

MAZDA

AC/VP1

A.C. Mains Variable-Mu Screened H.F. Pentode



RATING.										
Heater Voltage	4
Heater Current Amps.	0.65
Maximum Anode Voltage...	250
Maximum Screen Voltage	250
*Mutual Conductance (mA/V)	3.0

*at $E_a=250$; $E_s=200$; $E_g=0$.

TYPICAL OPERATING CONDITIONS.											
Anode Voltage	250	250
Screen Voltage	200	250
Grid Bias Voltage	-2.8	-4
Anode Current (mA)	7.4	8.8
Screen Current (mA)	1.85	2.2
Impedance (ohms)	1,100,000	1,000,000
Mutual Conductance (mA/V)	2.0	2.0
Grid Bias for Mutual Conductance (10 μ A/V)	-34.5	-43
Maximum Input Signal Handling Capacity Voltage (approx.)	7	8.5
Bias for Maximum Input Signal Handling Capacity Voltage (approx.)	-27	-34

INTER ELECTRODE CAPACITIES.										
Input	9.75 μ F.
Output	8.5 μ F.
Grid to Anode	0.005 μ F.

DIMENSIONS.										
Maximum overall length	125 m.m.
Maximum diameter	39 m.m.

PRICE 17/6

GENERAL.

The Mazda AC/VP1 is an indirectly heated variable mu screened pentode for high or intermediate frequency amplification. It will accept a modulated signal of over 8 volts peak carrier at bias without distortion and has a high working impedance. The variable mu characteristic has been specially shaped to give very small cross modulation at all values of bias. The screen may be operated at a potential of 200 to 250 volts and a potentiometer is therefore unnecessary.

APPLICATION.

The Mazda AC/VP1 is designed for operation as a radio frequency amplifier in the signal or intermediate frequency stages, and it is particularly suitable with diode or amplified automatic volume control.



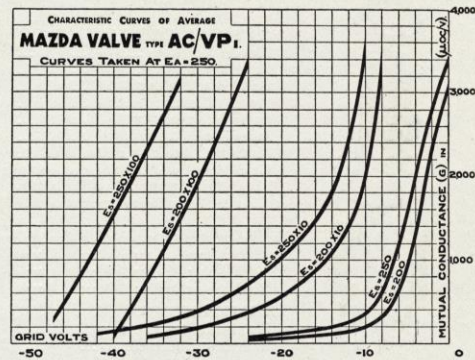
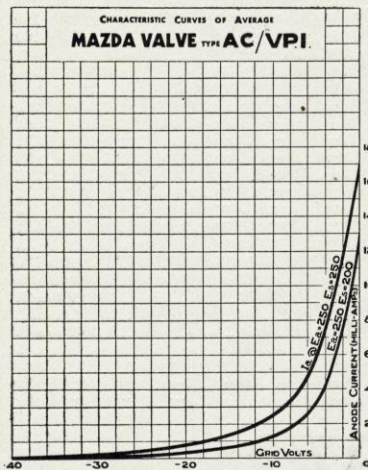
THE EDISON SWAN ELECTRIC CO. LTD.
Radio Division Showrooms:
155 Charing Cross Road, London, W.C.2
Showrooms in all the Principal Towns
 Mazda Valves are manufactured in Great Britain for
 The British Thomson-Houston Co., Ltd.,
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The screen may be operated at 250 volts, but it is recommended that the voltage at maximum gain should be limited to 200 volts by a series resistance. Minimum cross modulation and maximum signal handling capacity is thus achieved without excessive initial anode currents. Under these conditions a carrier of 8.5 volts peak, modulated at 60%, can be accepted at a bias of approximately -34 volts, without exceeding 5% distortion.

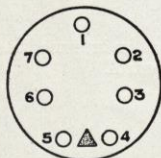


The maximum output signal is dependent on the impedance of the anode circuit and it is recommended that this should not be less than 100,000 ohms for the last I.F. stage.

The suppressor grid should be connected to cathode or a negative potential and the metal coating to earth. The valve may be used as a variable mu frequency changer with a separate oscillator and for a heterodyne voltage of 3 volts and a bias of approximately -38 volts a carrier of 9 volts peak, modulated at 60%, can be accepted.

HEATER SUPPLY.

It is recommended that the voltage across the heater pins should be 4 volts + 5% under normal working conditions.



CONNECTIONS TO BASE.

Pin No. 1.—Metal Coating.
Pin No. 2.—Control Grid.
Pin No. 3.—Suppressor Grid.
Pin No. 4.—Heater.

Pin No. 5.—Heater.
Pin No. 6.—Cathode.
Pin No. 7.—Screen Grid.
Top Cap.—Anode.

