



Q.P.25

BATTERY DOUBLE PENTODE OUTPUT VALVE

RATING.

Filament Voltage ... ..	...	...	...	...	...	...	...	...	...	2.0
Filament Current (Amps.) ... ..	...	...	...	...	...	...	...	...	...	0.2
Maximum Anode Voltage ... ..	...	...	...	...	...	...	...	...	...	120
Maximum Screen Voltage ... ..	...	...	...	...	...	...	...	...	...	120
*Mutual Conductance (mA/V) ... ..	...	...	...	...	...	...	...	...	...	3.0

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

TYPICAL OPERATION.

H.T. Battery Voltage ... ..	...	...	...	90	108	120	130
Anode Voltage ... ..	...	...	...	83.5	100	110	120
Screen Voltage ... ..	...	...	...	83.5	100	110	120
Grid Bias Voltage ... ..	...	...	...	6.1	7.7	8.65	9.75
Total Quiescent Anode Current (mA) ... ..	...	...	...	3.2	3.85	4.25	4.65
Total Quiescent Screen Current (mA) ... ..	...	...	...	0.6	0.72	0.8	0.87
Total Quiescent Current (mA) ... ..	...	...	...	3.8	4.6	5.0	5.5
Anode to Anode Load (ohms) ... ..	...	...	...	17,000	17,000	16,000	15,500
Power Output Watts ... ..	...	...	...	0.45	0.75	0.95	1.2
Input Swing per valve, R.M.S. ... ..	...	...	...	4.3	5.45	6.1	6.9

DIMENSIONS.

Maximum Overall Length ... ..	...	...	...	...	...	...	91 mm.
Maximum Diameter ... ..	...	...	...	...	...	...	32 mm.

GENERAL.

The QP 25 is a double pentode for use in the output stage of battery receivers employing Quiescent Push-pull. The valve is fitted with a Mazda Octal base, the connexions to which are given overleaf.

APPLICATION.

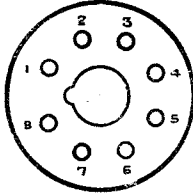
The valve is particularly suitable for use in battery portables where, even when used with H.T. battery voltages of as low as 90 volts a power output of the order of 450 mW is available.

Each pentode is accurately matched as regards its operating characteristics. The screens are operated at the full H.T. voltage, and no extra battery tappings are required. It is recommended that the bias be obtained by means of a resistance in the negative H.T. lead, and this resistance should be by-passed with a large condenser of about 50 μ F.

With self-bias operation, in order to prevent distortion and loss of power output, the total current of both anodes for a screen voltage of 110 should never be less than 3.5 milliamperes. The output transformer should be of normal Q.P.P. design, and an anode to anode load of the order of 16,000 to 18,000 will be satisfactory.

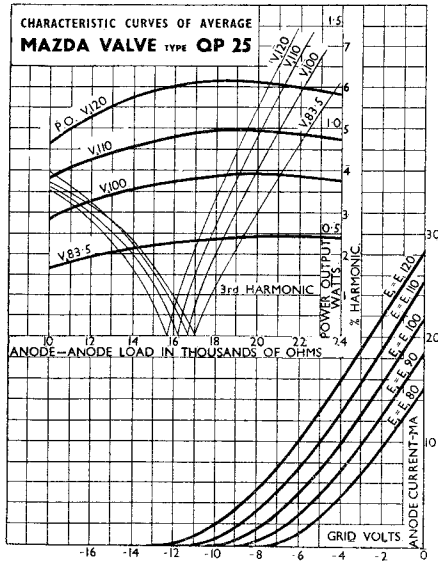


BASING.



- Pin No. 1. Filament.
- 2. —
- 3. Anode (a)
- 4. Screens.
- 5. Control Grid (a)
- 6. Control Grid (b)
- 7. Anode (b)
- 8. 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, and distributed by

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

