

VALVE ELECTRONIC **CV1651**GENERAL POST OFFICE: E-IN-C (S)

(POVT 68)

Specification: G.P.O./CV1651/Issue 1	<u>SECURITY</u>	
Dated: 4.11.46	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K 1001	Restricted	Restricted

---> indicates a change

<u>TYPE OF VALVE:</u> Triode				<u>MARKING</u>			
<u>CATHODE:</u> Directly heated				See K1001/4			
<u>ENVELOPE:</u> Unmetallised glass							
<u>PROTOTYPE</u> G445B							
<u>RATING</u>				<u>BASE</u>			
				British 4-pin (B4)			
				See Note B.			
				<u>CONNEXIONS</u>			
				<u>Pin</u>		<u>Electrode</u>	
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				4		Filament +	
Mutual conductance (mA/V) 1.9							
Anode impedance (ohms) 5,000							
<u>CAPACITANCES (pF)</u>				<u>DIMENSIONS</u>			
				See K1001/A1/D1			
Cag (max) 12.0				<u>Dimension</u>		<u>Min.</u>	<u>Max.</u>
Cae (max) 12.0				A (mm)		-	133
Cge (max) 12.0				B (mm)		-	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

(a)	TEST CONDITIONS			TEST	LIMITS		No. Tested	Note	
	See K1001/AIII				Min.	Max.			
	Links to H.P.	Links to L.P	Links to E	CAPACITANCES (pF)					
	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.			INSULATION (megohms) 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