

MINISTRY OF SUPPLY

Specification MOS/CV1382/Issue 1. Dated 27.11.45. To be read in conjunction with K1003.	SECURITY Specification Restricted	C.R.T. Restricted
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→ Indicates a change

<u>TYPE OF DEFLECTION:-</u> Electrostatic.		<u>MARKING</u> See K1001/4.
<u>BULB:-</u>	Internally coated with graphite. The coating to be connected to a ₃ .	
<u>SCREEN:-</u>	GGN1 or GGN28	
<u>RATING</u>	Note	<u>BASE</u> 12 Pin Spigot
Heater Voltage (V)	4	<u>DIMENSIONS AND CONNECTIONS</u> See Drawing on Page 4.
Heater Current (A)	1.1	
Max. Final Anode Voltage (kV)	1.5	
X plate sensitivity (mm/V)	$\frac{170}{V_{a3}}$	
Y plate sensitivity (mm/V)	$\frac{170}{V_{a3}}$	
<u>TYPICAL OPERATING CONDITIONS</u>		
First and Final Anode Voltage (V)	450	
Second Anode Voltage (V)	70	
Beam Current (μA)	2	

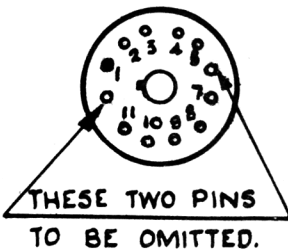
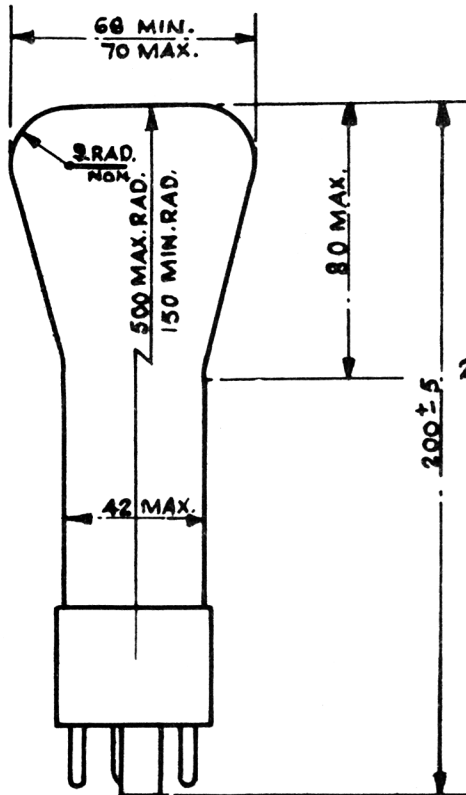
NOTE

- A:- The tube must be adequately free from microphony. This test to be covered by type approval.
- B:- The focussing system should be preferably of the three electrode type.

To be performed in addition to those applicable in K1003.

Class	Test Conditions				Tests	Limits		No. Tested.
	V _h	V _{a1} V _{a3}	V _{a2}	V _g		Min.	Max.	
(a)	0	0	0	0	Capacitances (pf) 1. Each X or Y plate to all other electrodes. 2. Grid to all other electrodes. 3. Each X to each Y plate.	-	15 20 3	Type Approval Test only
(b)	4	0	0	0	I _h (A)	.95	1.25	5% (5)
(c)	4	0	0	0	Cathode-Heater Current. (μA)	-	100	1% (5)
(d)	4	450	-	-	1. Line width shall not be greater than that of a standard tube. 2. V _{a2} (V) 3. V _g (to be noted) (V) 4. A change of + one volt in V _g to cause a perceptible increase in brightness, and no appreciable change of focus.	25 -2.5	100 -	100%
(e)	4	450	As in (d)	-	V _g (V)	-	-15	1% (5)
(f)	4	450	As in (d)	0	Deflector Plate Current Total current flowing to all deflector plates. (μA)	-	5	100%
(g)	4	450	As in (d)	Any convenient value	Deflection Sensitivities 1. X plate. (mm/V) 2. Y plate. (mm/V)	$\frac{135}{V_{a3}}$ $\frac{135}{V_{a3}}$	$\frac{205}{V_{a3}}$ $\frac{205}{V_{a3}}$	5% (10)

ALL DIMENSIONS IN MILLIMETRES.



PIN CONNECTIONS
VIED FROM
UNDERSIDE OF BASE.

NOTES.

1. VIEWING THE SCREEN WITH THE KEY ON 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.
2. THE INTERNAL CONDUCTIVE COATING SHALL BE OF SUCH DIMENSIONS THAT IT FUNCTIONS EFFECTIVELY BUT DOES NOT OBSCURE THE REQUIRED USEFUL SCREEN AREA.

PIN.	ELECTRODE.
1	CATHODE.
2	GRID.
3	HEATER.
4	HEATER.
5	2 ND . ANODE A2.
7	PLATE Y2
8	PLATE X2
9	3 RD . ANODE A3
10	PLATE X1
11	PLATE Y1

AMENDMENT TO CV. 1382 ISSUE 1

Page 2 Clause (d) for 110 mms.
read 55 mms.

Page 3 Clause (1) for Radius
read Diameter

Page 3 Clause (n) for 80 x 80 mms.
read 40 x 40 mms.

N.165653