

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

Specification ^{M.O.S.} M.O.S./CV.2204 Issue 5 Dated 1.2.58 To be read in conjunction with ES.1409 and K.1001 excluding clause 5.3.	<table border="1"> <tr> <th colspan="2">SECURITY</th></tr> <tr> <td>Specification</td><td>Valve</td></tr> <tr> <td>UNCLASSIFIED</td><td>UNCLASSIFIED</td></tr> </table>	SECURITY		Specification	Valve	UNCLASSIFIED	UNCLASSIFIED
SECURITY							
Specification	Valve						
UNCLASSIFIED	UNCLASSIFIED						



Indicates a change

TYPE OF VALVE - Disc Seal Triode				<u>MARKING</u>	
CATHODE - Indirectly Heated				See K.1001/4.	
ENVELOPE - Glass					
PROTOTYPE - VX.3047					
<u>RATINGS</u> (All limiting values are absolute)				<u>DIMENSIONS AND CONNECTIONS</u>	
				See Drawings on Pages 3 and 4.	
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		
<u>CAPACITANCES (pF)</u>					
Cg,kh (nom.)		1.7			
Ca,kh (nom.)		0.045			
Ca,g (nom.)		1.4			
<u>NOTES</u>					
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 oz. (approx. 60 grams) of brass, or its equivalent.					
B. Under C.W. conditions.					
C. Measured at Va = 250V; Ia = 20mA.					

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

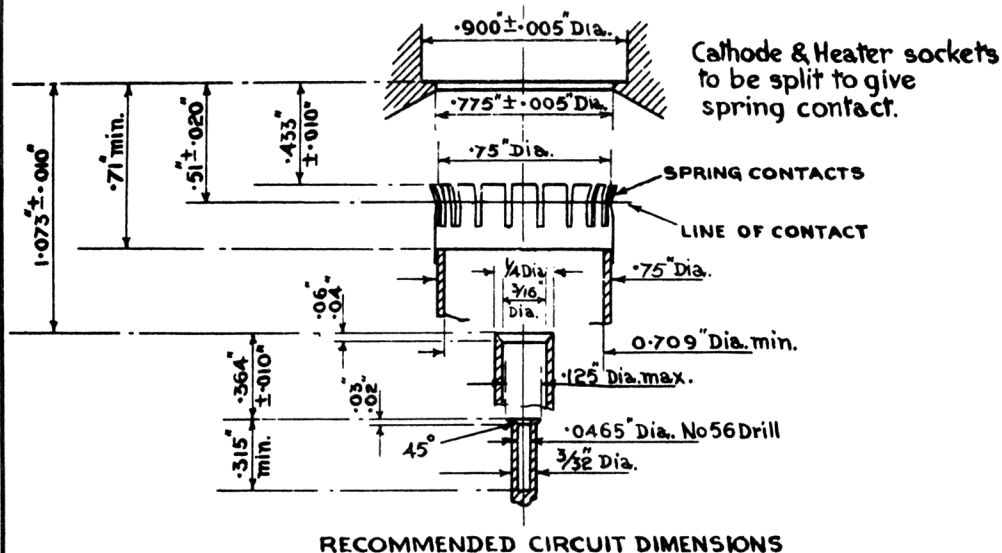
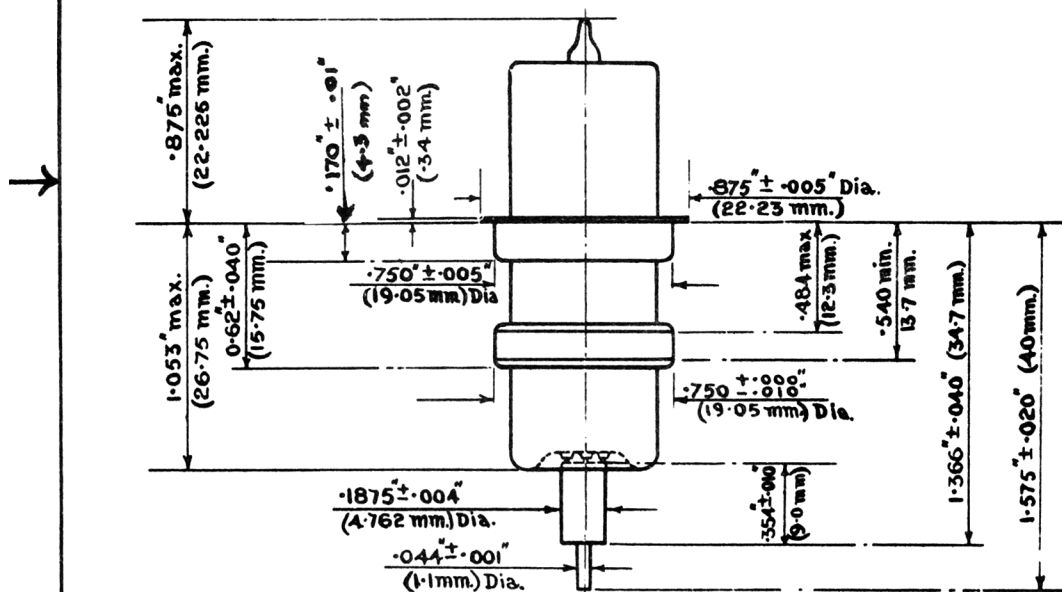
Test Conditions					Test	Limits		No. Tested	Note
						Min.	Max.		
a	Measurement to be at a Frequency of 1.0 Mc/s, using a jig which shall conform to R.A.E. Drawing No. WT.40482 or any other approved method.				<u>CAPACITANCES (pF)</u> Cg,kh Ca,kh Ca,g	1.1 0.035 1.0	2.3 0.055 1.7	6 per week	
b	Vh	Va	Ia(mA)	Vg	Ih (A)	0.37	0.43	100%	
	6.3	0	0	0					
c	6.3	350	30	Adjust	Reverse Ig (μA)	-	1.0	100%	1
d	6.3	350	2	Adjust	Reverse Ig (μA)	-	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 ± 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

NOTES

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.

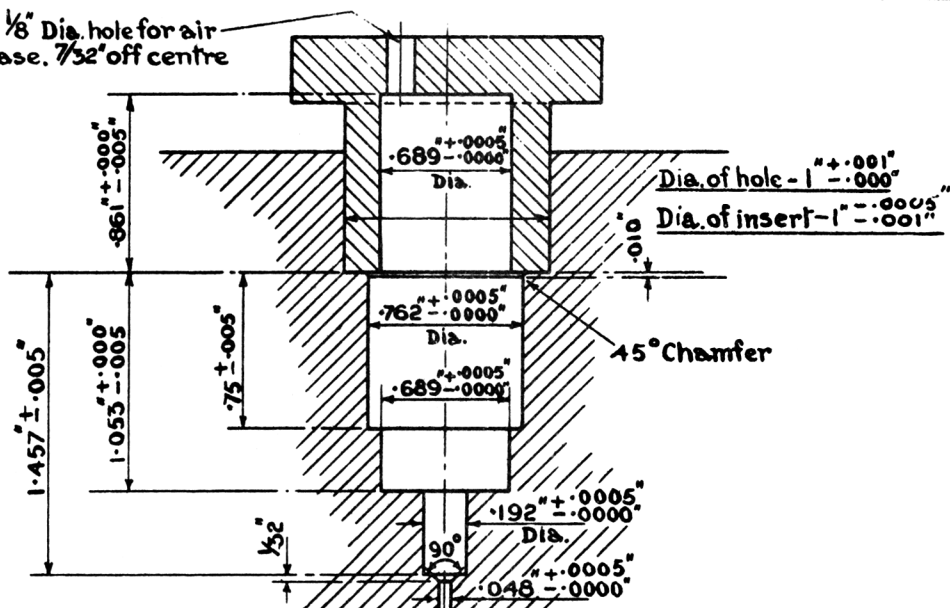
- 1660
- (1) Measure at $f = 1660 \text{ Mc/s} \pm 1 \text{ Mc/s}$.
 - (2) Measure at $f = 1660 \text{ Mc/s} \pm 1 \text{ Mc/s}$.
- +1660

Amk 2
Amk 1

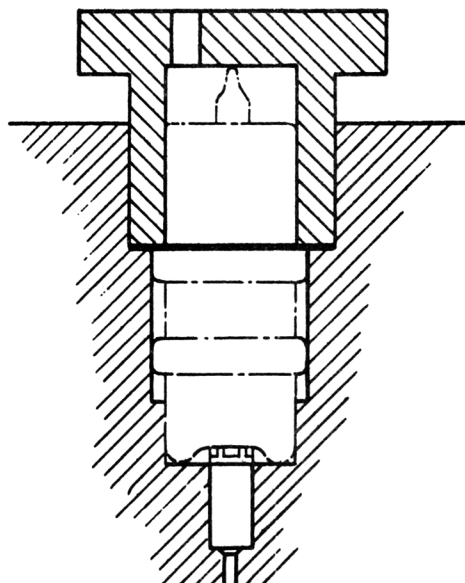


RECOMMENDED CIRCUIT DIMENSIONS

Drill $\frac{1}{8}$ " Dia. hole for air release, $\frac{7}{32}$ " off centre



SECTION ON C OF GAUGE



SECTION ON C OF GAUGE
SHOWING VALVE IN POSITION

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.

JAS
23/1/64

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

✓ AAB
19/4/64

September 1964

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

NM.190449