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1 AB 6

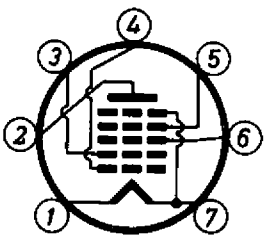
PENTAGRID CONVERTER

Physical Specifications

Filament	Coated
Base	Miniature button 7-pin
Bulb	T5½
Maximum overall length	2.205"
Maximum seated height	1.955"
Bulb length excluding tip	1.580" ± 0.094"
Maximum diameter	3/4"
Mounting position	any
Basing connections - JETEC basing designation	7DH

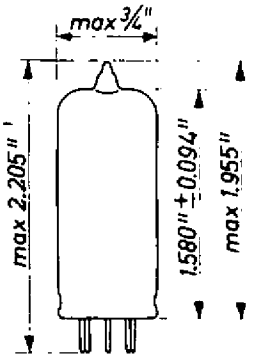
Pin 1 - filament(-)
Pin 2 - plate
Pin 3 - grid No.2
Pin 4 - grid No.1
Pin 5 - grid No.4
Pin 6 - grid No.3
Pin 7 - +filament and grid No.5

Bottom view of base



7DH

Tube outline



General Electrical Data

Filament voltage	1.4 volts
Filament current	25 m amps

Direct Interelectrode Capacitances

Plate to all other electrodes		8.4 µµF
Grid No.3 to all other electrodes		7.6 µµF
Grid No.2 to all other electrodes		4.8 µµF
Grid No.1 to all other electrodes		3.9 µµF
Plate to grid No.3	max.	0.36 µµF
Plate to grid No.2	max.	0.3 µµF
Plate to grid No.1	max.	0.11 µµF
Grid No.2 to grid No.3		1.6 µµF
Grid No.1 to grid No.3	max.	0.2 µµF
Grid No.1 to grid No.2		3 µµF

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Ratings (Design center values)			
Battery voltage	max.	90	volts[1])
Plate voltage	max.	90	volts
Plate dissipation	max.	0.15	watt
Grid No.4 voltage	max.	90	volts
Grid No.4 dissipation	max.	0.03	watt
Grid No.2 voltage	max.	60	volts
Grid No.2 dissipation	max.	0.1	watt
Cathode current	max.	2.6	ma
Grid No.3 circuit resistance	max.	3	megohms
Grid No.1 circuit resistance	max.	0.1	megohm
Filament voltage	min.	1.1	volts
Filament voltage	max.	1.6	volts

Characteristics of the oscillator section (grid No.1 connected to +filament)			
Plate voltage	64	85	volts
Grid No.4 voltage	64	64	volts
Grid No.3 voltage	0	0	volt
Grid No.2 voltage	35	35	volts
Grid No.2 current	1.7	1.7	ma
Transconductance of grid No.1 with respect to grid No.2	600	600	micromhos
Amplification factor of grid No.2 with respect to Grid No.1	7.5	7.5	

[1]) The absolute permissible maximum of the battery voltage is 110 volts.

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Operating Characteristics
(separate excitation, no impedance in the grid No.2 lead)

Anode voltage [1]	64	85	volts
Grid No.4 voltage	64	64.5	volts
Grid No.4 resistor	0	0.12	megohm
Grid No.3 voltage	0	0	volt
Grid No.2 voltage	35	35	volts
Grid No.2 resistor	18,000	33,000	ohms
Grid No.1 A.C.voltage	4	4	volts,rms
Grid No.1 resistor	27,000	27,000	ohms [2]
Plate current	0.6	0.65	ma
Grid No.4 current	0.16	0.17	ma
Grid No.2 current	1.6	1.5	ma
Grid No.1 current	85	85	µa
Cathode current	2.45	2.4	ma
Conversion conductance	275	300	micromhos
Conversion conductance (grid No.3 voltage = -6.5 volts)	-	3.0	micromhos
Conversion conductance (grid No.3 voltage = -4.5 volts)	2.75	-	micromhos
Plate resistance	0.9	1.0	megohm

1) Based on a battery voltage of 67.5 or 90 volts decreased with the negative bias for the output valve.

2) Connected to +filament.

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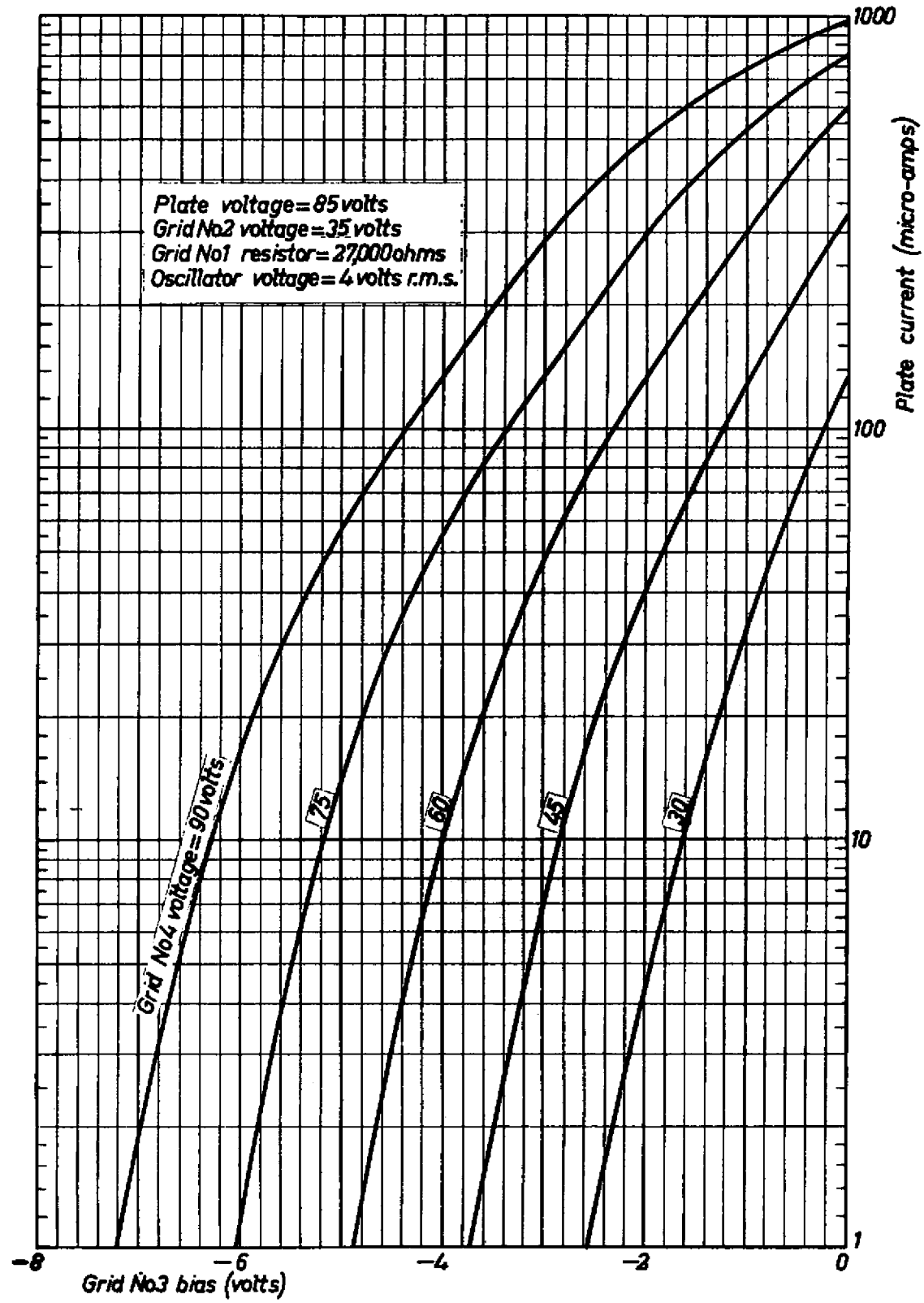

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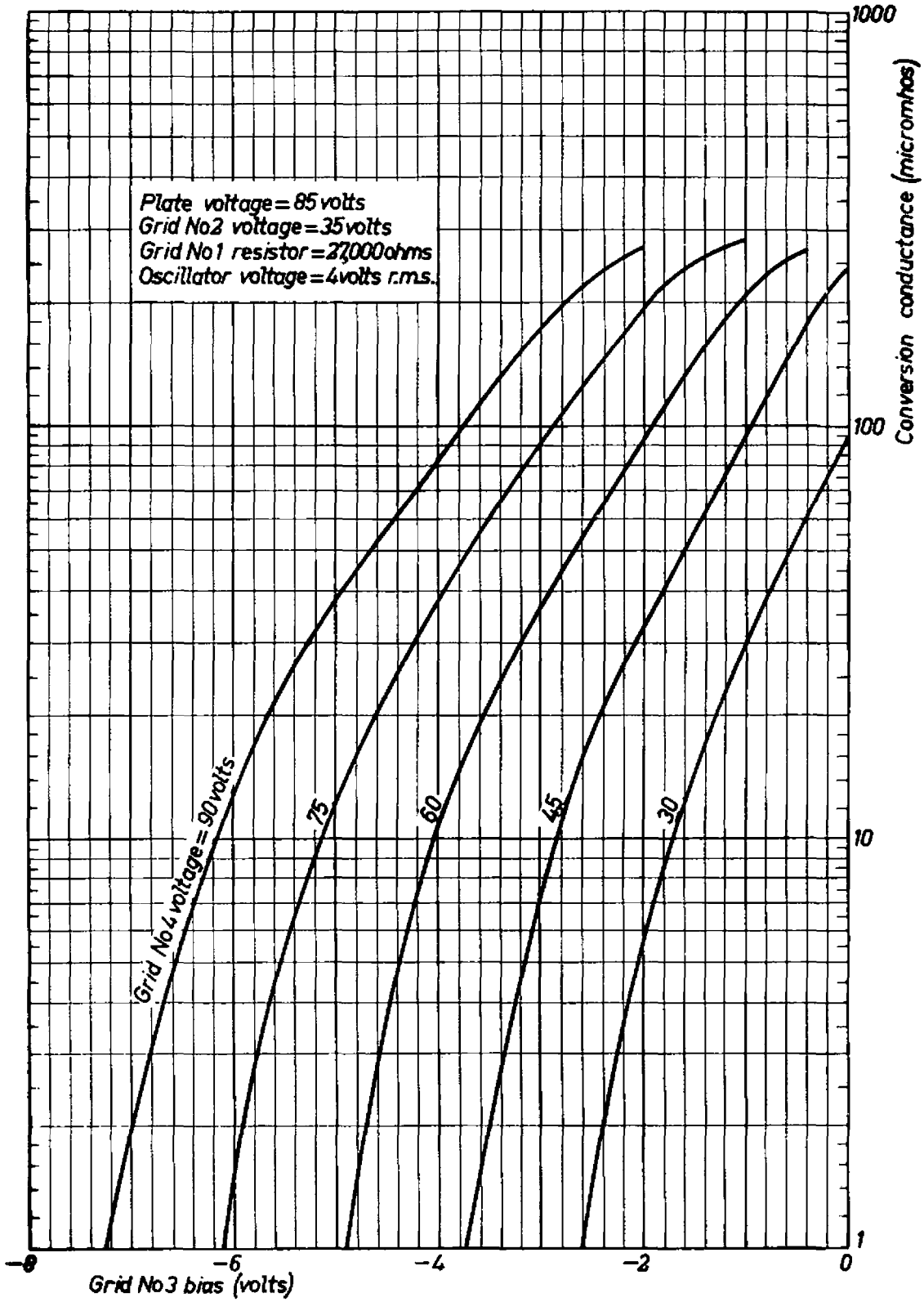

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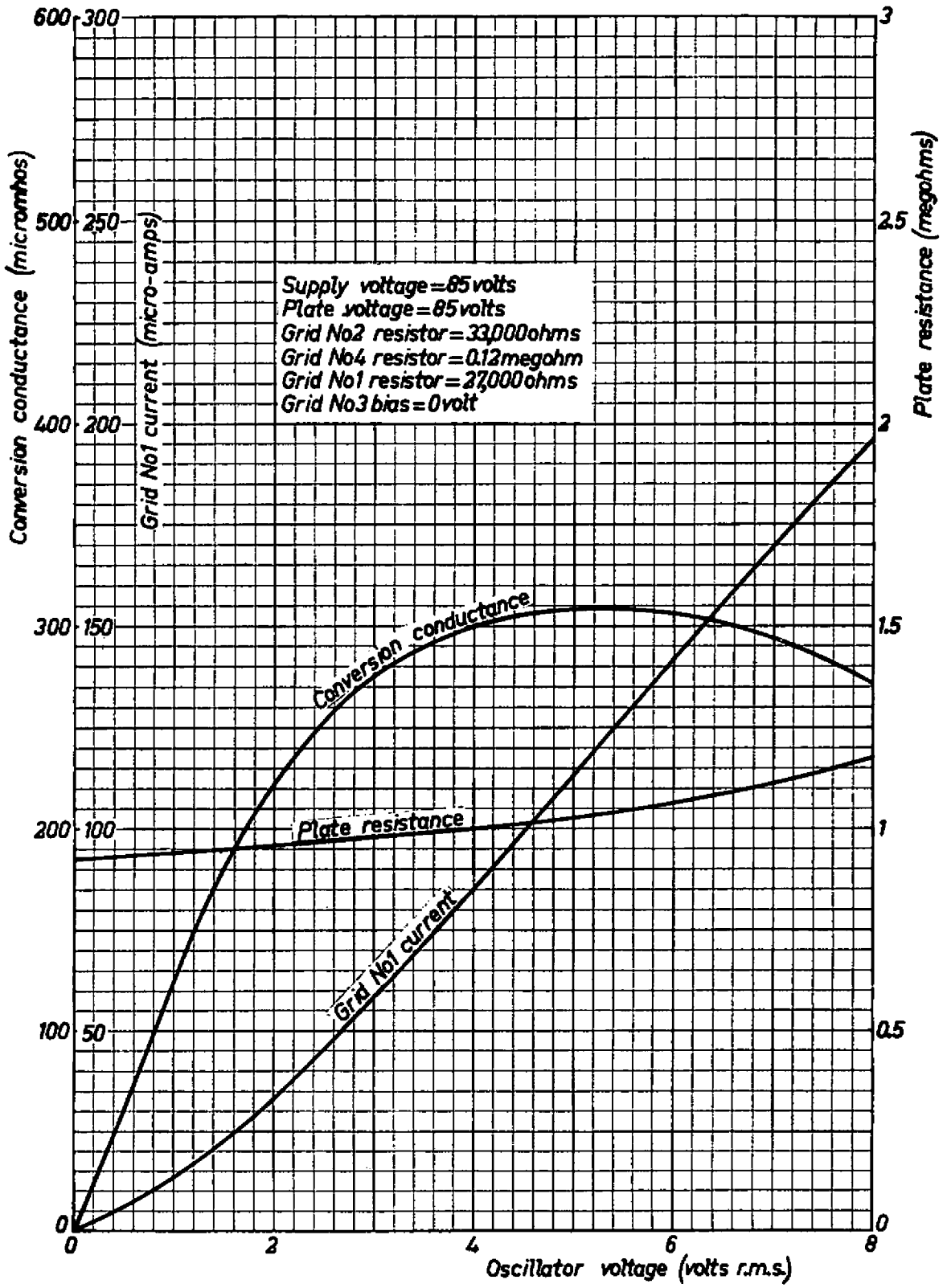
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