

FERRANTI BEAM TETRODE

An indirectly heated beam tetrode of all glass construction designed for use in the output stages of radio receivers and audio amplifiers.

PHYSICAL DETAILS.

Base	...	...	...	B8G (Loctal).
Max. Overall Length	...	...	...	80 mm. (3 $\frac{1}{8}$ in.).
Max. Seated Height	...	...	...	67 mm. (2 $\frac{3}{8}$ in.).
Max. Diameter	...	...	...	30 mm. (1 $\frac{1}{8}$ in.).
Mounting Position	...	...	...	Any.

BASE CONNECTIONS.

Pin 1—Heater.	Pin 5—No Connection.
Pin 2—Anode.	Pin 6—Control Grid.
Pin 3—Screen Grid.	Pin 7—Cathode.
Pin 4—No Connection.	Pin 8—Heater.

HEATER.

*Heater Voltage	...	...	...	6.3 volts.
†Heater Current	...	...	...	0.45 amp.

RATINGS.

Max. Anode Voltage	...	...	...	315 volts.
Max. Screen Voltage	...	...	...	285 volts.
Max. Anode Dissipation	...	...	...	12 watts.
Max. Screen Dissipation	...	...	...	2 watts.
Max. Heater-Cathode Voltage	...	...	...	100 volts DC.

TYPICAL OPERATION.

Single Valve Class A₁ Amplifier.

Anode Voltage	...	...	...	250	315	volts.
Screen Voltage	...	...	...	250	225	volts.
Control Grid Voltage	...	...	...	-12.5	-13	volts.
Anode Current (Zero Signal)	...	...	...	45	34	mA.
Anode Current (Max. Signal)	...	...	...	47	35	mA.
Screen Current (Zero Signal)	...	...	...	4.5	2.2	mA.
Screen Current (Max. Signal)	...	...	...	7.0	6.0	mA.
Anode Impedance (approx.)	...	...	...	52000	77000	ohms.
Mutual Conductance	...	...	...	4.1	3.75	mA/V.
Auto Bias Resistor	...	...	...	240	320	ohms.
Anode Load	...	...	...	5000	8500	ohms.
Power Output	...	...	...	4.5	5.5	watts.
Total Harmonic Distortion	...	...	...	6	12	%

Two Valves Push Pull Class AB₁ Amplifier.

Anode Voltage	...	...	...	250	285	volts.
Screen Voltage	...	...	...	250	285	volts.
Control Grid Voltage	...	...	...	-15	-19	volts.
Auto Bias Resistor	...	...	...	200	260	ohms.
Peak Input Voltage (Grid to Grid)	...	...	...	30	38	volts.
Anode Current (Zero Signal)	...	...	...	70	70	mA.
Anode Current (Max. Signal)	...	...	...	79	92	mA.
Screen Current (Zero Signal)	...	...	...	5	4	mA.
Screen Current (Max. Signal)	...	...	...	13	13.5	mA.
Anode Impedance	...	...	...	60000	65000	ohms.
Mutual Conductance	...	...	...	3.7	3.6	mA/V.
Optimum Load Resistance (Anode to Anode)	...	...	...	10000	8000	ohms.
Power Output	...	...	...	10	14	watts.
Total Harmonic Distortion	...	...	...	5	3.5	%

CAPACITANCES‡

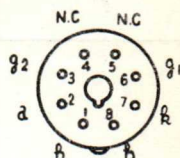
C _{in}	...	...	...	...	8.5 pF.
C _{out}	...	...	...	...	7.5 pF.
C _{a-g}	...	...	...	...	0.45 pF.

*The Nominal Heater Voltage is 7.0 volts.

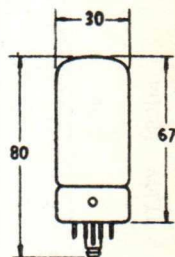
†The Nominal Heater Current is 0.48 amp.

‡Measured without external shield.

7C5



**Base
Connections
Underside View
of Base**



All dimensions
shown are in
millimetres
(max.).



7C5

