

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

Specification MOSA/CV136 Issue 6 Dated 4.12.56 To be read in conjunction with B.S.448, B.S.1409 and K.1001.	<u>SECURITY</u>	
	<u>Specification</u>	<u>Valve</u>
	UNCLASSIFIED	UNCLASSIFIED

→ Indicates a change

TYPE OF VALVE - Miniature H.F. Pentode		<u>MARKING</u> See K.1001/4			
CATHODE - Indirectly heated		<u>BASE</u> B.S.448/B7G.			
ENVELOPE - Glass		<u>CONNECTIONS</u>			
<u>RATING</u> (All limiting values are absolute)		Note	<u>CONNECTIONS</u>		
Heater Voltage (V)	6.3		Pin	Electrode	
Heater Current (A)	0.2		1	Grid	g1
Max. Operating Anode Voltage (V)	300		2	Cathode, Supp.	k+g3
Max. Operating Screen Voltage (V)	275		3	Heater	h
Max. Anode Dissipation (W)	4.75		4	Heater	h
Max. Screen Dissipation (W)	0.8		5	Anode	a
Max. Operating Frequency (Mc/s)	100		6	No connection	NL
Max. Heater-Cathode Voltage (V)	150	7	Screen	g2	
Max. Grid-Screen Voltage (dc) (V)	300	A	<u>DIMENSIONS</u> See B.S.448/B.7G/2.1 Size Ref. No. 2		
Max. Grid-Cathode Voltage (dc) (V)	100	C	Dimensions	Min. Max.	
Max. Mean Grid Current (mA)	3.3	E			
Mutual Conductance (mA/V)	2.6	B	A Seated height	- 47.5	
Inner Amplification Factor	12.0		C Diameter	16.0 19.0	
			D Overall length	- 54.5	
			<u>MOUNTING POSITION</u> Any		
<u>CAPACITANCES (pF)</u>					
C in (nom.)	4.25	D			
C out (nom.)	6.5	D			
Ca, g (max.)	0.3	D			
<u>NOTES</u>					
A. With adequate free air circulation. Valve not screened.					
B. $V_a = V_{g2} = 250V$, $I_a = 16 \text{ mA}$, $V_g = -13.5$.					
C. Max. Frequency for 100% ratings.					
D. Measured with screen.					
E. Cathode positive or negative to heater.					

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

	Test Conditions				Test	Limits		No. Tested	Note
						Min.	Max.		
a	Measured on a 1 Mc/s bridge with the valve mounted in a fully shielded holder. Valve screened.				Capacitances (pF)				
					C in	3.5	5.0	6	
					C out	5.8	7.2	per week	
					Ca,g	-	0.3	T.A.	
b	Vh	Va	Vg2	Ia	Heater Current (A)	0.18	0.22	100% or S	
	6.3	0	0	0					
c	6.5	See K.1001/5.3 except that the test voltage shall be applied with cathode both positive and negative to heater.			Heater-Cathode Leakage Current (μ A)	-	40	100%	
d	6.3	250	250	16 mA	Vg1 (V)	-11.0	-16.0	100%	
e	6.3	250	250	16 mA	Ig2 (mA)	1.5	3.0	100% or S	
f	6.3	250	250	16 mA	Reverse Ig1 (μ A)	-	1.0	100%	
g	6.3	250	250	16 mA	gm (mA/V)	2.1	3.1	100%	
h	6.3	250	250	50 μ A	Vg1 (V)	-	-50	100%	
j	6.3	250	-	16 mA	Inner μ	10.0	14.0	20 per week	
		Vg1 reduced by 1V. Reduce Vg2 to maintain Ia = 16 mA.							
k	6.3	75V peak applied between cathode and all other electrodes strapped. See K.1001/AV.			Peak current (mA)	150	-	100%	