

ELECTRONIC VALVE SPECIFICATIONS
SPECIFICATION MOA/CV2104

ISSUE 3 DATED 9TH AUGUST, 1951.

AMENDMENT NO. 1

Page 2. Test h

Test conditions Column Vd

Delete + 10 Insert + 5

Test Id, Column Min. Limits

Delete 1.0 Insert 0.3.

October, 1961.
N.4646

Signals Research and Development
Establishment.

Specification MOS/CV 2104/Issue 3 Dated:- 9.8.51. To be read in conjunction with K1001	<u>SECURITY</u>	
	<u>Specification</u> Restricted	<u>Valve</u> Unclassified

→ indicates a change

<u>TYPE OF VALVE:-</u> Sub-miniature Diode-Pentode		<u>MARKING</u> CV 2104		
<u>CATHODE:-</u> Directly heated		Date Code & Factory		
<u>ENVELOPE:-</u> Glass-umetallised		Identification Code		
<u>PROTOTYPE:-</u> VX8021				
<u>RATING</u>		Note	<u>BASE</u> B8D	
→ Filament voltage (V)	1.25		<u>CONNECTIONS</u>	
→ Filament current (mA)	25		Pin	Electrode
→ Max. anode voltage (V)	100		1	A
→ Max. screen voltage (V)	100		2	No Connection
→ Mutual conductance (mA/V)	0.4		3	G1
→ Anode impedance (MΩ)	0.7		4	-F (G3)
→ Anode current (mA)	0.75		5	+F
→ Screen current (mA)	0.2		6	D
Nominal power output (mW)	20	7	No Connection	
		8	G2	
			<u>DIMENSIONS</u>	
			See drawing page 3.	
		Dimension	Min. Max.	
		A	m.m. 4.2	
		B	m.m. 10.16	

NOTES

- A. Measured at $V_a = V_{g2} = 90V$, $V_{g1} = -2.3V$
 B. Measured at $V_a = V_{g2} = 90V$, $V_{g1} = -2.3V$, $R_L = 0.15 MΩ$

A sharp bend must not be made in any valve lead closer than 1.5 mm. to the glass seal and soldered joints in the leads must not be made closer than 5.0 mm. to the seal.

CV 2104

Page 2.

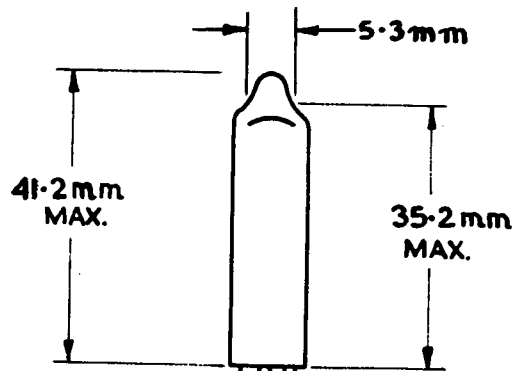
TESTS

To be performed in addition to those applicable in K1001

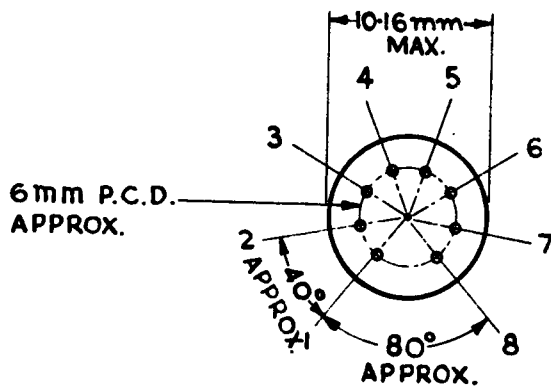
	Test Conditions					Test	Limits		No. Tested
	Vf	Va	Vg2	Vg1	Vd		Min.	Max.	
a	1.25	-	-	-	-	If (mA)	22	28	100%
b	1.25	70	70	0	-	Ia (mA)	0.8	1.4	100%
c	1.25	70	70	0	-	Ig2 (mA)	0.20	0.34	100%
d	1.25	70	70	-1.5	-	Rev.Ig1 (μA)	-	0.5	100%
e	1.25	70	70	0	-	gm (mA/V)	0.34	0.56	100%
→ f	1.1	70	70	0	-	gm (mA/V)	0.27	-	100%
g	1.25	0	0	0	-	Id(Note 1) (μA)	3.0	-	100%
h	1.25	0	0	0	+10	Id (mA)	1.0	-	100%

NOTE

1. Meter resistance 600 ohms.



BULBS STRAIGHTNESS TEST
 THE FINISHED VALVE MUST PASS THROUGH A CYLINDRICAL GAUGE OF LENGTH AT LEAST EQUAL TO THAT OF THE BULB. I.D. OF CYLINDER = 0.4 INCH.



VALVE BASE APPROX $\frac{2}{1}$

THE LEADS SHALL BE FLEXIBLE 25 - 27 S.W.G.
 TINNED COPPER-CLAD NICKEL IRON WIRE AT LEAST
 32mm IN LENGTH.