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

VALVE ELECTRONIC **CV432**

Specification MOSA/CV432 Issue 3 Dated 20.4.55 To be read in conjunction with B.S.448, B.S.1409 & K.1001	SECURITY Specification: UNCLASSIFIED Valve: UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - H.F. Pentode

CATHODE - Indirectly Heated

ENVELOPE - Glass, Metallised

PROTOTYPE - VX8048

MARKING

See K.1001/4.

BASE

B.S.448/10.

TOP CAP

B.S.448/CT1.

RATING

(All limiting values are absolute)

			Note
Heater Voltage	(V)	6.3	
Heater Current	(A)	0.2	
Max. Anode Voltage	(V)	300	
Max. Screen Grid Voltage	(V)	125	
Max. Anode Dissipation	(W)	1.0	
Max. Screen Grid Dissipation	(W)	0.3	
Mutual Conductance	(mA/V)	1.8	A
Anode Impedance	(MΩ)	2.0	A
Max. Operating Frequency	(Mc/s)	125	

CONNECTIONS

Pin	Electrode
1	M
2	h
3	a
4	g2
5	g3
6	NC
7	h
8	k
TC	g1

CAPACITANCES (pF)

C in	5.5
C out	8.5
Ca,g1	0.02

DIMENSIONS

See K.1001/A1/D1.

Dimensions (mm)	Min.	Max.
A	95	100
B	-	32
C	-	30

MOUNTING POSITION

Any

NOTES

A. Measured at Va = 250V; Vg2 = 100V; Vg1 = -2V.

B. This valve is similar to CV358, but it is specially selected for extremely low grid current.

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

	Test Conditions						Test	Limits Min.	Limits Max.	No. Tested	Note
a	See K.1001/AIII Measurements to be made in Adaptor Type 44, Ref. No. 10A/13340						Capacitance (pF)				
	Links to H.P.		Links to L.P.		Links to E						
	TC1		1,2,4,5,6, 7,8.		3,9,10, TC2.		C in	-	7	100%	
	Vh	Vg1	Vg2	Vg3	Va	Ia					
b	6.3	0	0	0	0	0	Ih (A)	0.18	0.22	100% or S	
c	6.3	30V A.C. R.M.S. (50 c/s) applied to anode, g1, g2 and g3 strapped.					Ik (mA)	32	-	100%	
d	6.3	-2.0	100	0	250	-	Reverse Ig1 (µA)	-	0.7	100%	1
e	6.3	-3.5	100	0	250	-	Ia (mA)	0.5	1.5	100%	
f	6.3	0	100	0	250	-	Ia (mA)	5.7	9.3	100%	
g	6.3	-7.5	100	0	250	-	Ia (µA)	-	50	100%	2
h	Grid Leak = 0.5 mΩ; Va = 250V through 0.1 mΩ; Cathode R = 3kΩ; Vg2 = 250V through 0.25 mΩ; g2 by-pass C = 0.5 µF; Anode Coupling C = 0.1 µF						Microphony (mV)	-	15	100%	3
j	4.5	-	50	0	50	150 µA	Vg1 (V)	-1.5	-2.5	100%	
k	4.5	-	50	0	50	150 µA	Ig1 (µA)	-	8×10^{-6}	100%	4

For Notes, see page 3.

NOTES

1. Carried out with 0.1 MΩ in Control Grid circuit.

2. Carried out with 1.0 MΩ in Anode circuit.

3. The valve shall be mounted in an agreed acoustic chamber, having the speaker mounted at one end facing inward, with the valve under test mounted at the other end. The valve under test shall be coupled to an audio amplifier having an input impedance = 0.1 mΩ and a frequency response characteristic between 60 and 5,000 c/s flat with ± 2 dB of the 400 c/s response. The output of the amplifier shall be fed to the speaker, and the output voltage shall be indicated by an R.M.S. voltmeter. On tapping with the finger, no perceptible noise other than normal valve hiss shall be evident, and the output from the valve as indicated by the amplifier voltmeter shall not exceed 15 mV.

4. Before carrying out test (k) the valve shall be run for not less than 48 hours under the following conditions.

   Vh = 5V; Va = Vg2 = 100V; Vg3 = 0; Ia = 1 mA.