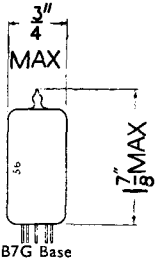
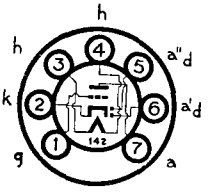


B7G Base

Current Equipment Type

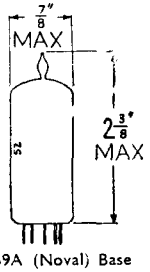
TYPE 12AT6 MINIATURE DOUBLE DIODE TRIODE



RATINGS

Heater Voltage ... ... 12.6 volts Heater Current ... ... 0.15 amp.

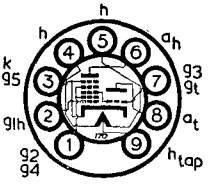
For further information and characteristic curves refer to type 6AT6.



B9A (Noval) Base

Current Equipment Type

TYPE 12AH8 MINIATURE TRIODE-HEPTODE FREQUENCY CHANGER



The Brimar 12AH8 is a triode-heptode frequency changer on the Noval (B9A) base, featuring high conversion conductance, conversion impedance and oscillator mutual conductance. The centre tapped heater permits operation from either 6.3 or 12.6 volts, enabling the same valve to be used in both A.C. and A.C./D.C. equipment.

RATINGS

Heater Voltage	6.3 or 12.6 volts
Heater Current	0.3 or 0.15 amp.
Heptode Anode Voltage	300 volts max.
Heptode Screen (g_2, g_4) Voltage	125 volts max.
Triode Anode Voltage	150 volts max.
Total Cathode Current	17.5 mA max.

OPERATING CHARACTERISTICS

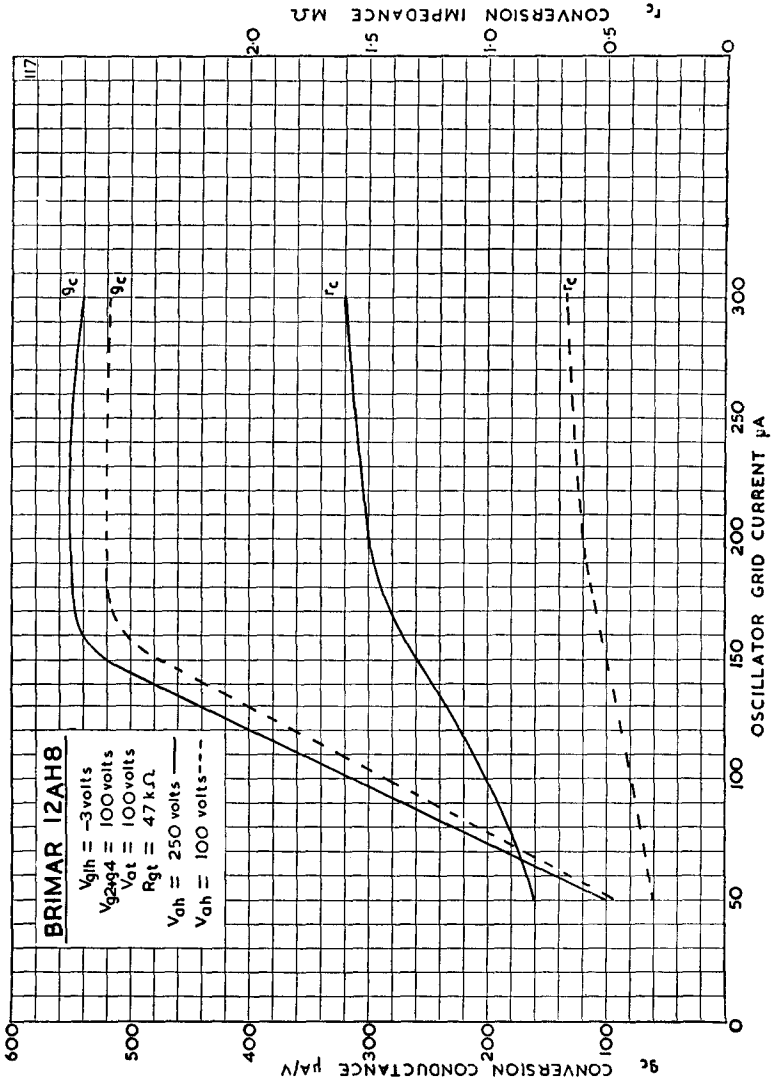
Heptode Anode Voltage	100	250 volts
Heptode Anode Current	2.5	2.6 mA
Heptode Screen Voltage	100	100 volts
Heptode Screen Current	4.5	4.4 mA
Signal Grid (g_1) Voltage	—3	—3 volts
Cathode Bias Resistor	220	220 ohms
Heptode Anode Impedance	0.6	1.5 meg.
Triode Anode Supply Voltage	100	250 volts
Triode Anode Resistor	0	27,000 ohms
Triode Anode Voltage	100	100 volts
Triode Anode Current	5.7	5.7 mA
Triode Grid Current	0.2	0.2 mA
Triode Grid Resistor	47	47 kilohms
Conversion Conductance	0.52	0.55 mA/V.
Conversion Conductance for V_{g_1}—22 volts	0.005	0.005 mA/V.
Equivalent Noise Resistance	100,000	100,000 ohms approx.
*Triode Mutual Conductance	3.5	3.5 mA/V.
*Triode Amplication Factor	17	17

* Taken at V_{at} = 100 v. V_{gt} — 0 v.

INTER-ELECTRODE CAPACITANCES

(with external close fitting shield)

R.F. Input (g_1h-all)	5.0 pF
I.F. Output (a_h-all)	8.0 pF
Triode Input	7.0 pF
Triode Output	2.5 pF
Heptode Grid to Heptode Anode (g_1h-a_h)	0.025 pF
Troide Grid to Triode Anode (g_t-a_t)	1.2 pF


BRIMAR 12AH8
V_{g1h} = −3 volts
V_{g2+g4} = 100 volts
V_{at} = 100 volts
R_{gt} = 47 kΩ
V_{ah} = 250 volts ——
V_{ah} = 100 volts - - -
g_c
r_c
117
OSCILLATOR GRID CURRENT μA
g_c CONVERSION CONDUCTANCE μA/V
r_c CONVERSION IMPEDANCE MΩ
0
50
100
150
200
250
300
100
200
300
400
500
600
0.5
1.0
1.5
2.0