



## HL. 22

### BATTERY TRIODE

#### RATING.

|                                      |        |
|--------------------------------------|--------|
| Filament Voltage ... ..              | 2.0    |
| Filament Current (Amps.) ... ..      | 0.1    |
| Maximum Anode Voltage ... ..         | 150    |
| *Amplification Factor ... ..         | 32     |
| *Mutual Conductance (mA/V) ... ..    | 1.5    |
| *Anode A.C. Resistance (ohms) ... .. | 21,000 |

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

#### OPERATING CONDITIONS.

|                            |        |         |
|----------------------------|--------|---------|
| H.T. Voltage ... ..        | 120    | 120     |
| Anode Load (ohms) ... ..   | 50,000 | 100,000 |
| Grid Bias ... ..           | 1.5    | 1.0     |
| Anode Current (mA.) ... .. | 0.5    | 0.45    |

#### INTER-ELECTRODE CAPACITIES.

|                         |                        |
|-------------------------|------------------------|
| Anode to Cathode ... .. | 5.25 $\mu\mu\text{F.}$ |
| Grid to Cathode ... ..  | 2.75 $\mu\mu\text{F.}$ |
| Anode to Grid ... ..    | 5.0 $\mu\mu\text{F.}$  |

#### DIMENSIONS.

|                               |        |
|-------------------------------|--------|
| Maximum Overall Length ... .. | 95 mm. |
| Maximum Diameter ... ..       | 32 mm. |

#### GENERAL.

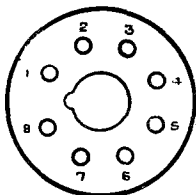
The HL.22 is a general purpose triode for use in battery-operated receivers. The bulb is of small dimensions and metallised, and the valve is fitted with a Mazda octal base, the connexions to which are given overleaf.

#### APPLICATIONS.

Owing to its high mutual conductance, coupled with a comparatively low anode A.C. resistance, the HL.22 will be found suitable for use in either the oscillator, detector or L.F. positions in a receiver. When used as an oscillator, the grid leak should be returned to L.T. positive. This connexion should also be employed when the valve is used as a cumulative grid detector, although in some receivers, in order to obtain the smoothest possible reaction control, it may be desirable to return the grid leak tapping on a potentiometer across the L.T. battery. Normal practice should be followed when the valve is used as an L.F. amplifier, and representative operating conditions are given above.

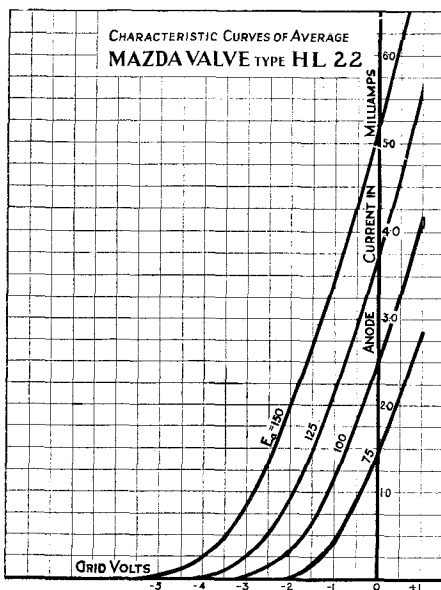


### BASING.



- Pin No. 1. Filament.  
 2. Omitted.  
 3. Anode.  
 4. Omitted.  
 5. Control Grid.  
 6. Metallising.  
 7. Omitted.  
 8. Filament.

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, and distributed by

THE EDISON SWAN ELECTRIC CO., LTD.  
 155, CHARING CROSS ROAD, LONDON, W.C.2

