VALVE ELECTRONIC CV 380

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

Specification: G.P.O./CV 380/Issue 1 Dated: 2/4/47 To be read in conjunction with K 1001	SECURITY	
	Specification	Valve
	Restricted	Restricted

——→ indicates a change

TYPE OF VALVE: H.F. Pentode
CATHODE: Indirectly heated
ENVELOPE: Glass, enclosed in metal shell
PROTOTYPE: MV 54 (mod)

MARKING
See K 1001/4

BASE
British 9-pin glass (B9G) with silver-plated pins (Note A)

RATING			Note
Heater voltage	(V)	6.3	
Nominal heater current	(A)	0.3	
Max. anode voltage	(V)	300	
Max. screen voltage	(V)	300	
Max. anode dissipation	(W)	3.0	
Max. screen dissipation	(W)	1.7	
Mutual conductance	(mA/V)	7.7	C
Anode impedance	(megohms)	0.5	C
Inner amplification factor		80.0	C
Max. operating frequency	(Mc/s)	300	

CONNEXIONS (Note B)

Pin	Electrode
1	Heater
2	Anode
3	Screen grid
4	Internal screen
5	Internal screen
6	Control grid
7	Internal screen
8	Internal screen
9	Heater

CAPACITANCES (pF)

Cag	(max)	0.02
Cak	(max)	6.0
Cgk	(max)	10.0
Cg1g2	(nominal)	2.1

DIMENSIONS
See K 1001/A1/D2
Groove referred to in Note 1 of drawing is required.

NOTES

A. Pins shall be silver plated to a thickness of 0.0003".

B. Cathode and supressor grid shall be connected internally to the screen.

C. Measured with Va = Vg2 = 250, and Ia = 10 mA.

TESTS

To be performed in addition to those applicable in K 1001.

	TEST CONDITIONS					TEST	LIMITS		No. Tested	Note
	See K 1001/A III									
(a)	Links to H.P.	Links to L.P.	Links to E			CAPACITANCES (pF)				
	2	6	1,3,4,5,7,8,9,10,TC1,TC2			(i) Cag	-	0.02	6 per week	
	2	1,3,4,5,7,8,9,10	6,TC1,TC2			(ii) Cae	4.5	6.0	6 per week	
	6	1,3,4,5,7,8,9,10	2,TC1,TC2			(iii) Cge	7.5	10.0	6 per week	
	Vh (V)	Va	Vg1	Vg2	Ia (mA)					
(b)	6.3	-	-	-	-	Ih (A)	0.27	0.33	100%	
(c)	6.3	250	Read	250	10	Vg1 (V)	-1.1	-2.1	100%	
(d)	6.3	250	Adjust	250	10	Reverse Ig (μA)	-	0.5	100%	
(e)	6.3	250	Adjust	250	10	gm (mA/V)	6.1	9.3	100%	1
(f)	6.3	250	Adjust	250	10	Ig2 (mA)	1.10	1.75	100%	
(g)	6.3	250	Adjust	250	10	Input impedance at 40 Mc/s (ohms)	9000	-	-	2

NOTES

1. Peak grid swing $\overset{+}{-}$ 0.5 volts max.
2. Input impedance measurements shall be made on 50% of the valves selected for capacitance measurements.