MINISTRY OF SUPPLY, D.L.R.D.(A)/R.A.E.

VALVE ELECTRONIC **CV2214**

Specification MOSA/CV2214
Issue 3 Dated 1.2.55
To be read in conjunction with BS448, BS1409, and K1001.

SECURITY	
Specification	Valve
UNCLASSIFIED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Grounded Grid Triode
CATHODE - Indirectly heated
ENVELOPE - Glass, unmetallised
PROTOTYPE - 3B/240M

MARKING see K1001/4
BASE BS448/B8G
TOP CAP BS448/CT1 ←

RATING			Note
Heater Voltage	(V)	6.3	
Heater Current	(A)	1.1	
Max. Anode Voltage	(V)	400	A
Max. Anode Dissipation	(W)	24	B
Mutual Conductance	(mA/V)	27	C
Amplification Factor		90	C
Max. Frequency of operation	(Mc/s)	200	

CONNECTIONS

Pin	Electrode
1	h
2	k
3	g
4	g
5	g
6	g
7	k
8	h
TC	a

CAPACITANCES (pF)

Cg, kh	(nom)	11.0
Ca, kh	(nom)	0.15
Ca, g	(nom)	4.3

DIMENSIONS see K1001/A1/D7

Dimensions		Min	Max.
A	(mm)	-	80.2
S	(mm)	-	30.15
L	(mm)	-	66.7

NOTES

A. Absolute maximum value.
B. Forced air cooling is required for anode dissipation in excess of 15 watts. 5 cu. ft per minute is usually adequate if introduced at the bottom of a 1-3/8" diameter valve screen, as indicated on the drawing on Page 3.
C. Measured at Va = 300 V; Vg = -1; Ia = 50 mA.

Z.8885.R.

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

	TEST CONDITIONS				TEST	Limits Min.	Limits Max.	No. Tested	Note
	To be measured in an approved adapter.				CAPACITANCES (pF)				
	Links to H.P.	Links to L.P.	Links to E						
a	3,4,5,6	1,2,7,8	9,10,T.C.1, T.C.2.		Cg, kh	-	17.0	6 per week	
	T.C.1	1,2,7,8	3,4,5,6,9, 10, T.C.2.		Ca, kh	-	0.5		
	T.C.1	3,4,5,6	1,2,7,8, 9,10, T.C.2.		Ca, g	-	~~5.5~~ 57		
	Vh (V)	Va (V)	Vg (V)	Ia (mA)					
b	6.3	0	0	0	Ih (A)	0.9	1.3	100% or S	1
c	6.3	300	-1	-	Ia (mA)	25	90	100%	1, 2
d	6.3	300	-1	-	μ	65	115	100%	1
e	6.3	300	-1	-	gm (mA/V)	17.5	35	100%	1
f	6.3	400	-	60	Reverse Ig (μA)	-	5	100%	1, 3
g	6.3	250	250	-	Total emission (A)	5	-	100%	4

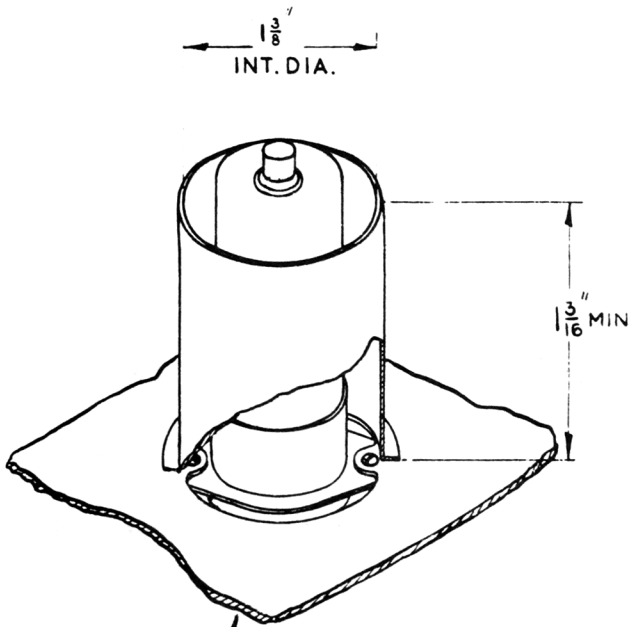
NOTES

1. Tests b to f inclusive shall be performed with forced air cooling of the bulb as required by Note B on Page 1.

2. A 100 ohm parasitic oscillation stopper resistor must be inserted in the anode lead.

3. The duration of this test shall not be less than three minutes. At the end of this period the reverse current to the control grid shall not exceed the value specified and shall not be increasing.

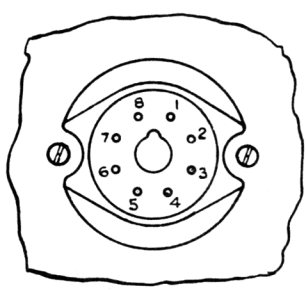
4. A 2/μSec pulse of 250 volts peak amplitude and 50 c/s repetition frequency shall be applied between the anode plus grid (Strapped) and the cathode.



Air flow of 5 cu. ft./min. directed through an air duct from underside of chassis.

NOTE

The maximum bulb temperature occurs on the parts of the bulb opposite pins 1 & 8 and 4 & 5. A valve socket should, therefore be used in which the mounting flanges are opposite pins 2 & 3 and 6 & 7. This will prevent obstruction of the air flow at these points (see sketch below). Alternatively deflecting plates may be fitted to ensure an even air flow around the bulb.



AMENDMENT NO.1

TO ISSUE 3 DATED 1.2.1955

OF ELECTRONIC VALVE SPECIFICATION CV.2214

Page 2, Clause (a), Ca, g,

Amend Maximum limit to read -

5.7 pF instead of 5.5 pF

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

June, 1958
N.31925R