

FERRANTI
DOUBLE DIODE TRIODE

An indirectly heated double diode triode of single ended construction, designed for use as a detector, A.V.C. and A.F. amplifier in radio receivers.

PHYSICAL DETAILS.

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

BASE CONNECTIONS.

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

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. V_{h-k}	100 volts DC.
Min. Grid Voltage	0 volts.

TYPICAL OPERATION.

TRIODE SECTION.

Class A1 amplifier.

Anode Voltage	...	100	250 volts.
Grid Voltage	...	-1	-2 volts.
Anode Current	...	0.4	0.9 mA.
Mutual Conductance	...	0.9	1.1 mA/V.
Anode Impedance	...	110,000	91,000 ohms.
Amplification Factor	...	100	100

Resistance Coupled Amplifier.

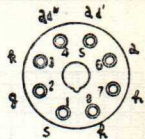
Anode Voltage	...	100	250 volts.
Anode Load Resistor	...	0.25	0.47 M Ω
Grid Resistor	...	1.0	1.0 M Ω
Auto Bias Resistor	...	6,800	4,700 ohms.
Peak Output Voltage	...	8	36 volts.
Stage Gain	...	48	67
Total Harmonic Distortion	...	4.5	4 %

DIODE SECTION.

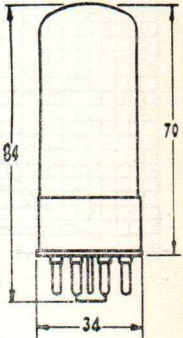
Refer to curves overleaf.

CAPACITANCES.

C_{in}	...	...	...	3.0 pF.
C_{out}	...	...	...	2.4 pF.
C_{a-gt}	...	...	...	1.6 pF.
C_{d-gt}	...	...	...	0.01 pF.
C_{d-gt}	...	...	...	0.04 pF.



Base
Connections
Underside View
of Base



All dimensions
shown are in
millimetres
(max.)



