MINISTRY OF SUPPLY (D.C.D.)

VALVE ELECTRONIC **CV 78**

Specification MAP/CV 78/Issue 4.
Dated 15.1.49
To be read in conjunction with K1001.

SECURITY	
Specification	Valve
RESTRICTED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE: Grounded anode triode

CATHODE: Indirectly heated.

ENVELOPE: Glass - Lower portion enclosed in metal can.

MARKING

See K1001/4

PACKING

See K1005

RATING		Note
Heater Voltage (V)	6.3	
Heater Current (A)	0.6	
Max. Anode Voltage (V)	250	
Max. Anode Dissipation with grid leak less than 1000Ω (W)	8.0	
Max. Anode Dissipation with grid leak greater than 1000Ω (W)	4.0	
Mutual Conductance (mA/V)	15	A
Amplification factor	50	A
Anode Impedance (Ω)	3100	A
Efficiences as Oscillator obtained at various wavelengths in a representative circuit.		
Efficiency at 50 cms.	4%	
60	12%	
70	18%	
80	23%	
90	27%	
100	30%	

BASE

B9G

Pin	Electrode
1	Heater
2	Anode
3	Anode
4	Control grid
5	Control grid
6	Anode
7	Anode
8	Cathode
9	Heater

DIMENSIONS

See K1001/A1/D2

Dimension		Min.	Max.
E	(mm)	53.5	62

CAPACITANCES (pF)		
Cag	7.4	B
Ca (c+h)	6.0	B
Cg (c+h)	5.7	B

NOTE

A:- Va = 250V., Ia = 32mA.

B:- Measured with spigot connected to anode.

To be performed in addition to those applicable in K1001

	Test Conditions				Test	Limits Min.	Limits Max.	No. Tested
a	To be measured using adaptor Type 39. Ref. 10A/13335							
	See K1001/AIII				CAPACITANCES (pF)			
	Links to H.P.		Links to L.P.	Links to E	1. Cag	6.3	8.5	6 per week
	2,3,6,7 10		4,5	1,8,9 TC1, TC2.				
	2,3,6,7 10		1,8,9	4,5 TC1, TC2.	2. Ca (c+h)	5.1	6.9	
	4,5		1,8,9	2,3,6,7 TC1, TC2.	3. Cg (c+h)	4.8	6.6	
b	Vh	Va	Vg	(Ia(mA)				
	6.3	0	0	0	Ih (A)	0.54	0.66	100% or S
c	6.3	250	-	32	Vg (V)	1.4	3.2	100%
d	6.3	250	grid swing ± 5V. max.	32	gm (mA/V)	11	19	100%
e	6.3	250	- 4.0	-	Reverse Ig (μA)	-	2.0	100%
f	6.3	Strapped. 10V. D.C. applied		-	Ic (mA)	90	-	100%