

VALVE ELECTRONIC **CV 1618**

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

(FOVT 54)

Specification: G.P.O./CV1618/Issue 2 Dated: 18.6.47 To be read in conjunction with K 1001	<u>SECURITY</u>	
	<u>Specification</u> Restricted	<u>Valve</u> Restricted

—————> indicates a change

<p><u>TYPE OF VALVE:</u> Transmitting triode</p> <p><u>CATHODE:</u> Directly heated tungsten filament</p> <p><u>ENVELOPE:</u> Unmetallised glass</p> <p><u>PROTOTYPE</u> —</p>	<p><u>MARKING</u></p> <p>See K1001/4</p> <p>Additional markings required (See Notes A, B & C)</p> <p>Serial No.</p> <p>Filament Volts</p>																													
<p><u>RATING</u></p>	<p>Note</p>	<p><u>BASE</u></p> <p>See drawing on page 3.</p>																												
<table border="0"> <tr> <td style="padding-right: 20px;">Filament voltage</td> <td style="padding-right: 20px;">(V)</td> <td style="padding-right: 20px;">As Marked</td> <td style="padding-right: 20px;">B</td> </tr> <tr> <td>Nominal filament current</td> <td>(A)</td> <td>10.0</td> <td></td> </tr> <tr> <td>Max. anode voltage</td> <td>(kV)</td> <td>3.0</td> <td></td> </tr> <tr> <td>Max. anode dissipation</td> <td>(W)</td> <td>250.0</td> <td></td> </tr> <tr> <td>Amplification factor</td> <td></td> <td>7.0</td> <td>D</td> </tr> <tr> <td>Mutual conductance</td> <td>(mA/V)</td> <td>1.2</td> <td>D</td> </tr> <tr> <td>Anode impedance</td> <td>(ohms)</td> <td>6,000</td> <td>D</td> </tr> </table>	Filament voltage	(V)	As Marked	B	Nominal filament current	(A)	10.0		Max. anode voltage	(kV)	3.0		Max. anode dissipation	(W)	250.0		Amplification factor		7.0	D	Mutual conductance	(mA/V)	1.2	D	Anode impedance	(ohms)	6,000	D		<p><u>CONNEXIONS</u></p> <p>See drawing on page 3.</p>
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		<p><u>DIMENSIONS</u></p> <p>See drawing on page 3.</p>																												
		<p><u>PACKING</u></p> <p>See K1001/7.3</p>																												
<p><u>NOTES</u></p> <p>A. The Serial Numbers will be allotted by the Inspecting Officer</p> <p>B. The Marked Voltage is defined on page 2, test (a)</p> <p>C. It is not essential that the additional markings shall appear within the frame</p> <p>D. Measured with $V_a = 2$ kV, and $I_a = 125$ mA.</p>																														

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(V)	Vg(V)	Ia(mA)		Min.	Max.		
(a)	Read	200	200	-	Vf required to produce an emission current of 250 mA. To be known as "Marked Voltage" (V)	11.0	13.0	100%	1
(b)	MV	-	-	-	If (A)	9.0	11.0	100%	
(c)	MV	3000	Adjust	84	Reverse Ig (μ A)	-	20.0	100%	2
(d)	MV	1000 2000	Adjust	125	μ	6.3	7.7	100%	
(e)	MV	1000	Read	100	Vg (V)	-8.0	-28.0	100%	

Table II (for D.C. filament heating)

	TEST CONDITIONS				TEST	LIMITS		No. Tested	Note
	Vf(V)	Va(V)	Vg(V)	Ia(mA)		Min.	Max.		
(a)	Read	200	200	-	Vf required to produce an emission current of 250 mA. To be known as "Marked Voltage" (V)	11.0	13.0	100%	1
(b)	M.V	-	-	-	If (A)	9.0	11.0	100%	
(c)	M.V	3000	Adjust	84	Reverse Ig (μ A)	-	20.0	100%	2
(d)	M.V	1000 2000	Adjust	125	μ	6.3	7.7	100%	
(e)	M.V	1000	Read	100	Vg (V)	-2.0	-22.0	100%	

NOTES

1. This test shall be performed in accordance with K1001/AV
2. The duration of test (c) shall be 15 minutes and the reverse grid current shall not be rising at the end of the test.

OUTLINE DRAWING

