

FERRANTI

DOUBLE DIODE TRIODE

Type 7K7 is an indirectly heated double diode triode with separate cathodes for the diode and triode sections.

PHYSICAL DETAILS.

Base	...	...	...	B8G (Loctal).
Bulb	...	...	...	Clear.
Max. Overall Length	...	...	...	71 mm. (2 $\frac{7}{8}$ in.).
Max. Seated Height	...	...	...	58 mm. (2 $\frac{1}{4}$ in.).
Max. Diameter	...	...	...	30 mm. (1 $\frac{1}{8}$ in.).
Mounting Position	...	...	...	Any.

BASE CONNECTIONS.

Pin 1—Heater.	Pin 5—Diode Anode 2.
Pin 2—Triode Cathode.	Pin 6—Diode Anode 1.
Pin 3—Triode Anode.	Pin 7—Diode Cathode, screen
Pin 4—Triode Grid.	Pin 8—Heater.

HEATER.

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

RATINGS.

Max. Anode Voltage (Triode)	...	250 volts.
Max. Anode Dissipation	...	1 watt.
Max. Heater-Cathode Voltage	...	90 volts DC.
Min. Grid Voltage	...	0 volts.

TYPICAL OPERATING CONDITIONS.

TRIODE SECTION.

As Class A1 Amplifier.

Heater Voltage	...	...	6.3 volts.
Anode Voltage	...	...	250 volts.
Grid Voltage	...	...	-2.0 volts.
Anode Current	...	...	2.3 mA.
Mutual Conductance	...	...	1.6 mA/V.
Anode Impedance	...	...	44 k Ω
Amplification Factor	...	...	70

As Resistance Coupled Amplifier.

Heater Voltage	...	6.3	6.3 volts.
Anode Voltage	...	100	250 volts.
Anode Load Resistor	...	0.27	0.47 M Ω
Grid Resistor	...	0.47	1.0 M Ω
Auto Bias Resistor	...	5.6	5.6 k Ω
Peak Output Voltage	...	8.6	48.5 volts.
Stage Gain	...	41	54

DIODE SECTION.

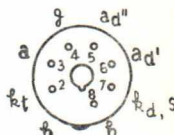
Refer to curves for type 6SQ7GT.

CAPACITANCES.

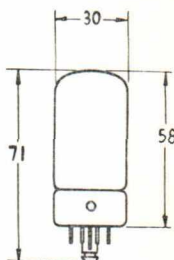
(With close fitting shield connected to Cathode).

C _{in}	...	...	2.4 pF.
C _{out}	...	...	2.0 pF.
C _{a-g}	...	...	1.7 pF.
C _{g-ad'} , C _{g-ad''}	...	...	0.25 pF. max.

7K7



Base
Connections
Underside View
of Base



All dimensions
shown are in
millimetres.
(max.)



* The Nominal Heater Voltage is 7.0 volts.

† The Nominal Heater Current is 0.32 amps.

7K7

