

MINISTRY OF SUPPLY (D.L.R.D. (A)/R.A.E.)VALVE ELECTRONIC**CV49**

Specification MAP/CV.49 Issue 2 dated 17.1.52 To be read in conjunction with K. 1001	<table> <tr> <th colspan="2"><u>SECURITY</u></th></tr> <tr> <td><u>Specification</u> UNCLASSIFIED</td><td><u>Valve</u> UNCLASSIFIED</td></tr> </table>	<u>SECURITY</u>		<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED
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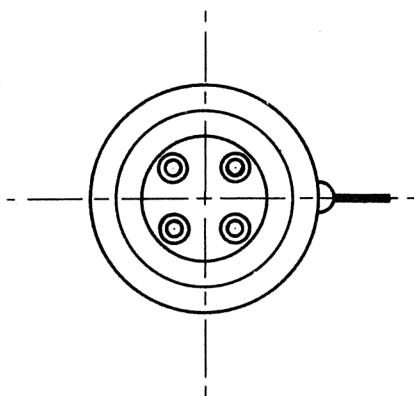
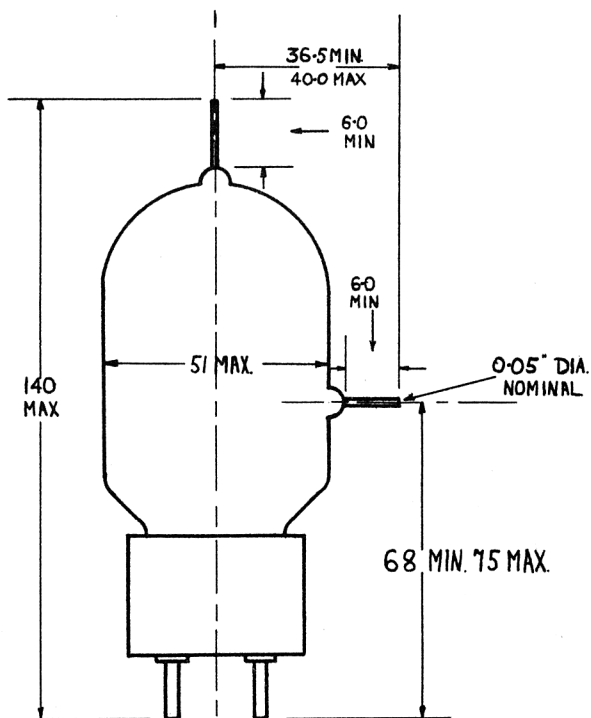
→ Indicates a change

TYPE OF VALVE - Transmitting triode.		<u>MARKING</u>	
CATHODE - Directly heated, thoriated tungsten.		See K. 1001/4.	
ENVELOPE - Glass - unmetallised.			
PROTOTYPE - 3B/501.A.			
<u>RATING</u>		<u>BASE</u>	
		American Medium	
		4 - pin	
Note		<u>CONNECTIONS</u>	
Filament Voltage (V) 5.0		Pin	Electrode
Filament Current (A) 5.15		1	Filament
Maximum Anode Voltage (kV) 2.0		2	No connection
Max. Direct Anode Current (mA) 120.		3	No connection
Max. Anode Dissipation (W) 50.		4	Filament
Mutual Conductance (mA/V) 2.0		Side contact	Control Grid
Amplification Factor 29.0		Top contact	Anode
Max. Frequency (Mc/s) at which above maximum ratings apply 200.		<u>DIMENSIONS</u>	
		See drawing on Page 3.	

To be performed in addition to those applicable in K1001.

Test Conditions					Test	Limits		No. Tested
						Min	Max	
a	See K1001/AIII				CAPACITANCES (pF)			1% (20)
	Links to H. P.	Links to L. P.	Links to E.					
	Side Contacts	Top Contact	1, 2, 3, 4.		1. Cag.	-	2.5	
	Side Contact	1, 2, 3, 4.	Top Contact		2. Cge.	-	2.7	
	1, 2, 3, 4.	Top Contact	Side Contact		3. Cac.	-	1.0	
b	Vf	Va	Vg	Ia				
	5.0 A.C.	0	0	0	Filament current (A)	4.9	5.4	
c	5.0 A.C.	Strapped peak applied volts 1.0 kV See K1001/AV		-	Peak emission current (A)	1.75	-	100%
d	5.0 A.C.	1.5 kV	-	50	Test conditions maintained for a period of 3 mins. At the end of which time:- Reverse grid current (mA). The reverse grid current must not be rising in value.	-	15.0	100%
e	5.0 A.C.	1.25 kV	-25	-	Anode current (mA)	18	42	100%
f	5.0 A.C.	1.25 kV	-30	-	Change in Anode current (mA) from value noted in test (e)	7.0	15.0	100%
g	5.0 A.C.	-	-30	Value as in test (d)	Amplification factor derived from tests (e) and (f)	24	34	100%
h	5.0 A.C.	1.25 kV	-60	-	Anode current (mA)	-	3.0	100%

NOTE:- All electrode potentials are measured with respect to the centre point of the filament transformer secondary.



VIEW OF UNDERSIDE OF BASE.