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

VALVE ELECTRONIC **CV 2102**
(VX8018)

Specification MOS/CV2102/Issue 3 Dated:- 9.8.51. To be read in conjunction with K1001	SECURITY Specification: Restricted Valve: Unclassified
indicates a change	

TYPE OF VALVE:- Sub-miniature output pentode
CATHODE:- Directly heated
ENVELOPE:- Glass unmetallised
PROTOTYPE:- VX8018

MARKING
CV2102
Date Code & Factory Identification Code.

BASE
B8D

RATING

			Note
Filament Voltage	(V)	1.25	
Filament Current	(mA)	25.0	
Max. Anode Voltage	(V)	100	
Max. Screen Voltage	(V)	100	
Mutual Conductance	(mA/V)	0.85	A
Anode Impedance	(M.ohms)	0.6	A
Optimum Anode Load	(M.ohms)	0.06	
Nominal Power Output	(mW)	50	A

PIN	ELECTRODE
1	I.C.
2	G1
3	N.C.
4	-F(G3)
5	+F
6	N.C.
7	A
8	G2

DIMENSIONS
See drawing on page 3

Dimension	Min.	Max.
A. mm.		41.2
B. mm.		10.16

NOTES

A. Measured at Va = Vg2 = 90V, Vg1 = -2.5V.

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
	Vf	Va	Vg2	Vg1	Vht		Min.	Max.	
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 (μA)		0.5	100%
f	1.25	90	90	-7		Ia tail (μA) (Note 2)		50	100%
g	1.25				90	Microphony (Note 1)	See Note 1.		

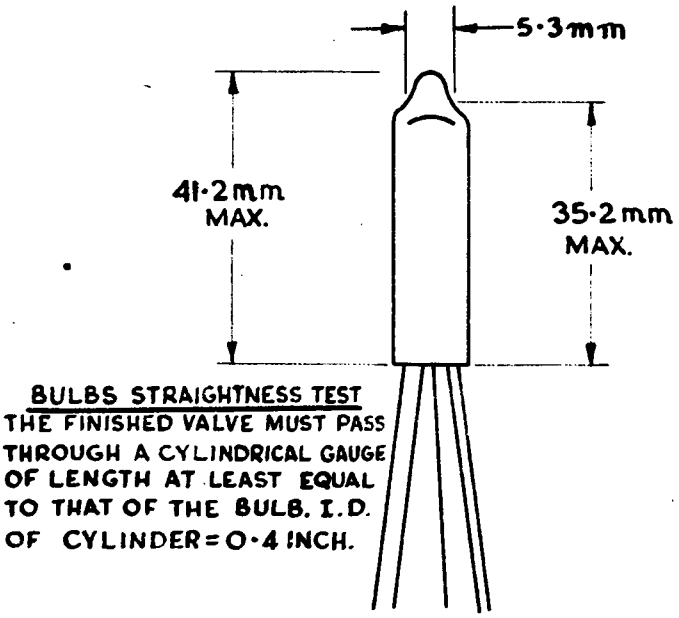
NOTES

1. 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 μF

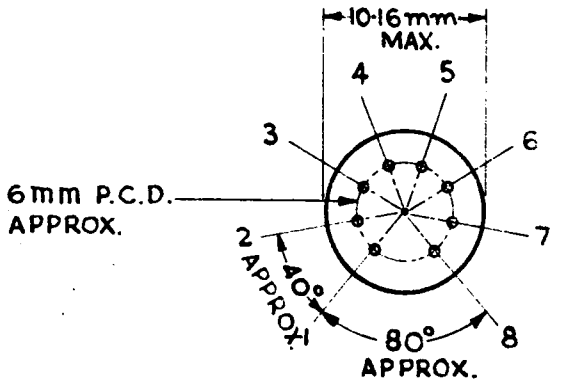
   Amplifier sensitivity 300 mV. input for 50 mW. (3.5V) output. Valves to be rejected if on tapping output meter reads greater than 3.5V.

2. 1 Megohm protective resistance in series.

CV2102



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.