

MINISTRY OF SUPPLY (S.R.D.E.)

Specification MOS/CV2102/Issue 4				<u>SECURITY</u>					
Dated:- 24.9.54				<u>Specification</u>		<u>Valve</u>			
To be read in conjunction with K1001				Unclassified		Unclassified			
→ indicates a change									
<u>TYPE OF VALVE</u> :- Sub-miniature output pentode				<u>MARKING</u> CV2102					
<u>CATHODE</u> :- Directly heated				Date Code & Factory Identification Code.					
<u>ENVELOPE</u> :- Glass unmetallised									
<u>PROTOTYPE</u> :- VX8018				<u>BASE</u> B8D					
<u>RATING</u>				PIN		ELECTRODE			
				1		I.C.			
				2		G1			
				3		N.C.			
				4		-F(G3)			
				5		+F			
				6		N.C.			
				7		A			
				8		G2			
				<u>DIMENSIONS</u>					
				See drawing on page 3					
				Dimension		Min.		Max.	
				A. mm.				41.2	
				B. mm.				10.16	

NOTESA. Measured at $V_a = V_{g2} = 90V$, $V_{g1} = -2.5V$.

B. Absolute Maximum Values.

Sharp bends in valve leads must not be made 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.

TESTS

To be performed in addition to those applicable in K1001

	Test Conditions					Test	Limits		No. Tested
							Min.	Max.	
	Vf	Va	Vg2	Vg1	Vht				
a	1.25	-	-	-	-	If (mA)	22	28	100%
b	1.25	90	90	-2.5	-	Ia (mA)	1.1	2.4	100%
c	1.25	90	90	-2.5		Ig2 (mA)		0.6	100%
d	1.25	90	90	-2.5		gm (mA/V)	0.65	1.05	100%
e	1.25	90	90	-2.5		Rev. Ig1 (μ A)		0.5	100%
f	1.25	90	90	-8		Ia tail (μ A) (Note 2)		50	100%
g	1.25				90	Microphony (Note 1)	See Note 1.		

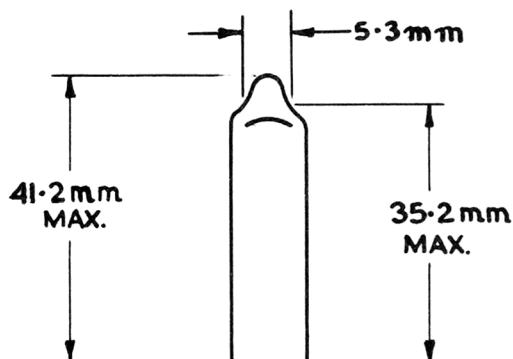
NOTES

- Method of test as JAN 1A F-6e(3).

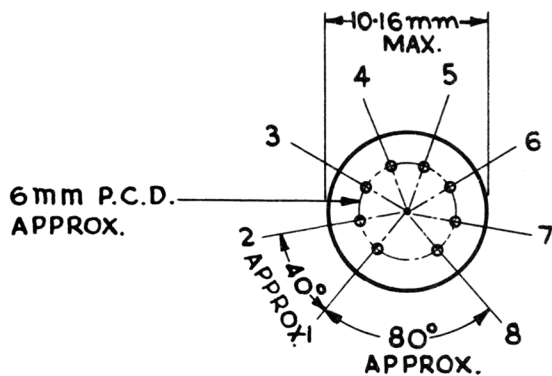
Conditions: R1 = 0.25 Megohm
 Rg2 = 1.0 Megohm
 Rg1 = 0.25 Megohm
 Cg2 = 0.5 μ F

Amplifier sensitivity 300 mV. input for 50 mW.
 (3.5V) output. Valves to be rejected if on
 tapping output meter reads greater than 3.5V.

- 1 Megohm protective resistance in series.



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
 32 mm IN LENGTH.