

Specification MAP/CV1501/Issue 8 Dated 10.3.47. 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> - R.F. Beam Power Amplifier <u>CATHODE</u> - Indirectly heated <u>ENVELOPE</u> - Glass - unmetallised		<u>MARKING</u> See K1001/4		
<u>RATING</u>		<u>BASE</u> I.O.		
		Pin	Electrode	
Heater Voltage (V)	6.3	1	No connection	
Heater Current (A)	0.8	2	Heater	
Max. Anode Voltage (V)	300	3	Beam forming plates	
Max. Screen Voltage (V)	250	4	Control grid plates	
Max. Anode Dissipation (W)	7.5	5	Screen grid	
Max. Screen Dissipation (W)	1.3	6	Pin omitted (See Note B)	
Mutual Conductance (mA/V)	3.5	7	Heater	
Grid-Screen Amplification Factor	-	8	Cathode	
	6.7	T.C.	Anode	
<u>CAPACITANCES (pF)</u> Cae 2.6 Cge 9.1 Cag 0.4		<u>TOP CAP</u> See K1001/AI/D5.2		
<u>NOTES</u> A. $V_a = 250V.$, $V_{g2} = 135V.$, $V_{g1} = -11.0$, $I_a = 30 mA.$ B. A blank pin may be supplied in position 6 of the base should a manufacturer so desire. C. The envelope up to a height of 36 mm. from the sole of the base shall lie wholly within a cylinder of dia. 32 mm. with its vertical axis through the centre of the spigot.		<u>DIMENSIONS</u> See K1001/AI/D1		
		Dimension	Min.	Max.
		A (mm)	94.0	103.5
B (mm)	-	33.0		
C (mm) (See Note C)	27.0	30.1		

To be performed in addition to those applicable in K1001.

	Test Conditions			Test	Limits		No. Tested	Note
					Min.	Max.		
a	See K1001/AIII			<u>CAPACITANCES</u> (pF)			6 per week	
	Links to H.P.	Links to L.P.	Links to E.					
	TC1	1,2,3,5,6, 7,8	4,9,10, TC2					
	4	1,2,3,5,6, 7,8	9,10, TC1,TC2					
	TC1	4	1,2,3,5, 6,7,8,9, 10, TC2	Cae	-	3.5		
				Oge	-	10.5		
				Cag	0.25	0.5		

For the following tests the beam forming plates shall be connected to the cathode

	Vh	Va	Vg2	Vg1	Ia(mA)					
b	6.3	0	0	0	0	Ih (A)	0.72	0.88	100% or S	
c	6.3	250	135	-	30	Vg (V)	-8.25	-15.5	100%	
d	6.3	250	135	-	30	Ig2 (mA)	-	2.22	100%	
e	6.3	250	135	-	30	gm (mA/V)	2.8	4.2	100%	
		Peak grid swing $\pm 1.0V$.max.								
f	6.3	250	135	-	30	Reverse Ig (μA)	-	2.0	100%	
g	6.3	250	135	-50	-	Ia (mA)	-	1.0	100%	
h	6.3	250	250	-100V. DC. +100V. Peak sinu- soidal A.C. (50 cps.)	-	Mean Ia (mA)	25	-	100%	1
j	6.3	250	250	0	-	Ia (mA)	160	-	100%	1

NOTE

1. Valves shall be subjected either to test 'h' or 'j'. In test 'j' the anode and screen voltages shall be applied only as long as is necessary to obtain the true anode current reading.