



## A.C.2/HL

### A.C. MAINS TRIODE

#### RATING.

Heater Voltage	...	...	...	...	...	...	4.0
Heater Current (Amps.)	...	...	...	...	...	...	1.0
Maximum Anode Voltage	...	...	...	...	...	...	200
*Mutual Conductance (mA/V)	...	...	...	...	...	...	6.5
*Amplification Factor	...	...	...	...	...	...	75
*Anode A.C. Resistance (ohms)	...	...	...	...	...	...	11,500

\*Taken at  $E_a=100$ ;  $E_g=0$ .

#### TYPICAL OPERATION.

Anode Voltage	...	...	100	150	200
Grid Bias (Anode-bend					
Detector)			-1.5 to -3	-3 to -6	-4.5 to -7.5
Grid Bias Amplifier	...		-1.0	-1.25 to -1.75	-1.5 to -2.25

#### INTER-ELECTRODE CAPACITIES.

Anode to Cathode	...	...	...	...	6.0 $\mu\mu\text{F}$ .
Grid to Cathode	...	...	...	...	9.0 $\mu\mu\text{F}$ .
Anode to Grid	...	...	...	...	6.5 $\mu\mu\text{F}$ .

#### DIMENSIONS.

Maximum Overall Length	...	...	...	...	115 mm.
Maximum Diameter	...	...	...	...	45 mm.

#### GENERAL.

The AC2/HL is an indirectly heated triode for A.C. Mains operation. It has a very high operating mutual conductance and amplification factor. The bulb is metallised, and the valve is fitted with a standard 5-pin base. The connexions to which are given overleaf.

#### APPLICATION.

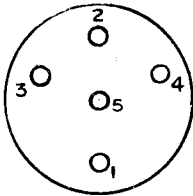
The low impedance of this valve, together with its high mutual conductance, makes it suitable for use as an anode-bend detector. The table above may be used as a rough guide when choosing the required value for bias, though the actual amount depends mainly on the amplitude of the applied signal.

The valve may be used as a low-frequency amplifier with either transformer choke or resistance-capacity coupling. With resistance coupling an anode coupling resistance of 50,000-100,000 ohms will be found satisfactory. By keeping the anode coupling resistance down to these values



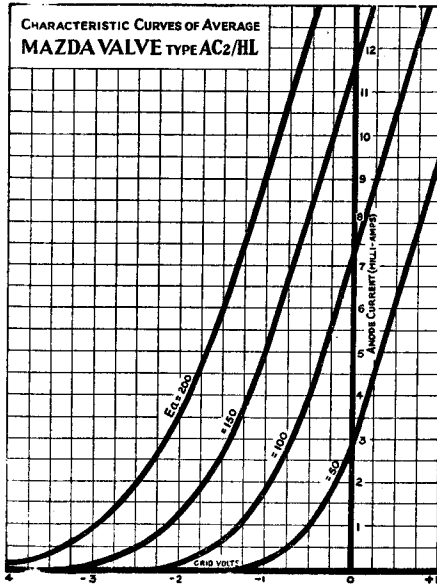
it is assured that the higher audio-frequencies are produced without attenuation. When using transformer or choke coupling, the primary inductance need not be high, the anode A.C. Resistance of the AC2/HL being exceptionally low for this class of valve.

**BASING.**



- Pin No. 1. Anode.
- 2. Control Grid.
- 3. Heater.
- 4. Heater
- 5. Cathode and Metallising.

Viewed from the free end of the base.



Mazda Radio Valves are manufactured in Great Britain for the British Thomson-Houston Co., Ltd., Letcham and Rugby, and distributed by THE EDISON SWAN ELECTRIC CO., LTD., 155, CHARING CROSS ROAD, LONDON, W.C.2

