

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

Specification MOSA/CV472 Issue 2 Dated 18.8.1953. To be read in conjunction with K.1001	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Low Microphony Pentode		<u>MARKING</u>		
CATHODE - Indirectly heated		See K.1001/4.		
ENVELOPE - Glass, unmetallised		<u>BASE</u>		
PROTOTYPE - VX.8066		See page 3.		
<u>RATING</u>		<u>CONNECTIONS</u>		
		Note	Pin	Electrode
Heater Voltage	(V) 6.3		1	Heater
Heater Current	(mA) 200		2	Anode
Max. Anode Voltage ($I_a = 0$)	(V) 350	A	3	Cathode
Max. Screen Voltage ($I_{g2} = 0$)	(V) 350	A	4	Suppressor
Max. Anode Dissipation	(W) 1		5	No wire
Max. Screen Dissipation	(W) 0.4		6	Heater
Max. Operating Anode Voltage	(V) 190		7	Anode
Max. Operating Screen Voltage	(V) 190		8	Screen
→ Mutual Conductance	(mA/V) 3.1	B	9	No wire
Anode Current	(mA) 7	B	10	Control grid
Screen Current	(mA) 2.4	B		
Max. Cathode Current	(mA) 12			
<u>CAPACITANCES (pF)</u>		<u>DIMENSIONS</u>		
		See page 3.		
C _{ge} (Nom.)	4	C	Dimension	Min.
C _{ae} (Nom.)	5	C		Max.
C _{ag} (Max.)	0.15	C	A mm	-
			B mm	38
				10.16

NOTES

- A. Absolute maximum values.
- B. All measured at $V_a = V_{g2} = 100$; $V_{g1} = -1.4$
- C. Measured with a close fitting metal screen.

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

Test Conditions						Test	Limits		No. Tested	Note
							Min.	Max.		
See K.1001/AIII Links to H.P. Links to L.P. Links to E. a						Capacitance (μF)	To be determined			
						C_{ag}				
						C_{ae}				
						C_{ge}				
b	Vh	Va	Vg2	Ia	Vg1	Ih (mA)	180	220	100% or S	
	6.3	-	-	-	-					
c	6.3	100	100	7.0 mA	-	Vg1 (V)	0.8	2.0	100%	
d	6.3	100	100	7.0 mA	-	g_m (mA/V)	2.4	3.8	100%	
e	6.3	100	100	7.0 mA	-	Ig2 (mA)	1.8	3.0	100%	
f	6.3	100	100	7.0 mA	-	Reverse Ig1 (μA)	0	0.5		
g	6.3	100	100	-	-10	Ia (μA)	0	50	100%	1
	6.3	-	-	-	-	Microphony (V)	0	3.5	100%	2

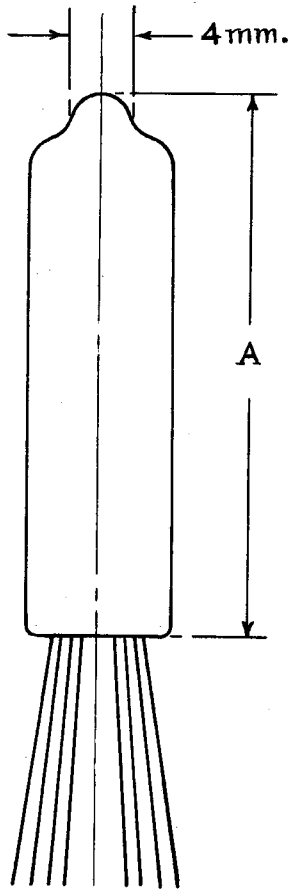
NOTES

- 1.OM protective resistance in series with meter.
2. Test in JAN type gear, $V_a = 100$; $R_a = 0.22M$; $R_{g2} = 0.87M$; $R_{g1} = 100$; $R_c = 2200$ shunted with $100 \mu\text{F}$ G2 decoupled by $0.1 \mu\text{F}$ to earth.

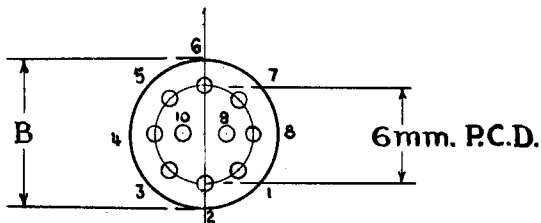
Amplifier sensitivity 20 mV input for 50 mW (3.5V) output. Valve to be tapped slightly with a mallet consisting of a 1 inch cork mounted on one end of a fibre rod 7 inches long, $\frac{3}{16}$ inches diameter. The output meter shall not give kicks above 3.5 volts (50 mW), and there shall not be any continuous howls from the loudspeaker.

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



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



Pins 5 and 9 removed flush with outer surface of base.