MINISTRY OF SUPPLY (D.C.D.) VALVE ELECTRONIC

CV15

Specification MAP/CV15/Issue 6 Dated 21.12.49. To be read in conjunction with K1001, ignoring clauses:- 5.2, 7.2.	SECURITY	
	Specification ~~RESTRICTED~~ Unclass.	Valve UNCLASSIFIED ←

→ Indicates a change

TYPE OF VALVE - Triode
CATHODE - Directly heated, Thoriated tungsten.
ENVELOPE - Metal-glass construction
PROTOTYPE - E.1266

MARKING
See K1001/4

BASE
None

RATING		Note
Filament Voltage (V)	3.25	
Filament Current (A)	6.75	
Max. Anode Voltage (kV)	4.0	
Max. Anode Dissipation (W)	1.0	A
Amplification Factor	15.5	B
Max. Operating Frequency (Mc/s)	300	

PACKING
See K1005/7.3 ←

CONNECTIONS AND DIMENSIONS
See drawing on page 3. ←

CAPACITANCES	
Cag (pF)	3.7
Cgf (pF)	2.3
Caf (pF)	1.0

NOTE A: Cooling, even when only filament volts are applied should be provided so that the temperature of the anode does not exceed 140°C. A suitable holder which satisfies this requirement for a pair of valves is cap holder Type 20, Ref. 10H/13569.

NOTE B:- At Va = 500 v, Ia = 20 mA.

TESTS

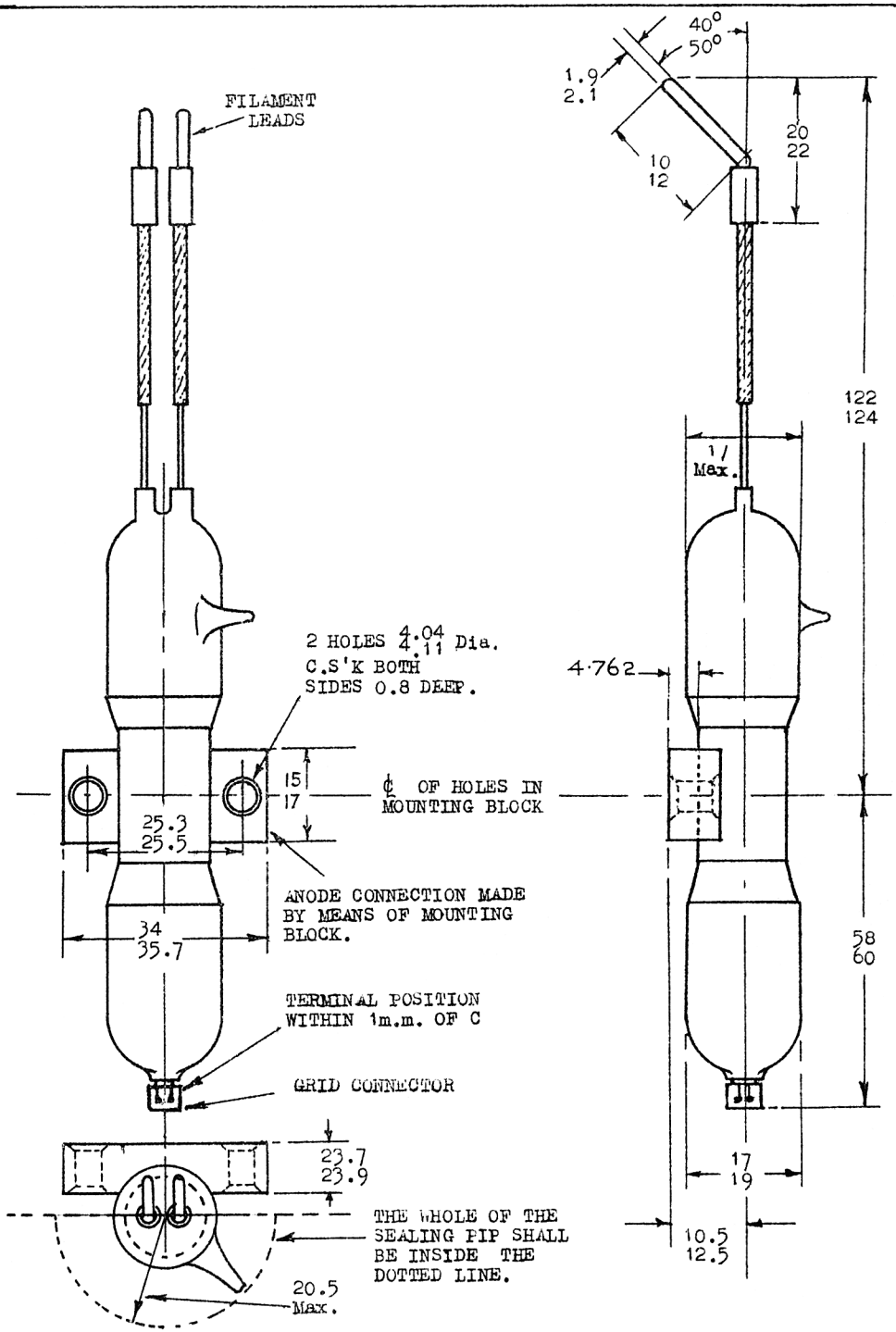
To be performed in addition to those applicable in K1001.

	Test Conditions				Test	Limits		No. Tested	Note
						Min.	Max.		
	Vf (AC)	Va	Vg	Ia (mA)					
For the following tests, the required cooling, as defined in Note A, can be provided by mounting the valves singly on a valve base type 20 and not in pairs as for normal working.									
a	3.5	Raised slowly to 5kV and maintained till flashing ceases	Preferably automatic bias	A trace	HOT FLASH PROCESS Va maintained at 5kV. for a period of 2 min. during which time valve shall show no sign of breakdown.	-	-	100%	1
b	3.5	0	0	-	If (A)	6.6	7.4	100%	
c	3.5	500	-	20	Reverse Ig (μA)	-	10	100%	
d	3.5	500	-	20	-Vg (V)	-6	-20	100%	
e	3.5	400	-	20	Change in Vg from value noted in (d)	5	8	1% (1)	
f	-	1000	0	10	Vf (V)	-	2.0	100%	
g	3.5	Anode and grid strapped. Peak applied volts 2.0kV. tp = 2μsec. P.R.F. = 50 per sec. Pulse shape sinusoidal.			Emission (A)	1.75		1% (1)	
h	See K1001/AIII using test jig type 112 Ref. 10A/17828								
	Links to H.P.	Links to L.P.	Links to E		CAPACITANCES				
	2	3	1,4,5, 6,7,8.		1. Cag (pF)	2.95	4.45	6 per week	
	3	5	1,2,4, 6,7,8.		2. Cge (pF)	1.2	2.3	"	

NOTE

1. Once the conditions specified in Test (a) have been met, conditions need not be repeated for acceptance testing. For this hot flash process there shall be a 500 ohm resistor in series with the applied voltage and a capacitance of 0.15μF. in parallel with the supply voltage on the supply side of the resistor.

CV15


FILAMENT LEADS
2 HOLES 4·04 / 4·11 Dia. C.S'K BOTH SIDES 0.8 DEEP.
15 / 17
℄ OF HOLES IN MOUNTING BLOCK
25.3 / 25.5
ANODE CONNECTION MADE BY MEANS OF MOUNTING BLOCK.
34 / 35.7
TERMINAL POSITION WITHIN 1m.m. OF C
GRID CONNECTOR
23.7 / 23.9
THE WHOLE OF THE SEALING PIP SHALL BE INSIDE THE DOTTED LINE.
20.5 Max.
40° / 50°
1.9 / 2.1
10 / 12
20 / 22
122 / 124
1/ Max.
4·762
58 / 60
17 / 19
10.5 / 12.5