

Specification MAP/CV1061/Issue 9 Dated 16.1.50 To be read in conjunction with K1001	<u>SECURITY</u>	
	<u>Specification</u> RESTRICTED	<u>Valve</u> UNCLASSIFIED

→ Indicates a change

<u>TYPE OF VALVE:</u> Double Triode <u>CATHODE:</u> Indirectly heated <u>ENVELOPE:</u> Glass - unmetallised <u>PROTOTYPES:</u> 4074A, DET19 RK34			<u>MARKING</u> See K1001/4			
			<u>PACKING</u> See K1005			
			<u>BASE</u> U. S. M 7 - ceramic			
<u>RATING</u>		Note	<u>Pin</u>		<u>Electrode</u>	
Heater Voltage (V)	6.3		1	Heater		
Heater Current (A)	0.8		2	No connection		
Maximum Anode Voltage (V)	300		3	Grid 1		
Maximum Anode Dissipation per anode (W)	7.5		4	Cathode		
Mutual Conductance (mA/V)	2.8		5	Grid 2		
Anode Impedance ( $\Omega$ )	5000		6	No connection		
Amplification Factor	14		7	Heater		
Maximum Operating Frequency (Mc/s)	125	A	TC1	Anode 1		
		A	TC2	Anode 2		
			<u>PLUG TOP CAPS</u> See K. 1001/AI/D5. 1. and drawing on Page 3.			
<u>CAPACITANCES (<math>\mu F</math>)</u>		B B B	<u>DIMENSIONS</u> See K1001/AI/D1			
Ca-c+h	0.6		<u>Dimension</u>		<u>Min.</u>	<u>Max.</u>
Cg-c+h	4.1		A	(mm)	-	130
Cag	2.45		B	(mm)	-	46
Ca <sub>1</sub> -a <sub>2</sub>	1.1		C	(mm)	-	35
<u>NOTES</u>						
A Va = 250, Vg = -7						
B These figures apply to each half of the valve						

## TESTS

Tests to be performed in addition to those applicable in K1001

Test Conditions				Test	Limits		No. Tested	Notes	
		Min.	Max.						
a	See K1001/AIII using adaptor type 41			<u>CAPACITANCES (pF)</u>				6 per week	
	Links to H.P.	Links to L.P.	Links to E						
	TC1	3	1,2,4,5,6,7 8,9,10 TC2	1. Ca <sub>1</sub> - g <sub>1</sub> (pF)	2.1	2.8			
	TC2	5	1,2,3,4,6,7 8,9,10 TC1	2. Ca <sub>2</sub> - g <sub>2</sub> (pF)	2.1	2.8			
	TC1	1,4,7	2,3,5,6,8,9 10, TC2	3. Ca <sub>1</sub> - c+h (pF)	0.4	0.8			
	TC2	1,4,7	2,3,5,6,8,9 10, TC1	4. Ca <sub>2</sub> - c+h (pF)	0.4	0.8			
	3	1,4,7	2,5,6,8,9,10 TC1, TC2,	5. Cg <sub>1</sub> - c+h (pF)	2.9	4.8			
	5	1,4,7	2,3,6,8,9,10 TC1, TC2,	6. Cg <sub>2</sub> - c+h (pF)	2.9	4.8			
TC1	TC2	1,2,3,4,5,6 7,8,9,10.	7. Ca <sub>1</sub> - a <sub>2</sub> (pF)	0.75	1.40				
b	V <sub>h</sub>	V <sub>a</sub>	V <sub>g</sub>	(I <sub>a</sub> (mA))					
	6.3	0	0	0	I <sub>h</sub> (A)	0.7	0.9	100% or S	
c	6.3	250	-7	-	I <sub>a</sub> (mA)	15	27	100%	1
d	6.3	250	-7	-	Reverse I <sub>g</sub> (μA)	-	3	100%	1
e	6.3	250	-7	-	μ	12.5	16.0	100% or S	1
f	6.3	250	-7	-	g <sub>m</sub> (mA/V)	2.4	3.45	100%	1
g	6.3	250	-	0.1	1. - V <sub>g</sub> (V)	-	50	100%	1
					2. Difference between readings for each half of valve. (V)	-	7.0	100%	1
h	6.3	Strapped 50V RMS at 50 c/s applied	-		Mean I <sub>c</sub> (mA)	60	-	100%	1
j	Valves having I <sub>c</sub> less than 80 mA. but not less than 60 mA. in test clause 'h' shall be checked by an approved method for effective shunt resistance, measured between the two control grids strapped and cathode with valve cold, at frequency of 20 Mc/s. Value of effective shunt resistance (ohms)				120,000	-	100%		
k	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% (29)		

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

