VP.133

A.C./D.C. MAINS H.F. PENTODE

RATING.

Heater Voltage	13·0
Heater Current (amps)	0·2
Maximum Anode Voltage	200
Maximum Screen Voltage	200
*Mutual Conductance (mA/V)	3·1

*Taken at Ea=200 ; Es=150 ; Eg=0.

TYPICAL OPERATION.

Anode Voltage	150	150	165	175
Screen Voltage (initial)	100	150	165	175
Grid Bias	—0·7	—2·7	—3·6	—3·9
Mutual Conductance (mA/V)	2·35	2·1	2·0	2·0
Anode Current (mA)	7·2	8·0	8·0	8·5
Screen Current (mA)	2·0	2·2	2·2	2·3
Anode A.C. Resistance (meghoms) ...	0·8	0·7	0·8	0·8
Grid Bias for Mutual Conductance of 10 uA/V	—	—	—	43·5
†Maximum Peak Carrier Input Volts ...	—	—	—	9·5
Grid Bias for M.P.C.I.	—	—	—	38

†For 5 per cent. Total Distortion with a 60 per cent. Modulation.

Note.

For the case of initial screen voltages of 100, 150 or 165, the signal handling capacity (M.P.C.I.V.) grid bias and gain will be the same as in the last column if the screen voltage is allowed to rise to 175 volts.

INTER-ELECTRODE CAPACITIES.

*Anode to Earth	11·5$\mu\mu$F
*Grid to Earth	7·0$\mu\mu$F
Anode to Grid	0·0025$\mu\mu$F

*" Earth " denotes the remaining earthy potential electrodes and metallising joined to cathode.

DIMENSIONS.

Maximum Overall Length	105 mm.
Maximum Diameter	32 mm.

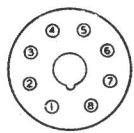
GENERAL.

The VP.133 is a variable-mu H.F. Pentode for use in A.C./D.C. receivers. The bulb is of small dimensions and metallised. The valve is fitted with a British Octal Base, the connections to which are given overleaf.

APPLICATION.

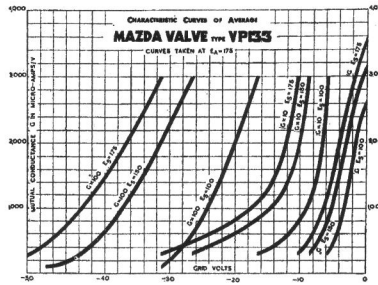
The valve has been specially designed for operation in A.C./D.C receivers employing the loud speaker field winding for smoothing. Under these conditions, the screen voltage does not rise above 175 volts with an average mains tapping. It is recommended that this valve should be used in a super-heterodyne receiver with a Mazda TH.2321 converter. When so used, in a receiver provided with automatic volume control the bias applied to the valve should be one-half to two-thirds of the bias applied to the TH.2321.

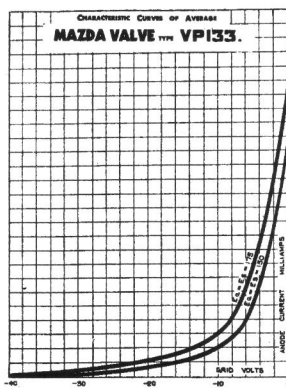
BASING.



Pin No. 1. Heater.
2. Cathode.
3. Anode.
4. Screen.
5. Suppressor Grid.
6. Metallising.
7. Omitted.
8. Heater.
Top Cap. Control Grid.

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.