L.22/DD

BATTERY DOUBLE DIODE TRIODE

RATING.

Filament Volts	2.0
Filament Current (amps.)	0.1
Maximum Anode Volts	150
*Mutual A.C. Conductance (mA/V)	1.85
*Amplification Factor	18.5
*Anode A.C. Resistance (ohms)	10,000

*Va=100 ; Vg=0.

TYPICAL OPERATION.

H.T. Voltage	120	120
Anode Load (ohms)	75,000	50,000
Grid Bias	—3.0	—3.0
Anode Current (mA)	0.6	0.8

INTER-ELECTRODE CAPACITIES.

*Anode to Earth	6.75 $\mu\mu$F.
*Grid to Earth	2.25 $\mu\mu$F.
Anode to Grid	3.25 $\mu\mu$F.
*Diode 1 to Earth	3.25 $\mu\mu$F.
*Diode 2 to Earth	3.25 $\mu\mu$F.
Diode 1 to Diode 2	0.1 $\mu\mu$F.

* " Earth " denotes the electrodes of any second valve section and the remaining earthy potential electrodes of the section under measurement and metallising.

DIMENSIONS.

Maximum Overall Length	... 106 mm.
Maximum Diameter	... 32 mm.

GENERAL.

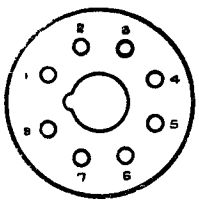
The valve is a double diode triode for use in battery operated receivers, and in operation the two sections are independent of each other. The bulb is metallised, and the valve is fitted with a British Octal Base, the connexions to which are given overleaf.

APPLICATION.

The valve is recommended for performing the simultaneous functions of detection, automatic volume control and audio frequency amplifications. The anode current of each diode starts at different potentials. In use, therefore, Pin No. 1 should be connected to the negative terminal of the L.T. battery, and for normal purposes the Diode No. 2 should be employed as a detector diode. The diode load resistance should be returned to the negative end of the filament, whilst diode No. 1 should be used as an A.V.C. diode. In this way an extra delay voltage of the order of 1.4 volts is obtained. When the valve is used in conjunction with an H.F.

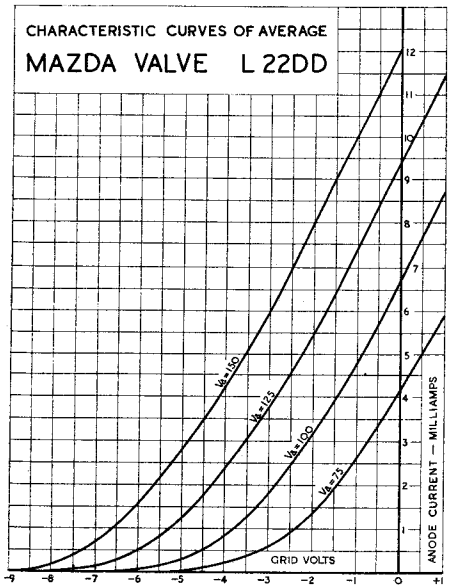
valve requiring an initial bias of 1.5 volts, a total delay voltage of about 2.9 is obtained. It is recommended that the diode load resistance should not be less than 0.5 megohm. When the triode is used as a resistance-coupled L.F. amplifier an anode load of the order of 75,000 ohms should be used. When used with a parafed transformer circuit, a lower resistance may be necessary, but this will depend upon the transformer design.

BASING.



Pin No. 1. Filament –ve.
2. –
3. Anode.
4. –
5. Diode 2.
6. Metallising.
7. Diode 1.
8. Filament +ve.
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.