

Specification MOSA/CV2163 Issue 1 Dated 12.6.1953 To be read in conjunction with K1001	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

—————→ Indicates a change

TYPE OF VALVE - Disc Seal Common Grid Triode CATHODE - Indirectly Heated ENVELOPE - Copper, Glass PROTOTYPE - VX.3071		<u>MARKING</u> See K1001/4																												
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<p>A. The above ratings are for Pulse operation only.</p> <p>B. For this dissipation forced air cooling shall be provided by not less than 150 cubic feet of air per minute through the anode cooler with a pressure drop of the order of 3" of water, and approx. 20 C.F.M. of air through the grid cooler. The temperature on the outside of the anode flange, on the inner edge of the grid disc and on the base of the cathode connector shall not exceed 100°C. These conditions apply for ambient temperatures up to 30°C. Air must be flowing before the power is switched on, and it is recommended that the flow be continued for approx. 2 min. after power is switched off.</p> <p>C. Measured at V_a = 1.5kV; I_a = 0.8A.</p> <p>D. A rigid connection must be made to anode or grid only.</p> <p>E. This voltage must not be exceeded under any condition.</p>																														

To be performed in addition to those applicable in K1001

Test Conditions					Test	Limits		No. Tested	Note
						Min.	Max.		
a	Measurements to be made at a frequency of 1.0 Mc/s				Capacitances(pF) C _{ag} C _{ge} C _{ae}	23.4 25.4 -	31.7 34.4 1.0	6 per month	
	V _r	V _g	V _a	I _a (mA)					
b	Valve to be run under agreed pulse conditions in an approved circuit								
c	16	0	0	0	I _r (A)	6.6	8.0	100%	
d	16	adjust	1,500	1,000	Reverse I _g (uA)		100	100%	2
e	16	adjust	1,500	800	V _g	-5.0	-20.0	100%	2
f	16	adjust Peak grid swing ± 1V	1,500	800	g _m (mA/V)	35		100%	2
g	16	adjust	1,700	800	V _g change from value found in test(d) (V)	3.7	5.5	100%	2
h	16	adjust	1,500	25	V _g (V)		-70	100%	2
j	12	Anode and grid strapped. Peak applied voltage=750, T _p = 2μsec. pulse shaped sinusoidal. p.r.f.= 50 c/s			Peak Emission(A)	30		100%	2
<u>NOTES</u>									
1. Test (b) forms part of the processing of this valve, and having been met during manufacture, shall not be repeated for acceptance testing.									
2. For these tests forced air-cooling not greater than the minimum required in Note B on Page 1 shall be used.									

