VALVE ELECTRONIC CV1709

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

(POVT 160)

Specification: G.P.O./CV1709/Issue 1 Date: 11.4.47 To be read in conjunction with K 1001	SECURITY Specification: Restricted	Valve: Restricted

---, indicates a change

TYPE OF VALVE: Variable u H.F. pentode
CATHODE: Indirectly heated
ENVELOPE: Unmetallised glass
PROTOTYPE: 6D8

MARKING

See K1001/4

BASE

U.S.Medium 6-pin (USM6)

RATING

			Note
Heater voltage	(V)	6.3	
Nominal heater current	(A)	0.3	
Max. anode voltage	(V)	250.0	
Max. screen voltage	(V)	100.0	
Mutual conductance	(mA/V)	1.6	A
Anode impedance	(ohms)	800,000	A

CAPACITANCES (pF)

Cag	(nominal)	0.007
Cae	(nominal)	6.5
Cge	(nominal)	4.7

CONNEXIONS

Pin	Electrode
1	Heater
2	Anode
3	G2
4	G3
5	Cathode
6	Heater
T.C.	G1

TOP CAP

See K1001/A1/D5.1

DIMENSIONS

See K1001/A1/D1

Dimension		Min.	Max.
A	(mm)	-	98
B	(mm)	-	38

NOTE

A. Measured with Va = 250, Vg2 = 100, Vg3 = 0, and Vg1 = -3.

To be performed in addition to those applicable in K1001

	TEST CONDITIONS						TEST	LIMITS		No. Tested	Note
	Vh(V)	Va	Vgl	Vg2	Vg3	Ia(mA)		Min.	Max.		
(a)	6.3	-	-	-	-	-	Ih (A)	0.26	0.34	100%	1
(b)	6.3	250	-3	100	0	-	Reverse Igl (μA)	-	0.5	100%	1
(c)	6.3	250	-3	100	0	Read	Ia (mA)	6.2	10.7	100%	1
(d)	6.3	250	-3	100	0	-	Ig2 (mA)	1.3	3.6	100%	1
(e)	6.3	250	-2.5 -3.5	100	0	-	gm (mA/V)	1.2	1.9	100%	1
(f)	6.3	250	-39 -41	100	0	-	gm (μA/V)	2.0	25.0	100%	1
(g)	6.3	250	-49 -51	100	0	-	gm (μA/V)	1.0	6.0	100%	1
(h)	6.3	250	Adjust	100	0	8.2	Ra (megohms)	0.7	-	100%	1
(j)	6.3	50	50	50	50	-	Ie (mA)	80.0	-	100%	1

NOTE

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.