

FERRANTI

OUTPUT BEAM TETRODE

Indirectly heated beam tetrode designed for use as a Low Frequency Amplifier or Modulator, or as a Radio Frequency Power Amplifier or Oscillator.

PHYSICAL DETAILS.

Base	UX-5 pin bayonet.
Max. Overall Length	147 mm.
Max. Seated Height	130 mm.
Max. Diameter (Bulb)	53 mm.
Mounting Position	Any.

BASE CONNECTIONS.

Pin 1—Heater.	Pin 4—Cathode, Beam Plates.
Pin 2—Screen Grid.	Pin 5—Heater.
Pin 3—Control Grid.	Top Cap—Anode.

HEATER.

Heater Voltage	6.3 volts.
Heater Current	0.9 amp.

RATINGS.

Max. Anode Voltage	600 volts.
Max. Peak Anode Voltage	2000 volts.
Max. Screen Grid Voltage	300 volts.
Max. Negative Control Grid Voltage	200 volts.
Max. Cathode Current	150 mA.
Max. Peak Cathode Current	400 mA.
Max. Screen Grid Current	10 mA.
Max. Control Grid Current	5 mA.
Max. Peak Control Grid Current	25 mA.
Max. Anode Dissipation	25 watts.
Max. Screen Grid Dissipation	3.5 watts.
Max. V _h -k	100 volts.
Max. R _g -k	25 kΩ

TYPICAL OPERATION.

Single Valve Class A Amplifier.

Anode Voltage	300	500	volts.
Screen Voltage	250	200	volts.
Control Grid Voltage	-12.5	-14.5	volts.
Anode Current	83	50	mA.
Screen Current	8.0	1.6	mA.
Anode Impedance	24	39	kΩ
Mutual Conductance	6.5	5.7	mA/volts.
Cathode Bias Resistor	140	280	ohms.
Anode Load	3	6	kΩ
Power Output	6.4	11.5	watts.
Total Harmonic Distortion	6	12	%

2 Valves Push Pull Amplifier.

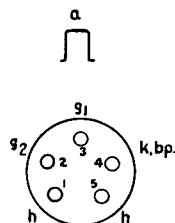
	Class AB1		Class AB2†
	Anode Voltage	500	600
Screen Voltage	300	300	300 volts.
Control Grid Voltage	-	-27.5	-30 volts.
Cathode Bias Resistor	270	-	- ohms.
Peak AF. Input Voltage			
Grid to Grid	72	59	78 volts.
Anode Current (Zero Signal)	100	80	60 mA.
Anode Current (Max. Signal)	119	150	200 mA.
Screen Current (Zero Signal)	2.5	1.5	1.5 mA.
Screen Current (Max. Signal)	16.5	17.5	21 mA.
Optimum Load Resistance			
Anode to Anode	9	10	6.4 kΩ
Power Output	32.5	47.5	80 watts.
Total Harmonic Distortion	2.7	2.2	3.5 %

CAPACITANCES.

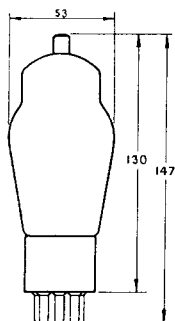
C _{in}	11 pF.
*C _{out}	7 pF.
C _{a-g1}	<0.2 pF.

*Measured with external shield.

†Anode and Screen supply voltages must not vary by more than 5% and grid bias voltage by not more than 3% between no signal and peak signal conditions to obtain the maximum output at low distortion.



Base
Connections
Underside View
of Base



All dimensions
shown are in
millimetres
(max.).



