

# Osram Valves

Made in England



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

## TYPE VMP4G VARIABLE MU SCREEN PENTODE

With Indirectly Heated Cathode

(For operation from A.C. Mains).

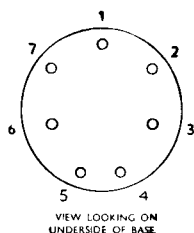
The OSRAM VMP4G is a Variable Mu Screen Pentode suitable for use in the High Frequency or Intermediate Frequency Amplifying portions of a receiver.

An important feature of the VMP4G is the low value of anode-grid interelectrode capacity. This, in conjunction with the pentode characteristic affords a means of obtaining considerable voltage magnification in the valve and its associated tuned circuit, while at the same time maintaining stability of operation and minimum feed-back.

### CHARACTERISTICS.

Heater Volts	..	..	..	..	..	..	..	4.0
Heater Current	..	..	..	..	..	..	..	1.0 amp. approx.
								Recommended Operating Condition.
Anode Volts	..	..	..	..	..	..	250	250
Screen Volts	..	..	..	..	..	..	100	100
Control Grid Volts	..	..	..	..	..	..	-2	-20
Anode Current average	..	..	..	..	..	..	8.0 m.a.	—
Screen Current average	..	..	..	..	..	..	5.0 m.a.	—
Fixed Bias Resistance	..	..	..	..	..	..	150 ohms	..
Mutual Conductance	..	..	..	..	..	..	2.7 ma/volt	0.01 ma/volt
<b>Interelectrode Capacities :-</b>								
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.



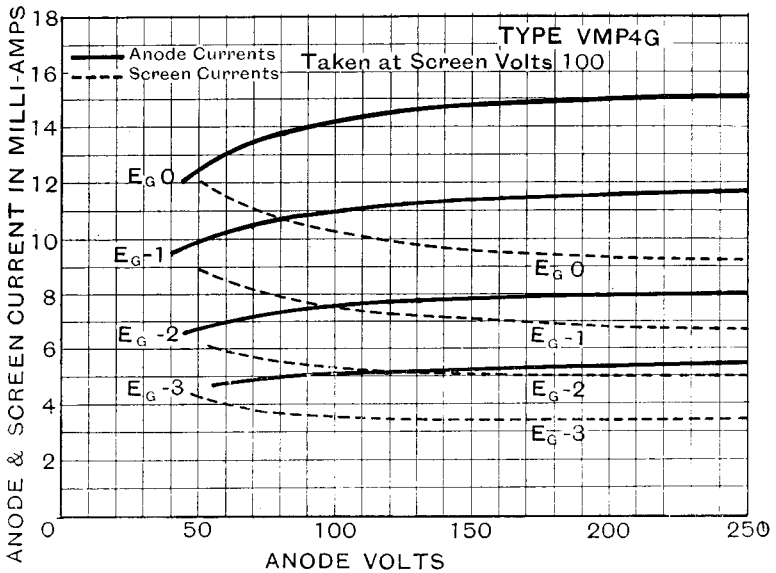
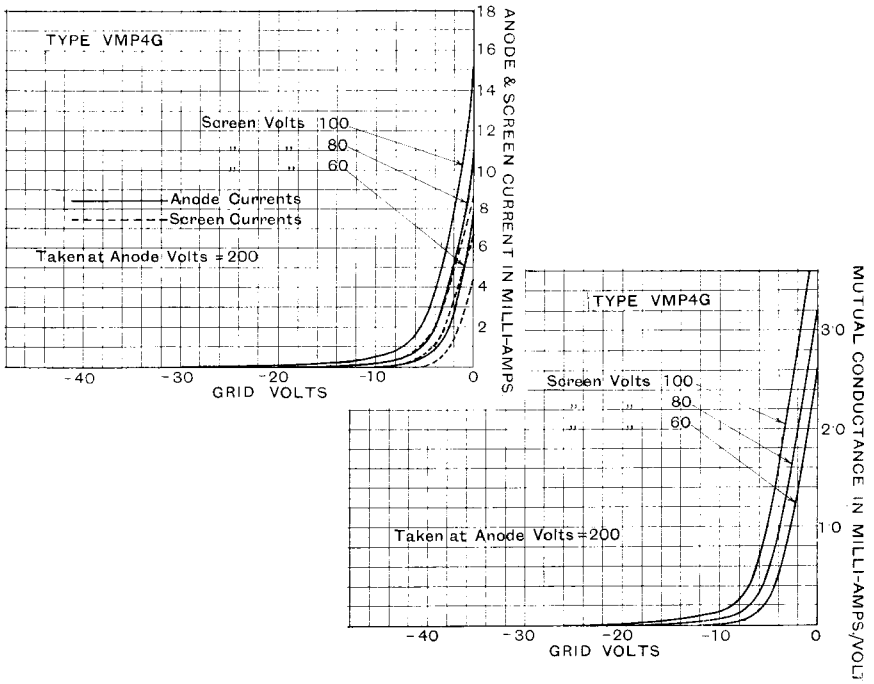
### BASE, 7-PIN.

- 1: Metallising.
  - 2: Grid.
  - 3: Suppressor Grid.
  - 4: Heater.
  - 5: Heater.
  - 6: Cathode.
  - 7: Screen Grid.
- Top Cap: Anode.
- Supplied in metallised bulb only.

### RECOMMENDED OPERATING CONDITIONS.

It is recommended that a potentiometer network should be employed in order to maintain the screen voltage at a constant potential with variation to grid bias. In some cases, however, such as in the second stage of an I.F. amplifier, a greater voltage output can be obtained by feeding the screen grid through a dropping resistance. This allows the screen voltage to rise and thus increases the grid base and available output with increasing grid bias or signal strength. When used as a controlled valve in A.V.C. circuits it is recommended that any grid resistance employed for decoupling purposes should have a value not exceeding 0.5 megohm.

# TYPE VMP4G



CHARACTERISTIC CURVES OF AVERAGE VALVE.