

VALVE ELECTRONIC

CV1711

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

(POVT 162)

Specification: G.P.O./CV1711/Issue 1 Dated: 11.4.47 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> Double diode pentode				<u>MARKING</u> See K1001/4		
<u>CATHODE:</u> Indirectly heated				<u>BASE</u> U.S. Medium 7-pin (U.S.M.7)		
<u>ENVELOPE:</u> Unmetallised glass				<u>CONNECTIONS</u>		
<u>PROTOTYPE:</u> 6B7						
<u>RATING</u>				Pin	Electrode	
Heater voltage	(V)	6.5		1	Heater	
Nominal heater current	(A)	0.5		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	A	5	Diode 2	
Anode impedance	(ohms)	650,000	A	6	Cathode & G3	
				7	Heater	
				T.C.	G1	
				<u>TOP CAP</u> See K1001/A1/D5.1		
				<u>DIMENSIONS</u> See K1001/A1/D1		
<u>CAPACITANCES (pF)</u>				Dimension	Min.	Max.
C _{ag}	(nominal)	0.007		A (mm)	-	106
C _{ae}	(nominal)	9.5		B (mm)	-	38
C _{ge}	(nominal)	3.5				
<u>NOTE</u>						
A. Measured with V _a = 250, V _{g2} = 100, and V _{g1} = -5						

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 I _{g1} (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(out-off) (μA)	-	15.0	100%	1
(e)	6.3	250	-3	100	-	-	-	I _{g2} (mA)	1.0	1.8	100%	1
(f)	6.3	250	-3	100	-	-	-	g _m (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 V_{d1} = 50 Cps
3. Measured with V_{d2} = 50 Cps.