VALVE ELECTRONIC CV 1605

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

(POVT 60)

Specification: G.P.O./CV 1605/Issue 2	SECURITY			
Dated: November, 1956	Specification	<u>Valve</u>		
To be read in conjunction with K 1001	U nclassifie d	Unclassified		

_____ indicates a change

TYPE OF VALVE: Triode, water-cooled CATHODE: Directly heated tungsten fi ENVELOPE: Metal-glass PROTOTYPE 4013 C RATING	lament	Note	MARKING See K 1001/4 Additional markings required (See notes A. B. & C.) Serial No
Nominal filament current Max. anode voltage (kV) Max. anode current Max. anode dissipation Max. operating frequency Amplification factor Anode impedance Max. anode voltage at 22 Mc/s (kV) Min. rate of water flow (gals/min)	As marked 36.0 6.0 0.7 5.0 22 20.0 5700 5.0 3.0	B D D D	CONNEXIONS See drawing on page 4 DIMENSIONS See drawing on page 4
CAPACITANCES (pF) Cag (nominal) Cae (nominal) Cge (nominal)	2.0		PACKING See K 1001/7.3

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. The maximum frequency of operation for these ratings is 15 Mc/s.
- E. Measured with Ia = 0.8 A, and Eg = -50V (A.C. filament) or -43V (P.C. Filament).



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).

	TE	ST COND	ITIONS			LIMITS				
	WP (AC)	Va(kV)	Vg(V)	Ia(A)	TEST		Min.	Max.	No. Tested	Note
(a)	Read	3	3000	-	Vf. Minimum required for peak emission of 3 a To be known as "Marked Voltage"		13.5	14.5	100%	1
(b)	WV	0	0	-	If	(A)	34.5	37.5	100%	
(0)	WV	10	Adjust	0.8	Reverse Ig	(pa)	•	55.0	100%	2
(d)	MV	5	0	Read	Ia	(A)	0.65	0.85	100%	
(-)	MV	Read	0	0.0	р	18.6	21.6	100%		
(e)		Read	- 100	0.8			10.0	21.0	100%	
(f)	MV	7•5	-	•	Oscillation efficiency	(%)	6 0	-	100%	3
(g)	MA	10	Adjust	0.8	Reverse Ig	(pA)	-	55.0	100%	2

TABLE II (for D.C. filament heating).

	TEST CONDITIONS				LIMITS		No.				
	Tr(DC)	Va(kV)	Vg(V)	Ta(A)	TEST		Min.	Max.	Tested	Note	
(a)	Read	3	3000	-	Vf. Minimum required for peak emission of 3 amps To be known as "Marked Voltage" (V)		13.5	14.5	100%	1	
(b)	WA	0	0	-	If (A)	3 4•5	37•5	100%		
(c)	MV	10	Adjust	0.8	Reverse Ig (p	ıA)	1	55.0	100%	2	
(d)	MEV	5	7	Read	Ia ((A)	0.65	0.85	100%		
(2)) CUT	Read 7 Read - 93	Read	7				18.6	21.6	100%	
(e)	MA		0.8	μ		13.0		100,0			
(f)	MV	7•5	-	-	Oscillation efficiency	(%)	60	_	100%	3	
(g)	MV	10	Adjust	0.8	Reverse Ig ()	1 A)	-	55.0	100%	2	

NOTES

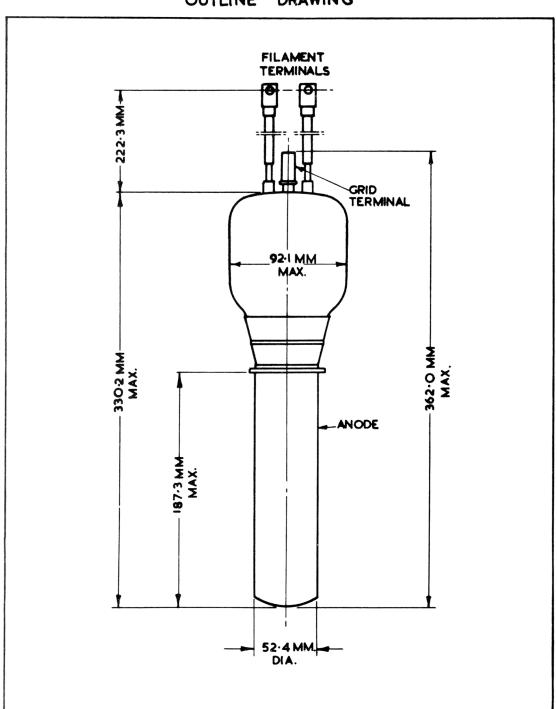
- 1. The test shall be made in accordance with K 1001/A V.
- The duration of tests (c) and (g) shall be 15 minutes each, and the reverse grid current shall not be rising at the end of either test.
 Test (c) shall precede test (f), and test (g) shall follow immediately upon the end of test (f).
- 3. The duration of test (f) shall be 15 minutes, and the anode current shall not be less than 1.1 A.

 The test shall be made by causing the valve to oscillate in an approved circuit, the oscillation frequency being not less than 15 Mc/s.

 In the event of such a circuit not being available for this test, the valve may be tested in an oscillatory circuit of a frequency not less than 800 kc/s, but, if this applies, the right is reserved to conduct test (f) on service premises in a circuit of frequency not greater than 15 Mc/s, and to reject any valve found to be unsatisfactory at this higher frequency during the test.



OUTLINE DRAWING



CVI6O5/2/4