

All dimensions are in m/m and are max. except where otherwise stated.

## Osram Valves

Made in England.

# TYPE QP21 QUIESCENT PUSH-PULL DOUBLE

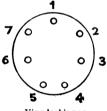
PENTODE VALVE
(For use with a 2-volt accumulator).

Type QP21 comprises two electrode systems in the one envelope and is designed for the output stage of 2-volt battery receivers in which this stage directly follows the Detector. In the method of use recommended, the standing anode current is restricted to a very small value and the actual high tension current is proportional to the strength of signal applied to the grids. By this means a considerable increase in power output becomes possible and at the same time an economy in average H.T. current is obtained.

#### CHARACTERISTICS.

Filament Voltage	•••	• • • •	•••	•••	•••	•••	•••	•••		2.0 max.
Filament Current	(total)	•••			•••	• • •				0.4 amp.
Anode Voltage	•••		•••	•••			• • •	•••		150 max.
Screen Voltage			•••	•••		•••		•••	•••	150 max.
Grid Bias Anode Current Load Resistance	nt } See table opposite									
Mutual Conductance of each half (measured at Ea = 150, Es = 150, Eg = -4.5)										2.3 mA/volt

For prices see pages 149-151



View looking on underside of base.

#### BASE, 7-PIN.

- Pin 1: Grid 1 2: Grid 2
  - 2: Grid 2 3: Anode 2
  - 4: Filament and suppressor grid.
  - 5: Filament
  - 6: Common Screen Grid
  - 7: Anode 1

### OPERATING CONDITIONS.

To ensure absence of distortion it is important that an output transformer of good design with low leakage inductance and self-capacity should be employed.

Type QP21 is supplied in three groups each with a code letter, which is marked on the top of the bulb, indicating the recommended screen voltage to use with each class for a fixed grid bias or, alternatively, the recommended grid bias to use for a fixed screen voltage. It is not recommended that H.T. voltages lower than 120 should be attempted. Type QP21 should not be operated under Positive Grid Current Class "B" conditions.

Operating data covering the three codes are given on the following page.

Automatic bias may be employed if the maximum undistorted output is not required.