



V.503

DIRECTLY HEATED MAINS OUTPUT TRIODE

RATING.

Filament Voltage	4.0
Filament Current (amps.)	2.0
Maximum Anode Volts	450
*Mutual Conductance (mA/V)	10
*Amplification Factor	4.25
*Anode A.C. Resistance (ohms)	425
Maximum Quiescent Anode Dissipation per Valve (watts)	25

*At $E_a = 100$ v. ; $E_g = 0$.

TYPICAL OPERATION (Push-Pull).

Anode Voltage	400	450
Total Anode Current (Quiescent) (mA)	100	110
Grid Bias for A.C. Filament Heating	85	96.5
Mutual Conductance (mA/V)	4.5	4.5
*Optimum Anode to Anode Load (ohms)	3,700	4,000
*R.M.S. Input Grid Volts per Valve	60	68
*Total Anode Current at M.U.P.O. with fixed Bias	210	230
*Power Output (watts)	32	40

*For a total harmonic content not exceeding 5 per cent.

DIMENSIONS.

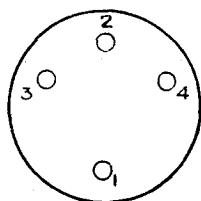
Maximum Overall Length	156 mm.
Maximum Diameter	64 mm.

GENERAL.

The V.503 is a directly heated power output triode for use in public address equipment, and is intended for use in Class AB operation. The valve is fitted with a standard 4-pin base, the connexions to which are given overleaf.

APPLICATION.

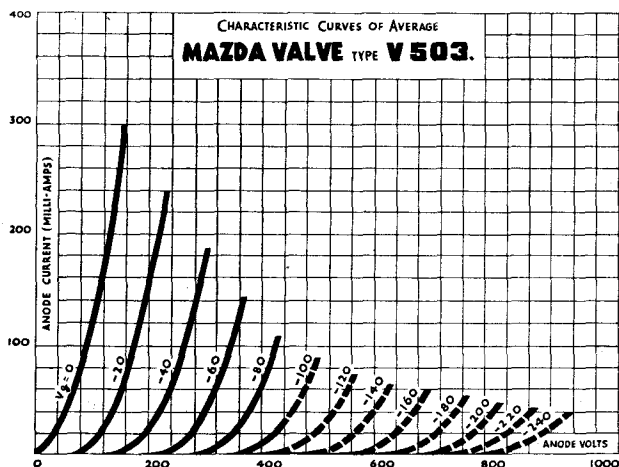
The valve should only be used with individual bias adjustment from a separate source to give the correct quiescent feed current. The grid-cathode resistance should be kept low, and in any case should not exceed 50,000 ohms. The valve is not intended for "positive drive" conditions of operation.



BASING.

- Pin No. 1. Anode.
 2. Grid.
 3. Filament.
 4. 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.