

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION MOS/CV2204 ISSUE 5 DATED 1.2.58

AMENDMENT NO. 1

(i) Page 1. Title Box

In the Specification Title amend "MOS/CV2204"
to read "MOA/CV2204"

(ii) Page 2. Note 3

Amend the frequencies ' $f = 1600 \text{ Mc/s} \pm 1 \text{ Mc/s}$ ' and
' $1660 \text{ Mc/s} \pm 1 \text{ Mc/s}$ ' to read ' $f = 1640 \text{ Mc/s} \pm 1 \text{ Mc/s}$ '
and ' $1710 \text{ Mc/s} \pm 1 \text{ Mc/s}$ ' respectively.

May, 1964

T.V.C. for R.A.E.

ELECTRONIC VALVE SPECIFICATIONS

SPECIFICATION MOA/CV2204 ISSUE 5 DATED 1.2.58

AMENDMENT NO. 2

Page 2. Note 3 and Amendment No. 1

Amend the frequencies ' $f = 1640 \text{ Mc/s} \pm 1 \text{ Mc/s}$ ' and
' $1710 \text{ Mc/s} \pm 1 \text{ Mc/s}$ ' (inserted by Amendment No. 1) to read
as originally specified i.e. ' $f = 1600 \text{ Mc/s} \pm 1 \text{ Mc/s}$ ' and
' $1660 \text{ Mc/s} \pm 1 \text{ Mc/s}$ ' respectively.

September 1964

T.V.C. for R.A.E.

NM.190449

MINISTRY OF SUPPLY D.L.R.D./E.A.E.

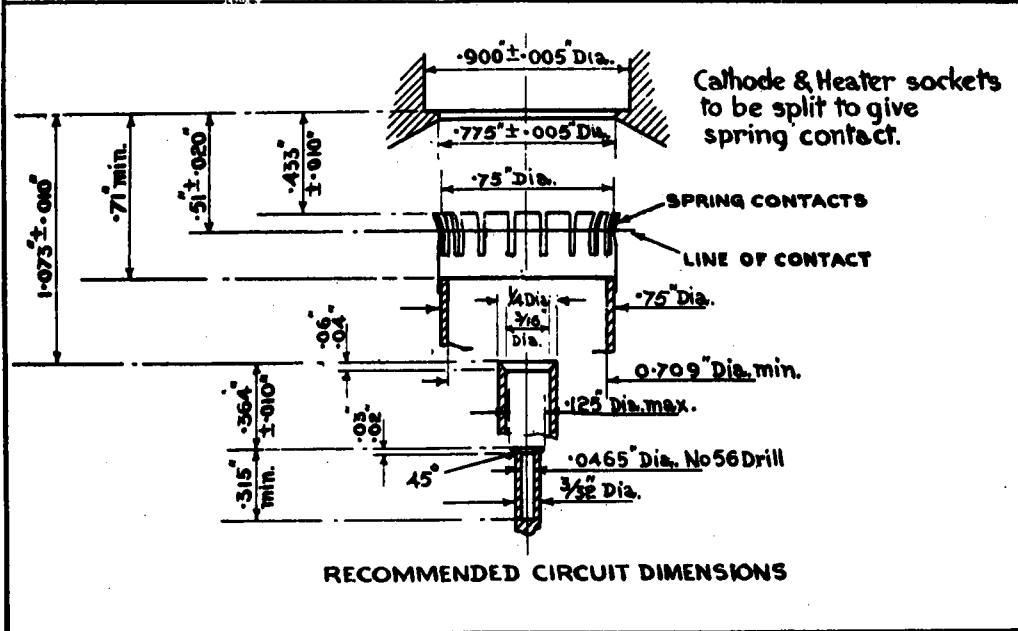
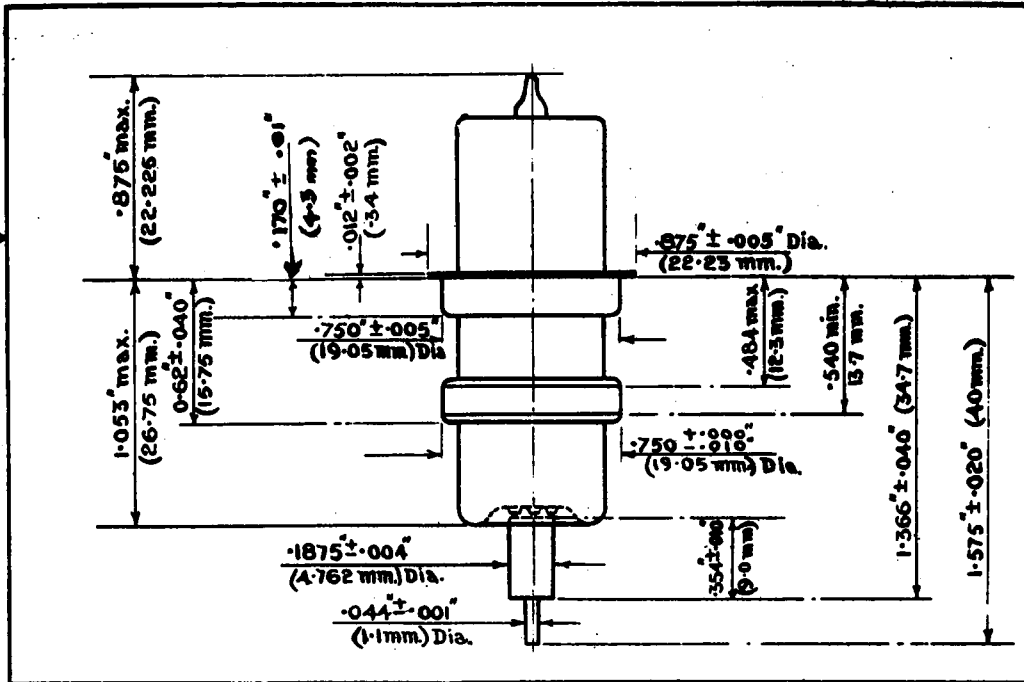
Specification M.O.S./CV.2204 Issue 5 Dated 1.2.58 To be read in conjunction with BS.1409 and K.1001 excluding clause 5.3.	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

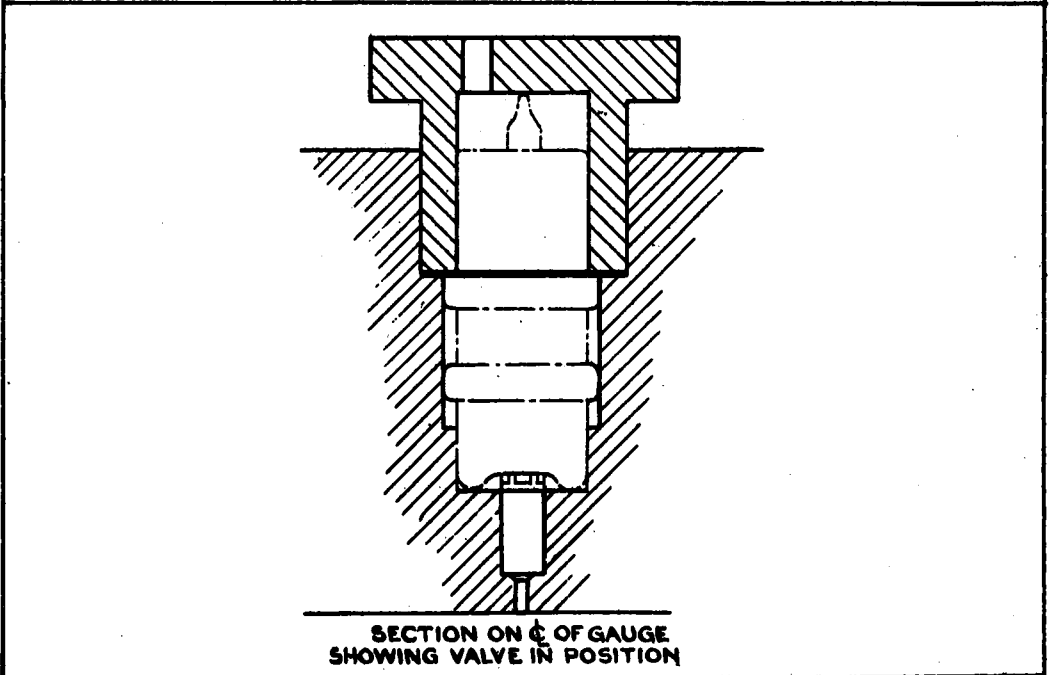
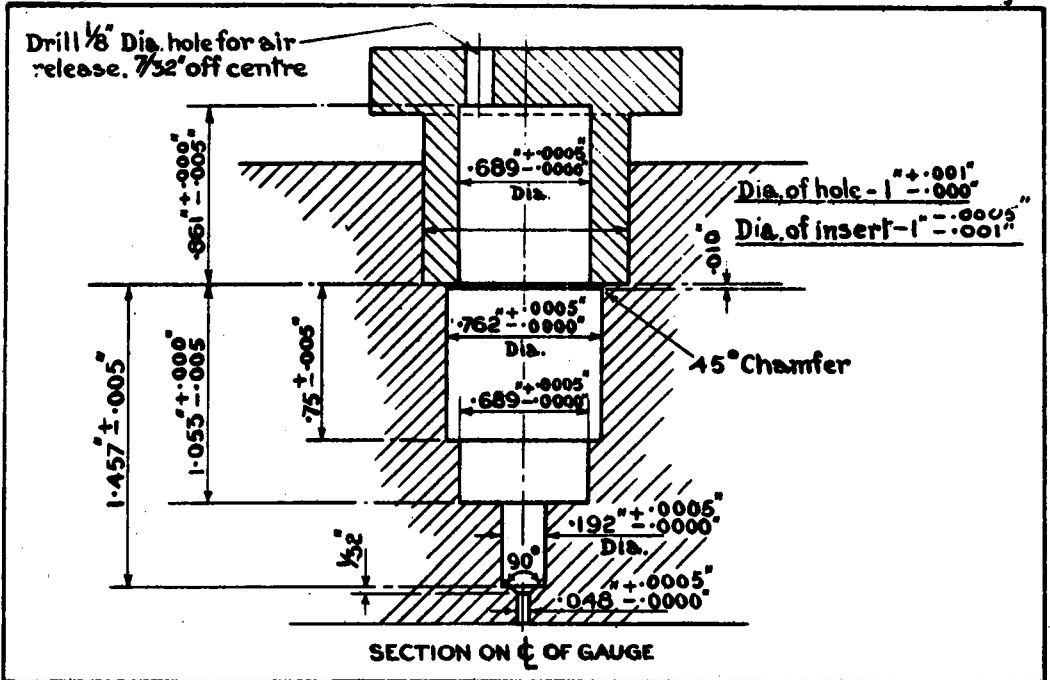
→ Indicates a change

TYPE OF VALVE - Disc Seal Triode CATHODE - Indirectly Heated ENVELOPE - Glass PROTOTYPE - VX.3047	<u>MARKING</u> See K.1001/4.																																									
<p style="text-align: center;"><u>RATINGS</u> (All limiting values are absolute)</p> <table border="1" style="width: 100%;"> <thead> <tr> <th></th> <th></th> <th></th> <th style="text-align: center;">Note</th> </tr> </thead> <tbody> <tr> <td>Heater Voltage</td> <td>(V)</td> <td>6.3</td> <td></td> </tr> <tr> <td>Heater Current</td> <td>(A)</td> <td>0.4</td> <td></td> </tr> <tr> <td>Max. Anode Voltage</td> <td>(V)</td> <td>350</td> <td></td> </tr> <tr> <td>Max. Anode Dissipation</td> <td>(W)</td> <td>10</td> <td>A</td> </tr> <tr> <td>Max. Mean Anode Current</td> <td>(mA)</td> <td>45</td> <td>B</td> </tr> <tr> <td>Max. Peak Anode Current</td> <td>(mA)</td> <td>250</td> <td>B</td> </tr> <tr> <td>Max. Grid Dissipation</td> <td>(W)</td> <td>0.5</td> <td></td> </tr> <tr> <td>Amplification Factor</td> <td></td> <td>30</td> <td>C</td> </tr> <tr> <td>Mutual Conductance</td> <td>(mA/V)</td> <td>6</td> <td>C</td> </tr> </tbody> </table>				Note	Heater Voltage	(V)	6.3		Heater Current	(A)	0.4		Max. Anode Voltage	(V)	350		Max. Anode Dissipation	(W)	10	A	Max. Mean Anode Current	(mA)	45	B	Max. Peak Anode Current	(mA)	250	B	Max. Grid Dissipation	(W)	0.5		Amplification Factor		30	C	Mutual Conductance	(mA/V)	6	C	<p style="text-align: center;"><u>DIMENSIONS AND CONNECTIONS</u> See Drawings on Pages 3 and 4.</p>	
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<p><u>NOTES</u></p> <p>A. The anode seal temperature must not exceed 140°C. In order to achieve this and also to limit the rate of change of anode seal temperature it is necessary that the mass of metal in close thermal contact with the anode disc shall not be less than 2 gm. (approx. 60 grams) of brass, or its equivalent.</p> <p>B. Under C.W. conditions.</p> <p>C. Measured at Va = 250V; Ia = 20mA.</p>																																										

To be performed in addition to those applicable in K.1001

Test Conditions					Test	Limits		No. Tested	Note
						Min.	Max.		
Measurement to be at a Frequency of 1.0 Mc/s, using a jig which shall conform to R.A.E. Drawing No. WT.4.0482 or any other approved method.					<u>CAPACITANCES (pF)</u> Cg,kh Ca,kh Ca,g	1.1 0.035 1.0	2.3 0.055 1.7	6 per week	
b	Vh	Va	Ia(mA)	Vg	Ih (A)	0.37	0.43	100%	
	6.3	0	0	0					
c	6.3	350	30	Adjust	Reverse Ig (μ A)	-	1.0	100%	1
d	6.3	350	2	Adjust	Reverse Ig (μ A)	-	1.0	100%	1
e	6.3	250	20	Adjust	Vg (to be noted) (V)	-1	-	100%	2
f	6.3	250	-	As in test(e)	gm (mA/V)	3.0	-	100%	
Peak grid swing \pm 0.5V max.									
g	6.3	250	2	Adjust	Vg (V)	-	-15	100%	2
h	5.7	250	40	-	Osc.Power (W)	1.0	-	100% or S	3
j	6.3	250	-	-	Onset of squegging current. (mA)	-	35	100% or S	3
<u>NOTES</u>									
1. Valve must be run for one minute before reading is taken.									
2. To be interpreted arithmetically.									
3. The oscillation test shall be carried out in the approved cavity, (i.e. Oscillator Unit type 352, A.M. Ref. 10V/661) to check power and squegging as follows.									
(1) Measure at $f = 1600 \text{ Mc/s} \pm 1 \text{ Mc/s}$.									
(2) Measure at $f = 1660 \text{ Mc/s} \pm 1 \text{ Mc/s}$.									





CV 2204/1/3/4