MINISTRY OF SUPPLY (S.R.D.E.) VALVE ELECTRONIC **CV2101**

Specification MOS/CV 2101/Issue 4 Dated:- 24.4.56. To be read in conjunction with K1001	SECURITY Specification: Unclassified Valve: Unclassified

→ indicates a change

TYPE OF VALVE:- Sub-miniature H.F. Pentode
CATHODE:- Directly heated
ENVELOPE:- Glass-unmetallised
PROTOTYPE:- VX8017

MARKING
See K1001/4, except that the valve shall be marked with the CV No. Factory and Date Code only.

RATING		Note
Filament Voltage (V)	1.25	
Filament current (mA)	25	
Max. anode voltage (V)	100	
Max. screen voltage (V)	100	
Mutual conductance (mA/V)	1.0	A
Anode impedance (MΩ)	0.65	A
Anode current (mA)	2.0	A
Screen current (mA)	0.55	A
CAPACITANCES (pF)		
→ Cag (max.)	0.015	B
Cae	5.1	B
Cge	3.2	B

BASE
B8D

CONNECTIONS

Pin	Electrode
1	Int. Connection
2	g1
3	No Connection
4	f(-), s
5	f(+), g3
6	No Connection
7	a
8	g2

DIMENSIONS
See drawing page 3.

Dimension	Min.	Max.
A m.m.	-	41.2
B m.m.	9.3	10.16

NOTES

A. Measured at Va = Vg2 = 70V, Vg1 = 0V
B. Measured with valve shielded.

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.

Z.11971.R.

TESTS

To be performed in addition to those applicable in K1001

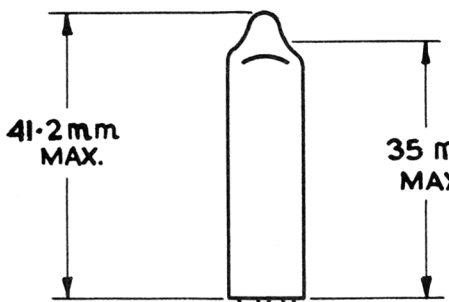
	Test Conditions				Test	Limits Min.	Limits Max.	No. Tested	Note
	See K1001/AIII				Capacitances (Shielded)(pF)				
	Links to H.P.	Links to L.P.	Links to E.						
a	7	2	1,3,4,5,6,8		(i) Cag	-	0.015	T.A.	1
	7	1,3,4,5,6,8	2		(ii) Cae	4.6	5.6	6 per week	1
	2	1,3,4,5,6,8	7		(iii) Cge	2.7	3.7		1
	Vf	Va	Vg2	Vg1					
b	1.25	-	-	-	If (mA)	22	28	100%	
c	1.25	70	70	0	Ia (mA)	1.5	2.5	100%	
d	1.25	70	70	0	Ig2 (mA)	0.4	0.7	100%	
e	1.25	70	70	-1.5	Rev.Ig1 (μA)	-	0.5	100%	
f	1.25	70	70	0	gm (mA/V)	0.75	1.25	100%	
g	1.1	70	70	0	gm (mA/V)	0.6	-	100%	
h	1.25	70	70	-6	Ia (Tail)(μA)	-	20	100%	2

NOTES

1. Capacities measured with shield round valve. All should be measured at R.F.

2. 1 Megohm protective resistance in series

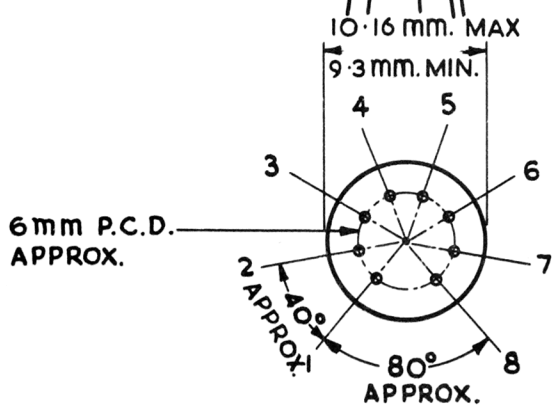
CV2101



MEASURED FROM BASE SEAT TO BULB TOP-LINE AS DETERMINED BY RING OF 5·334 ± ·025 mm GAUGE.

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 0·016–0·019 INCH DIA. TINNED COPPER-CLAD NICKEL IRON WIRE AT LEAST 38·1mm IN LENGTH.