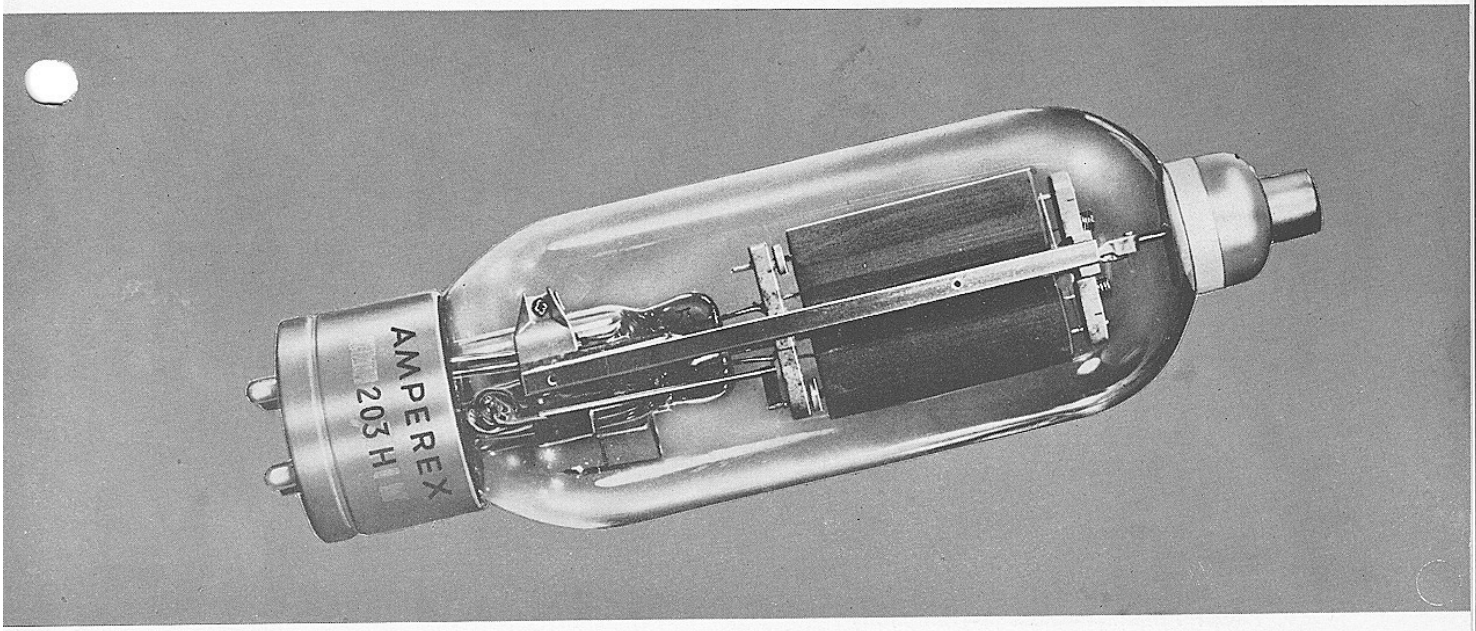
AMPEREX TRANSMITTING TUBE 203-H



AF Power Amplifier or Modulator
RF Power Amplifier or Oscillator

GENERAL CHARACTERISTICS

RADIATION COOLED TRIODE

ELECTRICAL

Filament	Thoriated Tungsten
Voltage	10.0 volts (ac or dc)
Current	3.25 amperes
Amplification Factor	25
Grid to Plate Transconductance at 100 ma	4500 micromhos
Direct Interelectrode Capacitances	
Grid to Plate	11.5 $\mu\mu$f
Grid to Filament	6.5 $\mu\mu$f
Plate to Filament	1.5 $\mu\mu$f

MECHANICAL

Maximum Overall Dimensions	
Length	9½ inches
Diameter	2 11/16 inches
Base	Standard Jumbo 4 Large Pin Bayonet
Mounting Position—Vertical	Base down
Horizontal	Plane of electrodes vertical
Net Weight (approx.)	8 ounces
Shipping Weight (approx.) (one tube)	3 pounds

203-H—AMPEREX TRANSMITTING TUBE

MAXIMUM RATINGS AND TYPICAL OPERATING CONDITIONS

A.F. Power Amplifier and Modulator—Class B

Unless otherwise stated, values are for 2 tubes.

Typical Operation:			Maximum Rating per Tube
D.C. Plate Voltage	1250	1500	1500
D.C. Grid Voltage[1]	—45	—45	....
Load Resistance (ohms) (per tube)	2250	3000	....
Effective Resistance (ohms) (pl-pl)	9000	12000	....
Zero Sig. D.C. Plate Current (ma)	40	80	....
Max. Sig. D.C. Plate Current (ma)	320	280	175[2]
Peak A.F. Grid to Grid Voltage	330	290	....
Max. Sig. Plate Input (watts)	400	420	250[2]
Plate Dissipation (watts)	....	....	100[2]
Max. Sig. Driving Power (watts) (approx.)	11	9	....
Max. Sig. Plate Power Output (watts) (approx.)	260	267	....

R.F. Power Amplifier—Class B—Telephony

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

Plate Volts & Input Max. %	100	88	70
For Frequencies Indicated (mc)	15	30	80

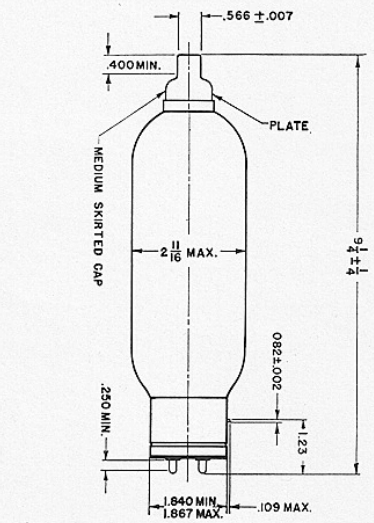
Typical Operation:			Maximum Rating per Tube
D.C. Plate Voltage	1250	1500	1500
D.C. Grid Voltage[1]	—45	—45	....
Peak R.F. Grid Voltage	90	85	....
D.C. Plate Current (ma)	106	97	150
D.C. Grid Current (ma) (approx.)	3	1	....
Plate Input (watts)	133	145	150
Plate Dissipation (watts)	90	97.5	100
Driving Power (watts) (approx.)[3]	3	1.1	....
Plate Power Output (watts) (approx.)	42.5	47.5	....

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

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

Plate Volts & Input Max. %	100	80	50
For Frequencies Indicated (mc)	15	30	80

Typical Operation:			Maximum Rating per Tube
D.C. Plate Voltage	1000	1250	1250
D.C. Grid Voltage[1]	—135	—170	—400
Peak R.F. Grid Voltage	275	315	....
D.C. Plate Current (ma)	150	152	175
D.C. Grid Current (ma) (approx.)	50	10	60
Plate Input (watts)	150	190	210
Plate Dissipation (watts)	50	45	67
Driving Power (watts) (approx.)	14	2.8	....
Plate Power Output (watts) (approx.)	100	145	....



JUMBO 4 PIN BASE WITH BAYONET PIN

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

Key-down conditions per tube without modulation[4]

Plate Volts & Input Max. %	100	80	50
For Frequencies Indicated (mc)	15	30	80

Typical Operation:			Maximum Rating per Tube
D.C. Plate Voltage	1250	1500	1500
D.C. Grid Voltage[1]	—125	—150	—400
Peak R.F. Grid Voltage	255	285	....
D.C. Plate Current (ma)	150	150	175
D.C. Grid Current (ma) (approx.)	25	20	60
Plate Input (watts)	188	225	260
Plate Dissipation (watts)	58	52	100
Driving Power (watts) (approx.)	7	5	....
Plate Power Output (watts) (approx)	130	173	....

NOTES:

[1]Grid voltages are given with respect to the mid-point of the 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.

[2]Averaged over any audio-frequency cycle of sine-wave form.

[3]At crest of audio-frequency cycle with modulation factor of 1.0.

[4]Modulation 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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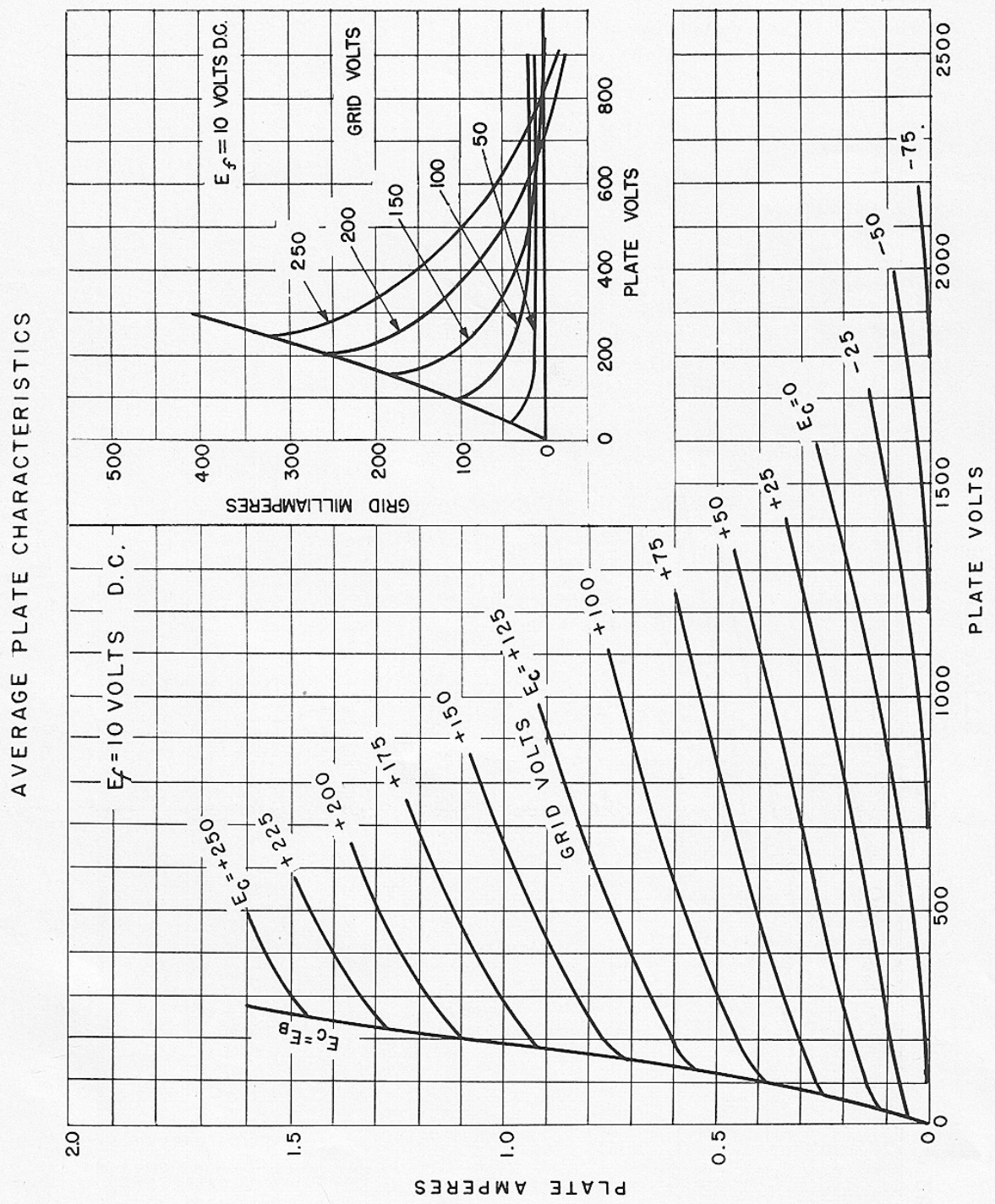

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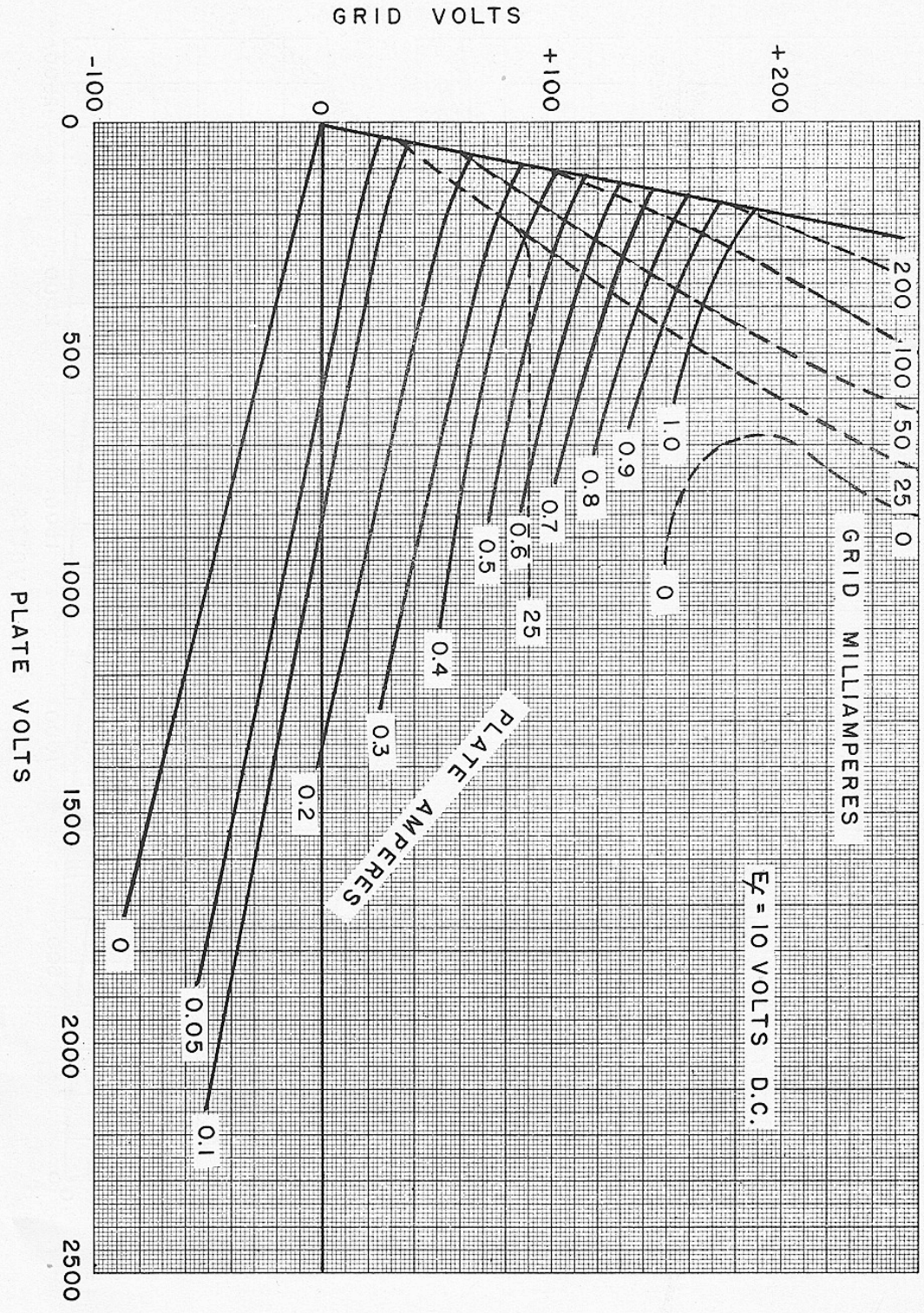

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