

VALVE ELECTRONIC CV 1610

GENERAL POST OFFICE: E-IN-C (W)

(POVT 10)

Specification: G.P.O./CV 1610/Issue 1	<u>SECURITY</u>	
Dated: 17-6-47	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K 1001	Restricted	Restricted

---> indicates a change

<u>TYPE OF VALVE:</u> Triode			<u>MARKING</u> See K 1001/4 Additional markings required (See Notes A & B) Serial No. Filament Volts 12.5		
<u>CATHODE:</u> Directly heated tungsten filament					
<u>ENVELOPE:</u> Glass: Unmetallised					
<u>PROTOTYPE</u> MT4					
<u>RATING</u>			Note	<u>BASE</u> None <u>CONNECTIONS</u>	
Filament voltage	(V)	12.5	C C	The anode lead shall be brought out at the opposite end of the valve from the grid and filament leads. All leads shall be suitably insulated and bound to the lips of the valve, and the loose ends shall be not less than 6 inches in length.	
Nominal filament current	(A)	6.3			
Max. anode voltage	(kV)	10.0			
Max. anode dissipation	(W)	200			
Max. frequency of operation	(Mc/s)	1.5			
Amplification factor		190			
Mutual conductance	(mA/V)	1.3			
				<u>DIMENSIONS</u> See K 1001/A1/D3	
				Dimension	Min. Max.
				A (mm)	- 260
				B (mm)	- 120
				C (mm)	- 50
				<u>PACKING</u> See K 1001/7.3	
<u>NOTES</u>					
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 $V_a = 3kV$, and $I_a = 4.0 mA$.					

TESTS

The tests shown in Table I, or, alternatively, those shown in Table II, shall be performed in addition to those applicable in K 1001.

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)	12.5	-	-	-	If (A)	6.0	6.6	100%	
(b)	12.5	2	Adjust	100	Vg change after first 5 mins. of test. (V)	-	10.0	100%	1
(c)	12.5	0.5	0.5	-	Ie (A)	0.4	-	100%	
(d)	12.5	2	Read	40	μ	150	230	100%	
		4	Read						
(e)	12.5	4	Read	20	Vg (V)	15.0	30.0	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)	12.5	-	-	-	If (A)	6.0	6.6	100%	
(b)	12.5	2	Adjust	100	Vg change after first 5 mins. of test. (V)	-	10.0	100%	1
(c)	12.5	0.5	0.5	-	Ie (A)	0.4	-	100%	
(d)	12.5	2	Read	40	μ	150	230	100%	
		4	Read						
(e)	12.5	4	Read	20	Vg (V)	21.0	36.0	100%	

NOTE

1. The duration of test (b) shall be 15 minutes.