

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

Specification MOSA/CV138 Issue 10 Dated 8.11.54 To be read in conjunction with BS.448, BS.1409 and K1001	<u>SECURITY</u> <u>Specification</u> UNCLASSIFIED <u>Valve</u> UNCLASSIFIED
--	--

→ Indicates a change

TYPE OF VALVE - Miniature H.F. Pentode			<u>MARKING</u>		
CATHODE - Indirectly Heated			See K.1001/4 Additional Marking 6AM6		
ENVELOPE - Glass			<u>BASE</u>		
PROTOTYPE - 6F12			B.S.448/B7G		
R.E.T.M.A. DESIGNATION - 6AM6			<u>CONNECTIONS</u>		
<u>RATING</u>		Note	Pin	Electrode	
Heater Voltage	(V) 6.3		1	g1	
Heater Current	(A) 0.3		2	k	
Max. Anode Voltage ($I_a = 0$)	(V) 550	A	3	h	
Max. Screen Voltage ($I_a = 0$)	(V) 450	A	4	h	
Max. Operating Anode Voltage	(V) 300	A	5	a	
Max. Operating Screen Voltage	(V) 300	A	6	g3 + s	
Max. Anode Dissipation	(W) 3.0	A	7	g2	
Max. Screen Dissipation	(W) 0.9	A			
Mutual Conductance	(mA/V) 7.5	B			
			<u>DIMENSIONS</u>		
			See B.S.448/B7G/2.1 Size Ref. No.2		
<u>CAPACITANCES</u> (pF)			Dimensions (mm)		Min. Max.
C in (Nom.)	7.60	C	A seated height		- 47.5
C out (Nom.)	3.25	C	C diameter		- 19.0
Ca, g1 (Nom.)	.008	C	D overall length		- 54.5

NOTES

- A. Absolute Maximum values.
- B. $V_a = V_{g2} = 250$; $I_a = 10$ mA, $V_{g1} = -2$
- C. Measured with a close fitting metal shield.

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

Test Conditions								Test	Limits		No. Tested	Note
									Min.	Max.		
a	See K.1001/AM using adaptor Type 124							CAPACITANCES (pF)				1
	Links to H.P.		Links to L.P.		Links to E.							
	1	2,3,4,6,7, 8,9.		5,10, TC1, TC2								
	5	2,3,4,6,7, 8,9.		1,10, TC1,TC2								
	5	1		2,3,4,6, 7,8,9,10, TC1,TC2								
b	Vh	Va (V)	Vg2 (V)	Vg3 (V)	Vg1 (V)	Rk (ohms)	Ia (μA)	Ih (A)	0.275	0.325	100% or S	
	6.3	0	0	0	0	0	0					
c	6.3	See K.10Q1/5.3 except that the test voltage shall be applied with cathode both positive and negative to heater.						hk Leakage Current (μA)	-	40	100%	
d	6.3	250	250	0	0	160	-	Ia (mA)	7.5	12.2	100%	3
e	6.3	250	250	0	0	160	-	-Ig1 (μA)	-	0.5	100%	3
f	6.3	250	250	0	0	160	-	gm (mA/V)	6.0 6.0	- 9.25	100% 20 per week	2,3
g	6.3	250	250	0	0	160	-	Ig2 (mA)	1.8	3.4	100%	3
h	6.3	250	250	0	-8	0	-	Ia (μA)	-	100	100%	
j	6.3	250	250	adjust	-3.5	0	50	Vg3 (V)	-70	-120	20 per week	
k	6.3	250	250	0	-1.6	0	-	μg1g2	60	89	20 per week	
Max. grid swing 1 volt												

NOTES

1. Measured with a close fitting metal shield.
2. Cathode resistor to be by-passed by 1000 μF condenser.
3. Voltages specified for Vg1 and Vg3 are relative to earth.