

SPECIFICATION M.O.S.(A)/CV.1540

ISSUE 2 DATED 21.11.58

AMENDMENT NO. 1

Page 3 Dimensions Table.

Amend dimensions "A" and "L" as follows:-

	Millimetres		Inches	
	Min.	Max.	Min.	Max.
Dimension "A"	72.06	78.74	2.837	3.1
Dimension "L"	58.73	63.5	2.312	2.5

Royal Aircraft Establishment.

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N/54575

Specification MOS(A)/CV1540 Issue 2 Dated 21.11.58 To be read in conjunction with BS448, BS1409 and K1001	<u>SECURITY</u>
	Specification UNCLASSIFIED Valve UNCLASSIFIED

TYPE OF VALVE - Grounded Grid Double Triode with separate heaters and cathodes CATHODE - Indirectly heated, oxide coated ENVELOPE - Glass PROTOTYPE - 35B/152M	<u>MARKING</u> K1001/4
	<u>BASE</u> BS.448/B9G
	<u>TOP CAPS</u> BS.448/OT1

<u>RATING</u> (All limiting values are absolute)			<u>CONNECTIONS</u>	
	Note		Pin	Electrode
Heater Voltage (V)	6.3	B		
Heater Current (A)	0.92	B	1	g ¹
Max. Anode Dissipation (W)	30	C	2	h ¹
Max. Operating Frequency (Mc/s)	420		3	k ¹
Max. Bulb Temperature (°C)	200		4	h ¹
Mutual Conductance (mA/V)	15.5	A	5	g ⁿ
Amplification Factor	90	A	6	h ⁿ
			7	k ⁿ
			8	h ⁿ
<u>Class C. Push-Full Amplifier, Modulated</u>		D	9	g ¹
Max. Anode Voltage (V)	275		TC1	a ¹
Max. Anode Current (mA)	35		TC2	a ⁿ
Max. Grid Current (mA)	9.0			
Max. Anode Dissipation (W)	5.25			
Max. Grid Dissipation (W)	0.1			
<u>Class C. Push-Full Amplifier, Unmodulated</u>		D		
Max. Anode Voltage (V)	300			
Max. Anode Current (mA)	55			
Max. Grid Current (mA)	15.0			
Max. Anode Dissipation (W)	8.0			
Max. Grid Dissipation (W)	0.2			

<u>CAPACITANCES (pF)</u>		
Cg ¹ , k ¹ h ¹ (nom.)	7.5	
Cg ⁿ , k ⁿ h ⁿ (nom.)	7.5	
Ca ¹ , k ¹ h ¹ (max.)	0.3	
Ca ⁿ , k ⁿ h ⁿ (max.)	0.3	
Ca ¹ , g ¹ (nom.)	3.75	
Ca ⁿ , g ⁿ (nom.)	3.75	
Ca ¹ , a ¹ (max.)	0.5	
An internal grid to grid by-pass capacitor is incorporated of approximately 50pF.		

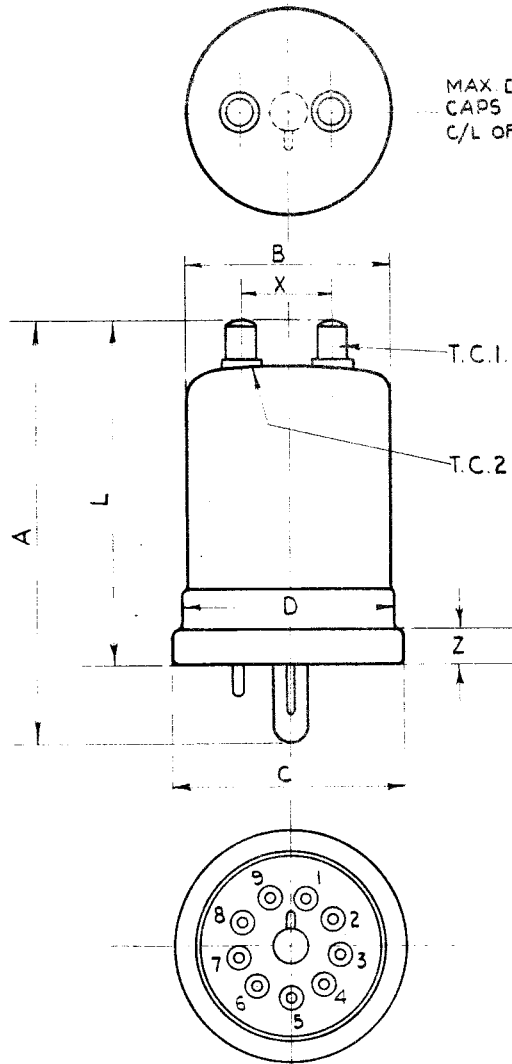
<u>NOTES</u>	
A.	At Va = 300V; Vg = -1V
B.	Each section.
C.	With a total anode dissipation in excess of 16 watts forced air cooling is required.
D.	Natural cooling. Free circulation of air must be provided for valves operating under these conditions.

To be performed in addition to those in K1001

Test Conditions				Test	Limits		No. Tested	Notes			
Links to H.P.	Links to L.P.	Links to E.			Min.	Max.					
See K1001/ALII				<u>CAPACITANCES (pF)</u>			6	per week			
3	1, 9	2,4,5,6,7,8,TC1,TC2,Sh.							Cg',k'h'	5	10
7	5	1,2,3,4,6,8,9,TC1,TC2,Sh.							Cg",k"h"	5	10
TC1	3	1,2,4,5,6,7,8,9,TC2,Sh.							Ca',k'h'	-	0.3
TC2	7	1,2,3,4,5,6,8,9,TC1,Sh.							Ca", "h"	-	0.3
TC1	1, 9	2,3,4,5,6,7,8,TC2,Sh.							Ca',g'	3.0	4.5
TC2	5	1,2,3,4,6,7,8,9,TC1,Sh.							Ca",g"	3.0	4.5
TC1	TC2	1,2,3,4,5,6,7,8,9,Sh.							Ca',a"	0.5	1.0
b	Vh	Va	Vg	Ia	Ih (A)	0.8	1.05	100%	1		
	6.3V	0	0	0							
c	6.3V	300V	-1.0V	-	Ia (mA)	18	45	100%	1,2		
d	6.3V	300V	-1.0V	-	gm (mA/V)	12	22	100%	1,2		
e	6.3V	300V	-1.0V	-	Amplification Factor	72	108	100%	1,2		
f	6.3V	450	adjust	35mA	Reverse Grid Current(μA)	-	2.5	100%	1,2,3		

NOTES

1. Test each section separately.
2. 1kΩ resistor to be inserted in series with the grid lead.
3. Maintain test for one minute, after which the reverse grid current must not be rising, or out of limit.



MAX DEVIATION OF ANODE CAPS TO BE $\pm 7/2^\circ$ FROM C/L OF BASE.

DIM.	MILLIMETRES		INCHES	
	MIN.	MAX.	MIN.	MAX.
A	73.66	78.74	2.9	3.1
B	-	41.0	-	1.61
C	-	45.0	-	1.77
D	-	41.6	-	1.64
L	60.32	63.5	2.375	2.5
X	17.27 \pm 0.50		0.680 \pm 0.020	
Z	7.9 \pm 0.8		0.312 \pm 0.031	

NOTE :- BASIC FIGURES ARE INCHES.