

Mullard

OUTPUT PENTODE

Pen4VA

The Pen4VA is an indirectly heated pentode capable of giving a large output in A.C. mains receivers.

HEATER CHARACTERISTICS

Heater Volts	...	...	$V_f = 4.0$ volts
Heater Current	...	...	$I_f = 1.35$ amps
Heating Time—40 secs.			

DIMENSIONS

Overall Length	...	$= 137$ mm.
Overall Diameter	...	$= 50$ mm.
Bulb Finish—Clear		

OPERATING DATA

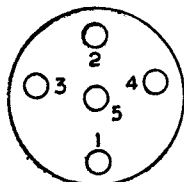
Anode Voltage	...	...	...	V_a	$= 250$ volts
Auxiliary Grid Voltage	...	...	...	V_{g2}	$= 250$ volts
Anode Current	...	...	...	I_a	$= 36$ mA
Auxiliary Grid Current	...	...	...	I_{g2}	$= 3$ mA
Mutual Conductance	...	...	...	S_w	$= 2.8$ mA/V
Anode Impedance	...	...	...	R_i	$= 40,000$ ohms
Optimum Load	...	...	...	R_a	$= 6,000$ ohms
Audio Output ($D = 10\%$ Total)	...	...	...	W_o	$= 3.8$ watts
Cathode Bias Resistance	...	...	...	R_k	$= 500$ ohms

LIMITS

Maximum Anode Voltage	...	...	...	$V_{a_{max}}$	$= 250$ volts
Maximum Anode Dissipation	...	...	...	$W_{a_{max}}$	$= 9$ watts
Maximum Cathode Current	...	...	...	$I_{k_{max}}$	$= 50$ mA
Maximum Auxiliary Grid Voltage	...	...	...	$V_{g2_{max}}$	$= 250$ volts
Maximum Auxiliary Grid Dissipation	...	...	...	$W_{g2_{max}}$	$= 1.5$ watts
Maximum Resistance in Grid Circuit (with auto bias)	...	...	...	$R_{g1a_{max}}$	$= 0.7$ megohm
Maximum Resistance in Grid Circuit (with fixed bias)	...	...	...	$R_{g1f_{max}}$	$= 0.3$ megohm
Maximum Voltage Heater-Cathode	...	...	...	$V_{fk_{max}}$	$= 50$ volts

CONNECTIONS

For Valves Capped in 5-pin B.V.A. Base



Viewed from free end of pins.

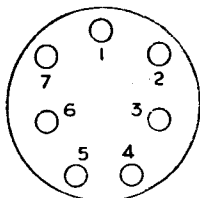
- Pin No. 1 Anode
- „ 2 Control Grid (G_1)
- „ 3 Heater
- „ 4 Heater
- „ 5 Cathode
- Side Terminal—Aux. Grid (G_2)

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CONNECTIONS

For Valves Capped in 7-pin B.V.A. Base



Viewed from free end of pins.

Pin No. 1 —

- „ 2 Control Grid (G₁)
- „ 3 Auxiliary Grid (G₂)
- „ 4 Heater
- „ 5 Heater
- „ 6 Cathode
- „ 7 Anode

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