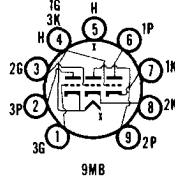


**RF AMPLIFIER; AUTODYNE MIXER
and AFC in FM RECEIVERS**

6GY8

Triple Triode

Construction Miniature T-6½
Base Button 9 Pin, E9-1
Basing 9MB
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.....	100 Volts
Heater Positive with Respect to Cathode.....	100 Volts

DIRECT INTERELECTRODE CAPACITANCES

	Section 1 ⁽¹⁾		Section 2 ⁽¹⁾		Section 3 ⁽¹⁾	
	Unsh.	Sh.	Unsh.	Sh.	Unsh.	Sh.
Grid to Plate	1.6	1.5	1.4	1.4	1.5	1.5 Pf
Input	5.0	5.0	2.4	2.6	2.2	2.4 Pf
Output	1.6	2.4	0.4	1.4	0.2	1.0 Pf
Heater to Cathode	5.0	5.0	2.8	2.8	—	— Pf

RATINGS (Design Maximum Rating System) (Each Section)

Plate Voltage (Max.)	330 Volts
Plate Dissipation (Each Plate) (Max.)	2.0 Watts
Plate Dissipation (Plates 1, 2, and 3) (Max.)	5.0 Watts
Positive Grid Voltage (Max.)	0 Volt

CHARACTERISTICS AND TYPICAL OPERATION

Class A1 Amplifier

	Section 1 ⁽¹⁾	Section 2 & 3 ⁽¹⁾
Plate Voltage	125	125 Volts
Grid Voltage	—	—1.0 Volts
Cathode Resistor	220	— Ohms
Plate Current	4.5	4.5 Ma
Plate Resistance.....	14,000	14,000 Ohms
Transconductance	4500	4500 μ mhos
Amplification Factor	63	63
Ec for Ib = 20 μ a (Approx.).....	—	—4 Volts

NOTE:

(1) Section 1 connects to pins 4, 6, and 7. Section 2 connects to pins 3, 8, and 9. Section 3 connects to pins 1, 2, and 4.

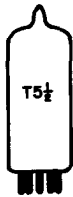
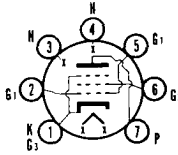
AUDIO POWER AMPLIFIER

6GZ5

4GZ5

Power Pentode

Construction Miniature T-5½
Base Button 7 Pin, E7-1
Basing 7CV
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.....	4GZ5 4.0	6GZ5 6.3 Volts
Heater Current.....	600	380 Ma
Heater Warm-up Time	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)

Grid No. 1 to Plate 0.24 Pf

Input: g_1 to $(h + k + g_2)$ 8.5 PfOutput: p to $(h + k + g_2)$ 8.5 Pf**RATINGS (Design Maximum Rating System)**

Plate Voltage (Max.) 300 Volts

Grid No. 2 Voltage (Max.) 300 Volts

Positive DC Grid No. 1 Voltage (Max.) 0 Volts

Plate Dissipation (Max.) 4.8 Watts

Grid No. 2 Dissipation—Continuous (Max.) 1.1 Watts

Cathode Current—Average (Max.) 30 Ma

Grid No. 1 Circuit Resistance

Fixed Bias (Max.) 0.5 Megohm

Cathode Bias (Max.) 1.0 Megohm

Bulb Temperature (Max.) 200 °C

CHARACTERISTICS AND TYPICAL OPERATION**Class A1 Audio Amplifier**

Plate Supply Voltage..... 250 250 Volts

Grid No. 2 Supply Voltage..... 250 250 Volts

Cathode Resistor 270 270 Ohms

Peak Audio Grid No. 1 Voltage 9.8 2.0 Volts

Zero Signal Plate Current 16 16 Ma

Maximum Signal Plate Current 16 16 Ma

Zero Signal Grid No. 2 Current 2.7 2.7 Ma

Maximum Signal Grid No. 2 Current 5.0 5.0 Ma

Transconductance 8400 μ mhos

Plate Resistance (Approx.) 0.15 Megohm

Load Resistance 15,000 15,000 Ohms

Total Harmonic Distortion 10 10 Percent

Power Output 1.8 1.1 Watts

6HA5/6HM5**4HA5/PC900, 4HM5,
3HA5/3HM5, 2HA5, 2HM5**

Color Television Type

VHF AMPLIFIER**Shielded Triode**

Construction Miniature T-5½

Base Button 7 Pin, E7-1

Basing 7GM

Outline 5-1

Maximum Diameter 0.750 In.

Maximum Seated Height 1.500 In.

Maximum Overall Height 1.750 In.

ELECTRICAL DATA**HEATER OPERATION**

	2HA5 2HM5	3HA5/ 3HM5	4HA5/PC900 4HM5	6HA5/ 6HM5
Heater Voltage.....	2.4	2.9	4.0	6.3 Volts
Heater Current.....	600	450	300	185 Ma
Heater Warm-up Time.....	11	11	11	— Seconds

Maximum Heater-Cathode Voltage

Heater Negative with Respect to Cathode

Total DC and Peak..... 100 Volts

Heater Positive with Respect to Cathode

Total DC and Peak..... 100 Volts

DIRECT INTERELECTRODE CAPACITANCES (Shielded)⁽¹⁾

Output 3.0 Pf

Input 4.5 Pf

Plate to Grid 0.34 Pf

Cathode to Heater 2.5 Pf

RATINGS (Design Maximum Rating System)

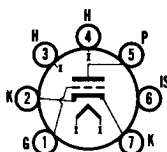
Plate Voltage (Max.) 200 Volts

Grid Voltage (Max.) -50 Volts

Cathode Current (Max.) 20 Ma

Plate Dissipation (Max.) 2.6 Watts

Grid Circuit Resistance 1 Megohm



7GM

