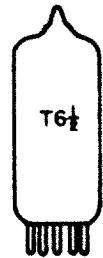
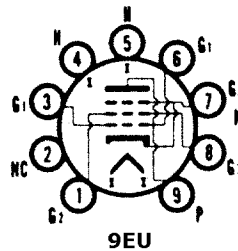
- (13) When Grid No. 1 is driven positive and the tube is operated at maximum ratings, the total dc Grid No. 1 circuit resistance should not exceed the specified value of 30,000 ohms. If this value is insufficient to provide adequate bias, the additional required bias must be supplied by a cathode resistor or fixed supply. For operation at less than maximum ratings, the dc Grid No. 1 circuit resistance may be as high as 100,000 ohms.

6973

AUDIO POWER AMPLIFIER

Beam Power Pentode

Construction Miniature T-6½
 Base Button 9 Pin, E9-1
 Basing 9EU
 Outline 6-4
 Maximum Diameter 0.875 In.
 Maximum Seated Height 2.812 In.
 Maximum Overall Height 3.062 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	450 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	0.4 Pf
Input	9.0 Pf
Output	6.0 Pf

RATINGS (Design Maximum Rating System)

	Ultra-Linear Conn.	Pentode Conn.
Plate and Grid No. 2 Voltage (Max.)	410	— Volts
Plate Voltage (Max.)	—	440 Volts
Grid No. 2 Voltage (Max.)	—	330 Volts
Plate Dissipation (Max.)	12	12 Watts
Grid No. 2 Input (Max.)	1.75	2 Watts
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.5	0.5 Megohm
Self Bias (Max.)	1.0	1.0 Megohm
Bulb Temperature (Max.)	250	250 °C

CHARACTERISTICS AND TYPICAL OPERATION

	S. T. Class A	P-P Class AB Fixed Bias			P-P Class AB Self Bias	
Plate Voltage	250	250	350	400	300	310 Volts
Grid No. 2 Voltage	250	250	280	290	300	310 Volts
Grid No. 1 Voltage	-15	-15	-22	-25	—	— Volts
Cathode Resistor	—	—	—	—	230	270 Ohms
Peak AF Grid No. 1 Voltage	—	15	22	25	24	22.5 Volts
Plate Current (Zero Signal)	46	92	58	50	80	77 Ma
Plate Current (Max. Signal)	—	105	106	107	96	92 Ma
Grid No. 2 Current (Zero Signal)	3.5	7	3.5	2.5	6	5 Ma
Grid No. 2 Current (Max. Signal)	—	16	14	13.7	14	14 Ma
Transconductance	4.8K	—	—	—	—	— μmhos
Plate Resistance.....	73K	—	—	—	—	— Ohms
Load Resistance (P to P)	—	8K	7.5K	8K	5.5K	6K Ohms
Power Output	—	12.5	20	24	15	17 Watts
Total Harmonic Distortion	—	2	1.5	2	2	4 Percent
E _{c1} for I _b = 100 μa	-40	—	—	—	—	— Volts

Class AB Ultra-Linear Conn.

Plate Supply Voltage.....	375 ⁽¹⁾	370 ⁽²⁾ Volts
Grid No. 1 Voltage	-33.5	— Volts
Cathode Resistor	—	355 Ohms
Peak AF Grid No. 1 Voltage	33.5	31 Volts
Cathode Current (Zero Signal)	62	74 Ma

Cathode Current (Maximum Signal)	95	84 Ma
Load Resistance (P to P)	12.5K	13K Ohms
Power Output	18.5	15 Watts
Total Harmonic Distortion	1.5	1.2 Percent

NOTES:

- (1) Obtained from taps on the primary winding of the output transformer. The taps are located on each side of the center tap so as to apply 50 percent of the plate signal voltage to Grid No. 2 of each output tube.
- (2) Obtained from taps on the primary winding of the output transformer. The taps are located on each side of the center tap so as to supply 43 percent of the plate signal voltage to Grid No. 2 of each output tube.

Color Television Type

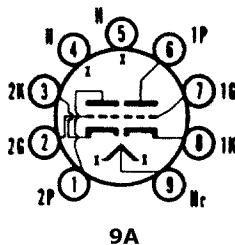
**AF AMPLIFIERS or
PHASE INVERTERS**

7025

Double High Mu Triode

ConstructionMiniature T-6½
 Base Button 9 Pin, E9-1
 Basing9A
 Outline6-4
 Maximum Diameter0.875 In.
 Maximum Seated Height1.937 In.
 Maximum Overall Height2.187 In.

The Type 7025 is identical to the Type 12AX7/ECC83 except for improved noise and hum characteristics.

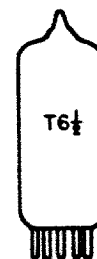
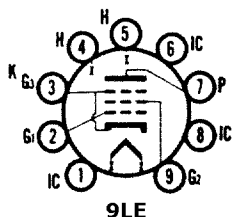


AUDIO POWER AMPLIFIER

7189A

Beam Power Pentode

ConstructionMiniature T-6½
 Base Button 9 Pin, E9-1
 Basing9LE
 Outline6-4
 Maximum Diameter0.875 In.
 Maximum Seated Height2.812 In.
 Maximum Overall Height8.062 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	760 Ma
Maximum Heater-Cathode Voltage	
Heater Negative with Respect to Cathode	100 Volts
Heater Positive with Respect to Cathode	100 Volts

DIRECT INTERELECTRODE CAPACITANCES

Grid No. 1 to Plate (Max.).....	0.5 Pf
Input	10.8 Pf
Output	6.5 Pf
Grid No. 1 to Heater (Max.)	0.25 Pf

RATINGS (Design Maximum Rating System)

	Class AB Pentode Conn.	Class AB Ultra-linear Conn.
Plate Voltage (Max.)	440	415 Volts
Grid No. 2 Voltage (Max.) ⁽¹⁾	400	415 Volts
Plate Dissipation (Max.)	13.2	13.2 Watts
Grid No. 2 Dissipation (Zero Signal) (Max.)	2.2	2.2 Watts
Grid No. 2 Dissipation (Max. Signal) (Max.).....	4.4	4.4 Watts
Cathode Current (Max.).....	72	72 Ma
Grid No. 1 Circuit Resistance		
Fixed Bias (Max.)	0.3	0.3 Megohm
Cathode Bias (Max.)	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Pentode Conn.		Ultra-linear Conn.
	Single Tube Class A1	Class AB Push-Pull	Class AB Push-Pull
Plate Voltage	250	400	375 Volts
Grid No. 2 Voltage	250	300	Note 1 Volts
Grid No. 1 Voltage	-7.3	-15	— Volts
Cathode Resistor	—	—	220 Ohms
Grid Voltage (RMS) ⁽²⁾	—	10.5	12.5 Volts
Plate Current (Zero Signal)	48	30	70 Ma
Plate Current (Max. Signal)	—	105	81 Ma
Grid No. 2 Current (Zero Signal)	5.5	1.6	— Ma
Grid No. 2 Current (Max. Signal)	—	25	— Ma
Transconductance	11.3K	—	— μ mhos
Amplification Factor ⁽³⁾	19.5	—	—
Plate Resistance	40K	—	— Ohms
Load Resistance (P to P)	—	8K	11K Ohms
Maximum Signal Power Output	—	24	16.5 Watts
Total Harmonic Distortion	—	4.0	3 Percent

NOTES:

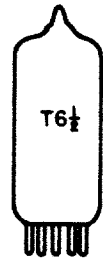
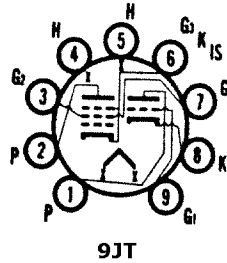
- (1) Grid No. 2 voltage is obtained from taps located at 43 percent of the output transformer windings.
- (2) Per grid
- (3) Measured from Grid No. 1 to Grid No. 2.

7199

PREAMPLIFIER (P)
PHASE INVERTER (T)

Medium Mu Triode and Sharp Cutoff Pentode

Construction Miniature T-6½
 Base Button 9 Pin, E9-1
 Basing 9JT
 Outline 6-2
 Maximum Diameter 0.875 In.
 Maximum Seated Height 1.937 In.
 Maximum Overall Height 2.187 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	6.3 Volts
Heater Current	450 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)

Triode Section

Grid to Plate	2.0 Pf
Input: g to (h + k)	2.3 Pf
Output: p to (h + k)	0.3 Pf

Pentode Section

Grid No. 1 to Plate (Max.)	0.06 Pf
Input: g1 to (h + k + g2 + g3 + IS)	5.0 Pf
Output: p to (h + k + g2 + g3 + IS)	2.0 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	330	330 Volts
Grid No. 2 Supply Voltage (Max.)	—	330 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Plate Dissipation (Max.)	2.4	3.0 Watts
Grid No. 2 Dissipation (Max.)	—	0.6 Watt
Grid Circuit Resistance		
Fixed Bias (Max.)	0.5	0.25 Megohm
Cathode Bias (Max.)	1.0	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Section	Pentode Section	
Plate Voltage	215	100	220 Volts
Grid No. 2 Voltage	—	50	130 Volts
Grid No. 1 Voltage	8.5	—	— Volts
Cathode Bias Resistor	—	1000	62 Ohms
Plate Current	9.0	1.1	12.5 Ma
Grid No. 2 Current	—	0.35	3.5 Ma
Transconductance	2100	1500	7000 μ mhos
Amplification Factor	17	—	—
Plate Resistance.....	0.0081	1.0	0.4 Megohm
Ec1 for Ib = 10 μ a (Approx.)	40	4	— Volts

Equivalent Noise and Hum Voltage (Referenced to Grid)

	Triode Section ⁽¹⁾	Pentode Section ⁽²⁾
Average Value	10	35 μ Volts rms
Maximum Value	150	100 μ Volts rms

NOTES:

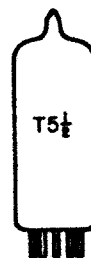
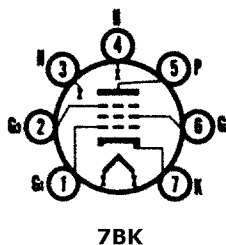
- (1) Measured under the following conditions: Ef = 6.3 Vac; center-tap of heater transformer grounded; Ebb = 250 Vdc; RL = 0.1 Megohm; Rk = 1500 ohms; Rg = 50,000 ohms; F = 25 to 10,000 Hertz.
- (2) Measured under the following conditions: Ef = 6.3 Vac; center-tap of heater transformer grounded; Ebb = 250 Vdc; RL = 0.1 Megohm; Ecc2 = 250 Vdc; Rg2 = 330,000 ohms; Eg2 = 0.22 μ f; Rk = 1200 ohms; Rg1 = 50,000 ohms; F = 25 to 10,000 Hertz.

AF AMPLIFIER

7543

Sharp Cutoff Pentode

Construction Miniature T-5½
 Base Button 7 Pin, E7-1
 Basing 7BK
 Outline 5-2
 Maximum Diameter 0.750 in.
 Maximum Seated Height 1.875 in.
 Maximum Overall Height 2.125 in.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	300 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

	Shielded ⁽¹⁾	Unshielded
Pentode Connection		
Grid No. 1 to Plate (Max.).....	0.0035	0.0035 Pf
Input: g1 to (h + k + g2 + g3 + IS).....	5.5	5.5 Pf
Output: p to (h + k + g2 + g3 + IS).....	5.0	5.0 Pf
Triode Connection⁽²⁾		
Grid to Plate: g1 to (p + g2 + g3 + IS)	2.6	2.6 Pf
Input: g1 to (h + k)	3.2	3.2 Pf
Output: p + g2 + g3 + IS to (h + k)	8.5	1.2 Pf

RATINGS (Design Center Rating System)

	Triode Conn. ⁽²⁾	Pentode Conn.
Plate Voltage (Max.)	250	300 Volts
Grid No. 2 Supply Voltage (Max.)	—	300 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Plate Dissipation (Max.)	3.2	3.0 Watts
Grid No. 2 Dissipation (Max.)	—	0.65 Watt
Positive Grid No. 1 Voltage (Max.)	0	0 Volt

CHARACTERISTICS AND TYPICAL OPERATION

	Triode Conn. ⁽²⁾		Pentode Connected	
	250	100	250	250 Volts
Plate Voltage	250	100	250	250 Volts
Grid No. 3 Voltage	—	Connected to Cathode at Socket		
Grid No. 2 Voltage	—	100	125	150 Volts
Cathode Bias Resistor	330	150	100	68 Ohms
Plate Current	12.2	5.0	7.6	10.6 Ma
Grid No. 2 Current	—	2.1	3.0	4.3 Ma
Transconductance	4800	3900	4500	5200 μ mhos
Amplification Factor	36	—	—	—
Plate Resistance (Approx.)	—	0.5	1.5	1.0 Megohms
E _{c1} for I _b = 10 μ a (Approx.)	—	-4.2	-5.5	-6.5 Volts

NOTES:

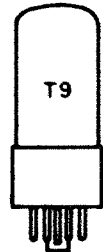
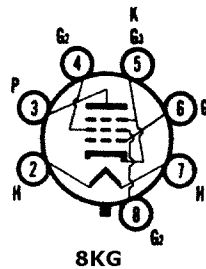
- (1) Shield No. 316 connected to Cathode Pin No. 7.
- (2) When operated as a triode Grid No. 2 and Grid No. 3 should be tied to the plate.

7591A

AUDIO POWER AMPLIFIER

Beam Power Pentode

Construction	Octal T-9
Base	Octal 7 Pin, B7-233 or B8-142
Basing8KG
Outline	9-11
Maximum Diameter	1.188 In.
Maximum Seated Height	2.750 In.
Maximum Overall Height	3.312 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage	6.3 Volts
Heater Current	800 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	0.25 Pf
Input	10 Pf
Output	5.0 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)	550 Volts
Grid No. 2 Voltage (Max.)	440 Volts
Plate Dissipation (Max.)	19 Watts
Grid No. 2 Dissipation (Max.) ⁽¹⁾	3.3 Watts
Cathode Current (Max.)	85 Ma
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.3 Megohm
Self Bias (Max.)	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

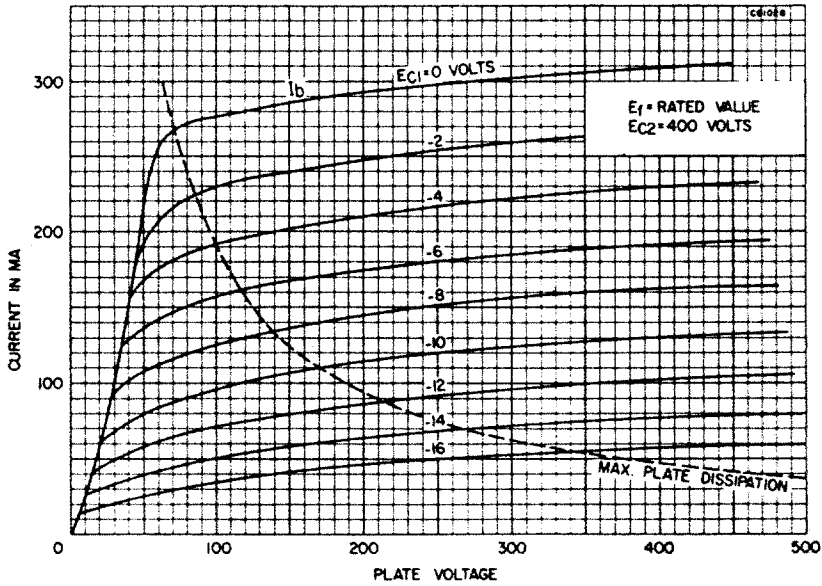
	Pentode Operation		Ultra-Linear Operation ⁽²⁾
	S. T.— Class A1 Amp.	Class AB1 - Push-Pull	
Plate Voltage	300	400	425 Volts
Grid No. 2 Voltage	300	Note 2	Note 2 Volts
Grid No. 1 Voltage	-10	-20.5	— Volts
Cathode Resistor	—	—	185 Ohms
Peak AF Grid Voltage	10	20.5	21 Volts
Zero Signal Plate Current	60	80	88 Ma
Max. Signal Plate Current	75	138	104 Ma
Zero Signal Grid No. 2 Current	8	11.5	13 Ma
Max. Signal Grid No. 2 Current	15	26.4	17.5 Ma
Transconductance	10.2K	—	— μ mhos
Plate Resistance (Approx.)	29K	—	— Ohms

Load Resistance	3K	—	—	—	—	—	— Ohms
Load Resistance (PL to PL)	—	6600	6600	6600	6600	6600	6600 Ohms
Power Output	11	32	32	32	32	32	26 Watts
Total Harmonic Distortion	13	1.0	1.0	1.0	1.0	1.0	2 Percent
Pentode Operation (Class AB1 Push-Pull Amp.)							
Plate Voltage	300	350	400	450	450	450	450 Volts
Grid No. 2 Voltage	300	350	350	350	400	400	400 Volts
Grid No. 1 Voltage	-12.5	-15.5	-16	-16.5	-21	-21	— Volts
Cathode Resistor	—	—	—	—	—	—	200 Ohms
Peak AF Grid to Grid Voltage	25	31	32	33	42	42	28 Volts
Zero Signal Plate Current	86	92	85	77	66	66	82 Ma
Max. Signal Plate Current	116	130	143	153	144	144	94 Ma
Zero Signal Grid No. 2 Current	12.6	13	11	9.6	9.4	9.4	11.5 Ma
Max. Signal Grid No. 2 Current	26	28.6	27	27	30	30	22 Ma
Load Resistance (PL to PL)	6600	6600	6600	6600	6600	9000	9000 Ohms
Power Output	23	30	37	43	45	45	28 Watts
Total Harmonic Distortion	2.4	2	1.5	1.5	1.5	1.5	2 Percent

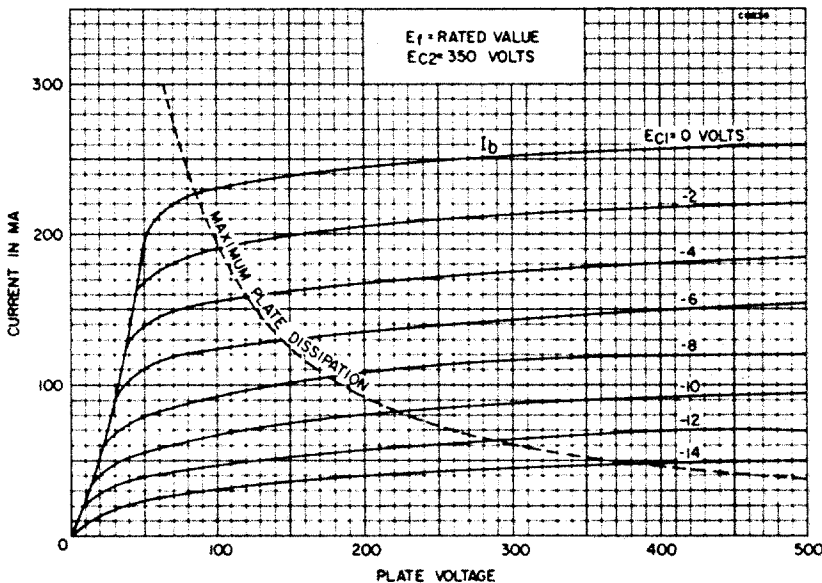
NOTES:

- (1) Grid No. 2 Dissipation may be permitted to reach 6 watts during the periods of maximum input of speech and music signals. For efficient operation of Grid No. 2, the two Grid No. 2 connections, Pins 4 and 8, should be externally tied together.
- (2) Grid No. 2 tapped at 40% of the primary winding.

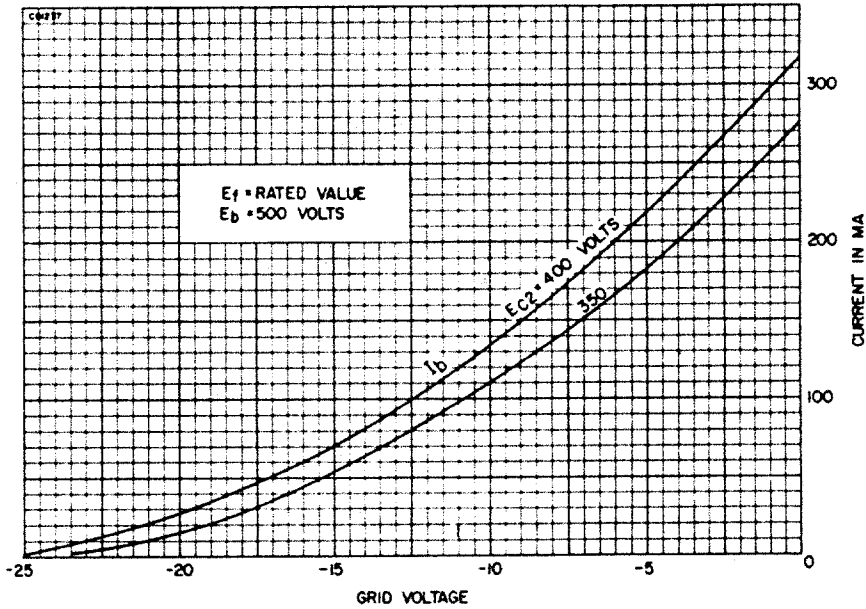
AVERAGE PLATE CHARACTERISTICS



AVERAGE PLATE CHARACTERISTICS



AVERAGE TRANSFER CHARACTERISTICS

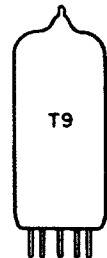
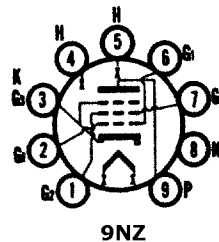


7868

AUDIO POWER AMPLIFIER

Beam Power Pentode

- ConstructionNovar T-9
- BaseButton 9 Pin, E9-75
- Basing9NZ
- Outline9-85
- Maximum Diameter1.188 In.
- Maximum Seated Height2.860 In.
- Maximum Overall Height3.240 In.



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current	800 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	0.15 Pf
Input	11 Pf
Output	4.4 Pf

RATINGS (Design Maximum Rating System)

Plate Voltage (Max.)	550 Volts
Grid No. 2 Voltage (Max.)	440 Volts
Plate Dissipation (Max.)	19 Watts
Grid No. 2 Dissipation (Max.) ⁽¹⁾	3.3 Watts
Cathode Current (Max.).....	90 Ma
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.)	0.3 Megohm
Self Bias (Max.)	1.0 Megohm

CHARACTERISTICS AND TYPICAL OPERATION

	Pentode Operation		Ultra-Linear Operation			
	S.T.—Class A1 Amp.		Class AB1 — Push-Pull			
Plate Voltage	300	400	400	425	Volts	
Grid No. 2 Voltage	300		Note 2	Note 2	Volts	
Grid No. 1 Voltage	-10		-20.5		— Volts	
Cathode Resistor	—		—		185 Ohms	
Peak AF Grid Voltage	10		41		42 Volts	
Zero Signal Plate Current.....	60		60		88 Ma	
Maximum Signal Plate Current	75		115		100 Ma	
Zero Signal Grid No. 2 Current.....	8		8		12 Ma	
Maximum Signal Grid No. 2 Current ..	15		18		16 Ma	
Transconductance	10.2K		—		— μ mhos	
Plate Resistance (Approx.)	29K		—		— Ohms	
Load Resistance	3K		—		— Ohms	
Load Resistance (PL to PL)	—		6600		6600 Ohms	
Power Output	11		23		21 Watts	
Total Harmonic Distortion	13		2.5		3.5 Percent	
Pentode Operation (Class AB1 Push-Pull Amp.)						
Plate Voltage	300	350	400	450	450	450 Volts
Grid No. 2 Voltage	300	350	350	350	400	400 Volts
Grid No. 1 Voltage	-12.5	-15.5	-16	-16.5	-21	— Volts
Cathode Resistor	—	—	—	—	—	170 Ohms
Peak AF Grid to Grid Voltage	25	31	32	33	42	31 Volts
Zero Signal Plate Current.....	74	72	64	60	40	86 Ma
Maximum Signal Plate Current	116	130	135	142	145	94 Ma
Zero Signal Grid No. 2 Current	10	9.5	8	7.2	5	10 Ma
Maximum Signal Grid No. 2 Current ..	28	32	28	26	30	20 Ma
Load Resistance (PL to PL)	6600	6600	6600	6600	6600	10,000 Ohms
Power Output	24	30	34	38	44	28 Watts
Total Harmonic Distortion	5	2.5	2	2.5	5	2 Percent

NOTES:

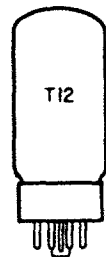
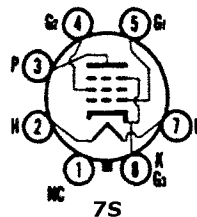
- (1) Grid No. 2 Dissipation may be permitted to reach 6 watts during the periods of maximum input of speech and music signals. For efficient operation of Grid No. 2, the two Grid No. 2 connections, Pins 1 and 7, should be externally tied together.
- (2) Grid No. 2 tapped from the primary winding of output transformer, in a manner to apply 50% of plate signal to G2 of each tube.

**AUDIO POWER AMPLIFIER
or VOLTAGE REGULATOR**

8417

Beam Power Pentode

Construction	Octal T-12
Base	Octal 6 Pin, B6-22
Basing.....	7S
Outline	
Maximum Diameter	1.562 In.
Maximum Seated Height	3.875 In.
Maximum Overall Height	4.500 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

