

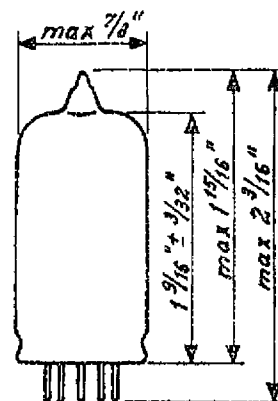
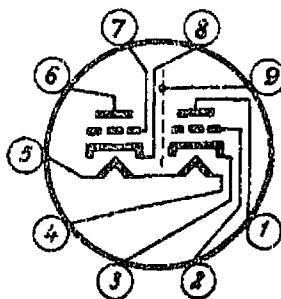
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DOUBLE TRIODE for use as R.F. amplifier and self-oscillating mixer in television receivers

PHYSICAL SPECIFICATIONS

Cathode	Coated unipotential
Base	Small button noval 9-pin
Maximum overall length	2 3/16"
Maximum seated height	1 15/16"
Bulb length excluding tip	1 9/16" $\pm$ 3/32"
Maximum diameter	7/8"
Mounting position	any
Basing connections- JETEC basing designation	9DE

Pin 1 - Plate	} Triode section 1
Pin 2 - Grid	
Pin 3 - Cathode	
Pin 4 - Heater	} Triode section 2
Pin 5 - Heater	
Pin 6 - Plate	
Pin 7 - Grid	
Pin 8 - Cathode	



GENERAL ELECTRICAL DATA

Heater voltage	9.0 volts
Heater current	0.3 ampere

DIRECT INTERELECTRODE CAPACITANCES

Triode section 1

Plate to grid	1.5 $\mu\mu\text{F}$
Plate to cathode	0.18 $\mu\mu\text{F}$
Grid to cathode + heater + shield	3.0 $\mu\mu\text{F}$
Plate to cathode + heater + shield	1.2 $\mu\mu\text{F}$
Plate to cathode + heater + shield [*])	1.9 $\mu\mu\text{F}$

^{*})With external shielding can with diameter of 0.886"

Triode section 2

Plate to grid	1.5 $\mu\mu\text{F}$
Plate to cathode	0.18 $\mu\mu\text{F}$
Grid to cathode + heater + shield	3.0 $\mu\mu\text{F}$
Plate to cathode + heater + shield	1.2 $\mu\mu\text{F}$
Plate to cathode + heater + shield ^x)	1.9 $\mu\mu\text{F}$

Between triode section 1 and triode section 2

Plate to plate	max. 0.04 $\mu\mu\text{F}$
Plate to plate ^x)	max. 0.008 $\mu\mu\text{F}$
Grid to grid	max. 0.003 $\mu\mu\text{F}$
Plate section 1 to grid section 2	max. 0.008 $\mu\mu\text{F}$
Plate section 2 to grid section 1	max. 0.008 $\mu\mu\text{F}$
Plate section 1 to cathode section 2	max. 0.008 $\mu\mu\text{F}$
Plate section 2 to cathode section 1	max. 0.008 $\mu\mu\text{F}$
Grid section 1 to cathode section 2	max. 0.003 $\mu\mu\text{F}$
Grid section 2 to cathode section 1	max. 0.003 $\mu\mu\text{F}$

MAXIMUM RATINGS (design center values; each section)

Plate voltage	max. 250 volts
Plate voltage without current	max. 550 volts
Plate dissipation	max. 2.5 watts
Plate dissipation of both sections together	max. 4.5 watts
Cathode current	max. 15 mamps
Negative grid bias	max. 100 volts
External resistance between grid and cathode	max. 1 megohm
External resistance between cathode and heater	max. 20 000 ohms
Voltage between cathode and heater	max. 90 volts

TYPICAL CHARACTERISTICS (each section)

Plate voltage	100	170	200 volts
Negative grid bias	-1.1	-1.5	-2.1 volts
Plate current	4.5	10	10 mamps
Transconductance	4600	6200	5800 micromhos
Amplification factor	50	50	48

^x)With external shielding can with diameter of 0.886"

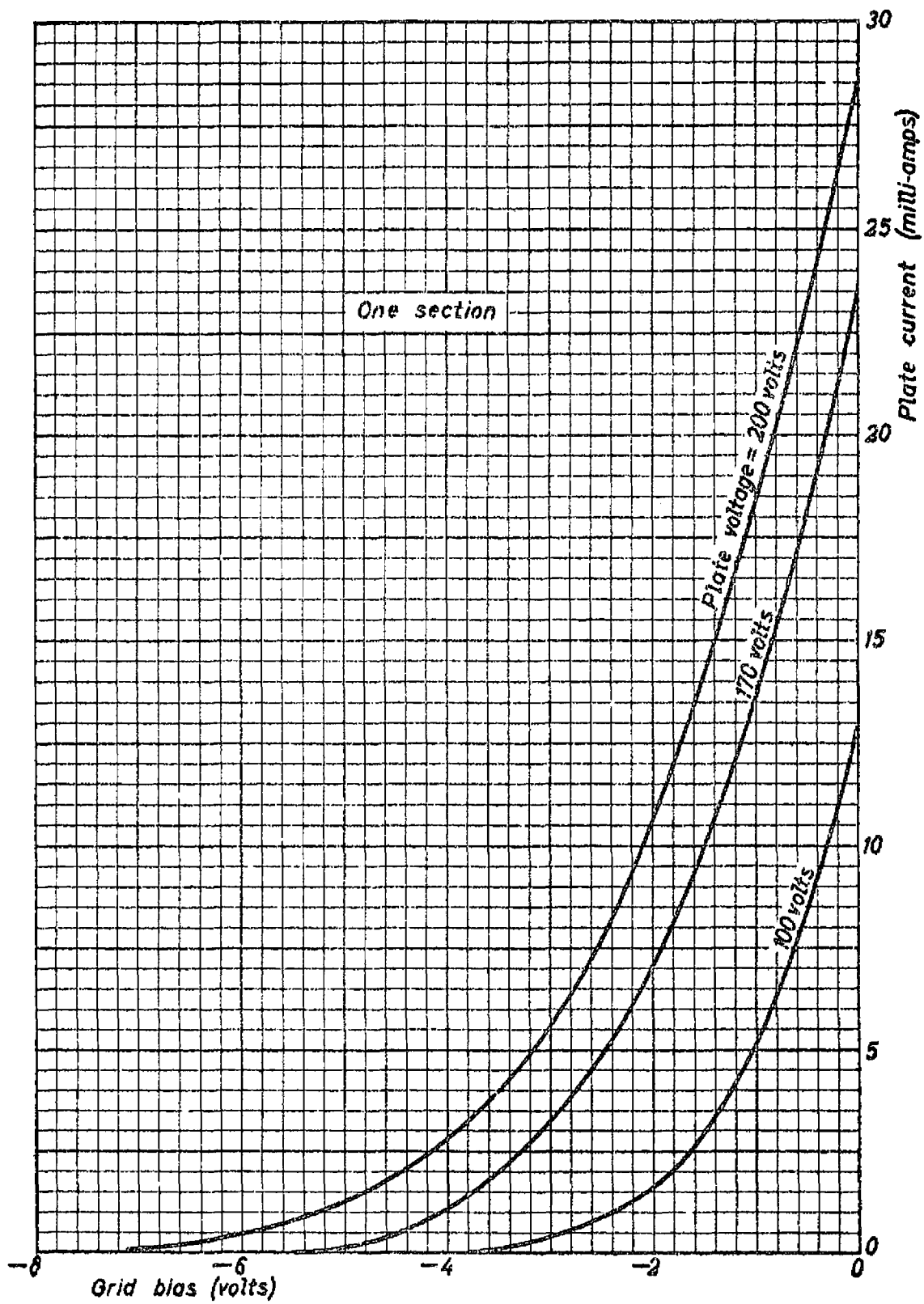
OPERATING CHARACTERISTICS AS ADDITIVE MIXER

Supply voltage	100	170	200 volts
Plate resistor	4700	4700	8200 ohms
Grid resistor	1	1	1 megohm
Oscillator voltage	1.8	2.8	2.8 volts,rms
Plate current	2.2	4.8	5.2 mamps
Conversion conductance	1700	2200	2300 micromhos
Plate resistance	20000	16000	15000 ohms
Input resistance at 100 Mc		15000	- ohms

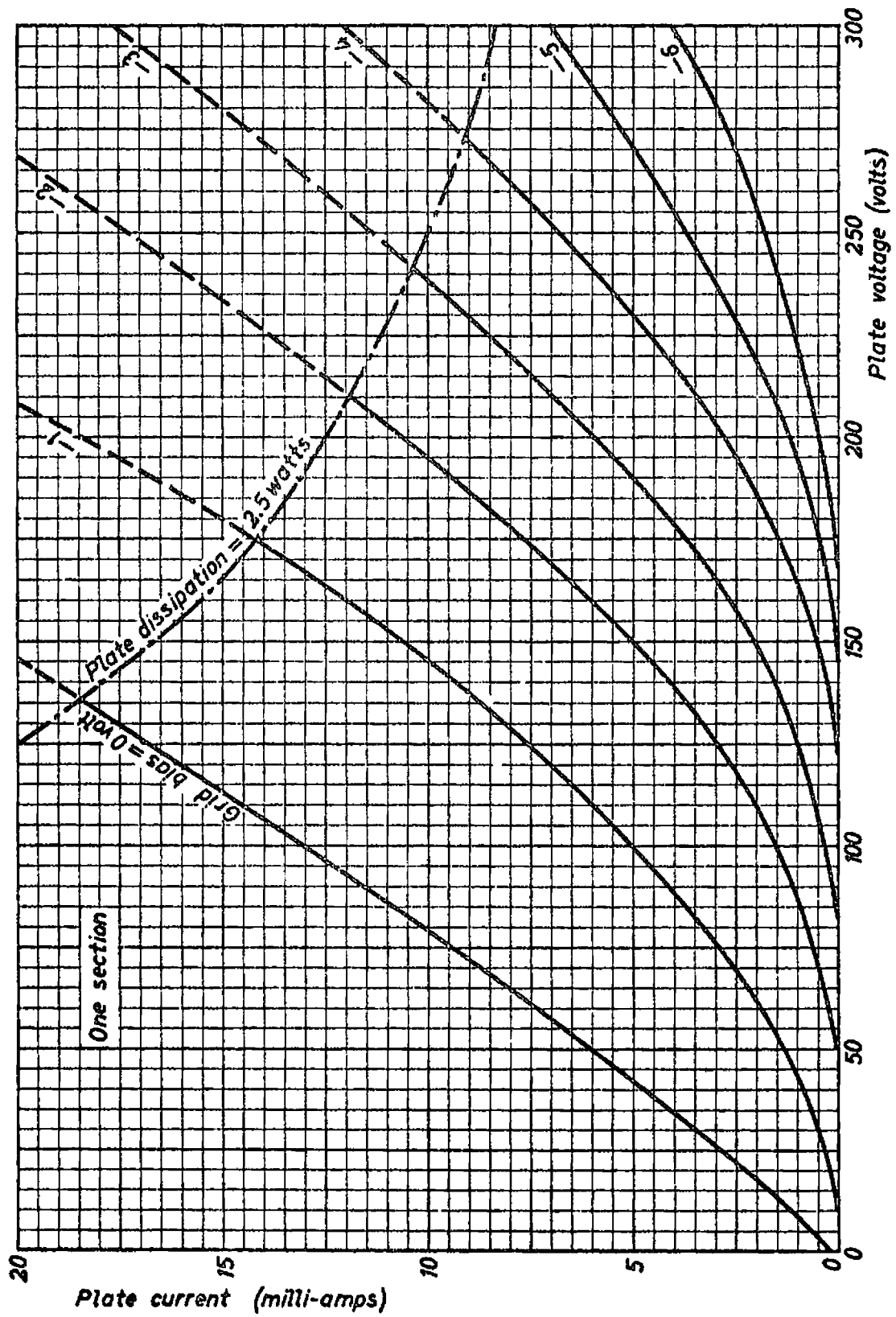
OPERATING CHARACTERISTICS AS OSCILLATOR in television receivers

Supply voltage	180 volts
Plate resistor	4400 ohms
Grid resistor	22000 ohms
Oscillator voltage	9 volts,rms
Plate current	8 mamps
Plate dissipation	1.2 watts

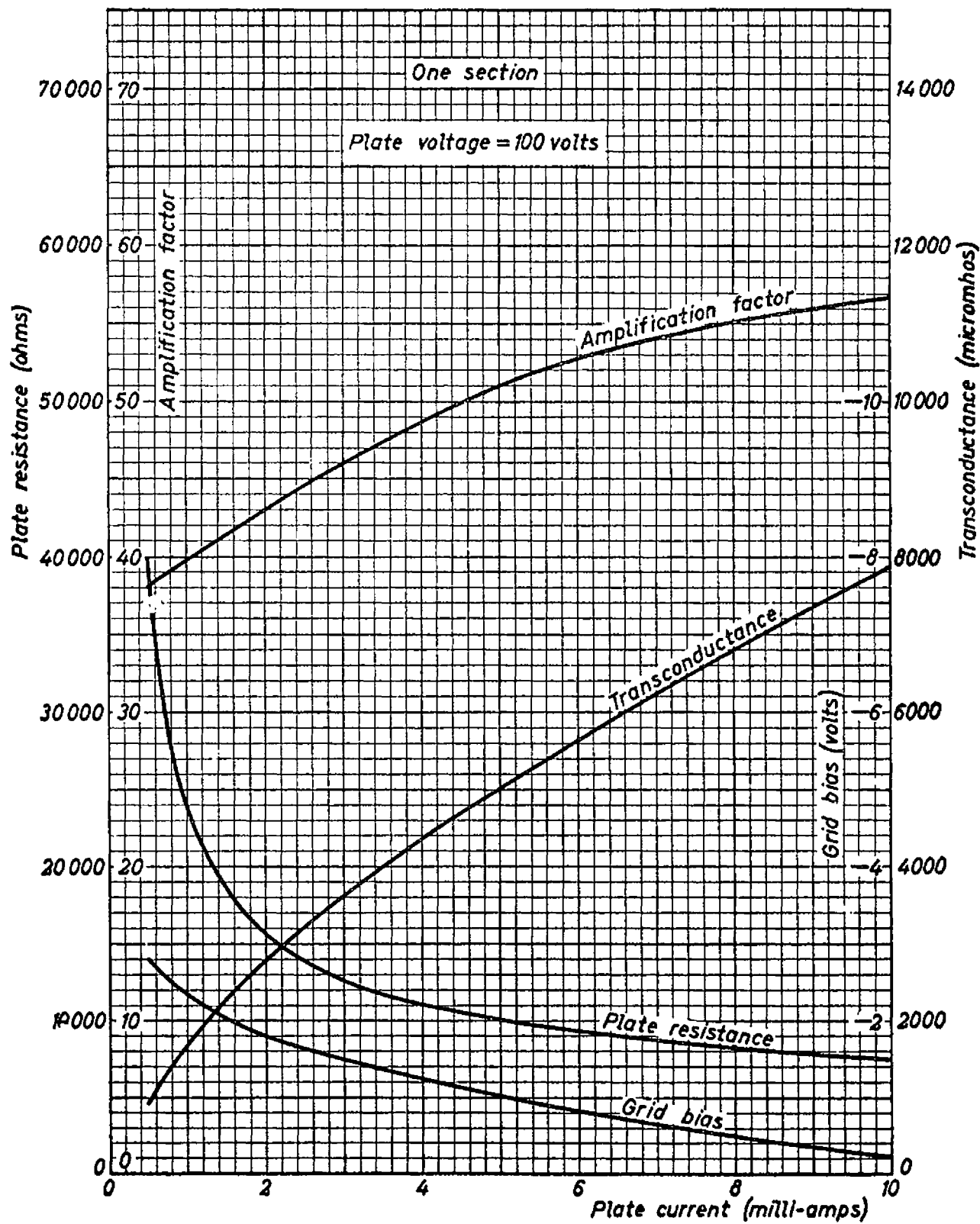
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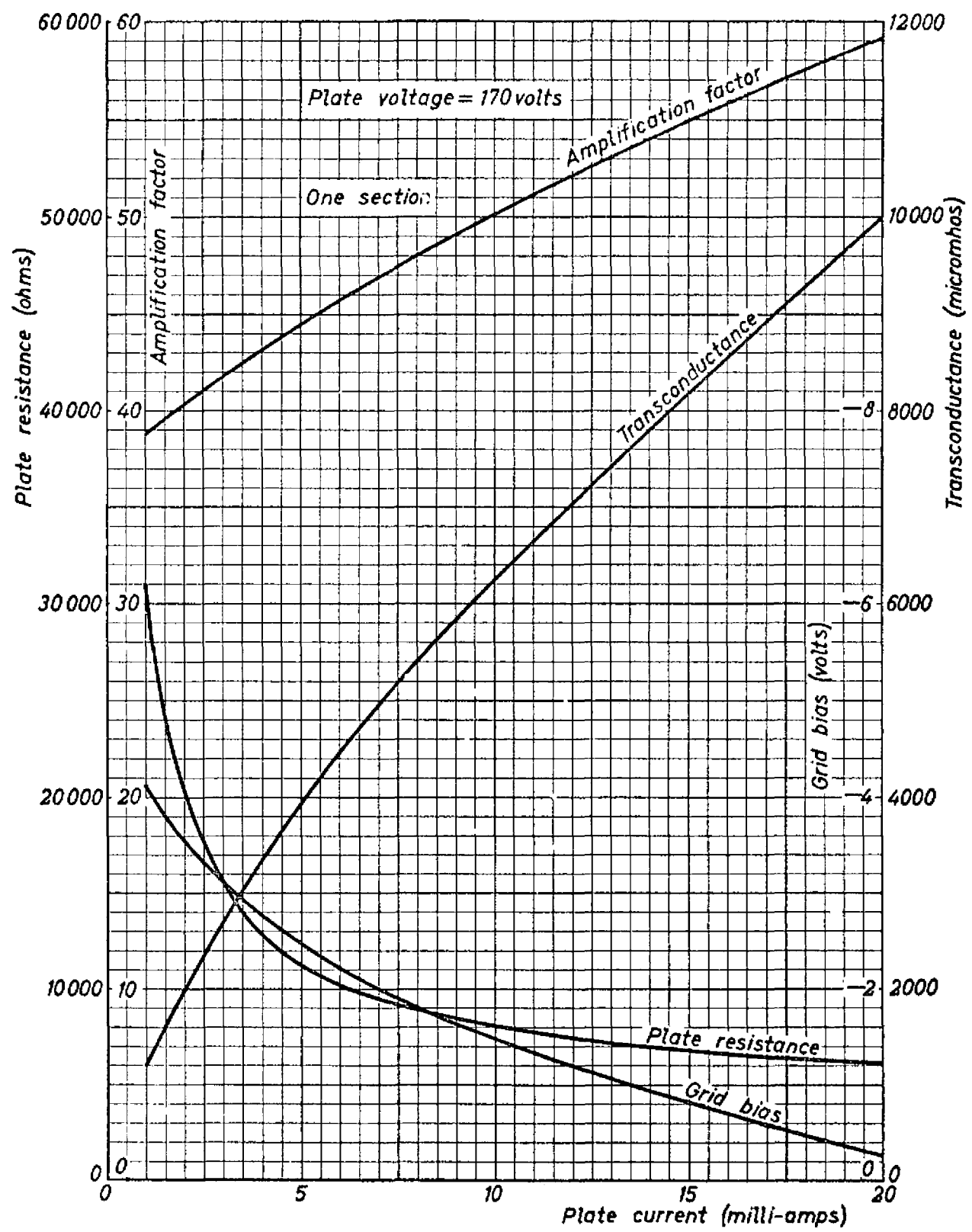


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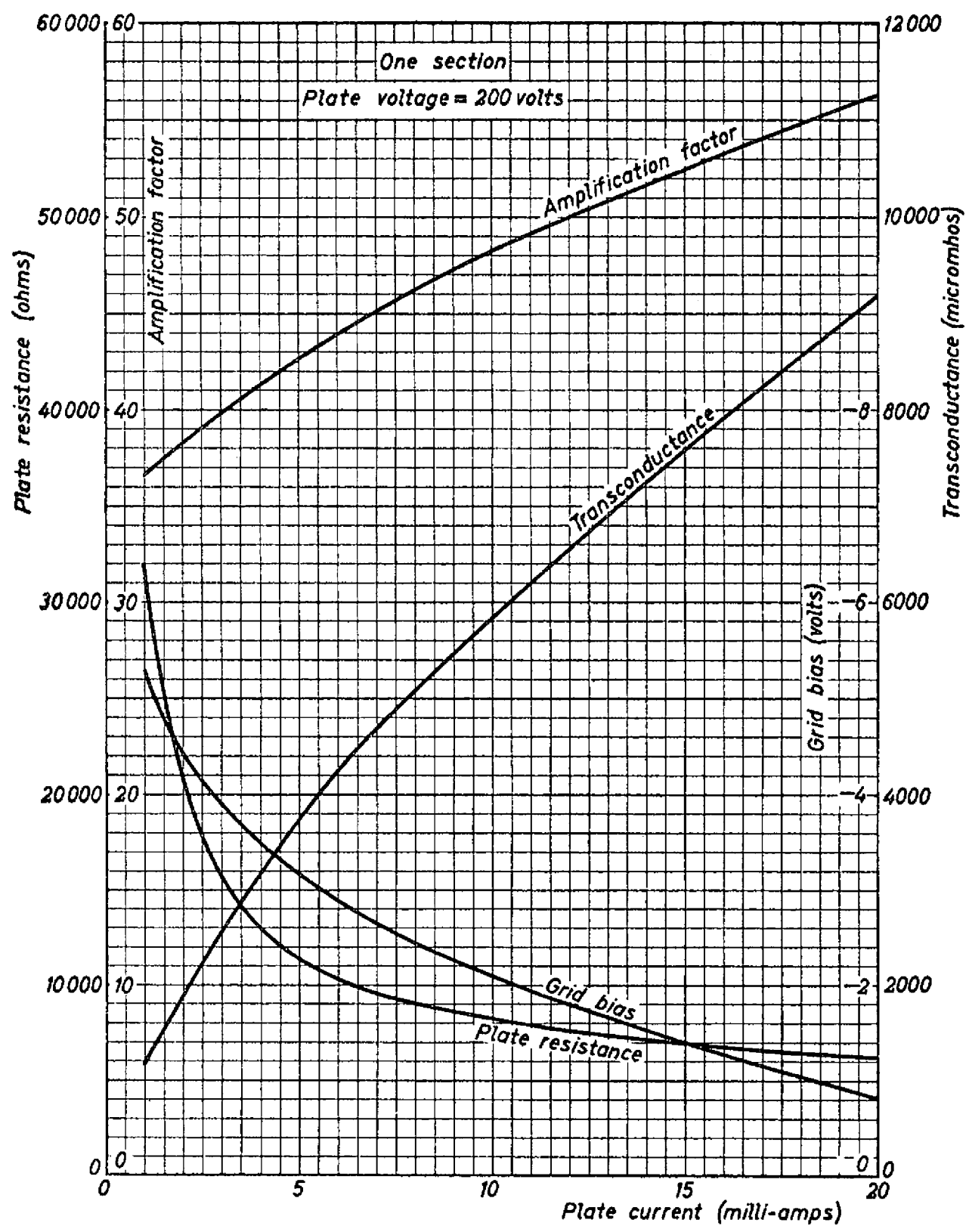


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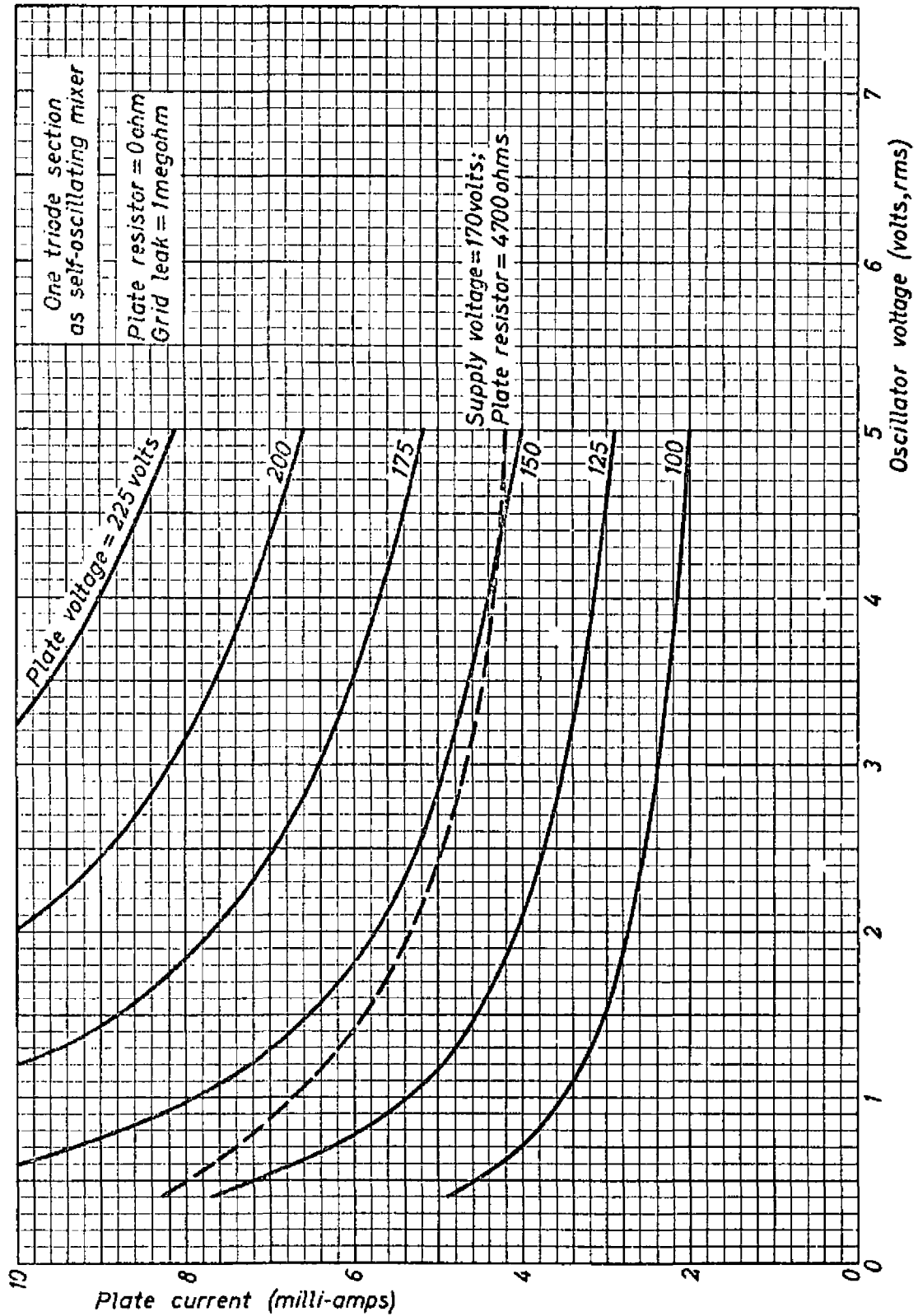


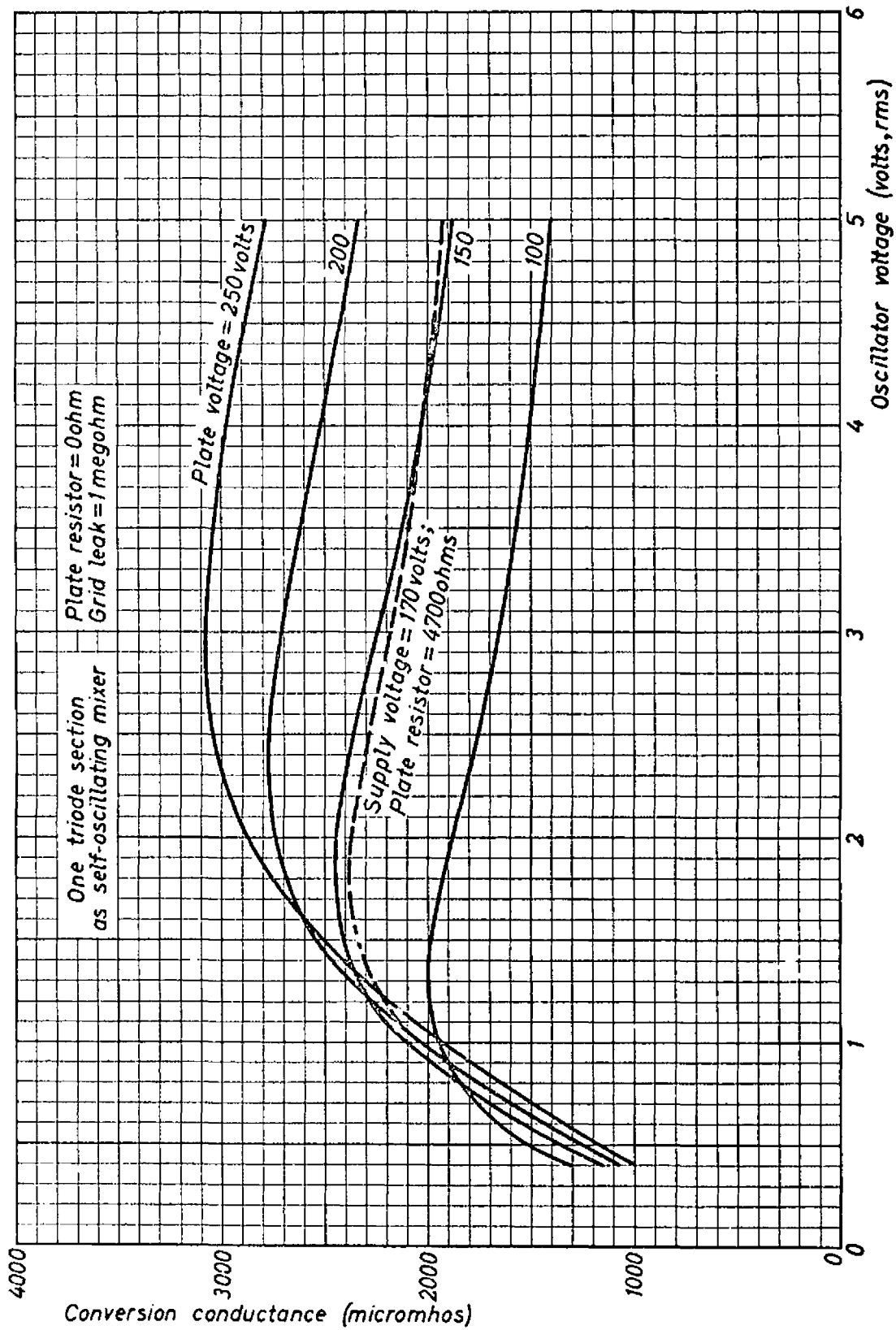


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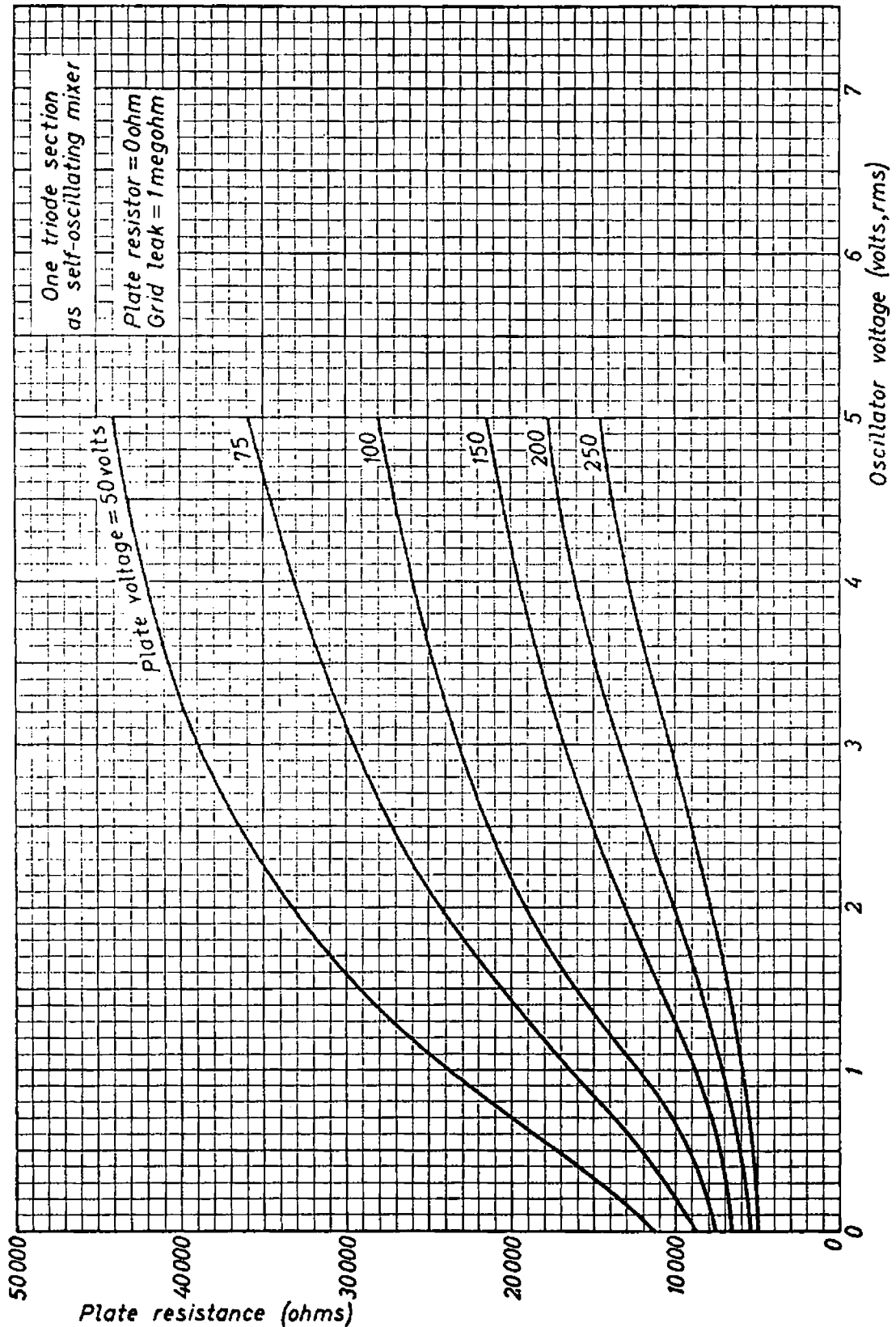


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