

FERRANTI

DOUBLE TRIODE

A double triode with separate cathodes, primarily designed for use as a cascode R.F. Amplifier in Television Receivers. Suitable for operation at frequencies up to 220 Mc/s.

PHYSICAL DETAILS.

Base	...	...	B9A—Noval.
Max. Overall Length	...	...	56 mm. (2 $\frac{1}{2}$ in.).
Max. Seated Height	...	...	49 mm. (1 $\frac{7}{8}$ in.).
Max. Diameter	...	...	22.2 mm. ($\frac{7}{8}$ in.).
Mounting Position	...	...	Any.

BASE CONNECTIONS.

Pin 1—Cathode Triode 2.	Pin 5—Heater.
Pin 2—Grid Triode 2, Shield.	Pin 6—Grid Triode 1.
Pin 3—Anode Triode 2.	Pin 7—Cathode Triode 1 (in).
Pin 4—Heater.	Pin 8—Cathode Triode 1 (out).
	Pin 9—Anode Triode 1.

The triode on Pins 6, 7, 8 and 9 should have grounded-cathode connection and that on pins 1, 2 and 3 should have grounded-grid connection.

HEATER.*

Heater Current	...	...	0.3 amp.
Heater Voltage	...	...	7.0 volts.

RATINGS.†

Max. Anode Supply Voltage	...	550 volts.
Max. Anode Voltage	...	180 volts.
Max. Anode Dissipation	...	2 watts.
Max. Cathode Current	...	18 mA.
Max. Neg. Grid Voltage	...	50 volts.
Max. $V_{h-k'}$	...	90 volts.
Max. $V_{h-k''}$ (heater positive)	...	90 volts.
**Max. $V_{h-k''}$ (pk) (heater negative)	...	250 volts.
Max. $R_{g'-k'}$	...	1.0 MΩ
Max. $R_{g''-k'}$	...	0.5 MΩ
Max. R_{h-k}	...	20 kΩ

CHARACTERISTICS.‡

Anode Voltage	...	90 volts.
Grid Voltage	...	-1.5 volts.
Anode Current	...	12 mA.
Amplification Factor	...	24
Mutual Conductance	...	6 mA/V.
§Input Impedance	...	2 kΩ

CAPACITANCES.§

$C_{g'-k'}$	...	2.1 pF.
$C_{a'-k'}$	...	0.45 pF.
$C_{g'-h}$	...	<0.25 pF.
$C_{a'-g'}$	...	1.2 pF.
$C_{a'-g''}$	...	2.3 pF.
$C_{a'-k''}$	...	0.16 pF.
$C_{k''-g''}+h$	...	4.7 pF.
$C_{a'-g''}+h$	...	2.5 pF.
$C_{g'-a'}$	...	<0.006 pF.
$C_{a'-a'}$	...	<0.035 pF.
$C_{a'-k'}+h+g''$	...	1.2 pF.
$C_{h-k'}$	...	2.7 pF.

*Suitable for series operation only, a.c. or d.c.

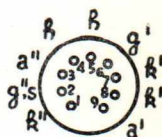
†Each section, unless otherwise indicated.

‡Measured without external shield.

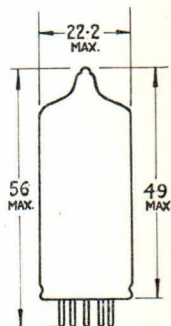
§Measured at a frequency of 200 Mc/s. with cathode connections pins 7 and 8 strapped.

**Max. d.c. component 180 volts.

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Base
Connections
Underside View
of Base



All dimensions
shown are in
millimetres
(max.).



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