

FERRANTI

VIDEO OUTPUT PENTODE

An indirectly heated output pentode. It is designed for use as a Video Output Valve, in Television Receivers with series heater chains.

PHYSICAL DETAILS.

Base	...	...	B9A—Noval.
Top Cap	...	...	CT1.
Max. Overall Length	...	...	78.5 mm. ($3\frac{1}{8}$ in.).
Max. Seated Height	...	...	71.5 mm. ($2\frac{1}{8}$ in.).
Max. Diameter	...	...	22.2 mm. ($\frac{7}{8}$ in.).
Mounting Position	...	...	Any.

BASE CONNECTIONS.

Pin 1—Screen Grid.	Pin 5—Heater.
Pin 2—Control Grid.	Pin 6—Suppressor Grid.
Pin 3—Cathode.	Pin 7—Anode.
Pin 4—Heater.	Pin 8—Shield.
	Pin 9—Internal Connection.

HEATER.

Heater Current	...	...	0.3 Amp.
Heater Voltage	...	...	15.0 volts.

RATINGS.

Max. DC Supply Voltage	...	550 volts.
Max. Anode Voltage	...	250 volts.
Max. Anode Dissipation	...	9 watts.
Max. Screen Voltage	...	250 volts.
Max. Screen Dissipation	...	2.0 watts.
Max. Cathode Current	...	70 mA.
Max. Neg. Grid Voltage	...	-1.3 volts.
($I_{g1} = +0.3 \mu A$)	...	150 volts.
Max. V_{h-k}	...	20 k Ω
Max. R_{h-k}	...	500 k Ω
Max. R_{g1-k} Fixed Bias	...	1.0 M Ω
Max. R_{g1-k} Auto Bias	...	

CHARACTERISTICS.

Anode Voltage	...	170	200	volts.
Screen Voltage	...	170	200	volts.
Suppressor Grid Voltage	...	0	0	volts.
Control Grid Voltage	...	-2.3	-3.5	volts.
Anode Current	...	36	36	mA.
Screen Current	...	5	5	mA.
Mutual Conductance	...	10.5	10.5	mA/V.
Anode Impedance	...	100	100	k Ω
Inner μ (μg_1-g_2)	...	25	25	

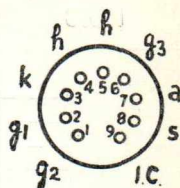
TYPICAL OPERATION.

Anode Supply Voltage	...	170 volts.
Screen Voltage	...	170 volts.
Suppressor Grid Voltage	...	0 volts.
Control Grid Voltage	...	-6.7 volts.
Anode Current	...	4 mA.
Screen Current	...	0.25 mA.
Anode Load Resistance	...	2.2 k Ω
Peak Output Voltage	...	> 70 volts.

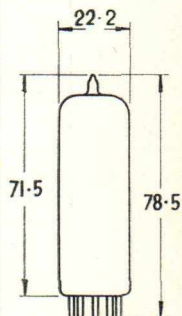
CAPACITANCES.

C_{in}	...	...	10.4 pF.
C_{out}	...	...	6.6 pF.
C_{a-g_1}	...	...	< 0.1 pF.
C_{g_1-h}	...	...	< 0.15 pF.

PL83



Base
Connections
Underside View
of Base



All Dimensions
shown are in
Millimetres.
(Max.)



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