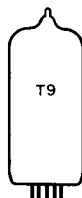
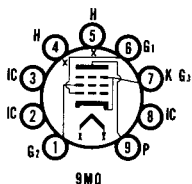


**AUDIO POWER AMPLIFIER**

**6GM5**

**Beam Power Pentode**

Construction .....9-T9  
 Base .....Button 9 Pin, E9-68  
 Basing .....9MQ  
 Outline .....9-71  
   Maximum Diameter .....1.188 In.  
   Maximum Seated Height .....2.920 In.  
   Maximum Overall Height .....3.230 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 ..... 0.13 Pf  
 Input ..... 9.0 Pf  
 Output ..... 4.0 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.)<sup>(1)</sup> ..... 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 S.T.—Class A1 Amp.		Ultra-Linear Operation <sup>(2)</sup> Class AB1—Push-Pull			
Plate Voltage	300	300	400	450	450	425 Volts
Grid No. 2 Voltage	300	300	Note 2	Note 2	Note 2	Note 2 Volts
Grid No. 1 Voltage	-10	-10	-20.5	-	-	- Volts
Cathode Resistor	—	—	—	—	—	185 Ohms
Peak A-F Grid Voltage	10	10	41	41	42	42 Volts
Zero-Signal Plate Current	60	60	80	80	88	88 Ma
Maximum-Signal Plate Current	75	75	138	138	104	104 Ma
Zero-Signal Grid No. 2 Current	8	8	11.5	11.5	13	13 Ma
Maximum Signal Grid No. 2 Current	15	15	26.4	26.4	17.5	17.5 Ma
Transconductance	10.2K	10.2K	—	—	—	— $\mu$ mhos
Plate Resistance (Approx.)	29K	29K	—	—	—	— Ohms
Load Resistance	3K	3K	—	—	—	— Ohms
Load Resistance (PL to PL)	—	—	6600	6600	6600	6600 Ohms
Power Output	11	11	32	32	26	26 Watts
Total Harmonic Distortion	13	13	1.0	1.0	2	2 Percent
<b>Pentode Operation (Class AB1 Push-Pull Amp)</b>						
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	—	—	—	—	—	200 Ohms
Peak A-F Grid Voltage	25	31	32	33	42	28 Volts
Zero-Signal Plate Current	86	92	85	77	66	82 Ma
Maximum-Signal Plate Current	116	130	143	153	144	94 Ma
Zero-Signal Grid No. 2 Current	12.6	13	11	9.6	9.4	11.5 Ma
Maximum-Signal Grid No. 2 Current	26	28.6	27	27	30	22 Ma
Load Resistance (PL to PL)	6600	6600	6600	6600	6600	9000 Ohms
Power Output	23	30	37	43	45	28 Watts
Total Harmonic Distortion	2.5	2	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.
- (2) Grid No. 2 tapped at 40% of the primary winding.