

VALVE ELECTRONIC **CV 1612**GENERAL POST OFFICE: E-IN-C (W)

(POVT 19)

Specification: G.P.O./CV1612/Issue 2	<u>SECURITY</u>	
Dated: 13-5-48	<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 Additional markings required (See Notes A & B) Serial No. Filament Volts																		
<u>CATHODE:</u> Directly heated thoriated tungsten filament																					
<u>ENVELOPE:</u> Unmetallised glass, double-ended																					
<u>PROTOTYPE</u> VT9B																					
<u>RATING</u>			<u>BASE</u> None <u>CONNEXIONS</u> The anode lead shall be brought out at the opposite end of the valve from the filament leads. Grid connection to be positioned as K1001/A1/D3, but a lead only required. All leads shall be suitably insulated and the loose ends shall be not less than 12 inches in length.																		
			<u>DIMENSIONS</u> See K1001/A1/D3																		
			<table><tr><td colspan="2">Dimension</td><td>Min.</td><td>Max.</td></tr><tr><td>A</td><td>{mm}</td><td>-</td><td>420</td></tr><tr><td>B</td><td>{mm}</td><td>-</td><td>185</td></tr><tr><td>C</td><td>{mm}</td><td>-</td><td>75</td></tr></table>			Dimension		Min.	Max.	A	{mm}	-	420	B	{mm}	-	185	C	{mm}	-	75
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A	{mm}	-	420																		
B	{mm}	-	185																		
C	{mm}	-	75																		
			<u>PACKING</u> See K1001/7.3																		

		<u>As Marked</u>	B
Filament voltage	(V)	15.5	
Filament current	(A)	12.5	
Max. anode voltage	(kV)	800.0	
Max. anode dissipation	(W)	50.0	
Amplification factor		30,000	
Anode impedance	(ohms)	10.0	
Max. frequency of operation	(Mc/s)		

<u>BASE</u> None <u>CONNEXIONS</u>		
The anode lead shall be brought out at the opposite end of the valve from the filament leads. Grid connection to be positioned as K1001/A1/D3, but a lead only required. All leads shall be suitably insulated and the loose ends shall be not less than 12 inches in length.		
<u>DIMENSIONS</u> See K1001/A1/D3		
Dimension	Min.	Max.
A {mm}	-	420
B {mm}	-	185
C {mm}	-	75

<u>PACKING</u> See K1001/7.3		
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NOTES

- A. The Serial Numbers will be allotted by the Inspecting Officer
- B. The Marked Voltage is defined on page 2, test (a)
- C. It is not essential that the additional markings shall appear within the frame
- D. Measured with $V_a = 8 \text{ kV}$, and $I_a = 90 \text{ mA}$.

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(V)	Ia(mA)		Min.	Max.		
(a)	Read	-	-	-	Vf required for filament current of 15.5A To be known as "Marked Voltage" (V)	14.5	16.5	100%	
(b)	M.V.	10	Read	100	Reverse Ig (μ A)	-	45.0	100%	1
(c)	M.V.	$\frac{4}{8}$	Adjust	90	μ	45.0	55.0	100%	
(d)	M.V.	6	-	Read	Ia (mA)	100.0	140.0	100%	

Table II (for D.C. filament heating)

	TEST CONDITIONS				TEST	LIMITS		No. Tested	Note
	Vf(V)	Va(kV)	Vg(V)	Ia(mA)		Min.	Max.		
(a)	Read	-	-	-	Vf required for filament current of 15.5A To be known as "Marked Voltage" (V)	14.5	16.5	100%	
(b)	M.V.	10	Read	100	Reverse Ig (μ A)	-	45.0	100%	1
(c)	M.V.	$\frac{4}{8}$	Adjust	90	μ	45.0	55.0	100%	
(d)	M.V.	6	7.5	Read	Ia (mA)	100.0	140.0	100%	

NOTE

- The duration of test (b) shall be 15 minutes and the reverse grid current shall not be rising at the end of the test.