

EDISWAN

AC/SP3/RH

LOW NOISE H.F. PENTODE

Indirectly heated—for parallel operation.

GENERAL

The AC/SP3/RH is an indirectly heated screened high slope H.F. Pentode. A special construction has been employed to minimise hum, noise and microphony within the valve which is intended for use in Audio or Video Amplifiers.

RATING

Heater Voltage	(volts)	V_h	4.0
Heater Current	(amps)	I_h	1.0
Maximum Anode Voltage	(volts)	$V_a(\text{max})$	250
Maximum Screen Voltage	(volts)	$V_{g2}(\text{max})$	250
Mutual Conductance	(mA/V)	g_m	7.5*

* Measured at $V_a = 250\text{v}$. $V_{g2} = 100\text{v}$. $V_{g1} = -1.5\text{v}$.

INTER-ELECTRODE CAPACITANCES (pF)

Grid 1/Anode	c_{g1-a}	0.005
Grid 1/All	c_{g1-all}	14.5
Anode/All	c_{a-all}	11.0

DIMENSIONS

Maximum Overall Length	(mm)	129
Maximum Diameter	(mm)	39
Maximum Seated Height	(mm)	113
Approximate Nett Weight	(ozs)	2
Approximate Packed Weight	(ozs)	3

MOUNTING POSITION Unrestricted.

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TYPICAL OPERATION—H.F. Amplifier

Anode Voltage	(volts) V_a	250	250	250	250
Screen Voltage	(volts) V_{g2}	80	100	160	200
Control Grid Bias Voltage	(volts) V_{g1}	-1.25	-1.7	-2.75	-3.5
Anode Current	(mA) I_a	7.8	7.9	10.5	12.3
Screen Current	(mA) I_{g2}	2.45	2.5	3.3	3.85
Mutual Conductance	(mA/V) g_m	7.0	7.0	7.45	7.6
Anode Impedance	(Megohms) r_a	0.55	0.55	0.4	0.34
Input Capacity (hot)	(pF) c_{in}	20.0	19.9	19.7	19.5

TYPICAL OPERATION—Resistance Capacity Coupled Amplifier.

H.T. Supply Voltage	(volts)	$V_a(b)$	250
Anode Load Resistance	(kilohms)	R_a	150
Screen Resistance	(kilohms)	R_{g2}	500
Control Grid Resistance	(kilohms)	R_{g1}	150
Cathode Bias Resistance	(ohms)	R_k	1000

NOTES—

All valves are tested for Noise Hum and Microphony, and a valve may be graded "B" on the results of any one of these tests. Grade "A" valves are approximately 6 db better for noise, 15 db better for hum, and 18 db better for microphony than valves graded "B" for any of these features.

When used under the given typical operating conditions in a high quality audio amplifier with a centre tapped heater supply a grade "A" valve will have a hum voltage of approximately 5 μ V, and a noise voltage of not more than 8 μ V present at the grid.

When used in R.F. and I.F. Amplifiers the screen voltage should be 80 to 100 volts with as low a value of grid resistor as possible.

INDUSTRIAL

June 1958

VALVE & CRT DIVISION

Issue 1/7

SIEMENS EDISON SWAN LIMITED

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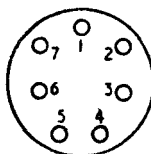
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When used in Video Frequency Output Stages fed from a diode with zero bias, the screen voltage should not exceed 140 volts. Under these conditions the quiescent anode will be approximately 30 mA. For screen voltages between 160 and 200 volts the anode current should not be allowed to exceed 14 mA. The grid resistor should not exceed a few thousand ohms.

BULB Metallised

BASE British 7 Pin (B.7)



Viewed from free end of pins.

CAP CT2.

VALVEHOLDER Ediswan Clix VH62/7

CONNECTIONS

Pin 1	Metallising	M
Pin 2	Anode	a
Pin 3	Suppressor Grid	g3
Pin 4	Heater	h
Pin 5	Heater	h
Pin 6	Cathode	k
Pin 7	Screen	g2
Top Cap	Control Grid	g1