Maximum Dimensions :
Overall length (including pins)
152 m/m.

Diameter of bulb
57 m/m.

Osram Valves

Made in England

TYPE DN41

DOUBLE DIODE-OUTPUT PENTODE

With Indirectly Heated Cathode.
(For operation from A.C. mains).

The OSRAM DN41 is a power amplifier pentode and a double diode system mounted in the same bulb, with cathodes connected to a common cathode pin in the valve base. A metal plate connected to the pentode cathode is interposed between the two sections to act as an electrostatic screen.

The pentode section develops a large power output, and owing to the high mutual conductance figure, is very sensitive. As a result of this high sensitivity it can be fed directly from the diode section.

CHARACTERISTICS.

Heater Volts		4.0
Heater Current		2.3 amps. approx.
Pentode Characteristics :—	Max.	
Anode Volts	250	250
Screen Volts	250	200
Grid Volts		–3.5
Anode Current average		32 ma.
Screen Current average		8 ma.
Anode Dissipation		8 watts.
Mutual Conductance		10.0 ma/volt.
Optimum Load Resistance		7,800 ohms.
Automatic Bias Resistance		90 ohms.

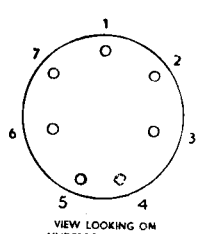
Diode Characteristics :—With 0.25 megohm diode load resistance.

H.F. Input Volts Modulated 30%	L.F. Output Peak Volts.
1	0.2
2	0.42
4	0.98
8	2.0
16	4.6

Interelectrode Capacities :—

Each diode anode—triode grid	0.05	micro-microfarad approx.
Both diodes—Earth	15.0	,, ,, ,,
Grid—Anode	0.75	,, ,, ,,
Anode—other electrodes	15.7	,, ,, ,,
Grid—other electrodes	18.5	,, ,, ,,

For prices see pages 126-129.



BASE, 7-PIN.
1 : Diode
2 : Anode
3 : Diode
4 : Heater
5 : Heater
6 : Cathode
7 : Screen Grid
Top Cap : Grid

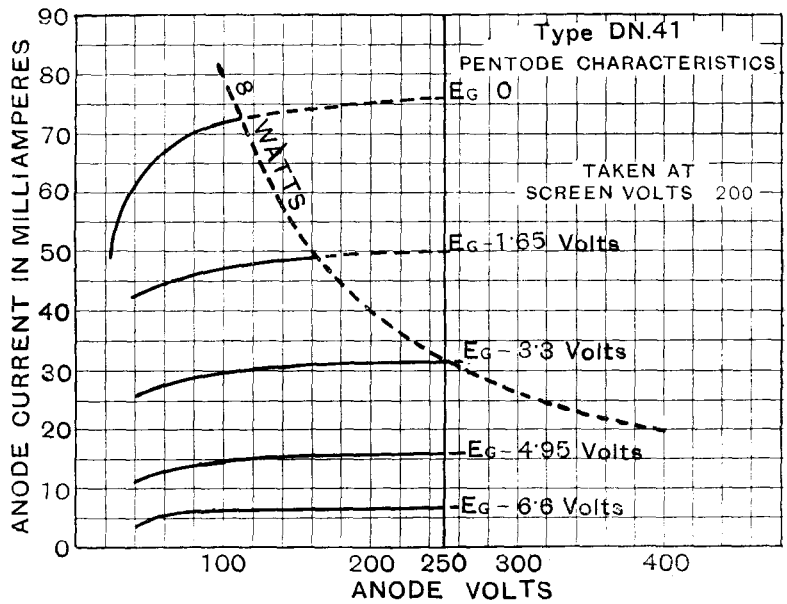
Type DN41 has a carbonised bulb.

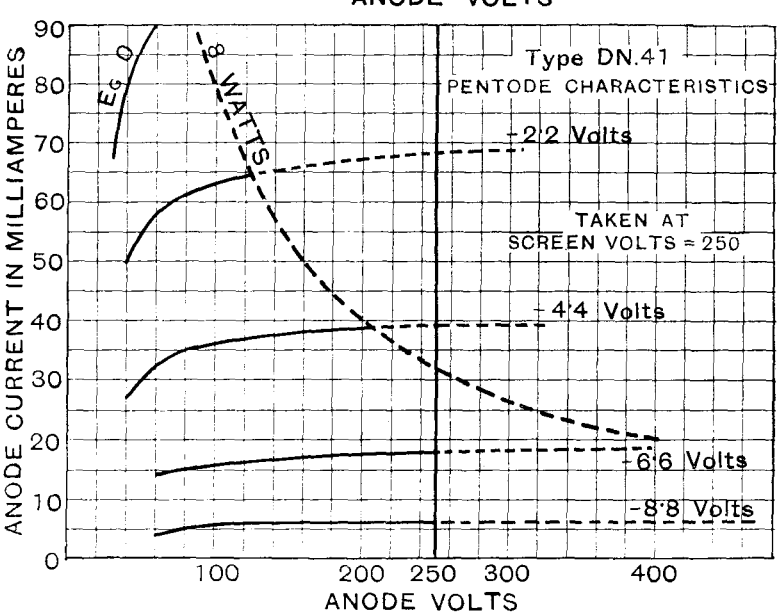
TYPE DN41

TYPICAL OPERATING CONDITIONS.

To make full use of the DN41 valve one diode will normally be operated as a detector feeding into the pentode grid while the other diode produces delayed A.V.C.

In operating the pentode section special precautions are necessary in view of its high sensitivity. The wiring and arrangement of the circuit should be such as to keep the capacity between input and output circuits as low as possible. A grid stopper resistance of 100,000 ohms or anode stopper of 100 ohms should be employed. It is recommended that in no case should the total resistance in the grid circuit exceed 500,000 ohms. In every case full automatic bias only should be used.





CHARACTERISTIC CURVES OF AVERAGE VALVE.