



Maximum Dimensions :  
 Overall length (including pins)  
 135 m/m.  
 Diameter of bulb 58 m/m.

# Osram Valves

Made in England.

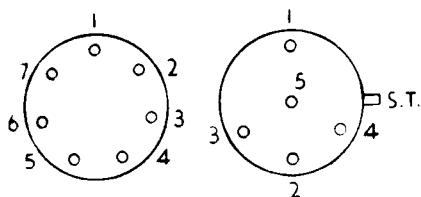
## TYPE MPT4 PENTODE POWER AMPLIFYING VALVE With Indirectly Heated Cathode (For operation from A.C. mains).

The OSRAM MPT4 is a Power Amplifying Pentode for use in the output stage of A.C. Receivers. It is capable of giving a large power output with a relatively small input signal voltage. For this reason the MPT4 should be restricted to use in sets using only one stage of Low Frequency Amplification before it.

### CHARACTERISTICS.

Heater Volts .. .. .	4.0
Heater Current .. .. .	1.0 amp. approx.
	Max.
Anode Volts .. .. .	250
Screen Grid Volts .. .. .	200
Amplification Factor .. .. .	100
Impedance .. .. .	33,000 ohms.
Mutual Conductance .. .. .	3.0 ma/volt measured at Anode Volts 100, Screen Grid Volts 100, Grid Volts 0.
Negative Grid Bias .. .. .	10 volts approx.
Automatic Bias Resistance .. .. .	270 ohms.
Anode Current average .. .. .	32 m.a.
Screen Current average .. .. .	6 m.a.
Optimum Load Resistance .. .. .	8,000 ohms.
Anode Dissipation .. .. .	8 watts max.

For prices see pages 126-129.



Views looking on underside of valve base.

Type MPT4 has a carbonised bulb.

### TYPICAL OPERATING CONDITIONS.

It is recommended that a filter circuit be employed, as shown in the diagram, in order to prevent over-emphasis of the higher audio frequencies. The screen voltage should be obtained by connecting the screen grid to the H.T. supply through a suitable resistance, and a non-inductive condenser connected from screen grid to cathode to provide a de-coupling circuit.

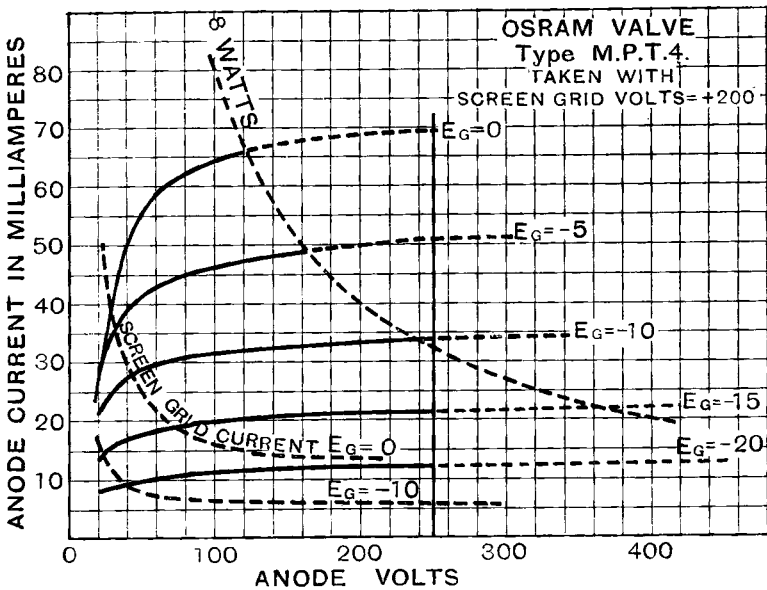
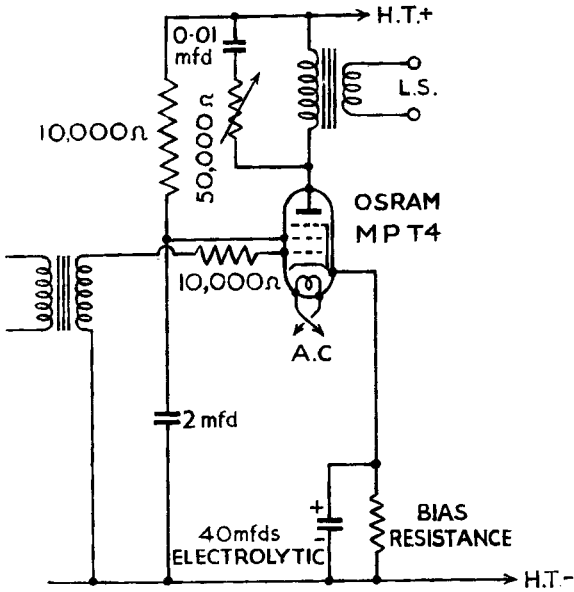
The total resistance in this grid circuit should not exceed 500,000 ohms, and full automatic grid bias is recommended.

Care should be taken that the anode circuit is never broken while the screen voltage is applied.

### ALTERNATIVE BASES.

7-PIN.	5-PIN.
1: —	1: Anode
2: Grid	2: Grid
3: Screen Grid	3: Heater
4: Heater	4: Heater
5: Heater	5: Cathode
6: Cathode	Side Terminal: Screen Grid.
7: Anode	

# TYPE MPT4



CHARACTERISTIC CURVES OF AVERAGE VALVE.