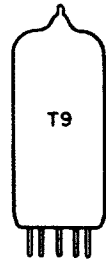
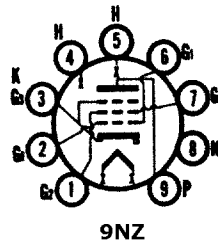


7868

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 S.T.-Class A1 Amp.		Ultra-Linear Operation 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		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.