

VALVE ELECTRONIC **CV1681**GENERAL POST OFFICE: E-IN-C (S)

(POVT 113)

Specification: G.P.O./CV1681/Issue 1 Dated: 18.11.46 To be read in conjunction with K 1001	<u>SECURITY</u>	
	<u>Specification</u> Restricted	<u>Valve</u> Restricted

—————> indicates a change

<u>TYPE OF VALVE:</u> H.F. Pentode <u>CATHODE:</u> Indirectly heated <u>ENVELOPE:</u> Metallised glass <u>PROTOTYPE</u> TSP4		<u>MARKING</u> See K1001/4			
		<u>BASE</u> British 7-pin (B7)			
<u>RATING</u>		<u>Note</u>	<u>CONNEXIONS</u>		
			<u>Pin</u>	<u>Electrode</u>	
Heater voltage (V)	4.0		1	Metallising	
Nominal heater current (A)	1.4		2	Anode	
Max. anode voltage (V)	250		3	G3	
Max. screen voltage (V)	250		4	Heater	
Max. anode dissipation (W)	1.0		5	Heater	
Mutual conductance (mA/V)	4.73	A	6	Cathode	
Amplification factor	6730	A	7	G2	
Anode impedance (ohms)	750,000	A	T.C.	G1	
			<u>TOP CAP</u>		
			See K1001/A1/D1		
<u>CAPACITANCES (pF)</u>			<u>DIMENSIONS</u>		
Cag (nominal)	0.009		See K1001/A1/D1		
Cae (nominal)	8.3				
Cge (nominal)	9.0				
			<u>Dimension</u>	<u>Min.</u>	<u>Max.</u>
			A (mm)	-	137
			B (mm)	-	47

This valve type is obsolete and this specification is for record purposes only

NOTE

- A. Measured with $V_a = 200$,
 $V_{g2} = 170$, and $V_{g1} = -1$

To be performed in addition to those applicable in K1001

	TEST CONDITIONS					TEST	LIMITS		No. Tested	Note	
							Min.	Max.			
(a)	See K1001/AIII					<u>CAPACITANCES (pF)</u>					
	Links to H.P.	Links to L.P.	Links to E								
	2	TC1	1,3,4,5,6, 7,8,9,10, TC2				(i) Cag	0.003	0.015	6 per week	1
	2	1,3,4,5, 6,7,	8,9,10, TC1,TC2				(ii) Cae	7.5	9.1	6 per week	1
	T.C.1	1,3,4,5, 6,7,	2,8,9,10 TC2			(iii) Cge	8.1	9.9	6 per week	1	
(b)	Test Voltage 200 Volts D.C.					<u>INSULATION (Megohms)</u>					
						(i) G1 to all other electrodes	500		1%		
						(ii) G2 to all other electrodes	200		1%	1	
						(iii) Anode to all other electrodes	200		1%		
	Vh	Va	Vg1	Vg2	Vg3						
(c)	4.0	-	-	-	-	Ih (A)	1.3	1.5	100%	1	
(d)	4.0	200	-2	170	-	Ia (mA)	4.1	8.9	100%	1	
(e)	4.0	200	-12	170	-	Ia (mA)	-	0.1	100%	1	
(f)	4.0	200	-1	170	-	gm (mA/V)	4.0	-	100%	1	
(g)	4.0	200	-2	170	-	Reverse Ig (μA)	-	1.5	100%	1	
(h)	4.0	200	-20	170	-	Reverse Ig (μA)	-	0.3	100%	1	
<u>NOTE</u>											
1. Before commencing the tests, the valve shall be pre-heated for 10 minutes, the heater voltage being adjusted to 4 volts with all other electrodes disconnected											