

AUDIO FREQUENCY POWER AMPLIFIER AND MODULATOR

Class B (Sinusoidal wave, two tubes unless otherwise specified)

MAXIMUM RATINGS

DC PLATE VOLTAGE	- - - - -	3000 VOLTS
MAX-SIGNAL DC PLATE CURRENT, PER TUBE	- - - - -	900 MA
PLATE DISSIPATION, PER TUBE	- - - - -	300 WATTS

TYPICAL OPERATION, CLASS AB₁

DC Plate Voltage	- 1500	2000	2500	3000 Volts
DC Grid Voltage (approx.)*	- - -118	-170	-230	-290 Volts
Zero-signal DC Plate Current	- - -	270	200	160 130 mA
Max-Signal DC Plate Current	- - -	572	546	483 444 mA
Effective Load, Plate-to-Plate	- - -	2540	5300	8500 12,000 Ohms
Peak AF Grid Input Voltage (per tube)	- 118	170	230	290 Volts
Max-Signal Peak Driving Power	- 0	0	0	0 Watts
Max-Signal Plate Power Output	- 256	490	610	730 Watts

*Adjust to give stated zero-signal plate current. The effective grid circuit resistance for each tube must not exceed 250,000 ohms.

TYPICAL OPERATION, CLASS AB₂

DC Plate Voltage	- 1500	2000	2500	3000 Volts
DC Grid Voltage (approx.)*	- - -118	-170	-230	-290 Volts
Zero-signal DC Plate Current	- - -	270	200	160 130 mA
Max-Signal DC Plate Current	- - -	1140	1000	900 800 mA
Effective Load, Plate-to-Plate	- - -	2750	4500	6600 9100 Ohms
Peak AF Grid Input Voltage (per tube)	- 245	290	340	390 Volts
Max-Signal Peak Driving Power	- 78	87	95	110 Watts
Max-Signal Nominal Driving Power (approx.)	- 39	44	48	55 Watts
Max-Signal Plate Power Output	- 1100	1400	1650	1800 Watts

*Adjust to give stated zero-signal plate current

PLATE MODULATED RADIO FREQUENCY AMPLIFIER

Class-C Telephony (Carrier conditions, per tube)

MAXIMUM RATINGS

DC PLATE VOLTAGE	- - - - -	2500 VOLTS
DC PLATE CURRENT	- - - - -	700 MA
PLATE DISSIPATION	- - - - -	200 WATTS
GRID DISSIPATION	- - - - -	50 WATTS

TYPICAL OPERATION (Power input limited to 500 and 1000 watts)*

DC Plate Voltage	- 2000	2000	2500	2500 Volts
DC Plate Current	- 250	500	200	400 mA
Total Bias Voltage	- -500	-500	-525	-550 Volts
Fixed Bias Voltage	- -410	-275	-300	-300 Volts
Grid Resistor	- 3000	3000	12,500	5000 Ohms
DC Grid Current	- 30	75	18	50 mA
Peak RF Grid Input Voltage	- - -	615	690	620 715 Volts
Driving Power	- 18	52	11	36 Watts
Grid Dissipation	- 3	15	2	9 Watts
Plate Power Input	- 500	1000	500	1000 Watts
Plate Dissipation	- 90	190	75	170 Watts
Plate Power Output	- 410	810	425	830 Watts

*The figures are for convenience in obtaining a 500 or 1000 Watt carrier input per tube to the modulated amplifier. The output figures do not allow for circuit losses.

TYPICAL OPERATION*

DC Plate Voltage	- 1500	2000	2500 Volts
DC Plate Current	- 520	525	450 mA
Total Bias Voltage	- -370	-500	-550 Volts
Fixed Bias Voltage	- -160	-260	-440 Volts
Grid Resistor	- 2800	3000	2000 Ohms
DC Grid Current	- 75	80	55 mA
Peak RF Grid Input Voltage	- - -	545	695 720 Volts
Driving Power	- 41	55	40 Watts
Grid Dissipation	- 13	15	10 Watts
Plate Power Input	- 780	1050	1125 Watts
Plate Dissipation	- 200	200	200 Watts
Power Output	- 580	850	925 Watts

*The figures are for one tube operating at maximum plate dissipation as a plate modulated Class C amplifier. The output figures do not allow for circuit losses.

