

6059

BRIMAR

VALVES

TYPE

DATE ISSUED **23.8.51.**

R.M.A. REGISTRATION DATA

6059

H.F. LOW NOISE AMPLIFIER PENTODE.

The 6059 is a sharp cut-off H.F. pentode of the 9-pin miniature type with general characteristics similar to type 6J7 designed for trustworthy operation under conditions of vibration and mechanical shock. It is primarily intended for use in applications where low microphonic, leakage and hum noise are required.

MECHANICAL DATA.

Coated unipotential cathode

Outline drawing.....	6-2	Bulb.....	T 6½
Base.....	ES-1	Miniature glass button	9-pin
Maximum diameter.....			7/8"
Maximum overall length.....			2.3/16"
Maximum seated height.....			1.15/16"
Pin connections.....		Basing Number	9BC

- | | |
|---------------------|---------------------|
| Pin 1 - I.C. | Pin 6 - Shield |
| Pin 2 - Grid No. 1. | Pin 7 - Plate |
| Pin 3 - Cathode | Pin 8 - Grid No. 2. |
| Pin 4 - Heater | Pin 9 - Grid No. 3. |
| Pin 5 - Heater | |

Mounting Position.....	any
Maximum shock (in intermittent service).....	500 g.
Vibration (continuous service).....	2.5 g.
Mechanical resonance.....	None below 100 c/s

ELECTRICAL DATA.

Direct Inter-electrode Capacitances. (without external shield)

Pentode Connection.

Grid No. 1. to Plate (Max)	0.01 µf
Input	4.25 µf
Output	4.0 µf

Triode Connection.

Grid No. 1. to Plate	1.2 µf
Input	3.1 µf
Output	6.7 µf

6059/100

Standard Telephones and Cables Limited

BRIMAR VALVE WORKS, FOOTSCRAY, KENT, ENGLAND.

RATINGS - Pentode Connection.

Heater voltage (ac or dc).....	6.3 volts
Maximum heater-cathode voltage.....	100 volts
Maximum plate voltage.....	300 volts
Maximum screen voltage.....	125 volts
Maximum Grid No.1. voltage	
Negative Bias Value.....	50 volts
Positive Bias Value.....	0 volts
Maximum plate dissipation.....	1.75 watts
Maximum screen dissipation.....	0.30 watts

CHARACTERISTICS - Pentode Connection.

Heater current.....	0.15 amp
Plate voltage.....	100 250 volts
Grid No.3. - connected to cathode at socket.	
Grid No.2. voltage.....	100 100 volts
Grid No.1. voltage.....	- 3 - 3 volts
Plate resistance.....	0.9 2.5 megohm
Transconductance.....	900 1250 μ hos
Grid No.1. Bias (approx) for plate current of	
10 μ amp. - 8	- 8 volts
Plate current.....	2.0 2.1 mA
Screen current.....	0.65 0.6 mA

Maximum Circuit Values.

Maximum Grid No.1. circuit Resistor.....	1.0 megohm
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RATINGS - Triode Connection (Grids No.2. & No.3. connected to Plate.

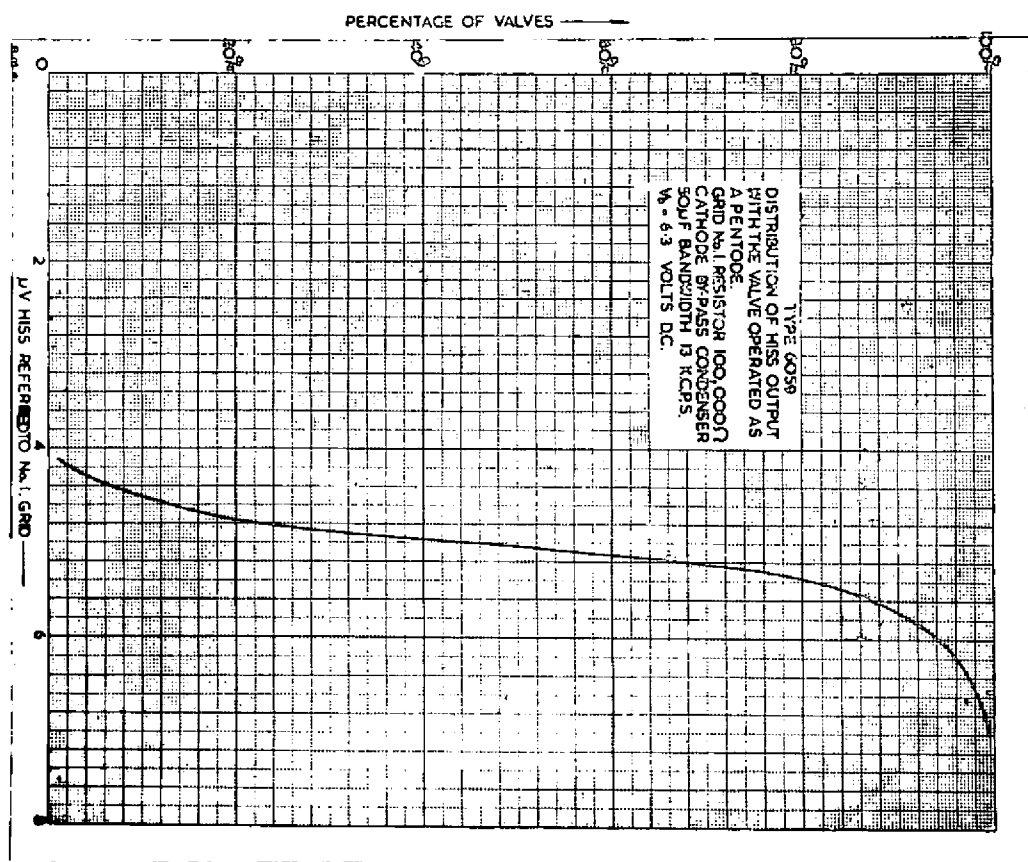
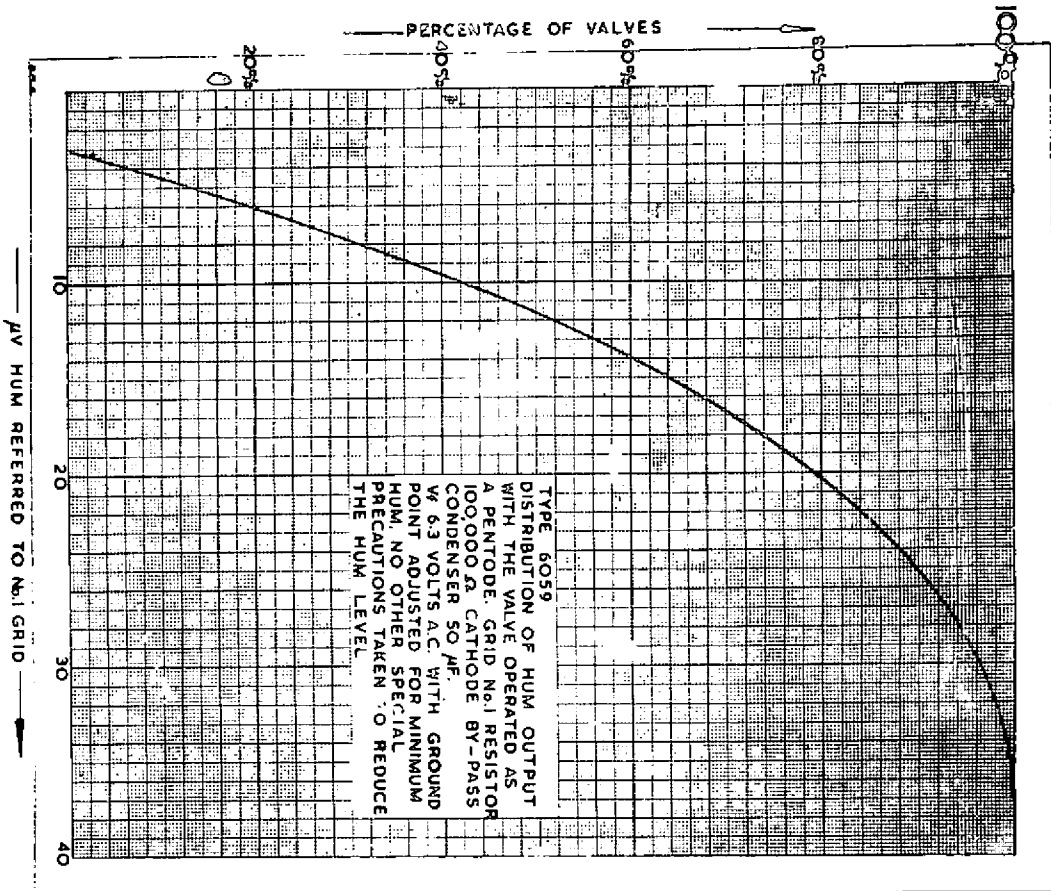
Heater voltage (ac or dc).....	6.3 volts
Maximum heater-cathode voltage.....	100 volts
Maximum plate voltage.....	250 volts
Maximum Grid No.1. voltage	
Negative Bias Value.....	50 volts
Positive Bias Value.....	0 volts
Maximum plate dissipation.....	2.05 watts

CHARACTERISTICS - Triode Connection.

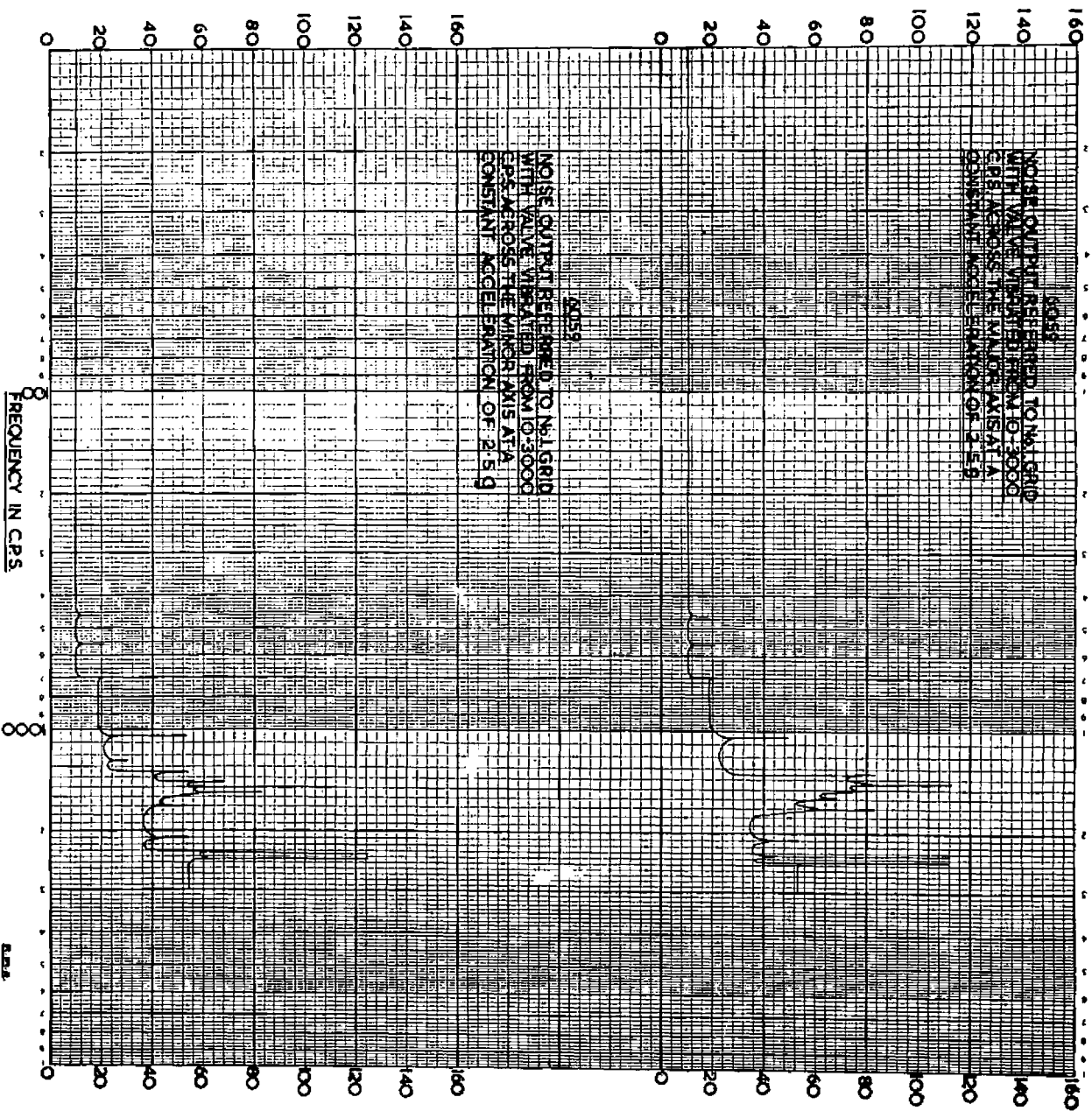
Heater current.....	0.15 amp
Plate voltage.....	100 250 volts
Grid No.1. voltage.....	- 3 - 8 volts
Plate resistance.....	12660 10250 ohms
Transconductance.....	1580 1950 μ hos
Amplification factor.....	20 20
Plate current.....	2.7 7.0 mA

Maximum Circuit Values.

Maximum Grid No.1. circuit Resistor.....	1.0 megohm.
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EQUIVALENT μ V ON CONTROL GRID.



NOISE OUTPUT REFERRED TO CONTROL GRID
 WITH VALVE VIBRATED FROM 10-3000
 CPS ACROSS THE RANGE AXIS AT A
 CONSTANT NOISE DENSITY OF 1.5 μ

NOISE OUTPUT REFERRED TO CONTROL GRID
 WITH VALVE VIBRATED FROM 10-3000
 CPS ACROSS THE RANGE AXIS AT A
 CONSTANT NOISE DENSITY OF 2.5 μ

FREQUENCY IN CPS

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