MAZDA

HL.41 DD

A.C. MAINS DOUBLE DIODE TRIODE

RATING.

Heater Voltage	4·0
Heater Current (Amps.)	0·65
Maximum Anode Voltage	250
*Mutual Conductance (mA/V)	2·5
*Amplification Factor	30
*Anode A.C. Resistance (Ohms)	12,000

* at Ea=100 ; Eg=0.

TYPICAL OPERATION.

H.T. Voltage after decoupling	250	250	250
Anode Load (ohms)	50,000	30,000	20,000
Anode Current (mA)	2·2	3·2	4·25
Cathode Self Bias Resistance (ohms)	1,400	1,000	700
Voltage Amplication	22·5	20	17·5
Maximum Output Voltage for $2\frac{1}{2}$%			
Second Harmonic Distortion (Volts RMS)	38·5	35	30

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

* " 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.

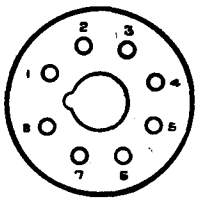
GENERAL.

The HL.41 DD is an indirectly heated double diode triode for A.C. Mains operation. 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.

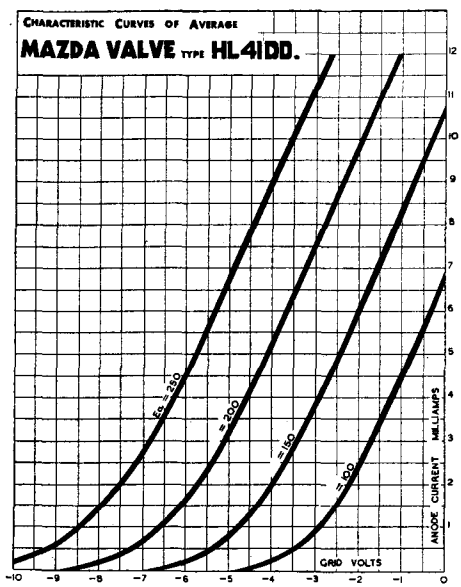
The HL.41 DD is recommended for performing the simultaneous functions of A.V.C. detection and A.F. amplification. When the valve is used for detection, only D2 (pin No. 5) should be used for the purpose. If the other diode is not required, it should be connected to the cathode. The control grid should be biased by means of a self-bias resistance which should be by-passed with a condenser of 25–50 mFd.

BASING.



Viewed from the free end of the base.

Pin No.	1.	Heater.
	2.	Cathode.
	3.	Anode.
	4.	—
	5.	D2.
	6.	Metallising.
	7.	D1.
	8.	Heater.
Top Cap		Control Grid.



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