

VALVE ELECTRONIC

(POVT 107)

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

Specification: G.P.O./CV 1675/Issue 1	<u>SECURITY</u>	
Dated: 12-6-46	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K 1001	Restricted	Restricted

—→ indicates a change

<u>TYPE OF VALVE:</u> Output pentode				<u>MARKING</u>			
<u>CATHODE:</u> Indirectly heated				See K 1001/4			
<u>ENVELOPE:</u> Unmetallised glass				<u>Base</u>			
<u>PROTOTYPE</u> N 43				British 7-pin (B7)			
<u>RATING</u>				Note	<u>CONNEXIONS</u>		
					Pin	Electrode	
Heater voltage	(V)	4.0	A	1	No connection		
Nominal heater current	(A)	2.0		2	No connection		
Max. anode voltage	(V)	250		3	Screen grid		
Max. screen voltage	(V)	250		4	Heater		
Max. anode dissipation	(W)	10.0		5	Heater		
Mutual conductance	(mA/V)	10.0		6	Cathode		
				7	Anode		
				TC	Control grid		
<u>CAPACITANCES (pF)</u>				<u>TOP CAP</u>			
Cag	(max)	0.60		See K 1001/A1/D5.1			
Cae	(max)	20.0	<u>DIMENSIONS</u>				
Cge	(max)	20.0	See K 1001/A1/D1				
				Dimension		Min.	Max.
				A (mm)		-	152
				B (mm)		-	58
<u>NOTE</u>							
A. Measured with $V_a = 250$, $V_g 2 = 250$, and $I_a = 40$ mA.							

TESTS

To be performed in addition to those applicable in K 1001

	TEST CONDITIONS						TEST	LIMITS		No. Tested	Note
								Min.	Max.		
(a)	See K 1001/A III						<u>Capacitances (pF)</u>				
	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	-	0.60	6 per week	
	7	3,4,5, 6.	1,2,8,9,10, TC1, TC2				(ii) Cae	-	20.0	6 per week	
	TC1	3,4,5, 6	1,2,7,8,9, 10, TC2				(iii) Cge	-	20.0	6 per week	
	Vh (V)	Va	Vg1	Vg2	Vg3	Ia (mA)					
(b)	4.0	-	-	-	-	-	If (A)	1.8	2.2	100%	
(c)	4.0	250	Read	250	-	4.0	Vg1 (V)	-3.0	-6.0	100%	
(d)	4.0	250	Adjust	250	-	4.0	gm (mA/V)	9.0	11.0	100%	
(e)	4.0	250	Adjust	250	-	4.0	Ig2 (mA)	7.0	11.0	100%	
(f)	4.0	250	Adjust	250	-	4.0	Reverse Ig1 (μA)	-	1.0	100%	