MINISTRY OF SUPPLY (D.C.D.)

VALVE ELECTRONIC

CV18

Specification MAP/CV18/Issue 7
Dated 22.1.50.
To be read in conjunction with K1001

SECURITY	
Specification	Valve
RESTRICTED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Double Triode

CATHODE - Indirectly Heated

ENVELOPE - Glass - Unmetallised

COMMERCIAL PROTOTYPE - 4074A. DET19. RK34.

MARKING

See K1001/4

PACKING

See K1005.

		Note
Heater Voltage (V)	6.3	
Heater Current (A)	0.8	
Maximum Anode Voltage (V)	300	
Maximum Anode Dissipation per Anode (W)	5.0	
Mutual Conductance (mA/V)	2.8	A
Anode Impedance (ohms)	5000	A
Amplification Factor	14	A
Maximum Operating Frequency (Mc/s)	175	

CAPACITANCES (pF)

Ca-c+h	0.6	B
Cg-c+h	4.1	B
Cag	2.45	B
Ca_1-a_2	1.1	

BASE

USM.7

CONNECTIONS

Pin	Electrode
1	Heater
2	No connection
3	Grid 1
4	Cathode
5	Grid 2
6	No connection
7	Heater
TC1	Anode 1
TC2	Anode 2

PLUG TOP CAP

See K1001/AI/D5.1 and drawing on page 3.

DIMENSIONS

See K1001/AI/D1

Dimension	Min.	Max.
A mm	-	130
B mm	-	46
C mm	-	35

NOTES

A. Va = 250, Vg = -7.

B. These figures apply to each half of the valve.

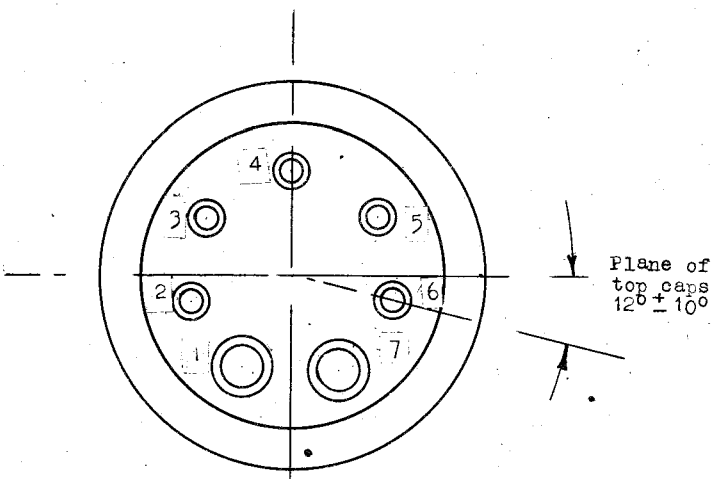
To be performed in addition to those applicable in K1001.

	Test Conditions				Test	Limits Min.	Limits Max.	No. Tested	Notes
a	See K1001/AIII								
	Links to H.P.	Links to L.P.	Links to E.	Links Omitted.	Total Capacitance (pF) A1G2 to A2G1	6.4	9.0	6 per week	
	TC1,5	TC2,3	2,6,8, 9,10	1,4,7.					

Before the valves are subjected to the following tests they shall be preheated for a period of 5 minutes with Vf-6.3V.

	Vh	Va	Vg	Ia(mA)					
b	6.3	0	0	-	Ih (A)	0.7	0.9	100% or S	
c	6.3	250	-7	-	Ia (mA)	13.5	27.0	100%	1
d	6.3	250	-7	-	Reverse Ig (μA)	-	3	100%	1
e	6.3 Peak grid swing ± 1V. max.	250	-7	-	μ	12.5	16.0	100% or S	1
f	6.3 Peak grid swing ±1V. max.	250	-7	-	gm (mA/V)	2.2	3.45	100%	1
g	6.3	250	-	0.1	1. Vg 2. Difference between readings for each half of valve (V).	- -	-50 10	100% 100%	1
h	6.3	Strapped. 50V.R.M.S. at 50 c/s applied.		-	Mean Ic (mA)	60	-	100%	1
j	Valves shall be tested to ensure that no appreciable coupling exists between the grid of one section and the anode of the other. The nature of the test can be determined by the manufacturer.							1% (20)	

Note 1. Tests c,d,e,f,g,1 and h shall be applied to each half of the valve.



Top Cap 1

Top Cap 2