

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

(POVT 130)

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

—————&gt; indicates a change

<u>TYPE OF VALVE:</u> <b>Transmitting triode</b> <u>CATHODE:</u> <b>Directly heated tungsten filament</b> <u>ENVELOPE:</u> <b>Unmetallised glass</b> <u>PROTOTYPE:</u> <b>ESW 501</b>			<u>MARKING</u> See K1001/4 Additional markings required (See Notes A & B) Serial No. .... Filament Volts 6.0		
<u>RATING</u>		Note	<u>BASE</u> British 4-pin (B4)		
Filament voltage (V) 6.0 Nominal filament current (A) 4.0 Max. anode voltage (kV) 1.5 Max. anode dissipation (W) 50.0 Amplification factor 8.0 Anode impedance (ohms) 6,000 Max. operating frequency (Mc/s) 75.0			<u>CONNEXIONS</u>		
<u>CAPACITANCES (pF)</u>			<u>TOP CAPS</u> Two fixed tungsten leads approx. 20 mm in length		
			<u>DIMENSIONS</u> See K1001/A1/D1		
C <sub>ag</sub> (nominal) 4.0 C <sub>ae</sub> (nominal) 1.26 C <sub>ge</sub> (nominal) 1.63			Pin	Electrode	
			1	No connection	
			2	No connection	
			3	Filament	
			4	Filament	
			TC1	Anode	
			TC2	Grid	
			Dimension	Min.	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This valve type is obsolete and this specification is for record purposes only.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 ( $\mu$ A)	-	5.0	100%	1
(c)	6.0	1.0	Adjust	50	$\mu$	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 ( $\mu$ A)	-	5.0	100%	1
(c)	6.0	1.0	Adjust	50	$\mu$	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

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