MINISTRY OF SUPPLY (D.C.D.)

VALVE ELECTRONIC

CVX471

Specification MAP/CVX471 Issue 3. Dated 2.10.1951 To be read in conjunction with K1001	SECURITY Specification: UNCLASSIFIED Valve: UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Audio Beam Power Amplifier

CATHODE - Indirectly Heated

ENVELOPE - Glass, Unmetallosed

PROTOTYPE - VX8054

MARKING

See K.1001/4 except that the title shall be "CVX471" and the Type Approval letter omitted.

RATING			Note
Heater Voltage	(V)	6.3	
Heater Current	(A)	0.45	
Max. Anode Voltage (Ia = 0)	(V)	350	A
Max. Screen Voltage (Ig2 = 0)	(V)	350	A
Max. Operating Anode Voltage	(V)	175	B
Max. Operating Screen Voltage	(V)	175	B
Max. Anode Dissipation	(W)	3.5	
Max. Screen Dissipation	(W)	1.0	
Mutual Conductance	mA/V	5.0	C
Anode Impedance	KΩ	15	C
Anode Current	mA	31	C
Screen Current	mA	2.2	C
Max. Cathode Current	mA	45	

CAPACITANCES (pF)	
Cag (max.) Shielded	0.15
Cae (max.) Shielded	7.0
Cge (max.) Shielded	8.0

BASE
B 8 D

CONNECTIONS

Pin	Electrode	
1	G1	
2	Cathode + BP	←
3	Heater	
4	Cathode + BP	←
5	Anode	←
6	Heater	
7	G2	←
8	Cathode + BP	←

DIMENSIONS
See Drawing on Page 3

Dimensions	Min.	Max.
A mm.	-	50.8
B mm.	-	10.16

NOTES

A. Absolute maximum values.

B. Design centre values.

C. All measured at Va = Vg2 = 100; Vg1 = -9.

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TESTS

To be performed in addition to those applicable in K1001

Test Conditions							Test	Limits		No. Tested	Note
								Min.	Max.		
See K1001/AIII											
	Links to H.P.		Links to L.P.		Links to E.		CAPACITANCE (pF)				
a	5		1		2,3,4,6,7 8, Sh.		Cag		0.15	6 per week	1
	5		2,3,4,6,7 8, Sh.		1		Cae	6.0	8.0		
	1		2,3,4,6,7 8, Sh.		5		Cge	7.0	9.0		
	Vh	Va	Vg2	Vg3	Vg1	Ia					
b	6.3	-	-	-	-	-	Ih (mA)	405	495	100% or S	
c	6.3	100	100	0	-	31 mA	Vg1 (V)	-6.0	-12.0	100%	
d	6.3	100	100	0	-	31 mA	gm (mA/V)	4.0	6.0	100%	
e	6.3	100	100	0	-	31 mA	Ig2 (mA)		3.5	100%	
f	6.3	100	100	0	-	31 mA	Reverse Ig (μA)		1.5	100%	

NOTES

1. Capacities measured with close fitting shield. Connections refer to valve pins. Cag should be measured at R.F.

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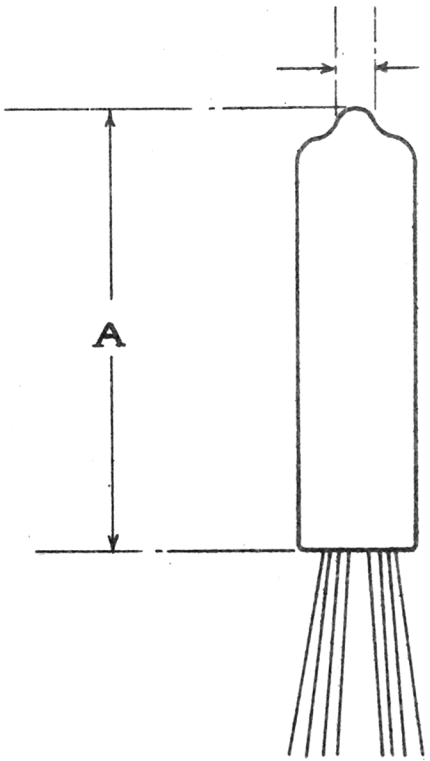

BULB STRAIGHTNESS TEST

The finished valve must pass through a cylindrical gauge of length at least equal to that of the bulb. I.D. of cylinder = 0.4 inch.

THE LEADS SHALL BE FLEXIBLE 25-27 S.W.G. TINNED COPPER WIRE AT LEAST 32 mm. IN LENGTH