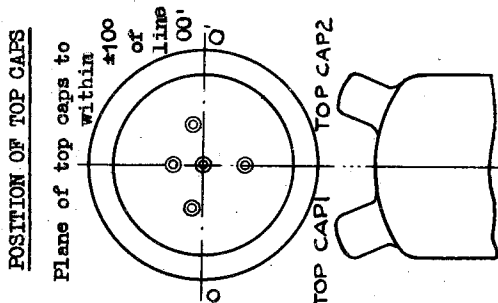


Specification MAP/CV1573/Issue 5 Dated 25.1.46. To be read in conjunction with K1001.	<u>SECURITY</u>	
	<u>Specification</u> RESTRICTED	<u>Valve</u> RESTRICTED

→ Indicates a change

<u>TYPE OF VALVE</u> - Double Triode.		<u>MARKING</u>	
<u>CATHODE</u>	- Indirectly Heated.	See K1001/4	
<u>ENVELOPE</u>	- Glass - Unmetallised.		
<u>PROTOTYPE</u>	- TVO3-10 (mod.)		
<u>RATING</u>		<u>BASE</u>	
		B5	
Heater Voltage (V)	12.0	Note	Pin
Heater Current (A)	0.44		Electrode
Max. Anode Voltage (V)	500	A A A	1
Max. Anode Dissipation per anode (W)	5		Grid 1
Mutual Conductance (mA/V)	3.2		2
Amplification Factor	12.5		3
Anode Impedance ( $\Omega$ )	3,900		Heater
Max. Grid Current (total for both grids) (mA)	10		4
Range of Vh for satisfactory operation (V)	11-14		Heater
Max. Operating Frequency (Mc/s)	75		5
			Cathode
			TC1
		TC2	
		Anode 1	
		Anode 2	
		<u>TOP CAPS</u>	
		See K1001/AI/D5..1.	
		<u>DIMENSIONS</u>	
		See K1001/AI/D1.	
<u>CAPACITANCES (pF)</u>			
Cac	2.0	Dimension	Min. Max.
Cgc	6.0	A	(mm) 114 127
Cag	3.3	B	(mm) - 46
Ca1a2	1.0	C	(mm) - 38
<u>NOTES</u>			
A:- Va = 300V, Vg1 = -17V, Ia = 17mA.			
B:- These figures apply to each half of the valve.			



To be performed in addition to those applicable in K1001.

	Test Conditions				Test	Limits		No. Tested.	Note
						Min.	Max.		
a	See K1001/AIII				CAPACITANCES (pF) A <sub>1</sub> G <sub>2</sub> to A <sub>2</sub> G <sub>1</sub>	8.0	10.0	6 per week	
	Links to H.P.	Links to L.P.	Links to E	Links Omitted					
	TC1,2.	TC2,1.	6,7,8,9,10.	3,4,5.					
b	Vh	Va	Vg1	Ia(mA)	Ih (A)	0.41	0.47	100% or S	
	12.0	0	0	-					
c	12.0	300	-	10 total	Total Reverse Ig (uA)	-	5.0	100%	
d	12.0	Strapped. A.C. voltage at 50 c/s applied to give mean I <sub>g</sub> between 40mA. and 60mA.		-	I <sub>c</sub> change during 30secs. after application of voltage. Drop (mA) Rise (mA)	-	3.0 5.0	100%	1
e	12.0	300	-	22	g <sub>m</sub> (mA/V)	2.5	4.0	100%	1
f	12.0	300	-	2	1.V <sub>g</sub> (V)	-20	-27	100%	1
					2.Difference between readings for each half.	-	3.0	100%	
h	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.							100%	

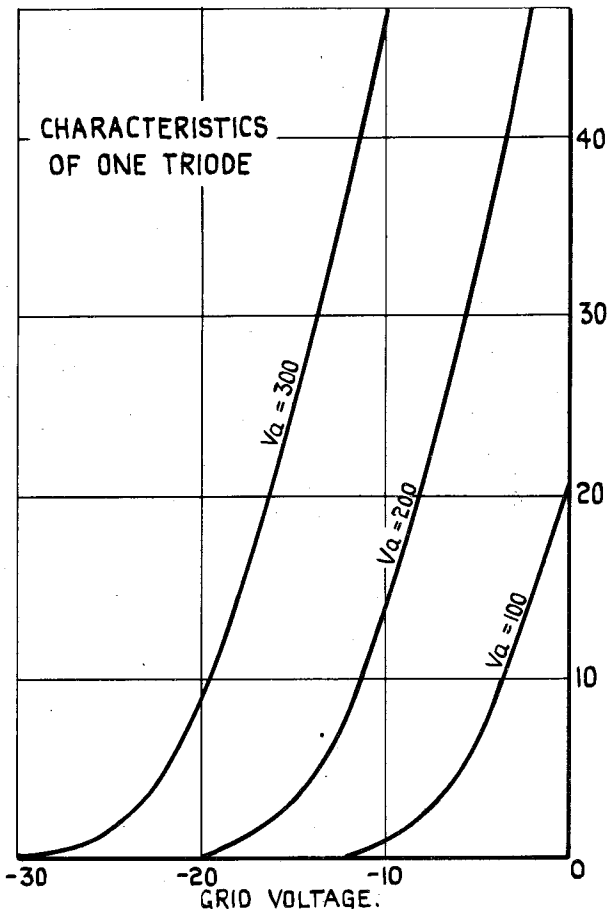
NOTE

1:- Tests (d), (e) and (f.1) shall be applied to each half of the valve, the half not being tested to be "cut-off".

TYPICAL OPERATING CONDITIONS.

	CLASS C RF AMPLIFIER.	CLASS B RF AMPLIFIER (MODULATED INPUT)	ANODE MODULATION
WAVELENGTH	5	5	5 M
ANODE VOLTAGE	300	30	275 V
GRID VOLTAGE	-100	-25	-100 V
ANODE CURRENT	66	42	62 mA
GRID CURRENT	14	12*	15 mA
GRID RF PEAK VOLTAGE (G-G)	290	50	310 V
ANODE DISSIPATION	7.8	9.45	6.7 W
OUTPUT POWER	12	3.15	10.3 W
EFFICIENCY	60.5	25	60.5 %
RF EXCITATION POWER	4.1	0.6*	4.7 W
MODULATION POWER	-	-	9 # W

# AT 100% MODULATION.



SOURCE OF CURVE & DATA: MULLARD CAT. SHEET FOR TV03-10  
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