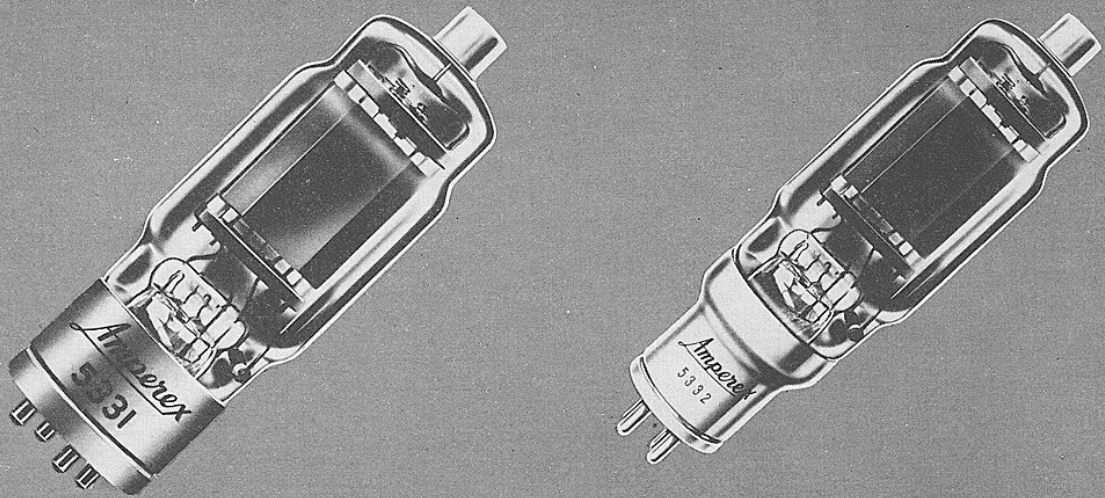


AMPEREX TRANSMITTING TUBE 5331-5332



AF Power Amplifier and Modulator RF Power Amplifier and Oscillator

GENERAL CHARACTERISTICS

RADIATION COOLED TRIODE

ELECTRICAL

Filament	Thoriated Tungsten
Voltage	10.0 volts (ac or dc)
Current	2.5 amperes
Amplification Factor	14
Grid to Plate Transconductance at Plate Current of 65 ma	4000 micromhos
Direct Interelectrode Capacitances	
Grid to Plate	9.0 $\mu\mu\text{f}$
Grid to Filament	5.0 $\mu\mu\text{f}$
Plate to Filament	2.4 $\mu\mu\text{f}$
Frequency for Maximum Ratings	30 Megacycles

MECHANICAL

Maximum Overall Dimensions	5331	5332
Length	6½ inches	7¼ inches
Diameter	2¼ ₁₆ inches	2¼ ₁₆ inches
Mounting Position—Vertical	Base down	
Horizontal	With plane of electrodes vertical	
Net Weight (approx.)	6 ounces	
Shipping Weight (approx.) (one tube)	3 pounds	

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5331-5332 — AMPEREX TRANSMITTING TUBE

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

A.F. Power Amplifier and Modulator—Class B

Typical Operation:

Unless otherwise specified, values are for 2 tubes

	Maximum Rating per Tube			
D.C. Plate Voltage	1000	1250	1500	1500
D.C. Grid Voltage ²	-70	-90	-110	....
Zero Sig. D.C. Plate Current (ma)	30	30	30	....
Max. Sig. D.C. Plate Current (ma)	240	240	225	150 ¹
Load Resistance (ohms) (pl-pl)	8000	11200	14400	....
Plate Dissipation (watts)	....	....	....	65 ¹
Power Output (watts)	185	200	215	....

R.F. Power Amplifier—Class B—Telephony

Carrier conditions per tube for use with a maximum modulation factor of 1.0

Typical Operation:

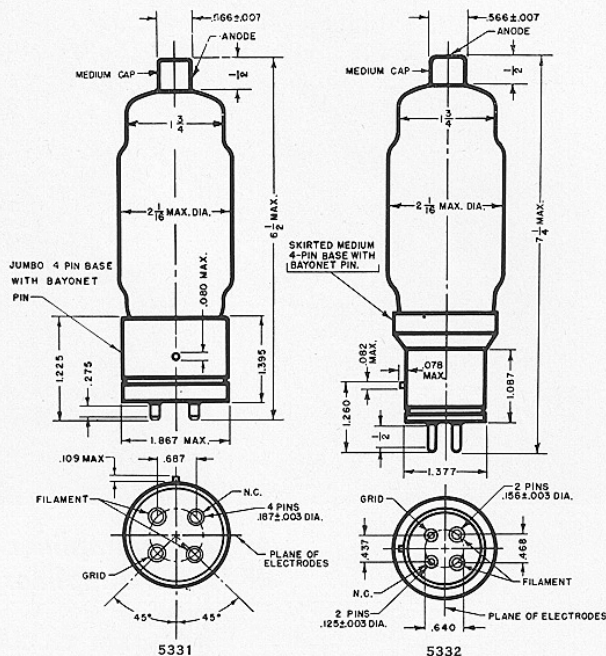
	Maximum Rating per Tube			
D.C. Plate Voltage	1000	1250	1500	1500
D.C. Grid Voltage ²	-70	-90	-110	....
D.C. Plate Current (ma)	95	80	65	120
R.F. Grid Current (amperes)	....	....	....	6
Plate Dissipation (watts)	....	....	....	65
Peak Power Output (watts)	120	128	128	....
Nominal Carrier Power Output (watts)	30	32	32	....

Plate-Modulated R.F. Power Amplifier Class C—Telephony

Carrier conditions per tube for use with a maximum modulation factor of 1.0

Typical Operation:

	Maximum Rating per Tube		
D.C. Plate Voltage	1000	1250	1250
D.C. Grid Voltage ²	-200	-250	....
D.C. Plate Current (ma)	120	130	150
D.C. Grid Current (ma) (approx.)	7	6	25
R.F. Grid Current (amperes)	....	....	5
Driving Power (watts) (approx.)	3	3	....
Plate Dissipation (watts)	....	....	30
Power Output (watts)	84	120	....



R.F. Power Amplifier and Oscillator Class C—Telegraphy

Key-down conditions without modulation³

Typical Operation:

	Maximum Rating per Tube			
D.C. Plate Voltage	1000	1250	1500	1500
D.C. Grid Voltage ²	-145	-180	-215	....
D.C. Plate Current (ma)	130	120	120	150
D.C. Grid Current (ma) (approx.)	6	7	6	25
R.F. Grid Current (amps)	....	....	....	6
Driving Power (watts) (approx.)	3	3	3	....
Plate Dissipation (watts)	....	....	....	65
Power Output (watts)	90	115	140	....

NOTES:

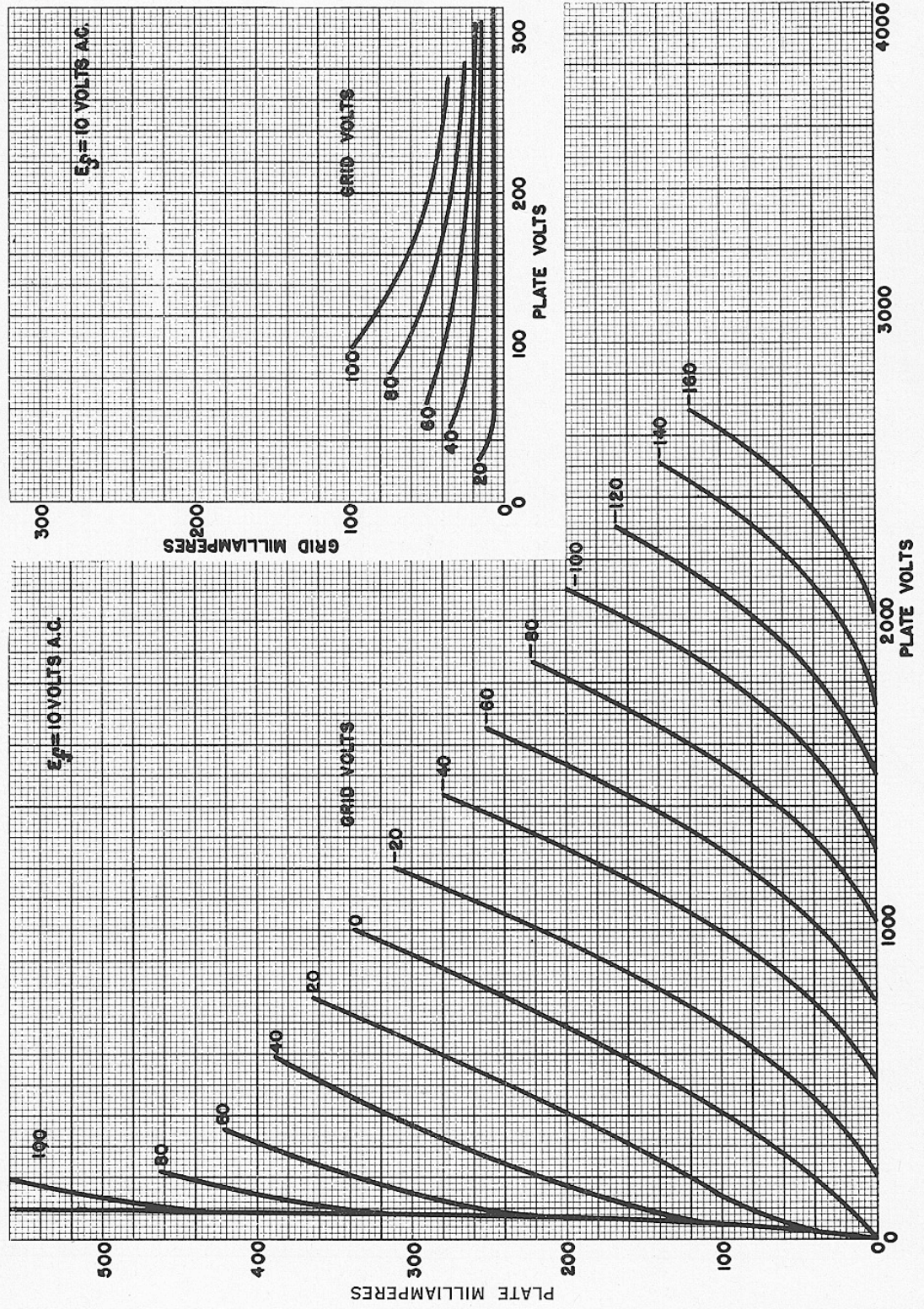
¹Averaged over any audio-frequency cycle of sine-wave form.

²Grid Voltages are given with respect to the mid-point of filament operated on A.C. If D.C. is used, each stated value of grid voltage should be decreased by 5 volts and the circuit returns made to the negative end of the filament.

³Modulation essentially negative may be used if the positive peak of the audio-frequency envelope does not exceed 115% of the carrier conditions.

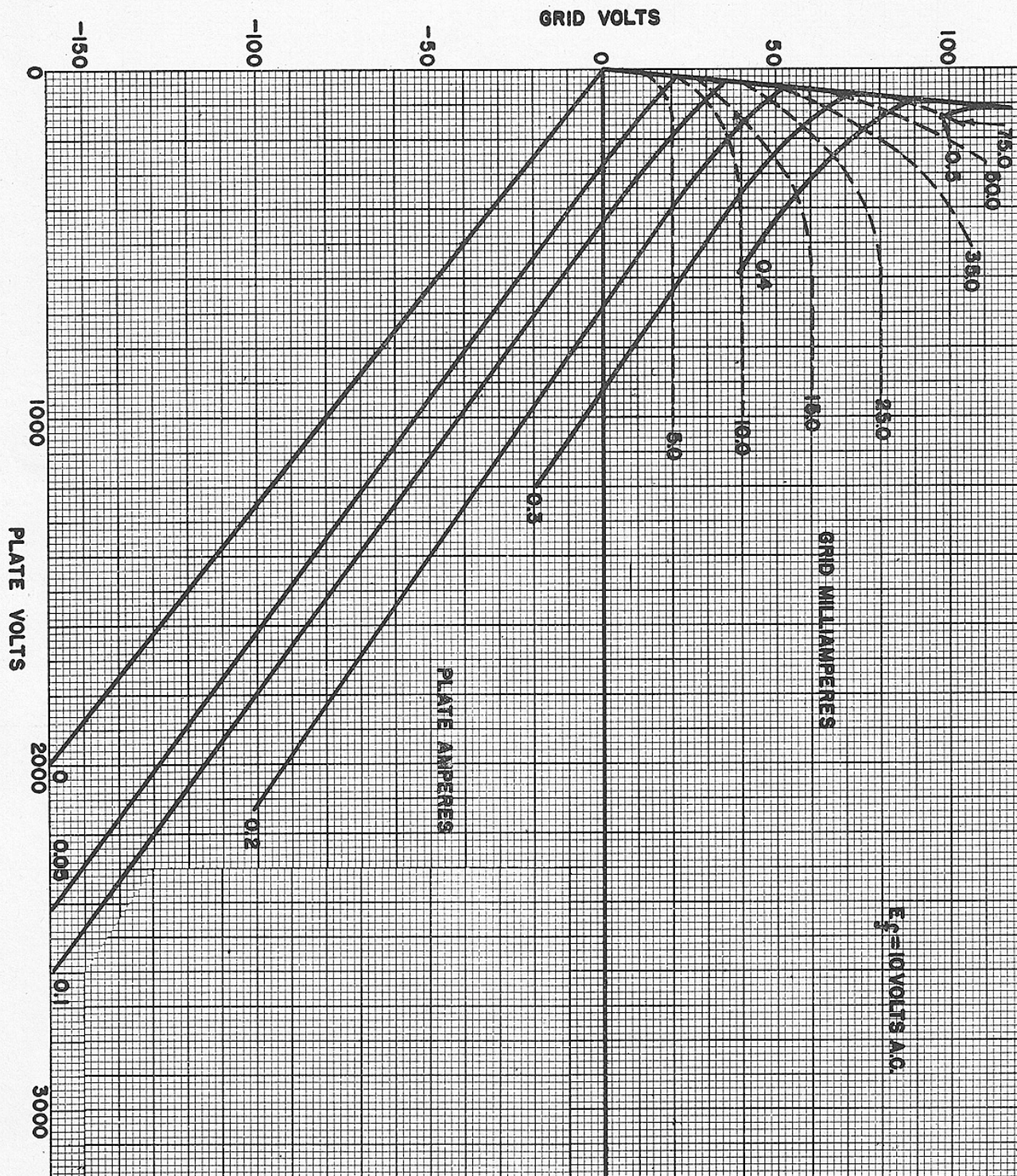
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AMPEREX TRANSMITTING TUBE 5331-5332



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5331-5332 — AMPEREX TRANSMITTING TUBE



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