

# HL.2I/DD and L.2I/DD BATTERY DOUBLE DIODE TRIODES.

#### RATINGS.

			HL	21/DD	L.21/DD
Filament Volts				2.0	2.0
Filament Current (amps.)				0.15	0.1
Maximum Anode Volts				150	150
*Mutual A.C. Conductance (mA)	/V)			1.5	1⋅85
*Amplification Factor				32	18.5
*Anode A.C. Resistance (ohms)				21,000	10,000
* <b>E</b> a=	100;	Eg=	0.		

## INTER-ELECTRODE CAPACITIES.

*Anode to Earth	 			 7.0	$6.75~\mu\mu$ F $\cdot$
*Grid to Earth	 			 2.5	$2.25 \mu\mu$ F.
Anode to Grid	• • •	• • •		 3.5	$3.25~\mu\mu$ F.
*Diode 1 to Earth	• • •		• • •	 4.5	$3.5 \mu \mu F$ .
*Diode 2 to Earth	 			 5∙0	$3.75 \mu\mu$ 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	 	 119	117 mm.
Maximum Diameter	 	 39	39 mm.

#### GENERAL.

The valves are double diode triodes for use in battery operated receivers, and in operation the two sections are independent of each other. The bulbs are metallised, and the valves are fitted with standard 5-pin bases, the connections to which are given overleaf.

#### APPLICATION.

The valves are recommended for performing the simultaneous functions of detection, automatic volume control, and audio frequency amplification. Transformer or resistance coupling may be used in the triode anode circuit. Care must be exercised in the use of the diodes owing to the different potentials at which the diode anode current starts. Pin No. 3 must always be connected to L.T. negative, and the diode connected to Pin No. 5 used for detection, and that connected to Pin No. 2 for automatic volume control. The detector diode load resistance should be returned to the negative terminal of the L.T. battery. The A.V.C. diode anode current starts at approximately 1.0 volt positive on the HL.21DD and 1.4 volts positive on the L.21DD, so that it gives a delay voltage of 1.0 and 1.4 volts respectively, which when used in conjunction with a high frequency valve requiring an initial bias of 1.5 volts gives an effective delay voltage of 2.5 and 2.9 volts respectively.

The triode sections of the HL.21DD and the L.21DD are similar to those of the HL.2 and L.2 respectively. The operating conditions of the L.21DD as a driver valve for a Class B stage are the same as those for the valve type L.2.

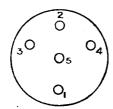


### BASING (Both Types).

Pin No. I. Anode.

- 2. Diode I.
- 3. Filament and Metallising
- 4. Filament.
- 5. Diode 2.

Top Cap. Control Grid.



Viewed from the free end of the base.

