

VALVE ELECTRONIC **CV 1621**GENERAL POST OFFICE: E-IN-C (W)

(POVT 130)

Specification: G.P.O./CV1621/Issue 1	<u>SECURITY</u>	
Dated: 19.3.47	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K 1001	Restricted	Restricted

—→ indicates a change

<u>TYPE OF VALVE:</u> Transmitting triode				<u>MARKING</u> See K1001/4			
<u>CATHODE:</u> Directly heated tungsten filament				Additional markings required (See Notes A & B)			
<u>ENVELOPE:</u> Unmetallised glass				Serial No.			
<u>PROTOTYPE</u> ESW 501				Filament Volts 6.0			
<u>RATING</u>			<u>Note</u>		<u>BASE</u> British 4-pin (B4)		
Filament voltage (V)			6.0	C	<u>CONNEXIONS</u>		
Nominal filament current (A)			4.0		Pin	Electrode	
Max. anode voltage (kV)			1.5		1	No connection	
Max. anode dissipation (W)			50.0		2	No connection	
Amplification factor			8.0		3	Filament	
Anode impedance (ohms)			6,000		4	Filament	
Max. operating frequency (Mc/s)			75.0	C	TC1	Anode	
					TC2	Grid	
					<u>TOP CAPS</u> Two fixed tungsten leads approx. 20 mm in length		
<u>CAPACITANCES (pF)</u>					<u>DIMENSIONS</u> See K1001/A1/D1		
Cag (nominal)			4.0		Dimension		
Cae (nominal)			1.26		Min.		
Cge (nominal)			1.63		Max.		
					A (mm)	-	190
					B (mm)	-	58

NOTES

This valve type is obsolete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

- A. The Serial Numbers will be allotted by the Inspecting Officer.
- B. It is not essential that the additional markings shall appear within the frame.
- C. Measured with $V_a = 1000$, and $I_a = 50$ mA.

TESTS

The tests shown in Table I or, alternatively, those shown in Table II, shall be performed in addition to those applicable in K1001.

Table I (for A.C. filament heating)

	TEST CONDITIONS				TEST	LIMITS		No. Tested	Note
	Vf (V)	Va(kV)	Vg(kV)	Ia(mA)		Min.	Max.		
(a)	6.0	-	-	-	If (A)	3.5	4.5	100%	
(b)	6.0	1.0	Adjust	50	Reverse Ig (μ A)	-	5.0	100%	1
(c)	6.0	1.0	Adjust	50	μ	7.0	9.0	100%	
(d)	6.0	1.0	Adjust	50	Ra (ohms)	5000	7000	100%	
(e)	6.0	1.0	Read	50	Vg (V)	-65.0	-85.0	100%	
(f)	6.0	0.5	0.5	-	Ie (A)	0.8	-	100%	

Table II (for D.C. filament heating)

	TEST CONDITIONS				TEST	LIMITS		No. Tested	Note
	Vf(V)	Va(kV)	Vg(kV)	Ia(mA)		Min.	Max.		
(a)	6.0	-	-	-	If (A)	3.5	4.5	100%	
(b)	6.0	1.0	Adjust	50	Reverse Ig (μ A)	-	5.0	100%	1
(c)	6.0	1.0	Adjust	50	μ	7.0	9.0	100%	
(d)	6.0	1.0	Adjust	50	Ra (ohms)	5000	7000	100%	
(e)	6.0	1.0	Read	50	Vg (V)	-62.0	-82.0	100%	
(f)	6.0	0.5	0.5	-	Ie (A)	0.8	-	100%	

NOTES

1. The duration of test (b) shall be 10 minutes, and the reverse grid current shall not be rising at the end of the test.