

Specification MAP/CV15/Issue 6 Dated 21.12.49. To be read in conjunction with K1001, ignoring clauses:- 5.2, 7.2.	<u>SECURITY</u>	
	<u>Specification</u> RESTRICTED	<u>Valve</u> UNCLASSIFIED

→ Indicates a change

<u>TYPE OF VALVE</u> - Triode		<u>MARKING</u> See K1001/4	
<u>CATHODE</u> - Directly heated, Thoriated tungsten.		<u>BASE</u> None	
<u>ENVELOPE</u> - Metal-glass construction		<u>PACKING</u> See K1005/7.3	
<u>PROTOTYPE</u> - E.1266		<u>CONNECTIONS AND DIMENSIONS</u> See drawing on page 3.	
<u>RATING</u>		<u>Note</u>	
Filament Voltage (V)	3.25	A B	
Filament Current (A)	6.75		
Max. Anode Voltage (KV)	4.0		
Max. Anode Dissipation (W)	1.0		
Amplification Factor	15.5		
Max. Operating Frequency (Mc/s)	300		
<u>CAPACITANCES</u>			
C <sub>ag</sub> (PF)	3.7		
C <sub>gf</sub> (PF)	2.3		
C <sub>af</sub> (PF)	1.0		

**NOTE A:** Cooling, even when only filament volts are applied should be provided so that the temperature of the anode does not exceed 140°C. A suitable holder which satisfies this requirement for a pair of valves is cap holder Type 20, Ref. 1CH/13569.

**NOTE B:-** At  $V_a = 500$  v,  $I_a = 20$  mA.

TESTS

To be performed in addition to those applicable in K1001.

Test Conditions					Test	Limits		No. Tested	Note																														
Vf (AC)	Va	Vg	Ia (mA)	Min.		Max.																																	
For the following tests, the required cooling, as defined in Note A, can be provided by mounting the valves singly on a valve base type 20 and not in pairs as for normal working.																																							
a	3.5	Raised slowly to 5kV and maintained till flashing ceases	Preferably automatic bias	A trace	<u>HOT FLASH PROCESS</u> Va maintained at 5kV. for a period of 2 min. during which time valve shall show no sign of break-down.	-	-	100%	1																														
b	3.5	0	0	-	If (A)	6.6	7.4	100%																															
c	3.5	500	-	20	Reverse Ig ( $\mu$ A)	-	10	100%																															
d	3.5	500	-	20	-Vg (V)	-6	-20	100%																															
e	3.5	400	-	20	Change in Vg from value noted in (d)	5	8	1% (1)																															
f	-	1000	0	10	Vf (V)	-	2.0	100%																															
g	3.5	Anode and grid strapped. Peak applied volts 2.0kV. $t_p = 2\mu$ sec. P.R.F. = 50 per sec. Pulse shape sinusoidal.			Emission (A)	1.75		1% (1)																															
See K1001/AIII using test jig type 112 Ref. 10A/17828																																							
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Links to H.P.</th> <th>Links to L.P.</th> <th>Links to E</th> <th><u>CAPACITANCES</u></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>2</td> <td>3</td> <td>1,4,5,6,7,8.</td> <td>1. Cag (PF)</td> <td>2.95</td> <td>4.45</td> <td>6 per week</td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>5</td> <td>1,2,4,6,7,8.</td> <td>2. Cge (PF)</td> <td>1.2</td> <td>2.3</td> <td>"</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>										Links to H.P.	Links to L.P.	Links to E	<u>CAPACITANCES</u>							2	3	1,4,5,6,7,8.	1. Cag (PF)	2.95	4.45	6 per week				3	5	1,2,4,6,7,8.	2. Cge (PF)	1.2	2.3	"			
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1. Once the conditions specified in Test (a) have been met, conditions need not be repeated for acceptance testing. For this hot flash process there shall be a 500 ohm resistor in series with the applied voltage and a capacitance of 0.15 $\mu$ F. in parallel with the supply voltage on the supply side of the resistor.																																							

