



## AC/PEN

### A.C. MAINS OUTPUT PENTODE

#### RATING.

Heater Voltage	...	...	...	...	...	...	4.0
Heater Current (Amps.)	...	...	...	...	...	...	1.0
Maximum Anode Voltage	...	...	...	...	...	...	250
Maximum Screen Voltage	...	...	...	...	...	...	250
*Mutual Conductance (mA/V)	...	...	...	...	...	...	2.5
Maximum Anode Dissipation (watts)	...	...	...	...	...	...	8.0

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

#### TYPICAL OPERATION.

Anode Voltage	...	...	...	...	...	200	250
Screen Voltage	...	...	...	...	...	200	250
Anode Current (mA)	...	...	...	...	...	24	32
Self-Bias Resistance (ohms)	...	...	...	...	...	300	250
*Optimum Load (ohms)	...	...	...	...	...	8,000	7,500
*Power Output (Watts)	...	...	...	...	...	2.0	3.3
*Input Swing (Volts RMS)	...	...	...	...	...	8.0	10.0

\*For 5% Third Harmonic, and Second Harmonic not exceeding 5%.

#### DIMENSIONS.

Maximum Overall Length	...	...	...	...	...	134 mm.
Maximum Diameter	...	...	...	...	...	58 mm.

#### GENERAL.

The AC/PEN is an output pentode designed for use in A.C. mains receivers. The valve is fitted with a 7-pin base, the connexions to which are given overleaf.

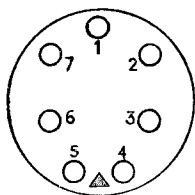
#### APPLICATION.

The valve should always be self-biased, and the bias resistance bypassed by a 50 mfd. condenser. In order to prevent excessive rise of anode load with frequency a condenser resistance filter should be connected across the anode load circuit. The condenser should have a capacity of .01 mfd. and the resistance should be about 7,500. The grid to cathode resistance should not exceed 1 megohm.

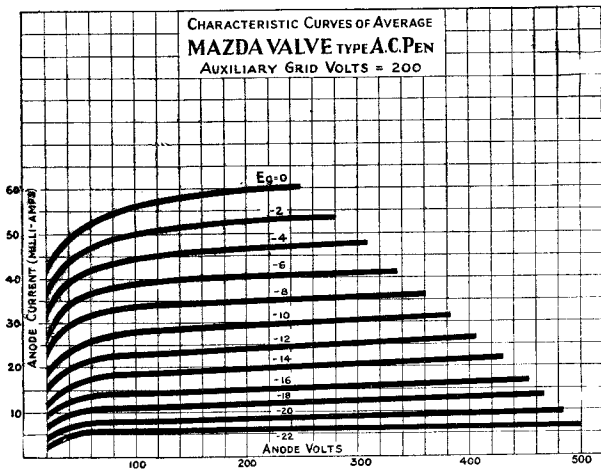
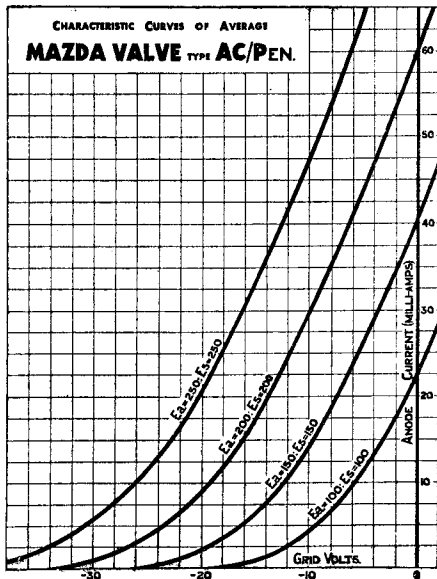
# MAZDA

## BASING.

- Pin No. 1. —  
 2. Control Grid.  
 3. Screen.  
 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, and distributed by

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

