VALVE ELECTRONIC **CV 1031**

Specification MAP/CV1031/Issue 10 Dated 6.1.49 To be read in conjunction with K1001	SECURITY Specification: RESTRICTED Valve: UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE: - Transmitting Tetrode

CATHODE: - Directly Heated

ENVELOPE: - Glass-Double-ended

COMMERCIAL PROTOTYPE: - S.G. 250

MARKING

See K1001/4

PACKING

See K1005

BASE

None

RATING			Note
Filament Voltage	(V)	11.25	
Filament Current	(A)	8.0	
Max. Anode Voltage	(kV)	5.0	
Max. Anode Dissipation	(W)	250	
Mutual Conductance	(mA/V)	1.0	A
Amplification Factor		100	A

CONNECTIONS

The anode lead shall be brought out at one end of the valve and the remaining leads at the other end. All leads shall be securely bound in their insulating sleeves to the lips of the valve, and shall be of the following lengths (clear of bindings) and colour:-
Filament (Black) 7.5 ins.
Screen Grid (Red) 7.5 ins.
Control Grid (Green) 11 ins.
Anode (Red) 11 ins.
The insulating sleevings shall terminate 1 inch from the end of each lead.

NOTES

A. Va = 3kV, V_{g2} = 600,
V_{g1} = -40.

DIMENSIONS
See K1001/AI/D3

Dimension	Min.	Max.
A (mm)	355	395
B (mm)	158	168
C (mm)	60	66
F (mm)	48	-
G (mm)	355	365

CV1031

TESTS

To be performed in addition to those applicable in K1001.

Clause	Test Conditions					Test	Limits		No. Tested
							Min.	Max.	
	Vf	Va	V_g2	V_g1	Ia(mA)				
(a)	See K1001/AIII					Cag (pF)	-	1.7	6 per wk.
(b)	11.25	0	0	0	-	If (A)	7.6	8.9	100%
(c)	11.25	3000	600	-	83	Dissipation Test 1. There shall be no sparking between pinch leads or loss of emission. 2. At end of test reverse I_g1 (μA)	- -	 20	100%
	Conditions maintained for 10 minutes.								
(d)	11.25	3000	600	-120	-	Ia (mA)	-	20	100%
(e)	11.25	3000	600	-30 to -32	-	gm (mA/V)	1.0	-	100%
(f)	11.25	Adjust for required Ia	600	-30	-	μ	100	-	100%
(g)	11.25	3000	up to 1100	-41	-	Reverse I_g2 (mA)	-	2	100%
(h)	11.25	3000	1000	-41	-	I_g2	To be +ve		100%
(j)	11.25	Anode and grids strapped 450v. max. applied only for sufficient time to observe required reading.				Ic (mA)	450	-	100%