VALVE ELECTRONIC **CV 1630**

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

(POVT 205)

Specification: G.P.O./CV1630/Issue 2 Dated: 18.6.47 To be read in conjunction with K 1001	SECURITY Specification: Restricted Valve: Restricted

——> indicates a change

TYPE OF VALVE: Pentode
CATHODE: Directly heated tungsten filament
ENVELOPE: Unmetallised glass
PROTOTYPE: 5C/450A

MARKING

See K1001/4
Additional markings required (See Notes A & B)
Serial No. .....
Filament Volts 10.0

RATING

			Note
Filament voltage	(V)	10.0	
Nominal filament current	(A)	13.0	
Max. anode voltage	(kV)	3.0	C
Max. screen voltage	(V)	650.0	C
Max. anode dissipation	(W)	450.0	C
Max. screen dissipation	(W)	100.0	C
Mutual conductance	(mA/V)	6.5	D
Max. anode voltage at 20 Mc/s.	(kV)	2.25	

CAPACITANCES (pF)

Cag	(max)	0.2
Cae	(max)	30.0
Cge	(max)	50.0

BASE

See drawing on page 4

CONNEXIONS

See drawing on page 4

DIMENSIONS

See drawing on page 4

PACKING

See K1001/7.3

NOTES

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. The maximum frequency of operation for these ratings is 10 Mc/s.
D. Measured with Va = 2500, Vg2 = 600, Vg3 = 0, and Vg1 = -90 (A.C. filament) or -85 (D.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 K1001

Table I (for A.C. filament heating)

	TEST CONDITIONS						TEST	LIMITS		No. Tested	Note
	Vf(V)	Va(kV)	Vg1(V)	Vg2(V)	Vg3(V)	Ia(mA)		Min.	Max.		
(a)	10.0	-	-	-	-	-	If (A)	12.4	13.6	100%	
(b)	10.0	2.5	Adjust	600	0	200	Reverse Ig (μA)	-	15.0	100%	1
(c)	10.0	2.5	-88	600	0	Read	Ia (mA)	130.0	180.0	100%	
(d)	10.0	2.5	-88	600	0	-	Ig2 (mA)	-	-	100%	2
(e)	10.0	2.5	-88 -93	600	0	Read Read	gm (mA/V)	5.0	-	100%	
(f)	10.0	2.5	Note 3	600	100 -100	Read Read	Reduction in Ia (mA)	30.0	-	100%	3
(g)	10.0	1.0	1000	1000	1000	-	Ie(Peak) (A)	7.5	-	100%	4

Table II (for D.C. filament heating)

	TEST CONDITIONS						TEST	LIMITS		No. Tested	Note
	Vf(V)	Va(kV)	Vg1(V)	Vg2(V)	Vg3(V)	Ia(mA)		Min.	Max.		
(a)	10.0	-	-	-	-	-	If (A)	12.4	13.6	100%	
(b)	10.0	2.5	Adjust	600	0	200	Reverse Ig (μA)	-	15.0	100%	1
→ (c)	10.0	2.5	-83	600	0	Read	Ia (mA)	130.0	180.0	100%	
→ (d)	10.0	2.5	-83	600	0	-	Ig2 (mA)	-	-	100%	2
(e)	10.0	2.5	-83 -88	600	0	Read Read	gm (mA/V)	5.0	-	100%	
(f)	10.0	2.5	Note 3	600	105 -95	Read Read	Reduction in Ia (mA)	30.0	-	100%	3
(g)	10.0	1.0	1000	1000	1000	-	Ie(Peak) (A)	7.5	-	100%	4

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NOTES

1. The duration of test (b) shall be 15 minutes and the reverse grid current shall not be rising during the last 10 minutes.

2. The value of test (d) shall not be greater than 6% of the value obtained in test (c).

3. For test (f) Vg1 shall be adjusted to the same value as that obtained for test (b).

4. To be performed in accordance with K1001/AV.

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OUTLINE DRAWING