

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

(POVT 114)

Specification: <b>G.P.O./CVI682/Issue 1</b> Dated: <b>18.11.46</b> To be read in conjunction with K 1001	<u>SECURITY</u>	
	<u>Specification</u> <b>Restricted</b>	<u>Valve</u> <b>Restricted</b>

→ indicates a change

<u>TYPE OF VALVE:</u> <b>Pentode</b>			<u>MARKING</u> See K1001/4		
<u>CATHODE:</u> <b>Indirectly heated</b>			<u>BASE</u> British 7-pin (B7)		
<u>ENVELOPE:</u> <b>Unmetallised glass</b>			<u>CONNEXIONS</u>		
<u>PROTOTYPE:</u> <b>PENA4 (mod)</b>			<u>Pin</u>	<u>Electrode</u>	
<u>RATING</u>			<u>Note</u>		
Heater voltage	(V)	4.0		1	No connection
Nominal heater current	(A)	2.0		2	No connection
Max. anode voltage	(V)	250		3	G2
Max. screen voltage	(V)	250		4	Heater
Max. anode dissipation	(W)	9.0		5	Heater
Mutual conductance	(mA/V)	9.5	A	6	Cathode
Anode impedance	(ohms)	50,000	A	7	Anode
				TC	G1
<u>CAPACITANCES (pF)</u>			<u>TOP CAP</u> See K1001/A1/D5.1		
Cag	(max)	1.0	<u>DIMENSIONS</u> See K1001/A1/D1		
Cae	(nominal)	7.25	<u>Dimension</u>		
Cge	(nominal)	12.8	<u>Min.</u>		
			<u>Max.</u>		
			A	(mm)	-
			B	(mm)	150
					51

NOTEA. Measured with  $V_a = V_{g2} = 250.$  and  $I_a = 40$  mA.

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.P.	Links to E									
	7	TC1	1,2,3,4,5,6,8,9,10,TC2					(i) Cag	-	1.0	6 per week	
	7	3,4,5,6	1,2,8,9,10,TC1,TC2					(ii) Cae	6.53	7.97	6 per week	
	TC1	3,4,5,6	1,2,7,8,9,10,TC2				(iii) Cge	11.62	14.0	6 per week		
(b)	Test Voltage 250 Volts D.C.						<u>INSULATION (megohms)</u>					
							(i) Between any two electrodes	150	-	1%		
							(ii) Between any electrode and metallic shell of the base	150	-	1%		
	Wh	Va	Vg1	Vg2	Vg3	Ia (mA)						
(c)	4.0	-	-	-	-	-	Ih (A)	1.9	2.2			
(d)	4.0	250	Adjust	250	-	40	gm (mA/V)	8.2	10.0			
(e)	4.0	250	Adjust	250	-	40	Ig2 (mA)	4.5	6.0			
(f)	4.0	250	Adjust	250	-	40	Reverse Ig1 (μA)	-	1.0			
(g)	4.0	250	Read	250	-	40	Vg1 (V)	4.9	7.0			