



PEN. 3520

RATING.

Heater Voltage	...	...	...	...	...	...	35
Heater Current (Amps.)	...	...	...	...	...	...	0.2
Maximum Anode Voltage	...	...	...	...	...	...	250
Maximum Screen Voltage	...	...	...	...	...	...	250
*Mutual Conductance (mA/V)	...	...	...	...	...	...	7.0
Maximum Anode Dissipation (watts)	...	...	...	...	...	...	8.0

* Taken at $E_a = 100$; $E_s = 100$; $E_g = 0$.

OPERATING CONDITIONS.

Anode Voltage	...	...	...	...	...	185	200
Screen Voltage	...	...	...	...	...	185	200
Anode Current	...	...	...	...	...	36.5	40
Screen Current	...	...	...	...	...	7.3	8.0
Grid Bias Volts	...	...	...	...	...	7.25	8.0
*Optimum Load (ohms)	...	...	...	...	...	4,400	4,400
Self-bias Resistance (ohms)	...	...	...	...	...	165	165
*Power Output (watts)	...	...	...	...	...	2.3	3.0
*Input Swing (volts R.M.S.)	...	...	...	...	...	3.8	4.3

* For 5 per cent. Third Harmonic and Second Harmonic not exceeding 5 per cent.

DIMENSIONS.

Maximum Overall Length	...	...	...	...	...	132 mm.
Maximum Diameter	...	...	...	...	...	54 mm.

GENERAL.

The PEN.3520 is an indirectly heated output pentode for use in A.C./D.C. receivers. The valve is based in a standard 7-pin base, the connexions to which are given overleaf.

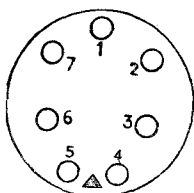
APPLICATION.

In receivers employing A.V.C. it is possible to obtain ample power output without an intermediate L.F. stage, by feeding the PEN.3520 direct from the diode. Suitable values for the condenser resistance filter in the anode circuit are 5,000 ohms and 0.02 μ F., when the valve is operating a B.T.H. R.K. speaker. The valve must always be self-biased, and the resistance of the grid-cathode circuit should not exceed 1 megohm.

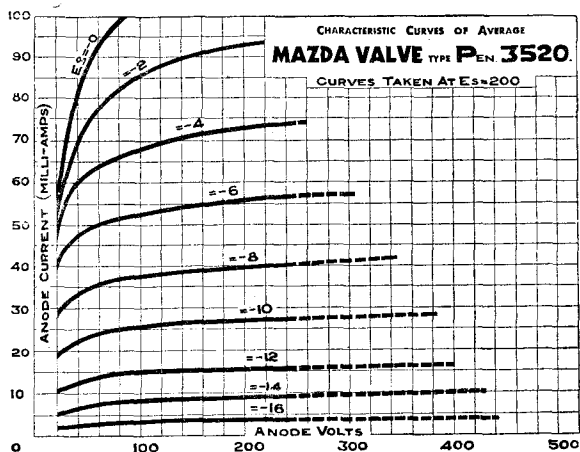
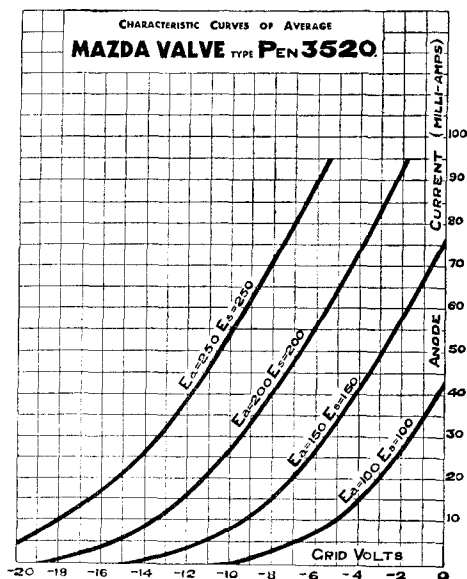


BASING.

- Pin No. 1. —
2. Control Grid.
 3. Screen.
 4. Heater.
 5. Heater.
 6. Cathode
 7. Anode.



Viewed from the
free end of the base.



Mazda Radio Valves are manufactured in Great Britain for the British
Thomson-Houston Co., Ltd., London and Rugby, and distributed by

THE EDISON SWAN ELECTRIC CO., LTD.
155, CHARING CROSS ROAD, LONDON, W.C.2.

