

Specification MAP/CV1525/Issue 2.
Dated 21. 7. 45.
To be read in conjunction with K1003.

SECURITY

Specification
RESTRICTED

Tube
RESTRICTED

TYPE OF DEFLECTION - Electrostatic suitable for symmetrical deflection.

BULB - Internally coated with conductive coating.

SCREEN - Afterglow (GGM27 or YNM36)

MARKING
VCR525
CV1525

BASE
12 pin spigot

RATING

Note

Heater Voltage (V)
Heater Current (A)
Max. Final Anode Voltage (kV)
X plate sensitivity (mm/V)
Y plate sensitivity (mm/V)

4.0
1.1
1.5
170/Va³
170/Va³

A

Typical Operating Conditions

Third Anode Voltage (V)
Second Anode Voltage (V)
Beam Current (μA)

800
135
3

CONNECTIONS

Pin Electrode

1	C
2	G
3	H
4	H
5	A ₂
6	Pin omitted
7	Y ₂
8	X ₂
9	A ₃
10	X ₁
11	Y ₁
12	Pin omitted

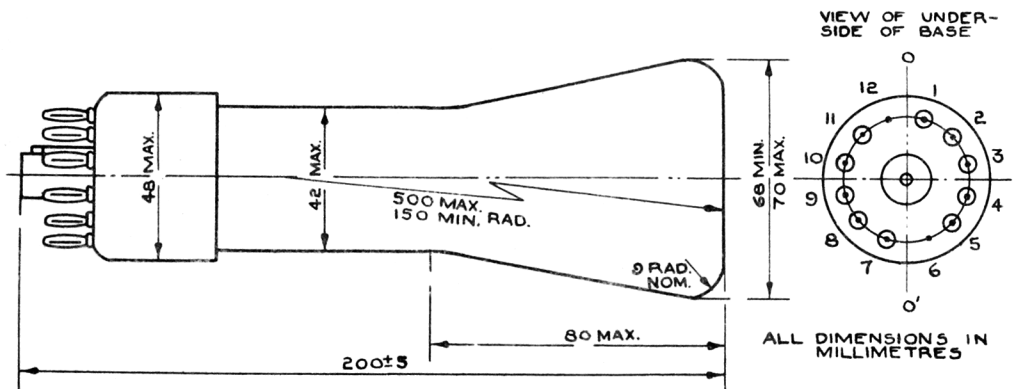
NOTES

A:- The tube shall be capable of operating satisfactorily under conditions of reduced pressure equivalent to 6" of mercury at 15°C.

B:- The tube shall be adequately free from microphony.

C:- Viewing the screen of the tube with the key of the base uppermost, a positive potential applied to pin X₂ shall deflect the spot to the right and a positive potential applied to pin Y₂ shall deflect the spot downwards.

D:- The internal conductive coating shall be of such dimensions that it functions effectively but does not obscure the useful screen area.



Clause	Test Conditions					Test	Limits		No. Tested
	V _h	V _{a3}	V _{a2}	V _{a1}	V _g		Min.	Max.	
Deflection voltages shall be applied symmetrically in all cases.									
(a)						<u>INTER-ELECTRODE CAPACITANCES (pF)</u> 1. Each X or Y plate to all other electrodes. 2. Grid to all other electrodes. 3. X ₁ to Y ₁ plate. 4. X ₂ to Y ₂ plate. 5. X ₂ to Y ₁ plate. 6. X ₁ to Y ₂ plate.	-	15	T/A
(b)	4.0	0	0	0	0	I _h (A) <i>And. 1</i>	0.85 0.95	1.25	5%(10)
(c)	4.0	800	Adjust for optimum focus.	800	Adjust	1. Line Width 2. V _{a2} (V)	Not greater than standard tube. 50	175	100% 5%(10)
(d)	4.0	800	ditto	800	ditto	V _g (V)	To be at least 1V (-) ve to Cathode		100%
(e)	4.0	800	ditto	800	Adjust to cut off.	V _g (V)	-10	-20	100%
(f)	4.0	800	Any convenient value	800	-20	<u>GRID INSULATION</u> 1. Leakage Current (μA) 2. Increase in voltmeter reading	-	4 100%	100% 100%
Recommended method:- K1003/5.4.2. Resistor = 5 megohms									
(g)	4.0	800	Adjust for optimum focus	800	Any convenient value	<u>DEFLECTION SENSITIVITIES</u> 1. X - plate (mm/V) 2. Y - plate (mm/V)	145/V _{a3} 145/V _{a3}	195/V _{a3} 195/V _{a3}	5%(10) 5%(10)
(h)	4.0	800	ditto	800	ditto	Deviation of spot from centre of screen.	-	5	100%
(j)	4.0	800	ditto	800	ditto	<u>USEFUL SCREEN AREA</u> Diameter (mm)	55	-	100%
(k)	4.0	800	ditto	800	ditto	1. Orientation of X axis of deflection relative to 00° on drg. 2. Angle between X and Y axes	80° 85°	100° 95°	100% 100%
(l)	Test to be carried out in Test Set 331					Afterglow (secs)	Results to be collated		10%

ELECTRONIC VALVE SPECIFICATIONS
SPECIFICATION CV.1525 ISSUE 2 DATED 21.7.1945

AMENDMENT NO. 1

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Clause "b" Ih Limits:-

DELETE: MIN. 0.95

INSERT: MIN. 0.85

November, 1963
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T.V.C. for
R.A.E.

JMB
14²/64