

FERRANTI

TRIODE HEXODES

Indirectly heated triode-hexodes designed for use as frequency changers in superheterodyne receivers. As these valves are not critical to changes in oscillator anode voltage or control grid bias they are particularly useful in all-wave receivers in order to minimise frequency drift at the higher frequencies.

PHYSICAL DETAILS.

	6K8G.	6K8GT.
Base	International Octal.	International Octal (Small Wafer-Metal Sleeve).
Top Cap	Skirted Miniature (CT1).	
Max. Overall Length	114 mm. (4½ in.).	90 mm. (3½ in.).
Max. Seated Height	99 mm. (3¾ in.).	76 mm. (3 in.).
Max. Diameter	40 mm. (1½ in.).	34 mm. (1⅜ in.).
Mounting Position	Any.	

BASE CONNECTIONS.

Pin 1—No Connection—6K8G.	Pin 5—Triode Grid, and Hexode Grid 1.
Base Sleeve—6K8GT.	Pin 6—Triode Anode.
Pin 2—Heater.	Pin 7—Heater.
Pin 3—Hexode Anode.	Pin 8—Cathode.
Pin 4—Hexode Grids 2 and 4.	
Top Cap—Hexode Control Grid.	

HEATER.

Heater Voltage	6.3 volts.
Heater Current	0.3 amp.

RATINGS.

Max. Hexode Anode Voltage	300 volts.
Max. Hexode Screen Voltage (Grids 2, 4)	150 volts.
Min. Hexode Control Grid Voltage (Grid 3)	0 volts.
Max. Hexode Anode Dissipation	0.75 watt.
Max. Hexode Screen Dissipation	0.7 watt.
Max. Triode Anode Voltage	125 volts.
Max. Triode Anode Dissipation	0.75 watt.
Max. Total Cathode Current	16 mA.
Max. Heater-Cathode Voltage	100 volts DC.

TYPICAL OPERATION.

Hexode Anode Voltage	100	250	volts.
Hexode Screen Voltage	100	100	volts.
Hexode Control Grid Voltage	-3	-3	volts.
Hexode Anode Current	2.3	2.5	mA.
Hexode Screen Current	6.2	6.0	mA.
Auto Bias Resistor	220	300	ohms.
Hexode Anode Impedance	0.4	0.6	MΩ
Triode Anode Voltage	100	100	volts.
Triode Anode Current	3.8	3.8	mA.
Triode Grid Resistor	50000	50000	ohms.
†Oscillator Grid Current	0.15	0.15	mA.
Conversion Conductance	0.33	0.36	mA/V.
Conversion Conductance with Hexode Control Grid	0.002	0.002	mA/V.

CAPACITANCES.

CAPACITANCES.					Triode.	Hexode.
C _{in}	...	...	...	...	6.5	4.6 pF.
C _{out}	...	...	...	...	3.4	4.8 pF.
C _{a-g}	...	...	...	...	1.8	*0.08 pF.
Hexode Control Grid to Oscillator Grid†						0.2 pF. Max.
Hexode Control Grid to Oscillator Anode‡						0.05 pF. Max.
Hexode Anode to Oscillator Grid†						0.15 pF.

†Triode Grid (gt) and Hexode Grid (g₁).

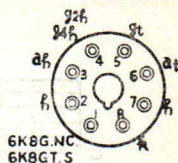
*Hexode Control Grid (g₃).

‡Triode Anode.

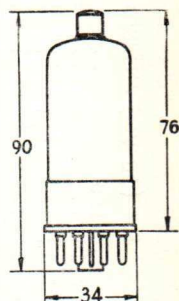
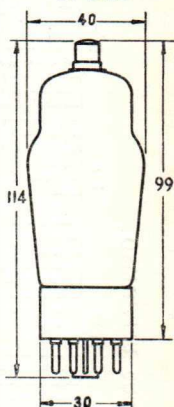
6K8G

6K8GT

T.C. gl

6K8G.NC.
6K8GT.S

Base
Connections
Underside View
of Base



All dimensions
shown are in
millimetres
(max.).



6K8G

6K8GT

