

GENERAL POST OFFICE: E-IN-C (S)

(POVT 132)

Specification: G.P.O./CV 1694/Issue 2 Date: 21.2.47 To be read in conjunction with K 1001	<u>SECURITY</u>	
	<u>Specification</u> Restricted	<u>Valve</u> Restricted

---> indicates a change

<u>TYPE OF VALVE:</u> Triode <u>CATHODE:</u> Directly heated <u>ENVELOPE:</u> Unmetallised glass <u>PROTOTYPE:</u> 4104D			<u>MARKING</u> See K1001/4												
<u>RATING</u>		Note	<u>BASE</u> Bayonet cap 4-pin (BC4) See drawing on page 3 and Note B. <u>CONNEXIONS</u>												
Filament current	(A)		1.0	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 25%;">Pin</th> <th style="width: 75%;">Electrode</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Grid</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Filament -</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Filament +</td> </tr> <tr> <td style="text-align: center;">4</td> <td>Anode</td> </tr> </tbody> </table>		Pin	Electrode	1	Grid	2	Filament -	3	Filament +	4	Anode
Pin	Electrode														
1	Grid														
2	Filament -														
3	Filament +														
4	Anode														
Nominal filament voltage	(V)		4.5												
Max. anode voltage	(V)		160												
Max. anode dissipation	(W)		5.0												
Mutual conductance	(mA/V)	1.15	A												
Amplification factor		2.35	A												
Anode impedance	(ohms)	2000	A												
<u>CAPACITANCES (pF)</u>			<u>DIMENSIONS</u> See K1001/A1/D1												
C _{ag}	(max)	7.5	<table border="1" style="width: 100%;"> <thead> <tr> <th style="width: 30%;">Dimension</th> <th style="width: 20%;">Min.</th> <th style="width: 50%;">Max.</th> </tr> </thead> <tbody> <tr> <td>A (mm)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">108</td> </tr> <tr> <td>B (mm)</td> <td style="text-align: center;">-</td> <td style="text-align: center;">64</td> </tr> </tbody> </table>			Dimension	Min.	Max.	A (mm)	-	108	B (mm)	-	64	
Dimension	Min.	Max.													
A (mm)	-	108													
B (mm)	-	64													
C _{ae}	(max)	4.0													
C _{ge}	(max)	5.0													
<u>NOTE</u>															
A. Measured with V _a = 130, and I _a = 20 mA.															
B. The axis of the bayonet locating pin shall lie within 25° of the plane of the filament.															

TESTS

To be performed in addition to those applicable in K1001

	TEST CONDITIONS			TEST	LIMITS		No. Tested	Note	
					Min.	Max.			
	See K1001/AIII			<u>CAPACITANCES (pf)</u>					
(a)	Links to H.P.	Links to L.F.	Links to E						
	4	1	2,3,5,6,7,8,9,10,TC1,TC2		(i) Cag	-	7.5	6 per week	
	4	2,3	1,5,6,7,8,9,10,TC1,TC2.		(ii) Cae	-	4.0	6 per week	
	1	2,3	4,5,6,7,8,9,10,TC1,TC2.	(iii) Cge	-	5.0	6 per week		
(b)	Test Voltage 500 Volts, D.C.			<u>INSULATION (megohms)</u>					
				(i) Anode to filament	100	-	1%		
				(ii) Between all other electrodes	500	-	1%		
				(iii) Between any electrode and the metallic shell of the base.	500	-	1%		
	If(A)	Va	Vg						
(c)	1.0	-	-	Vf (V)	4.0	5.0	100%		
(d)	1.0	130	-20	Reverse Ig (μA)	-	0.5	100%		
(e)	1.0	130	-20	Ia (mA)	19.0	31.0	100%		
(f)	1.0	130	-20	μ	2.0	2.7	100%		
(g)	1.0	130	-20	Ra"x" (ohms)	1,600	2,400	100%		
(h)	0.9	130	-20	Ra"y" (ohms)	-	1.2"x"	100%	1	

NOTE

1. Re-adjust If with Va = Vg = 0

OUTLINE DRAWING

