



## A40 and A41

### ACORN VALVES

#### RATINGS.

|                                  | Triode<br>Type<br>A.40 | Pentode<br>Type<br>A.41 |
|----------------------------------|------------------------|-------------------------|
| Heater Voltage ... ..            | 4.0                    | 4.0                     |
| Heater Current (amps.) ... ..    | 0.25                   | 0.25                    |
| Maximum Anode Voltage ... ..     | 200                    | 250                     |
| Amplification Factor ... ..      | 25                     | —                       |
| Maximum Screen Voltage ... ..    | —                      | 100                     |
| Mutual Conductance (mA/V) ... .. | *2                     | †2                      |

\* At  $E_a=100$ .    † At  $E_a=250$  ;  $E_s=100$ .

#### INTER-ELECTRODE CAPACITIES.

|                         |     |                           |
|-------------------------|-----|---------------------------|
| Anode to Cathode ... .. | 0.6 | 3.0 $\mu\mu\text{F}$ .    |
| Grid to Cathode ... ..  | 1.0 | 3.0 $\mu\mu\text{F}$ .    |
| Anode to Grid ... ..    | 1.4 | 0.0025 $\mu\mu\text{F}$ . |

#### DIMENSIONS.

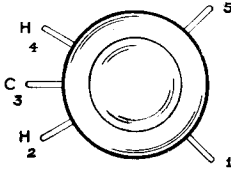
|                               |    |        |
|-------------------------------|----|--------|
| Maximum Overall Length ... .. | 34 | 46 mm. |
| Maximum Diameter ... ..       | 30 | 30 mm. |

#### GENERAL.

These Acorn Valves are valves in which the electrodes have been reduced to very small dimensions, whilst the working conductances have been maintained at a normal value. The feature of small electrode dimensions, combined with the small bulb, the extremely short terminal connections, and unconventional pin spacing, make operation on ultra-short waves down to 0.5 metre possible with ordinary valve circuits. The basing connections are given overleaf.

#### APPLICATION.

The triode is suitable for operation as Detector or Oscillator, and the pentode as Detector or H.F. amplifier at ultra high frequencies.

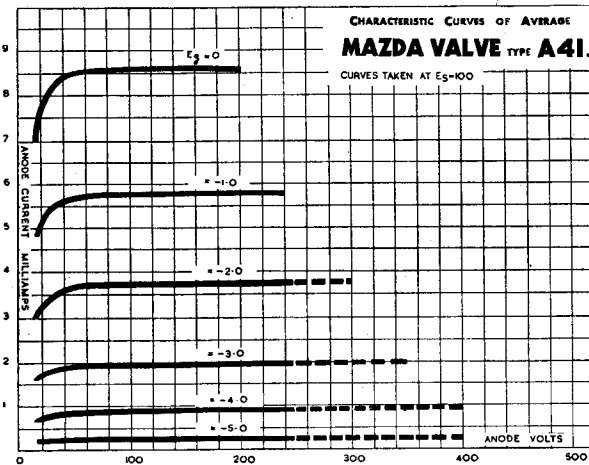
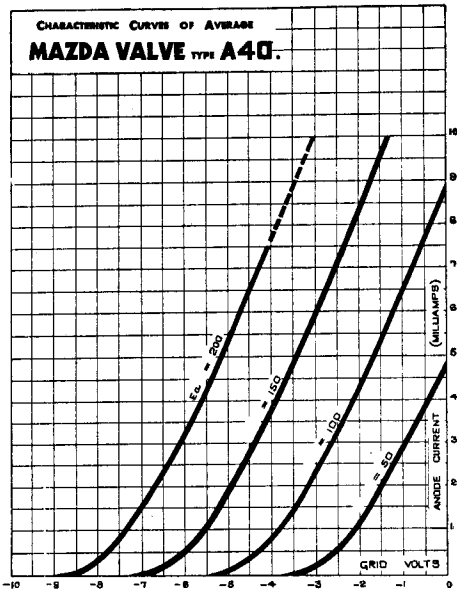


### BASING.

The drawing shows a plan view of the acorn triode, the connections being as follows :

- Pin No. 1. Anode.  
5. Grid.

In the acorn pentode the anode and grid are brought out to pins at the top and bottom of the bulb. When viewed from the anode pin No 5 is then the suppressor grid and No. 1 the screen.



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