

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

Specification MOSA/CV.416 Issue 4 Dated 8.11.54. To be read in conjunction with B.S.448, B.S.1409 and K.1001.	<u>SECURITY</u> <u>Specification</u> UNCLASSIFIED <u>Valve</u> UNCLASSIFIED
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→ Indicates a change

TYPE OF VALVE - H.F. Beam Tetrode CATHODE - Indirectly heated ENVELOPE - Glass PROTOTYPE - VX.6055				MARKING See K.1001/4			
RATING				BASE BS 448/B7G			
				CONNECTIONS			
				Note			
				Pin		Electrode	
Heater Voltage (V) 6.3				1		g1	
Heater Current (A) 0.3				2		k	
Max. Anode Voltage (V) 300				3		h	
Max. Screen Voltage (V) 300				4		h	
Max. Anode Voltage (Ia = 0) (V) 600				5		a	
Max. Screen Voltage (Ic = 0) (V) 600				6		bp	
Max. Anode Dissipation (W) 3.5				7		g2	
Max. Screen Dissipation (W) 0.7							
Max. Mean Cathode Current (mA) 12				G D			
Max. Mean Cathode Current (mA) 18							
Max. Grid Voltage (V) +5				DIMENSIONS See B.S.448/B7G/2.1. Size Ref. No. 2.			
Max. Grid Voltage Negative overswing (V) 100							
Max. Peak Grid Current (mA) 10				Dimensions (mm)Min.Max.			
Mutual Conductance (mA/V) 3.6							
A				A seated height - 47.5			
				C diameter - 19.0			
				D overall length - 54.5			
CAPACITANCES (pF)							
C in (Nom.) 6.6				B			
C out (Nom.) 5.9				B			
Ca, g1 (Nom.) 0.033				B			

NOTES

- A. At $V_a = V_{g2} = 200$, $I_a = 17$ mA.
- B. Measured with a close fitting metal shield.
- C. At the maximum permissible peak cathode current of 250 mA.
- D. At a peak current of not more than 40 mA.
- E. All limiting values are absolute.

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

	Test Conditions					Test	Limits		No. Tested	Note
							Min.	Max.		
a	See K.1001/AIII Measurements to be made in adaptor Type 124, Ref. No. 10AD/9					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.		C in	5.6	7.6		6	
	5	2,3,4,6, 7,8,9.	1,10,TC1, TC2.		C out	5.0	6.8		per week	
					Ca,gl	-	.05		T.A.	
b	Vh	Va	Vg2	Vg3	Ia	Ih (A)	0.27	0.33	100% or S	
	6.3	0	0	0	0					
c	6.3	200	200	0	17	-Vg1 (V)	8.4	15.8	100%	
d	6.3	200	200	0	17	Reverse Ig (μ A)	-	0.75	100%	
e	6.3	200	200	0	17	gm (mA/V)	2.6	5.0	100% 20 per week	
	(Peak grid swing ± 0.25 V max.)						2.6			
f	6.3	200	200	0	17	Ig2 (mA)	2.05	5.1	100% or S	
g	6.3	200	200	0	100 μ A	-Vg1 (V)	-	38	100%	
h	6.3	200	200	0	17	Vg2 change (V)	20	34	20 per week	
	Reduce Vg1 by 2 V and reduce Vg2 to maintain Ia = 17 mA.									
j	6.3	300	300	0		Ia (mA)	133	-	100%	
	Vg1 = -100V DC. with super- imposed pulses of 10-12 μ .secs. duration, +100V peak value and 400:1 off: on ratio.									

NOTE

1. Test to be carried out with the valve fully shielded.