



A40 and A41

ACORN VALVES

RATINGS.

	Triode Type A.40	Pentode Type 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.

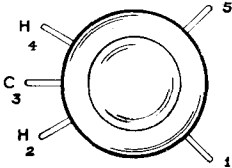
Maximum Overall Length	34	46 mm.
Maximum Diameter	30	30 mm.

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.

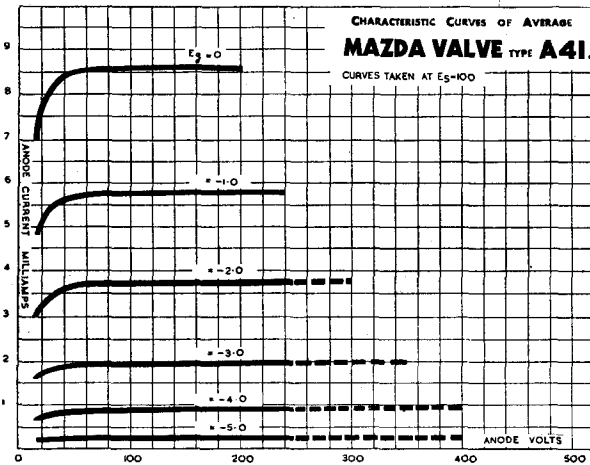


BASING.

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.