

VALVE ELECTRONIC **CV 1651**GENERAL POST OFFICE: E-IN-C (S)

(POVT 68)

Specification: G.P.O./CV1651/Issue 1 Dated: 4.11.46 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> Triode <u>CATHODE:</u> Directly heated <u>ENVELOPE:</u> Unmetallised glass <u>PROTOTYPE</u> G445B			<u>MARKING</u> See K1001/4		
<u>RATING</u>			<u>BASE</u> British 4-pin (B4) See Note B. <u>CONNEXIONS</u>		
			Note	Pin	Electrode
Filament current	(A)	0.45		1	Anode
Nominal filament voltage	(V)	4.0		2	Grid
Max. anode voltage	(V)	150		3	Filament -
Amplification factor		9.5	A	4	Filament +
Mutual conductance	(mA/V)	1.9	A		
Anode impedance	(ohms)	5,000	A		
<u>CAPACITANCES (pF)</u>			<u>DIMENSIONS</u> See K1001/A1/D1		
C _{ag}	(max)	12.0		Dimension	Min.
C _{ae}	(max)	12.0		A (mm)	-
C _{ge}	(max)	12.0		B (mm)	-
					Max.
					133
					64

NOTES

- A. Measured with $V_a = 130$, and $V_g = -4$
- B. The plane of the anode and grid pins shall lie within 25° of the plane of the filament.

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							
	1	2	3,4,5,6,7,8,9,10,TC1,TC2			(i) Cag	-	12.0	6 per week	
	1	3,4	2,5,6,7,8,9,10,TC1,TC2			(ii) Cae	-	12.0	6 per week	
	2	3,4	1,5,6,7,8,9,10,TC1,TC2		(iii) Cge	-	12.0	6 per week		
(b)	Test Voltage 500 Volts D.C.				<u>INSULATION (megohms)</u> Between any two electrodes	500	-	1%		
	If (A)	Va (V)	Vg (V)	Ia (mA)						
(c)	0.45	-	-	-	Vf (V)	3.7	4.3	100%		
(d)	0.45	130	-4	-	Reverse Ig (μA)	-	0.5	100%		
(e)	0.45	130	-4	-	Ra"x" (ohms)	4000	6000	100%		
(f)	0.43	130	-4	-	Ra"y" (ohms)	-	1.2"x"	100%	1	
(g)	0.45	130	-4	-	μ	8.4	10.6	100%		
(h)	0.45	100	Adjust	40	Ig (mA)	-	2.5	100%		
(i)	Read	100	100	10	If (A)	-	0.34	100%		

NOTE

1. Re-adjust If with Va = Vg = 0