MAZDA

HL.133 DD

A.C./D.C. MAINS DOUBLE DIODE TRIODE

RATING.

Heater Voltage	13·0
Heater Current (Amps)	0·2
Maximum Anode Voltage	250
*Mutual Conductance (mA/V)	2·5
*Amplification Factor	32
*Anode A.C. Resistance (Ohms)	12,800

* at Ea=100 ; Eg=0.

OPERATING CONDITIONS.

H.T. Supply	165	185
Decoupling Resistance (ohms.)	10,000	10,000
Anode Load (ohms)	50,000	50,000
Anode Current (mA)	1·25	1·45
Grid Bias Voltage	2·2	2·5
Self-Bias Resistance (ohms)	1,750	1,750
Voltage Amplification	20	21
Maximum Output Volts R.M.S. for 2½% Harmonic Content	22½	27

INTER-ELECTRODE CAPACITIES.

Anode to Cathode	4·5 $\mu\mu$F
Grid to Cathode	3·5 $\mu\mu$F
Anode to Grid	3·5 $\mu\mu$F
*Diode 1 to Earth	3·25 $\mu\mu$F
*Diode 2 to Earth	3·25 $\mu\mu$F
Diode 1 to Diode 2	0·6 $\mu\mu$F

* "Earth" denotes the electrodes of any second valve section and the remaining earthy potential electrodes of the section under measurement, H. and M. joined to cathode.

DIMENSIONS.

Maximum overall length	105 mm.
Maximum diameter	32 mm

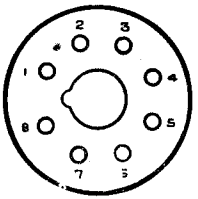
GENERAL.

The HL.133DD is an indirectly heated double diode triode for use in D.C., A.C./D.C. mains, and car radio receivers. It consists of two separate diodes and a triode on a common cathode sleeve. 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.

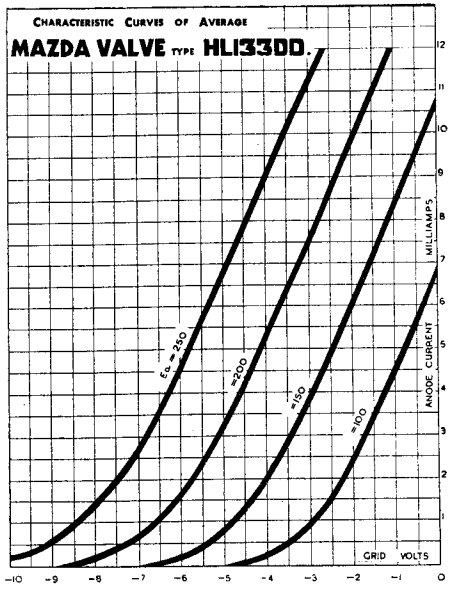
The HL.133DD is recommended for performing the simultaneous functions of A.V.C., detection and amplification. When the valve is used for detection, only D2 (pin No. 5) should be used for the purpose. If the other diode is not required, it should be connected to the cathode. The control grid should be biased by means of a self-bias resistance which should be by-passed with a condenser of 25–50 mFd.

BASING.



Pin No. 1. Heater.
2. Cathode.
3. Anode.
4. —
5. D2.
6. Metallising.
7. D1.
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.