Osram Valves

Made in England

Maximum Dimensions :
Overall length (including pins) 120 m m.
Diameter of bulb 41.5 m.m.

TYPE W42

VARIABLE MU SCREEN PENTODE

With Indirectly Heated Cathode

(For operation from A.C. Mains).

The OSRAM W42 is a Variable Mu Screen Pentode suitable for use in a high frequency or intermediate frequency amplifier. The heater has a 2.4 watt rating which makes for economical running. The variable Mu characteristics enable control of volume to be effected by variation of grid bias voltage, and the operating grid base is adequate to allow for full A.V.C. to be applied without modulation distortion on normal signal inputs.

In this valve the control grid is taken to a top cap connection which reduces the input capacity and is of advantage in the layout of certain receiver designs.

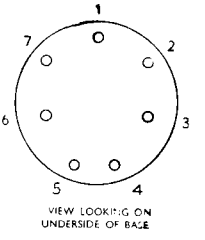
CHARACTERISTICS.

Heater Volts				4.0
Heater Current				0.6 amp. approx.
		Recommended Operating Conditions.		
	Max.			
Anode Volts	250	250		
Screen Volts	125	100		
Control Grid Volts	—	0	-3	-40
Anode Current average	—	—	7.6	—
Screen Current average	—	—	1.9	—
Fixed Bias Resistance	—	—	300 ohms	—
Mutual Conductance	—	1.75 mA/v. (at Eg = 0)	1.5 mA/v.	0.0045 mA/v.

Interelectrode Capacities :—

Grid to Anode (others earthed)	0.005 m.mfd. approx.		
Anode to other Electrodes	10.4	,,	,,
Grid to other Electrodes	5.1	,,	,,

For prices see pages 126-129.



BASE, 7-pin.

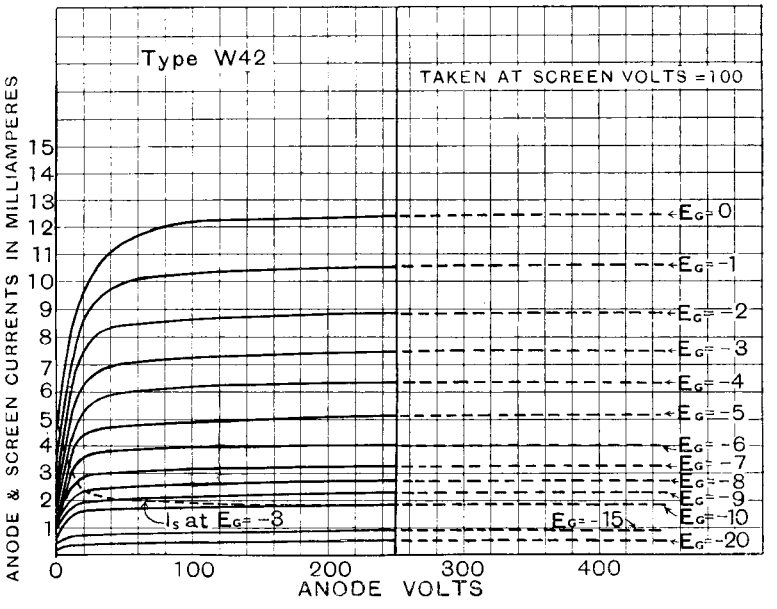
Pin 1 : —
2 : Anode
3 : Suppressor Grid
4 : Heater
5 : Heater
6 : Cathode
7 : Screen Grid
Top Cap : Grid

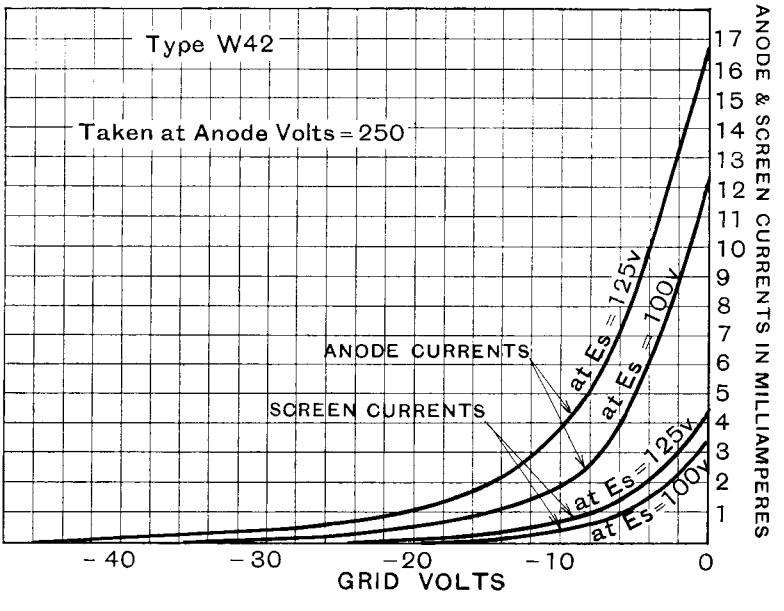
Type W42 has a carbonised bulb and is supplied unmetallised only.

TYPICAL OPERATING CONDITIONS.

It is recommended that a potentiometer network should be employed in order to maintain the screen voltage sensibly constant. The total effective resistance between the grid and cathode must not exceed 2 megohms. The valve is not metallised, but in cases where screening is essential a can with the following dimensions may be used: The suggested length of the can is 78 m/m, extending from the bottom of the bakelite base to the centre of the earthed screen inside the dome of the bulb. The diameter should be about 42.5 m/m These dimensions should be closely followed in order to take full advantage of the low value of anode to grid capacity.

TYPE W42





CHARACTERISTIC CURVES OF AVERAGE VALVE.