PHILIPS

6 BX 6

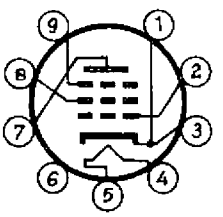
HIGH SLOPE RF AMPLIFIER PENTODE

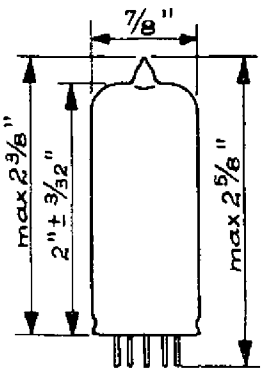
Physical specifications

Cathode	Coated unipotential
Base	small button noval 9-pin
Bulb	T 6½
Maximum overall length	2-5/8 inches
Maximum seated height	2-3/8 inches
Bulb lenght excluding tip	2±3/32 inches
Maximum diameter	7/8 inches
Mounting position	any

Basing connections –JETEC BASING designation 9AQ–0–0

Pin 1 – Cathode
Pin 2 – Grid No.1
Pin 3 – Cathode
Pin 4 – Heater
Pin 5 – Heater
Pin 6 – Internal shield
Pin 7 – Plate
Pin 8 – Grid No.2
Pin 9 – Grid No.3





General Electrical Data

Heater voltage	6.3	volts
Heater current	300	ma

Direct Interelectrode Capacitances

Grid No.1 to all other electrodes		7.2 µµF
Plate to all other electrodes		3.4 µµF
Plate to grid No.1	max.	0.007 µµF
Plate to cathode	max.	0.01 µµF
Grid No.2 to all other electrodes		5.3 µµF
Grid No.1 to grid No.2		2.5 µµF
Grid No.1 to heater	max.	0.2 µµF

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Maximum Ratings		
Plate voltage (without current)	550	volts
Plate voltage	250	volts
Plate dissipation	2.5	watts
Grid No.2 voltage (without current)	550	volts
Grid No.2 voltage	250	volts
Grid No.2 dissipation	0.65	watts
Cathode current	15	ma
Grid No.1 voltage at grid No.1 current = + 0.3 micro-amp.	- 1.3	volts
External resistance between grid No.1 and cathode (with automatic grid-bias)	1	megohm
External resistance between grid No.1 and cathode (with fixed grid-bias)	0.5	megohm
External resistance between heater and cathode	20,000	ohms
Voltage between heater and cathode	150	volts
Operating Conditions as RF amplifier		
Plate voltage	170	volts
Grid No.3 voltage	0	volt
Grid No.2 voltage	170	volts
Grid No.1 voltage	- 2	volts
Plate current	10	ma
Grid No.2 current	2.5	ma
Transconductance	7200	micromhos
Plate resistance	0.4	megohm
Amplification factor of grid No.2 with respect to grid No.1	50	
Equivalent noise resistance	1,000	ohms
Input resistance (pin 1 connected to pin 3;f= 50 Mc/s)	12,000	ohms

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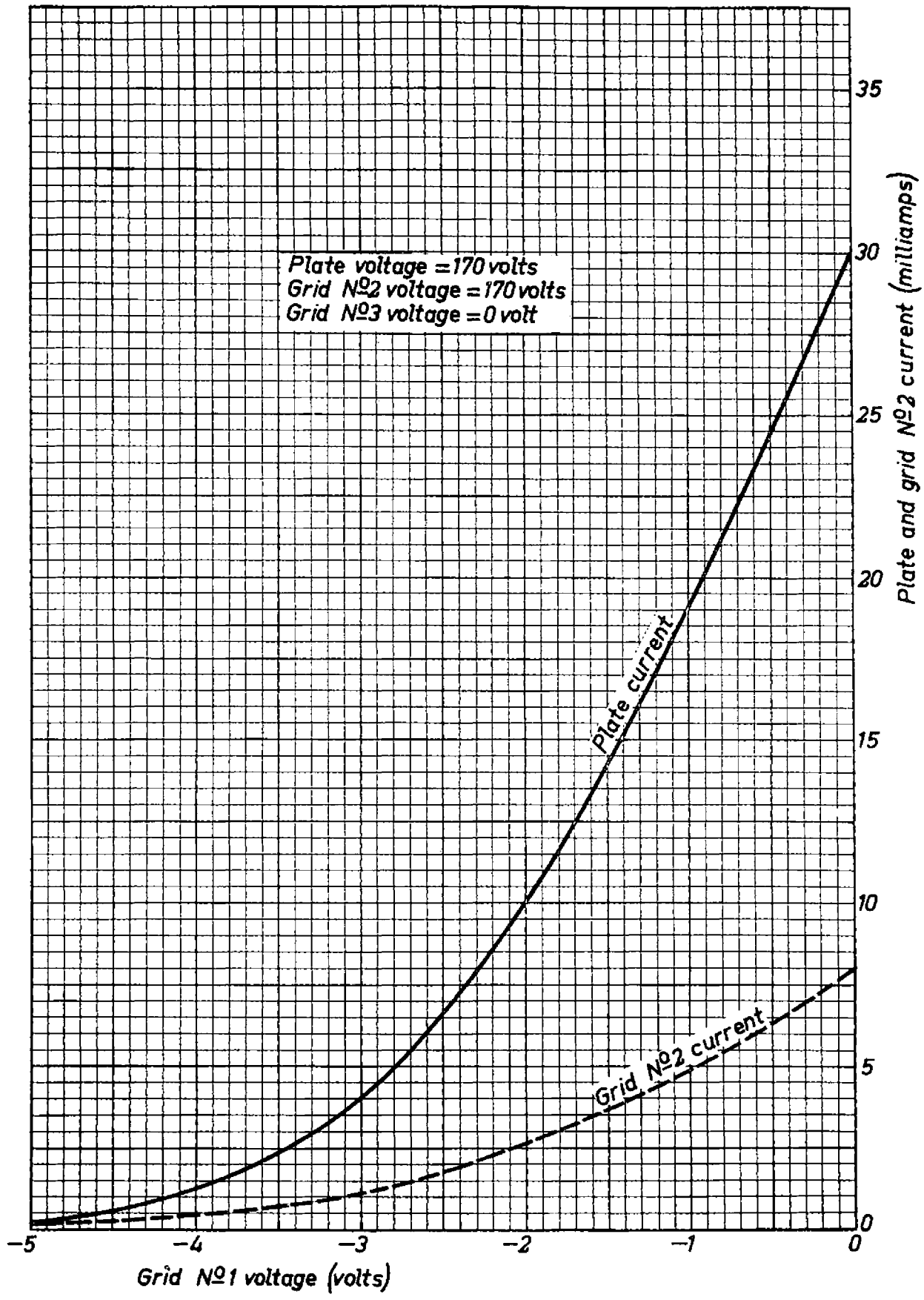

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