

Specification MAP/CV1096/Issue 6 Dated 25.1.49 To be read in conjunction with K1001.	<u>SECURITY</u> <table style="width: 100%; border: none;"> <tr> <td style="border: none; width: 50%; text-align: center;"> <u>Specification</u> RESTRICTED </td> <td style="border: none; width: 50%; text-align: center;"> <u>Valve</u> UNCLASSIFIED </td> </tr> </table>	<u>Specification</u> RESTRICTED	<u>Valve</u> UNCLASSIFIED																																															
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→ Indicates a change																																																		
<u>TYPE OF VALVE</u> - Pentode <u>CATHODE</u> - Directly heated - Thoriated Tungsten <u>ENVELOPE</u> - Unmetallised <u>PROTOTYPE</u> - 5B/502A	<u>MARKING</u> See K1001/4 <u>PACKING</u> See K1005																																																	
<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;"><u>RATING</u></td> <td style="text-align: center;">Note</td> <td></td> </tr> <tr> <td>Filament Voltage (V)</td> <td>12.0</td> <td rowspan="10" style="vertical-align: middle; text-align: center;">A A A</td> </tr> <tr> <td>Filament Current (A)</td> <td>2.0</td> </tr> <tr> <td>Max. Anode Voltage (kV)</td> <td>1.5</td> </tr> <tr> <td>Max. Screen Voltage (V)</td> <td>300</td> </tr> <tr> <td>Max. Suppressor Voltage (V)</td> <td>45</td> </tr> <tr> <td>Max. Anode Dissipation (W)</td> <td>60</td> </tr> <tr> <td>Max. Screen Dissipation (W)</td> <td>20</td> </tr> <tr> <td>Mutual Conductance (mA/V)</td> <td>3.0</td> </tr> <tr> <td>Amplification Factor (Mμ)</td> <td>1500</td> </tr> <tr> <td>Anode Impedance (MΩ)</td> <td>0.5</td> </tr> <tr> <td>Max. Operating Frequency (Mcs)</td> <td>20</td> </tr> </table>	<u>RATING</u>	Note		Filament Voltage (V)	12.0	A A A	Filament Current (A)	2.0	Max. Anode Voltage (kV)	1.5	Max. Screen Voltage (V)	300	Max. Suppressor Voltage (V)	45	Max. Anode Dissipation (W)	60	Max. Screen Dissipation (W)	20	Mutual Conductance (mA/V)	3.0	Amplification Factor (M μ)	1500	Anode Impedance (M Ω)	0.5	Max. Operating Frequency (Mcs)	20	<u>BASE</u> USM5 (Ceramic) <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Pin</td> <td style="text-align: center;">Electrode</td> </tr> <tr> <td style="text-align: center;">1</td> <td>Filament</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Screen grid</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Control grid</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Suppressor grid</td> </tr> <tr> <td style="text-align: center;">5</td> <td>Filament</td> </tr> <tr> <td style="text-align: center;">T.C.</td> <td>Anode</td> </tr> </table> <u>TOP CAP</u> See K1001/AI/D5.1 <u>DIMENSIONS</u> See K1001/AI/D1 <table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">Dimension</td> <td style="text-align: center;">Min.</td> <td style="text-align: center;">Max.</td> </tr> <tr> <td style="text-align: center;">A</td> <td style="text-align: center;">(mm)</td> <td style="text-align: center;">181</td> </tr> <tr> <td style="text-align: center;">B</td> <td style="text-align: center;">(mm)</td> <td style="text-align: center;">59</td> </tr> </table>	Pin	Electrode	1	Filament	2	Screen grid	3	Control grid	4	Suppressor grid	5	Filament	T.C.	Anode	Dimension	Min.	Max.	A	(mm)	181	B	(mm)	59
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<u>NOTES</u> A - Va = 1250V, Vg1 = -13.0V, Vg2 = 300V, Vg3 = 0.																																																		

CV1096

TESTS

To be performed in addition to those applicable in K1001.

Test Conditions							Test	Limits		No. Tested
								Min.	Max.	
a	Vf (AC) 12.0	Va 0	Vg2 0	Vg3 0	Vg1 0	Ia 0	If (A)	1.8	2.2	100%
b	12.0	Strapped 750V. (Note 1)			applied		Peak Ic Emission (A)	1.75	-	100%
c	12.0	1500	300	0	-	50	Reverse Ig after 3 mins. (mA) and must not increase during remaining 2 mins.	-	10	100%
d	12.0	1500	300	0	-32	-	Ia (mA)	-	5	100%
e	12.0	1500	300	0	-15	-	Ia (mA)	23	37	100%
f	12.0	1500	300	0	-20	-	Ia (mA)	10	20	100%
g	12.0	1500	300	0	-15 to -20	-	Ia change (mA)	13	17	100%
h	12.0	1500	300	0	-15	-	Ig2 (mA)	4.0	8.5	100%
j	12.0	1500	300	+20	-16	-	Ia (mA)	23	35	100%
k	12.0	1500	300	+20 to -100	-16	-	Ia change (mA)	2	5	100%
l	Conditions as in tests (j) and (k)						Ig3 change (mA)	-	1.0	100%

NOTE

- To be maintained only for sufficient time for the measurement to be made.