

FERRANTI

R.F. PENTODE

An indirectly heated, single ended R.F. Pentode designed for use in High-gain Amplifiers or as Anode Bend Detector in AC. or AC./DC. equipments. The internal screening, connected to the cathode, will provide sufficient shielding except in the case of very high gain circuits.

PHYSICAL DETAILS.

Base	...	...	...	International Octal. (Small Wafer-Metal Sleeve).
Max. Overall Length	...	...	...	84 mm. (3 $\frac{5}{8}$ in.).
Max. Seated Height	...	...	...	70 mm. (2 $\frac{7}{8}$ in.).
Max. Diameter (Base)	...	...	...	34 mm. (1 $\frac{3}{8}$ in.).
Max. Base Sleeve Diameter	...	...	...	32 mm. (1 $\frac{1}{2}$ in.).
Mounting Position	...	...	...	Any.

BASE CONNECTIONS.

Pin 1—Base Sleeve.	Pin 5—Cathode.
Pin 2—Heater.	Pin 6—Screen Grid (g_2).
Pin 3—Suppressor Grid (g_3).	Pin 7—Heater.
Pin 4—Control Grid (g_1).	Pin 8—Anode.

HEATER.

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

RATINGS.

Max. Anode Voltage	...	...	...	300 volts.
Max. Screen Voltage	...	...	...	125 volts.
Max. Anode Dissipation	...	...	...	2.5 watts.
Max. Screen Dissipation	...	...	...	0.7 watt.
Max. Heater-Cathode Voltage	...	...	...	100 volts DC.
Min. Grid Voltage	...	...	...	0 volt.
Max. R_{g1-k}	...	...	...	1 M Ω

TYPICAL OPERATION.

CLASS A1 AMPLIFIER.

Pentode Connection.

Anode Voltage	...	...	...	100	250	volts.
Screen Voltage	...	...	...	100	100	volts.
Suppressor Grid	...	...	...	Connect to Cathode.		
Grid Voltage	...	...	...	-3	-3	volts.
Auto Bias Resistor	...	...	...	790	790	ohms.
Anode Current	...	...	...	2.9	3.0	mA.
Screen Current	...	...	...	0.9	0.8	mA.
Mutual Conductance	...	...	...	1.575	1.65	mA/V.
Anode Impedance	...	...	...	0.7	> 1.0	M Ω
Grid Volts for Cut-off	...	...	...	-8	-8	volts.

Triode Connection†

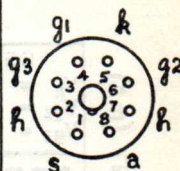
Anode Voltage	...	...	...	180	250	volts.
Grid Voltage	...	...	...	-6	-8.5	volts.
Auto Bias Resistor	...	...	...	1000	925	ohms.
Anode Current	...	...	...	6.0	9.2	mA.
Mutual Conductance	...	...	...	2.3	2.5	mA/V.
Anode Impedance	...	...	...	8250	7600	ohms.

CAPACITANCES.

	Pentode Connection	Triode Connection
C_{a-g}	...	...
C_{in}	...	...
C_{out}	...	...

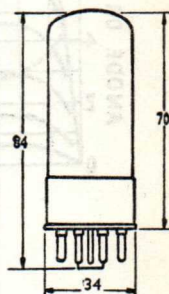
† g_2 and g_3 connected to anode.

6SJ7GT



Base
Connections

Underside View
of Base



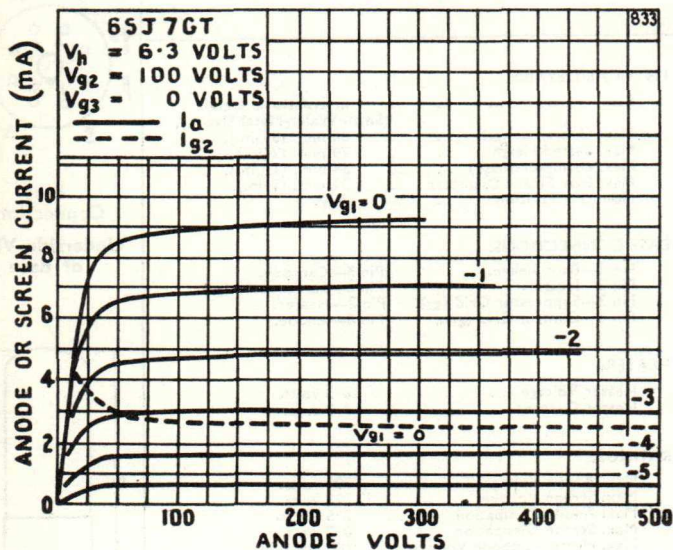
All dimensions
shown are in
millimetres
(max.).



6SJ7GT



PENTODE CONNECTION



TRIODE CONNECTION

