

FERRANTI

OUTPUT BEAM TETRODES

Indirectly heated beam tetrodes designed for use in the output stages of radio receivers and audio amplifiers.

PHYSICAL DETAILS.

6V6G.			
Base	...	...	International Octal.
Max. Overall Length	...	...	119 mm. ($4\frac{1}{2}$ in.).
Max. Seated Height	...	...	104 mm. ($4\frac{1}{8}$ in.).
Max. Diameter (Bulb)	...	...	45 mm. ($1\frac{1}{2}$ in.).
Mounting Position	...	...	Any.

6V6GT.

Base	...	...	International Octal.
Max. Overall Length	...	...	84 mm. ($3\frac{1}{4}$ in.).
Max. Seated Height	...	...	70 mm. ($2\frac{7}{8}$ in.).
Max. Diameter (Base)	...	...	33 mm. ($1\frac{1}{8}$ in.).
Mounting Position	...	...	Any.

BASE CONNECTIONS.

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

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 OPERATING CONDITIONS.

Single Valve Class A₁ Amplifier.

Anode Voltage	...	180	250	315 volts.
Screen Voltage	...	180	250	225 volts.
Control Grid Voltage	...	-8.5	-12.5	-13 volts.
Peak AF. Input Voltage	...	8.5	12.5	13 volts.
Anode Current (Zero Signal)	...	29	45	34 mA.
Anode Current (Max. Signal)	...	30	47	35 mA.
Screen Current (Zero Signal)	...	3	4.5	2.2 mA.
Screen Current (Max. Signal)	...	4	7	6 mA.
Anode Impedance (approx.)	...	50	50	80 kΩ
Mutual Conductance	...	3.7	4.1	3.75 mA/V.
Cathode Bias Resistor	...	270	250	360 ohms.
Anode Load	...	5.5	5.0	8.5 kΩ
Power Output	...	2.0	4.5	5.5 watts.
Total Harmonic Distortion	...	8	8	12 %

2 Valves Push Pull Class AB₁ Amplifier.

Anode Voltage	...	...	250	285 volts.
Screen Voltage	...	...	250	285 volts.
Control Grid Voltage	...	...	-15	-19 volts.
Peak AF. 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 (approx.)	...	...	60	70 kΩ
Mutual Conductance	...	...	3.7	3.6 mA/V.

Optimum Load Resistance

Anode to Anode	...	...	10	8 kΩ
Power Output (Max.)	...	...	10	14 watts.
Total Harmonic Distortion	...	...	5	3.5 %

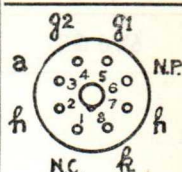
CAPACITANCES (approx.)*

COMPONENTS (approx.)				6V6G	6V6GT
C _{in}	...	...	...	10.0	9.5 pF.
C _{out}	...	...	...	8.0	9.1 pF.
C _{a-g}	...	...	...	1.0	1.0 pF.
C _{h-k}	...	...	...	6.0	6.0 pF.

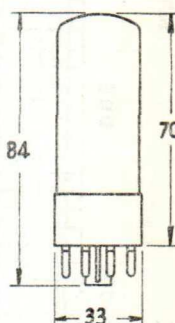
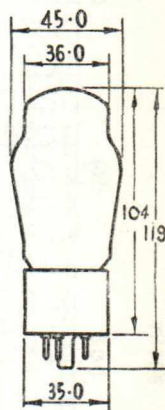
*Measured without external shield.

6V6 G

6V6 GT



Base Connections
Underside View
of Base



All dimensions
shown are in
millimetres
(max.).





6V6 G

6V6 GT

ANODE OR SCREEN CURRENT (mA)

