

**6P17****OUTPUT PENTODE**

Indirectly heated—for parallel operation

**TENTATIVE****GENERAL**

The 6P17 is a miniature based Power Output Pentode having a maximum anode dissipation of 4.75 watts and its Suppressor Grid internally tied to the cathode.

It has a maximum operating frequency at full ratings of 100 Mc/s and is intended for use in equipment powered from AC mains.

**RATING**

|                                             |         |                   |       |
|---------------------------------------------|---------|-------------------|-------|
| Heater Voltage                              | (volts) | $V_h$             | 6.3   |
| Heater Current                              | (amps)  | $I_h$             | 0.2   |
| Maximum Anode Voltage                       | (volts) | $V_a$ (max)       | 300   |
| Maximum Screen Voltage                      | (volts) | $V_{g2}$ (max)    | 275   |
| Maximum Anode Dissipation                   | (watts) | $P_a$ (max)       | 4.75* |
| Maximum Screen Dissipation                  | (watts) | $P_{g2}$ (max)    | 0.8   |
| Maximum Heater/Cathode Voltage              | (volts) | $V_{h-k}$ (max)   | 150†  |
| Maximum Grid 1/Grid 2 Voltage (DC)          | (volts) | $V_{g1-g2}$ (max) | 300   |
| Maximum Grid 1/Cathode Voltage (DC)         | (volts) | $V_{g1-k}$ (max)  | 100   |
| Maximum Mean Grid 1 Current                 | (mA)    | $I_{g1}$ (max)    | 3.3   |
| Mutual Conductance                          | (mA/V)  | $g_m$             | 2.6‡  |
| Inner Amplification Factor                  |         | $\mu_{g1-g2}$     | 12‡   |
| Maximum Operation Frequency at full ratings | (Mc/s)  | $f$ (max)         | 100   |

\* Valve unscreened with adequate ventilation.

† Cathode positive or negative to heater.

‡ Measured at  $V_a = V_{g2} = 250$  V ;  $I_a = 16$  mA ;  $V_{g1} = -13.5$  V.



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## INTER-ELECTRODE CAPACITANCES (pF)

|              |            |      |
|--------------|------------|------|
| Grid 1/Earth | $c_{in}$   | 4.25 |
| Anode/Earth  | $c_{out}$  | 6.5  |
| Anode/Grid 1 | $c_{a-g1}$ | <0.3 |

Measured cold with an external screen but with holder capacity balanced out.

"Earth" denotes the remaining earthy potential electrodes, heater and shields connected to cathode.

## DIMENSIONS

|                           |       |               |
|---------------------------|-------|---------------|
| Maximum Overall Length    | (mm)  | 54.5          |
| Maximum Diameter          | (mm)  | 19.0          |
| Maximum Seated Height     | (mm)  | 47.5          |
| Approximate Nett Weight   | (ozs) | $\frac{1}{4}$ |
| Approximate Packed Weight | (ozs) | $\frac{1}{2}$ |

MOUNTING POSITION—Unrestricted.

## TYPICAL OPERATION—Class A Power Output.

|                                                |               |           |     |
|------------------------------------------------|---------------|-----------|-----|
| Anode Voltage                                  | (volts)       | $V_a$     | 250 |
| Screen Voltage                                 | (volts)       | $V_{g2}$  | 250 |
| Cathode Bias Resistance                        | (ohms)        | $R_k$     | 740 |
| Anode Current                                  | (mA)          | $I_a$     | 16  |
| Screen Current                                 | (mA)          | $I_{g2}$  | 2.4 |
| Power Output for 10% Total Harmonic Distortion | (watts)       | $P_{out}$ | 1.4 |
| Anode Load Impedance                           | (k $\Omega$ ) | $R_a$     | 16  |
| Input Voltage Swing (r.m.s.)                   | (volts)       | $V_{in}$  | 5.3 |

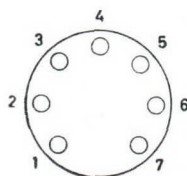
BULB—Clear

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BASE—B7G



Viewed from free end of pins

**VALVE HOLDER**

Ediswan Clix VH337/7, VH437/7 and VH17/7 series.

**CONNECTIONS**

|       |                 |      |
|-------|-----------------|------|
| Pin 1 | Grid 1          | g1   |
| Pin 2 | Cathode, Grid 3 | k,g3 |
| Pin 3 | Heater          | h    |
| Pin 4 | Heater          | h    |
| Pin 5 | Anode           | a    |
| Pin 6 | No Connection   | N.C. |
| Pin 7 | Grid 2          | g2   |



8917

OUTPUT RENTAGE

rentage based on parallel operation

TENTATIVE

8917-875



rentage based on parallel operation

RENT RENTAGE

rentage based on parallel operation

RENT RENTAGE

|       |       |
|-------|-------|
| 10-1  | 10-1  |
| 10-2  | 10-2  |
| 10-3  | 10-3  |
| 10-4  | 10-4  |
| 10-5  | 10-5  |
| 10-6  | 10-6  |
| 10-7  | 10-7  |
| 10-8  | 10-8  |
| 10-9  | 10-9  |
| 10-10 | 10-10 |