

ELECTRONIC VALVE SPECIFICATIONS
SPECIFICATION MOS(A)/CV.415
ISSUE 7 DATED 8.11.54
AMENDMENT No.1.

PAGE 2.

- (1) Clause "c" amend the limits of "-9.8" to "-18.2" to read "-12" to "-20".
- (2) Clause "d" amend the maximum limit of "5" to read "2.5".

September, 1960.

R.A.E.

N.33757

Specification MOSA/CV415 Issue 7 Dated 8.11.54 To be read in conjunction with B.S.448, B.S.1409 & K1001		<u>SECURITY</u> Specification UNCLASSIFIED Valve UNCLASSIFIED																					
-----> Indicates a change																							
TYPE OF VALVE - Double Tetrode Beam Power Amplifier CATHODE - Indirectly Heated ENVELOPE - Glass, lower portion in metal shell PROTOTYPE - VX.3087		<u>MARKING</u> See K1001/4 <u>BASE</u> B.S.448/B9G																					
<u>RATINGS</u>		Note	<u>CONNECTIONS</u>																				
Heater Voltage (V) Heater Current (A) Max. Operating Anode Voltage (V) Max. Operating Screen Voltage (V) Max. Anode Dissipation (per anode) (W) Max. Screen Dissipation (total) (W) Mutual Conductance (mA/V) Max. Operating Frequency (Mc/s)	6.3 1.6 400 400 8.0 3.0 3.9 150	A A A A A B	<table border="1"> <thead> <tr> <th>Pin</th> <th>Electrode</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>h</td> </tr> <tr> <td>2</td> <td>g¹</td> </tr> <tr> <td>3</td> <td>k¹ + s</td> </tr> <tr> <td>4</td> <td>a¹</td> </tr> <tr> <td>5</td> <td>g² + gⁿ²</td> </tr> <tr> <td>6</td> <td>aⁿ</td> </tr> <tr> <td>7</td> <td>kⁿ + s</td> </tr> <tr> <td>8</td> <td>gⁿ¹</td> </tr> <tr> <td>9</td> <td>h</td> </tr> </tbody> </table>	Pin	Electrode	1	h	2	g ¹	3	k ¹ + s	4	a ¹	5	g ² + g ⁿ²	6	a ⁿ	7	k ⁿ + s	8	g ⁿ¹	9	h
Pin	Electrode																						
1	h																						
2	g ¹																						
3	k ¹ + s																						
4	a ¹																						
5	g ² + g ⁿ²																						
6	a ⁿ																						
7	k ⁿ + s																						
8	g ⁿ¹																						
9	h																						
<u>CAPACITANCES (pF)</u> (per section)		9.0 7.5 0.05	<u>DIMENSIONS</u> See K1001/AI/D2, with the following exceptions:-																				
1. C in 2. C out 3. Ca, g1			<table border="1"> <thead> <tr> <th>Dimension</th> <th>(mm)</th> <th>Min.</th> <th>Max.</th> </tr> </thead> <tbody> <tr> <td>E</td> <td>(mm)</td> <td>-</td> <td>70</td> </tr> <tr> <td>P</td> <td>(mm)</td> <td>-</td> <td>41</td> </tr> <tr> <td>Q</td> <td>(mm)</td> <td>-</td> <td>45</td> </tr> </tbody> </table>	Dimension	(mm)	Min.	Max.	E	(mm)	-	70	P	(mm)	-	41	Q	(mm)	-	45				
Dimension	(mm)	Min.	Max.																				
E	(mm)	-	70																				
P	(mm)	-	41																				
Q	(mm)	-	45																				
The groove on the spigot is optional																							
<u>NOTES</u>																							
A. Absolute maximum values.																							
B. Measured at: Va = 250V; Vg2 = 15V; Ia = 30 mA																							

To be performed in addition to those applicable in K1001

Test Conditions					Test	Limits		No. Tested	Note		
						Min.	Max.				
a See K1001/AlII Measurements to be made in Adaptor Type 125, Ref. 10AD/24					<u>CAPACITANCES (pF)</u>						
Links to H.P.	Links to L.P.	Links to E									
2	1,3,5,6,7, 8,9,10	4, TC1, TC2				C in'	-	10.25	6 per week		
4	1,3,5,6,7, 8,9,10	2, TC1, TC2				C out'	-	9.5	6 per week		
4	2	1,3,5,6,7, 8,9,10, TC1, TC2				C a',g1'	-	0.06	T.A.		
8	1,2,3,4, 5,7,9,10	6,TC1 TC2				C in''	-	10.25	6 per week		
6	1,2,3,4, 5,7,9,10	8,TC1, TC2				C out''	-	9.5	6 per week		
6	8	1,2,3,4,5, 7,9,10, TC1,TC2.				C a'',g1''	-	0.06	T.A.		
					C in' + C in''	-	20.25	T.A.			
b	Vh (V)	Va (V)	Vg2 (V)	Vg1 (V)	Ia (mA)	Ih	(A)	1.44	1.76	100% or S	
	6.3	0	0	0	0						
c	6.3	250	135	-	30	Vg1	(V)	-9.8	-18.2	100%	1
d	6.3	250	135	-	30	Ig2	(mA)	-	5.0	100% or S	
e	6.3	250	135	-	30	ga	(mA/V)	2.9	4.9	100%	1
Peak Grid Swing = 1V max.											
f	6.3	250	135	-	30	Reverse Ig1	(μA)	-	2.0	100%	1
g	6.3	250	135	-50	-	Ia	(mA)	-	1.0	100%	1
h	6.3	250	250	-100V D.C. Plus 100V Peak sinusoidal A.C. (50 c.p.s.)	-	Mean Ia	(mA)	25	-	100%	1

NOTES

1. Test to be made on each section separately, a bias of -50 volts being applied to the section not under test.