

VALVE ELECTRONIC **CV1682**GENERAL POST OFFICE: E-IN-C (S)

(POVT 114)

Specification: G.P.O./CV1682/Issue 1	<u>SECURITY</u>	
Dated: 18.11.46	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K 1001	Restricted	Restricted

—→ indicates a change

<u>TYPE OF VALVE:</u> Pentode <u>CATHODE:</u> Indirectly heated <u>ENVELOPE:</u> Unmetallised glass <u>PROTOTYPE</u> PENA4 (mod)				<u>MARKING</u> See K1001/4		
				<u>BASE</u> British 7-pin (B7)		
<u>RATING</u>				<u>CONNEXIONS</u>		
				<u>Note</u>	<u>Pin</u>	<u>Electrode</u>
Heater voltage	(V)	4.0			1	No connection
Nominal heater current	(A)	2.0			2	No connection
Max. anode voltage	(V)	250			3	G2
Max. screen voltage	(V)	250			4	Heater
Max. anode dissipation	(W)	9.0			5	Heater
Mutual conductance	(mA/V)	9.5	A		6	Cathode
Anode impedance	(ohms)	50,000	A		7	Anode
					TC	G1
				<u>TOP CAP</u> See K1001/A1/D5.1		
<u>CAPACITANCES (pF)</u>				<u>DIMENSIONS</u> See K1001/A1/D1		
Cag	(max)	1.0			<u>Dimension</u>	<u>Min.</u>
Cac	(nominal)	7.25				<u>Max.</u>
Cge	(nominal)	12.8			A (mm)	-
					B (mm)	-
						150
						51

NOTEA. Measured with $V_a = V_{g2} = 250$. and $I_a = 40$ mA.

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								
	7	TC1	1,2,3,4,5,6,8,9,10,TC2			(i) Cag	-	1.0	6 per week		
	7	3,4,5,6	1,2,8,9,10,TC1,TC2			(ii) Cae	6.53	7.97	6 per week		
	TC1	3,4,5,6	1,2,7,8,9,10,TC2			(iii) Cge	11.62	14.0	6 per week		
(b)	Test Voltage 250 Volts D.C.						<u>INSULATION (megohms)</u>				
							(i) Between any two electrodes	150	-	1%	
							(ii) Between any electrode and metallic shell of the base	150	-	1%	
	Vh	Va	Vg1	Vg2	Vg3	Ia (mA)					
(c)	4.0	-	-	-	-	-	Ih (A)	1.9	2.2		
(d)	4.0	250	Adjust	250	-	40	gm (mA/V)	8.2	10.0		
(e)	4.0	250	Adjust	250	-	40	Ig2 (mA)	4.5	6.0		
(f)	4.0	250	Adjust	250	-	40	Reverse Ig1 (μA)	-	1.0		
(g)	4.0	250	Read	250	-	40	Vg1 (V)	4.9	7.0		