

(VT51)

Specification MAP/CV1051/Issue 6 Dated 10.9.46. 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> - Pentode <u>CATHODE</u> - Directly Heated - oxide coated <u>ENVELOPE</u> - Glass - Unmetallised <u>PROTOTYPE</u> - PEN 220A	<u>MARKING</u> See K1001/4.
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<u>RATING</u>	Note	<u>BASE</u> B5		
Filament Voltage (V)	2.0	A B	Pin	Electrode
Filament Current (A)	0.2		1	Anode
Maximum Anode Voltage (V)	150		2	Control Grid
Maximum Screen Voltage (V)	150		3	Filament Negative and Suppressor Grid
Maximum Anode Dissipation (W)	3		4	Filament Positive
Mutual Conductance (mA/V)	2.5		5	Screen Grid
Anode Current (mA)	18			
Optimum Load Resistance (Ω)	6,000			
Maximum Operating Frequency (Mc/s)	7			
<u>CAPACITANCES</u> (pF)			<u>DIMENSIONS</u> See K1001/AI/D1	
C _{ae}	10.5	Dimensions		Min. Max.
C _{ge}	11.0	A	(mm)	- 115
C _{ag}	1.5			

<u>NOTES</u>	Diameter of valve not to exceed 44 mm. up to 71.5 mm from bottom of base.
A. $V_a = 100, V_{g2} = 100, V_{g1} = 0$ B. $V_a = 150, V_{g2} = 150, V_{g1} = -9$	

CV1051

TESTS

To be performed in addition to those application in K1001.

	Test Conditions				Test	Limits		No. Tested
	Min.		Max.					
a	See K1001/AIII				Capacitances (pF)			6 per week
	Links to H.P.	Links to L.P.	Links to E.					
	1	3,4,5	2,6,7,8,9,10,TC1,TC2					
	2	3,4,5	1,6,7,8,9,10,TC1,TC2					
	1	2	3,4,5,6,7,8,9,10,TC1,TC2.		C _{ae}	-	10.5	
					C _{ge}	-	11.0	
					C _{ag}	-	1.5	
b	V _f	V _a	V _{g2}	V _{g1}	I _f (A)	0.18	0.23	100% or 3
	2.0	0	0	0				
c	2.0	120	120	-9	I _a (mA)	8.0	13.5	100%
d	2.0	25	120	0	I _a (mA)	21.5	-	100%
e	2.0	120	120	-9	I _{g2} (mA)	1.6	3.0	100% or 3
f	2.0	120	120	-9	Reverse I _{g1} (μA)	-	1.0	100%
g	2.0	120	120	-8 to -10	g _m (mA/V)	1.55	2.15	100%
h	2.0 - 1.8	120	120	-9	I _a drop (mA)	-	1.0	100%