



## PP.3521

### AC/DC MAINS OUTPUT TRIODE

#### RATING

Heater Voltage	...	...	...	...	...	...	35
Heater Current	...	...	...	...	...	...	0.2
Maximum Anode Voltage	...	...	...	...	...	...	250
*Mutual Conductance (mA/V)	...	...	...	...	...	...	10
*Amplification Factor	...	...	...	...	...	...	6
*Anode A.C. Resistance (ohms)	...	...	...	...	...	...	600
Max. Anode Dissipation (watts)	...	...	...	...	...	...	15

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

#### OPERATING CONDITIONS.

		Single.	Push-Pull
Anode Voltage	...	200	175
Anode Current (mA)	...	70	60
Grid Bias	...	25	22.5
Optimum Load (ohms)	...	2,000	2,800
Self-bias Resistance (ohms) (per valve)	...	360	375
Power Output (for 5 per cent. total harmonic) (watts)	...	2.3	1.5
			6.0

#### DIMENSIONS.

Maximum Overall Length	...	...	...	...	132 mm.
Maximum Diameter	...	...	...	...	54 mm.

#### GENERAL.

The PP.3521 is an indirectly heated triode of very low impedance for use in the output stage of A.C./D.C. mains receivers, when large power outputs are required. The valve is based in a standard 7-pin base, the connections to which are given overleaf.

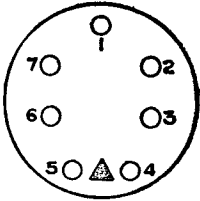
#### APPLICATION.

For the maximum power output to be obtained, the anode voltage should be as high as possible up to the permissible limit. Each valve must be individually self-biased and for this purpose a 360 ohm resistance should be inserted in each cathode lead. To prevent loss of bass, this resistance should be by-passed with a high-capacity condenser which can be of the low voltage electrolytic type. The grid to cathode resistance must not exceed 150,000 ohms per valve.

The heater is designed to operate at 0.2 amp, and the series heater resistance should be such that the filament current has this value at average line voltage.

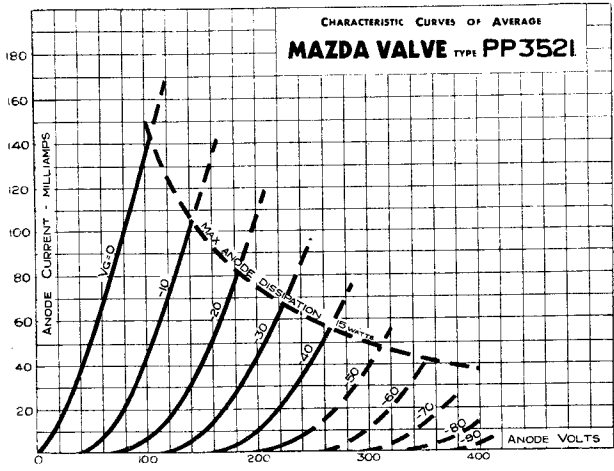


**BASING.**



- Pin No. 1. —  
 2. Control Grid.  
 3. —  
 4. Heater.  
 5. Heater.  
 6. Cathode.  
 7. Anode.

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.*