

VALVE ELECTRONIC **CV1711**GENERAL POST OFFICE: E-IN-C (W)

(POVT 162)

Specification: G.P.O./CV1711/Issue 1	<u>SECURITY</u>	
Dated: 11.4.47	<u>Specification</u>	<u>Valve</u>
To be read in conjunction with K 1001	Restricted	Restricted

→ indicates a change

<u>TYPE OF VALVE:</u> Double diode pentode				<u>MARKING</u>			
<u>CATHODE:</u> Indirectly heated				See K1001/4			
<u>ENVELOPE:</u> Unmetallised glass				<u>BASE</u>			
<u>PROTOTYPE</u> 6B7				U.S. Medium 7-pin (U.S.M.7)			
<u>RATING</u>				<u>Note</u>	<u>CONNECTIONS</u>		
					<u>Pin</u>	<u>Electrode</u>	
Heater voltage	(V)	6.3	A	1	Heater		
Nominal heater current	(A)	0.3		2	Anode		
Max. anode voltage	(V)	250.0		3	G2		
Max. screen voltage	(V)	125.0		4	Diode 1		
Mutual conductance	(mA/V)	1.125		5	Diode 2		
Anode impedance	(ohms)	650,000		6	Cathode & G3		
				7	Heater		
				T.C.	G1		
				<u>TOP CAP</u>			
				See K1001/A1/D5.1			
<u>CAPACITANCES (pF)</u>				<u>DIMENSIONS</u>			
				See K1001/A1/D1			
Cag	(nominal)	0.007		<u>Dimension</u>		<u>Min.</u>	<u>Max.</u>
Cac	(nominal)	9.5		A (mm)		-	108
Cge	(nominal)	3.5		B (mm)		-	38

NOTE**A. Measured with $V_a = 250$, $V_{g2} = 100$, and $V_{g1} = -3$**

To be performed in addition to those applicable in K1001

	TEST CONDITIONS							TEST	LIMITS		No. Tested	Note
	Vh(V)	Va	Vg1	Vg2	Ia (mA)	Vd1	Vd2		Min.	Max.		
(a)	6.3	-	-	-	-	-	-	Ih (A)	0.26	0.34	100%	1
(b)	6.3	250	-3	100	-	-	-	Reverse Ig1 (μA)	-	1.0	100%	1
(c)	6.3	250	-3	100	Read	-	-	Ia (mA)	4.8	7.5	100%	1
(d)	6.3	250	-17	100	Read	-	-	Ia (cut-off) (μA)	-	15.0	100%	1
(e)	6.3	250	-3	100	-	-	-	Ig2 (mA)	1.0	1.8	100%	1
(f)	6.3	250	-3	100	-	-	-	gm (mA/V)	0.85	1.4	100%	1
(g)	6.3	250	Adjust	100	6	-	-	Ra (megohms)	0.65	-	100%	1
(h)	6.3	0	0	0	-	-	-	D1.Space current (μA)	1.0	4.0	100%	1
(j)	6.3	0	0	0	-	-	-	D2.Space current (μA)	1.0	4.0	100%	1
(k)	6.3	0	0	0	-	5	-	D1 Rectified current (μA)	225.0	-	100%	1,2
(l)	6.3	0	0	0	-	-	5	D2 Rectified current (μA)	225.0	-	100%	1,3

NOTES

1. Before commencing the tests, the valve shall be pre-heated for 10 minutes, the heater voltage being adjusted to 6.3 volts with all other electrodes disconnected.
2. Measured with Vd1 = 50 Cps
3. Measured with Vd2 = 50 Cps.