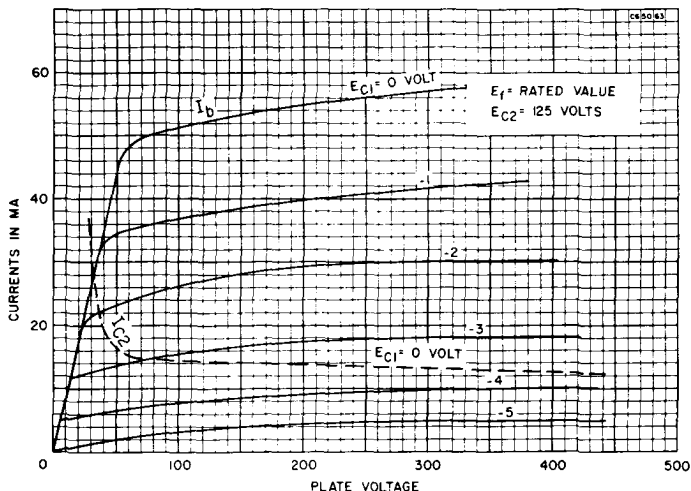


AVERAGE PLATE CHARACTERISTICS (Pentode Section)

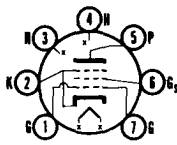


6HG5

AUDIO POWER AMPLIFIER

Beam Power Pentode

Construction Miniature T-5½
 Base Button 7 Pin, E7-1
 Basing 7BZ
 Outline 5-3
 Maximum Diameter 0.750 In.
 Maximum Seated Height 2.375 In.
 Maximum Overall Height 2.625 In.



7BZ



ELECTRICAL DATA

HEATER OPERATION

Heater Voltage.....	6.3 Volts
Heater Current.....	450 Ma
Heater Warm-up Time ⁽¹⁾	14 Seconds
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 to Plate.....	0.4 Pf
Input: g1 to (h + k + g2 + g3).....	8.0 Pf
Output: p to (h + k + g2 + g3).....	8.5 Pf

RATINGS (Design Maximum Rating System)

Class A1 Amplifier

Plate Voltage (Max.).....	275 Volts
Grid No. 2 Voltage (Max.).....	275 Volts
Plate Dissipation (Max.).....	12 Watts
Grid No. 2 Dissipation (Max.).....	2 Watts
Grid No. 1 Circuit Resistance	
Fixed Bias (Max.).....	0.1 Megohm
Cathode Bias (Max.).....	0.5 Megohm
Bulb Temperature (At Any Point) (Max.).....	250 °C

CHARACTERISTICS AND TYPICAL OPERATION

Plate Voltage	180	250 Volts
Grid No. 2 Voltage	180	250 Volts
Grid No. 1 Voltage	-8.5	-12.5 Volts
Peak AF Grid No. 1 Voltage	8.5	12.5 Volts
Zero-Signal Plate Current	29	45 Ma
Maximum Signal Plate Current	30	47 Ma
Zero-Signal Grid No. 2 Current	3	4.5 Ma
Maximum Signal Grid No. 2 Current	4	7.0 Ma
Plate Resistance (Approx.)	58,000	52,000 Ohms
Transconductance	3700	4100 μ mhos
Load Resistance	5500	5000 Ohms
Maximum Signal Power Output	2.0	4.5 Watts
Total Harmonic Distortion (Approx.)	8	8 Percent

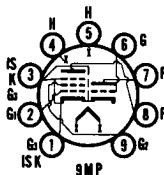
NOTE:

- (1) The time interval between the instant all electrode voltages are applied and the instant a current of 1 Ma flow in the plate circuit. Ef = 6.3, Eb and Ec2 = 250 V, Rk = 680 Ohms.

Color Television Type

VHF OSCILLATOR and MIXER**6HG8/ECF86**4HG8, 5HG8/LCF86,
7HG8/PCF86, 8HG8**Medium Mu Triode and
Sharp Cutoff Pentode**

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

**ELECTRICAL DATA
HEATER OPERATION**

	8HG8	7HG8/ PCF86	5HG8/LCF86	4HG8	6HG8/ ECF86
Heater Voltage.....	8.0	7.2	5.3	4.5	6.3 Volts
Heater Current	300	300	450	600	340 Ma
Heater Warm-up Time	—	—	11	11	— Seconds
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, Pk, Pg3, IS)	2.4 Pf
Output: p to (h + k, Pk, Pg3, IS)	1.1 Pf

Pentode Section

Grid No. 1 to Plate (Max.).....	0.020 Pf
Input: g1 to (h + k, Tk, g3, IS + g2)	6.0 Pf
Output: p to (h + k, Pk, Pg3, IS + g2)	3.5 Pf
Grid No. 1 to Grid No. 2	1.7 Pf

Coupling

Triode Grid to Pentode Plate (Max.)	0.014 Pf
Pentode Grid No. 1 to Triode Plate (Max.)	0.01 Pf
Pentode Plate to Triode Plate (Max.)	0.14 Pf
Pentode Grid No. 1 to Triode Grid (Max.)	0.01 Pf

RATINGS (Design Maximum Rating System)

	Triode Section	Pentode Section
Plate Voltage (Max.)	125	250 Volts
Grid No. 2 Supply Voltage (Max.)	—	250 Volts
Grid No. 2 Voltage	See Rating Chart (Gen. Info. Sec.)	
Positive Grid No. 1 Voltage (Max.)	0	0 Volt
Plate Dissipation (Max.)	1.9	2.2 Watts
Grid No. 2 Dissipation (Max.)	—	0.55 Watts
Cathode Current (Max.).....	16.5	20 Ma