

FERRANTI

HIGH IMPEDANCE DOUBLE TRIODE

An indirectly heated double triode valve with centre tapped heater. Except for the common heater each triode unit is independent of the other. It is suitable for use as an amplifier or phase inverter in AC/DC radio receivers, or in oscillator or multivibrator circuits for industrial applications.

PHYSICAL DETAILS.

Base	...	...	...	B9A Noval.
Bulb	...	...	...	Clear.
Max. Overall Length	...	...	...	56 mm. (2 $\frac{1}{2}$ in.).
Max. Seated Height	...	...	...	49 mm. (1 $\frac{1}{2}$ in.).
Max. Diameter (Base)	...	...	...	22.2 mm. ($\frac{7}{8}$ in.).
Mounting Position	...	...	...	Any.

BASE CONNECTIONS.

Pin 1—Anode Triode 2.	Pin 5—Heater.
Pin 2—Grid Triode 2.	Pin 6—Anode Triode 1.
Pin 3—Cathode Triode 2.	Pin 7—Grid Triode 1.
Pin 4—Heater.	Pin 8—Cathode Triode 1.
Pin 9—Heater Centre Tap.	

HEATER.

The heater is centre tapped and the two halves may be operated either in series or in parallel with one another.

	Series.†	Parallel.‡
Heater Voltage	12.6	6.3 volts.
Heater Current	0.15	0.3 Amp.

RATINGS.§

Max. Anode Supply Voltage	...	550 volts.
Max. Anode Voltage	...	300 volts.
Max. Anode Dissipation	...	2.75 watts.
Max. Cathode Current	...	20 mA.
Max. Neg. Grid Voltage	...	50 volts.
Max. Pos. Grid Voltage	...	0 volts.
Max. V _{h-k} (Heater negative)	...	180 volts.
Max. V _{h-k} (Heater positive)	...	180 volts.
Max. R _{g-k} (Cathode Bias)	...	1.0 MΩ
Max. R _{g-k} (Fixed Bias)	...	0.25 MΩ
**Max. R _{h-k}	...	20 kΩ

CAPACITANCES.*

§C _{in}	...	...	1.6 pF.
C _{out}	Triode No. 1	...	0.5 pF.
	Triode No. 2	...	0.35 pF.
§C _{a-g}	...	...	1.5 pF.

CHARACTERISTICS.§

Anode Voltage	...	100	250	volts.
Anode Current	...	12	10.5	mA.
Grid Voltage	...	0	-8.5	volts.
Amplification Factor	...	19	17	
Anode Impedance	...	6200	7700	Ω
Mutual Conductance	...	3.1	2.2	mA/V.

*Measured without external shield.

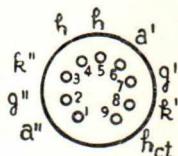
†V_h applied between pins 4 and 5.

‡V_h applied between pin 9 and pins 4 and 5 connected together.

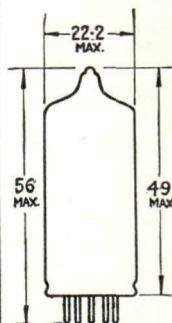
**When used as a phase inverter immediately preceding the output stage R_{h-k} max. may be 120 kΩ

§Each Section, unless otherwise indicated.

12AU7



Base
Connections
Underside View
of Base



All dimensions
shown are in
millimetres
(max.).



12AU7

