

VALVE ELECTRONIC **CV 1706**GENERAL POST OFFICE: E-IN-C (W)

(FOVT 157)

Specification: G.P.O./CV 1706/Issue 1 Dated: 30-8-46 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 K 1001/4		
<u>CATHODE:</u> Indirectly heated				<u>BASE</u> U.S. Medium 7-pin (U.S.M.7)		
<u>ENVELOPE:</u> Unmetallised glass						
<u>PROTOTYPE:</u> 2B7						
<u>RATING</u>			Note	<u>CONNEXIONS</u>		
				Pin	Electrode	
Heater voltage	(V)	2.5		1	Heater	
Nominal heater current	(A)	0.8		2	Anode	
Max. anode voltage	(V)	250		3	G2	
Max. screen voltage	(V)	150		4	D1	
Amplification factor		730	A	5	D2	
Mutual conductance	(mA/V)	1.125	A	6	Cathode & G3	
Anode impedance	(megohms)	0.65	A	7	Heater	
				T.C.	G1	
				<u>TOP CAP</u> See K 1001/A1/D5.1		
<u>CAPACITANCES (pF)</u>				<u>DIMENSIONS</u> See K 1001/A1/D1		
C <sub>ag</sub>	(nominal)	0.007		Dimension	Min.	Max.
C <sub>g</sub> - all	(nominal)	3.5		A (mm)	-	106
C <sub>a</sub> - all	(nominal)	9.5		B (mm)	-	38
This valve type is obsolete and this specification is for record purposes only.				<u>NOTE</u> A. Measured with V <sub>a</sub> = 250, V <sub>g2</sub> = 100, and V <sub>g1</sub> = -3		

TESTS

To be performed in addition to those applicable in K 1001

	TEST CONDITIONS								TEST	LIMITS		No. Tested	Note	
	Vh	Va	Vg.1	Vg.2	Vg.3	Ia (mA)	VD1	VD2		Min.	Max.			
	(a)	2.5	-	-	-	-	-	-		-	Ih			(A)
(b)	2.5	250	-3	100	0	Read	-	-	Ia	(mA)	4.8	7.5	100%	1
(c)	2.5	250	-17	100	0	Read	-	-	Ia (cut off)	( $\mu$ A)	-	15.0	100%	1
(d)	2.5	250	-3	100	0	-	-	-	Ig2	(mA)	1.0	1.8	100%	1
(e)	2.5	250	-3	100	0	-	-	-	gm	(mA/V)	0.85	1.4	100%	1
(f)	2.5	250	Adjust	100	0	6.0	-	-	Ra	(megohms)	0.65	-	100%	1
(g)	2.5	250	-3	100	0	-	-	-	Reverse Ig 1	( $\mu$ A)	-	1.0	100%	1
(h)	2.5	0	0	0	0	-	-	-	D1 Space Current	( $\mu$ A)	1.0	4.0	100%	1
(j)	2.5	0	0	0	0	-	-	-	D2 Space Current	( $\mu$ A)	1.0	4.0	100%	1
(k)	2.5	0	0	0	0	-	5	-	D1 Rect. Current	( $\mu$ A)	225	-	100%	1,2
(l)	2.5	0	0	0	0	-	-	5	D2 Rect. Current	( $\mu$ A)	225	-	100%	1,3

NOTES

1. Before commencing the tests, the valve shall be pre-heated for 10 minutes, the heater voltage being adjusted to 2.5 volts with all other electrodes disconnected.
2. Measured with VD1 = 50 C ps.
3. Measured with VD2 = 50 C ps.