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#### VALVE ELECTRONIC

## ADMIRALTY SURFACE WEAPONS ESTABLISHMENT

Specification AD/CV5080 Issue 1 reprint "A" dated 29.3.63 To be read in conjunction with K1001 and BS448. Letter symbols as in BS1409	SECURITY			
	Specification Unclassified	<u>Valve</u> Unclassified		

### Indicates a change

microphony	OF VALVE: HF Pentode with limited microphony characteristics		MARKING See K1001/4				
CATHODE: Indirectly heate ENVELOPE: Glass, metallise PROTOTYPE: EF.37A			See KIDDI/AII SEE M Dimension (1)	BASE BS448/B8- applies	·o		
RATINGS All limiting values are absolute			CONNECTIONS Pin Electrodes				
Heater Voltage (V) Heater Current (A) Max. Anode Voltage (V) Max. Soreen Voltage (W) Max. Anode Dissipation (W) Max. Soreen Dissipation (W) Mutual Conductance (mA/V) Anode Impedance (M2)  CAPACITANCES (pF)  Ca-g1 (max.) Ca-e (max.) Cg1-e (max.)	6.3 0.2 300 125 1.0 0.3 1.8	0.2 300 125 1.0 0.3 1.8 2.0 A	1 M 2 h 3 a 4 g2 5 g3 6 NC 7 h 8 k TC g1  TOP CAP See BS.448/CT1				
			DIMENSIONS See K1001/A.1/D.1  Dimensions (mm) Min. Max.				
			A (Overall leng B (Diameter) L (Seated height	th) 95	100 32 30		

A. Measured with  $V_a = 250V$ ;  $V_{g2} = 100V$ ;  $V_{g1} = -2.0V$ 

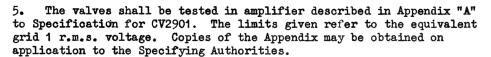
## TESTS

To be performed in addition to those applicable in K1001. Tests are to be performed in the specified order unless otherwise agreed with the Inspecting Authority.

	Test	Conditions - unless	othe	rwise	stated			
		V <sub>a</sub> V <sub>g1</sub> V <sub>g2</sub> (V) (V) (V) 250 -1.4 100	1	7 g3 (♥) 0	<b>V</b> <sub>a</sub> ( <b>V</b> ) 6.3			
V4004	Ma a ±	Most Conditions	AQL	Insp.	Sembol	Lim	its	Maita
1001 Ref	Test	Test Conditions	%	Level	Symbol	Min.	Max.	Units
	Group "A" Omitted							
	Group "B" Heater Current Anode Current (1) Anode Current (2) Soreen Current Control-grid Cut-off volts	V <sub>g1</sub> = -3.5V Vg1 = 0V Vg1 = -2.0V Ia = 50/uA (Note 2)		100% 100% 100% 100%	Ih Ia Ia Ig2	180 0•5 5•7 0•3		mA mA mA
	Group "C"  Reverse Grid Current Emission	V <sub>g1</sub> = -2.0 (Note 1) V <sub>a</sub> = V <sub>g1</sub> = V <sub>g2</sub> = V <sub>g3</sub> = 30V a.c.		100%	-I <sub>g1</sub>	<b>-</b> 32	0.7	/uA mA
	Microphony	$V_{g2} = 75V$ $V_a = 100V$ (Notes 3, 5, 6, 7)	2,5	I	Va Ac	-	300	<i>™</i> <sup>V</sup>
	Hum (Grid)	$V_{g2} = 75V$ $V_a = 100V$ (Notes 4, 5, 7)	2.5	I	Hum	_	12.5	/uA
	Hum (Cathode)	V <sub>g2</sub> = 75V V <sub>a</sub> = 100V (Notes, 4, 5, 7)	2.5	I	Hum	_	75.0	
	Hiss	V <sub>g2</sub> = 75V V <sub>a</sub> = 100V (Notes 5, 6, 7)	2,5	I	Hiss	-	12.5	
	Group "D"							
	Capacitances	Measured on a  1 Mc/s bridge with valve mounted in a fully screened socket		6 per week and T.A.	Ca-g1 Ca-e Cg1-e	- - -	0.01 8.5 5.5	pF pF pF

#### NOTES

- 1. Carried out with 0.1 Megohm in the control grid circuit.
- 2. Carried out with 1 Megohm in the anode circuit.
- 3. Valves to be lightly tapped with a small rubber headed hammer, the highest reading obtained being the recorded value. The number of valves tested to be in accordance with Inspection Level I and AQL = 2.5%.
- 4. The valve shall be tested using a low-loss socket. The hum tests shall be conducted by alternately earthing pins 2 and 7.



- 6. Microphony and hiss tests may be conducted with d.c. heating of the cathode.
- 7. The microphony, hum and hiss tests are to be carried out with  $V_a = 100V$ ;  $V_{g2} = 75V$  and  $R_a = 100k\Omega$ ;  $R_{g1} = 470k\Omega$ :  $R_{g2} = 680k\Omega$ ;  $R_k = 1.2k\Omega$ .

# ELECTRONIC VALVE SPECIFICATIONS

# SPECIFICATION AD/CV 5080 ISSUE 1. (REPRINT. 'A'), DATED 29.3.63

## AMENDMENT No. 1.

# Page 2 Group C. Microphony Test.

In the column headed 'Units' delete ' $\mu A$  ' and substitute ' $\mu V$  '

T.V.C. for A.S.W.E.

January, 1964.

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