

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

Specification MOSA/CV73. Issue 7 Dated 14.4.1954. To be read in conjunction with K1001 ignoring clauses - 5.2., 5.3.	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

—————> Indicates a change

TYPE OF VALVE - Output Tetrode (Aligned grids)  CATHODE - Indirectly Heated  ENVELOPE - Glass, unmetallised.			<u>MARKING</u> See K1001/4		
			<u>BASS</u> E.7.		
<u>RATING</u>			<u>CONNECTIONS</u>		
			Note		
Heater Voltage (V)	4.2	A	Pin	Electrode	
Heater Current (A)	2.5		1	No connection	
<u>Series Modulator</u>			2	Control grid	
Max. Anode Voltage (kV)	3.5	A	3	No connection	
Max. Screen Dissipation (W)	0.9		4	Heater	
<u>Break Modulator</u>			5	Heater	
Max. Peak Anode Voltage (kV)	12.5	B	6	Cathode and beam forming plates	
Max. Screen Dissipation (W)	2.0		7	Screen grid	
Max. Anode Dissipation (W)	10.0		T.C.	Anode	
Max. Screen Voltage (kV)	0.7		<u>PLUG TOP CAP</u> See K1001/A1/D5.1		
Max. Grid Negative Bias (kV)	0.7		<u>DIMENSIONS</u> See K1001/A1/D1		
Max. Grid to Screen Voltage (kV)	1.2		Dimension	Min.	Max.
Max. Peak Cathode Current (A)	3.5		A (mm)	131	144
Mutual Conductance (mA/V)	7.5		B (mm)	53	55
			C (mm)	-	35.5
			D (mm)	39	44
			G (mm)	22.5	Mem.
			J (mm)	67	79

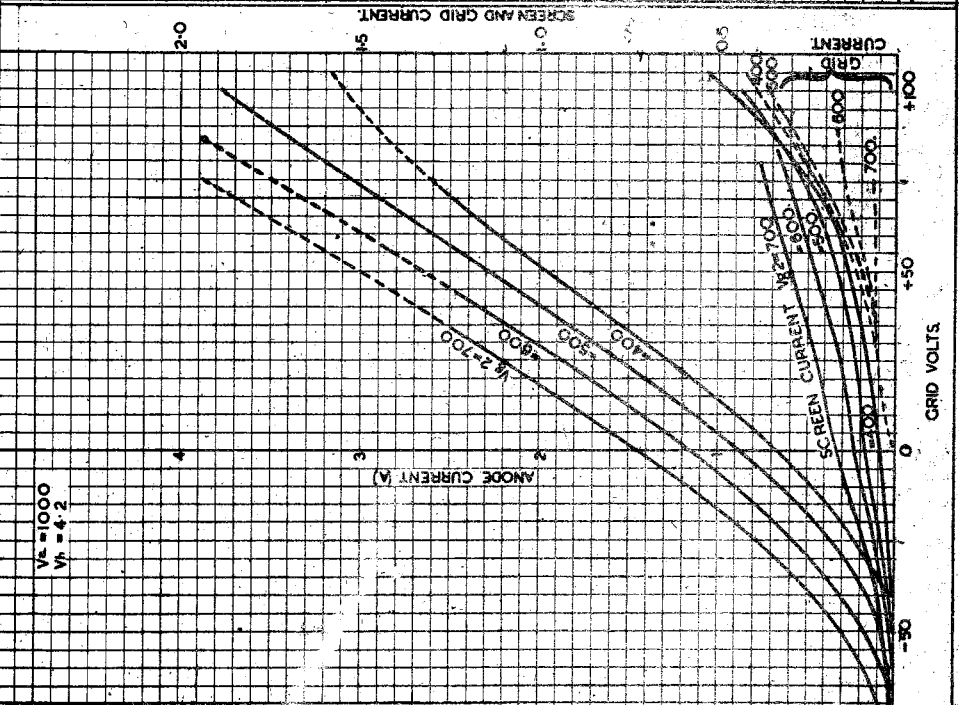
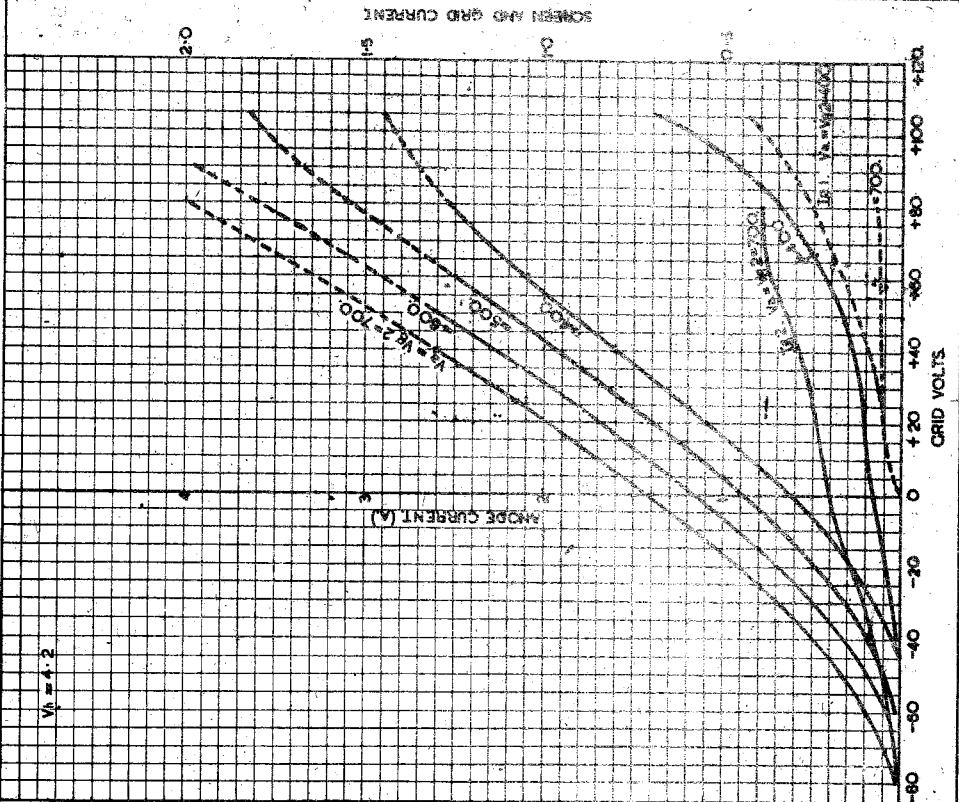
NOTES

A. Under pulse conditions of approximately 10  $\mu$ seconds duration and 400:1 minimum off-on ratio.

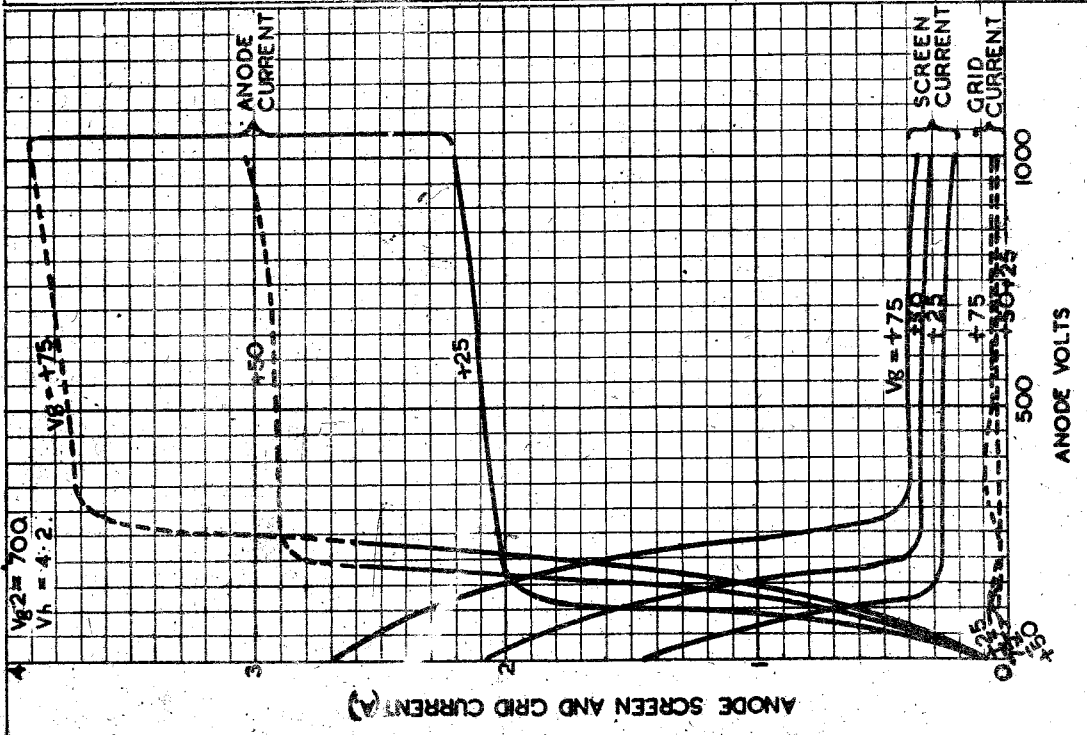
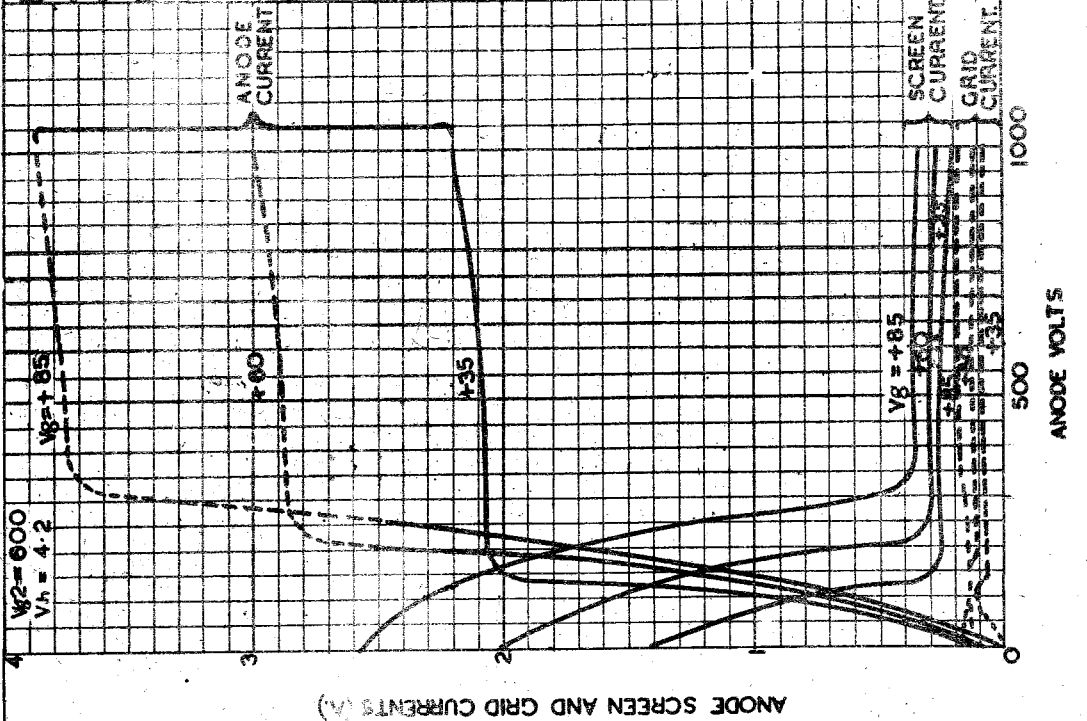
B.  $V_a = V_{g2} = 200V$ ,  $I_a = 40 mA$ .

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

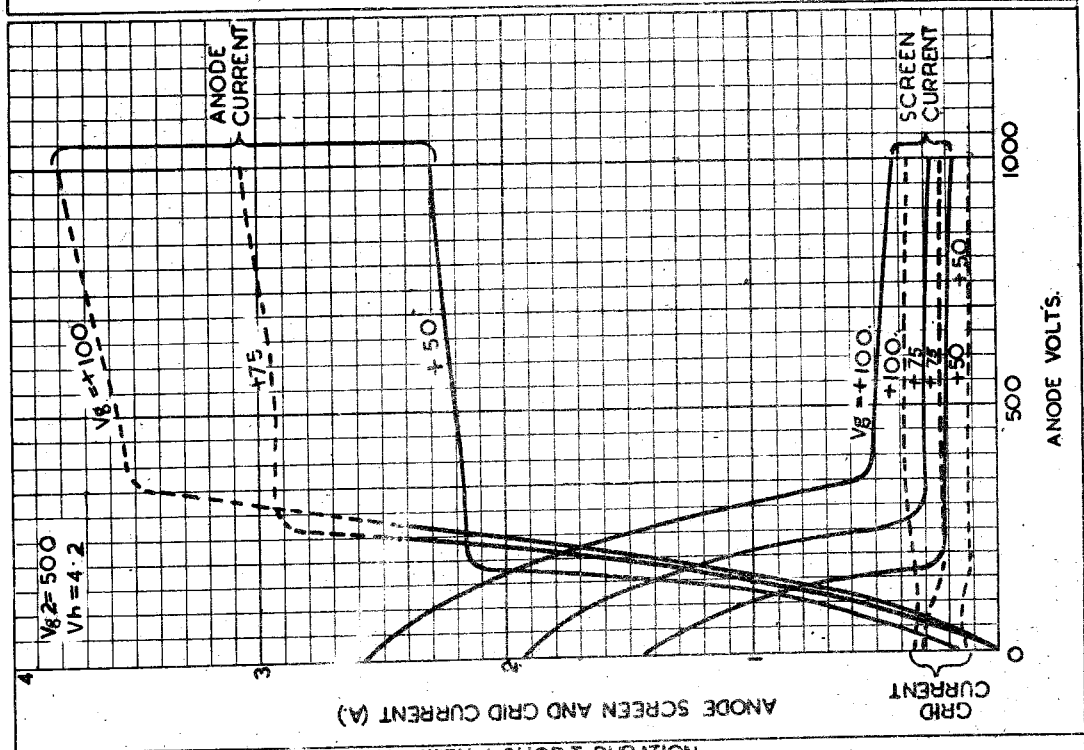
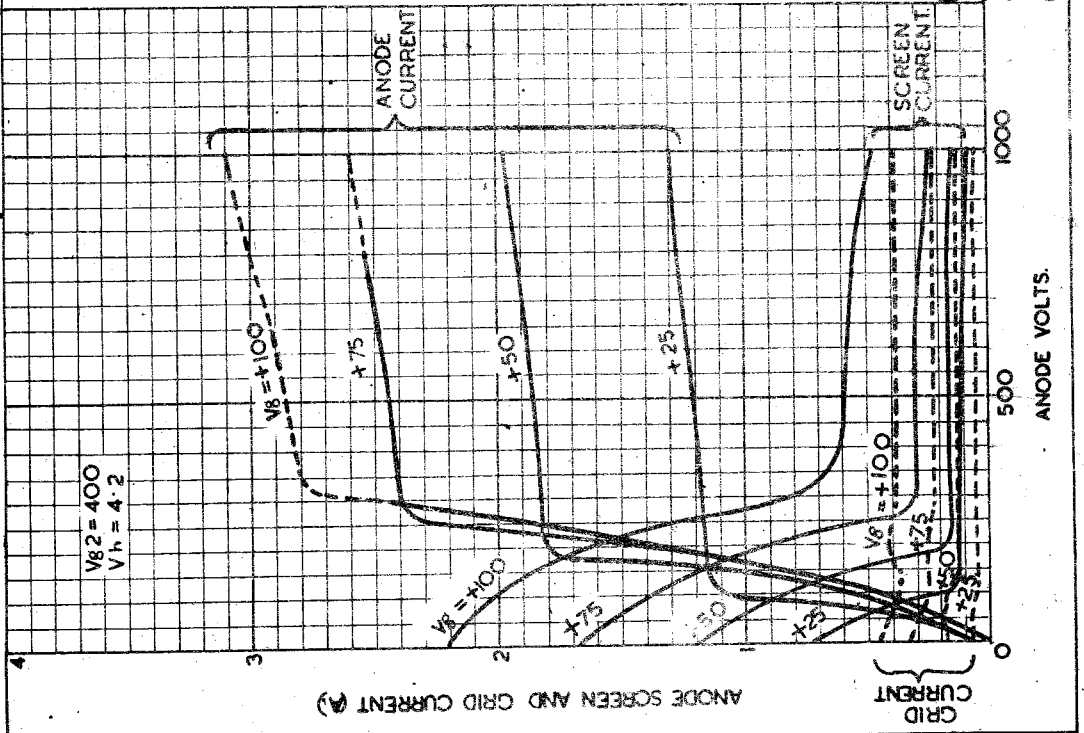
	Test Conditions					Test	Limits		No. Tested	Note
	Vh	Va	Vg2	Vg1	Ia(mA)		Min.	Max.		
a	4.2	0	0	0	-	Ih (A)	2.25	2.75	100% or S	
b	4.2	200	200	-	40	I <sub>g</sub> <sup>2</sup> (mA)	-	4.5	100% or S	
c	4.2	200	200	-	40	Reverse I <sub>g</sub> <sup>1</sup> (μA)	-	1.5	100%	
d	4.2	200	200	-60	-	I <sub>g</sub> <sup>1</sup> (μA)	-	7.0	100%	
e	4.2	Cathode 250V positive to heater				I <sub>o</sub> (μA)	-	250.0	100%	
f	4.2	500	500	105 max.	-	Ia (A)	2.4	-	100%	
	<p>V<sub>g</sub><sup>1</sup> shall be applied as an intermittent pulse of 10 to 12 μsecs duration with a 400:1 off-on ratio. Ia measurement to be made when V<sub>g</sub><sup>1</sup> is not more than 105V positive.</p>									
g	4.2	7.5 (kV)	500	-175	-	I <sub>o</sub> (μA)	-	100.0	100%	
						<p>The valve shall be processed until it can withstand the stated conditions for a period of 1 min. without flashing. Once the conditions have been met they need not be repeated for acceptance testing.</p>				



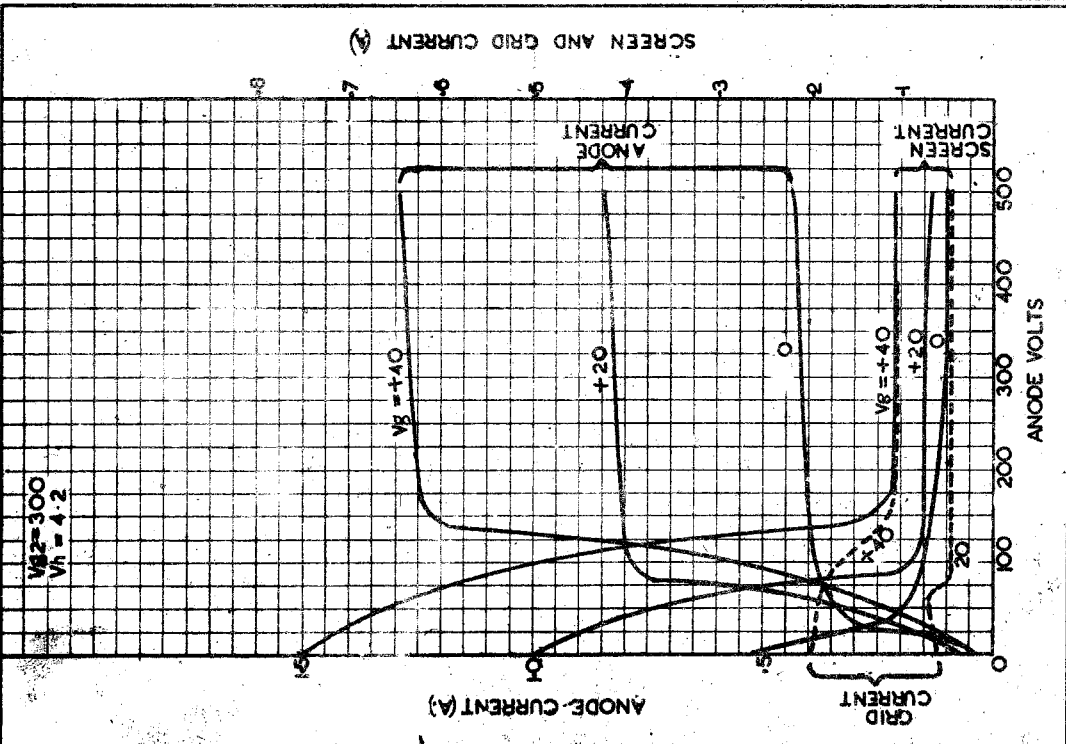
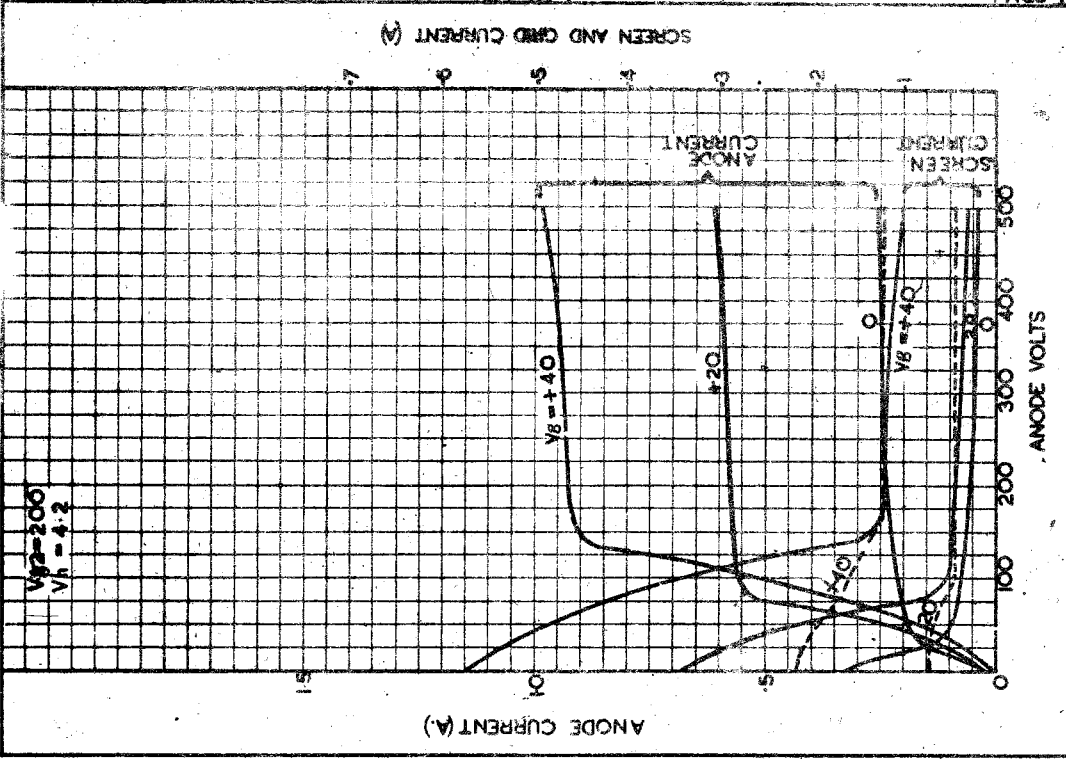
NOTE:- THESE CURVES WERE TAKEN WITH A SHORT DURATION PULSE HAVING A 400-1 OFF TO ON PERIOD.



NOTE- THESE CURVES WERE TAKEN WITH A SHORT DURATION PULSE HAVING A 100-USEC TO ON PERIOD.



NOTE :- THESE CURVES WERE TAKEN WITH A SHORT DURATION PULSE HAVING A 400-1 OFF TO ON PERIOD.  
SOURCE - MAZDA VALVE TYPE CV73 COPYRIGHT RESERVED.



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NOTE: THESE CURVES WERE TAKEN WITH A SHORT DURATION PULSE HAVING A 400-1 OFF TO ON PERIOD.