Osram Valves

Made in England.

Maximum Dimensions :
Overall length (including pins)
140 m/m.
Diameter of bulb
45 m/m.

TYPE W31

UNIVERSAL RANGE VARIABLE MU SCREEN PENTODE

(With Indirectly Heated Cathode).

The OSRAM W31 is a Variable Mu Screen Pentode suitable for use in the High Frequency or Intermediate Frequency Amplifying portions of a receiver. Its filament rating of 0.3 amp. makes it suitable for operation in D.C. and Universal Receivers employing valves having filaments of a similar current rating in series. An important feature of the W31 is the low value of anode-grid interelectrode capacity.

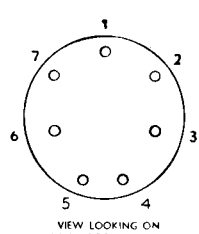
CHARACTERISTICS.

		Max.	Recommended Operating Condition.	
Heater Current		0.3 amp.		
Heater Volts		13.0		
Anode Volts		250	180–200	
Screen Volts		100	100	
Control Grid Volts			–2	–20
Anode Current average			8.0 ma.	—
Screen Current average			5.0 ma.	—
Fixed Bias Resistance			150 ohms.	—
Mutual Conductance			2.7 ma/volt	0.01 ma/volt.

Interelectrode Capacities :—

Grid-Anode (others earthed)	0.0026 micro-microfarad approx.
Anode—other electrodes	8.7 ,, ,, ,,
Grid—other electrodes	14.0 ,, ,, ,,

For prices see pages 126-129.



VIEW LOOKING ON UNDERSIDE OF BASE.

BASE, 7-PIN.

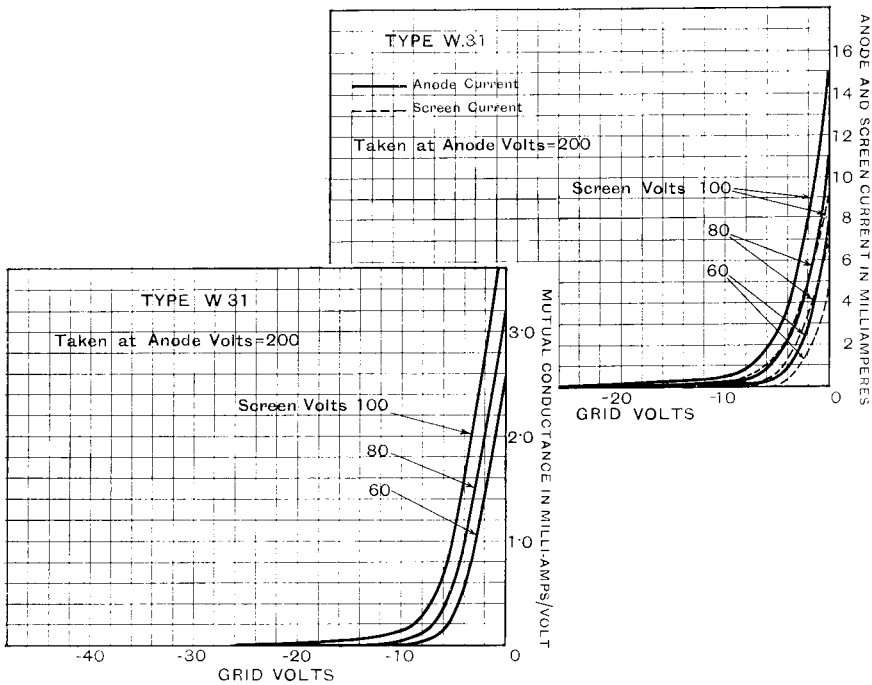
1 : Metallising.
2 : Grid.
3 : Suppressor Grid.
4 : Heater.
5 : Heater.
6 : Cathode.
7 : Screen Grid.
Top Cap : Anode.

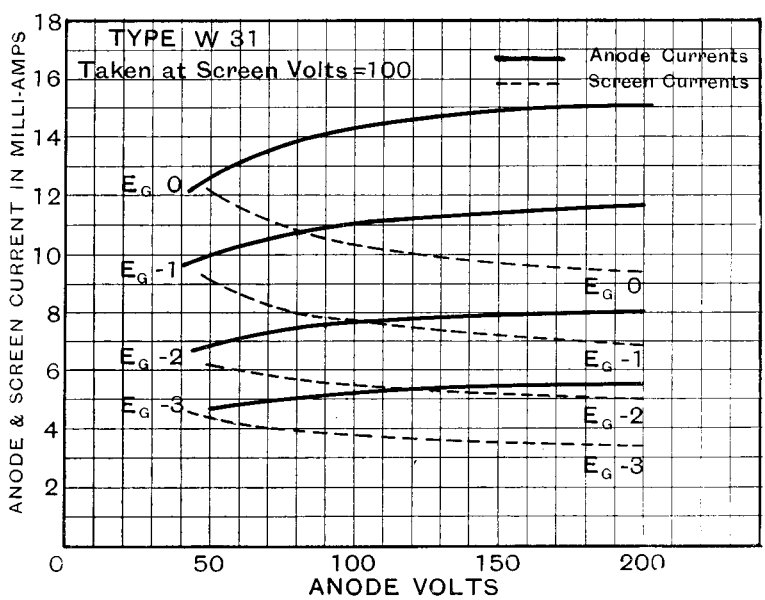
Supplied in metallised bulb only.

TYPICAL OPERATING CONDITIONS.

It is recommended that a potentiometer network should be employed in order to maintain the screen voltage sensibly constant. This may conveniently be used also to supply the necessary screen voltage for a frequency changer such as type X31. Should a greater voltage output be required, as for example when used in the second stage of an I.F. amplifier, the screen voltage may be obtained by employing a dropping resistance in place of a potentiometer. This results in an increase in screen voltage and output, as the signal voltage and negative grid bias are increased.

TYPE W31





CHARACTERISTIC CURVES OF AVERAGE VALVE.