

FERRANTI

DOUBLE DIODE TRIODES

Indirectly heated double diode triodes designed for use as detector, A.V.C. and L.F. amplifiers in radio receivers.

PHYSICAL DETAILS.

6Q7G.

Base	...	International Octal.
Top Cap	...	Skirted Miniature CT1
Max. Overall Length	...	114 mm. ($4\frac{1}{2}$ in.).
Max. Seated Height	...	99 mm. ($3\frac{7}{8}$ in.).
Max. Diameter (Bulb)	...	40 mm. ($1\frac{5}{8}$ in.).
Mounting Position	...	Any.

6Q7GT.

Base	...	International Octal. (Small Wafer-metal Sleeve).
Top Cap	...	Skirted Miniature.
Max. Overall Length	...	84 mm. ($3\frac{3}{8}$ in.).
Max. Seated Height	...	70 mm. ($2\frac{3}{4}$ in.).
Max. Diameter (Base)	...	34 mm. ($1\frac{3}{8}$ in.).
Mounting Position	...	Any.

BASE CONNECTIONS.

Pin 1—No Connection—6Q7G. Base Sleeve—6Q7GT.	Pin 5—Diode Anode 1.
Pin 2—Heater.	Pin 6—No Pin.
Pin 3—Triode Anode.	Pin 7—Heater.
Pin 4—Diode Anode 2.	Pin 8—Cathode.
	Top Cap—Triode Grid.

HEATER.

Heater Voltage	...	6.3 volts.
Heater Current	...	0.3 amp.

RATINGS.

Max. Anode Voltage (Triode)	300 volts.
Max. Diode Voltage (each Diode)	200 volts.
Max. Diode Current (each Diode)	1.0 mA.
Max. Heater-Cathode voltage	100 volts DC.
Min. Grid Voltage	0 volts.

TYPICAL OPERATION.

TRIODE SECTION.

Class A₁ Amplifier.

Anode Voltage	...	100	250	volts.
Grid Voltage	...	-1	-3	volts.
Anode Current	...	0.8	1.0	mA.
Mutual Conductance	...	1.2	1.2	mA/volts.
Anode Impedance	...	58000	58000	ohms.
Amplification Factor	...	70	70	

Resistance Coupled Amplifier.

Anode Voltage	...	100	250	volts.
Anode Load Resistor	...	0.25	0.47	MΩ
Grid Resistor	...	1.0	1.0	MΩ
Auto Bias Resistor	...	5600	6800	ohms.
Peak Output Voltage	...	12	49	volts.
Stage Gain	...	45	56	
Total Harmonic Distortion	...	4.5	5	%

DIODE SECTION.

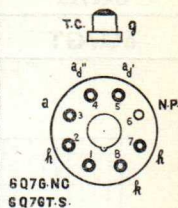
Refer to curves.

CAPACITANCES.

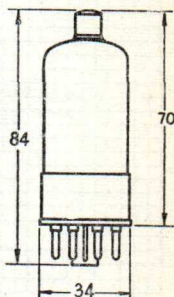
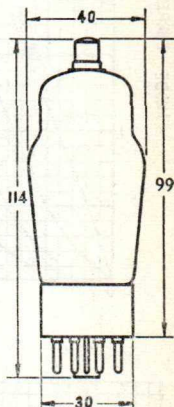
	6Q7G	6Q7GT
C _{in}	2.0	1.8 pF.
C _{out}	4.0	3.4 pF.
C _{a-g}	2.0	1.8 pF.
C _{ad-kC=a_d-k}	2.5	2.8 pF.

6Q7G

6Q7GT



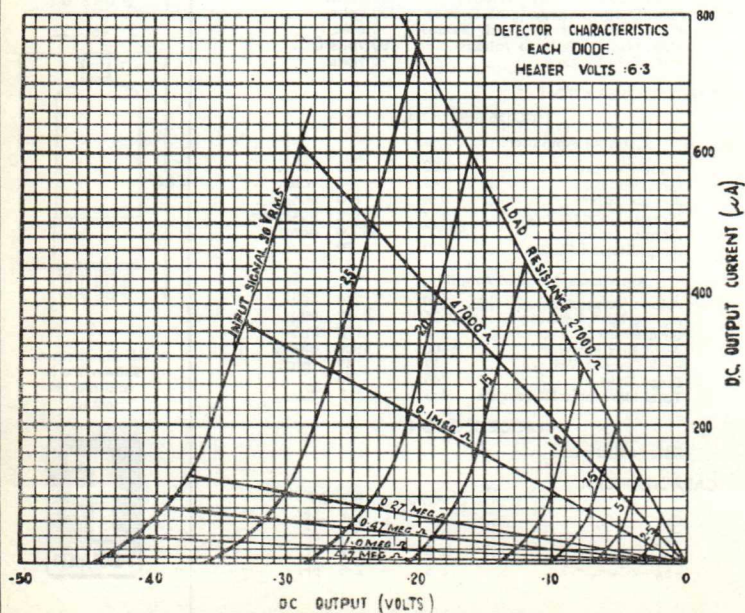
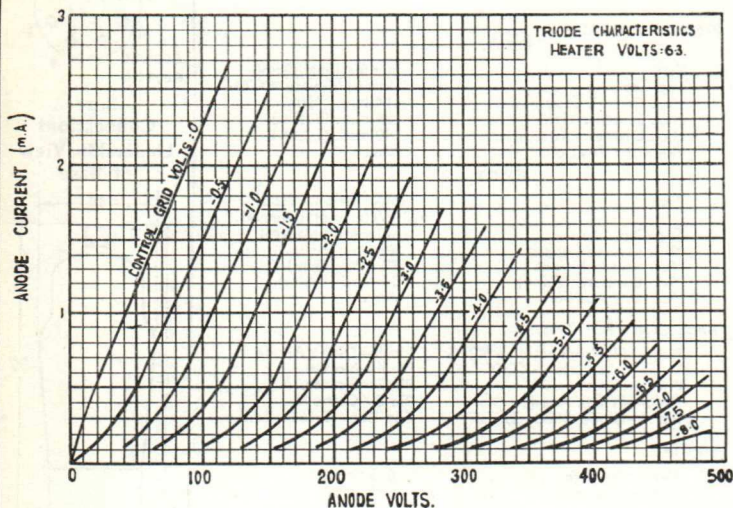
Base Connections Underside View of Base



All dimensions shown are in millimetres (max.).



6Q7GT



FERRANTI LIMITED, GEM MILL, CHADDERTON, OLDHAM, LANCs.