

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

→ 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>PACKING</u>		
				See K1005		
<u>PROTOTYPES:</u> 4074A, DET19 RK34				<u>BASE</u>		
				U.S. M 7 - ceramic		
<u>RATING</u>			<u>Note</u>	<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	
				4	Cathode	
Maximum Anode Dissipation per anode (W)	7.5			5	Grid 2	
				6	No connection	
Mutual Conductance (mA/V)	2.8	A		7	Heater	
Anode Impedance (Ω)	5000	A		TC1	Anode 1	
Amplification Factor	14	A		TC2	Anode 2	
Maximum Operating Frequency (Mc/s)	125			<u>PLUG TOP CAPS</u>		
				See K.1001/AI/D5.1. and drawing on Page 3.		
<u>CAPACITANCES (μF)</u>				<u>DIMENSIONS</u>		
Ca-c+h	0.6	B		See K1001/AI/D1		
Cg-c+h	4.1	B				
Cag	2.45	B				
Ca ₁ -a ₂	1.1					
				<u>Dimension</u>	<u>Min.</u>	<u>Max.</u>
				A (mm)	-	130
				B (mm)	-	46
				C (mm)	-	35

NOTES

A $V_a = 250$, $V_g = -7$

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. $Ca_1 - g_1$ (pF)		2.1 2.8			
	TC2	5	1,2,3,4,6,7 8,9,10 TC1	2. $Ca_2 - g_2$ (pF)		2.1 2.8			
	TC1	1,4,7	2,3,5,6,8,9 10, TC2	3. $Ca_1 - c+h$ (pF)		0.4 0.8			
	TC2	1,4,7	2,3,5,6,8,9 10, TC1	4. $Ca_2 - c+h$ (pF)		0.4 0.8			
	3	1,4,7	2,5,6,8,9,10 TC1, TC2,	5. $Cg_1 - c+h$ (pF)		2.9 4.8			
	5	1,4,7	2,3,6,8,9,10 TC1, TC2,	6. $Cg_2 - c+h$ (pF)		2.9 4.8			
	TC1	TC2	1,2,3,4,5,6 7,8,9,10.	7. $Ca_1 - a_2$ (pF)	0.75 1.40				
b	Vh	Va	Vg	(Ia(mA))	Ih (A)	0.7	0.9	100% or S	
c	6.3	250	-7	-	Ia (mA)	15	27	100%	1
d	6.3	250	-7	-	Reverse Ig (μ A)	-	3	100%	1
e	6.3	250	-7	-	μ	12.5	16.0	100% or S	1
	Peak grid swing $\pm 1.0V$. max.								
f	6.3	250	-7	-	gm (mA/V)	2.4	3.45	100%	1
	Peak grid swing $\pm 1.0V$. max.								
g	6.3	250	-	0.1	1. - Vg (V) 2. Difference between readings for each half of valve. (V)	-	50	100%	1
						-	7.0	100%	1
h	6.3	Strapped 50V RMS at 50 c/s applied	-		Mean Ic (mA)	60	-	100%	1
j	Valves having Ic 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)	

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