

Rogers Electronic Tubes & Components

6 DL 5

Description: Output pentode for use in carradio sets

Mechanical data

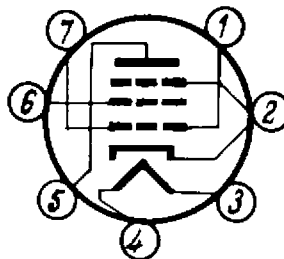
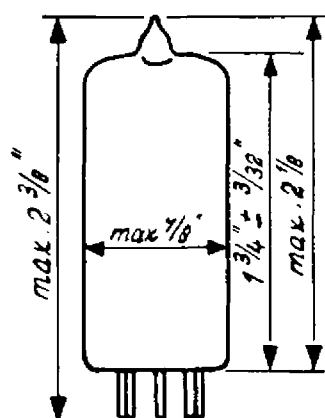
Cathode	coated, unipotential
Base	E7-1
Bulb	T5 ¹ / ₂
Outline	See drawing
Basing	7DQ
Mounting position	any

TUBE OUTLINE

BOTTOM VIEW OF BASE

BASE PIN No.

ELEMENT



1	Grid No. 1
2	Cathode, grid No. 3
3	Heater
4	Heater
5	Plate
6	Grid No. 2
7	Grid No. 1

Heater data

Heater voltage	6.3 volts
Heater current	0.2 amp

Direct interelectrode capacitances

Grid No. 1 to all other elements except plate	5.3 μμF
Plate to all other elements except grid No. 1	3.5 μμF
Plate to grid No. 1	max. 0.4 μμF
Grid No. 1 to heater	max. 0.2 μμF

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Maximum ratings (design center values)

Plate voltage (without current)	550 volts max.
Plate voltage	⁺)300 volts max.
Plate dissipation	6 watts max.
Grid No.2 voltage(without current)	550 volts
Grid No.2 voltage	⁺)300 volts max.
Grid No.2 dissipation (Input A.F. voltage = 0 volt)	1.25 watts max.
Peak grid No. 2 dissipation	2.5 watts max.
Cathode current	35 mamps max.
Grid No. 1 circuit resistance with cathode bias	2 megohms max.
Voltage between heater and cathode	100 volts max.
Circuit resistance between cathode and heater	20.000 ohms max.

Operating conditions as class A sound output tube

Plate voltage	200	250 volts
Grid No. 2 voltage	200	250 volts
Cathode resistor	230	320 ohms
Plate current	23	24 mamps
Grid No. 2 current	4.2	4.5 mamps
Load resistance	8000	10000 ohms
Input A.F. voltage	4.5	5 volts (rms)
Power output	2.3	3.0 watts
Total harmonic distortion	12	12 %
Input A.F. voltage for 50 milliwatts power output	0.55	0.50 volts (rms)

Operating conditions as sound output tube, class A push-pull (two tubes)

Plate voltage	200	250	volts
Grid No. 2 voltage	200	250	volts
Cathode resistor	180	180	ohms
Load resistance (plate to plate)	10000	10000	ohms
Input A.F. voltage	0 0.5 7	0 0.5 9	volts(rms)
Plate current	2x17.5	2x20 2x22	2x26 mamps
Grid No.2 current	2x3.2	2x5.2 2x4.0	2x7.5 mamps

⁺) See page 3

Operating conditions as sound output tube, class A push-pull (two tubes), continued

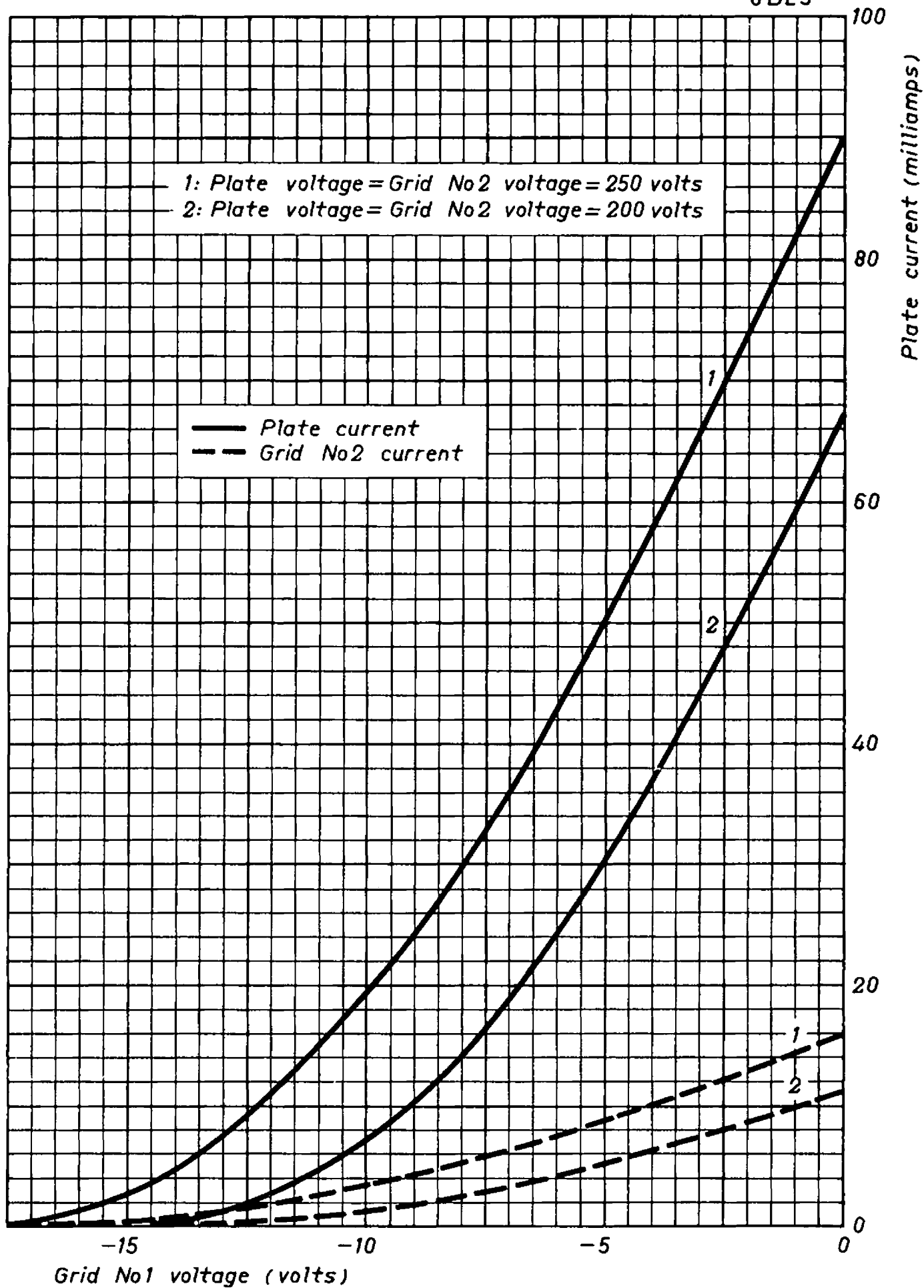
Power output	0	0.05	4.1	0	0.05	7 watts
Total harmonic distortion			4.5			5 %

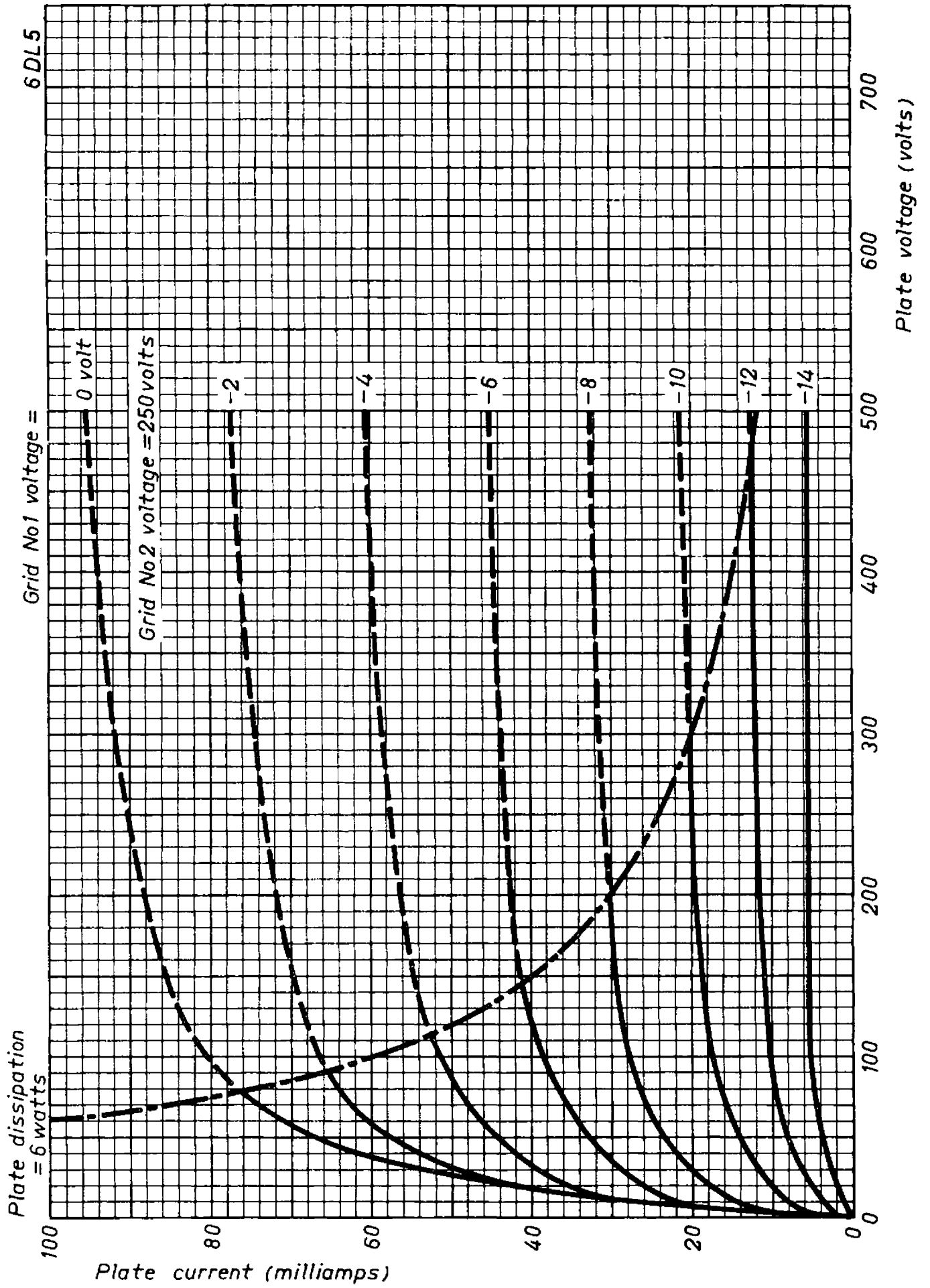
Operating conditions as sound output tube, class B push-pull (two tubes)

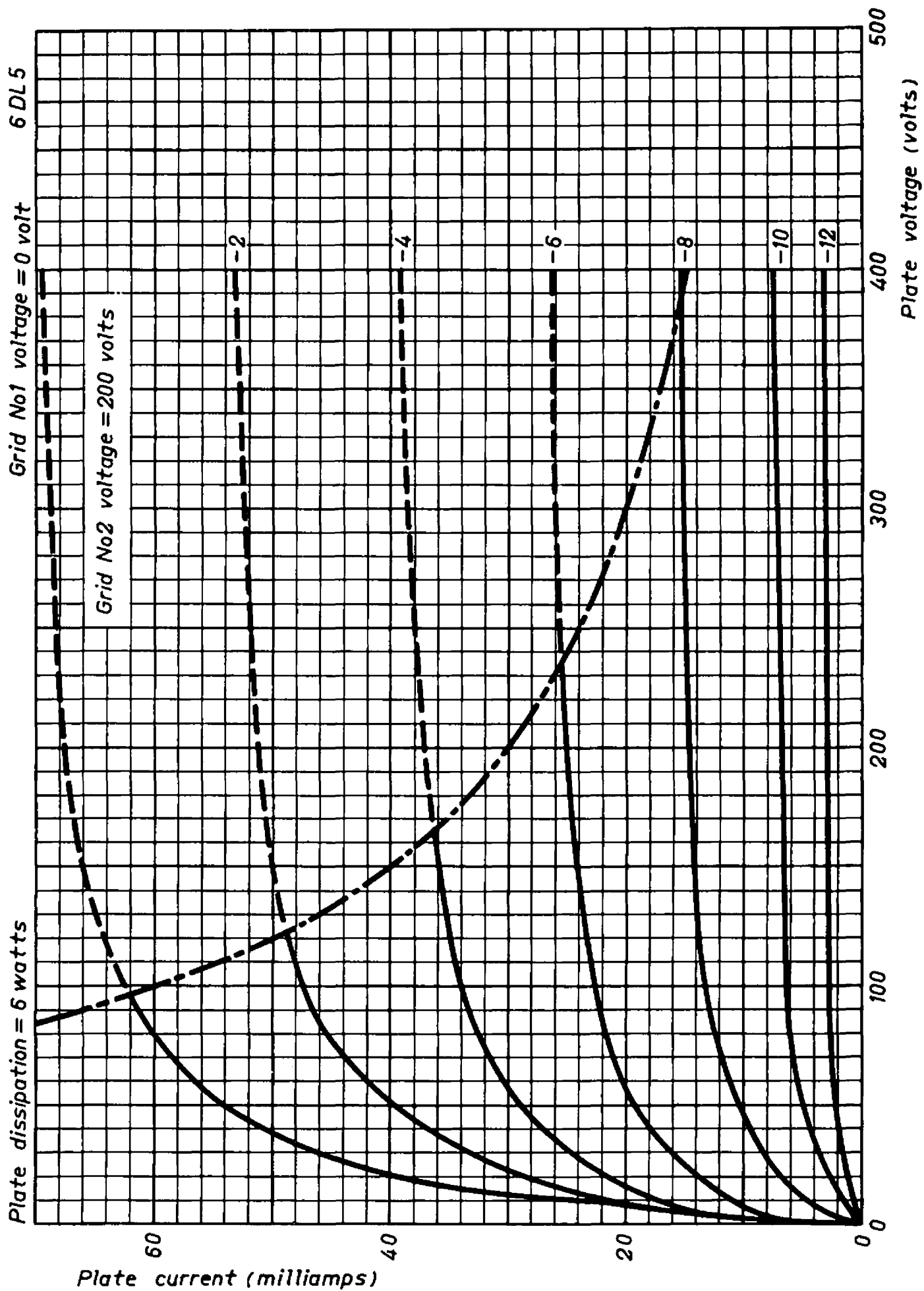
Plate voltage	200		250	volts
Grid No.2 voltage	200		250	volts
Grid No.1 bias	-10		-13	volts
Load resistance (plate to plate)	10000		10000 ohms	
Input A.F. voltage	0	0.7	7	0 0.7 9 volts(rms)
Plate current	2x7		2x19	2x8 2x24 mamps
Grid No.2 current	2x1.2		2x5	2x1.2 2x7.2 mamps
Power output	0	0.05	4.0	0 0.05 6.5 watts
Total harmonic distortion			3.5	3.5 %

*) When the heater and positive voltages are obtained from a storage battery (positive voltages by means of a vibrator) the max. values of plate and grid No.2 voltages are 250 volts.

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TRIODE

Grid No 1 voltage
= 0 volt

Plate dissipation
7.25 watts

Plate current (milliamps)

Plate voltage (volts)

