

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

Specification MOSA/CV1060 Issue 8 Dated 4.8.54. To be read in conjunction with B.S.1409 and K1001	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

—————> Indicates a change

TYPE OF VALVE - Beam Tetrode		<u>MARKING</u>		
CATHODE - Indirectly Heated		See K1001/4		
BULB - Glass, unmetallised		<u>BASE</u>		
PROTOTYPE - 807		USM5		
<u>RATING</u>		<u>CONNECTIONS</u>		
		Pin	Electrode	
Heater Voltage	(V) 6.3	1	h	
Heater Current	(A) 0.9	2	g2	
Max. Anode Voltage	(V) 600	3	g1	
Max. Screen Voltage	(V) 300	4	k and b.p.	
Max. Anode Dissipation	(W) 25	5	h	
Max. Screen Dissipation	(W) 3.5	T.C	a	
Mutual Conductance	(mA/V) 7.1	A		
Max. operating frequency	(Mc/s) 120			
		<u>PLUG TOP CAP</u>		
		See K.1001/A1/D5.1		
		<u>DIMENSIONS</u>		
		See K.1001/A1/D1		
<u>CAPACITANCES (pF)</u>		Dimension	Min.	Max.
C in	12.5	Amm	-	146
C out	8.2	Bmm	-	53
Ca, g1 (max.)	0.25	Cmm	-	35
<u>NOTES</u>				
A. $V_a = 300$, $V_{g2} = 250$, $I_a = 83\text{mA}$, $V_{g1} = -12.5$ Approx.				

TESTS

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

Test Conditions				Test	Limits		No. Tested	Note					
					Min.	Max.							
Measured using Adaptor type 40, Ref.10A/13336				CAPACITANCES (pF)	11.5	13.5	6 per week						
See K.1001/AIII													
a	Links to H.P.	Links to L.P.	Links to E						C in				
	3	1,2,4,5	6,7,8,9,10, TC1, TC2						C out	7.7	8.7		
	TC1	1,2,4,5	3,6,7,8,9,10,TC2						Ca, g1	-	0.25		
	TC1	3	1,2,4,5,6,7,8,9,10,TC2	Cg2g1	4.2	5.5							

Before any of the following tests are made, the valve shall be run for a period of 10 minutes with $V_a = 300$ volts, $V_{g2} = 250$ volts, $I_a = 83$ milliamps.

	Vh	Va	Vg2	Ia(mA)						
b	6.3	0	0	0	Ih	(A)	0.8	1.0	100% or S	
c	6.3	300	250	83	Vg1	(V)	-9.5	-15.5	100%	
d	6.3	300	250	83	Reverse Ig1	(μ A)	-	2.5	100%	1
e	6.3	300	250	83	Ig2	(mA)	-	10.5	100% or S	
f	6.3	300	250	83	gm	(mA/V)	5.5	8.7	100%	
Peak grid swing ± 1.0 volt max.										
g	6.3	300	250	1.0	Vg1	(V)	-	-4.8	100%	
h	6.3	400 volts applied to anode, screen and grid strapped. See K.1001/A5			Ie	(A)	4.0	-	100%	

NOTE

- The grid current due to ionisation shall not exceed $1.0 \mu A$.