

## 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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**TENTATIVE****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

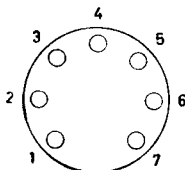
**BULB**—Clear

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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