

Specification MOSA/CV428 Issue 5 Dated 24.7.1953 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 - Beam Power Amplifier		<u>MARKING</u>		
CATHODE - Indirectly heated		See K.1001/4.		
ENVELOPE - Glass - unmetallised		<u>BASE</u>		
PROTOTYPE - 5B/251M		B8G.		
<u>RATING</u>		Note	<u>CONNECTIONS</u>	
Heater Voltage (V)	6.3	A	Pin	Electrode
Heater Current (A)	0.9		1	Heater
Max. Anode Voltage (V)	600		2	Cathode & Beam Plates
Max. Anode Voltage (I _a = 0) (V)	750		3	Grid 2
Max. Screen Voltage (V)	300		4	Cathode & Beam Plates
Max. Anode Current (mA)	120		5	Grid 1
Max. Anode Dissipation (W)	25		6	Grid 1
Max. Screen Dissipation (W)	3		7	Cathode & Beam Plates
Mutual Conductance (mA/V)	6	B	8	Heater
Inner μ	9	B	T.C.	Anode
Max. D.C. Control Grid Voltage (V)	-200		<u>TOP CAP</u>	
Max. R.F. Voltage between Control and Screen Grids (V)	1000		See K.1001/A1/D5.2.	
Max. Frequency for above ratings (Mc/s)	60		<u>DIMENSIONS</u>	
<u>CAPACITANCES (pF)</u>			See K.1001/A1/D7.	
C _{ag}	0.1		Dimensions	Min. Max.
C _{gs}	13		A mm	- 105.6
C _{as}	7		B mm	- 30.15
			L mm	- 92.1

NOTES

- A. Absolute Maximum Values.
- B. Measured at V_a = 300V; V_{g2} = 250V; I_a = 72 mA.

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

Test Conditions						Test	Limits		No. Tested	Note
							Min.	Max.		
See K.1001/A.111						<u>CAPACITANCES (pF)</u>			6	per week
Links to H.P.	Links to L.P.	Links to H.								
TC1	5,6	1,2,3,4,7,8,9,10 TC2								
TC1	1,2,3,4,7,8	5,6,9,10, TC2								
5,6		1,2,3,4,7,8	9,10,TC1, TC2			(iii) Cge	-	14.0		
						Ih	(A)	0.8	1.0	100% or 8
Vh	Va	Vg2	Vg1	Ia (mA)						
6.3	-	-	-	-						
6.3	500	300	Adjust	50		Reverse Ig1 (Note 1)	(μA)	-	5.0	100%
6.3	500	300	-	28		Vg1	(V)	-25	-40	100%
6.3	500	300	-	28		Ig2	(mA)	-	2.5	100%
6.3	500	300	-75	-		Ia out-off	(mA)	-	1.0	100%
6.3	300	300	300	-		Ie (Note 2)	(A)	3.5	-	100%

NOTES

- After 2 minutes the reverse current to the control grid shall not exceed the value specified and shall not be rising.
- This test shall be carried out by the application of a 2 μsec. pulse of 300 volts peak amplitude and 50 c/s repetition frequency between the cathode and all other electrodes strapped together.